Appendix 1

Notice of Preparation and Comments Received on the NOP

NOTICE OF PREPARATION
ENVIRONMENTAL IMPACT REPORT
WILLOW VILLAGE MASTER PLAN PROJECT
CITY OF MENLO PARK

Date: September 18, 2019

To: State Clearinghouse
State Responsible Agencies
State Trustee Agencies
Other Public Agencies
Interested Organizations

From: Kyle Perata
Principal Planner
City of Menlo Park
701 Laurel Street
Menlo Park, CA 94025

Subject: **Notice of Preparation (NOP) of the Environmental Impact Report for the Willow Village Master Plan Project**

Lead Agency: City of Menlo Park Planning Division

Project Title: Willow Village Master Plan Project

Project Area: City of Menlo Park

Notice is hereby given that the City of Menlo Park (City) will be the lead agency and will prepare an Environmental Impact Report (EIR) for the proposed Willow Village Master Plan Project (Proposed Project). The EIR will address the Proposed Project's potential physical environmental effects on each of the environmental topics outlined in the California Environmental Quality Act (CEQA), with the exception of agricultural or forestry resources, mineral resources, and wildfire. The City of Menlo Park is requesting comments on the scope and content of this EIR.

A scoping session will be held as part of the Planning Commission meeting on **October 7, 2019,** at **7:00 p.m.** at the Menlo Park City Council Chambers, located at 701 Laurel Street, Menlo Park, CA 94025. The scoping session is part of the EIR scoping process and is the time when the City solicits input from the public and other agencies on specific topics they believe should be addressed in the environmental analysis. The focus of the scoping meeting will be the content that will be studied in the EIR. Written comments on the scope of the EIR may also be sent to:

Kyle Perata, Principal Planner
City of Menlo Park
Community Development Department, Planning Division
701 Laurel Street
Menlo Park, CA 94025
ktperata@menlopark.org
Phone: 650.330.6721
Fax: 650.327.1653

Comments on the NOP are due no later than the close of the NOP review period at 5:00 p.m. on **October 18, 2019**. However, we would appreciate your response as soon as possible. Please send your written comments to Kyle Perata at the address shown above or via email to ktperata@menlopark.org with "Proposed Willow Village Master Plan Project EIR" as the subject. Public agencies providing comments are asked to include a contact person for the agency.

PROJECT LOCATION AND EXISTING CONDITIONS: The approximately 59-acre Menlo Science and Technology Park (Project Site) is located north of US 101 in the City of Menlo Park. The Project Site is bounded by the currently inactive Dumbarton Rail Corridor to the north, an existing life science complex to the east and south (Menlo Park Labs Campus), the Hetch Hetchy right-of-way corridor and Mid-Peninsula High School to the south, and Willow Road to the west. North of the currently inactive Dumbarton Rail Corridor, across State Route (SR) 84, are tidal mudflats and marshes along San Francisco Bay, the Don Edwards San Francisco Bay National Wildlife Refuge, and Ravenswood Slough. The Project Site is located within the vicinity of the existing Facebook campuses, which consist of the Classic Campus (East Campus) encompassing Buildings 10–19, located north of SR 84 on the former Sun Microsystems campus, and the West Campus encompassing Buildings 20, 21, 22 (expected to be operational by early 2020), and 23, located west of Willow Road on the former TE Connectivity campus. Figure 1 depicts the location of the Project Site.

The Project Site currently contains 20 buildings with a mix of office, research and development (R&D), and warehousing uses at the following addresses: 1350–1390 Willow Road, 925–1098 Hamilton Avenue, and 1005–1275 Hamilton Court. The existing site contains approximately 1 million gross square feet (gsf). Currently, Facebook occupies a number of the buildings for a variety of uses, including office space, employee amenities, research and development, and an employee health clinic. Other tenants occupy buildings pursuant to short-term leases, including the Menlo Park Fire Protection District (which uses an existing warehouse facility for storage and training), Satellite Healthcare (which operates a dialysis clinic), and Community Legal Services of East Palo Alto (which rents temporary office space). In total, approximately 3,500 people are currently employed at the Project Site.

PROJECT DESCRIPTION: The Proposed Project would demolish existing onsite buildings and landscaping and construct new buildings within a Town Square District, a Residential/Shopping District, and a Campus District. The Proposed Project would result in a net increase of approximately 1 million square feet (sf) of nonresidential uses (office space and non-office commercial/retail), for a total of approximately 2 million sf of nonresidential uses at the Project Site. In addition, the Proposed Project would include multi-family housing units, a hotel, indoor space dedicated for community facilities/uses, park building/improvements and open space.

The approximately 22-acre Residential/Shopping District would be located in the southwestern portion of the Project Site. The approximately 5-acre Town Square District would be located in the northwestern portion of the Project Site. Together, these two districts would include: approximately 1,735 residential units, which would include a minimum of 15 percent affordable/below market-rate units (approximately 261 units); up to approximately 200,000 sf of retail, including a grocery store, pharmacy, and restaurants (of which approximately 25,000 sf would be located on the ground floor along the east side of Main Street in the Campus District and would be open to the public); an approximately 175,000-sf hotel with 200-250 rooms and food services; an approximately 500 space parking structure intended to accommodate visitors/vendors to the office campus and hotel guests during normal business hours and provide retail overflow parking during evening and weekend time periods; and an approximately 10,000 sf indoor space dedicated to community facilities/uses adjacent to a 4-acre public park. In addition, an approximately 0.7-acre Town Square and 0.3-acre dog park would be accessible to the public.

The approximately 32-acre Campus District, located in the eastern portion of the Project site, would include approximately 1.75 million sf of office uses and employee-serving amenity space, along with two above-ground parking structures with approximately 3,100 parking spaces. Both parking structures would include

a ground-level Transit Hub to support private campus commuter shuttles and trams. Open spaces would include a chain of publicly-accessible spaces and gardens along Main Street, a landscaped area off O'Brien Drive, and various secure, interior open spaces for the Campus District users.

The Proposed Project is anticipated to be developed in three phases, with the first phase consisting of approximately 595,000 sf of offices, 767 residential units, and 3,000 sf of retail; the second phase consisting of approximately 633,000 sf of offices, 633 residential units, and 35,000 sf of retail; and the third phase consisting of approximately 522,000 sf of offices, 335 residential units, the hotel, and 137,000 sf of retail. The Project Site would generally be developed beginning along the southern portion of the site and moving north with the northwest portion being completed last.

The Project Site would be bisected by the proposed north-south Main Street, which would provide access to all three districts. The Project Site would include a circulation network for vehicles, bicycles, and pedestrians inclusive of both public rights-of-way and private streets, generally aligned in an east-to-west and a north-to-south grid. The exact amount of dedicated public rights-of-way will be determined through the City review process. Modifications to the total area of dedicated rights-of-way could affect the overall development potential at the Project Site and the Proposed Project would be adjusted accordingly.

PROJECT APPROVALS AND ANALYSIS: The Proposed Project would require a Zoning Map Amendment to modify the circulation within the Project Site and the proposed site connections to the surrounding roadway network. The Proposed Project would require a General Plan Amendment to the Circulation Element for the associated circulation changes. At the time of the release of this NOP, the City has received development applications for approximately 457 hotel rooms, which would exceed the development cap of 400 hotel rooms set by the General Plan; therefore, the Proposed Project could require a General Plan Amendment to the Land Use Element to increase the development cap for hotel rooms to accommodate the proposed 250 room hotel, unless the proposed hotel room count for this Proposed Project or the other projects are reduced. In addition, the following City discretionary approvals or analysis would be required prior to development at the Project Site:

- Conditional Development Permit
- Subdivision Map/Vesting Tentative Map
- Right-of-Way Abandonment
- Rezoning to Incorporate X Overlay
- Development Agreement
- Environmental Review
- Fiscal Impact Analysis
- Architectural Control/Future Design Review
- Tree Removal Permits
- Below-Market-Rate Housing Agreement
- Appraisal/Community Amenity Value Analysis

RESPONSIBLE AND OTHER AGENCIES: The agencies listed below are expected to review the Draft EIR to evaluate the Proposed Project:

- Bay Area Air Quality Management District (BAAQMD)
- California Department of Transportation (Caltrans)
- California Regional Water Quality Control Board (RWQCB)/San Mateo Countywide Water Pollution Prevention Program
- City/County Association of Governments (C/CAG)
- San Mateo County Transportation Authority (SMCTA)
- Department of Toxic Substance Control (DTSC)
- Menlo Park Fire Protection District
- San Mateo County Environmental Health Division
- West Bay Sanitary District

- Native American Heritage Commission
- San Francisco Public Utilities Commission (SFPUC)

INTRODUCTION TO EIR: The purpose of an EIR is to inform decision-makers and the general public of the environmental effects of a proposed project. The EIR process is intended to provide environmental information for evaluating a proposed project and its potential to cause significant effects on the environment, examine methods of reducing adverse environmental impacts, and identify alternatives to a proposed project. The Willow Village Master Plan Project EIR will be prepared and processed in accordance with CEQA and the State CEQA Guidelines in effect at the time of the release of this NOP. Where appropriate the EIR for the Proposed Project will incorporate by reference analyses, discussions and mitigation measures from the program EIR certified on November 29, 2016 by the City Council for the ConnectMenlo General Plan Update. The EIR will include the following:

- Summary of the Proposed Project and its potential environmental effects
- Description of the Proposed Project
- Description of the existing environmental setting, potential environmental impacts of the Proposed Project, and mitigation measures to reduce significant environmental effects of the Proposed Project
- Variants to the Proposed Project
- Alternatives to the Proposed Project
- Cumulative impacts
- CEQA conclusions

PROBABLE ENVIRONMENTAL EFFECTS: The EIR will analyze whether the Proposed Project would have significant environmental impacts in the following areas:

- Aesthetics
- Air Quality
- Biological Resources
- Cultural and Tribal Resources
- Energy
- Geology and Soils
- Greenhouse Gas Emissions
- Hazards and Hazardous Materials
- Hydrology and Water Quality
- Land Use and Planning
- Noise
- Population and Housing
- Public Services and Recreation
- Utilities
- Transportation

To help prepare several of these sections and analyze the impacts, a transportation study will be prepared. The transportation study will focus on intersections, residential and non-residential roadway segments, and Routes of Regional Significance.

ENVIRONMENTAL EFFECTS NOT LIKELY TO REQUIRE FURTHER ANALYSIS: The Proposed Project is not anticipated to result in significant environmental effects in the following areas:

- Agricultural or Forestry Resources
- Mineral Resources
- Wildfire

The Project site is fully developed in an urbanized area and located near SR 84 and US 101. As such, agricultural and mineral resources do not exist on the site and wildfires are not a concern. A detailed analysis of these topics will not be included in the EIR.

VARIANTS: The Proposed Project could include additional and/or alternative access to/from the Proposed Project Site, along with other onsite features than currently proposed. All potential variants to the Proposed Project will be analyzed in the EIR. Variants that could be analyzed currently include: realignment of Hamilton Avenue and relocation of the existing gas station; a grade-separated crossing over or under the currently inactive Dumbarton Rail Corridor/Willow Road for bicycles, pedestrians, and Facebook trams; an onsite emergency water storage tank; and a recycled water system for either public use or onsite use only. In addition, the EIR will analyze two housing variants: an increase in housing units up to a maximum of 2,000 housing units and a decrease in housing units to a minimum of 1,500 housing units. The ConnectMenlo program EIR analyzed up to 2,000 residential units at the Project Site; however, with the anticipated right-of-way dedication, the maximum number of residential units would be approximately 1,860 units. The analysis will also consider a variant to the programming of the proposed onsite park. The proposed 4-acre park is currently identified as being programmed with playing fields and a playground but could be programmed differently than currently proposed with potentially passive recreational uses instead of active uses. Any environmental impacts associated with the potential Proposed Project variants will be disclosed in the EIR.

ALTERNATIVES: Based on the significance conclusions determined in the EIR, alternatives to the Proposed Project will be analyzed to reduce identified impacts. Section 15126.6(e) of the State CEQA Guidelines requires the evaluation of a No Project Alternative. Other alternatives may be considered during preparation of the EIR and will comply with the State CEQA Guidelines, which call for a "range of reasonable alternatives to the project, or to the location of the project, which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project." The EIR will analyze a Reduced Intensity Alternative, the No Project Alternative, along with any other feasible alternatives that are proposed during the scoping process.

EIR PROCESS: Following the close of the NOP comment period, a draft EIR will be prepared that will consider all NOP comments. In accordance with State CEQA Guidelines Section 15105(a), the draft EIR will be released for public review and comment for the required 45-day review period. Following the close of the 45-day public review period, the City will prepare a final EIR, which will include responses to all substantive comments received on the draft EIR. The draft EIR and final EIR and will be considered by the Planning Commission and City Council in making the decision to certify the EIR and approve or deny the Proposed Project.

Kyle Perata, Principal Planner
City of Menlo Park

September 18, 2019
Date

ICF Graphics 00040.18 (4-1-2019)

Figure 1
Project Location
Willow Village Master Plan Project

CITY OF MENLO PARK

MEMORANDUM

Date: 11/18/2019
To: Planning Commission
From: Kyle Perata, Principal Planner
Re: Edits to transcript of October 7, 2019 environmental impact report scoping session for proposed Willow Village Master Plan project

At the November 4, 2019 Planning Commission meeting, the Commission voted 5-0-1, with Commissioner Kahle abstaining and Commissioner DeCardy absent to approve the transcript for the environmental impact report (EIR) scoping session public hearing for the proposed Willow Village Master Plan project, with edits suggested by Commissioner Riggs.

Following the meeting, Planning Division staff relayed Commissioner Riggs's edits to the contracted court reporter for review and inclusion into a revised transcript, if applicable (based on review and consistency with the audio recording). Upon further review of the transcript, staff determined that portions of the transcript needed clarification by the court reporter to ensure that the transcript accurately reflected the discussion at the meeting. Staff subsequently asked the court reporter to review the audio recording and update the transcript for consistency.

A number of small edits were made to the transcript for consistency with the discussion at the meeting. The following list identifies more detailed edits to the transcript that were made to improve accuracy:

1) On pages 45-47 of the transcript, public comments were reviewed and updated to more accurately capture the public commenter's verbal remarks on the scope and content of the EIR. The edits to the transcript were limited to clarifications for consistency between the transcript and the audio recording.
2) On pages 80-83, commissioner comments were reviewed and updated to accurately capture comments on the scope and content of the EIR. These edits were also limited to changes for consistency between the transcript and the audio recording.
3) Commissioner Riggs's suggested edits are included in the revised transcript when they are consistent with the audio recording.

Given the changes to the transcript after the Planning Commission's approval of the transcript on November 4, 2019, staff requests that the Planning Commission review and approve the changes to the updated transcript. The revised transcript is attached for the Commission's review and approval.

Attachments:

Attachment A: Updated transcript of October 7, 2019 Planning Commission meeting

CITY OF MENLO PARK

PLANNING COMMISSION

CERTIFIED TRANSCRIPT

In re)
Willow Village Project)
_____)

ENVIRONMENTAL IMPACT REPORT

SCOPING SESSION

REPORTER'S TRANSCRIPT OF PROCEEDINGS

MONDAY, OCTOBER 7, 2019

MENLO PARK CITY COUNCIL CHAMBERS

Reported by: MARK I. BRICKMAN, CSR, RPR
License No. 5527

ATTENDEES

THE PLANNING COMMISSION:

Andrew Barnes - Chairperson
Henry Riggs - Vice Chairperson
Camille Kennedy
Chris Decardy (Absent)
Michele Tate
Michael C. Doran

THE CITY STAFF:

Kyle Perata - Principal Planner

SUPPORT CONSULTANTS:

Kirsten Chapman, ICF Consultants
Erin Efner, ICF Consultants
Gary Black, Hexagon Transportation

PROJECT PRESENTERS:

Michael Ghielmetti
Eron Ashley

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BE IT REMEMBERED that, pursuant to Notice of the Meeting, and on October 7, 2019, 7:305 PM at the Menlo Park City Council Chambers, 701 Laurel Street, Menlo Park, California, before me, MARK I. BRICKMAN, CSR No. 5527, State of California, there commenced a Planning Commission meeting under the provisions of the City of Menlo Park.

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MEETING AGENDA

OCTOBER 7, 2019 7:05 PM

P R O C E E D I N G S

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COMMISSIONER BARNES: We have a public hearing and there are two -- we've got a public hearing. This is F1 and FG, and these are associated items within a single staff report.

What I will to do is I'll read one of these in both F1 and FG and I'll have the same lead in.

F1, Environmental Impact Report, EIR Scoping Session/Peninsula Innovation Partners/1350 to 1390 Willow Road, 925 to 1098 Hamilton and 1005-1275 Hamilton Court.

This is a request for an Environmental Review, Conditional Development Permit, Development Agreement, Below Market Rate (BMR) Housing Agreement, Zoning Map Amendment, General Plan Amendment, Heritage Tree Removal, Vesting Tentative Map, Fiscal Impact Analysis and an appraisal to identify the Community Amenity Value for a Master Plan to comprehensively redevelop an approximately 9 -- 59-acre site located at 1350-1390 Willow Road, 925-1098 Hamilton Avenue and 1005-1275 Hamilton Court.

The proposed project would demolish approximately one million square feet of existing office, industrial research and development (R&D) and warehousing campus. The project site will be redeveloped with

approximately 1,735 housing units (with a minimum fifteen percent affordable), up to 200,000 square feet of non-office/commercial retail uses (including a grocery store and pharmacy), approximately 1,750,000 square feet of offices, a hotel with approximately 200-250 rooms, an approximately 10,000 square foot community center, and approximately 9.8 acres of publicly accessible open space (including an approximately four acre public park).

The proposal includes the request for an increase in height, floor area ratio (FAR) and density under the bonus level development allowance in exchange for community amenities, as outlined in the General Plan and Zoning Ordinance.

The project site encompasses multiple parcels zones O-B (Office) and R-MU-B (Residential Mixed Use). The project site contains a toxic release -- contains a toxic release site, per Section 6596.2 of the California Government Code that would be remediated as part of the proposed project, in accordance and in compliance with the applicable requirements of the California Department of Toxic Substance Control, the State Water Resources Control Board and/or other responsible agencies.

So there you have it.

Commissioner -- excuse me. Mr. Perata.

MR. PERATA: Thank you. So I will give the

staff introduction to the project tonight and we'll follow up with a presentation of the applicant and then a presentation from the Environmental Impact Report consultant developing the EIR for the project.

So I just want to start from a staff perspective by giving an overview of the meeting purpose for tonight.

As mentioned, we have two items on the agenda for the Willow Village project. These are two public hearings. The first is an Environmental Impact Report Scoping Session, so this provides an opportunity for members of the public and members of the Planning Commission to provide input on the scope and content of topics on items that can be studied in the EIR.

Then following that, we'll have a Study Session tonight which will allow an opportunity for members of the public and the Commission as well as provide feedback on the project plans more generally, so not EIR focused for that, but rather more general design, uses, layout, more conceptual guidance or comments on the plans for the applicant team and the staff.

And then just by way of kind of background, the latest Study Session by the City Council for this project May 7th. And so no actions will be taken at tonight's hearing.

So I just want to start with a little bit of background which is highlighted in blue on the side slide.

It is generally located on the east side of Willow Road north of the San Francisco Public Utilities Commission right-of-way and Ivy Drive, then just south of the Dumbarton corridor, the Dumbarton corridor further north of that is Highway 84/Bayfront Expressway.

So the existing site, it's approximately 59 acres in size. It's commonly referred to as a Prologic Menlo Science and Technology Park. The site includes twenty buildings, approximately one million square feet of square footage within those buildings, and existing land uses at the project site include office, research and development and warehouse uses.

Facebook occupies a number of buildings on the project site and uses those buildings for a multitude of uses, including offices, employee amenities, research and development and a employee health center.

There's approximately 3,500 employees at the site currently and the site has two zoning districts, Office Bonus as well as Mixed Use Residential Bonus.

So I'll give a brief overview of the proposed project here and the applicant team can go into further detail.

As part of the project, the existing buildings onsite will be demolished. The proposed project is a Mixed Use Development. It would utilize the City's ordinance allowance for a Master Plan Development which will include a Conditional Development Permit and a Development Agreement as a part of the entitlements for the project.

Some of the main components to talk about briefly. The project includes housing, retail as well as a hotel and office.

As far as housing, there's approximately 1,735 units currently proposed. Retail, you have 200,000 square feet, and that does includes uses such as a grocery store and pharmacy as well as some other non-office commercial uses, restaurants, cafes, commercial services could be within that square footage.

The hotel right now is proposed for up to 250 rooms and the office campus is 1.75 million square feet, and that is a net increase of approximately 750,000 square feet above the existing commercial square footage at the site currently.

The site also includes public space throughout, the majority of which is an approximately four acre publicly accessible park at the southwestern corner of the site.

Adjacent to that site would be a community serving space within the adjacent building.

And so the recommended meeting format for tonight. As mentioned, we have two items, the EIR Scoping Session and Study Session.

For the EIR Scoping Session, staff recommends that the Commission, after staff's review and overview of the proposed project, listen to a presentation by the applicant, and then following that a presentation by the City's EIR consultant of the project.

It's recommended that the Commission hold general questions on the project for the EIR process more generally without -- not comment particularly, but more general clarifying questions.

So after all three presentations, but certainly if you have a question for the applicant or the EIR consultant or myself, we can take that after each presentation if necessary.

Following any clarifying questions, we want to open public comment, and then close that, Commissioner comments on the EIR scope and content, and then after closing the Scoping Session and Public Hearing, move on to the Study Session, item G1.

For that, there will be no presentations. Staff recommends moving all three presentations to this

time rather than having the applicant present it during the Study Session.

But it would be an opportunity for clarifying questions and we would take Public Comment and Commissioner comments on the project.

So that concludes my presentation. As I stated previously, I'd be happy to answer any general questions, and then I'll turn it over to the applicant team to make their presentation.

CHAIRPERSON BARNES: Any clarifying questions from the Commissioners?

Seeing none, and, too, for the purpose of clarity, just to give an overview one more time, we're going to have the consultant for the EIR give a presentation, and then -- then we'll bring it back to Public Comment and then bring it up here.

We'll do it again as it relates to the session on the project itself as we move to the EIR. In the middle of that will be Public Comment opportunity and then we'll bring it back up here.

So with that, let's call for the applicant. Good evening.

MR. GHIELMETTI: Hi. My name is Mike Ghielmetti. I'm the founder of Signature Development Group and we're partnering with Facebook on the project

before you. So thanks for having us tonight. We've been to a few of these before, so some of these may be repeats for members of the audience and some of you Commissioners have been to our study sessions, as well.

So again, I'm Mike Ghielmetti with Signature Development Group. We're a Bay Area-based private family-owned development organization; been building around the Bay Area for twenty years, and we take pride in building the right project for the community we're building in.

So a picture of the project we did in Oakland called The Hive with kind of a derelict district that was defunct and we brought it alive with a mixture of residential and retail, building hotels and office space around there and -- and we build from Novato to -- to San Jose, San Francisco to Oakland.

And the consistent theme there is not that it's a specific type of project, but it's hopefully the right product for the community in terms of scale and scope, architecture and the theme being connectivity.

Because we want residents to be connected to these neighborhoods that we're building, be they brown field or green field or something in between.

So we're excited to be here. We've been partnering with Facebook for about eighteen months now.

We're trying to envision what this project could be.

As you know, Facebook's been in the community for about seven or eight years now. I don't need to go into too much detail. They've been very generous with their time and public dollars and a number of topics here, economic opportunity, housing, mobility, community, sustainability and hopefully this project can carry forward some of those goals.

A little bit of background. This concept has been before you a couple of times. Initially Facebook brought forth the concept in 2017 to help try and envision what -- what could -- what could happen in this area, and there were a number of community workshops.

We met with hundreds of people during that timeframe and trying to get ideas from folks.

This wasn't a talking tour. It was really a listening tour to -- to Belle Haven and to the neighborhood surrounding it and broader Menlo Park.

What would you like to see here? What's important to you? What are some of the good things? What are some of the bad things? And how can we make this better?

From that process, a number of issues came forth that were things that the community had said hey, can you help solve some of these problems and/or can you

provide opportunities or amenities? Things like retail amenities, grocery store, pharmacy, things like parks and open space, bike trails, traffic solutions and general connectivity were very important.

Educational opportunities, housing and housing affordability came about. Mobility in a variety of ways, like I said, bike and pedestrian, public transportation, vehicular access.

And so we took all of those ideas and meshed them with some of the conditions at the site to help create something that we could build forth from there.

As staff indicated, the site is about plus/minus sixty acres. It's filled with a number of old buildings, about -- about a million square feet with capacity for about 3,500 folks working there.

The existing site conditions are ones that were built from yesteryear. Not what I would call resilient, not what I would call sustainable and it's not what I would call connected.

So there's a whole lot of folks working there that aren't going to be able to provide the broader benefit we think a future project can deliver to the -- to the neighborhood.

So from all of the workshops that we had with the community and stakeholder organizations, we started

to come up with some really broad brush Stokes, just kind of a back-of-the-napkin kind of first blush, and basically what it shows is that the project wanted to have ample public parks.

We thought moving them together we'd be able to create some parks and open space with better visibility and better use and wanted to have a lot of connectivity, both to the other Facebook campuses, but also to the community as large.

And it didn't want to be sequestered. It wanted to be an open community.

So the dotted lines in there kind of represent places where a campus and a community could kind of come together.

And so we've got office to, you know -- as I'm looking at it to the right in and residential to the left, but also ways for those to kind of blend together.

So this is the start of it and I'm going to introduce Eron Ashley from our land planner and Howard Layton to help explain how involved and I'll come back.

MR. ASHLEY: Thanks, Mike.

Good evening. My name is Eron Ashley. I'm a partner in Hart Howerton. We're planners, architects, interior designers based in San Francisco and New York and we tend to get involved in either exceedingly large

or exceedingly complex projects where the real focus is --

CHAIRPERSON BARNES: I'm sorry. Can you move the mic?

MR. ASHLEY: Sure. We tend to work in situations where the experience of living there working there, visiting there is, you know, of the utmost importance.

And so it's been really kind of fun for us to get to know Facebook, get to know the community, especially Belle Haven community, but Menlo Park as a whole and to understand how a project of this sort can really make more of a site.

Today it's really a cul-de-sac full of outdated offices.

The program forward Willow Village is very much what it was a year ago or two years ago when you first saw it. It's a mix of office, residential, retail and a hotel.

I think what's different here is we -- we've spent a lot of time listening onsite, and if you've ever sat at a light at Hamilton waiting for it to turn, all the Facebook bikes and all the people walking across Willow, you can really understand what connectivity means in this part of Menlo Park.

And so a lot of what we've been doing is how do you create a place that better interfaces with the community.

And so my pointer doesn't really work here, but one big change is to take the grocery store and some of the other communities, the retail, the hotel, and make them more a part of Willow Road in a way that makes it more accessible for Belle Haven, more accessible to the larger community.

Same for our open space. I think in a previous version, you might have seen open space winding itself through the community, and in this place -- in this case, we really thought about -- well, we're not sure what this open space wants to be yet, but let's consolidate it in a way that's very accessible to the community.

A big theme of Facebook as a place to work, it's connectivity. It's amazing to me that someone has a business that people will be inclined to get on a bike, to walk to meet one face-to-face as opposed to calling them on the phone or e-mail them, and yet that's such a significant part of the culture there.

And so we wanted to really embrace that in a way that made it easier to be a Facebook employee, but not in such a way that it would bother the community.

I think there's a blatant desire in this part

of Menlo Park to connect to things that certainly were from the bay, by the highway. So how do we connect better to the Bay Trail. How do we connect better to each other?

And so some of the key themes are what is this big red line that flashes through the plan? So this is a theme or -- or a -- it's principally a road, but a road dedicated more to people and bikes than it is to cars.

Thus creating a seam between the office campus, which tends to be on the right side, and mixed use of the plan which tends to be on the left side, and that theme connects to -- it's shown with that yellow circle which would be a grade separated crossing over the rail corridor that will start to link people from belle Haven and this Willow Village site to the bay.

We think that's just a huge opportunity that is seamless connectivity.

We're at a site today that's got one way in, one way out. Well, two if you're a UPS driver, I guess.

This needs to have as many ways in and ways out as it can. So we've created five meaningful connections for people, for bikes, for vehicles that capitalizes on the redundancy.

You know, mixed use place to work because people are coming and going at different times, and

connectivity means different things to different people.

So principally this is a place to walk. In green, there are all -- all the green lines are the pedestrian paths, and if you think about how few pedestrian paths exist on the site today, what a significant increase this is.

Dashed red lines are streets designed so that bikes have the right-of-way. Solid red lines are where bikes have a dedicated space to go from point A to point B.

The idea you could ride safely free of cars through that site and connect to the bay.

Obviously bikes are a big part of working at Facebook, and so in kind of solid areas are these bike parking lots and at the front door to every building.

The really -- the entire project team at Facebook loved the idea that this office campus functions like it's in a real town.

You walk out the front door, you use the real street to get places, and it's not all behind gates and walls.

On the two, on the east side of the property, there's two large parking structures for 3,000 cars total, but on the bottom portion is for the buses.

Obviously you're familiar with the Facebook

buses. The idea is that those buses are coming in and leaving in an efficient way, and we're designing for them, and this continues to allow Facebook to rely heavily on transit and not every -- every employee has a car.

At the heart of the project, we're calling it a town square, and it really is. It's a - it's a hub of activity and this gathering place where a grocery store, a pharmacy, restaurant, shopping all come together with the hotel and the front door of the office complex.

So if I'm a visitor to Facebook, I come to this very civic place. If I'm a neighbor who lives across the street and I want to come to this civic place, and it really is a -- you know, great public space at the heart of the project.

So here is the plan. On the left-hand side is Willow. You can see Hamilton Avenue labeled just below that. Above that would be the Chevron just above that, the Jack-in-the-Box.

And so this square which has a hotel on the top side of it, which is numbers 4 and 6, the office campus to the right, numbers 9, a grocery store number 2 and a pharmacy number 3 really is, you know, in a specific place.

You know, we don't much have as many of the

squares in the West Coast, but certainly if you spend any time on the East Coast, these squares are a great place to come together.

The yellow is meant to be kind of a plaza street. So the idea is that this whole place could be taken over for farmer's markets and festivals and really feel like the pedestrians have the right-of-way.

So if you were coming in from Willow Road, here's the grocery store on the right, here's the pharmacy in the distance as you come into the town square.

It's important for us as you arrive to this place, it felt like a real place. It didn't feel like an office campus masquerading as a place.

So the office campus is set back and really kind of community life is at the forefront.

I mentioned this bright red line which we call Main Street. It's between the office campus, which is on the right, and the residential mixed use area on the left. In the distance is the hotel or town square.

The idea is that the office campus would have retail and other active uses kind of laminated on the front of it.

So it behaves like it's a real active participant in the streetscape, in the public realm even

though it does have certain security requirements that it's going to maintain.

And so you've got this kind of great street-scape with this dedicated bike lane, all the stormwater treatment, the street and -- and very few cars.

I think one of the things we're trying to do is put cars that come here to work and shop into garages. And so the public realm becomes a place for people and bikes.

Inside the office campus, kind of borrowing on a lot of the things that have worked really well in the classic old Sun Microsystems campus on the other side of the highway, a place that within that kind of secure office environment that people can come together and socialize, a place that feels very California.

You know, buildings that are four and five stories, but also have lots of outdoor space. You know, the kind of place that can only be here in Menlo Park.

A big piece of what we're excited about is a big public park. I'm showing it here with no lines. And so it's four acres. That's the school on the right there. There's soccer fields behind. That's Willow Road in the foreground.

There's a modest parking lot, and I think we see a lot of value in that open space. We're really

looking to the community to help us figure out what that means.

We don't have the monopoly on good ideas on what should be built here, and a big point of public engagement over the coming months is to understand this.

So here we -- we just drew the lines. This was a college soccer field. So you can put two youth soccer fields across here or two baseball fields, how big it is.

So, you know, here's the campus that we're looking for the community to really share with us. We'd love to hear from you tonight, and then here's the detail of what we're attempting to do.

So with that, I'll turn it back to Mike.

MR. GHIELMETTI: So you heard from staff tonight. This is a Scoping Session. It is a Study Session. We're not here to answer. We're hear to share our initial thoughts about the project, talk to you about some of our goals and listen.

And then along with our -- the City's EIR consultants, study a number of alternatives and variants that meet with community desires.

We do start off with a number of -- of really important goals here, especially in this day and age around sustainability. The LEED goals, all electric, recycled water, no new emissions for gases, et cetera.

And so we've -- we set the bar pretty high compared to -- to the community development standards in the Bay Area, which are quite high, and we'll be studying these throughout the process.

Some other things I just wanted to touch on have to do with phasing. So what we're trying to do here -- and again, we'd love to take input from the community and you and continue to get input on the entire process, but we had to start somewhere. We had to put pen to paper.

We've got a three-phase project as shown here and what we've tried to do is combine elements of different aspects of this.

So, for instance, major community benefits and amenities up-front along with a certain amount of housing, both affordable and market rate and a certain amount of office.

Now, we recognize that these lines are going to move through the process again as we get input from everybody.

The blue area was shown as -- as our initial thoughts on phase one. What we've got are the parks as they may manifest themselves over time.

We have four building -- residential buildings here and a certain amount of office space with a certain

amount of parking and the transit hub.

We -- we do intend to exceed the minimum requirements for affordable housing. How that comes out again depends on community input. Your input to the Council, et cetera, all the various stakeholders, but we do intend to receive those standards. They elected you to go through to go through the environmental and feasibility standards.

The green phase here shown in phase two, again more of the housing and pharmacy, the town square, which is kind of scaled like the Sonoma town square, some office and the balance of the transit hub and parking.

The yellow area that's shown here is phase three which includes the bounds of the office space, the grocery store, the hotel, the visitor center and more residential.

We've already heard from folks in the community about wanting to accelerate the grocery store. So we've already started to look at that. Ways to do that either to accelerate the grocery store or put in some other grocery type use.

We certainly want the grocery store to be successful, as well, and so we're -- we're looking at that.

Part of this plan, too, is looking at, you

know, incorporating senior housing, you know, messing around with the phasing over time.

So this is not something that is, you know, a finished product. This is very early in the process and that's why we're here to get all of your input.

A little bit about the schedule. So in February of this year, we basically re-engaged -- as I said, Facebook had started with the concept plan in 2017 and through parts of '18 and they brought us on board in early '18 to help take that concept forward.

We -- we submitted a revised plan to the City in February and have continued to have open houses, you know, and a number of, as it said, one-on-one or large or small-sized group presentations around the City.

We tried to emphasize Belle Haven because it's the neighborhood most proximate.

In May, we had our Council Study Session. The EIR contract was approved in August, and the NOP, Notice of Preparation was posted in September and we're here before you now.

But we have, you know, a while ahead of us. We're -- we are -- we know there are issues out there. We've heard a lot about the traffic and congestion.

We think we have some solutions that can help that, but we know there are issues and we know we have to

be a part of those solutions.

So with that, we're available for any questions you may have and thank you for your time.

CHAIRPERSON BARNES: Thank you very much.

And at this time clarifying questions only if we have some. Your light's on, Commissioner Riggs.

COMMISSIONER RIGGS: So you're taking questions that would be for the study just or just EIR at this point?

CHAIRPERSON BARNES: You know, the fact is that it might be better to hold the project in general because we're going to do the project last, the EIR before that.

We're going to hear from the consultant prior to that. So if it's clarifying, feel free to ask it.

COMMISSIONER RIGGS: I'm happy to hold it.

CHAIRPERSON BARNES: Great. Thank you.

Commissioner Doran.

COMMISSIONER DORAN: Yeah. I'd just like to know on the residential units whether the intention is for those to be earmarked for Facebook employees or are they going to be available for rent, selling condos? What's the use of this?

MR. GHIELMETTI: Thank you for the question.

At this point, again, I think we're open to

listening. I think there are referred folks in the community talking about, you know, pros and cons either way, but they probably at this point are looking to be public.

Again, some folks have talked about a certain amount that maybe cuts down on traffic if some of are more geared towards Facebook employees, but I think they're -- they're up for grabs in terms of input from you and the community.

COMMISSIONER DORAN: Thank you.

CHAIRPERSON BARNES: Great. Seeing no other questions, we will progress to the EIR consultant.

MS. CHAPMAN: Good evening, Commissioners and members of the public. Thank you for coming to the Scoping Session for the Willow Village Master Plan Project EIR.

My name is Kirsten Chapman and I work for the environmental consulting firm ICF. We will be pre -- preparing the environmental review component for the project.

I'm a project manager. I -- with us tonight we have Erin Efner who's the project director from ICF and then we also Gary Black from Hexagon and they will be preparing the transportation component of the EIR.

So should you have any questions after the

presentation regarding the environmental review process, we can respond to them accordingly.

Let me move to what is shown here. So we'll cover the building process and the environmental review process. We won't get into a project overview because that is the job of the project applicant.

Just a quick introduction to our CEQA project team or California Environmental Quality Act project team.

We have the City of Menlo Park as the lead agency, meaning that they have the principal responsibility for carrying out the project.

ICF will be the lead EIR consultant and we will prepare all sections of the EIR with assistance from Hexagon for the transportation analysis.

We will also have Keyser Marston & Associates on our team and they will be preparing the housing needs assessment which we will then incorporate into the population and housing section of the EIR.

And then also Bay Area Economics will prepare the fiscal impact analysis which part of that will be incorporated into the public services section, but it will also be an interim document separate from the EIR.

So since the project involves discretionary actions by the City, it is subject to the California

Environmental Quality Act or CEQA, and according to CEQA, because this project may have significant effects on the environment, an EIR is being prepared.

The EIR is a tool for identifying physical impacts to the environment by analyzing the community conducted by our EIR team.

The EIR is also used to inform the public and decision-makers about a project and its potential variance prior to project approval, recommend ways to reduce impacts and also consider feasible alternatives to lessen the item by physical.

So what's shown here, the EIR will cover most of the environmental top -- topics required by CEQA. The EIR analysis will cover topics such as asthetics, air quality, transportation, noise.

Since the project site is going to be developed in an urbanized area of the City, we will not be doing a full analysis of agricultural or rural resources. They do not exist on the project site.

But each of these projects have several sub-issues associated with them. There's one purpose of this meeting tonight is to understand what the Planning Commission and the public think about specific issues under topics such as hydrology, for example.

So this slide shows the general step involved

in the CEQA process for the project. As most of you know, the NOP was released on October 18th and the NOP comment period will end on October 18th.

Following close of the scoping period, we will begin preparing the EIR. When the Draft EIR is released for public review, a Public Hearing will be held to solicit comments on the adequacy of the Draft EIR.

A Final EIR will then be prepared and will address all the comments received during the Draft EIR review period and make any required changes that are necessary to the Draft EIR.

And then the third hearing for the Final EIR will be held before the Planning Commission and City Council.

After the EIR is certified, the project can then be approved, and following approval of the project, Notice of Determination will be issued.

So the purpose of tonight's scoping phase is to guarantee public input, early investigation of possible mitigation measures to reduce the impact and also to consider possible project alternative.

I want you to know that the attempt of the scoping period is not focused on the project itself or its merits, but instead the comments should be focused on the environmental impact of the project.

The next step includes collecting data on existing conditions from which we will evaluate the impacts of the project. We will also begin a preliminary review of the project for potential effects, and as we prepare the EIR, we will consider all public comments received during the scoping period either tonight, received orally or via comment letter.

You can submit comments on the scope of the EIR to Kyle Perata, Principal Planner with the City. You can also speak tonight and we will note your comments and consider them during the preparation of the Draft EIR. As shown here, the comments must be received by October 18th.

So thank you again for coming tonight and we look forward to receiving your comments.

CHAIRPERSON BARNES: Thank you.

Commissioner questions as it relates to the EIR?

Seeing no Commissioner questions as it relates to the EIR, I will move to open Public Comment on --

MR. PERATA: Through the chair, can I just chime in before you open public comment?

CHAIRPERSON BARNES: Yes.

MR. PERATA: I just want to make one additional staff clarification or update for the project.

In my opening remarks, I didn't mention that we received four items of correspondence since the staff report. Those were provided via e-mail to the Planning Commission throughout the last few days, and hard copies were available, also in the back of the room.

Members of the public who are interested in hearing additional comments that are not in the staff report due to time permitting after publication of it. I just wanted to get that update prior to opening Public Comment.

CHAIRPERSON BARNES: Great. Thank you.

And I will proceed to open Public Comment, and then after that, will be another opportunity for Commissioners to provide comments at that time, as well.

And I have a number of cards. Some of them double up on the EIR portion of this meeting and on the project portion of tonight's meeting.

I'm going to start with a Ms. Patti Fry going first followed by Pamela Jones.

Good evening. Good evening. Please state your name, jurisdiction.

MS. FRY: Patti Fry, Menlo Park. I wanted to make -- make some suggestions regarding the EIR evaluation. One is that since this is the largest project Menlo Park has had it is planned to occur in

phases, that the EIR evaluate each phase separately so that the mitigations for impacts for each phase could be implemented since the implementation of the entire project may take time.

We would not like to see these mitigation measures end up being at the very end of the project, but rather as they occur.

So that's one suggestion.

Another is as an alternate that the reduced intensity alternate be focused on less office as opposed to less retail or housing.

Those two uses are uses that are very important to the community, and office I know is very important to Facebook, but if there were a less intense project, it should be solely less office, in my opinion.

In terms of metrics, we often see EIRs based on ABAG projections. Since Menlo Park just went through a ConnectMenlo General Plan update process, I suggest that that be used for the growth assumptions that comparisons are made regarding population, jobs and housing, et cetera rather than ABAG.

And in terms of transportation and traffic, I know that CEQA likes to look at VMT, vehicle miles traveled solely, but our town, especially in that part of it, is congested incredibly, gridlocked a lot of the

time.

I would suggest that some of our traditional tools also be used also to help inform decisions, and that will be things like local level of service at intersections and roadway segments.

The jobs/housing imbalance in Menlo Park and our region is very, very acute and causing a lot of the problems with traffic and displacement of very important people to our community, so I urge the -- that be looked at in terms of its impact and ways to help our overall community do better at that.

So I thank you.

CHAIRPERSON BARNES: Thank you very much.

Followed by Patti Fry who is in turn -- excuse me. That was Patti Fry. Excuse me. Pamela Jones followed by Ms. Crystal Leach.

MS. JONES: Good evening.

A couple things for this aspect that I would like to see included in the NOP. One is notification. I'd like to see us use the TIERS public engagement process.

The local newspaper, there is none, so for people to find out about the sequencing here is going to be virtually possible. My letter includes some detail.

High level Dumbarton corridor project,

including the train stop, must be a part of this Environmental Impact Report along with a list of any projects that are somewhere in the pipeline, one almost to be completed with the -- with comment on specific discussion items, mixed of land use and Master Plan development.

I think it's critical that all of the team review the CCI meeting -- the City Council meeting, CCI and community role and input to better understand the sentiments of the residents at this time when it comes to development.

I know it can't be a part of the EIR, but it helps to have everything framed.

I also -- under the land use, I would like to see the bar significantly reduced for office and an increase in housing, significance in housing.

The reality is we have an additional 6,000 employees over in that area which means there will be 9,000.

Currently there's about 18,000 -- somewhere between 16 and 18,000 Facebook employees and we've only built 738 units.

So we would further exacerbate the jobs/housing imbalance if we move forward with this configuration. So I would like for the NOP to consider those two areas.

I do want to see increase in BMR, for sale housing and for sale condos. We know that communities are stronger when people buy their property.

All residential and commercial areas should be completed prior to any office regardless of what the configuration is.

On the proposed circulation, the traffic studies must include cross traffic between University Avenue, O'Brien avenue and Willow Road in addition to the usual cut-through traffic, and I would also like for them to look at having a direct access from where the office buildings would be to Bayfront so there would be no need for any of the office people during Monday through Friday to have to access Willow Road or University Avenue for that matter.

In the rest of the impact from Pacific from Bohannon building, hotel, shuttles, private vehicles.

CHAIRPERSON BARNES: Thirty seconds.

MS. JONES: Uber, Lyft and limousine. Air quality, we must do local air quality monitoring. The closest monitor in Redwood City. That definitely doesn't address the area where this impact is.

Thank you.

CHAIRPERSON BARNES: Thank you.

Crystal Leach followed by Mr. Matthew Zito.

MS. LEACH: Good evening. My name is Crystal Leach and I am the superintendent at Sequoia Union High School District.

The district does not oppose development within the district boundaries and appreciates the importance of housing.

Rather, the district is solely concerned with ensuring the safety of district families and staff and the viability of the district's educational program.

The district is concerned that the project as presented will have a vast number of significant impacts on the district, including impacts related to transportation, traffic, circulation, safety, noise, population and student housing.

Are we counting the underclass? Often our middle class, especially in the Bay Area, is now our underclass, and realistically we have families living in studios and in one bedroom housing.

So I ask: Why are we excited to build communities without children? Thank you.

CHAIRPERSON BARNES: Thank you.

Matthew Zito followed but Luis Guzman.

MR. ZITO: Good evening, Commissioners. Thanks for the opportunity to speak. I'm Matthew Zito. I'm the chief facility officer for the Sequoia Union High

School District and the Pueblo Village sits squarely within and near this project.

Menlo-Atherton currently has 2,500 students and is the largest high school in the county, and the scope and content of the EIR as it's being scoped out.

So this project has potential to have profound and lasting impacts on the district, its facilities, our students and staff, and Menlo-Atherton in particular is the high school, the public high school for the entire City of Menlo Park. There are 1,200 students from Menlo at M-A currently.

And it has this impact particularly on this entire project as proposed. You have recently been proposed or approved in the Bayfront area of Menlo Park as well as some of the condominium development, Stanford development on El Camino Real.

So the district hopes to work with the City and the developer to ensure that these impacts are fully and adequately mitigated.

As I mentioned, the district operates two schools within the attendance area, Menlo-Atherton, which is a traditional public high school, plus the two miles from the project site, and we also have a new small high school that's essentially, Bohannon Industrial Park, but it's in the former M-2 area at Jefferson near Chrysler.

So just opened this year. Has a capacity for 400 students, and it costs 56 million dollars.

Imagine the cost of development in the Bay Area, it's astronomical and the cost of school development is particularly challenging for us.

So we bought two acres for 9.6 million dollars. Two acres which are probably now worth eighteen million dollars. To secure land and build facilities is staggering.

We are also a mile and a half from the proposed project and we have many, many students that are in East Palo Alto, and in that area, I know it's not really east, but the El Camino kind of north and south that is behind this development, and the bus that actually takes many students from East Palo Alto to Menlo-Atherton is Q96 currently has an average speed of 5 miles an hour.

And so the traffic impacts in this area are particularly troubling to us. It does look like a very substantial transit center's being developed is what looks like hundreds of buses in and out, I think an additional 3,000 parking spaces and other ancillary traffic, so we're concerned about our students actually being able to move from their location, particularly in East Palo Alto and actually being able to get safely in time and safely to Menlo-Atherton.

So while the miles might seem quickly, might seem a small distance, it's quite a bit of time to travel..

So we have challenges to what the statutory fees are for all intents a pittance. They cover almost none of the construction costs, maybe five to eight percent of the building facilities.

We're concerned about the traffic caused by the project. This will discourage alternative means of traffic and we really would ask that the EIR analyze the existing and anticipated student movement pattern, bus routes to all these two schools, looking at vehicular movement and potential conflict, and this is a key part.

Potential conflicts with school pedestrian movement with all the additional cars and buses and our most precious commodity are teenagers that are moving to the two schools.

So the safety issue is first and foremost --

CHAIRPERSON BARNES: Time is expired.

MR. ZITO: -- our concern.

We have other issues that we will outline, noise and air quality concerns, but again, mitigation is just key and the ability to have our students actually be able to.

CHAIRPERSON BARNES: I'm sorry. Your time is

expired.

MR. ZITO: Thank you. Appreciate it.

CHAIRPERSON BARNES: Thank you.

With that, I have no other additional cards for the EIR. If anyone -- I do have some more. So for clarification, this is the EIR public comment period. We will be doubling back for another. That relates to the project itself, and -- so I have -- I have two here. They're both for -- these look like EIR.

Is that your understanding for the EIR?

MR. PERATA: Correct. The one should be an EIR comment card. I also another here. So I'm trying to bring them up.

CHAIRPERSON BARNES: Is it your understanding Mr. Bookman is EIR, as well?

MR. PERATA: That one appears to not be EIR. What I might recommend that the chair does is there's a number of comments that are for the project which might be on the Study Session, but it may be possible that people may want to speak now instead of wading through the Commission deliberation.

So I would recommend giving the public opportunity if they have submitted a card more for a Study Session topic, commenting now in respect.

It might be a good idea to give an opportunity

to speak on this item prior to the Study Session. The preference would be continue, separately from the EIR comments for the purposes of the record.

CHAIRPERSON BARNES: I have no problem with that.

So for clarification, what I will be doing is we just finished the EIR Public Comment and we'll move right into Public Comment as it relates to the project itself, and I see Ms. Levin coming forward.

It sounds as though she -- so with that in mind, I'm happy to call Ms. Levin.

MS. LEVIN: I'm --

CHAIRPERSON BARNES: Thank you. I had called prior to that for Mr. Guzman. The gentleman who's waiting in front.

Thank you very much. Sorry for the delay.

MR. GUZMAN: Good evening. Luis Guzman, a East Palo Alto resident. Dear Commissioners, we will benefit from the new village Facebook campus and we are excited about the opportunity to have the access to new retail services and recreational amenities on the east side of 101.

However, East Palo Alto residents will also be highly impacted to the increase of Facebook traffic and parking issues.

Therefore, the revised East Palo Alto city trip must be included in the evaluation as part of the EIR and some of the impact projects, the City of East Palo Alto for safety and traffic mitigation measures.

Residents would like to have as much local amenities as many community parks, because we -- we do not have access to public open space at the present in the East Palo Alto area.

Therefore, we would like to have the O'Brien Park much bigger than the current plan site.

The park shall include the complete re-development of Hetch Hetchy right-of-way to connect to the parks with additional park lands.

We would like the current developer of this project to work with relevant parties such as the City in that SF-PUC to increase park, playgrounds, actual on the Hetch Hetchy sight to secure children, toddlers areas and, football, soccer courts to serve future employees and local residents.

Additional pedestrian parks to connect O'Brien and Willow Village shall also be with other nearby landlords.

For example, utilizing the current drainage channel between 1075 and 1105 O'Brien Drive and the previous connection between the Hamilton Court and 960

and 1350 Hamilton.

In connection with the project and in order to limit traffic, the Willow-O'Brien area should be redeveloped with pedestrian/bicycle traffic in mind.

Such a time was which at the present are mostly non-existent should be constructed, from Capital Way in Menlo Park.

Better lighting shall should be installed and bicycle lanes should be also developed on the O'Brien drive.

Although we are very excited about this new mixed use project with public access needed, nearby residents are looking forward for their developers to improve their areas.

We are also looking forward for the City of Menlo Park and the Planning Commission to encouraging more of such live/work play development in the near future that we will transform the O'Brien Business Park into a more lively community district integrating in the surrounding city neighborhoods.

Thank you.

CHAIRPERSON BARNES: Thank you. Thank you for your patience. Appreciate it.

Next up is Ms. Adina Levin followed by Mr. Colin Bookman.

Good evening.

MS. LEVIN: Good evening. Planning Commissioners. I'm Adina Levin. I serve on Complete Street Commission and was on the Menlo Park General Plan Advisory Committee. I'm speaking for myself. So having served on General Plan Committee, it's exciting to see mixed use proposed moving forward including much needed housing, multiple income levels and needed services.

On the project alternatives for the EIR, because there's a window for opportunity to be studied, the EIR studies a lower office alternative that would rebuild the current office and then use the remaining space for a higher housing alternative with up to 3,000 units for us, for BMR and at the same time office.

The areas seeing tremendous job growth, Facebook is driving displacement of Belle Haven and nearby communities.

These alternatives in the EIR should consider reporting on vehicle miles traveled and the consequences on less office and more housing.

Also the transportation, since there is ongoing study of Dumbarton rail that Facebook is working on, please do include a report of impacts of the vehicle miles traveled when Dumbarton rail is coming forward using that study that is currently in progress.

I know that's a little bit unusual because it's usually only something that is done, but that analysis could be highly relevant.

Let me see. With regard to phasing, phasing has accelerated housing, which is very welcome. I'm glad to hear that the grocery may be accelerated.

In terms of energy, please remove the offset and credit options. That is no longer eligible under the PUC code policy, and this is a big enough development. It should be able to accommodate that without those workarounds.

In terms of the safety of this EIR, pedestrian overcrossing. It seems counterintuitive. A pedestrian overcrossing of arterials.

The latest best practices suggest that that could reduce safety because people will still cross, drivers will expect them less and it might be even less safe, so please do look at the latest and best practices for the safety.

In terms of the housing needs assessment, I'm glad to see that that is being done and we want to see this project and the City as a whole to get total impacts of the housing needs thing invoked by the additional office, and on the housing, please do use the Density Bonus Development Agreement for a higher share of below

market rate housing of twenty-five percent would be a good level, including in a mix of subsidy levels with very low and, you know, a mix of income levels with senior housing also sounds like it would be welcome.

And I think those are the comments that I had had. So thank you very much for your consideration on this important project.

CHAIRPERSON BARNES: Thank you.

Mr. Colin Bookman followed by Mr. John Kadvany.

MR. BOOKMAN: So I'm Colin Bookman.

CHAIRPERSON BARNES: Good evening.

MR. BOOKMAN: Thank you. First off, thank you for your time today.

CHAIRPERSON BARNES: Could you please state your political jurisdiction?

MR. BOOKMAN: I live in East Palo Alto.

CHAIRPERSON BARNES: Thank you.

MR. BOOKMAN: One mile away from this new development.

CHAIRPERSON BARNES: Thank you.

MR. BOOKMAN: My only comment why not build more? Why not build higher? Why not more below market unit rental units?

Doubling or tripling the height of these buildings would afford the greater density, to justify

more public transit, more investment.

As that area builds up, so builds the surrounding areas, and I think by extending the height limits, it would benefit the surrounding communities and would enable a lot of the concerns to be addressed.

You get more BMR, you triple the housing density, all that could be used for housing. You triple that, right, hey, we need more public transit, all of those people are paying tax revenue.

Not all of them are commuting very far. Many of them will be working at Facebook and will benefit the surrounding areas.

That's all.

CHAIRPERSON BARNES: Thank you.

Mr. Kadvany followed by Pat Sausedo.

MR. KADVANY: Good evening, Commissioners. I'm John Kadvany, several decades resident of Menlo -- Menlo Park.

I think this project as it comes forward and assuming it gets past some considerable hurdles, it's going to involve significant negotiation for additional public benefit going well beyond the boundaries of Willow Village that has been presented to us today.

Within the village, the housing looks great. Its environment looks great. We need to say 1,700 units,

but in terms of the environmental numbers, the housing and the office, office increase is probably going to offset each other, especially with transportation changes.

But I think -- I think within the boundaries of the project, Facebook can probably come in with a pretty good -- a pretty good case, but I don't think that's going to be enough.

We're -- it's not like this is an isolated project. Menlo Park is at a significant crossroads like the rest of Silicon Valley in terms of our infras -- infrastructure and our quality of life.

Facebook is proceeding in advance with good ideas to mitigate that with -- such as their Dumbarton Rail and Bridge Study, and if that's successful, that can be a part of our future negotiations, but that's not going to be nearly enough.

We need a whole lot more as indicated by Mr. -- Mr. Zito and by Adina Levin, that we have to think in terms of what's really going to be involved here in terms of public benefit. Then it's going to go well beyond the borders of this project.

So in terms of the EIR, I suggest -- the EIR can't be everything, but it can start looking at what goes beyond.

For example, the discussed transit corridor down the rail line from East Palo Alto to Redwood -- to Redwood City, that would be a big jump.

Facebook may be working with Google and other South -- South Bay tech firms can talk about keeping that going down into the South Bay.

As Mr. Zito said, we're going to have significant impacts on the educational system. Maybe we need to look inside the circle of the campus for an ed -- for an educational facility because land is so expensive.

So to the extent -- and as Adina said, also, let's look at how the housing can be expanded different from the parameters that are given here and maybe even looking at changing the zone -- the zoning in the office area, which doesn't allow any -- any housing at all.

So do that somehow so that the public is ready with the knowledge base to intelligently discuss these issues when they come up in the areas of transit, housing, including affordability and education.

Thank you.

CHAIRPERSON BARNES: Thank you. Good evening.

MS. SAUSEDO: Good evening, Commissioners. I'm Pat Sausedo with BIA Bay Area. BIA Bay Area is very encouraged by the Willow Village project before you this evening.

Willow Village embraces today's urban village concept enabling City residents to work, reside, shop, socialize and generally live a full rewarding life within their local community with minimal dependence on the automobile to fulfill their daily needs.

The village project will enable the City to maintain -- maintain stable economic growth while significantly increasing its housing supply utilizing smart land use and building design standards to minimize environmental impacts.

In response to prior feedback, the applicants have rev -- revised their proposed project to develop at this point over 1,700 residential units and are analyzing single occupancy to family size three-bedroom residential units.

The project's increase for multi-family housing will help balance the proposed office and retail development while reducing vehicle miles traveled by giving employees the opportunity to walk and bike between their homes, their jobs and shopping.

Recognizing the significant issues of housing affordability, over twenty -- over 260 residential units at this point will be committed to affordability standards as determined by the City.

Additionally through the project's town square,

public parks, designated community buildings, it will allow neighbor-to-neighbor socializing and community engagement opportunity that will be fully supported by the project's community benefits infrastructure.

Willow Village's core components embrace smart development. Housing, jobs, retail services all in one location.

BIA believes that this project as it continues through the process has great core components and the applicants want to work with you, work with the community to make it all that it can be.

BIA thanks you for this opportunity to share our thoughts at this point in time and we look forward to continuing the dialogue as this project moves through the processes in the City of Menlo Park.

Thank you again. Good evening.

CHAIRPERSON BARNES: Thank you.

COMMISSIONER RIGGS: Ma'am, could I just ask for those present if you would tell us. BIA stands for what?

MS. SAUSEDO: Building Industry Association for the Bay Area.

COMMISSIONER RIGGS: Thank you.

MS. SAUSEDO: You're welcome.

CHAIRPERSON BARNES: Thank you.

MR. PERATA: Through the chair?

CHAIRPERSON BARNES: Yes, sir.

MR. PERATA: May I just jump in and clarify the process? At the point that we're at, I just had an additional item labeled F1 for this topic area to dias.

It sounds like we're starting to get into comments that were probably identified as G1 Study Session, and so I think it would probably be appropriate for the Planning Commission through the chair to check and see if there's any other items with F1 if the rest are study items, actually close Public Comment, but prior to closing Public Comment on the EIR scoping session, call for any other items or anyone who has submitted a card so far and would like to make their comments or have comments on the EIR content and scope, make those comments now rather than waiting for the Study Session.

CHAIRPERSON BARNES: So I've got maybe five F1 cards.

MR. PERATA: Okay.

CHAIRPERSON BARNES: And the intent is to work through the F1. That's my intent.

So with that, Sergio Ramirez-Herrera followed by Lushorn Lee.

And good evening. Please state your -- you have three minutes. Please state your name, organization

and political jurisdiction.

MR. RAMIREZ-HERRERA: Good evening, Chair and Commissioners. Thank you for allowing me to speak. My name is Sergio Ramirez-Herrera and I am a member of Carpenters Local 217 and a long resident of Menlo Park.

I'm here to speak in favor of the Willow Village project for the benefit it brings to the surrounding community through housing and job creation.

This development will allow my carpenters like me to continue living in Menlo Park, and will provide me with the nec -- necessary benefits and income to provide for myself and my family.

And I am in full support of the Willow Village project. I encourage you to consider the positive benefits of this community center. Responsible development brings to Menlo Park by making certain it is appealing.

All right. Thank you so much.

CHAIRPERSON BARNES: Thank you.

Next is Lushorn Lee followed by Elizabeth Jackson.

Good evening, you have three minutes, please state your name and your organizes.

MS. JACKSON: Good evening. My name is Elizabeth Jackson and I am currently live in East Palo

Alto, but for many years, I lived in eastern Menlo Park, and I feel that these two areas, they're the same community.

So whatever you do, it's going to affect both of them because people who live in both areas share in the community.

So I thank you for having the meeting tonight and I wanted to attend to express my support for your Willow Village and for the affordable housing project, and also the traffic improvements that you plan on working on, and that will certainly benefit both areas.

This Willow Village, I think it will deliver good benefits and it will allow Facebook to continue to remain in Menlo Park and to provide jobs for the surrounding areas.

And I'm a carpenter and we look forward to working with Facebook and the development because we know that they understand skilled labor and quality work and that's what we intend to offer.

And as a carpenter, I -- on this project, I feel that I could help build and improve this project because we're well trained. So I urge you to support Willow Village.

Thank you very much for letting me -- allowing me to make comments.

CHAIRPERSON BARNES: Thank you.

So the last two cards I have for G1 is Jose Contreras followed lastly by James Kendle.

Good evening. You have three minutes.

MR. CONTRERAS: Good evening.

CHAIRPERSON BARNES: Excuse me. Your organization represented, if any?

MR. CONTRERAS: Good evening, Commissioner. My name is Jose Contreras. I'm a resident of Menlo Park, Belle Haven for the past forty years.

CHAIRPERSON BARNES: Would you pull the mic up a little bit?

MR. CONTRERAS: I'm a resident of Menlo Park and Belle Haven for the past forty years. I'm here tonight to support the Willow Village.

Willow Village will bring new retail and housing to the Belle Haven community, but will also create jobs and pay fair wages.

As a carpenter, I look forward to working in the community where I live and close to home and to support my family.

I've lived in Menlo Park for the past forty years. I would encourage you to move the project as far as possible and approve it.

Thank you.

CHAIRPERSON BARNES: Thank you.

And lastly Mr. James Kendall.

MR. KENDALL: Good evening, Chair and Commissioners and staff. My name is James Kendall. I'm a representative from Carpenter's Local 217 for San Mateo County. I'm speaking on behalf of approximately 39,000 carpenter men and women across Northern California, including Menlo Park residents, and some of them are with me here tonight.

We are here in full support of the Willow Village project signature development, and responsible contractors will work on this project. This company has a growing history that respects the workers.

Carpenters will earn a fair wage with medical and retirement benefits that will allow workers a chance to live in the community they work in.

It also means those wages will be invested back into the community as they spend their earnings and tax dollars into the local school and government.

This comes with commitment to apprenticeship programs which guarantee that you will continue to have trained, skilled and experienced workforce and be able to complete high quality projects in a safe and timely manner.

Opportunities not just for jobs on this

project, but a career path for many men and women apprentices, hard hat program for returning veterans.

Community members look forward to more than their income. They're excited to have a chance to revitalize their own community at the same time as increasing the housing stock so badly needed by this region.

The carpenters are in full support of this project to expedite Willow Village the benefits bring to the community as well as housing and union job creation.

Thank you for your time.

CHAIRPERSON BARNES: Thank you.

So with that, having no other cards specific to F1 and G1, seeing no one coming forward, I will close Public Comment.

There's another public for public after this which we will get to later.

And I'm going to bring it back up to the dais, my fellow Commissioners for comments related to the EIR Scoping Session.

Comments at this time. Commissioner Doran.

COMMISSIONER DORAN: Through the Chair, I'd like to ask the people on the EIR about this mention of a toxic site, toxic release site on the building site.

Could you just give us a little bit more

information about what that toxic site is, what the toxins are? If you have any preliminary things to say.

MS. CHAPMAN: No. We actually do not have any information on that at this time. A Phase I environmental site has been prepared by the project applicant, and as part of our environmental review, we will be reviewing that and incorporating that into the EIR.

But at this time it has not been reviewed yet. But it will definitely be.

CHAIRPERSON BARNES: Good. Commissioner Riggs.

COMMISSIONER RIGGS: Yes. Thank you, Chair Barnes.

I have -- I have a few comments to make. First I did want to acknowledge more than half a dozen comments tonight that addressed the EIR.

For the most part, they seem to deal with the potential alternate projects. So our first speaker suggested that there be a project that holds the existing million square feet of office and that the new construction or new square footage consisting of housing and non-commercial retail spaces.

There was also the comment that in review of transportation and traffic, VMT alone ignores local

conditions.

That can be local gridlock. That can be neighborhood lockdowns. That can be diversion of traffic through Wayz to go through neighborhoods.

We'll note the suggestion to add back levels of service for related intersections, and per my comments from several months ago, I would also add that neighborhoods that are adjacent to these arterials that are so impacted but are not listed as -- were not normally listed as candidates for study under LOS, that these should be included also because in fact if traffic does divert.

And then there was the overall comment about the jobs to housing balance. I believe that that refers to in the case of this immediate area, the Facebook campuses, that the last two projects of half a million square feet each actually did not include any housing.

They were entirely negative to the jobs/housing balance, and I would note that it's self-evident what the transportation situation is and we haven't even occupied the buildings that are currently under construction.

The next speaker made a similar suggestion regarding the balance to note they have an alternative noticeably reducing office and boosting housing. With the emphasis on the fact that this proposal will make the

situation worse.

There was a comment from the school district that the EIR should include a study of student traffic, and I realize that VMT would include likely vehicles, but the new school does not have a history and would not have been measured to date, and I don't know that it would come up with full numbers if it were measured here in October or in the next few months compared with 2020 or 2021.

We might want to look ahead to that, including Mr. Zito's comments about pedestrian access.

But I will note in response to an earlier comment that we don't -- Facebook or I should say Signature Development is not proposing pedestrian overcrossing at Willow, but an undercrossing as I understand it, which is much more inviting to people in a hurry than having to climb -- rather than having to climb fifteen feet when there is only ten to cross.

Another comment to reduce office square footage to the existing one million square feet and put the increased development and housing.

There was a comment that to the degree that this conforms to the ConnectMenlo guidelines -- and I'll note since this is looking to a development agreement that doesn't actually necessarily attempt to do so, that

particular effort perhaps outside of the zoning, which would indeed be a public benefit discussion, that a lead item would be activating the rail which already exists and is in occasional use for Caltrain when it opens between Facebook and Redwood City junction.

In other words, the infrastructure is sitting there, and that essential transportation link could indeed be an impact on overall traffic.

And I would have more comment on that later.

And also the suggestion that I assume is for the City Council that potentially ConnectMenlo should be reconsidered in that the OB, office and bonus area does not currently allow housing.

I think that reflects the fact that the RM, the mixed use residential on the other hand does allow office which perhaps was not what everyone anticipated.

And then there was an interesting comment from one of our neighbors outside of Menlo Park that this person looks forward to this project and its potential traffic improvements, resulting improvement in current traffic conditions, and for that, I have a couple of questions for the transportation consultant through the chair.

CHAIRPERSON BARNES: Yes, please.

COMMISSIONER RIGGS: So is that Mr. Black?

MR. BLACK: Yes. Gary Black with Hexagon Transportation Consultants. Good evening.

COMMISSIONER RIGGS: Good evening.

I guess the key question is through the team, you would have an idea at perhaps the proposed additional 750,000 square feet about how many new employees that would indicate or as we have in recent meetings, assuming fifty percent diversion from a single car occupancy, how many additional drivers were likely to be associated with another 750,000 square feet of office?

MR. BLACK: Yes. Unfortunately I'm not prepared to answer that question tonight because that's part of the study that will be done, and it's anticipated that that office would be occupied by Face -- Facebook.

And so we are scoped to engage with a study of Facebook of their existing campus and their existing number of employees and their mode of getting to work versus bus versus drivable car, et cetera and to apply those same numbers to the projected occupancy of the office on this site.

But we haven't done that study yet, so we're not prepared to provide that information tonight.

COMMISSIONER RIGGS: All right. Thank you.

And Kyle, I'll turn to you. For building 21 we knew roughly how many employees resulted from 500,000

square feet, 490 or whatever it was, and again the latest information that I recall is somewhere around fifty percent diversion from single occupancy cars, and I guess perhaps that doesn't exactly count the additional buses and Lyft drivers and so forth.

But just looking at the single car, do we have a rough idea -- well, for example, for the 500,000 square feet, do we know? Was that an additional 4,000 employees, for example?

MR. PERATA: Sure. So I don't have off the top of my head the breakdown for building 21 and 22, but I can tell you the total.

It was approximately 962,000 square feet and the employment was 6,400 to be anticipated employment based on Facebook's utilization of square footage within the offices.

COMMISSIONER RIGGS: All right. So doing a very rough shot at this, we could anticipate, assuming some similarities, another 5,000 vehicles using seventy-five percent of 100,000 square feet for 750 versus 940 or whatever the number was. That can be improved.

MR. PERATA: I'm not prepared to answer how many vehicles here and the building would equate in terms of number of employees per vehicle at the time.

COMMISSIONER RIGGS: That's all right. I'm willing to do that because I have a history of three building approvals.

So if we're talking about -- for the moment, until we get Mr. Black's actual analysis, we're talking an additional 5,000 vehicles for an office portion alone for this project, not counting vehicles associated with close to 2,000 residents, residences.

So maybe 3,000 additional humans of which a percentage will either work in another location or will come as tech workers do to in the future work in a another location or have a spouse that works in another location.

So just for perspective, I wanted to note that this project will not on the surface of it reduce traffic.

So I'll jump ahead and -- and make a couple of suggestions for the EIR alternatives. I think we're reflecting the comments tonight and e-mails to the Planning Commission and I'll confess that I have not in the last six or eight days looked at CCIN for e-mails to the City Council, that an alternative -- one alternative might be to indeed hold the existing office space at the existing one million square feet.

Of course that existing is actually R&D space

and is a lower intensity than full-on office space. But it's a handy target.

And then again I would support adding LOS measurements to the VMT -- I'm sorry. For those who don't speak the lingo, vehicle miles traveled is the latest and most hip way of measuring traffic flow because in theory, it measures how much time -- it's actually mileage, automobile engines are running and therefore how much pollution they're causing.

But it does not serve well to measure how much time a resident is stuck in traffic, including a bus or a fire truck.

Whereas LOS, which is levels of service says at this intersection, that we're going to be stuck there for three traffic lights or from this block to the next block, it will take you seventeen minutes to go one block, and we do that in some situations in Menlo Park.

And then I think the alternative reflects the note that I had made which was that there should be a real residential component.

I think in terms of traffic there should be an alternative project which has no increase in traffic associated with it, at the peak hour and through the day, because many people know, our morning commutes ends at around 11:30 am and our evening commute begins somewhere

around 2:45 or 3:00. I think earlier in that area.

And then maybe just a -- an overall comment that this project which -- I should stop for a moment and say I am impressed with this project.

I like a lot about it. I do have some experience in the last thirty years with town planning, and I think this is something very much to look forward to, including a certain level of curiosity on my part just how well it will work trying to be a center of residential and social activity.

But this is not what is referred to I believe in the project description as an urban area served by transit. It simply is not.

The fact that there are shuttle buses and Lyft drivers available two to three miles away from the train station does not make the area served by transit.

So in and of itself, it lacks transportation, but I believe there are significant transportation opportunities, and as one speaker noted, perhaps one of those should be linked to this project when we move from environmental into scoping.

So those are my comments this evening.

CHAIRPERSON BARNES: Thank you.

A couple questions for our consultants. Before I start, thank you to everyone that made public comment

this evening. I have taken copious notes and there's just a trove of good thoughts here to bring down.

I'll focus on a couple of things. I'd like to ask the consultants for the record as it relates to the ability or inability to spec out future transportation projects, for instance, a regional project like the Dumbarton corridor cross by Transbay Partners.

For the record, does that at all fit into or will become part of your analysis as it relates to traffic flows?

MR. BLACK: It's in our scope of work to study the effects of rail service on the Dumbarton rail -- in the Dumbarton rail corridor.

CHAIRPERSON BARNES: Say more about that. From where to where?

MR. BLACK: From the East Bay to this area and then continuing where the tracks meet up with the existing Caltrain tracks. It -- the exact scope of that has not been identified yet --

CHAIRPERSON BARNES: Mm-hmm.

MR. BLACK: -- but it is going to be part of the study.

CHAIRPERSON BARNES: So there's enough information available to create a scenario where -- so educate me. How does that show up in your scenarios?

Say a little more about that.

MR. BLACK: Well, we need to -- we are still to study a scenario that has that and a scenario that does not have that.

So we need to identify what the scenario with the rail is going to look like. We're not prepared to say right now tonight what that area is going to look like, but we do believe there's enough studies that looked at that corridor that we could identify a likely possibility of a transportation improvement there.

CHAIRPERSON BARNES: And is that only for rail or does it include some of the bus expressway lines, dedicated lines that are contemplated, any improvements in that service transportation?

MR. BLACK: We are scoped to look at only improvements that are reasonably expected to be in place by the year 2040.

I don't know if that answers your question, but if it's just somebody's idea that's not in the Regional Transportation Plan, then that would not be part of this study.

But of course the reason for this hearing is the -- you could add things to the study that aren't already part of the scope.

CHAIRPERSON BARNES: And so to clarify, that's

an in-service date of 2040 which is some time between now and 2040, twentyish years from now.

MR. BLACK: Yes. If the project is in the Regional Transportation Plan.

CHAIRPERSON BARNES: And I would assume that service is in there, and if it's not, certainly to be talked about through samTrans through -- as a component of the Dumbarton corridor, that shows up in there somehow.

MR. BLACK: I'll make a note that the Commission is interested in seeing that studied.

CHAIRPERSON BARNES: It's in the context of a hypothetical, of course. That's what scenarios are for, and being able to in this EIR to understand the interplay between the potentiality for regional solutions for transportation and how it fits into what's being contemplated here in Menlo Park and what it alleviates, what it doesn't, how it impacts. That's what the scenario is for.

So yes, to the extent that it's out there, and whatever vetting process you have for its plausibility, it should be in there.

Do me a favor, because we talk about acronyms a lot. Educate me, if you would, about VMT and LOS and why one is included, why VMT is used and how it relates to

this particular project and what would be the role of for instance in level of service, as well, what your methodology is.

MR. BLACK: Well yes. Right now we're scoped to do both VMT and level of service. VMT is vehicle miles traveled.

As I'm sure you're aware, the California legislature passed a bill a number of years ago that requires that EIRs look at vehicle miles traveled instead of intersection level of service when assessing projects from a transportation standpoint for EIRs.

And that new rule goes into effect in July of 2020, which is before we anticipate that this EIR would be available.

And so we are required to include a discussion of vehicle miles traveled in the EIR and to come to the conclusion whether it -- the project would or would not have significant impact on vehicle miles traveled.

But we do recognize as -- as some people have commented, including the Commission, that that doesn't answer the question about how long is it going to take me to drive down Willow Road, for example, and that gets into level of service and traffic flow and delays on the streets, and it's in our scope to analyze that, as well.

Even though starting in July 2020 that would

not be a -- what we call CEQA impact, but it would be studied in the traffic study.

CHAIRPERSON BARNES: And when you do an EIR study, whether it's this project or something in our Life Sciences District, how are you able to ferret out what is a specific project for what the EIR is done on, what that contribution is to overall traffic flows in terms of the general public being able to understand and contextualize?

You've got -- in any given arterial, you've got X traffic generated by Y locations. Y locations could be disparate throughout the area, could be local.

To what level of granularity are you able to pull out the -- the origination destinations for traffic and be able to get to net new trips, where they're coming from, where we're going, what they impact?

And this gets to the bigger issue of data driven discussions about what's contributing to what, where the circulation is getting held up and by whom and how it is to address that.

So if you could educate a little bit on how that works in terms of what you what work that you do in the EIR.

MR. BLACK: Yes. Well, we look at scenarios that are with and without the project, and so that would

clearly show how the transportation system would change as a result of the project.

In terms of sort of background of the transportation system and who's going where, the tool that we use to do the analysis is the regional travel demand model that accounts for where trips originate and where they're destined for, and we can look at patterns in there and pretty much answer whatever question might come up in the EIR process about -- if you want to know, for example, let's look at the traffic on Bayfront Expressway, where is it coming from and where is it going to? Is it originating in Menlo Park? Is it originating somewhere else and where is it going to?

Those types of questions can be answered with the tools that we intend to implement.

Though this EIR's on a specific project, so it will be focused on what will happen to the system with this project.

CHAIRPERSON BARNES: So the -- the before-mentioned data which is on the Bayfront, we have X amount of cars and where is it coming from, where is it going to? I'm sorry. That data exists, but it's outside the scope of this? Is that what you said?

MR. BLACK: It does exist. That would not normally be a product of this EIR process to report

something like that, but if it's the interest of the community to really dig down and know more about what's happening on Bayfront Expressway, for example, the tools exist to be able to do that.

And perhaps a question that might be related to the project is well, what will happen to Bayfront Expressway?

I can posit a scenario where the traffic would not increase on Bayfront Expressway with this project because the capacity is limited.

And so what would happen is -- is that there would be more traffic from this project or from Menlo Park that would use Bayfront Expressway, thereby displacing perhaps longer distance trips today using Bayfront Expressway.

Maybe this is getting a little too wonky, but we would expect questions like that, could very well come up.

CHAIRPERSON BARNES: Well, it's -- it's not too wonky. We have sat in this chamber over and over again with Planning Commission meetings as a ConnectMenlo process and as projects come through the cycle now is the data that relates to what's happening on our streets, who's going where.

And on the smaller projects, it's very

difficult to get detailed data -- to use a particular project as a conduit to extract more detailed data.

On a project this big, there is no more worthy endeavor for this whole process than to move the discussion from, you know, I was on this street this many years ago and this was my experience with traffic and now I'm on this street now and this is my experience of traffic. Therefore do something.

Move it from the visceral reaction of what we think congestion is to really understand what congestion is. Who's on the roads -- to the extent we can get the data, DODs, all of it. Who's on the roads, what's coming through our town.

For this particular development, and we've heard tonight a number of times this is the largest single development in -- to be proposed in Menlo Park's history.

So there is no better time, opportunity to get some real data on this, and we -- we have been through and are still in the last leg of our Transportation Master Plan which we did without data, as well.

So I personally have been waiting for the right moment where we can get in and dig in and understand to where, from where, when, whose sit, what are the trips, who's adding to the trips, what's the complexion of those

night trips, what's mass transit, what can we do to get there, and certainly to use this project as a lever to better understand and have more data discussions so we're all working off the same information when we extrapolate impacts.

I think it's the most critical piece that we can have information about what's going on.

So with that said, how close can you get us to that?

MR. BLACK: Well, I'm making notes that the Commission is quite interested in that, and I guess the good news is we're getting better tools every day to be able to answer that question about where traffic is coming from and going to, and it is in our scope to study that as part of putting together the tool that we're going to use.

And so we could report out some of the facts from that exercise that I think would be of interest to the Commission.

CHAIRPERSON BARNES: And to the community.

MR. BLACK: Yeah.

CHAIRPERSON BARNES: A community discussion.

And so to that extent, you have, for instance on this project the tentative Facebook, and Facebook runs extensive Transportation Demand Management programs and

shuttles and has data available to it based on its own workforce, where they're going, how they're getting there, what they're doing.

To what extent do you have the ability to tap into them or other sources to get real data from existing patterns?

And is there a firewall between what you do and what for instance data they might have and how is it that what they have in terms of knowledge can -- can be validated and come to use so we can use it, as well?

MR. BLACK: Well, it is our expectation that we're going to get that type of data from Facebook, exactly the questions that you just asked.

There is a concern about -- from -- about privacy for Facebook workers, so we're not going to identify, you know, specific people, but we will identify aggregated data about mode split and place, you know, where people live, basically, working at Facebook, not individual addresses, of course, but perhaps zip code data would be available or at least by City. That will definitely be available, and mode split will be available, I'm told.

CHAIRPERSON BARNES: Incredibly important, the ability to understand what's happening in our town as it relates to traffic patterns.

MR. BLACK: I'll also say that that would be information that we would know for Facebook, but you probably also would like to know what about traffic that's not Facebook that's out there, and --

CHAIRPERSON BARNES: Well, as part of it, that's contextualizing the whole flow. You have it in X, Y and Z. However granular that gets, obviously better.

MR. BLACK: That's the type of data that I said we're fortunate that more data's becoming available every day that we can tap in to where there are companies that are keeping track of where people are coming from and going to.

CHAIRPERSON BARNES: Thank you.

I wanted to bring up two other points. One of them is the ability to -- the ability to look at the project over multiple phases, and you're going to do an EIR and it's going to assume a completed project and we're looking at Phase I, Phase II, Phase III.

What's your flexibility to do that and how would that look and is it something you've done before?

MR. BLACK: Yes. We can certainly look at the project in whatever phases it's presented. I believe we heard tonight that there would be three phases, and so we can do the analysis on three phases.

One of the comments was that we wanted -- we

don't want to wait until the very end to get our improvements that -- that would go along with the project.

And so that part of that phasing would be to identify which improvements, transportation and otherwise, would occur with each phase.

CHAIRPERSON BARNES: I think it's helpful because it helps to add clarity to impacts, and so I -- I would propose that, as well.

And then the question of using -- as it relates to statistics, using Menlo Park statistics versus ABAG statistics and the Menlo Park statistics is done with the ConnectMenlo process, and I remember -- I can see in my head the staff line of jobs, population, employment, all of that.

Tell me a little bit about what's used for what and respond to that question.

MR. BLACK: Well, it's in our scope of work to use the ConnectMenlo dataset for Menlo Park that we would obtain from the City.

For the context outside of Menlo Park, we would use the ABAG 2040 forecasts, but ConnectMenlo inside Menlo Park.

CHAIRPERSON BARNES: Okay. And then if there were to be -- this is a half applicant question about to

get back over to you.

If there was the ability to look at access directly from Bayfront to the project -- and I don't know how it gets scoped out, but would that change materially scenarios that you're running?

MR. BLACK: It could, and the first I've heard of that was just suggested tonight and I wrote it down on my list of things to look at, that -- that direct connection.

That could be looked at in the context of -- of mitigation, in which case it wouldn't really be an additional scenario, but I haven't really thought that through about how that would be -- how that would be analyzed.

CHAIRPERSON BARNES: And of course I don't know what, so let me elevate that as something to be considered and looked at.

So thank you.

Additional Commissioner questions? And I forget who was next. So Commissioner Kennedy.

COMMISSIONER KENNEDY: So I did scribble a lot of notes that I've now confused myself. So, you know, I want to add something that maybe hasn't been said before, and I generally -- you know, I -- I agree with Commissioner Riggs it's a -- that the project is a very

attractive project. It's -- it's very unique in both its size and complexity, its phasing.

I think for me from a visual perspective, it's very important to see an overlay of all the -- all the different campuses, the phases that the tenants can occupy within the communities because it is -- the Belle Haven -- the classic Belle Haven community is bounded on three sides by significant development that is phasing driven, and I don't think that's either a good thing or a bad thing. It's just what it is. It's the amount of zoning of the development.

But I think what's -- what's hard is that there's -- I'm trying to figure out a good -- a visual, but it really is a tsunami coming from this development that just overtakes that community, and whether we phase in community amenities that, you know, have been vetted by the community and the people have asked for it, phasing is eally important.

And so I think frontloading all of the community development in Phase I is -- is incredibly important, but beyond that, any -- any privately owned public space is just that, it is a privately owned public space, and so it comes with a tremendous number of restrictions, and potentially it sends not belonging.

And so if residents say, "Well, a significant

portion of the residents who will be living in Willow Village are Facebook workers," but they're residents who live there, as well, those community amenities are designed in part for them, but it is also designed in part to benefit the classic commuter, which to me seems to be the most important driver in how -- how these phases are programmed.

That being said, the -- the hope of creating more jobs in the Belle Haven community for existing Belle Haven residents, and some of people have lived there, and I think that's really important to have skilled craftsman jobs that are local so you don't have to drive from Modesto, because that's where you can afford to live, as a union carpenter or electrician.

But just thinking more holistically on this project, not just from -- not just from an EIR perspective, but from the planning perspective on how -- what does that overlay look like and who does it impact and how do we make it such that, as my colleagues up here and talked about all the traffic, and that is -- if you're able to count it, if you're able to collect all that data and then analyze it.

But beyond that, people have to live there. They want to live there. They've lived there for decades and there seems to be this ongoing -- this ongoing

situation where we -- things get built and then in hindsight, we'll say, "We'll correct that next time."

That won't happen again, but I have yet to see that as part of the Commission or as parts of the residents of Menlo Park that being corrected, right?

So I think this is an opportunity to watch Belle Haven and for Menlo Park to actually correct the things that have gone wrong and create tools and paths forward that will work beyond the next twenty or thirty or forty years.

I also believe that and feel that regional solutions have to be tied to all of this and how to make that a possibility.

I don't have the answers to that, but my general sense is that this is a -- the project itself is a very -- this is a good project and the question is how -- how is that project implemented in reality as opposed to being really lovely.

I do support this kind of development, but it is it needs to be looked at.

CHAIRPERSON BARNES: Commissioner Riggs.

COMMISSIONER RIGGS: Yeah. Thank you.

This isn't really anything new. I think if anything, I just wanted to take the opportunity to add to what Chair Barnes said regarding -- let me put it this

way: What happens to the traffic after it is only measured as what we used to call LOSF or it wasn't moving and it won't be moving after the new project?

So in context, it was maybe six years ago we had a project on El Camino Real where we were considering reducing -- holding the number of traffic lanes through downtown at two lanes and reducing it north and south of downtown to two lanes, as well, in order to provide better bicycle lanes.

And I asked the question given that that is the main highway connecting the twenty-three cities, if the traffic right now needs the three lanes and it's quite evident when we get to the two lane portion for the four lanes through Menlo Park that that is a bottleneck, where does the traffic go if we enlarge the bottleneck?

And by the way, where is the traffic going right now as a result of the existing bottleneck?

We were told by our transportation consultants -- not Hexagon at the time -- that people would find other routes and everything works out, and so I said well, what other routes would those be that associate with El Camino Real? Well, Alameda de las Pulgas and Middlefield.

Well, but during commute hours, they come to a full stop. Well, then people change their behavior, but

if they were going to 101, they go to 280. Well, but 280 is no longer a clear shot south of Palo Alto or up near San Mateo.

Well, we don't study the freeways, and actually Alameda and Middlefield are outside of our study, so the answer is that everything looks fine on El Camino.

So I have not forgotten that exchange or the fact that this went down just fine with City Council at the time, and they concluded that there would be no impact as a result of fewer lanes, and we had similar discussions when projects of 10,000 square feet or larger on El Camino were built.

So when traffic is diverted to routes outside of our study area, we don't -- have not in the past necessarily responded.

Recent traffic studies I have seen absolutely that Middlefield and Alameda de Las Pulgas are included, but the traffic when it is diverted through, say -- in the last six years roughly through the Willows, no one could say in a traffic impact analysis that traffic is significantly increased on McKendry Drive because there were no previous estimates of traffic on McKendry Drive, and McKendry Drive is a residential street and wasn't meant to take commuter traffic. Therefore, no impacts were identified.

Can we just assure that we won't similarly miss an impact? And -- and I'll note that's why I -- and I don't word things anywhere near as well as Chair Barnes, but that's why I have noted a few months ago and tonight that we need to look at impacts in neighborhoods and the -- within the neighborhood and an increase in access.

Is that all doable and is that in the current scope or can be in the scope?

MR. BLACK: Yes. I -- I already took a note from one of the comments that we don't want to just study intersections.

Typically when we do intersection levels of service, we're looking at intersections, but what you're talking about is traffic that would use -- what I -- I use the term cut-through. It would cut through of residential streets to avoid certain congested intersections for congested arterials.

We have a very extensive area that we're scoped to look at for this project, and it does include many residential streets, but we'll definitely take your comment in -- to heart and be on the lookout for that type of potential impact.

CHAIRPERSON BARNES: Commissioner Tate.

COMMISSIONER TATE: So I'd like to move us just a bit and that is to that housing needs portion, and

I was wondering if it is possible to make sure the study looks at twenty-five percent BMR as well as having some condo units and just really what would be the difference -- the impact I should say in the community with having twenty-five percent BMR or higher and some units that are for sale?

CHAIRPERSON BARNES: And that's to the consultant?

COMMISSIONER TATE: That is to the consultant.

MS. EFNER: Erin Efner for ICF. We can take that to the consultant and talk about adding that analysis to their scope of work.

COMMISSIONER TATE: Thanks.

CHAIRPERSON BARNES: Process question as it relates to the scope of work. And you're bidding it out and understanding how much money it takes to get it done.

How is it that we don't end up with a situation where you don't have enough money -- specific on traffic, that we don't run into a situation where you don't say you have a scope of work and funds allocated to cover some of the -- explicitly what we talked about tonight as it relates to traffic and we don't end up with a situation which -- again, I'll call out the Transportation Master Plan where we said we didn't have the money to go through and go through the type of data

that we think we have the opportunity to do now.

Do you think that the things that we're telling you about now just all included in the scope, how we make sure that there's a budget for this and what you need to ask Council for this and what would it look like?

MR. BLACK: Oh, well, I can answer with the transportation scope that there's -- everything that you mentioned tonight could be reasonably construed by me to be included in our scope.

So I'll stay tuned if -- if something else comes up that seems like it's out of scope and then we would need to communicate with our client that that's out of scope and what do you want to do about it.

CHAIRPERSON BARNES: Great.

MR. BLACK: Yeah.

CHAIRPERSON BARNES: Thank you.

So looking for any more EIR specific questions, comments from my fellow Commissioners, and if I don't have any, then we will move to the Project Proposal Study Session.

Mr. Perata.

MR. PERATA: Sure. So -- so you're looking to closing the EIR Public Hearing?

CHAIRPERSON BARNES: Yeah. I'm looking to you to see if you have any thoughts, and if not, if you're

blank on thoughts, I'll just close it.

MR. PERATA: Yeah. I --

CHAIRPERSON BARNES: If you want to think what you're having for lunch tomorrow, that's fine.

MR. PERATA: I don't know. You may close the public hearing portion now.

CHAIRPERSON BARNES: Right. Thank you.

(This record was concluded at 9:14 PM).

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STATE OF CALIFORNIA)
COUNTY OF SAN FRANCISCO)

I, the undersigned, hereby certify that the discussion in the foregoing meeting was taken at the time and place therein stated; that the foregoing is a full, true and complete record of said matter.

I further certify that I am not of counsel or attorney for either or any of the parties in the foregoing meeting and caption named, or in any way interested in the outcome of the cause named in said action.

IN WITNESS WHEREOF I have hereunto set my hand this 12 day of November

MARK I. BRICKMAN CSR 5527

STAFF REPORT

City Council
Meeting Date: **12/16/2019**
Staff Report Number: **19-274-CC**

Regular Business: **Receive an overview of public comments on the notice of preparation and confirm the scope and content of the environmental impact report to be prepared for the proposed Willow Village mixed-use master plan development**

Recommendation

Staff recommends that the City Council review the following related to the environmental impact report (EIR) for the proposed Willow Village mixed-use master plan development (proposed project):

1. Comment letters received by the City during the notice of preparation (NOP) comment period on the scope and content of the EIR (Attachment A;)
2. Transcript from the Planning Commission scoping session (Attachment B) on the proposed project; and
3. The matrix summarizing the comment letters and transcript and providing a brief discussion (Attachment C.)

Staff recommends that the City Council provide any additional input on the scope and content of the EIR, and proceed with the preparation of the draft EIR for the proposed project in compliance with State law.

Policy Issues

Signature Development Group (the applicant) has submitted an application for the proposed project. The Planning Commission and the City Council will be required to consider the merits of the proposed project, including its consistency with the city's general plan and zoning ordinance, along with the municipal code, and other adopted policies and programs of the city such as the below market rate housing program. The proposed project requires an EIR pursuant to the California Environmental Quality Act (CEQA.) The City Council will be the final decision-making body on the certification of the EIR and on the proposed project, including a development agreement.

On August 20, the City Council authorized the contract with ICF International, Inc. (ICF) and its subconsultants to prepare an EIR for the proposed project and to conduct a housing needs assessment (HNA) and a fiscal impact analysis (FIA.) Authorization of the contract did not imply an endorsement of the proposed project by the City Council, rather it allowed the city to move forward with the legally required processing of the application, which includes conducting the environmental review required by CEQA.

When the City Council authorized the contract, it requested that staff bring a summary of the comments received on the scope and content of the EIR to City Council for review and input following the close of the NOP comment period as an additional step given the large scale of this particular project. This agenda item satisfies that request and provides the City Council the opportunity to provide additional feedback and confirm the scope and content of the EIR, and to consider policy issues that may be addressed through the EIR, the HNA, and the FIA or outside of these documents, either in or concurrently with the entitlement process.

Background

Site location

The approximately 59-acre project site is generally located along Willow Road between Hamilton Avenue and Ivy Drive, previously referred to as the ProLogis Menlo Science and Technology Park. The site contains 20 existing buildings, encompassing the following addresses 1350-1390 Willow Road, 925-1098 Hamilton Avenue and 1005-1275 Hamilton Court. Facebook Building 20 is located to the northwest and multifamily and neighborhood commercial uses are to the west, across Willow Road. The property is generally bordered by the San Francisco Public Utilities Commission (SFPUC) Hetch Hetchy right of way and Mid-Peninsula High School to the south, the Dumbarton Corridor to the north, and properties within the Menlo Business Park to the east.

Proposed project

The applicant on behalf of Peninsula Innovation Partners, Inc. is proposing to redevelop the project site through the master plan process, as provided for in the zoning ordinance, by utilizing a conditional development permit and entering into a development agreement with the city. The proposed project would demolish existing on-site buildings and landscaping and construct new buildings within a town square district, a residential/shopping district, and a campus district. Excerpted plan sheets identifying the proposed site plan and layout of the project components are included in Attachment D. The proposed project would result in a net increase of approximately 1 million square feet (sf) of nonresidential uses (office space and non-office commercial/retail,) for a total of approximately 2 million sf of nonresidential uses at the project site. In addition, the proposed project would include multifamily housing units, a hotel, indoor space dedicated for community facilities/uses, park building/improvements and open space.

The EIR would analyze the proposed project along with up to five potential variants on the proposed project. Variants that are currently anticipated to be analyzed include: realignment of Hamilton Avenue and relocation of the existing gas station; a grade-separated crossing over or under the currently inactive Dumbarton Rail Corridor/Willow Road for bicycles, pedestrians and Facebook trams; an on-site emergency municipal water storage tank; and a recycled water system for either public use or on-site use only. In addition, the EIR would analyze two housing variants: an increase in housing units up to a maximum of 2,000 housing units and a decrease in housing units to a minimum of 1,500 housing units. An additional variant could look at additional programming for the proposed publicly accessible park or modifications to the project phasing.

The approximately 22-acre residential/shopping district would be located in the southwestern portion of the project site. The approximately 5-acre town square district would be located in the northwestern portion of the project site. Together, these two districts would include: approximately 1,735 residential units, which would include a minimum of 15 percent affordable/below market-rate units (approximately 261 units;) a maximum of up to approximately 200,000 sf of retail, including a grocery store, pharmacy and restaurants (of which approximately 25,000 sf would be located on the ground floor along the east side of Main Street in the campus district and would be open to the public;) an approximately 175,000-sf hotel with up to approximately 200-250 rooms and food services; an approximately 500-space parking structure intended to accommodate visitors/vendors to the office campus and hotel guests during normal business hours and provide retail overflow parking during evening and weekend time periods; and an approximately 10,000 sf indoor space dedicated to community facilities/uses adjacent to a 4-acre public park. In addition, an approximately 0.7-acre town square and 0.3-acre dog park would be accessible to the public.

The approximately 32-acre campus district, located in the eastern portion of the project site, would include

approximately 1.75 million sf of office uses and employee-serving amenity space, along with two aboveground parking structures with approximately 3,100 parking spaces. Both parking structures would include a ground-level transit hub to support private campus commuter shuttles and trams. Open spaces would include a chain of publicly accessible spaces and gardens along Main Street, a landscaped area off O'Brien Drive, and various secure, interior open spaces for the campus district users.

The proposed project is anticipated to be developed in three phases, outlined in the table below.

Table 1: Proposed phasing schedule

Phase	Office (s.f.)	Retail/non-office commercial (s.f.)	Hotel (s.f.) (200-250 rooms)	Residential dwelling units
Phase 1	600,000 s.f.	10,000 s.f.	-	767 du
Phase 2	630,000 s.f.	40,000 s.f.	-	633 du
Phase 3	520,300 s.f.	150,000 s.f.	140,000 s.f - 175,000 s.f	335 du
Total	1,750,000 s.f.	200,000 s.f.	140,000 s.f - 175,000 s.f.	1,735 du

The project site would generally be developed beginning along the southern portion of the site and moving north with the northwest portion being completed last. The project site would be bisected by the proposed north-south Main Street, which would provide access to all three districts. The project site would include a circulation network for vehicles, bicycles, and pedestrians inclusive of both public rights-of-way and private streets, generally aligned in an east-to-west and a north-to-south grid. The exact amount of dedicated public rights-of-way will be determined through the city review process. Modifications to the total area of dedicated rights-of-way could affect the overall development potential at the project site and the proposed project would be adjusted accordingly.

For a more detailed analysis of the proposed project, including an overview of the project history and analysis of the site plan, land use and zoning compliance, site circulation and project phasing, please see the October 7 Planning Commission staff report in the link in Attachment E. A link to the most recent project plans is included in Attachment F.

Environmental review process

One of the basic purposes of CEQA is to inform decision makers and the public about the potential significant environmental effects of a proposed project. For purposes of CEQA, the environment is the physical conditions within the area which will be affected by a proposed project, including land, air, water, plants and animals, noise and objects of historic or aesthetic significance. An EIR must be prepared whenever it is established that a proposed project may have a significant effect on the environment.

An EIR is an informational document that the City Council must consider and certify as compliant with CEQA before it approves or disapproves the proposed project. The purpose of an EIR is to provide decision makers and the public with detailed information about the effect that the proposed project is likely to have on the environment, list ways in which the significant effects of the proposed project might be minimized and identify alternatives to the proposed project. The main substantive components of an EIR are as follows:

- The project description, which discloses the activity that is proposed for approval;
- Discussion and analysis of significant environmental effects of the proposed project, including cumulative impacts and growth-inducing impacts;

- Discussion of ways to mitigate or avoid the proposed project's significant environmental impacts; and
- Discussion of alternatives to the project as proposed, in order to reduce potentially significant environmental impacts while still meeting the overall project objectives.

The EIR process begins with the city's decision to prepare an EIR. The city determined that an EIR was required for the proposed project and issued a NOP September 18. A link to the NOP is included in Attachment G for reference. A NOP signifies the city's intention to prepare an EIR for the proposed project. The notice is designed to seek guidance from potentially interested parties and members of the public on the scope and content of the EIR.

As part of the city's outreach for the proposed project, the city sent a mailed notice of the release of the NOP and the Planning Commission scoping session public hearing and study session to all addresses within a quarter mile radius of the project site. A public notice was also published in the Daily News prior to the release of the NOP identifying the date of the release of the NOP and the start of the NOP comment period along with the date and time of the Planning Commission meeting for the proposed project. In addition, the city mailed copies of the NOP to a comprehensive list of local agencies (including adjacent cities, special districts and school districts), state agencies and federal agencies, Planning Commissioners and City Council members, and members of the public who requested CEQA notices. A City Council digest item publicizing the release of the NOP and the start of the scoping comment period was also published. The NOP was available for review at City Hall as well as the Main Library and Belle Haven Branch Library.

The release of the NOP began the process for agency and early public consultation, which is referred to as the "scoping" process. The scoping process is designed to enable the city to determine the scope and content of the EIR at an early stage, including identifying possible issues to be studied, topic areas that do not warrant additional study based on specifics of the proposed project (e.g., mineral resources,) and possible alternatives and mitigation measures to be analyzed and considered in the EIR. As part of the scoping process, the Planning Commission held a scoping session for the EIR for the proposed project October 7, 2019. The scoping period was set at 30 days following the release of the NOP, ending October 18, 2019. For a more detailed discussion of the proposed project, the CEQA analysis, the CEQA topics included and those excluded from the EIR, the project variants, and the framework for the alternative analysis, please review the October 7 Planning Commission staff report available through the link in Attachment E.

The scoping session was an opportunity for the Planning Commission and public to provide comments on the scope and content in the EIR. Oral comments received during the scoping session and written comments received during the NOP comment period on the scope and content of the environmental review will be considered while preparing the draft EIR. NOP comments will not be responded to individually in the draft EIR; however, all written comments on the NOP will be included in an appendix of the draft EIR, and a summary of all comments received (both written and oral) on the NOP will be included in the body of the draft EIR.

Staff has prepared a matrix summarizing all of the comments received and providing a brief discussion regarding each comment. This matrix provides a more detailed discussion regarding the comments than the summary of comments typically included in a draft EIR. The matrix helps identify and explain those areas which will be considered in the EIR pursuant to CEQA compared to those areas that are outside the scope of CEQA review (understanding that CEQA is focused on changes to the physical environment and therefore does not cover all issues about which a community member may be concerned) but that may be addressed through other mechanisms (e.g., HNA, FIA, the entitlement process, etc.) The matrix is included in Attachment C and discussed in more detailed in the Analysis section of this report. The comment letters and transcript of the EIR scoping session are included in the links in Attachment A and B.

At the December 16 meeting, the City Council will have an opportunity to review the scoping comments and provide any additional comments on the scope and content of the EIR for the proposed project (e.g., alternatives the City Council would like considered in the CEQA process, or the level of detail at which VMT should be analyzed for an alternative.) Unless directed otherwise, following the meeting the city's environmental consultants will continue the work needed to thoughtfully and thoroughly prepare the draft EIR based on the scope of work in Attachment H. The draft EIR will be prepared and processed in accordance with CEQA statues and guidelines in effect at the time of the release of the NOP. Senate Bill (SB) 743 will modify state guidelines for transportation impact analyses and effects all draft EIRs released after July 1, 2020. Since the draft EIR is anticipated to be released in the fall of 2020, after the effective date of SB 743, the transportation impact analysis will be structured to comply with the requirements of SB 743. A detailed discussion of the transportation impact analysis and SB 743 is included in the Analysis section of the staff report. Where appropriate, the EIR for the proposed project will incorporate by reference analyses, discussions and mitigation measures from the program EIR certified November 29, 2016 by the City Council for the general plan and zoning ordinance update.

Upon release of the draft EIR there will be another opportunity to comment on the analysis before the final EIR is prepared. The final EIR will include responses to the comments provided on the draft EIR during the comment period. The final EIR will also be reviewed by the City Council, which is the final decision-making body regarding the certification of the EIR as compliant with CEQA.

In addition to the EIR process, concurrently, the city's consultants will be working to prepare an HNA and a FIA, The proposed project will also go through an appraisal process regarding community amenities because the project is seeking bonus level development. The City Council will review all of these analyses along with the full record of proceedings prior to taking final action on the proposed project, which requires a development agreement.

Analysis

During the EIR scoping period, the City received 23 total comment letters, 14 from members of the public, three from community organizations/nonprofits (Committee for Green Foothills, Menlo Together, Mid-Peninsula High School,) and six from public agencies (City of East Palo Alto, Governor's Office of Planning and Research, Native American Heritage Commission, San Francisco Public Utilities Commission, Sequoia Unified High School District, West Bay Sanitary District.) In addition to the comment letters, 13 members of the public spoke at the EIR scoping session, some of who also provided written comment letters. Individual Planning Commissioners also provided comments and input on the scope and content of the EIR for consideration in the preparation of the draft EIR.

City staff has reviewed the written comments received and oral comments made by members of the public and the Planning Commission at the EIR scoping session. A comment matrix is included in Attachment C summarizing the comments and providing a brief discussion regarding each comment. The comment matrix is set up to provide the following information:

- Identify the commenter and summarize individual comments from each individual, organization or agency;
- Identify the general topic area;
- Identify the context through which the comment would be considered, for example the EIR, the HNA, the FIA or outside of these documents, either through or concurrently with the entitlement process; and
- Provide a discussion related to the comment and how the comment, if applicable, fits within the EIR, HNA, FIA or other element of the entitlement process. These discussions are intended to be informational to help aid the City Council in understanding why the comments would or would not be

considered in the CEQA process and what other opportunities the City may have to consider these comments during the entitlement process.

The majority of the comments provided during the NOP comment period relate to topics within the EIR, HNA, FIA, and requested land use entitlements (conditional development permit, development agreement, below market rate housing agreement, etc.) Comments focused on transportation impacts (e.g., vehicle miles traveled, Dumbarton rail, traffic congestion, cut-through traffic impacts, cumulative impacts), population and housing (e.g., jobs/housing balance, indirect population growth and displacement), air quality, project design components (e.g., number of below market rate units, reduced office square footage, increase in total number of housing units, on-site and off-site circulation, project phasing,) and potential project alternatives.

Transportation comments

With respect to transportation, some comments identify the desire to limit traffic from the site to current levels. The city's current transportation impact analysis (TIA) guidelines include adopted impact thresholds for level of service (LOS,) which measures motor vehicle delay during peak commute hours. In accordance with state law SB 743, the City will need to update its guidelines to identify an impact threshold for vehicle miles traveled (VMT,) which will be the CEQA metric for transportation impacts for draft EIRs released after July 1, 2020. That threshold represents a policy decision for the City Council and will be applied to all draft EIRs released after July 1, 2020. A City Council study session on the TIA guidelines update is currently planned for January 14, 2020. As stated previously, it is anticipated that the draft EIR for the proposed project would be released after July 1, 2020; as such, the EIR for this project would analyze the impact of transportation in relation to the identified VMT threshold of significance. Discussion on LOS will be provided for informational purposes only (and will be considered in the land use section relative to compliance with general plan goals, policies and programs.) Currently, the thresholds of significance for transportation do not require that mitigation measures reduce transportation impacts to current levels. Thus, comments relative to maintaining existing conditions are a policy consideration for the City Council when considering the proposed project (as well as during the process to adopt a VMT threshold of significance.)

A number of comments on transportation impacts requested that the EIR analyze the potential impacts of the proposed project with and without Dumbarton Rail, including a potential transit station at Willow Road. The EIR scope that the City Council authorized includes an analysis of quantitative cumulative impacts with and without the Dumbarton Rail. Therefore, the cumulative analysis for the transportation section of the EIR will include the potential impacts of the proposed project with and without Dumbarton Rail. The analysis of Dumbarton Rail will be done in the cumulative analysis as it is a reasonably foreseeable project; however, the timeline for delivery of Dumbarton Rail is beyond the timeline for the near term project level analysis. The city also intends to coordinate, as appropriate, with SamTrans as the Lead Agency for the Dumbarton Rail project to ensure consistency between the cumulative analysis for the proposed project and the Dumbarton Rail project. It should be noted, however that the City's transportation consultant Hexagon is currently scoped to conduct a qualitative, not a quantitative, analysis for alternatives with and without Dumbarton Rail as the analysis of alternatives is generally completed at a lesser degree of specificity.

Air quality comments

With regard to air quality, a commenter requested that the analysis include local monitoring stations, specifically in the Belle Haven neighborhood, in addition to the Bay Area Air Quality Management District (BAAQMD) monitoring station in Redwood City. The BAAQMD monitoring station is the best and most reliable source of data and should be utilized in the analysis. However, ICF will evaluate what additional information is available regarding air quality from the County or the applicant (who is in the process of obtaining a quote for additional air quality monitoring in Belle Haven) and include it as appropriate in the

draft EIR.

Project alternatives comments

With regard to project alternatives, City staff will consider the suggested alternatives in the comments when developing the EIR for the proposed project, but cannot identify the specific alternatives at this time. Some suggested alternatives received during the scoping period were an increase in housing units and/or reduction in office square footage, limiting traffic congestion to current conditions, and limiting office to the existing square footage at the site. The CEQA guidelines require the evaluation of a no project alternative plus a range of reasonable alternatives to the proposed project, or to the location of the proposed project, which would feasibly attain most of the basic objectives of the proposed project, but would avoid or substantially lessen any of the significant effects of the proposed project. The EIR will analyze a no project alternative, a reduced intensity alternative and two other feasible alternatives, including potentially an alternative that is proposed during the scoping process. To develop project alternatives, potential impacts must first be identified through the initial analysis within the draft EIR. Once potential impacts are identified through the environmental analysis, City staff will work with ICF to develop alternatives compliant with the requirements of CEQA and will take into consideration alternatives identified through the scoping process. Alternatives will be included in the draft EIR.

Project alternatives are different from project variants. Alternatives are analyzed qualitatively, where the project variants are proposed to be analyzed quantitatively. As stated previously, the project variants that would be studied in the EIR include increased housing, decreased housing, Hamilton Avenue realignment, Willow Road/Dumbarton Corridor grade separated crossing, municipal emergency water storage tank, recycled water, and potentially an additional variant identified through the scoping process (e.g., public park programming, project phasing.) The scope assumes that variants would be quantitatively analyzed in a separate chapter in the EIR at a level of detail that would allow for the variants to be adequately analyzed under CEQA, allowing the project entitlements to potentially include the variants.

Policy level and non-CEQA comments

Some comments identify broader policy issues that are outside the purview of the entitlement review and environmental analysis for the proposed project, such as the jobs/housing balance within Menlo Park. The jobs/housing balance is an economic and social issue, but not a physical environmental issue subject to analysis in the EIR. The jobs/housing balance may impact commute times, the effects of which would be considered in the transportation, air quality and GHG sections of the draft EIR. The HNA will not specifically consider the jobs/housing balance, but will consider the housing need generated by the proposed project and compare that to the available supply of housing. City staff consulted with the city's housing consultant and a study of the jobs/housing balance would be more appropriate on a larger citywide or regional scale. Such an analysis could be completed concurrently during the entitlement process. If the City Council is interested in a broader study of the jobs/housing balance, it may wish to prioritize the study during the development of the City Council's 2020 work plan, which would be outside of the project's environmental and entitlement review. However, the preparation of a jobs/housing balance study could be conducted concurrent with the project's timeline. The jobs housing/balance and any study thereof could be applicable to the City Council's consideration of this proposed project and other proposed development projects in the city. For this project specifically, the applicant is proposing bonus level development, which requires the provision of community amenities, the value and identification of which will be determined through the community amenities appraisal process, which will involve City Council review and approval. As part of the master plan development, the applicant is required to enter into a development agreement with the City, which could include additional applicant commitments in exchange for vested rights. The jobs/housing balance and any study thereof could be used to inform the development agreement negotiations as part of the entitlement review.

Other comments that are not directly related to the CEQA analysis include comments on the project description or design of the proposed project. For instance, a number of comments suggest modifying the phasing to increase housing units in earlier phases and delivering key commercial components such as the grocery store earlier in the project development timeline than currently proposed. These comments can be considered through the entitlement process and changes incorporated into the proposed project at any time during the entitlement review process. Staff would ensure that the environmental review appropriately consider any changes to the project components. In addition, there were a number of comments on the percentage of BMR units provided. The number of BMR units would not affect the environmental analysis in the draft EIR, which is concerned mainly with the number and type of unit, but consideration of the number of affordable units would be evaluated in the HNA and can be considered as part of the entitlement process. Finally, comments either in support or opposition to the proposed project would be considered as part of the overall entitlement review by the Planning Commission and any other responsible city commissions, and the City Council. All comments received can be considered throughout the entitlement process.

Next steps

At its December 10 meeting the City Council is scheduled to create a Willow Village development agreement subcommittee. The draft EIR, HNA, FIA and other information would be used to inform the subcommittee's work on the development agreement for the proposed project. Following the City Council's review and confirmation of the scope of the draft EIR, the consultant team will continue the environmental analysis for the proposed project, including the TIA. As stated previously, the draft EIR is anticipated to be released in the fall of 2020 and staff plans to develop a public engagement and development agreement process schedule to bring to the City Council for review before the release of the draft EIR. Staff believes that a draft schedule can be developed by summer 2020. The draft schedule would outline the public engagement process, the meeting schedule for the entitlement and environmental review, and the milestones for the development agreement negotiation process.

Conclusion

The NOP scoping period closed October 18 and the majority of the comments will be evaluated in either the EIR, HNA, FIA or the project entitlement review. As mentioned above, policy issues about which the community is concerned that do not fall directly within the scope of the environmental review, such as the jobs/housing balance could be considered in the entitlement process and analyzed in more detail through a broader citywide study undertaken by staff outside of the focused review of the proposed project. Staff recommends that the City Council provide any additional input on the scope and content of the EIR, and proceed with the timely preparation of the draft EIR for the proposed project in compliance with State law. Unless directed otherwise by the City Council, the development of the draft EIR is the next step in the review process and will be prepared concurrently with the HNA and FIA and staff's review of the requested land use entitlements.

Impact on City Resources

The applicant is required to pay all planning, building, public works and city attorney fees, based on the city's master fee schedule, to fully cover the cost of staff time spent on the review of the proposed project. The applicant is also required to bear the cost of the environmental review and any associated analysis. For the environmental review and associated analysis, the applicant deposits money with the city and the city pays the consultants.

Environmental Review

A full project level EIR is being prepared for the proposed project. The project-level EIR will, to the extent applicable, utilize the program-level EIR prepared for the general plan and zoning ordinance update.

Public Notice

Public notification was achieved by posting the agenda, with the agenda items being listed, at least 72 hours prior to the meeting. In addition, a Community Development Update email notification about this agenda item was sent December 2 to interested parties that signed up for the city notifications.

Attachments

A. Hyperlink – NOP comment letters on the EIR: menlopark.org/DocumentCenter/View/23597/Facebook-Willow-Village-Comment-Letters
B. Hyperlink – October 7, 2019 Planning Commission meeting transcript: menlopark.org/DocumentCenter/View/23598/Planning-Commission-EIR-Scoping-Transcript-October-7-2019
C. Willow Village master plan EIR comment matrix
D. Excerpted plan sheets from the project plans dated October 1
E. Hyperlink – October 7 Planning Commission staff report: menlopark.org/DocumentCenter/View/23053/F1---Willow-Village?bidId=
F. Hyperlink – project plans, dated October 1: menlopark.org/DocumentCenter/View/23655/18-021_WP_CitySubmission_20191001_11x17
G. Hyperlink – NOP for the Willow Village master plan project, dated September 18: menlopark.org/DocumentCenter/View/22953/Notice-of-Preparation-of-an-Environment-Impact-Report
H. Approved scope and budget for EIR, HNA, and FIA for the Willow Village master plan project, dated August 6.

Report prepared by:
Kyle Perata, Principal Planner

Report reviewed by:
Deanna Chow, Interim Community Development Director
Kristiann Choy, Interim Transportation Manager
Nikki Nagaya, Interim Public Works Director
Leigh Prince, Assistant City Attorney

ATTACHMENT C

Notice of Preparation Comment Letters Summary

Notice of Preparation Comment Letters Summary
Willow Village Master Plan EIR

#	Date	Commenter Name	Commenting Entity	Topics	EIR	HNA	FIA	Other	Summary of NOP Comment	Discussion
1	9/18/2019	Scott Morgan	State of California Governor's Office of Planning and Research State Clearinghouse and Planning Unit	Other	Yes				The State Clearinghouse provided the City with a copy of the letter that was sent to responsible agencies to comment on the Notice of Preparation (NOP) and the distribution list, showing the responsible agencies to which the NOP was sent.	The California Environmental Quality Act (CEQA) requires that the NOP be sent to the State Clearinghouse. The letter confirms that the City has complied with the CEQA requirement. There is no comment in this letter that requires analysis in the Environmental Impact Report (EIR) for the proposed project.
2	9/24/2019	Andrew Green	Native American Heritage Commission (NAHC)	Tribal/Cultural Resources	Yes				NAHC recommends consultation with California Native American Tribes in order to avoid inadvertent discoveries of Native American human remains and to best protect tribal cultural resources.	The City will consult with California Native American tribal organizations prior to the release of the draft EIR. A form describing the proposed project will be sent to the NAHC requesting a list of eligible tribes. The City will send a letter to eligible tribes providing an opportunity for consultation.
				Tribal/Cultural Resources	Yes				The comment letter identifies the requirements to adhere to AB 52, including the procedures that would be followed for AB 52, including notification, consultation, requirements for the environmental document, and the types of mitigation that could be implemented.	The City will follow the requirements of AB 52 relative to notification and consultation with tribal organizations during the CEQA process.
				Tribal/Cultural Resources	Yes				The comment letter identifies the requirements to adhere to SB 18.	In accordance with SB 18, the City will establish meaningful consultation with California Native American tribal governments at the earliest possible point in the EIR process so that places of archaeological, cultural, spiritual, and ceremonial importance can be identified and considered.
				Tribal/Cultural Resources	Yes				The NAHC includes recommendations for cultural resource assessments, including (1) conducting an archeological records search at the appropriate California Historical Information System Center, (2) preparation of a report detailing findings and recommendations of the record search and field survey, (3) contacting the NAHC for a sacred land files search and Native American tribal consultation list, and (4) recommendations for mitigation measures, per existing State Regulations.	The City's environmental consultant (ICF) will contact the NAHC and request a search of its sacred land files. The applicant is having a professional consultant prepare an archeology report that will be peer reviewed by ICF. All of this information will be considered and analyzed in the tribal/cultural resources section of the draft EIR and mitigation measures will be recommended if necessary.
				Utilities and Service Systems	Yes				The SFPUC owns an 80-foot wide parcel in-fee as part of the Hetch Hetchy Regional Water System right-of-way (ROW) along the southern boundary of the project area. SFPUC has provided a map showing the SFPUC ROW and infrastructure. The SFPUC pipelines and property ownership must be described as part of the existing setting in the draft EIR. The EIR should also describe the project's impact on this infrastructure.	The SFPUC pipelines and property ownership will be described in the draft EIR. Any potential impact of the proposed project on existing conditions will be analyzed in the utilities and service systems section of the draft EIR.

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#	Date	Commenter Name	Commenting Entity	Topics	EIR	HNA	FIA	Other	Summary of NOP Comment	Discussion
3	10/11/2019	Jonathan S. Mendoza	San Francisco Public Utilities Commission (SFPUC)	Utilities and Service Systems	Yes				The project includes a new public roadway ROW (Main Street), which would connect to O'Brien Drive. SFPUC has identified that this new ROW appears to go over the SFPUC ROW property. This new ROW could impact SFPUC facilities. SFPUC has not yet permitted this use and must be reviewed in the SFPUC project review process.	Any potential impact of the proposed project on SFPUC facilities will be analyzed in the utilities and service systems section of the draft EIR. The draft EIR will identify the SFPUC as a responsible agency for permitting.
				Utilities and Service Systems	Yes				The applicant should determine the feasibility of constructing Main Street over the SFPUC pipelines, and adjacent to the SFPUC appurtenances. Describe the disruptions that could occur to the SFPUC Hetch Hetchy Regional Water System during construction and whether critical infrastructure would be impacted or reconfigured. Mitigation should include mitigation to address any impact.	Any potential impact of the proposed project on the SFPUC pipelines will be analyzed in the utilities and service systems section of the draft EIR. Mitigation measures will be recommended if necessary.
				Project Description	Yes				During which phase will Main Street (over the SFPUC ROW) be constructed? If during the first phase, SFPUC recommends starting the project review process immediately.	The draft EIR will identify the phase during which Main Street will be constructed. The draft EIR will identify the SFPUC as a responsible agency for permitting.
				Project Description	Yes				Will temporary access or staging occur on the SFPUC ROW? The EIR should disclose any temporary use of SFPUC property, include mitigation if there is an impact, and any proposed use must be reviewed and authorized by the SFPUC.	The draft EIR will identify the location of temporary access or staging. Mitigation measures will be recommended if necessary.
				Project Description	Yes				The EIR should clarify that the SFPUC must review and approve any proposed improvements, including the proposed street connection, on SFPUC property.	The draft EIR will identify the SFPUC as a responsible agency for permitting.
				Alternatives	Yes				Include an alternative where the street connection (Main Street) over the SFPUC property is not built.	One purpose of the NOP is to identify potential alternatives to the proposed project. Alternatives that would reduce significant impacts of the proposed project are identified during the CEQA process prior to the release of the draft EIR.
				Transportation	Yes				The transportation impact analysis (TIA) should detail the safety of the proposed street connection, over the SFPUC property, including designing the street to ensure visibility of pedestrians and drivers crossing the intersection. The TIA must also include that SFPUC staff will need sufficient space to park vehicles and access SFPUC infrastructure and appurtenances from all sides of the SFPUC ROW near the proposed street connection.	Safety will be considered in the TIA and transportation section of the draft EIR; however, safety is not a threshold of significance. To the extent that the proposed project modifies SFPUC access and parking, it will be considered.
				Project Description	Yes				The Project must be reviewed by the SFPUC 's Project Review Committee.	The draft EIR will identify the SFPUC as a responsible agency for permitting.
				Land Use	Yes				The EIR should include an analysis of the project's consistency with SFPUC adopted plans and policies.	The draft EIR will consider the consistency of the street connection proposed by the project with the SFPUC adopted plans and policies in the land use section.
				Hydrology and Water Quality	Yes				The project must comply with current West Bay Regulations and Standards.	The draft EIR will identify West Bay as a responsible agency for permitting. West Bay's current regulations and standards will be considered in the hydrology and water quality section of the draft EIR.

Notice of Preparation Comment Letters Summary
Willow Village Master Plan EIR

#	Date	Commenter Name	Commenting Entity	Topics	EIR	HNA	FIA	Other	Summary of NOP Comment	Discussion
4	10/14/2019	Jonathan Werness	West Bay Sanitary District (West Bay)	Utilities and Service S	Yes				Project may require improvements to downstream West Bay facilities.	Down stream improvements to West Bay facilities are not identified as part of the proposed project. The draft EIR will analyze and determine if such improvements are necessary.
				Utilities and Service S	Yes				EIR shall address all sewer improvements, including gravity mains, force mains, and pump stations.	The utilities and service systems section of the draft EIR will analyze such improvements.
				Utilities and Service S	Yes				On-site recycled water may not be needed, since the West Bay is in the preliminary stages of a Recycled Water Treatment Facility and distribution system near the project.	Pursuant to the applicant's project description, the office parcel(s) will include looped recycled water systems. Because on-site recycled water is identified in the application materials, it will be analyzed in the utilities and service systems section of the draft EIR. The draft EIR would analyze public recycled water as a variant and the City will coordinate with West Bay during the CEQA process.
				Utilities and Service S	Yes				New sewer mains should be in the ROW if possible, and not in easements.	Pursuant to the project description, public domestic water, storm drain, sewer, recycled water, communications, and PG&E electrical and gas mains will be routed in public roadways and within public utility easements within private streets. The draft EIR will analyze the project as proposed. Any potential impacts related to sewer mains will be considered in the utilities and service systems section of the draft EIR.
				Public Services	Yes				The new residential units will generate hundreds of new students, creating significant impacts on the District, including impacts on the District's already overburdened and overcrowded educational facilities.	The potential for the proposed housing to generate students will be analyzed in the public services section of the draft EIR.
				Transportation	Yes				The District is concerned about traffic impacts from the significant number of vehicles that will be brought to the area.	Potential traffic impacts from the proposed project will be analyzed in the transportation section of the draft EIR.
				Air Quality	Yes				The District is concerned about air quality impacts from the significant number of vehicles that will be brought to the area.	Potential air quality impacts from the proposed project will be analyzed in the air quality section of the draft EIR.
				Transportation	Yes				Describe the existing and the anticipated vehicular traffic and student pedestrian movement patterns to and from school sites, including movement patterns to and from TIDE Academy and Menlo-Atherton High School, and including consideration of bus routes.	The transportation section of the draft EIR will discuss the potential impacts of the proposed project on several intersections adjacent to the TIDE Academy and Menlo-Atherton High School. The City's transportation consultant (Hexagon) will provide a qualitative discussion of project-generated student pedestrian, bicycle, and transit patterns to these schools. However, additional specific consideration of school movement patterns is beyond the scope of analysis relative to the proposed project.
				Transportation	Yes				Assess the impact(s) of increased vehicular movement and volumes caused by the project, including but not limited to potential conflicts with school pedestrian movement, school transportation, and busing activities to and from TIDE Academy and Menlo-Atherton High School.	The transportation section of the draft EIR will discuss the potential impacts of the proposed project on several intersections adjacent to the TIDE Academy and Menlo-Atherton High School.

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#	Date	Commenter Name	Commenting Entity	Topics	EIR	HNA	FIA	Other	Summary of NOP Comment	Discussion
5	10/18/2019	Mary Streshly	Sequoia Union High School District (District)	Transportation	Yes				Estimate travel demand and trip generation, trip distribution, and trip assignment by including consideration of school sites and home-to-school travel.	The transportation section of the draft EIR will include consideration of home-to-school trip patterns in development of the trip generation, distribution and assignment for project-generated trips.
				Transportation	Yes				Assess cumulative impacts on schools and the community in general resulting from increased vehicular movement and volumes expected from additional development already approved or pending in the City and Bayfront neighborhood. (Cumulative Projects: 777 Hamilton Drive; Facebook Campus Project; Menlo Gateway Project; Facebook Campus Expansion; Menlo Uptown Project; 111 Independence Drive; Sobrato Group acquisition of 5 parcels).	The transportation section of the draft EIR will include a discussion of potential cumulative impacts. Those listed projects that were occupied at the time of the spring 2019 counts will be in the baseline and those that were not occupied will be considered in the cumulative analysis.
				Transportation	Yes				Discuss the direct, indirect, and cumulative impacts on the circulation and traffic patterns in the community as a result of traffic generated by the transportation needs of students to and from the Project and schools throughout the District during and after the Project build-out.	The transportation section of the draft EIR will analyze project-generated school traffic and will include a discussion of potential cumulative impacts. An indirect environmental impact is a change that is not immediately related to the proposed project, but occurs later in time or farther removed in distance. An indirect impact will be considered if it is a reasonably foreseeable physical change to the environment caused by the proposed project and it will be evaluated at a more general level of detail.
				Transportation	Yes				Assess the impacts on the routes and safety of students traveling to school by vehicle, bus, walking, and bicycle/skateboard.	The transportation section of the draft EIR will provide a qualitative discussion of the multimodal facilities between the project site and the nearby schools.
				Transportation	Yes				Assess increased potential for accidents due to gridlock during school drop-off and pick-up hours.	The transportation section of the draft EIR will answer the question of whether there is a substantial increase in hazards due to a design feature or incompatible uses. There is no defined methodology for analyzing the potential for accidents due to gridlock; this is not included in Hexagon's scope. Afternoon school pick-up is outside of the PM peak.
				Public Services	Yes				Assess potentially reduced response time for emergency services and first responder (traveling to school).	The potential for reduced response times will be considered in the public services section of the draft EIR.
				Noise	Yes				Identify any noise sources and volumes, which may affect school facilities, classroom, and outdoor school areas. Include TIDE Academy and Menlo-Atherton High School in the analysis.	The noise analysis in the draft EIR will consider adjacent sensitive users.
				Public Services	Yes				Identify historical, current, and future population projectio	The draft EIR will identify the current student population and analyze the potential increase as a result of the proposed project, including cumulative conditions, in the public services section of the draft EIR.
				Public Services	Yes				Assess the impacts of population growth within the District, on the District's ability to provide its educational program. The commenter identifies that TIDE Academy is expected to exceed its capacity for the 2023-2024 school year and Menlo-Atherton High School struggles with its population size.	The potential increase in student population as a result of the proposed project will be considered in the public services section of the draft EIR. An assessment of the potential impacts of population growth within the District generally is beyond the scope of the EIR for the proposed project.

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#	Date	Commenter Name	Commenting Entity	Topics	EIR	HNA	FIA	Other	Summary of NOP Comment	Discussion
				Public Services	Yes				Potential overcrowding impacts include: unsafe conditions, decreased quality of education, need for new bus routes.	The potential increase in student population as a result of the proposed project will be considered in the public services section of the draft EIR. Consideration generally of potential impacts of school overcrowding is beyond the scope of the EIR for the proposed project.
				Public Services	Yes				Potential overcrowding impacts include: need for new school construction. Consider AB 48.	The potential increase in student population as a result of the proposed project will be considered in the public services section of the draft EIR. If the proposed project necessitates construction of additional school facilities that will be considered in the draft EIR. However, consideration more broadly of the District's potential need for school construction is beyond the scope of the EIR for the proposed project. AB 48 is relative to school bond funding and does not appear to raise an issue for study in the draft EIR.
				Population and Housing	Yes	Yes			Describe the type and number of anticipated dwelling units resulting directly or indirectly from the project.	The draft EIR and HNA will describe the number and type of dwelling units proposed by the project. The population and housing section of the draft EIR will consider the potential for the proposed project to induce substantial population growth directly or indirectly and the potential for adverse impacts on the physical environment.
				Population and Housing	Yes	Yes			Describe the average square footage for anticipated dwelling units, broken down by type of unit, directly or indirectly resulting from the project.	The draft EIR will describe the number and type of dwelling units proposed by the project. The Housing Needs Assessment (HNA) will consider direct and indirect housing market effects. Consideration of average square footage for anticipated dwelling units, broken down by type of unit for potential indirect growth is too speculative for the HNA and beyond the scope of the environmental analysis in the draft EIR.
				Population and Housing			Yes		Estimate the amount of development fees to be generated by development in accordance with implementation of the project.	This information is outside the scope of the EIR which is focused on the potential physical environmental effects of the proposed project. However, this information will be included in the Fiscal Impact Analysis (FIA) that is prepared for the proposed project.
				Transportation	Yes				The East Palo Alto has identified 23 intersections that they are requesting be included in the TIA. Many of these intersections have been identified to be included in the TIA; however, intersections 8 and 16-23 are not currently in the scope of work.	Hexagon will analyze all of East Palo Alto's requested intersections, with the exception of #8 which is not an intersection that exists (two streets that do not intersect are identified).
				Transportation	Yes				Prior to release of the draft EIR, the City of Menlo Park should identify specific City intersections, grade separations, specify the trip reduction measures, and specify transit capacity enhancements that will be implemented to determine whether the project is effectively addressing its contribution to cumulative traffic volumes and congestion in East Palo Alto.	To the extent that infrastructure improvements or trip reduction measures are necessary to mitigate potentially significant effects of the proposed project, whether in Menlo Park or in East Palo Alto, they will be identified in the draft EIR. Menlo Park will coordinate with East Palo alto if any of the identified mitigations are located in East Palo Alto.

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#	Date	Commenter Name	Commenting Entity	Topics	EIR	HNA	FIA	Other	Summary of NOP Comment	Discussion
6	10/17/2019	Patrick Heisinger	City of East Palo Alto (East Palo Alto)	Population and Housing	Yes	Yes			Per the Settlement Agreement, a HNA is required. East Palo Alto identifies that the EIR should be consistent with all relevant terms of the Settlement Agreement. East Palo also identifies that the scope of the HNA, to the extent possible, shall include an analysis of the multiplier effect for indirect and induced employment by the development project and its relationship to the regional housing needs market and displacement.	An HNA compliant with the settlement agreement will be prepared for the proposed project. An HNA is not a CEQA requirement. Potential Impacts on population and housing as required by CEQA will be considered in the draft EIR.
				Population and Housing		Yes		Yes	East Palo Alto is concerned about exacerbating the housing crisis from displacement of current residents and/or creating a demand for residential units without sufficient resources to address the need. Include an analysis of how the project will affect the jobs/housing ratio in Menlo Park and include the following analysis: (1) net number of new market rate and affordable units permitted and constructed in the last 10 years in Menlo Park and (2) an analysis of where it is anticipated that the new employees will live, based on zip code level data.	To the extent possible, the HNA will consider displacement as a result of the proposed project. Based on zip code data, the HNA will consider where new employees generated by the proposed project are anticipated to live. The HNA will not specifically consider the jobs housing balance, but will consider the housing need generated by the proposed project and compare that to the available supply of housing (with reference to the number of units generated in Menlo Park per year over the past 10 years). A study of the jobs housing balance would be more appropriate on a larger city-wide or regional scale and could be completed concurrently during the entitlement process.
				Population and Housing	Yes				Identify total population growth from indirect household growth and compare to projected population growth.	The population and housing section of the draft EIR will consider potential for the proposed project to induce substantial population growth indirectly through job growth and the potential for the projected growth to result in impacts on the physical environment.
7	10/8/2019	Phil Gutierrez	Mid-Peninsula High School	Transportation	Yes				Concern about increased traffic on Willow Road.	The transportation section of the draft EIR will consider potential impacts to Willow Road through a microsimulation analysis.
				Transportation	Yes				Identification of potential mitigation: reworking of the intersection of Ivy Drive and Willow Road so that Ivy Drive leads straight into Mid-Peninsula High School's parking lot, with a signal. This would allow drivers to go left, straight, or right as they leave campus, as opposed to the current set-up, where everyone exiting the site has to make a right onto Willow Drive.	Hexagon is not currently scoped to study this proposed configuration as it is not currently identified as part of the proposed project or a project variant. Mitigation measures will be identified after the analysis of potential impacts is completed. If modifications to Ivy Drive and Willow Road are needed, they will be considered.
8	10/18/2019	Helen Wolter	Committee for Green Foothills	Hydrology and Water Quality	Yes				EIR should consider sea level rise sustainability and flood resilience.	Sea level rise will be considered in the hydrology and water quality section of the draft EIR.
				Alternatives	Yes	Yes			EIR should include an alternative that has less office space (1 million sf) and more housing (up to 3,000 units using the density bonus for below market rate units). The comment identifies that this would result in a better balance between jobs and housing, which could help reduce displacement. An analysis of the VMT would be needed for this, since the alternative would include more housing and less office.	One purpose of the NOP is to identify potential alternatives to the proposed project. Alternatives that would reduce significant impacts of the proposed project are identified during the CEQA process prior to the release of the draft EIR. Hexagon is not currently scoped to complete a quantitative VMT analysis for alternatives. The potential for displacement will be considered to the extent possible in the HNA.

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Willow Village Master Plan EIR

#	Date	Commenter Name	Commenting Entity	Topics	EIR	HNA	FIA	Other	Summary of NOP Comment	Discussion
9	10/18/2019	Adina Levin	Menlo Together	Project Description	Yes	Yes		Yes	Commenter requests that the EIR include the consequence on housing needs and VMT from providing 20 percent below market rate housing.	The proposed project includes approximately 1,735 residential units of which 15% would be for below market rate (BMR) housing in compliance with the City's BMR ordinance. The draft EIR will describe and consider the potential environmental effect of the project as proposed. Additional BMR housing could be considered by the applicant. For purposes of the draft EIR, analysis of the number and type of dwelling units is critical; the income level of the residents does not change the impact on the environment. The HNA will take into consideration the number of BMR units relative to housing need generated by the proposed project. The percentage of BMR units within the proposed project could be considered through the entitlement process.
				Population and Housing	Yes	Yes			The HNA should include cumulative impacts of the relative amounts of housing and job growth since Facebook initially moved in, including the "fit" between the affordability of housing and the additional jobs.	The draft EIR and the HNA are focused on the potential effects of the proposed project. Existing development will be included in the baseline conditions to which the proposed project will be added to determine its potential environmental effects. The draft EIR will also consider potential cumulative impacts.
				Transportation	Yes				Include in the EIR, the impacts on VMT if/when Dumbarton Rail is in place.	Dumbarton Rail will be considered quantitatively in the cumulative analysis of the transportation section of the draft EIR. The City is currently discussing with Hexagon the appropriate level of detail for analysis with and without Dumbarton Rail.
				Transportation	Yes				Include in the EIR, the nature and impacts of transportation to and from the Willow station which will be adjacent or co-located with the development.	Dumbarton Rail will be considered quantitatively in the cumulative analysis of the transportation section of the draft EIR. The City is currently discussing with Hexagon the appropriate level of detail for analysis with and without Dumbarton Rail.
				Project Description	Yes				Move the grocery store from Phase 3 to Phase 1, since it would be valuable to the community. Include VMT for the following scenario: Having the grocery store/pharmacy available in different phases of the project.	The grocery store is currently identified as a component of the proposed project in the third phase. The draft EIR will analyze the project as proposed. Should the phasing be changed through the entitlement process, the draft EIR will analyze accordingly.
				Transportation	Yes				Include VMT for the following scenario: Project with Dumbarton Rail.	Dumbarton Rail will be considered quantitatively in the cumulative analysis of the transportation section of the draft EIR. The City is currently discussing with Hexagon the appropriate level of detail for analysis with and without Dumbarton Rail.
				Transportation	Yes				Include VMT for the following scenario: Project without Dumbarton Rail.	Dumbarton Rail will be considered quantitatively in the cumulative analysis of the transportation section of the draft EIR. The City is currently discussing with Hexagon the appropriate level of detail for analysis with and without Dumbarton Rail.

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#	Date	Commenter Name	Commenting Entity	Topics	EIR	HNA	FIA	Other	Summary of NOP Comment	Discussion
				Alternatives	Yes				Include VMT for the following scenario: 1 million sf office, 3000 homes, with Dumbarton rail.	One purpose of the NOP is to identify potential alternatives to the proposed project. Alternatives that would reduce significant impacts of the proposed project are identified during the CEQA process prior to the release of the draft EIR. Hexagon is not currently scoped to complete a quantitative VMT analysis for alternatives.
				Alternatives	Yes				Include VMT for the following scenario: 1 million sf office, 3000 homes, without Dumbarton rail.	One purpose of the NOP is to identify potential alternatives to the proposed project. Alternatives that would reduce significant impacts of the proposed project are identified during the CEQA process prior to the release of the draft EIR. Hexagon is not currently scoped to complete a quantitative VMT analysis for alternatives.
				Energy	Yes				The most recent "Reach Code" policy adopted by the City eliminates credits/offsets. Please do not include credits/offsets as options for this project in order to meet 100 percent renewable energy use.	The applicant will be required to comply with and the draft EIR will consider all applicable codes adopted by the City.
10	9/26/2019	Dave Gildea	Public	Transportation	Yes				EIR should review the unwanted traffic side effects of Facebook's employee growth.	The transportation section of the draft EIR will analyze the effect of the proposed project.
				Transportation	Yes				The project should not be allowed to increase traffic beyond existing levels.	The impacts from the proposed project on transportation will be analyzed in the draft EIR. If there are potentially significant impacts, mitigation would be identified to minimize the impacts. The desire not to increase traffic beyond existing levels is a policy consideration.
11	10/7/2019	Gabrielle Johnck	Public	Population and Housing	Yes	Yes			EIR should consider whether the 1,500 residential units proposed is not sufficient to offset added employees.	The draft EIR will consider the potential environmental impact of the proposed project (approx. 1,735 units) and variants with fewer (approx. 1,500) and more (approx. 2,000) units. The HNA will consider the housing need generated by the proposed project and compare that to the available supply of housing.
				Project Description	Yes				Housing should be built before the offices.	The draft EIR will analyze the project as proposed, including the timing for the office and housing components of the proposed project. Should this change be implemented through the entitlement process, the draft EIR will analyze accordingly.
				Project Description	Yes				Pursuit of AB 900 could result in bypassing the City's effort to plan for the future, per the ConnectMenlo General Plan.	If the applicant seeks AB 900 certification, the City is not limited in its ability to conduct its own environmental review of the proposed project and reach its own conclusions regarding potential environmental impacts and appropriate mitigations, even those necessary to meet the requirements for certification as an AB 900 project.
12	9/25/2019	Jeffrey A. Rodgers	Public	Transportation	Yes				Identify timeline for offsetting new traffic caused by the project; commit to executing plan of offsetting traffic before construction begins.	Appropriate timing for mitigation measures will be determined through the transportation analysis and included in the fully enforceable mitigation monitoring and reporting program (MMRP) for the proposed project.

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#	Date	Commenter Name	Commenting Entity	Topics	EIR	HNA	FIA	Other	Summary of NOP Comment	Discussion
				Transportation	Yes				Incorporate the concept of "offsetting the environmental traffic impacts of the project" into the EIR.	Appropriate mitigation measures will be determined through the transportation analysis and included in the fully enforceable MMRP for the proposed project.
13	9/26/2019	Lloyd Leanse	Public	Population and Housing		Yes		Yes	Concern that the project would make the jobs-housing imbalance worse. The Project should accommodate all or most of the employees generated by the project.	The HNA will not specifically consider the jobs housing balance, but will consider the housing need generated by the proposed project and compare that to the available supply of housing. A study of the jobs housing balance would be more appropriate on a larger city-wide or regional scale and could be completed concurrently during the entitlement process.
				Other	Yes				Consider environmental justice when considering topics to consider in the EIR.	The City does not currently have an environmental justice element. Nevertheless, there are certain topics that will be considered in the draft EIR that are relevant to environmental justice; for example, preparation of a health risk assessment and analysis of compliance with the general plan's goals policies and programs designed to promote citywide equity and healthy communities.
				Other	Yes				What is the status of mitigation in Resolution 6356?	Resolution 6356 adopted the MMRP for the general plan update. These mitigations will be applied, as appropriate, to the proposed project and discussed in the draft EIR. A broader discussion regarding the status of the general plan update mitigations is beyond the scope of the EIR for the proposed project.
				Other				Yes	The assumptions in the program-level EIR (Plan Bay Area 2040) are not correct. What now needs revising in the ConnectMenlo Program-level EIR?	At any time the City Council could modify the general plan and/or zoning, and if changes are made, an appropriate level of environmental review (addendum, supplemental, or subsequent EIR) would be conducted for the proposed changes. A full EIR utilizing appropriate assumptions will be prepared to analyze the proposed project.
				Other				Yes	What is the status of benefits in Resolution No. 6356? What are the City's plans to achieve the benefit and by when?	Resolution 6356 adopted the statement of overriding considerations for the general plan update. Any discussion of this Resolution is beyond the scope of the EIR for the proposed project.
				Other				Yes	What are the City's plans to revise the ConnectMenlo ordinances in light of Council's recent discussion of a development moratorium?	Any potential revisions to either the general plan or zoning are beyond the scope of the EIR for the proposed project. Should the City modify either prior to final action on the proposed project, those modifications will be applied to the project and considered in the EIR.
				Transportation	Yes				What measures will the City institute so that development requires tangible transportation improvements before approving more development?	Appropriate mitigation measures for the proposed project and their timing will be determined through the transportation analysis and included in the fully enforceable MMRP for the proposed project.

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#	Date	Commenter Name	Commenting Entity	Topics	EIR	HNA	FIA	Other	Summary of NOP Comment	Discussion
				Transportation	Yes				What's the cost from the infrastructure improvements needed due to increased traffic from the Project (what has Facebook funded, what will taxpayers pay)?	Appropriate mitigation measures for the proposed project and their timing will be determined through the transportation analysis and included in the fully enforceable MMRP for the proposed project. Any cost of mitigation will be borne by the applicant. In addition, the City is currently updating its Transportation Impact Fee (TIF) to fund infrastructure improvements and the proposed project will be subject to the new TIF, once adopted.
				Other				Yes	How will the potential breakup of Facebook by the U.S. Justice Department affect the Project and Menlo Park?	This comment is beyond the scope of the draft EIR which is focused on the physical environmental impact of the project as proposed.
				Public Services	Yes				What is the City's plan for emergency services in District 1, especially during commute hours?	Emergency services will be considered in the public services section of the draft EIR.
				Geology/ Hazards/ Hydrology	Yes				What is the City's plan for disaster preparation for a major disaster, such as a major earthquake that also causes fire and flooding in District 1?	The potential for the project to directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving rupture of a known earthquake fault, will be considered in the geology and soils section of the draft EIR.
				Other				Yes	What is the status of Facebook's required mitigations (total, how it's tracked, measures, reported, how Facebook is held to account)?	This is not project-specific and will not be considered in the EIR for the proposed project. Through the MMRP and annual reviews, the City keeps track of the status of mitigations applicable to previously approved projects.
				Other			Yes	Yes	What is the sum total of Facebook's annual financial contributions to the City's annual revenue?	To the extent this comment relates to previous projects, it is not project-specific. Furthermore, financial contributions are not a physical environmental impact that will be considered in the draft EIR. A FIA will be prepared for the proposed project that will look at the impact of the proposed project on City revenue.
				Transportation	Yes				Stringent requirements for measuring traffic impacts (reverse commutes and average daily traffic).	The transportation analysis in the draft EIR will analyze impacts using VMT, LOS, and will include average daily traffic.
				Biological Resources	Yes				How will the Project affect birdlife?	Any potential impacts on birds will be analyzed in the biological resources section of the draft EIR.
				Biological Resources	Yes				How will the Project affect nature (insects, flower pollinat	Any potential impacts on nature will be analyzed in the biological resources section of the draft EIR.
				Population and Housing	Yes				Impacts on current occupants of the Projects site due to displacement.	CEQA identifies displacement of existing housing, necessitating the construction of replacement housing for study in the EIR. There are no housing units on the project site. The project site is currently occupied by office and warehouse uses; relocation of these businesses is beyond the scope of the draft EIR for the proposed project.
14	9/22/2019	Lynne Bramlett	Public	Population and Housing				Yes	Where will the businesses that would be demolished relocate? What is the impact on clientele? Where will non-profit and local government services go?	The EIR focuses on the potential environmental impact of the proposed project and does not speculate relative to the relocation of existing businesses. These are questions outside the scope of environmental review, but that could be answered through the entitlement process.

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#	Date	Commenter Name	Commenting Entity	Topics	EIR	HNA	FIA	Other	Summary of NOP Comment	Discussion
				Greenhouse Gases	Yes				Impact on climate change, per Council Resolution No. 64	Resolution 6493 was an aspirational statement relative to reducing greenhouse gas (GHG) emissions. The resolution does not adopt specific thresholds or requirements. The draft EIR will analyze compliance with the City's Climate Action Plan in the GHG section of the draft EIR.
				Project Description	Yes			Yes	How will public amenities be chosen? How is it consistent with ConnectMenlo Program-level EIR (environmental justice)?	The draft EIR will consider the potential environmental impact of the proposed project, including any community amenities. The process for selection of community amenities is outside the scope of the EIR for the proposed project. The determination of community amenities is subject to City Council review through the entitlement process. If the City Council makes any changes to the community amenities list prior to action on the proposed project, the updated community amenities list will be applicable to the proposed project.
				Project Description				Yes	What retail, grocery store, and restaurant is planned? How will this impact other existing grocery stores and restaurants? How will Facebook help to ensure retail is successful?	These are questions outside the scope of environmental review, but could be answered through the entitlement process.
				Project Description				Yes	Provide additional information about community space (dollar amount, what is being discussed, what is ruled out).	These are questions outside the scope of environmental review, but that could be answered through the entitlement process. The proposed project will be required to go through an appraisal process to identify the community amenity value.
				Project Description				Yes	Can more housing be added instead of community space? Instead of community space, and a dollar amount set aside for District 1 residents to decide how and where it will be spent?	These are questions outside the scope of environmental review, but that could be answered through the entitlement process. The proposed project will be required to go through an appraisal process to identify the community amenity value and the amenity itself. If there are changes to the proposed project as a result, those will be analyzed in the EIR.
				Project Description	Yes				Identify trees to be planted to mitigate impacts of development.	The removal and replacement of trees will be discussed in the project description and biological resources sections of the draft EIR. If mitigation measures are necessary they will be identified in the draft EIR.
				Utilities and Service S	Yes				What landfills will be used for demolition debris and what is the impact? How will debris be reused.	Use of landfills will be analyzed in the utilities section of the draft EIR.
				Hydrology and Water Quality	Yes				Impacts from building the Project in a flood zone, and what are the plans to protect life and property? Including impact on underground water reservoir from flooding.	These issues will be analyzed in the hydrology and water quality section of the draft EIR.
				Other				Yes	Will adjacent property owners also be allowed to develop their properties into office complexes due to changes in zoning?	This is not project specific and is outside the scope of the environmental review for the proposed project.

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#	Date	Commenter Name	Commenting Entity	Topics	EIR	HNA	FIA	Other	Summary of NOP Comment	Discussion
				Population and Housing	Yes			Yes	Identify overall jobs/housing imbalance in Menlo Park, Santa Clara County, San Mateo County. Identify impacts on jobs/housings imbalance, including cumulative impacts.	The jobs housing balance is an economic and social issue, but not a physical environmental issue subject to analysis in the EIR. The jobs housing balance may impact commute times, the effects of which would be considered in the transportation, air quality and GHG sections of the draft EIR. A study of the jobs housing balance would be more appropriate on a larger city-wide or regional scale and could be completed concurrently during the entitlement process.
				Other				Yes	Is there any regional effort to halt office development projects?	This is not project-specific and not required for CEQA review. City staff is unaware of regional efforts to halt development projects.
				Cumulative	Yes			Yes	Identify cumulative impact from jobs/housing imbalance (noise; pollution; species decline, including birds).	The jobs housing balance is an economic and social issue, but not a physical environmental issue subject to analysis in the EIR. The jobs housing balance may impact commute times, the effects of which would be considered in the transportation, air quality and GHG sections of the draft EIR.
				Cumulative	Yes				Consider cumulative impacts from (Stanford and Los Angeles Developer, Lowe Enterprise), including from jobs/housing imbalance.	The draft EIR will consider cumulative impacts resulting from reasonably foreseeable future projects. The jobs housing balance is an economic and social issue, but not a physical environmental issue subject to analysis in the EIR. The jobs housing balance may impact commute times, the effects of which would be considered in the transportation, air quality and GHG sections of the draft EIR.
				Other				Yes	The use of the term "Village" is misleading, consider using "Office Park."	The title of the proposed project has no impact on the environmental analysis.
				Other				Yes	The commenter identifies a “misleading Facebook sponsored poll designed to get answers that would help Facebook to demonstrate public support for Willow Village.” Would the Planning Commission consider adopting a general development code of ethics that would prohibit misleading or deceptive business practices such as described below?	This comment does not raise any environmental issues that require analysis in the EIR for the proposed project.
				Transportation	Yes				Traffic impacts from construction of new offices and structures in the perimeter of their neighborhood (Belle Haven). Future growth should reduce traffic (not just maintain parity).	Impacts from construction will be considered in the transportation section of the draft EIR. Mitigations measures identified as appropriate.
				Noise	Yes				Noise impacts from construction equipment and labor in the perimeter of their neighborhood (Belle Haven).	Construction noise impacts will be analyzed in the draft EIR.
				Air Quality/Noise	Yes				Dust and air pollution from construction of new offices and structures in the perimeter of their neighborhood (Belle Haven). Concern for impacts on asthma and respiratory illnesses for their children. Would like to see rigorous mitigation during construction and after construction (addition of more trees, plans, sound walls, traps for air particulates).	Construction impacts on air quality will be analyzed in the draft EIR. In addition, a health risk assessment will be prepared. Mitigation measures will be identified as appropriate.

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15	9/22/2019	Mike Murillo	Public	Project Description	Yes	Yes			Increase affordable housing from a minimum of 15 percent to 30 percent.	The proposed project includes approximately 1,735 residential units of which 15% would be for BMR housing in compliance with the City's BMR ordinance. The draft EIR will describe and consider the potential environmental effect of the project as proposed. Additional BMR housing could be considered by the applicant. For purposes of the draft EIR, analysis of the number and type of dwelling units is critical; the income level of the residents does not change the impact on the environment. The HNA will take into consideration the number of BMR units relative to housing need generated by the proposed project. The percentage of BMR units provided in the project could be considered through the entitlement process.
				Project Description	Yes				Increase open space by 50 percent more than proposed. Connect open space to Baylands.	The draft EIR will analyze the project with the amount of open space proposed. Should the applicant choose to implement the comment and increase open space, the draft EIR will analyze accordingly. A potential increase in open space provided by the project could be considered through the entitlement process.
16	9/25/2019	Nancy Barnby	Public	Transportation	Yes				Submit a viable plan that identifies mitigation to traffic impacts, prior to any construction beginning. The commenter identifies increasing traffic problems in Belle Haven in the past 15 years.	Appropriate mitigation measures for the proposed project and their timing will be determined through the transportation analysis and included in the fully enforceable MMRP for the proposed project.
				Other				Yes	Concern over public noticing. Suggestion that the process should follow the TIERS public engagement process.	CEQA required noticing procedures will be followed; noticing in excess of legal requirements is a policy decision. This comment does not raise any environmental issues that require analysis in the EIR for the proposed project.
				Population and Housing	Yes				Identify number of Facebook employees and contracted employees in multiple buildings throughout District 1.	The draft EIR will identify existing baseline conditions, including existing employment.
				Transportation	Yes				Include Bus Stop Occupancy Plan in analysis.	The applicant will be asked to provide an updated plan showing shuttle and tram routes for consideration as part of the transit analysis in the transportation section of the draft EIR.
				Cumulative	Yes				Include these projects in the cumulative analysis: Dumbarton Corridor project including train stop; Bohannon Gateway (almost completed); Gateway Family Housing; Sobrato Office development; SP Menlo LLC multi-family; Menlo Uptown; Menlo Portal; and Hotels citizen and Moxy.	Projects will be included as appropriate either in the background conditions or the cumulative conditions.
				Other				Yes	Review council meetings (including moratorium), CCIN, and community input to understand resident's concerns.	This comment does not raise any environmental issues that require analysis in the EIR for the proposed project. Comments provided on the NOP or the draft EIR will be included in the EIR.

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#	Date	Commenter Name	Commenting Entity	Topics	EIR	HNA	FIA	Other	Summary of NOP Comment	Discussion
				Project Description	Yes				Reduce FAR and decrease office size (30-50%) to allow for more housing.	The draft EIR will analyze the project as proposed. One purpose of the NOP is to identify potential alternatives to the proposed project. Alternatives that would reduce significant impacts of the proposed project are identified during the CEQA process prior to the release of the draft EIR.
				Cumulative	Yes				The hotel is next to the proposed Dumbarton Corridor train stop.	The Dumbarton Corridor train stop is not an existing condition, but will be included in the cumulative analysis in the transportation section of the draft EIR.
				Population and Housing		Yes		Yes	Include a housing needs and displacement study. Ensure mitigation for jobs/housing imbalance.	The jobs housing balance is an economic and social issue, but not a physical environmental issue subject to analysis in the EIR. The jobs housing balance may impact commute times, the effects of which would be considered in the transportation, air quality and GHG sections of the draft EIR. The HNA will not specifically consider the jobs housing balance, but will consider the housing need generated by the proposed project and compare that to the available supply of housing. A study of the jobs housing balance would be more appropriate on a larger city-wide or regional scale and could be completed concurrently during the entitlement process. To the extent possible, the HNA will consider displacement as a result of the proposed project.
				Project Description		Yes			The housing needs and displacement study should include change of property ownership, including LLCs for the past 10 years. In addition, the number of apartments and homes unoccupied, reserved for Airbnb, reserved for corporations, or otherwise unavailable to the public must be included.	Such information could be incorporated into the HNA if available.
17	10/7/2019	Pamela D. Jones	Public	Project Description	Yes				Residential and commercial areas should be completed prior to office development.	The draft EIR will analyze the project as proposed. Should the phasing be modified through the entitlement process, the draft EIR will analyze accordingly.
				Land Use				Yes	The potential loss of the local businesses on Willow Road and Hamilton Avenue will create an additional hardship on the residential area.	Potential loss of local business is an economic effect and will be considered to the extent that the proposed project has the potential to cause urban decay.
				Other	Yes			Yes	Review community amenities, grocery store, so that they are compatible with needs of residents.	The draft EIR will consider the potential environmental impact of the proposed project, including any community amenities. The process for selection of community amenities is outside the scope of the EIR for the proposed project. Community amenities provided by the project would be reviewed through the entitlement process.
				Project Description	Yes				Decrease office development to allow for more open space.	The draft EIR will analyze the project as proposed. One purpose of the NOP is to identify potential alternatives to the proposed project. Alternatives that would reduce significant impacts of the proposed project are identified during the CEQA process prior to the release of the draft EIR.

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#	Date	Commenter Name	Commenting Entity	Topics	EIR	HNA	FIA	Other	Summary of NOP Comment	Discussion
				Project Description	Yes				Include access to Bayfront Expressway from the Southern boundary.	The draft EIR will analyze the project as proposed. Should this be implemented through the entitlement process, the draft EIR will analyze accordingly.
				Transportation	Yes				Include “cross-traffic” between University Avenue, O’Brien Avenue, and Willow Road.	Traffic on O'Brien Drive, University Avenue and Willow Road will be analyzed in the transportation section of the draft EIR.
				Transportation	Yes				Study “cut-through traffic" along Hamilton Avenue, Chilco Avenue, and Ivy Drive.	Cut-though traffic on the suggested streets will be analyzed in the transportation section of the draft EIR.
				Project Description	Yes				Provide public access.	Public access as proposed by the project will be identified and considered in the draft EIR.
				Cumulative	Yes				Include Dumbarton Rail in analysis.	Dumbarton Rail will be considered quantitatively in the cumulative analysis of the transportation section of the draft EIR. The City is currently discussing with Hexagon the appropriate level of detail for analysis with and without Dumbarton Rail.
				Project Description	Yes				Acquire Willow Road from Caltrans.	This is not currently a component of the proposed project. The project will be analyzed as proposed. Should this be implemented through the entitlement process, the draft EIR will analyze accordingly.
				Transportation	Yes				Enforcement of no bus, shuttle, or private vehicles on local streets, fine schedule, trip cap.	Appropriate timing for mitigation measures will be determined through the transportation analysis and included in the fully enforceable mitigation monitoring and reporting program (MMRP) for the proposed project.
				Transportation	Yes				Study pedestrian overcrossings for safety.	Pedestrian overcrossings will be analyzed in the transportation section of the draft EIR.
				Cumulative	Yes				Cumulative impacts on traffic [Bohannon buildings, Sobrato proposed development, and Hotels shuttles, buses, and private vehicles (including Uber, Lyft and limousines)].	The cumulative impacts on traffic will be considered in the transportation section of the draft EIR.
				Air Quality	Yes				The Redwood City air monitoring location is inadequate; use location in Belle Haven Neighborhood, which will be installed by San Mateo County Labs.	The Bay Area Air Quality Management District (BAAQMD) monitoring station is the best and most reliable source of data and will be utilized. ICF will evaluate what additional information is available regarding air quality from the County or the applicant and include it as appropriate in the draft EIR.
	10/7/2019			Population and Housing	Yes				Use ConnectMenlo General Plan Projections instead of the ABAG Projections.	Both ConnectMenlo growth projections and ABAG projections will be considered.
				Project Description	Yes				Commenter notes the requirements from the Facebook Development Agreement (DA).	The Facebook Campus Expansion Development Agreement required Facebook to design a minimum of 1,500 on the project site. This requirement was not a mitigation measure, but a negotiated public benefit. The City could not pre-authorize development of these housing units through the Development Agreement. By submitting the proposed project application with 1,735 units Facebook has complied with the Development Agreement.

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#	Date	Commenter Name	Commenting Entity	Topics	EIR	HNA	FIA	Other	Summary of NOP Comment	Discussion
18	10/6/2019	Patti Fry	Public	Project Description	Yes				In the EIR, analyze each proposed phase (Phase 1; Phase 1 and 2; all Phases). Mitigation should be included for each phase.	The phasing plan, as proposed by the applicant, will be analyzed throughout the EIR and mitigation will be phased as appropriate (although it is currently anticipated that the majority of the mitigation will be front-loaded).
				Population and Housing		Yes		Yes	Discuss jobs/housing imbalance (ConnectMenlo is reaching its projections for office but not residential).	The jobs housing balance is an economic and social issue, but not a physical environmental issue subject to analysis in the EIR. The jobs housing balance may impact commute times, the effects of which would be considered in the transportation, air quality and GHG sections of the draft EIR. The HNA will not specifically consider the jobs housing balance, but will consider the housing need generated by the proposed project and compare that to the available supply of housing. A study of the jobs housing balance would be more appropriate on a larger city-wide or regional scale and could be completed concurrently during the entitlement process.
				Population and Housing	Yes				Per the DA, the 1,500 units would be for previous housing demand. So, the project can only claim the 235 units from the demand for Willow Village. Consider this in analysis.	The Facebook Campus Expansion Development Agreement required Facebook to design a minimum of 1,500 on the project site. This requirement was not a mitigation measure, but a negotiated public benefit. The City could not pre-authorize development of these housing units through the Development Agreement. By submitting the proposed project application Facebook has complied with the Development Agreement. The project will be analyzed as proposed, with approximately 1,735 units.
				Alternatives	Yes				Consider Alternative: Alternative should only comprise a reduction of Office square footage while keeping proposed housing, retail, community services.	One purpose of the NOP is to identify potential alternatives to the proposed project. Alternatives that would reduce significant impacts of the proposed project are identified during the CEQA process prior to the release of the draft EIR.
				Population and Housing	Yes	Yes		Yes	Use standard metric for jobs/housing imbalance. Consider impacts within the context of Facebook footprints in Menlo Park. Consider the overall jobs/housing imbalance. Consider: trips, greenhouse gas emissions, demand for water and housing, air quality, noise, etc.	The jobs housing balance is an economic and social issue, but not a physical environmental issue subject to analysis in the EIR. The jobs housing balance may impact commute times, the effects of which would be considered in the transportation, air quality and GHG sections of the draft EIR. The HNA will not specifically consider the jobs housing balance, but will consider the housing need generated by the proposed project and compare that to the available supply of housing. A study of the jobs housing balance would be more appropriate on a larger city-wide or regional scale and could be completed concurrently during the entitlement process.

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#	Date	Commenter Name	Commenting Entity	Topics	EIR	HNA	FIA	Other	Summary of NOP Comment	Discussion
				Transportation	Yes				EIR should analyze VMT and LOS.	The draft EIR will analyze VMT in the transportation section (and also the GHG section). LOS will be included in the draft EIR transportation section for informational purposes. LOS will also be considered in the land use section of the draft EIR relative to the proposed project's compliance with the general plan goals, policies and programs.
				Population and Housing				Yes	Consider displacement of the Menlo Park Fire Protection district and Urban Search and Rescue training and storage facility, a dialysis clinic, Community Legal Services of East Palo Alto, and other community-serving tenants.	The EIR focuses on the potential environmental impact of the proposed project and does not speculate relative to the relocation of existing businesses. These are questions outside the scope of environmental review, but that could be answered through the entitlement process.
19	9/25/2019	Peter Altman	Public	Air Quality	Yes				Work to reduce the spread of air pollution caused by traffic.	The impact of traffic on air quality will be analyzed in the air quality section of the draft EIR.
				Noise	Yes				Work to reduce the spread of noise caused by traffic.	The impact of traffic on noise will be analyzed in the noise section of the draft EIR.
				Transportation	Yes				Prepare a traffic assessment and work to reduce traffic.	A Transportation Impact Analysis (TIA) will be prepared for the proposed project. Transportation impacts will be analyzed in the transportation section of the draft EIR and appropriate mitigations measures will be identified.
	9/27/2019			Air Quality	Yes				Increase in soot from cutting down the trees at Willow and 101. Impact on health of children.	The draft EIR will consider all elements of the proposed project in analyzing the impact on air quality. A health risk assessment will be conducted and the results reported in the air quality section of the draft EIR.
				Noise	Yes				Increase in noise from cutting down the trees at Willow and 101.	The draft EIR will consider all elements of the proposed project in analyzing the impact on noise.
				Transportation	Yes				Increase in time to get off US-101 (South) onto Willow West and Willow East.	The transportation section of the draft EIR will consider both VMT and LOS, which is a measure of delay. However, the threshold of significance will be based upon VMT, and LOS will be provided for informational purposes only (and to determine compliance with the general plan).
				Transportation	Yes				Evaluate Project's impacts on traffic/parking on East Palo City Streets.	The draft EIR will consider whether there is adequate parking proposed for the project and whether there is a physical environmental impact that could result from a shortage. The draft EIR transportation section will assess transportation impacts on East Palo Alto facilities.
				Transportation	Yes				Use impact fees for East Palo Alto (2 new stop signs; radar speed limit signs; reconstruction of roadways; larger sidewalks; burying utility lines; lamp posts; traffic calming study; bike lanes; lighting; all-red traffic light interval; enforcement of speed and parking regulations).	The draft EIR transportation section will consider whether there are any impacts to identified intersections in East Palo Alto and any appropriate mitigation. Impact fees are earmarked for specific projects (some of which may be in East Palo Alto) and cannot be re-allocated through the environmental review process.

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20	10/7/2019	Romain Taniere	Public	Project Description	Yes				Redevelop Willow/O'Brien/University with pedestrian/bicycle traffic in mind. Construct sidewalks with ADA compliant crosswalks/curbs/ramps, on both sides all along O'Brien Drive. Better lighting should be installed and bicycle lanes should be also developed on O'Brien Drive.	This is not currently a component of the proposed project. The project will be analyzed as proposed. Should this be implemented through the entitlement process, the draft EIR will analyze accordingly.
				Project Description	Yes				Work with nearby landowners (10 Kelly Court, 1 Casey Court, 1215 O'Brien Drive) and specifically CSBio (Kelly Court, 1075 O'Brien) and 1105-1165 O'Brien Drive to better connect to O'Brien Drive.	This is not currently a component of the proposed project. The project will be analyzed as proposed. Should this be implemented through the entitlement process, the draft EIR will analyze accordingly.
				Project Description	Yes				Consider more direct bus/street connections from Willow/University to Willow Village to limit residential traffic.	This is not currently a component of the proposed project. The project will be analyzed as proposed. Should this be implemented through the entitlement process, the draft EIR will analyze accordingly.
				Project Description	Yes				Add the redevelopment of Hetch Hetchy right of way as an open space.	This is not currently a component of the proposed project. The project will be analyzed as proposed. Should this be implemented through the entitlement process, the draft EIR will analyze accordingly.
				Project Description	Yes				Make the O'Brien Park (presumably the Dog Park) much bigger than the current planned size.	This is not currently a component of the proposed project. The project will be analyzed as proposed. Should this be implemented through the entitlement process, the draft EIR will analyze accordingly.
				Project Description	Yes				Move public park away from Willow Road towards O-Brien Drive. The public park should be full amenity community park and not limited as a sport's/multi use field.	This is not currently a component of the proposed project. The project will be analyzed as proposed. Should this be implemented through the entitlement process, the draft EIR will analyze accordingly.
				Project Description	Yes				Include and allow rooftop accessible mixed use business/retail spaces such as bars/restaurants.	This is not currently a component of the proposed project. The project will be analyzed as proposed. Should this be implemented through the entitlement process, the draft EIR will analyze accordingly.
				Project Description	Yes				Allow options to include and connect a future Dumbarton transit/commuting center to the Willow Village Campus.	This is not currently a component of the proposed project. The project will be analyzed as proposed. Should this be implemented through the entitlement process, the draft EIR will analyze accordingly.
	10/8/2019			Transportation	Yes			Yes	Consider no net increase in VMT.	The VMT impacts from the proposed project will be analyzed in the transportation section of the draft EIR. If potentially significant impacts are identified, mitigation would be implemented to minimize the impact (which may not result in no net increase in VMT). The threshold of significance for VMT impacts is a policy consideration to be considered as part of an update to the City's TIA guidelines.
				Transportation	Yes				Consider analyzing VMT from having grocery store/pharmacy at different phases.	This is not currently a component of the proposed project. The project will be analyzed as proposed. Should this be implemented through the entitlement process, the draft EIR will analyze accordingly.
				Alternatives	Yes				Study a Lower Office Alternative: 1 million sf of office and more housing (3,000 units using density bonus for BMR).	One purpose of the NOP is to identify potential alternatives to the proposed project. Alternatives that would reduce significant impacts of the proposed project are identified during the CEQA process prior to the release of the draft EIR.

Notice of Preparation Comment Letters Summary
Willow Village Master Plan EIR

#	Date	Commenter Name	Commenting Entity	Topics	EIR	HNA	FIA	Other	Summary of NOP Comment	Discussion
21	10/7/2019	Adina Levin	Public	Transportation	Yes				Identify VMT with Dumbarton Rail in place.	Dumbarton Rail will be considered quantitatively in the cumulative analysis of the transportation section of the draft EIR. The City is currently discussing with Hexagon the appropriate level of detail for analysis with and without Dumbarton Rail.
				Project Description	Yes				Use Density Bonus for higher share of BMR housing (25%).	The proposed project includes approximately 1,735 residential units of which 15% would be for below market rate (BMR) housing in compliance with the City's BMR ordinance. The draft EIR will describe and consider the potential environmental effect of the project as proposed. Additional BMR housing could be considered by the applicant. For purposes of the draft EIR, analysis of the number and type of dwelling units is critical; the income level of the residents does not change the impact on the environment. The HNA will take into consideration the number of BMR units relative to housing need generated by the proposed project.
				Population and Housing	Yes	Yes			Provide housing to balance jobs and reduce displacement.	The jobs housing balance is an economic and social issue, but not a physical environmental issue subject to analysis in the EIR. The jobs housing balance may impact commute times, the effects of which would be considered in the transportation, air quality and GHG sections of the draft EIR. The HNA will not specifically consider the jobs housing balance, but will consider the housing need generated by the proposed project and compare that to the available supply of housing. A study of the jobs housing balance would be more appropriate on a larger city-wide or regional scale and could be completed concurrently during the entitlement process.
				Project Description	Yes				Move grocery store to an earlier phase.	The grocery store is currently identified as a component of the proposed project in the third phase. The draft EIR will analyze the project as proposed. Should the timing of the grocery store be modified through the entitlement process, the draft EIR will analyze accordingly.
				Energy	Yes				Do not include credits/offsets for the project, per “Reach Code.”	The applicant will be required to comply with and the draft EIR will consider all applicable codes adopted by the City.
				Project Description				Yes	Consider needs of community when choosing a grocery store.	The choice of the grocery store will not be included in the EIR because this information is not necessary for the environmental impact analysis. This can, however, be considered through the entitlement process.
				Transportation	Yes				Consider safety from having pedestrian overcrossing, per safety concerns. https://www.itdp.org/2019/10/01/pedestrian-bridges-make-cities-less-walkable-why-do-cities-keep-building-them/	A pedestrian overcrossing will be considered transportation section of the draft EIR.

Notice of Preparation Comment Letters Summary
Willow Village Master Plan EIR

#	Date	Commenter Name	Commenting Entity	Topics	EIR	HNA	FIA	Other	Summary of NOP Comment	Discussion
				Alternatives	Yes				Consider this in the Analysis: Current proposal, with Dumbarton rail.	Dumbarton Rail will be considered quantitatively in the cumulative analysis of the transportation section of the draft EIR. The City is currently discussing with Hexagon the appropriate level of detail for analysis with and without Dumbarton Rail.
	10/14/2019			Alternatives	Yes				Consider this in the Analysis: Current proposal, without Dumbarton rail.	Dumbarton Rail will be considered quantitatively in the cumulative analysis of the transportation section of the draft EIR. The City is currently discussing with Hexagon the appropriate level of detail for analysis with and without Dumbarton Rail.
				Alternatives	Yes				Consider this in the Analysis: 1 million sf, with Dumbarton rail.	Dumbarton Rail will be considered quantitatively in the cumulative analysis of the transportation section of the draft EIR. The City is currently discussing with Hexagon the appropriate level of detail for analysis with and without Dumbarton Rail.
				Alternatives	Yes				Consider this in the Analysis: 1 million sf, without Dumbarton rail.	Dumbarton Rail will be considered quantitatively in the cumulative analysis of the transportation section of the draft EIR. The City is currently discussing with Hexagon the appropriate level of detail for analysis with and without Dumbarton Rail.
				Alternatives	Yes				Consider this in the Analysis: Less office space with Dumbarton (low impact scenario).	Dumbarton Rail will be considered quantitatively in the cumulative analysis of the transportation section of the draft EIR. The City is currently discussing with Hexagon the appropriate level of detail for analysis with and without Dumbarton Rail.
				Alternatives	Yes				Consider this in the Analysis: Current proposal without Dumbarton (high impact scenario).	Dumbarton Rail will be considered quantitatively in the cumulative analysis of the transportation section of the draft EIR. The City is currently discussing with Hexagon the appropriate level of detail for analysis with and without Dumbarton Rail.
				Project Description/ Biological Resources	Yes				Plant 10 percent of trees (50) with older, mature trees (e.g., 20 year native oak).	This is not currently a component of the proposed project. The project will be analyzed as proposed. Should this be implemented through the entitlement process, the draft EIR will analyze accordingly.
				Project Description	Yes				Any plans for connecting the Project with future rail or bus rapid transit station (Dumbarton)?	Dumbarton Rail will be considered quantitatively in the cumulative analysis of the transportation section of the draft EIR. The City is currently discussing with Hexagon the appropriate level of detail for analysis with and without Dumbarton Rail.
				Land Use	Yes				How will the project integrate with other office developments south of the Project site? Recommendation: bike/ped friendly neighborhood integration plan.	Consistency with existing land uses will be analyzed in the land use section of the draft EIR.
				Transportation	Yes				Analysis of impacts from traffic due to access to the Office Campus from residential areas (new Park Street).	Access issues will be analyzed in the transportation section of the draft EIR.
				Other	Yes				Because of changes, the Project cannot rely on the program EIR, especially for GHG, transportation, and AQ.	The EIR will be a project-level EIR and will not tier from the certified program-level EIR that was prepared for ConnectMenlo. However, ConnectMenlo will be summarized and referenced, where applicable.

Notice of Preparation Comment Letters Summary
Willow Village Master Plan EIR

#	Date	Commenter Name	Commenting Entity	Topics	EIR	HNA	FIA	Other	Summary of NOP Comment	Discussion
22	10/12/2019	Chris DeCardy	Public	Project Description/Air Quality	Yes				Consider net zero emissions from all buildings, without the use of offset or credits. Consider no net increase in indoor and outdoor air pollution.	The impacts from the proposed project on air quality will be analyzed in the draft EIR, with thresholds established by the regional air quality board. These thresholds do not include “no net increase” in air pollutants. Nonetheless, the draft EIR will consider air quality impacts during construction and operation.
				Transportation	Yes			Yes	Consider no net increase in VMT (TDM plan that zeroes out net new trips).	The VMT impacts from the proposed project will be analyzed in the transportation section of the draft EIR. If potentially significant impacts are identified, mitigation would be implemented to minimize the impact (which may not result in no net increase in VMT). The threshold of significance for VMT impacts is a policy consideration to be considered as part of an update to the City's TIA guidelines.
				Alternatives	Yes				Consider keeping office space at or close to its current size (area, no. of employees, vehicle trips).	One purpose of the NOP is to identify potential alternatives to the proposed project. Alternatives that would reduce significant impacts of the proposed project are identified during the CEQA process prior to the release of the draft EIR.
23	10/22/2019	John Kadvany	Public	Alternatives	Yes				Consider keeping traffic at or close to existing baseline.	The VMT impacts from the proposed project will be analyzed in the transportation section of the draft EIR. If potentially significant impacts are identified, mitigation would be implemented to minimize the impact (which may not result in keeping traffic at or close to existing baseline).
				Transportation	Yes				Include travel time estimates, from project entrances to 101 entrance/exits, nearby intersections, Dumbarton Bridge (University Ave).	The transportation section of the draft EIR will consider both VMT and LOS, which is a measure of delay. However, the threshold of significance will be based upon VMT, and LOS will be provided for informational purposes only (and to determine compliance with the general plan).
				Transportation	Yes				Identify a study option or transit scenario for Willow Village becoming a destination.	One purpose of the NOP is to identify potential alternatives to the proposed project. Alternatives that would reduce significant impacts of the proposed project are identified during the CEQA process prior to the release of the draft EIR.
				Other				Yes	Identify office needs based on Connect Menlo and compare to other cities.	Office needs for Menlo Park and other cities is not project-specific and not a CEQA topic subject to analysis in the EIR for the proposed project.

Notice of Preparation Scoping Session Public Comments Summary

Notice of Preparation Scoping Session Public Comments Summary
Willow Village Master Plan EIR

#	Date	Commenter Name	Commenting Entity	Topics	EIR	HNA	FIA	Other	Summary of NOP Comment	Discussion
P_1	10/7/2019	Patti Fry	Member of the Public	Project Description	Yes				EIR to evaluate each phase separately since mitigation measures should be implemented by phase, as they occur.	The phasing plan, as proposed by the applicant, will be analyzed throughout the EIR and mitigation will be phased as appropriate (although it is currently anticipated that the majority of the mitigation will be front-loaded).
				Alternatives	Yes				Alternative: should focus on less office and not less retail or housing.	One purpose of the NOP is to identify potential alternatives to the proposed project. Alternatives that would reduce significant impacts of the proposed project are identified during the CEQA process prior to the release of the draft EIR.
				Population and Housing	Yes				ABAG Projections vs. ConnectMenlo growth projections. Use ConnectMenlo instead of ABAG.	Both ConnectMenlo growth projections and ABAG projections will be considered in the draft EIR.
				Transportation	Yes				Consider LOS and VMT.	The draft EIR will analyze VMT in the transportation section (and also the GHG section). LOS will be included in the draft EIR transportation section for informational purposes. LOS will also be considered in the land use section of the draft EIR relative to the proposed project's compliance with the general plan goals, policies and programs.
				Population and Housing	Yes	Yes		Yes	Jobs/housing imbalance – traffic and displacement of people. Ways to help the overall community.	The jobs housing balance is an economic and social issue, but not a physical environmental issue subject to analysis in the EIR. The jobs housing balance may impact commute times, the effects of which would be considered in the transportation, air quality and GHG sections of the draft EIR. The HNA will not specifically consider the jobs housing balance, but will consider the housing need generated by the proposed project and compare that to the available supply of housing. A study of the jobs housing balance would be more appropriate on a larger city-wide or regional scale and could be completed concurrently during the entitlement process.

Notice of Preparation Scoping Session Public Comments Summary
Willow Village Master Plan EIR

#	Date	Commenter Name	Commenting Entity	Topics	EIR	HNA	FIA	Other	Summary of NOP Comment	Discussion
P_2	10/7/2019	Pamela Jones	Member of the Public	Other				Yes	Provide notifications and use tier notification process.	CEQA required noticing procedures will be followed; noticing in excess of legal requirements is a policy decision. This comment does not raise any environmental issues that require analysis in the EIR for the proposed project.
				Cumulative	Yes				Dumbarton must be part of the analysis and other pipeline projects.	Dumbarton Rail along with other projects will be considered quantitatively in the cumulative analysis of the transportation section of the draft EIR. The City is currently discussing with Hexagon the appropriate level of detail for analysis with and without Dumbarton Rail.
				Other				Yes	Review of the CCIN meeting and community rol	This comment does not raise any environmental issues that require analysis in the EIR for the proposed project. Comments provided on the NOP or the draft EIR will be included in the EIR.
				Alternatives	Yes				FAR should be reduced for office, increase housing. Further exacerbate the jobs/housing imbalance. Increase BMR, condos.	One purpose of the NOP is to identify potential alternatives to the proposed project. Alternatives that would reduce significant impacts of the proposed project are identified during the CEQA process prior to the release of the draft EIR.
				Project Description	Yes				All residential and commercial areas should be completed prior to any office development.	The draft EIR will analyze the project as proposed. Should the be implemented through the entitlement process, the draft EIR will analyze accordingly.
				Transportation	Yes				Traffic: consider nearby intersections.	Nearby intersections will be considered in the transportation section of the draft EIR.
				Project Description	Yes				Direct access to Bayfront Expressway.	The draft EIR will analyze the project as proposed. Should this be implemented through the entitlement process, the draft EIR will analyze accordingly.
				Air Quality	Yes				Air quality: do local monitoring closer than Redwood City.	The Bay Area Air Quality Management District (BAAQMD) monitoring station is the best and most reliable source of data and will be utilized. ICF will evaluate what additional information is available regarding air quality from the County or the applicant and include it as appropriate in the draft EIR.

Notice of Preparation Scoping Session Public Comments Summary
Willow Village Master Plan EIR

#	Date	Commenter Name	Commenting Entity	Topics	EIR	HNA	FIA	Other	Summary of NOP Comment	Discussion
P_3	10/7/2019	Crystal Leach	Sequoia Unified School District	Other	Yes				Concerned about impacts related to circulation, traffic, noise, safety, housing with regards to the school district.	The draft EIR will analyze the potential impact of the proposed project on traffic, noise, housing, etc.
				Other	Yes				A comment letter with detailed issues of concern will be submitted.	Comment letters on the NOP will be considered prior to the preparation of the draft EIR.
P_4	10/7/2019	Matthew Zito	Sequoia Unified School District	Other	Yes				Project site is in Menlo-Atherton High School District. Impacts should be mitigated. New school (TIDE Academy) has capacity for 400 students. Fees do not cover development.	Section 65996 of the State Government Code states that the payment of school impact fees as established by SB 50 is deemed to constitute full and complete mitigation for school impacts from development.
				Transportation	Yes				Analyze existing and anticipated traffic impacts to schools.	The transportation section of the draft EIR will analyze project-generated school traffic and will include a discussion of potential cumulative impacts.
				Transportation	Yes				Analyze potential conflicts with school pedestrian movement and other safety concerns.	The transportation section of the draft EIR will discuss the potential impacts of the proposed project on several intersections adjacent to the TIDE Academy and Menlo-Atherton High School. The City's transportation consultant (Hexagon) will provide a qualitative discussion of project-generated student ped/bike/transit patterns to these schools. However, additional specific consideration of school movement patterns is beyond the scope of analysis relative to the proposed project.
				Other	Yes				A comment letter with detailed issues of concern will be submitted.	Comment letters on the NOP will be considered prior to the preparation of the draft EIR.

Notice of Preparation Scoping Session Public Comments Summary
Willow Village Master Plan EIR

#	Date	Commenter Name	Commenting Entity	Topics	EIR	HNA	FIA	Other	Summary of NOP Comment	Discussion
P_5	10/7/2019	Luis Guzman	Member of the Public	Transportation	Yes				East Palo Alto streets must be considered. Consider safety and mitigation measures.	Hexagon will analyze all of East Palo Alto's requested intersections, with the exception of #8 which is not an intersection. Mitigation measures will be identified as appropriate.
				Other	Yes				East Palo Alto should get development fees.	The draft EIR transportation section will consider whether there are any impacts to identified intersections in East Palo Alto and any appropriate mitigation. Impact fees are earmarked for specific projects (some of which may be in East Palo Alto) and cannot be re-allocated through the environmental review process.
				Project Description	Yes				O'Brien Park should be bigger and develop SFPUC ROW with open space.	This is not currently a component of the proposed project. The project will be analyzed as proposed. Should this be implemented through the entitlement process, the draft EIR will analyze accordingly.
				Project Description	Yes				Construct new sidewalks and bike lanes on O'Brien. Area should be redeveloped with pedestrian/bicycle traffic in mind. Better lighting on bicycle lanes.	This is not currently a component of the proposed project. The project will be analyzed as proposed. The transportation section of the draft EIR will evaluate potential transporation impacts. To the extent that the project results in impacts on O'Brien Drive, mitigation measures will be evaluated and included accordingly.
				Other	Yes				Comments regarding improvements to the O'Brien Business Park.	This is not currently a component of the proposed project. The project will be analyzed as proposed. Should this be implemented through the entitlement process, the draft EIR will analyze accordingly.

Notice of Preparation Scoping Session Public Comments Summary
Willow Village Master Plan EIR

#	Date	Commenter Name	Commenting Entity	Topics	EIR	HNA	FIA	Other	Summary of NOP Comment	Discussion
P_6	10/7/2019	Adina Levin	Complete Streets, General Plan Committee	Alternatives	Yes				Project Alternatives: Lower office and more housing.	One purpose of the NOP is to identify potential alternatives to the proposed project. Alternatives that would reduce significant impacts of the proposed project are identified during the CEQA process prior to the release of the draft EIR.
				Alternatives	Yes				Include VMT to show less office/more housing.	One purpose of the NOP is to identify potential alternatives to the proposed project. Alternatives that would reduce significant impacts of the proposed project are identified during the CEQA process prior to the release of the draft EIR.
				Cumulative	Yes				Consider VMT with and without Dumbarton.	Dumbarton Rail along with other projects will be considered quantitatively in the cumulative analysis of the transportation section of the draft EIR. The City is currently discussing with Hexagon the appropriate level of detail for analysis with and without Dumbarton Rail.
				Project Description	Yes				Accelerate housing and grocery in phasing plan.	The draft EIR will analyze the project as proposed. Should this be implemented through the entitlement process, the draft EIR will analyze accordingly.
				Energy	Yes				Remove offsets and credit options.	The applicant will be required to comply with and the draft EIR will consider all applicable codes adopted by the City.
				Transportation	Yes				Pedestrian overcrossing could lead to less safety for pedestrians. Consider revising.	Pedestrian overcrossings will be analyzed in the transportation section of the draft EIR.
				Population and Housing		Yes			In support of HNA being conducted. Analyze the impact of additional office and housing.	The HNA will consider the housing need generated by the proposed project and compare that to the available supply of housing.
				Project Description	Yes	Yes			Consider housing needs – use density bonus for more BMR/senior housing. Mix of income levels should be provided.	The proposed project includes approximately 1,735 residential units of which 15% would be for below market rate (BMR) housing in compliance with the City's BMR ordinance. The draft EIR will describe and consider the potential environmental effect of the project as proposed. Additional BMR housing could be considered by the applicant. For purposes of the draft EIR, analysis of the number and type of dwelling units is critical; the income level of the residents does not change the impact on the environment. The HNA will take into consideration the number of BMR units relative to housing need generated by the proposed project.

Notice of Preparation Scoping Session Public Comments Summary
Willow Village Master Plan EIR

#	Date	Commenter Name	Commenting Entity	Topics	EIR	HNA	FIA	Other	Summary of NOP Comment	Discussion
P_7	10/7/2019	Colin Bookman	Member of the Public	Project Description	Yes				Build more and higher. Extend height limits. More BMR units and more housing density.	This is not currently a component of the proposed project. The project will be analyzed as proposed. Should this be implemented through the entitlement process, the draft EIR will analyze accordingly.
P_8	10/7/2019	John Kadvany	Member of the Public	Project Description				Yes	Need additional public benefits, for example, transit corridor down the rail line, educational facilities, housing.	These are questions outside the scope of environmental review, but that could be answered through the entitlement process. The proposed project will be required to go through an appraisal process to identify the community amenity value.
P_9	10/7/2019	Pat Sausedo	Member of Public/BIA Bay Area/Building Industry Association	Other				Yes	In support of Project.	There is no comment in this letter that requires analysis in the EIR for the proposed project.
P_10	10/7/2019	Sergio Ramirez-Herrera	Member of Public/Carpenter Union 217	Other				Yes	In support of Project.	There is no comment in this letter that requires analysis in the EIR for the proposed project.
P_11	10/7/2019	Lushorn Lee	Member of the Public	Other				Yes	In support of Project.	There is no comment in this letter that requires analysis in the EIR for the proposed project.
P_12	10/7/2019	Elizabeth Jackson	Member of the Public	Other				Yes	In support of Project.	There is no comment in this letter that requires analysis in the EIR for the proposed project.
P_13	10/7/2019	Jose Contreras	Member of Public/Carpenter Union 217	Other				Yes	In support of Project.	There is no comment in this letter that requires analysis in the EIR for the proposed project.
P_14	10/7/2019	James Kendall	Member of the Public	Other				Yes	In support of Project.	There is no comment in this letter that requires analysis in the EIR for the proposed project.
P_15	10/7/2019	Commissioner Doran	Planning Commissioner	Hazardous Materials	Yes				Consider toxic release site in the draft EIR.	This will be analyzed in the hazardous materials section of the draft EIR.

Notice of Preparation Scoping Session Public Comments Summary
Willow Village Master Plan EIR

#	Date	Commenter Name	Commenting Entity	Topics	EIR	HNA	FIA	Other	Summary of NOP Comment	Discussion
P_16	10/7/2019	Commissioner Riggs	Planning Commissioner	Alternatives	Yes				Alternatives: more housing/less office, only develop office to replace existing onsite office, a “real” residential component with no increase in traffic.	One purpose of the NOP is to identify potential alternatives to the proposed project. Alternatives that would reduce significant impacts of the proposed project are identified during the CEQA process prior to the release of the draft EIR.
				Transportation	Yes				Transportation: include VMT and LOS, neighborhoods adjacent to arterials should be considered, activate Dumbarton rail corridor, state the number of net new trips in document.	The draft EIR will analyze VMT in the transportation section (and also the GHG section). LOS will be included in the draft EIR transportation section for informational purposes. LOS will also be considered in the land use section of the draft EIR relative to the proposed project's compliance with the general plan goals, policies and programs. Dumbarton Rail along with other projects will be considered in the cumulative analysis of the transportation section of the draft EIR. The City is currently discussing with Hexagon the appropriate level of detail for analysis with and without Dumbarton Rail.
				Population and Housing	Yes	Yes		Yes	Jobs/Housing imbalance should be considered.	The jobs housing balance is an economic and social issue, but not a physical environmental issue subject to analysis in the EIR. The jobs housing balance may impact commute times, the effects of which would be considered in the transportation, air quality and GHG sections of the draft EIR. The HNA will not specifically consider the jobs housing balance, but will consider the housing need generated by the proposed project and compare that to the available supply of housing. A study of the jobs housing balance would be more appropriate on a larger city-wide or regional scale and could be completed concurrently during the entitlement process.
				Baseline	Yes				Baseline: consider TIDE Academy at full development, rather than current conditions.	The baseline normally consists of the physical conditions that exist at the time the NOP is published. Under certain circumstances, it is appropriate to deviate from the traditional definition of baseline where supported by substantial evidence. Those projects that are not occupied at the time of the NOP will be included in the cumulative analysis.
				Project Description	Yes				Prefers the pedestrian undercrossing instead of an overcrossing.	Both scenarios will be analyzed in the draft EIR; the comment is expressing a preference.

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Willow Village Master Plan EIR

#	Date	Commenter Name	Commenting Entity	Topics	EIR	HNA	FIA	Other	Summary of NOP Comment	Discussion
				Land Use				Yes	Land Use: Zoning for O-B in ConnectMenlo does not allow for housing, but it should.	Any potential revisions to the zoning are beyond the scope of the EIR for the proposed project. Should the City modify the zoning prior to final action on the proposed project, those modifications will be applied to the project and considered in the EIR.
				Other				Yes	Terminology: don't use the term "urban area served by transit."	There is a comment relative to terminology and does not specifically require analysis in the EIR for the proposed project. The transportation section of the draft EIR will identify what transit serves the project site.
P_17	10/7/2019	Commissioner Barnes	Planning Commissioner	Transportation/Cumulative	Yes				Transportation: Study the effect of rail service and the Project (Dumbarton); need to identify what that scenario would look like. Need to consider regional multimodal solutions for transportation.	Dumbarton Rail will be considered quantitatively in the cumulative analysis of the transportation section of the draft EIR. The City is currently discussing with Hexagon the appropriate level of detail for analysis with and without Dumbarton Rail.
				Transportation	Yes				Transportation: LOS vs. VMT, study who is adding the net trips, mass transit, single occupancy vehicles, night trips, where traffic is coming/going, provide real Facebook data from existing patterns.	The draft EIR will analyze VMT in the transportation section; LOS will also be included in the transportation section for informational purposes. The transportation analysis will utilize a travel demand model to develop trip distribution patterns for the proposed land uses. However, individual project components (such as office or residential uses) will not be evaluated separately in the draft EIR; the impacts of the project are evaluated in aggregate as proposed.
				Project Description	Yes				Phasing: study the Project in multiple phases; helpful to add clarity to impacts.	The phasing plan, as proposed by the applicant, will be analyzed throughout the EIR and mitigation will be phased as appropriate (although it is currently anticipated that the majority of the mitigation will be front-loaded).
				Population and Housing	Yes				Data: Menlo Park statistics vs. ABAG Projects; how will this be approached?	Both ConnectMenlo growth projections and ABAG projections will be considered.
				Project Design	Yes				Design: Potentially add access directly from Bayfront to the Project site – something needs to be considered.	This is not currently a component of the proposed project. The project will be analyzed as proposed. Should this be implemented through the entitlement process, the draft EIR will analyze accordingly.

Notice of Preparation Scoping Session Public Comments Summary
Willow Village Master Plan EIR

#	Date	Commenter Name	Commenting Entity	Topics	EIR	HNA	FIA	Other	Summary of NOP Comment	Discussion
P_18	10/7/2019	Commissioner Kennedy	Planning Commissioner	Aesthetics	Yes				Provide overlay of Facebook developments, current and future. Concern of development overtaking the community.	Existing development will be included in the baseline conditions to which the proposed project will be added to determine its potential environmental effects.
				Project Description	Yes				Frontload community development in Phase I and public space.	This is not currently a component of the proposed project. The project will be analyzed as proposed. Should this be implemented through the entitlement process, the draft EIR will analyze accordingly.
P_19	10/7/2019	Commissioner Tate	Planning Commissioner	Project Description	Yes	Yes			Study 25% BMR or higher and some units that a	The proposed project includes approximately 1,735 residential units of which 15% would be for BMR housing in compliance with the City's BMR ordinance. The draft EIR will describe and consider the potential environmental effect of the project as proposed. Additional BMR housing could be considered by the applicant. For purposes of the draft EIR, analysis of the number and type of dwelling units is critical; the income level of the residents does not change the impact on the environment. The HNA will take into consideration the number of BMR units relative to housing need generated by the proposed project.

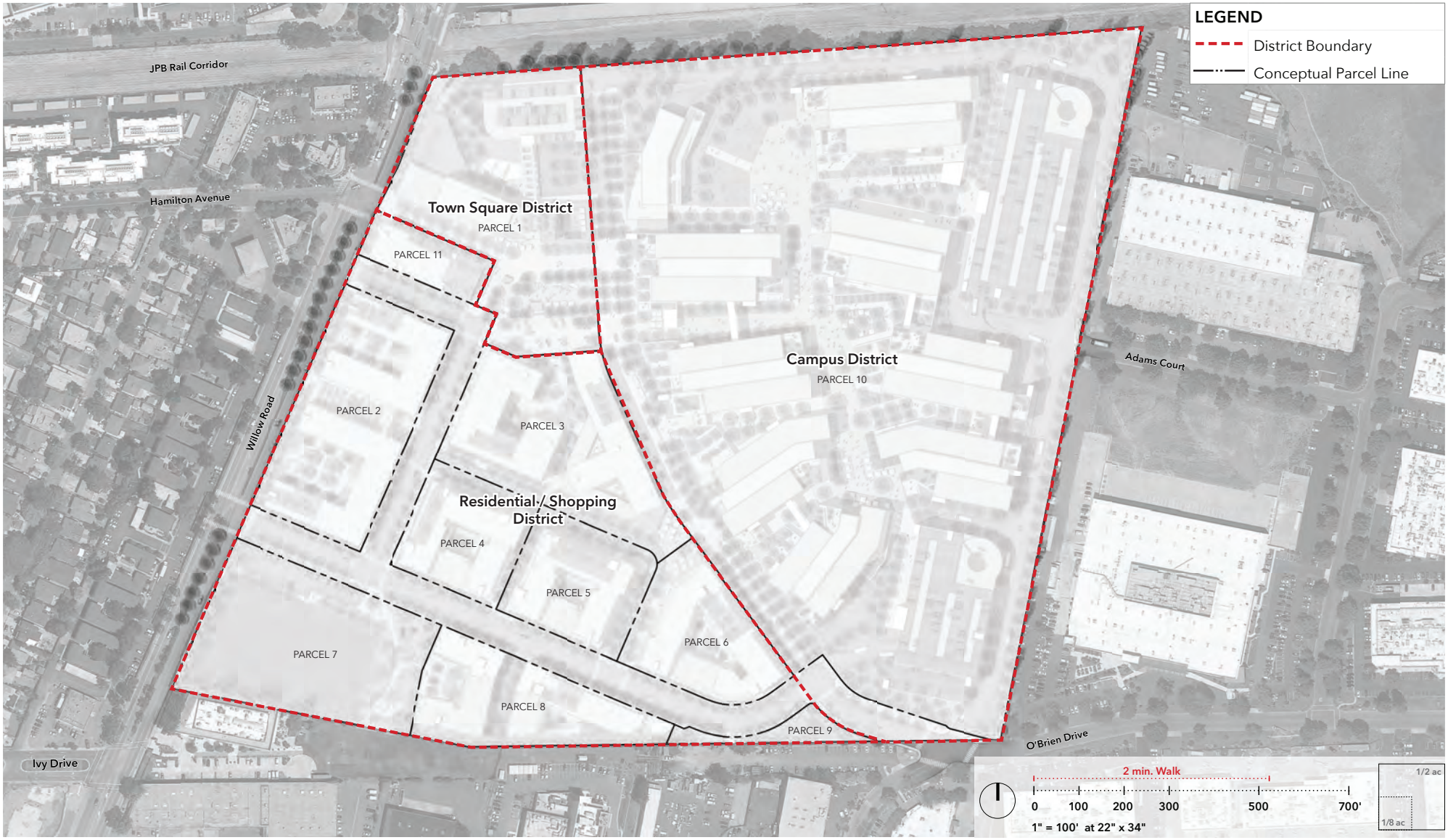
LEGEND	
1	Town Square
2	Grocery Store on Ground Level
3	Pharmacy on Ground Level
4	Public Park
5	Dog Park
6	Grade Separated Willow Road Crossing
7	Campus Visitor Parking Garage
8	Hotel
9	Mixed-Use Block
10	Residential Block
11	Office Campus
12	Parking Garage with Transit Center on Ground Level
13	Community Space on Ground Level
14	Proposed Paseo

Peninsula Innovation Partners

WILLOW VILLAGE

Menlo Park, CA

Exhibit 6
Conceptual Master Plan
October 1, 2019



Peninsula Innovation Partners

WILLOW VILLAGE

Menlo Park, CA

Exhibit 7
Conceptual District Plan
October 1, 2019

August 6, 2019

Kyle Perata, Principal Planner
City of Menlo Park Community Development Department
701 Laurel Street
Menlo Park, CA 94025

SUBJECT: Proposal to Prepare an Environmental Impact Report for the Willow Village Master Plan Project – Phase II/Budget Amendment 2

Dear Mr. Perata:

ICF Jones & Stokes, Inc. ("ICF") is pleased to present this scope and budget to prepare Phase II of an Environmental Impact Report (EIR) for the proposed Willow Village Master Plan Project (hereafter referred to as the Project). ICF submitted a Scope of Work (scope) for Phase I of the Project EIR in December 2017. With Budget Amendment 1 (approved May 2019), the current approved budget for the EIR is $67,565.

This scope and budget ($1,113,858) focuses on Phase II of the EIR, which includes the completion of the Notice of Preparation, Draft EIR, and Final EIR. In addition, this Phase II scope and budget includes tasks for the transportation subconsultants Hexagon (Attachment A), the Housing Needs Assessment subconsultant KMA (Attachment B), and the Fiscal Impact Analysis subconsultant BAE (Attachment C). Including Budget Amendment 1 and 2, the total budget for the EIR would be $1,181,423 ICF proposes to invoice costs monthly, on a time and materials basis.

This proposal is valid for a period of 90 days, at which time ICF reserves the right to revise the contents or extend the validity date, if needed. ICF shall provide services, as outlined in the attachment, under the terms and conditions of its existing agreement number 2251 with the City dated January 26, 2018. If you have any questions regarding this proposal, please feel free to contact Kirsten Chapman at 415.537.1702 or kirsten.chapman@icf.com. We look forward to working with you on this project.

Sincerely,

Jodi Young
Manager, Contracts

Attachments

A. Hexagon Scope of Work
B. Keyser Marston Associates Scope of Work
C. BAE Urban Scope of Work
D. Budget – Phase II

A. Project Understanding and General Approach

ICF has reviewed the information provided by the City and Peninsula Innovation Partners, LLC and Signature Development Group, on behalf of Facebook, Inc. (Project Sponsor). Based on our review of project materials and experience with similar projects, we understand that an EIR is needed.

Project Understanding

The Project involves the redevelopment of the existing Menlo Park Science and Technology Park. The Project would demolish existing onsite buildings and landscaping and construct new buildings within a Town Square District, a Residential/Shopping District, and a Campus District. The Project would result in a net increase of approximately 1 million square feet (sf) of nonresidential uses (office space and non-office commercial/retail), for a total of approximately 2 million sf of nonresidential uses at the Project site. In addition, the Project would include housing units, a limited-service hotel, a community center, and open space. (The square footage of the hotel, community center, and park buildings are in addition to the increase of 1 million square feet of nonresidential square footage.) The Project site would be bisected by the north-south Main Street, which would provide access to all three districts. The Project site would also include a circulation network for vehicles, bicycles, and pedestrians with approximately 4.6 acres of public rights-of-way and 1.4 acres of private streets, generally aligned in an east-to-west and a north-to-south grid.

The Residential/Shopping District would be located in the southwestern portion of the Project Site, while the Town Square District would be located in the northwestern portion of the Project Site. Together, these two districts would include: approximately 1,735 residential units; a maximum of 200,000 sf of nonresidential/retail uses (including a grocery store, pharmacy, and restaurant); a hotel with 200-250 rooms and food services; and an approximately 10,000 sf indoor community center adjacent to a 4-acre public park. In addition, a 0.5-acre Town Square and 0.3-acre dog park would be accessible to the public.

The 37-acre Campus District, located in the eastern portion of the Project site, would include approximately 1.75 million sf of office uses and employee-serving amenity space, along with two above-ground parking structures with approximately 3,000 parking spaces. Both parking structures would include a ground-level Transit Center for commuter shuttles and campus trams. Open spaces would include a chain of publicly-accessible urban spaces and gardens along Main Street, a landscaped area off of O'Brien Street, and various secure, interior open spaces for the Campus District users.

The Willow Village Master Plan was designed to implement the guiding principles and policies adopted as part of ConnectMenlo such as including new affordable and market-rate housing units for local workers, opportunities for future transit connections, and construction of a grocery store. The Project is meant to align with ConnectMenlo's development and zoning standards and is consistent with ConnectMenlo's density and height limits for bonus development. The Project would develop an area that is transit-ready, with new infrastructure, housing, sustainability features, circulation, open spaces, office and mixed-uses, and pedestrian boulevards. New housing and community-serving retail would include a collection of

varied-scale public spaces, restaurants, and public gathering spaces. The Project would seek to develop using the bonus level allowance of the Zoning Ordinance and as such, would incorporate community amenities selected from the adopted Community Amenities List, consistent with the Zoning Ordinance requirements. As appropriate, this analysis would assess the possible environmental effects of the physical community amenities, provided as part of the Project.

General Approach

ConnectMenlo, which updated the City's General Plan Land Use and Circulation Elements and the Zoning in the M-2 (Bayfront) Area, was approved on November 29, 2016. This serves as the City's comprehensive and long-range guide to land use and infrastructure development. Because of the long-term planning horizon of ConnectMenlo, the ConnectMenlo EIR was prepared as a program EIR, pursuant to Section 15168 of the CEQA Guidelines. Once a program EIR has been certified, subsequent activities within the program must be evaluated to determine whether additional CEQA review needs to be prepared. However, if the program EIR addresses the program's effects as specifically and comprehensively as possible, subsequent activities could be found to be within the program EIR scope, and additional environmental review would not be required (CEQA Guidelines Section 15168[c]). When a program EIR is relied on for a subsequent activity, the lead agency must incorporate feasible mitigation measures and alternatives developed in the program EIR into the subsequent activities (CEQA Guidelines Section 15168[c][3]). If a subsequent activity would have potentially significant environmental effects that are not within the scope of a program EIR, the lead agency must prepare an Initial Study leading to a Negative Declaration, a Mitigated Negative Declaration, or an EIR. The ConnectMenlo Program EIR will serve as the first-tier environmental analysis for the CEQA evaluation of the Project.

ConnectMenlo analyzed an increase in net new development in the Bayfront Area of up to 2.3 million square feet of non-residential uses, up to 4,500 residential units, and up to 400 hotel rooms, and up to 5,500 new employees. As mentioned above, the Project includes a net of approximately 750,000 sf of office uses, 200,000 sf of retail, a 10,000 sf indoor community center, approximately 1,735 residential units, and up to 250 hotel rooms, and approximately 9,500 employees. In total, the Project would include a net increase of approximately 1.04 million sf of non-residential uses (not including the hotel gross square footage), which is within the buildout projections of ConnectMenlo and within the parameters of what was analyzed in the ConnectMenlo EIR. However, it is anticipated that the Project would result in more employees than what was analyzed in the ConnectMenlo EIR. In addition, the Project will be implemented through a Master Plan, the specifics of which were unknown during the preparation of ConnectMenlo.

Due to the General Plan Amendments required to implement the Project, the Settlement Agreement with East Palo Alto (discussed further below), the Master Plan across zoning districts, and the potential increase in on-site employees over what was assumed in the ConnectMenlo EIR, a full EIR is proposed to analyze the Project. The EIR will tier from and utilize the ConnectMenlo program EIR where appropriate.

On December 5, 2017, the City Council approved the proposed Settlement Agreement between the City of Menlo Park and the City of East Palo Alto to fully and finally resolve the litigation initiated by East Palo Alto regarding the environmental review for ConnectMenlo. The Settlement Agreement will serve to inform the scope of the analysis for several topics in the EIR and provide guidance on the requirements for the Project's Housing Needs Assessment (HNA) (Attachment B).

B. Scope of Work – Phase II

The Phase I scope of work was approved in January 2018 and included the following tasks: Project Initiation (Task 1), EIR Project Description (Task 2), EIR Scope Definition (Task 3), and Project Management and Meetings (Task 4). The following tasks were conducted by ICF from January to April 2018, prior to the Project going on hold: attendance at team kick-off meeting; review of all project materials; preparation of several iterations of the data needs lists; preparation of the first draft of the Project Description; review of City/applicant comments on the Project Description and preliminary edits; preparation of the first draft of the Notice of Preparation; ongoing conversations about the transportation scope; and scoping, contracting, and coordination with the transportation subconsultants. Some of the work that was generated during this time period can be applied; however, due to the change in site plans and the year-long hold on the Project, many of the tasks need to be revisited and revised.

Therefore, below scope of work for the EIR includes Tasks 1 through 4 (as amendments to the tasks in the Phase I scope of work), and additional tasks through the certification of the EIR.

Task 1. Project Initiation

Project Initiation will continue by discussing key issues, reviewing completed environmental documents, reviewing revised Project materials, attending a site visit, and continuing to refine the schedule for completion of individual tasks. In addition, ICF will work with the City and Project Sponsor on the data needs list by obtaining the necessary information to conduct the EIR analysis. This task assumes that an in-person "re-kick-off meeting" will occur with City of Menlo Park staff, the Project Sponsor team, and the traffic subconsultant. All other Project Initiation tasks were covered and/or will be covered by the existing Phase I scope of work and budget.

Task 2. EIR Project Description

ICF prepared a draft Project Description and submitted it to the City in February 2018. Comments were received in April 2018. This was included in the Phase I scope of work. However, substantial revisions need to be applied to the Project Description due to the changes in the site plan, pending data needs responses, and changes in existing conditions. Based on discussions with City staff and on the Project Sponsor's application and plans, ICF will update the Project Description. This task assumes that one additional draft of the Project Description will be submitted to the City. Revisions to the Project Description based on City/Project Sponsor comments, and additional data needs responses from the Project Sponsor, will be included in the submittal of the Administrative Draft EIR (Task 5).

Task 3. EIR Scope Definition

ICF prepared the first draft of the Notice of Preparation (NOP) in April 2018 under the Phase I scope and budget. However, this draft was not submitted to the City before the Project went on hold. ICF will prepare the revised NOP for City staff review and revise per City/Project Sponsor edits. Our budget assumes that ICF will distribute to the State Clearinghouse and that the City will oversee mailing to other interested parties and public agencies. ICF will attend and be present at one scoping meeting (held as part of a regular Planning Commission meeting) and record comments received during the meeting. The principle objective of this scoping meeting will be to confirm or revise the list of environmental issues and the range of alternatives to be examined in the EIR. At the close of the comment period, ICF will review all comments and consider and address them while preparing the EIR. The hours for the scoping meeting are included in Task 5 of our budget.

Deliverables

- Electronic copies of draft and revised NOP in MS Word and Adobe PDF format
- Electronic copies of the final NOP in MS Word and Adobe PDF format
- Fifteen hard copies of the final NOP to the State Clearinghouse
- One PowerPoint presentation for scoping meeting.

Task 4. Project Management and Meetings

The purpose of this task is to continue to effectively manage the below tasks and maintain communication with City staff. ICF project management will be responsible for coordination activities, will maintain QA/QC requirements for document preparation, and will monitor schedule and performance for all EIR work tasks. Project management subtasks also include maintaining internal communications among ICF staff and subconsultants and with City staff and other team members through emails and frequent phone contact, as well as the preparation of all correspondence. The Project Manager will coordinate internal staff, project guidance, and analysis criteria.

The purpose of this task is to attend meetings to accomplish the below tasks. Team members will attend and participate in meetings on an as-needed basis. For purposes of the cost estimates, ICF has assumed ten City staff and/or Project Sponsor face-to-face meetings and 30 phone conference calls. Additional meetings may be appropriate during the course of this effort and will be invoiced on a time-and-materials basis. The estimated cost for additional meetings is included in the discussion of the project budget, below.

Task 5. Administrative Draft EIR

The purpose of this task is to prepare the Administrative Draft EIR. This task will synthesize background information for use in the existing setting, evaluate changes to those baseline conditions resulting from implementation of the Project, identify significant impacts, and identify mitigation measures to reduce potentially significant impacts to a less-than-significant level.

For this task, there will be four principal activities:

- Determine, by individual resource topic, the significance criteria to be used in the analysis.
- Present the analysis at full buildout of the Project.
- Compare the Project against analysis and conclusions in the ConnectMenlo EIR.
- Perform the analysis and make determinations of impact significance.
- Recommend mitigation measures to reduce impacts, if needed.

The ICF team will collect the information necessary to define baseline conditions in the Project area. Based on our understanding of the Project and discussions with City staff, baseline conditions will reflect the conditions at the time of the NOP release, unless as the analysis progresses an adjusted baseline is determined to be appropriate. ICF will also refer to the ConnectMenlo EIR (2016) and the Facebook Expansion Project EIR (2016)/EIR Addendum (2017) for applicable background data and impact areas. In particular, ICF will use the mitigation measures from the ConnectMenlo EIR, as applicable.

For each environmental topic, significance thresholds or criteria will be defined in consultation with the City so that it is clear how the EIR classifies an impact. These criteria will be based on CEQA Guidelines, Appendix G, standards used by the City, and our experience in developing performance standards and planning guidelines to minimize impacts.

The analysis will be based on standard methodologies and techniques and will focus on the net changes anticipated at the Project site. The text will clearly link measures to impacts and indicate their effectiveness (i.e., ability to reduce an impact to a less-than-significant level), identify the responsible agency or party, and distinguish whether measures are proposed as part of the Project, are already being implemented (such as existing regulations), or are to be considered. This approach facilitates preparation of the Mitigation Monitoring and Reporting Program (MMRP) that follows certification of an EIR.

The Administrative Draft EIR will also incorporate the alternatives and other CEQA considerations described in Task 7 (below). It is envisioned that the City's initial review of the document will consider content, accuracy, validity of assumptions, classification of impacts, feasibility of mitigation measures, and alternatives analyses. Because the impacts and mitigations are subject to revision based on staff review of the Administrative Draft EIR, the Executive Summary will be prepared only for the Screencheck Draft. The following task descriptions summarize the data to be collected, impact assessment methodologies to be used, and types of mitigation measures to be considered, by environmental issue.

Project Description

The revised draft of the Project Description was submitted to the City and Project Sponsor as part of Task 2, above. The second draft of the Project Description will be included in the Administrative Draft EIR. This will include revisions to the Project Description based on comments from the City and Project Sponsor on the first draft. ICF will also incorporate the data needs responses from the City and Project Sponsor into this draft of the Project Description.

Issues Anticipated to be Less Than Significant

To streamline the EIR process, ICF will "scope out" some environmental topics that do not require detailed discussion in the EIR. These topics will not be evaluated at the level of detail specified for the issues below, but at a level adequate to fully assess the potential effects. This discussion will be presented in the Impacts Found to be Less Than Significant chapter of the EIR.

Based on our preliminary review, the following environmental topics may be scoped out from detailed analysis in the EIR.

- **Agricultural and Forestry Resources.** ICF will describe existing conditions at the Project site, identify General Plan designation and zoning districts, and indicate lack of agricultural and forestry uses at the Project site.
- **Mineral Resources.** ICF will describe existing conditions at the Project site and identify the mineral resources zone classification for soils at the site. It is anticipated that the site does not contain significant mineral resources.
- **Wildfire.** The Project site is not located in or near state responsibility areas, or in an area classified as very high fire hazard severity zones.

Aesthetics

The ConnectMenlo EIR considers views to the Santa Cruz Mountain Range, views to the Bay, and views of the foothills as scenic vistas. The ConnectMenlo EIR determined that no publically accessible views of scenic resources would be blocked by the increasing height limits. The ConnectMenlo EIR determined that buildout in the area would not impact scenic vistas/resources, would not degrade the existing visual character of the area, and would not introduce a significant source of light and glare. The ConnectMenlo EIR conclusions relate to a wide geographic area; the conclusions in the EIR for the Project are anticipated to be consistent with the ConnectMenlo EIR.

The analysis will consider Project site-specific impacts and impacts as viewed from Willow Road, Bayfront Expressway, and the Bay Trail. Data needs to complete the section include massing studies/visual simulations, landscape plans, lighting plans, and building architectural styles. It is assumed that this information will be provided by the Project Sponsor. ICF will prepare the Aesthetics section of the EIR based on the information provided and will conduct the following tasks:

- Visit the Project site and surroundings to identify and photo-document existing visual character and quality conditions, views to and from the Project site, and other urban design features.
- Peer review the massing studies/visual simulations, landscape plans, lighting plans, and shadow diagrams provided by the Project Sponsor.
- Based on scenic resources and scenic vistas identified in ConnectMenlo and the Project Sponsor's massing studies, analyze potential adverse aesthetic effects resulting from the Project:
    - The surrounding scenic vista locations that could be affected by the proposed development include the Bay Trail, and the BCDC Public Shoreline Trail.

  - Scenic vistas in the immediate vicinity that could be affected include the tidal mudflats and marshes of the San Francisco Bay and the Santa Cruz Mountain Range.
  - Analyze potential adverse effects on scenic vistas from adjacent uses and other sensitive viewer locations.
- Review existing and proposed General Plan goals, policies, and programs related to visual quality to determine conflicts with any relevant plans and policies.
- Using the visual simulations and field observations, analyze whether the Project would conflict with applicable zoning and other regulations governing scenic quality due to grading, height, bulk, massing, architectural style, building materials, and other site alterations.
- Analyze lighting and glare impacts created by the proposed buildings, focusing on motorists on Bayfront Expressway and residents of the Belle Haven neighborhood.

Air Quality

ICF will compose the Air Quality section of the EIR using the quantitative and qualitative analyses to be provided by Ramboll (the Project Sponsor's consultant). ICF assumes that the CEQA Technical Analysis Documentation (Task A.14 [Tech Report] in Ramboll's scope of work) will contain sufficient information to complete the EIR section. ICF will conduct a peer review of the Technical Report to ensure that the data, analyses, and conclusions are valid.

In the setting section of the EIR, ICF will summarize meteorological and climatological data for the Project study area, as well as ambient air quality near the Project. Existing state and federal regulations, as well as the locations of sensitive receptors, will also be described. For the discussion of impacts, the analysis will be comprised of the following components:

- Consistency with the BAAQMD's 2017 Clean Air Plan
- Construction emissions inventory of criteria air pollutants
- Operational emissions inventory of criteria air pollutants
- Discussion of the health outcomes associated with the project's construction and operational criteria pollutant emissions.
- Construction health risk assessment based on the project's toxic air contaminants
- Operational health risk assessment based on the project's toxic air contaminants
- Localized carbon monoxide impact analysis
- Odor impact analysis
- Cumulative analysis of toxic air contaminants, carbon monoxide, and odor

As described in Ramboll's scope of work, ICF is assuming that each of the components above will be fully analyzed quantitatively or qualitatively, as applicable, with the results presented in the Tech Report. We are also assuming that the results in the Tech Report will include an analysis of the existing uses at the Project site and that the net effect of the Project will be clearly discernable (i.e., Project emissions – existing site emissions = net emissions). Based on the analysis results of the Tech Report, ICF will use the Bay Area Air Quality Management District's (BAAQMD) most recent CEQA Air Quality Guidelines to

evaluate project impacts. The ultimate determination of impact significance will be evaluated with respect to the BAAQMD CEQA Guidelines or other relevant agency guidance. In the EIR, we will describe the air quality thresholds used to identify significant impacts based on the BAAQMD's CEQA Guidelines and guidance provided by BAAQMD staff. The methodology write-up used to analyze Project impacts will be a high-level overview in the EIR section, and readers of the EIR will be referred to the detailed discussion of methods in the Tech Report, which will be included as an Appendix to the EIR.

In the event that the impact results of any of the components listed above would lead to significant impacts, ICF will review the mitigation recommended by Ramboll in the Tech Report. As discussed in the Ramboll scope of work, ICF will participate in discussions with Ramboll, the City, and the Project Sponsor as needed to determine appropriate, feasible mitigation. ICF also assumes that any revised analyses and/or results that would be needed for a mitigated analysis will be provided by Ramboll. If Project impacts cannot be mitigated by the recommended mitigation measures, ICF would report this conclusion in the EIR.

In addition to the tasks described above, ICF will also review the work products described in Ramboll's scope of work. We are assuming that Ramboll will submit relevant modeling files to ICF for Quality Assurance (QA) purposes, and that the relevant files will be suitable for an air quality expert to determine the overall modeling procedures. ICF will review the Methodology Documentation and Tech Report prepared by Ramboll and will provide input on these documents as applicable.

Biological Resources

The ConnectMenlo EIR determined that development could have an impact on special status species, sensitive habitats, migratory wildlife, and wetlands. ConnectMenlo Mitigation Measure BIO-1 requires that prior to individual project approval, project applicants shall prepare and submit project-specific baseline biological resources assessments on sites with features such as mature trees or unused structures that could support special-status species. The existing site is developed with buildings and surface parking lots. As such, natural biological resources are likely to be minimal. Nonetheless, the Project site is in close proximity to the Bay and the Don Edwards San Francisco Bay National Wildlife Refuge and could have an indirect impact on special-status species inhabiting these areas. In addition, buildings and trees currently exist on the campus, which could provide habitat for nesting birds and/or roosting bats. Consistent with the requirements in Mitigation Measure BIO-1, ICF's qualified biologists will conduct the following tasks:

- The Project Sponsor has conducted a baseline Biological Assessment. ICF will peer review the Biological Assessment and provide one round of comments in a memorandum. In addition to technical accuracy, ICF will verify whether the Biological Assessment is adequate for CEQA purposes. If necessary, an ICF biologist will visit the site to verify existing conditions. Once final, ICF will incorporate the Biological Assessment in the Setting section of the Biological Resources EIR chapter. It is assumed that the assessment will determine if any sensitive biological resources are present on the Project site and will include review of Menlo Park's heritage tree

ordinance, the California Department of Fish and Wildlife's Natural Diversity Database (CNDDB), the U.S. Fish and Wildlife Service's Special-Status Species Online Database, and the California Native Plant Society's online inventory. ICF will also conduct a site visit to aid in the peer review.

- Based on the Biological Assessment and site visit, ICF will evaluate the Project's effects on the identified biological resources, and recommend mitigation as warranted. Based on prior experience in the region, and the urban nature of the site, ICF anticipates that the prominent issues for the Project will be limited to nesting migratory birds, roosting bats, and protected trees, per the City of Menlo Park heritage tree ordinance. However, with the proximity of Ravenswood Slough, the Don Edwards San Francisco Bay National Wildlife Refuge, and the associated salt marsh habitat, ICF also will address the possibility that special-status species associated with this habitat could be affected by the Project.
- Per Mitigation Measure BIO-1, if sensitive biological resources are determined to be present, appropriate measures should be included in the Biological Assessment, such as preconstruction surveys, establishing no-disturbance zones during construction, and applying bird-safe building design practices and materials. ICF will incorporate the mitigation measures, as applicable.

Greenhouse Gas Emissions

As discussed above for Air Quality, ICF will compose the Greenhouse Gas Emissions section of the EIR using the quantitative and qualitative analyses to be provided by Ramboll. ICF assumes that the CEQA Technical Analysis Documentation (Task A.14 [Tech Report] of Ramboll's scope of work) will contain sufficient information to complete the EIR section.

In the setting section of the EIR, ICF will summarize the GHGs of greatest concern, including carbon dioxide (CO_2), methane (CH_4) and nitrous oxide (N_2O) that directly and indirectly result from the proposed project. The project setting will describe these pollutants and their relationship to global climate change. ICF will include information on applicable federal, state, and local goals, policies, and regulations adopted to reduce GHG emissions. ICF will use the BAAQMD's most recent CEQA Air Quality Guidelines to evaluate Project impacts. For the discussion of impacts, the analysis will be comprised of the following components:

- Construction emissions inventory
- Operational emissions inventory
- Greenhouse gas consistency analysis with applicable plans and regulations

As described in Ramboll's scope of work, ICF is assuming that each of the components above will be fully analyzed quantitatively or qualitatively, as applicable, with the results presented in the Tech Report. We are also assuming that the results in the Tech Report will include an analysis of the existing uses at the Project site and that the net effect of the Project will be clearly discernable (i.e. project emissions – existing site emissions = net emissions). As discussed in Ramboll's scope of work, Ramboll will prepare a memorandum that summarizes the available BAAQMD thresholds and presents alternative GHG

thresholds that respond to recent court cases and are based on local conditions. ICF will review the memorandum prepared by Ramboll and will evaluate the findings of their memo.

ICF notes that the BAAQMD's current CEQA Guidelines that include operational GHG thresholds for land use development and stationary source projects are tailored to the state's 2020 GHG reduction goal, and therefore may not be appropriate to evaluate project-level emissions generated after 2020. BAAQMD is currently working on an update to their CEQA Guidelines, which is expected to include GHG thresholds to project-level GHG emissions relative to the state's post-2020 GHG reduction targets. Because the regulatory environment for GHG emissions is evolving, the significant threshold(s) for evaluating the operational GHG impacts for the Project will be finalized at the time of analysis preparation. The ultimate threshold(s) will be selected in coordination with BAAQMD, the City, and Ramboll, and consider all applicable case law and air district and expert agency guidance. ICF will use the GHG threshold(s) to evaluate the Project's significance based on the considerations above, which may or may not be consistent with the findings of Ramboll's memorandum.

ICF expects that because the decision on the appropriate GHG threshold to be used will be developed in concert with the Project Sponsor, City, and Ramboll, all parties will ultimately be in agreement on the appropriate approach. ICF will also review the consistency table to be provided by Ramboll that outlines the Project's consistency with applicable regulations, plans, policies, etc. ICF will provide feedback on this consistency on this analysis as applicable.

The methodology write-up used to analyze Project impacts will be a high-level overview in the EIR section, and readers of the EIR will be referred to the detailed discussion of methods in the Tech Report, which will be included as an Appendix to the EIR.

In the event that the impact results of any of the components listed above would lead to significant impacts, ICF will review the mitigation recommended by Ramboll in the Tech Report. As discussed in the Ramboll scope of work, ICF will participate in discussions with Ramboll, the City, and the Project Sponsor as needed to determine appropriate mitigation. ICF also assumes that any revised analyses and/or results that would be needed for a mitigated analysis will be provided by Ramboll. If Project impacts cannot be mitigated by the recommended mitigation measures, ICF would report this conclusion in the EIR.

In addition to the tasks described above, ICF will also review the work products described in Ramboll's scope of work. We are assuming that Ramboll will submit relevant modeling files to ICF for Quality Assurance (QA) purposes, and that the relevant files will be suitable for an air quality expert to determine the overall modeling procedures. ICF will review the Methodology Documentation and Tech Report prepared by Ramboll and will provide input on these documents as applicable.

Cultural and Tribal Resources

ICF will prepare the Cultural Resources section of the EIR and will conduct the following tasks:

- Where applicable, ICF will use information presented in the ConnectMenlo EIR in the Cultural Resources analysis.
- It is ICF's understanding that an Archeology Report is being prepared by the Project Sponsor. Therefore, ICF's senior archaeologist will peer review the archaeological technical report prepared for the Project to assess whether there are any substantive data gaps or items that require additional clarification as well as assess the report for CEQA adequacy. ICF will provide comments in the form of a memorandum, and participate in up to two one-hour teleconference calls to discuss the technical report with the client and/or their archaeological consultant. ICF will also conduct a site visit to aid in the peer review. Once the Archeology Report is considered final, ICF will incorporate it into the EIR and include mitigation measures, as applicable.
- This scope of work assumes that the Archeology Report conducted by the Project Sponsor will include an updated records search at the Northwest Information Center (NWIC). As needed, ICF can conduct records searches and archival research, if not included in the Archeology Report, to identify any previously documented cultural resources and cultural resources studies that have previously occurred within the vicinity of the Project site. ICF will review historic maps, ethnographic literature, and any related documents on-file with the City.
- The Project would demolish all 21 buildings at the Project site, which includes a mix of office, research and development (R&D), and warehousing uses. Of these, five buildings are 45 years or older. Per ConnectMenlo Mitigation Measure CULT-1 and best practices for built environment resource evaluation, ICF will prepare State of California, Department of Parks and Recreation (DPR) 523 Form A and B forms for the five properties that are 45 years or older. The DPR forms will document the eligibility of the properties under California Register of Historical Resources (CRHR) and the National Register of Historic Places (NRHP) criteria. Each DPR form set will include a detailed description of the respective property, construction history, sketch map, historic context, and an evaluation of the property for listing under CRHR/NRHP criteria. Archival research and pedestrian survey will inform the documentation of current conditions of the properties and the significance evaluations in the DPR forms. This scope assumes that the buildings will be found to not be historic resources. If it is determined that these buildings are historic resources, then a revised scope of work and budget amendment will be needed to complete the work.
- ICF will contact the California Native American Heritage Commission and interested Native American Representatives to help identify any locations of concern to the local Native American community. The results of this review will be integrated into the EIR. If requested by the City, ICF will assist with the City's outreach to Native Americans in accordance with the project's AB-52 and SB-18 obligations. Assistance will include writing correspondence on behalf of the city, tracking and compiling correspondence, and identifying critical path items that arise as a result of the correspondence, including consultation. The results of this correspondence will be integrated into the project's EIR and ICF will analyze whether the Project would cause a substantial adverse change in the significance of a tribal resource

- Pursuant to ConnectMenlo Mitigation Measure CULT-1, the Cultural Resources section of the EIR will summarize the historic context of the Project site, methods employed in the documentation and evaluation of built environment resources, and CRHR evaluations documented in the DPR form sets. If it is determined that any building within the Project site is a historical resource, ICF will prepare a scope amendment to incorporate appropriate mitigation measures in the EIR.

Energy Resources

ICF will use the quantitative energy values for building energy (electricity and natural gas) and transportation fuel (construction and operational equipment/vehicles) provided by Ramboll, as part of their air quality and greenhouse gas analyses. ICF will make a determination as to whether the Project would result in the inefficient, wasteful, or unnecessary consumption of energy pursuant to Appendix G of the CEQA Guidelines. ICF will also evaluate whether the Project would conflict with or obstruct a state or local plan for renewable energy or energy efficiency. The review of Ramboll's energy resources calculations is included in the Air Quality and Greenhouse Gas scopes, above.

Geology/Soils

The ConnectMenlo EIR found impacts related to geology and soils to be less than significant. ICF will use the discussion and findings in the ConnectMenlo EIR, but supplement the analysis with site-specific information. Based on the ConnectMenlo EIR technical information received for the Project site, ICF will prepare the Geology/Soils section of the EIR and will conduct the following tasks:

- Obtain the Geotechnical Report from the Project Sponsor and review.
- Evaluate the geohazard risks from development at the Project site, using the Geotechnical Report, available geologic and/or soils maps, published literature, and other information, reports, and/or plans. The main issue that will be analyzed is the seismic and geotechnical safety of the proposed buildings.
- Assess potential geohazard impacts of the Project in light of existing regulations and policies that would serve to minimize potential impacts. Pertinent regulatory requirements, as outlined in ConnectMenlo, will be identified so that the nexus between regulations and minimized impacts is apparent. In general, construction of development similar to the Project has little or no effect on the geology of an area, but is still subject to seismic ground shaking and local soil conditions, including ground oscillation and long-term and differential settlement.
- ICF will also consider impacts on paleontological resources and human remains. Standard mitigation measures, as outlined in the ConnectMenlo EIR, will be identified.

Hazards and Hazardous Materials

This scope assumes that a Phase I Environmental Site Assessment (ESA) will be provided to ICF. Based on the information in the Phase I ESA, ICF will conduct the following tasks:

- Describe applicable federal, state, and local regulations and how these regulations apply to the Project and reduce the potential for impact. Information in the ConnectMenlo EIR will be used, as appropriate.
- Identify potential exposure to hazardous materials or waste during construction activities and during long-term operation at the Project site. Demolition of the existing structures could potentially result in the release of hazardous materials (asbestos or lead-based paint). ICF will consider this in the analysis.
- Evaluate potential public health risks at the site from groundwater and soil contamination from prior land uses. In addition, the analysis will focus on any potentially poor hazardous materials "housekeeping" practices at the site or from nearby uses. This information will be augmented by the Phase I ESA. The Project site is not listed as a hazardous materials site. However, according to the ConnectMenlo EIR, an open hazardous materials site listed on EnviroStor is located at 990 O'Brien Drive, to the south of the Project site. In addition, in 2017, a site at 1010 O'Brien Drive, also to the south of the Project site, was listed as an open cleanup program site on GeoTracker. ICF will consider this in the analysis.
- Include a discussion of the potential hazardous materials that could be used during the operation of the Project and any potential releases of these materials.
- Include a discussion of the potential public health risk from exposure to hazardous building components in the structures to be demolished at the Project site (e.g., asbestos, PCBs, etc.). Our scope does not assume the preparation of a quantitative health risk from hazards and hazardous materials.
- As needed, the Project will be required to comply with ConnectMenlo Mitigation Measure HAZ-4a and HAZ-4b which require a project-specific Environmental Site Management Plan and a vapor intrusion assessment, respectively. As necessary, compliance with these mitigation measures will be described in the EIR.
- Consider how the Project could interfere with an adopted emergency response plan and/or the airport land use plan for the Palo Alto Airport.

Hydrology/Water Quality

Based on technical information received from the Project Sponsor (such as a hydrology/drainage report), ICF will prepare the Hydrology/Water Quality section of the EIR and will conduct the following tasks:

- Describe the existing regulatory environment at the local, state, and federal levels, including, but not limited to, the Construction General Permit, Municipal Regional Permit for stormwater discharges (including how the project relates to C.3 requirements), the City of Menlo Park Municipal Code, and the California Building Code. ICF will incorporate information from ConnectMenlo, as applicable. These regulations require specific measures for reducing potential impacts on hydrology and water quality as well as from flooding.

- Assess potential Project hydrology and water quality impacts in light of existing regulations and policies that would serve to minimize potential impacts. Pertinent regulatory requirements will be explicitly identified so that the nexus between regulations and minimized impacts is apparent.
- Per ConnectMenlo EIR, each new development project is required, as part of the CEQA process, to demonstrate that stormwater runoff from the site would not result in an increase from pre-development flows. ICF will discuss compliance with these requirements.
- Discuss sea level rise and evaluate future flooding scenarios.

Land Use

Land use and planning analysis generally considers division of an established community and consistency of a proposed project with relevant local land use policies that have been adopted with the intent to mitigate or avoid an environmental effect. With respect to land use conflicts, the magnitude of these impacts depends on how a proposed project affects the existing development pattern, development intensity, traffic circulation, noise, and visual setting in the immediately surrounding area, which are generally discussed in the respective sections. However, per the ConnnectMenlo EIR (Mitigation Measure LU-2), all proposed development is required to demonstrate consistency with the applicable goals, policies, and programs in the General Plan and supporting zoning standards. Therefore, ICF will conduct the following tasks:

- The ConnectMenlo EIR considered the compatibility of the proposed land uses and zoning with current onsite and offsite development. The EIR will reiterate the findings of the ConnectMenlo EIR; it is not anticipated that further land use compatibility discussion will be needed.
- Tiering from the discussion in the Impact LU-1 in the ConnectMenlo EIR, describe the Project's potential to divide an established community highlighting any site-specific features that were not already considered in the ConnectMenlo analysis.
- For applicable plans other than the General Plan and zoning standards, a policy consistency analysis (only for policy conflicts that could result in environmental impacts) will be conducted and will focus only on those Project features that differ from what was considered in the ConnectMenlo EIR since that analysis did a comprehensive policy consistency analysis. The EIR will, however, evaluate the Project against relevant General Plan (including ConnectMenlo) policies and supporting zoning standards, in accordance with Mitigation Measure LU-2.

Noise

ICF will prepare a noise and vibration impact analysis that employs standard noise and vibration modeling techniques consistent with the requirements of the City of Menlo Park General Plan Noise Element and noise section of the City's municipal code. As appropriate, data and analyses from the General Plan Update effort as well as the ConnectMenlo EIR can be used to complete this chapter of the EIR.

Primary noise sources in the Project vicinity include local and regional roadway traffic on nearby roads, including Bayfront Expressway and Willow Road. Noise-sensitive receptors in the Project vicinity include residential uses located directly across Willow Road to the west of the Project site. Other sensitive

receptors could be identified during the screening process. Due to the development intensity at the Project site, the Project would be expected to result in greater noise levels compared to existing conditions.

The discussion of construction noise and vibration impacts will rely on the analysis in the ConnectMenlo EIR, and will include applicable mitigation measures from that EIR that would be required for the Project. Therefore, construction noise (ConnectMenlo Mitigation Measure NOISE-1c), construction vibration (ConnectMenlo Mitigation Measure NOISE-2a), and potential noise impacts to future on-site land uses (ConnectMenlo Mitigation Measures NOISE-1a and NOISE-1b) will be mitigated through the application of relevant mitigation measures. If desired by the City, ICF can prepare the specific vibration analysis required by Mitigation Measures NOISE-2a and NOISE-2b and/or the acoustical study for future on-site uses required by Mitigation Measure NOISE-1a during the CEQA process for integration into the EIR. If desired, our scope and budget will be modified accordingly.

ICF will address the following key noise issues:

- Exposure of existing noise sensitive land uses to Project-related changes in traffic noise. Although the Project was considered in the ConnectMenlo EIR, the access points for vehicles have changed. In addition, the Project was not analyzed in the ConnectMenlo EIR at the Project level (only cumulative traffic noise impacts of all expected future projects were discussed). As a result, traffic noise for roadway segments in the Project vicinity will need to be analyzed based on new Project-specific traffic numbers.
- Exposure of existing noise sensitive land uses to operational noise from the Project site (mechanical equipment, parking lots, loading docks, etc.).

Although one noise measurement for the ConnectMenlo EIR is located adjacent to the Project site, additional noise measurements would help to characterize the existing noise environment in the Project area for a proposed development of this size. Existing noise levels in the Project area will be characterized based on noise monitoring to be conducted at selected locations and traffic noise modeling, as follows:

- It is anticipated that short-term (15 minutes or less) noise monitoring will be conducted at up to two locations in the Project area. Continuous long-term monitoring (24 hours or more) will be conducted at up to two locations in the Project area.
- Existing traffic noise conditions in the Project area will be modeled using the FHWA Traffic Noise Model (TNM) version 2.5 and traffic data to be provided by the Project traffic engineer.

Traffic noise will be evaluated under the conditions analyzed in the Transportation section, which should include: Existing, Near Term Conditions, Near Term + Project Conditions, and Cumulative with and without the Project. Traffic noise along as many as 10 roadway segments will be modeled. The significance of traffic noise impacts will be evaluated using significance thresholds established based on

applicable City noise standards. Where significant impacts are identified, mitigation measures to reduce impacts will be identified.

Impacts on adjacent uses from noise generated by facility operation including a possible on-site co-generation plant, loading docks, parking lots, and mechanical equipment will be evaluated using standard acoustical modeling methods and operational data provided by the Project Sponsor. The significance of noise impacts will be evaluated using the significance thresholds. Where significant impacts are identified, mitigation measures to reduce impacts, as feasible, will be identified.

Population/Housing

Due to the Settlement Agreement with East Palo Alto, the increase in the number of employees anticipated at the site from the ConnectMenlo EIR, and the public interest in this topic, ICF proposes to do a full analysis of potential impacts to population and housing. The Project would include office, retail, and hotel uses, which would generate new employees at the Project site. In addition, the Project would include approximately 1,735 housing units, directly increasing the population in the City consistent with growth planned in Connect Menlo. ICF will analyze the impact of the increase in employees and residents. The Population and Housing chapter of the EIR will examine the Project's effect on population and housing in the City, and to a lesser extent, the region. This analysis will focus on the increase in population and the secondary effects associated with housing needed to accommodate the increased employment that would result from the Project. ICF, with assistance from Keyser Marston Associates (KMA), will undertake the following tasks:

- ICF will obtain additional information from the Project Sponsor, including the number of existing employees at the Project site and the assumptions for how many employees could also live at the proposed housing, if available.
- A Housing Needs Assessment (HNA) will be prepared by Keyser Marston Associates (Attachment B). ICF will work closely with the KMA throughout the process and will peer review the HNA and incorporate the findings into the analysis.
- Discuss the housing effect resulting from the Project in the context with the Association of Bay Area Governments (ABAG) regional household forecasts and fair share housing allocations.
- ICF will evaluate the direct population impacts from the proposed housing at the Project site.
- Similar to other job intensive projects, the EIR will examine the secondary housing demands based on future residential patterns for Project employees.
- One of the key terms of the Settlement Agreement between the City of Menlo Park and the City of East Palo Alto is that an HNA will be prepared when the preparation of an EIR is required. As required by the Settlement Agreement, the HNA prepared for the Project will include an analysis of the multiplier effect for indirect and induced employment to the extent possible.

Public Services and Recreation

It is ICF's understanding that the population increases associated with the Project site as assumed in the ConnectMenlo EIR may be less than what is now anticipated. Thus, ICF proposes to not tier from the

ConnectMenlo EIR and conduct a full analysis for the impacts to public services and utilities since the magnitude of impacts could be greater than what was previously disclosed. Based on information received from various service providers, ICF will prepare the Public Services section of the EIR. BAE will conduct an FIA (Attachment C) and ICF will coordinate the FIA findings with the Public Services section to ensure that we are efficient in our requests for information from the public service providers. As appropriate, ICF will utilize existing data gathered as part of the ConnectMenlo EIR. ICF will conduct the following tasks:

- As necessary, send public service questionnaires to the City's police department, community services department, library, fire district, and the school district to determine current service levels and capacity to serve increased demand. For efficiency, ICF will coordinate these questionnaires with BAE.
- Estimate Project-generated demand for public services based on existing operational standards obtained from the service providers. Other measures of demand will also be considered, such as the projected increase in the calls for service and the projected demand of recreational facilities and library services. ICF will consider the direct impacts from the residents living at the Project site and the secondary effects of adding to the residential population due to employment growth.
- In accordance with CEQA, evaluate the extent to which Project demands would trigger the need for new public facilities whose construction might result in physical environmental effects.

Transportation

The scope of work for the Transportation analysis is included as Attachment A (Hexagon). Note that the appropriate standards for the transportation analysis will be identified at a later time, based on the legal requirements.

Utilities/Service Systems

As appropriate, the ConnectMenlo EIR will be summarized. However, the EIR will evaluate the site-specific nature of certain utilities such as storm drain and wastewater infrastructure. The Utilities/Services Systems section of the EIR will examine the Project's effect on water supply, wastewater treatment, storm drainage, solid waste disposal, telecommunications facilities, and energy generation and transmission. Information for these analyses is expected to come from the Project Sponsor and the City. Per discussions with the Project Sponsor, ICF will assume a Code-compliant project for a conservative analysis. Based on technical information for the Project site, and information received from the utility providers, ICF will prepare the Utilities/Service Systems section of the EIR and will conduct the following tasks:

- Discuss applicable regulations at the local, state, and federal level, using the ConnectMenlo EIR where applicable.
- Peer review utilities data prepared by the Project Sponsor for adequacy and use in the EIR.
- ICF assumes the City will require a Water Supply Assessment for the Project. ICF will peer review the WSA which will be provided by the City and incorporate the WSA into the analysis.

- Describe existing utility providers, system capacity, and improvement plans, using the ConnectMenlo EIR where applicable.
- Evaluate the net change in the demand for water, wastewater, storm drainage, solid waste, telecommunications, and energy, relative to existing and planned capacity for the utilities and using the ConnectMenlo EIR where applicable.
- Discuss whether Project impacts would require the expansion or construction of new infrastructure or facilities.
- Include a discussion of fuel and energy consumption pursuant to Appendix F of the CEQA Guidelines.

Deliverables

- Five hard copies of Administrative Draft EIR
- One electronic copy of Administrative Draft EIR in MS Word
- One electronic copy of Administrative Draft EIR in Adobe PDF format

Task 6. Project Variants

The Project could include additional and/or alternative access to/from the Project site, along with other onsite features than currently proposed. All potential variants to the Project will be analyzed as a separate chapter in the EIR. As needed, the analysis will be quantitative; however, this scope and budget assumes that the variants would not be analyzed at the same level as detail as the Project.

- **Increased Housing Variant.** A maximum of 2,000 dwelling units could be constructed at the Project Site, as permitted with the density bonus. The EIR will analyze the development of up to 1,735 housing units as part of the Project, but to provide development flexibility, a variant will be analyzed to include the construction and operation of up to 2,000 units.
- **Decreased Housing Variant**. A minimum of 1,500 units, as required by the development agreement for the Facebook Expansion Project, would be analyzed in order to provide development flexibility.
- **Hamilton Realignment.** Hamilton Avenue could be realigned at the intersection with Willow Road. ICF would consider the environmental impacts associated with the construction of the realignment. In addition, as a result of the realignment, an existing gas station would need to be relocated across the street. ICF would analyze the environmental impacts associated with demolition and construction of a gas station. For purposes of this analysis, it is assumed that the replacement gas station would be the same size as existing; therefore, operational impacts would not be considered since there would be no change compared to existing conditions.
- **Willow Road/Dumbarton Rail Corridor Crossing.** A grade-separate crossing is proposed for bicycles, pedestrians, and campus trams. It is currently unknown whether this proposed crossing would be above or below grade. The EIR will analyze one of the options as part of the Project, while the other option will be analyzed in the Variants chapter.

- **Recycled Water.** It is currently unknown whether the recycled water system would be used at the Project site only, or if it should be a public utility. The onsite system will be analyzed as part of the Project, while the system as a public utility would be analyzed in the Variants chapter.
- **Others.** Other potential variants could include different programming for the proposed park and community amenities.

Task 7. Project Alternatives and Other CEQA Considerations

The purpose of this task is to complete drafts of the remaining sections (Alternatives and Other CEQA Considerations) of the EIR for City staff review. This task involves preparation of other required sections examining particular aspects of the Project's effects and the identification and comparison of Project alternatives.

Other CEQA Considerations

This task involves documenting unavoidable adverse impacts, growth-inducing effects, and cumulative effects of the Project:

- The unavoidable effects will be summarized from analyses performed in Task 6.
- Growth-inducing effects will be based on economic multipliers for the proposed uses, as well as comparisons with ABAG projections for the City. Growth inducement will be discussed in the context of population increases, utility and public services demands, infrastructure, and land use. Effects associated with increased housing demand in the City and region will be discussed.
- Cumulative effects where relevant will be addressed in Task 6 and summarized as part of this section of the EIR. The future projects in the vicinity of the Project site will be considered as they relate to potential cumulative impacts. This scope assumes the City will help develop the approach for analyzing cumulative effects, typically a combination of using the General Plan and a list of reasonably foreseeable planned projects.

Alternatives

The alternatives to the Project must serve to substantially reduce impacts identified for the Project while feasibly attaining most of the Project objectives. ICF assumes that one Reduced Project Alternative will be quantitatively analyzed and will be based on a sensitivity analysis to reduce identified impacts, unless the Project Sponsor has a preferred alternative. The No Project Alternative will also be analyzed. Up to two additional alternatives could be developed by ICF, the City, and/or the Project Sponsor and evaluated qualitatively. This scope assumes that the City/Project Sponsor will provide justification for dismissing offsite alternatives and other alternatives considered but rejected.

Deliverables

- Other CEQA Considerations chapter to be submitted with Administrative Draft EIR
- Alternatives chapter to be submitted with Administrative Draft EIR

Task 8. Screencheck Draft

The purpose of this task is to prepare the Screencheck Draft EIR for City staff review. ICF will prepare a Screencheck Draft EIR to respond to the City's and Project Sponsor's comments on the Administrative Draft EIR. This scope assumes that comments from multiple reviewers will be consolidated with any conflicting comments resolved, and that comments do not result in substantial revisions or additional analyses. The Screencheck Draft EIR will include an Executive Summary section, which will summarize the Project Description, impacts and mitigations, and alternatives. Impacts and mitigations will be presented in a table that identifies each impact, its significance, and proposed mitigation as well as the level of significance following adoption for the mitigation measures.

Deliverables

- Five hard copies of Screencheck Draft EIR
- Electronic copies of Screencheck Draft EIR in MS Word and Adobe PDF format

Task 9. Public Draft EIR

The purpose of this task is to prepare and submit the Draft EIR to the City for distribution to the public. ICF will revise the Screencheck Draft to incorporate modifications identified by the City. The revised document will be a Draft EIR, fully in compliance with State CEQA Guidelines and City guidelines, and will be circulated among the public agencies and the general public as well as specific individuals, organizations, and agencies expressing an interest in receiving the document. During this task, ICF will also compile the appendices that will be distributed with the Draft EIR and produce a version of the full document that can be uploaded onto the City's website. ICF will also prepare a Notice of Completion (NOC) to accompany the copies that must be sent to the State Clearinghouse. This scope of work and budget assumes that ICF will send the required documents to the State Clearinghouse and that the City will distribute the Draft EIRs to all other recipients.

Once the City has been notified of the intent to pursue AB 900 certification, ICF will concurrently prepare the Administrative Record. In addition, ICF will show compliance with AB 900 requirements regarding the posting on the City's website.

Deliverables

- Thirty-five hard copies of the Draft EIR with appendices in CDs
- Electronic copies of the Draft EIR in MS Word and in Adobe PDF format
- Notice of Completion
- Fifteen hard copies of the Executive Summary, along with 15 electronic copies of the entire Draft EIR on CD, for the State Clearinghouse
- One electronic copy of the Draft EIR Administrative Record, pursuant to AB 900.

City Involvement

Review the Notice of Completion. Prepare and file the Notice of Availability with the County Clerk. Distribute the NOA and Draft EIRs (other than to the State Clearinghouse), and handle any additional noticing (e.g., newspaper, posting at site).

Task 10. Public Review and Hearing

The City will provide a 45-day review period during which the public will have an opportunity to review and comment on the Draft EIR. During the 45-day review period, the City will hold a public hearing to receive comments on the Draft EIR. ICF key team members will attend and participate as requested. This scope of work assumes the preparation of meeting materials (e.g., PowerPoint presentations and handouts) but does not assume the labor needed to provide meeting transcript/minutes.

Task 11. Draft Responses to Comments and Administrative Final EIR

The purpose of this task is to prepare responses to the comments received on the Draft EIR and incorporate these responses into an Administrative Final EIR for City review. The Administrative Final EIR will include:

- Comments received on the Draft EIR, including a list of all commenters and the full comment letters and public meeting transcripts with individual comments marked and numbered;
- Responses to all comments; and
- Revisions to the Draft EIR in errata format as necessary in response to comments.

All substantive comments for each written and oral comment will be reviewed, bracketed, and coded for a response. Prior to preparing responses, ICF will meet with staff to review the comments and suggest strategies for preparing responses. This step is desirable to ensure that all substantive comments are being addressed and that the appropriate level of response will be prepared. This scope of work and budget assumes ICF will prepare responses for up to 100 substantive discrete, non-repeating comments and will coordinate integrating the responses prepared by other consultants. However, the number and content of public comments is unknown at this time. Therefore, following the close of the Draft EIR public review period and receipt of all public comments, ICF will meet with the City to revisit the budget associated with this effort to determine if additional hours are needed. Very roughly, each additional substantive discrete comment may cost an additional $350.

Frequently raised comments of a substantive nature may be responded to in a Master Response, which allows for a comprehensive response to be presented upfront for all interested commenters. ICF will identify and recommend possible Master Reponses for City consideration during the initial meeting to discuss strategies for preparing responses.

Following the strategy session, ICF will prepare Master Responses (as appropriate) and individual responses to the bracketed and coded comments. Individual responses to each comment letter will be placed immediately after the comment letter. As necessary, responses may indicate text revisions, in addition to clarifications and explanations. All text changes stemming from the responses to the

comments, as well as those suggested by City staff, will be compiled into an errata included as part of the Final EIR.

Following City's review of the Administrative Final EIR, ICF will address all comments received and prepare a Screencheck Final EIR for City review to ensure that all comments on the Draft were adequately addressed.

Deliverables

- Five hard copies of the Administrative Final EIR
- Electronic copies Administrative Final EIR in MS Word and in Adobe PDF format
- Five hard copies of the Screencheck Final EIR
- Electronic copies of the Screencheck Final EIR in MS Word and in Adobe PDF format

Task 12. Screencheck and Final EIR

Based on comments received from City staff, the Screencheck Responses to Comments will be revised and appropriate revisions to the Draft EIR will be noted. This scope assumes that comments from multiple reviewers will be consolidated with any conflicting comments resolved, and that comments do not result in substantial revisions or additional analyses. The Final EIR will then consist of the Draft EIR and the Responses to Comments document. Revisions to the Draft EIR will be presented as a separate chapter in the Final EIR. The revised Responses to Comments document will be submitted to the City for discussion by the Planning Commission and subsequent certification by the City Council.

Deliverables

- Twenty hard copies of the Final EIR with appendices in CDs
- Electronic copies of the Final EIR in MS Word and Adobe PDF format

Task 13. Certification Hearings, MMRP, Statement of Overriding Considerations, and Final Administrative Record

The purpose of this task is to attend meetings to certify the EIR. Team members will attend and participate in up to two meetings to certify the EIR. If requested by City staff, ICF will present the conclusions of the EIR and a summary of the comments and responses.

As part of this task, ICF will also prepare a draft and final MMRP for the Project, as required by Section 15097 of the State CEQA Guidelines. The MMRP will be in a tabular format and include:

- The mitigation measures to be implemented
- The entity responsible for implementing a particular measure
- The entity responsible for verifying that a particular measure has been completed
- A monitoring milestone(s) or action(s) to mark implementation/completion of the mitigation measure

ICF will prepare the Statement of Overriding Considerations pursuant to Section 15093 of the CEQA Guidelines, if required based on the impacts of the Project. CEQA requires the decision-making agency to balance the economic, legal, social, and technological benefits of a proposed project against its unavoidable environmental impacts. The Statement of Overriding Considerations includes the specific reasons to support its action based on the Final EIR and other information in the record.

ICF will also compile the Administrative Record, assembling background documents as well as correspondence or telephone notes that are cited as sources in the EIR.

Deliverables

- Electronic copies of the Draft MMRP in MS Word and Adobe PDF format
- Five hard copies of the Final MMRP
- Electronic copies of the Final MMRP in MS Word and Adobe PDF format
- Electronic copies of the Draft Statement of Overriding Considerations in MS Word and Adobe PDF format
- Electronic copies of the Final Statement of Overriding Considerations
- One electronic copy (on CD or DVD) of the final Administrative Record

C. Cost

The cost estimate to implement Phase II of the EIR is $1,113,858 as detailed in Attachment D.

HEXAGON TRANSPORTATION CONSULTANTS, INC.

June 26, 2019

Ms. Kirsten Chapman
ICF
201 Mission Street, Suite 1500
San Francisco, CA 94105

Re: Proposal to Prepare a Transportation Impact Analysis for the Proposed Willow Village Project in Menlo Park, CA.

Dear Ms. Chapman:

Hexagon Transportation Consultants, Inc. is pleased to submit this proposal to prepare a Transportation Impact Analysis (TIA) for the proposed Willow Village project in Menlo Park, CA. The approximately 59-acre project site is bounded to the north by the Dumbarton rail corridor, to the south by the Hetch Hetchy right-of-way and Mid-Peninsula High School, Willow Road to the west and existing life science complex to the east. The project proposes to demolish the existing approximately one million s.f. of industrial/office/warehouse buildings on site and build a mixed-use development including approximately 1,735 residential units, 125,000 to 200,000 s.f. of retail (non-office commercial) uses, a 200- to 250-room hotel and a 1.75 million s.f. office campus. A variant project description increasing the residential component to up to 2,000 units (as permitted with the density bonus) is being considered. Another variant where the project will include no less than 1,500 residential units (in order to comply with the Development Agreement for the Facebook Expansion Project) is also being considered.

Site access to the project site would be provided by three intersections on Willow Road (at Hamilton Avenue, and two new driveways south of Hamilton Avenue), a new intersection on O'Brien Drive at the southeast corner of the project site, and Adams Court. A variant to re-align the Hamilton Avenue intersection is also being considered.

Scope of Services

The purpose of the traffic study is to satisfy the requirements of the City of Menlo Park and the City/County Associations of Governments (C/CAG) Congestion Management Program (CMP). The traffic analysis will include an analysis of weekday AM and PM peak-hour traffic conditions and will determine the traffic impacts of the proposed project on 49 key intersections, 20 freeway segments and 8 freeway ramps in the vicinity of the site. The study will also analyze 10 roadways segments for Average Annual Daily Traffic (AADT) analysis. All internal intersections and driveways proposed on the project site (approximately 20 intersections/driveways based on the February 8, 2019 site plan) will also be evaluated. The external intersections, freeway segments and freeway ramps that we propose to study are identified below.

Study Intersections

1. Marsh Road & Bayfront Expressway [CMP]
2. Marsh Road & US 101 Northbound Off-Ramp
3. Marsh Road & US 101 Southbound Off-Ramp
4. Marsh Road & Scott Drive
5. Marsh Road & Bohannon Drive/Florence Street

6. Marsh Road & Bay Road
7. Marsh Road & Middlefield Road [Atherton]
8. Chrysler Drive & Bayfront Expressway
9. Chilco Street & Bayfront Expressway
10. MPK 21 Driveway (west) & Bayfront Expressway
11. MPK 20 Driveway (east) & Bayfront Expressway
12. Chrysler Drive & Constitution Drive
13. Chilco Street & Constitution Drive/MPK 22 Driveway (unsignalized)
14. Chilco Street & Hamilton Avenue (unsignalized)
15. Ravenswood Avenue & Middlefield Road
16. Ringwood Avenue & Middlefield Road
17. Willow Road & Bayfront Expressway [CMP]
18. Willow Road & Hamilton Avenue
19. Willow Road & North Street (future intersection)
20. Willow Road & Park Street (future intersection)
21. Willow Road & Ivy Drive
22. Willow Road & O'Brien Drive
23. Willow Road & Newbridge Street [East Palo Alto]
24. Willow Road & US 101 Northbound Ramps [East Palo Alto]
25. Willow Road & US 101 Southbound Ramps
26. Willow Road & Bay Road
27. Willow Road & Hospital Plaza/Durham Street
28. Willow Road & Coleman Avenue
29. Willow Road & Gilbert Avenue
30. Willow Road & Middlefield Road
31. O'Brien Drive/Loop Road & Main Street/O'Brien Drive (future intersection)
32. O'Brien Drive & Kavanaugh Drive (unsignalized)
33. Adams Drive & Adams Court (unsignalized)
34. Adams Drive & O'Brien Drive (unsignalized)
35. University Avenue & Bayfront Expressway [CMP]
36. University Avenue & Purdue Avenue (unsignalized)
37. University Avenue & Adams Drive (unsignalized) [East Palo Alto]
38. University Avenue & O'Brien Drive [East Palo Alto]
39. University Avenue & Kavanaugh Drive/Notre Dame Avenue [East Palo Alto]
40. University Avenue & Bay Road [East Palo Alto]
41. University Avenue & Runnymede Street [East Palo Alto]
42. University Avenue & Bell Street [East Palo Alto]
43. University Avenue & Donohoe Street [East Palo Alto]
44. US 101 Northbound Off-Ramp & Donohoe Street [East Palo Alto]
45. Cooley Avenue & Donohoe Street [East Palo Alto]
46. University Avenue & US 101 Southbound Ramps [East Palo Alto]
47. University Avenue & Woodland Avenue [East Palo Alto]
48. University Avenue & Middlefield Road [Palo Alto]
49. Lytton Avenue & Middlefield Road [Palo Alto]

Note: This proposal includes budget to study a few additional intersections if necessary.

CMP Roadway Segments

San Mateo County:

- SR 84 – 4 CMP segments between Alameda de las Pulgas and Alameda County Line
- US 101 – 2 CMP segments between SR 92 and Santa Clara County Line
- SR 109 – 1 CMP segment between Kavanaugh Drive and SR 84
- SR 114 – 1 CMP segment between US 101 and SR 84

Santa Clara County:

- US 101 – 8 CMP segments between Embarcadero Road and SR 85

Alameda County

- SR 84 – 4 CMP segments between San Mateo County Line and I-880

Freeway Ramps

- US 101/Marsh Road Interchange – 2 ramps
- US 101/Willow Road Interchange – 4 ramps
- US 101/University Avenue Interchange – 2 ramps

Roadway Segments for AADT Analysis

Minor Arterials

1. Willow Road, north of Durham Street [Avenue – Mixed Use]
2. Willow Road, north of Blackburn Avenue [Avenue – Mixed Use]
3. Middlefield Road, west of Willow Road [Avenue – Mixed Use]
4. Middlefield Road, east of Willow Road [Avenue – Mixed Use]

Collectors

5. Marsh Road, north of Bohannon Drive [Mixed Use Collector]
6. Hamilton Avenue, east of Madera Avenue [Neighborhood Collector]
7. O'Brien Drive, east of Willow Road [Mixed Use Collector]
8. O'Brien Drive, west of University Avenue [Mixed Use Collector]
9. Adams Drive, west of University Avenue [Mixed use Collector]
10. Bay Road, west of Willow Road [Neighborhood Collector]

It should be noted that Hexagon has prepared an interim proposal for this project to collect travel time data on Willow Road and conduct field observations for approximately 30 to 35 intersections. The interim proposal has a budget of $16,000. These tasks will not be repeated in the scope below and will not be reflected in this proposal's budget or schedule breakdowns.

The tasks to be included in this proposal are:

1. ***Site Reconnaissance***. The physical characteristics of the site and the surrounding roadway network will be reviewed to identify existing roadway cross-sections, intersection lane configurations, traffic control devices, and surrounding land uses.

2. ***Observation of Existing Traffic Conditions in the Study Area.*** Existing traffic conditions will be observed in the field in order to identify any operational deficiencies and to confirm the accuracy of calculated levels of service. This task includes conducting field observations for the remaining approximately 20 study intersections not covered by the interim proposal.

3. ***Data Collection***. It is assumed that intersection counts at all study intersections and AADT counts at all 10 study roadway segments will be provided by City staff. This task does not include conducting additional counts. Freeway segment traffic counts will be obtained from the latest Congestion Management Program (CMP) monitoring report.

4. ***Evaluation of Existing Conditions***. Existing traffic conditions will be evaluated based on existing traffic volumes at the study intersections. Study intersections within each jurisdiction will be evaluated using the jurisdiction's approved software and analysis methodologies. Due to the close proximity of the intersections at University Avenue and Donohoe Street, at US 101 Northbound Off-Ramp and Donohoe Street and at University Avenue and US 101 Southbound Ramps, these three intersections will be analyzed using the Synchro/SimTraffic software using the latest micro-simulation model built for the University Avenue corridor.

5. ***Willow Road Simulation.*** Hexagon proposes to develop a micro-simulation model of all study intersections along Willow Road north of Durham Street using the City-preferred simulation software (SimTraffic 10). The micro-simulation model will simulate travel of individual vehicles and pedestrians along the corridor and will allow us to generate a visual animation of the existing traffic operations. Separate simulation models will be developed for the AM and PM peak hours. In order to closely simulate existing conditions, it is assumed that City staff and Caltrans staff will provide detailed signal timing plans as inputs into the simulation model. Hexagon will utilize the collected travel time data (outlined in the interim proposal) and field observations to calibrate the model to closely represent existing traffic operations. The progression analysis will be run for existing conditions as well as for each fully studied scenario.

   Hexagon will report LOS results from Vistro for intersections along Willow Road that are being analyzed using simulation models. To ensure consistency, Vistro parameters at each intersection under each scenario will be adjusted so the Vistro results and the simulation results are consistent. Hexagon will prepare an initial technical memorandum summarizing our simulation calibration methodology and results for existing conditions. Upon receiving City approval on the existing simulation model, Hexagon will provide subsequent memorandums documenting all parameter adjustments made to the Vistro file. Separate memorandums will be provided for existing and existing project conditions, background and background project conditions, cumulative and cumulative plus project conditions, and cumulative with Dumbarton conditions (if needed). Impact discussions for each project scenario will begin only after receiving City approval on the respective technical memorandum documenting the Vistro parameter adjustments.

6. ***Model Validation***. Hexagon will start with the ConnectMenlo model to be provided by the City. It is assumed that the land use data for existing conditions is relatively up to date and would not require modifications. It is assumed that the model is set up to run daily, AM and PM 4-hour trip assignments, and that it includes most of the study intersections. The model network will be updated to ensure any study intersections not included in the model are also coded. We will check the model validation for the study area, and we will make adjustments to model parameters to get a good match with traffic counts. Because the model will be running 4-hour trip assignments but traffic counts are only 2-hour counts, additional 24-hour roadway traffic counts within or near Menlo Park will be needed to validate the model and derive conversion factors for the intersection counts. Hexagon will provide a list of up to 25 street segments where daily roadway traffic counts are needed. It is assumed that City will provide Hexagon with the counts. We will expect the City to critically evaluate the land use data in the ConnectMenlo model and advise Hexagon about any necessary changes to reflect current existing conditions. Hexagon will input the land use data into the model files. Hexagon will prepare a memorandum documenting our assumptions, inputs and adjustments to the model as well as the validation results.

7. ***Future Land Use Data.*** Hexagon will rely on the City to provide land use data for the future scenarios, which include Background and Cumulative (2040). The Background scenario will include projects that have been approved and may be under construction but not yet occupied. For zones outside of Menlo Park, Hexagon will use the existing model data for year 2025 for Background conditions. The 2040 scenario will use the current model's 2040 land use data set, except as modified by the City in Menlo Park. This task budget includes some time for Hexagon to assist City staff with allocating development into the model's zones and land use categories.

8. ***Trip Generation***. Hexagon will prepare trip generation estimates for the project using various sources. For the Office District, Hexagon will rely on data to be supplied by the project applicant based on driveway counts and in-house mode-split data. For other uses in the project (residential and retail), Hexagon will use ITE trip generation rates. Hexagon will rely on input from the City/project applicant regarding the different land use categories (for the non-residential and office components) and the amount of development in each land use category for trip generation purposes. For internal and any transit-oriented reductions, Hexagon will run the MXD model and derive appropriate trip reductions. Trips generated by existing uses on site will be credited using ITE trip generation rates.

   Hexagon will run the travel demand forecasting model to determine the trip distribution pattern for the project. It is assumed that a detailed site plan including parking management plan will be provided by the applicant. This information is needed for trip assignment assumptions. Hexagon will prepare a memo with the trip generation estimates and trip assignment pattern for review and approval by City staff prior to completing the following tasks. This task will be completed for only the main project description.

9. ***Background Scenarios.*** Hexagon will run the travel forecasting model to produce link-level and intersection turning movement forecasts for the study intersections and freeway segments. The model will be used to produce 4-hour forecasts. Hexagon will convert the 4-hour link forecasts into forecasts of peak-hour intersection turning movements. Hexagon will produce model forecasts both with and without the project. Hexagon will also produce forecasts of vehicle miles traveled (VMT). Model forecasts for the two residential variants

will be analyzed and documented in the same fashion. This task will be completed for only the main project description.

10. ***Cumulative (2040) Scenarios***. In the same fashion as Task 9, Hexagon will produce year 2040 forecasts with and without the project. Hexagon will work with City staff to identify the transportation network to be used in the Cumulative scenario, and potentially include a scenario that includes rail service in the Dumbarton corridor. Hexagon will work with the City to determine how to analyze a Dumbarton scenario. This task will be completed for only the main project description.

11. ***Intersection Analysis.*** For all background, cumulative and Dumbarton scenarios with and without the project, Hexagon will evaluate intersection levels of service using adjusted model forecast volumes. Intersection impacts will be identified by comparing the project scenarios to the without-project scenarios in accordance with the appropriate jurisdiction's adopted significant impact criteria. For intersections analyzed using the micro-simulation models, this task assumes adjustments to signal timing and corridor coordination under the without-project scenarios. The adjustments will be made based on several key measures of effectiveness (i.e. travel time, stops, queues, etc.) to be determined in coordination with City staff. The with-project scenarios will use the same models as the without-project models. This task will be completed for only the main project description.

12. ***Intersection Variant Analysis.*** It is our understanding that the project applicant is considering a variant scheme at the Willow Road and Hamilton Avenue intersection. This variant scheme would realign Hamilton Avenue south of the current Chevron gas station. As a result, the current signalized intersection at Willow Road and Hamilton Avenue would be moved south by about 200 feet. Under this scheme, the original Hamilton Avenue site access point will become a right-in-right-out only access point. Hexagon will conduct intersection level of service analysis under all project scenarios at these two intersections using the simulation model. The evaluation will include reassigning traffic volumes at these two intersections as necessary. This task will be completed for only the main project description.

13. ***Freeway Analysis.*** For all background and cumulative scenarios with and without the project, freeway levels of service will be evaluated using adjusted model forecast volumes. Freeway impacts will be identified by comparing the project scenarios to the without-project scenarios in accordance with the appropriate jurisdiction's adopted significant impact criteria. This task will be completed for only the main project description.

14. ***Freeway Ramp Analysis***. The freeway ramp analysis will consist of a volume-to-capacity analysis of the study freeway ramps under all study scenarios. Hexagon will conduct field observations at existing on-ramps with ramp meters to determine the existing ramp meter rates and queuing. Queuing at the study on-ramps will be analyzed under background and background plus project scenarios assuming the same ramp meter rates. Freeway ramp analysis will be presented only for information. This task will be completed for only the main project description.

15. ***Roadway AADT Analysis.*** For all background and cumulative scenarios with and without the project, Hexagon will evaluate the project impacts on roadway AADT using adjusted model forecast volumes. Impacts will be identified by comparing the project scenarios to

the without-project scenarios in accordance with the appropriate jurisdiction's adopted significant impact criteria. This task will be completed for only the main project description.

16. ***Signal Warrant Analysis.*** The need for future signalization of the unsignalized study intersections will be evaluated on the basis of the Peak Hour Warrant (Warrant 3 – Part B) in the *California Manual on Uniform Traffic Control Devices*. The warrant will be evaluated using peak-hour volumes for all study scenarios. This task will be completed for only the main project description.

17. ***Alternative Metrics***. This task provides a budget allowance for Hexagon to calculate other potential transportation metrics. These could include travel time and speed, mode split, transit ridership, or others. This task could also be used to test different mitigation strategies such as congestion pricing, trip caps, parking charges, or others. This task will be completed for only the main project description.

18. ***Project Alternatives.*** Hexagon will estimate the trip generation of project alternatives for reporting in the EIR. Estimates will be done using ITE trip rates and the MXD model. This task does not include running the travel forecasting model for the project alternatives. Hexagon will qualitatively discuss whether the potential project impacts would differ as a result of the different land use alternatives. This discussion will be based off only the impact conclusions of the main project description. This task assumes analyzing up to four project alternatives. Two of the project alternatives will be the increased residential variant (up to 2,000 units) and the decreased residential variant (no less than 1,500 units). It is envisioned that the two residential variants will be analyzed in greater detail than the other two project alternatives budgeted in this task, but the level of analysis required for the two residential variants is unknown at this time. Therefore, this task assumes up to 80 hours of Hexagon staff time.

19. ***Sensitivity Analysis.*** Hexagon will conduct a qualitative sensitivity analysis to determine the extent to which the project would need to be modified to eliminate all significant intersection and freeway impacts. This task will be completed for only the main project description.

20. ***Phasing Analysis.*** It is our understanding that the project is anticipated to be completed in three phases. Hexagon will conduct a trip generation analysis to estimate the project trips after completion of each phase. Hexagon will provide a qualitative discussion of the intersection and freeway impacts expected during the two interim phases. This task will be completed for only the main project description.

21. ***Internal Intersection Analysis.*** Hexagon will conduct an operations analysis of the proposed internal roadway network. This task will be completed for only the main project description. This analysis will include intersection levels of service analysis using the Vistro software. Intersection controls will be assumed as proposed. For proposed unsignalized intersections, a signal warrant analysis will be conducted in accordance with Task 16. A queueing analysis will also be conducted to determine the need, and if so length of turn pockets, as well as to identify any potential spillback issues.

    For the variant scheme, it is expected that traffic operations at the four internal intersection on West Street and on Main Street at Hamilton Avenue and at North Street will be affected. The intersection levels of service analysis, queuing analysis and potential signal warrant analysis will be evaluated just for these four intersections under the variant scheme.

22. ***Site Plan Review.*** A review of the project site plan will be performed to determine the overall adequacy of the site access and on-site circulation in accordance with generally accepted traffic engineering standards and to identify and access or circulation issues that should be improved.

    Hexagon will also review any proposed bus/shuttle routes on site for site access and site circulation. Proposed bus/shuttle stops will be reviewed to determine potential circulation issues. This task will be completed for only the main project description.

23. ***Parking and Peer Review of Shared Parking Analysis.*** Parking will be evaluated relative to the City of Menlo Park parking requirements. It is our understanding that a shared parking analysis will be prepared by the project applicant. This task includes two rounds of peer review of the shared parking analysis (one round of review for the draft and one round of review for the final report). This task will be completed for only the main project description.

24. ***Evaluation of Vehicle Queuing.*** For selected locations where the project would add a significant number of left-turning vehicles, the adequacy of existing/planned storage at turn pockets will be assessed by means of comparison with expected maximum vehicle queues. Vehicle queues will be estimated using a Poisson probability distribution. This task will be completed for only the main project description.

25. ***Bicycle, Pedestrian, and Transit Facilities***. A qualitative analysis of the project's effect on transit service in the area and on bicycle and pedestrian circulation in the study area will be included in the traffic report. This includes sidewalks, bicycle lanes, and amenities to promote the safe use of alternate modes of transportation, and connections to the existing bicycle and pedestrian network. The analysis will consider the project's proposed elements with respect to the City's currently adopted Bicycle Plan and Sidewalk Master Plan as well as the Transportation Master Plan currently in development. This task will be completed for only the main project description.

26. ***Peer Review of TDM Plan.*** Hexagon will conduct a comprehensive peer review of the applicant-provided Transportation Demand Management (TDM) Plan. Hexagon will summarize our comments in a draft memorandum and will respond to one round of comments from City of Menlo Park and ICF and prepare a final memorandum. This task also includes a peer review of the Final TDM Plan. This task will be completed for only the main project description.

27. ***Description of Impacts and Recommendations***. Based on the results of the level of service calculations, impacts of the site-generated traffic will be identified and described. Recommendations will be formulated that identify the locations and types of improvements or modifications necessary to mitigate significant near-term or long-range project impacts. Potential secondary impacts associated with any proposed improvements will be discussed as well. Hexagon will also determine whether the requirement of specific TDM measures could mitigate project impacts. This task will be completed for only the main project description.

28. ***C/CAG Checklist.*** For developments generating over 100 net peak hour trips, the San Mateo County CMP require the completion of a C/CAG checklist. Hexagon will prepare the required C/CAG checklist based on the final TDM Plan provided by the project applicant. This task will be completed for only the main project description.

29. ***Meetings***. The fee estimate includes Hexagon staff attendance at ten meeting in connection with the project. It also includes Hexagon staff attendance at four public hearings in connection with the project.

30. ***Reports***. Hexagon will prepare the Transportation chapter of the EIR as well as a stand-alone TIA report. The TIA report will include all analysis included in the Transportation chapter of the EIR and will include other non-CEQA related analysis. The TIA report will serve as the technical appendix to the Transportation chapter of the EIR This task includes preparation of two rounds of the Administrative Draft and one round of the Draft Transportation Chapter and TIA. Hexagon will respond to editorial comments on each round of the reports from both City staff and ICF. It is assumed that ICF will provide the outline of the format to be used for the EIR Transportation Chapter.

31. ***Final EIR.*** Hexagon will respond in writing to comments received on the Draft EIR Transportation Chapter. As it is unknown at this time the level of effort required in responding to these comments, this task assumes up to 80 hours of Hexagon staff time.

Additional Services

Any work not specified in the above Scope of Work Tasks 1-31 – for example analyzing a different project description, reviewing a different site plan, analyzing additional intersections, or conducting progression analysis for other corridors – shall be considered additional services. Additional services will require additional budget and additional time and will be conducted upon receipt of authorization to proceed.

Time of Performance

Barring any unforeseen delays, an administrative Transportation Chapter and the technical appendix will be submitted approximately 30 weeks after: (1) authorization to proceed, (2) receipt of all required data (such as new count data, model's land use input assumptions, and project related information), and (3) field observations. It should be noted that the field observations included in this proposal cannot be conducted until school resumes in September. Upon receiving budget authorization, Hexagon will provide a detailed schedule outlining a list of milestones needed to maintain the 32-week schedule.

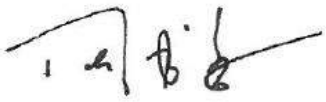
Cost of Services

The fee for the scope of services will be based on time and expenses up to a maximum budget of $367,000.

We appreciate your consideration of Hexagon Transportation Consultants for this assignment. If you have any questions, please do not hesitate to call.

Sincerely,
HEXAGON TRANSPORTATION CONSULTANTS, INC.

Gary K. Black
President



Ollie Zhou, T.E.
Senior Associate

Table 1
Budget Breakdown

Project:	Willow Village EIR						Multiplier:	1.00
COST ESTIMATE								
		Labor Hours						
Number	Item	Black	Van Den Hout	Zhou	Engineer	Admin/Graphics	Expenses	Labor Costs
	Rate	$ 280	$ 240	$ 210	$ 125	$ 105		
1	Site Reconnaissance			4				$ 840
2	Field Observations				40		$ 100	$ 5,000
3	Data Collection				8			$ 1,000
4	Evaluation of Existing Conditions			20	40			$ 9,200
5	Willow Road Simulation	8		100	100			$ 35,740
6	Model Validation		40	100				$ 30,600
7	Future Land Use Data			40				$ 8,400
8	Trip Generation	8	8	32				$ 10,880
9	Background (2025)		16	40				$ 12,240
10	Cumulative (2040)	8	32	80				$ 26,720
11	Intersection Analysis			60	60			$ 20,100
12	Intersection Variant Analysis			10	20			$ 4,600
13	Freeway Analysis				40			$ 5,000
14	Freeway Ramp Analysis				40		$ 200	$ 5,000
15	Roadway AADT Analysis				20			$ 2,500
16	Signal Warrant Analysis				20			$ 2,500
17	Alternative Metrics	16	24	60				$ 22,840
18	Project Alternatives	20		60				$ 18,200
19	Sensitivity Analysis			20	20			$ 6,700
20	Phasing Analysis			10	20			$ 4,600
21	Internal Intersection Analysis			20	40			$ 9,200
22	Site Plan Review			10	20		$ 100	$ 4,600
23	Parking and Shared Parking Peer Review	2		10	40			$ 7,660
24	Queuing				20		$ 200	$ 2,500
25	Bicycle, Pedestrian and Transit			20	20			$ 6,700
26	Peer Review of TDM Plan			20	40			$ 9,200
27	Impact and Recommendations	8		20	20			$ 8,940
28	C/CAG Checklist				10			$ 1,250
29	Meetings	84					$ 450	$ 23,520
30	Reports	16	16	80	100	20		$ 39,720
31	Final EIR	40		40				$ 19,600
Totals		**210**	**136**	**856**	**738**	**20**	**$ 1,050**	**$ 365,550**
Total Contract Cost:			$ 366,600.00					

Attachment B

KEYSER MARSTON ASSOCIATES
ADVISORS IN PUBLIC/PRIVATE REAL ESTATE DEVELOPMENT

August 1, 2019

Erin Efner and Kirsten Chapman
ICF International
201 Mission Street, Suite 1500
San Francisco, CA 94105

Re: Proposed Scope of Services to Prepare a Housing Needs Assessment for the Willow Village Master Plan

Dear Ms. Efner and Ms. Chapman:

Keyser Marston Associates, Inc. ("KMA") is pleased to present the enclosed proposed scope of services to prepare a Housing Needs Assessment ("HNA") for the City of Menlo Park addressing the proposed Willow Village Master Plan Project ("Project"). The Project is a mixed-use development encompassing up to 1,735 units of housing, 1.75 million square feet of office space, 250 hotel rooms, up to 200,000 square feet of retail, as well as parks and open space. The Project replaces the existing Menlo Science and Technology Park encompassing approximately 1 million square feet of existing office, R&D and warehouse space in 21 separate buildings.

KMA is exceptionally well qualified to prepare the HNA for the Project based on our broad expertise preparing housing impact studies and project-specific housing needs analyses. Our HNA experience includes three prior projects in Menlo Park: Menlo Gateway, the Facebook Campus, and the Facebook Campus Expansion Project. KMA is also currently engaged in preparation of HNAs for several additional development projects in Menlo Park.

The enclosed HNA scope of services includes preparation of an HNA addressing, to the extent possible, the following housing-related impacts of the proposed Project:

- Housing need by affordability level for on-site workers;
- Estimated geographic distribution of housing needs by jurisdiction; and
- Evaluation of the potential impacts on the regional housing market, including in connection with potential multiplier effects, and the degree to which the Project may contribute to rising housing costs and displacement of existing residents of lower income communities in the local area.

We understand that the HNA must be prepared consistent with the terms of the recent settlement agreement between the City of East Palo Alto and Menlo Park. The enclosed scope of service is designed to provide the analyses contemplated by the settlement agreement. However, we would be happy to discuss potential refinements to the scope of services and budget to ensure the HNA addresses the City's needs and satisfies the intent of the agreement with East Palo Alto.

The scope of services and proposed budget for the HNA is enclosed as Attachment A. The HNA will provide similar analyses to the other HNAs KMA is currently engaged to prepare but will need to address the added complexity associated with the larger scale, greater range of non-residential uses, inclusion of a significant housing component, and analyses related to removal of the existing Menlo Science and Technology Park.

Please let me know if you have any questions or comments regarding this proposed scope of services.

Sincerely,

KEYSER MARSTON ASSOCIATES, INC.

David Doezema

Attachment A: Scope of Services
Attachment B: KMA Rate Schedule

Attachment A
Scope of Services to Prepare a Housing Needs Assessment (HNA)
for the Willow Village Master Plan Project

The following scope of services is for preparation of a Housing Needs Assessment (HNA) addressing the Willow Village Master Plan Project ("Project"). The HNA will address the following major housing-related topics, to the extent possible:

1) Housing need by affordability level for on-site Project workers;

2) Estimated geographic distribution of housing needs by jurisdiction; and

3) Evaluation of potential impacts of the Project on the regional housing market and the degree to which the Project may contribute to rising housing costs and displacement of existing residents of lower income communities in the local area. The analysis of housing market effects will include, to the extent possible, consideration of the potential "multiplier effect" for indirect and induced employment by the Project.

These housing-related impacts are not required to be analyzed under CEQA but may be of interest to decision-makers and/or the public in evaluating the merits of the Project. These analyses are being provided consistent with the terms of a 2017 settlement agreement with the City of East Palo Alto. The pertinent paragraph from the 2017 settlement agreement states the following:

> *When the preparation of an EIR is required pursuant to this Agreement, concurrent with the preparation of the EIR, Menlo Park or East Palo Alto, whichever is the lead agency for the Development Project, will conduct a Housing Needs Assessment ("HNA"). The scope of the HNA will, to the extent possible, include an analysis of the multiplier effect for indirect and induced employment by that Development Project and its relationship to the regional housing market and displacement. Nothing in this section indicates an agreement that such an analysis is required by CEQA.*

Task 1 – Project Initiation and Data Collection

The purpose of this task is to identify the availability of data necessary to complete the HNA, identify key analysis inputs and assumptions, and refine the approach to the assignment. As part of this task, KMA will:

(1) Provide a list of data needs to complete the HNA and work with ICF International and the City's project team as necessary to gather the necessary data.

(2) Meet with City staff, its consultants, and the project sponsor team to: (a) discuss data and analysis alternatives (b) review technical methodology and approach (c) discuss and agree on schedule.

Task 2 – Housing Needs Assessment for On-Site Workers

KMA will quantify, by affordability level, the net new housing demand associated with on-site workers at the Project. The analysis will quantify total housing demand based on the estimated number of employees added by the Project (which are net new jobs in the region) and household size ratios developed from Census data. Employee compensation levels are estimated by linking generic occupational categories with local data on compensation levels. Employee compensation levels are then translated into housing need by affordability level using published income limits and accounting for the fact that households have more than one worker on average.

The primary data sources we will use for this component of the analysis are:

1. Data on occupations by industry from the Bureau of Labor Statistics. KMA will select the industry categories (or blend multiple categories) to represent each non-residential component of the Project.

2. Current employee compensation data specific to San Mateo County for the relevant occupational categories from the California Employment Development Department will be used in the analysis.

Each project component will need to be analyzed separately to address differences in compensation structure. In addition, existing housing needs associated with the Menlo Science and Technology Park will need to be analyzed to establish the net new housing demand considering removal of this existing use.

KMA has prepared similar analyses for other projects in Menlo Park including the existing Facebook Campus, the Facebook Campus Expansion Project, and the Menlo Gateway Project. We have also performed project-specific housing needs analyses for commercial and institutional development proposals in the cities of San Carlos, Palo Alto, Redwood City, and Napa County. Some of these analyses have been performed using employee occupation and compensation data provided by the applicant and some have been performed using generic data as is assumed in this proposal. KMA has also prepared affordable housing nexus fee studies in many cities and has developed a methodology to perform the nexus analyses using local, state and federal data sources. KMA has refined the nexus analysis methodology over the years and now has considerable experience adapting it to specific development projects.

The result of this task will be the estimated number of net new employee households, by affordability level, who will need housing within daily commute distance.

Task 3 – Net Housing Need Considering 1,735 Added Housing Units

In this task, KMA will take the 1,735 added housing units into consideration through completion of the following analyses:

a. *Housing Supply Addition by Income Level* – The 1,735 units to be added to the housing supply by the Project will be summarized based on the income level applicable to the proposed market rate and below market rate (BMR) affordable units. The income level for market rate units will utilize rent estimates provided by the applicant or will be estimated by KMA based on an analysis of rental market data. The income level for the BMR units will reflect City requirements.

b. *Off-site Jobs Supported by Residential – D*evelopment of new residential units adds to the demand for services such as retail, restaurants, healthcare and education. Some of these services will be met through on-site retail, while others may be met at off-site establishments. KMA will prepare an analysis to estimate housing demand by income for workers associated with off-site services to residential units. The analysis will utilize the most current data available and will follow a series of steps linking the estimated incomes of residents living in the new units, their demand for goods and services estimated to be met off-site, the number of jobs associated with providing these off-site services, and the housing need by income level of the workers who fill those jobs. The analysis will adjust for non-local spending such as at on-line retailers. Multiplier effects will be considered as part of the analysis.

c. *Net Housing Demand / Supply Effect* – The net housing supply / demand effects will be computed by combining the findings of the above analyses with that of Task 2.

Task 4 – Analysis of Commuting and Geographic Distribution of Housing Needs

The prior tasks are to determine the total housing needs irrespective of where workers will live. This task develops information to help understand existing commute relationships and trends, and approaches to identifying how the total housing needs will be accommodated locally. KMA will analyze the commute relationships of existing jobs in Menlo Park and where job holders live (or commute from as a place of residence) using data from the U.S. Census. KMA will then apply the data to estimate Menlo Park's share of increased housing needs and the estimated distribution of housing needs throughout the region. KMA will incorporate any tenant-specific commute data for Facebook and / or the existing tenants of the Menlo Science and Technology Park to be removed, to the extent it can be provided.

Task 5 – Relationship to Regional Housing Market and Potential to Contribute to Displacement

This task is designed to provide an evaluation, to the extent possible, of the potential for the Project to influence housing prices and rents and contribute to displacement pressures in the local area. Lower income communities in the Bay Area have become increasingly vulnerable to displacement of existing residents. Employment growth, constrained housing production, and rising income inequality are among the factors that have contributed to increased displacement pressures, especially within lower income communities in locations accessible to employment centers where many households are housing-cost burdened.

Given the complex array of factors that influence housing markets and neighborhood change, precise estimates or projections of impacts and outcomes are not feasible; rather, the analysis will seek to provide information and context that will be useful to understanding the likely magnitude or range of potential impacts. The estimated local housing demand absorbed by the 1,735 units of additional housing, including required BMR affordable units, will be considered as part of the evaluation.

KMA will complete the following tasks to inform an evaluation of potential impacts:

a) *Historic Residential Real Estate trends* – KMA will assemble data on historic home sales and rental trends for the County, the Belle Haven Neighborhood, the City of East Palo Alto, and up to seven other comparison communities within the Bay Area. Selection of comparison communities will be based on areas that are considered vulnerable to displacement or undergoing displacement as the most relevant context for trends in East Palo Alto and Belle Haven. KMA will utilize data readily available from commercial data providers such as CoStar and CoreLogic.

b) *Comparative Analysis of Residential Real Estate Trends* – Residential real estate market trends in East Palo Alto and Menlo Park's Belle Haven neighborhood since the existing Facebook campus was first occupied will be compared to trends in the selected Bay Area comparison communities to inform an understanding of the extent to which localized market trends in the two communities diverged from other Bay Area locations since Facebook moved into its existing campus in 2011. This information will help inform an understanding of whether Facebook has had a localized impact on the housing market that is distinguishable from broader regional trends.

c) *Review of employment trends* – KMA will assemble data on historic employment trends for the same time frame as the historic review of real estate trends. Employment trends data will be distinguished by compensation level so that growth in higher-income and lower-income jobs can be separately understood. We will look at employment trends

across different geographic scales to enable relationships to be tested at the different geographic scales.

d) *Analysis of historic relationships* – KMA will analyze the extent to which employment growth and residential real estate trends have been correlated with one another. Separate findings specific to the influence of high compensation jobs will be provided as a proxy for consideration of the impacts associated with potential multiplier effects. These relationships will be drawn upon to provide context for understanding the degree of influence the Project may have on local home prices and rents.

e) *Estimated increased housing demand in East Palo Alto and Belle Haven* – KMA will draw on the commute shed data from Task 4 to describe the estimated share of new Project workers likely to seek and find housing in East Palo Alto and Belle Haven. The ability to isolate commute trends specific to Belle Haven will depend on the availability of commute data from the Project Sponsor.

KMA will discuss the likely impacts or range of impacts on displacement that could be experienced as a result of the Project based upon the information assembled in a) through e), above. Findings will be qualitative in nature but will reference the quantitative information assembled in the analysis tasks as part of the narrative.

Task 6 – Evaluation of Project Variants

The report will include a discussion of two Project variants regarding the number of added housing units, a 2,000-unit variant and a 1,500-unit variant. KMA will quantify the net impact on housing demand and supply for the Project variants consistent with Tasks 3 and 4. For the Task 5 analysis of displacement impacts, a limited qualitative discussion of Project variants will be provided.

Task 7 – Report Preparation

The methodology, data sources, results and implications of the HNA will be documented in a written report. This scope assumes one draft version of the report for review and one final report.

Task 8 – Coordination with DEIR Population and Housing Section

This task includes a time and materials budget allowance for review and coordination between the Population and Housing Section of the DEIR to be prepared by ICF and the HNA.

Task 9 – Responses to DEIR Comments

KMA anticipates assisting the City and ICF International in preparing responses to comments on the Draft EIR. KMA's focus will be on comments that are directly related to the HNA. We have included a time and materials budget allowance for KMA to assist with preparation of responses to comments.

Budget

KMA proposes to complete this scope of services for the Willow Village Master Plan Project on a time and materials basis for an amount not to exceed $105,500 per the estimate below. A copy of our current rate schedule is attached.

Task	Budget Estimate
Task 1 - Project Initiation and Data Collection	$4,000
Task 2 – Total Housing Need by Income, on-site workers	$22,000
Task 3 – Off-site jobs supported by residential and net new housing needs	$15,000
Task 4 – Geographic Distribution of Housing Needs	$4,000
Task 5 – Relationship to Regional Housing Market and Displacement	$27,000
Task 6 – Evaluation of Project Variants	$3,000
Task 7 – Report (Draft and Final)	$7,000
Task 8 – Coordination with DEIR Population and Housing Section	$1,500
Task 9 – T&M Allowance for DEIR responses to comments	$12,000
Meetings in Menlo Park (one in addition to kickoff)	$1,000
Public hearings (assume two)*	$4,000
Reimbursable Expenses (market data)	$5,000
Total	**$105,500**

* Includes related coordination and preparation.

ATTACHMENT B

KEYSER MARSTON ASSOCIATES, INC.
PUBLIC SECTOR HOURLY RATES

	2019/2020
CHAIRMAN, PRESIDENT, MANAGING PRINCIPALS*	$280.00
SENIOR PRINCIPALS*	$270.00
PRINCIPALS*	$250.00
MANAGERS*	$225.00
SENIOR ASSOCIATES	$187.50
ASSOCIATES	$167.50
SENIOR ANALYSTS	$150.00
ANALYSTS	$130.00
TECHNICAL STAFF	$95.00
ADMINISTRATIVE STAFF	$80.00

Directly related job expenses not included in the above rates are: auto mileage, parking, air fares, hotels and motels, meals, car rentals, taxies, telephone calls, delivery, electronic data processing, graphics and printing. Directly related job expenses will be billed at 110% of cost.

Monthly billings for staff time and expenses incurred during the period will be payable within thirty (30) days of invoice date.

* *Rates for individuals in these categories will be increased by 50% for time spent in court testimony.*

bae urban economics

July 2, 2019

Kirsten Chapman
Project Manager
ICF
201 Mission Street, Suite 1500
San Francisco, CA 94105

Dear Ms. Chapman:

We appreciate the opportunity to submit this proposal to prepare a Fiscal Impact Analysis for the Willow Village Master Plan in the Bayfront Area of Menlo Park ("Project"). Our understanding is that the Base Project would consist of a 59-acre mixed-use neighborhood with 1,735 housing units, 125,000 to 200,000 square feet of retail that would include a grocery store and pharmacy (and possibly entertainment uses), a 200- to 250-room hotel and ancillary uses, a 1.75 million square foot office campus with ancillary uses, and public parks and open space. A 10,000 square foot community center is planned adjacent to the public park. The City of Menlo Park ("client") requires a Fiscal Impact Analysis study that will address impacts to the City's General Fund, as well as Special Districts, including the Menlo Park Fire Protection District. In addition to an analysis of the fiscal impacts of the Base Project described above, the City of Menlo Park is requesting an analysis of two potential "Variants" of the Project: Variant 1, which would include up to 2,000 housing units, and Variant 2, which would include no less than 1,500 units.

BAE is an award-winning real estate economics and development advisory firm with a distinguished record of achievement over its 30+-year history. Headquartered in Berkeley, CA, BAE also has branch offices in Los Angeles, Sacramento, New York City, and Washington DC, enabling our 18 staff to contribute to and learn from best practices in urban sustainable development around the U.S. Our practice spans national and state policy studies to local strategic plans and public-private development projects. BAE has extensive experience assessing the fiscal impacts and economic impacts of proposed new development, including our previous work for the City of Menlo Park, as well as assisting local governments to negotiate for community benefits from proposed new development.

The following pages detail our proposed work program, schedule, and budget. This proposal remains effective for 90 days from the date of submittal of this letter. Please feel free to

contact me at stephaniehagar@bae1.com or 510.547.9380 if you have any questions or would like to further discuss this proposal.

Sincerely,

Stephanie Hagar
Vice President

SCOPE OF SERVICES

This section outlines BAE's proposed work program, including deliverables.

Task 1: Meet with City Staff and Review Background Materials

Task 1A: Meet with City Staff and Tour Project Site. BAE will meet with City staff to review the scope of services, proposed schedule, and deliverables. BAE will also tour the site and area.

Task 1B: Review Key Financial, Planning, and Environmental Documents. This task will include a review of relevant documents and plans pertaining to the proposed project including the Willow Village Project Description and Plans, the City's General Plan and Zoning Ordinance, the project Environmental Impact Report (if applicable), and City staff reports. BAE will also review the City budget, the Comprehensive Annual Financial Report, City fee ordinances, and other financial documents from the City and affected special districts including fire and school districts.

Task 2: Analyze Fiscal Impacts

This analysis will consider revenue and cost implications of the Project, up to three Project Alternatives, and two Project Variants for the City, Menlo Park Fire Protection District, and affected special districts and school districts. BAE understands that the Project Variants analyzed under this task will be the Variants that includes up to 2,000 dwelling units and the Variant that includes no less than 1,500 dwelling units. BAE has included a contingency budget in this proposal, which would enable additional analysis of the fiscal impacts of Project Variants if determined necessary. BAE will utilize and update prior FIA models prepared for the City of Menlo Park to conduct this analysis.

BAE will estimate annual General Fund revenue sources, including sales tax, property tax, transient occupancy tax, business license revenue, franchise fees, and any other applicable taxes. BAE will also estimate one-time revenue sources including impact fees and property transfer tax. For key revenues, (e.g., transient occupancy taxes) BAE will estimate revenues within an expected low to high range as appropriate.

BAE will estimate annual General Fund expense items, including police, public works, recreation and library services, and general government services, as well as services provided by special districts. The cost analysis will, whenever feasible, study the marginal cost of providing additional service. As part of this process, BAE will contact local public service providers including the police department and Fire Protection District to assess existing service capacity and the potential impact of the proposed project. For police, BAE will work with the local department to examine the current beat structure and discuss how this may need to be altered to serve the new development. Any new patrol officers and/or equipment

would also be analyzed on a marginal basis. For fire, BAE will study existing capacity at the station that would serve the proposed project and assess any additional labor or equipment costs that the station would incur. Cost impacts for other city departments and school districts will also be analyzed.

Fiscal impacts will be presented in current dollars on a net annual and cumulative basis over a 20-year period presented in constant 2019 dollars. To determine an appropriate absorption rate for the various proposed land uses, BAE will review the project applicant's anticipated absorption schedule.

During the preparation of the FIA, all communication with the project sponsor will be with or through City staff.

Task 3: Prepare Fiscal and Economic Impact Report

Task 3A: Prepare Administrative Draft Fiscal and Economic Impact Analysis Report. BAE will prepare and submit an Administrative Draft Fiscal Impact Analysis report to City staff. The report will include a concise and highly-accessible executive summary, including a summary of the methodology and key findings from Tasks 1 and 2.

Task 3B: Prepare Public Review and Final Draft Report. Staff will provide written a single set of consolidated comments to BAE regarding the Administrative Draft. At the discretion of City Staff, BAE will also review any comments from the Project Applicant. BAE will address all comments with City staff and make modifications as needed. BAE will then submit a draft Public Review Draft for staff to review. Staff will note any minor corrections and BAE will submit a Public Review Draft.

Task 3C: Prepare Presentation, Attend Two Meetings. This task includes preparation of a PowerPoint presentation for use by staff, BAE, and posting to the City's website. BAE will discuss comments with City staff and make changes as necessary. BAE will then submit a Final report. BAE will attend up to two meetings to present its findings, anticipated to be one Planning Commission meeting and one City Council meeting.

Task 4: Project Coordination

BAE will coordinate this assignment and participate in team conference calls with ICF, as necessary.

DATA NEEDS

In order to complete this analysis BAE will require access to various City and special district staff to conduct brief interviews and confirm methodologies and assumptions. In particular, BAE would intend to speak with most department/district heads, or their designees, as well as the City finance director. BAE would work with the finance department to obtain electronic copies of relevant budget files if any of the files needed for this analysis are not publicly available on the City's website.

BAE will acquire market, demographic, and other data from data vendors and publicly-accessible data sources. A budget for all data that BAE will purchase to undertake the above scope of work is included below.

From the project sponsor, BAE will request market studies and marketing plans, including pricing assumptions. If the project sponsor provides these studies and plans, BAE will use this information to supplement data from data vendors and publicly-accessible data sources to inform assumptions related to assessed property values as well as other revenue and cost assumptions, as appropriate. If the project sponsor does not provide market studies or marketing plans, BAE will rely on more general information provided by data vendors and publicly-available sources.

BUDGET AND FEES

BAE will complete the work described above for a fixed-fee budget of $35,800, or $39,050 including the proposed contingency budget, as shown in the budget provided below. BAE believes that it is prudent to include a contingency budget for this project given that there is little information currently available related to the Project Variants, and that it may be determined that analysis of the fiscal impacts of additional Project Variants is necessary as these Variants are defined over time. In no event shall BAE perform work under the contingency budget without prior written approval from City staff.

The budget shown below will include all consultant costs, including personnel, overhead, and miscellaneous reimbursable expenses. Miscellaneous expenses such as data purchase and travel are passed through to the client with no markup. This budget includes two public meetings as part of Task 3. Please note that attendance at additional public meetings/hearings is calculated at the rate of $1,500 for preparation, travel and up to three hours of meeting time, with hourly rates for all meeting time over three hours, as well as additional meetings beyond those set forth in the scope. In no event shall the total project cost exceed the fixed-fee budget, unless the client requests work beyond the agreed-upon scope.

	Hours by Staff			
	Principal Shiver	Vice President Hagar	Associate	
Hourly Rate	*$300*	*$210*	*$140*	**Budget**
Task 1: Start-up Meeting & Review of Background Materials	4	8	6	$3,720
Task 2: Conduct Fiscal Impact Analysis	6	31	66	$17,550
Task 3: Prepare Draft & Final FIA Reports (incl. 2 mtgs)	6	30	25	$11,600
Task 4: Project Coordination	1	3	0	$930
Subtotal Labor	17	72	97	**$33,800**
Expenses (a)				$2,000
Total (Labor + Expenses) before contingency				**$35,800**
Contingency (b)				$3,250
Total with Contingency				**$39,050**
Optional Task: BAE Attendance at Additional Public Meetings/Hearings - Each				**$1,500**

Notes:
(a) Includes purchase of Smith Travel Research data for hotel market trends, other data expenses, and mileage for meetings.
(b) Contingency budget will cover any unanticipated additions to BAE's scope of work, which could include analysis of additional Project Variants. BAE will use the contingency budget only if authorized by City staff for specific additions to BAE's scope of work.

Costs for any additional work authorized by the client will be billed on an hourly time-and-materials basis, in accordance with BAE's standard hourly billing rates:

Principal	$300/hour
Senior Advisor	$300/hour
Director	$235/hour
Vice President	$210/hour
Senior Associate	$185/hour
Associate	$140/hour
Sr. Analyst	$110/hour
Analyst	$95/hour

These rates are subject to revision on or after January 1, 2020.

PROJECT SCHEDULE

Assuming that BAE receives all requested data within the first two weeks following project start up, BAE will complete the Administrative Draft within eight weeks following project start up. BAE will prepare a Public Review Draft within two weeks of receiving a single set of combined written comments on the Administrative Draft. BAE will prepare a Final report within two weeks of receiving a single set of combined written comments on the Public Review Draft.

	Project Total
Budget	$1,113,858

Jump to:

Project Role	Last Name	First Name	Rate	1 Project Initiation Hours	1 Project Initiation Dollars	2 EIR Project Description Hours	2 EIR Project Description Dollars	3 EIR Scope Definition Hours	3 EIR Scope Definition Dollars	4 Project Management and Meetings Hours	4 Project Management and Meetings Dollars	5 Administrative Draft EIR Hours	5 Administrative Draft EIR Dollars	6 Project Variants Hours	6 Project Variants Dollars	7 Project Alternatives and Other CEQA Hours	7 Project Alternatives and Other CEQA Dollars
Labor																	
Senior Advisor	Walter	Richard		2	$585.16	0	$0.00	0	$0.00	6	$1,781.81	8	$2,340.64	1	$301.36	0	$0.00
Project Director	Efner	Erin		8	$2,120.48	4	$1,060.24	10	$2,650.60	86	$23,097.33	72	$19,084.32	12	$3,276.14	8	$2,184.09
Project Manager	Chapman	Kirsten		16	$2,649.60	16	$2,649.60	24	$3,974.40	148	$24,826.75	164	$27,158.40	24	$4,093.63	16	$2,729.09
Deputy Project Manager	Mena	Leo		16	$2,084.32	24	$3,126.48	12	$1,563.24	146	$19,300.80	156	$20,322.12	34	$4,562.06	32	$4,293.70
Analyst	Andersen	Jennifer		0	$0.00	0	$0.00	0	$0.00	0	$0.00	100	$13,933.00	12	$1,722.12	4	$574.04
Analyst	Winslow	Anne		0	$0.00	0	$0.00	0	$0.00	0	$0.00	24	$3,720.96	6	$958.15	4	$638.76
Analyst	Vurlumis	Caroline		0	$0.00	0	$0.00	0	$0.00	0	$0.00	84	$9,228.24	14	$1,584.18	12	$1,357.87
Hydro	Sukola	Katrina		0	$0.00	0	$0.00	0	$0.00	0	$0.00	45	$4,845.60	2	$221.82	4	$443.64
Geo/Haz	Roberts	Diana		0	$0.00	0	$0.00	0	$0.00	0	$0.00	100	$13,360.00	6	$825.65	6	$825.65
AQ/GHG	Hartley	William		0	$0.00	0	$0.00	0	$0.00	0	$0.00	80	$10,515.20	4	$541.53	4	$541.53
AQ/GHG/ Energy	Yoon	Laura		0	$0.00	0	$0.00	0	$0.00	0	$0.00	28	$5,184.20	6	$1,144.23	4	$762.82
AQ/GHG/ Energy	Matsui	Cory		0	$0.00	0	$0.00	0	$0.00	0	$0.00	234	$28,192.32	10	$1,240.94	8	$992.76
Historic	Boyce	Gretchen		0	$0.00	0	$0.00	0	$0.00	0	$0.00	16	$3,452.48	1	$222.25	2	$444.51
Archeo	Elder	James		0	$0.00	0	$0.00	0	$0.00	0	$0.00	50	$8,381.00	2	$345.30	2	$345.30
Historic	Rusch	Jonathon		0	$0.00	0	$0.00	0	$0.00	0	$0.00	140	$17,889.20	1	$131.61	2	$263.23
Noise	Foley	Elizabeth		0	$0.00	0	$0.00	0	$0.00	0	$0.00	110	$13,249.50	12	$1,488.76	8	$992.51
Noise	Buehler	David		0	$0.00	0	$0.00	0	$0.00	0	$0.00	8	$2,177.28	2	$560.65	1	$280.32
Bio	Ricketts	Matthew		0	$0.00	0	$0.00	0	$0.00	0	$0.00	80	$12,093.60	4	$622.82	2	$311.41
Graphics	Messick	Timothy		0	$0.00	8	$1,226.48	1	$153.31	0	$0.00	16	$2,452.96	4	$631.64	1	$157.91
Editor	Mathias	John		0	$0.00	8	$938.24	1	$117.28	0	$0.00	72	$8,444.16	16	$1,932.77	8	$966.39
Total - Labor				**42**	**$7,439.56**	**60**	**$9,001.04**	**48**	**$8,458.83**	**386**	**$69,006.70**	**1,587**	**$226,025.18**	**173**	**$26,407.61**	**128**	**$19,105.52**

Other Direct Costs (ODCs)																	
Category			**Rate**		**Dollars**		**Dollars**		**Dollars**		**Dollars**		**Dollars**		**Dollars**		**Dollars**
Subtotal - ODCs					$1,200.00		$0.00		$0.00		$1,000.00		$500.00		$0.00		$0.00
G & A		Markup	10.00%		$120.00		$0.00		$0.00		$100.00		$50.00		$0.00		$0.00
Total - ODCs					**$1,320.00**		**$0.00**		**$0.00**		**$1,100.00**		**$550.00**		**$0.00**		**$0.00**

Subcontractors																	
Firm	**Name**	**Rate**		**Hours**	**Dollars**	**Hours**	**Dollars**	**Hours**	**Dollars**	**Hours**	**Dollars**	**Hours**	**Dollars**	**Hours**	**Dollars**	**Hours**	**Dollars**
Hexagon	,			0	$0.00	0	$0.00	0	$0.00	0	$0.00	0	$367,000.00	0	$0.00	0	$0.00
BAE	,			0	$0.00	0	$0.00	0	$0.00	0	$0.00	0	$39,050.00	0	$0.00	0	$0.00
KMA	,			0	$0.00	0	$0.00	0	$0.00	0	$0.00	0	$105,500.00	0	$0.00	0	$0.00
				0	**$0.00**	**0**	**$0.00**	**0**	**$0.00**	**0**	**$0.00**	**0**	**$511,550.00**	**0**	**$0.00**	**0**	**$0.00**
Subcontractors - Markup			**10.00%**		**$0.00**		**$0.00**		**$0.00**		**$0.00**		**$51,155.00**		**$0.00**		**$0.00**
Total Proposed Price				**42**	**$8,759.56**	**60**	**$9,001.04**	**48**	**$8,458.83**	**386**	**$70,106.70**	**1,587**	**$789,280.18**	**173**	**$26,407.61**	**128**	**$19,105.52**

	Project Total
Budget	$1,113,858

Jump to:

Labor				8 Screencheck Draft EIR		9 Public Draft EIR		10 Public Review and Hearing		11 Draft Responses to Comments and Admin Final		12 Screencheck and Final EIR		13 Certification, MMRP, SOC, Admin Record		TOTAL	
Project Role	Last Name	First Name	Rate	Hours	Dollars	Hours	Dollars	Hours	Dollars	Hours	Dollars	Hours	Dollars	Hours	Dollars	Hours	Dollars
Senior Advisor	Walter	Richard		2	$602.71	0	$0.00	0	$0.00	4	$1,205.43	0	$0.00	0	$0.00	23	$6,817.11
Project Director	Efner	Erin		24	$6,552.28	10	$2,730.12	8	$2,184.09	32	$8,736.38	16	$4,368.19	16	$4,368.19	306	$82,412.46
Project Manager	Chapman	Kirsten		62	$10,575.22	24	$4,093.63	16	$2,729.09	60	$10,234.08	28	$4,775.90	32	$5,458.18	630	$105,947.57
Deputy Project Manager	Mena	Leo		82	$11,002.60	40	$5,367.12	12	$1,610.14	100	$13,417.81	44	$5,903.84	54	$7,245.62	752	$99,799.85
Analyst	Andersen	Jennifer		20	$2,870.20	4	$574.04	0	$0.00	24	$3,444.24	10	$1,435.10	0	$0.00	174	$24,552.73
Analyst	Winslow	Anne		4	$638.76	2	$319.38	0	$0.00	6	$958.15	2	$319.38	0	$0.00	48	$7,553.55
Analyst	Vurlumis	Caroline		40	$4,526.23	6	$678.93	0	$0.00	24	$2,715.74	6	$678.93	0	$0.00	186	$20,770.13
Hydro	Sukola	Katrina		6	$665.46	2	$221.82	0	$0.00	8	$887.28	2	$221.82	0	$0.00	69	$7,507.45
Geo/Haz	Roberts	Diana		10	$1,376.08	4	$550.43	0	$0.00	8	$1,100.86	2	$275.22	0	$0.00	136	$18,313.89
AQ/GHG	Hartley	William		2	$270.77	1	$135.38	0	$0.00	4	$541.53	2	$270.77	0	$0.00	97	$12,816.71
AQ/GHG/ Energy	Yoon	Laura		2	$381.41	1	$190.70	0	$0.00	8	$1,525.64	1	$190.70	0	$0.00	50	$9,379.70
AQ/GHG/ Energy	Matsui	Cory		4	$496.38	10	$1,240.94	0	$0.00	40	$4,963.78	8	$992.76	0	$0.00	314	$38,119.87
Historic	Boyce	Gretchen		1	$222.25	0	$0.00	0	$0.00	1	$222.25	0	$0.00	0	$0.00	21	$4,563.75
Archeo	Elder	James		6	$1,035.89	2	$345.30	0	$0.00	8	$1,381.19	2	$345.30	0	$0.00	72	$12,179.27
Historic	Rusch	Jonathon		4	$526.45	1	$131.61	0	$0.00	2	$263.23	0	$0.00	0	$0.00	150	$19,205.33
Noise	Foley	Elizabeth		30	$3,721.91	4	$496.25	0	$0.00	16	$1,985.02	4	$496.25	0	$0.00	184	$22,430.20
Noise	Buehler	David		1	$280.32	0	$0.00	0	$0.00	4	$1,121.30	0	$0.00	0	$0.00	16	$4,419.88
Bio	Ricketts	Matthew		6	$934.23	2	$311.41	0	$0.00	8	$1,245.64	2	$311.41	0	$0.00	104	$15,830.52
Graphics	Messick	Timothy		2	$315.82	0	$0.00	0	$0.00	8	$1,263.27	0	$0.00	0	$0.00	40	$6,201.39
Editor	Mathias	John		24	$2,899.16	20	$2,415.97	0	$0.00	40	$4,831.94	16	$1,932.77	4	$483.19	209	$24,961.88
Total - Labor				**332**	**$49,894.15**	**133**	**$19,803.06**	**36**	**$6,523.32**	**405**	**$62,044.75**	**145**	**$22,518.34**	**106**	**$17,555.18**	**3,581**	**$543,783.23**

Other Direct Costs (ODCs)																	
Category			Rate		Dollars		Dollars		Dollars		Dollars		Dollars		Dollars		Dollars
Subtotal - ODCs					$500.00		$2,000.00		$0.00		$500.00		$1,000.00		$0.00		$6,700.00
G & A		Markup	10.00%		$50.00		$200.00		$0.00		$50.00		$100.00		$0.00		$670.00
Total - ODCs					**$550.00**		**$2,200.00**		**$0.00**		**$550.00**		**$1,100.00**		**$0.00**		**$7,370.00**

Subcontractors																	
Firm	Name	Rate		Hours	Dollars	Hours	Dollars	Hours	Dollars	Hours	Dollars	Hours	Dollars	Hours	Dollars	Hours	Dollars
Hexagon	,			0	$0.00	0	$0.00	0	$0.00	0	$0.00	0	$0.00	0	$0.00	0	$367,000.00
BAE	,			0	$0.00	0	$0.00	0	$0.00	0	$0.00	0	$0.00	0	$0.00	0	$39,050.00
KMA	,			0	$0.00	0	$0.00	0	$0.00	0	$0.00	0	$0.00	0	$0.00	0	$105,500.00
				0	**$0.00**	**0**	**$0.00**	**0**	**$0.00**	**0**	**$0.00**	**0**	**$0.00**	**0**	**$0.00**	**0**	**$511,550.00**
Subcontractors - Markup			**10.00%**		**$0.00**		**$0.00**		**$0.00**		**$0.00**		**$0.00**		**$0.00**		**$51,155.00**
Total Proposed Price				**332**	**$50,444.15**	**133**	**$22,003.06**	**36**	**$6,523.32**	**405**	**$62,594.75**	**145**	**$23,618.34**	**106**	**$17,555.18**	**3,581**	**$1,113,858.23**

WILLOW VILLAGE

Menlo Park, CA

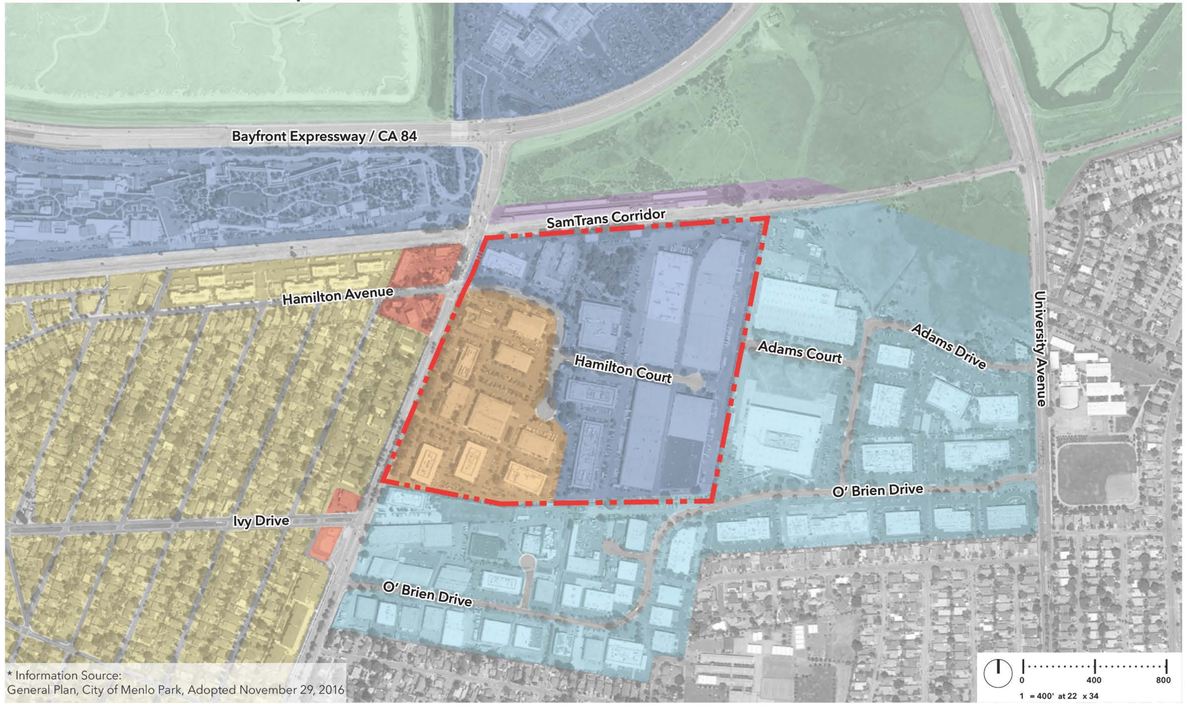
MASTER PLAN
CONDITIONAL DEVELOPMENT PERMIT

Peninsula Innovation Partners
December 23, 2021

TABLE OF CONTENTS

Location Map

General Plan Land Use Map



* Information Source:
General Plan, City of Menlo Park, Adopted November 29, 2016

Assessor's Parcel Numbers

* Information Source:
Willow Survey, Freyer & Laureta, Inc., April 18, 2018

General Plan

Office. This designation provides for office and R&D uses, business-oriented community education and training facilities, supportive sales and personal services, corporate housing, and hotel uses. The designation also accommodates existing and new light-industrial uses that are not in conflict with existing or planned commercial or residential uses in the vicinity. Hotels are allowed as options in several locations. The maximum base FAR shall be 45 percent and the maximum bonus FAR with community amenities shall be 100 percent. Maximum FAR for corporate housing shall be 60 percent, for retail and service uses shall be 25 percent, and for hotels shall be 175 percent

Mixed Use Residential. This designation provides for higher density housing to meet the needs of all income levels. It also allows mixed use developments with integrated or stand-alone supportive sales and service uses, and uses that are consistent with the Office Designation. Sales uses can range from small-scale businesses that serve nearby employment to a large-format grocery to serve adjacent neighborhoods. This designation is intended to promote live/work/play environments oriented toward pedestrians, transit, and bicycle use, especially for commuting to nearby jobs. The maximum base residential density shall not exceed 30 units per acre, and the maximum bonus FAR is 100 units per acre. Maximum base FAR for residential uses shall be 90 percent, and a maximum of 225 percent for bonus FAR. Non-residential uses shall have a maximum base FAR of 15 percent and bonus FAR of 25 percent.

General Plan Land Use Designations

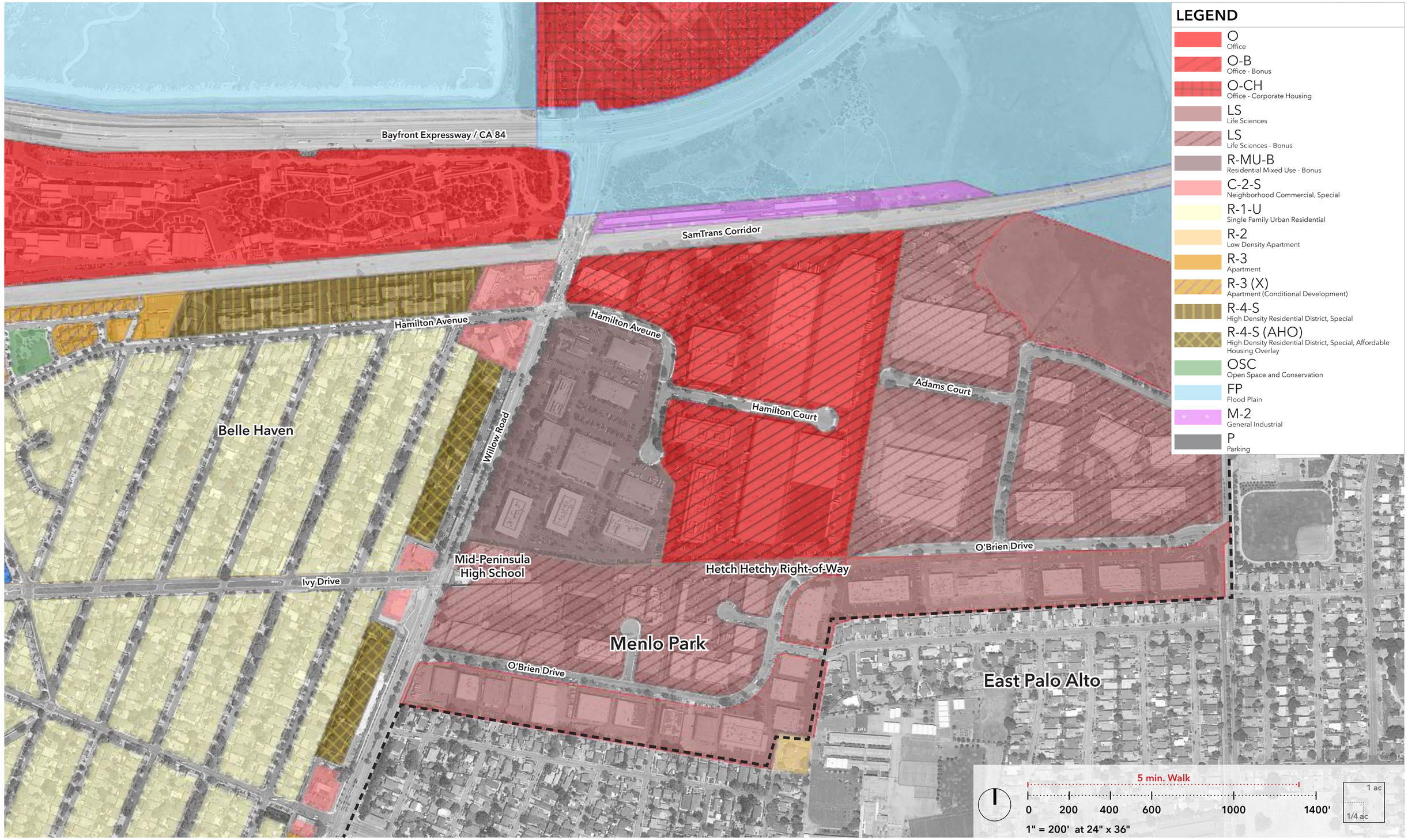
- Residential
- Baylands
- Life Sciences
- Office
- Mixed Use Residential
- Light Industrial
- Commercial Business Park

MASTER PLAN
Peninsula Innovation Partners
Conditional Development Permit

WILLOW VILLAGE

Menlo Park, CA

G1.02
Existing Condition Aerial Map
December 23, 2021

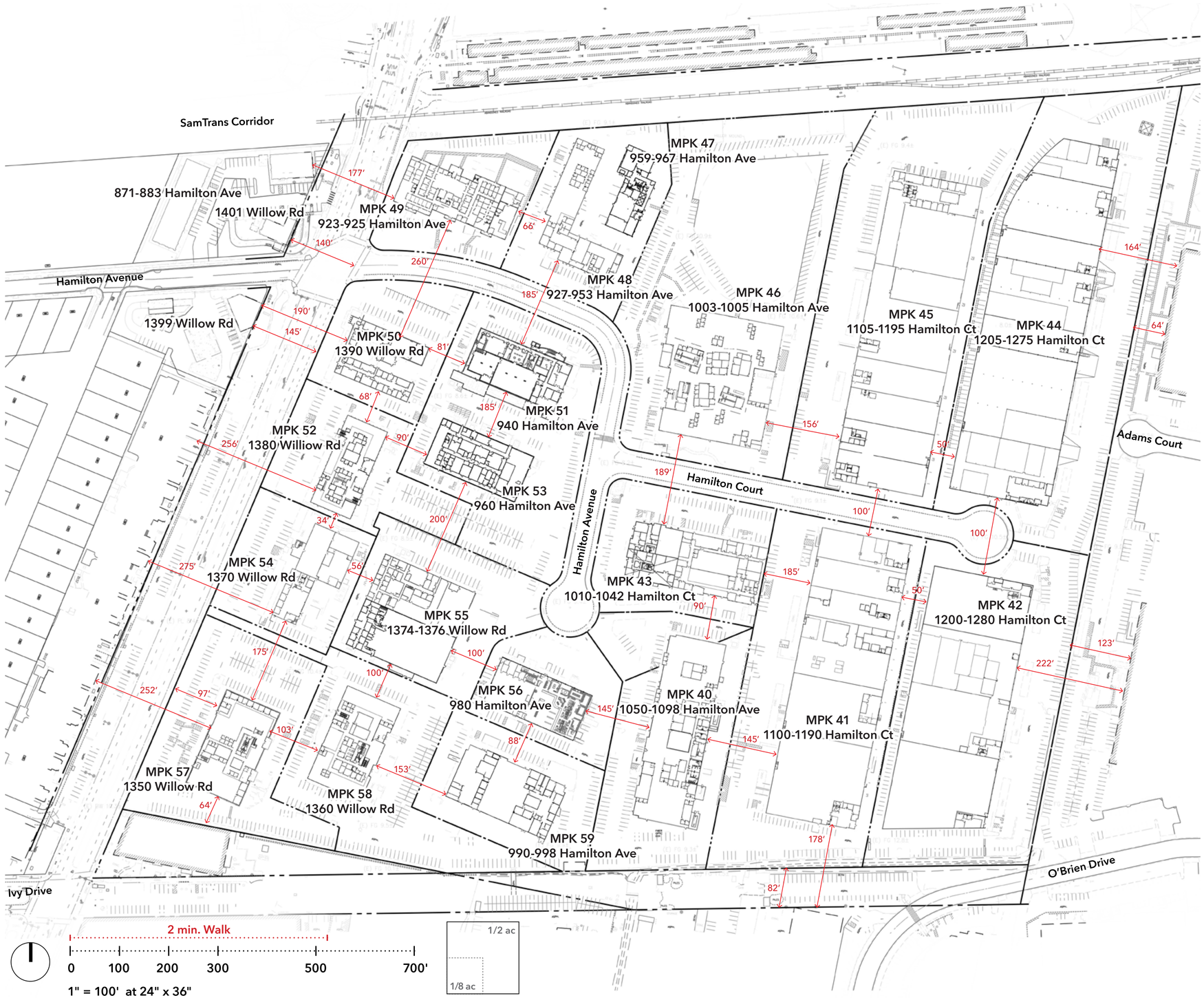


MASTER PLAN
Peninsula Innovation Partners
Conditional Development Permit

WILLOW VILLAGE

Menlo Park, CA

G1.03
Zoning Map
December 23, 2021



EXISTING LAND USE AREA SUMMARY

Land Use	Bldg#	Area (GSF)	Subtotal (GSF)
Office	MPK 40	46,640	251,530
	MPK 46	56,340	
	MPK 50	15,200	
	MPK 52	34,890	
	MPK 57	50,500	
	MPK 58	47,960	
Office & R&D	MPK 43	20,840	93,500
	MPK 48	20,160	
	MPK 54	26,740	
	MPK 59	25,760	
Office & Lab & Manufacture	MPK 51	23,570	23,570
R&D	MPK 47	10,400	30,370
	MPK 53	19,970	
Warehouse	MPK 41	109,620	500,780
	MPK 42	107,350	
	MPK 44	145,080	
	MPK 45	118,740	
	MPK 56	19,990	
Health Center	MPK 49	24,060	24,060
Former Fire Department	MPK 55	80,100	80,100
		Total	1,003,910

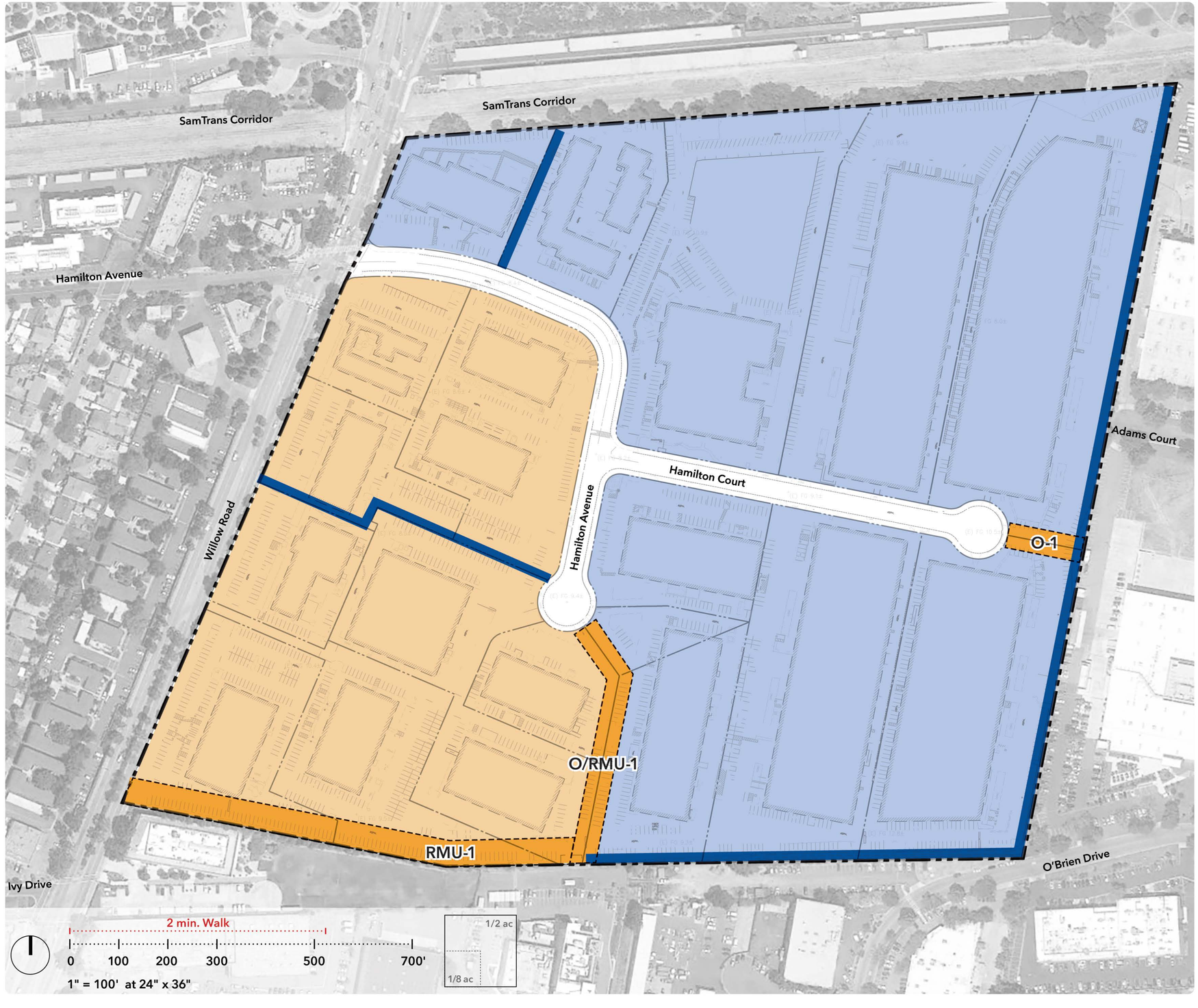
Note: Refer to Appendix 8 for building-by-building details.

MASTER PLAN
Peninsula Innovation Partners
Conditional Development Permit

WILLOW VILLAGE

Menlo Park, CA

G1.04
Existing Land Use Map
December 23, 2021



LEGEND

	Site Boundary
	General Plan Office
	General Plan Residential Mixed Use
	General Plan Mixed Use Collector
	General Plan Paseo

GENERAL PLAN AREA SUMMARY

	Area (sf)	Area (acre)
Aggregate Site Area (ASA)	2,585,538.50	59.36
Existing ROW Area	128,737.50	2.96
Existing ASA Minus Existing ROW Area	2,456,801.00	56.40
General Plan Office Area	1,624,248.00	37.29
General Plan Residential Mixed Use Area	832,553.00	19.11

ZONING ROW AREA SUMMARY

To-Be Deducted from Zoning	#	Area (sf)	Sub-total
O	O-1*	9,480.00	O - 24,975.00 sf; R-MU - 72,628.20 sf
R-MU	RMU-1*	57,133.20	
50% O; 50% R-MU	O/RMU-1*	30,990.00	

*Proposed Mixed-Use Collector ROW width = 60 feet
**Paseos are not included in the General Plan ROW area calculations

ZONING DISTRICT FAR AREA SUMMARY

	Area (sf)	Area (acre)
Aggregate Site Area (ASA)	2,585,538.50	59.36
Required O FAR Area General Plan O Area – ROW Area to-be deducted from O Zoning	1,599,273.00	36.71
Required R-MU FAR Area General Plan R-MU Area – ROW Area to-be deducted from R-MU Zoning	759,924.80	17.45
Total Zoning ROW Area	226,340.70	5.20
ASA minus Existing ROW & Zoning ROW	2,359,197.80	54.16

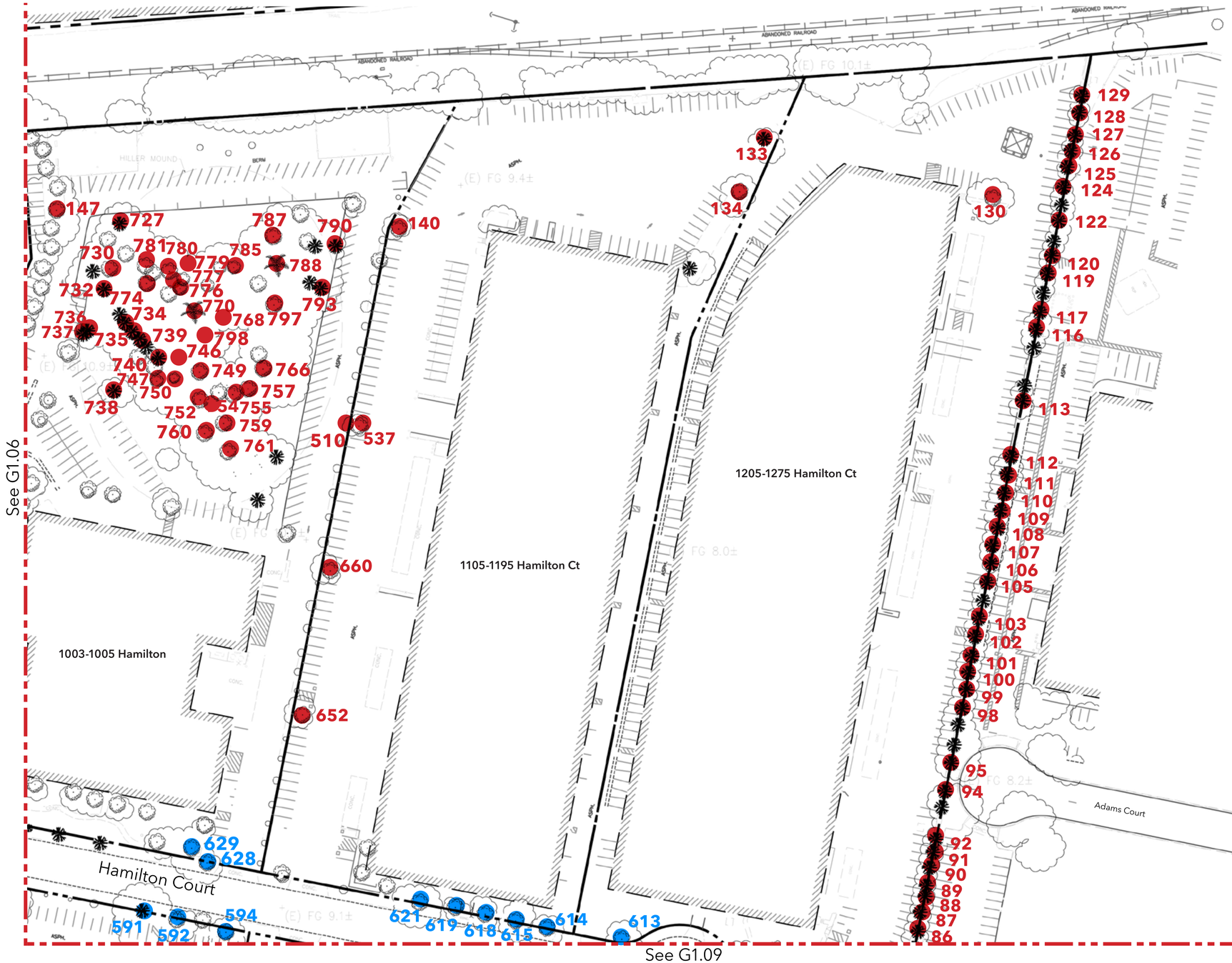
Heritage Tree Removal Summary

	Total Trees To-Be Removed	760
	Heritage Trees (Street Tree) To-Be Removed	87
	Heritage Trees To-Be Removed	179
	Non-heritage Trees To-Be Removed	494*

	Total Trees To Remain	24
	Heritage Trees To Remain	8
	Non-heritage Trees To Remain	16

* Includes 54 non-heritage street trees to be removed.

Note: All tree replacements will meet minimum tree replacement value determined by the arborist, SBCA Tree Consulting, per arborist report dated December 23, 2021.



Heritage Tree Removal Summary		
	Total Trees To-Be Removed	760
	Heritage Trees (Street Tree) To-Be Removed	87
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	Non-heritage Trees To Remain	16

* Includes 54 non-heritage street trees to be removed.

Note: All tree replacements will meet minimum tree replacement value determined by the arborist, SBCA Tree Consulting, per arborist report dated December 23, 2021.

1 min. Walk

0 50 100 150 250 400'

1" = 50' at 22" x 34"

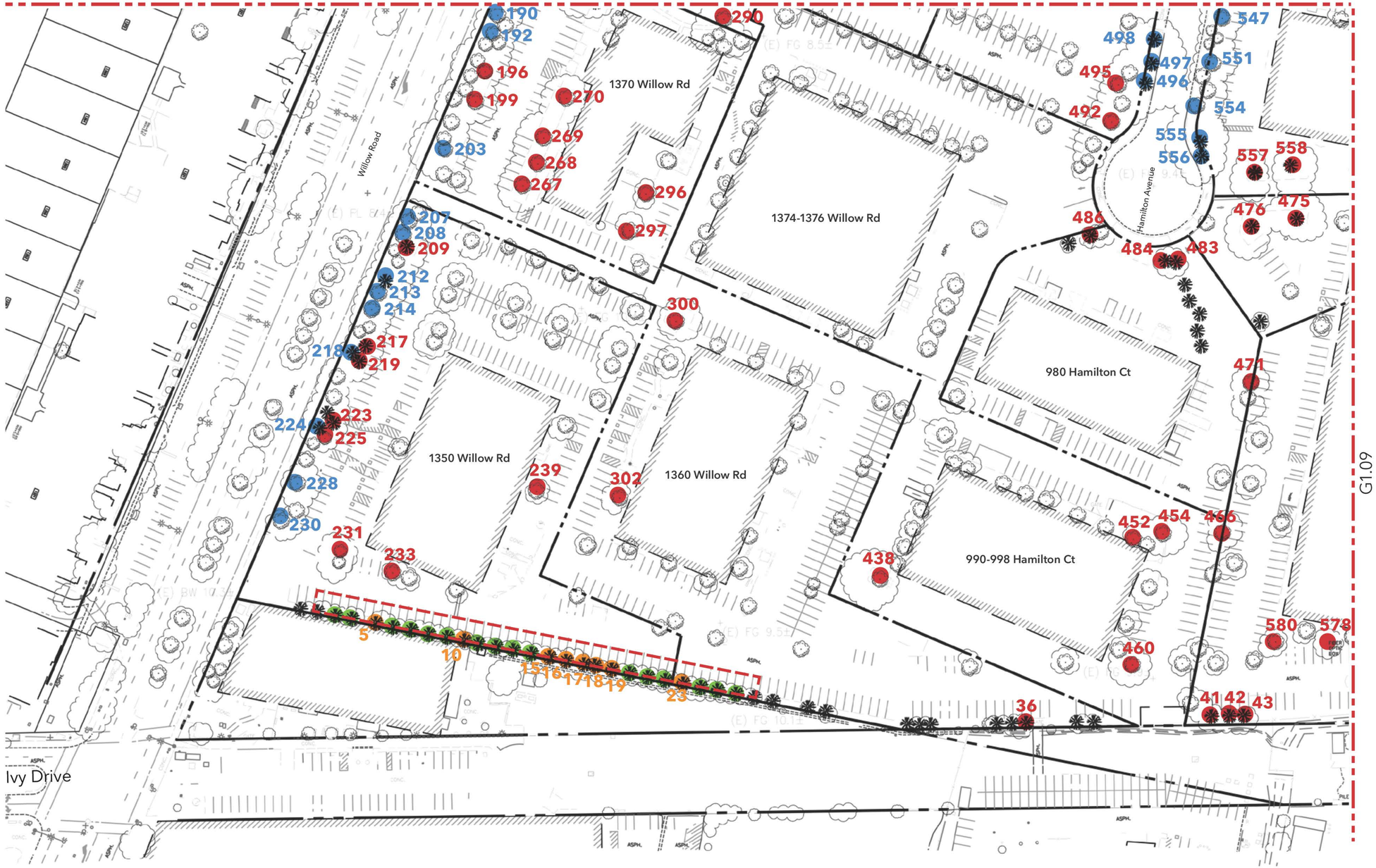
MASTER PLAN
Peninsula Innovation Partners
Conditional Development Permit

WILLOW VILLAGE

Menlo Park, CA

G1.07
Heritage Tree Removal Plan
December 23, 2021

See G1.06



G1.09

Heritage Tree Removal Summary

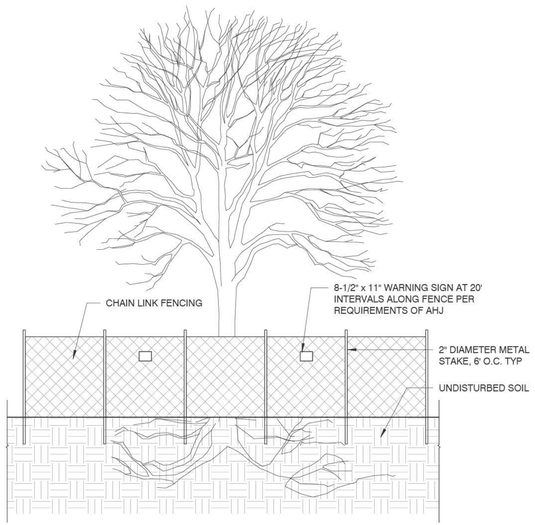
	Total Trees To-Be Removed	760
	Heritage Trees (Street Tree) To-Be Removed	87
	Heritage Trees To-Be Removed	179
	Non-heritage Trees To-Be Removed	494*
	Total Trees To Remain	24
	Heritage Trees To Remain	8
	Non-heritage Trees To Remain	16

* Includes 54 non-heritage street trees to be removed.

Note: All tree replacements will meet minimum tree replacement value determined by the arborist, SBCA Tree Consulting, per arborist report dated December 23, 2021.

	23' Tree Protection Zone** for Trees to be Preserved

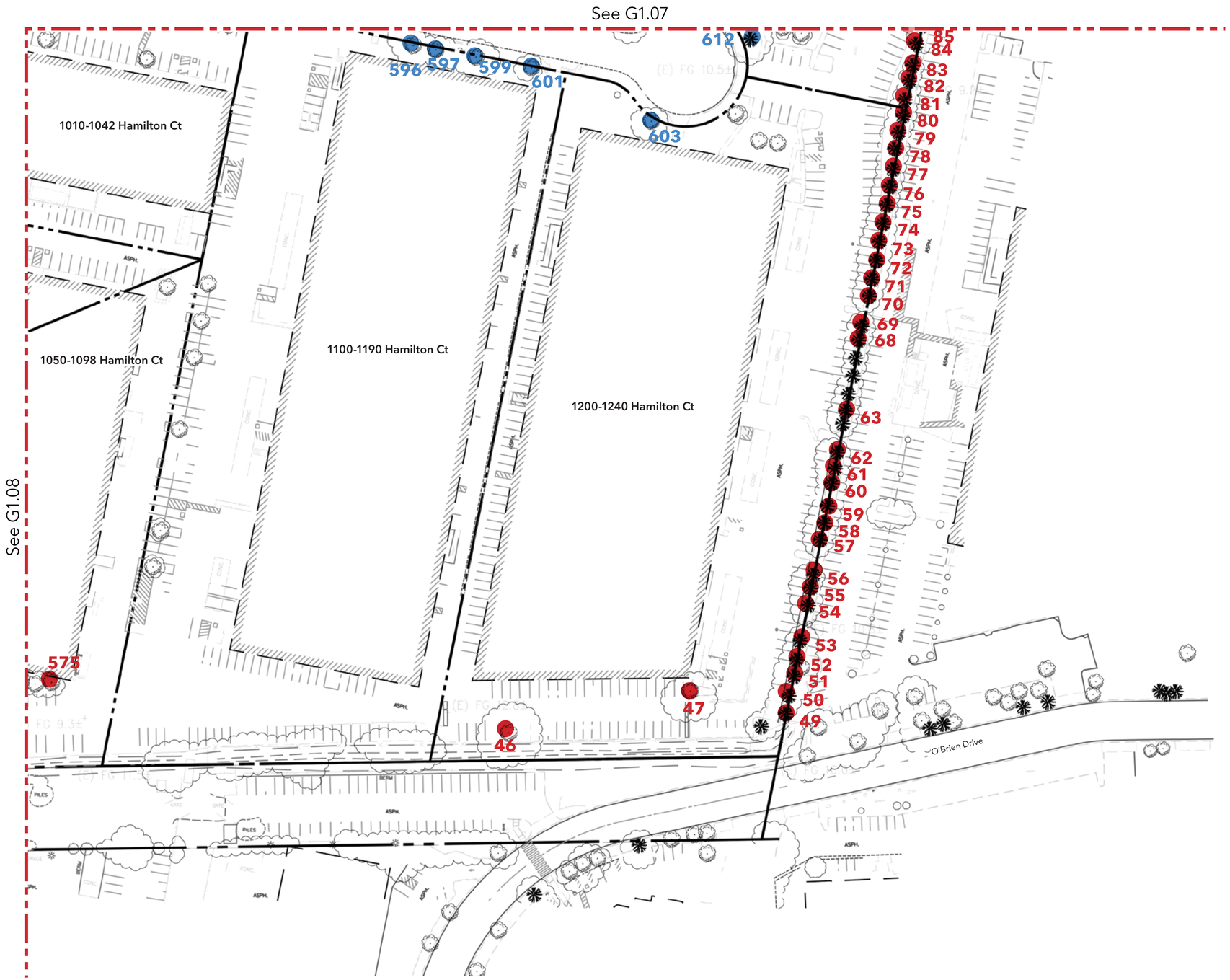
** Per Menlo Park Municipal Code section 13.24.030 Maintenance and Preservation of Heritage Trees.



TEMP. TREE PROTECTION DETAIL
SCALE: 3/16" = 1' - 0"

NOTES

1. TREE IDENTIFICATION NUMBERS REFERENCE ARBORIST REPORT BY ERIC FOLMER DATED 2/1/2020, AND ARBORIST REPORT BY SBCA DATED 06/15/2021.
2. PROTECTIVE FENCING INSTALLED PRIOR TO ARRIVAL OF MATERIALS, VEHICLES, OR EQUIPMENT.
3. MOVING TREE PROTECTION FENCE PROHIBITED WITHOUT AUTHORIZATION FROM PROJECT ARBORIST AND CITY STAFF.
4. TREE PROTECTION ZONE COVERS PRIMARY ROOT PLATES (PRP) AT A MIN.
5. FOR DEMOLITION WITHIN AREAS OF TREE PROTECTION SEE PROJECT ARBORIST SPECIFICATIONS.



Heritage Tree Removal Summary

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	Heritage Trees (Street Tree) To-Be Removed	87
	Heritage Trees To-Be Removed	179
	Non-heritage Trees To-Be Removed	494*

	Total Trees To Remain	24
	Heritage Trees To Remain	8
	Non-heritage Trees To Remain	16

* Includes 54 non-heritage street trees to be removed.

Note: All tree replacements will meet minimum tree replacement value determined by the arborist, SBCA Tree Consulting, per arborist report dated December 23, 2021.

1 min. Walk

0 50 100 150 250 400'

1" = 50' at 22" x 34"

LEGEND	
1	Town Square
2	Grocery Store on Ground Level
3	Publicly Accessible Park
4	Publicly Accessible Dog Park
5	Elevated Park Access (Elevator and Stairs)
6	Elevated Park
7	Hotel
8	Mixed-Use Block
9	Residential Block
10a	Office Campus
10b	Meeting & Collaboration Space
11	Parking Garage with Transit Hub on Ground Level
12	Proposed Multi-use Pathway
13	Willow Road Tunnel
14	Realigned Hamilton Avenue
15	Hamilton Avenue Parcel North
16	Hamilton Avenue Parcel South

MASTER PLAN
Peninsula Innovation Partners
Conditional Development Permit

WILLOW VILLAGE

Menlo Park, CA

G2.01
Conceptual Master Plan
December 23, 2021

MASTER PLAN
Peninsula Innovation Partners
Conditional Development Permit

WILLOW VILLAGE

Menlo Park, CA

G2.02
Illustrative Main Street Entry
December 23, 2021

MASTER PLAN
Peninsula Innovation Partners
Conditional Development Permit

WILLOW VILLAGE

Menlo Park, CA

G2.03
Illustrative Main Street
December 23, 2021

MASTER PLAN
Peninsula Innovation Partners
Conditional Development Permit

WILLOW VILLAGE

Menlo Park, CA

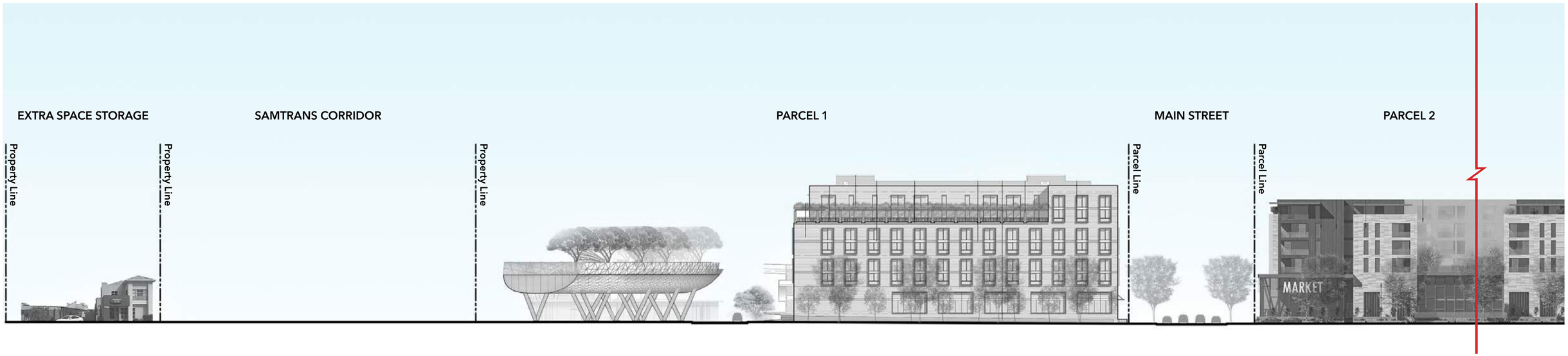
G2.04
Illustrative Campus District
December 23, 2021

MASTER PLAN
Peninsula Innovation Partners
Conditional Development Permit

WILLOW VILLAGE

Menlo Park, CA

G2.05
Illustrative Publicly Accessible Park
December 23, 2021

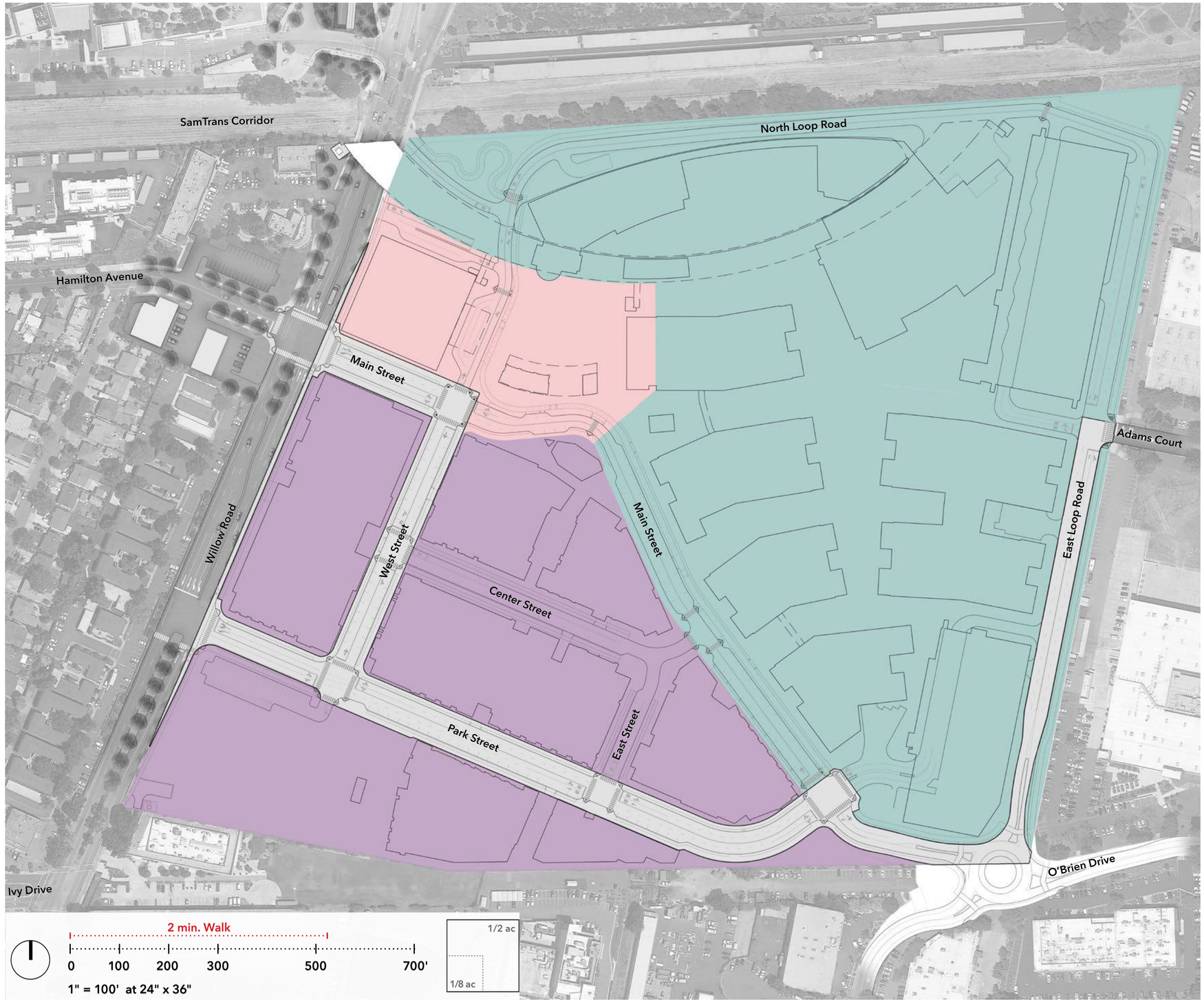


MASTER PLAN
Peninsula Innovation Partners
Conditional Development Permit

WILLOW VILLAGE

Menlo Park, CA

G2.06
Conceptual Willow Road Elevation
December 23, 2021



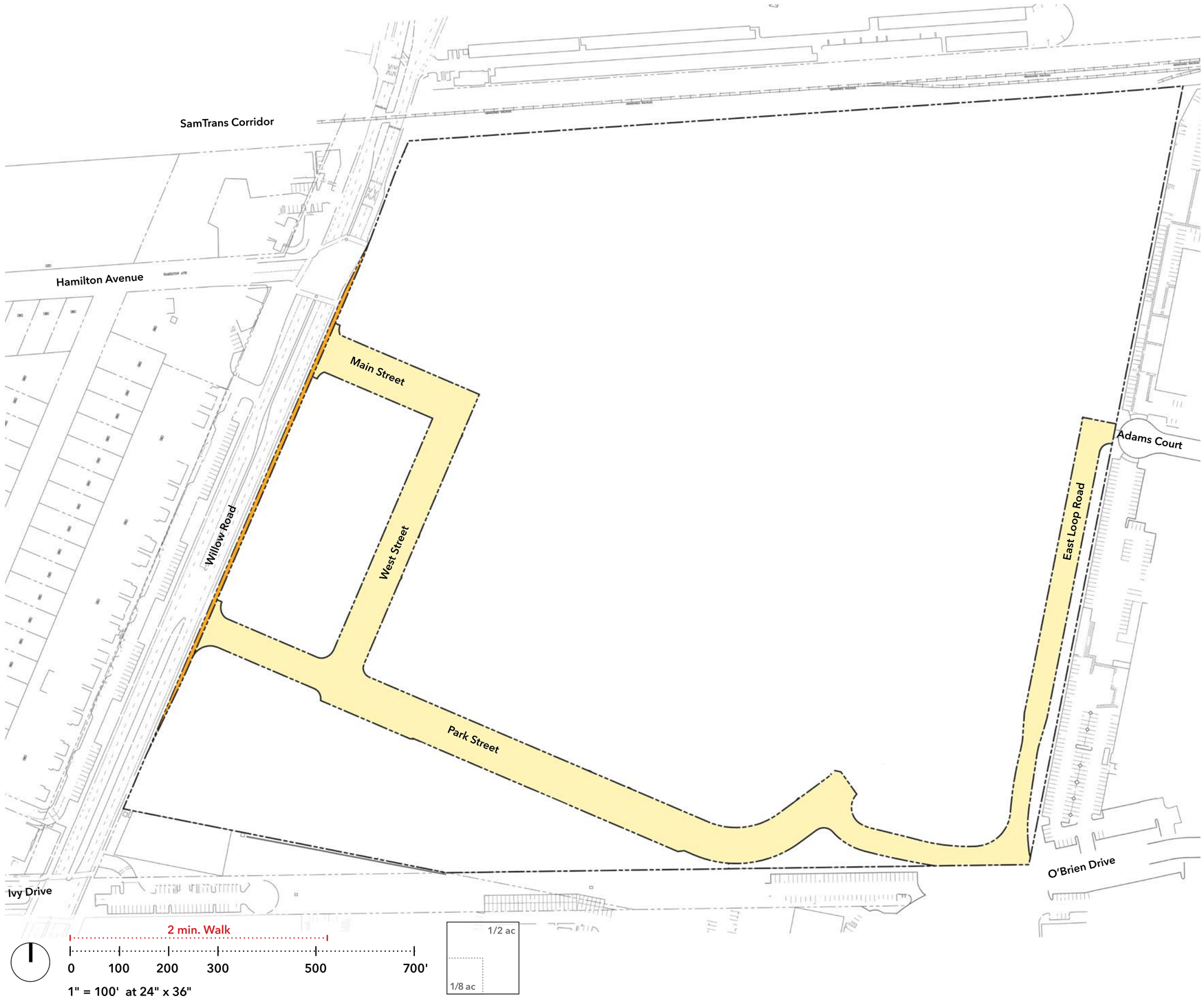
LEGEND		
	Town Square District	4.33 acre
	Campus District	31.72 acre
	Residential / Shopping District	17.67 acre
	Public R.O.W.	5.64 acre
	Total	59.36 acre

MASTER PLAN
Peninsula Innovation Partners
Conditional Development Permit

WILLOW VILLAGE

Menlo Park, CA

G3.01
Conceptual District Plan
December 23, 2021



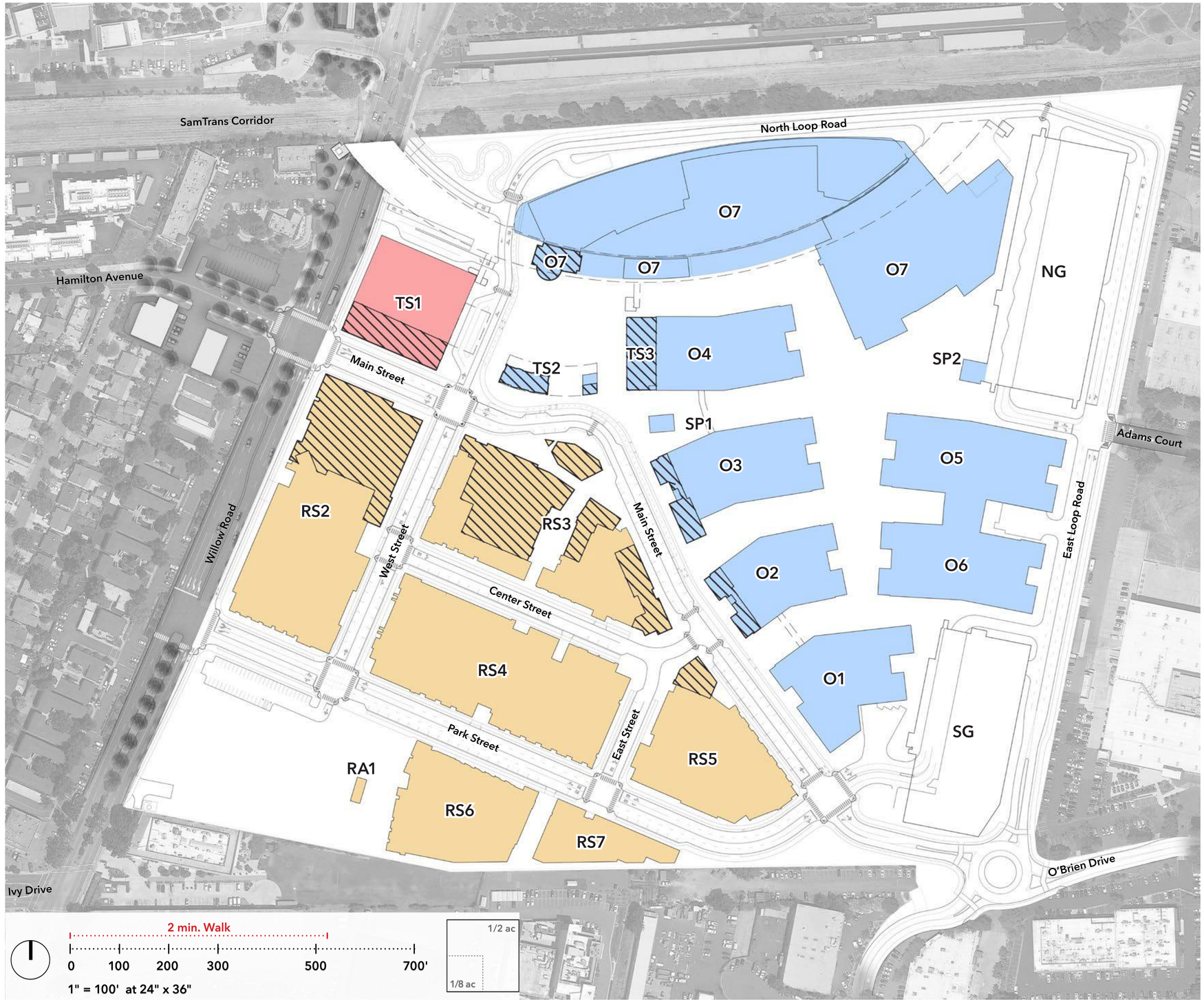
ZONING DISTRICT FAR AREA SUMMARY	
Aggregate Site Area (ASA)	2,585,538.50 sf
Existing & Zoning Public ROW	226,340.70 sf
ASA minus Existing & Zoning ROW	2,359,197.80 sf
Required O FAR Area	1,599,273.00 sf
Required O FAR Area % of Total (O FAR Area) / (ASA – ROW)	67.79 %
Required R-MU FAR Area	759,924.80 sf
Required R-MU FAR Area % of Total (R-MU FAR Area) / (ASA – ROW)	32.21 %

PROPOSED FAR AREA SUMMARY	
Caltrans ROW Dedication	8,344.72 sf
Proposed Public ROW (Caltrans ROW Dedication Included)	245,458.71 sf
Public ROW Increase above Existing & Zoning Public ROW (Proposed ROW – Existing & Zoning R.O.W.)	19,118.01 sf
ASA minus Proposed ROW	2,340,079.79 sf
New O FAR Area Zoning Existing O FAR Area – (ROW Increase x Zoning O FAR Area %)	1,586,312.90 sf
Zoning R-MU FAR Area Revised Existing R-MU FAR Area – (ROW Increase x Zoning R-MU FAR Area %)	753,766.89 sf

MAXIMUM BUILDABLE AREA SUMMARY	
ZD Compliant Total Office	1,774,754.62 sf*
ZD Compliant Total Commercial Area	396,578.23 sf
ZD Compliant Residential (max)	1,695,975.50 sf
ZD Compliant Residential (max)	1,730 units**

* Includes the "non-residential" GFA permitted under the R-MU zoning which allows for office uses.
** Residential FAR is variable, ranging from 30 developable units per acre (FAR 0.9) to 100 developable units per acre (FAR 2.25).

Note: Parcels may be further subdivided for subphasing, financing, or other development purposed.



LEGEND

	Office
	Hotel
	Residential
	Commercial / Retail

PROPOSED FAR AREA SUMMARY

R - MU	753,766.89 sf*
O	1,586,312.90 sf**
Public R.O.W.	245,458.71 sf
Total	2,585,538.50 sf (59.36 Acre)

* Includes 55,461.49 sf of private R.O.W.
** Includes 257,474.32 sf of private R.O.W.

MAXIMUM BUILDABLE AREA SUMMARY PER ZONING

	O			R-MU	
Use	**Office**	**Commercial**	**Hotel**	**Residential**	**Non-Residential**
Bonus Level GFA	(O FAR 100%) 1,586,312.90	(O FAR 25%) 396,578.23	(O FAR 175%) 2,776,047.58	(R-MU FAR 225%) 1,695,975.50	(R-MU FAR 25%) 188,441.72
Total Allowable GFA	1,774,754.62***	396,578.23	2,776,047.58	1,695,975.50	-
Allowable Units	-	-	-	1,730 unit	-

*** Includes the "non-residential" GFA permitted under the R-MU zoning which allows for office uses.

CDP STANDARDS

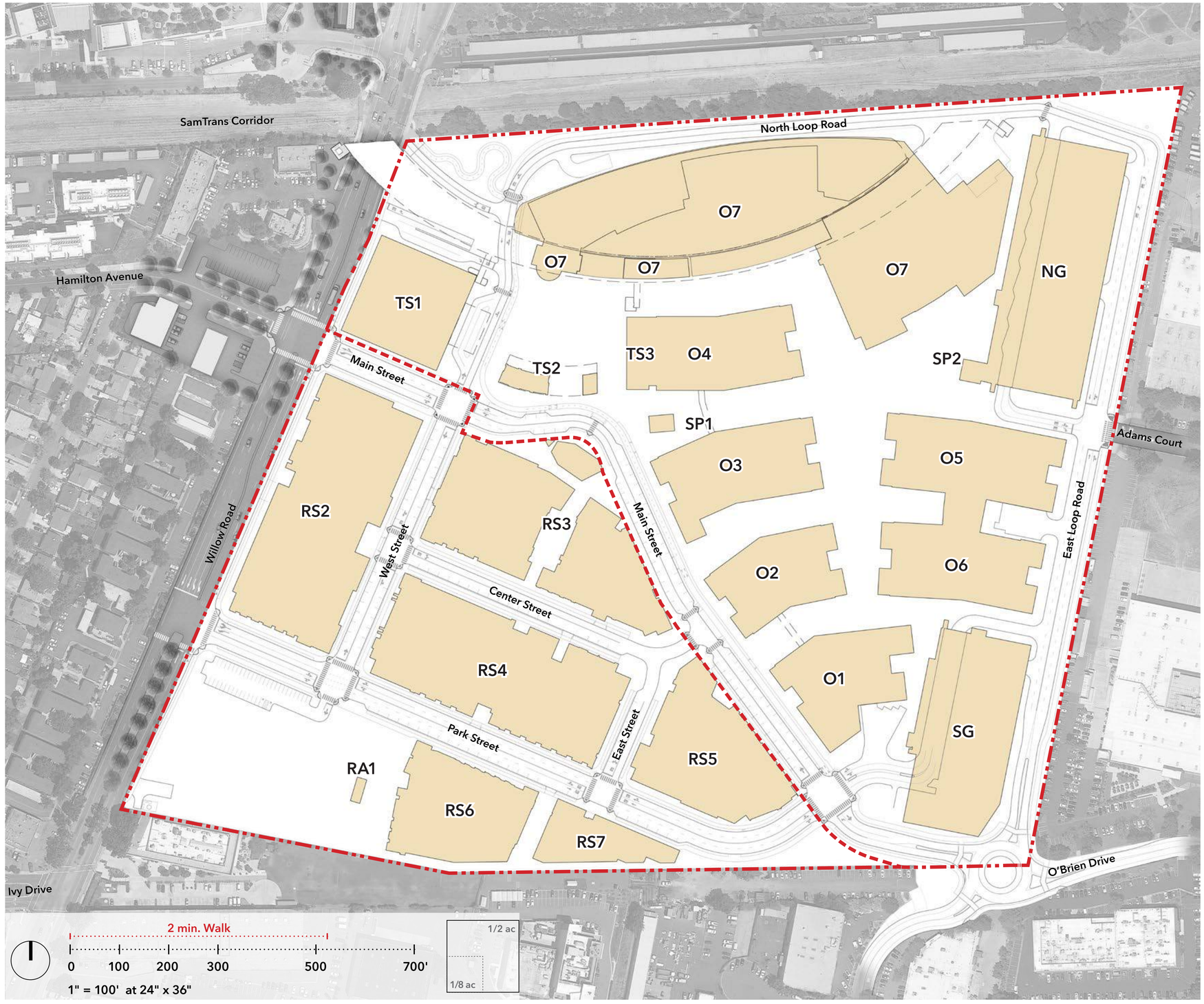
Use	Office	Hotel	Residential	Retail
Maximum GFA	1,600,000	172,000	1,695,975.50	200,000
Maximum Units	-	-	1,730 unit	-

ILLUSTRATIVE GFA / UNIT COUNT AS DEPICTED****

Bldg #	Office	Hotel	Residential	Retail
O1	132,477	-	-	-
O2	160,271	-	-	6,470
O3	210,081	-	-	7,638
O4	168,810	-	-	-
O5	236,151	-	-	-
O6	216,824	-	-	-
O7	455,157	-	-	16,157
SP1	1,678	-	-	-
SP2	2,500	-	-	-
TS1	-	149,776	-	13,999
TS2	364	-	-	4,588
TS3	-	-	-	14,149
RS2	-	-	316,572	39,595
RS3	-	-	412,529	54,632
RS4	-	-	433,170.75	-
RS5	-	-	242,257.75	4,390
RS6	-	-	210,180	-
RS7	-	-	80,266	-
RA1	-	-	1,000	-
Total	1,584,313	149,776	1,695,975.50 1,730 unit	161,618

**** Refer to Appendix 1 for illustrative parcel-by-parcel details.

Note: Square footage and unit count depicted is illustrative and may be subject to change, but will remain compliant with Maximum Buildable Area Summary per Zoning and CDP Standards.



LEGEND

	Site Boundary
	Land Use Boundary

BUILDING HEIGHT MAXIMUM PER ZONING

Zone	Maximum Height (ft)	Height (ft)	
R-MU	70	52.5	Properties within the flood zone or subject to flooding and sea level rise are allowed a 10-foot increase in height and maximum height.
O	110	67.5, except hotels	

CDP STANDARDS

Zone	Maximum Height (ft)	Height (ft)
R-MU	85*	62.5
O	120	70

* Includes maximum height adjustment for R-MU zoning district.

ILLUSTRATIVE BUILDING HEIGHT AS DEPICTED**

Zone	Bldg#	Individual Bldg Max. Height	Zoning Max. Height	Individual Bldg Height***	Zoning Height***
R-MU	RS2	77.15	84.15	59.81	61.47
	RS3	84.15		66.31	
	RS4	76.61		61.02	
	RS5	77.89		60.16	
	RS6	79.78		62.92	
	RS7	76.06		53.24	
	RA1	15.16		15.16	
O	O1	67.46	118.04	57.69	66.84
	O2	83.41		79.70	
	O3	83.13		78.26	
	O4	82.31		76.28	
	O5	83.17		80.37	
	O6	82.27		73.98	
	O7	118.04		57.13	
	SP1	27.75		27.75	
	SP2	30.50		30.50	
	NG	89.30		80.27	
	SG	79.37		72.78	
	TS1	84.48		58.84	
	TS2	35.32		34.48	
	TS3	36.81		27.31	

** Refer to Appendix 2 for illustrative parcel-by-parcel details.
*** Heights depicted are calculated based on average weighted height across zoning districts.

Note: Building heights depicted are illustrative and may be subject to change, but will remain compliant with Building Height Maximum per Zoning and CDP Standards.

LEGEND

	Open Space (Publicly Accessible)
	Elevated Open Space (Publicly Accessible)
	At-grade Open Space (No Public Access)*
	Above-grade Open Space (No Public Access)**

* Includes covered open space.
** Includes above-grade open space such as, roof and podium level decks, terraces, balconies, gardens, etc.

PROPOSED FAR AREA SUMMARY

R - MU	753,766.89 sf***
O	1,586,312.90 sf****
Public R.O.W.	245,458.71 sf
Total	2,585,538.50 sf (59.36 Acre)

*** Includes 55,461.49 sf sf of private R.O.W.
**** Includes 257,474.32 sf of private R.O.W.

OPEN SPACE REQUIREMENT PER ZONING

Land Use	Minimum Open Space	Minimum Publicly Accessible
R - MU	188,441.72 sf (25%)	47,110.43 sf (25%)
O	475,893.87 sf (30%)	237,946.94 sf (50%)
Total	664,335.59 sf	285,057.37 sf

CDP STANDARDS

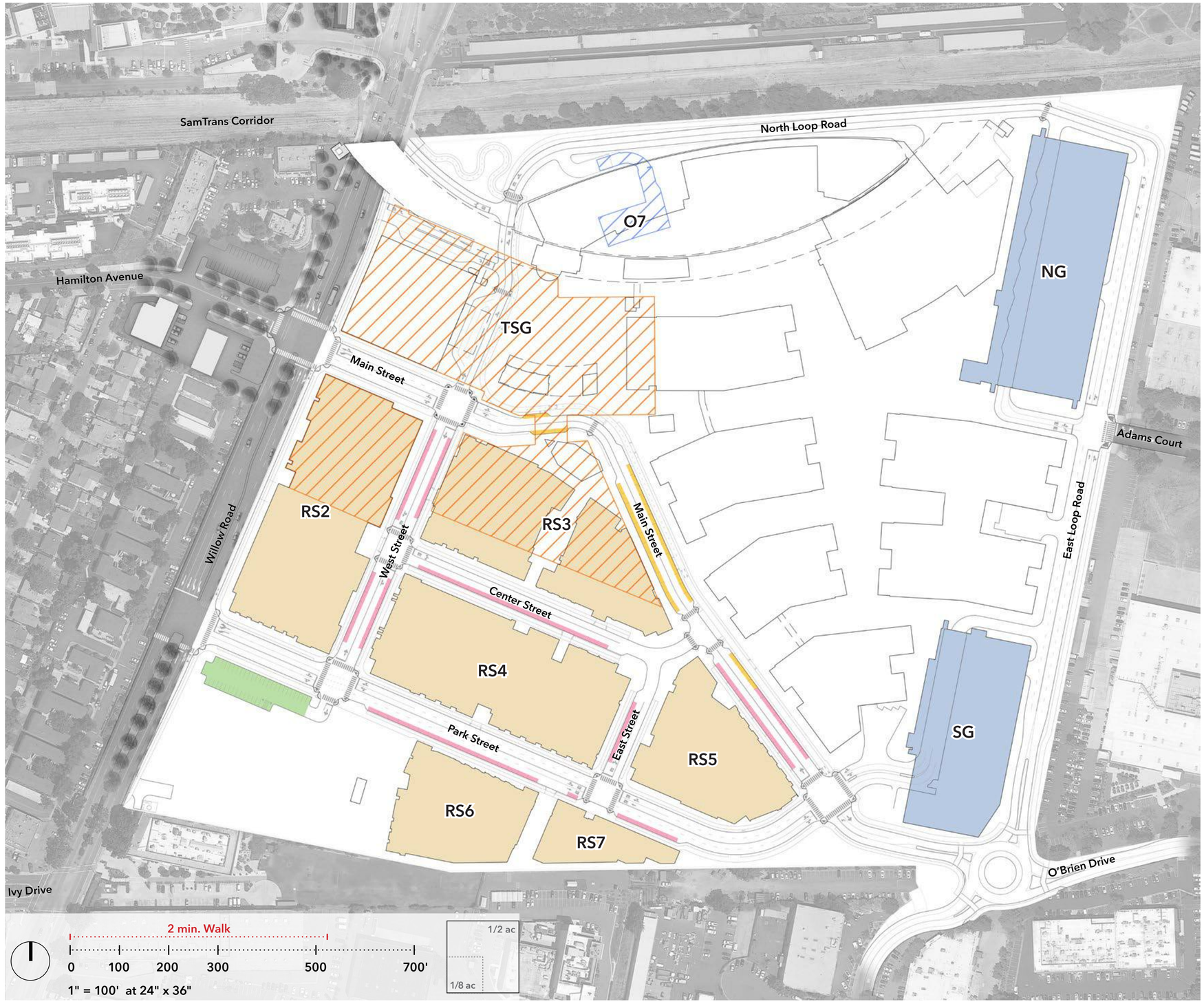
Land Use	Minimum Open Space	Minimum Publicly Accessible
R - MU	370,000 sf	160,000 sf
O	487,000 sf	200,000 sf
Total	857,000 sf	360,000 sf

ILLUSTRATIVE OPEN SPACE AS DEPICTED*****

Land Use	Open Space	Publicly Accessible
R - MU	400,442 sf	175,047 sf
O	540,117 sf	209,980 sf
Total	940,559 sf	385,027 sf

***** Refer to Appendix 3 for illustrative parcel-by-parcel details.

Note: Open space depicted are illustrative and may be subject to change, but will remain compliant with Open Space Requirement per Zoning and CDP Standards.



LEGEND

	Office Parking Structure
	Office Parking (Subgrade)
	Off-street Residential
	Shared Parking (Subgrade)
	Park Parking
	On-Street Parking
	Passenger Loading / Service

PARKING REQUIREMENT PER ZONING

Land Use	Development Maximum	Menlo Park Municipal Code			
		Minimum		Maximum	
		Ratio	Spaces	Ratio	Spaces
Office	1,600,000 sf	2.0/1,000sf	3,200	3.0/1,000sf	4,800
Residential	1,730 unit	1.0/unit	1,730	1.5/unit	2,595
Retail	200,000 sf	2.5/1,000sf	500	3.3/1,000sf	660
Hotel	193 room	0.75/room	145	1.1/room	213
Total	-	-	5,575	-	8,268

CDP STANDARDS

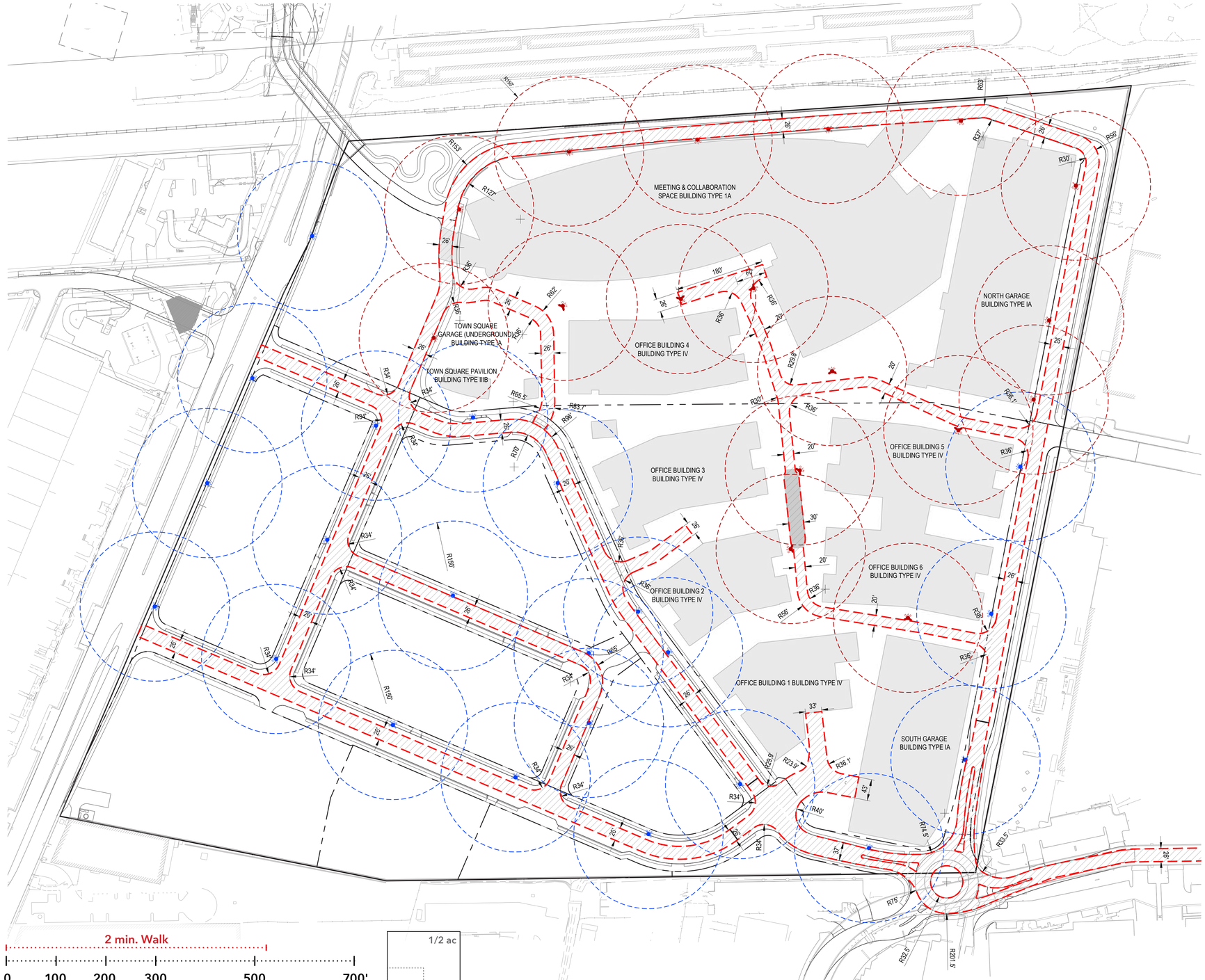
Land Use	Development Maximum	Minimum		Maximum	
		Ratio	Spaces	Ratio	Spaces
Office*	1,600,000 sf	2.0/1,000sf	3,200	2.3/1,000sf	3,700
Residential*	1,730 unit	-	1,670	-	1,695
Non-senior Senior**	1,610 unit 120 unit	1.0/unit 0.5/unit	1,610 60	1.5/unit 0.5/unit	1,635 60
Shared***	-	-	1,052	-	1,080
Public Park Off-Street	-	-	38	-	41
Total	-	-	5,960	-	6,516

ILLUSTRATIVE PARKING AS DEPICTED****

Land Use	Location	Spaces
Office*	NG / SG / O7	3,680
Residential*		
Non-senior Senior	RS2-7	1,694
Shared***	RS2 / RS3 / TSG / On-Street / Passenger Loading	1,061
Public Park Off-Street	Publicly Accessible Park	41
Total	-	6,476

* Excludes visitor parking, which is included in Shared Parking.
** Includes parking count adjustment for senior residential land use.
*** Shared parking includes office visitor, residential visitor, retail, and hotel uses.
**** Refer to Appendix 4 for illustrative parcel-by-parcel details.

Note: Parking depicted is illustrative and may be subject to change, but will remain compliant with Parking Requirements per Zoning and CDP Standards.



LEGEND

- Public Fire Hydrant
- Private Fire Hydrant
- Fire Lane
- 150' Radius for Fire Hose

MASTER PLAN
Peninsula Innovation Partners
Conditional Development Permit

WILLOW VILLAGE

Menlo Park, CA

G4.02
Conceptual Fire Access Plan
December 23, 2021

LEGEND

	Inter-Campus Tram Route*
	Inter-Campus Tram Route between Classic & Chilco Campuses**
	Sub-grade Tram Route
	

* Routing in this diagram includes five inter-campus tram lines.
** Inter-Campus trams between the Classic and Chilco Campuses will continue to operate on Bayfront Expressway.

Note: Proposed primary tram route is conceptual and may be subject to change.

Gateway Campus
Independence Drive
Commonwealth Drive
Chilco Street
Chilco Campus
Bayfront Expressway / CA 84
Existing Tunnel
Bayfront Campus
Constitution Drive
Chilco Street
Proposed Willow Road Tunnel
Hamilton Avenue
Classic Campus
SamTrans Corridor
Willow Road
Belle Haven
Adams Court
Adams Drive
University Avenue
O'Brien Drive
Ivy Drive

5 min. Walk
0 400 800 1200 1600 2400'
1" = 400' at 22" x 34"
5 ac
1 ac

MASTER PLAN
Peninsula Innovation Partners
Conditional Development Permit

WILLOW VILLAGE

Menlo Park, CA

G4.03
Conceptual Inter-Campus Tram Route
December 23, 2021

LEGEND

———	Inter-Campus Tram Route
·····	Sub-grade Tram Route
O	Tram Stop

Note: Proposed primary tram route is conceptual and may be subject to change.

MASTER PLAN
Peninsula Innovation Partners
Conditional Development Permit

WILLOW VILLAGE

Menlo Park, CA

G4.04
Conceptual Primary Tram Route
December 23, 2021

LEGEND

	Commuter Shuttle Route
	Shuttle Passenger Loading
	Existing Public Bus Route
	Relocated Public Bus Stop

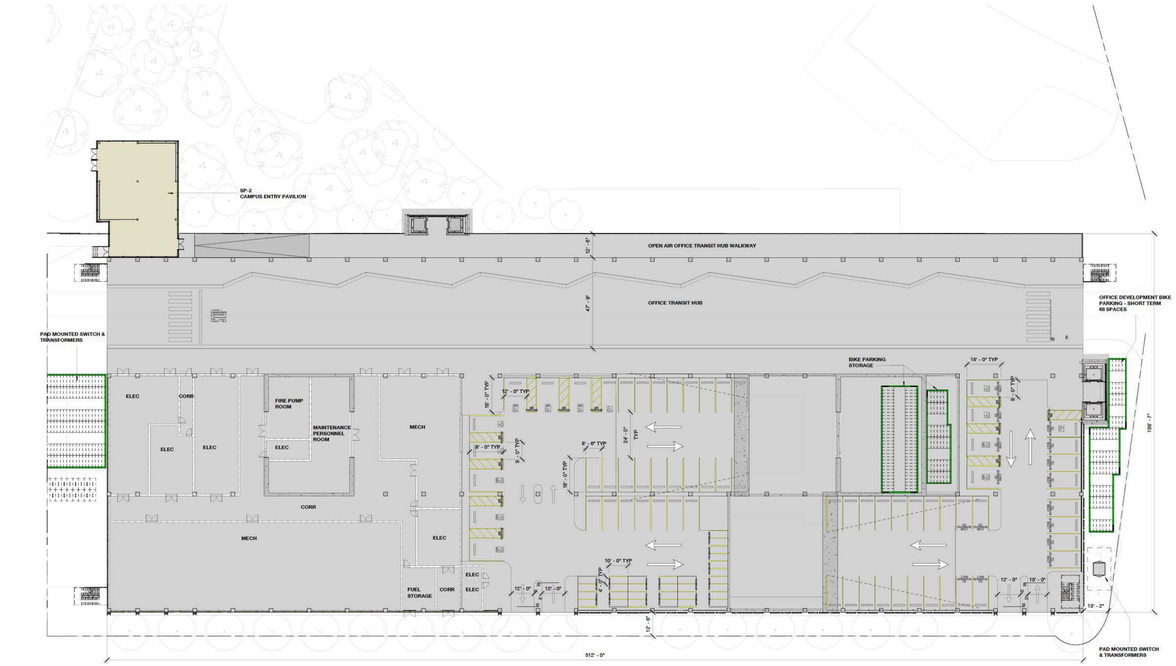
Note: Proposed primary tram route is conceptual and may be subject to change.

MASTER PLAN
Peninsula Innovation Partners
Conditional Development Permit

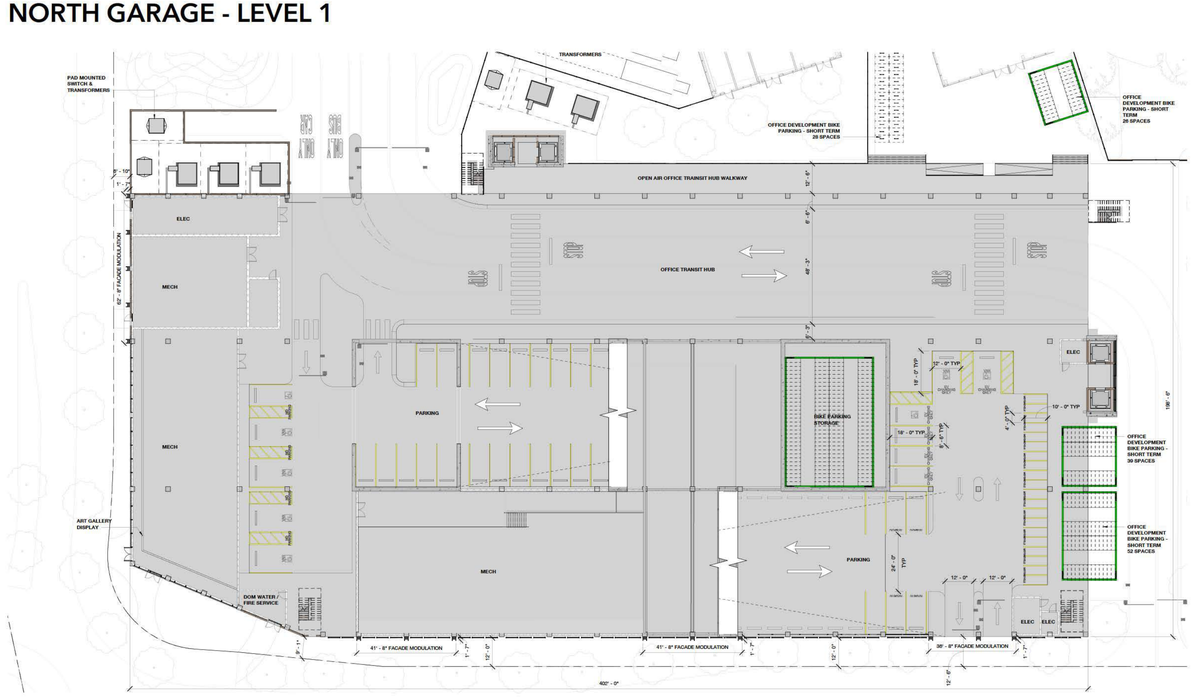
WILLOW VILLAGE

Menlo Park, CA

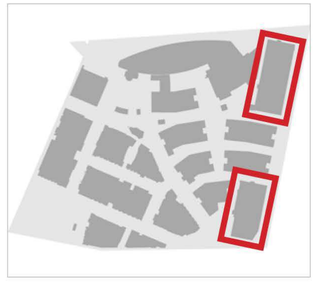
G4.05
Conceptual Shuttle & Public Bus Route
December 23, 2021

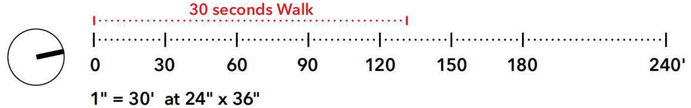


NORTH GARAGE - LEVEL 1



SOUTH GARAGE - LEVEL 1





1" = 30' at 24" x 36"

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Peninsula Innovation Partners
Conditional Development Permit

WILLOW VILLAGE

Menlo Park, CA

G4.06
Conceptual Transit Center Enlargements
December 23, 2021

LEGEND

	Vehicular Route
	Restricted Vehicular Route
	Sub-grade Vehicular Route
R	Passenger Loading / Drop-off (Metered Parking at Off-Peak Hours)
R	Passenger Loading / Drop-off
	Garage Access
	FB Commuter Shuttle and Tram Only Approach

Note: Proposed primary vehicle route is conceptual and may be subject to change.

MASTER PLAN
Peninsula Innovation Partners
Conditional Development Permit

WILLOW VILLAGE

Menlo Park, CA

G4.07
Conceptual Vehicular Circulation Plan
December 23, 2021

LEGEND

	Vehicular Route
	Restricted Vehicular Route
	Sub-grade Vehicular Route
R	Passenger Loading / Drop-off (Metered Parking at Off-Peak Hours)
R	Passenger Loading / Drop-off
	Garage Access
	FB Commuter Shuttle and Tram Only Approach

Note: Proposed primary vehicle route is conceptual and may be subject to change.

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WILLOW VILLAGE

Menlo Park, CA

G4.08
Variant: Conceptual Vehicular Circulation Plan
December 23, 2021

LEGEND	
	Service Vehicular Route
S	On-Street Service Loading Area
D	Off-Street Service Loading Area

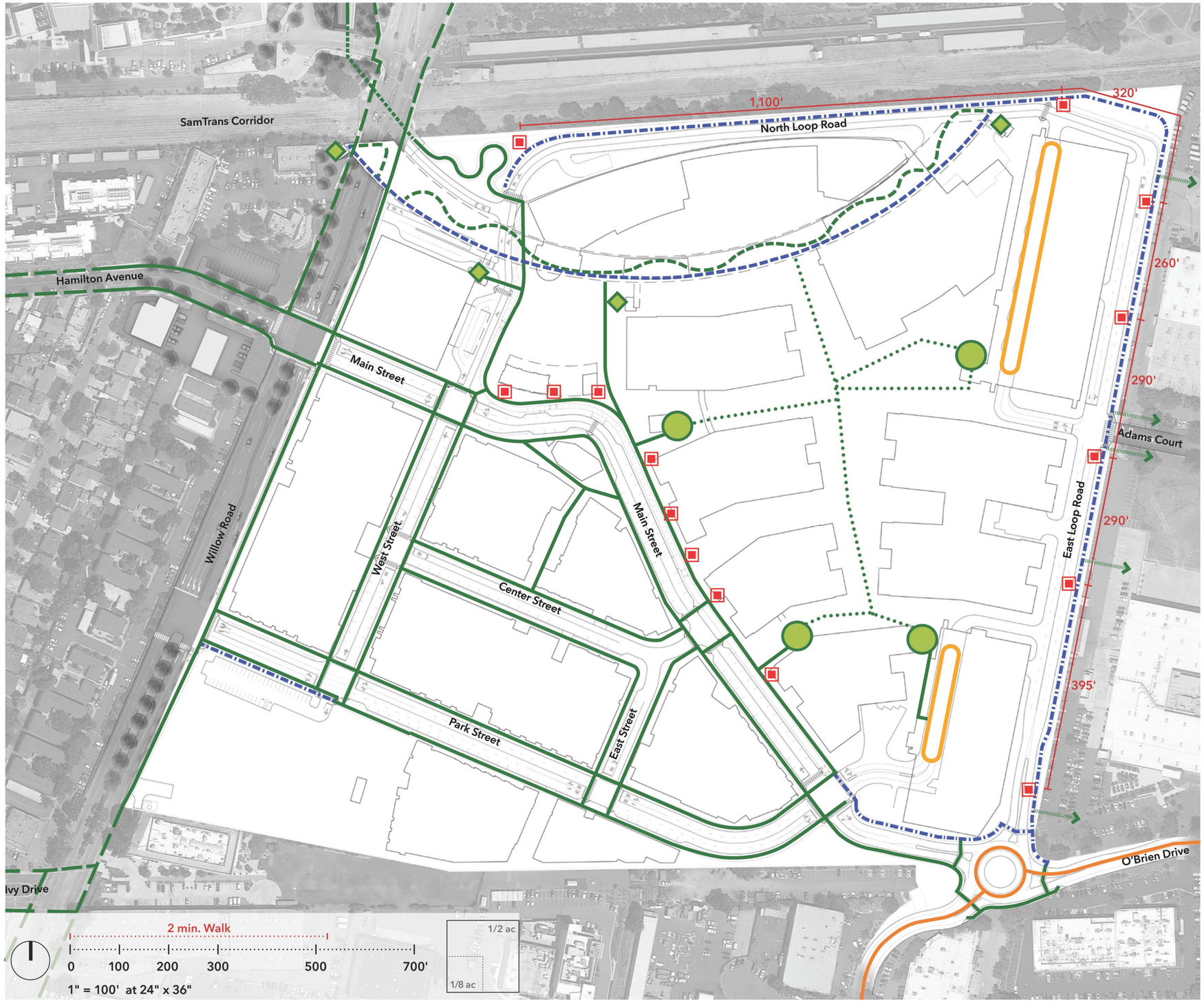
Note: Proposed service vehicle route is conceptual and may be subject to change.

MASTER PLAN
Peninsula Innovation Partners
Conditional Development Permit

WILLOW VILLAGE

Menlo Park, CA

G4.09
Conceptual Service Circulation Plan
December 23, 2021



LEGEND

	Existing Pedestrian Circulation
	Pedestrian Circulation
	Subgrade Pedestrian Circulation
	Elevated Park Pedestrian Circulation
	Internal Campus Pedestrian Circulation
	Potential Future Connection
	Multi-Use Pathway
	Elevated Park Multi-Use Pathway
	Furnishing Zone
	Elevated Park Access
	Secure Campus Entry
	Transit Hub

Note:
- Proposed primary pedestrian is conceptual and may be subject to change.
- Refer to Appendix 4 for parcel-by-parcel details on short and long term bike parking.

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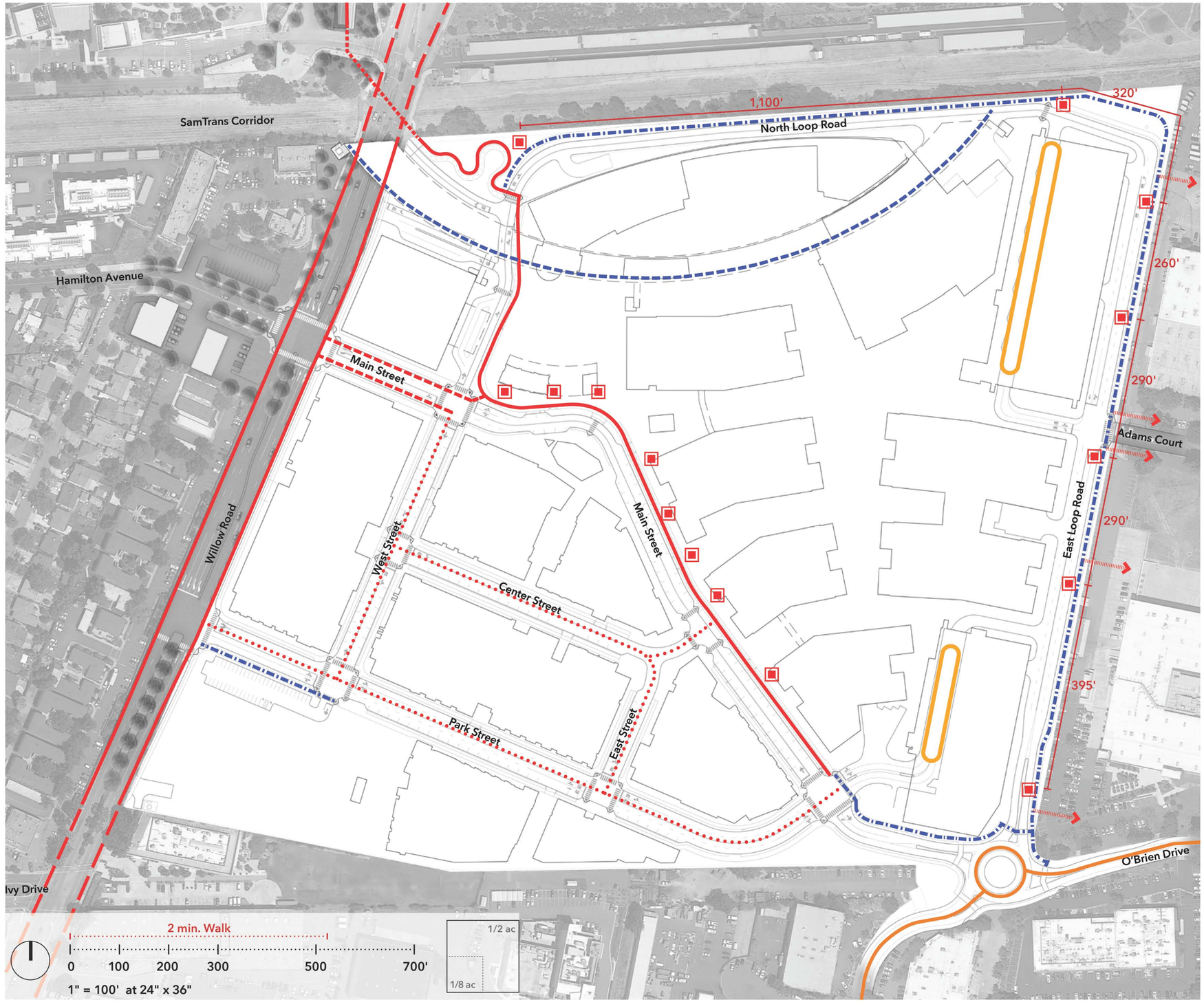
WILLOW VILLAGE

Menlo Park, CA

G4.10
Conceptual Pedestrian Circulation Plan
December 23, 2021



LEGEND

	Multi-Use Pathway
	Elevated Park Multi-Use Pathway
	Existing Class II Bikeway
	Class IV Bikeway
	Subgrade Class IV Bikeway
	Class III Bikeway
	On-Street Bike Circulation
	Suggested Bike Routes*
	Potential Future Connection
	Furnishing Zone
	Transit Hub

* Information Source:
- Menlo Park Comprehensive Bicycle Development Plan, City of Menlo Park, 2005
- San Mateo Bike Map Southeast Booklet, City/County Association of Governments of San Mateo County

- Proposed primary bike route is conceptual and may be subject to change.
- Refer to Appendix 4 for parcel-by-parcel details on short and long term bike parking.

BICYCLE PARKING REQUIREMENT PER ZONING

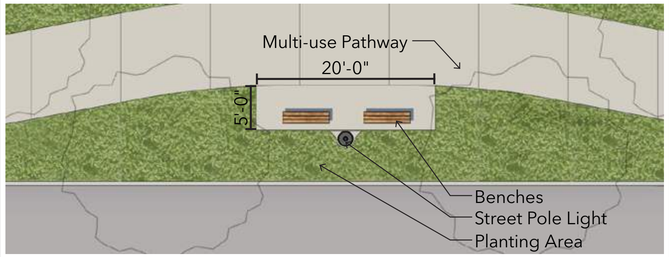
Land Use	Development Maximum	Menlo Park Municipal Code			
		Short-Term		Long-Term	
		Ratio	Spaces	Ratio	Spaces
Office	1,600,000 sf	20% of 1.0/5,000sf	64	80% of 1.0/5,000sf	256
Hotel	172,000 sf	20% of 1.0/5,000sf	7	80% of 1.0/5,000sf	28
Residential	1,730 unit	10% of 1.5/1unit	260	1.5/1unit	2,595
Commercial	200,000 sf	80% of 1.0/5,000sf	32	20% of 1.0/5,000sf	8

CDP STANDARDS

Land Use	Development Maximum	Short-Term	Long-Term
		Ratio / Spaces	Ratio / Spaces
Office	1,600,000 sf	133 spaces	340 spaces
Hotel	172,000 sf	Per zoning code	Per zoning code
Residential	1,730 unit	Per zoning code	Per zoning code
Commercial	200,000 sf	Per zoning code	Per zoning code

Note: Bicycle parking depicted is illustrative and may be subject to change, but will remain compliant with Parking Requirements per Zoning and CDP Standards.

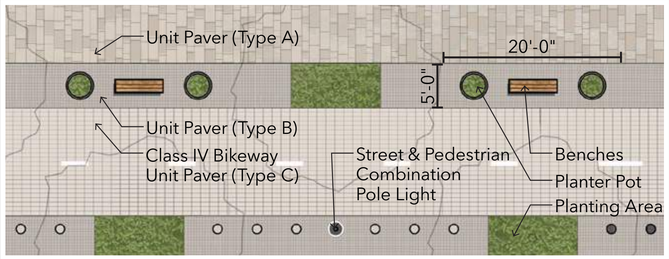
TYPICAL FURNISHING ZONE @ MULTI-USE PATHWAY



1/8" = 1'-0" at 24" x 36"

0 4 8 16'

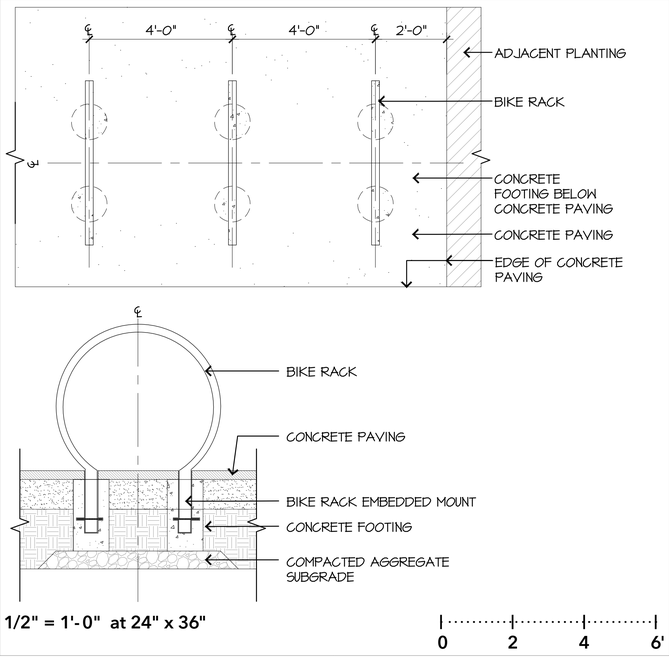
TYPICAL FURNISHING ZONE @ MAIN STREET



1/8" = 1'-0" at 24" x 36"

0 4 8 16'

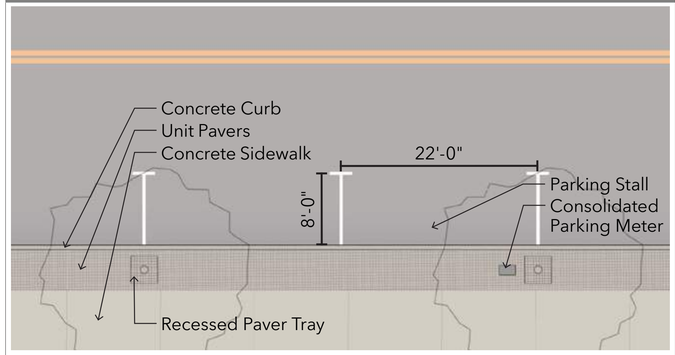
TYPICAL COMMERCIAL SHORT-TERM BICYCLE PARKING



1/2" = 1'-0" at 24" x 36"

0 2 4 6'

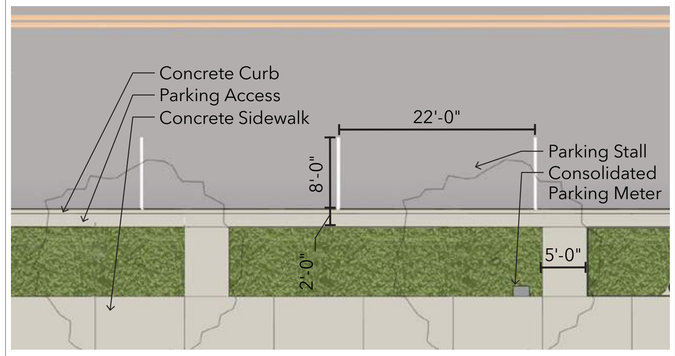
TYPICAL STREET PARKING & LOADING ALONG PAVING



1/8" = 1'-0" at 24" x 36"

0 4 8 16'

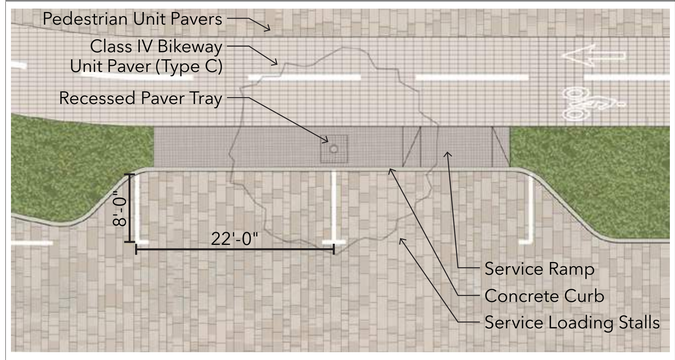
TYPICAL STREET PARKING ALONG PLANTING



1/8" = 1'-0" at 24" x 36"

0 4 8 16'

TYPICAL ON-STREET SERVICE LOADING AREA



1/8" = 1'-0" at 24" x 36"

0 4 8 16'

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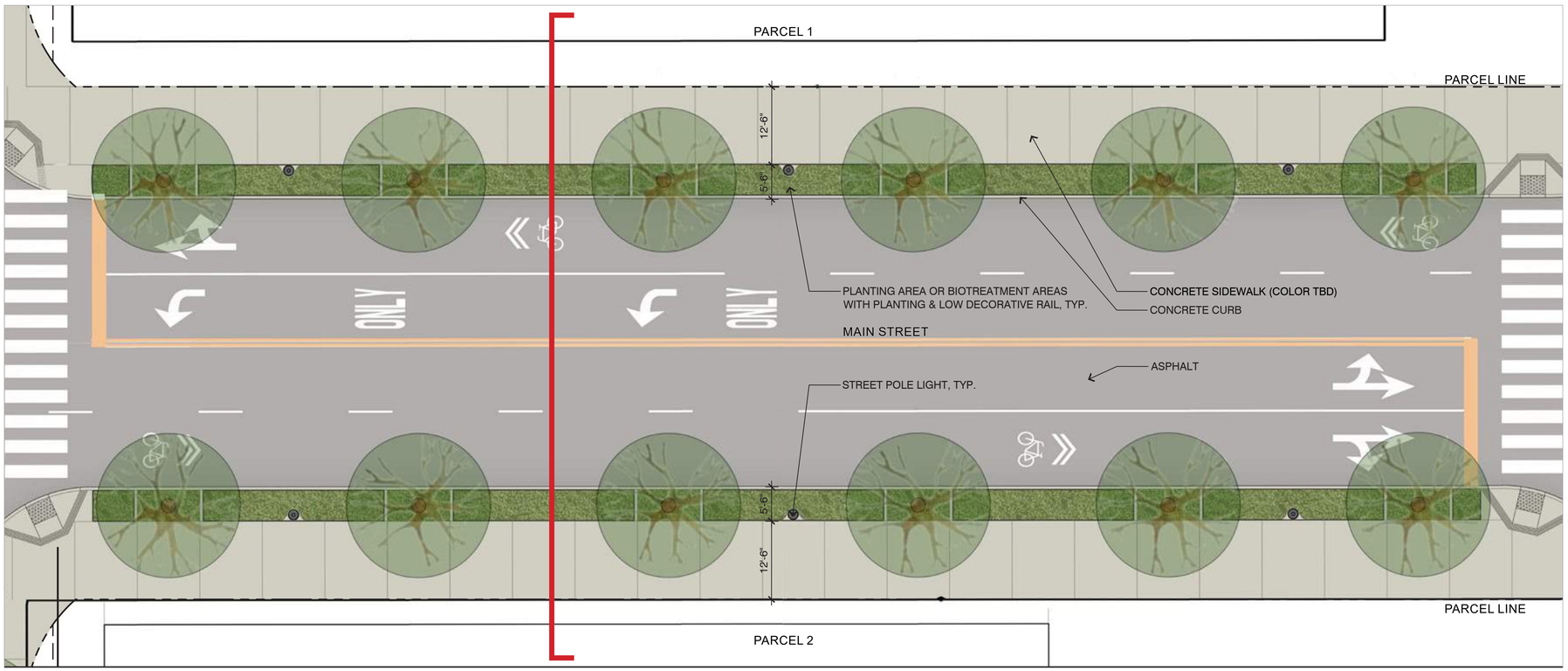
Peninsula Innovation Partners
Conditional Development Permit

WILLOW VILLAGE

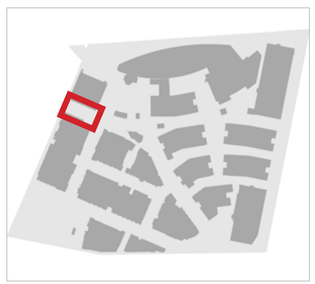
Menlo Park, CA

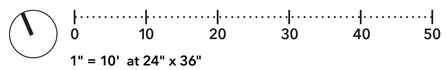
G5.01
Conceptual Public Realm Landscape Plan
December 23, 2021

SECTION



PLAN ENLARGEMENT



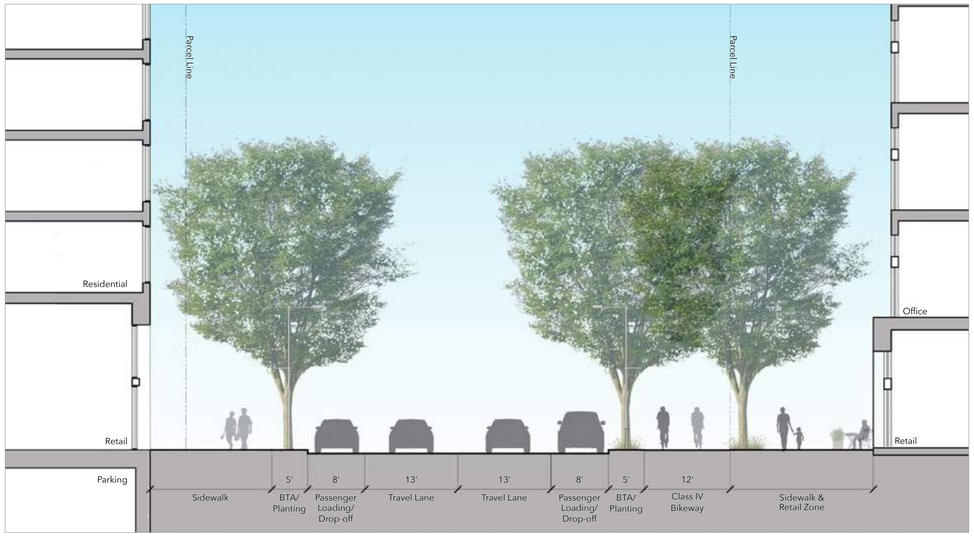


MASTER PLAN
Peninsula Innovation Partners
Conditional Development Permit

WILLOW VILLAGE

Menlo Park, CA

G5.02
Conceptual Street Enlargement - Main Street A
December 23, 2021



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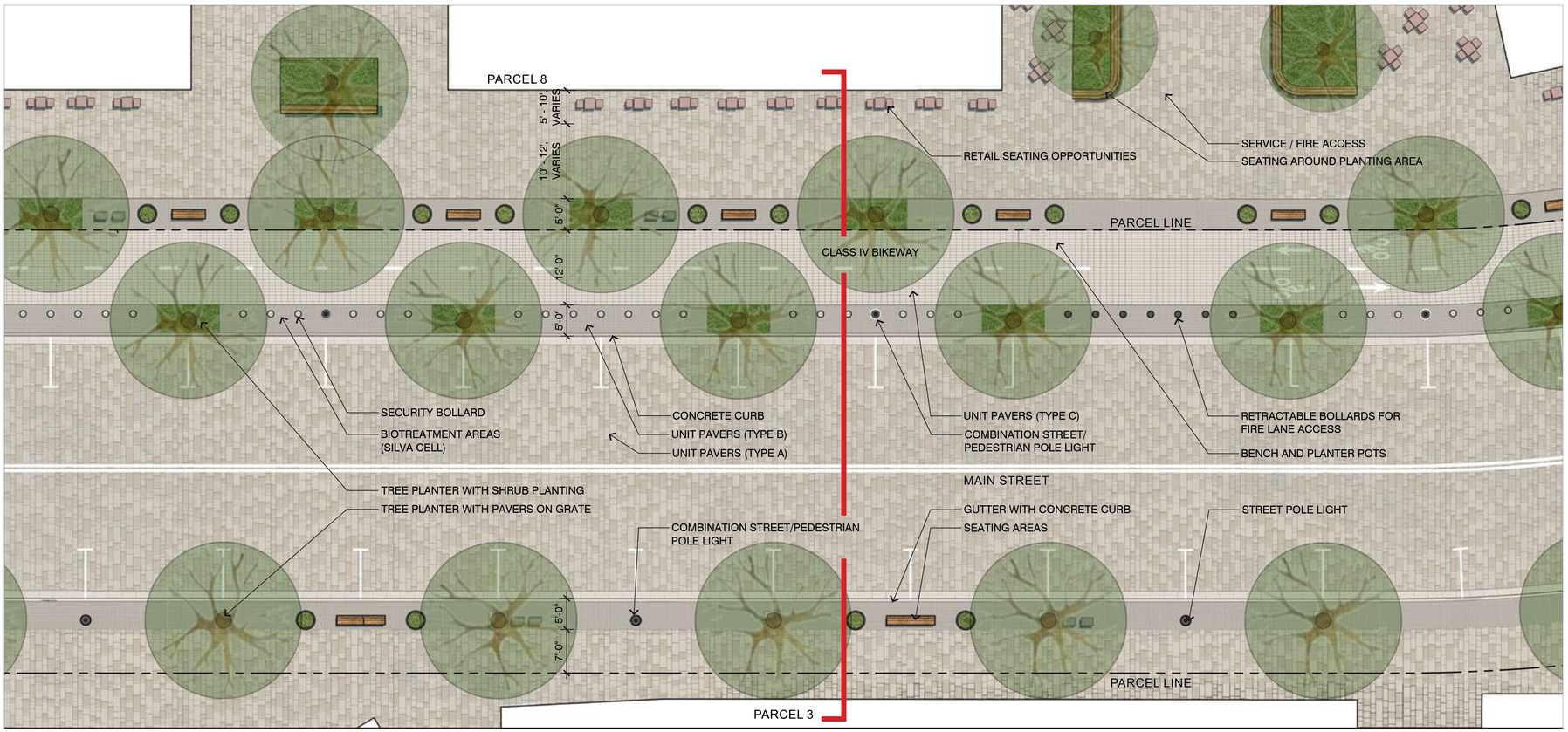

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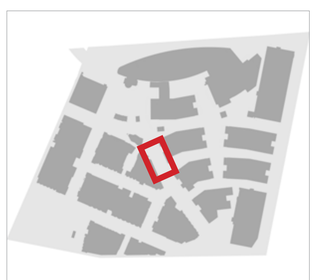

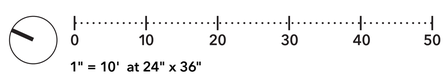

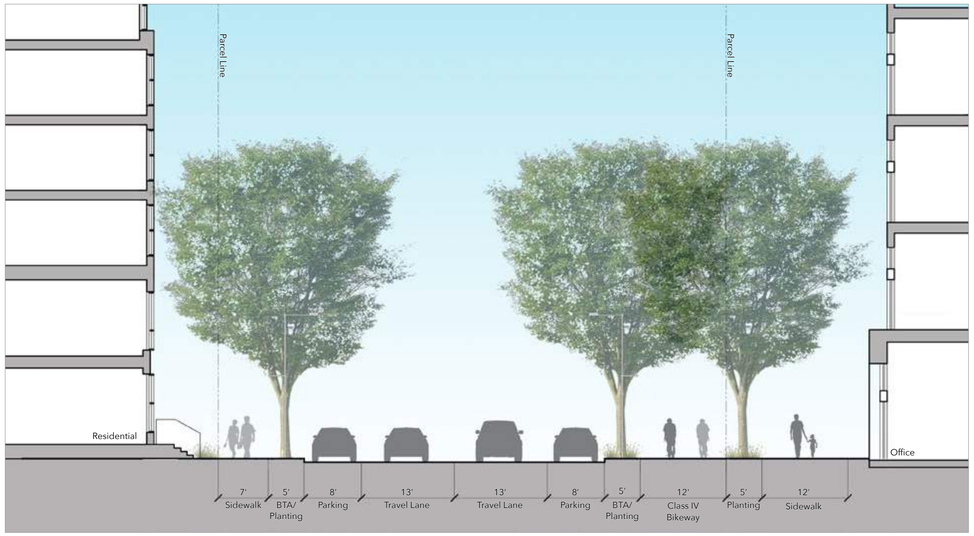

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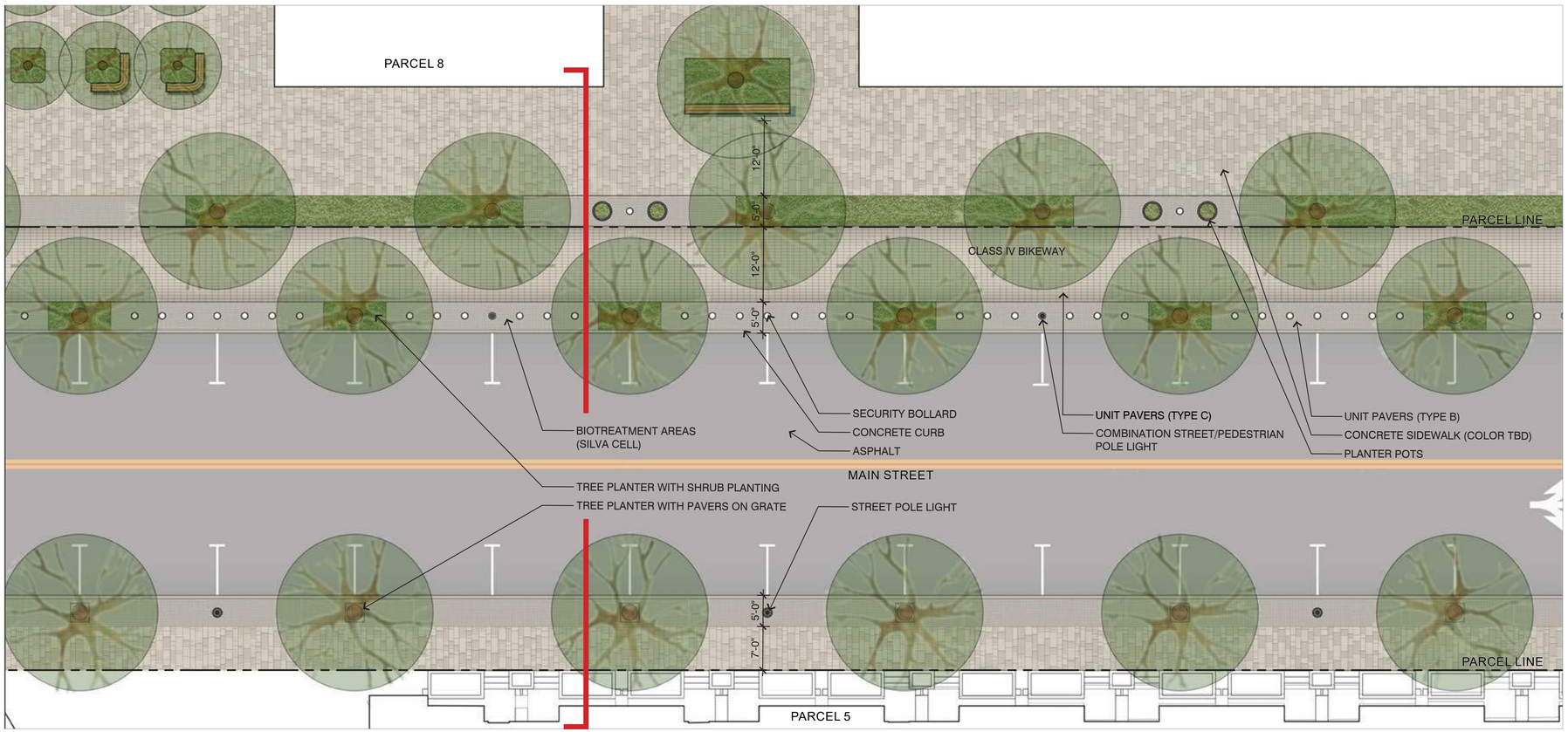

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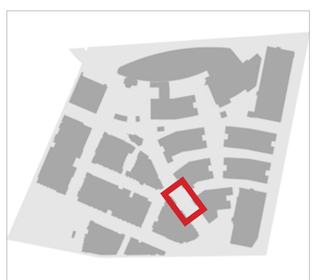

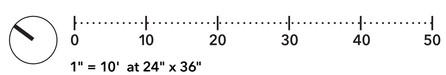

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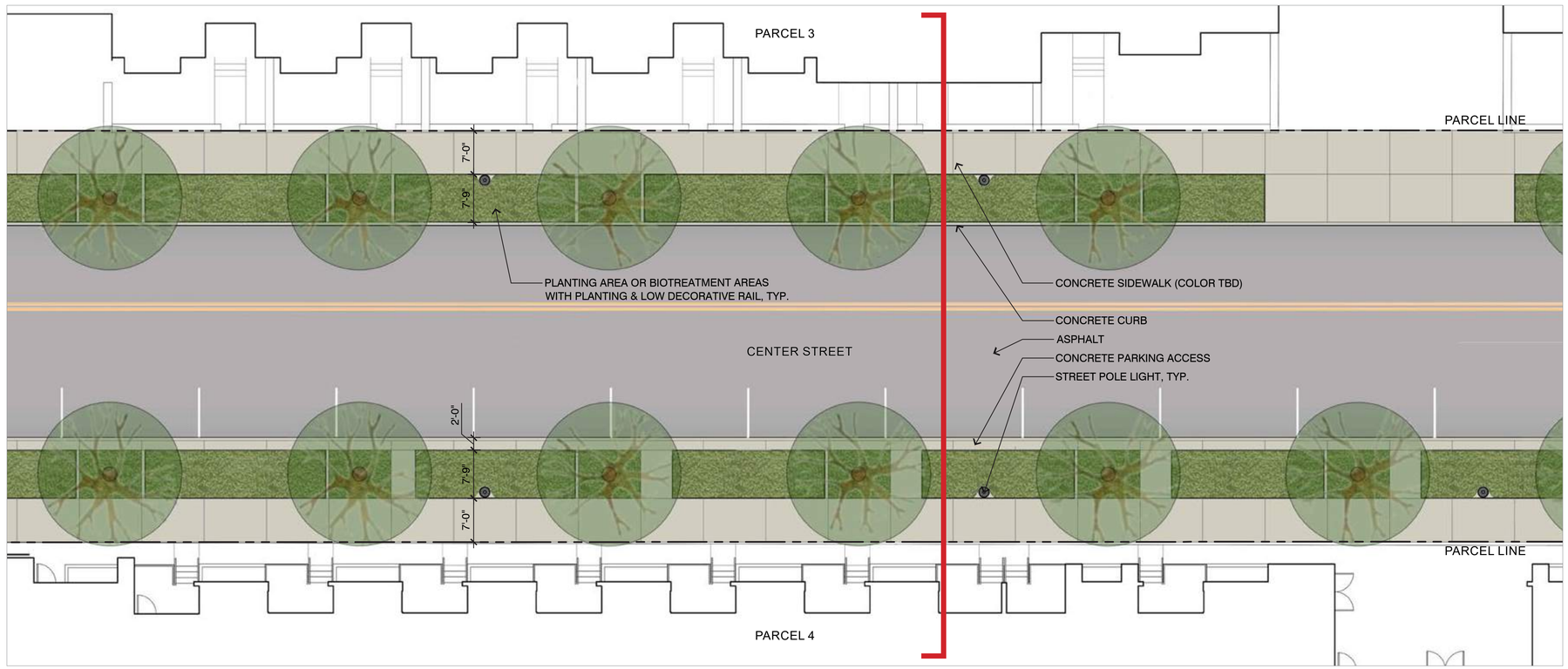
WILLOW VILLAGE

Menlo Park, CA

G5.04
Conceptual Street Enlargement - Main Street C
December 23, 2021

SECTION



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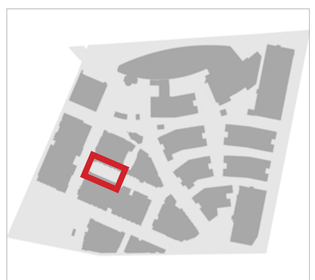


0 10 20 30 40 50

1" = 10' at 24" x 36"

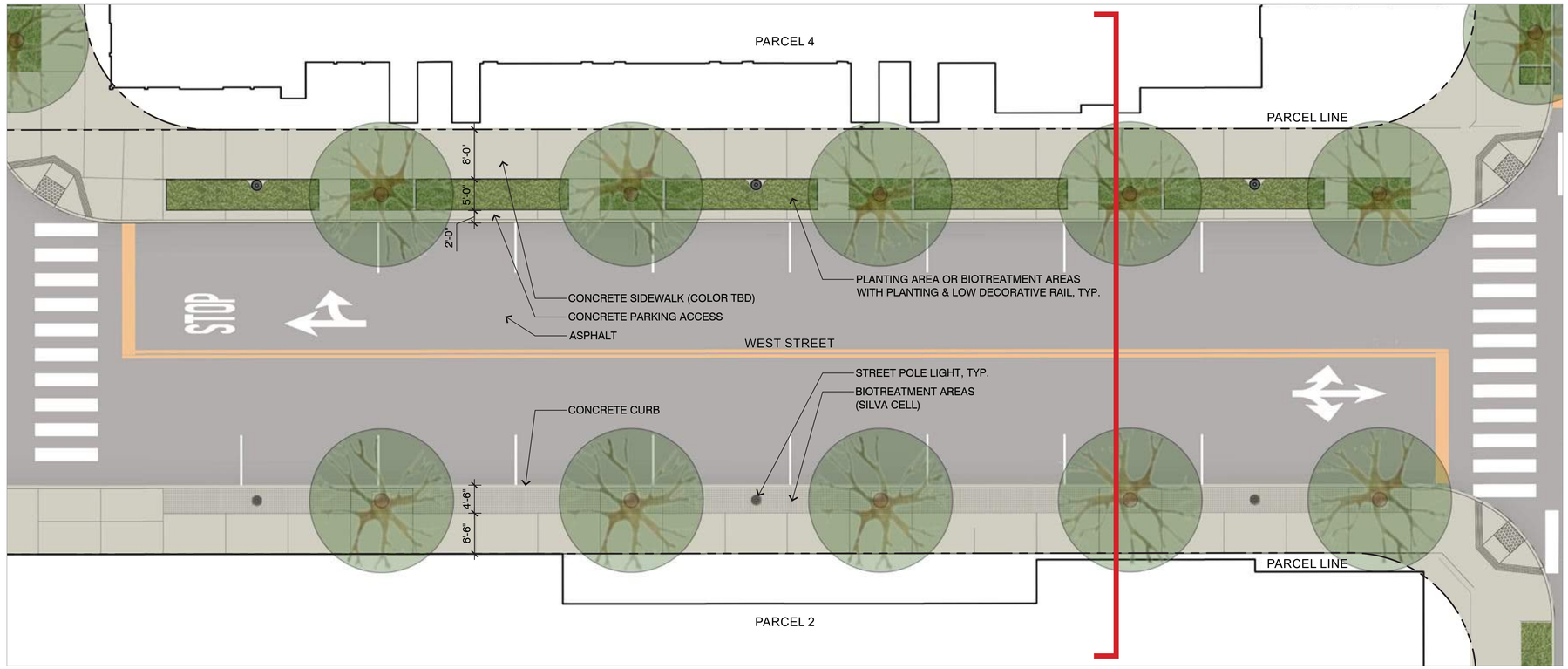
MASTER PLAN
Peninsula Innovation Partners
Conditional Development Permit

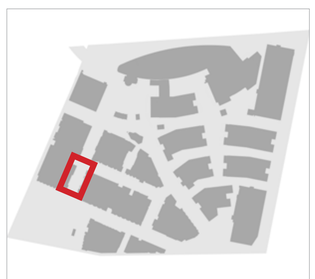
WILLOW VILLAGE

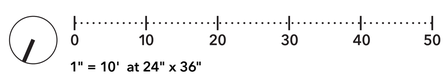
Menlo Park, CA

G5.05
Conceptual Street Enlargement - Center Street
December 23, 2021

SECTION







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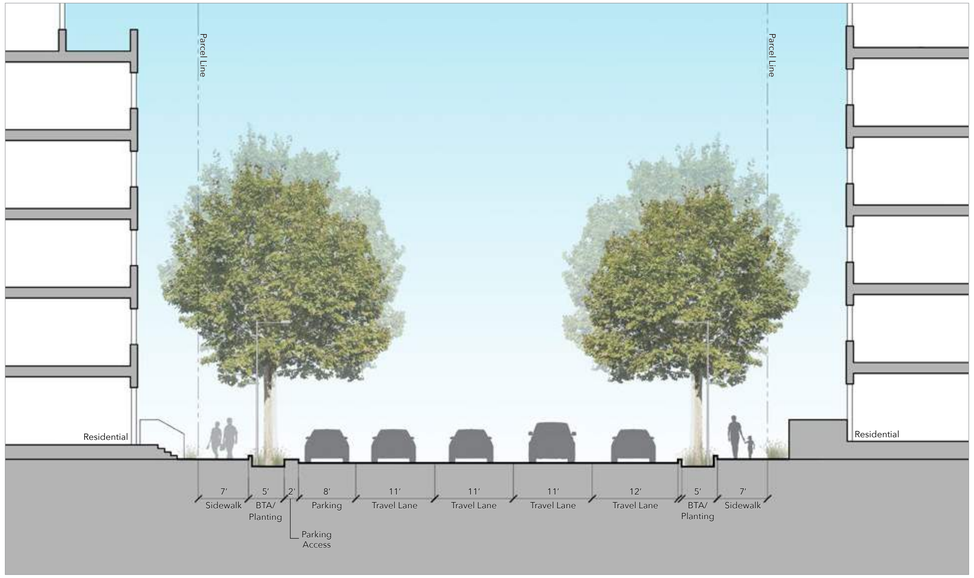

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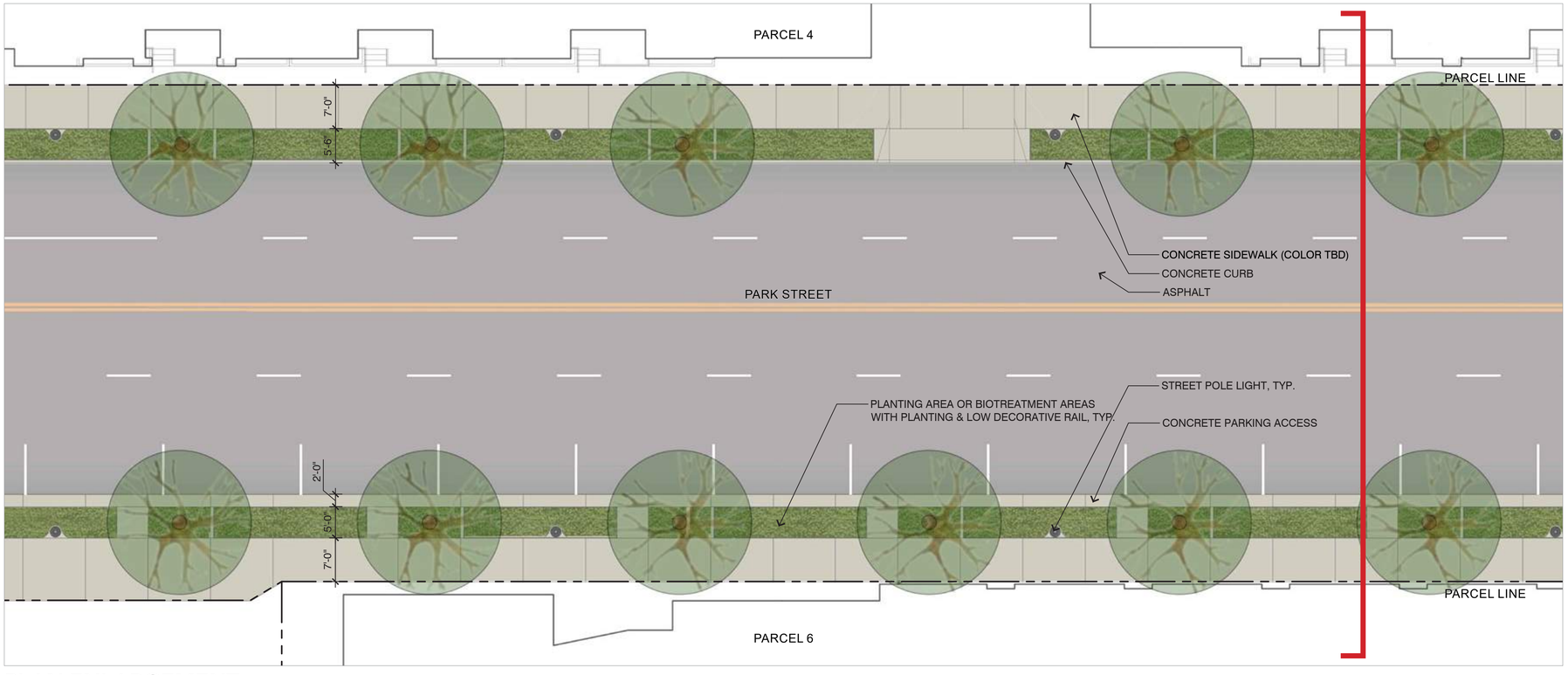

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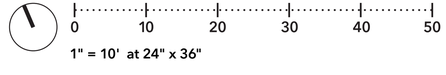

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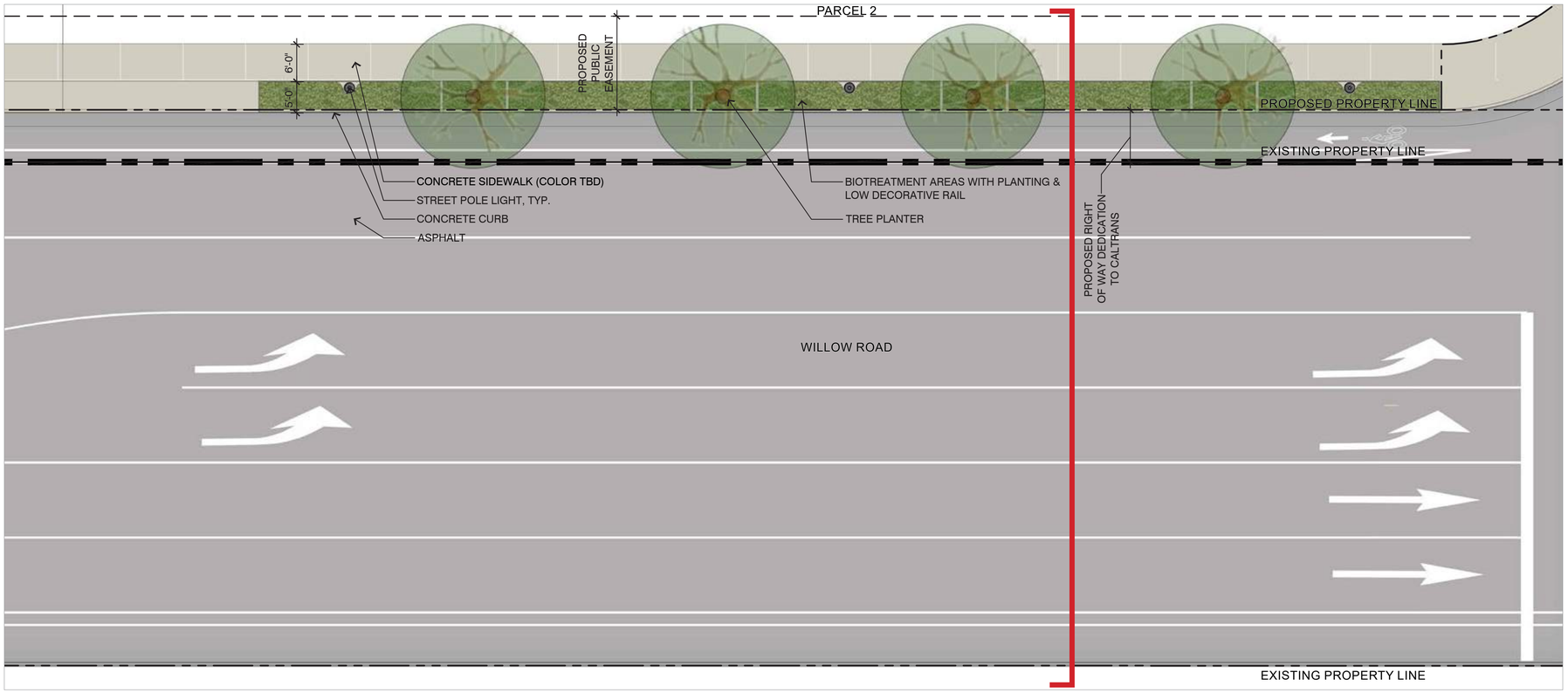

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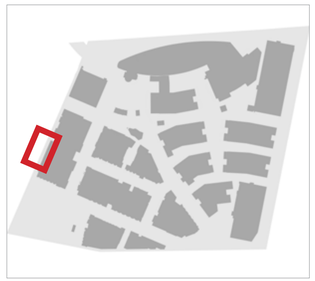

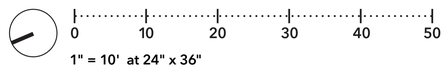

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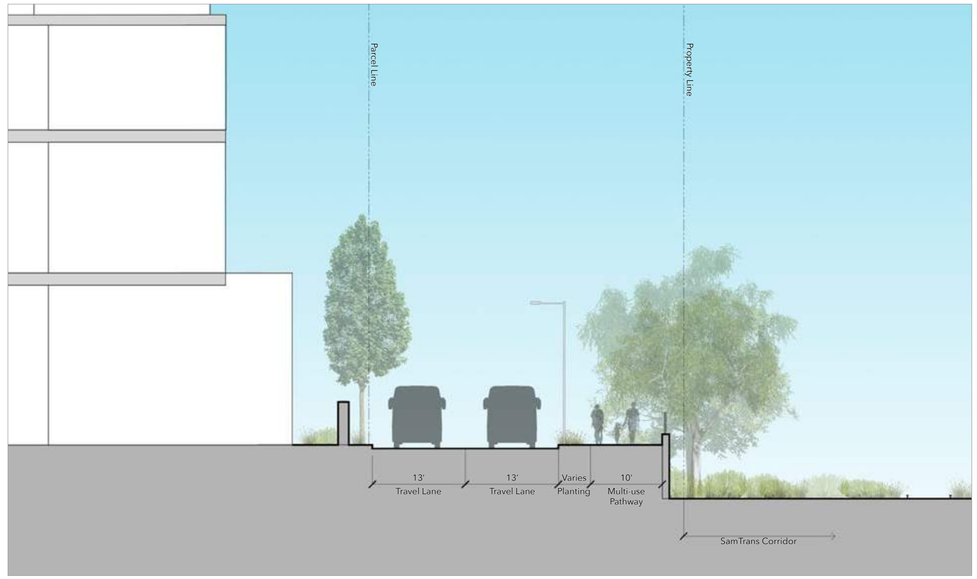
Peninsula Innovation Partners
Conditional Development Permit

WILLOW VILLAGE

Menlo Park, CA

G5.08
Conceptual Street Enlargement - Willow Road
December 23, 2021



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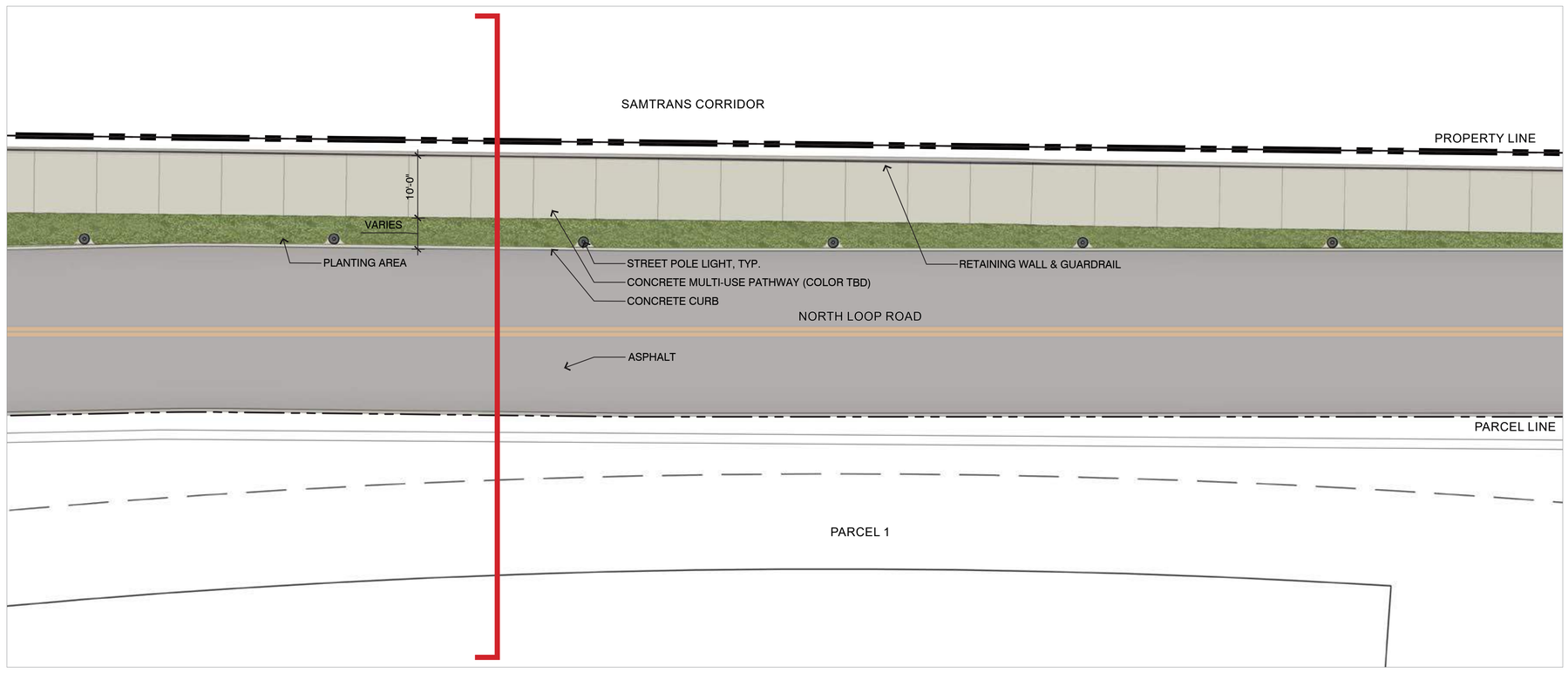

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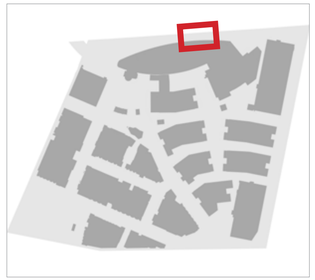

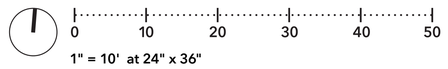

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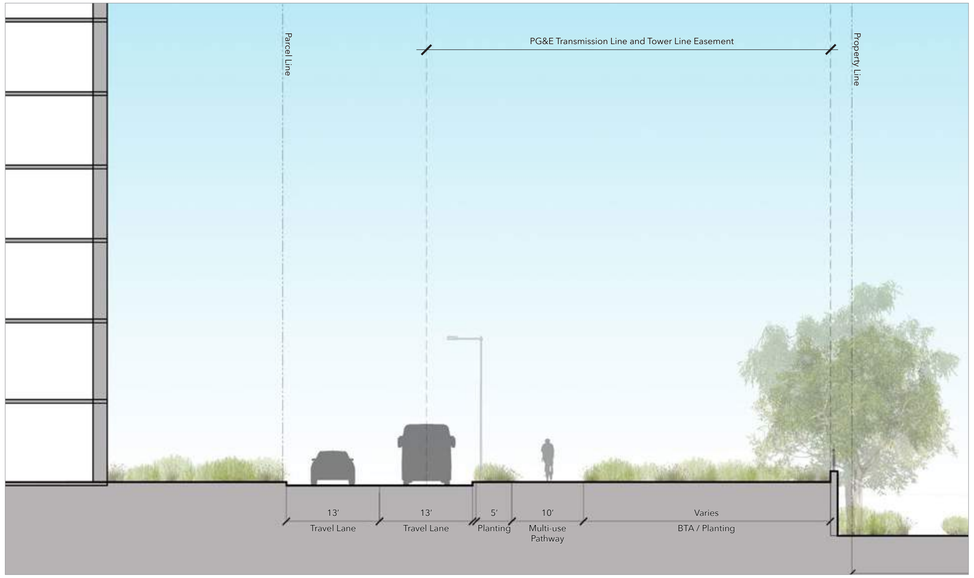
Peninsula Innovation Partners
Conditional Development Permit

WILLOW VILLAGE

Menlo Park, CA

G5.09
Conceptual Street Enlargement - North Loop Road & Multi-use Pathway (A)
December 23, 2021



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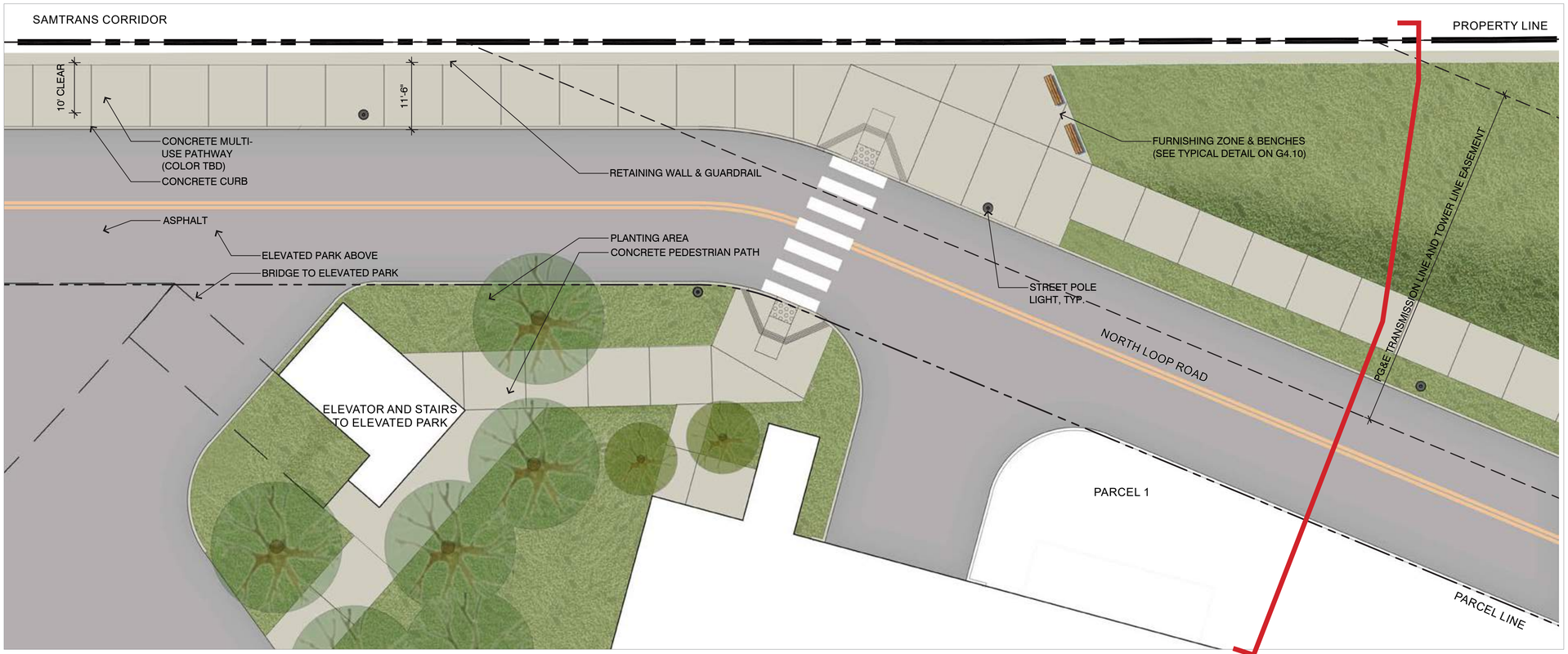

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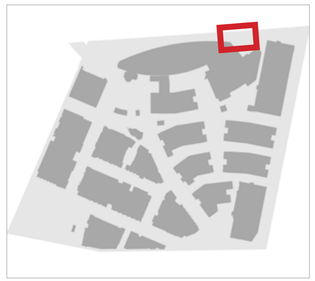


0 10 20 30 40 50

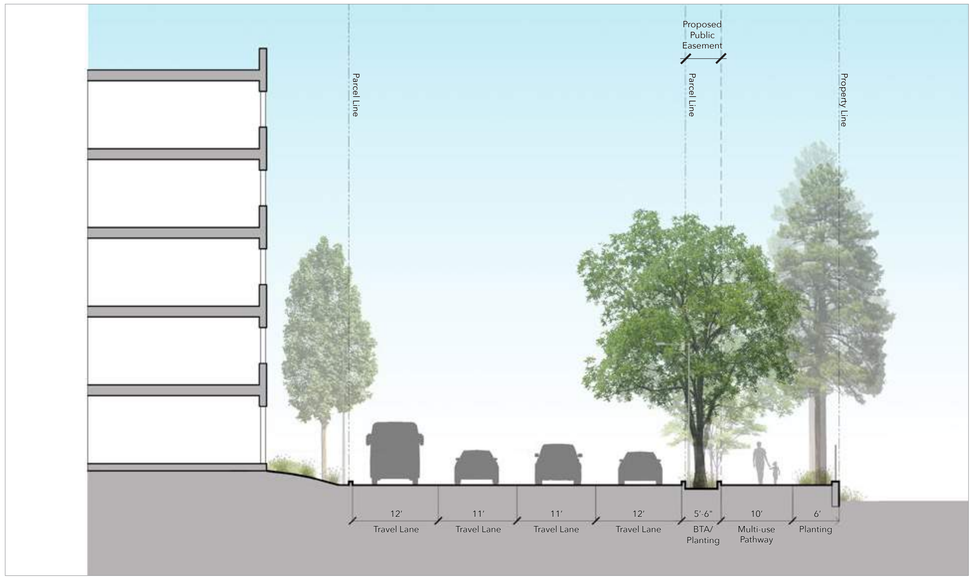
1" = 10' at 24" x 36"

MASTER PLAN
Peninsula Innovation Partners
Conditional Development Permit

WILLOW VILLAGE

Menlo Park, CA

G5.10
Conceptual Street Enlargement - North Loop Road & Multi-use Pathway (B)
December 23, 2021



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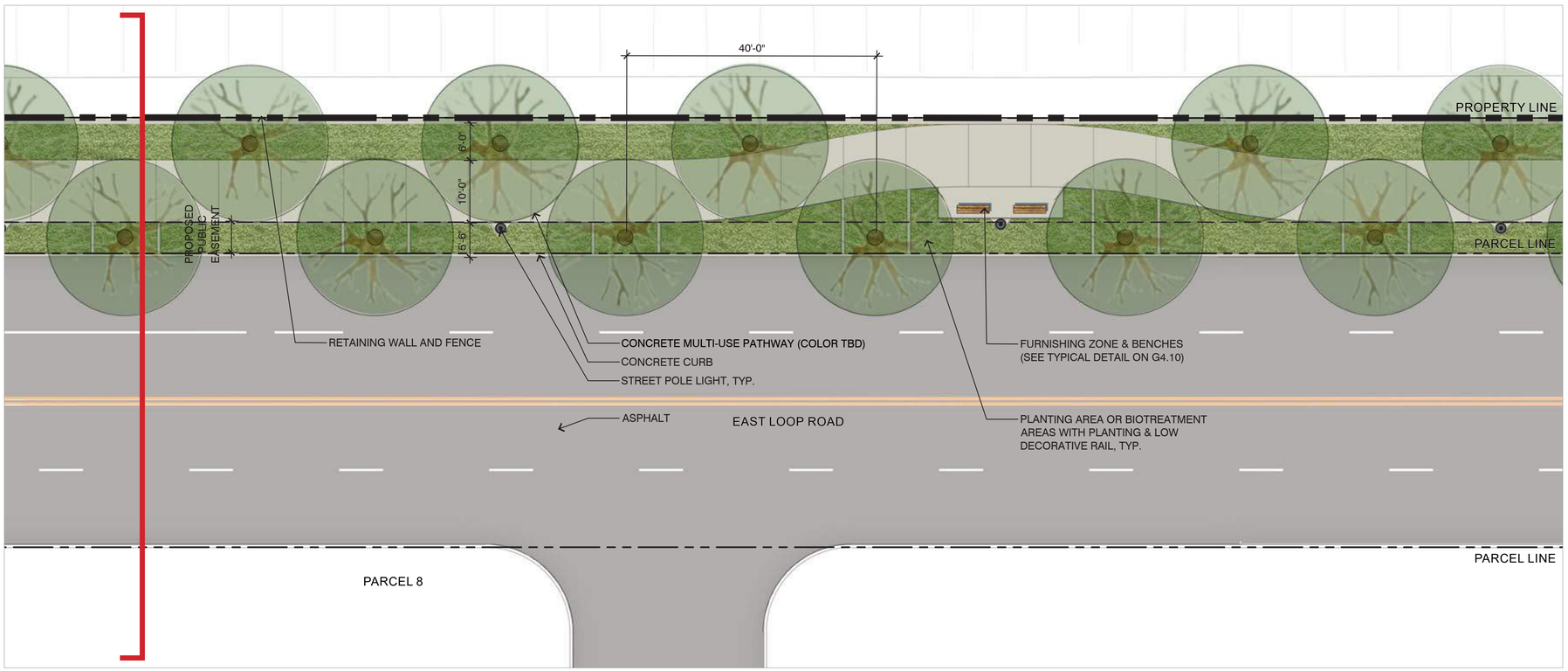
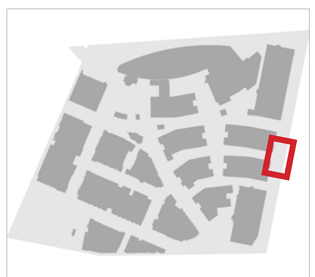


PLAN ENLARGEMENT

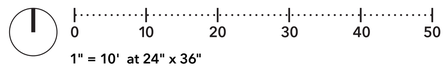


0 10 20 30 40 50

1" = 10' at 24" x 36"

1" = 20' at 24" x 36"

PLAN ENLARGEMENT



PLAN ENLARGEMENT

0 20 40 60 80 100

1" = 20' at 24" x 36"

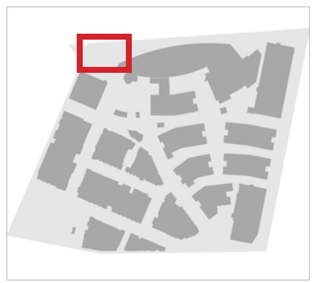
PLAN ENLARGEMENT

MASTER PLAN
Peninsula Innovation Partners
Conditional Development Permit

WILLOW VILLAGE

Menlo Park, CA

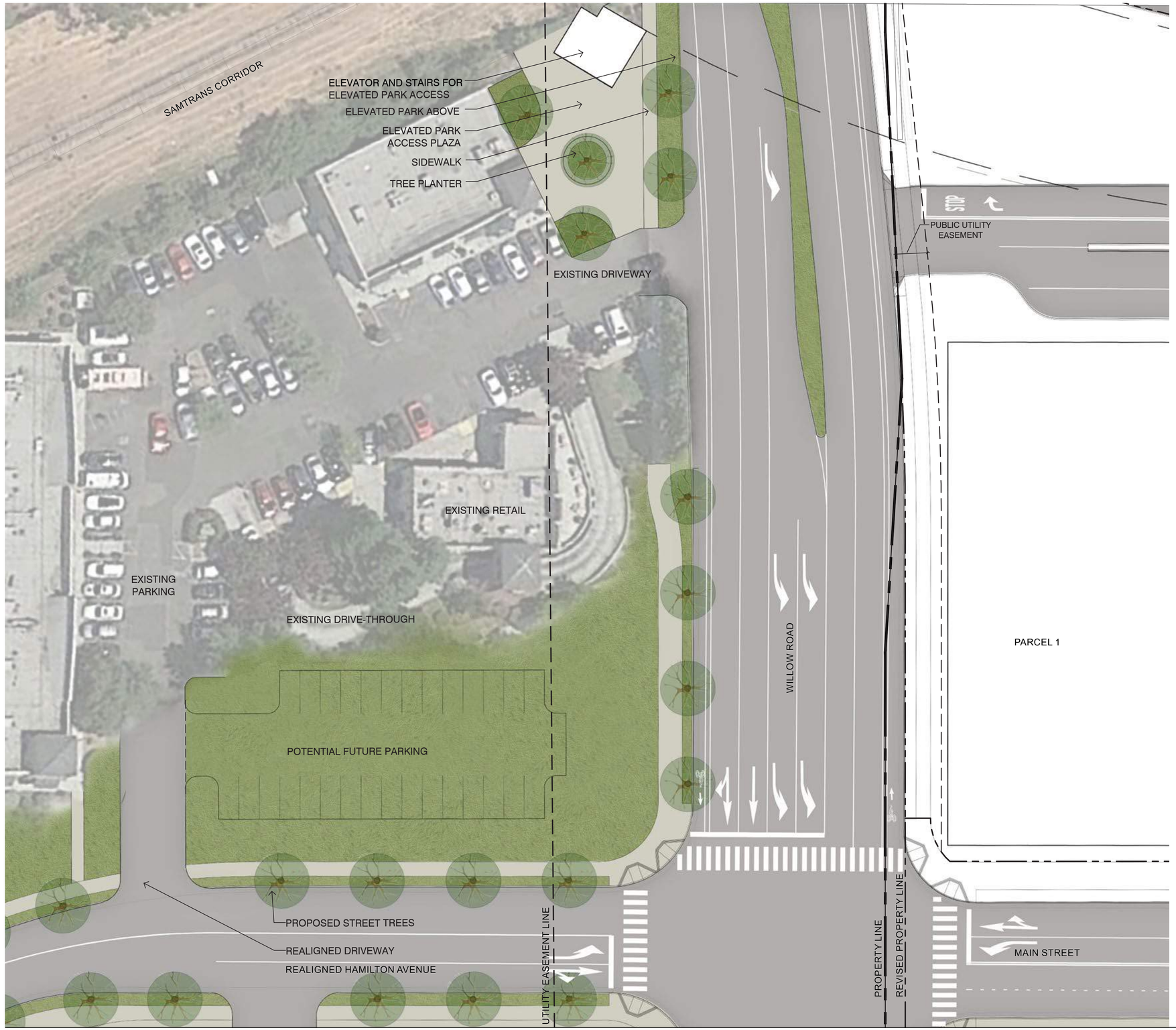
G5.14
Conceptual Willow Road Tunnel / MPK20 Portal
December 23, 2021

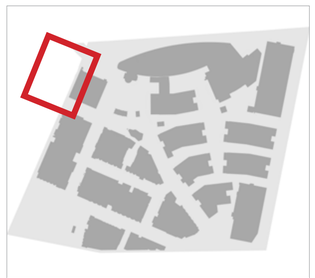


0 20 40 60 80 100

1" = 20' at 24" x 36"

PLAN ENLARGEMENT





0 20 40 60 80 100

1" = 20' at 24" x 36"

MASTER PLAN
Peninsula Innovation Partners
Conditional Development Permit

WILLOW VILLAGE

Menlo Park, CA

G5.17
Conceptual Realigned Hamilton Avenue & Elevated Park Access
December 23, 2021

LEGEND

	BOTANIC NAME (COMMON NAME)	QUANTITY	SIZE	WUCOLS
	Existing Tree to Remain *Pinus canariensis* (Canary Island Pine)	23	-	-
	Alnus rhombifolia (White Alder)	10	48" box	High
	Arbutus 'Marina' (Marina Arbutus)	13	48" box	Low
	Magnolia grandiflora (Southern Magnolia)	21	48" box	Medium
	Pinus canariensis (Canary Island Pine)	33	48" box	Low
	Pistacia chinensis (Chinese Pistache)	2	48" box	Low
	Platanus x *acerifolia* 'Morton Circle' (Exclamation London Plane Tree)	118	48" box	Medium
	Platanus racemosa (California Sycamore)	53	48" box	Medium
	Ulmus parvifolia cv. (Chinese Elm)	38	48" box	Low
	Zelkova serrata cv. (Zelkova)	68	60" box	Medium
	Total Proposed Tree	356		

Note: Structural soil to be used under sidewalk and plaza adjoining street trees.

TREE VALUATION

QUANTITY	UNIT SIZE	UNIT VALUE	VALUE
0	#5	$ 100	$ -
55	#5	$ 200	$ 11,000
369	24" box	$ 400	$ 147,000
103	36" box	$ 1,200	$ 123,000
670	48" box	$ 5,000	$ 3,350,000
110	60" box	$ 7,000	$ 770,000
294	72" box	$ 10,000	$ 2,940,000
12	84" box	$ 12,000	$ 144,000
34	96" box	$ 15,000	$ 510,000
2	108" box	$ 17,000	$ 34,000
2	120" box	$ 20,000	$ 40,000
1,651			$ 8,070,000

Note: Current valuation includes all proposed trees within Willow Village, and excludes the publicly accessible park. Pending park design.

White Alder
Alnus rhombifolia

Marina Arbutus
Arbutus 'Marina'

Southern Magnolia
Magnolia grandiflora

Canary Island Pine
Pinus canariensis

Chinese Pistache
Pistacia chinensis

Exclamation London Plane Tree
Platanus x acerifolia 'Morton Circle'

California Sycamore
Platanus racemosa

Chinese Evergreen Elm
Ulmus parvifolia cv.

Zelkova
Zelkova serrata cv.

WATER USE ESTIMATION & IRRIGATION SCHEDULE - PUBLIC REALM

WATER TYPE	Recycled
CITY	Palo Alto
ETO	43.1
DATE	

Nearest City to project with published ET data

REGULAR LANDSCAPE AREAS

STATION/HYDROZONE	GPM	AREA (sq.ft) (HA)	WATER USE TYPE (LW=LOW, MW=MOD, HW=HIGH)	PLANT TYPE	IRRIGATION TYPE	PLANT FACTOR (PF)	IRRIGATION EFFICIENCY (IE)	PRECIP. RATE/ APPLICATION RATE (IN/HR)	ETAF (PF/IE)	CYCLES PER DAY	DAYS PER WEEK	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEP	OCT	NOV	DEC	ETWU (GALLONS PER YEAR)	PERCENTAGE OF LANDSCAPE
												MONTHLY ETO													
												1.5	1.8	2.8	3.8	5.2	5.3	6.2	5.6	5.0	3.2	1.7	1.0		
												TOTAL RUN TIME IN MINUTES PER DAY													
Trees - Low	0	21737	LW	SHRUB DC LW	DRIP LINE 12"	0.3	0.81	0.9	0.4	2	2	0.0	0.0	8.0	11.0	15.0	15.0	18.0	16.0	14.0	9.0	5.0	0.0	215,132	18%
Trees - Med	0	48086	MW	SHRUB DC LW	DRIP LINE 12"	0.5	0.81	0.9	0.6	2	2	0.0	0.0	14.0	18.0	25.0	25.0	29.0	27.0	24.0	15.0	8.0	0.0	793,182	41%
Trees - High	0	1000	HW	SHRUB DC HW	DRIP LINE 12"	0.8	0.81	0.9	1.0	2	3	0.0	0.0	14.0	19.0	25.0	27.0	31.0	29.0	25.0	15.0	9.0	0.0	26,392	1%
Shrubs	0	53909	LW	SHRUB DC LW	DRIP LINE 12"	0.3	0.81	0.9	0.4	2	2	0.0	0.0	8.0	11.0	15.0	15.0	18.0	16.0	14.0	9.0	5.0	0.0	324,712	28%
BTA	0	14936	LW	SHRUB DC LW	SPRAY	0.3	0.75	1.6	0.4	2	2	0.0	0.0	5.0	7.0	9.0	9.0	11.0	10.0	9.0	6.0	3.0	0.0	159,680	13%
	TOTAL	118,571																					TOTAL	1,554,706	66%

SPECIAL LANDSCAPE AREAS

HYDROZONE #	HYDROZONE NAME	AREA (sq.ft) (HA)	Percentage of Landscape
ALL		118,571	
		118,571	100%

MAWA	GALLONS/YR	3,188,454
	ACRE FEET/YR	9.72
	HCF/YR	4,235.90
ETWU	GALLONS/YR	1,554,706
	ACRE FEET/YR	3.18
	HCF/YR	1,383.30

SITE IRRIGATION EFFICIENCY	SITE PLANT FACTOR	MAWA COMPLIANT
65.4%	0.26	YES

ETAF Calculations

REGULAR LANDSCAPE AREAS	
TOTAL ETAF x AREA	38,721
TOTAL AREA	118,571
AVG. ETAF	32.66%

THE IRRIGATION VALVE SCHEDULE SHOWN ABOVE IS INTENDED TO BE USED AS A GUIDELINE ONLY AND INDICATES THE APPROXIMATE RUN TIMES IN MINUTES FOR EACH VALVE BASED ON ESTIMATED WEEKLY WATER REQUIREMENTS FOR ESTABLISHED PLANT MATERIAL. THE TIMES SHOWN ARE APPROXIMATE AND HAVE BEEN DEVELOPED FROM LOCAL AND CURRENT AVERAGES FOR EVAPOTRANSPIRATION, AND REFLECTIVE WATER REQUIREMENTS OF THE PLANT MATERIAL BASED ON PLANT TYPE AND THE APPROXIMATE PRECIPITATION OR APPLICATION RATES OF THE IRRIGATION SYSTEM TYPE. ACTUAL RUN TIMES MAY BE DIFFERENT DEPENDING ON A VARIETY OF FACTORS INCLUDING TOPOGRAPHY, SOIL STRUCTURE, SUN AND WIND EXPOSURE, WEATHER, ACTUAL PLANT WATER REQUIREMENTS, OVERALL PRECIPITATION RATE OF ZONE, ETC.

MAWA FORMULA
MAXIMUM APPLIED WATER ALLOWANCE (MAWA) GALLONS PER YEAR
MAWA = (ETo)(0.62)(LA x 0.45) + (0.55 x SLA)]

ETo = REFERENCE EVAPOTRANSPIRATION

0.45= ET ADJUSTMENT FACTOR

LA=LANDSCAPED AREA (SQUARE FEET)
0.62 = CONVERSION FACTOR (GALLONS/SQ.FT/YR)

ETWU FORMULA
ESTIMATED TOTAL WATER USE (ETWU) GALLONS PER YEAR
ETWU= (ETO)(.62)(ETAF x LA))

ETo = REFERENCE EVAPOTRANSPIRATION

PF = PLANT FACTOR FOR HYDROZONES

HA = HYDROZONE AREA (SQ.FT)
0.62 = CONVERSION FACTOR (GALLONS/SQ.FT/YR)

IE = IRRIGATION EFFICIENCY (0.81)-BUBBLER/DRIP

IE = IRRIGATION EFFICIENCY (0.75)-ROTORS/SPRAY

California Sycamore
Platanus racemosa

Chinese Evergreen Elm
Ulmus parvifolia cv.

Zelkova
Zelkova serrata cv.

Agave
Agave spp.

Berkeley Sedge
Carex divulsa

Dietes
Dietes spp.

New Zealand Flax
Phormium cv.

Aloe
Aloe spp.

California Wild Lilac
Ceanothus spp.

Grevillea
Grevillea 'Noelii'

Rosemary
Rosmarinus officinalis cv.

Kangaroo Paw
Anigozanthos cv.

Small Cape Rush
Chondropetalum tectorum

Pine Muhly
Muhlenburgia dubia

Sage
Salvia spp.

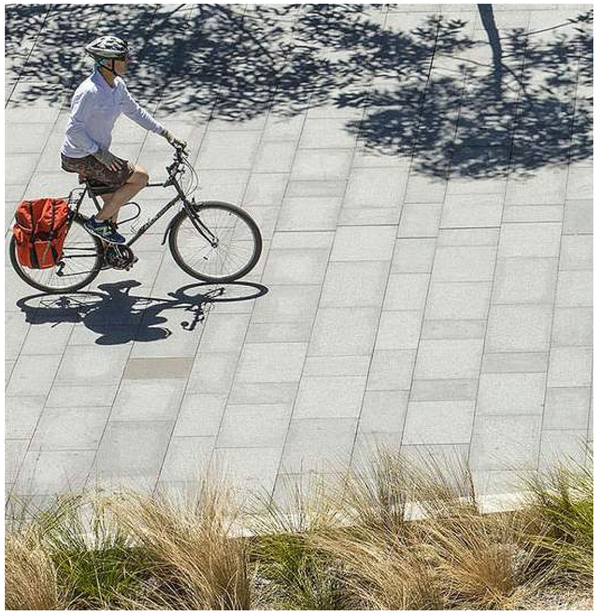
Bench Example

BTA Low Decorative Rail Example

Security Bollard Example

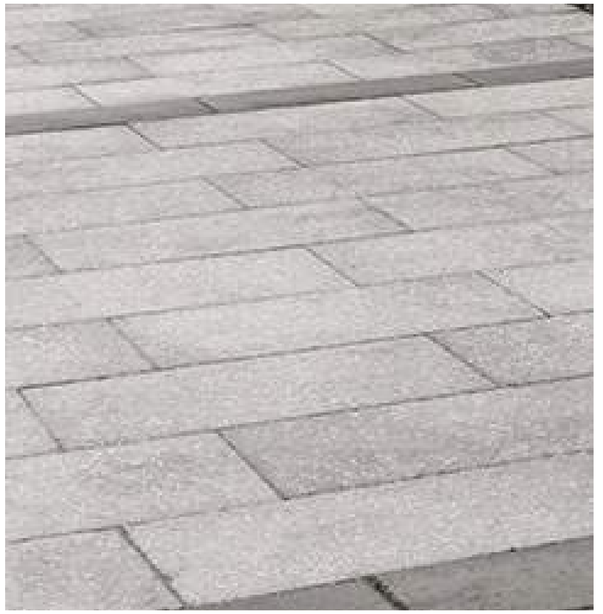
Retractable Bollard Example

Dog Park Raised Tree Planter Example

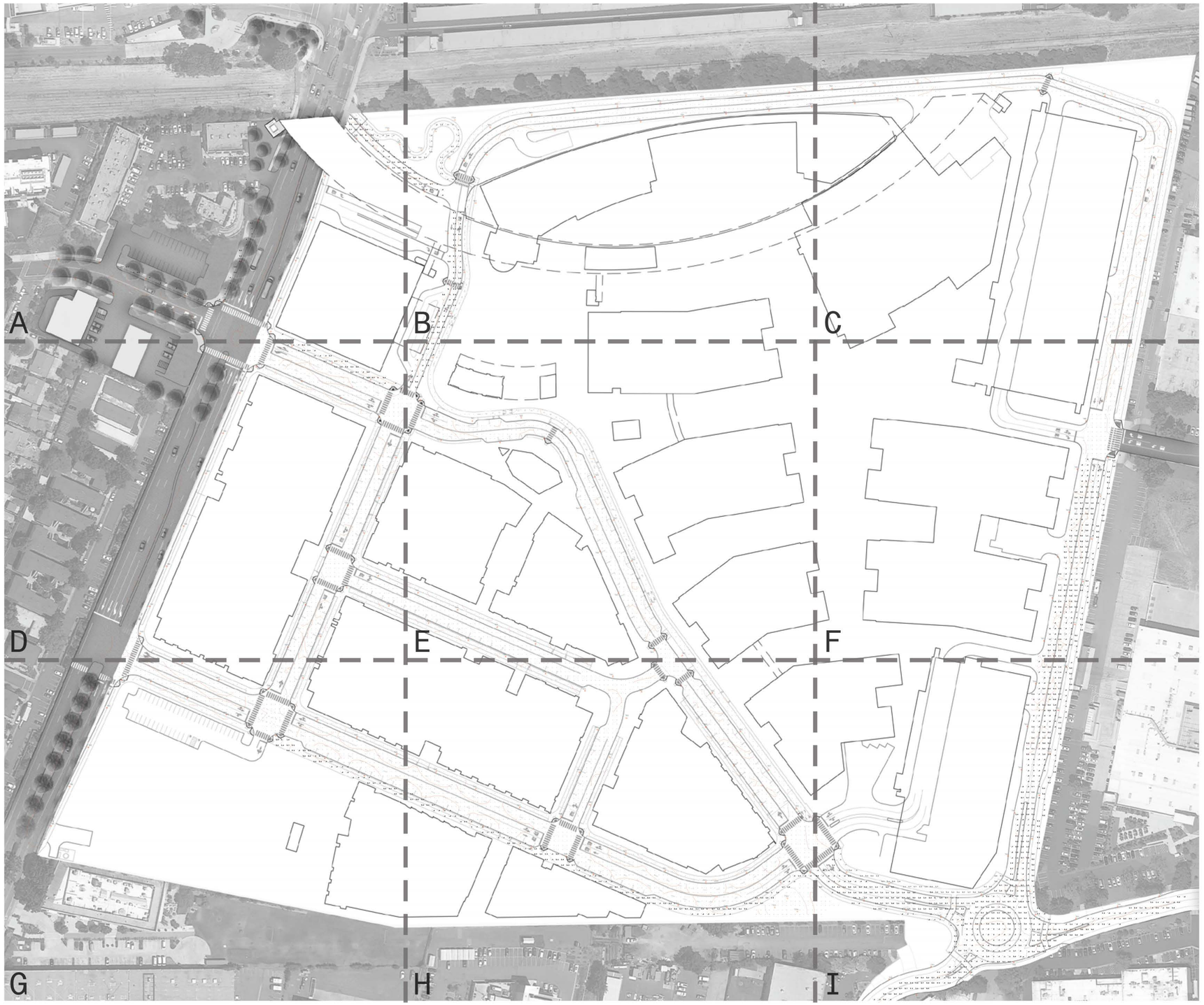


Main Street Paving Example
Unit Pavers (Type A)

Accent Band Example
Unit Pavers (Type B)



Bikeway Example
Unit Pavers (Type C)



0.5 FC 1.6 FC

Calculation Summary
Scene: types

Label	CalcType	Units	Avg	Max	Min	Avg/Min	Max/Min
Bike Path 2 Top	Illuminance	Fc	1.64	5.8	0.2	8.20	29.00
Bike Path new Top	Illuminance	Fc	1.23	4.4	0.2	6.15	22.00
Bike Path North Loop_Top	Illuminance	Fc	0.92	1.7	0.1	9.20	17.00
Dog Park_1_Top	Illuminance	Fc	1.78	4.3	0.1	17.80	43.00
East Loop Road B Top	Illuminance	Fc	0.77	2.0	0.2	3.85	10.00
East Loop Road_Top	Illuminance	Fc	0.66	1.5	0.2	3.30	7.50
Int Center Park_Top	Illuminance	Fc	2.41	4.7	0.6	4.02	7.83
Int Center West Top	Illuminance	Fc	2.97	4.8	0.7	4.24	6.86
Int East Loop Main_Top	Illuminance	Fc	1.72	5.7	0.2	8.60	28.50
Int East Loop_Top	Illuminance	Fc	2.67	4.9	0.5	5.34	9.80
Int Main B Main C Top	Illuminance	Fc	2.60	5.1	0.6	4.33	8.50
Int Main West_Top	Illuminance	Fc	2.63	4.8	0.7	3.76	6.86
Int Park Main Top	Illuminance	Fc	2.19	4.8	0.2	10.95	24.00
Int Park Parc5 Top	Illuminance	Fc	3.13	4.9	1.0	3.13	4.90
Int Willow road Main St A_Top	Illuminance	Fc	2.03	5.0	0.3	6.77	16.67
Multi-use Pathway 2_Top	Illuminance	Fc	0.57	3.3	0.2	2.85	16.50
Multiuse Pathway 1 Top	Illuminance	Fc	0.51	1.4	0.1	5.10	14.00
North Loop Road_Top	Illuminance	Fc	1.08	2.7	0.2	5.40	13.50
O Brien Drive East_Top	Illuminance	Fc	0.84	4.6	0.2	4.20	23.00
O Brien Drive West Top	Illuminance	Fc	1.11	4.6	0.2	5.55	23.00
Ped Parcel 1_Top	Illuminance	Fc	0.72	2.4	0.2	3.60	12.00
Ped Parcel 2_Top	Illuminance	Fc	0.86	3.7	0.2	4.30	18.50
Ped Parcel 3_Top	Illuminance	Fc	0.59	1.1	0.2	2.95	5.50
Ped Parcel 4_Top	Illuminance	Fc	0.66	3.1	0.2	3.30	15.50
Ped Parcel 5_Top	Illuminance	Fc	0.63	3.8	0.2	3.15	19.00
Ped Parcel 6_7_8 Top	Illuminance	Fc	0.84	3.4	0.2	4.20	17.00
Ped Parcel A_Top	Illuminance	Fc	0.70	2.2	0.2	3.50	11.00
Ped Parcel Willow Road West_Top	Illuminance	Fc	0.89	3.6	0.2	4.45	18.00
Road Center Main Top	Illuminance	Fc	0.73	1.7	0.2	3.65	8.50
Road Center St_Top	Illuminance	Fc	0.82	2.9	0.3	2.73	9.67
Road Hamilton Avenue_Top	Illuminance	Fc	0.75	1.6	0.2	3.75	8.00
road Main St A 1 Top	Illuminance	Fc	0.87	2.5	0.4	2.18	6.25
Road Main St B_Top	Illuminance	Fc	0.89	2.6	0.2	4.45	13.00
Road Main St C_Top	Illuminance	Fc	0.95	3.0	0.4	2.38	7.50
Road Main St D_Top	Illuminance	Fc	1.13	3.3	0.2	5.65	16.50
Road Park St A_Top	Illuminance	Fc	0.75	1.7	0.3	2.50	5.67
Road Park St B_Top	Illuminance	Fc	0.61	1.5	0.3	2.03	5.00
Road Park St C Top	Illuminance	Fc	0.68	1.7	0.2	3.40	8.50
Tunnel_Top	Illuminance	Fc	0.75	1.6	0.2	3.75	8.00
West St A_Top	Illuminance	Fc	0.89	3.5	0.2	4.45	17.50
West St B_Top	Illuminance	Fc	0.84	1.8	0.3	2.80	6.00
West St C_Top	Illuminance	Fc	0.74	2.3	0.2	3.70	11.50
Willow Road_Top	Illuminance	Fc	1.36	4.6	0.2	6.80	23.00

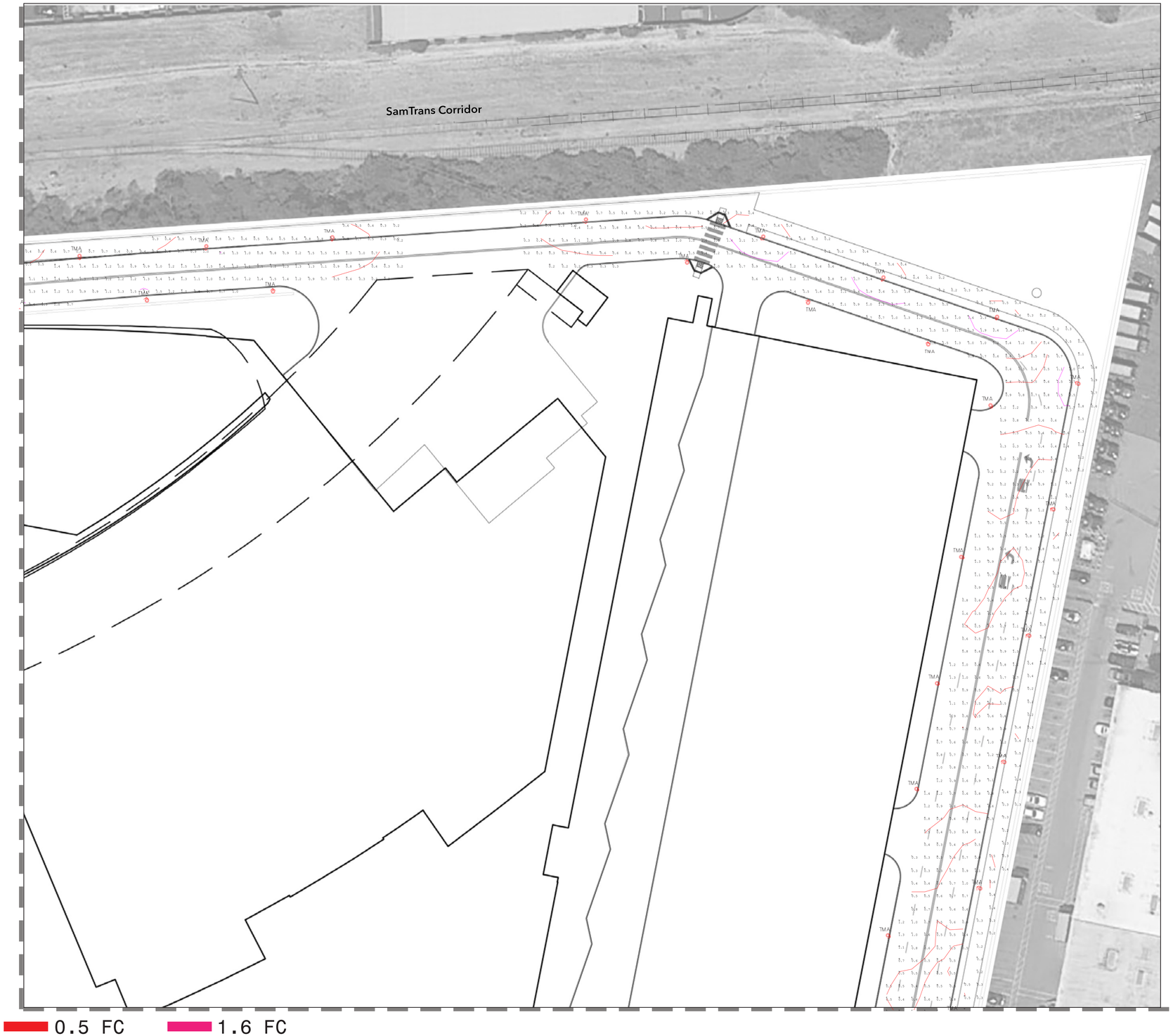
PLAN NOT TO SCALE

Calculation Summary							
Scene: types							
Label	CalcType	Units	Avg	Max	Min	Avg/Min	Max/Min
Bike Path 2 Top	Illuminance	Fc	1.64	5.8	0.2	8.20	29.00
Bike Path new Top	Illuminance	Fc	1.23	4.4	0.2	6.15	22.00
Bike Path North Loop_Top	Illuminance	Fc	0.92	1.7	0.1	9.20	17.00
Dog Park 1 Top	Illuminance	Fc	1.78	4.3	0.1	17.80	43.00
East Loop Road B Top	Illuminance	Fc	0.77	2.0	0.2	3.85	10.00
East Loop Road_Top	Illuminance	Fc	0.66	1.5	0.2	3.30	7.50
Int Center Park_Top	Illuminance	Fc	2.41	4.7	0.6	4.02	7.83
Int Center West Top	Illuminance	Fc	2.97	4.8	0.7	4.24	6.86
Int East Loop Main_Top	Illuminance	Fc	1.72	5.7	0.2	8.60	28.50
Int East Loop_Top	Illuminance	Fc	2.67	4.9	0.5	5.34	9.80
Int Main B Main C Top	Illuminance	Fc	2.60	5.1	0.6	4.33	8.50
Int Main West_Top	Illuminance	Fc	2.63	4.8	0.7	3.76	6.86
Int Park Main Top	Illuminance	Fc	2.19	4.8	0.2	10.95	24.00
Int Park Parc5 Top	Illuminance	Fc	3.13	4.9	1.0	3.13	4.90
Int Willow road Main St A_Top	Illuminance	Fc	2.03	5.0	0.3	6.77	16.67
Multi-use Pathway 2_Top	Illuminance	Fc	0.57	3.3	0.2	2.85	16.50
Multiuse Pathway 1_Top	Illuminance	Fc	0.51	1.4	0.1	5.10	14.00
North Loop Road_Top	Illuminance	Fc	1.08	2.7	0.2	5.40	13.50
O Brien Drive East_Top	Illuminance	Fc	0.84	4.6	0.2	4.20	23.00
O Brien Drive West Top	Illuminance	Fc	1.11	4.6	0.2	5.55	23.00
Ped Parcel 1_Top	Illuminance	Fc	0.72	2.4	0.2	3.60	12.00
Ped Parcel 2_Top	Illuminance	Fc	0.86	3.7	0.2	4.30	18.50
Ped Parcel 3_Top	Illuminance	Fc	0.59	1.1	0.2	2.95	5.50
Ped Parcel 4_Top	Illuminance	Fc	0.66	3.1	0.2	3.30	15.50
Ped Parcel 5_Top	Illuminance	Fc	0.63	3.8	0.2	3.15	19.00
Ped Parcel 6_7_8 Top	Illuminance	Fc	0.84	3.4	0.2	4.20	17.00
Ped Parcel A Top	Illuminance	Fc	0.70	2.2	0.2	3.50	11.00
Ped Parcel Willow Road West_Top	Illuminance	Fc	0.89	3.6	0.2	4.45	18.00
Road Center Main Top	Illuminance	Fc	0.73	1.7	0.2	3.65	8.50
Road Center St_Top	Illuminance	Fc	0.82	2.9	0.3	2.73	9.67
Road Hamilton Avenue_Top	Illuminance	Fc	0.75	1.6	0.2	3.75	8.00
road Main St A 1 Top	Illuminance	Fc	0.87	2.5	0.4	2.18	6.25
Road Main St B_Top	Illuminance	Fc	0.89	2.6	0.2	4.45	13.00
Road Main St C_Top	Illuminance	Fc	0.95	3.0	0.4	2.38	7.50
Road Main St D Top	Illuminance	Fc	1.13	3.3	0.2	5.65	16.50
Road Park St A_Top	Illuminance	Fc	0.75	1.7	0.3	2.50	5.67
Road Park St B_Top	Illuminance	Fc	0.61	1.5	0.3	2.03	5.00
Road Park St C Top	Illuminance	Fc	0.68	1.7	0.2	3.40	8.50
Tunnel Top	Illuminance	Fc	0.75	1.6	0.2	3.75	8.00
West St A_Top	Illuminance	Fc	0.89	3.5	0.2	4.45	17.50
West St B_Top	Illuminance	Fc	0.84	1.8	0.3	2.80	6.00
West St C_Top	Illuminance	Fc	0.74	2.3	0.2	3.70	11.50
Willow Road_Top	Illuminance	Fc	1.36	4.6	0.2	6.80	23.00

PLAN NOT TO SCALE

Calculation Summary							
Scene: types							
Label	CalcType	Units	Avg	Max	Min	Avg/Min	Max/Min
Bike Path 2_Top	Illuminance	Fc	1.64	5.8	0.2	8.20	29.00
Bike Path new_Top	Illuminance	Fc	1.23	4.4	0.2	6.15	22.00
Bike Path North Loop_Top	Illuminance	Fc	0.92	1.7	0.1	9.20	17.00
Dog Park_1_Top	Illuminance	Fc	1.78	4.3	0.1	17.80	43.00
East Loop Road B_Top	Illuminance	Fc	0.77	2.0	0.2	3.85	10.00
East Loop Road_Top	Illuminance	Fc	0.66	1.5	0.2	3.30	7.50
Int Center Park_Top	Illuminance	Fc	2.41	4.7	0.6	4.02	7.83
Int Center West_Top	Illuminance	Fc	2.97	4.8	0.7	4.24	6.86
Int East Loop Main_Top	Illuminance	Fc	1.72	5.7	0.2	8.60	28.50
Int East Loop_Top	Illuminance	Fc	2.67	4.9	0.5	5.34	9.80
Int Main B Main C_Top	Illuminance	Fc	2.60	5.1	0.6	4.33	8.50
Int Main West_Top	Illuminance	Fc	2.63	4.8	0.7	3.76	6.86
Int Park Main_Top	Illuminance	Fc	2.19	4.8	0.2	10.95	24.00
Int Park Parc5_Top	Illuminance	Fc	3.13	4.9	1.0	3.13	4.90
Int Willow road Main St A_Top	Illuminance	Fc	2.03	5.0	0.3	6.77	16.67
Multi-use Pathway 2_Top	Illuminance	Fc	0.57	3.3	0.2	2.85	16.50
Multiuse Pathway 1_Top	Illuminance	Fc	0.51	1.4	0.1	5.10	14.00
North Loop Road_Top	Illuminance	Fc	1.08	2.7	0.2	5.40	13.50
O Brien Drive East_Top	Illuminance	Fc	0.84	4.6	0.2	4.20	23.00
O Brien Drive West_Top	Illuminance	Fc	1.11	4.6	0.2	5.55	23.00
Ped Parcel 1_Top	Illuminance	Fc	0.72	2.4	0.2	3.60	12.00
Ped Parcel 2_Top	Illuminance	Fc	0.86	3.7	0.2	4.30	18.50
Ped Parcel 3_Top	Illuminance	Fc	0.59	1.1	0.2	2.95	5.50
Ped Parcel 4_Top	Illuminance	Fc	0.66	3.1	0.2	3.30	15.50
Ped Parcel 5_Top	Illuminance	Fc	0.63	2.8	0.2	3.15	19.00
Ped Parcel 6 7 8_Top	Illuminance	Fc	0.84	3.4	0.2	4.20	17.00
Ped Parcel A_Top	Illuminance	Fc	0.70	2.2	0.2	3.50	11.00
Ped Parcel Willow Road West_Top	Illuminance	Fc	0.89	3.6	0.2	4.45	18.00
Road Center Main_Top	Illuminance	Fc	0.73	1.7	0.2	3.65	8.50
Road Center St_Top	Illuminance	Fc	0.82	2.9	0.3	2.73	9.67
Road Hamilton Avenue_Top	Illuminance	Fc	0.75	1.6	0.2	3.75	8.00
road Main St A_1_Top	Illuminance	Fc	0.87	2.5	0.4	2.18	6.25
Road Main St B_Top	Illuminance	Fc	0.89	2.6	0.2	4.45	13.00
Road Main St C_Top	Illuminance	Fc	0.95	3.0	0.4	2.38	7.50
Road Main St D_Top	Illuminance	Fc	1.13	3.3	0.2	5.65	16.50
Road Park St A_Top	Illuminance	Fc	0.75	1.7	0.3	2.50	5.67
Road Park St B_Top	Illuminance	Fc	0.61	1.5	0.3	2.03	5.00
Road Park St C_Top	Illuminance	Fc	0.68	1.7	0.2	3.40	8.50
Tunnel_Top	Illuminance	Fc	0.75	1.6	0.2	3.75	8.00
West St A_Top	Illuminance	Fc	0.89	3.5	0.2	4.45	17.50
West St B_Top	Illuminance	Fc	0.84	1.8	0.3	2.80	6.00
West St C_Top	Illuminance	Fc	0.74	2.3	0.2	3.70	11.50
Willow Road_Top	Illuminance	Fc	1.36	4.6	0.2	6.80	23.00

PLAN NOT TO SCALE



Calculation Summary							
Scene: types							
Label	CalcType	Units	Avg	Max	Min	Avg/Min	Max/Min
Bike Path 2_Top	Illuminance	Fc	1.64	5.8	0.2	8.20	29.00
Bike Path new_Top	Illuminance	Fc	1.23	4.4	0.2	6.15	22.00
Bike Path North Loop_Top	Illuminance	Fc	0.92	1.7	0.1	9.20	17.00
Dog Park 1_Top	Illuminance	Fc	1.78	4.3	0.1	17.80	43.00
East Loop Road B_Top	Illuminance	Fc	0.77	2.0	0.2	3.85	10.00
East Loop Road_Top	Illuminance	Fc	0.66	1.5	0.2	3.30	7.50
Int Center Park_Top	Illuminance	Fc	2.41	4.7	0.6	4.02	7.83
Int Center West_Top	Illuminance	Fc	2.97	4.8	0.7	4.24	6.86
Int East Loop Main_Top	Illuminance	Fc	1.72	5.7	0.2	8.60	28.50
Int East Loop_Top	Illuminance	Fc	2.67	4.9	0.5	5.34	9.80
Int Main B Main C_Top	Illuminance	Fc	2.60	5.1	0.6	4.33	8.50
Int Main West_Top	Illuminance	Fc	2.63	4.8	0.7	3.76	6.86
Int Park Main_Top	Illuminance	Fc	2.19	4.8	0.2	10.95	24.00
Int Parc5_Top	Illuminance	Fc	3.13	4.9	1.0	3.13	4.90
Int Willow road Main St A_Top	Illuminance	Fc	2.03	5.0	0.3	6.77	16.67
Multi-use Pathway 2_Top	Illuminance	Fc	0.57	3.3	0.2	2.85	16.50
Multiuse Pathway 1_Top	Illuminance	Fc	0.51	1.4	0.1	5.10	14.00
North Loop Road_Top	Illuminance	Fc	1.08	2.7	0.2	5.40	13.50
O Brien Drive East_Top	Illuminance	Fc	0.84	4.6	0.2	4.20	23.00
O Brien Drive West_Top	Illuminance	Fc	1.11	4.6	0.2	5.55	23.00
Ped Parcel 1_Top	Illuminance	Fc	0.72	2.4	0.2	3.60	12.00
Ped Parcel 2_Top	Illuminance	Fc	0.86	3.7	0.2	4.30	18.50
Ped Parcel 3_Top	Illuminance	Fc	0.59	1.1	0.2	2.95	5.50
Ped Parcel 4_Top	Illuminance	Fc	0.66	3.1	0.2	3.30	15.50
Ped Parcel 5_Top	Illuminance	Fc	0.63	3.8	0.2	3.15	19.00
Ped Parcel 6_7_8_Top	Illuminance	Fc	0.84	3.4	0.2	4.20	17.00
Ped Parcel A_Top	Illuminance	Fc	0.70	2.2	0.2	3.50	11.00
Ped Parcel Willow Road West_Top	Illuminance	Fc	0.89	3.6	0.2	4.45	18.00
Road Center Main_Top	Illuminance	Fc	0.73	1.7	0.2	3.65	8.50
Road Center St_Top	Illuminance	Fc	0.82	2.9	0.3	2.73	9.67
Road Hamilton Avenue_Top	Illuminance	Fc	0.75	1.6	0.2	3.75	8.00
road Main St A_1_Top	Illuminance	Fc	0.87	2.5	0.4	2.18	6.25
Road Main St B_Top	Illuminance	Fc	0.89	2.6	0.2	4.45	13.00
Road Main St C_Top	Illuminance	Fc	0.95	3.0	0.4	2.38	7.50
Road Main St D_Top	Illuminance	Fc	1.13	3.3	0.2	5.65	16.50
Road Park St A_Top	Illuminance	Fc	0.75	1.7	0.3	2.50	5.67
Road Park St B_Top	Illuminance	Fc	0.61	1.5	0.3	2.03	5.00
Road Park St C_Top	Illuminance	Fc	0.68	1.7	0.2	3.40	8.50
Tunnel_Top	Illuminance	Fc	0.75	1.6	0.2	3.75	8.00
West St A_Top	Illuminance	Fc	0.89	3.5	0.2	4.45	17.50
West St B_Top	Illuminance	Fc	0.84	1.8	0.3	2.80	6.00
West St C_Top	Illuminance	Fc	0.74	2.3	0.2	3.70	11.50
Willow Road_Top	Illuminance	Fc	1.36	4.6	0.2	6.80	23.00

PLAN NOT TO SCALE

MASTER PLAN
Peninsula Innovation Partners
Conditional Development Permit

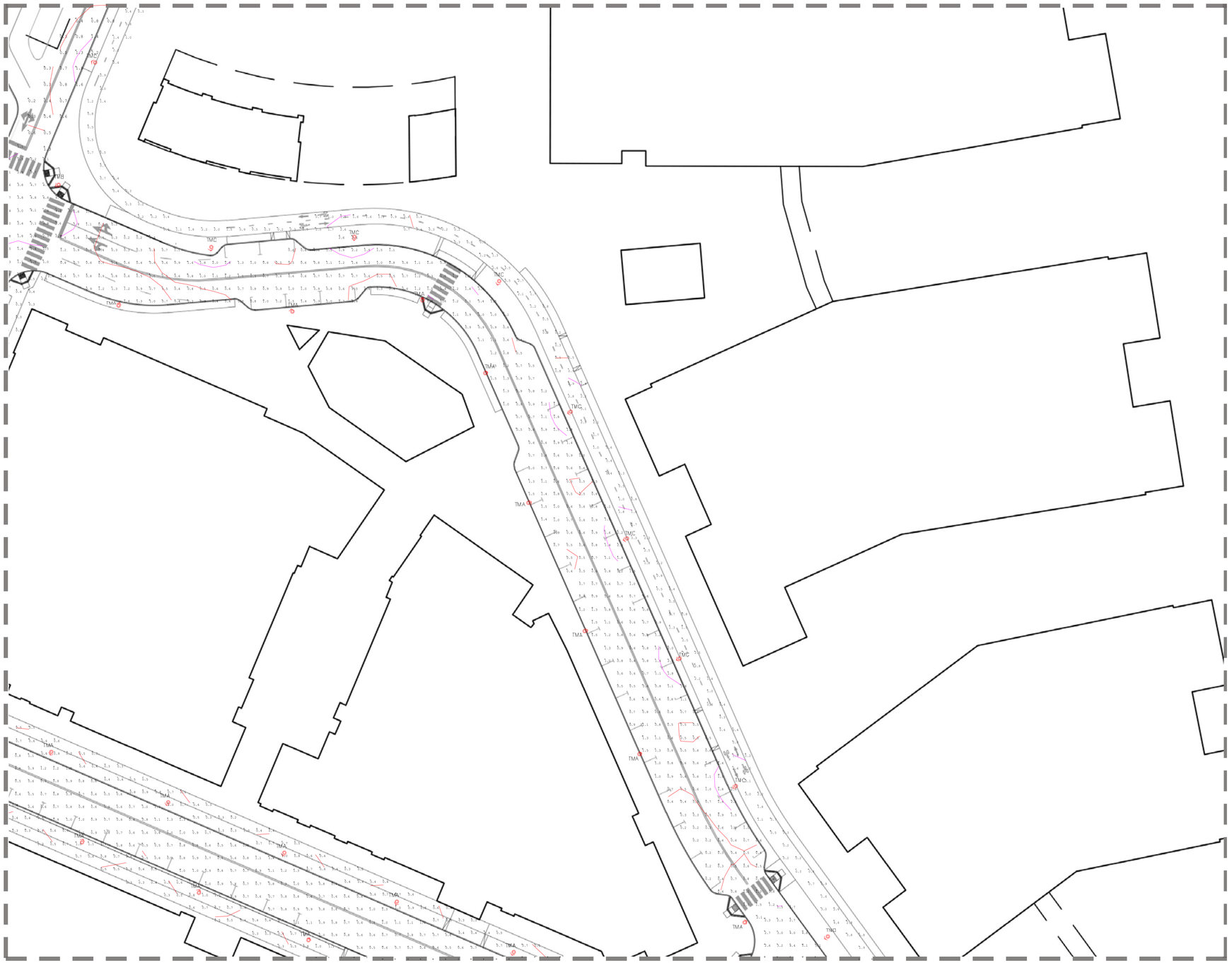
WILLOW VILLAGE

Menlo Park, CA

G5.25
Conceptual Lighting Plan: Quadrant C
December 23, 2021

Calculation Summary							
Scene: types							
Label	CalcType	Units	Avg	Max	Min	Avg/Min	Max/Min
Bike Path 2 Top	Illuminance	Fc	1.64	5.8	0.2	8.20	29.00
Bike Path new Top	Illuminance	Fc	1.23	4.4	0.2	6.15	22.00
Bike Path North Loop_Top	Illuminance	Fc	0.92	1.7	0.1	9.20	17.00
Dog Park_1 Top	Illuminance	Fc	1.78	4.3	0.1	17.80	43.00
East Loop Road B Top	Illuminance	Fc	0.77	2.0	0.2	3.85	10.00
East Loop Road_Top	Illuminance	Fc	0.66	1.5	0.2	3.30	7.50
Int Center Park_Top	Illuminance	Fc	2.41	4.7	0.6	4.02	7.83
Int Center West_Top	Illuminance	Fc	2.97	4.8	0.7	4.24	6.86
Int East Loop Main_Top	Illuminance	Fc	1.72	5.7	0.2	8.60	28.50
Int East Loop_Top	Illuminance	Fc	2.67	4.9	0.5	5.34	9.80
Int Main B Main C Top	Illuminance	Fc	2.60	5.1	0.6	4.33	8.50
Int Main West_Top	Illuminance	Fc	2.63	4.8	0.7	3.76	6.86
Int Park Main_Top	Illuminance	Fc	2.19	4.8	0.2	10.95	24.00
Int Park Parc5 Top	Illuminance	Fc	3.13	4.9	1.0	3.13	4.90
Int Willow road Main St A_Top	Illuminance	Fc	2.03	5.0	0.3	6.77	16.67
Multi-use Pathway_2 Top	Illuminance	Fc	0.57	3.3	0.2	2.85	16.50
Multiuse Pathway 1 Top	Illuminance	Fc	0.51	1.4	0.1	5.10	14.00
North Loop Road_Top	Illuminance	Fc	1.08	2.7	0.2	5.40	13.50
O Brien Drive East_Top	Illuminance	Fc	0.84	4.6	0.2	4.20	23.00
O Brien Drive West Top	Illuminance	Fc	1.11	4.6	0.2	5.55	23.00
Ped Parcel 1_Top	Illuminance	Fc	0.72	2.4	0.2	3.60	12.00
Ped Parcel 2_Top	Illuminance	Fc	0.86	3.7	0.2	4.30	18.50
Ped Parcel 3 Top	Illuminance	Fc	0.59	1.1	0.2	2.95	5.50
Ped Parcel 4_Top	Illuminance	Fc	0.66	3.1	0.2	3.30	15.50
Ped Parcel 5_Top	Illuminance	Fc	0.63	3.8	0.2	3.15	19.00
Ped Parcel 6 7 8 Top	Illuminance	Fc	0.84	3.4	0.2	4.20	17.00
Ped Parcel A_Top	Illuminance	Fc	0.70	2.2	0.2	3.50	11.00
Ped Parcel Wllow Road West_Top	Illuminance	Fc	0.89	3.6	0.2	4.45	18.00
Road Center Main Top	Illuminance	Fc	0.73	1.7	0.2	3.65	8.50
Road Center St_Top	Illuminance	Fc	0.82	2.9	0.3	2.73	9.67
Road Hamilton Avenue_Top	Illuminance	Fc	0.75	1.6	0.2	3.75	8.00
road Main St A 1 Top	Illuminance	Fc	0.87	2.5	0.4	2.18	6.25
Road Main St B_Top	Illuminance	Fc	0.89	2.6	0.2	4.45	13.00
Road Main St C_Top	Illuminance	Fc	0.95	3.0	0.4	2.38	7.50
Road Main St D Top	Illuminance	Fc	1.13	3.3	0.2	5.65	16.50
Road Park St A_Top	Illuminance	Fc	0.75	1.7	0.3	2.50	5.67
Road Park St B_Top	Illuminance	Fc	0.61	1.5	0.3	2.03	5.00
Road Park St C Top	Illuminance	Fc	0.68	1.7	0.2	3.40	8.50
Tunnel_Top	Illuminance	Fc	0.75	1.6	0.2	3.75	8.00
West St A_Top	Illuminance	Fc	0.89	3.5	0.2	4.45	17.50
West St B_Top	Illuminance	Fc	0.84	1.8	0.3	2.80	6.00
West St C_Top	Illuminance	Fc	0.74	2.3	0.2	3.70	11.50
Willow Road_Top	Illuminance	Fc	1.36	4.6	0.2	6.80	23.00

PLAN NOT TO SCALE



Calculation Summary							
Scene: types							
Label	CalcType	Units	Avg	Max	Min	Avg/Min	Max/Min
Bike Path 2_Top	Illuminance	Fc	1.64	5.8	0.2	8.20	29.00
Bike Path new_Top	Illuminance	Fc	1.23	4.4	0.2	6.15	22.00
Bike Path North Loop_Top	Illuminance	Fc	0.92	1.7	0.1	9.20	17.00
Dog Park 1_Top	Illuminance	Fc	1.78	4.3	0.1	17.80	43.00
East Loop Road B_Top	Illuminance	Fc	0.77	2.0	0.2	3.85	10.00
East Loop Road_Top	Illuminance	Fc	0.66	1.5	0.2	3.30	7.50
Int Center Park_Top	Illuminance	Fc	2.41	4.7	0.6	4.02	7.83
Int Center West_Top	Illuminance	Fc	2.97	4.8	0.7	4.24	6.86
Int East Loop Main_Top	Illuminance	Fc	1.72	5.7	0.2	8.60	28.50
Int East Loop_Top	Illuminance	Fc	2.67	4.9	0.5	5.34	9.80
Int Main B Main C_Top	Illuminance	Fc	2.60	5.1	0.6	4.33	8.50
Int Main West_Top	Illuminance	Fc	2.63	4.8	0.7	3.76	6.86
Int Park Main_Top	Illuminance	Fc	2.19	4.8	0.2	10.95	24.00
Int Park Parc5_Top	Illuminance	Fc	3.13	4.9	1.0	3.13	4.90
Int Willow road Main St A_Top	Illuminance	Fc	2.03	5.0	0.3	6.77	16.67
Multi-use Pathway 2_Top	Illuminance	Fc	0.57	3.3	0.2	2.85	16.50
Multiuse Pathway 1_Top	Illuminance	Fc	0.51	1.4	0.1	5.10	14.00
North Loop Road_Top	Illuminance	Fc	1.08	2.7	0.2	5.40	13.50
O Brien Drive East_Top	Illuminance	Fc	0.84	4.6	0.2	4.20	23.00
O Brien Drive West_Top	Illuminance	Fc	1.11	4.6	0.2	5.55	23.00
Ped Parcel 1_Top	Illuminance	Fc	0.72	2.4	0.2	3.60	12.00
Ped Parcel 2_Top	Illuminance	Fc	0.86	3.7	0.2	4.30	18.50
Ped Parcel 3_Top	Illuminance	Fc	0.59	1.1	0.2	2.95	5.50
Ped Parcel 4_Top	Illuminance	Fc	0.66	3.1	0.2	3.30	15.50
Ped Parcel 5_Top	Illuminance	Fc	0.63	3.8	0.2	3.15	19.00
Ped Parcel 6_7_8_Top	Illuminance	Fc	0.84	3.4	0.2	4.20	17.00
Ped Parcel A_Top	Illuminance	Fc	0.70	2.2	0.2	3.50	11.00
Ped Parcel Willow Road West_Top	Illuminance	Fc	0.89	3.6	0.2	4.45	18.00
Road Center Main_Top	Illuminance	Fc	0.73	1.7	0.2	3.65	8.50
Road Center St_Top	Illuminance	Fc	0.82	2.9	0.3	2.73	9.67
Road Hamilton Avenue_Top	Illuminance	Fc	0.75	1.6	0.2	3.75	8.00
road Main St A_1_Top	Illuminance	Fc	0.87	2.5	0.4	2.18	6.25
Road Main St B_Top	Illuminance	Fc	0.89	2.6	0.2	4.45	13.00
Road Main St C_Top	Illuminance	Fc	0.95	3.0	0.4	2.38	7.50
Road Main St D_Top	Illuminance	Fc	1.13	3.3	0.2	5.65	16.50
Road Park St A_Top	Illuminance	Fc	0.75	1.7	0.3	2.50	5.67
Road Park St B_Top	Illuminance	Fc	0.61	1.5	0.3	2.03	5.00
Road Park St C_Top	Illuminance	Fc	0.68	1.7	0.2	3.40	8.50
Tunnel_Top	Illuminance	Fc	0.75	1.6	0.2	3.75	8.00
West St A_Top	Illuminance	Fc	0.89	3.5	0.2	4.45	17.50
West St B_Top	Illuminance	Fc	0.84	1.8	0.3	2.80	6.00
West St C_Top	Illuminance	Fc	0.74	2.3	0.2	3.70	11.50
Willow Road_Top	Illuminance	Fc	1.36	4.6	0.2	6.80	23.00

PLAN NOT TO SCALE

MASTER PLAN
Peninsula Innovation Partners
Conditional Development Permit

WILLOW VILLAGE

Menlo Park, CA

G5.27
Conceptual Lighting Plan: Quadrant E
December 23, 2021

Calculation Summary							
Scene: types							
Label	CalcType	Units	Avg	Max	Min	Avg/Min	Max/Min
Bike Path 2_Top	Illuminance	Fc	1.64	5.8	0.2	8.20	29.00
Bike Path new_Top	Illuminance	Fc	1.23	4.4	0.2	6.15	22.00
Bike Path North Loop_Top	Illuminance	Fc	0.92	1.7	0.1	9.20	17.00
Dog Park_1_Top	Illuminance	Fc	1.78	4.3	0.1	17.80	43.00
East Loop Road B_Top	Illuminance	Fc	0.77	2.0	0.2	3.85	10.00
East Loop Road_Top	Illuminance	Fc	0.66	1.5	0.2	3.30	7.50
Int Center Park_Top	Illuminance	Fc	2.41	4.7	0.6	4.02	7.83
Int Center West_Top	Illuminance	Fc	2.97	4.8	0.7	4.24	6.86
Int East Loop Main_Top	Illuminance	Fc	1.72	5.7	0.2	8.60	28.50
Int East Loop_Top	Illuminance	Fc	2.67	4.9	0.5	5.34	9.80
Int Main B Main C_Top	Illuminance	Fc	2.60	5.1	0.6	4.33	8.50
Int Main West_Top	Illuminance	Fc	2.63	4.8	0.7	3.76	6.86
Int Park Main_Top	Illuminance	Fc	2.19	4.8	0.2	10.95	24.00
Int Park Parc5_Top	Illuminance	Fc	3.13	4.9	1.0	3.13	4.90
Int Willow road Main St A_Top	Illuminance	Fc	2.03	5.0	0.3	6.77	16.67
Multi-use Pathway 2_Top	Illuminance	Fc	0.57	3.3	0.2	2.85	16.50
Multiuse Pathway 1_Top	Illuminance	Fc	0.51	1.4	0.1	5.10	14.00
North Loop Road_Top	Illuminance	Fc	1.08	2.7	0.2	5.40	13.50
O Brien Drive East_Top	Illuminance	Fc	0.84	4.6	0.2	4.20	23.00
O Brien Drive West_Top	Illuminance	Fc	1.11	4.6	0.2	5.55	23.00
Ped Parcel 1_Top	Illuminance	Fc	0.72	2.4	0.2	3.60	12.00
Ped Parcel 2_Top	Illuminance	Fc	0.86	3.7	0.2	4.30	18.50
Ped Parcel 3_Top	Illuminance	Fc	0.59	1.1	0.2	2.95	5.50
Ped Parcel 4_Top	Illuminance	Fc	0.66	3.1	0.2	3.30	15.50
Ped Parcel 5_Top	Illuminance	Fc	0.63	3.8	0.2	3.15	19.00
Ped Parcel 6_7_8_Top	Illuminance	Fc	0.84	3.4	0.2	4.20	17.00
Ped Parcel A_Top	Illuminance	Fc	0.70	2.2	0.2	3.50	11.00
Ped Parcel Willow Road West_Top	Illuminance	Fc	0.89	3.6	0.2	4.45	18.00
Road Center Main_Top	Illuminance	Fc	0.73	1.7	0.2	3.65	8.50
Road Center St_Top	Illuminance	Fc	0.82	2.9	0.3	2.73	9.67
Road Hamilton Avenue_Top	Illuminance	Fc	0.75	1.6	0.2	3.75	8.00
road Main St A_1_Top	Illuminance	Fc	0.87	2.5	0.4	2.18	6.25
Road Main St B_Top	Illuminance	Fc	0.89	2.6	0.2	4.45	13.00
Road Main St C_Top	Illuminance	Fc	0.95	3.0	0.4	2.38	7.50
Road Main St D_Top	Illuminance	Fc	1.13	3.3	0.2	5.65	16.50
Road Park St A_Top	Illuminance	Fc	0.75	1.7	0.3	2.50	5.67
Road Park St B_Top	Illuminance	Fc	0.61	1.5	0.3	2.03	5.00
Road Park St C_Top	Illuminance	Fc	0.68	1.7	0.2	3.40	8.50
Tunnel_Top	Illuminance	Fc	0.75	1.6	0.2	3.75	8.00
West St A_Top	Illuminance	Fc	0.89	3.5	0.2	4.45	17.50
West St B_Top	Illuminance	Fc	0.84	1.8	0.3	2.80	6.00
West St C_Top	Illuminance	Fc	0.74	2.3	0.2	3.70	11.50
Willow Road_Top	Illuminance	Fc	1.36	4.6	0.2	6.80	23.00

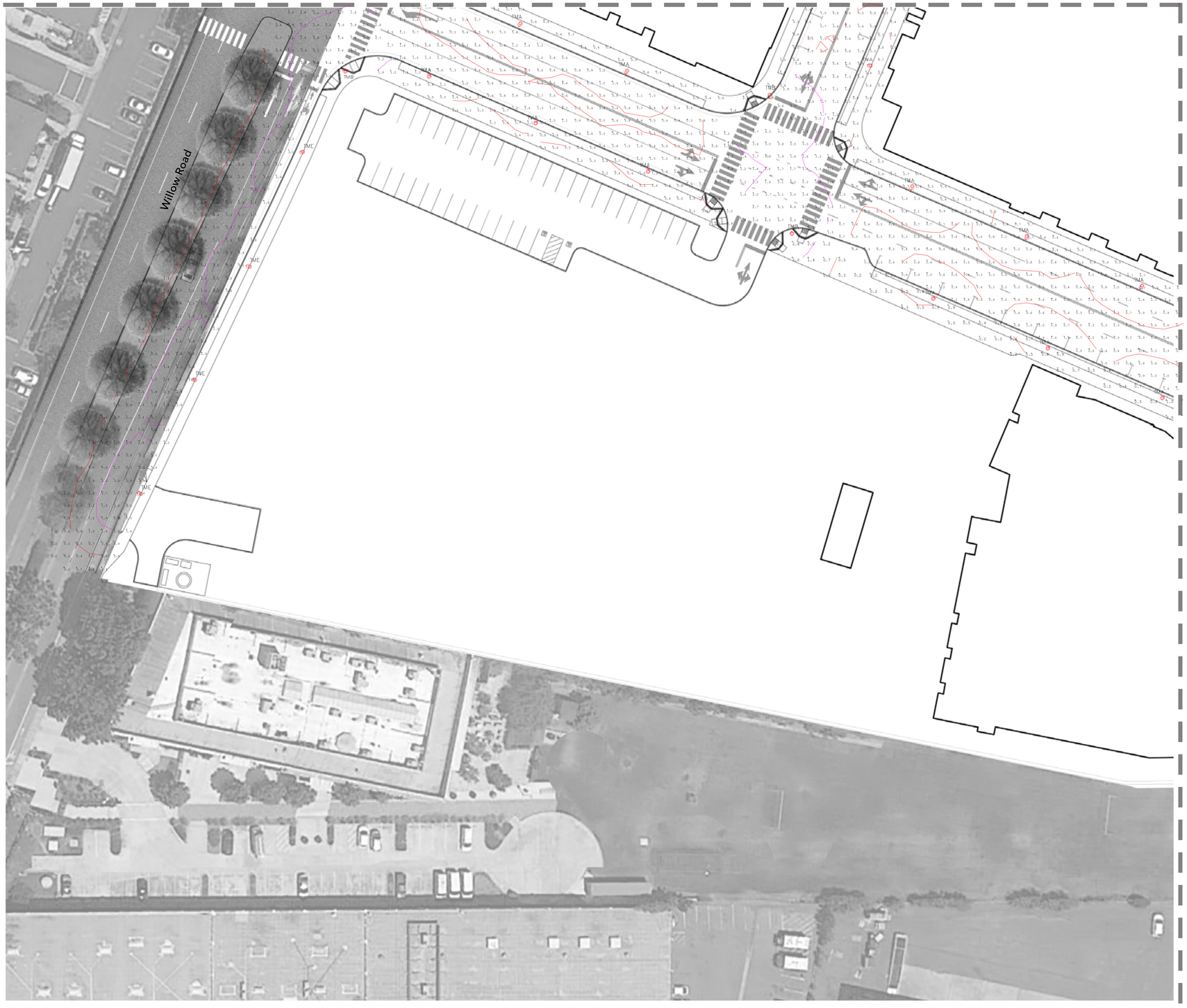
PLAN NOT TO SCALE

MASTER PLAN
Peninsula Innovation Partners
Conditional Development Permit

WILLOW VILLAGE

Menlo Park, CA

G5.28
Conceptual Lighting Plan: Quadrant F
December 23, 2021



0.5 FC 1.6 FC

Calculation Summary							
Scene: types							
Label	CalcType	Units	Avg	Max	Min	Avg/Min	Max/Min
Bike Path 2_Top	Illuminance	Fc	1.64	5.8	0.2	8.20	29.00
Bike Path new_Top	Illuminance	Fc	1.23	4.4	0.2	6.15	22.00
Bike Path North Loop_Top	Illuminance	Fc	0.92	1.7	0.1	9.20	17.00
Dog Park_1_Top	Illuminance	Fc	1.78	4.3	0.1	17.80	43.00
East Loop Road B_Top	Illuminance	Fc	0.77	2.0	0.2	3.85	10.00
East Loop Road_Top	Illuminance	Fc	0.66	1.5	0.2	3.30	7.50
Int Center Park_Top	Illuminance	Fc	2.41	4.7	0.6	4.02	7.83
Int Center West_Top	Illuminance	Fc	2.97	4.8	0.7	4.24	6.86
Int East Loop Main_Top	Illuminance	Fc	1.72	5.7	0.2	8.60	28.50
Int East Loop_Top	Illuminance	Fc	2.67	4.9	0.5	5.34	9.80
Int Main B Main C_Top	Illuminance	Fc	2.60	5.1	0.6	4.33	8.50
Int Main West_Top	Illuminance	Fc	2.63	4.8	0.7	3.76	6.86
Int Park Main_Top	Illuminance	Fc	2.19	4.8	0.2	10.95	24.00
Int Park Parc5_Top	Illuminance	Fc	3.13	4.9	1.0	3.13	4.90
Int Willow road Main St A_Top	Illuminance	Fc	2.03	5.0	0.3	6.77	16.67
Multi-use Pathway_2_Top	Illuminance	Fc	0.57	3.3	0.2	2.85	16.50
Multiuse Pathway 1_Top	Illuminance	Fc	0.51	1.4	0.1	5.10	14.00
North Loop Road_Top	Illuminance	Fc	1.08	2.7	0.2	5.40	13.50
O Brien Drive East_Top	Illuminance	Fc	0.84	4.6	0.2	4.20	23.00
O Brien Drive West_Top	Illuminance	Fc	1.11	4.6	0.2	5.55	23.00
Ped Parcel 1_Top	Illuminance	Fc	0.72	2.4	0.2	3.60	12.00
Ped Parcel 2_Top	Illuminance	Fc	0.86	3.7	0.2	4.30	18.50
Ped Parcel 3_Top	Illuminance	Fc	0.59	1.1	0.2	2.95	5.50
Ped Parcel 4_Top	Illuminance	Fc	0.66	3.1	0.2	3.30	15.50
Ped Parcel 5_Top	Illuminance	Fc	0.63	3.8	0.2	3.15	19.00
Ped Parcel 6 7 8_Top	Illuminance	Fc	0.84	3.4	0.2	4.20	17.00
Ped Parcel A_Top	Illuminance	Fc	0.70	2.2	0.2	3.50	11.00
Ped Parcel Willow Road West_Top	Illuminance	Fc	0.89	3.6	0.2	4.45	18.00
Road Center Main_Top	Illuminance	Fc	0.73	1.7	0.2	3.65	8.50
Road Center St_Top	Illuminance	Fc	0.82	2.9	0.3	2.73	9.67
Road Hamilton Avenue_Top	Illuminance	Fc	0.75	1.6	0.2	3.75	8.00
road Main St A 1_Top	Illuminance	Fc	0.87	2.5	0.4	2.18	6.25
Road Main St B_Top	Illuminance	Fc	0.89	2.6	0.2	4.45	13.00
Road Main St C_Top	Illuminance	Fc	0.95	3.0	0.4	2.38	7.50
Road Main St D_Top	Illuminance	Fc	1.13	3.3	0.2	5.65	16.50
Road Park St A_Top	Illuminance	Fc	0.75	1.7	0.3	2.50	5.67
Road Park St B_Top	Illuminance	Fc	0.61	1.5	0.3	2.03	5.00
Road Park St C_Top	Illuminance	Fc	0.68	1.7	0.2	3.40	8.50
Tunnel_Top	Illuminance	Fc	0.75	1.6	0.2	3.75	8.00
West St A_Top	Illuminance	Fc	0.89	3.5	0.2	4.45	17.50
West St B_Top	Illuminance	Fc	0.84	1.8	0.3	2.80	6.00
West St C_Top	Illuminance	Fc	0.74	2.3	0.2	3.70	11.50
Willow Road_Top	Illuminance	Fc	1.36	4.6	0.2	6.80	23.00

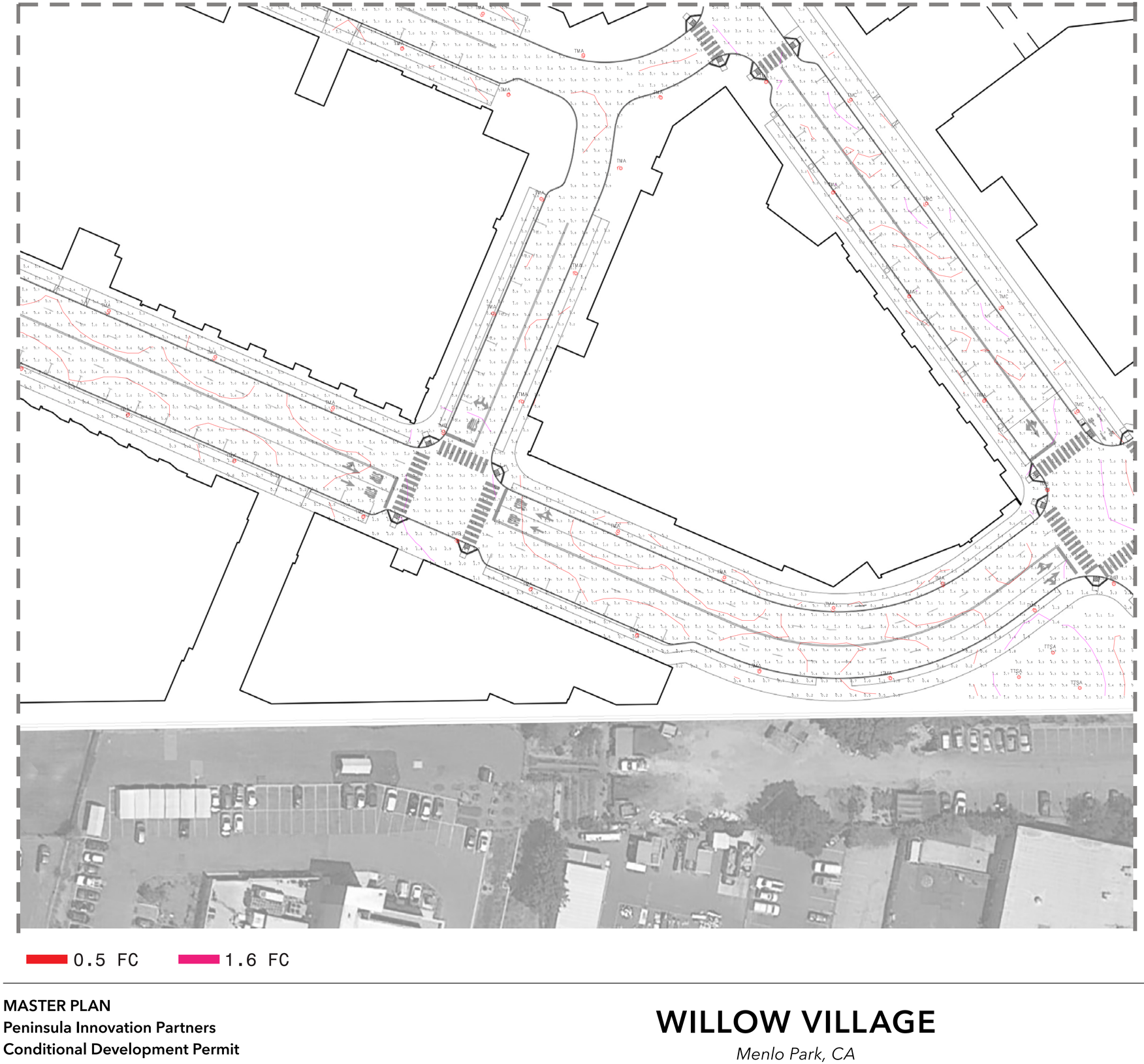
PLAN NOT TO SCALE

MASTER PLAN
Peninsula Innovation Partners
Conditional Development Permit

WILLOW VILLAGE

Menlo Park, CA

G5.29
Conceptual Lighting Plan: Quadrant G
December 23, 2021



Calculation Summary							
Scene: types							
Label	CalcType	Units	Avg	Max	Min	Avg/Min	Max/Min
Bike Path 2_Top	Illuminance	Fc	1.64	5.8	0.2	8.20	29.00
Bike Path new_Top	Illuminance	Fc	1.23	4.4	0.2	6.15	22.00
Bike Path North Loop_Top	Illuminance	Fc	0.92	1.7	0.1	9.20	17.00
Dog Park_1_Top	Illuminance	Fc	1.78	4.3	0.1	17.80	43.00
East Loop Road B_Top	Illuminance	Fc	0.77	2.0	0.2	3.85	10.00
East Loop Road_Top	Illuminance	Fc	0.66	1.5	0.2	3.30	7.50
Int Center Park_Top	Illuminance	Fc	2.41	4.7	0.6	4.02	7.83
Int Center West_Top	Illuminance	Fc	2.97	4.8	0.7	4.24	6.86
Int East Loop Main_Top	Illuminance	Fc	1.72	5.7	0.2	8.60	28.50
Int East Loop_Top	Illuminance	Fc	2.67	4.9	0.5	5.34	9.80
Int Main B Main C_Top	Illuminance	Fc	2.60	5.1	0.6	4.33	8.50
Int Main West_Top	Illuminance	Fc	2.63	4.8	0.7	3.76	6.86
Int Park Main_Top	Illuminance	Fc	2.19	4.8	0.2	10.95	24.00
Int Park Parc5_Top	Illuminance	Fc	3.13	4.9	1.0	3.13	4.90
Int Willow road Main St A_Top	Illuminance	Fc	2.03	5.0	0.3	6.77	16.67
Multi-use Pathway 2_Top	Illuminance	Fc	0.57	3.3	0.2	2.85	16.50
Multiuse Pathway 1_Top	Illuminance	Fc	0.51	1.4	0.1	5.10	14.00
North Loop Road_Top	Illuminance	Fc	1.08	2.7	0.2	5.40	13.50
O Brien Drive East_Top	Illuminance	Fc	0.84	4.6	0.2	4.20	23.00
O Brien Drive West_Top	Illuminance	Fc	1.11	4.6	0.2	5.55	23.00
Ped Parcel 1_Top	Illuminance	Fc	0.72	2.4	0.2	3.60	12.00
Ped Parcel 2_Top	Illuminance	Fc	0.86	3.7	0.2	4.30	18.50
Ped Parcel 3_Top	Illuminance	Fc	0.59	1.1	0.2	2.95	5.50
Ped Parcel 4_Top	Illuminance	Fc	0.66	3.1	0.2	3.30	15.50
Ped Parcel 5_Top	Illuminance	Fc	0.63	3.8	0.2	3.15	19.00
Ped Parcel 6_7_8_Top	Illuminance	Fc	0.84	3.4	0.2	4.20	17.00
Ped Parcel A_Top	Illuminance	Fc	0.70	2.2	0.2	3.50	11.00
Ped Parcel Willow Road West_Top	Illuminance	Fc	0.89	3.6	0.2	4.45	18.00
Road Center Main_Top	Illuminance	Fc	0.73	1.7	0.2	3.65	8.50
Road Center St_Top	Illuminance	Fc	0.82	2.9	0.3	2.73	9.67
Road Hamilton Avenue_Top	Illuminance	Fc	0.75	1.6	0.2	3.75	8.00
road Main St A_1_Top	Illuminance	Fc	0.87	2.5	0.4	2.18	6.25
Road Main St B_Top	Illuminance	Fc	0.89	3.6	0.2	4.45	13.00
Road Main St C_Top	Illuminance	Fc	0.95	3.0	0.4	2.38	7.50
Road Main St D_Top	Illuminance	Fc	1.13	3.3	0.2	5.65	16.50
Road Park St A_Top	Illuminance	Fc	0.75	1.7	0.3	2.50	5.67
Road Park St B_Top	Illuminance	Fc	0.61	1.5	0.3	2.03	5.00
Road Park St C_Top	Illuminance	Fc	0.68	1.7	0.2	3.40	8.50
Tunnel_Top	Illuminance	Fc	0.75	1.6	0.2	3.75	8.00
West St A_Top	Illuminance	Fc	0.89	3.5	0.2	4.45	17.50
West St B_Top	Illuminance	Fc	0.84	1.8	0.3	2.80	6.00
West St C_Top	Illuminance	Fc	0.74	2.3	0.2	3.70	11.50
Willow Road_Top	Illuminance	Fc	1.36	4.6	0.2	6.80	23.00

PLAN NOT TO SCALE

MASTER PLAN
Peninsula Innovation Partners
Conditional Development Permit

WILLOW VILLAGE

Menlo Park, CA

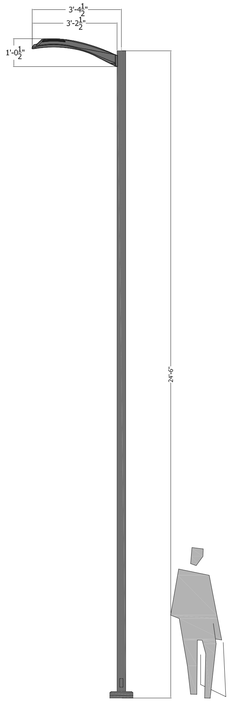
G5.30
Conceptual Lighting Plan: Quadrant H
December 23, 2021

Calculation Summary
Scene: types

Label	CalcType	Units	Avg	Max	Min	Avg/Min	Max/Min
Bike Path 2_Top	Illuminance	Fc	1.64	5.8	0.2	8.20	29.00
Bike Path new_Top	Illuminance	Fc	1.23	4.4	0.2	6.15	22.00
Bike Path North Loop_Top	Illuminance	Fc	0.92	1.7	0.1	9.20	17.00
Dog Park_1_Top	Illuminance	Fc	1.78	4.3	0.1	17.80	43.00
East Loop Road B_Top	Illuminance	Fc	0.77	2.0	0.2	3.85	10.00
East Loop Road_Top	Illuminance	Fc	0.66	1.5	0.2	3.30	7.50
Int Center Park_Top	Illuminance	Fc	2.41	4.7	0.6	4.02	7.83
Int Center West_Top	Illuminance	Fc	2.97	4.8	0.7	4.24	6.86
Int East Loop Main_Top	Illuminance	Fc	1.72	5.7	0.2	8.60	28.50
Int East Loop_Top	Illuminance	Fc	2.67	4.9	0.5	5.34	9.80
Int Main B Main C_Top	Illuminance	Fc	2.60	5.1	0.6	4.33	8.50
Int Main West_Top	Illuminance	Fc	2.63	4.8	0.7	3.76	6.86
Int Park Main_Top	Illuminance	Fc	2.19	4.8	0.2	10.95	24.00
Int Park Parc5_Top	Illuminance	Fc	3.13	4.9	1.0	3.13	4.90
Int Willow road Main St A_Top	Illuminance	Fc	2.03	5.0	0.3	6.77	16.67
Multi-use Pathway_2_Top	Illuminance	Fc	0.57	3.3	0.2	2.85	16.50
Multiuse Pathway_1_Top	Illuminance	Fc	0.51	1.4	0.1	5.10	14.00
North Loop Road_Top	Illuminance	Fc	1.08	2.7	0.2	5.40	13.50
O Brien Drive East_Top	Illuminance	Fc	0.84	4.6	0.2	4.20	23.00
O Brien Drive West_Top	Illuminance	Fc	1.11	4.6	0.2	5.55	23.00
Ped Parcel 1_Top	Illuminance	Fc	0.72	2.4	0.2	3.60	12.00
Ped Parcel 2_Top	Illuminance	Fc	0.86	3.7	0.2	4.30	18.50
Ped Parcel 3_Top	Illuminance	Fc	0.59	1.1	0.2	2.95	5.50
Ped Parcel 4_Top	Illuminance	Fc	0.66	3.1	0.2	3.30	15.50
Ped Parcel 5_Top	Illuminance	Fc	0.63	3.8	0.2	3.15	19.00
Ped Parcel 6 7 8_Top	Illuminance	Fc	0.84	3.4	0.2	4.20	17.00
Ped Parcel A_Top	Illuminance	Fc	0.70	2.2	0.2	3.50	11.00
Ped Parcel Willow Road West_Top	Illuminance	Fc	0.89	3.6	0.2	4.45	18.00
Road Center Main_Top	Illuminance	Fc	0.73	1.7	0.2	3.65	8.50
Road Center St_Top	Illuminance	Fc	0.82	2.9	0.3	2.73	9.67
Road Hamilton Avenue_Top	Illuminance	Fc	0.75	1.6	0.2	3.75	8.00
road Main St A_1_Top	Illuminance	Fc	0.87	2.5	0.4	2.18	6.25
Road Main St B_Top	Illuminance	Fc	0.89	2.6	0.2	4.45	13.00
Road Main St C_Top	Illuminance	Fc	0.95	3.0	0.4	2.38	7.50
Road Main St D_Top	Illuminance	Fc	1.13	3.3	0.2	5.65	16.50
Road Park St A_Top	Illuminance	Fc	0.75	1.7	0.3	2.50	5.67
Road Park St B_Top	Illuminance	Fc	0.61	1.5	0.3	2.03	5.00
Road Park St C_Top	Illuminance	Fc	0.68	1.7	0.2	3.40	8.50
Tunnel_Top	Illuminance	Fc	0.75	1.6	0.2	3.75	8.00
West St A_Top	Illuminance	Fc	0.89	3.5	0.2	4.45	17.50
West St B_Top	Illuminance	Fc	0.84	1.8	0.3	2.80	6.00
West St C_Top	Illuminance	Fc	0.74	2.3	0.2	3.70	11.50
Willow Road_Top	Illuminance	Fc	1.36	4.6	0.2	6.80	23.00

PLAN NOT TO SCALE

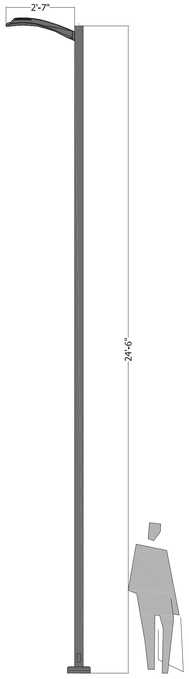
STERNBERG MILLENIA PROPOSED TYPOLOGIES



Type TMB- ML730 - At intersection

STREET COMPONENT

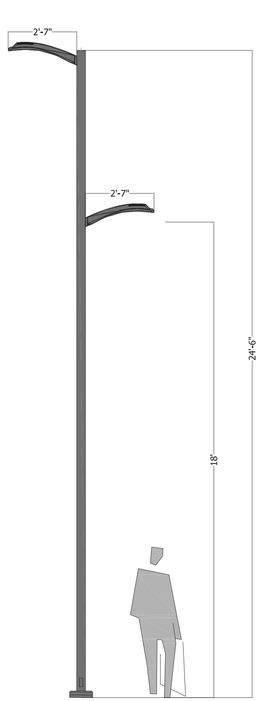
Fixture ordering code : Sternberg Millenia ML730-32L30T4-MDL018-SV1
Pole height : 25'
Fixture head size : 12"Hx20.5"Wx38"L
Wattage : 154w
Lumen package : 16,560 lm
Number of LEDs : 32L
Distribution : T4
Lens : SV1: (Flat Soft Vue Light Difused Acrylic)
Color Temperature : 3,000K
Driver : MDL018
Pole Finish : Black



Type TMA - ML630 - Typical streets

STREET COMPONENT

Fixture ordering code : Sternberg Millenia ML630-12L30T2-MDL018-SV1
Pole height : 18'
Fixture head size : 9"Hx16"Wx30"L
Wattage : 27 W
Lumen package : 2,990 lm
Number of LEDs : 32L
Distribution : T2
Lens : SV1: (Flat Soft Vue Light Difused Acrylic)
Color Temperature : 3,000K
Driver : MDL018
Pole Finish: Black



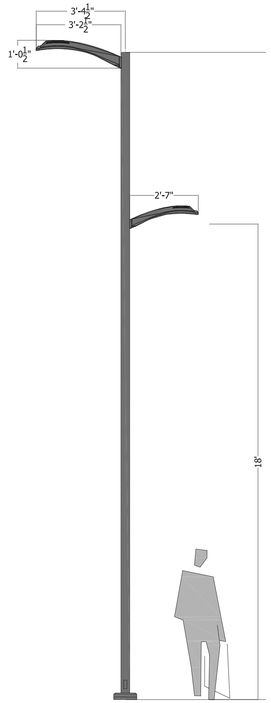
Type TMC - ML630 -Main street
+ ML630 - pedestrian on Main street

STREET COMPONENT (Type TMA)

Fixture ordering code : Sternberg Millenia - ML730-32L30T4-MDL018-SV1
Pole height : 25'
Fixture head size : 12"Hx20.5"Wx38"L
Wattage : 154w
Lumen package : 16,560 lm
Number of LEDs : 32L
Distribution : T4
Lens : SV1: (Flat Soft Vue Light Difused Acrylic)
Color Temperature : 3,000K
Driver : MDL018
Pole Finish: Black

PEDESTRIAN COMPONENT (Type TMA)

Fixture ordering code : Sternberg Millenia: ML630-12L30T2-MDL018-SV1
Pole height : 18'
Fixture head size : 9"Hx16"Wx30"L
Wattage : 27 W
Lumen package : 2,990 lm
Number of LEDs : 12L
Distribution : T2
Lens : SV1: (Flat Soft Vue Light Difused Acrylic)
Color Temperature : 3,000K
Driver : MDL018
Pole Color : Black



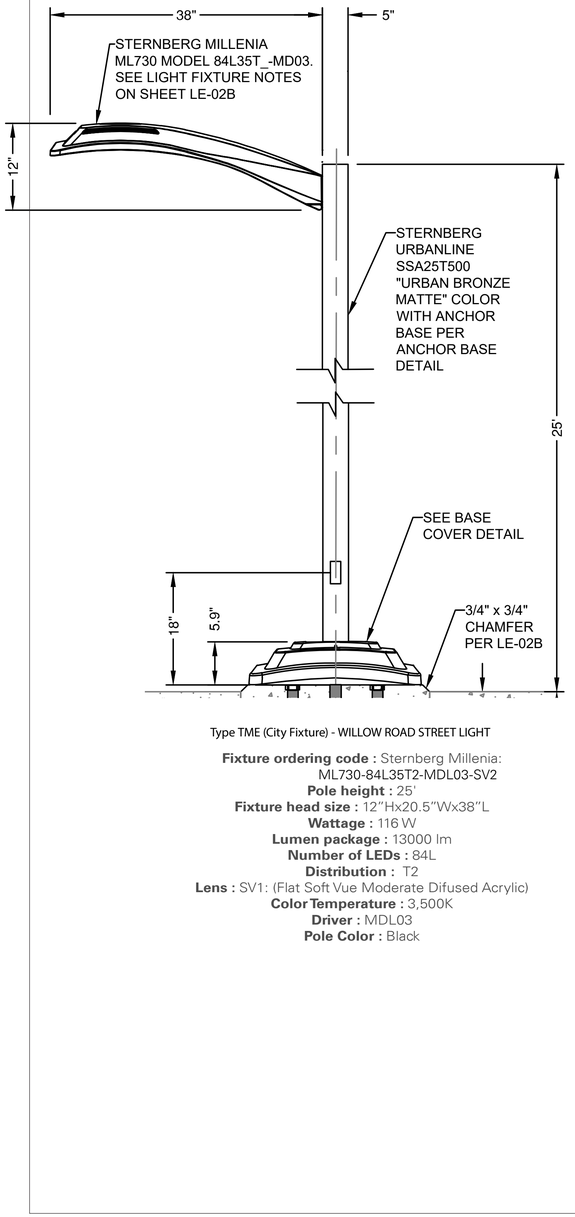
Type TMD - ML730 - At intersection
+ ML630 - pedestrian on Intersection

STREET COMPONENT (Type TMB)

Fixture ordering code : Sternberg Millenia - ML730-32L30T4-MDL018-SV1
Pole height : 25'
Fixture head size : 12"Hx20.5"Wx38"L
Wattage : 154w
Lumen package : 16,560 lm
Number of LEDs : 32L
Distribution : T4
Lens : SV1: (Flat Soft Vue Light Difused Acrylic)
Color Temperature : 3,000K
Driver : MDL018
Pole Finish: Black

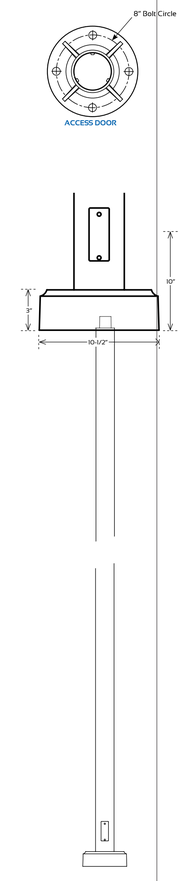
PEDESTRIAN COMPONENT (Type TMA)

Fixture ordering code : Sternberg Millenia: ML630-12L30T2-MDL018-SV1
Pole height : 18'
Fixture head size : 9"Hx16"Wx30"L
Wattage : 27 W
Lumen package : 2,990 lm
Number of LEDs : 12L
Distribution : T2
Lens : SV1: (Flat Soft Vue Light Difused Acrylic)
Color Temperature : 3,000K
Driver : MDL018
Pole Color : Black



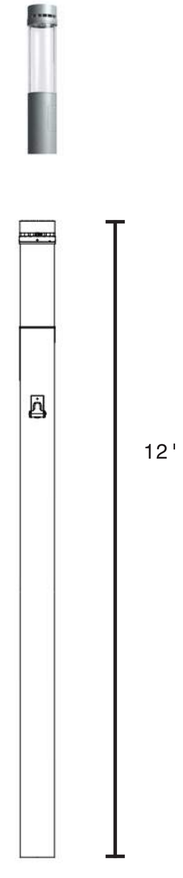
Type TME (City Fixture) - WILLOW ROAD STREET LIGHT

Fixture ordering code : Sternberg Millenia: ML730-84L35T2-MDL03-SV2
Pole height : 25'
Fixture head size : 12"Hx20.5"Wx38"L
Wattage : 116 W
Lumen package : 13000 lm
Number of LEDs : 84L
Distribution : T2
Lens : SV1: (Flat Soft Vue Moderate Difused Acrylic)
Color Temperature : 3,500K
Driver : MDL03
Pole Color : Black



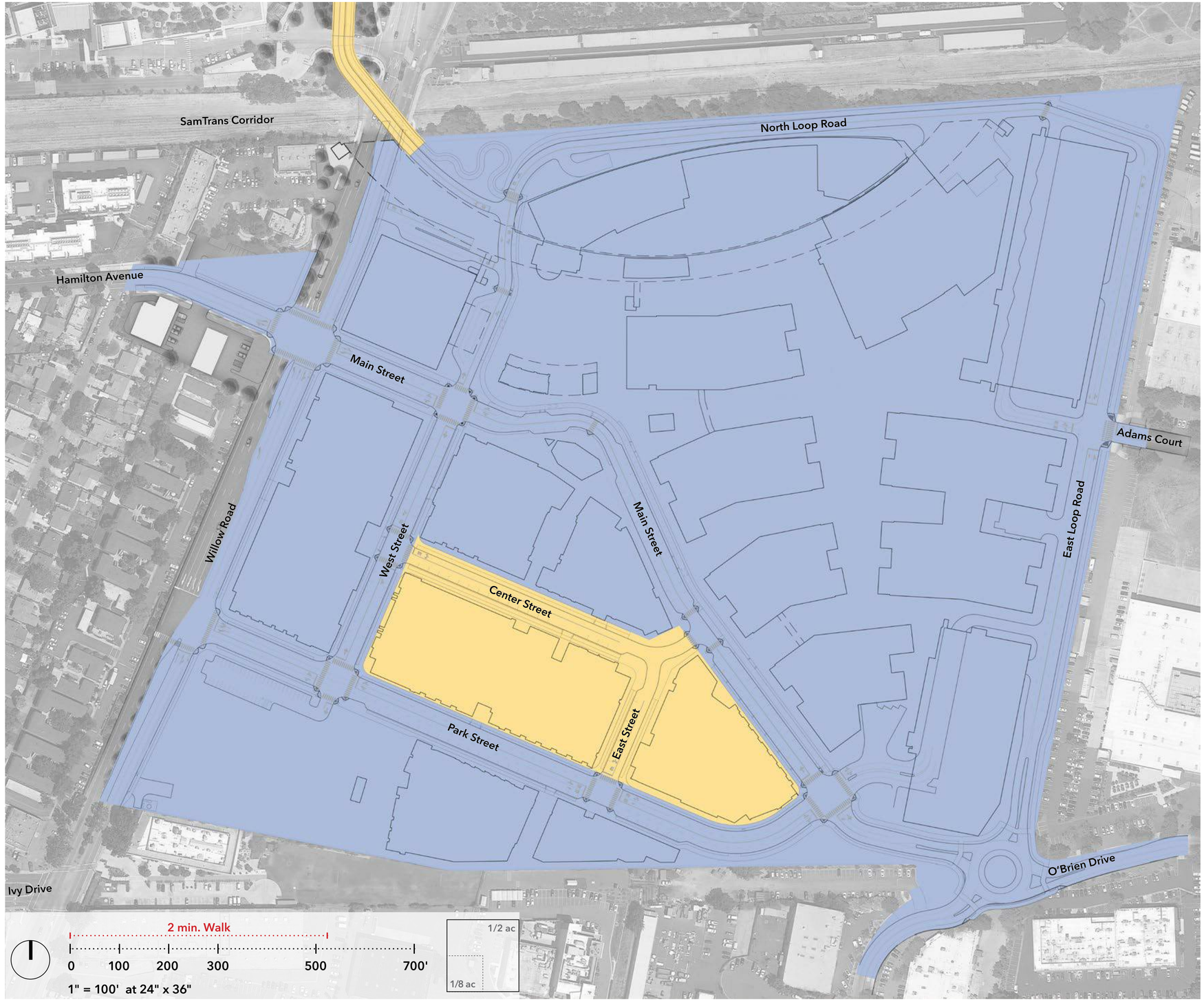
Pole Spec for Type TMA, TMB, TMC & TMD

Pole ordering code : 450 Lexington Series



Type TTSA- NORTH WEST STREET LIGHT

Fixture ordering code : Selux : Exelia Gen5 LED
Pole height : 12'
Wattage : 66 W
Lumen package : 5962 lm
Distribution : Asymmetic
Color Temperature : 3,000K



LEGEND	
	Phase 1
	Phase 2

MASTER PLAN
Peninsula Innovation Partners
Conditional Development Permit

WILLOW VILLAGE

Menlo Park, CA

G6.01
Conceptual Horizontal Construction Phasing Plan
December 23, 2021

ILLUSTRATIVE VERTICAL CONSTRUCTION PHASING SUMMARY AS DEPICTED

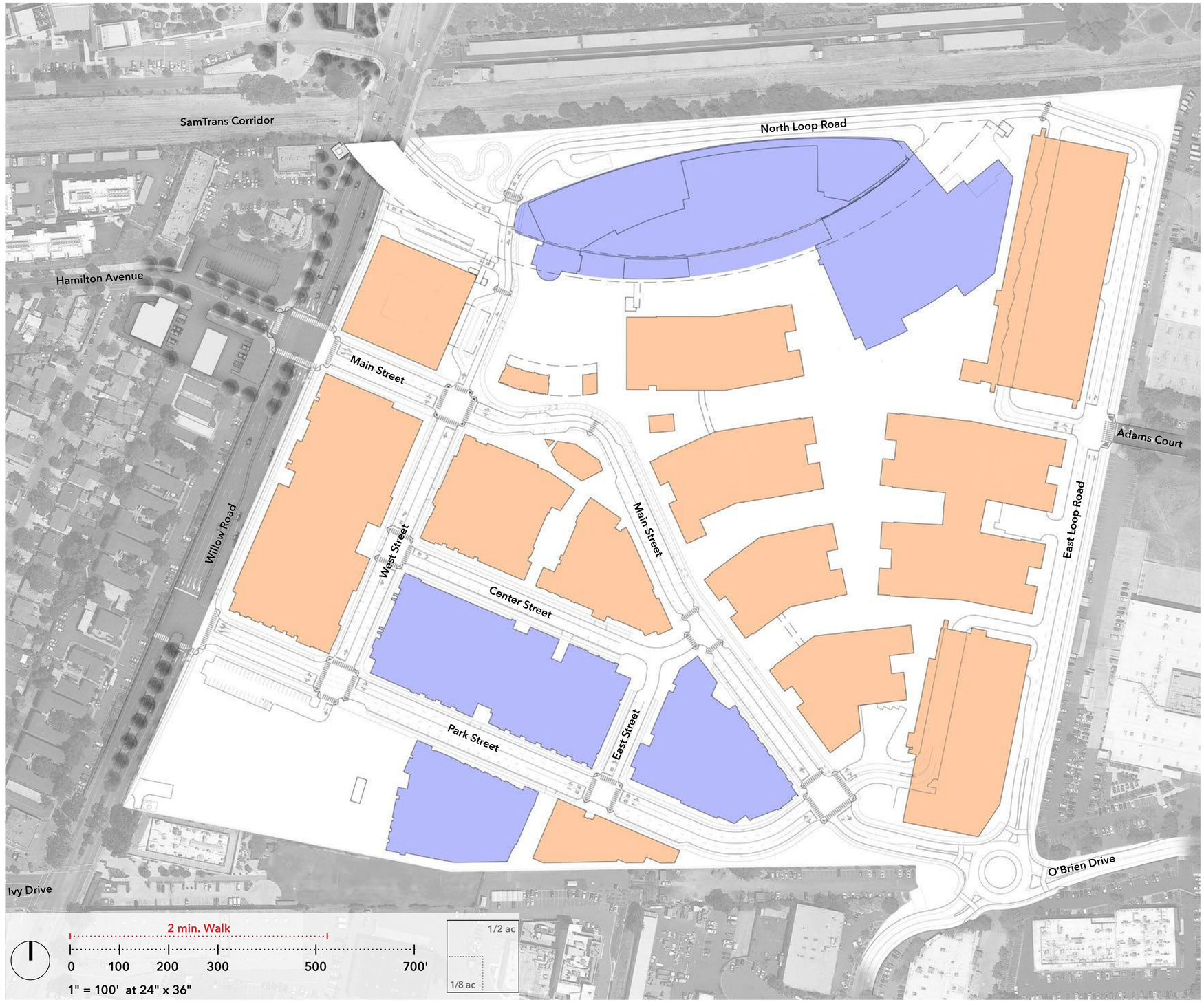
	Office (sf)	Retail (sf)	Hotel (sf)	Residential Units
Phase 1	1,585,176	200,000	149,776	1,044
Phase 2	-	-	-	686
Total	1,585,176	Up to 200,000	149,776	1,730

MASTER PLAN
Peninsula Innovation Partners
Conditional Development Permit

WILLOW VILLAGE

Menlo Park, CA

G6.02
Conceptual Vertical Construction Phasing Plan
December 23, 2021



LEGEND	
	2025
	2026

MASTER PLAN
Peninsula Innovation Partners
Conditional Development Permit

WILLOW VILLAGE

Menlo Park, CA

G6.03
Conceptual Occupancy Phasing Plan
December 23, 2021

LEGEND	
	Publicly Accessible Open Space*
	At-Grade Quasi-Publicly Accessible Open Space**
	Above-Grade Quasi-Publicly Accessible Open Space**
	Publicly Accessible Public R.O.W.
	Publicly Accessible Private R.O.W.

Note: All areas above will be owned and maintanined by the Property Owner's Association.

* Generally accessible daily.
** Publicly accessible but subject to limiting public access for various events.

LEGEND

	Open Space (Publicly Accessible)
	Elevated Open Space (Publicly Accessible)
	At-grade Open Space (No Public Access)*
	Above-grade Open Space (No Public Access)**

* Includes covered open space.
** Includes above-grade open space such as, roof and podium level decks, terraces, balconies, gardens, etc.

ILLUSTRATIVE OPEN SPACE AS DEPICTED: PHASE 1*

Land Use	Open Space	Publicly Accessible
R - MU	313,234 sf	175,047 sf
O	540,117 sf	209,980 sf
Total	853,351 sf	385,027 sf

* Refer to Appendix 3 for illustrative parcel-by-parcel details.

LEGEND

	At-grade Open Space (No Public Access)*
	Above-grade Open Space (No Public Access)**

* Includes covered open space.
** Includes above-grade open space such as, roof and podium level decks, terraces, balconies, gardens, etc.

ILLUSTRATIVE OPEN SPACE AS DEPICTED: PHASE 2*

Land Use	Open Space	Publicly Accessible
R - MU	87,208 sf	-
O	-	-
Total	87,208 sf	-

***** Refer to Appendix 3 for parcel-by-parcel details.

LEGEND

■	Emergency Generator

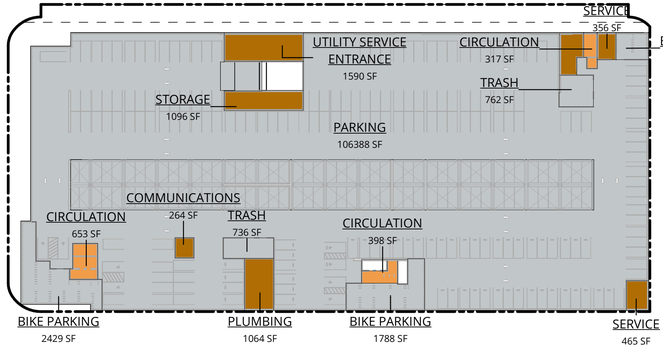
EMERGENCY GENERATOR SUMMARY

Use	Location	Quantity	Generator Size
Hotel	TS1	1	600KW / 750KVA
Accessory/Convention	NG	2	(2) 750KW / 1,000KVA
Office	SG	2	(2) 1,750KW / 2,188KVA
R-MU	RS2	1	1,000 KW
	RS3	1	750 KW
	RS4	1	500 KW
	RS5	1	500 KW
	RS6	1	250 KW
	RS7	1	150 KW
West Bay District Sanitary Pump Station	Publicly Accessible Park	1	500 KW
Off-Site Retail	Hamilton Avenue Parcel North	1	150 KW

Note: Generators will be located in the the basement or ground floor level. Specific locations will be provided with architectural review plans.

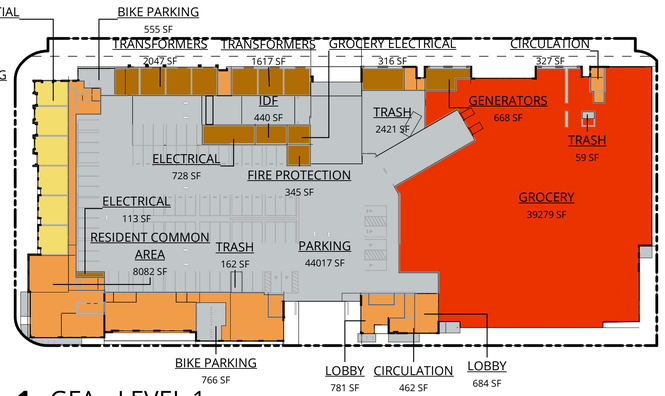
APPENDIX 1

PARCEL 1-8
ILLUSTRATIVE GFA



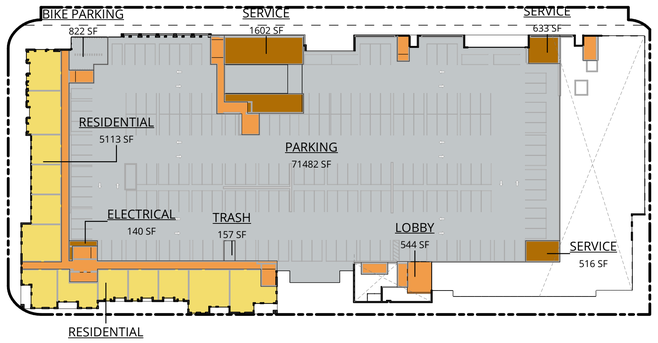
P1 GFA - LEVEL P1

1" = 60'-0"



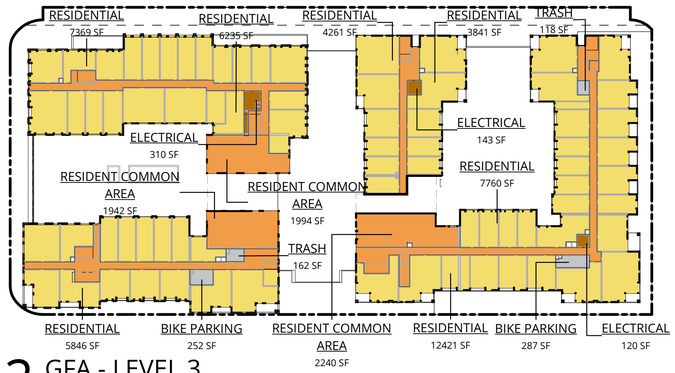
1 GFA - LEVEL 1

1" = 60'-0"



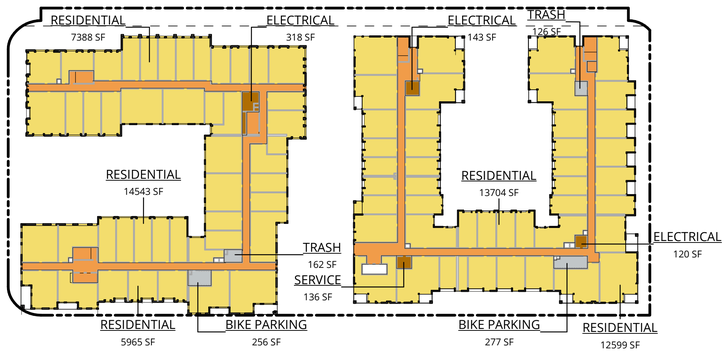
2 GFA - LEVEL 2

1" = 60'-0"



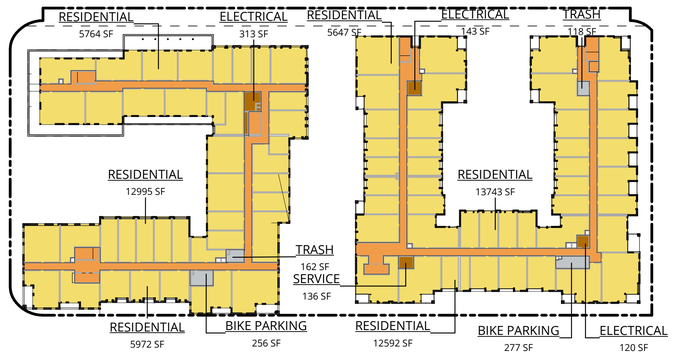
3 GFA - LEVEL 3

1" = 60'-0"



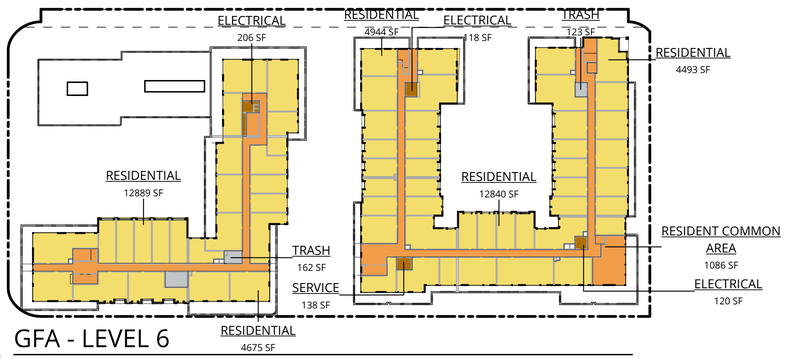
4 GFA - LEVEL 4

1" = 60'-0"



5 GFA - LEVEL 5

1" = 60'-0"



6 GFA - LEVEL 6

1" = 60'-0"

GFA SUBTOTALS	
INCLUDED IN GFA PER ZONING CODE	
RETAIL	
GROCERY	39,279 SF
GROCERY ELECTRICAL	316 SF
RETAIL	**39,595 SF**
RESIDENTIAL	
CIRCULATION	45,484 SF
LOBBY	2,009 SF
RESIDENT COMMON AREA	15,344 SF
RESIDENTIAL	238,862 SF
COMMUNICATIONS	264 SF
ELECTRICAL	3,154 SF
FIRE PROTECTION	345 SF
GENERATORS	668 SF
IDF	440 SF
PLUMBING	1,064 SF

GFA SUBTOTALS	
SERVICE	6,251 SF
UTILITY SERVICE ENTRANCE	1,590 SF
STORAGE	1,096 SF
RESIDENTIAL	**316,572 SF**
INCLUDED IN GFA PER ZONING CODE	**356,166 SF**
EXCLUDED FROM GFA PER ZONING CODE	
TRANSFORMERS	3,665 SF
BIKE PARKING	8,843 SF
PARKING	223,046 SF
VENT SHAFT	735 SF
TRASH	5,429 SF
	241,719 SF
EXCLUDED FROM GFA PER ZONING CODE	**241,719 SF**
TOTAL GFA	**597,885 SF**

GROSS FLOOR AREA	
Name	**AREA**
EXCLUDED FROM GFA PER ZONING CODE	
LEVEL P1	
BIKE PARKING	4,837 SF
PARKING	106,388 SF
TRASH	1,497 SF
	112,722 SF
LEVEL 1	
BIKE PARKING	1,322 SF
PARKING	45,176 SF
TRANSFORMERS	3,665 SF
TRASH	2,642 SF
	52,804 SF
LEVEL 2	
BIKE PARKING	822 SF
PARKING	71,482 SF
TRASH	157 SF
	72,461 SF
LEVEL 3	
BIKE PARKING	539 SF
TRASH	280 SF
VENT SHAFT	187 SF
	1,006 SF
LEVEL 4	
BIKE PARKING	533 SF
TRASH	288 SF
VENT SHAFT	189 SF
	1,011 SF
LEVEL 5	
BIKE PARKING	533 SF
TRASH	280 SF
VENT SHAFT	189 SF
	1,002 SF
LEVEL 6	
BIKE PARKING	257 SF
TRASH	285 SF
VENT SHAFT	170 SF
	712 SF
	241,719 SF
EXCLUDED FROM GFA PER ZONING CODE	**241,719 SF**

GROSS FLOOR AREA	
Name	**AREA**
INCLUDED IN GFA PER ZONING CODE	
RETAIL	
LEVEL 1	
GROCERY	39,279 SF
GROCERY ELECTRICAL	316 SF
	39,595 SF
RETAIL	**39,595 SF**
RESIDENTIAL	
LEVEL P1	
CIRCULATION	1,368 SF
COMMUNICATIONS	264 SF
PLUMBING	1,064 SF
SERVICE	1,455 SF
STORAGE	1,096 SF
UTILITY SERVICE ENTRANCE	1,590 SF
	6,838 SF
LEVEL 1	
CIRCULATION	3,654 SF
ELECTRICAL	841 SF
FIRE PROTECTION	345 SF
GENERATORS	668 SF
IDF	440 SF
LOBBY	1,465 SF
RESIDENT COMMON AREA	8,082 SF
RESIDENTIAL	3,925 SF
SERVICE	729 SF
	20,149 SF
LEVEL 2	
CIRCULATION	5,415 SF
ELECTRICAL	140 SF
LOBBY	544 SF
RESIDENTIAL	11,115 SF
SERVICE	3,656 SF
	20,871 SF
LEVEL 3	
CIRCULATION	8,971 SF
ELECTRICAL	573 SF
RESIDENT COMMON AREA	6,176 SF
RESIDENTIAL	54,263 SF
	69,983 SF
LEVEL 4	
CIRCULATION	9,187 SF
ELECTRICAL	580 SF
RESIDENTIAL	64,210 SF
SERVICE	136 SF
	74,114 SF
LEVEL 5	
CIRCULATION	9,308 SF
ELECTRICAL	576 SF
RESIDENTIAL	60,995 SF
SERVICE	136 SF
	71,015 SF
LEVEL 6	
CIRCULATION	7,580 SF
ELECTRICAL	444 SF
RESIDENT COMMON AREA	1,086 SF
RESIDENTIAL	44,354 SF
SERVICE	138 SF
	53,602 SF
RESIDENTIAL	**316,572 SF**
INCLUDED IN GFA PER ZONING CODE	**356,166 SF**
TOTAL GFA	**597,885 SF**

LEGEND

- RESIDENTIAL
- RETAIL
- CIRCULATION / LOBBY / COMMON AREA
- UTILITY / SERVICE
- EXCLUDED FROM GFA

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PENINSULA INNOVATION PARTNERS

WILLOW VILLAGE
Architectural Control Package - Parcel 2
Menlo Park, CA

SCALE: As indicated

NOTE: THIS DRAWING IS ISO A1. DO NOT SCALE DRAWINGS. USE FIGURED DIMENSIONS ONLY, OR SEEK CLARIFICATION FROM ARCHITECT FOR MEASUREMENTS THAT ARE NOT INDICATED.

MILESTONES

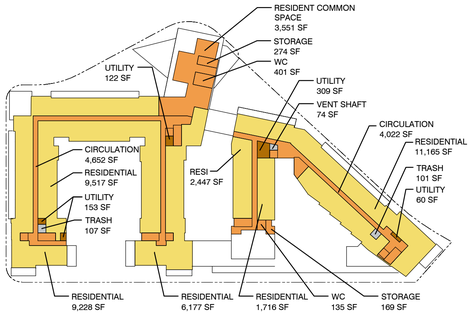
DATE	ISSUE
09/07/2021	ACP

REVISIONS

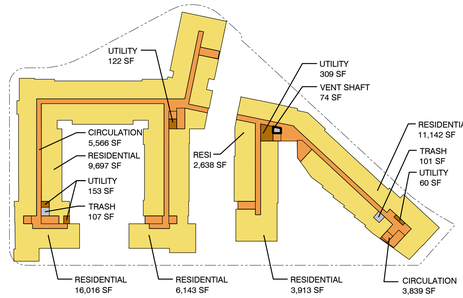
NO.	DATE	ISSUE

DRAWING TITLE: SQUARE FOOTAGE PLANS

DRAWING NO: *A9.04



LEVEL 07



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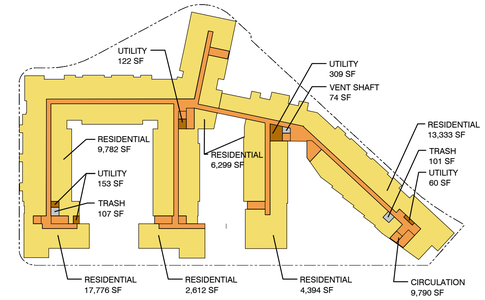

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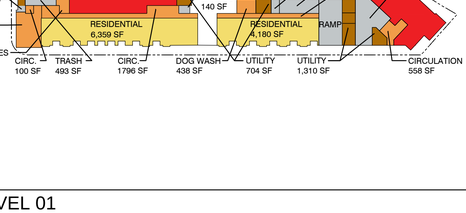

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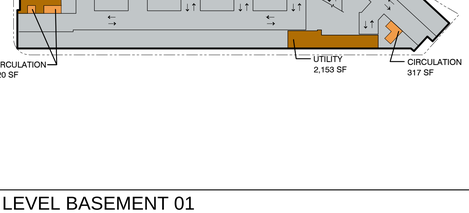
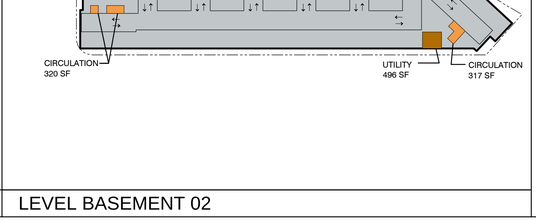
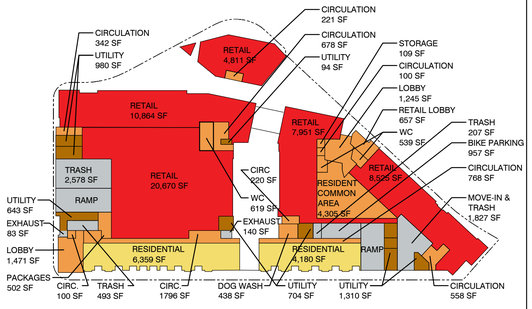


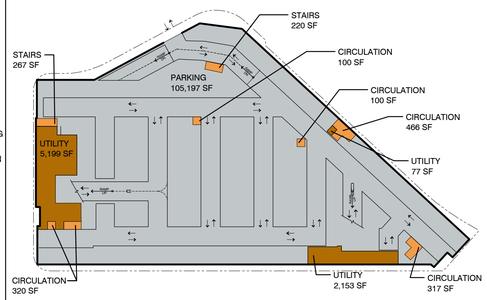
LEVEL 03



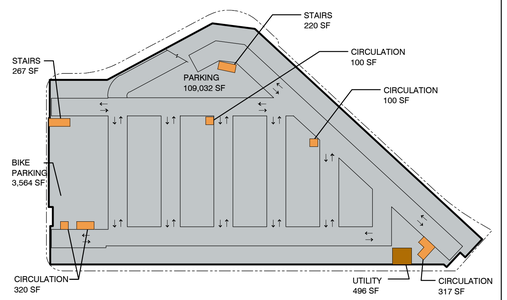
LEVEL 02



LEVEL 01



LEVEL BASEMENT 01



LEVEL BASEMENT 02

GROSS FLOOR AREA	
CATEGORY	**ZONING GFA**
LEVEL B2	
UTILITY	496
	496
LEVEL B1	
UTILITY	7,429
	7,429
LEVEL 1	
CIRCULATION	4,783
LOBBY	3,373
STORAGE	109
WC	1,158
DOG WASH	438
RESIDENT COMMON AREA	4,807
RESIDENTIAL	10,539
RETAIL	52,817
UTILITY	3,731
	81,755
LEVEL 2	
CIRCULATION	11,664
STORAGE	5,703
RESIDENT COMMON AREA	1,927
RESIDENTIAL	41,669
UTILITY	1,060
	62,023
LEVEL 3	
CIRCULATION	11,225
STORAGE	183
WC	647
RESIDENTIAL	54,581
UTILITY	644
	67,280
LEVEL 4	
CIRCULATION	10,362
RESIDENTIAL	55,732
UTILITY	644
	66,094
LEVEL 5	
CIRCULATION	9,790
RESIDENTIAL	54,196
UTILITY	644
	64,630
LEVEL 6	
CIRCULATION	9,405
RESIDENTIAL	49,549
UTILITY	644
	59,598
LEVEL 7	
CIRCULATION	8,674
STORAGE	443
WC	536
RESIDENT COMMON AREA	3,551
RESIDENTIAL	40,250
UTILITY	644
	54,098

GROSS FLOOR AREA	
CATEGORY	**EXCLUDED GFA**
VEHICULAR PARKING	109,032
BIKE PARKING	3,564
CIRCULATION	1,324
	113,920
VEHICULAR PARKING	105,197
CIRCULATION	1,790
	106,987
BIKE PARKING	957
TRASH	5,105
EXHAUST	223
	6,285
BIKE PARKING	1,526
TRASH ROOM	205
	1,731
TRASH ROOM	209
VENT STACK	74
	283
TRASH ROOM	208
VENT STACK	74
	282
TRASH ROOM	208
VENT STACK	74
	282
TRASH ROOM	208
VENT STACK	74
	282
TRASH ROOM	208
VENT STACK	74
	282

GFA SUBTOTALS - INCLUDED PER CODE	
RETAIL	
RETAIL	52,817
LOBBY	657
WC	1,158
	54,632
RESIDENTIAL	
CIRCULATION	69,017
LOBBY	2,716
STORAGE	6,438
WC	1,183
DOG WASH	438
RESIDENT COMMON AREA	10,285
RESIDENTIAL	306,516
UTILITY	15,936
	412,529
TOTAL INCLUDED GFA (PER ZONING CODE)	**467,161**

GFA SUBTOTALS - EXCLUDED PER CODE	
EXCLUDED PER ZONING CODE	
VEHICULAR PARKING	214,229
BIKE PARKING	6,047
TRASH	6,351
VENT STACK/EXHAUST	593
TOTAL EXCLUDED GFA (PER ZONING CODE)	**227,220**
TOTAL GFA	**694,381**

LEGEND

- RETAIL
- RESIDENTIAL
- CIRCULATION / COMMON AREA/ LOBBY
- UTILITY / SERVICE
- EXCLUDED FROM GFA

PENINSULA INNOVATION PARTNERS

WILLOW VILLAGE
Architectural Control Package - Parcel 3
Menlo Park, CA

SCALE:

NOTE: THIS DRAWING IS ISO A1. DO NOT SCALE DRAWINGS. USE FIGURED DIMENSIONS ONLY, OR SEEK CLARIFICATION FROM ARCHITECT FOR MEASUREMENTS THAT ARE NOT INDICATED.

MILESTONES

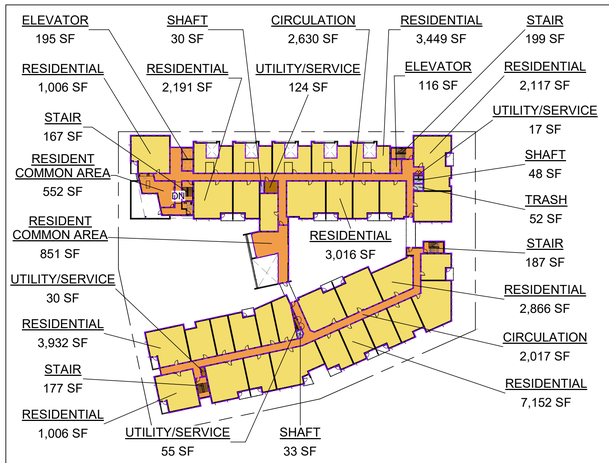
DATE	ISSUE
9/7/2021	ACP

REVISIONS

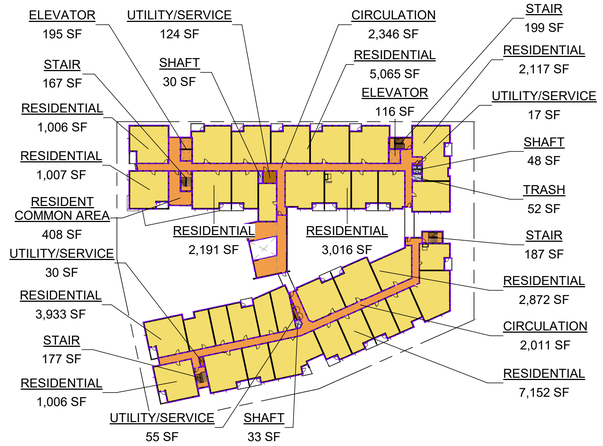
NO.	DATE	ISSUE

DRAWING TITLE:
AREA SQUAREFOOTAGE PLAN

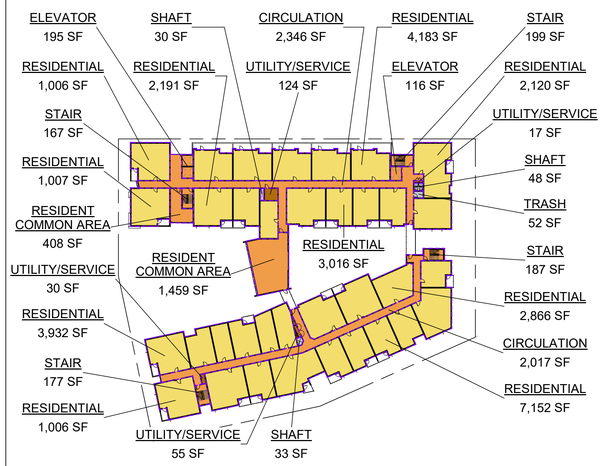
DRAWING NO:
A9.04



LEVEL 7 (7)
1" = 60'-0"



LEVEL 4 (4)
1" = 60'-0"



LEVEL 6 (6)
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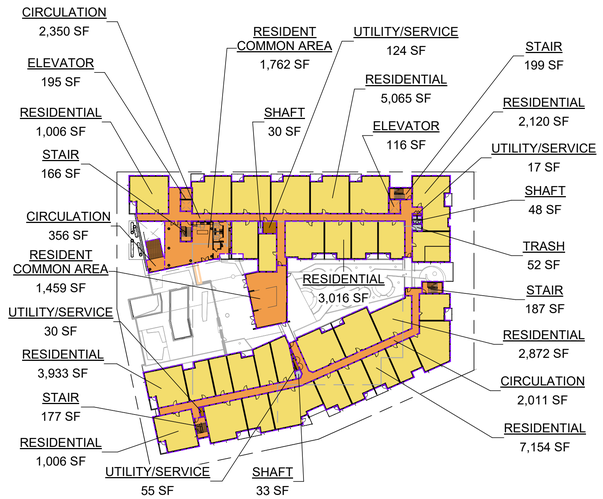
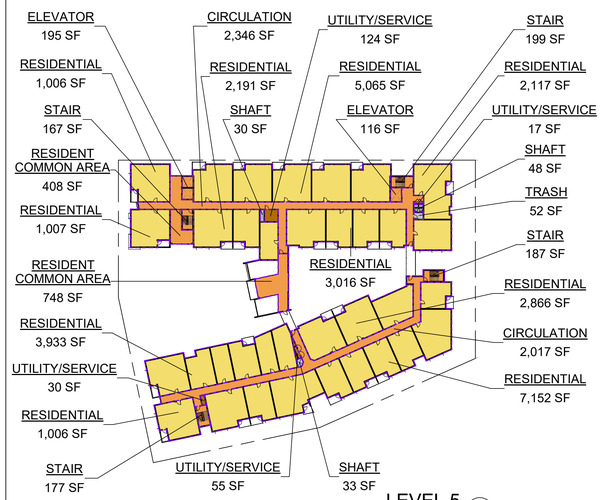


ST LEVEL 3 (3)
1" = 60'-0"



LEVEL 5 (5)
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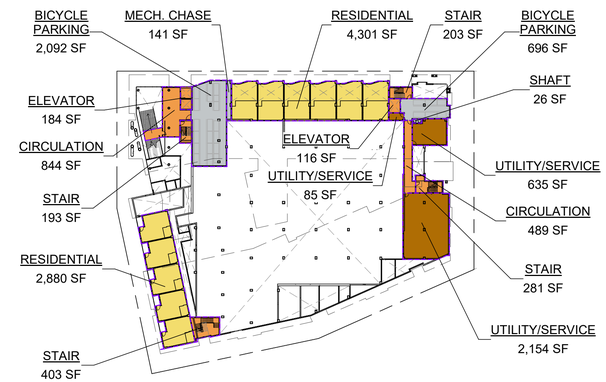
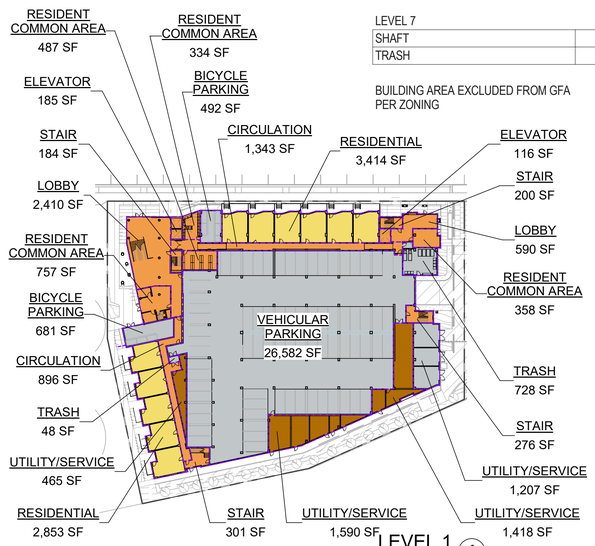


LEVEL 2 (2)
1" = 60'-0"

GROSS FLOOR AREA LEGEND

- RESIDENTIAL (INCLUDED IN GFA)
- CIRCULATION / LOBBY / COMMON AREA (INCLUDED IN GFA)
- UTILITY / SERVICE (INCLUDED IN GFA)
- EXCLUDED FROM GFA



LEVEL 1 (1)
1" = 60'-0"

GROSS FLOOR AREA BY PROGRAM

PROGRAM	AREA	ZONING CODE REFERENCE
BUILDING AREA EXCLUDED FROM GFA PER ZONING		
BICYCLE PARKING	3,961 SF	EXCLUDED PER 16.04.325(C)(3)
MECH. CHASE	141 SF	EXCLUDED PER 16.04.325(C)(1)
SHAFT	582 SF	EXCLUDED PER 16.04.325(C)(5)
TRASH	1,036 SF	EXCLUDED PER 16.04.325(C)(6)
UTILITY/SERVICE	1,207 SF	EXCLUDED PER 16.04.325(C)(2)
VEHICULAR PARKING	26,582 SF	EXCLUDED PER 16.04.325(C)(3)
BUILDING AREA EXCLUDED FROM GFA PER ZONING	33,509 SF	
BUILDING AREA INCLUDED IN GFA PER ZONING		
CIRCULATION	26,021 SF	INCLUDED PER 16.04.325(A)
ELEVATOR	2,157 SF	INCLUDED PER 16.04.325(B)(7)
LOBBY	3,000 SF	INCLUDED PER 16.04.325(A)
RESIDENT COMMON AREA	11,091 SF	INCLUDED PER 16.04.325(A)
RESIDENTIAL	154,745 SF	INCLUDED PER 16.04.325(A)
STAIR	5,687 SF	INCLUDED PER 16.04.325(B)(7)
UTILITY/SERVICE	7,480 SF	INCLUDED PER 16.04.325(A), 16.04.325(B)(4), & 16.04.325
BUILDING AREA INCLUDED IN GFA PER ZONING	210,180 SF	
TOTAL BUILDING AREA	243,689 SF	

GROSS FLOOR AREA

PROGRAM	AREA
BUILDING AREA EXCLUDED FROM GFA PER ZONING	
Not Placed	
SHAFT	0 SF
	0 SF
LEVEL 1	
BICYCLE PARKING	1,173 SF
TRASH	776 SF
UTILITY/SERVICE	1,207 SF
VEHICULAR PARKING	26,582 SF
	29,737 SF
LEVEL 2	
BICYCLE PARKING	2,788 SF
MECH. CHASE	141 SF
SHAFT	26 SF
	2,954 SF
LEVEL 3	
SHAFT	111 SF
TRASH	52 SF
	163 SF
LEVEL 4	
SHAFT	111 SF
TRASH	52 SF
	163 SF
LEVEL 5	
SHAFT	111 SF
TRASH	52 SF
	163 SF
LEVEL 6	
SHAFT	111 SF
TRASH	52 SF
	163 SF
LEVEL 7	
SHAFT	111 SF
TRASH	52 SF
	163 SF
BUILDING AREA EXCLUDED FROM GFA PER ZONING	33,509 SF

GROSS FLOOR AREA

PROGRAM	AREA
BUILDING AREA INCLUDED IN GFA PER ZONING	
Not Placed	
UTILITY/SERVICE	0 SF
	0 SF
LEVEL 1	
CIRCULATION	2,239 SF
ELEVATOR	301 SF
LOBBY	3,000 SF
RESIDENT COMMON AREA	1,935 SF
RESIDENTIAL	6,267 SF
STAIR	962 SF
UTILITY/SERVICE	3,473 SF
	18,177 SF
LEVEL 2	
CIRCULATION	1,333 SF
ELEVATOR	300 SF
RESIDENTIAL	7,181 SF
STAIR	1,080 SF
UTILITY/SERVICE	2,874 SF
	12,769 SF
LEVEL 3	
CIRCULATION	4,717 SF
ELEVATOR	311 SF
RESIDENT COMMON AREA	3,221 SF
RESIDENTIAL	27,352 SF
STAIR	728 SF
UTILITY/SERVICE	227 SF
	36,556 SF
LEVEL 4	
CIRCULATION	4,357 SF
ELEVATOR	311 SF
RESIDENT COMMON AREA	1,509 SF
RESIDENTIAL	29,367 SF
STAIR	729 SF
UTILITY/SERVICE	227 SF
	36,500 SF
LEVEL 5	
CIRCULATION	4,363 SF
ELEVATOR	311 SF
RESIDENT COMMON AREA	1,156 SF
RESIDENTIAL	29,361 SF
STAIR	729 SF
UTILITY/SERVICE	227 SF
	36,147 SF
LEVEL 6	
CIRCULATION	4,363 SF
ELEVATOR	311 SF
RESIDENT COMMON AREA	1,867 SF
RESIDENTIAL	28,480 SF
STAIR	729 SF
UTILITY/SERVICE	227 SF
	35,977 SF
LEVEL 7	
CIRCULATION	4,648 SF
ELEVATOR	311 SF
RESIDENT COMMON AREA	1,403 SF
RESIDENTIAL	26,737 SF
STAIR	729 SF
UTILITY/SERVICE	227 SF
	34,054 SF
BUILDING AREA INCLUDED IN GFA PER ZONING	210,180 SF
TOTAL BUILDING AREA	243,689 SF

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PENINSULA INNOVATION PARTNERS

WILLOW VILLAGE
Architectural Control Package - Parcel 6
Menlo Park, CA

SCALE: 1" = 60'-0"

NOTE: THIS DRAWING IS ISO A1. DO NOT SCALE DRAWING. USE FIGURED DIMENSIONS ONLY. OR SEEK CLARIFICATION FROM ARCHITECT FOR MEASUREMENTS THAT ARE NOT INDICATED.

MILESTONES

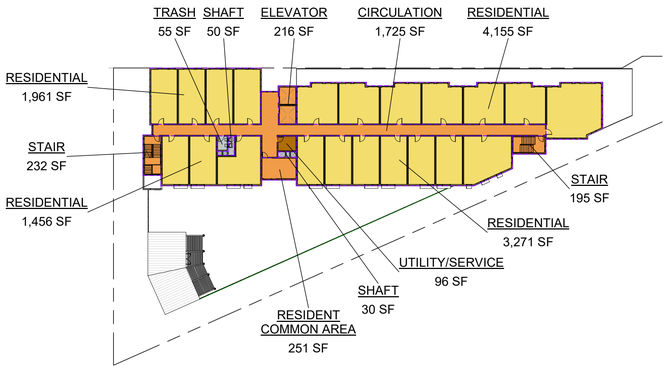
DATE	ISSUE
09/07/2021	ACP

REVISIONS

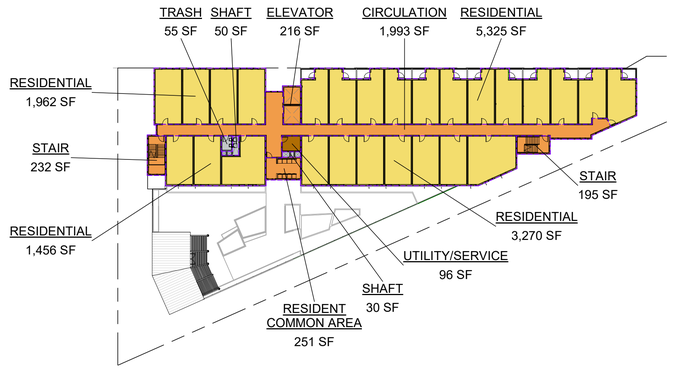
NO.	DATE	ISSUE

DRAWING TITLE: SQUARE FOOTAGE PLANS

DRAWING NO: A9.04



FLOOR PLAN - LEVEL 6 (6)
1" = 40'-0"



FLOOR PLAN - LEVEL 3 (3)
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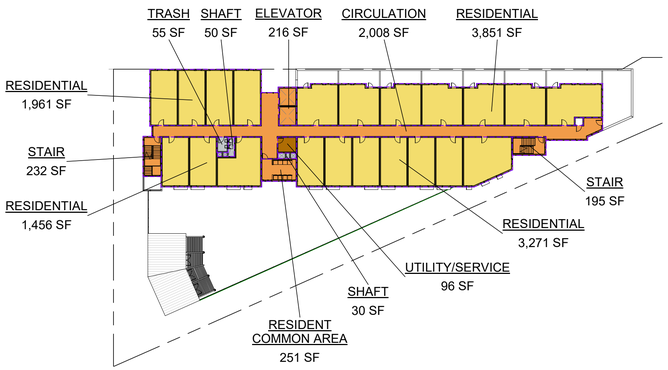
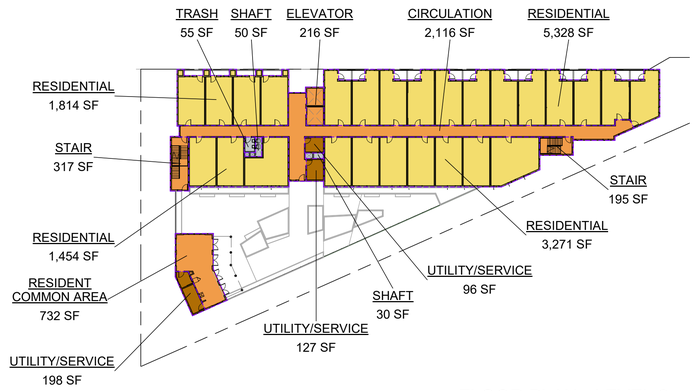
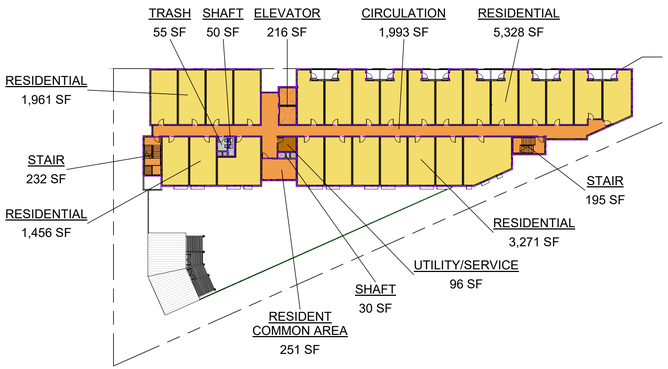


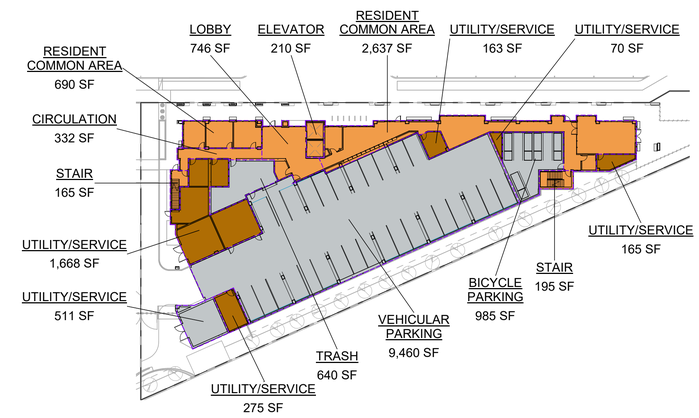
FLOOR PLAN - LEVEL 5 (5)
1" = 40'-0"



FLOOR PLAN - LEVEL 2 (2)
1" = 40'-0"



FLOOR PLAN - LEVEL 4 (4)
1" = 40'-0"



FLOOR PLAN - LEVEL 1 (1)
1" = 40'-0"

GROSS FLOOR AREA BY PROGRAM

PROGRAM	AREA	ZONING CODE REFERENCE
BUILDING AREA EXCLUDED FROM GFA PER ZONING		
BICYCLE PARKING	985 SF	EXCLUDED PER 16.04.325(C)(3)
SHAFT	400 SF	EXCLUDED PER 16.04.325(C)(5)
TRASH	914 SF	EXCLUDED PER 16.04.325(C)(6)
UTILITY/SERVICE	511 SF	EXCLUDED PER 16.04.325(C)(2)
VEHICULAR PARKING	9,460 SF	EXCLUDED PER 16.04.325(C)(3)
BUILDING AREA EXCLUDED FROM GFA PER ZONING	12,270 SF	
BUILDING AREA INCLUDED IN GFA PER ZONING		
CIRCULATION	10,166 SF	INCLUDED PER 16.04.325(A)
ELEVATOR	1,290 SF	INCLUDED PER 16.04.325(B)(7)
LOBBY	746 SF	INCLUDED PER 16.04.325(A)
RESIDENT COMMON AREA	5,064 SF	INCLUDED PER 16.04.325(A)
RESIDENTIAL	57,276 SF	INCLUDED PER 16.04.325(A)
STAIR	2,576 SF	INCLUDED PER 16.04.325(B)(7)
UTILITY/SERVICE	3,147 SF	INCLUDED PER 16.04.325(A), 16.04.325(B)(4), & 16.04.325
BUILDING AREA INCLUDED IN GFA PER ZONING	80,266 SF	
TOTAL BUILDING AREA	92,536 SF	

GROSS FLOOR AREA

NAME	AREA
BUILDING AREA EXCLUDED FROM GFA PER ZONING	
LEVEL 1	
BICYCLE PARKING	985 SF
TRASH	640 SF
UTILITY/SERVICE	511 SF
VEHICULAR PARKING	9,460 SF
	11,596 SF
LEVEL 2	
SHAFT	80 SF
TRASH	55 SF
	135 SF
LEVEL 3	
SHAFT	80 SF
TRASH	55 SF
	135 SF
LEVEL 4	
SHAFT	80 SF
TRASH	55 SF
	135 SF
LEVEL 5	
SHAFT	80 SF
TRASH	55 SF
	135 SF
LEVEL 6	
SHAFT	80 SF
TRASH	55 SF
	135 SF
BUILDING AREA EXCLUDED FROM GFA PER ZONING	12,270 SF

GROSS FLOOR AREA

NAME	AREA
BUILDING AREA INCLUDED IN GFA PER ZONING	
LEVEL 1	
CIRCULATION	332 SF
ELEVATOR	210 SF
LOBBY	746 SF
RESIDENT COMMON AREA	3,328 SF
STAIR	360 SF
UTILITY/SERVICE	2,342 SF
	7,316 SF
LEVEL 2	
CIRCULATION	2,116 SF
ELEVATOR	216 SF
RESIDENT COMMON AREA	732 SF
RESIDENTIAL	11,867 SF
STAIR	511 SF
UTILITY/SERVICE	422 SF
	15,864 SF
LEVEL 3	
CIRCULATION	1,993 SF
ELEVATOR	216 SF
RESIDENT COMMON AREA	251 SF
RESIDENTIAL	12,012 SF
STAIR	426 SF
UTILITY/SERVICE	96 SF
	14,995 SF
LEVEL 4	
CIRCULATION	1,993 SF
ELEVATOR	216 SF
RESIDENT COMMON AREA	251 SF
RESIDENTIAL	12,016 SF
STAIR	426 SF
UTILITY/SERVICE	96 SF
	14,998 SF
LEVEL 5	
CIRCULATION	2,008 SF
ELEVATOR	216 SF
RESIDENT COMMON AREA	251 SF
RESIDENTIAL	10,539 SF
STAIR	426 SF
UTILITY/SERVICE	96 SF
	13,536 SF
LEVEL 6	
CIRCULATION	1,725 SF
ELEVATOR	216 SF
RESIDENT COMMON AREA	251 SF
RESIDENTIAL	10,843 SF
STAIR	426 SF
UTILITY/SERVICE	96 SF
	13,557 SF
BUILDING AREA INCLUDED IN GFA PER ZONING	80,266 SF
TOTAL BUILDING AREA	92,536 SF

GROSS FLOOR AREA LEGEND

- RESIDENTIAL (INCLUDED IN GFA)
- CIRCULATION / LOBBY / COMMON AREA (INCLUDED IN GFA)
- UTILITY / SERVICE (INCLUDED IN GFA)
- EXCLUDED FROM GFA

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PENINSULA INNOVATION PARTNERS

WILLOW VILLAGE
Architectural Control Package - Parcel 7
Menlo Park, CA

SCALE: 1" = 40'-0"

NOTE: THIS DRAWING IS ISO A1. DO NOT SCALE DRAWINGS. USE FIGURED DIMENSIONS ONLY, OR SEEK CLARIFICATION FROM ARCHITECT FOR MEASUREMENTS THAT ARE NOT INDICATED.

MILESTONES	
DATE	ISSUE
09/07/2021	ACP

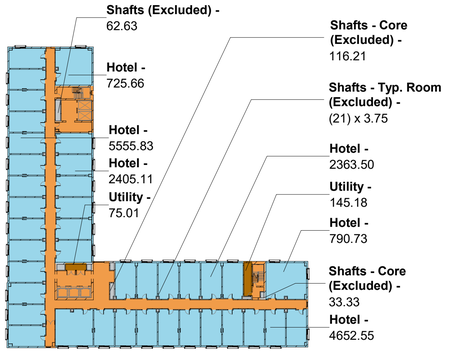
REVISIONS		
NO.	DATE	ISSUE

DRAWING TITLE:
SQUARE FOOTAGE PLANS

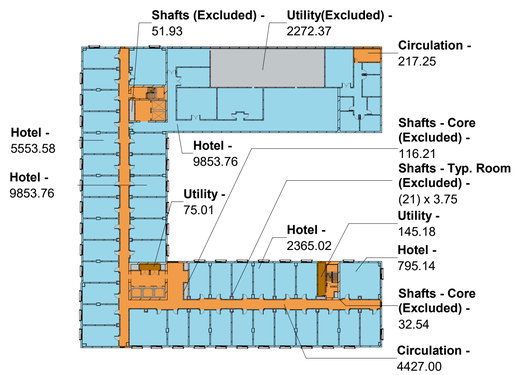
DRAWING NO:
A9.04

Key

- Hotel
- Retail
- Circulation/Lobby/Common Area
- Utility/Service
- Excluded From GFA

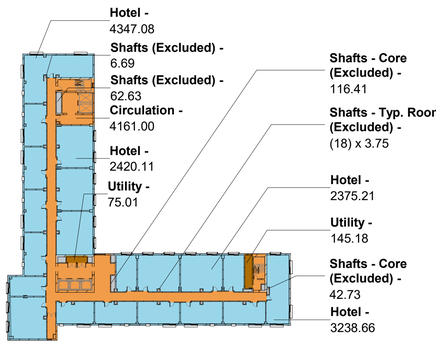


6 HOTEL LEVEL 5 - AREA PLAN
1" = 50'-0"

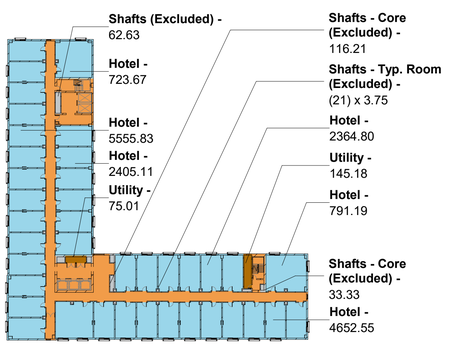


1 HOTEL LEVEL 2 - AREA PLAN
1" = 50'-0"

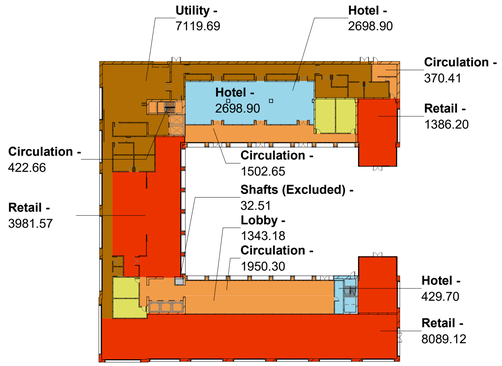
ACP - GFA - Included	
Name	Area
BASEMENT 1	
Utility -	7517.82 SF
TOWN SQUARE LEVEL X	
Circulation -	4246.02 SF
Common Area -	1313.56 SF
Hotel -	3128.60 SF
Lobby -	1343.18 SF
Retail -	13456.89 SF
Utility -	7119.69 SF
HOTEL LEVEL 2	
Circulation -	4644.25 SF
Hotel -	23214.85 SF
Utility -	220.20 SF
HOTEL LEVEL 3	
Circulation -	4599.77 SF
Common Area -	794.16 SF
Hotel -	15193.03 SF
Retail -	542.37 SF
Utility -	220.20 SF
HOTEL LEVEL 4	
Circulation -	4634.75 SF
Hotel -	16493.15 SF
Utility -	220.20 SF
HOTEL LEVEL 5	
Circulation -	4634.52 SF
Hotel -	16493.38 SF
Utility -	220.20 SF
HOTEL LEVEL 6	
Circulation -	4161.00 SF
Hotel -	12381.23 SF
Utility -	220.20 SF
HOTEL LEVEL 7	
Circulation -	4161.00 SF
Hotel -	12381.07 SF
Utility -	220.20 SF
	163775.49 SF



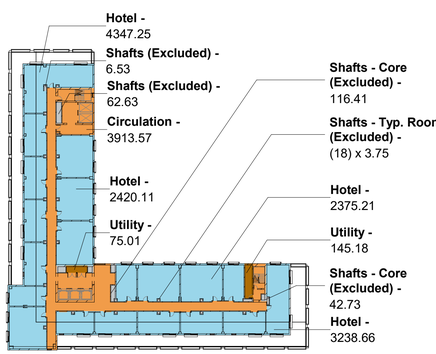
8 HOTEL LEVEL 7 - AREA PLAN
1" = 50'-0"



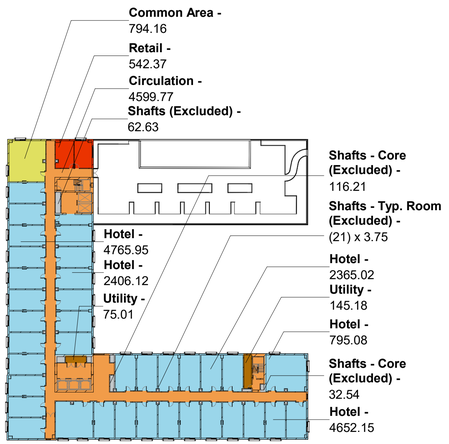
5 HOTEL LEVEL 4 - AREA PLAN
1" = 50'-0"



2 HOTEL LEVEL 1 - AREA PLAN
1" = 50'-0"



7 HOTEL LEVEL 6 - AREA PLAN
1" = 50'-0"



4 HOTEL LEVEL 3 - AREA PLAN
1" = 50'-0"

3 BASEMENT - AREA PLAN
1" = 50'-0"

ACP - GFA - Excluded	
Name	Area
BASEMENT 1	
Bicycle Parking (Excluded) -	320.25 SF
Circulation (Excluded) -	673.64 SF
Elevator & Stairs (Excluded) -	1571.60 SF
Parking (Excluded) -	60406.68 SF
TOWN SQUARE LEVEL X	
Shafts (Excluded) -	32.51 SF
HOTEL LEVEL 2	
Shafts (Excluded) -	280.30 SF
Utility(Excluded) -	2272.37 SF
HOTEL LEVEL 3	
Shafts (Excluded) -	290.93 SF
HOTEL LEVEL 4	
Shafts (Excluded) -	291.68 SF
HOTEL LEVEL 5	
Shafts (Excluded) -	291.68 SF
HOTEL LEVEL 6	
Shafts (Excluded) -	296.03 SF
HOTEL LEVEL 7	
Shafts (Excluded) -	296.19 SF
	67023.85 SF

8/11/2021 1:56:03 PM

PENINSULA INNOVATION PARTNERS

WILLOW VILLAGE
Architectural Control Package - Parcel 1 - Hotel
Menlo Park, CA

SCALE: As indicated

NOTE: THIS DRAWING IS ISO A1. DO NOT SCALE DRAWINGS. USE FIGURED DIMENSIONS ONLY, OR SEEK CLARIFICATION FROM ARCHITECT FOR MEASUREMENTS THAT ARE NOT INDICATED.

MILESTONES

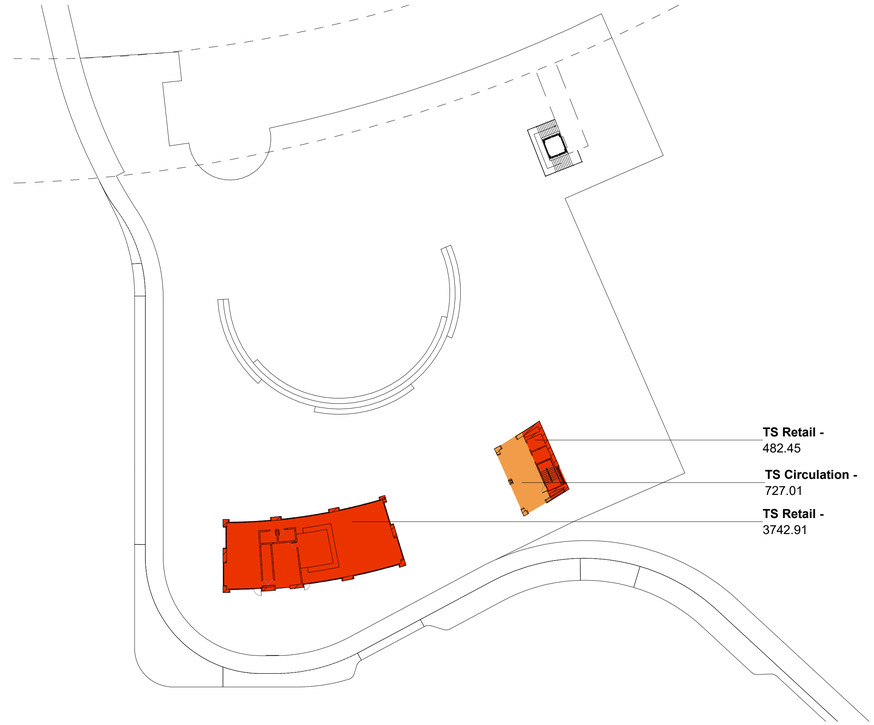
DATE	ISSUE
09/07/2021	ACP

REVISIONS

NO.	DATE	ISSUE

DRAWING TITLE:
Willow Village Hotel
Square Footage Plan

DRAWING NO:
A9.04



ACP - TS - GFA - Included	
Name	Area
TOWN SQUARE LEVEL X	
TS Circulation -	727.01 SF
TS Retail -	4225.36 SF
	4952.38 SF

ACP - TS - GFA - Excluded	
Name	Area
BASEMENT 1	
TS Circulation (Excluded) -	401 SF
TS Elevator & Stairs (Excluded) -	1072 SF
TS Parking (Excluded) -	91685 SF
TS Shafts (Excluded) -	334 SF
	93492 SF

Key

- Retail
- Circulation/Lobby/Common Area
- Excluded From GFA

2 TOWN SQUARE PAVILION - LEVEL 1

1" = 40'-0"

1 TOWN SQUARE PAVILION - BASEMENT

1" = 40'-0"

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PENINSULA INNOVATION PARTNERS

WILLOW VILLAGE

Architectural Control Package - Parcel 1 - Town Square

Menlo Park, CA

SCALE: As indicated

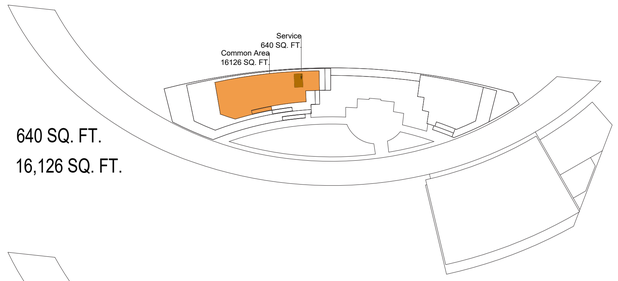
NOTE: THIS DRAWING IS ISO A1. DO NOT SCALE DRAWINGS. USE FIGURED DIMENSIONS ONLY, OR SEEK CLARIFICATION FROM ARCHITECT FOR MEASUREMENTS THAT ARE NOT INDICATED.

MILESTONES	
DATE	ISSUE
09/07/2021	ACP

REVISIONS		
NO.	DATE	ISSUE

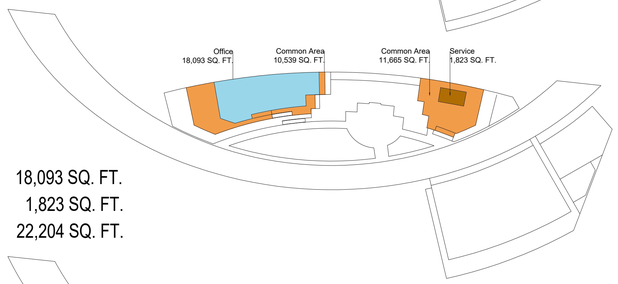
DRAWING TITLE:
WILLOW VILLAGE TOWN SQUARE
Square Footage Plan

DRAWING NO:
A9.04



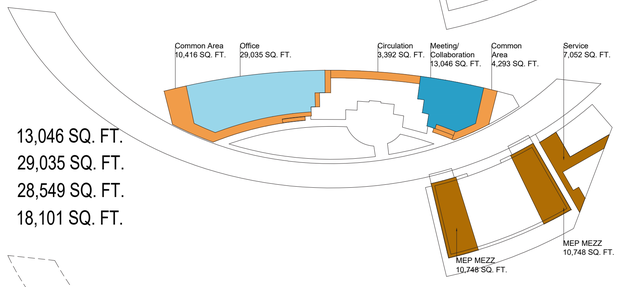
LEVEL 4

- Utility / Service — 640 SQ. FT.
- Circulation / Common Area — 16,126 SQ. FT.



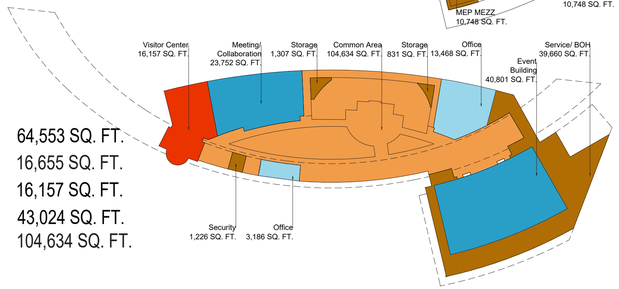
LEVEL 3

- Office — 18,093 SQ. FT.
- Utility / Service — 1,823 SQ. FT.
- Circulation / Common Area — 22,204 SQ. FT.



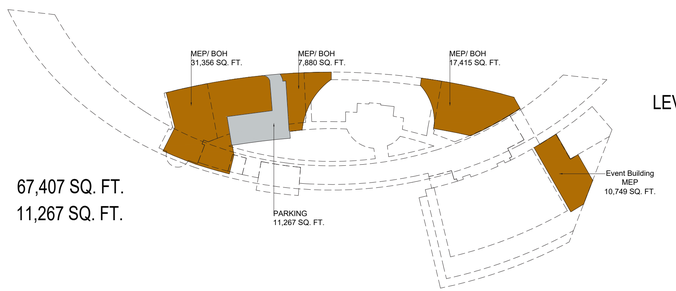
LEVEL 2

- Meeting & Collaboration — 13,046 SQ. FT.
- Office — 29,035 SQ. FT.
- Utility / Service — 28,549 SQ. FT.
- Circulation / Common Area — 18,101 SQ. FT.



LEVEL 1

- Meeting & Collaboration — 64,553 SQ. FT.
- Office — 16,655 SQ. FT.
- Retail — 16,157 SQ. FT.
- Utility/ Service — 43,024 SQ. FT.
- Circulation / Common Area — 104,634 SQ. FT.



LEVEL B1

- Utility/ Service — 67,407 SQ. FT.
- Excluded from GFA — 11,267 SQ. FT.

Gross Areas by Floor		Total Gross Area (sf)
Level 4	**Total**	**16,766**
Common Area		16,766
Level 3	**Total**	**42,120**
Office		19,916
Common Area		22,204
Level 2	**Total**	**88,731**
Meeting & Collaboration		13,046
Office		29,035
Common Area		18,101
Service		28,549
Level 1	**Total**	**245,023**
Meeting & Collaboration		64,553
Office		16,655
Visitor Center		16,157
Utility/ Service		43,024
Common Area*		104,634
Basement	**Total**	**78,674**
Utility/ Service		67,407
Parking		11,267
TOTAL GFA		**471,314 sf**

Gross Areas by Floor Excluded from GFA per Zoning Code		Total Gross Area (sf)
Basement	**Total**	**34,217**
Basement MEP		22,950
Parking		11,267
TOTAL EXCLUDED GFA		**34,217 sf**

TOTAL GFA PER ZONING CODE **437,097 sf**

1 SQUARE FOOTAGE AND BUILDING COVERAGE

PENINSULA INNOVATION PARTNERS

WILLOW VILLAGE
Architectural Control Package - Parcel 1
Menlo Park, CA

SCALE:

NOTE: THIS DRAWING IS ISO A1. DO NOT SCALE DRAWINGS. USE FIGURED DIMENSIONS ONLY. OR SEEK CLARIFICATION FROM ARCHITECT FOR MEASUREMENTS THAT ARE NOT INDICATED.

MILESTONES

DATE	ISSUE
09/07/2021	ACP

REVISIONS

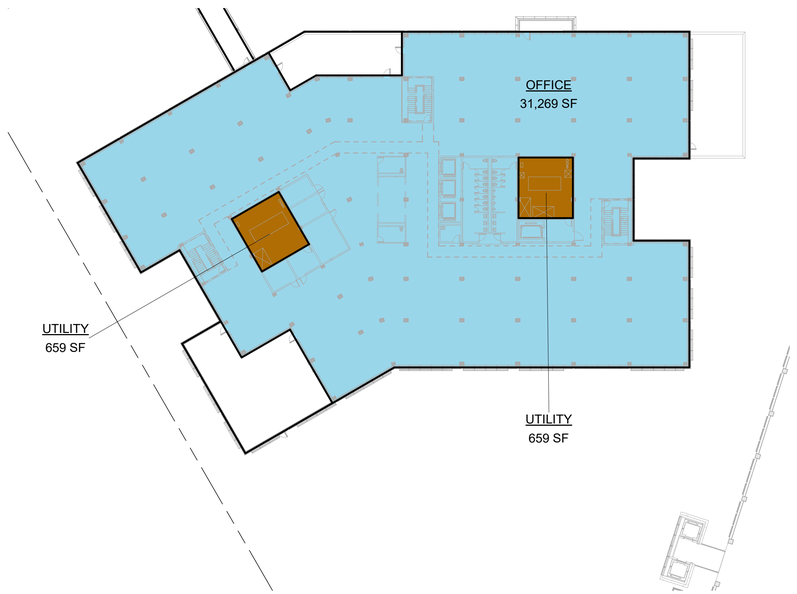
NO.	DATE	ISSUE

DRAWING TITLE: SQUARE FOOTAGE AND BUILDING COVERAGE

DRAWING NO: **A9.04**

1 LEVEL 1 - O1
1/32" = 1'-0"

2 LEVEL 2 - O1
1/32" = 1'-0"



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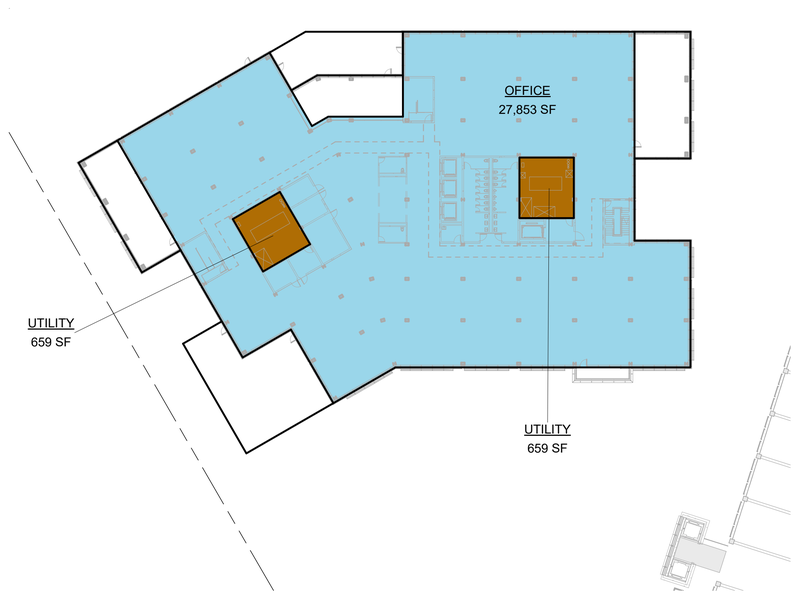
1/32" = 1'-0"



4 LEVEL 4 - O1
1/32" = 1'-0"

GROSS FLOOR AREA - O1 INCLUSIONS

Name	Area
LEVEL 1	
OFFICE	38,892 SF
	38,892 SF
LEVEL 2	
OFFICE	34,464 SF
	34,464 SF
LEVEL 3	
OFFICE	31,269 SF
	31,269 SF
LEVEL 4	
OFFICE	27,853 SF
	27,853 SF
INCLUDED IN GFA PER ZONING CODE	132,477 SF

GROSS FLOOR AREA - O1 EXCLUSIONS

Name	Area
LEVEL 1	
BIKE PARKING	469 SF
TRASH	618 SF
UTILITY	1,318 SF
	2,405 SF
LEVEL 2	
UTILITY	1,318 SF
	1,318 SF
LEVEL 3	
UTILITY	1,318 SF
	1,318 SF
LEVEL 4	
UTILITY	1,318 SF
	1,318 SF
EXCLUDED IN GFA PER ZONING CODE	6,360 SF

GFA BY LAND USE LEGEND

SWATCH	USE
	Office
	Retail
	Circulation / Lobby / Common Area
	Utility / Service
	Excluded from GFA

GROSS FLOOR AREA - TOTAL OFFICE CAMPUS

1,128,792 SF

GROSS FLOOR AREA - TOTAL RETAIL*

***Retail area not counted in Office GFA. See Master Plan CDP.**

28,258 SF

Plan North

True North

0 16 32 64

GFA SUMMARY - TOTAL OFFICE CAMPUS

GROSS FLOOR AREA - O1 TOTALS / LEVEL

Level	Area
LEVEL 1	38,892 SF
LEVEL 2	34,464 SF
LEVEL 3	31,269 SF
LEVEL 4	27,853 SF
TOTAL	132,477 SF

GROSS FLOOR AREA - O2 TOTALS / LEVEL

Level	Area
LEVEL 1	27,977 SF
LEVEL 2	35,584 SF
LEVEL 3	34,322 SF
LEVEL 4	34,322 SF
LEVEL 5	28,066 SF
TOTAL	160,271 SF

GROSS FLOOR AREA - O3 TOTALS / LEVEL

Level	Area
LEVEL 1	37,138 SF
LEVEL 2	46,449 SF
LEVEL 3	45,566 SF
LEVEL 4	42,408 SF
LEVEL 5	38,520 SF
TOTAL	210,081 SF

GROSS FLOOR AREA - O4 TOTALS / LEVEL

Level	Area
LEVEL 1	35,846 SF
LEVEL 2	37,737 SF
LEVEL 3	35,843 SF
LEVEL 4	31,109 SF
LEVEL 5	28,275 SF
TOTAL	168,810 SF

GROSS FLOOR AREA - O5 TOTALS / LEVEL

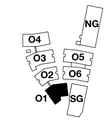
Level	Area
LEVEL 1	50,895 SF
LEVEL 2	48,434 SF
LEVEL 3	49,372 SF
LEVEL 4	45,142 SF
LEVEL 5	42,308 SF
TOTAL	236,151 SF

GROSS FLOOR AREA - O6 TOTALS / LEVEL

Level	Area
LEVEL 1	47,839 SF
LEVEL 2	44,498 SF
LEVEL 3	44,498 SF
LEVEL 4	41,411 SF
LEVEL 5	38,577 SF
TOTAL	216,824 SF

GROSS FLOOR AREA - PAVILION TOTALS / LEVEL

Level	Area
LEVEL 1	4,178 SF
TOTAL	4,178 SF



PENINSULA INNOVATION PARTNERS

WILLOW VILLAGE
Architectural Control Package - Parcel 1 (Portion) & 8
Menlo Park, CA

SCALE: As indicated

NOTE: THIS DRAWING IS ISO A1. DO NOT SCALE DRAWINGS. USE FIGURED DIMENSIONS ONLY, OR SEEK CLARIFICATION FROM ARCHITECT FOR MEASUREMENTS THAT ARE NOT INDICATED.

MILESTONES

DATE	ISSUE
09/07/2021	ACP

REVISIONS

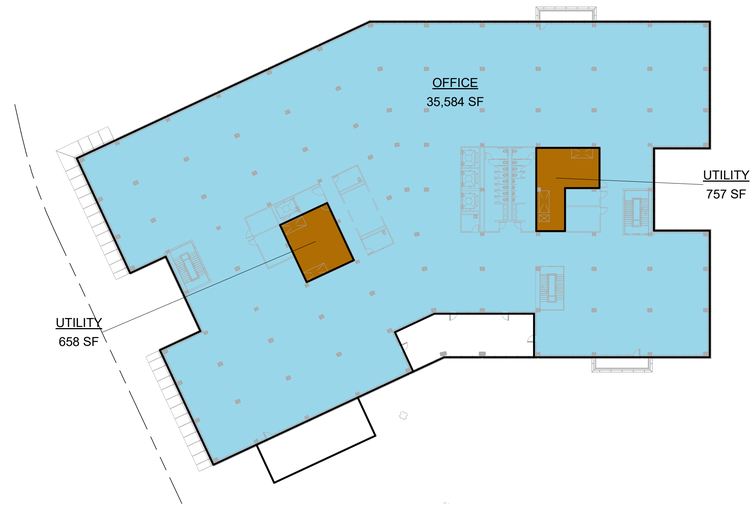
NO.	DATE	ISSUE

DRAWING TITLE: Square Footage Plan - Building O1

DRAWING NO: A9.04.1

8/31/2021 9:15:26 AM

1 LEVEL 1 - O2
1/32" = 1'-0"



2 LEVEL 2 - O2
1/32" = 1'-0"

3 LEVEL 3 - O2
1/32" = 1'-0"

4 LEVEL 4 - O2
1/32" = 1'-0"

5 LEVEL 5 - O2
1/32" = 1'-0"

8/31/2021 9:15:59 AM

GROSS FLOOR AREA - O2 INCLUSIONS

Name	Area
LEVEL 1	
OFFICE	27,977 SF
	27,977 SF
LEVEL 2	
OFFICE	35,584 SF
	35,584 SF
LEVEL 3	
OFFICE	34,322 SF
	34,322 SF
LEVEL 4	
OFFICE	34,322 SF
	34,322 SF
LEVEL 5	
OFFICE	28,066 SF
	28,066 SF
INCLUDED IN GFA PER ZONING CODE	160,271 SF

GROSS FLOOR AREA - O2 EXCLUSIONS

Name	Area
LEVEL 1	
BIKE PARKING	427 SF
TRASH	587 SF
UTILITY	1,414 SF
	2,428 SF
LEVEL 2	
UTILITY	1,414 SF
	1,414 SF
LEVEL 3	
UTILITY	1,414 SF
	1,414 SF
LEVEL 4	
UTILITY	1,414 SF
	1,414 SF
LEVEL 5	
UTILITY	1,414 SF
	1,414 SF
EXCLUDED FROM GFA PER ZONING CODE	8,085 SF

GROSS FLOOR AREA - O2 RETAIL INCLUSIONS*

*Retail area not counted in Office GFA. See Master Plan CDP.

Name	Area
RETAIL	6,470 SF
INCLUDED IN GFA PER ZONING CODE	6,470 SF

GROSS FLOOR AREA - O2 RETAIL EXCLUSIONS*

*Retail area not counted in Office GFA. See Master Plan CDP.

Name	Area
RETAIL TRASH	584 SF
EXCLUDED FROM GFA PER ZONING CODE	584 SF

GFA BY LAND USE LEGEND

SWATCH	USE
	Office
	Retail
	Circulation / Lobby / Common Area
	Utility / Service
	Excluded from GFA

GROSS FLOOR AREA - TOTAL OFFICE CAMPUS

1,128,792 SF

GROSS FLOOR AREA - TOTAL RETAIL*

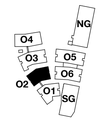
***Retail area not counted in Office GFA. See Master Plan CDP.**

28,258 SF

Plan North

True North

0 16 32 64



PENINSULA INNOVATION PARTNERS

WILLOW VILLAGE
Architectural Control Package - Parcel 1 (Portion) & 8
Menlo Park, CA

SCALE: As indicated

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MILESTONES

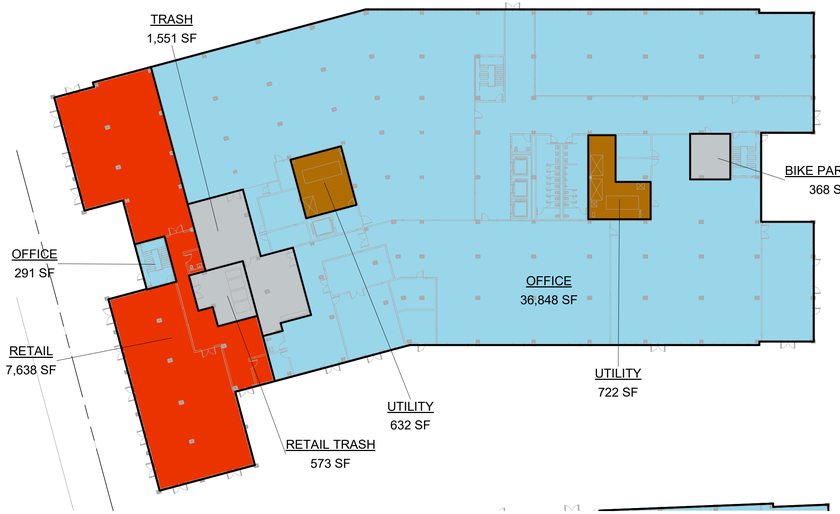
DATE	ISSUE
09/07/2021	ACP

REVISIONS

NO.	DATE	ISSUE

DRAWING TITLE:
Square Footage Plan - Building O2

DRAWING NO:
A9.04.2



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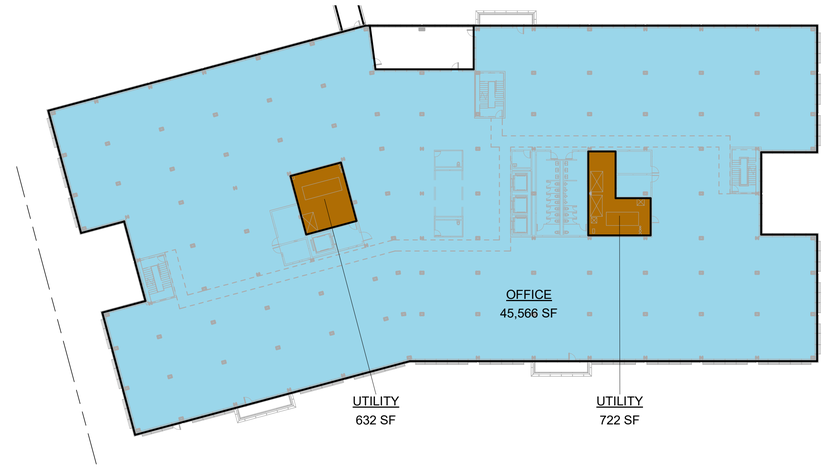
1/32" = 1'-0"

2 LEVEL 2 - O3
1/32" = 1'-0"



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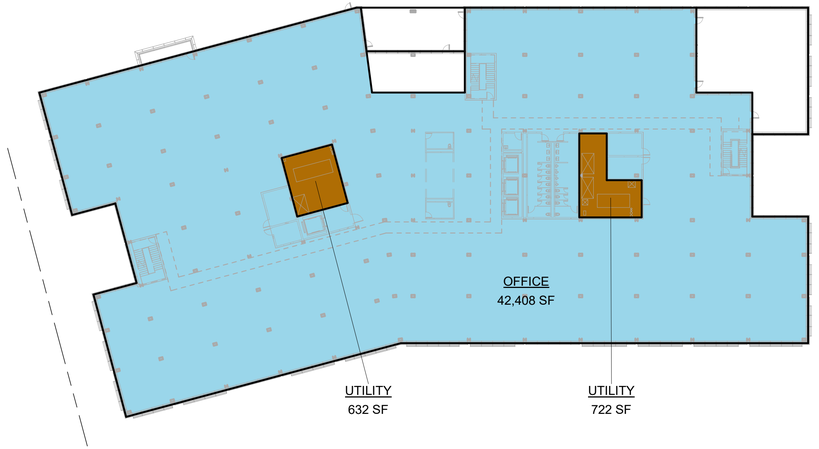


4 LEVEL 4 - O3
1/32" = 1'-0"

5 LEVEL 5 - O3
1/32" = 1'-0"

8/31/2021 9:16:32 AM

GROSS FLOOR AREA - O3 INCLUSIONS

Name	Area
LEVEL 1	
OFFICE	37,138 SF
	37,138 SF
LEVEL 2	
OFFICE	46,449 SF
	46,449 SF
LEVEL 3	
OFFICE	45,566 SF
	45,566 SF
LEVEL 4	
OFFICE	42,408 SF
	42,408 SF
LEVEL 5	
OFFICE	38,520 SF
	38,520 SF
INCLUDED IN GFA PER ZONING CODE	210,081 SF

GROSS FLOOR AREA - O3 EXCLUSIONS

Name	Area
LEVEL 1	
BIKE PARKING	368 SF
TRASH	1,551 SF
UTILITY	1,354 SF
	3,273 SF
LEVEL 2	
UTILITY	1,354 SF
	1,354 SF
LEVEL 3	
UTILITY	1,354 SF
	1,354 SF
LEVEL 4	
UTILITY	1,354 SF
	1,354 SF
LEVEL 5	
UTILITY	1,354 SF
	1,354 SF
EXCLUDED IN GFA PER ZONING CODE	8,688 SF

GROSS FLOOR AREA - O3 RETAIL INCLUSIONS*

*Retail area not counted in Office GFA. See Master Plan CDP.

Name	Area
RETAIL	7,638 SF
INCLUDED IN GFA PER ZONING CODE	7,638 SF

GROSS FLOOR AREA - O3 RETAIL EXCLUSIONS*

*Retail area not counted in Office GFA. See Master Plan CDP.

Name	Area
RETAIL TRASH	573 SF
EXCLUDED FROM GFA PER ZONING CODE	573 SF

GFA BY LAND USE LEGEND

SWATCH	USE
	Office
	Retail
	Circulation / Lobby / Common Area
	Utility / Service
	Excluded from GFA

GROSS FLOOR AREA - TOTAL OFFICE CAMPUS

1,128,792 SF

GROSS FLOOR AREA - TOTAL RETAIL*

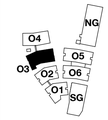
***Retail area not counted in Office GFA. See Master Plan CDP.**

28,258 SF

Plan North

True North

0 16 32 64



PENINSULA INNOVATION PARTNERS

WILLOW VILLAGE
Architectural Control Package - Parcel 1 (Portion) & 8
Menlo Park, CA

SCALE: As indicated

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MILESTONES

DATE	ISSUE
09/07/2021	ACP

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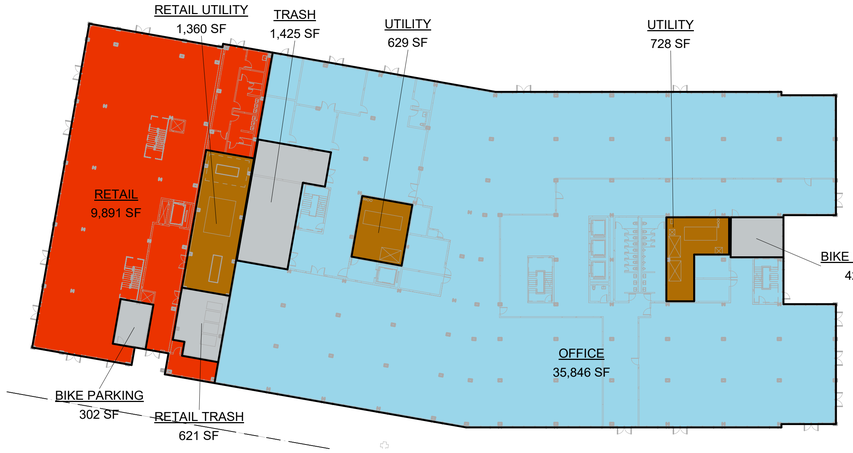
DRAWING TITLE: Square Footage Plan - Building O3

DRAWING NO: A9.04.3

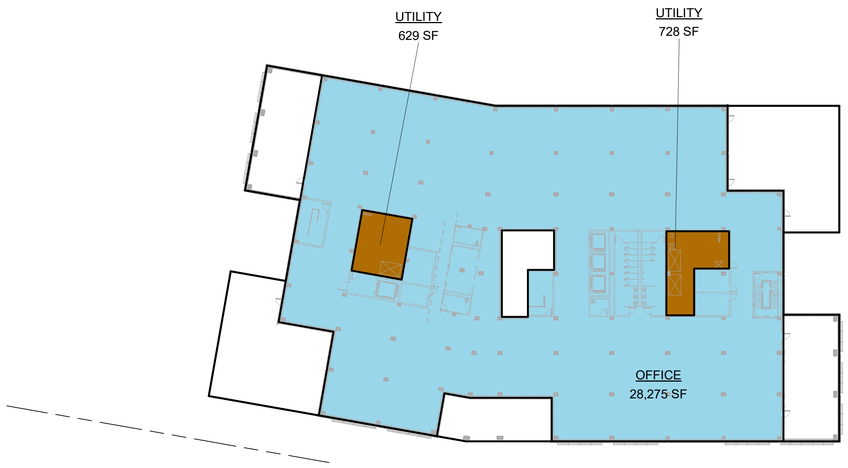


1 LEVEL 1 - O4
1/32" = 1'-0"

2 LEVEL 2 - O4
1/32" = 1'-0"

3 LEVEL 3 - O4
1/32" = 1'-0"

4 LEVEL 4 - O4
1/32" = 1'-0"



5 LEVEL 5 - O4
1/32" = 1'-0"

GROSS FLOOR AREA - O4 INCLUSIONS

Name	Area
LEVEL 1	
OFFICE	35,846 SF
	35,846 SF
LEVEL 2	
OFFICE	37,737 SF
	37,737 SF
LEVEL 3	
OFFICE	35,843 SF
	35,843 SF
LEVEL 4	
OFFICE	31,109 SF
	31,109 SF
LEVEL 5	
OFFICE	28,275 SF
	28,275 SF
INCLUDED IN GFA PER ZONING CODE	168,810 SF

GROSS FLOOR AREA - O4 EXCLUSIONS

Name	Area
LEVEL 1	
BIKE PARKING	421 SF
TRASH	1,425 SF
UTILITY	1,357 SF
	3,203 SF
LEVEL 2	
UTILITY	1,357 SF
	1,357 SF
LEVEL 3	
UTILITY	1,357 SF
	1,357 SF
LEVEL 4	
UTILITY	1,357 SF
	1,357 SF
LEVEL 5	
UTILITY	1,357 SF
	1,357 SF
EXCLUDED IN GFA PER ZONING CODE	8,632 SF

GROSS FLOOR AREA - O4 RETAIL INCLUSIONS*

*Retail area not counted in Office GFA. See Master Plan CDP.

Name	Area
RETAIL	4,258 SF
RETAIL	9,891 SF
INCLUDED IN GFA PER ZONING CODE	14,149 SF

GROSS FLOOR AREA - O4 RETAIL EXCLUSIONS*

*Retail area not counted in Office GFA. See Master Plan CDP.

Name	Area
RETAIL TRASH	621 SF
RETAIL UTILITY	1,360 SF
BIKE PARKING	302 SF
EXCLUDED FROM GFA PER ZONING CODE	2,283 SF

GFA BY LAND USE LEGEND

SWATCH	USE
	Office
	Retail
	Circulation / Lobby / Common Area
	Utility / Service
	Excluded from GFA

GROSS FLOOR AREA - TOTAL OFFICE CAMPUS

1,128,792 SF

GROSS FLOOR AREA - TOTAL RETAIL*

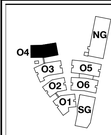
***Retail area not counted in Office GFA. See Master Plan CDP.**

28,258 SF

Plan North

True North

0 16 32 64



PENINSULA INNOVATION PARTNERS

WILLOW VILLAGE
Architectural Control Package - Parcel 1 (Portion) & 8
Menlo Park, CA

SCALE: As indicated

NOTE: THIS DRAWING IS ISO A1. DO NOT SCALE DRAWINGS. USE FIGURED DIMENSIONS ONLY. OR SEEK CLARIFICATION FROM ARCHITECT FOR MEASUREMENTS THAT ARE NOT INDICATED.

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NO.	DATE	ISSUE

DRAWING TITLE: Square Footage Plan - Building O4

DRAWING NO: A9.04.4

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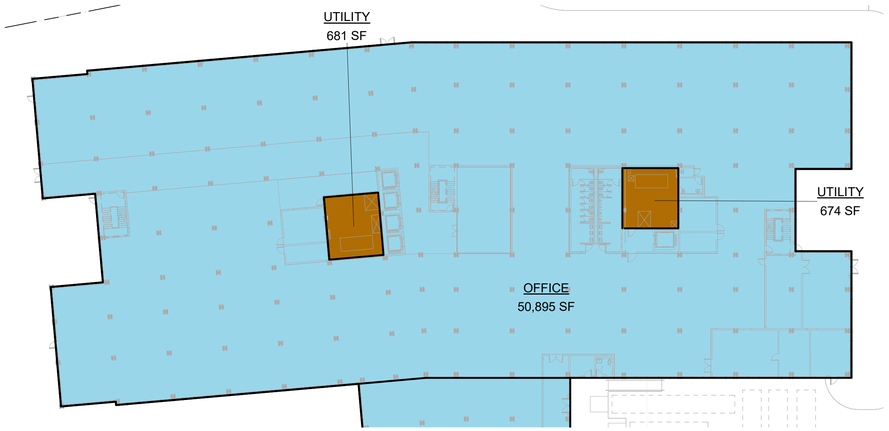
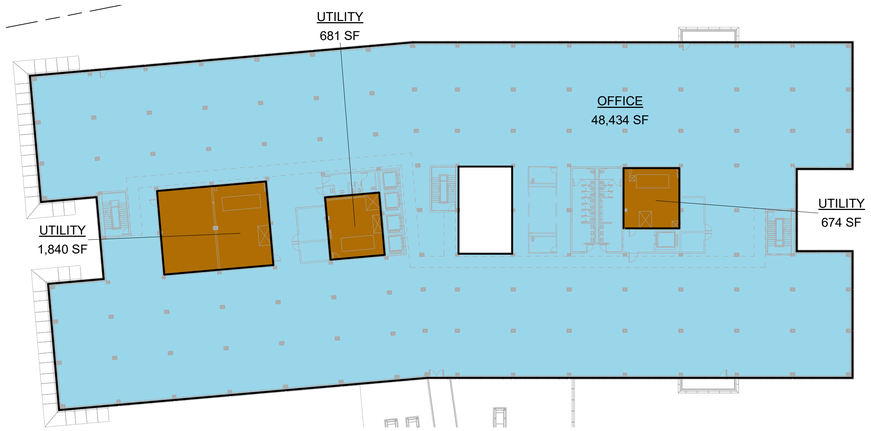
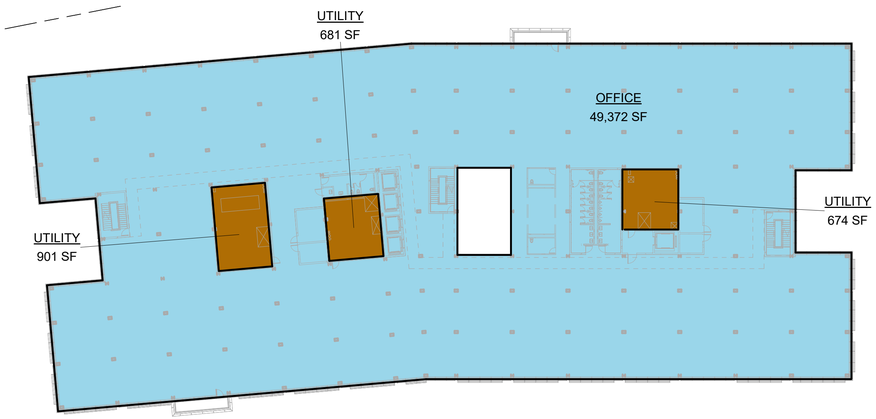


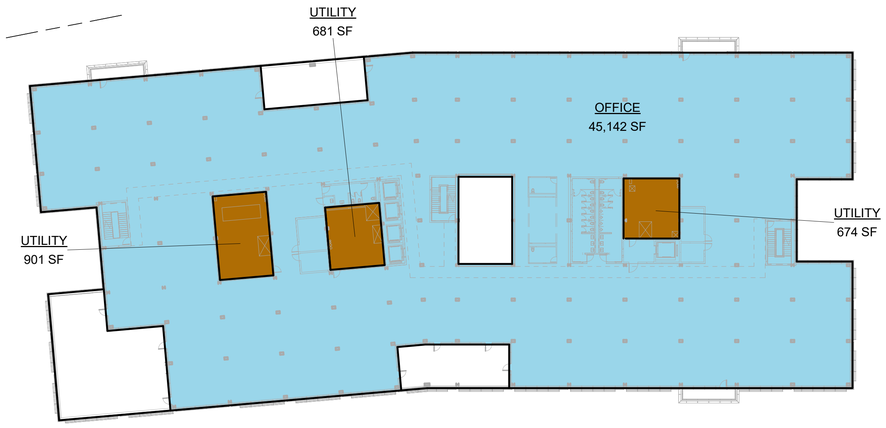
1 LEVEL 1 - O5
1/32" = 1'-0"



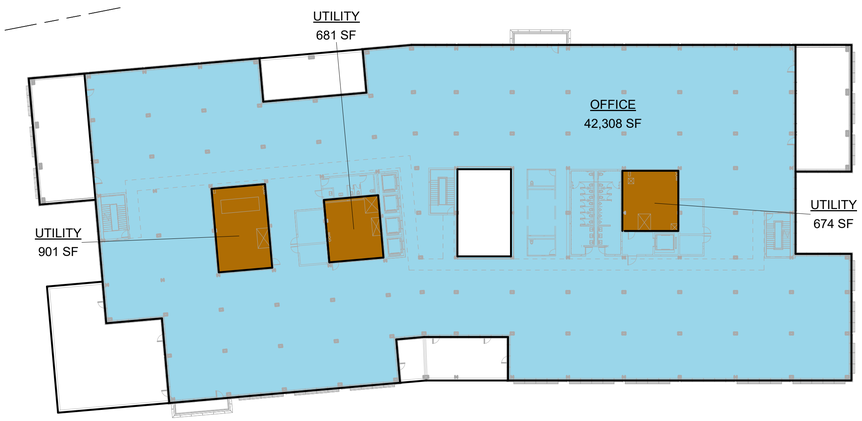
2 LEVEL 2 - O5
1/32" = 1'-0"



3 LEVEL 3 - O5
1/32" = 1'-0"



4 LEVEL 4 - O5
1/32" = 1'-0"



5 LEVEL 5 - O5
1/32" = 1'-0"

GROSS FLOOR AREA - O5 INCLUSIONS

Name	Area
LEVEL 1	
OFFICE	50,895 SF
	50,895 SF
LEVEL 2	
OFFICE	48,434 SF
	48,434 SF
LEVEL 3	
OFFICE	49,372 SF
	49,372 SF
LEVEL 4	
OFFICE	45,142 SF
	45,142 SF
LEVEL 5	
OFFICE	42,308 SF
	42,308 SF
INCLUDED IN GFA PER ZONING CODE	236,151 SF

GROSS FLOOR AREA - O5 EXCLUSIONS

Name	Area
LEVEL 1	
UTILITY	1,355 SF
	1,355 SF
LEVEL 2	
UTILITY	3,195 SF
	3,195 SF
LEVEL 3	
UTILITY	2,256 SF
	2,256 SF
LEVEL 4	
UTILITY	2,256 SF
	2,256 SF
LEVEL 5	
UTILITY	2,256 SF
	2,256 SF
EXCLUDED IN GFA PER ZONING CODE	11,319 SF

GFA BY LAND USE LEGEND

SWATCH	USE
	Office
	Retail
	Circulation / Lobby / Common Area
	Utility / Service
	Excluded from GFA

GROSS FLOOR AREA - TOTAL OFFICE CAMPUS

1,128,792 SF

GROSS FLOOR AREA - TOTAL RETAIL*

***Retail area not counted in Office GFA. See Master Plan CDP.**

28,258 SF

Plan North

True North

0 16 32 64

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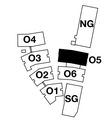

PENINSULA INNOVATION PARTNERS

WILLOW VILLAGE

Architectural Control Package - Parcel 1 (Portion) & 8

Menlo Park, CA

SCALE: As indicated

NOTE: THIS DRAWING IS ISO A1. DO NOT SCALE DRAWINGS. USE FIGURED DIMENSIONS ONLY, OR SEEK CLARIFICATION FROM ARCHITECT FOR MEASUREMENTS THAT ARE NOT INDICATED.

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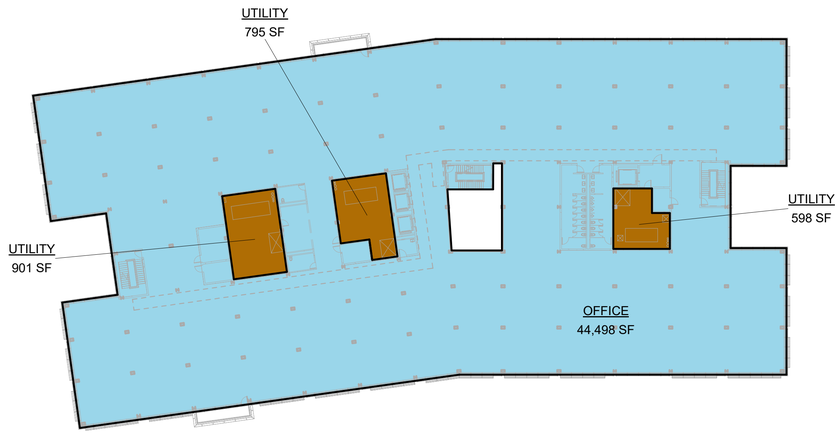
NO.	DATE	ISSUE

DRAWING TITLE: Square Footage Plan - Building O5

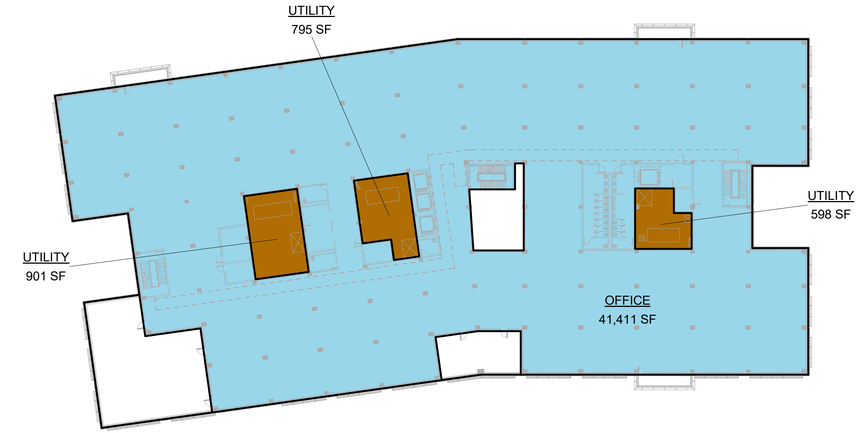
DRAWING NO: A9.04.5

1 LEVEL 1 - O6
1/32" = 1'-0"

2 LEVEL 2 - O6
1/32" = 1'-0"



3 LEVEL 3 - O6
1/32" = 1'-0"



4 LEVEL 4 - O6
1/32" = 1'-0"

5 LEVEL 5 - O6
1/32" = 1'-0"

GROSS FLOOR AREA - O6 INCLUSIONS

Name	Area
LEVEL 1	
OFFICE	47,839 SF
	47,839 SF
LEVEL 2	
OFFICE	44,498 SF
	44,498 SF
LEVEL 3	
OFFICE	44,498 SF
	44,498 SF
LEVEL 4	
OFFICE	41,411 SF
	41,411 SF
LEVEL 5	
OFFICE	38,577 SF
	38,577 SF
INCLUDED IN GFA PER ZONING CODE	216,824 SF

GROSS FLOOR AREA - O6 EXCLUSIONS

Name	Area
LEVEL 1	
BIKE PARKING	377 SF
TRASH	2,058 SF
UTILITY	2,295 SF
	4,730 SF
LEVEL 2	
UTILITY	2,295 SF
	2,295 SF
LEVEL 3	
UTILITY	2,295 SF
	2,295 SF
LEVEL 4	
UTILITY	2,295 SF
	2,295 SF
LEVEL 5	
UTILITY	2,295 SF
	2,295 SF
EXCLUDED IN GFA PER ZONING CODE	13,908 SF

GFA BY LAND USE LEGEND

SWATCH	USE
	Office
	Retail
	Circulation / Lobby / Common Area
	Utility / Service
	Excluded from GFA

GROSS FLOOR AREA - TOTAL OFFICE CAMPUS

1,128,792 SF

GROSS FLOOR AREA - TOTAL RETAIL*

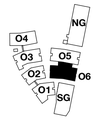
***Retail area not counted in Office GFA. See Master Plan CDP.**

28,258 SF

Plan North

True North

0 16 32 64



PENINSULA INNOVATION PARTNERS

WILLOW VILLAGE
Architectural Control Package - Parcel 1 (Portion) & 8
Menlo Park, CA

SCALE: As indicated

NOTE: THIS DRAWING IS ISO A1. DO NOT SCALE DRAWINGS. CONTRACTOR SHALL VERIFY AND SEEK CLARIFICATION FROM ARCHITECT FOR MEASUREMENTS THAT ARE NOT INDICATED.

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REVISIONS

NO.	DATE	ISSUE

DRAWING TITLE:
Square Footage Plan - Building O6

DRAWING NO:
A9.04.6

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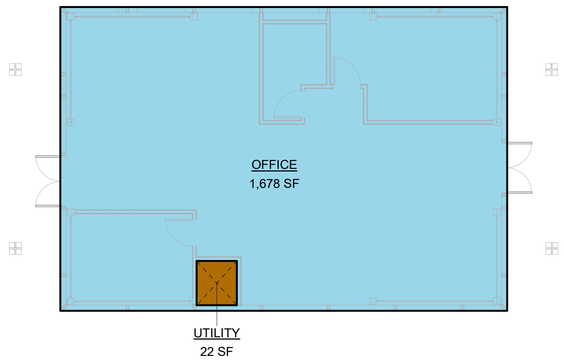
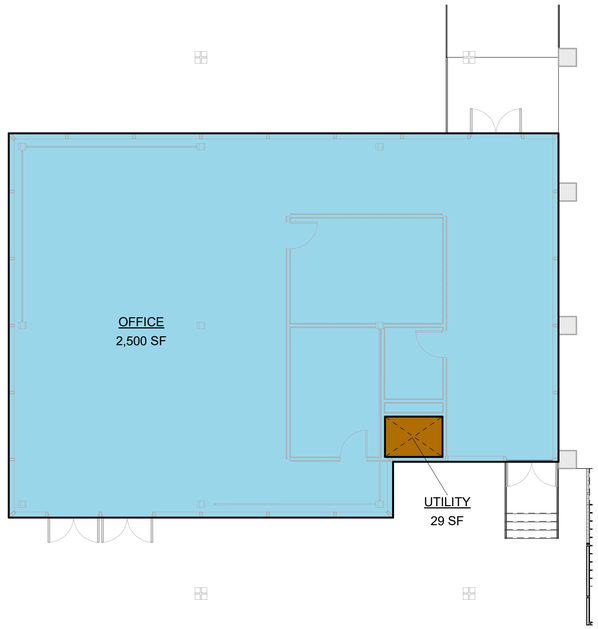


1 LEVEL 1 - SP1
1/8" = 1'-0"



2 LEVEL 1 - SP2
1/8" = 1'-0"

GROSS FLOOR AREA - PAVILION INCLUSIONS

Name	Area
LEVEL 1	
OFFICE	4,178 SF
	4,178 SF
INCLUDED IN GFA PER ZONING CODE	4,178 SF

GROSS FLOOR AREA - PAVILION EXCLUSIONS

Name	Area
LEVEL 1	
UTILITY	51 SF
	51 SF
EXCLUDED IN GFA PER ZONING CODE	51 SF

GFA BY LAND USE LEGEND

SWATCH	USE
	Office
	Retail
	Circulation / Lobby / Common Area
	Utility / Service
	Excluded from GFA

GROSS FLOOR AREA - TOTAL OFFICE CAMPUS

1,128,792 SF

GROSS FLOOR AREA - TOTAL RETAIL*

***Retail area not counted in Office GFA. See Master Plan CDP.**

28,258 SF

0 4 8 16

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PENINSULA INNOVATION PARTNERS

WILLOW VILLAGE
Architectural Control Package - Parcel 1 (Portion) & 8
Menlo Park, CA

SCALE: As indicated

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NO.	DATE	ISSUE

DRAWING TITLE: Square Footage Plan - Pavilions

DRAWING NO: A9.04.7

APPENDIX 2

PARCEL 1-8
ILLUSTRATIVE BUILDING HEIGHT

BUILDING HEIGHT

Menlo Park Municipal Code 16.04.330 Definitions
Except as otherwise provided in this chapter, "height of structure" means the vertical distance from the average level of the highest and lowest points of the natural grade of the portion of the lot covered by the structure to the topmost point of the structure, excluding elevator equipment rooms, ventilating and air conditioning equipment and chimneys. (Ord. 938 § 1 (part), 2005: Ord. 822 § 2 (part), 1991: Prior code § 30.232)

Menlo Park Municipal Code 16.45.050 Development Regulations
Height: 52.5 feet; Maximum Height: 70 feet
A parapet used to screen mechanical equipment is not included in the height or maximum height. The maximum allowed height for rooftop mechanical equipment is 14 feet, except for elevator towers and associated equipment, which may be 20 feet.
Properties within the flood zone or subject to flooding and sea level rise are allowed a 10-foot increase in height and maximum height.

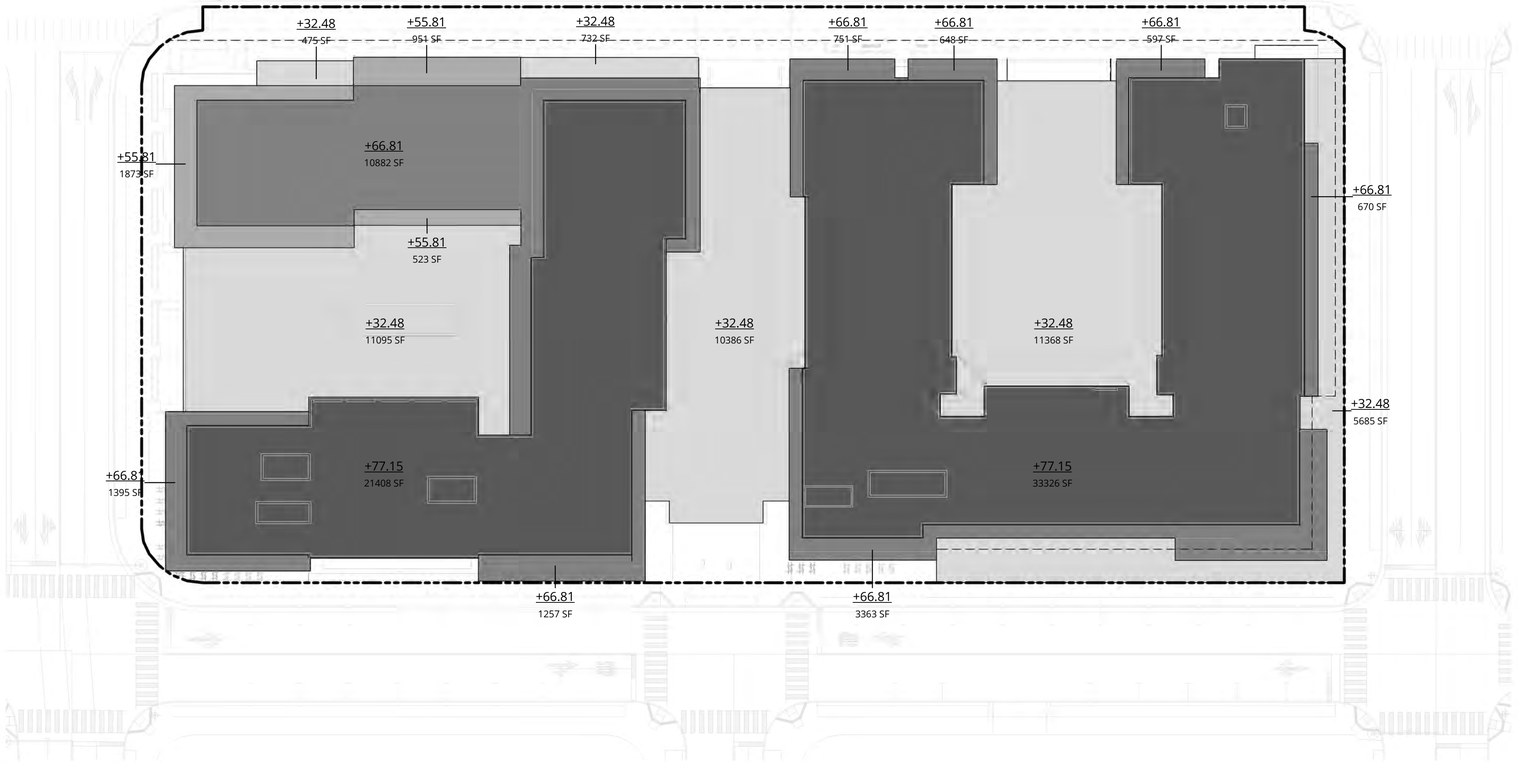
Proposal / Notes: This project is subject to flooding and sea level rise, and therefore qualifies for the 10-foot increase in height and maximum height. See below for calculations.

BUILDING HEIGHT CALCUATIONS

Roofs w/ Different Heights	Average Natural Level (FASL)	New FFE (FASL)	Added Height (Nat. to FFE)	Roof Height (FFE. to roof)	Roof Height (Nat. to roof)	Footprint (SF)	Roof Height x Footprint
3	9.19	13.00	3.81	28.67	32.48	39,328.00	1,277,373.44
5	9.19	13.00	3.81	52.00	55.81	2,824.00	157,607.00
6	9.19	13.00	3.81	63.00	66.81	19,563.00	1,307,004.03
Roof	9.19	13.00	3.81	73.34	77.15	54,734.00	4,222,728.10
Total						116,449.00	6,964,712.57
			Weighted Average Height (ft)				59.81
			Proposed Maximum Height (ft)				77.15

LEGEND

- +32.48
- +55.81
- +66.81
- +77.15



ROOF PLAN - BUILDING HEIGHT DIAGRAM

1/32" = 1'-0"

0 16 32 64

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PENINSULA INNOVATION PARTNERS

WILLOW VILLAGE
Architectural Control Package - Parcel 2
Menlo Park, CA

SCALE: As indicated

NOTE: THIS DRAWING IS ISO A1. DO NOT SCALE DRAWINGS. USE FIGURED DIMENSIONS ONLY, OR SEEK CLARIFICATION FROM ARCHITECT FOR MEASUREMENTS THAT ARE NOT INDICATED.

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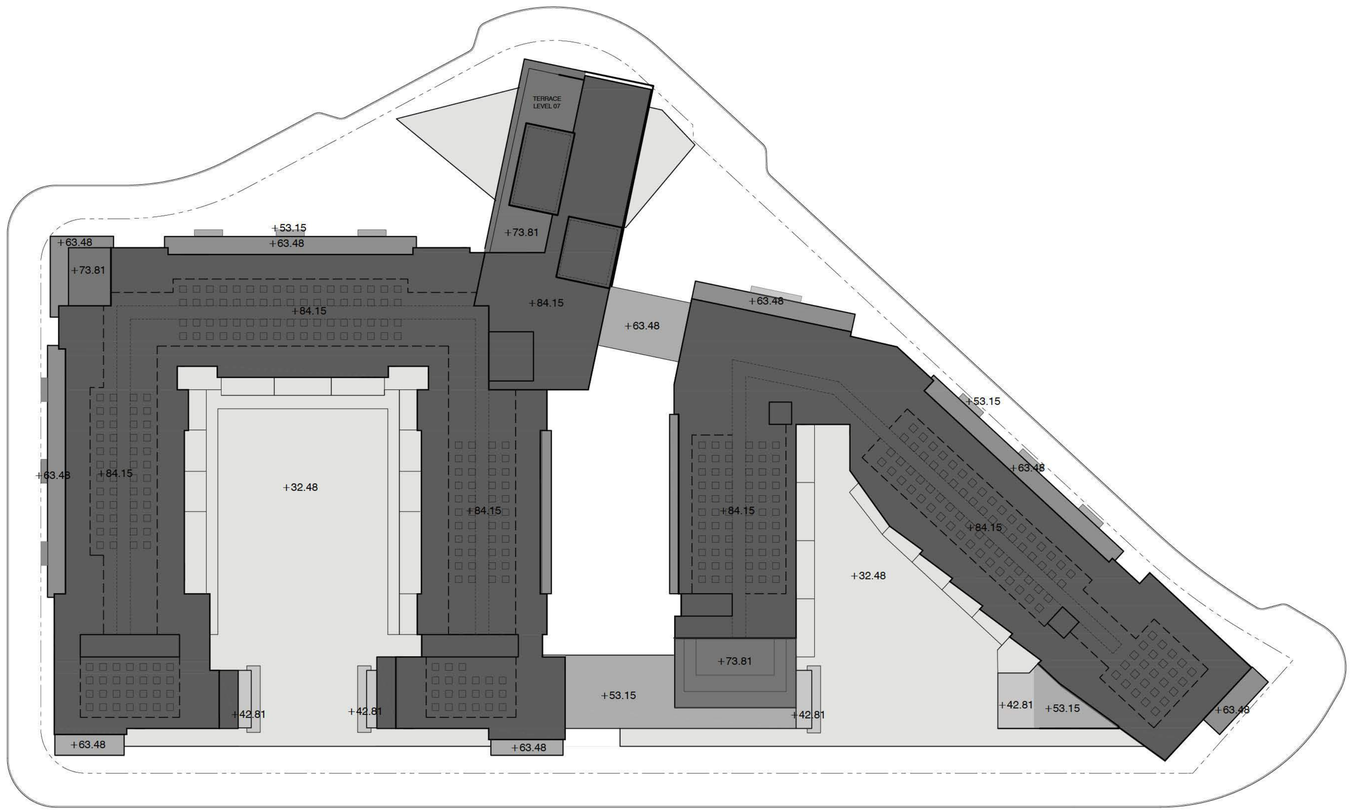
DRAWING TITLE: BUILDING HEIGHT ANALYSIS PLAN

DRAWING NO: *A9.05



BUILDING HEIGHT

HEIGHT REGULATIONS PER CITY OF MENLO PARK MUNICIPAL CODE

PROPOSAL / NOTES: THIS PROJECT IS SUBJECT TO FLOODING AND SEA LEVEL RISE, AND THEREFORE QUALIFIES FOR THE 10-FOOT INCREASE IN HEIGHT AND MAXIMUM HEIGHT. SEE BELOW FOR CALCULATIONS.

HEIGHT OF STRUCTURE - 16.04.330

EXCEPT AS OTHERWISE PROVIDED IN THIS CHAPTER, EIGHT OF STRUCTURE" MEANS THE VERTICAL DISTANCE FROM THE AVERAGE LEVEL OF THE HIGHEST AND LOWEST POINT OF THE NATURAL GRADE OF THE PORTION OF THE LOT COVERED BY THE STRUCTURE TO THE TOPMOST POINT OF THE STRUCTURE, EXCLUDING ELEVATOR EQUIPMENT ROOMS, VENTILATING AND AIR CONDITIONING EQUIPMENT AND CHIMNEYS.

- MAXIMUM HEIGHT
  16.45.050 (70-FT. + 10-FT.=80-FT.)

BONUS LEVEL DEVELOPMENTS SHALL NOT EXCEED 70-FEET IN HEIGHT, EXCEPT THAT PROPERTIES WITHIN THE FLOOD ZONE OR SUBJECT TO FLOODING AND SEA LEVEL RISE ARE ALLOWED A 10-FOOT INCREASE IN HEIGHT AND MAXIMUM HEIGHT.

- MAXIMUM AVERAGE HEIGHT
  16.45.050 (52.5-FT. + 10-FT. = 62.5-FT.)

BONUS LEVEL DEVELOPMENTS SHALL NOT EXCEED 52.5-FEET IN AVERAGE HEIGHT, EXCEPT THAT PROPERTIES WITHIN THE FLOOD ZONE OR SUBJECT TO FLOODING ARE SEA LEVEL RISE ARE ALLOWED A 10-FOOT INCREASE IN HEIGHT AND MAXIMUM HEIGHT.

LEGEND

- +32.48
- +42.81
- +53.15
- +63.48
- +73.81
- +84.15

Roofs w/ Different Heights	Average Natural Level (FASL)	New FFE (FASL)	Added Height (Nat. to FFE)	Roof Height (FFE. to roof)	Roof Height (Nat. to roof)	Footprint (SF)	Roof Height x Footprint
Level 3	9.35	14.50	5.15	27.33	32.48	28,110	913,013
Level 4	9.35	14.50	5.15	37.66	42.81	1,235	52,870
Level 5	9.35	14.50	5.15	48.00	53.15	2,910	154,667
Level 6	9.35	14.50	5.15	58.33	63.48	6,250	396,750
Level 7	9.35	14.50	5.15	68.66	73.81	3,765	277,895
Roof	9.35	14.50	5.15	79.00	84.15	56,465	4,751,530
Total						98,735	6,546,724
			Weighted Average Height (ft)				66.31
			Proposed Maximum Height (ft)				84.15

16.04.330 Height of structure.	Except as otherwise provided in this chapter, "height of structure" means the vertical distance from the average level of the highest and lowest points of the natural grade of the portion of the lot covered by the structure to the topmost point of the structure, excluding elevator equipment rooms, ventilating and air conditioning equipment and chimneys. (Ord. 938 § 1 (part), 2005: Ord. 822 § 2 (part), 1991: Prior code § 30.232)
16.45.050 Development regulations.	Height: 52.5 feet; Maximum height: 70 feet
	A parapet used to screen mechanical equipment is not included in the height or maximum height. The maximum allowed height for rooftop mechanical equipment is 14 feet, except for elevator towers and associated equipment, which may be 20 feet.
	Properties within the flood zone or subject to flooding and sea level rise are allowed a 10-foot increase in height and maximum height.

PENINSULA INNOVATION PARTNERS

WILLOW VILLAGE
Architectural Control Package - Parcel 3
Menlo Park, CA

SCALE:

NOTE: THIS DRAWING IS ISO A1. DO NOT SCALE DRAWINGS. USE FIGURED DIMENSIONS ONLY, OR SEEK CLARIFICATION FROM ARCHITECT FOR MEASUREMENTS THAT ARE NOT INDICATED.

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REVISIONS

NO.	DATE	ISSUE

DRAWING TITLE:
BUILDING HEIGHT ANALYSIS PLAN

DRAWING NO:
A9.05

R-MU BUILDING HEIGHT ANALYSIS
Parcel 6

Roofs w/ Different Heights	Average Natural Level (FASL)	New FFE (FASL)	Added Height (Nat. to FFE)	Roof Height (FFE. to roof)	Roof Height (Nat. to roof)	Footprint (SF)	Roof Height x Footprint
UPPER ROOF (SLOPED)	9.74	12.90	3.16	76.62	79.78	3,358	267,901
UPPER ROOF (LOUNGE)				76.37	79.53	1,522	121,045
ROOF (MAIN ROOF)				73.85	77.01	32,486	2,501,747
LEVEL 7 (ROOF DECK)				63.35	66.51	318	21,150
LEVEL 6 (UPPER PRIVATE TERRACES)				51.60	54.76	1,039	56,896
LEVEL 4 (LOWER ROOF)				32.10	35.26	515	18,159
LEVEL 3 (PODIUM)				20.52	23.68	13,201	312,600
					TOTAL	52,439	3,299,497

Weighted Average Height (ft)	**62.92**
Proposed Maximum Height (ft)	**79.78**

GENERAL NOTES:

- HEIGHT IS MEASURED AS FEET ABOVE NATURAL GRADE
- STAIR AND ROOF PENTHOUSE AREAS, ALLOWED BY CODE TO EXCEED THE 80' MAX HEIGHT ARE NOT SHOWN AND HAVE NOT BEEN CALCULATED IN THIS EXHIBIT

Building Height

- 23.68'
- 35.26'
- 54.76'
- 66.51'
- 77.01'
- 79.43'
- 79.78'

P6 - BUILDING HEIGHT CALCULATION - ROOF (1)
1" = 30'-0"

MENLO PARK ZONING CODE REQUIREMENTS

16.04.330: HEIGHT OF STRUCTURE (DEFINITION)

EXCEPT AS OTHERWISE PROVIDED IN THIS CHAPTER, "HEIGHT OF STRUCTURE" MEANS THE VERTICAL DISTANCE FROM THE AVERAGE LEVEL OF THE HIGHEST AND LOWEST POINTS OF THE NATURAL GRADE OF THE PORTION OF THE LOT COVERED BY THE STRUCTURE TO THE TOPMOST POINT OF THE STRUCTURE, EXCLUDING ELEVATOR EQUIPMENT ROOMS, VENTILATING AND AIR CONDITIONING EQUIPMENT AND CHIMNEYS.

16.45.050: HEIGHT

"HEIGHT" IS DEFINED AS AVERAGE HEIGHT OF ALL BUILDINGS ON ONE SITE, WHERE A MAXIMUM HEIGHT CANNOT BE EXCEEDED. MAXIMUM HEIGHT DOES NOT INCLUDE ROOF-MOUNTED EQUIPMENT AND UTILITIES.

HEIGHT: 52.5 FEET

MAXIMUM HEIGHT: 70 FEET

A PARAPET USED TO SCREEN MECHANICAL EQUIPMENT IS NOT INCLUDED IN THE HEIGHT OR MAXIMUM HEIGHT. THE MAXIMUM ALLOWED HEIGHT FOR ROOFTOP MECHANICAL EQUIPMENT IS 14 FEET, EXCEPT FOR ELEVATOR TOWERS AND ASSOCIATED EQUIPMENT, WHICH MAY BE 20 FEET.

PROPERTIES WITHIN THE FLOOD ZONE OR SUBJECT TO FLOODING AND SEA LEVEL RISE ARE ALLOWED A 10-FOOT INCREASE IN HEIGHT AND MAXIMUM HEIGHT.

PROPOSED DESIGN

MAXIMUM HEIGHT:
ALLOWED PER ZONING CODE: 70' + 10' = 80'
PROPOSED DESIGN: 80' ABOVE NATURAL GRADE

(SEE ELEVATION SHEETS AND PLAN DIAGRAM FOR MAXIMUM BUILDING HEIGHT DIMENSIONS)

AVERAGE HEIGHT:
ALLOWED PER ZONING CODE: 52.5' + 10' = 62.5'
PROPOSED DESIGN: 62.92' ABOVE NATURAL GRADE

(SEE PLAN DIAGRAM FOR ROOF AREAS AND HEIGHTS. SEE TABLE FOR AVERAGE HEIGHT CALCULATIONS.)

NOTES:
THIS PROJECT IS SUBJECT TO FLOODING AND SEA LEVEL RISE, AND THEREFORE QUALIFIES FOR THE 10-FOOT INCREASE IN HEIGHT AND MAXIMUM HEIGHT.

AVERAGE HEIGHT COMPLIANCE IS REGULATED AT A MASTERPLAN-WIDE LEVEL FOR WILLOW VILLAGE.

0 30 60

PENINSULA INNOVATION PARTNERS

WILLOW VILLAGE
Architectural Control Package - Parcel 6
Menlo Park, CA

SCALE: 1" = 30'-0"

NOTE: THIS DRAWING IS ISO A1. DO NOT SCALE DRAWINGS. USE FIGURED DIMENSIONS ONLY, OR SEEK CLARIFICATION FROM ARCHITECT FOR MEASUREMENTS THAT ARE NOT INDICATED.

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09/07/2021	ACP

REVISIONS

NO.	DATE	ISSUE

DRAWING TITLE:
BUILDING HEIGHT ANALYSIS PLAN

DRAWING NO:
A9.05

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R-MU BUILDING HEIGHT ANALYSIS
Parcel 7

Roofs w/ Different Heights	Average Natural Level (FASL)	New FFE (FASL)	Added Height (Nat. to FFE)	Roof Height (FFE. to roof)	Roof Height (Nat. to roof)	Footprint (SF)	Roof Height x Footprint
UPPER ROOF (WEST)	9.58	13.55	3.97	72.09	76.06	1,988	151,207
UPPER ROOF (EAST)				67.54	71.51	4,007	286,541
ROOF (MAIN ROOF)				64.28	68.25	7,806	532,760
LEVEL 5 (TERRACE)				42.95	46.92	1,865	87,506
LEVEL 3 (PAVILION ROOF)				30.03	34.00	931	31,654
LOWER ROOF (STAIR)				22.62	26.59	83	2,207
LEVEL 2 (PODIUM)				12.45	16.42	5,536	90,901
					TOTAL	22,216	1,182,775

Weighted Average Height (ft)	**53.24**
Proposed Maximum Height (ft)	**76.06**

MENLO PARK ZONING CODE REQUIREMENTS

16.04.330: HEIGHT OF STRUCTURE (DEFINITION)

EXCEPT AS OTHERWISE PROVIDED IN THIS CHAPTER, "HEIGHT OF STRUCTURE" MEANS THE VERTICAL DISTANCE FROM THE AVERAGE LEVEL OF THE HIGHEST AND LOWEST POINTS OF THE NATURAL GRADE OF THE PORTION OF THE LOT COVERED BY THE STRUCTURE TO THE TOPMOST POINT OF THE STRUCTURE, EXCLUDING ELEVATOR EQUIPMENT ROOMS, VENTILATING AND AIR CONDITIONING EQUIPMENT AND CHIMNEYS.

16.45.050: HEIGHT

"HEIGHT" IS DEFINED AS AVERAGE HEIGHT OF ALL BUILDINGS ON ONE SITE, WHERE A MAXIMUM HEIGHT CANNOT BE EXCEEDED. MAXIMUM HEIGHT DOES NOT INCLUDE ROOF-MOUNTED EQUIPMENT AND UTILITIES.

HEIGHT: 52.5 FEET

MAXIMUM HEIGHT: 70 FEET

A PARAPET USED TO SCREEN MECHANICAL EQUIPMENT IS NOT INCLUDED IN THE HEIGHT OR MAXIMUM HEIGHT. THE MAXIMUM ALLOWED HEIGHT FOR ROOFTOP MECHANICAL EQUIPMENT IS 14 FEET, EXCEPT FOR ELEVATOR TOWERS AND ASSOCIATED EQUIPMENT, WHICH MAY BE 20 FEET.

PROPERTIES WITHIN THE FLOOD ZONE OR SUBJECT TO FLOODING AND SEA LEVEL RISE ARE ALLOWED A 10-FOOT INCREASE IN HEIGHT AND MAXIMUM HEIGHT.

PROPOSED DESIGN

MAXIMUM HEIGHT:
ALLOWED PER ZONING CODE: 70' + 10' = 80'
PROPOSED DESIGN: 76.06' ABOVE NATURAL GRADE

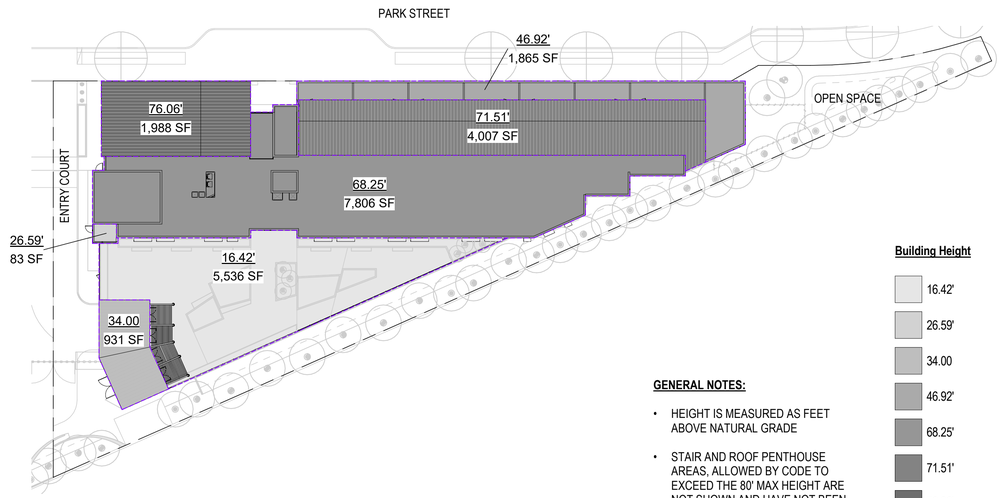
(SEE ELEVATION SHEETS AND PLAN DIAGRAM FOR MAXIMUM BUILDING HEIGHT DIMENSIONS)

AVERAGE HEIGHT:
ALLOWED PER ZONING CODE: 52.5' + 10' = 62.5'
PROPOSED DESIGN: 53.24' ABOVE NATURAL GRADE

(SEE PLAN DIAGRAM FOR ROOF AREAS AND HEIGHTS. SEE TABLE FOR AVERAGE HEIGHT CALCULATIONS.)

NOTES:
THIS PROJECT IS SUBJECT TO FLOODING AND SEA LEVEL RISE, AND THEREFORE QUALIFIES FOR THE 10-FOOT INCREASE IN HEIGHT AND MAXIMUM HEIGHT.

AVERAGE HEIGHT COMPLIANCE IS REGULATED AT A MASTERPLAN-WIDE LEVEL FOR WILLOW VILLAGE.



GENERAL NOTES:

- HEIGHT IS MEASURED AS FEET ABOVE NATURAL GRADE
- STAIR AND ROOF PENTHOUSE AREAS, ALLOWED BY CODE TO EXCEED THE 80' MAX HEIGHT ARE NOT SHOWN AND HAVE NOT BEEN CALCULATED IN THIS EXHIBIT

BUILDING HEIGHT ANALYSIS (1)
1" = 30'-0"

0 30 60

PENINSULA INNOVATION PARTNERS

WILLOW VILLAGE
Architectural Control Package - Parcel 7
Menlo Park, CA

SCALE: 1" = 30'-0"

NOTE: THIS DRAWING IS ISO A1. DO NOT SCALE DRAWINGS. USE FIGURED DIMENSIONS ONLY, OR SEEK CLARIFICATION FROM ARCHITECT FOR MEASUREMENTS THAT ARE NOT INDICATED.

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NO.	DATE	ISSUE

DRAWING TITLE:
BUILDING HEIGHT ANALYSIS PLAN

DRAWING NO:
A9.05

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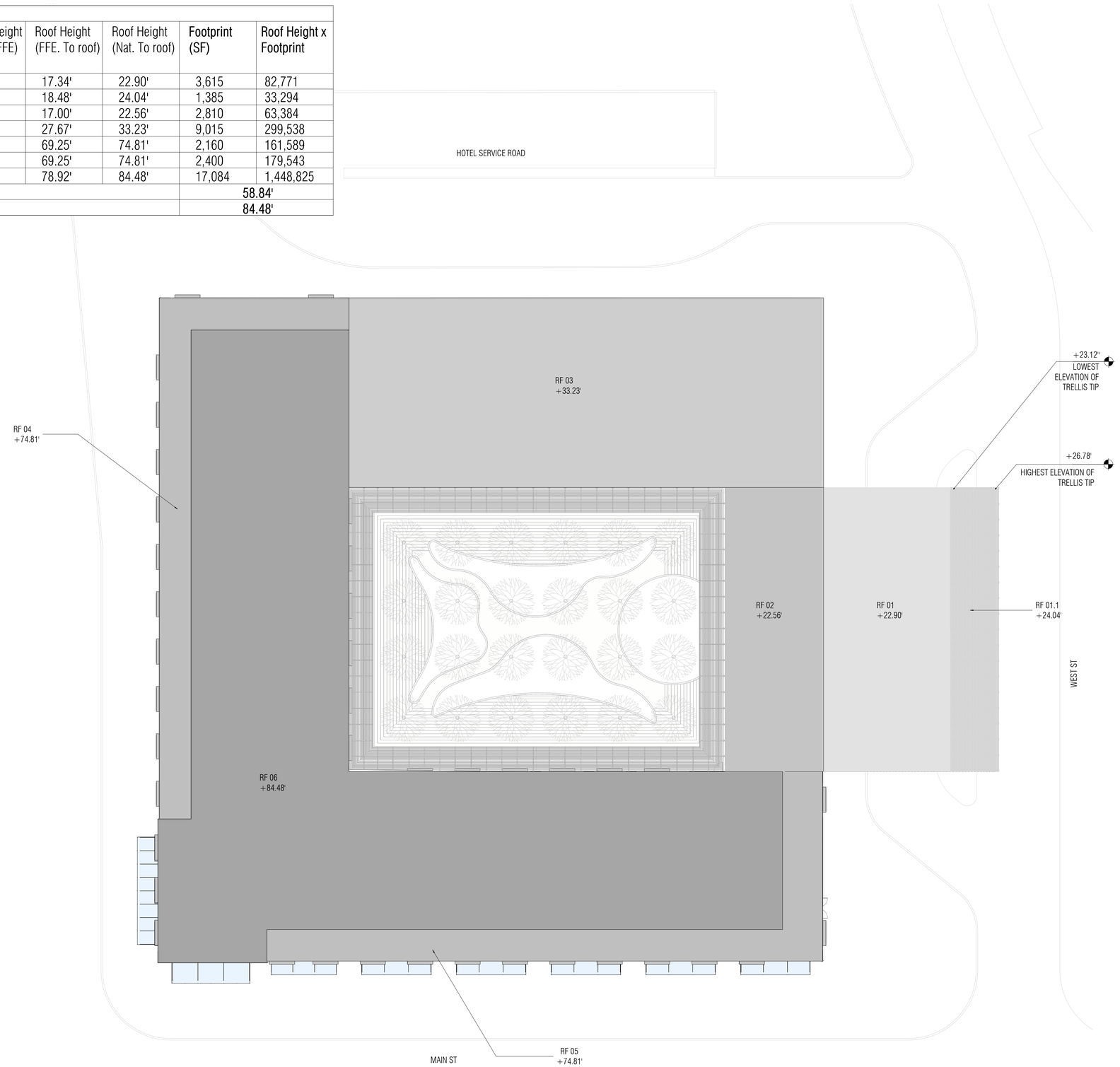
Building Height Analysis							
Roofs w/ Different Heights	Average Natural Level (FASL)	New FFE (FASL)	Added Height (Nat. to FFE)	Roof Height (FFE. To roof)	Roof Height (Nat. To roof)	Footprint (SF)	Roof Height x Footprint
RF 01	8.94'	14.50'	5.56'	17.34'	22.90'	3,615	82,771
RF 01.1	8.94'	14.50'	5.56'	18.48'	24.04'	1,385	33,294
RF 02	8.94'	14.50'	5.56'	17.00'	22.56'	2,810	63,384
RF 03	8.94'	14.50'	5.56'	27.67'	33.23'	9,015	299,538
RF 04	8.94'	14.50'	5.56'	69.25'	74.81'	2,160	161,589
RF 05	8.94'	14.50'	5.56'	69.25'	74.81'	2,400	179,543
RF 06	8.94'	14.50'	5.56'	78.92'	84.48'	17,084	1,448,825
Weighted Average Height						58.84'	
Proposed Maximum Height						84.48'	



1 BUILDING HEIGHT ANALYSIS PLAN
1/16" = 1'-0"

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PENINSULA INNOVATION PARTNERS

WILLOW VILLAGE
Architectural Control Package - Parcel 1 - Hotel
Menlo Park, CA

SCALE: 1/16" = 1'-0"

NOTE: THIS DRAWING IS ISO A1. DO NOT SCALE DRAWINGS. USE FIGURED DIMENSIONS ONLY, OR SEEK CLARIFICATION FROM ARCHITECT FOR MEASUREMENTS THAT ARE NOT INDICATED.

MILESTONES

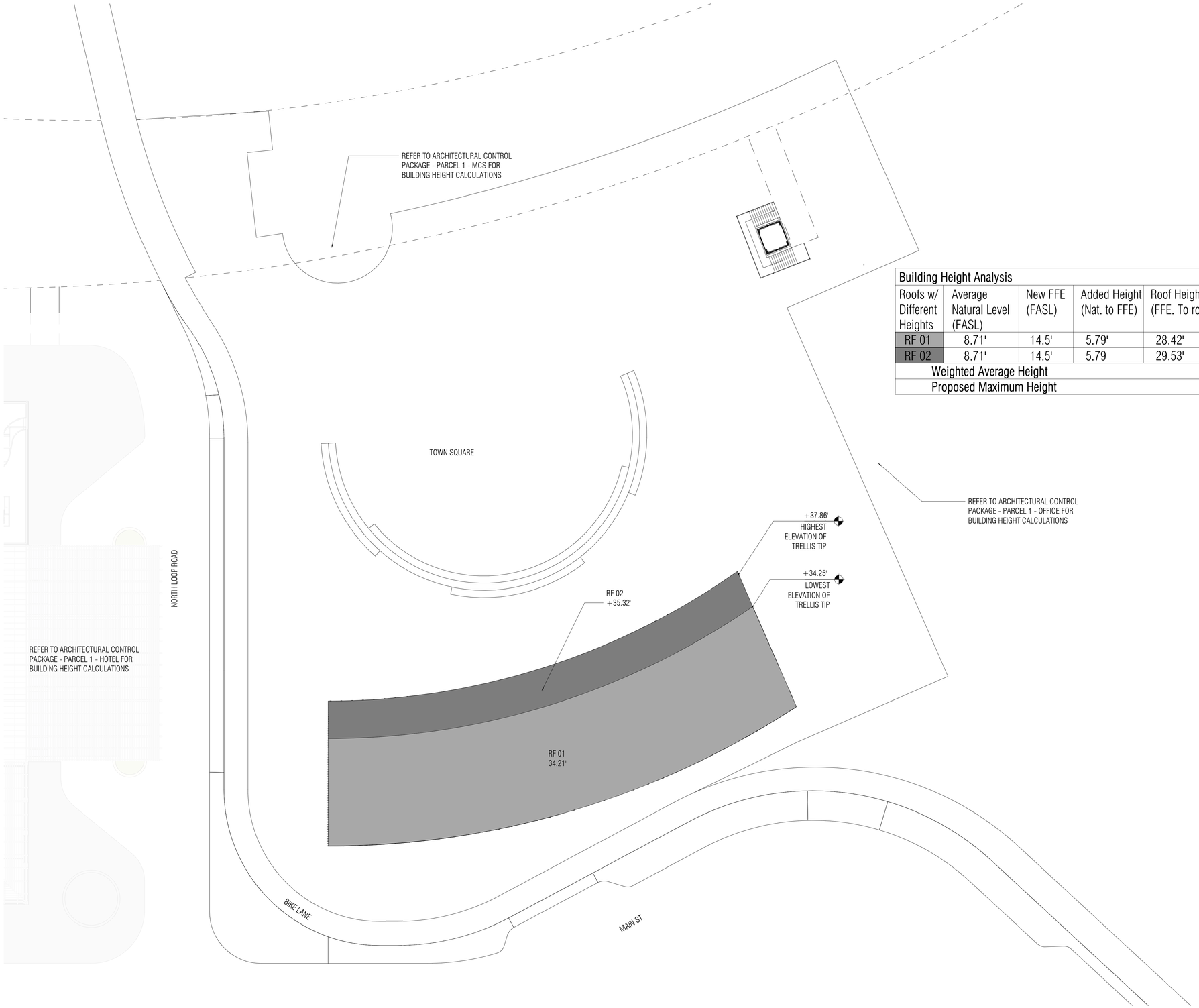
DATE	ISSUE
09/07/2021	ACP

REVISIONS

NO.	DATE	ISSUE

DRAWING TITLE:
Willow Village Hotel
Building Height Analysis Plan

DRAWING NO:
A9.05



Building Height Analysis							
Roofs w/ Different Heights	Average Natural Level (FASL)	New FFE (FASL)	Added Height (Nat. to FFE)	Roof Height (FFE. To roof)	Roof Height (Nat. To roof)	Footprint (SF)	Roof Height x Footprint
RF 01	8.71'	14.5'	5.79'	28.42'	34.21'	8,858.00	303,032.18
RF 02	8.71'	14.5'	5.79	29.53'	35.32'	2,905.00	102,604.60
Weighted Average Height						34.48'	
Proposed Maximum Height						35.32'	

1 TOWN SQUARE PAVILION - ROOF
1" = 20'-0"

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PENINSULA INNOVATION PARTNERS

WILLOW VILLAGE
Architectural Control Package - Parcel 1 - Town Square
Menlo Park, CA

SCALE: 1" = 20'-0"

NOTE: THIS DRAWING IS ISO A1. DO NOT SCALE DRAWINGS. CONTRACTOR SHALL VERIFY AND SEEK CLARIFICATION FROM ARCHITECT FOR MEASUREMENTS THAT ARE NOT INDICATED.

MILESTONES	
DATE	ISSUE
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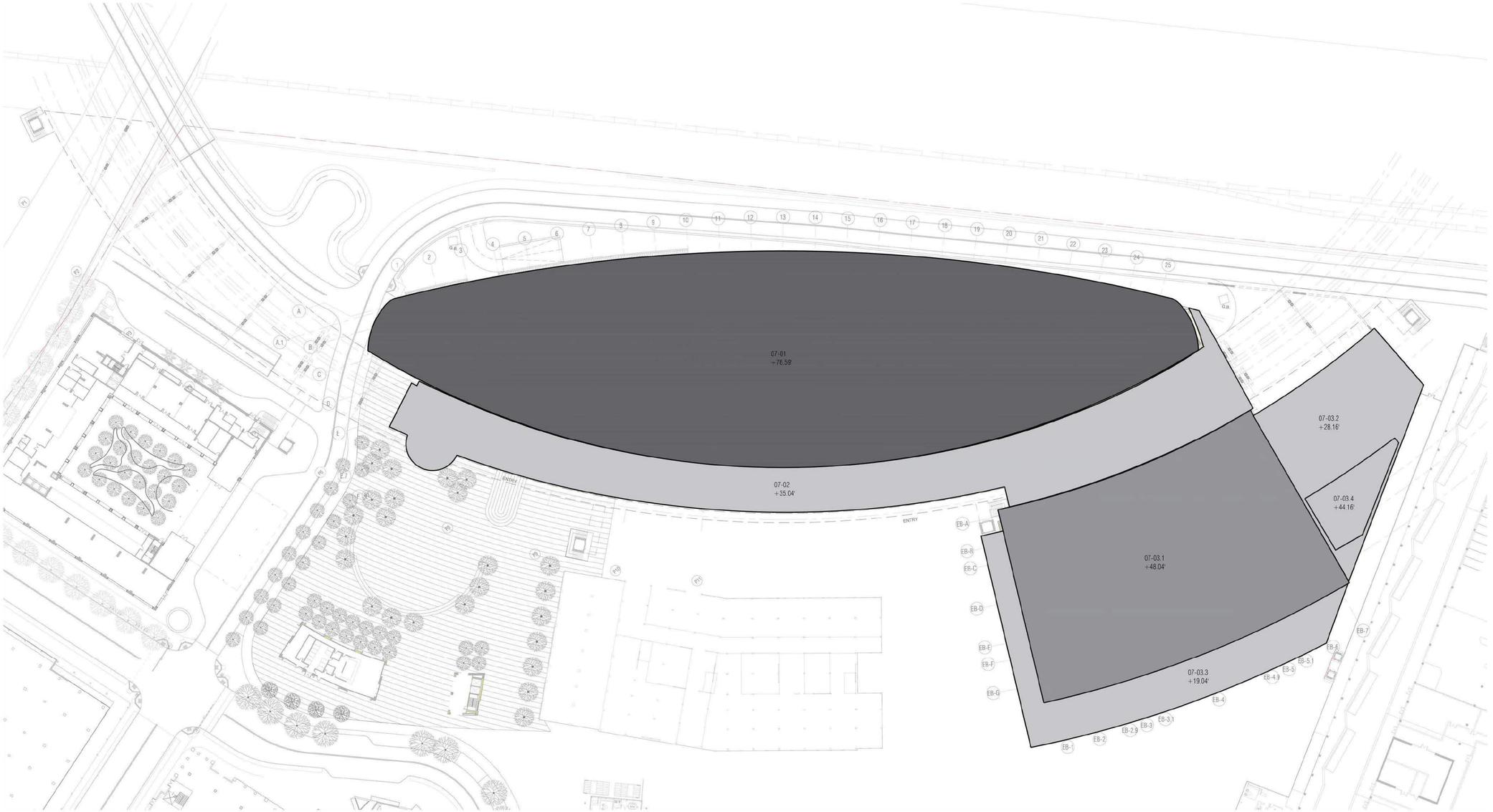
REVISIONS		
NO.	DATE	ISSUE

DRAWING TITLE:
WILLOW VILLAGE TOWN SQUARE
Building Height Analysis Plan

DRAWING NO:
A9.05

Building #	Natural Level (FASL)	New FFE (FASL)	Added Height (Nat. to FFE)	Average Height (FFE. to roof)	Average Height (Nat. to roof)	Footprint (SF)	Average Height x Footprint
1-Jul	9.96	15	5.04	71.55	76.59	129,085	9,887,024
						129,085	**9,887,024**
MC 02	9.96	15	5.04	30.00	35.04	46,637	1,634,160
						46,637	**1,634,160**
MC 03.1	9.96	15	5.04	43.00	48.04	56,863	2,731,699
MC 03.2	9.96	15	5.04	23.12	28.16	4,237	119,314
MC 03.3	9.96	15	5.04	14.00	19.04	16,811	320,081
MC 03.4	9.96	15	5.04	39.12	44.16	15,554	686,865
						93,465	**3,857,959**

MCS - WEIGHTED AVERAGE HEIGHT (FT)	57.13
MCS - PROPOSED MAXIMUM HEIGHT (FT)	116.44



PENINSULA INNOVATION PARTNERS

WILLOW VILLAGE

Architectural Control Package - Parcel 1

Menlo Park, CA

SCALE: 1"=50'-0"

NOTE: THIS DRAWING IS ISO A1. DO NOT SCALE DRAWINGS. USE FIGURED DIMENSIONS ONLY, OR SEEK CLARIFICATION FROM ARCHITECT FOR MEASUREMENTS THAT ARE NOT INDICATED.

MILESTONES

DATE	ISSUE
09/07/2021	ACP

REVISIONS

NO.	DATE	ISSUE

DRAWING TITLE:

BUILDING HEIGHT DIAGRAM

DRAWING NO:

A9.05

9/7/2021

OFFICE BUILDING HEIGHT ANALYSIS

Parcel # 1(Portion) & 8

Roofs w/ Different Heights	Average Natural Level (FASL)	New FFE (FASL)	Added Height (Nat. to FFE)	Roof Height (FFE. to roof)	Roof Height (Nat. to roof)	Footprint (SF)	Roof Height x Footprint
O1-Roof	10.54	15.00	4.46	63.00	67.46	31,627	2,133,557.42
O1-2	10.54	15.00	4.46	18.00	22.46	6,790	152,503.40
O1-3	10.54	15.00	4.46	33.00	37.46	2,857	107,023.22
O1-4	10.54	15.00	4.46	48.00	52.46	2,312	121,287.52
Total						43,586	2,514,371.56
			Bldg 1 - Weighted Average Height (ft)				57.69
			Bldg 1 - Proposed Maximum Height (ft)				67.46

Roofs w/ Different Heights	Average Natural Level (FASL)	New FFE (FASL)	Added Height (Nat. to FFE)	Roof Height (FFE. to roof)	Roof Height (Nat. to roof)	Footprint (SF)	Roof Height x Footprint
O2-Roof	9.59	15.00	5.41	78.00	83.41	32,408	2,703,151.28
O2-2	9.59	15.00	5.41	18.00	23.41	968	22,660.88
O2-5	9.59	15.00	5.41	63.00	68.41	5,815	397,804.15
Total						39,191	3,123,616.31
			Bldg 2 - Weighted Average Height (ft)				79.70
			Bldg 2 - Proposed Maximum Height (ft)				83.41

Roofs w/ Different Heights	Average Natural Level (FASL)	New FFE (FASL)	Added Height (Nat. to FFE)	Roof Height (FFE. to roof)	Roof Height (Nat. to roof)	Footprint (SF)	Roof Height x Footprint
O3-Roof	9.87	15.00	5.13	78.00	83.13	42,573	3,539,093.49
O3-2	9.87	15.00	5.13	18.00	23.13	1,563	36,152.19
O3-3	9.87	15.00	5.13	33.00	38.13	724	27,606.12
O3-4	9.87	15.00	5.13	48.00	53.13	2,204	117,098.52
O3-5	9.87	15.00	5.13	63.00	68.13	3,612	246,085.56
Total						50,676	3,966,035.88
			Bldg 3 - Weighted Average Height (ft)				78.26
			Bldg 3 - Proposed Maximum Height (ft)				83.13

Roofs w/ Different Heights	Average Natural Level (FASL)	New FFE (FASL)	Added Height (Nat. to FFE)	Roof Height (FFE. to roof)	Roof Height (Nat. to roof)	Footprint (SF)	Roof Height x Footprint
TS3- Roof	10.69	15.00	4.31	32.50	36.81	4,257	156,700.17
O4-2	10.69	15.00	4.31	18.00	22.31	3,064	68,357.84
TS3-2	10.69	15.00	4.31	18.00	22.31	5,029	112,196.99
Total						12,350	337,255.00
			TS3 - Weighted Average Height (ft)				27.31
			TS3 - Proposed Maximum Height (ft)				36.81

Roofs w/ Different Heights	Average Natural Level (FASL)	New FFE (FASL)	Added Height (Nat. to FFE)	Roof Height (FFE. to roof)	Roof Height (Nat. to roof)	Footprint (SF)	Roof Height x Footprint
O4-Roof	10.69	15.00	4.31	78.00	82.31	31,860	2,622,396.60
O4-3	10.69	15.00	4.31	33.00	37.31	1,622	60,516.82
O4-4	10.69	15.00	4.31	48.00	52.31	4,408	230,582.48
O4-5	10.69	15.00	4.31	63.00	67.31	2,608	175,544.48
Total						40,498	3,089,040.38
			Bldg 4 - Weighted Average Height (ft)				76.28
			Bldg 4 - Proposed Maximum Height (ft)				82.31

Roofs w/ Different Heights	Average Natural Level (FASL)	New FFE (FASL)	Added Height (Nat. to FFE)	Roof Height (FFE. to roof)	Roof Height (Nat. to roof)	Footprint (SF)	Roof Height x Footprint
O5-Roof	9.83	15.00	5.17	78.00	83.17	47,625	3,960,971.25
O5-4	9.83	15.00	5.17	48.00	53.17	3,734	198,536.78
O5-5	9.83	15.00	5.17	63.00	68.17	2,608	177,787.36
Total						53,967	4,337,295.39
			Bldg 5 - Weighted Average Height (ft)				80.37
			Bldg 5 - Proposed Maximum Height (ft)				83.17

Roofs w/ Different Heights	Average Natural Level (FASL)	New FFE (FASL)	Added Height (Nat. to FFE)	Roof Height (FFE. to roof)	Roof Height (Nat. to roof)	Footprint (SF)	Roof Height x Footprint
O6-Roof	10.73	15.00	4.27	78.00	82.27	43,497	3,578,498.19
O6-2	10.73	15.00	4.27	18.00	22.27	5,464	121,683.28
O6-4	10.73	15.00	4.27	48.00	52.27	2,777	145,153.79
O6-5	10.73	15.00	4.27	63.00	67.27	2,608	175,440.16
Total						54,346	4,020,775.42
			Bldg 6 - Weighted Average Height (ft)				73.98
			Bldg 6 - Proposed Maximum Height (ft)				82.27

Roofs w/ Different Heights	Average Natural Level (FASL)	New FFE (FASL)	Added Height (Nat. to FFE)	Roof Height (FFE. to roof)	Roof Height (Nat. to roof)	Footprint (SF)	Roof Height x Footprint
NG-T/PV	10.20	12.00	1.80	87.50	89.30	51,189	4,571,177.70
NG-7	10.20	12.00	1.80	75.00	76.80	48,242	3,704,985.60
NG-2	10.20	12.00	1.80	22.75	24.55	361	8,862.55
NG-1	10.20	12.00	1.80	15.00	16.80	4,328	72,710.40
Total						104,120	8,357,736.25
			NG - Weighted Average Height (ft)				80.27
			NG - Proposed Maximum Height (ft)				89.30

Roofs w/ Different Heights	Average Natural Level (FASL)	New FFE (FASL)	Added Height (Nat. to FFE)	Roof Height (FFE. to roof)	Roof Height (Nat. to roof)	Footprint (SF)	Roof Height x Footprint
SG-T/PV	10.88	13.00	2.12	77.25	79.37	38,431	3,050,268.47
SG-6	10.88	13.00	2.12	64.75	66.87	36,941	2,470,244.67
SG-5	10.88	13.00	2.12	55.50	57.62	2,320	133,678.40
Total						77,692	5,654,191.54
			SG - Weighted Average Height (ft)				72.78
			SG - Proposed Maximum Height (ft)				79.37

Roofs w/ Different Heights	Average Natural Level (FASL)	New FFE (FASL)	Added Height (Nat. to FFE)	Roof Height (FFE. to roof)	Roof Height (Nat. to roof)	Footprint (SF)	Roof Height x Footprint
SP1	9.00	15.00	6.00	21.75	27.75	4,074	113,053.50
Total						4,074	113,053.50
			SP1 - Weighted Average Height (ft)				27.75
			SP1 - Proposed Maximum Height (ft)				27.75

Roofs w/ Different Heights	Average Natural Level (FASL)	New FFE (FASL)	Added Height (Nat. to FFE)	Roof Height (FFE. to roof)	Roof Height (Nat. to roof)	Footprint (SF)	Roof Height x Footprint
SP2	9.00	15.00	6.00	24.50	30.50	2,528	77,104.00
Total						2,528	77,104.00
			SP2 - Weighted Average Height (ft)				30.50
			SP2 - Proposed Maximum Height (ft)				30.50

Grand Total						483,028	35,590,475.23
			Total Campus - Weighted Average Height (ft)				73.68

16.04.330 Height of structure.	Except as otherwise provided in this chapter, "height of structure" means the vertical distance from the average level of the highest and lowest points of the natural grade of the portion of the lot covered by the structure to the topmost point of the structure, excluding elevator equipment rooms, ventilating and air conditioning equipment and chimneys. (Ord. 938 § 1 (part), 2005: Ord. 822 § 2 (part), 1991: Prior code § 30.232)
16.43.050 Development regula	Height: 67.5 feet; Maximum height: 110 feet
	A parapet used to screen mechanical equipment is not included in the height or maximum height. The maximum allowed height for rooftop mechanical equipment is 14 feet, except for elevator towers and associated
	Properties within the flood zone or subject to flooding and sea level rise are allowed a 10-foot increase in height and maximum height.

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PENINSULA INNOVATION PARTNERS

WILLOW VILLAGE

Architectural Control Package - Parcel 1 (Portion) & 8

Menlo Park, CA

SCALE:

NOTE: THIS DRAWING IS ISO A1. DO NOT SCALE DRAWINGS. USE FIGURED DIMENSIONS ONLY. OR SEEK CLARIFICATION FROM ARCHITECT FOR MEASUREMENTS THAT ARE NOT INDICATED.

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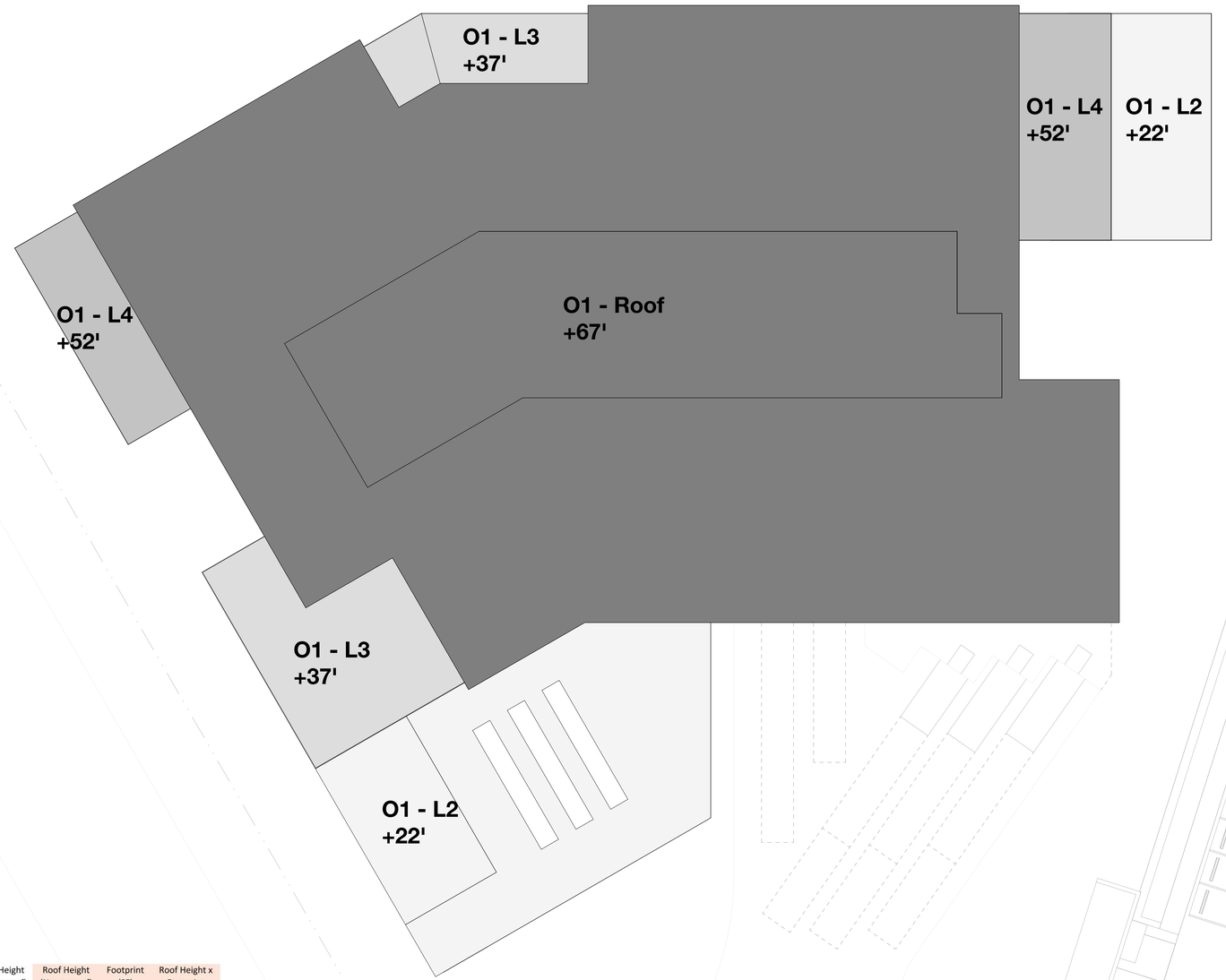
NO.	DATE	ISSUE

DRAWING TITLE:

Building Height Analysis - Summary

DRAWING NO:

A9.05



Roofs w/ Different Heights	Average Natural Level (FASL)	New FFE (FASL)	Added Height (Nat. to FFE)	Roof Height (FFE. to roof)	Roof Height (Nat. to roof)	Footprint (SF)	Roof Height x Footprint
O1-Roof	10.54	15.00	4.46	63.00	67.46	31,627	2,133,557.42
O1-2	10.54	15.00	4.46	18.00	22.46	6,790	152,503.40
O1-3	10.54	15.00	4.46	33.00	37.46	2,857	107,023.22
O1-4	10.54	15.00	4.46	48.00	52.46	2,312	121,287.52
Total						43,586	2,514,371.56
Bldg 1 - Weighted Average Height (ft)							57.69
Bldg 1 - Proposed Maximum Height (ft)							67.46

Plan North

True North

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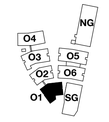

PENINSULA INNOVATION PARTNERS

WILLOW VILLAGE

Architectural Control Package - Parcel 1 (Portion) & 8

Menlo Park, CA

SCALE: 1/16" = 1'-0"

NOTE: THIS DRAWING IS ISO A1. DO NOT SCALE DRAWINGS. USE FIGURED DIMENSIONS ONLY, OR SEEK CLARIFICATION FROM ARCHITECT FOR MEASUREMENTS THAT ARE NOT INDICATED.

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NO.	DATE	ISSUE

DRAWING TITLE:

Builidng Height Analysis Plan - O1

DRAWING NO:

A9.05.1

Roofs w/ Different Heights	Average Natural Level (FASL)	New FFE (FASL)	Added Height (Nat. to FFE)	Roof Height (FFE. to roof)	Roof Height (Nat. to roof)	Footprint (SF)	Roof Height x Footprint
O2-Roof	9.59	15.00	5.41	78.00	83.41	32,408	2,703,151.28
O2-2	9.59	15.00	5.41	18.00	23.41	968	22,660.88
O2-5	9.59	15.00	5.41	63.00	68.41	5,815	397,804.15
Total						39,191	3,123,616.31
Bldg 2 - Weighted Average Height (ft)							79.70
Bldg 2 - Proposed Maximum Height (ft)							83.41

Plan North

True North

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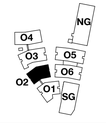

PENINSULA INNOVATION PARTNERS

WILLOW VILLAGE

Architectural Control Package - Parcel 1 (Portion) & 8

Menlo Park, CA

SCALE: 1/16" = 1'-0"

NOTE: THIS DRAWING IS ISO A1. DO NOT SCALE DRAWINGS. USE FIGURED DIMENSIONS ONLY. OR SEEK CLARIFICATION FROM ARCHITECT FOR MEASUREMENTS THAT ARE NOT INDICATED.

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DATE	ISSUE
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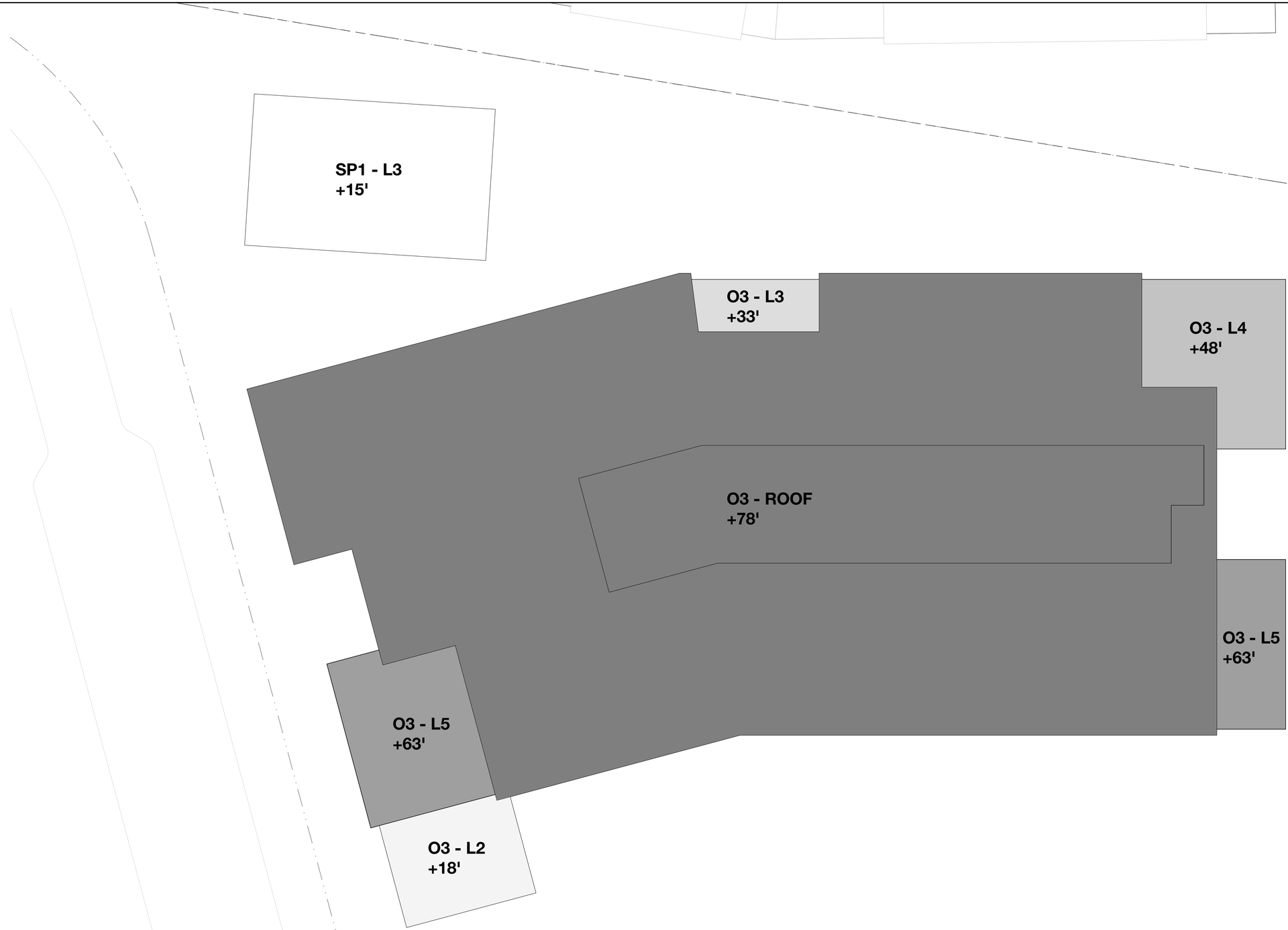
NO.	DATE	ISSUE

DRAWING TITLE: Builidng Height Analysis Plan - O2

DRAWING NO: A9.05.2



Roofs w/ Different Heights	Average Natural Level (FASL)	New FFE (FASL)	Added Height (Nat. to FFE)	Roof Height (FFE. to roof)	Roof Height (Nat. to roof)	Footprint (SF)	Roof Height x Footprint
O3-Roof	9.87	15.00	5.13	78.00	83.13	42,573	3,539,093.49
O3-2	9.87	15.00	5.13	18.00	23.13	1,563	36,152.19
O3-3	9.87	15.00	5.13	33.00	38.13	724	27,606.12
O3-4	9.87	15.00	5.13	48.00	53.13	2,204	117,098.52
O3-5	9.87	15.00	5.13	63.00	68.13	3,612	246,085.56
Total						50,676	3,966,035.88
Bldg 3 - Weighted Average Height (ft)							78.26
Bldg 3 - Proposed Maximum Height (ft)							83.13

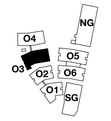
Roofs w/ Different Heights	Average Natural Level (FASL)	New FFE (FASL)	Added Height (Nat. to FFE)	Roof Height (FFE. to roof)	Roof Height (Nat. to roof)	Footprint (SF)	Roof Height x Footprint
SP1	9.00	15.00	6.00	21.75	27.75	4,074	113,053.50
Total						4,074	113,053.50
SP1 - Weighted Average Height (ft)							27.75
SP1 - Proposed Maximum Height (ft)							27.75

Plan North

True North

0 8 16 32

8/31/2021 9:19:11 AM



PENINSULA INNOVATION PARTNERS

WILLOW VILLAGE
Architectural Control Package - Parcel 1 (Portion) & 8
Menlo Park, CA

SCALE: 1/16" = 1'-0"

NOTE: THIS DRAWING IS ISO A1. DO NOT SCALE DRAWINGS. USE FIGURED DIMENSIONS ONLY, OR SEEK CLARIFICATION FROM ARCHITECT FOR MEASUREMENTS THAT ARE NOT INDICATED.

MILESTONES

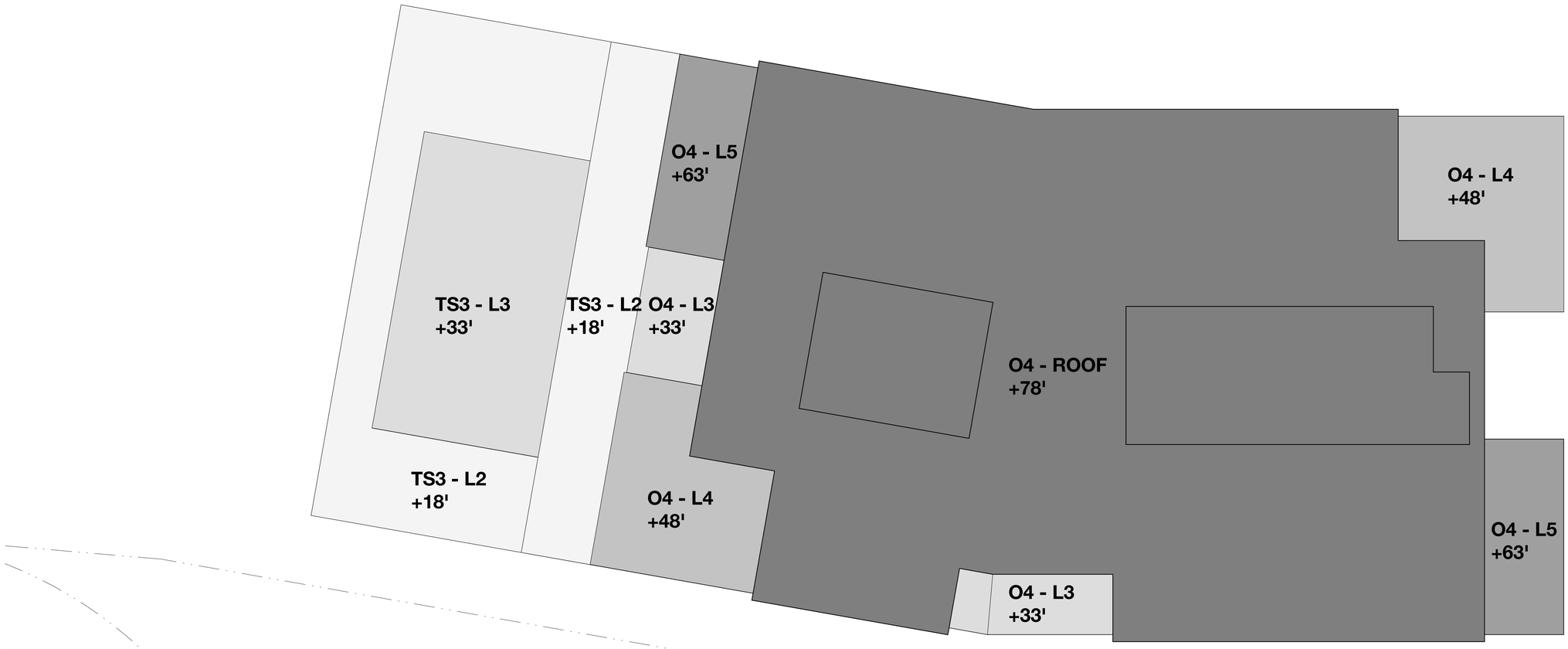
DATE	ISSUE
09/07/2021	ACP

REVISIONS

NO.	DATE	ISSUE

DRAWING TITLE:
Building Height Analysis
Plan - O3

DRAWING NO:
A9.05.3



Roofs w/ Different Heights	Average Natural Level (FASL)	New FFE (FASL)	Added Height (Nat. to FFE)	Roof Height (FFE. to roof)	Roof Height (Nat. to roof)	Footprint (SF)	Roof Height x Footprint
TS3- Roof	10.69	15.00	4.31	32.50	36.81	4,257	156,700.17
O4-2	10.69	15.00	4.31	18.00	22.31	3,064	68,357.84
TS3-2	10.69	15.00	4.31	18.00	22.31	5,029	112,196.99
Total						12,350	337,255.00
TS3 - Weighted Average Height (ft)							27.31
TS3 - Proposed Maximum Height (ft)							36.81

Roofs w/ Different Heights	Average Natural Level (FASL)	New FFE (FASL)	Added Height (Nat. to FFE)	Roof Height (FFE. to roof)	Roof Height (Nat. to roof)	Footprint (SF)	Roof Height x Footprint
O4-Roof	10.69	15.00	4.31	78.00	82.31	31,860	2,622,396.60
O4-3	10.69	15.00	4.31	33.00	37.31	1,622	60,516.82
O4-4	10.69	15.00	4.31	48.00	52.31	4,408	230,582.48
O4-5	10.69	15.00	4.31	63.00	67.31	2,608	175,544.48
Total						40,498	3,089,040.38
Bldg 4 - Weighted Average Height (ft)							76.28
Bldg 4 - Proposed Maximum Height (ft)							82.31

Plan North

True North

0 8 16 32

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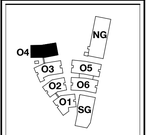


PENINSULA INNOVATION PARTNERS

WILLOW VILLAGE
Architectural Control Package - Parcel 1 (Portion) & 8
Menlo Park, CA

SCALE: 1/16" = 1'-0"

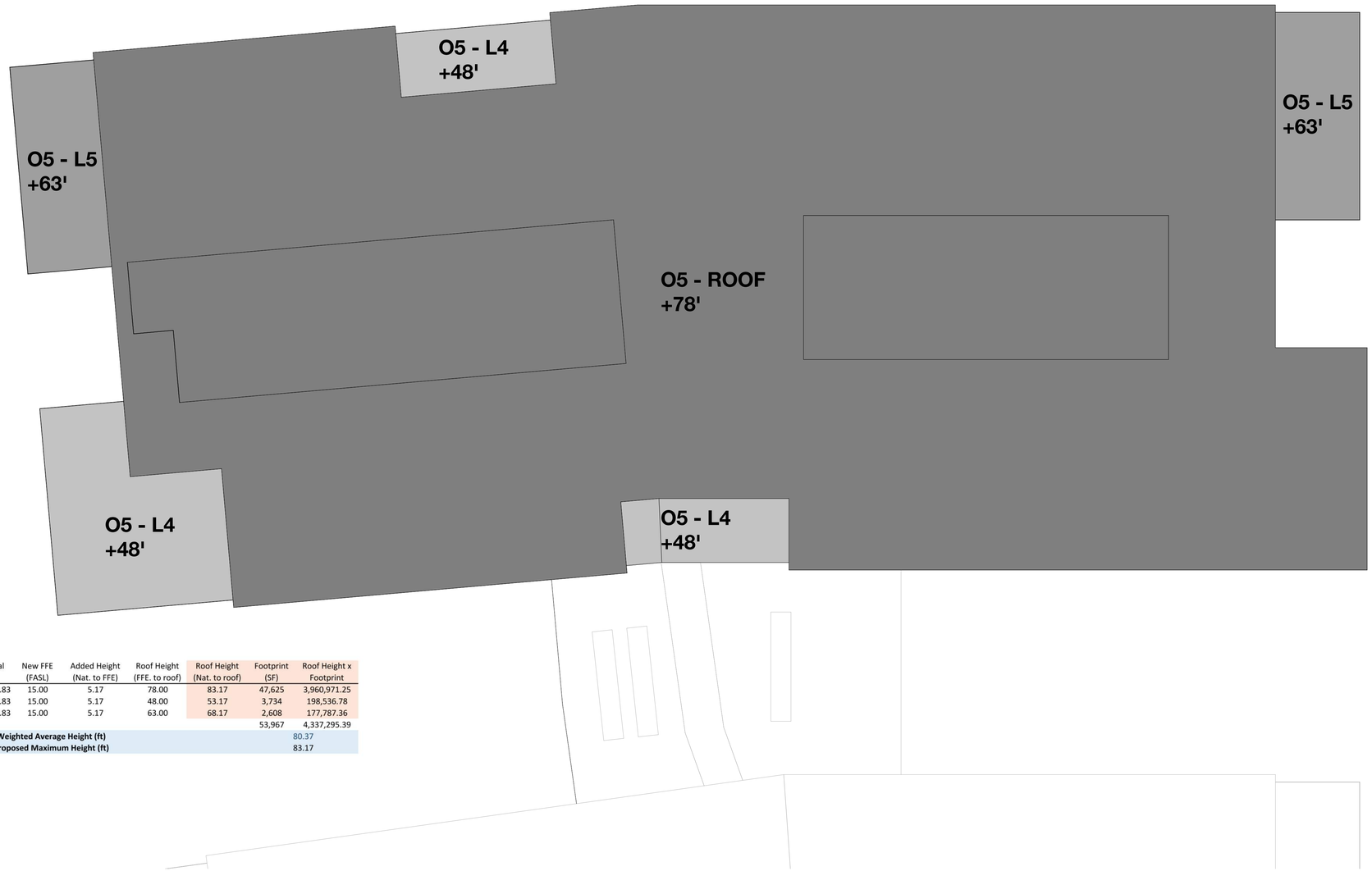
NOTE: THIS DRAWING IS ISO A1. DO NOT SCALE DRAWINGS. USE FIGURED DIMENSIONS ONLY, OR SEEK CLARIFICATION FROM ARCHITECT FOR MEASUREMENTS THAT ARE NOT INDICATED.

MILESTONES	
DATE	ISSUE
09/07/2021	ACP

REVISIONS		
NO.	DATE	ISSUE

DRAWING TITLE:
Building Height Analysis
Plan - O4

DRAWING NO:
A9.05.4



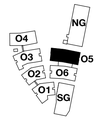
Roofs w/ Different Heights	Average Natural Level (FASL)	New FFE (FASL)	Added Height (Nat. to FFE)	Roof Height (FFE. to roof)	Roof Height (Nat. to roof)	Footprint (SF)	Roof Height x Footprint
O5-Roof	9.83	15.00	5.17	78.00	83.17	47,625	3,960,971.25
O5-4	9.83	15.00	5.17	48.00	53.17	3,734	198,536.78
O5-5	9.83	15.00	5.17	63.00	68.17	2,608	177,787.36
Total						53,967	4,337,295.39
Bldg 5 - Weighted Average Height (ft)							80.37
Bldg 5 - Proposed Maximum Height (ft)							83.17

Plan North

True North

0 8 16 32

8/31/2021 9:19:27 AM



PENINSULA INNOVATION PARTNERS

WILLOW VILLAGE
Architectural Control Package - Parcel 1 (Portion) & 8
Menlo Park, CA

SCALE: 1/16" = 1'-0"

NOTE: THIS DRAWING IS ISO A1. DO NOT SCALE DRAWINGS. USE FIGURED DIMENSIONS ONLY. OR SEEK CLARIFICATION FROM ARCHITECT FOR MEASUREMENTS THAT ARE NOT INDICATED.

MILESTONES

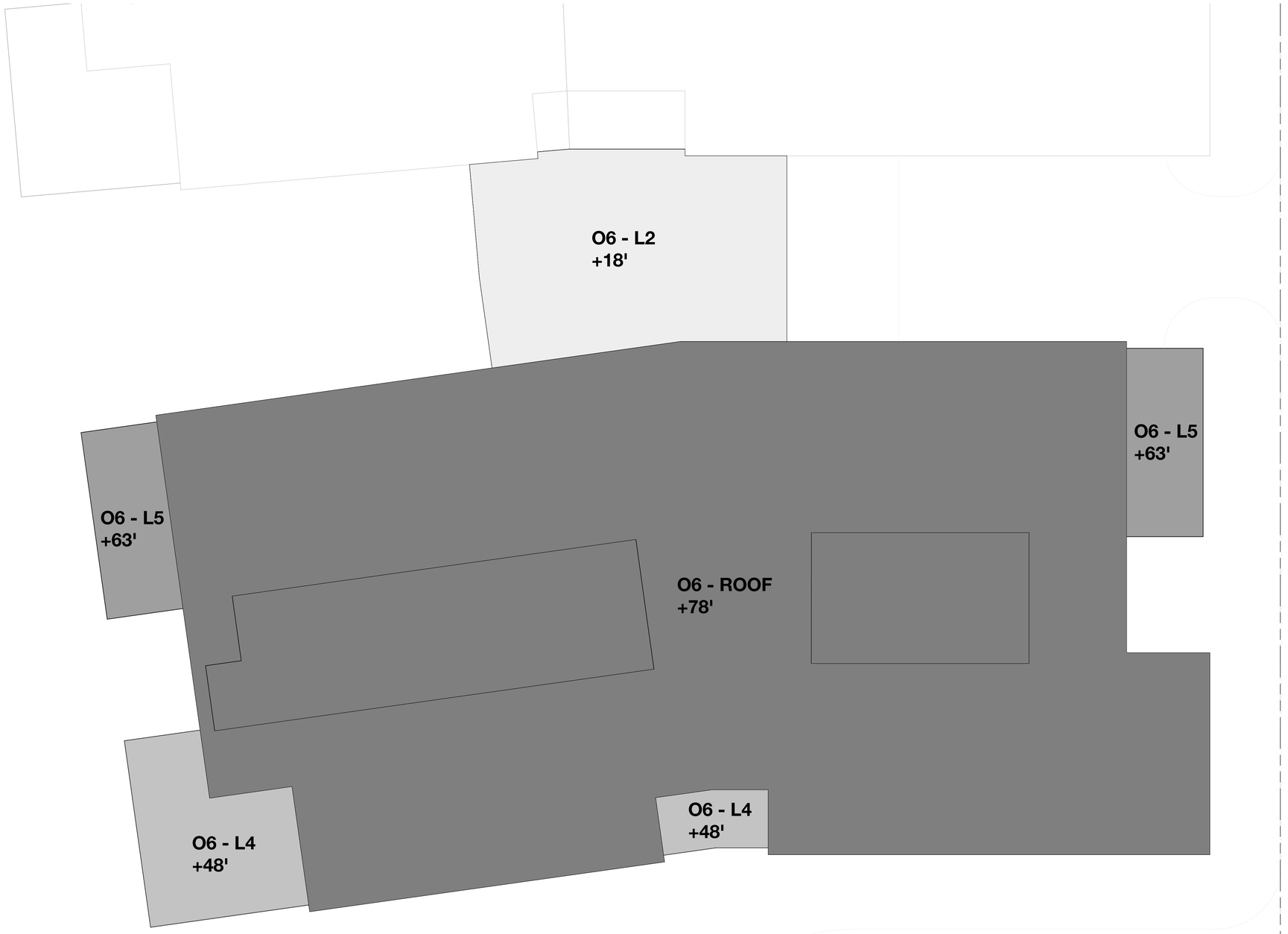
DATE	ISSUE
09/07/2021	ACP

REVISIONS

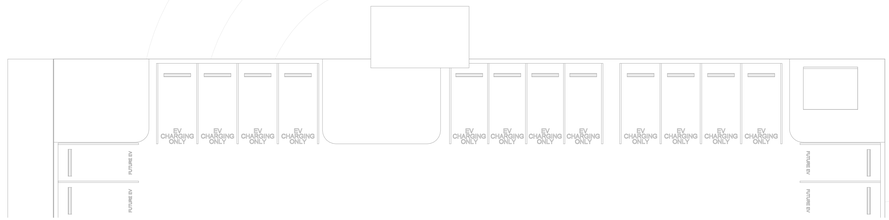
NO.	DATE	ISSUE

DRAWING TITLE:
Building Height Analysis
Plan - O5

DRAWING NO:
A9.05.5



Roofs w/ Different Heights	Average Natural Level (FASL)	New FFE (FASL)	Added Height (Nat. to FFE)	Roof Height (FFE. to roof)	Roof Height (Nat. to roof)	Footprint (SF)	Roof Height x Footprint
O6-Roof	10.73	15.00	4.27	78.00	82.27	43,497	3,578,498.19
O6-2	10.73	15.00	4.27	18.00	22.27	5,464	121,683.28
O6-4	10.73	15.00	4.27	48.00	52.27	2,777	145,153.79
O6-5	10.73	15.00	4.27	63.00	67.27	2,608	175,440.16
Total						54,346	4,020,775.42
Bldg 6 - Weighted Average Height (ft)							73.98
Bldg 6 - Proposed Maximum Height (ft)							82.27



Plan North

True North

0 8 16 32

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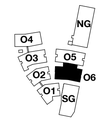


PENINSULA INNOVATION PARTNERS

WILLOW VILLAGE
Architectural Control Package - Parcel 1 (Portion) & 8
Menlo Park, CA

SCALE: 1/16" = 1'-0"

NOTE: THIS DRAWING IS ISO A1. DO NOT SCALE DRAWINGS. CONTRACTOR SHALL VERIFY AND SEEK CLARIFICATION FROM ARCHITECT FOR MEASUREMENTS THAT ARE NOT INDICATED.

MILESTONES

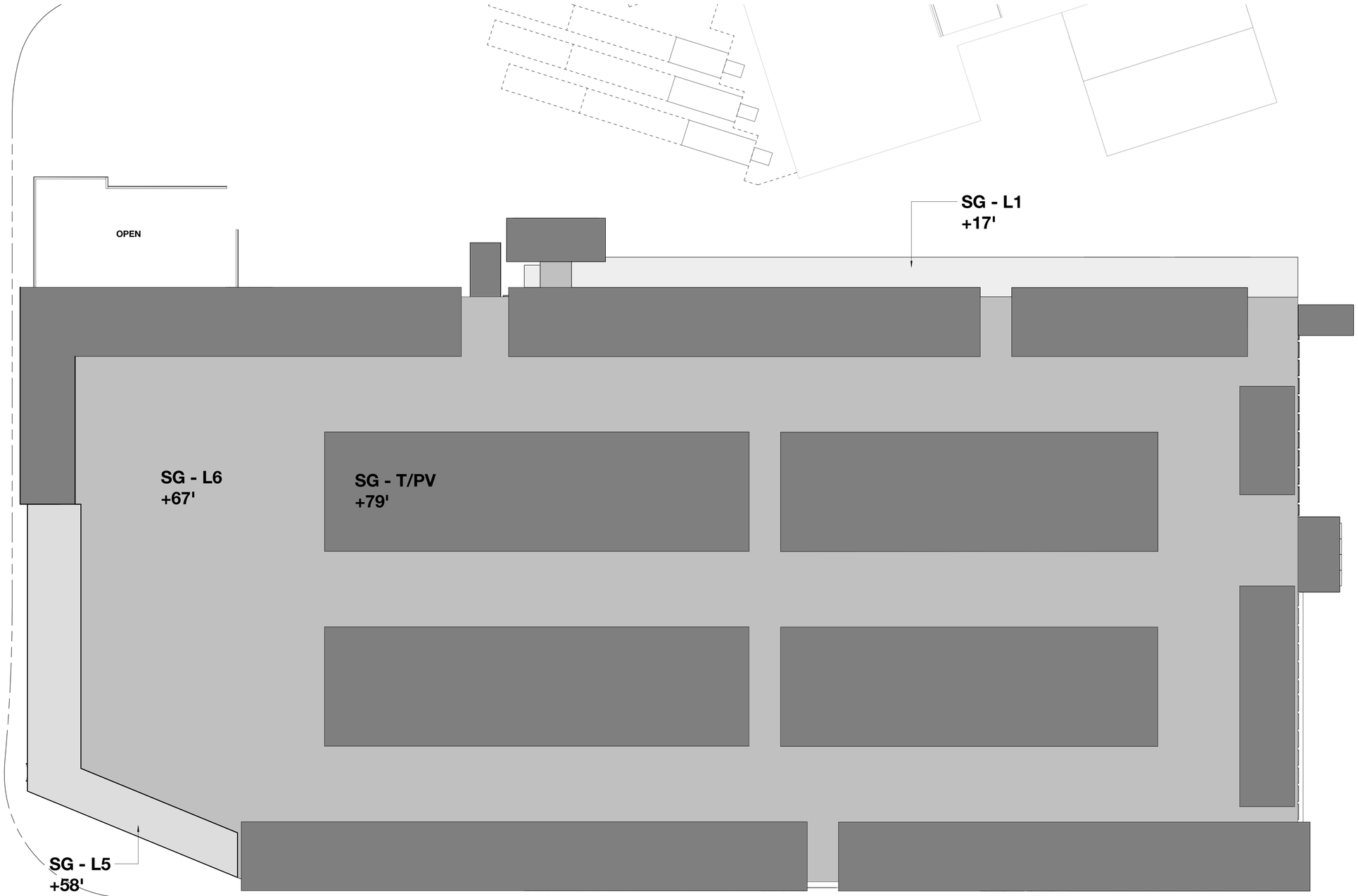
DATE	ISSUE
09/07/2021	ACP

REVISIONS

NO.	DATE	ISSUE

DRAWING TITLE:
Building Height Analysis
Plan - O6

DRAWING NO:
A9.05.6



Roofs w/ Different Heights	Average Natural Level (FASL)	New FFE (FASL)	Added Height (Nat. to FFE)	Roof Height (FFE. to roof)	Roof Height (Nat. to roof)	Footprint (SF)	Roof Height x Footprint
SG-T/PV	10.88	13.00	2.12	77.25	79.37	38,431	3,050,268.47
SG-6	10.88	13.00	2.12	64.75	66.87	36,941	2,470,244.67
SG-5	10.88	13.00	2.12	55.50	57.62	2,320	133,678.40
Total						77,692	5,654,191.54
SG - Weighted Average Height (ft)							72.78
SG - Proposed Maximum Height (ft)							79.37

Plan North

True North

0 8 16 32

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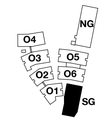


PENINSULA INNOVATION PARTNERS

WILLOW VILLAGE
Architectural Control Package - Parcel 1 (Portion) & 8
Menlo Park, CA

SCALE: 1/16" = 1'-0"

NOTE: THIS DRAWING IS ISO A1. DO NOT SCALE DRAWINGS. CONTRACTOR SHALL VERIFY AND SIGN CLARIFICATION FROM ARCHITECT FOR MEASUREMENTS THAT ARE NOT INDICATED.

MILESTONES

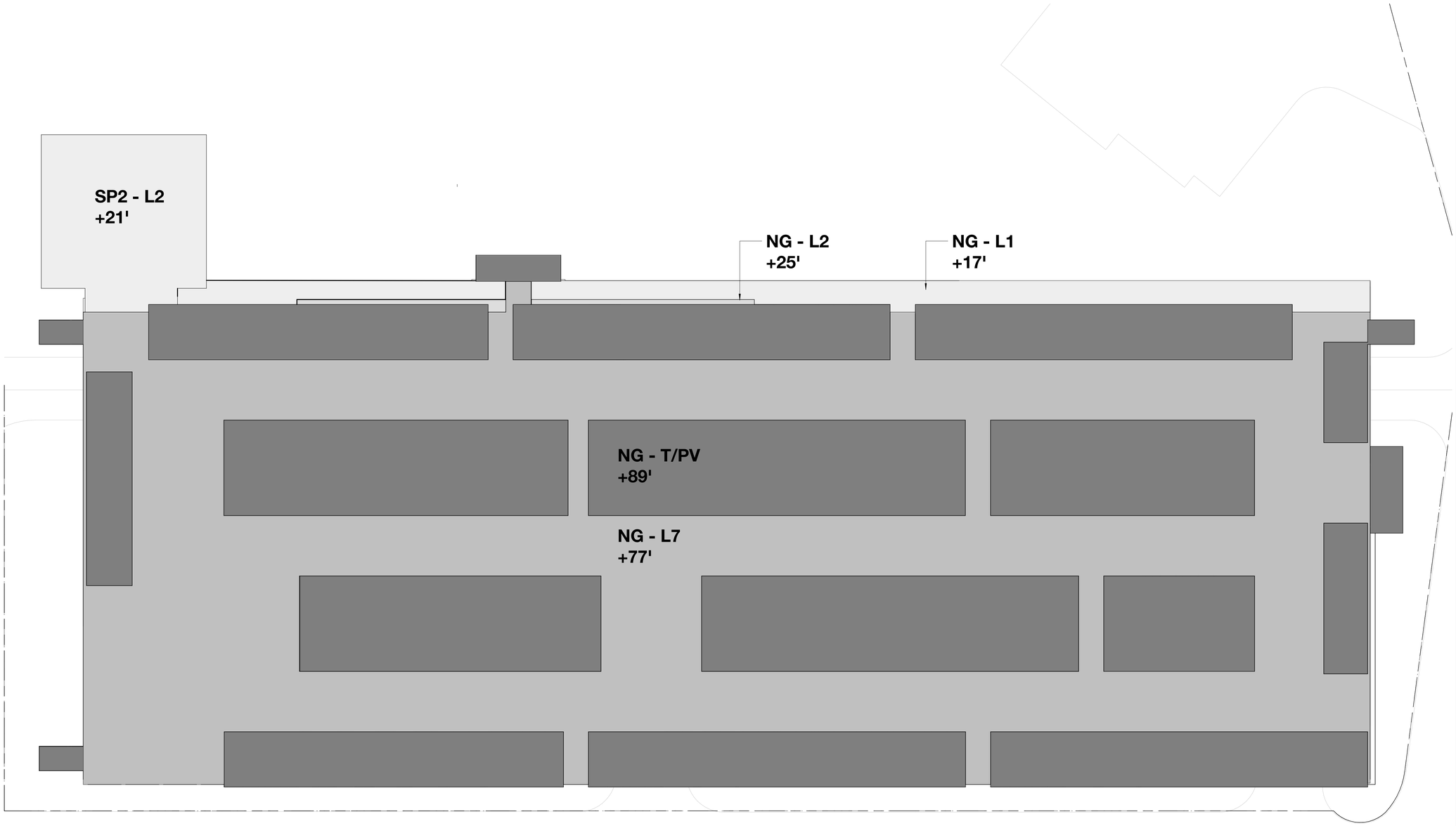
DATE	ISSUE
09/07/2021	ACP

REVISIONS

NO.	DATE	ISSUE

DRAWING TITLE:
Building Height Analysis
Plan - South Garage

DRAWING NO:
A9.05.7



Roofs w/ Different Heights	Average Natural Level (FASL)	New FFE (FASL)	Added Height (Nat. to FFE)	Roof Height (FFE. to roof)	Roof Height (Nat. to roof)	Footprint (SF)	Roof Height x Footprint
NG-T/PV	10.20	12.00	1.80	87.50	89.30	51,189	4,571,177.70
NG-7	10.20	12.00	1.80	75.00	76.80	48,242	3,704,985.60
NG-2	10.20	12.00	1.80	22.75	24.55	361	8,862.55
NG-1	10.20	12.00	1.80	15.00	16.80	4,328	72,710.40
Total						104,120	8,357,736.25
NG - Weighted Average Height (ft)							80.27
NG - Proposed Maximum Height (ft)							89.30

Roofs w/ Different Heights	Average Natural Level (FASL)	New FFE (FASL)	Added Height (Nat. to FFE)	Roof Height (FFE. to roof)	Roof Height (Nat. to roof)	Footprint (SF)	Roof Height x Footprint
SP2	9.00	15.00	6.00	24.50	30.50	2,528	77,104.00
Total						2,528	77,104.00
SP2 - Weighted Average Height (ft)							30.50
SP2 - Proposed Maximum Height (ft)							30.50

Plan North

True North

0 20 40

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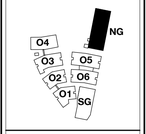

PENINSULA INNOVATION PARTNERS

WILLOW VILLAGE
Architectural Control Package - Parcel 1 (Portion) & 8
Menlo Park, CA

SCALE: 1" = 20'-0"

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MILESTONES

DATE	ISSUE
09/07/2021	ACP

REVISIONS

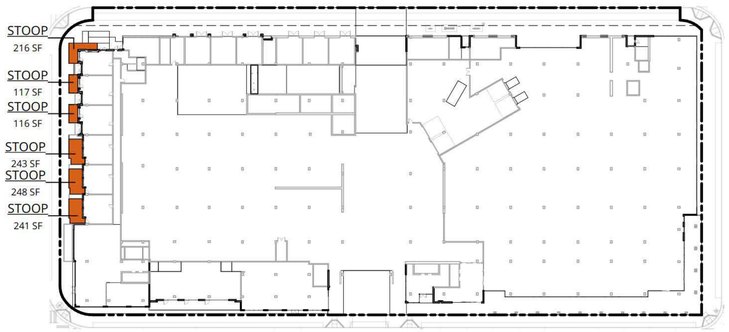
NO.	DATE	ISSUE

DRAWING TITLE:
Building Height Analysis
Plan - North Garage

DRAWING NO:
A9.05.8

APPENDIX 3

PARCEL 1-8
ILLUSTRATIVE OPEN SPACE

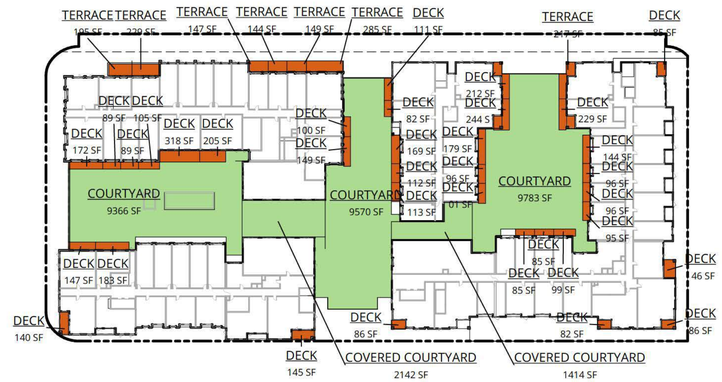


1 OPEN SPACE - LEVEL 1

1" = 60'-0"

2 OPEN SPACE - LEVEL 2

1" = 60'-0"

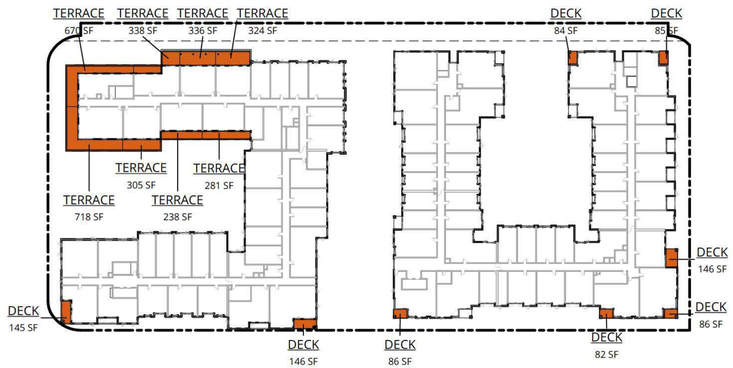


3 OPEN SPACE - LEVEL 3

1" = 60'-0"

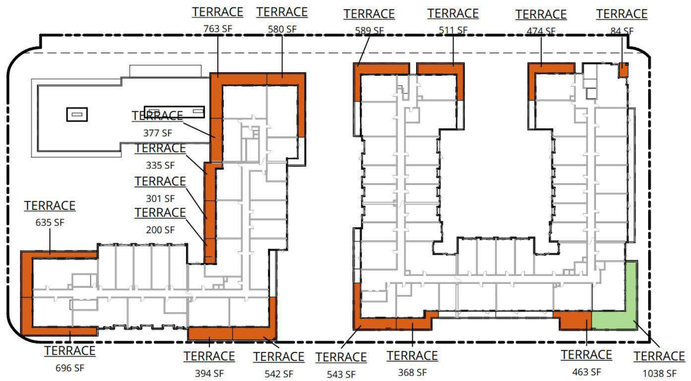
4 OPEN SPACE - LEVEL 4

1" = 60'-0"



5 OPEN SPACE - LEVEL 5

1" = 60'-0"



6 OPEN SPACE - LEVEL 6

1" = 60'-0"

LEGEND

PRIVATE OPEN SPACE

RESIDENT COMMON OPEN SPACE

OPEN SPACE

Menlo Park Municipal Code 16.45.120(4) Open Space

(C) Residential developments shall have a minimum of common open space and private open space. These requirements are counted towards the minimum amount of open space equal to twenty-five percent (25%) of the total lot area.

(i) One hundred (100) square feet of open space per unit shall be created as common open space or a minimum of eighty (80) square feet of open space per unit created as private open space, where private open space shall have a minimum dimension of six (6) feet by six (6) feet;

(ii) In the case of a mix of private and common open space, such common open space shall be provided at a ratio equal to one and one-quarter (1.25) square feet for each one (1) square foot of private open space that is not provided.

(iii) Depending on the number of dwelling units, common open space shall be provided to meet the following criteria:

c. One hundred one (101) or more units: minimum of one (1) space, forty (40) feet minimum dimension (one thousand six hundred (1,600) square feet total, minimum).

(D) All open spaces shall:

(i) Interface with adjacent buildings via direct connections through doors, windows, and entryways;

(ii) Be integrated as part of building modulation and articulation to enhance building facade and should be sited and designed to be appropriate for the size of the development and accommodate different activities, groups and both active and passive uses;

(iii) Incorporate landscaping design that includes:

a. Sustainable stormwater features;

b. A minimum landscaping bed no less than three (3) feet in length or width and five (5) feet in depth for infiltration planting;

c. Native species able to grow to their maximum size without shearing.

(E) All exterior landscaping counts towards open space requirements.

Proposal / Notes: See open space calculations provided below.

Open Space Summary

Lot Area: 137,540 SF 100%

Open Space	Area	% of Total Lot Area
Private Open Space:	20,326 SF	15%
Common Open Space:	33,314 SF	24%
Total:	**53,640 SF**	**39%**
Minimum Required:		**25%**

Total provided is greater than minimum required.
Therefore project complies.

Public Open Space: 0 SF 0%

Private and Common Open Space Mix

Min. Private Open...	80 SF
Min. Common Open Space/Unit:	100 SF
Min. area of Common Open Space required to replace (1) square foot of Private Open Space that is not provided:	1.25 SF

Provided Private Open...	Unit Count	Area/Unit	Total Area
Units with 80SF+ of Private Open Space:	91	Varies - Always >80SF	20,326 SF
Total:			20,326 SF

Required Common Open...	Unit Count	Area/Unit	Total Area
Units with no Private Open Space:	236	100 SF	23,600 SF
Total Required:			**23,600 SF**
Common Open Space Provided:			**33,314 SF**

Total provided is greater than minimum required.
Therefore project complies.

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PENINSULA INNOVATION PARTNERS

WILLOW VILLAGE
Architectural Control Package - Parcel 2
Menlo Park, CA

SCALE: As indicated

NOTE: THIS DRAWING IS ISO A1. DO NOT SCALE DRAWINGS. USE FIGURED DIMENSIONS ONLY, OR SEEK CLARIFICATION FROM ARCHITECT FOR MEASUREMENTS THAT ARE NOT INDICATED.

MILESTONES

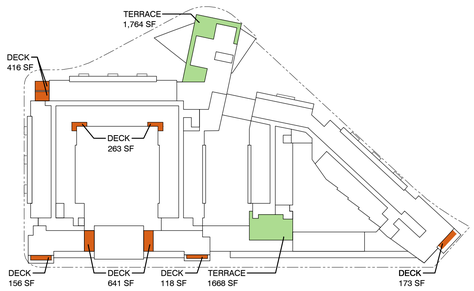
DATE	ISSUE
09/07/2021	ACP

REVISIONS

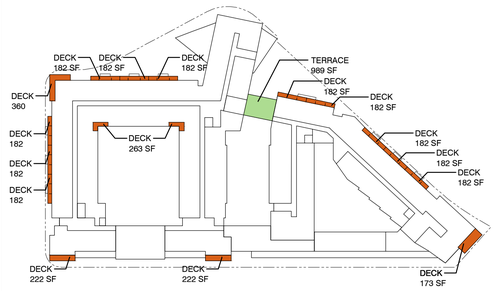
NO.	DATE	ISSUE

DRAWING TITLE: OPEN SPACE PLANS

DRAWING NO: *A9.06



LEVEL 07



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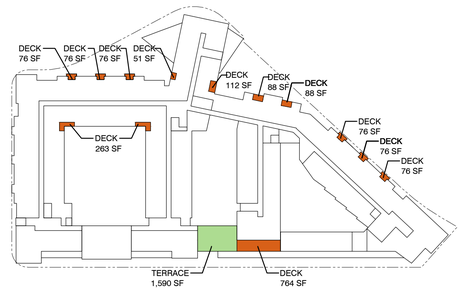

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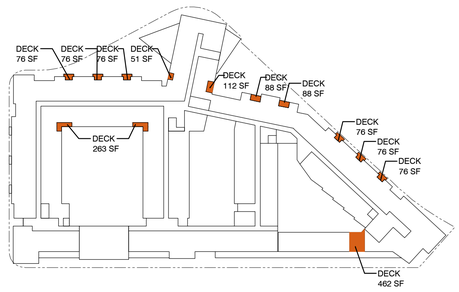

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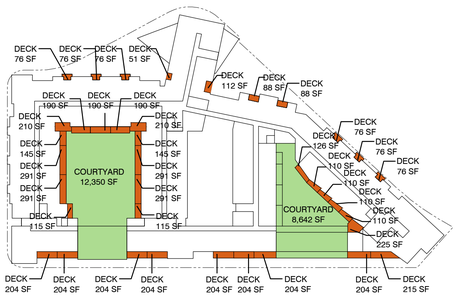

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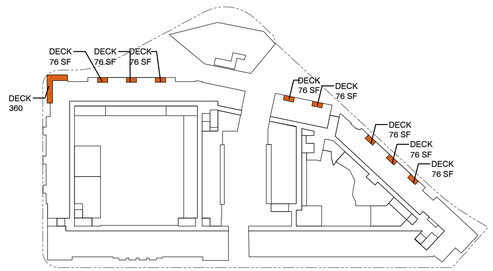

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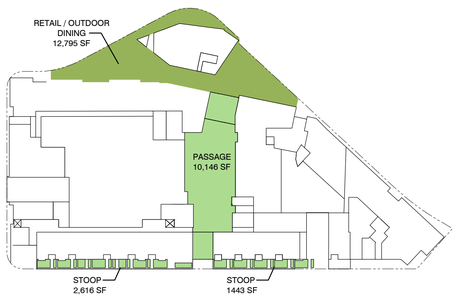


LEVEL 01

OPEN SPACE SUMMARY				
	Publicly Accessible Open Space	Common Open Space	Private Open Space	TOTAL
LEVEL 1	12,795.00	12,576.00	-	25,371.00
LEVEL 2	-	-	997.00	997.00
LEVEL 3	-	20,990.00	6,258.00	27,248.00
LEVEL 4	-	-	1,530.00	1,530.00
LEVEL 5	-	1,590.00	1,841.00	3,431.00
LEVEL 6	-	989.00	3,234.00	4,223.00
LEVEL 7		3,432.00	1,767.00	5,199.00
TOTAL	12,795.00	39,577.00	15,627.00	62,800.00
Percent	10%	32%	12%	54%
Required				31.25%

OPEN SPACE

Menlo Park Municipal Code 16.45.120(4) Open Space

(C) Residential developments shall have a minimum of common open space and private open space. These requirements are counted towards the minimum amount of open space equal to twenty-five per-cent (25%) of the total lot area.

(i) One hundred (100) square feet of open space per unit shall be created as common open space or a minimum of eighty (80) square feet of open space per unit created as private open space, where private open space shall have a minimum dimension of six (6) feet by six (6) feet;

(ii) In the case of a mix of private and common open space, such common open space shall be provided at a ratio equal to one and one-quarter (1.25) square feet for each one (1) square foot of private open space that is not provided.

(iii) Depending on the number of dwelling units, common open space shall be provided to meet the following criteria:

c. One hundred one (101) or more units: minimum of one (1) space, forty (40) feet minimum dimension (one thousand six hundred (1,600) square feet total, minimum).

(D) All open spaces shall:

(i) Interface with adjacent buildings via direct connections through doors, windows, and entryways;

(ii) Be integrated as part of building modulation and articulation to enhance building facade and should be sited and designed to be appropriate for the size of the development and accommodate different activities, groups and both active and passive uses;

(iii) Incorporate landscaping design that includes:

a. Sustainable stormwater features;

b. A minimum landscaping bed no less than three (3) feet in length or width and five (5) feet in depth for infiltration planting;

c. Native species able to grow to their maximum size without shearing.

(E) All exterior landscaping counts towards open space requirements.

Proposal / Notes: See open space calculations provided below.

PENINSULA INNOVATION PARTNERS

WILLOW VILLAGE
Architectural Control Package - Parcel 3
Menlo Park, CA

SCALE:

NOTE: THIS DRAWING IS ISO A1. DO NOT SCALE DRAWINGS. USE FIGURED DIMENSIONS ONLY. OR SEEK CLARIFICATION FROM ARCHITECT FOR MEASUREMENTS THAT ARE NOT INDICATED.

MILESTONES

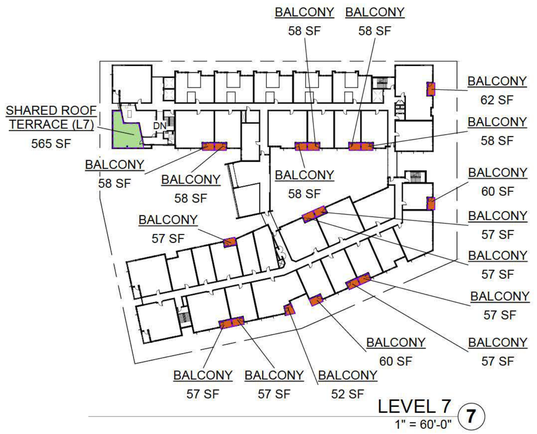
DATE	ISSUE
9/7/2021	ACP

REVISIONS

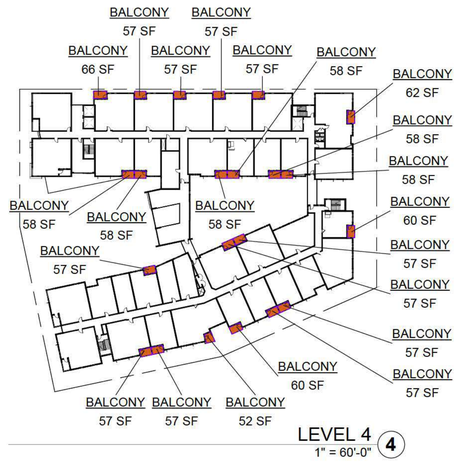
NO.	DATE	ISSUE

DRAWING TITLE: OPEN SPACE DIAGRAM

DRAWING NO: A9.06



LEVEL 7 (7)
1" = 60'-0"



LEVEL 4 (4)
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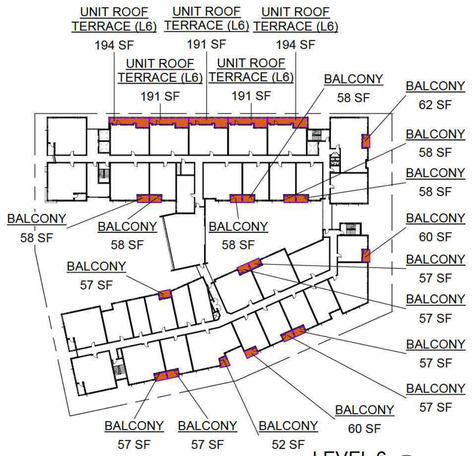

LEVEL 6 (6)
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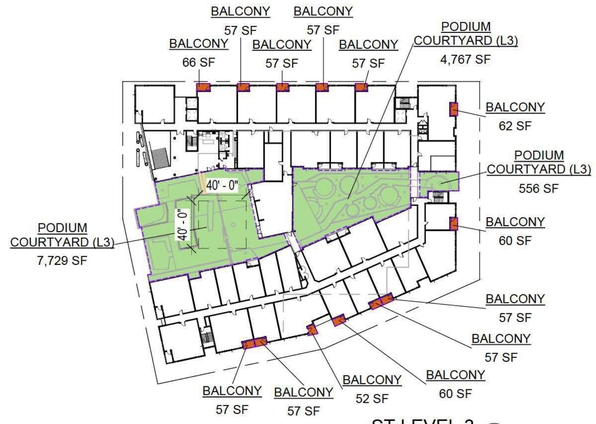
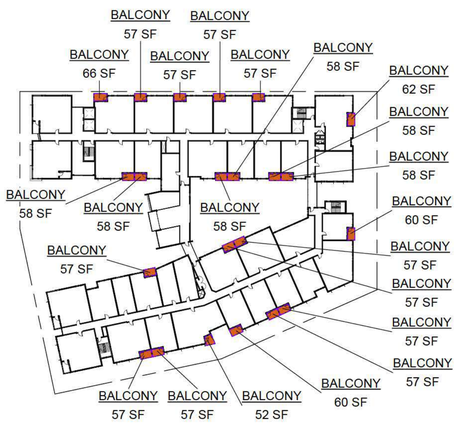


ST LEVEL 3 (3)
1" = 60'-0"



LEVEL 5 (5)
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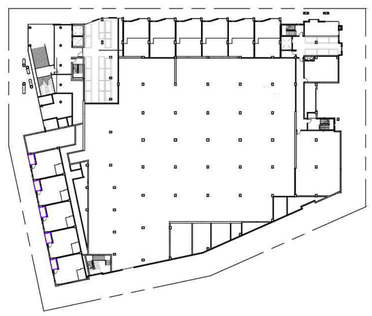

LEVEL 2 (2)
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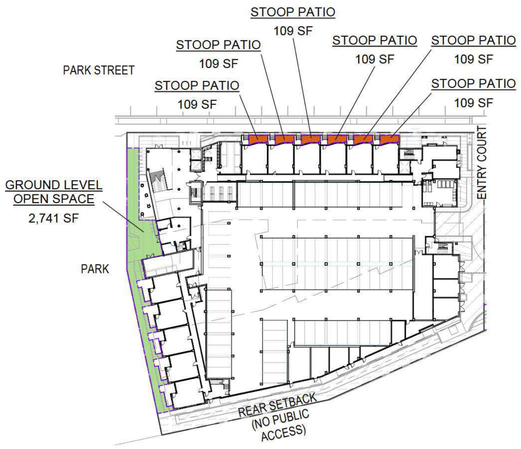


LEVEL 1 (1)
1" = 60'-0"

PARCEL 6 - OPEN SPACE AREA CALCS			
Name	**Open Space Type**	**Open Space Location**	**Area**
GROUND LEVEL OPEN SPACE	COMMON OPEN SPACE	L1	2,741 SF
GROUND LEVEL OPEN SPACE: 2			2,741 SF
PODIUM COURTYARD (L3)	COMMON OPEN SPACE	L3	13,052 SF
PODIUM COURTYARD (L3): 3			13,052 SF
SHARED ROOF TERRACE (L7)	COMMON OPEN SPACE	L7	565 SF
SHARED ROOF TERRACE (L7): 1			565 SF
COMMON OPEN SPACE			16,358 SF
BALCONY	PRIVATE OPEN SPACE	L3-L7	5,260 SF
BALCONY: 91			5,260 SF
STOOP PATIO	PRIVATE OPEN SPACE	L1	651 SF
STOOP PATIO: 6			651 SF
UNIT ROOF TERRACE (L6)	PRIVATE OPEN SPACE	L6	961 SF
UNIT ROOF TERRACE (L6): 5			961 SF
PRIVATE OPEN SPACE			6,872 SF
Total Open Space			23,230 SF

PARCEL 6 OPEN SPACE ANALYSIS:

OPEN SPACE SUMMARY:

LOT AREA: 64,315 SF 100%

OPEN SPACE	AREA	% OF TOTAL AREA
PRIVATE OPEN SPACE	6,872 SF	10%
COMMON OPEN SPACE	16,358 SF	25%
TOTAL	**23,230 SF**	**35%**
MINIMUM REQUIRED		**25%**

PRIVATE & COMMON OPEN SPACE MIX:

MIN. REQUIRED OPEN SPACE (IF PRIVATE):
80 SF/UNIT * 176 UNITS = **14,080 SF**

MIN. REQUIRED OPEN SPACE (IF COMMON):
100 SF/UNIT * 176 UNITS = **17,600 SF**

MIN. AREA OF COMMON OPEN SPACE TO REPLACE (1) SF OF REQUIRED PRIVATE OPEN SPACE THAT IS NOT PROVIDED: **1.25 SF**

CALCULATION:

	14,080	SF (REQ. PRIVATE OPEN SPACE)
-	6,872	SF (PROVIDED PRIVATE OPEN SPACE)
	7,208	SF (REQ. PRIVATE OPEN SPACE THAT IS NOT PROVIDED)
x	1.25	SF (RATIO OF REQ. COMMON OPEN SPACE TO PRIVATE)
	9,010	**SF (MIN. REQUIRED COMMON OPEN SPACE)**
	16,358	**SF (PROVIDED COMMON OPEN SPACE) > 9,010 SF = COMPLIANT**

MENLO PARK ZONING CODE REQUIREMENTS

16.45.120 (4): OPEN SPACE

(C) RESIDENTIAL DEVELOPMENTS SHALL HAVE A MINIMUM OF COMMON OPEN SPACE AND PRIVATE OPEN SPACE. THESE REQUIREMENTS ARE COUNTED TOWARDS THE MINIMUM AMOUNT OF OPEN SPACE EQUAL TO TWENTY-FIVE PERCENT (25%) OF THE TOTAL LOT AREA.

(I) ONE HUNDRED (100) SQUARE FEET OF OPEN SPACE PER UNIT SHALL BE CREATED AS COMMON OPEN SPACE OR A MINIMUM OF EIGHTY (80) SQUARE FEET OF OPEN SPACE PER UNIT CREATED AS PRIVATE OPEN SPACE, WHERE PRIVATE OPEN SPACE SHALL HAVE A MINIMUM DIMENSION OF SIX (6) FEET BY SIX (6) FEET;

(II) IN THE CASE OF A MIX OF PRIVATE AND COMMON OPEN SPACE, SUCH COMMON OPEN SPACE SHALL BE PROVIDED AT A RATIO EQUAL TO ONE AND ONE-QUARTER (1.25) SQUARE FEET FOR EACH ONE (1) SQUARE FOOT OF PRIVATE OPEN SPACE THAT IS NOT PROVIDED.

(III) DEPENDING ON THE NUMBER OF DWELLING UNITS, COMMON OPEN SPACE SHALL BE PROVIDED TO MEET THE FOLLOWING CRITERIA:
- C. ONE HUNDRED ONE (101) OR MORE UNITS: MINIMUM OF ONE (1) SPACE, FORTY (40) FEET MINIMUM DIMENSION (ONE THOUSAND SIX HUNDRED (1,600) SQUARE FEET TOTAL, MINIMUM).

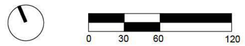
(D) ALL OPEN SPACES SHALL:

(I) INTERFACE WITH ADJACENT BUILDINGS VIA DIRECT CONNECTIONS THROUGH DOORS, WINDOWS, AND ENTRYWAYS;

(II) BE INTEGRATED AS PART OF BUILDING MODULATION AND ARTICULATION TO ENHANCE BUILDING FACADE AND SHOULD BE SITED AND DESIGNED TO BE APPROPRIATE FOR THE SIZE OF THE DEVELOPMENT AND ACCOMMODATE DIFFERENT ACTIVITIES, GROUPS AND BOTH ACTIVE AND PASSIVE USES;

(III) INCORPORATE LANDSCAPING DESIGN THAT INCLUDES:
- A. SUSTAINABLE STORMWATER FEATURES;
- B. A MINIMUM LANDSCAPING BED NO LESS THAN THREE (3) FEET IN LENGTH OR WIDTH AND FIVE (5) FEET IN DEPTH FOR INFILTRATION PLANTING;
- C. NATIVE SPECIES ABLE TO GROW TO THEIR MAXIMUM SIZE WITHOUT SHEARING.

(E) ALL EXTERIOR LANDSCAPING COUNTS TOWARDS OPEN SPACE REQUIREMENTS.



PENINSULA INNOVATION PARTNERS

WILLOW VILLAGE
Architectural Control Package - Parcel 6
Menlo Park, CA

SCALE: 1" = 60'-0"

NOTE: THIS DRAWING IS ISO A1. DO NOT SCALE DRAWINGS. USE FIGURED DIMENSIONS ONLY, OR SEEK CLARIFICATION FROM ARCHITECT FOR MEASUREMENTS THAT ARE NOT INDICATED.

MILESTONES

DATE	ISSUE
09/07/2021	ACP

REVISIONS

NO.	DATE	ISSUE

DRAWING TITLE: OPEN SPACE PLANS

DRAWING NO: A9.06

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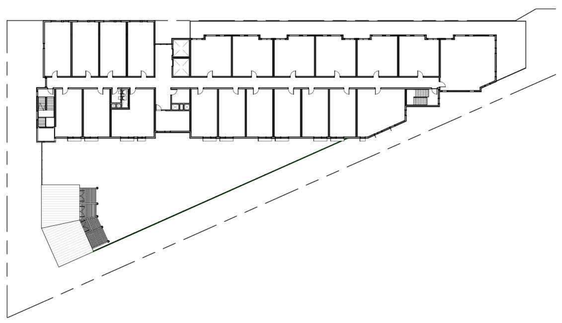
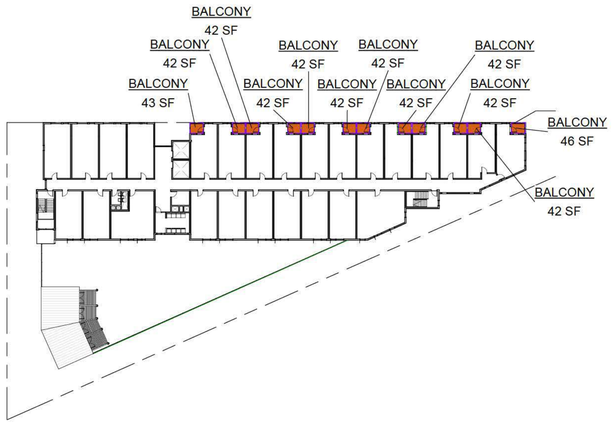


LEVEL 6
1" = 40'-0" 6



LEVEL 3
1" = 40'-0" 3

PARCEL 7 - OPEN SPACE AREA CALCS			
Name	Open Space Type	Open Space Location	Area
GROUND LEVEL OPEN SPACE	COMMON OPEN SPACE	LEVEL 1 GROUND	2,497 SF
GROUND LEVEL OPEN SPACE: 2			2,497 SF
PODIUM COURTYARD (L2)	COMMON OPEN SPACE	LEVEL 2	5,536 SF
PODIUM COURTYARD (L2): 1			5,536 SF
SHARED ROOF TERRACE (L5)	COMMON OPEN SPACE	LEVEL 5	461 SF
SHARED ROOF TERRACE (L5): 1			461 SF
COMMON OPEN SPACE			8,494 SF
BALCONY	PRIVATE OPEN SPACE	LEVELS 2-4	1,522 SF
BALCONY: 36			1,522 SF
UNIT TERRACE (L5)	PRIVATE OPEN SPACE	LEVEL 5	1,297 SF
UNIT TERRACE (L5): 7			1,297 SF
PRIVATE OPEN SPACE			2,818 SF
Total Open Space			11,312 SF

PARCEL 7 OPEN SPACE ANALYSIS:

OPEN SPACE SUMMARY:

LOT AREA: 32,101 SF 100%

OPEN SPACE	AREA	% OF TOTAL AREA
PRIVATE OPEN SPACE	2,818 SF	9%
COMMON OPEN SPACE	8,494 SF	26%
TOTAL	**11,312 SF**	**35%**
MINIMUM REQUIRED		**25%**

PRIVATE & COMMON OPEN SPACE MIX:

MIN. REQUIRED OPEN SPACE (IF PRIVATE):
80 SF/UNIT * 120 UNITS = **9,600 SF**

MIN. REQUIRED OPEN SPACE (IF COMMON):
100 SF/UNIT * 120 UNITS = **12,000 SF**

MIN. AREA OF COMMON OPEN SPACE TO REPLACE (1) SF OF REQUIRED PRIVATE OPEN SPACE THAT IS NOT PROVIDED: **1.25 SF**

CALCULATION:

	9,600	SF (REQ. PRIVATE OPEN SPACE)
-	2,818	SF (PROVIDED PRIVATE OPEN SPACE)
	6,782	SF (REQ. PRIVATE OPEN SPACE THAT IS NOT PROVIDED)
x	1.25	SF (RATIO OF REQ. COMMON OPEN SPACE TO PRIVATE)
	8,478	**SF (MIN. REQUIRED COMMON OPEN SPACE)**
	8,494	**SF (PROVIDED COMMON OPEN SPACE) > 8,478 SF = COMPLIANT**

MENLO PARK ZONING CODE REQUIREMENTS

16.45.120 (4): OPEN SPACE

(C) RESIDENTIAL DEVELOPMENTS SHALL HAVE A MINIMUM OF COMMON OPEN SPACE AND PRIVATE OPEN SPACE. THESE REQUIREMENTS ARE COUNTED TOWARDS THE MINIMUM AMOUNT OF OPEN SPACE EQUAL TO TWENTY-FIVE PERCENT (25%) OF THE TOTAL LOT AREA.

(I) ONE HUNDRED (100) SQUARE FEET OF OPEN SPACE PER UNIT SHALL BE CREATED AS COMMON OPEN SPACE OR A MINIMUM OF EIGHTY (80) SQUARE FEET OF OPEN SPACE PER UNIT CREATED AS PRIVATE OPEN SPACE, WHERE PRIVATE OPEN SPACE SHALL HAVE A MINIMUM DIMENSION OF SIX (6) FEET BY SIX (6) FEET;

(II) IN THE CASE OF A MIX OF PRIVATE AND COMMON OPEN SPACE, SUCH COMMON OPEN SPACE SHALL BE PROVIDED AT A RATIO EQUAL TO ONE AND ONE-QUARTER (1.25) SQUARE FEET FOR EACH ONE (1) SQUARE FOOT OF PRIVATE OPEN SPACE THAT IS NOT PROVIDED.

(III) DEPENDING ON THE NUMBER OF DWELLING UNITS, COMMON OPEN SPACE SHALL BE PROVIDED TO MEET THE FOLLOWING CRITERIA:
C. ONE HUNDRED ONE (101) OR MORE UNITS: MINIMUM OF ONE (1) SPACE, FORTY (40) FEET MINIMUM DIMENSION (ONE THOUSAND SIX HUNDRED (1,600) SQUARE FEET TOTAL, MINIMUM).

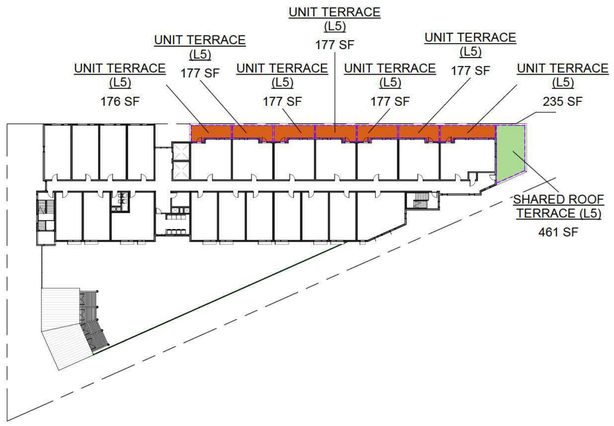
(D) ALL OPEN SPACES SHALL:

(I) INTERFACE WITH ADJACENT BUILDINGS VIA DIRECT CONNECTIONS THROUGH DOORS, WINDOWS, AND ENTRYWAYS;

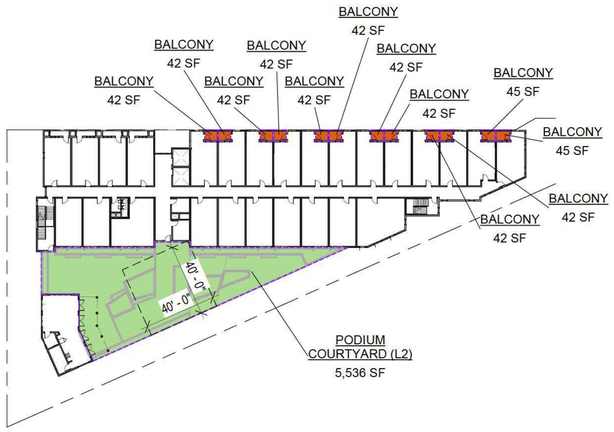
(II) BE INTEGRATED AS PART OF BUILDING MODULATION AND ARTICULATION TO ENHANCE BUILDING FACADE AND SHOULD BE SITED AND DESIGNED TO BE APPROPRIATE FOR THE SIZE OF THE DEVELOPMENT AND ACCOMMODATE DIFFERENT ACTIVITIES, GROUPS AND BOTH ACTIVE AND PASSIVE USES;

(III) INCORPORATE LANDSCAPING DESIGN THAT INCLUDES:
A. SUSTAINABLE STORMWATER FEATURES;
B. A MINIMUM LANDSCAPING BED NO LESS THAN THREE (3) FEET IN LENGTH OR WIDTH AND FIVE (5) FEET IN DEPTH FOR INFILTRATION PLANTING;
C. NATIVE SPECIES ABLE TO GROW TO THEIR MAXIMUM SIZE WITHOUT SHEARING.

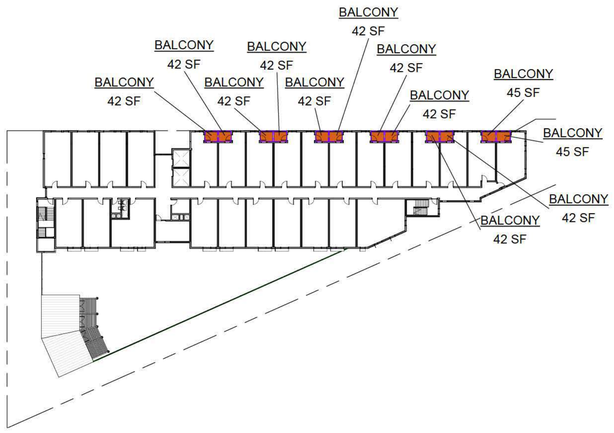
(E) ALL EXTERIOR LANDSCAPING COUNTS TOWARDS OPEN SPACE REQUIREMENTS.



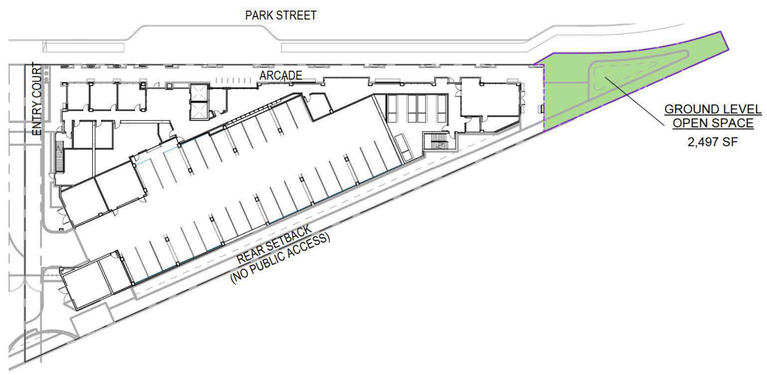
LEVEL 5
1" = 40'-0" 5



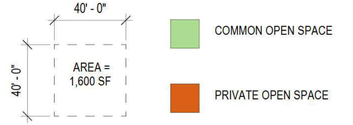
LEVEL 2
1" = 40'-0" 2



LEVEL 4
1" = 40'-0" 4



LEVEL 1
1" = 40'-0" 1



0 40 80

PENINSULA INNOVATION PARTNERS

WILLOW VILLAGE
Architectural Control Package - Parcel 7
Menlo Park, CA

SCALE: 1" = 40'-0"

NOTE: THIS DRAWING IS ISO A1. DO NOT SCALE DRAWINGS. USE FIGURED DIMENSIONS ONLY, OR SEEK CLARIFICATION FROM ARCHITECT FOR MEASUREMENTS THAT ARE NOT INDICATED.

MILESTONES

DATE	ISSUE
09/07/2021	ACP

REVISIONS

NO.	DATE	ISSUE

DRAWING TITLE: OPEN SPACE PLANS

DRAWING NO: A9.06

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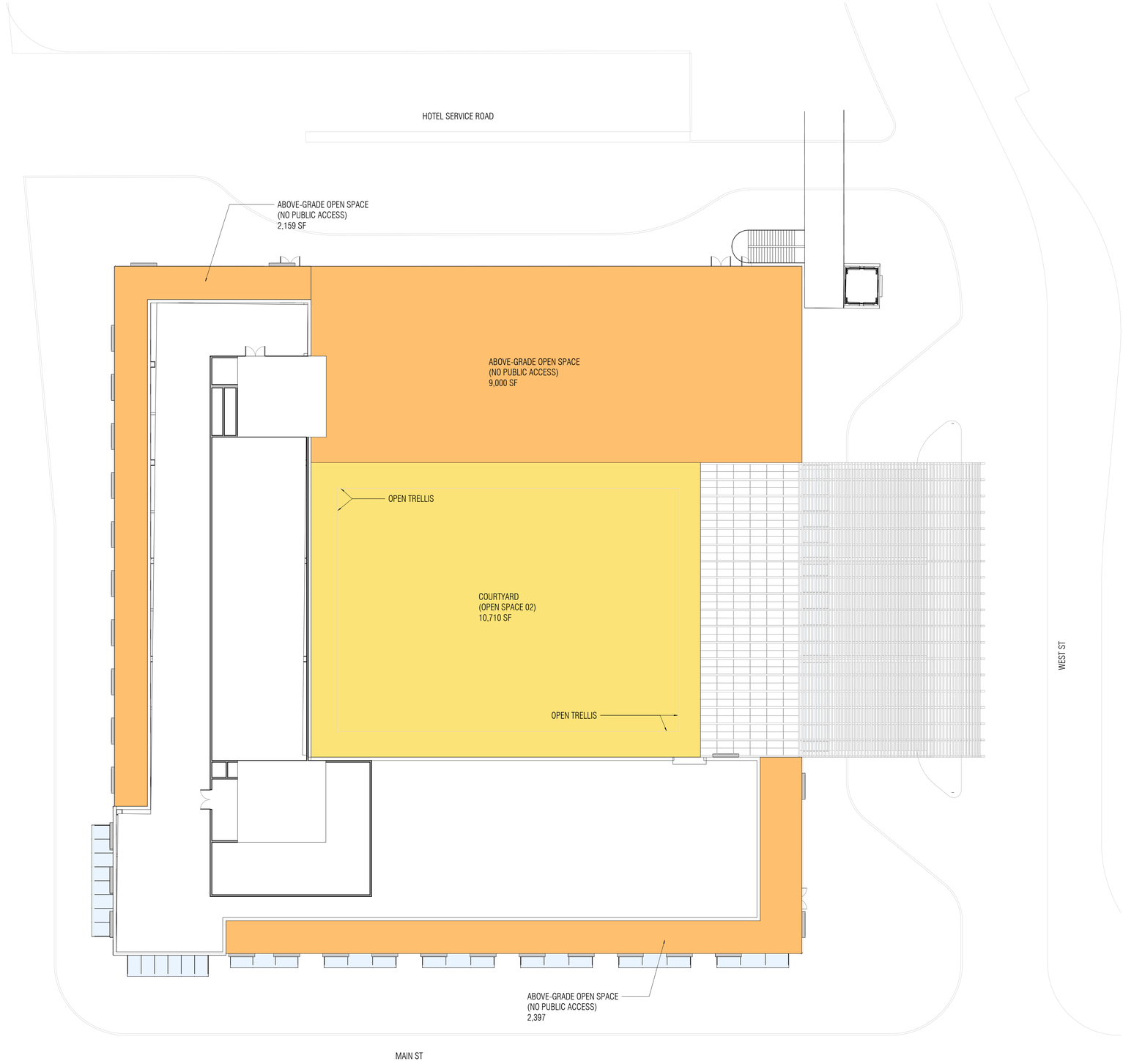
OPEN SPACE SUMMARY - HOTEL		
	OPEN SPACE	AREA (FT^2)
	ABOVE-GRADE OPEN SPACE (NO PUBLIC ACCESS)	13,556
	AT-GRADE OPEN SPACE (NO PUBLIC ACCESS)	10,710
	TOTAL	24,266



1 OPEN SPACE DIAGRAM
1/16" = 1'-0"

0 8 16

8/11/2021 2:11:58 PM

PENINSULA INNOVATION PARTNERS

WILLOW VILLAGE
Architectural Control Package - Parcel 1 - Hotel
Menlo Park, CA

SCALE: 1/16" = 1'-0"

NOTE: THIS DRAWING IS ISO A1. DO NOT SCALE. WORK TO GIVEN FIGURED DIMENSIONS ONLY, OR SEEK CLARIFICATION FROM ARCHITECT FOR MEASUREMENTS THAT ARE NOT INDICATED.

MILESTONES

DATE	ISSUE
09/07/2021	ACP

REVISIONS

NO.	DATE	ISSUE

DRAWING TITLE:
Willow Village Hotel
Open Space Plan

DRAWING NO:
A9.06

OPEN SPACE SUMMARY		
	OPEN SPACE	AREA (FT²)
	OPEN SPACE (PUBLICLY ACCESSIBLE)	54,461
	AT-GRADE OPEN SPACE (NO PUBLIC ACCESS)	8,682
	TOTAL	63,143

1 TOWN SQUARE PAVILION - LEVEL 1
1" = 20'-0"

0 10 20

8/31/2021 4:47:23 PM

PENINSULA INNOVATION PARTNERS

WILLOW VILLAGE
Architectural Control Package - Parcel 1 - Town Square
Menlo Park, CA

SCALE: 1" = 20'-0"

NOTE: THIS DRAWING IS ISO A1. DO NOT SCALE DRAWINGS. CONTRACTOR SHALL VERIFY AND SEEK CLARIFICATION FROM ARCHITECT FOR MEASUREMENTS THAT ARE NOT INDICATED.

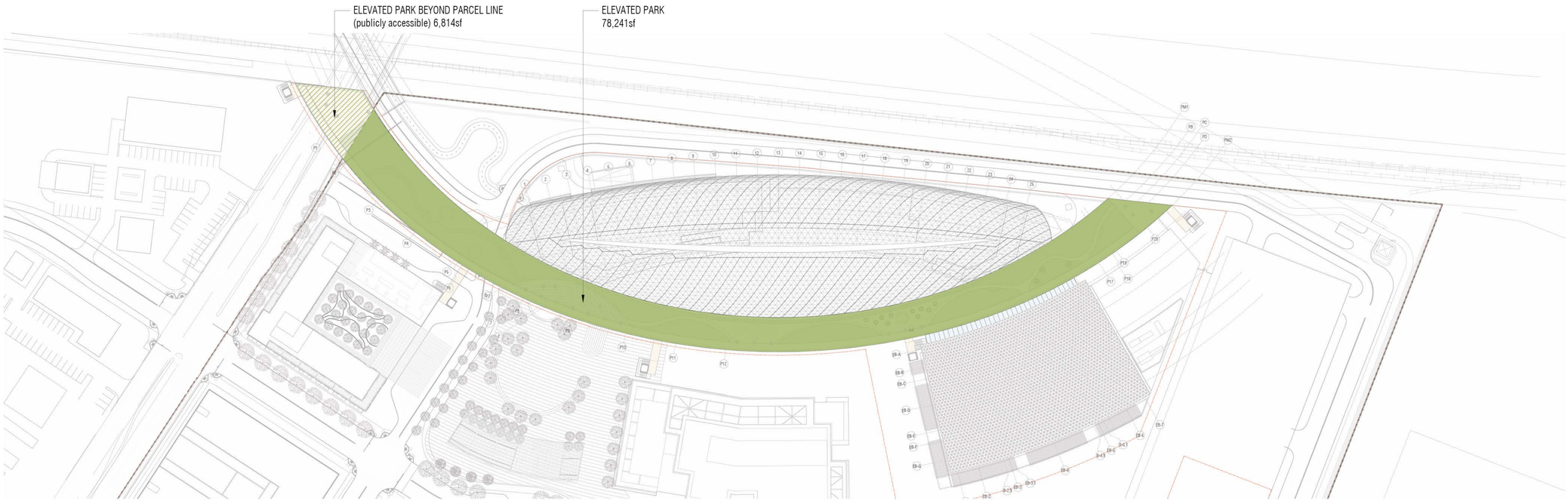
MILESTONES	
DATE	ISSUE
08/17/2021	ACP DRAFT

REVISIONS		
NO.	DATE	ISSUE

DRAWING TITLE:
WILLOW VILLAGE TOWN SQUARE
Open Space Plan

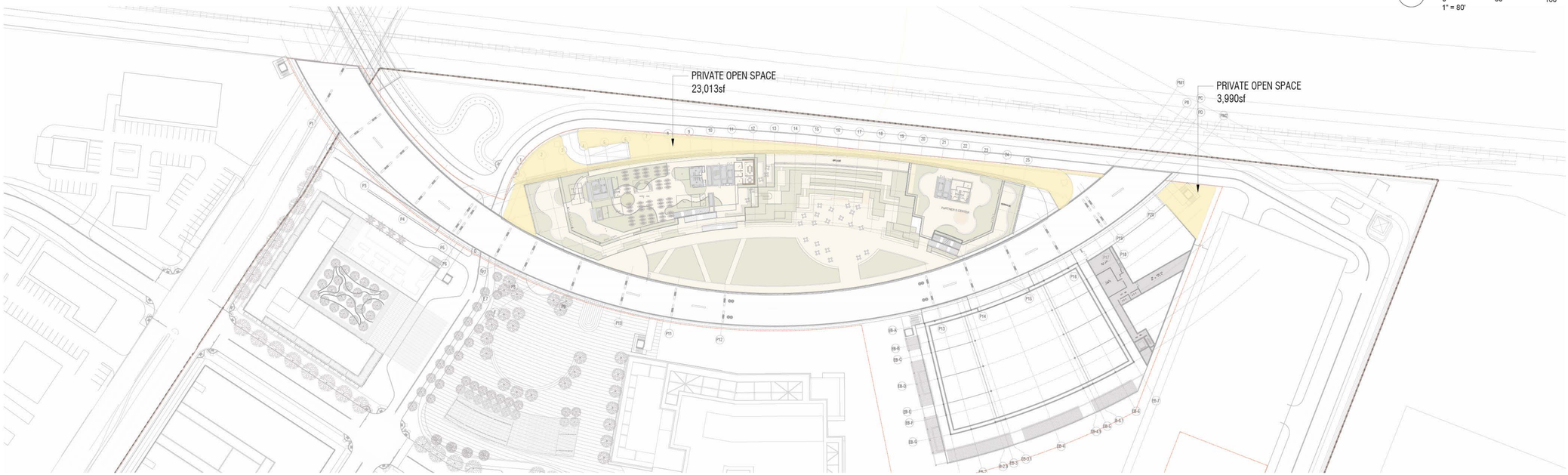
DRAWING NO:
A9.06

	OPEN SPACE	AREA (SF)
	PUBLICLY ACCESSIBLE	78,241
	NO PUBLIC ACCESS	27,003
	TOTAL	105,244



2 PUBLIC OPEN SPACE DIAGRAM

0 80 160
1" = 80'



1 PRIVATE OPEN SPACE DIAGRAM

0 80 160
1" = 80'

PENINSULA INNOVATION PARTNERS

WILLOW VILLAGE
Architectural Control Package - Parcel 1
Menlo Park, CA

SCALE: 1"=80'-0"

NOTE: THIS DRAWING IS ISO A1. DO NOT SCALE DRAWINGS. USE FIGURED DIMENSIONS ONLY, OR SEEK CLARIFICATION FROM ARCHITECT FOR MEASUREMENTS THAT ARE NOT INDICATED.

MILESTONES

DATE	ISSUE
09/07/2021	ACP

REVISIONS

NO.	DATE	ISSUE

DRAWING TITLE:
OPEN SPACE DIAGRAM

DRAWING NO:
A9.06

Open Space Summary	
Open Space Above Grade - No Public Access	45,512 SF
Open Space at Grade - No Public Access	224,674 SF
	270,186 SF
Grand total	**270,186 SF**

True North

0 80 160

8/31/2021 9:20:21 AM

PENINSULA INNOVATION PARTNERS

WILLOW VILLAGE
Architectural Control Package - Parcel 1 (Portion) & 8
Menlo Park, CA

SCALE: 1" = 80'-0"

NOTE: THIS DRAWING IS ISO A1. DO NOT SCALE DRAWINGS. USE FIGURED DIMENSIONS ONLY. OR SEEK CLARIFICATION FROM ARCHITECT FOR MEASUREMENTS THAT ARE NOT INDICATED.

MILESTONES

DATE	ISSUE
09/07/2021	ACP

REVISIONS

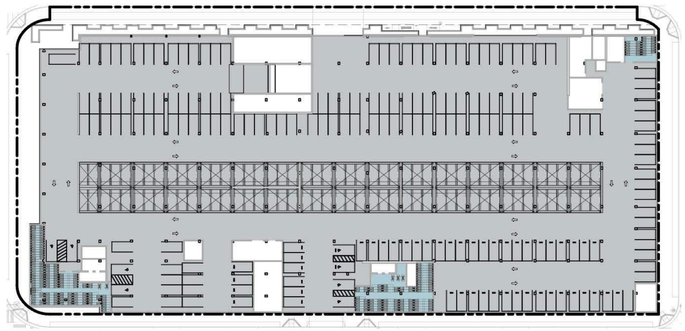
NO.	DATE	ISSUE

DRAWING TITLE: Open Space Plan

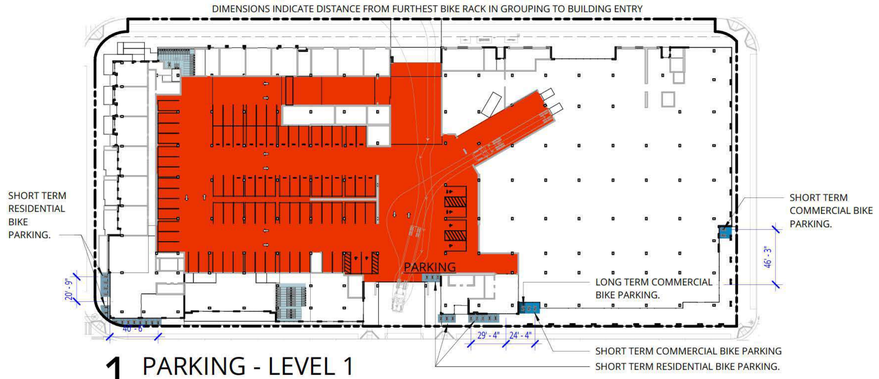
DRAWING NO: A9.06

APPENDIX 4

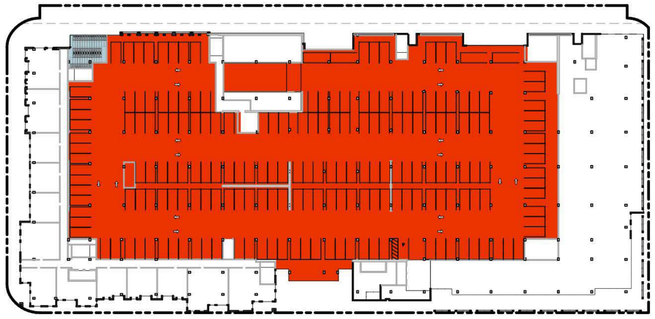
PARCEL 1-8
ILLUSTRATIVE PARKING



0 PARKING - LEVEL P1
1" = 60'-0"

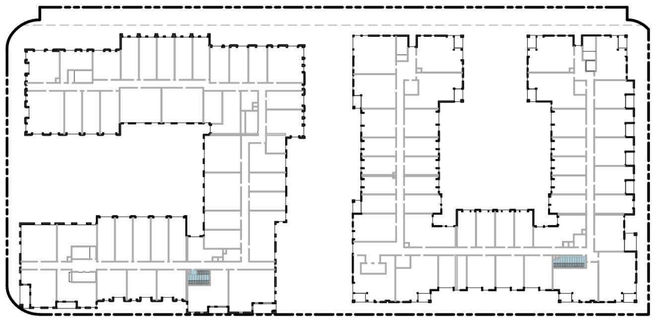


1 PARKING - LEVEL 1
1" = 60'-0"

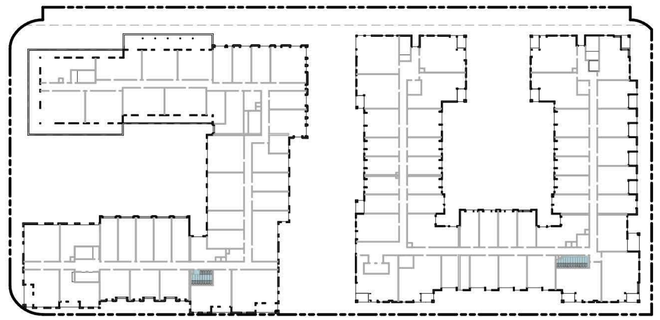


2 PARKING - LEVEL 2
1" = 60'-0"

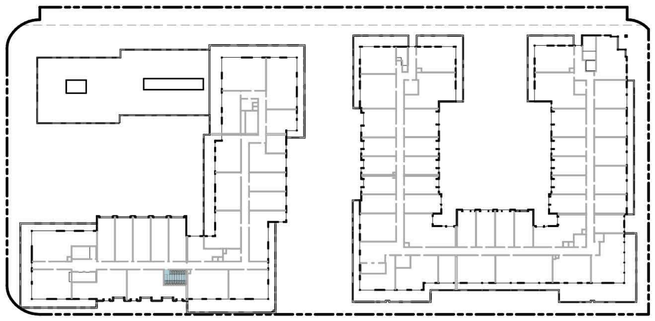
3 PARKING - LEVEL 3
1" = 60'-0"



4 PARKING - LEVEL 4
1" = 60'-0"

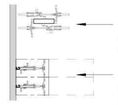


5 PARKING - LEVEL 5
1" = 60'-0"



6 PARKING - LEVEL 6
1" = 60'-0"

BIKE PARKING TYPES



FLOOR MOUNTED "INVERTED U" RACK, SQUARE TUBE, TWO POINTS OF CONTACT TO SUPPORT BIKE, ALLOWS FOR FRAME AND ONE WHEEL TO BE SECURED WITH U-LOCKS

WALL MOUNTED VERTICAL BIKE RACK, INCLUDES SUPPORT HOOK, ALLOWS FOR FRAME AND ONE WHEEL TO BE SECURED WITH U-LOCKS

RESIDENTIAL EVSE SPACES

PER MENLO PARK MUNICIPAL CODE 12.18.030 & 12.18.050:
FOR EACH DWELLING UNIT, INSTALL A LISTED RACEWAY AND WIRING TO ACCOMMODATE A 208/240-VOLT DEDICATED BRANCH CIRCUIT AND INSTALL EVSE IN 15 PERCENT OF THE TOTAL NUMBER OF REQUIRED ELECTRIC VEHICLE CHARGING SPACES (EV SPACES) ASSOCIATED WITH THE BUILDING CALCULATIONS FOR THE REQUIRED NUMBER OF EV SPACES SHALL BE ROUNDED UP TO THE NEAREST WHOLE NUMBER

	TOTAL SPACES	DWELLING UNITS	EVSE SPACES CALC	REQUIRED EVSE SPACES
RESIDENTIAL:	352	327	327x15%=49.05	50

NONRESIDENTIAL EVSE SPACES

PER TABLE 5.106.5.3.3 AS AMENDED BY MENLO PARK MUNICIPAL CODE 12.18.110:
FOR NEW CONSTRUCTION BUILDINGS GREATER THAN 9,999 SQ. FT. THE NUMBER OF EV CHARGING SPACES REQUIRED IS 15% OF TOTAL NUMBER OF REQUIRED PARKING STALLS AND INSTALL EVSE IN 10% OF THE TOTAL REQUIRED NUMBER OF PARKING STALLS, WITH A MINIMUM OF 1, IN CHARGING SPACE(S).

	TOTAL SPACES	EV CHARGING SPACES CALC	REQUIRED EV CHARGING SPACES	EVSE SPACES CALC	REQUIRED EVSE SPACES
PUBLIC:	282	282x15%=42.3	43	282x10%=28.2	29

PROPOSED EVSE SPACES ARE INDICATED WITH AN "EVSE" TAG AT THE FRONT OF THE SPACE ON A2.00 - A2.02

PARKING PLANS

- RESIDENTIAL CAR PARKING
- COMMERCIAL CAR PARKING
- COMMERCIAL LONG TERM BIKE PARKING
- COMMERCIAL SHORT TERM BICYCLE PARKING
- RESIDENTIAL LONG TERM BICYCLE PARKING
- RESIDENTIAL SHORT TERM BICYCLE PARKING

RESIDENTIAL PARKING

16.45.080 Parking standards

Residential units	Minimum Spaces (Per Unit or 1,000 Sq. Ft.)	Maximum Spaces (Per Unit or 1,000 Sq. Ft.)
	1 per Unit	1.5 per Unit
Proposed Units 327	327 spaces Min	491 spaces Max

_CAR PARKING SCHEDULE_RESIDENTIAL

Level	Type Comments	Spaces per Parking Unit	Count	Total Space Count
PARKING PIT				
PARKING PIT	PUZZLE 2W X 2H	3	2	6
PARKING PIT	PUZZLE 3W x 2H	5	30	150
				156
LEVEL P1				
LEVEL P1	ACCESSIBLE 9 X 18	1	8	8
LEVEL P1	PARALLEL 8 5 X 22	1	1	1
LEVEL P1	STANDARD 8.5 X 17 5	1	186	186
				195
Grand total				351

RETAIL PARKING

16.45.080 Parking standards

Retail	Minimum Spaces (Per Unit or 1,000 Sq. Ft.)	Maximum Spaces (Per Unit or 1,000 Sq. Ft.)
	2.5	3.3
Retail 39,288SF	99 spaces Min	130 spaces Max**

**Refer to Masterplan plan set for parking allocation

_CAR PARKING SCHEDULE_COMMERCIAL

Level	Type Comments	Spaces per Parking Unit	Count	Total Space Count
LEVEL 1				
LEVEL 1	ACCESSIBLE 9 X 18	1	6	6
LEVEL 1	STANDARD 8.5 X 17 5	1	77	77
				83
LEVEL 2				
LEVEL 2	ACCESSIBLE 9 X 18	1	1	1
LEVEL 2	PARALLEL 8 5 X 22	1	4	4
LEVEL 2	STANDARD 8.5 X 17 5	1	195	195
				200
Grand total				283

RESIDENTIAL BIKE PARKING

16.45.080 Parking standards

Residential units	Minimum Spaces Per Unit - Long Term	Minimum Spaces Per Unit - Short Term
	1.5 per Unit	10% additional
Proposed Units 327	491 spaces Min - Long Term	50 spaces additional - Short Term

_BIKE PARKING SCHEDULE_RESIDENTIAL

Level	Parking Type	Parking Duration	Spaces per Parking Unit	Count	Total Parking Capacity
RESIDENTIAL					
LEVEL P1	RESIDENTIAL	LONG TERM	1	276	276
BIKE ROOM	RESIDENTIAL	LONG TERM	1	25	25
LEVEL 1	RESIDENTIAL	LONG TERM	1	44	44
LEVEL 2	RESIDENTIAL	LONG TERM	1	47	47
LEVEL 3	RESIDENTIAL	LONG TERM	1	27	27
LEVEL 4	RESIDENTIAL	LONG TERM	1	28	28
LEVEL 5	RESIDENTIAL	LONG TERM	1	28	28
LEVEL 6	RESIDENTIAL	LONG TERM	1	16	16
					491
LEVEL 1	RESIDENTIAL	SHORT TERM	2	25	50
					50
Grand total					541

COMMERCIAL BIKE PARKING

16.45.080 Parking standards

Retail	Minimum Spaces Per Unit - Long Term	Minimum Spaces Per Unit - Short Term
	1 per 5,000 sq. ft. of gross floor area - 20%	1 per 5,000 sq. ft. of gross floor area - 80%
Retail 39,288SF	2 Min - Long Term	7 Min - Short Term

_BIKE PARKING SCHEDULE_COMMERCIAL

Level	Parking Type	Parking Duration	Spaces per Parking Unit	Count	Total Parking Capacity
RETAIL					
LEVEL 1	RETAIL	LONG TERM	2	1	2
					2
LEVEL 1	RETAIL	SHORT TERM	2	4	8
					8
Grand total					10

PENINSULA INNOVATION PARTNERS

WILLOW VILLAGE
Architectural Control Package - Parcel 2
Menlo Park, CA

SCALE: As indicated

NOTE: THIS DRAWING IS ISO A1. DO NOT SCALE DRAWING. USE FIGURED DIMENSIONS ONLY. OR SEEK CLARIFICATION FROM ARCHITECT FOR MEASUREMENTS THAT ARE NOT INDICATED.

MILESTONES

DATE	ISSUE
09/07/2021	ACP

REVISIONS

NO.	DATE	ISSUE

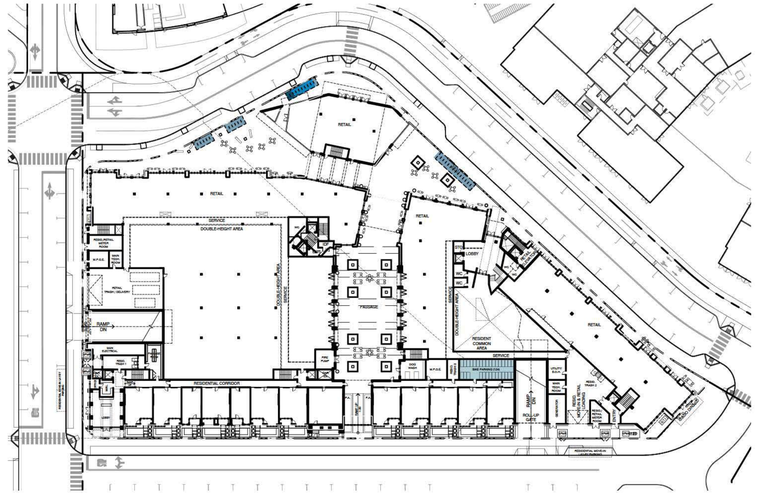
DRAWING TITLE: PARKING COUNT DIAGRAM

DRAWING NO: *A9.14

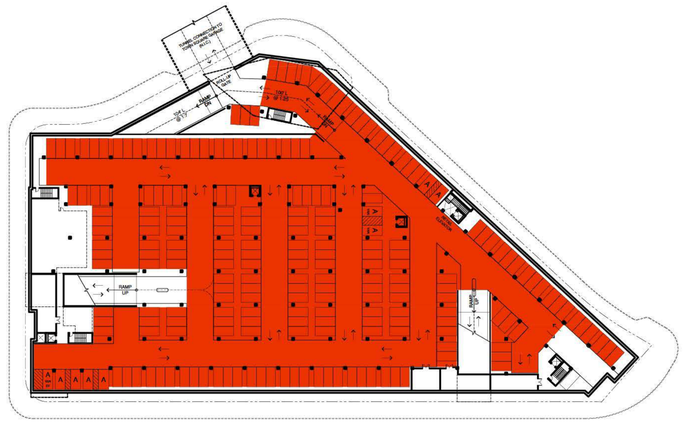
8/24/2021 10:00:26 AM

LEGEND

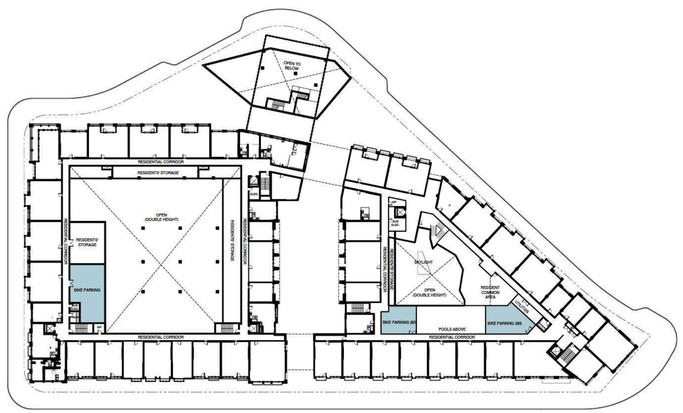
- RESIDENTIAL VEHICLE PARKING
- COMMERCIAL VEHICLE PARKING
- RESIDENTIAL LONG-TERM BIKE PARKING
- RESIDENTIAL SHORT-TERM BIKE PARKING
- RETAIL LONG-TERM BIKE PARKING
- RETAIL SHORT-TERM BIKE PARKING



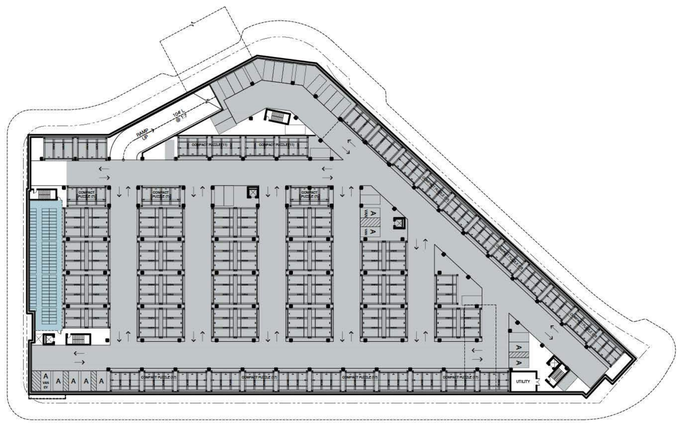
LEVEL 01 - PARKING



LEVEL B1 - PARKING



LEVEL 2 - PARKING



LEVEL B2 - PARKING

PARKING COUNT

16.45.080 Parking Standards

Req. Residential = 419 Units

Min	1 per Unit	419 Spaces Min.
Max	1.5 per Unit	629 Spaces Max.

Proposed Residential Parking

Level	Type	Spaces per Type	Count	Total
B2	Puzzle 3Wx2H	5	37	185
B3	Tandem Puzzle 2Wx2H	7	1	7
B4	Tandem Puzzle 3Wx2H	11	3	33
B2	Compact Puzzle 4Wx2H	7	3	21
B2	Compact Puzzle 6Wx2H	11	2	22
B2	Compact Puzzle 9Wx2H	17	7	119
B2	Standard 8.5x17.5	1	23	23
B2	ADA Parking - 9'x18'	1	6	6
B2	ADA Van - 12'x18'	1	2	2
B2	Ada Van EV - 12'x18'	1	1	1

Total Residential Parking Spaces Provided: 419

Residential EVSE Spaces

Per Menlo Park Municipal Code 12.16.030 & 12.16.050

For each dwelling unit, install a listed raceway and wiring to accommodate a 208/240 V dedicated branch circuit and install EVSE in 15% of the total number of req. electric vehicle charging spaces (EV spaces) associated with the building calculations for the required number of EV spaces shall be rounded up to the nearest whole nu

419* 15% = 62.85 — 63 EVSE Spaces Req.

COMMERCIAL PARKING

16.45.080 Parking Standards

Req. Uses (Retail) = 68,000SF Total

Min	2.5 per 1,000 ft	137.5	
Max	3.3 per 1,000 ft	182 **	

**Refer to Masterplan Set for parking allocations

Proposed Parking Provided

Level	Type	Spaces per Type	Count	Total
B1	Standard 8.5x17.5	1	212	212
B1	ADA Parking - 9'x18'	1	6	6
B1	ADA Van - 12'x18'	1	2	2
B1	Ada Van EV - 12'x18'	1	1	1

Total Commercial Parking Spaces Provided: 220

Non-Residential EVSE Spaces

Per Table 2.1106.5.2.3, as amended by Menlo Park Municipal Code 12.16.110:

For new construction buildings greater than 9,999 SF, the number of EV Charging Spaces required is 10% of total number of required parking stalls and install EVSE in 10% of total required number of parking stalls, with a minimum of 1, in charging space(s).

182** 5% = 27.3 — 28 EV Charging Spaces Req.

182** 10%= 18.2 — 19 EVSE Spaces Req.

RESIDENTIAL BIKE PARKING

16.45.080 Parking Standards

Req. Uses (Residential) = 419 Units

Long Term	1.5 per Unit	629
Short Term	10% additional	63

Long Term Residential Bike Parking Provided:

Level	Type	Spaces per Type	Count	Total
B2	Long Term	4	85	340
L1	Long Term	4	35	124
L2	Long Term	4	38	148

Total Long Term Residential Bike Parking Spaces Provided: 612

Short Term Residential Bike Parking Provided:

Level	Type	Spaces per Type	Count	Total
L1	Short Term	2	32	64

Total Bike Spaces Provided: 676

COMMERCIAL BIKE PARKING

16.45.080 Parking Standards

Req. Uses (Retail) = 68,000SF Total

Long Term	1 per 5,000SF GFA - 20%	2.2	
Short Term	1 per 5,000SF GFA - 80%	9	

Proposed Parking Provided

Level	Type	Spaces per Type	Count	Total
L1	Long Term - Bike Rack	2	2	4
L1	Short Term - Bike Rack	2	4	8

Total Commercial Parking Spaces Provided: 12

PENINSULA INNOVATION PARTNERS

WILLOW VILLAGE
Architectural Control Package - Parcel 3
Menlo Park, CA

SCALE:

NOTE: THIS DRAWING IS ISO A1. DO NOT SCALE DRAWINGS. USE FIGURED DIMENSIONS ONLY, OR SEEK CLARIFICATION FROM ARCHITECT FOR MEASUREMENTS THAT ARE NOT INDICATED.

MILESTONES

DATE	ISSUE
9/7/2021	ACP

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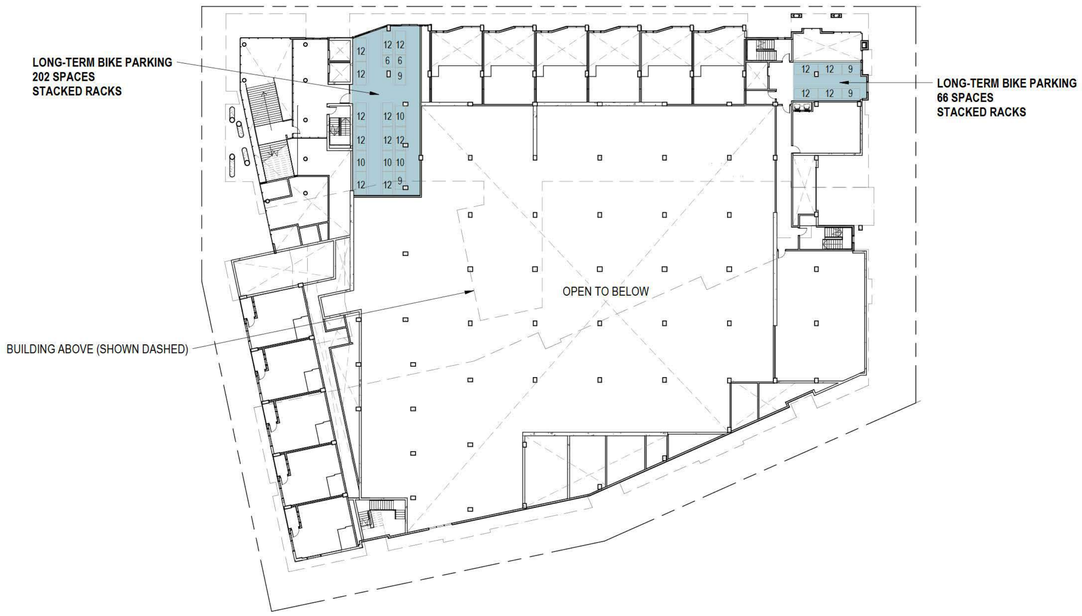
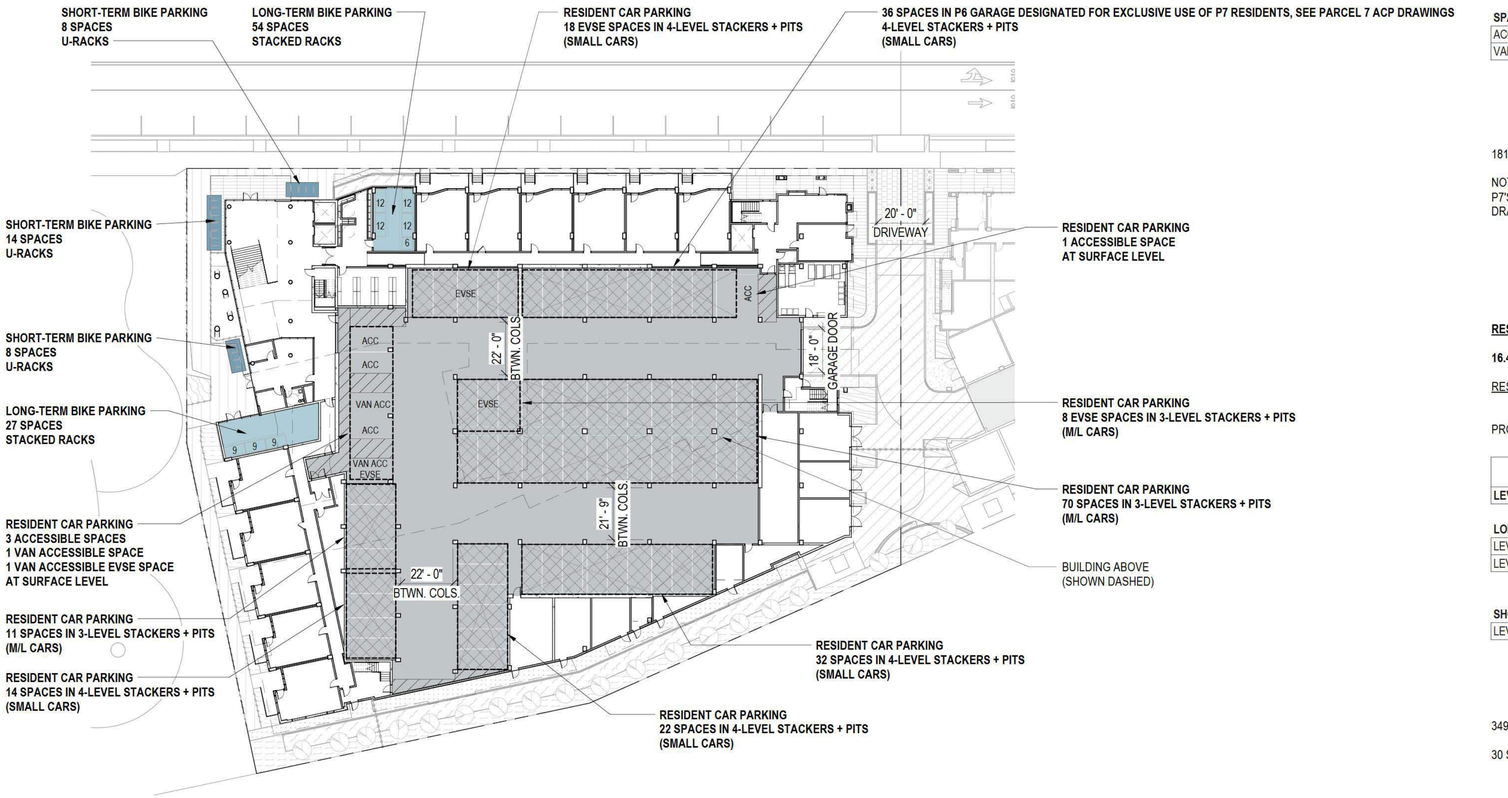
NO.	DATE	ISSUE

DRAWING TITLE:
PARKING COUNT DIAGRAM

DRAWING NO:
A9.14



LEVEL 2 -PARKING DIAGRAM (2)
1" = 30'-0"



LEVEL 1 - PARKING DIAGRAM (1)
1" = 30'-0"

RESIDENTIAL CAR PARKING - EVSE SPACES

MENLO PARK ZONING CODE REQUIREMENTS

12.18.030 & 12.18.050: CALIFORNIA GREEN BUILDING STANDARDS CODE AMENDMENTS

FOR EACH DWELLING UNIT, INSTALLATION OF A LISTED RACEWAY AND WIRING TO ACCOMMODATE A 208/240-VOLT DEDICATED BRANCH CIRCUIT.

INSTALL EVSE IN 15 PERCENT OF THE TOTAL NUMBER OF REQUIRED ELECTRIC VEHICLE CHARGING SPACES (EV SPACES) ASSOCIATED WITH THE BUILDING INCLUSIVE OF LANDSCAPE RESERVE PARKING, FOR ALL TYPES OF PARKING FACILITIES, BUT IN NO CASE LESS THAN ONE.

CALCULATIONS FOR THE REQUIRED NUMBER OF EV SPACES SHALL BE ROUNDED UP TO THE NEAREST WHOLE NUMBER.

RESIDENTIAL UNITS	EVSE CALC.	REQ. EVSE SPACES
178	178 * 15% = 26.7	27 REQ. EVSE SPACES

27 EVSE SPACES PROVIDED.
REMAINING 154 SPACES PROVIDED WITH RACEWAY AND WIRING PER 12.18.50.

RESIDENTIAL CAR PARKING

16.45.08: PARKING STANDARDS

RESIDENTIAL UNITS	MIN. REQ. SPACES	MAX. ALLOWED SPACES
	1 PER UNIT	1.5 PER UNIT
PROPOSED UNITS: 178	178 SPACES MIN.	267 SPACES MAX.

PARCEL 6 - RESIDENTIAL CAR PARKING	
TYPE	**COUNT**
SPACES IN STACKERS:	
3-LEVEL STACKER SPACE	82
4-LEVEL STACKER SPACE	93
TOTAL:	175
SPACES AT SURFACE LEVEL:	
ACCESSIBLE (18' x 9')	4
VAN ACCESSIBLE (18' x 9')	2
TOTAL:	6
GRAND TOTAL:	**181**

181 SPACES PROVIDED IS > MIN. REQ. SPACES & < MAX. ALLOWED SPACES = COMPLIANT

NOTE: 36 SPACES IN P6 GARAGE ARE FOR USE OF P7. THOSE SPACES ARE COUNTED IN P7'S PARKING TOTALS AND EXCLUDED FROM P6'S PARKING TOTALS. SEE P7 ACP DRAWINGS.

RESIDENTIAL BIKE PARKING

16.45.08: PARKING STANDARDS

RESIDENTIAL UNITS	MIN. LONG-TERM SPACES	MIN. SHORT-TERM SPACES
	1.5 PER UNIT	10% ADDITIONAL
PROPOSED UNITS: 178	267 LONG-TERM SPACES MIN.	18 SHORT-TERM SPACES MIN.

PARCEL 6 - RESIDENTIAL BIKE PARKING	
LEVEL	**COUNT**
LONG-TERM SPACES (STACKED RACKS):	
LEVEL 1 (INSIDE)	81
LEVEL 2 (INSIDE)	268
TOTAL:	349
SHORT-TERM SPACES (U-RACKS):	
LEVEL 1 (OUTSIDE)	30
TOTAL:	30
GRAND TOTAL:	**379**

349 LONG-TERM SPACES PROVIDED > 267 MIN. REQ. LONG-TERM SPACES = COMPLIANT

30 SHORT-TERM SPACES PROVIDED > 18 MIN. REQ. SHORT-TERM SPACES = COMPLIANT

0 30 60

PENINSULA INNOVATION PARTNERS

WILLOW VILLAGE
Architectural Control Package - Parcel 6
Menlo Park, CA

SCALE: 1" = 30'-0"

NOTE: THIS DRAWING IS ISO A1. DO NOT SCALE DRAWINGS. USE FIGURED DIMENSIONS ONLY, OR SEEK CLARIFICATION FROM ARCHITECT FOR MEASUREMENTS THAT ARE NOT INDICATED.

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REVISIONS

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DRAWING TITLE: PARKING COUNT DIAGRAM

DRAWING NO: A9.14

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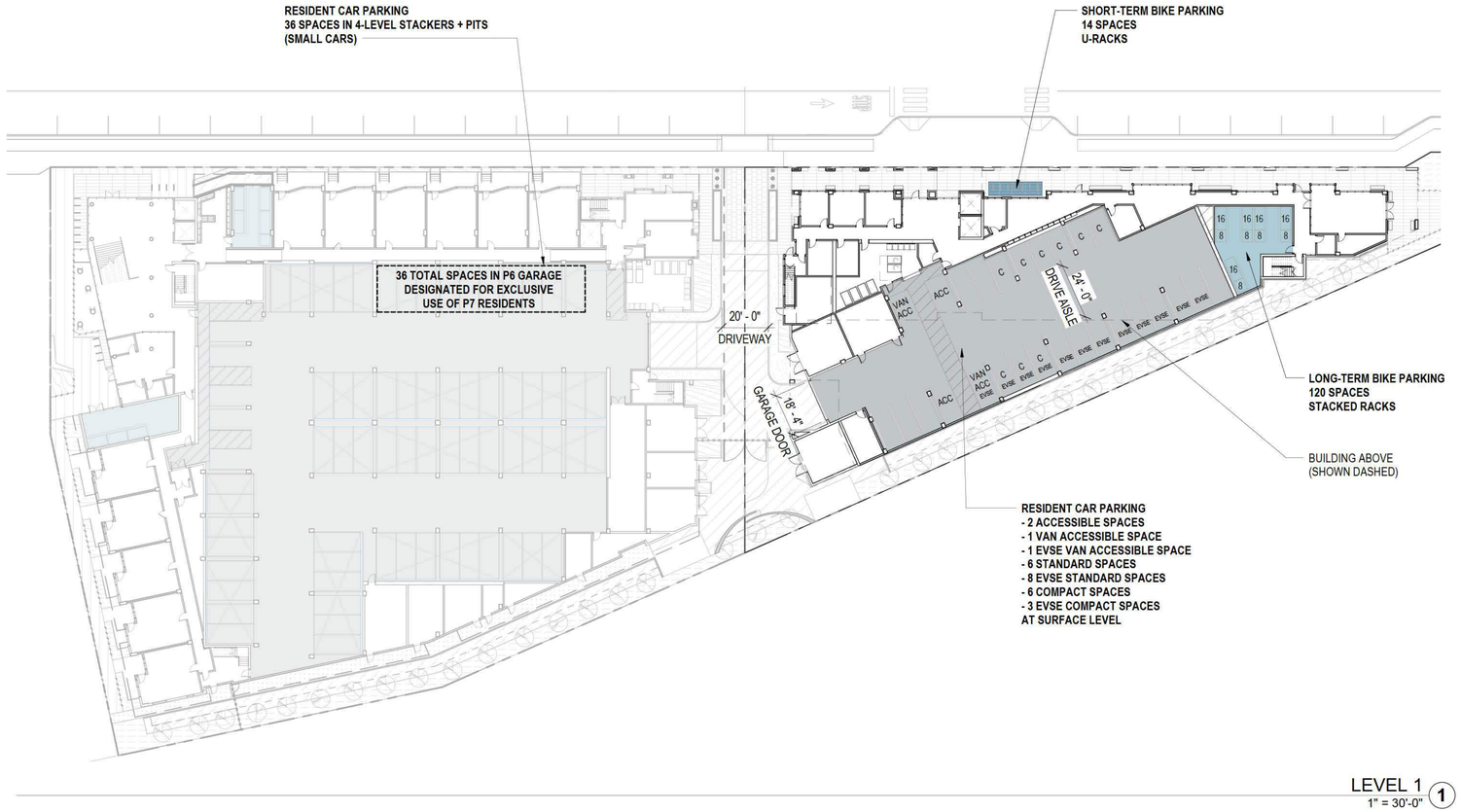

LEVEL 1 (1)
1" = 30'-0"

RESIDENTIAL CAR PARKING - EVSE SPACES

MENLO PARK ZONING CODE REQUIREMENTS

12.18.030 & 12.18.050: CALIFORNIA GREEN BUILDING STANDARDS CODE AMENDMENTS

FOR EACH DWELLING UNIT, INSTALLATION OF A LISTED RACEWAY AND WIRING TO ACCOMMODATE A 208/240-VOLT DEDICATED BRANCH CIRCUIT.

FOR 100 PERCENT BELOW MARKET RATE HOUSING DEVELOPMENTS, EVSE SHALL BE PROVIDED FOR A MINIMUM OF 10 PERCENT OF THE TOTAL NUMBER OF DWELLING UNITS.

CALCULATIONS FOR THE REQUIRED NUMBER OF EV SPACES SHALL BE ROUNDED UP TO THE NEAREST WHOLE NUMBER.

RESIDENTIAL UNITS	EVSE CALC.	REQ. EVSE SPACES
120	120 * 10% = 12	**12 REQ. EVSE SPACES**

12 EVSE SPACES PROVIDED.
REMAINING 51 SPACES PROVIDED WITH RACEWAY AND WIRING PER 12.18.50.

RESIDENTIAL CAR PARKING

16.45.08: PARKING STANDARDS

RESIDENTIAL UNITS	MIN. SPACES	MAX. SPACES
	1 PER UNIT	1.5 PER UNIT
PROPOSED UNITS: 120	120 SPACES MIN.	180 SPACES MAX.

PARCEL 7 - RESIDENTIAL CAR PARKING	
TYPE	**COUNT**
SPACES AT SURFACE LEVEL AT P7:	
ACCESSIBLE (18' x 9')	2
VAN ACCESSIBLE (18' x 9')	2
STANDARD (18' x 8'-6")	14
COMPACT (16' x 8'-6")	9
TOTAL:	27
SPACES IN STACKERS AT P6:	
4-LEVEL STACKER SPACE	36
TOTAL:	36
GRAND TOTAL:	**63**

63 SPACES PROVIDED IS < 120 MIN. REQ. SPACES & < 180 MAX. REQ. SPACES = DOES NOT COMPLY. SEE ADJUSTMENT REQUEST IN APPENDIX.

NOTE: 36 SPACES INCLUDED IN TABLE ABOVE ARE LOCATED AT PARCEL 6 AND ARE DESIGNATED FOR USE BY PARCEL 7.

RESIDENTIAL BIKE PARKING

16.45.08: PARKING STANDARDS

RESIDENTIAL UNITS	MIN. LONG-TERM SPACES	MIN. SHORT-TERM SPACES
	1.5 PER UNIT	10% ADDITIONAL
PROPOSED UNITS: 120	180 LONG-TERM SPACES MIN.	12 SHORT-TERM SPACES MIN.

PARCEL 7 - RESIDENTIAL BIKE PARKING	
LEVEL	**COUNT**
LONG-TERM SPACES (STACKED RACKS):	
LEVEL 1 (INSIDE)	120
TOTAL:	120
SHORT-TERM SPACES (U-RACKS):	
LEVEL 1 (OUTSIDE)	14
TOTAL:	14
GRAND TOTAL:	**134**

120 LONG-TERM SPACES PROVIDED < 180 MIN. REQ. LONG-TERM SPACES = DOES NOT COMPLY. SEE ADJUSTMENT REQUEST IN APPENDIX 1.

14 SHORT-TERM SPACES PROVIDED > 12 MIN. REQ. SHORT-TERM SPACES = COMPLIES.

0 30 60

PENINSULA INNOVATION PARTNERS

WILLOW VILLAGE
Architectural Control Package - Parcel 7
Menlo Park, CA

SCALE: 1" = 30'-0"

NOTE: THIS DRAWING IS ISO A1. DO NOT SCALE DRAWINGS. VERIFY ALL DIMENSIONS, AND SEEK CLARIFICATION FROM ARCHITECT FOR MEASUREMENTS THAT ARE NOT INDICATED.

MILESTONES	
DATE	ISSUE
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DRAWING TITLE: PARKING COUNT DIAGRAM

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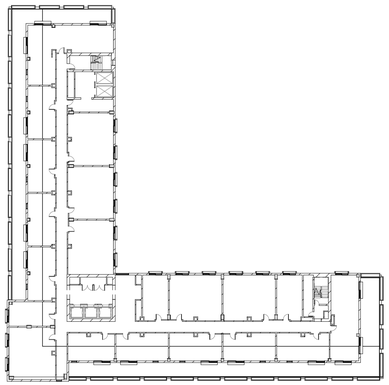
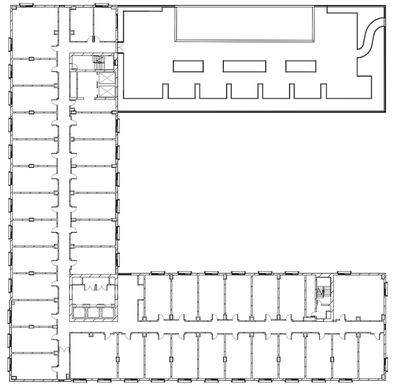
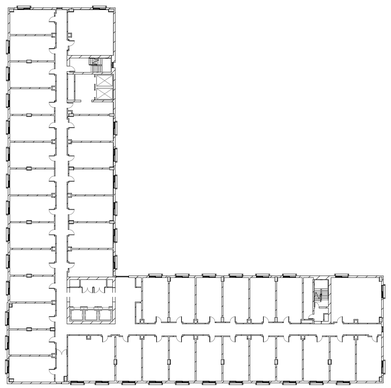


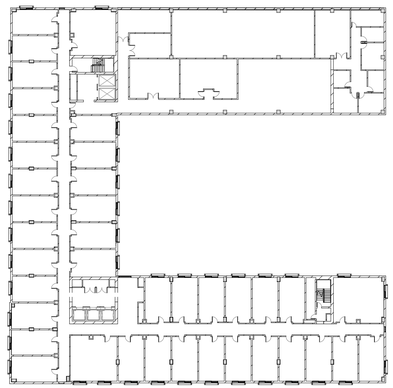
7 Hotel Level 6
1" = 40'-0"



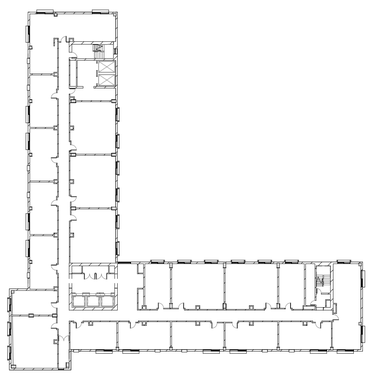
4 Hotel Level 3
1" = 40'-0"



6 Hotel Level 5
1" = 40'-0"

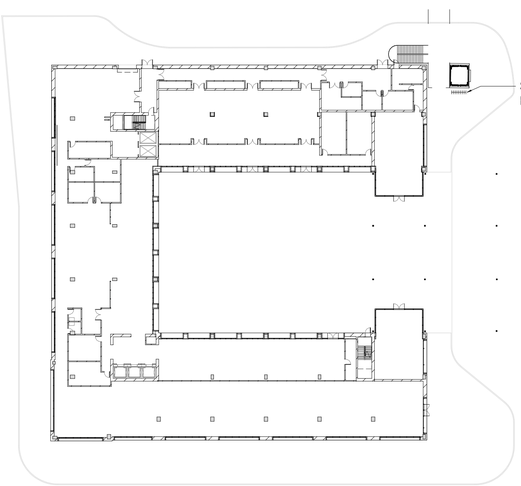


3 Hotel Level 2
1" = 40'-0"



8 Hotel Level 7
1" = 40'-0"

5 Hotel Level 4
1" = 40'-0"



2 Hotel Level 1
1" = 40'-0"

Hotel Parking		
16.43.090 Parking Standards		
Hotel	Minimum Spaces (Per Guest Room)	Maximum Spaces (Per Guest Room)
	0.75	1.1
Hotel 193 Guest Rooms	145 Spaces Minimum	212 Spaces Maximum

Hotel EVSE Spaces					
Per Menlo Park Municipal Code 12.18.110					
A minimum of 15% of total required number of parking stalls are to be EV Spaces with installed EVSE in 10% of the total required number of parking stalls, with a minimum of 1, in charging space(s).					
	Total Spaces	EV Spaces Calculation	Required EV Spaces	EVSE Spaces Calculation	Required EVSE Spaces
Hotel	145	145x15%=21.75	22	145x10%=14.5	15

Basement Parking Schedule				
Level	Type	Spaces per Parking Unit	Count	Total Space Count
Basement	EV Future 8.5x18	1	7	7
Basement	EV Standard 8.5x18	1	15	15
Basement	HC Standard 9x18	1	2	2
Basement	Stacker 9x18	2	38	76
Basement	Standard 8.5x18	1	68	68
Grand Total				168

Bike Parking Schedule				
	Area	Short Term	Long Term	Total
Retail*	13,966	2	1	3
Hotel**	151,604	6	24	30
Total	165,570	8	25	33

*20% long term and 80% short term for retail.
**80% long term and 20% short term for for hotel.

PENINSULA INNOVATION PARTNERS

WILLOW VILLAGE
Architectural Control Package - Parcel 1 - Hotel
Menlo Park, CA

SCALE: 1" = 40'-0"

NOTE: THIS DRAWING IS ISO A1. DO NOT SCALE DRAWINGS. USE FIGURED DIMENSIONS ONLY. OR SEEK CLARIFICATION FROM ARCHITECT FOR MEASUREMENTS THAT ARE NOT INDICATED.

MILESTONES

DATE	ISSUE
09/07/2021	ACP

REVISIONS

NO.	DATE	ISSUE

DRAWING TITLE:
Willow Village Hotel
Parking Count Diagram

DRAWING NO:
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Base e t Park g Sc edu e				
eve	Type	Spaces pe Park g	Co	S ace Co
B s en	V u . x			
B s	V a			
Basement	HC Standard 9x18	1	2	2
B s	9			
B s	x			
G a				

B ke Parking Sched e				
	A ea	r		o
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e *	1 4			
Total	65,570	8	25	33

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KEY
- COMMERCIAL PARKING
- HOTEL PARKING - 146 SPACES
- LONG TERM BICYCLE PARKING
- S STACKER (HOTEL)

1 Hote Basement Plan
1" = 30'-0"

PENINSULA INNOVATI A

e - Parcel 1 - Hotel

A r n M I

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DATE	ISSUE
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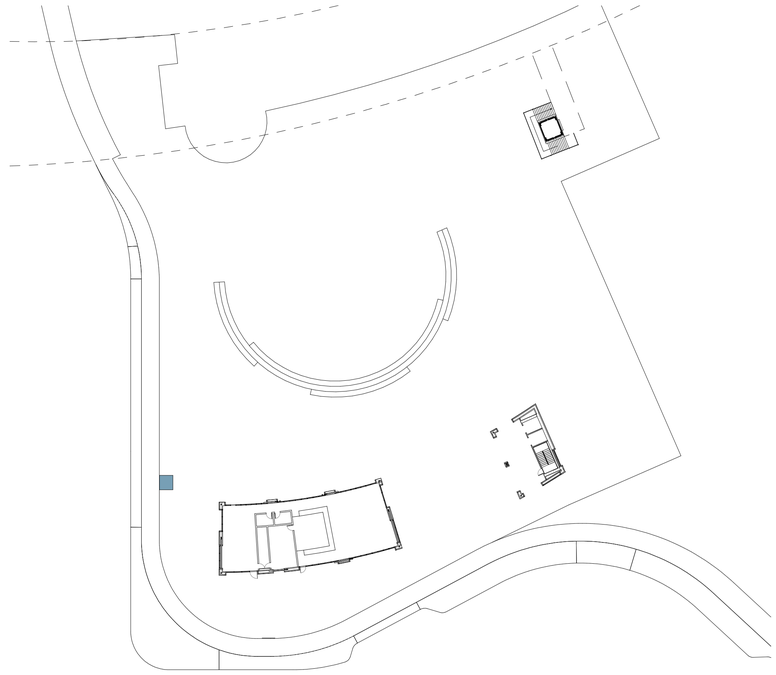

1 TOWN SQUARE PAVILION - LEVEL 1
1" = 40'-0"

2 TOWN SQUARE PAVILION - BASEMENT
1" = 40'-0"

Town Square Parking		
16.43.090 Parking Standards		
Retail	Minimum Spaces (Per 1,000 Sq. Ft)	Maximum Spaces (Per 1,000 Sq. Ft.)
	2.5	3.3
Retail 6,725 SF	18 Spaces Minimum	24 Spaces Maximum

Town Square EVSE Spaces					
Per Menlo Park Municipal Code 12.18.110					
A minimum of 15% of total required number of parking stalls are to be EV Spaces with installed EVSE in 10% of the total required number of parking stalls, with a minimum of 1, in charging space(s).					
	Total Spaces	EV Spaces Calculation	Required EV Spaces	EVSE Spaces Calculation	Required EVSE Spaces
Retail	18	18x15%=2.7	3	18x10%=1.8	2

Basement Parking Schedule				
Level	Type	Spaces per Parking Unit	Count	Total Space Count
Basement	Ev Future 8.5*18	1	17	17
Basement	EV HC Ambulatory 9x18	1	1	1
Basement	EV HC Standard 9x18	1	1	1
Basement	EV HC Van 12x18	1	1	1
Basement	EV Standard 8.5x18	1	27	27
Basement	HC Standard 9x18	1	7	7
Basement	HC Van 12x18	1	1	1
Basement	Standard 8.5x18	1	212	212
Grand Total				267

Bike Parking Schedule*				
	Area	Short Term	Long Term	Total
Retail*	4,188	1	0	1

*20% long term and 80% short term for retail.

KEY
- COMMERCIAL PARKING
- HOTEL PARKING - 146 SPACES
- LONG TERM BICYCLE PARKING
- S STACKER

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PENINSULA INNOVATION PARTNERS

WILLOW VILLAGE
Architectural Control Package - Parcel 1 - Town Square
Menlo Park, CA

SCALE: 1" = 40'-0"

NOTE: THIS DRAWING IS ISO A1. DO NOT SCALE DRAWINGS. USE FIGURED DIMENSIONS ONLY, OR SEEK CLARIFICATION FROM ARCHITECT FOR MEASUREMENTS THAT ARE NOT INDICATED.

MILESTONES

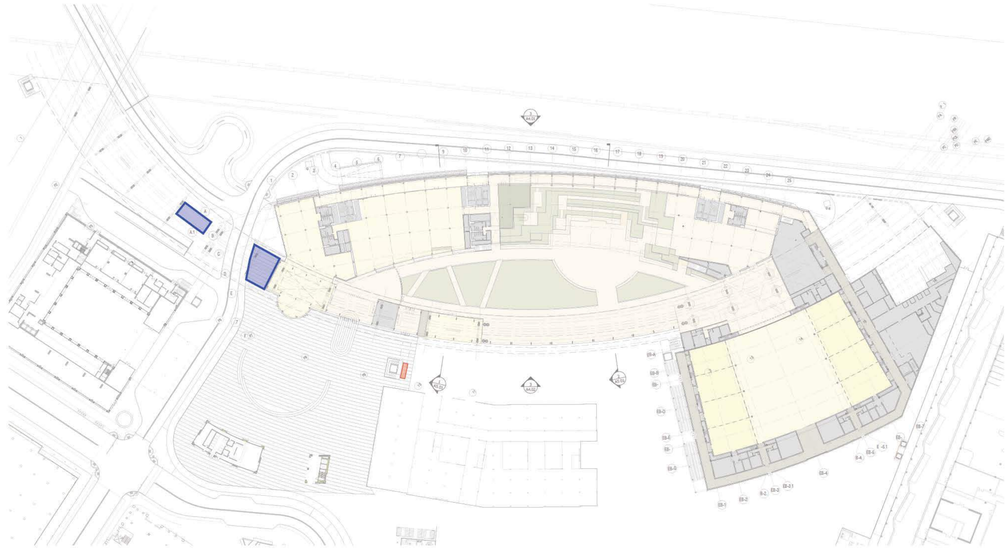
DATE	ISSUE
09/07/2021	ACP

REVISIONS

NO.	DATE	ISSUE

DRAWING TITLE:
WILLOW VILLAGE TOWN SQUARE
Parking Count Diagram

DRAWING NO:
A9.14



1 LEVEL 01 PLAN

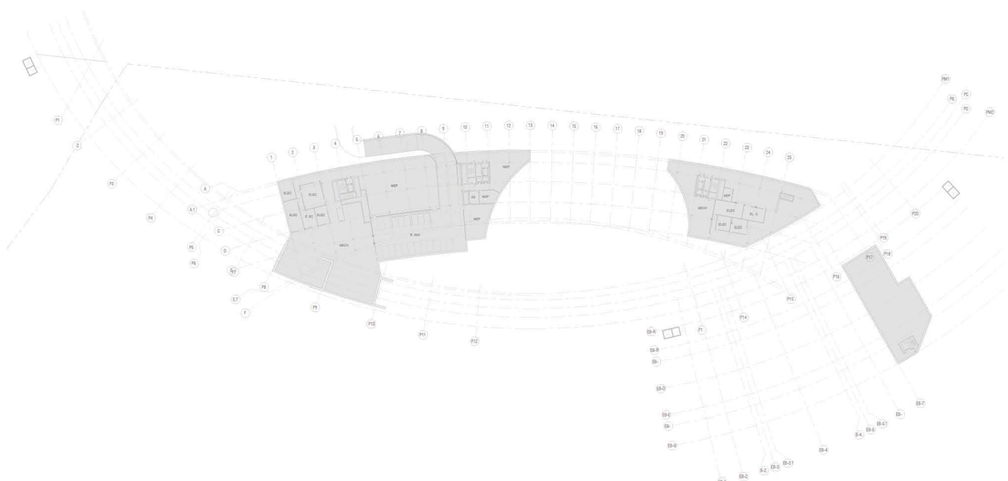
MCS OFFICE BIKE PARKING COUNT

16.43 090 Parking Standards

Office	1 per 5,000sf of gross area	
Office	296,596 sf	60 spots
Long Term	(80%)	48 spots
Short Term	(20%)	12 spots

Long Term Bike Parking

Short Term Bike Parking



1 BASEMENT PLAN

MCS OFFICE PARKING

16.43.090 Parking Standards

	Minimum Spaces (Per 1,000 Sq. Ft)	Maximum Spaces (Per 1,000 Sq. Ft.)
Office	2	3
Office 296,596 [1]	594 Spaces Min [2]	891 Spaces Max

[1] Building area calculated from total Gross Area for Fully Enclosed "Interior"

[2] Refer to Masterplan plan set for parking allocation. Sspaces serving MCS are included with the Office Campus.

MCS OFFICE EVSE SPACES

Per Menlo Park Municipal Code 12.18.110

A minimum of 15% of total required number of parking stalls are to be EV Spaces with installed EVSE in 10% of the total required number of parking stalls, with a minimum of 1, in charging space(s).

	TOTAL SPACES	EV SPACES CALC	REQUIRED EV SPACES	EVSE SPACES CALC	REQUIRED EVSE SPACES
Office	594	594x15%=89.1	90	594x10%=59.4	60

ENTITLE_CAR PARKING SCHEDULE_OFFICE

Level	Type Comments	Spaces per Parking Unit	Count	Total Space Count
BASEMENT				
BASEMENT	HC VAN 12 X 18	1	1	1
BASEMENT	STANDARD 8.5 X 18	1	1	1
BASEMENT	EV STANDARD 8.5 X 18	1	13	13
Grand Total				15

*634-958 ADDITIONAL PARKING AT NORTH GARAGE

PENINSULA INNOVATION PARTNERS

WILLOW VILLAGE

Architectural Control Package - Parcel 1

Menlo Park, CA

SCALE: 1"=50'-0"
1"=20'-0"

NOTE: THIS DRAWING IS ISO A1. DO NOT SCALE DRAWINGS. USE FIGURED DIMENSIONS ONLY, OR SEEK CLARIFICATION FROM ARCHITECT FOR MEASUREMENTS THAT ARE NOT INDICATED.

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DATE	ISSUE
09/07/2021	ACP

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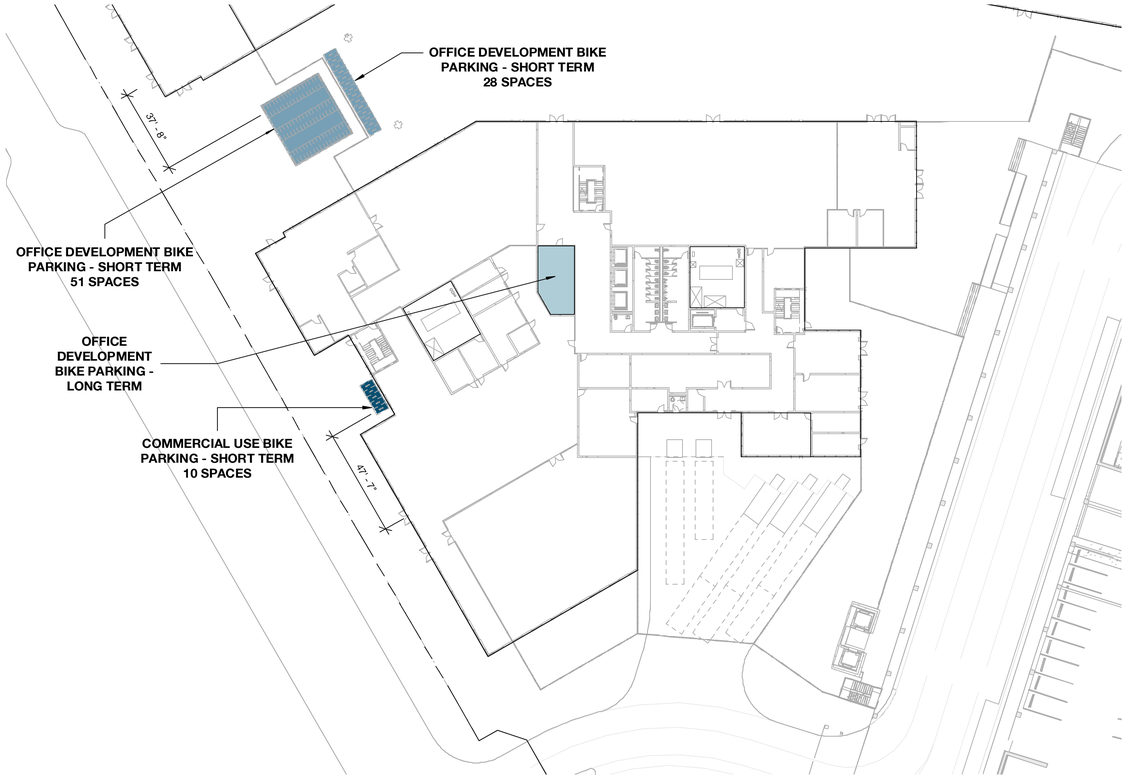
DRAWING TITLE: PARKING COUNT DIAGRAM

DRAWING NO: **A9.14**



1 LEVEL 1 Parking - O1
1/32" = 1'-0"

BIKE PARKING SCHEDULE - COMMERCIAL

Level	Bike Parking Type	Parking Duration	Count
LEVEL 1	COMMERCIAL	SHORT TERM	44
LEVEL 1	COMMERCIAL	LONG TERM	2

BIKE PARKING SCHEDULE - OFFICE

Level	Bike Parking Type	Parking Duration	Count
LEVEL 1	OFFICE	SHORT TERM	772
LEVEL 1	OFFICE	LONG TERM	680

PARKING BY LAND USE LEGEND

SWATCH	USE
	Office Car Parking
	Commercial Car Parking
	Commercial Bicycle Parking
	Short Term Bicycle Parking
	Long Term Bicycle Parking

Plan North

True North

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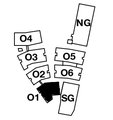

PENINSULA INNOVATION PARTNERS

WILLOW VILLAGE
Architectural Control Package - Parcel 1 (Portion) & 8
Menlo Park, CA

SCALE: As indicated

NOTE: THIS DRAWING IS ISO A1. DO NOT SCALE DRAWINGS. USE FIGURED DIMENSIONS ONLY, OR SEEK CLARIFICATION FROM ARCHITECTS ON MEASUREMENTS THAT ARE NOT INDICATED.

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DATE	ISSUE
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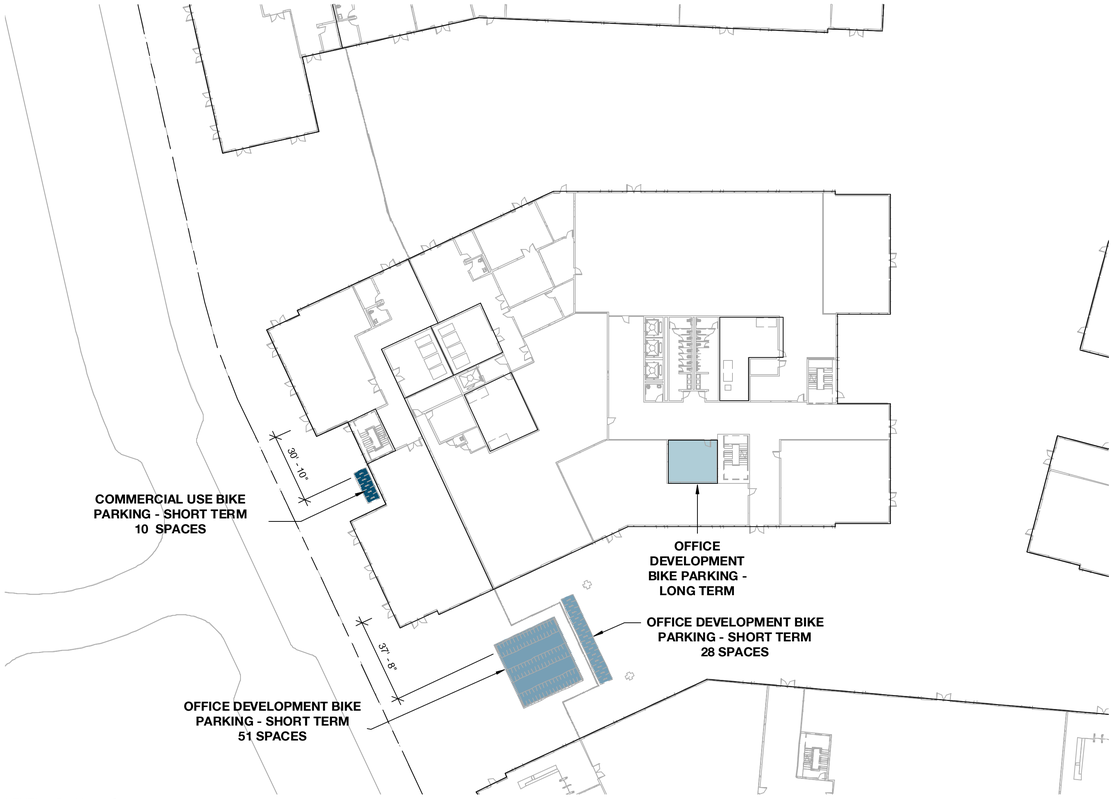
REVISIONS

NO.	DATE	ISSUE

DRAWING TITLE: Parking Count Diagram - Building O1

DRAWING NO: A9.14.1



1 LEVEL 1 Parking - O2
1/32" = 1'-0"

BIKE PARKING SCHEDULE - COMMERCIAL

Level	Bike Parking Type	Parking Duration	Count
LEVEL 1	COMMERCIAL	SHORT TERM	44
LEVEL 1	COMMERCIAL	LONG TERM	2

BIKE PARKING SCHEDULE - OFFICE

Level	Bike Parking Type	Parking Duration	Count
LEVEL 1	OFFICE	SHORT TERM	772
LEVEL 1	OFFICE	LONG TERM	680

PARKING BY LAND USE LEGEND

SWATCH	USE
	Office Car Parking
	Commercial Car Parking
	Commercial Bicycle Parking
	Short Term Bicycle Parking
	Long Term Bicycle Parking

Plan North

True North

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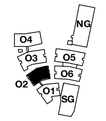

PENINSULA INNOVATION PARTNERS

WILLOW VILLAGE
Architectural Control Package - Parcel 1 (Portion) & 8
Menlo Park, CA

SCALE: As indicated

NOTE: THIS DRAWING IS ISO A1. DO NOT SCALE DRAWINGS. USE FIGURED DIMENSIONS ONLY. OR SEEK CLARIFICATION FROM ARCHITECTS ON MEASUREMENTS THAT ARE NOT INDICATED.

MILESTONES

DATE	ISSUE
09/07/2021	ACP

REVISIONS

NO.	DATE	ISSUE

DRAWING TITLE: Parking Count Diagram - Building O2

DRAWING NO: A9.14.2

1 LEVEL 1 Parking - O3
1/32" = 1'-0"

BIKE PARKING SCHEDULE - COMMERCIAL

Level	Bike Parking Type	Parking Duration	Count
LEVEL 1	COMMERCIAL	SHORT TERM	44
LEVEL 1	COMMERCIAL	LONG TERM	2

BIKE PARKING SCHEDULE - OFFICE

Level	Bike Parking Type	Parking Duration	Count
LEVEL 1	OFFICE	SHORT TERM	772
LEVEL 1	OFFICE	LONG TERM	680

PARKING BY LAND USE LEGEND

SWATCH	USE
	Office Car Parking
	Commercial Car Parking
	Commercial Bicycle Parking
	Short Term Bicycle Parking
	Long Term Bicycle Parking

Plan North

True North

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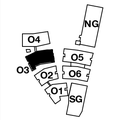

PENINSULA INNOVATION PARTNERS

WILLOW VILLAGE
Architectural Control Package - Parcel 1 (Portion) & 8
Menlo Park, CA

SCALE: As indicated

NOTE: THIS DRAWING IS ISO A1. DO NOT SCALE DRAWINGS. USE FIGURED DIMENSIONS ONLY, OR SEEK CLARIFICATION FROM ARCHITECTS FOR MEASUREMENTS THAT ARE NOT INDICATED.

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DATE	ISSUE
09/07/2021	ACP

REVISIONS

NO.	DATE	ISSUE

DRAWING TITLE: Parking Count Diagram - Building O3

DRAWING NO: A9.14.3

1 LEVEL 1 Parking - O4
1/32" = 1'-0"

BIKE PARKING SCHEDULE - COMMERCIAL

Level	Bike Parking Type	Parking Duration	Count
LEVEL 1	COMMERCIAL	SHORT TERM	44
LEVEL 1	COMMERCIAL	LONG TERM	2

BIKE PARKING SCHEDULE - OFFICE

Level	Bike Parking Type	Parking Duration	Count
LEVEL 1	OFFICE	SHORT TERM	772
LEVEL 1	OFFICE	LONG TERM	680

PARKING BY LAND USE LEGEND

SWATCH	USE
	Office Car Parking
	Commercial Car Parking
	Commercial Bicycle Parking
	Short Term Bicycle Parking
	Long Term Bicycle Parking

Plan North

True North

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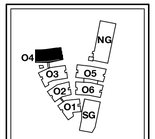

PENINSULA INNOVATION PARTNERS

WILLOW VILLAGE
Architectural Control Package - Parcel 1 (Portion) & 8
Menlo Park, CA

SCALE: As indicated

NOTE: THIS DRAWING IS ISO A1. DO NOT SCALE DRAWINGS. USE FIGURED DIMENSIONS ONLY. OR SEEK CLARIFICATION FROM ARCHITECTS ON MEASUREMENTS THAT ARE NOT INDICATED.

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DATE	ISSUE
09/07/2021	ACP

REVISIONS

NO.	DATE	ISSUE

DRAWING TITLE: Parking Count Diagram - Building O4

DRAWING NO: A9.14.4

1 LEVEL 1 Parking - O5
1/32" = 1'-0"

BIKE PARKING SCHEDULE - COMMERCIAL

Level	Bike Parking Type	Parking Duration	Count
LEVEL 1	COMMERCIAL	SHORT TERM	44
LEVEL 1	COMMERCIAL	LONG TERM	2

BIKE PARKING SCHEDULE - OFFICE

Level	Bike Parking Type	Parking Duration	Count
LEVEL 1	OFFICE	SHORT TERM	772
LEVEL 1	OFFICE	LONG TERM	680

PARKING BY LAND USE LEGEND

SWATCH	USE
	Office Car Parking
	Commercial Car Parking
	Commercial Bicycle Parking
	Short Term Bicycle Parking
	Long Term Bicycle Parking

Plan North

True North

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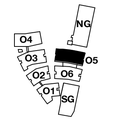

PENINSULA INNOVATION PARTNERS

WILLOW VILLAGE
Architectural Control Package - Parcel 1 (Portion) & 8
Menlo Park, CA

SCALE: As indicated

NOTE: THIS DRAWING IS ISO A1. DO NOT SCALE DRAWINGS. USE FIGURED DIMENSIONS ONLY, OR SEEK CLARIFICATION FROM ARCHITECTS ON MEASUREMENTS THAT ARE NOT INDICATED.

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NO.	DATE	ISSUE

DRAWING TITLE:
Parking Count Diagram - Building O5

DRAWING NO:
A9.14.5

1 LEVEL 1 Parking - O6
1/32" = 1'-0"

BIKE PARKING SCHEDULE - COMMERCIAL

Level	Bike Parking Type	Parking Duration	Count
LEVEL 1	COMMERCIAL	SHORT TERM	44
LEVEL 1	COMMERCIAL	LONG TERM	2

BIKE PARKING SCHEDULE - OFFICE

Level	Bike Parking Type	Parking Duration	Count
LEVEL 1	OFFICE	SHORT TERM	772
LEVEL 1	OFFICE	LONG TERM	680

PARKING BY LAND USE LEGEND

SWATCH	USE
	Office Car Parking
	Commercial Car Parking
	Commercial Bicycle Parking
	Short Term Bicycle Parking
	Long Term Bicycle Parking

Plan North

True North

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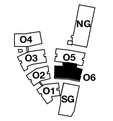

PENINSULA INNOVATION PARTNERS

WILLOW VILLAGE
Architectural Control Package - Parcel 1 (Portion) & 8
Menlo Park, CA

SCALE: As indicated

NOTE: THIS DRAWING IS ISO A1. DO NOT SCALE DRAWINGS. USE FIGURED DIMENSIONS ONLY, OR SEEK CLARIFICATION FROM ARCHITECTS ON MEASUREMENTS THAT ARE NOT INDICATED.

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09/07/2021	ACP

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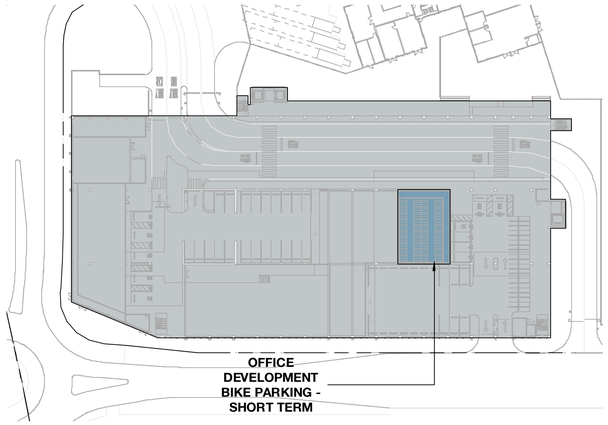
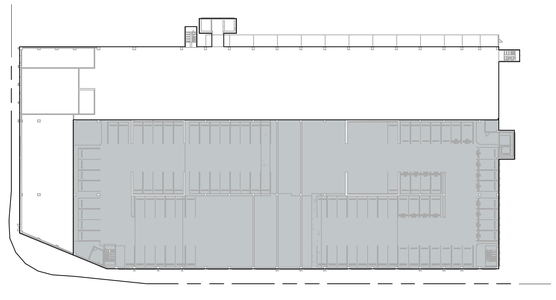
DRAWING TITLE:
Parking Count Diagram - Building O6

DRAWING NO:
A9.14.6

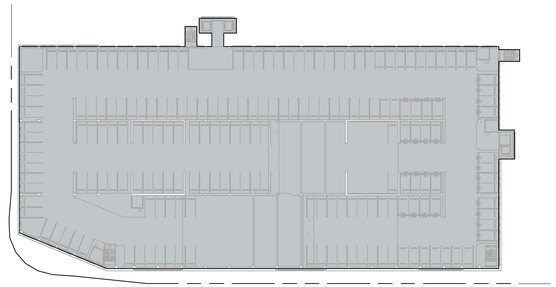


1 SG LEVEL 1
1" = 60'-0"

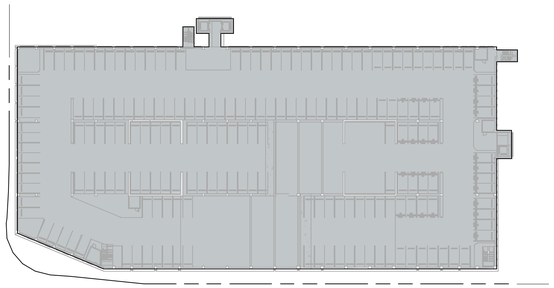


2 SG LEVEL 1 MEZZ.
1" = 60'-0"

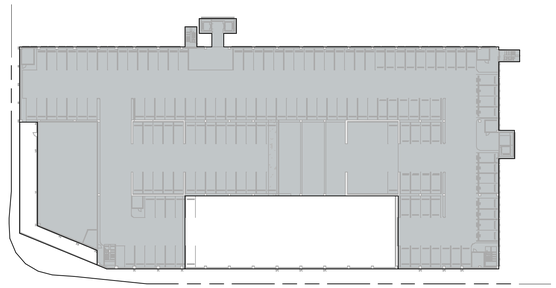
3 SG LEVEL 2
1" = 60'-0"



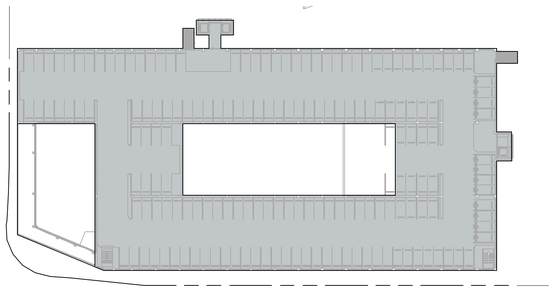
4 SG LEVEL 3
1" = 60'-0"



5 SG LEVEL 4
1" = 60'-0"



6 SG LEVEL 5
1" = 60'-0"



7 SG LEVEL 6
1" = 60'-0"

CAR PARKING SCHEDULE_OFFICE_SOUTH GARAGE

SOUTH GARAGE PARKING SCHEDULE

Type Mark	Count
EV Future	135
EV HC Ambulatory	4
EV HC Standard	4
EV HC Van	2
EV Standard	126
Expectant Mother	14
HC Standard	20
HC Van	4
Motorcycle	20
Standard	952
Vanpool	20

TOTAL COMBINED: 1301

SOUTH GARAGE EV COUNT

10% Day 1 EV spaces	136
10% Future EV spaces	135

TOTAL COMBINED: 271

36 Charging Stations Required Day 1

SG LEVEL 1 PARKING SCHEDULE

Type Mark	Count
EV Future	4
EV HC Standard	1
EV HC Van	2
EV Standard	3
HC Standard	1
HC Van	4
Motorcycle	20
Standard	89

TOTAL COMBINED: 124

SG LEVEL 1 MEZZANINE PARKING SCHEDULE

Type Mark	Count
EV Future	12
EV HC Ambulatory	2
EV Standard	16
Standard	113

TOTAL COMBINED: 143

SG LEVEL 2 PARKING SCHEDULE

Type Mark	Count
EV Future	10
EV HC Ambulatory	2
EV HC Standard	3
EV Standard	27
Expectant Mother	14
HC Standard	19
Standard	130
Vanpool	20

TOTAL COMBINED: 225

SG LEVEL 3 PARKING SCHEDULE

Type Mark	Count
EV Future	19
EV Standard	28
Standard	188

TOTAL COMBINED: 235

SG LEVEL 4 PARKING SCHEDULE

Type Mark	Count
EV Future	19
EV Standard	28
Standard	188

TOTAL COMBINED: 235

SG LEVEL 5 PARKING SCHEDULE

Type Mark	Count
EV Future	35
EV Standard	12
Standard	122

TOTAL COMBINED: 169

SG LEVEL 6 PARKING SCHEDULE

Type Mark	Count
EV Future	36
EV Standard	12
Standard	122

TOTAL COMBINED: 170

BIKE PARKING SCHEDULE - COMMERCIAL

Level	Bike Parking Type	Parking Duration	Count
LEVEL 1	COMMERCIAL	SHORT TERM	44
LEVEL 1	COMMERCIAL	LONG TERM	2

BIKE PARKING SCHEDULE - OFFICE

Level	Bike Parking Type	Parking Duration	Count
LEVEL 1	OFFICE	SHORT TERM	772
LEVEL 1	OFFICE	LONG TERM	680

PARKING BY LAND USE LEGEND

SWATCH	USE
	Office Car Parking
	Commercial Car Parking
	Commercial Bicycle Parking
	Short Term Bicycle Parking
	Long Term Bicycle Parking

Plan North

True North

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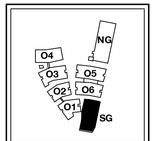

PENINSULA INNOVATION PARTNERS

WILLOW VILLAGE
Architectural Control Package - Parcel 1 (Portion) & 8
Menlo Park, CA

SCALE: As indicated

NOTE: THIS DRAWING IS ISO A1. DO NOT SCALE DRAWINGS. USE FIGURED DIMENSIONS ONLY. OR SEEK CLARIFICATION FROM ARCHITECT FOR MEASUREMENTS THAT ARE NOT INDICATED.

MILESTONES

DATE	ISSUE
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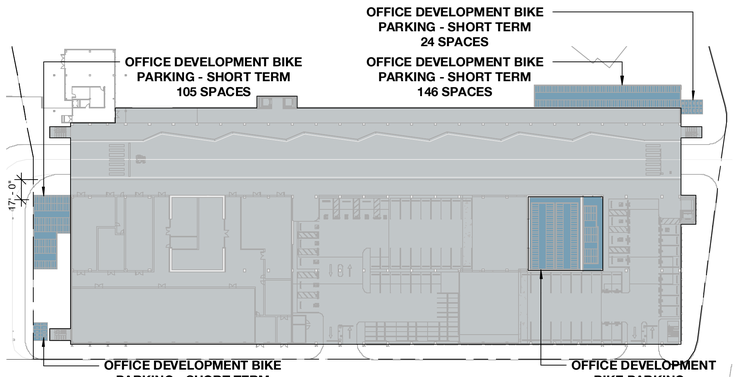
REVISIONS

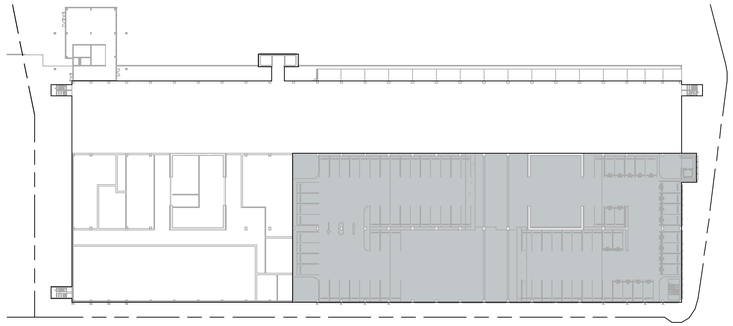
NO.	DATE	ISSUE

DRAWING TITLE: Parking Count Diagram - South Garage

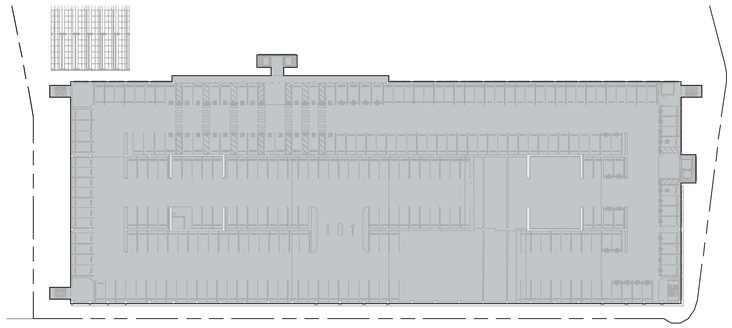
DRAWING NO: A9.14.7



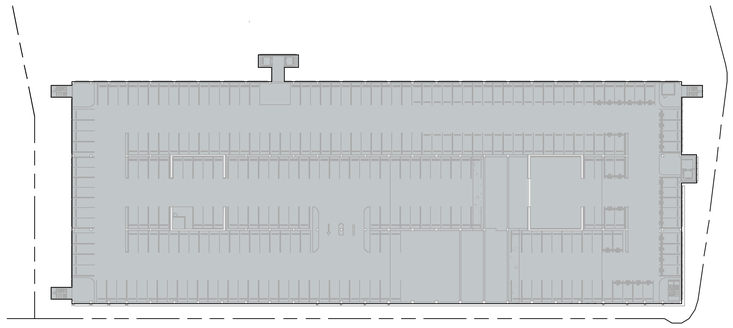
1 NG LEVEL 1
1" = 60'-0"



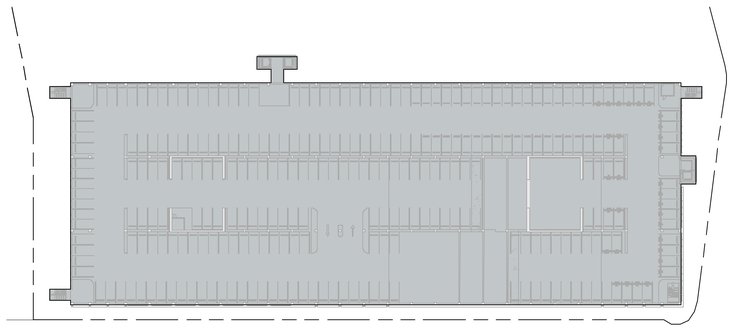
2 NG LEVEL 1 MEZZ.
1" = 60'-0"



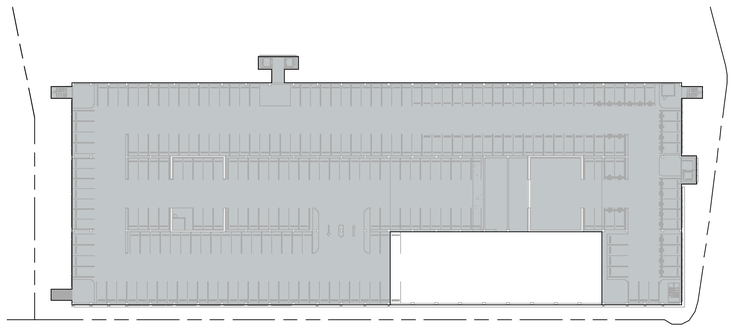
3 NG LEVEL 2
1" = 60'-0"



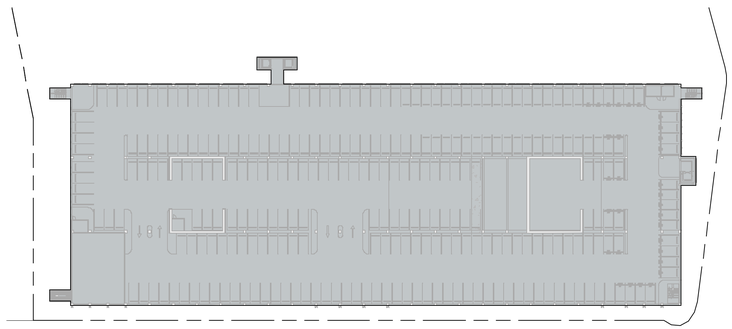
4 NG LEVEL 3
1" = 60'-0"



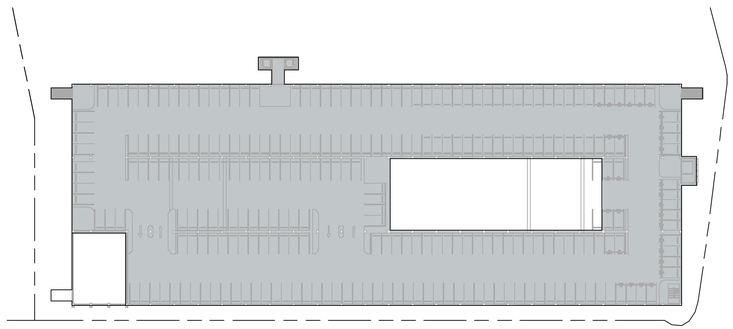
5 NG LEVEL 4
1" = 60'-0"



6 NG LEVEL 5
1" = 60'-0"



7 NG LEVEL 6
1" = 60'-0"



8 NG LEVEL 7
1" = 60'-0"

CAR PARKING SCHEDULE_OFFICE_NORTH GARAGE

NORTH GARAGE PARKING SCHEDULE	
Type Mark	Count
EV Future	206
EV HC Ambulatory	6
EV HC Standard	5
EV HC Van	2
EV Standard	201
Expectant Mother	20
HC Standard	25
HC Van	6
Motorcycle	30
Standard	1501
Vanpool	30
TOTAL COMBINED: 2032	

NORTH GARAGE EV COUNT	
10% Day 1 EV spaces	214
10% Future EV spaces	206
TOTAL COMBINED: 420	

64 Charging Stations Required Day 1

NG LEVEL 1 PARKING SCHEDULE	
Type Mark	Count
EV HC Standard	3
EV HC Van	2
EV Standard	11
HC Standard	3
HC Van	6
Motorcycle	30
Standard	91
TOTAL COMBINED: 146	

NG LEVEL 1 MEZZANINE PARKING SCHEDULE	
Type Mark	Count
EV HC Ambulatory	2
EV Standard	19
Standard	109
TOTAL COMBINED: 130	

NG LEVEL 2 PARKING SCHEDULE	
Type Mark	Count
EV Future	26
EV HC Ambulatory	4
EV HC Standard	2
EV Standard	22
Expectant Mother	20
HC Standard	22
Standard	176
Vanpool	30
TOTAL COMBINED: 302	

NG LEVEL 3 PARKING SCHEDULE	
Type Mark	Count
EV Future	36
EV Standard	31
Standard	246
TOTAL COMBINED: 313	

NG LEVEL 4 PARKING SCHEDULE	
Type Mark	Count
EV Future	36
EV Standard	31
Standard	246
TOTAL COMBINED: 313	

NG LEVEL 5 PARKING SCHEDULE	
Type Mark	Count
EV Future	36
EV Standard	25
Standard	210
TOTAL COMBINED: 271	

NG LEVEL 6 PARKING SCHEDULE	
Type Mark	Count
EV Future	36
EV Standard	31
Standard	231
TOTAL COMBINED: 298	

NG LEVEL 7 PARKING SCHEDULE	
Type Mark	Count
EV Future	36
EV Standard	31
Standard	192
TOTAL COMBINED: 259	

BIKE PARKING SCHEDULE - COMMERCIAL

Level	Bike Parking Type	Parking Duration	Count
LEVEL 1	COMMERCIAL	SHORT TERM	44
LEVEL 1	COMMERCIAL	LONG TERM	2

BIKE PARKING SCHEDULE - OFFICE

Level	Bike Parking Type	Parking Duration	Count
LEVEL 1	OFFICE	SHORT TERM	772
LEVEL 1	OFFICE	LONG TERM	680

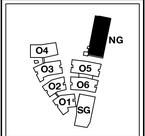
PARKING BY LAND USE LEGEND	
SWATCH	USE
	Office Car Parking
	Commercial Car Parking
	Commercial Bicycle Parking
	Short Term Bicycle Parking
	Long Term Bicycle Parking

Plan North

True North

0 60 120

8/31/2021 9:30:39 AM



PENINSULA INNOVATION PARTNERS

WILLOW VILLAGE
Architectural Control Package - Parcel 1 (Portion) & 8
Menlo Park, CA

SCALE: As indicated

NOTE: THIS DRAWING IS ISO A1. DO NOT SCALE DRAWINGS. USE FIGURED DIMENSIONS ONLY. OR SEEK CLARIFICATION FROM ARCHITECT FOR MEASUREMENTS THAT ARE NOT INDICATED.

MILESTONES

DATE	ISSUE
09/07/2021	ACP

REVISIONS

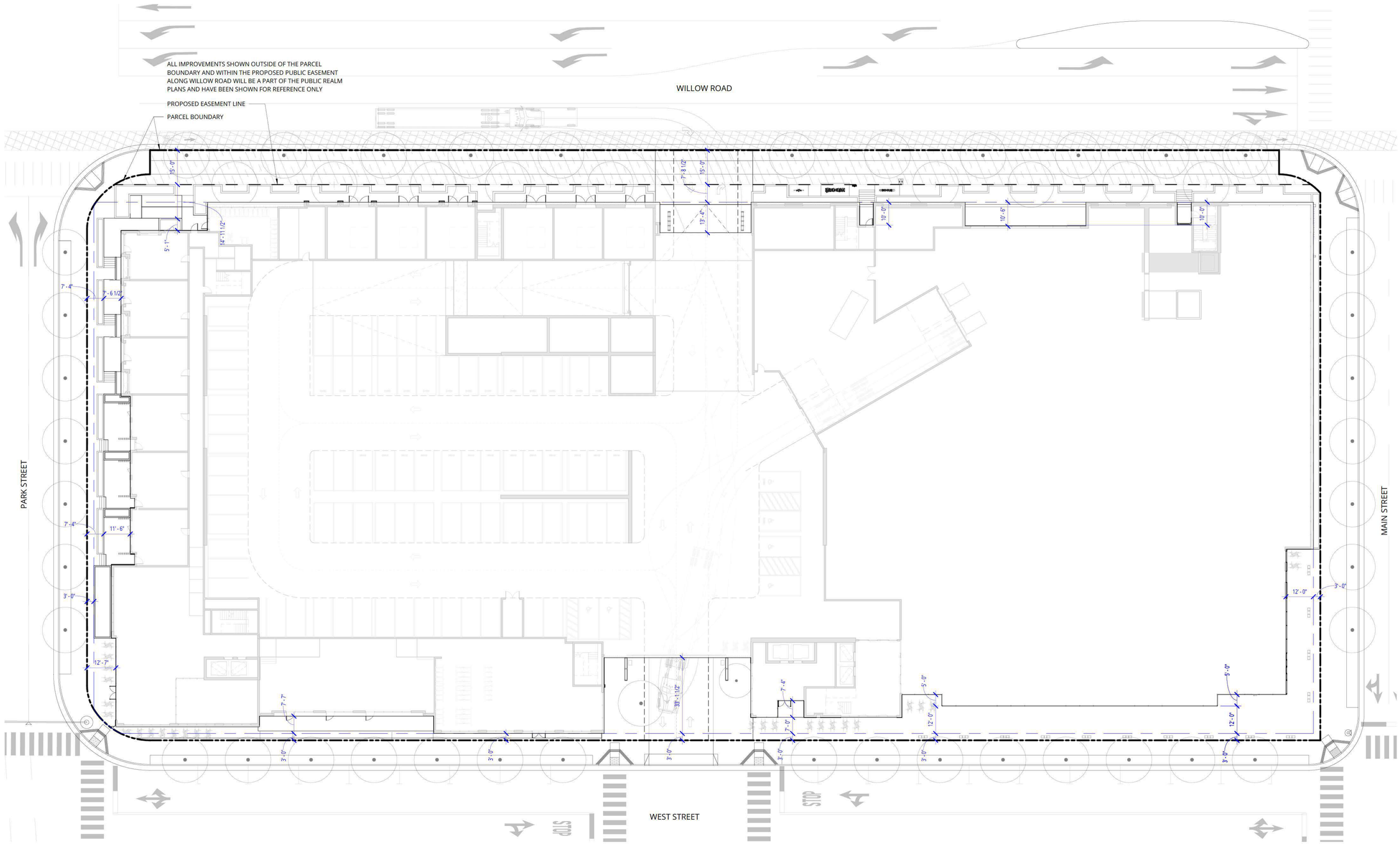
NO.	DATE	ISSUE

DRAWING TITLE: Parking Count Diagram - North Garage

DRAWING NO: A9.14.8

APPENDIX 5

PARCEL 1-8
ILLUSTRATIVE SITE PLAN



1 SITE PLAN

1" = 20'-0"

0 20 40

8/24/2021 9:50:12 AM

PENINSULA INNOVATION PARTNERS

WILLOW VILLAGE

Architectural Control Package - Parcel 2

Menlo Park, CA

SCALE: 1" = 20'-0"

NOTE: THIS DRAWING IS ISO A1. DO NOT SCALE DRAWINGS. USE FIGURED DIMENSIONS ONLY, OR SEEK CLARIFICATION FROM ARCHITECT FOR MEASUREMENTS THAT ARE NOT INDICATED.

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REVISIONS

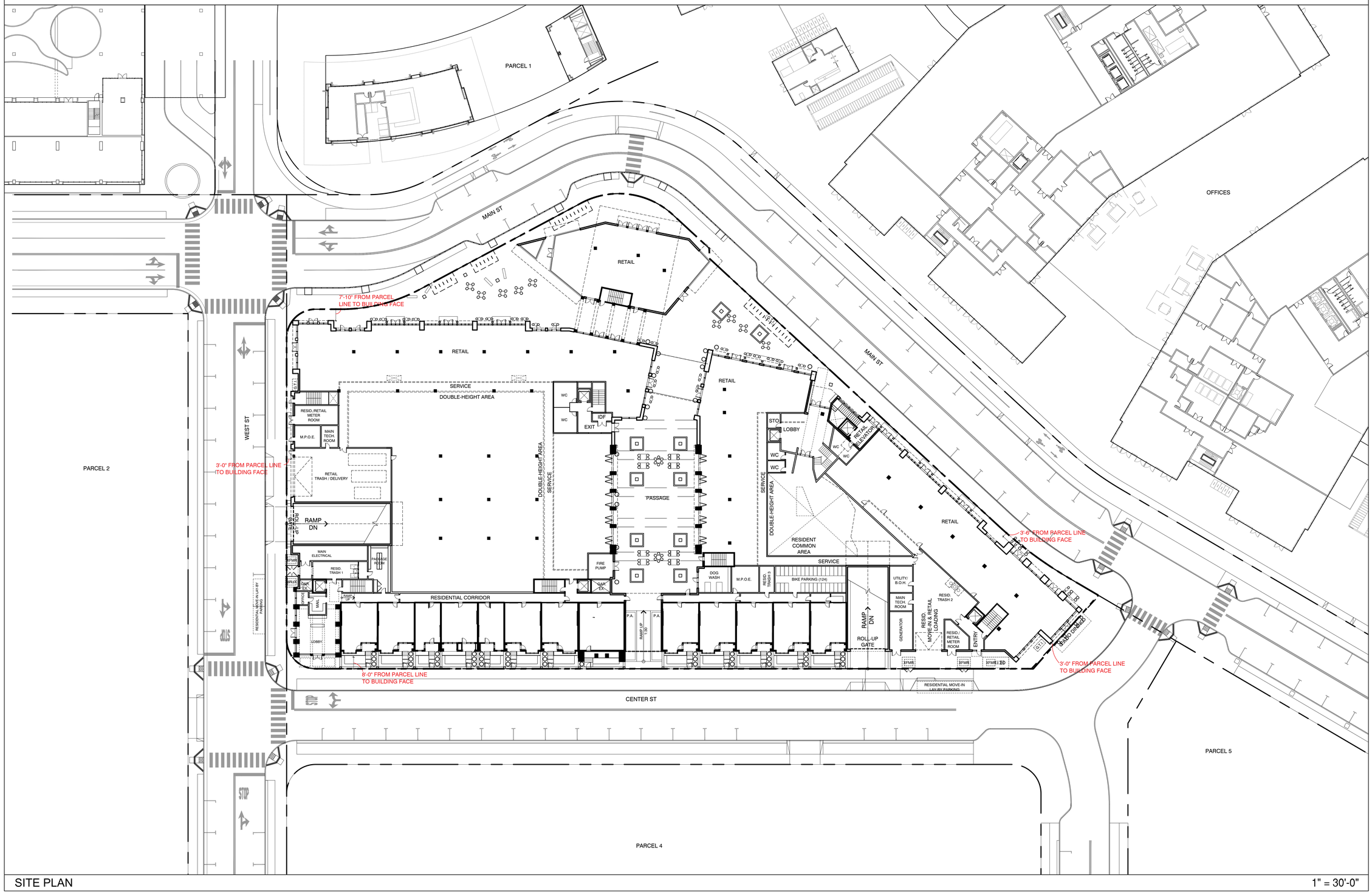
NO.	DATE	ISSUE

DRAWING TITLE: SITE PLAN

DRAWING NO.: *A1.01

GENERAL NOTES

A. SEE LANDSCAPE DRAWINGS FOR ADDITIONAL INFORMATION INCLUDING SITE WALLS, GRADING, PLANTING, ETC.



SITE PLAN

1" = 30'-0"

PENINSULA INNOVATION PARTNERS

WILLOW VILLAGE

Architectural Control Package - Parcel 3

Menlo Park, CA

SCALE:

NOTE: THIS DRAWING IS ISO A1. DO NOT SCALE DRAWINGS. VERIFY ALL DIMENSIONS ON SITE, OR SEEK CLARIFICATION FROM ARCHITECT FOR MEASUREMENTS THAT ARE NOT INDICATED.

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REVISIONS		
NO.	DATE	ISSUE

DRAWING TITLE:

---- SITE PLAN

DRAWING NO:

A1.01

PARCEL 4

PARCEL 5

CENTER STREET

PARK STREET

BUILDING PROJECTION ABOVE (DASHED LINE), TYP.

ENTRY COURT

PARCEL 7

PARK

LOBBY #1

MAILROOM

BICYCLE PARKING

1-BEDROOM LOFT

1-BEDROOM LOFT

1-BEDROOM LOFT

1-BEDROOM LOFT

1-BEDROOM LOFT

1-BEDROOM LOFT

LOBBY #2

RESIDENT COMMON AREA

TRASH

PACKAGE ROOM

TRASH ROOM

ACC

ACC

ACC

VAN ACC

ACC

LEASING / LOUNGE

BICYCLE PARKING

TRASH CLOSET

VAN ACC EVSE

2-BEDROOM TOWNHOUSE-STYLE UNIT

2-BEDROOM TOWNHOUSE-STYLE UNIT

2-BEDROOM TOWNHOUSE-STYLE UNIT

2-BEDROOM TOWNHOUSE-STYLE UNIT

2-BEDROOM TOWNHOUSE-STYLE UNIT

STORAGE

PARKING GARAGE

DOMESTIC WATER PUMP ROOM

MAIN ELECTRICAL ROOM

TRANSFORMER ROOM

TRANSFORMER ROOM

TRANSFORMER ROOM

STORAGE

METER ROOM

FIRE WATER PUMP ROOM

MDF

MPOE

STORAGE

10' - 0" REQ. SETBACK

10' - 0" REQ. SETBACK

10' - 0" REQ. SETBACK

10' - 0" REQ. SETBACK

3' - 0 1/2"

13' - 0 1/2"

10' - 0 1/2"

16' - 1 1/2"

3' - 0 1/2"

7' - 10"

13' - 0 1/2"

3' - 0"

19' - 9 1/2"

19' - 10 1/2"

17' - 6"

11' - 1"

13' - 11"

10' - 5 1/2"

13' - 11"

19' - 9 1/2"

20' - 7 1/2"

19' - 10"

13' - 5 1/2"

19' - 10"

13' - 6"

18' - 4"

14' - 8 1/2"

SITE PLAN
1" = 20'-0" (1)

0 20 40

8/30/2021 2:52:15 PM

PENINSULA INNOVATION PARTNERS

WILLOW VILLAGE
Architectural Control Package - Parcel 6
Menlo Park, CA

SCALE: 1" = 20'-0"

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MILESTONES

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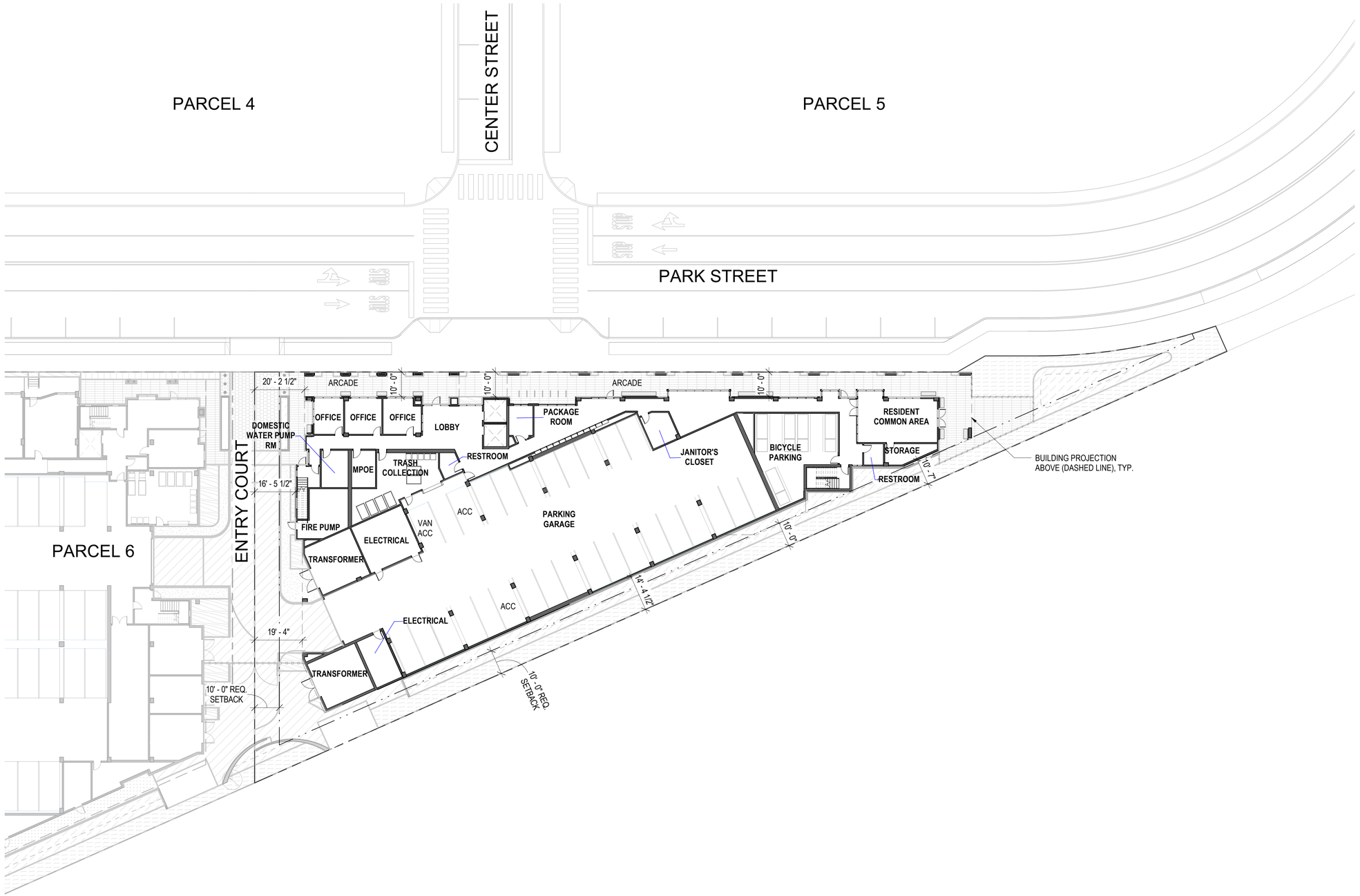
NO.	DATE	ISSUE

DRAWING TITLE: SITE PLAN

DRAWING NO: A1.01



SITE PLAN 1
1" = 20'-0"

0 20 40

8/31/2021 11:09:10 AM

PENINSULA INNOVATION PARTNERS

WILLOW VILLAGE
Architectural Control Package - Parcel 7
Menlo Park, CA

SCALE: 1" = 20'-0"

NOTE: THIS DRAWING IS ISO A1. DO NOT SCALE DRAWINGS. USE FIGURED DIMENSIONS ONLY, OR SEEK CLARIFICATION FROM ARCHITECT FOR MEASUREMENTS THAT ARE NOT INDICATED.

MILESTONES	
DATE	ISSUE
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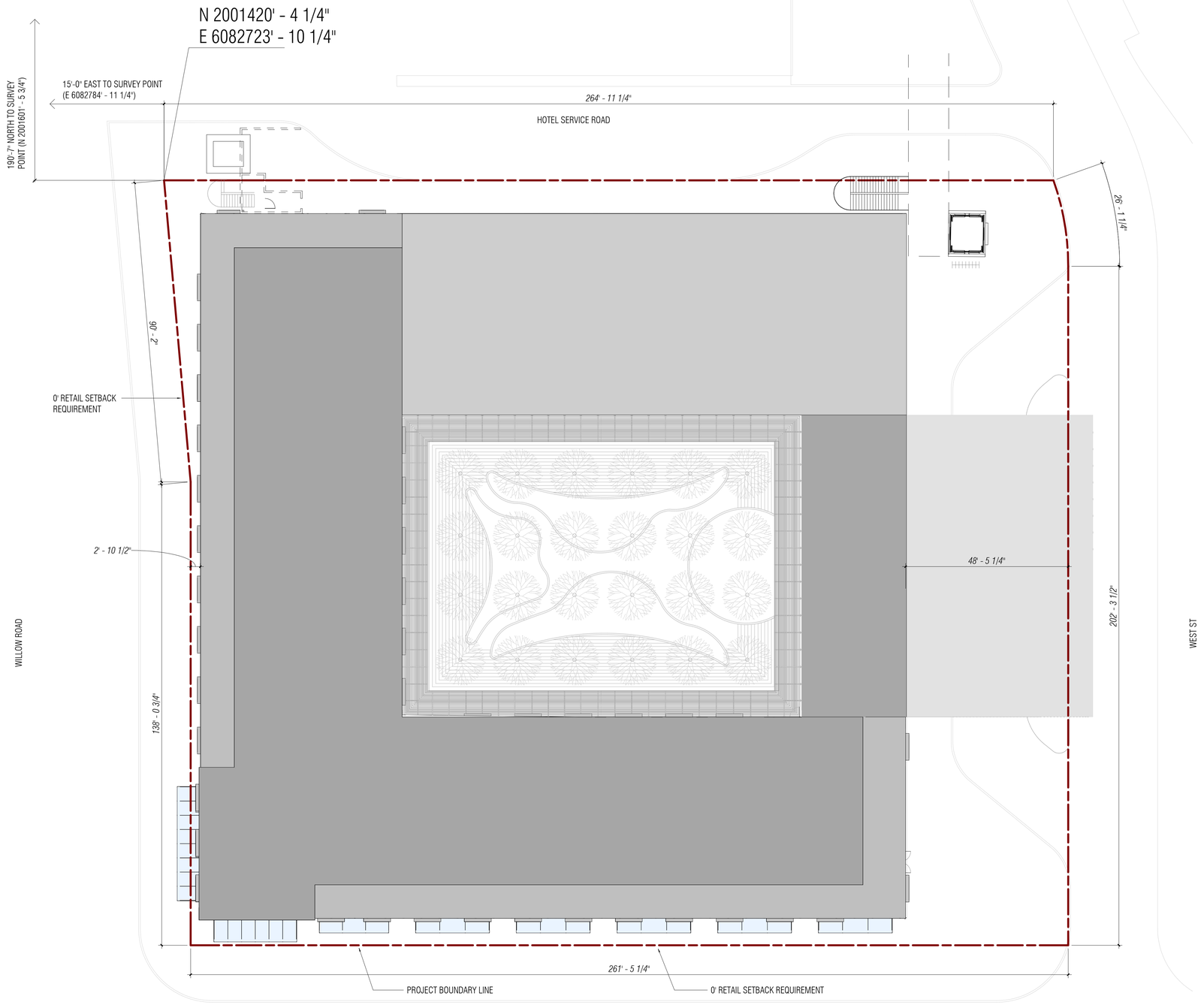
NO.	DATE	ISSUE

DRAWING TITLE: SITE PLAN

DRAWING NO: A1.01



1 SITE PLAN

1/16" = 1'-0"

8/11/2021 11:41:22 AM

PENINSULA INNOVATION PARTNERS

WILLOW VILLAGE

Architectural Control Package - Parcel 1 - Hotel

Menlo Park, CA

SCALE: 1/16" = 1'-0"

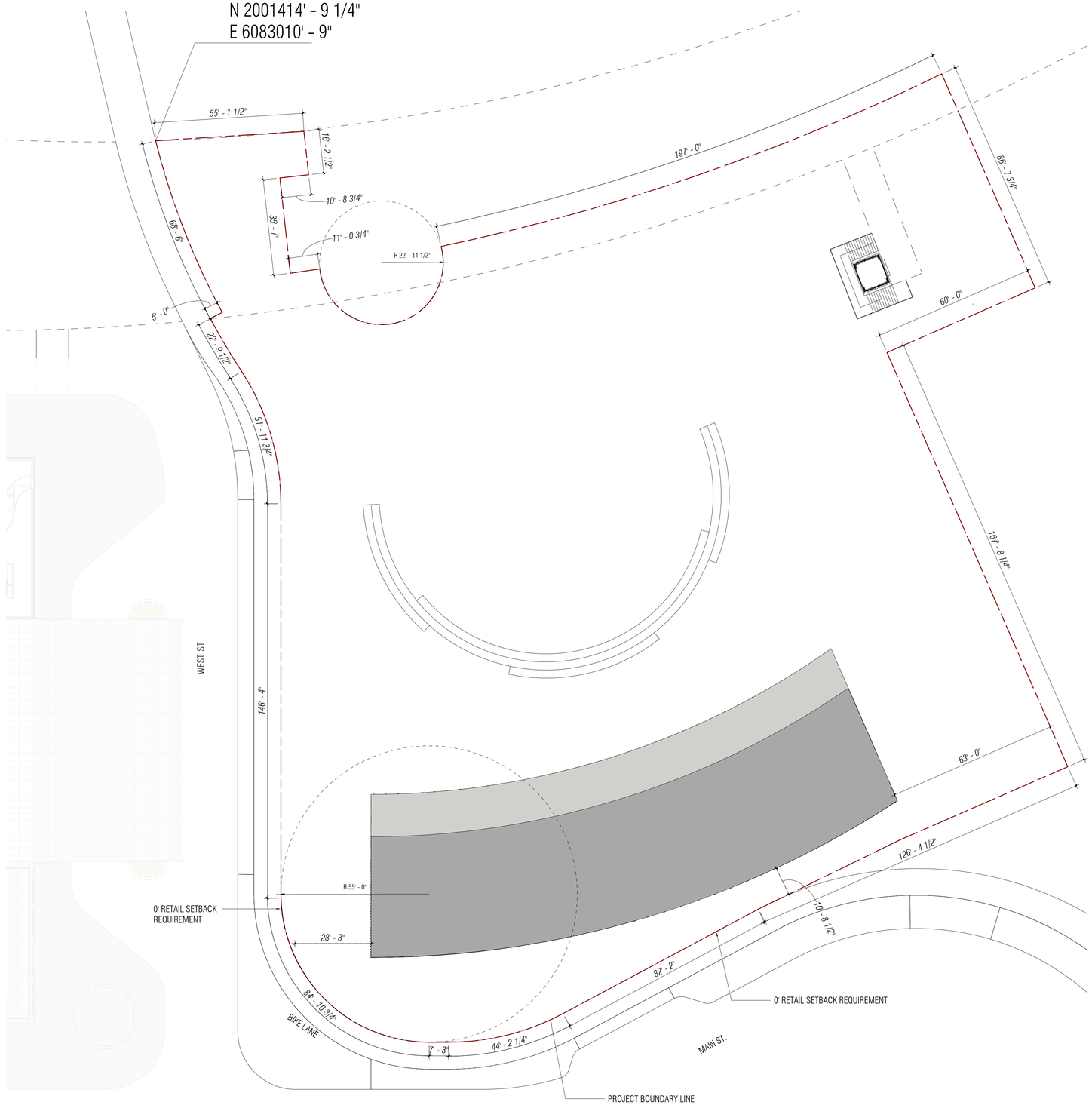
NOTE: THIS DRAWING IS ISO A1. DO NOT SCALE DRAWINGS. CONTRACTOR SHALL VERIFY AND SEEK CLARIFICATION FROM ARCHITECT FOR MEASUREMENTS THAT ARE NOT INDICATED.

MILESTONES	
DATE	ISSUE
09/07/2021	ACP

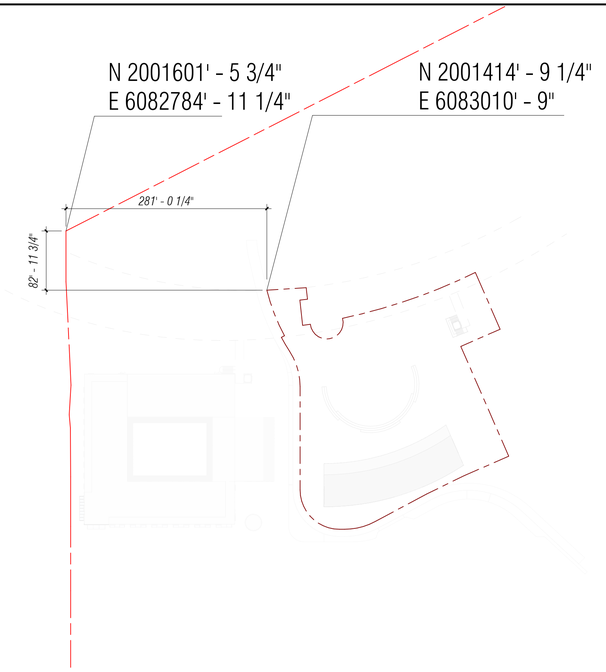
REVISIONS		
NO.	DATE	ISSUE

DRAWING TITLE:
Willow Village Hotel
Site Plan

DRAWING NO:
A1.01



1 SITE PLAN
1" = 20'-0"



2 SITE LOCATION PLAN
1" = 100'-0"

8/12/2021 11:11:39 AM

PENINSULA INNOVATION PARTNERS

WILLOW VILLAGE
Architectural Control Package - Parcel 1 - Town Square
Menlo Park, CA

SCALE: As indicated

NOTE: THIS DRAWING IS ISO A1. DO NOT SCALE DRAWINGS. USE FIGURED DIMENSIONS ONLY, OR SEEK CLARIFICATION FROM ARCHITECT FOR MEASUREMENTS THAT ARE NOT INDICATED.

MILESTONES

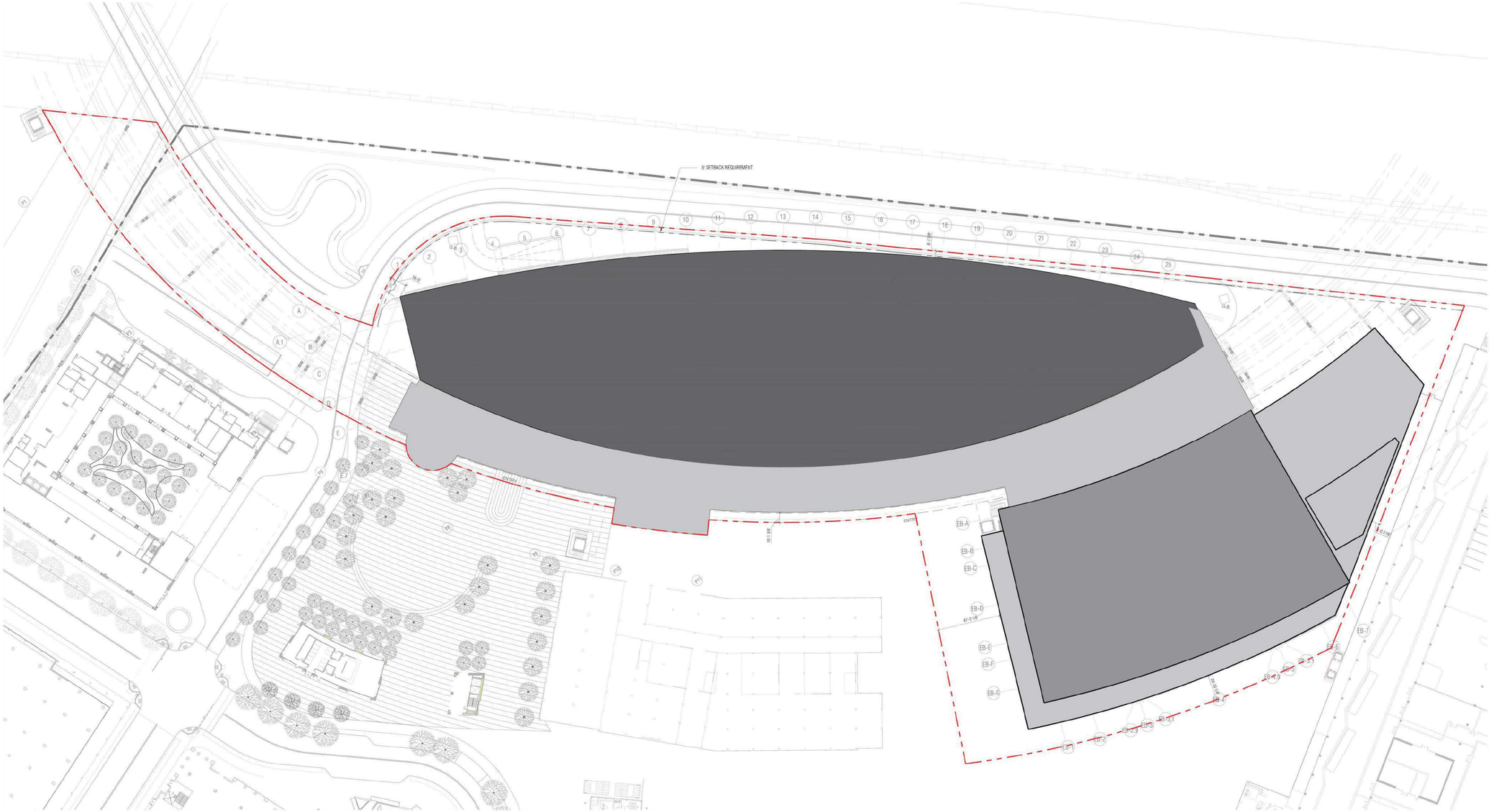
DATE	ISSUE
09/07/2021	ACP

REVISIONS

NO.	DATE	ISSUE

DRAWING TITLE:
WILLOW VILLAGE TOWN SQUARE
Site Plan

DRAWING NO:
A1.01



1 SITE PLAN

WILLOW VILLAGE
Architectural Control Package - Parcel 1
Menlo Park, CA

PENINSULA INNOVATION PARTNERS

SCALE:

NOTE: THIS DRAWING IS ISO A1. DO NOT SCALE DRAWINGS. USE FIGURED DIMENSIONS ONLY, OR SEEK CLARIFICATION FROM ARCHITECT FOR MEASUREMENTS THAT ARE NOT INDICATED.

MILESTONES

DATE	ISSUE
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REVISIONS

NO.	DATE	ISSUE

DRAWING TITLE: SITE PLAN

DRAWING NO: **A1.01**

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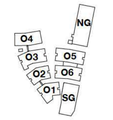


PENINSULA INNOVATION PARTNERS

WILLOW VILLAGE
Architectural Control Package - Parcel 1 (Portion) & 8
Menlo Park, CA

SCALE: 1" = 80'-0"

NOTE: THIS DRAWING IS ISO A1. DO NOT SCALE DRAWINGS. USE FIGURED DIMENSIONS ONLY, OR SEEK CLARIFICATION FROM ARCHITECT FOR MEASUREMENTS THAT ARE NOT INDICATED.

MILESTONES

DATE	ISSUE
09/07/2021	ACP

REVISIONS

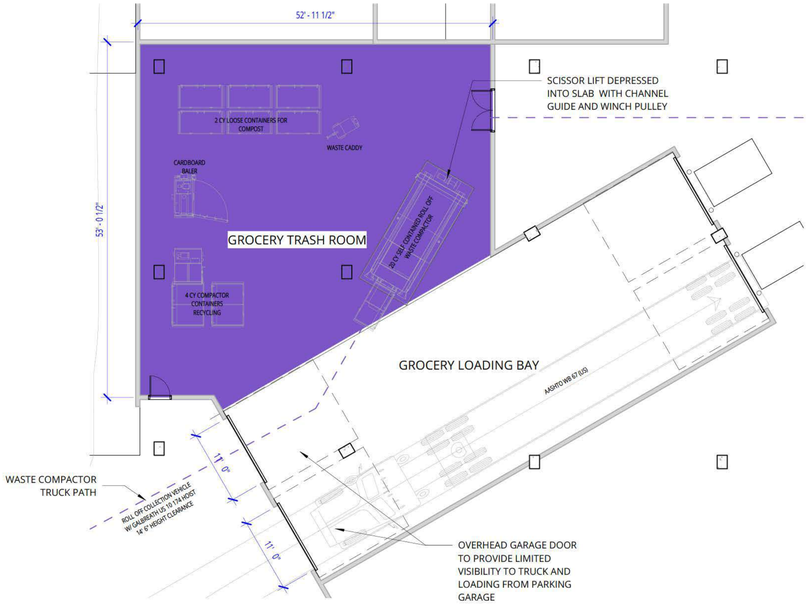
NO.	DATE	ISSUE

DRAWING TITLE: Proposed Site Plan

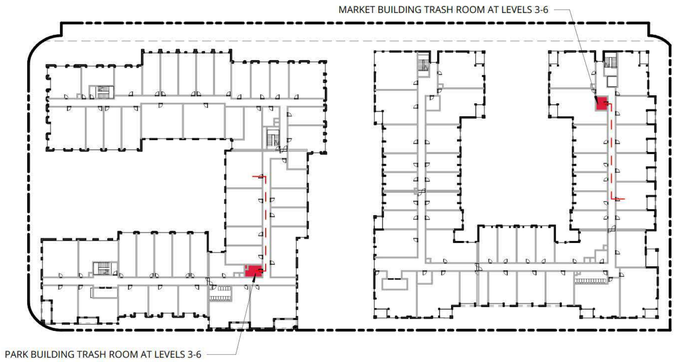
DRAWING NO: A1.01.1

APPENDIX 6

PARCEL 1-8
ILLUSTRATIVE REFUSE, RECYCLING, AND ZERO WASTE DIAGRAM



6 GROCERY TRASH ROOM
3/32" = 1'-0"



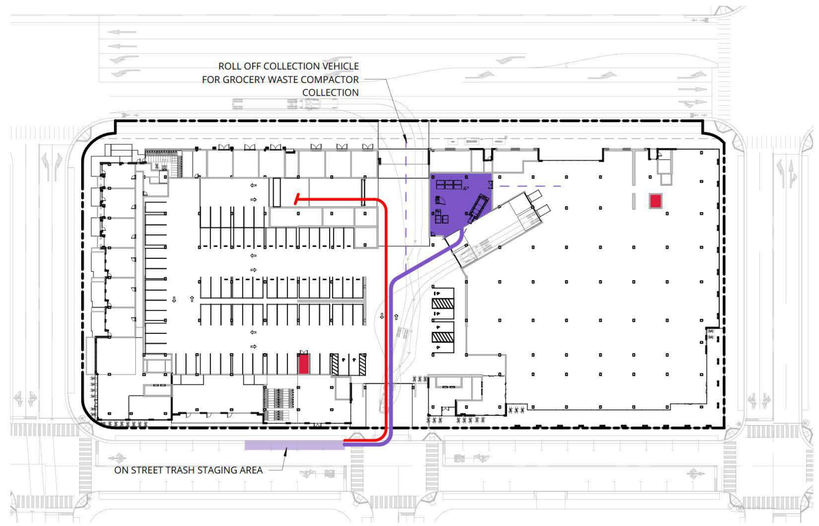
3 TRASH PLAN OVERALL LEVEL 4
1" = 60'-0"

LEGEND

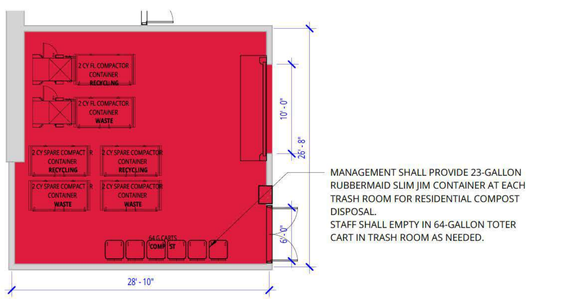
- RESIDENTIAL TRASH ROOM / CHUTE
- GROCERY TRASH ROOM
- TRASH COLLECTION AREA
- RESIDENTIAL TRASH CADDY ROUTE
- GROCERY TRASH CADDY ROUTE
- RESIDENTIAL TRASH CIRCULATION
- GROCERY TRASH CIRCULATION

PRELIMINARY PLAN

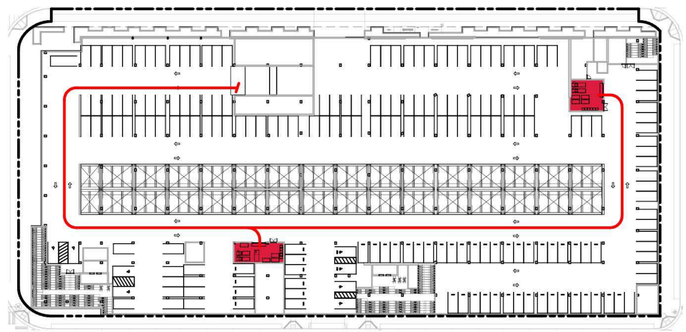
5 PARK BLDG TRASH ROOM
1/8" = 1'-0"



2 TRASH PLAN OVERALL LEVEL 1
1" = 60'-0"



4 MARKET BLDG TRASH ROOM
1/8" = 1'-0"



1 TRASH PLAN OVERALL LEVEL P1
1" = 60'-0"

0 60 120

8/24/2021 10:01:31 AM

PENINSULA INNOVATION PARTNERS

WILLOW VILLAGE
Architectural Control Package - Parcel 2
Menlo Park, CA

SCALE: As indicated

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09/07/2021	ACP

REVISIONS

NO.	DATE	ISSUE

DRAWING TITLE: REFUSE, RECYCLING, AND ZERO WASTE DIAGRAM

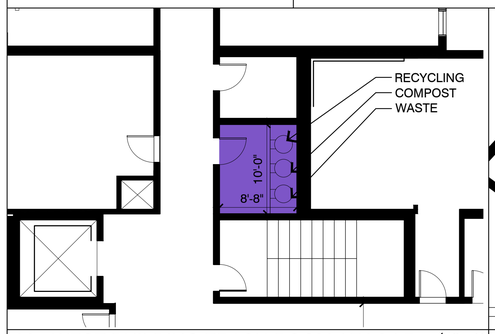
DRAWING NO: *A9.20

LEGEND

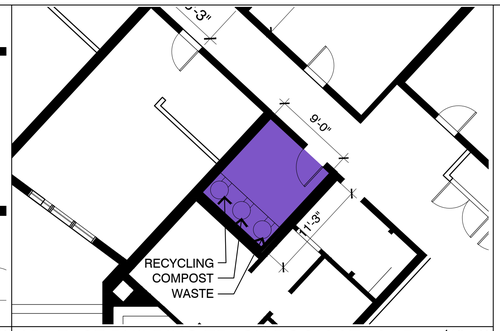
- TRASH CIRCULATION ROUTE
- TRASH ROOMS
- TRASH COLLECTIONS AREAS

GENERAL NOTES

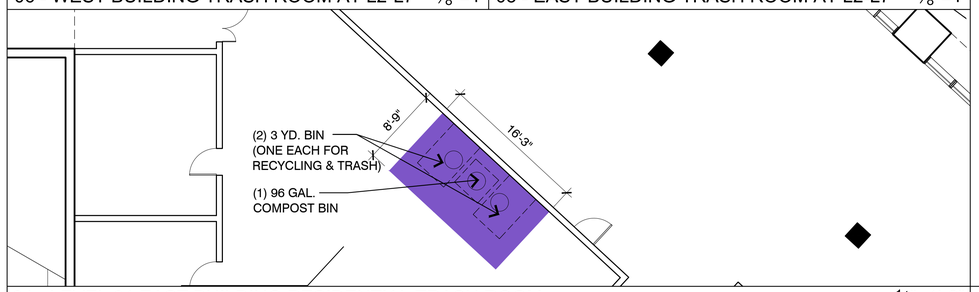
A. ALL PLANS ARE PRELIMINARY.
B. ALL UNITS PROVIDED WITH 3 STREAM COLLECTION FACILITIES.
C. TRASH CHUTES FOR 3 STREAM DEPOSITS FROM EACH UNIT PROVIDED ON EACH FLOOR.



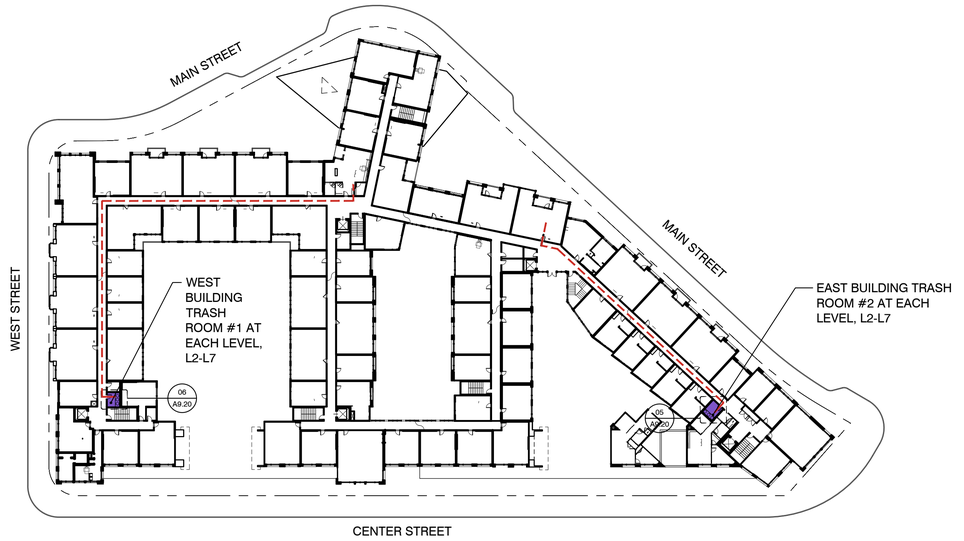
06 - WEST BUILDING TRASH ROOM AT L2-L7 1/8"=1'



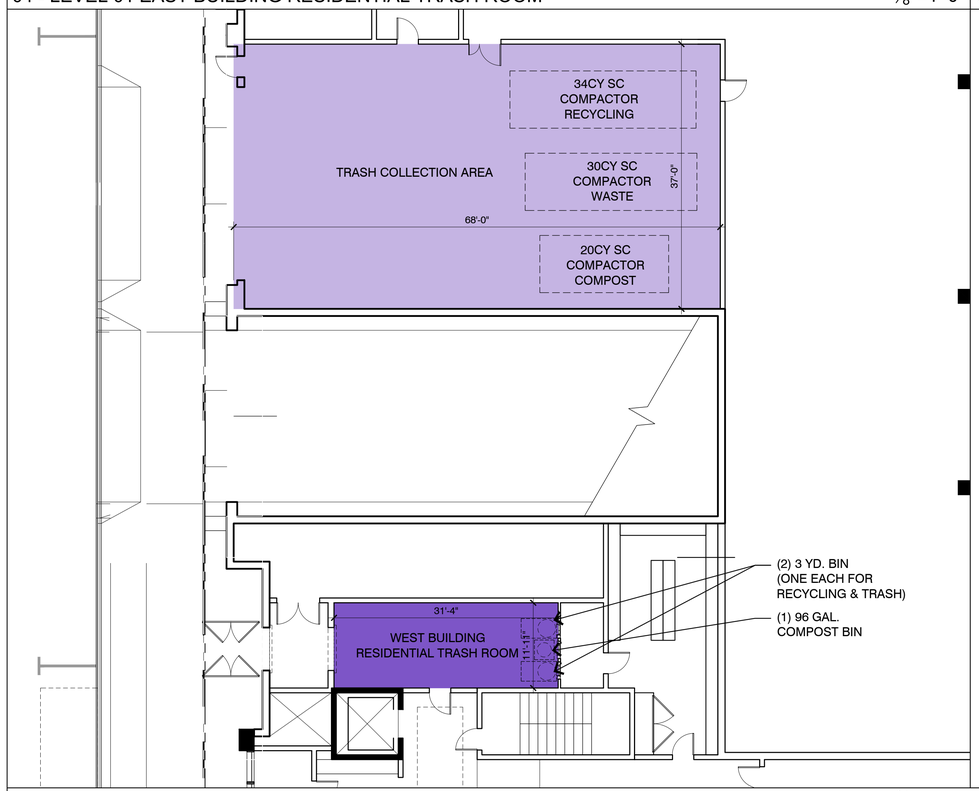
05 - EAST BUILDING TRASH ROOM AT L2-L7 1/8"=1'



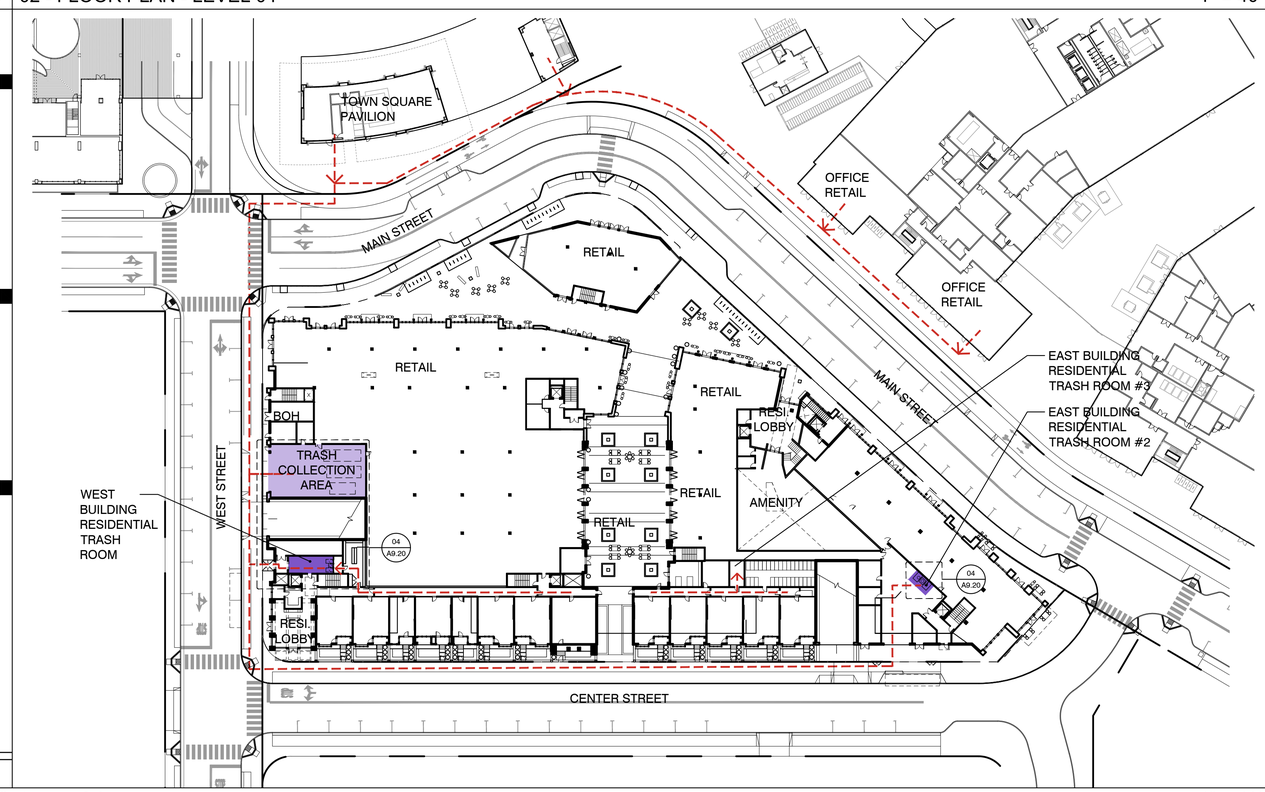
04 - LEVEL 01 EAST BUILDING RESIDENTIAL TRASH ROOM 1/8"=1'-0"



02 - FLOOR PLAN - LEVEL 04 1" = 40'-0"



03 - LEVEL 01 WEST BUILDING TRASH COLLECTION AREA 1/8"=1'-0"



01 - FLOOR PLAN - LEVEL 01 1" = 40'-0"

PENINSULA INNOVATION PARTNERS

WILLOW VILLAGE
Architectural Control Package - Parcel 3
Menlo Park, CA

SCALE:

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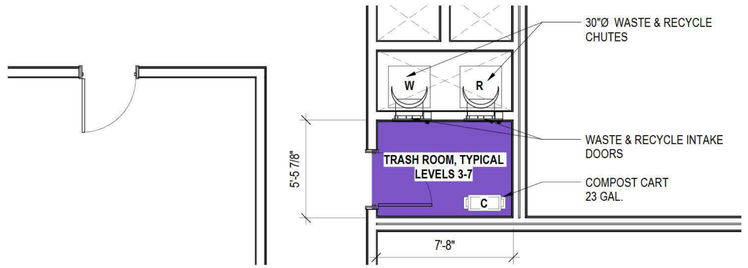
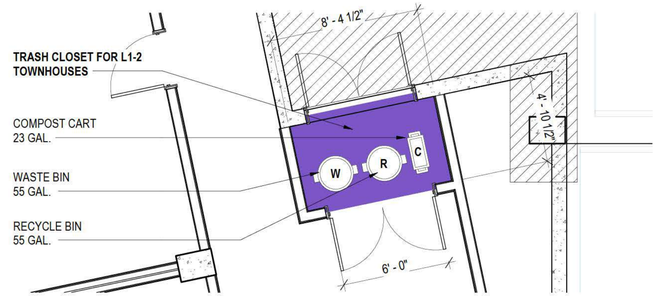
DRAWING TITLE:
REFUSE, RECYCLING, AND ZERO WASTE DIAGRAM

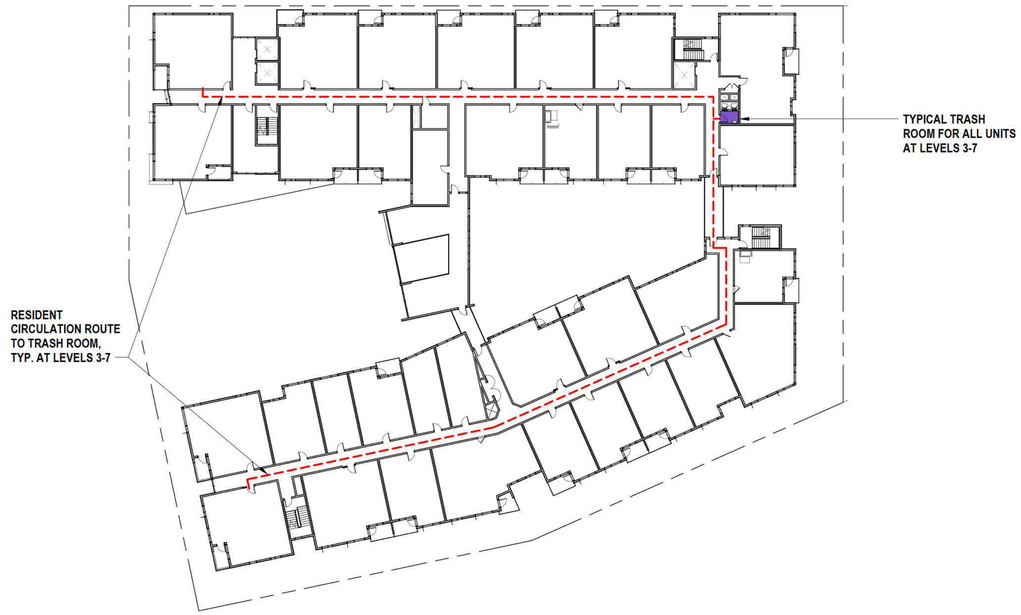
DRAWING NO:
A9.20



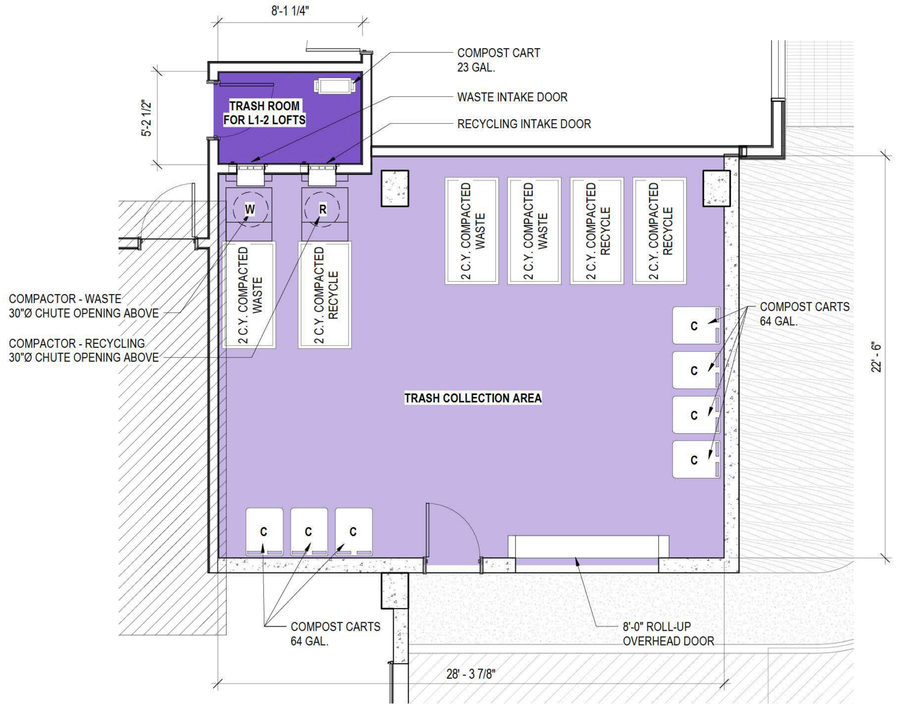
LEVEL 3-7, TYP. - TRASH ROOM (5)
1/4" = 1'-0"



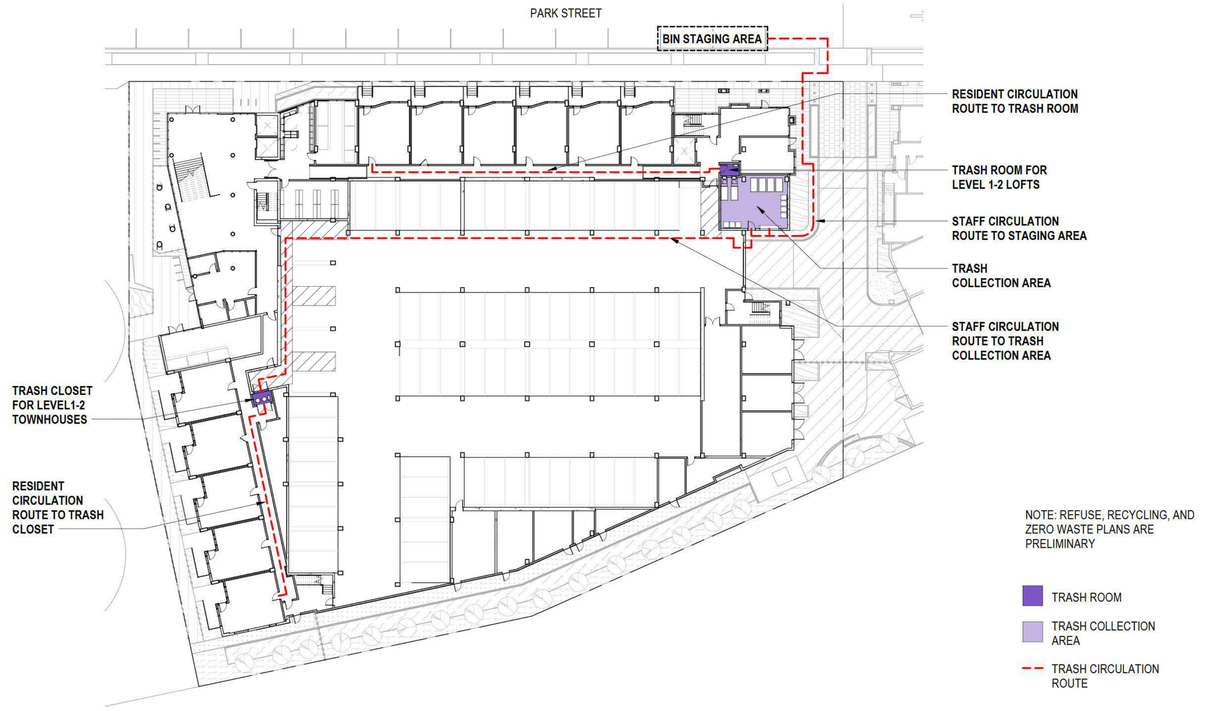
LEVEL 1 - ENLARGED TRASH CLOSET (4)
1/4" = 1'-0"



LEVEL 3-7, TYP. - REFUSE, RECYCLING & ZERO WASTE DIAGRAM (2)
1" = 30'-0"



LEVEL 1 - ENLARGED TRASH COLLECTION AREA & TRASH ROOM (3)
1/4" = 1'-0"



LEVEL 1 - REFUSE, RECYCLING & ZERO WASTE DIAGRAM (1)
1" = 30'-0"

8/30/2021 2:54:36 PM

PENINSULA INNOVATION PARTNERS

WILLOW VILLAGE
Architectural Control Package - Parcel 6
Menlo Park, CA

SCALE: As indicated

NOTE: THIS DRAWING IS ISO A1. DO NOT SCALE DRAWINGS. USE FIGURED DIMENSIONS ONLY. OR SEEK CLARIFICATION FROM ARCHITECT FOR MEASUREMENTS THAT ARE NOT INDICATED.

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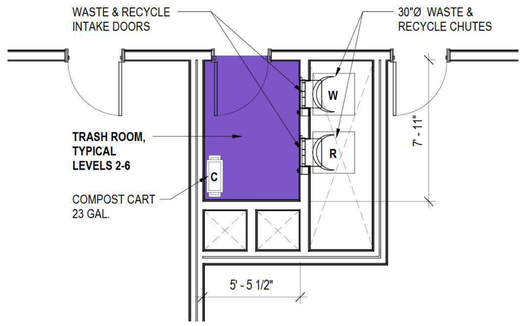
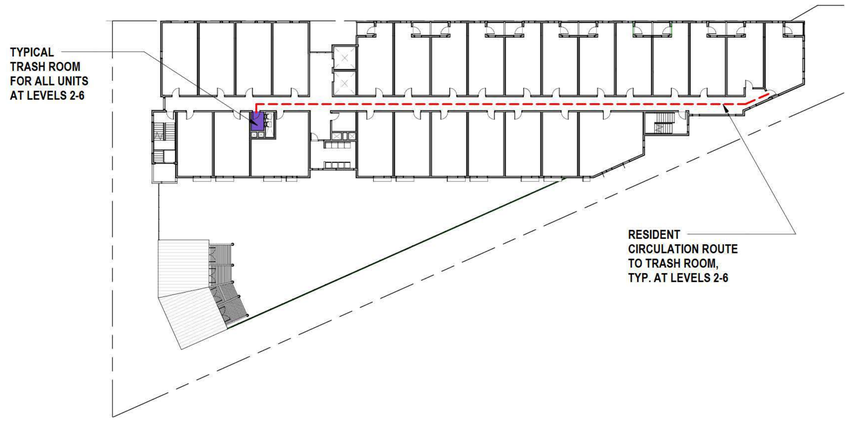
DRAWING TITLE: REFUSE, RECYCLING & ZERO WASTE DIAGRAM

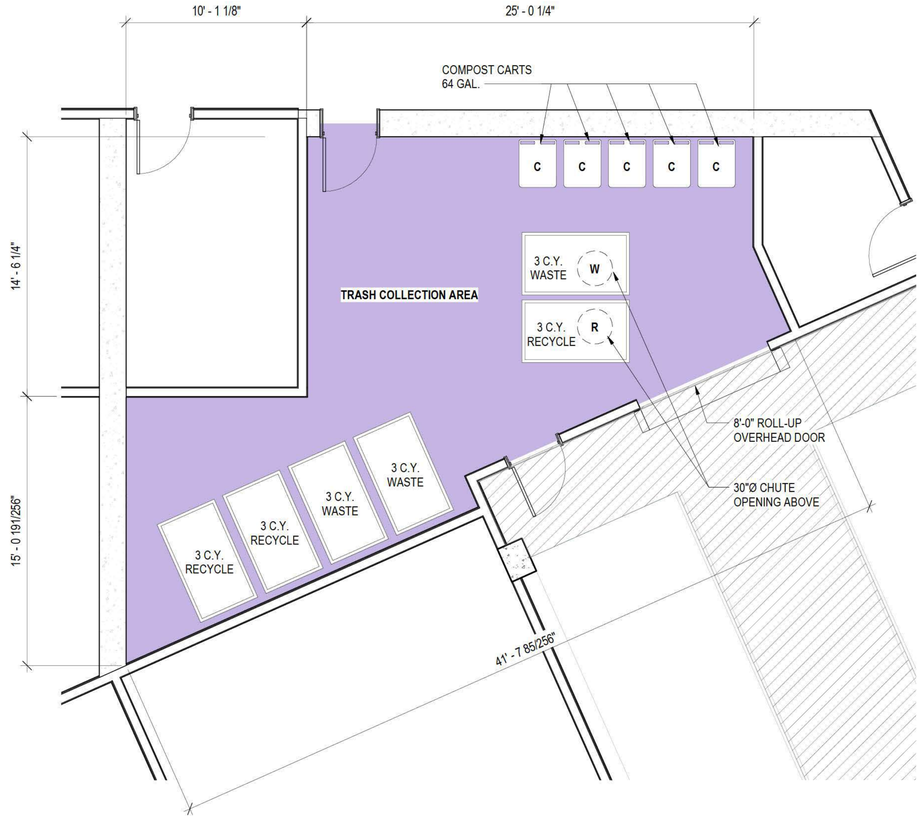
DRAWING NO: A9.20



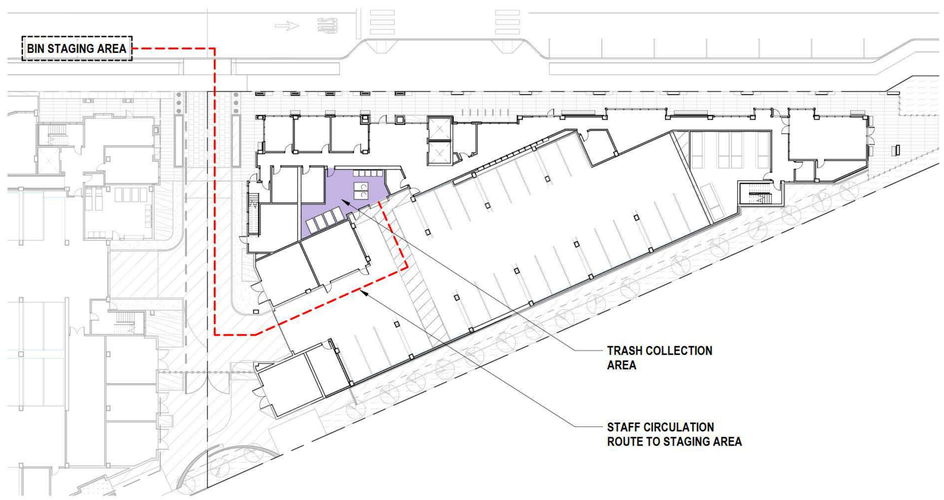
LEVEL 2-6, TYP. -TRASH ROOM (4)
1/4" = 1'-0"



LEVEL 2-6, TYP. - REFUSE, RECYCLING & ZERO WASTE DIAGRAM (2)
1" = 30'-0"



LEVEL 1 - ENLARGED TRASH COLLECTION AREA (3)
1/4" = 1'-0"



LEVEL 1 - REFUSE, RECYCLING & ZERO WASTE DIAGRAM (1)
1" = 30'-0"

NOTE: REFUSE, RECYCLING, AND ZERO WASTE PLANS ARE PRELIMINARY

- TRASH ROOM
- TRASH COLLECTION AREA
- TRASH CIRCULATION ROUTE

PENINSULA INNOVATION PARTNERS

WILLOW VILLAGE
Architectural Control Package - Parcel 7
Menlo Park, CA

SCALE: As indicated

NOTE: THIS DRAWING IS ISO A1. DO NOT SCALE DRAWINGS. USE FIGURED DIMENSIONS ONLY, OR SEEK CLARIFICATION FROM ARCHITECT FOR MEASUREMENTS THAT ARE NOT INDICATED.

MILESTONES

DATE	ISSUE
09/07/2021	ACP

REVISIONS

NO.	DATE	ISSUE

DRAWING TITLE: REFUSE, RECYCLING & ZERO WASTE DIAGRAM

DRAWING NO: A9.20

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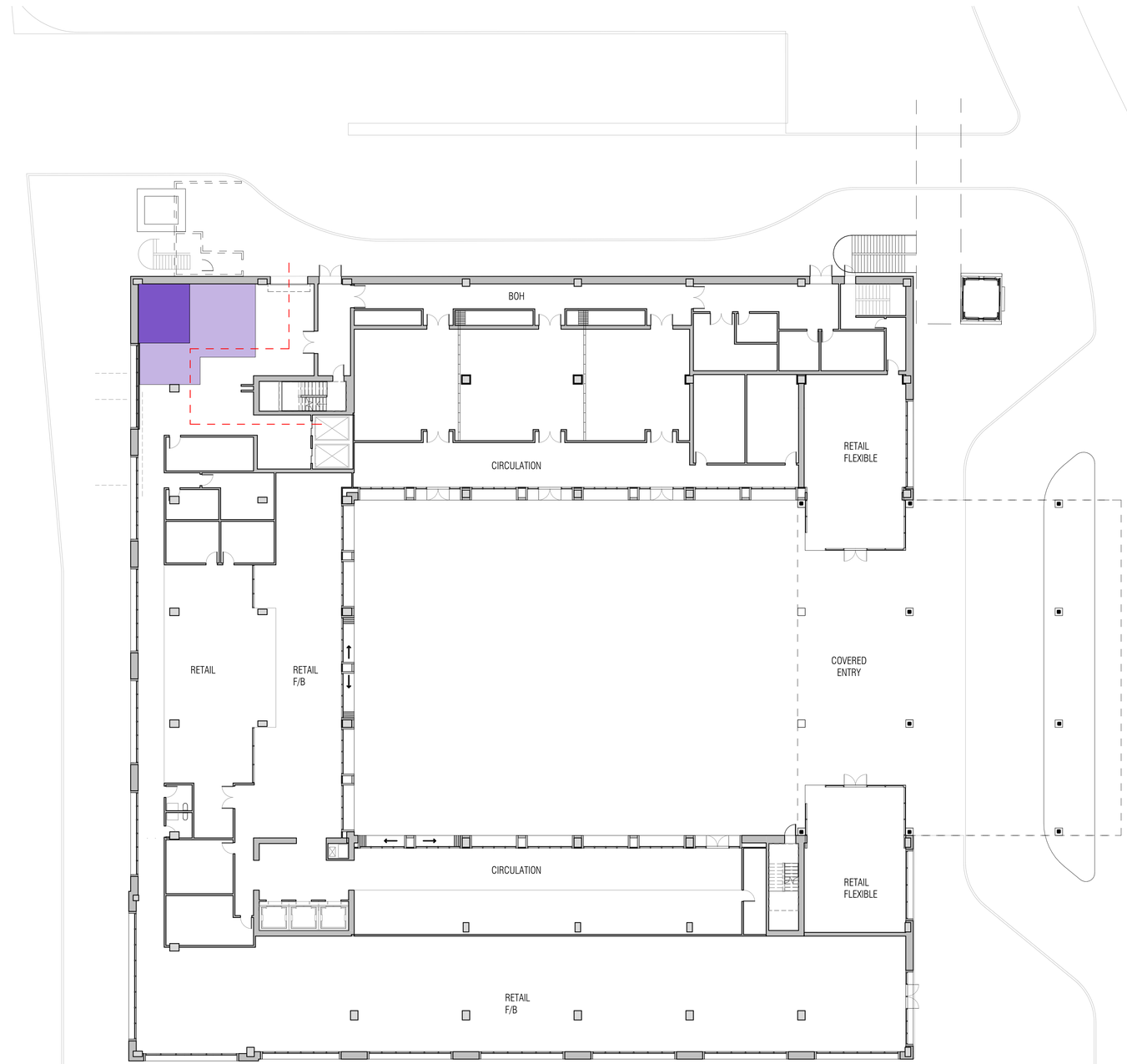
Key

- Trash Room
- Trash Collection Area
- Trash Circulation



1 HOTEL LEVEL 01

1/16" = 1'-0"

8/27/2021 1:53:07 PM

PENINSULA INNOVATION PARTNERS

WILLOW VILLAGE

Architectural Control Package - Parcel 1 - Hotel

Menlo Park, CA

SCALE: As indicated

NOTE: THIS DRAWING IS ISO A1. DO NOT SCALE DRAWINGS. USE FIGURED DIMENSIONS ONLY. OR SEEK CLARIFICATION FROM ARCHITECT FOR MEASUREMENTS THAT ARE NOT INDICATED.

MILESTONES

DATE	ISSUE
09/07/2021	ACP

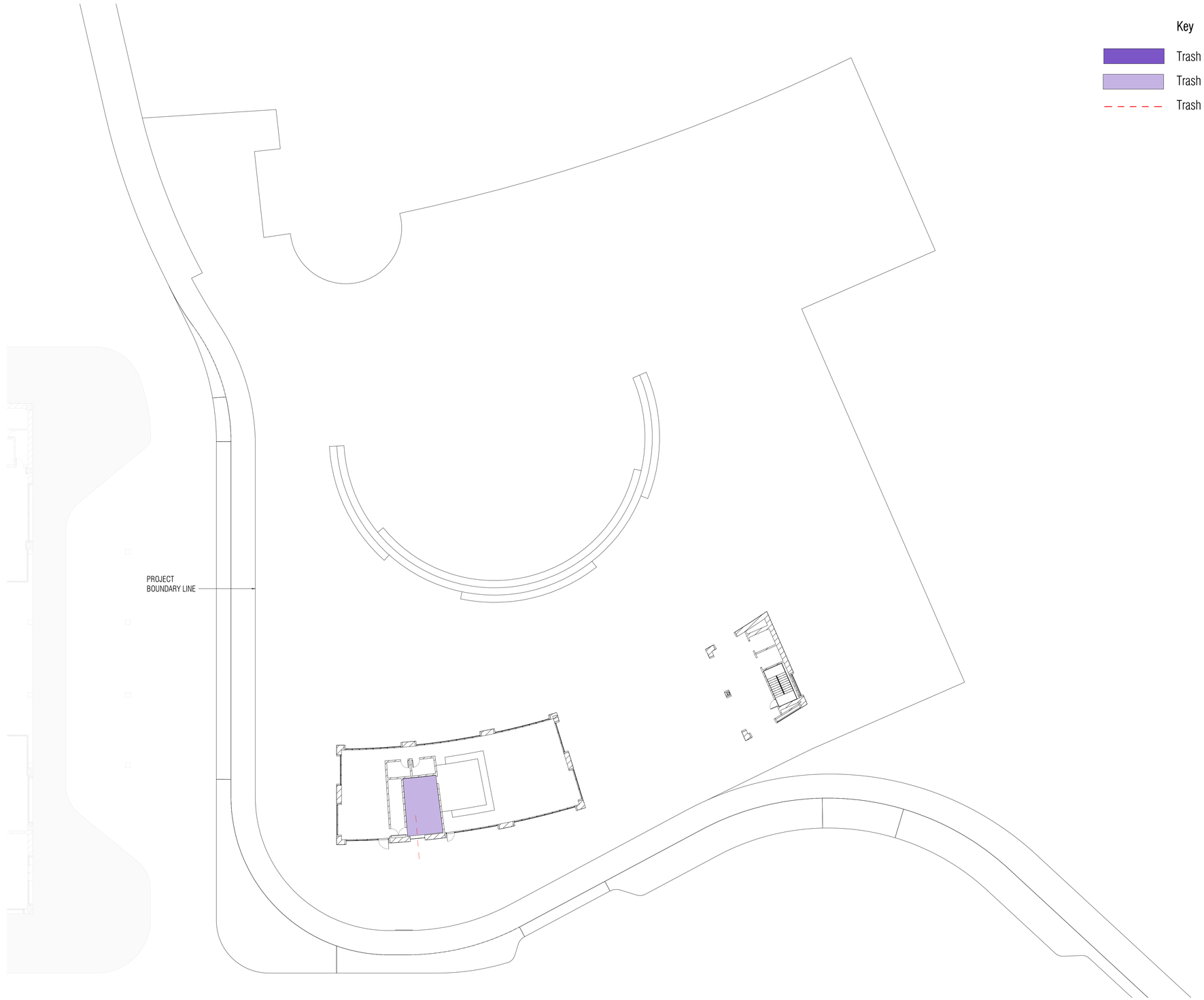
REVISIONS

NO.	DATE	ISSUE

DRAWING TITLE:
Willow Village Hotel
Refuse, Recycling and Zero Waste
Diagram

DRAWING NO:

A9.20



3 TOWN SQUARE PAVILION - LEVEL 1
1" = 20'-0"

8/10/2021 9:38:59 PM

PENINSULA INNOVATION PARTNERS

WILLOW VILLAGE
Architectural Control Package - Parcel 1 - Hotel
Menlo Park, CA

SCALE: As indicated

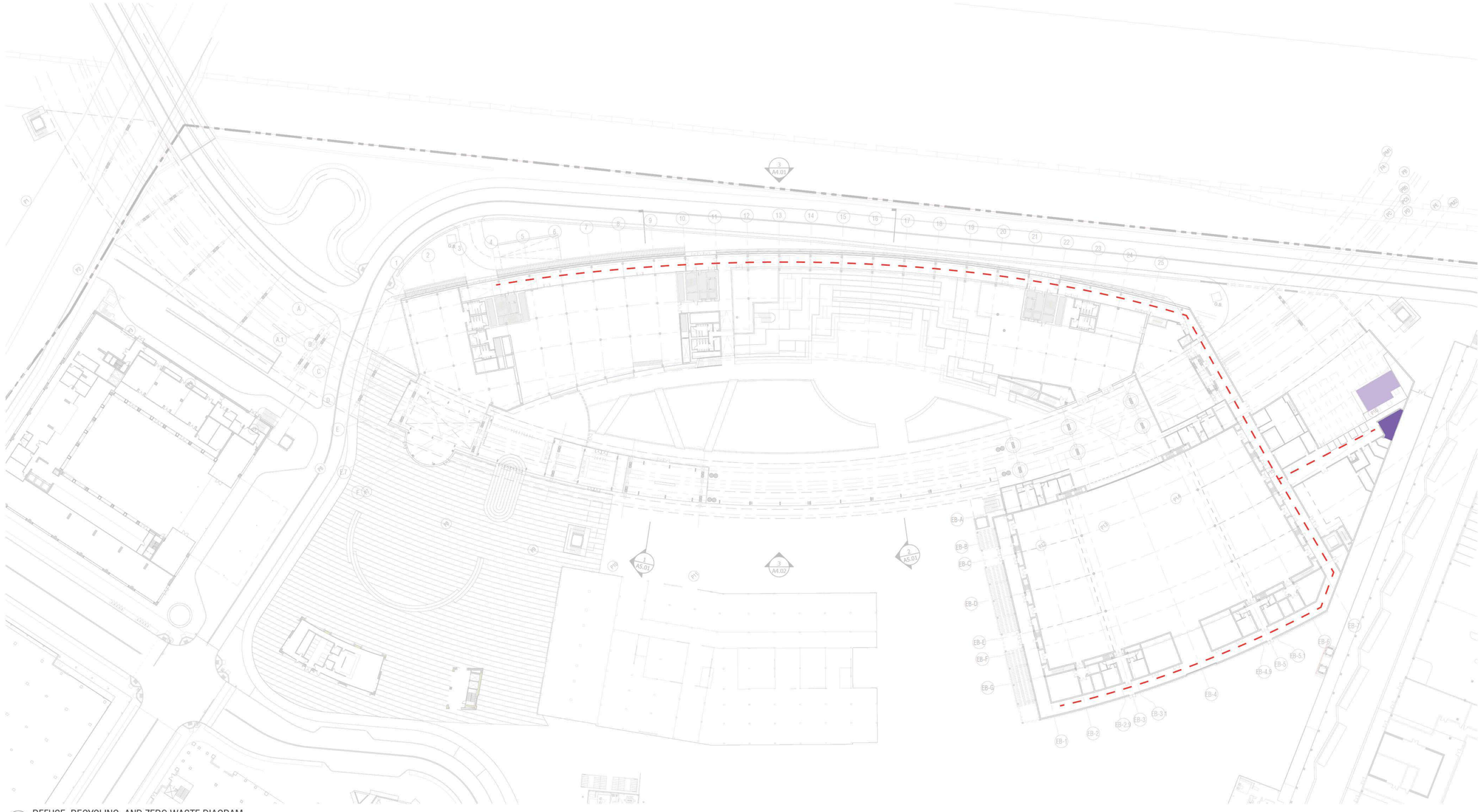
NOTE: THIS DRAWING IS ISO A1. DO NOT SCALE DRAWINGS. USE FIGURED DIMENSIONS ONLY, OR SEEK CLARIFICATION FROM ARCHITECT FOR MEASUREMENTS THAT ARE NOT INDICATED.

MILESTONES	
DATE	ISSUE
09/07/2021	ACP

REVISIONS		
NO.	DATE	ISSUE

DRAWING TITLE:
Willow Village Hotel
Refuse, Recycling and Zero Waste
Diagram

DRAWING NO:
A9.20



1 REFUSE, RECYCLING, AND ZERO WASTE DIAGRAM
1" = 40'-0"

TRASH CIRCULATION ROUTE

TRASH ROOM

TRASH COLLECTION AREA

PENINSULA INNOVATION PARTNERS

WILLOW VILLAGE
Architectural Control Package - Parcel 1
Menlo Park, CA

SCALE:

NOTE: THIS DRAWING IS ISO A1. DO NOT SCALE DRAWINGS. USE FIGURED DIMENSIONS, OR SEEK CLARIFICATION FROM ARCHITECT FOR MEASUREMENTS THAT ARE NOT INDICATED.

MILESTONES	
DATE	ISSUE
09/07/2021	ACP

REVISIONS		
NO.	DATE	ISSUE

DRAWING TITLE:
REFUSE, RECYCLING, ZERO WASTE DIAGRAM

DRAWING NO:
A9.20

1 Garbage Removal Site Plan - Level 1
1" = 80'-0"

True North

0 80 160

8/31/2021 9:34:57 AM

PENINSULA INNOVATION PARTNERS

WILLOW VILLAGE

Architectural Control Package - Parcel 1 (Portion) & 8

Menlo Park, CA

SCALE: 1" = 80'-0"

NOTE: THIS DRAWING IS ISO A1. DO NOT SCALE DRAWINGS. USE FIGURED DIMENSIONS ONLY, OR SEEK CLARIFICATION FROM ARCHITECTS ON MEASUREMENTS THAT ARE NOT INDICATED.

MILESTONES

DATE	ISSUE
09/07/2021	ACP

REVISIONS

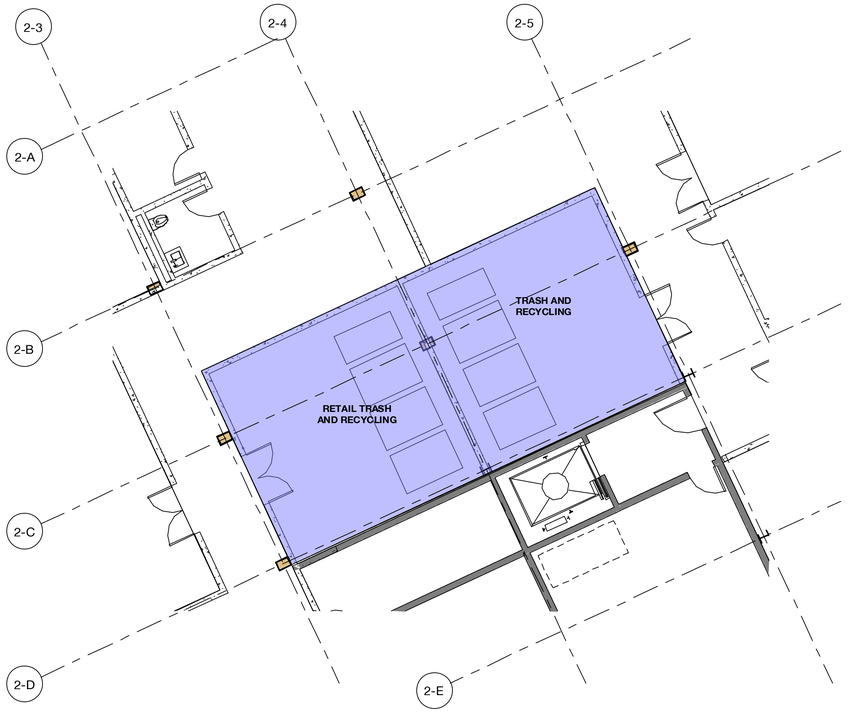
NO.	DATE	ISSUE

DRAWING TITLE:

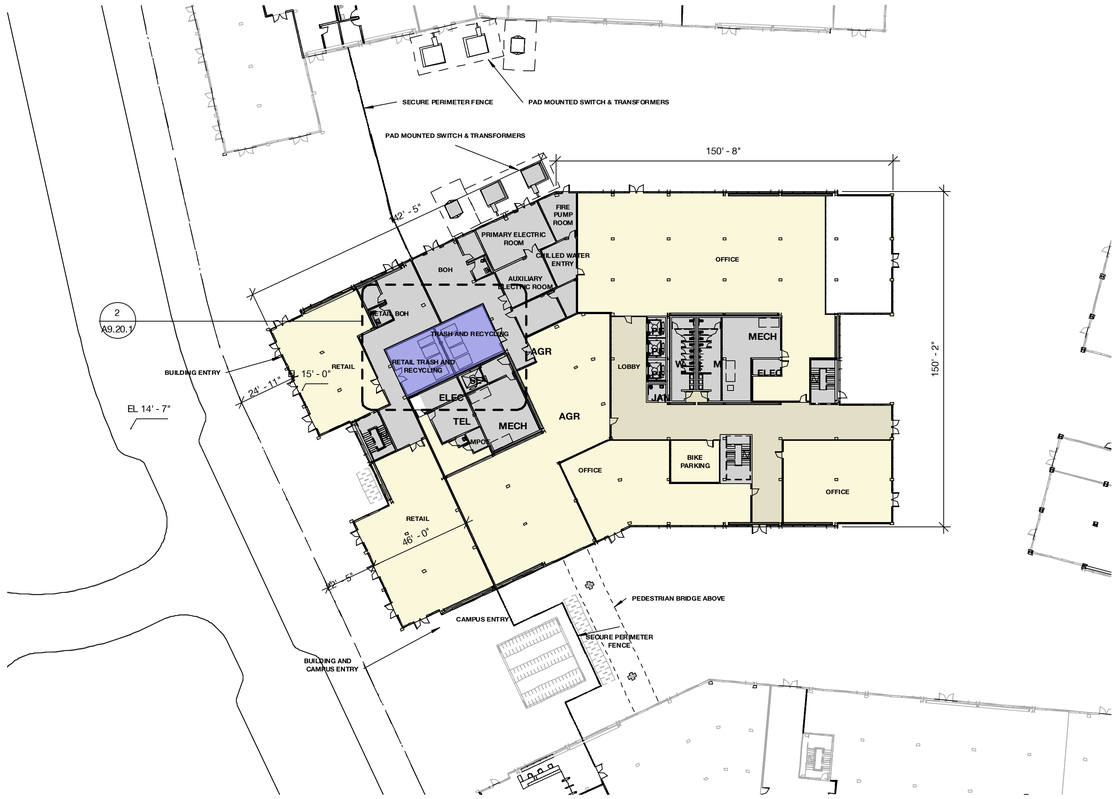
Refuse, Recycling, and Zero Waste Diagram

DRAWING NO:

A9.20



2 Building 02 - Level 1 - Trash Removal - Callout 1
1/8" = 1'-0"



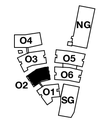
1 Building 02 - Level 1 - Trash Removal
1/32" = 1'-0"

Plan North

True North

0 16 32 64

8/31/2021 9:35:12 AM



PENINSULA INNOVATION PARTNERS

WILLOW VILLAGE
Architectural Control Package - Parcel 1 (Portion) & 8
Menlo Park, CA

SCALE: As indicated

NOTE: THIS DRAWING IS ISSUED AS 'DO NOT SCALE' DRAWING. USE FIGURED DIMENSIONS ONLY, OR SEEK CLARIFICATION FROM ARCHITECT FOR MEASUREMENTS THAT ARE NOT INDICATED.

MILESTONES

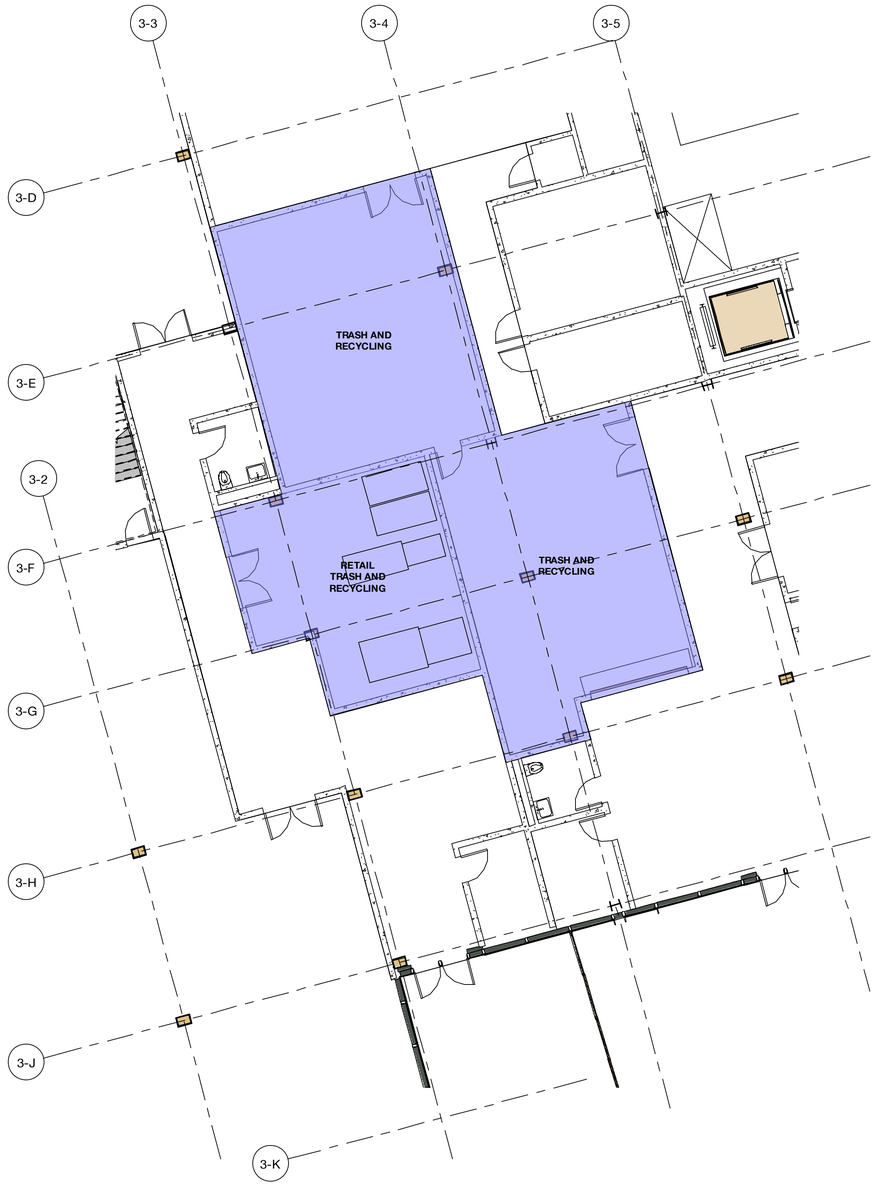
DATE	ISSUE
09/07/2021	ACP

REVISIONS

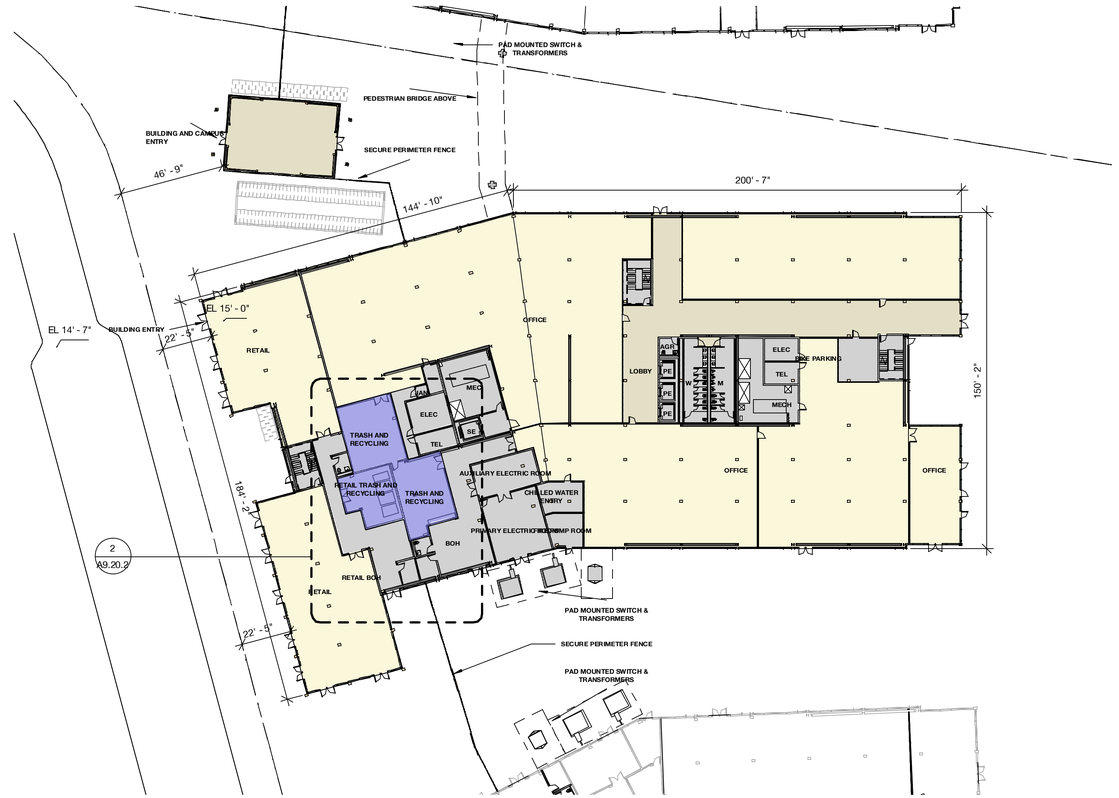
NO.	DATE	ISSUE

DRAWING TITLE:
Refuse, Recycling, and Zero Waste Diagram - O2

DRAWING NO:
A9.20.1



2 Building 03 - Level 1 Trash Removal - Callout 1
1/8" = 1'-0"



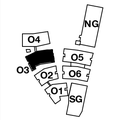
1 Building 03 - Level 1 Trash Removal
1/32" = 1'-0"

Plan North

True North

0 16 32 64

8/31/2021 9:35:24 AM



PENINSULA INNOVATION PARTNERS

WILLOW VILLAGE
Architectural Control Package - Parcel 1 (Portion) & 8
Menlo Park, CA

SCALE: As indicated

NOTE: THIS DRAWING IS ISO A1. DO NOT SCALE DRAWINGS. USE FIGURED DIMENSIONS ONLY, OR SEEK CLARIFICATION FROM ARCHITECT FOR MEASUREMENTS THAT ARE NOT INDICATED.

MILESTONES

DATE	ISSUE
09/07/2021	ACP

REVISIONS

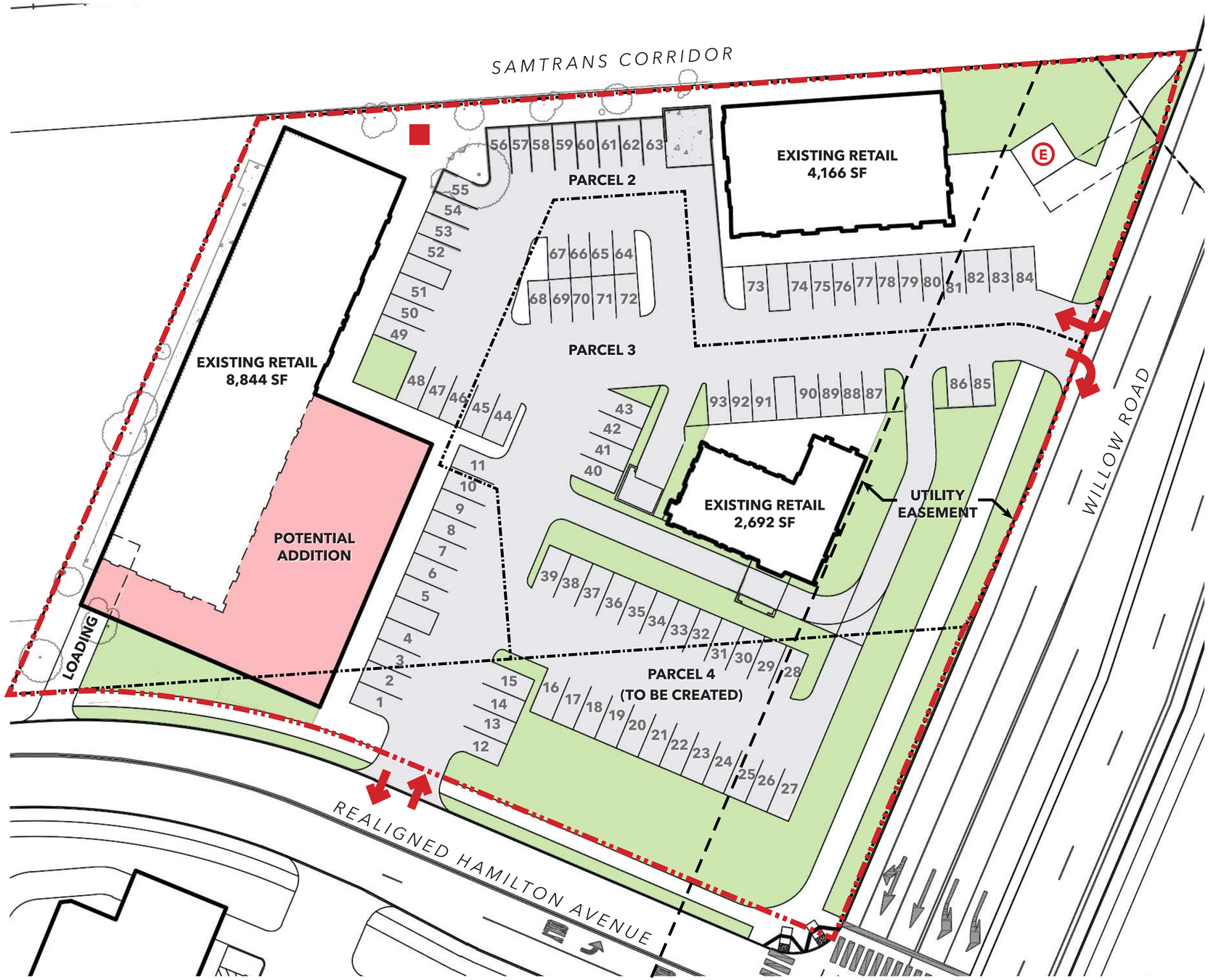
NO.	DATE	ISSUE

DRAWING TITLE:
Refuse, Recycling, and Zero Waste Diagram - O3

DRAWING NO:
A9.20.2

APPENDIX 7

CONCEPTUAL HAMILTON PARCELS



LEGEND

	Existing Parcel Boundary
	Existing Easement Boundary
	Proposed Parcel Boundary
	Proposed Added Built Area
	Proposed Landscaped Area
	Proposed Generator*
E	Proposed Elevator to Elevated Park Access
	Driveway Access

*Generator to be place within sound attenuating enclosure.

SITE AREA

Existing Total Site Area (Parcels 2 & 3)	+/- 1.81 acre
Proposed Site Area (Parcels 2, 3, 4)	+/- 2.21 acre

BUILT AREA

Existing Total Area	15,702 sf
Potential Area Added	Up to 6,700 sf
Proposed Potential Total Area	Up to 22,402 sf

PARKING

Proposed Total Parking	93 spaces
Proposed Parking Ratio	4.16 spaces/ksf

0 20 40 60 80 100

1" = 20' at 24" x 36"

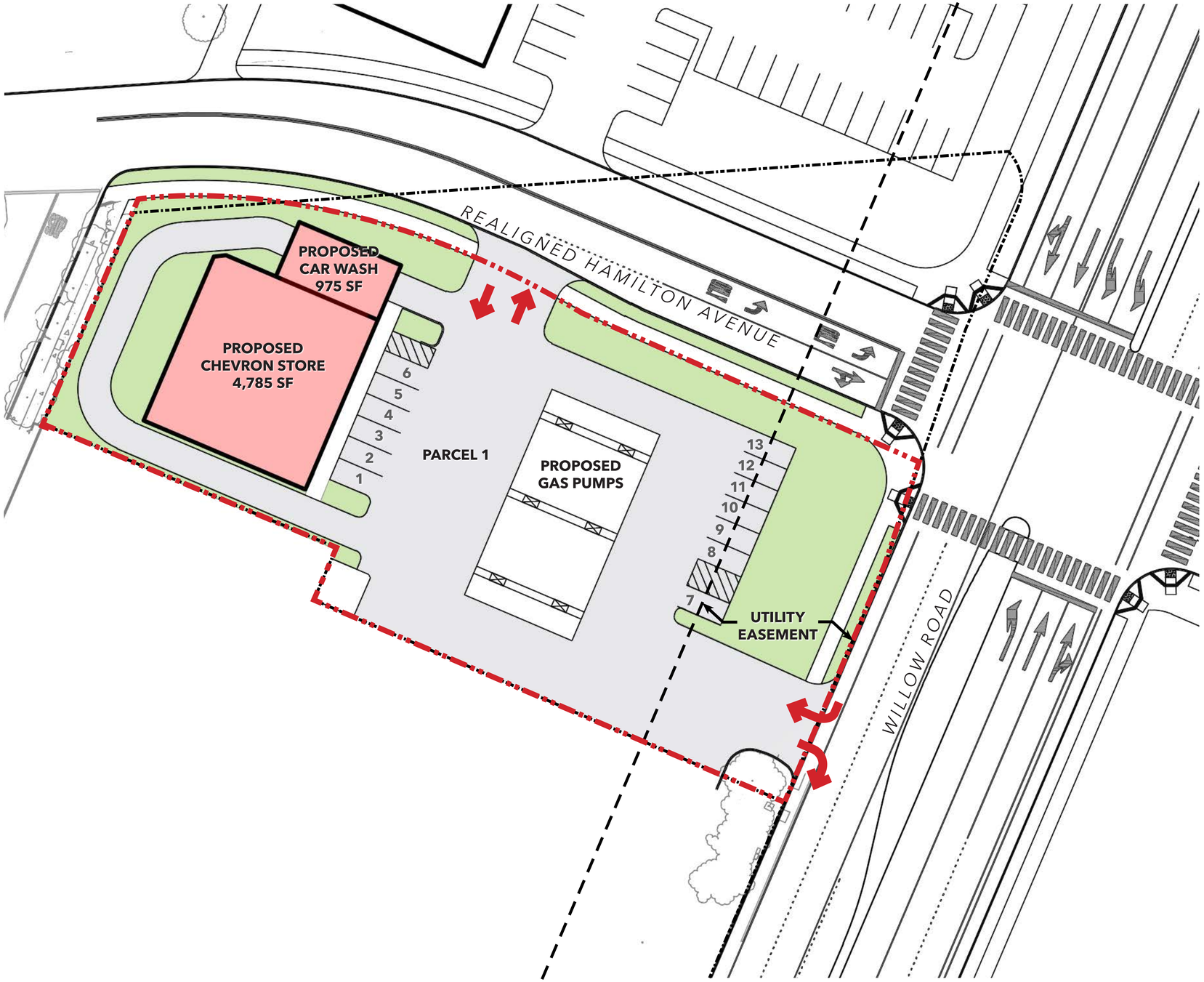
Peninsula Innovation Partners

HAMILTON AVENUE PARCEL NORTH

Menlo Park, CA

Potential Site Plan To Be Studied

December 23, 2021



LEGEND	
	Existing Parcel Boundary
	Existing Easement Boundary
	Proposed Parcel Boundary
	Proposed Built Area
	Proposed Landscaped Area
	Driveway Access

SITE AREA	
Existing Site Area	+/- 1.33 acre
Proposed Site Area	+/- 0.97 acre

BUILT AREA	
Proposed Total Area	5,760 sf

PARKING	
Proposed Total Parking	13 spaces
Proposed Parking Ratio	2.26 spaces/ksf

0 20 40 60 80 100

1" = 20' at 24" x 36"

Peninsula Innovation Partners

HAMILTON AVENUE PARCEL SOUTH

Menlo Park, CA

Proposed Site Plan

December 23, 2021

APPENDIX 8

EXISTING LAND USE ENLARGEMENT

Use	Office (GSF)	R&D (GSF)	Warehouse (GSF)
Total	46,640	0	0

Level 1

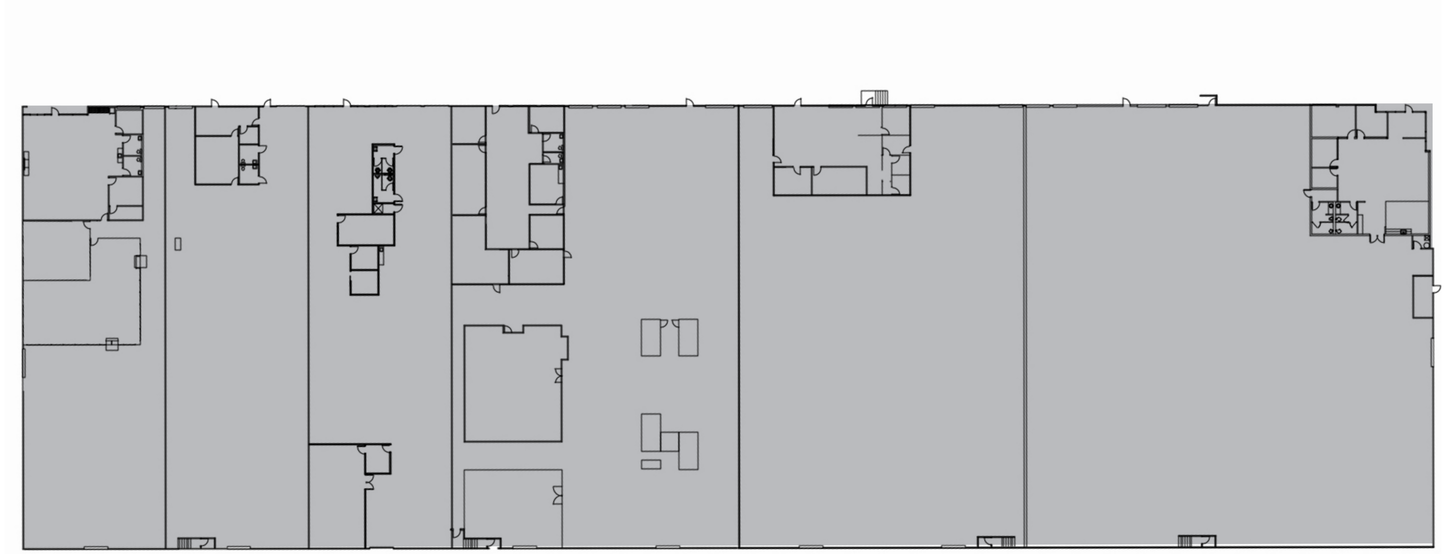
MPK 40
1050-1098 Hamilton Avenue

30 seconds Walk

0 30 60 90 120 150 180 240'

1" = 30' at 24" x 36"

Use	Office (GSF)	R&D (GSF)	Warehouse (GSF)
Total	0	0	109,620



Level 1

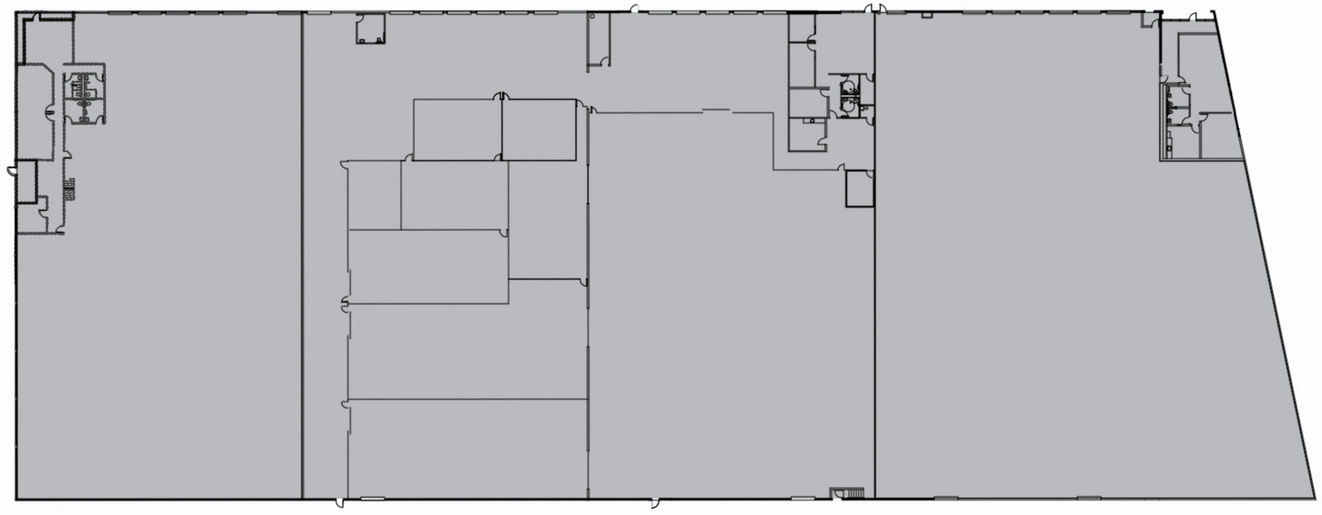
30 seconds Walk

0 30 60 90 120 150 180 240'

1" = 30' at 24" x 36"

MPK 41
1100-1190 Hamilton Court

Use	Office (GSF)	R&D (GSF)	Warehouse (GSF)
Total	0	0	107,350

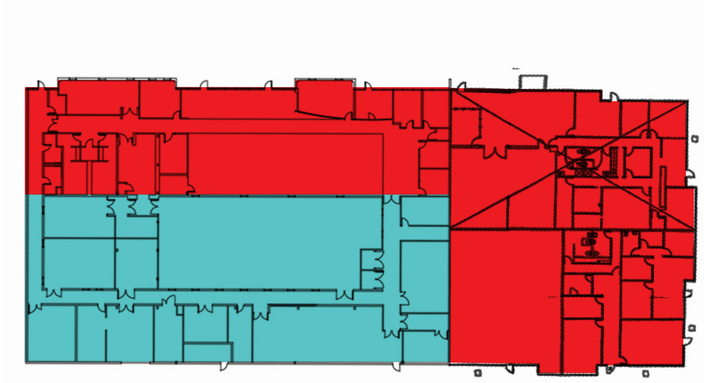


Level 1

MPK 42
1200-1280 Hamilton Court

Use	Office (GSF)	R&D (GSF)	Warehouse (GSF)
Total	10,250	10,590	0

Note: Tenants are Satellite Healthcare and Community Legal Services.



Level 1

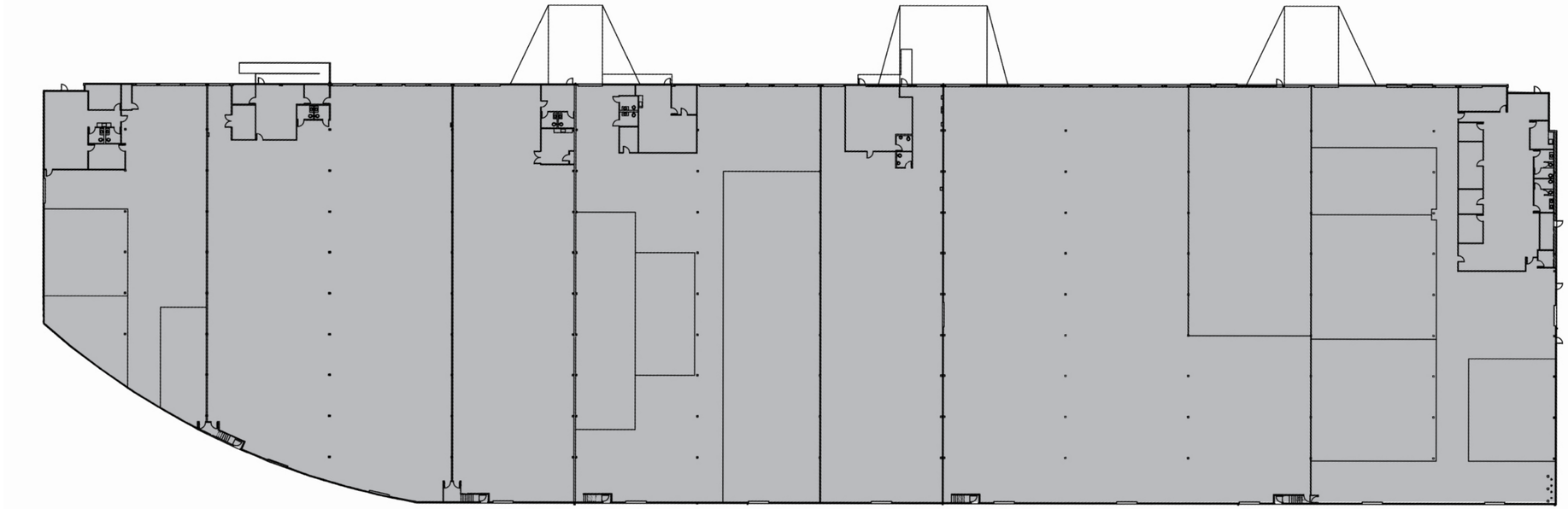
MPK 43
1010-1042 Hamilton Court

30 seconds Walk

0 30 60 90 120 150 180 240'

1" = 30' at 24" x 36"

Use	Office (GSF)	R&D (GSF)	Warehouse (GSF)
Total	0	0	145,080



Level 1

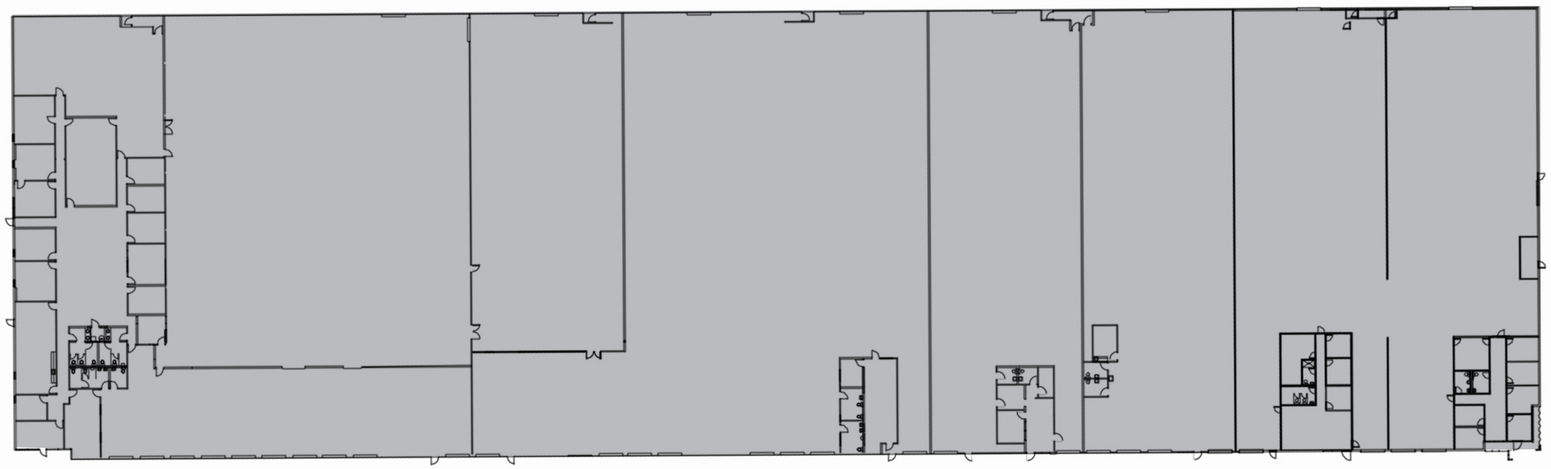
30 seconds Walk

0 30 60 90 120 150 180 240'

1" = 30' at 24" x 36"

MPK 44
1205-1275 Hamilton Court

Use	Office (GSF)	R&D (GSF)	Warehouse (GSF)
Total	0	0	118,740



Level 1

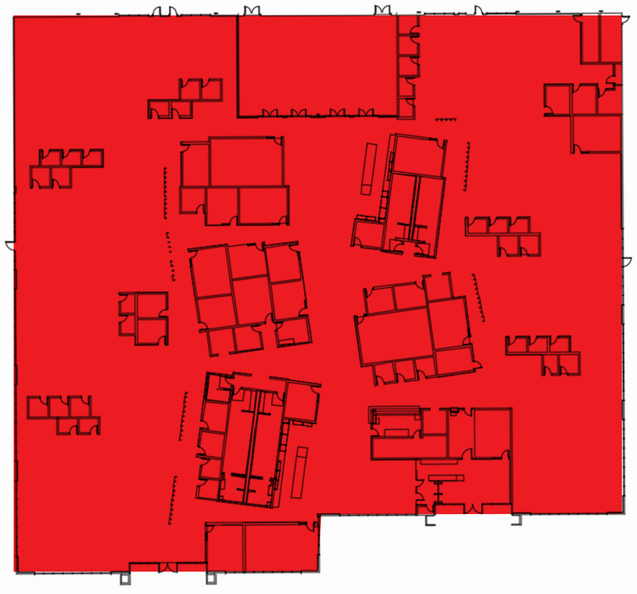
30 seconds Walk

0 30 60 90 120 150 180 240'

1" = 30' at 24" x 36"

MPK 45
1105-1195 Hamilton Court

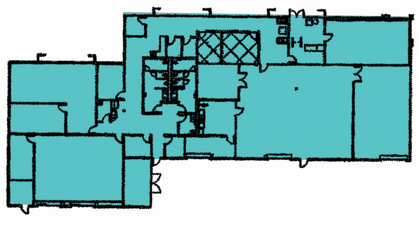
Use	Office (GSF)	R&D (GSF)	Warehouse (GSF)
Total	56,340	0	0



Level 1

MPK 46
1003-1005 Hamilton Avenue

Use	Office (GSF)	R&D (GSF)	Warehouse (GSF)
Total	0	10,400	0



Level 1

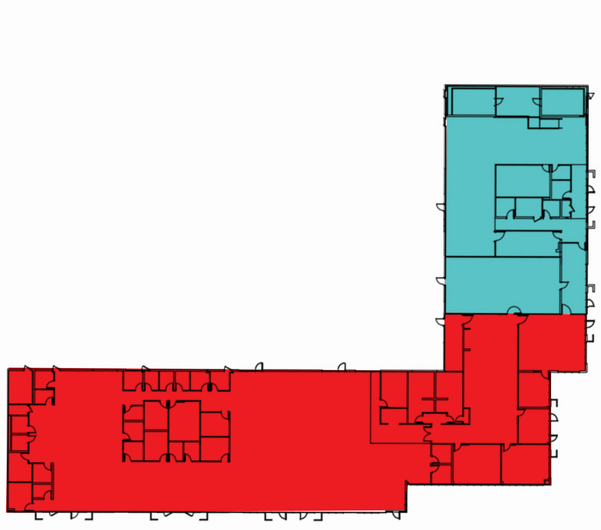
MPK 47
959-967 Hamilton Avenue

30 seconds Walk

0 30 60 90 120 150 180 240'

1" = 30' at 24" x 36"

Use	Office (GSF)	R&D (GSF)	Warehouse (GSF)
Total	14,410	5,750	0



Level 1

MPK 48
927-953 Hamilton Avenue

Use	Office (GSF)	R&D (GSF)	Warehouse (GSF)	Health Center (GSF)
Total	0	0	0	24,060

Level 1

MPK 49
923-925 Hamilton Avenue

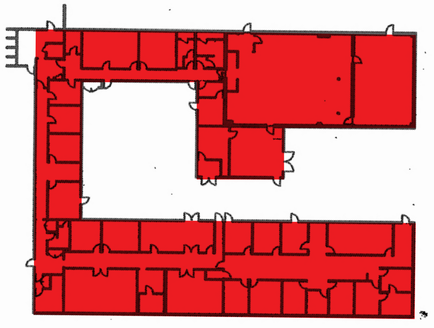
30 seconds Walk

0 30 60 90 120 150 180 240'

1" = 30' at 24" x 36"

Use	Office (GSF)	R&D (GSF)	Warehouse (GSF)
Total	15,200*	0	0

* Most recent land use.

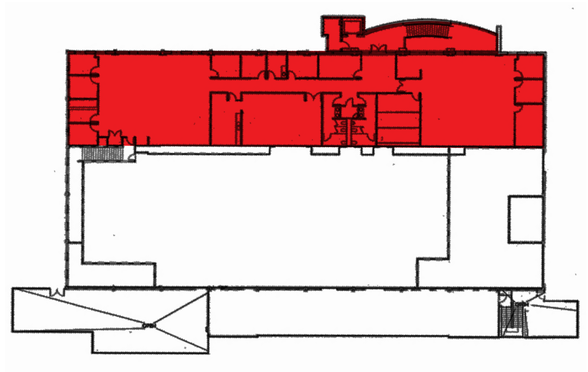


Level 1

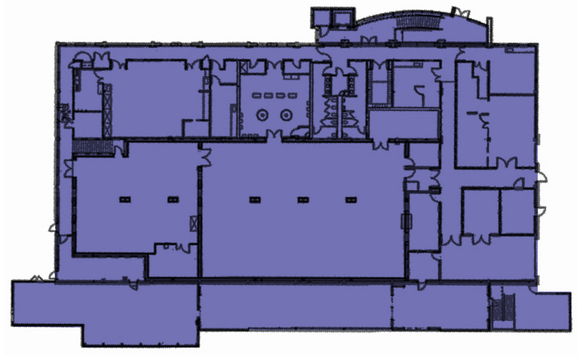
MPK 50
1390 Willow Road

Use / Level	Office (GSF)	R&D (GSF)	Warehouse (GSF)	Lab & Manufacture (GSF)
1	0	0	0	21,300*
2	2,270*	0	0	0
Total	2,270	0	0	21,300

Note: Level 2 mechanical duct platform (white area below) is excluded from total GSF.
* Most recent land use.



Level 2



Level 1

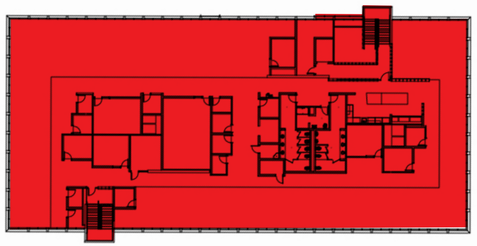
MPK 51
940 Hamilton Avenue

30 seconds Walk

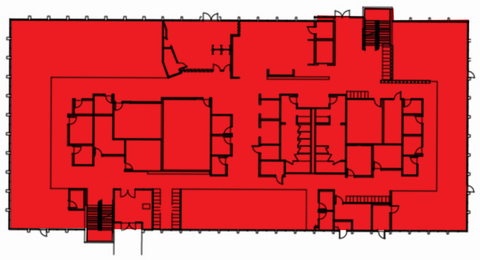
0 30 60 90 120 150 180 240'

1" = 30' at 24" x 36"

Use / Level	Office (GSF)	R&D (GSF)	Warehouse (GSF)
1	17,125	0	0
2	17,765	0	0
Total	34,890	0	0



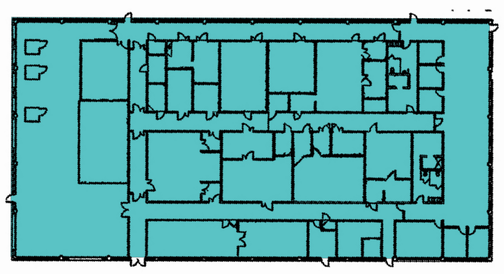
Level 2



Level 1

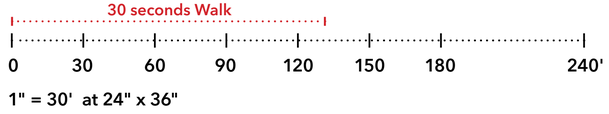
MPK 52
1380 Willow Road

Use / Level	Office (GSF)	R&D (GSF)	Warehouse (GSF)
Total	0	19,970	0



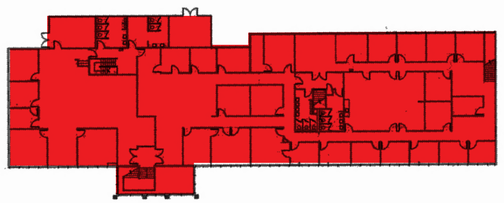
Level 1

MPK 53
960 Hamilton Avenue

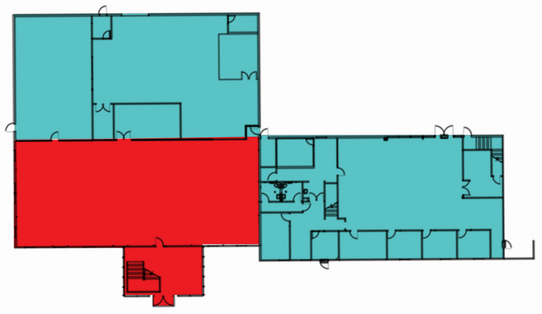


Use / Level	Office (GSF)	R&D (GSF)	Warehouse (GSF)
1	5,020*	10,050**	0
2	11,670*	0	0
Total	16,690	10,050	0

* Most recent land use.
** Current land use.



Level 2

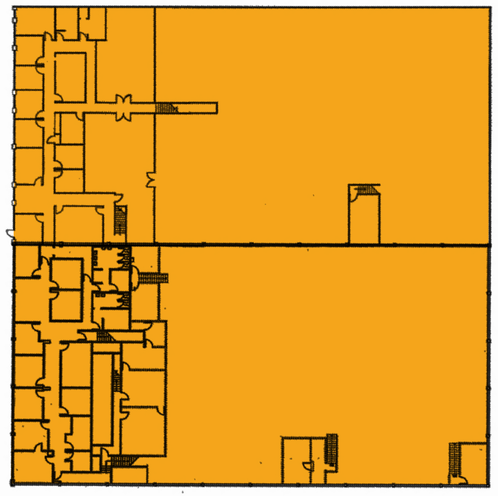


Level 1

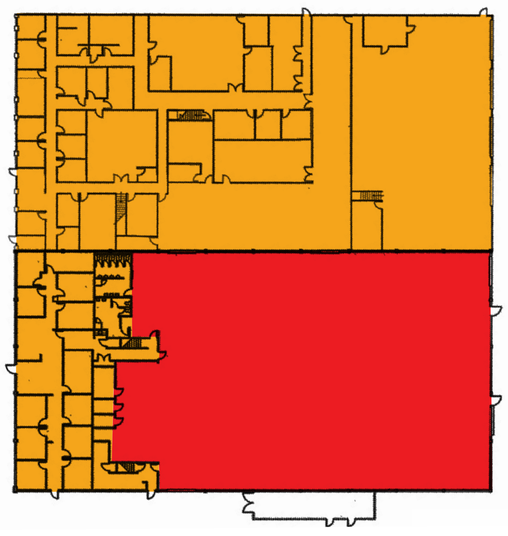
MPK 54
1370 Willow Road

Use / Level	Office (GSF)	R&D (GSF)	Warehouse (GSF)	Former Fire Department (GSF)
1	15,345**	0	0	24,705*
2	0	0	0	40,050*
Total	15,345	0	0	64,755

* Most recent land use.
** Current land use.



Level 2



Level 1

MPK 55
1374-1376 Willow Road

30 seconds Walk

0 30 60 90 120 150 180 240'

1" = 30' at 24" x 36"

Peninsula Innovation Partners

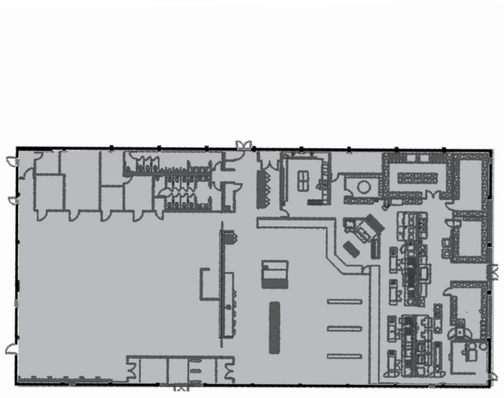
WILLOW VILLAGE

Menlo Park, CA

Appendix 8j
Existing Land Use Enlargement

December 23, 2021

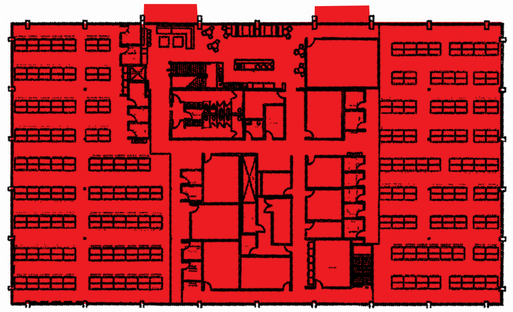
Use	Office (GSF)	R&D (GSF)	Warehouse (GSF)
Total	0	0	19,990



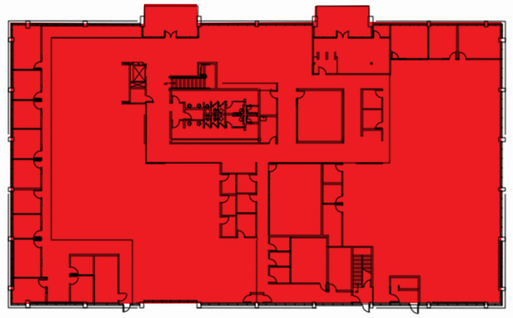
Level 1

MPK 56
980 Hamilton Avenue

Use / Level	Office (GSF)	R&D (GSF)	Warehouse (GSF)
1	25,250	0	0
2	25,250	0	0
Total	50,500	0	0



Level 2



Level 1

MPK 57
1350 Willow Road

30 seconds Walk

0 30 60 90 120 150 180 240'

1" = 30' at 24" x 36"

Peninsula Innovation Partners

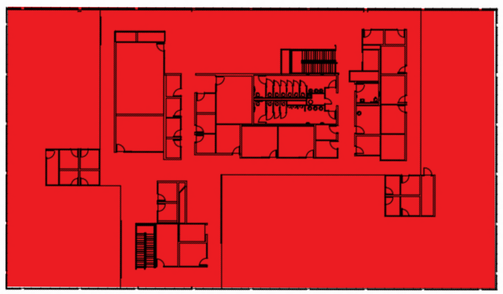
WILLOW VILLAGE

Menlo Park, CA

Appendix 8k
Existing Land Use Enlargement

December 23, 2021

Use / Level	Office (GSF)	R&D (GSF)	Warehouse (GSF)
1	23,825	0	0
2	24,135	0	0
Total	47,960	0	0

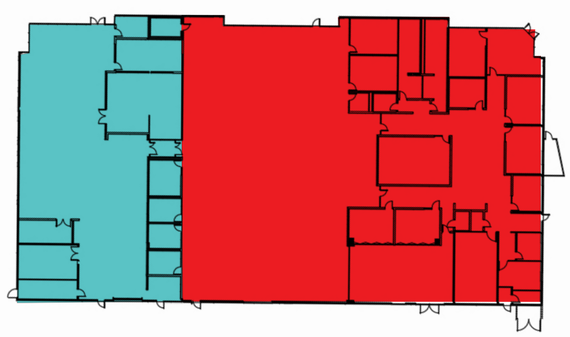


Level 2

Level 1

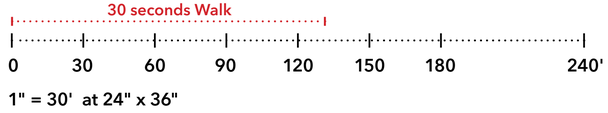
MPK 58
1360 Willow Road

Use	Office (GSF)	R&D (GSF)	Warehouse (GSF)
Total	17,700	8,060	0



Level 1

MPK 59
990-998 Hamilton Avenue



Appendix 3.3

Transportation Impact Assessment

HEXAGON TRANSPORTATION CONSULTANTS, INC.

Willow Village Master Plan

Draft Transportation Impact Analysis

Prepared for:

ICF

April 5, 2022

Hexagon Transportation Consultants, Inc.
Hexagon Office: 100 Century Center Court, Suite 501
San Jose, CA 95112
Hexagon Job Number: 18GB38
Phone: 408.971.6100
Client Name: ICF

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Executive Summary

This report presents the results of the Transportation Impact Analysis (TIA) conducted for the proposed Willow Village Master Plan Project in Menlo Park, California. The Proposed Project would redevelop an approximately 59-acre industrial site plus two parcels north of Willow Road[1] (collectively, the Project Site) as a mixed-use development. The Proposed Project would demolish all existing onsite buildings and landscaping on the 59-acre portion of the Project Site and construct new buildings, provide open space areas, and install infrastructure within a new Residential/Shopping District, Town Square District, and Campus District. In addition, the Proposed Project would alter two parcels (Hamilton Avenue Parcels North and South[2]) to accommodate realignment of Hamilton Avenue at Willow Road for Project Site access.

The Proposed Project would provide up to 1.6 million sf of space for office and accessory use (consisting of up to 1.25 million sf of office uses and the balance (350,000 square if office use is maximized) of accessory uses[3]) and up to 200,000 sf of commercial/retail space. The Proposed Project would also include up to 1,730 multi-family housing units, an up to 193-room hotel, and open spaces, including publicly accessible parks (e.g. 3.5 acre publicly accessible park, elevated linear park, town square, and dog park).

The Project Site would be bisected by a new north–south street (Main Street) and an east–west street, which would provide access to all three districts. It would include a circulation network for vehicles, bicycles, and pedestrians, inclusive of both public rights-of-way and private streets, that would be generally aligned to an east-to-west and a north-to-south grid. The Proposed Project would also alter parcels north of the industrial site, across Willow Road, on both the east and west sides of Hamilton Avenue (Hamilton Avenue Parcels North and South) to support realignment of the Hamilton Avenue right-of-way and provide access to the new elevated park. This would require demolition and reconstruction of an existing service station (Chevron gas station) and potentially an increase in 1,000 sf on Hamilton Avenue Parcel South and enable the potential addition of up to 6,700 sf of retail uses at the existing neighborhood shopping center on the Hamilton Avenue Parcel North. A total of 7,700 sf could be added to the Hamilton Avenue Parcels.

[1] For transportation analysis, “North/South” is aligned to be parallel to US 101. Hence, Willow Road and University Avenue are considered east-west streets, whereas Hamilton Road and Bayfront Expressway are considered north-south streets.
[2] Hamilton Avenue Parcels North and South consider Hamilton Avenue an east to west street, which differs from the compass directions used for the transportation analysis discussion.
[3] Accessory uses could include the following types of spaces: meeting/collaboration space, orientation space, training space, event space, incubator space, a business partner center, an event building (including pre-function space, collaboration areas, and meeting/event rooms), a visitor center, product demonstration areas, film studio, gathering terraces and private gardens, and space for other Meta accessory uses. Accessory uses could occur in spaces located anywhere throughout the Campus District

CEQA Vehicle-Miles Travelled Analysis

The most readily available long-range forecast year is the year-2040 conditions, which assumes the buildout of the City of Menlo Park General Plan and any pending General Plan Amendments, the buildout of the pending developments in the City of East Palo Alto (as of December 2020), and regional growth projected by the Association of Bay Area Governments (ABAG), modified by VTA/C/CAG for model land use inputs. Therefore, the project's VMT analysis was conducted under year-2040 conditions.

Office VMT

According to the City's VMT guidelines, office land use is evaluated based on a daily VMT per employee metric. Using the model, this metric is calculated only for home-based work trips, per OPR's Technical Advisory on Evaluating Transportation Impacts in CEQA. Based on the latest citywide travel demand model, the regional average office VMT is 15.9 per employee. Therefore, City's office VMT impact threshold, at 15% below regional average, would be 13.6 daily VMT per employee. Office land use was evaluated using the model under the year 2040 plus project scenario. For the Campus District, the applicant proposed a daily trip cap of 18,237 trips, which would be 20% below the standard ITE trip generation estimate. The model was adjusted to account for the proposed trip cap. As shown in Table ES-1 below, the project's Campus District land use would generate VMT at the City's VMT impact threshold and would thus not have a VMT impact.

Residential VMT

According to City VMT guidelines, the evaluation of residential land use is based on a daily VMT per capita metric. Using the model, this metric is calculated only for home-based trips, per OPR's technical advisory. Based on the latest citywide travel demand model, regional average residential VMT is 13.1 per capita. Therefore, the City's residential VMT impact threshold, at 15% below regional average, would be 11.2 daily VMT per capita.

For the residential land use, trip generation was adjusted to account for the Project's expected 2.03 people per unit compared to the ITE average of 2.46 people per unit. The VMT analysis also accounted for the applicant proposed TDM Plan for the mixed-use district. The TDM Plan proposed a 20% trip reduction from gross ITE trip generation through a combination of passive TDM measures and active TDM measures. Passive TDM measures include the project's proximity to complementary land uses, proximity to alternative transportation infrastructure, and the project's mixed-use nature. As discussed in Chapter 3 below, it is estimated that the passive TDM measures would achieve a 17% trip reduction from the gross ITE trip generation. Active TDM measures include TDM programs to be implemented to further promote alternative modes of travel. These TDM measures generally include providing transit, biking, and carpooling information to residents, assisting in ride-matching programs for residents, and could also include transit subsidies and other measures. To represent the applicant proposed 20% trip reduction goal and given that passive TDM measures are assumed to achieve a 17% trip reduction, the balance of 3% (20%-17%) trip reduction due to active TDM measures was assumed for the VMT analysis.

The Project's residential land use would require a 16% reduction in VMT to mitigate the significant VMT impact. The VMT analysis, as discussed above, already assumed 3% trip reduction due to active TDM measures. Therefore, mitigation of the VMT impact would require implementing a TDM Plan for the residential component that achieves at least 19% (3% + 16%) trip reduction via active TDM measures (see Figure 10 in Chapter 3 below) or increases the effectiveness of passive TDM measures. According to the Project's proposed TDM Plan dated July 2021 and attached in Appendix G, the proposed active TDM measures for the residential component could achieve at least a 19% reduction in trips, with an estimated reduction between between 11% and 36% [4]. This range represents the potential low to high range of effectiveness of the proposed TDM measures, as calculated by research data from the California Air Pollution Control Officers Association (CAPCOA). This range depends on how each TDM measure is eventually implemented. Therefore, it is feasible for the Project to mitigate its residential VMT impact by implementing its proposed TDM Plan.

IMPACT (TRA-2 in Transportation Chapter): As shown in Table ES-1 below, the Proposed Project's residential land use VMT is estimated to be 13.3 daily miles per capita, which would exceed the VMT threshold and result in a VMT impact. The mitigation measure TRA-2 identified below would fully mitigate this impact.

MITIGATION MEASURE (TRA 2 in Transportation Chapter): The residential land use of the Project Site will be required to implement a TDM Plan achieving a 36% reduction from gross ITE trip generation rates (for the Project, this reduction equals 6,023 daily trips). Should a different number of residential units be built, the total daily trips will be adjusted accordingly. The required residential TDM Plan will include annual monitoring and reporting requirements on the effectiveness of the TDM program. The Project applicant submitted a draft residential TDM Plan, which contained specific measures that would meet this trip reduction requirement. The draft TDM Plan is subject to City review and approval. If the annual monitoring finds that the TDM reduction is not met , the TDM coordinator will be required to work with City staff to detail next steps to achieve the TDM reduction. With the implementation of the required residential TDM Plan, the residential VMT impact would be **less than significant with mitigation (LTS/M)**.

Table ES- 1
Office and Residential VMT Evaluation

Land Use	Regional Average	VMT Threshold	Project VMT	VMT Impact	Additional TDM Mitigation needed to eliminate VMT impact
Office [1]	15.9	13.6	13.6	No	-
Residential [2]	13.1	11.2	13.3	Yes	16%

Notes:
** All data referenced the latest Menlo Park citywide travel demand forecast model.*
1. VMT for office land use is reported in VMT per employee.
2. VMT for residential land use is reported in VMT per capita.

[4] Willow Village TDM Plan. Prepared for Peninsula Innovation Partners. Fehr & Peers, Inc. July 2021

Hotel VMT

Based on consultation with the City and applicant, the hotel is expected to have a service area of approximately three (3) miles in radius. This means that most of the destinations of hotel patrons are expected to be within three miles of the hotel. While some trips are expected to be longer than three miles, the majority of the change in VMT is expected to occur within this three-mile radius. The evaluated daily VMT includes the entire length of the trip even when it extends beyond the three-mile radius.

The total daily VMT generated by land uses within a three-mile radius was compared under the "no hotel" and "with project" scenarios. As shown in Table ES-2, the proposed hotel component of the project was shown to slightly reduce the total daily VMT generated by land uses within a three-mile radius of the Project Site. Since the proposed hotel would be located within very close proximity to major employment in the Bayfront area, hotel patrons would enjoy shorter travel distances to their business destinations. It's location within a mixed-use project, including complementary retail space, also would allow hotel patrons to shop/dine within walking distance.

Because the proposed hotel component of the Project would not cause an increase in total VMT generated within the analysis area, it is concluded that the proposed hotel component of the Project would have a less than significant impact on vehicle miles travelled.

Table ES- 2
Hotel VMT Evaluation

	3-Mile Radius Area of Project Site		
	No Hotel Conditions [2]	With Project Conditions [2]	% Change
Total Daily VMT [1]	6,656,914	6,629,443	-0.4%

Notes:
1. Total daily VMT includes VMT generated by all trips having at least one trip-end in the analysis area, as estimated by the citywide travel demand model.
2. "No hotel conditions" represent conditions with the Proposed Project except the hotel component. "With project conditions" represent conditions with the Proposed Project including the hotel component.

Retail VMT

The project has two areas of retail development. The main Project Site includes up to 200,000 s.f. of retail space within a mixed use development. North of Willow Road, as a result of the proposed Hamilton Avenue realignment, the two retail parcels adjacent to Hamilton Avenue at the intersection with Willow Road ("Hamilton Avenue Parcels") would be reconfigured. The Project proposes to increase the total retail square footage at the Hamilton Avenue parcels by up to 7,700 s.f. to approximately 23,400 s.f. Because the retail at the Hamilton Avenue Parcels will require a separate use permit and would be operated as a separate retail use from the retail uses at the main Project Site, the Hamilton Avenue Parcels retail is evaluated separately from the retail component of the main Project Site. According to the City's VMT policy, local serving retail (defined as having total square footage less than 50,000 s.f.) would be exempt from a VMT analysis. The Project's proposed net 7,700 s.f. of potential retail development at the Hamilton Avenue Parcels would thus be exempt from VMT analysis. The discussion below is focused on the 200,000 s.f. of retail space at the main Project Site.

Based on the types of retail being proposed as well as nearby comparable retail stores, it is expected that the proposed retail would have a service area of approximately five (5) miles in radius. The 5-mile radius service area was selected based on engineering judgement, as it would cover most of Menlo Park, Palo Alto, as well as downtown Redwood City, and would include a mix of retail shops and restaurants comparable to the three cities. Assuming equal services, it is expected that people would patronize the closer store or restaurant. The five-mile radius service area also means that most of the destinations of the Project's retail patrons are expected to be within five miles of the project. While some trips are expected to be longer than five miles, the majority of the change in VMT is expected to occur within this five-mile radius.

The total daily VMT generated by land uses within a five-mile radius was compared under the "no retail" and "with project" scenarios. As shown in Table ES-3, the proposed retail component of the project was shown to slightly reduce the total daily VMT generated by land uses within a five-mile radius of the Project Site. Since the proposed retail space would be located in close proximity to the Belle Haven neighborhood, a large number of offices and life sciences buildings in the Bayfront area, as well as the project's proposed residential land uses, the proposed retail component would provide retail stores closer to homes for nearby residents and closer to jobs for nearby workers.

Because the proposed retail component of the Project would not cause an increase in total VMT generated by the analysis area, it is concluded that the proposed retail component of the Project would have a less than significant impact on vehicle miles travelled.

Table ES- 3
Retail VMT Evaluation

	5-Mile Radius Area of Project Site		
	No Retail Conditions [2]	With Project Conditions [2]	% Change
Total Daily VMT [1]	14,360,590	14,334,067	-0.2%

Notes:
1. Total daily VMT includes VMT generated by all trips having at least one trip-end in the analysis area, as estimated by the citywide travel demand model.
2. "No retail conditions" represent with the Proposed Project except the retail component. "With project conditions" represent with the Proposed Project including the retail component.

Non-CEQA Levels of Service Transportation Analysis

Until July 1, 2020, the City's TIA Guidelines used roadway congestion, commonly referred to as level of service (LOS), as the primary study metric for evaluating transportation impacts under CEQA. LOS is no longer a CEQA threshold of significance; however, the City's TIA Guidelines require that the TIA also analyze LOS for planning purposes (per General Plan Program Circ-3.A Transportation Impact Metrics):

> Supplement Vehicle Miles Traveled (VMT) and greenhouse gas emissions per service population (or other efficiency metric) metrics with Level of Service (LOS) in the transportation impact review process, and utilize LOS for identification of potential operational improvements, such as traffic signal upgrades and coordination, as part of the Transportation Master Plan.

The LOS analysis would determine whether the project traffic would cause an intersection LOS to exceed the City's LOS thresholds or cause either the average delay or average critical delay to exceed the City's intersection delay thresholds under near term and cumulative conditions. The LOS and delay thresholds vary depending on the street classifications as well as whether the intersection is on a State route or not.

The City's TIA Guidelines further require an analysis of the Proposed Project in relation to relevant policies of the Circulation Element and consideration of specific measures to address noncompliance with local policies which may occur as a result of the addition of project traffic. The TIA identifies measures that could be applied as conditions of approval that would bring operations back to pre-Project levels. Although not included in the TIA for purposes of this EIR, an analysis may be prepared separately to determine if there are potential measures that could bring the Proposed Project into conformance with the LOS goals of Circulation Policy 3.4. Implementation of any such measures would require review and approval by City decision makers.

Intersection level of service non-compliance caused by the proposed project under near-term (2025[5]) with project, cumulative (2040) with project, and cumulative (2040) with Dumbarton rail with project conditions were analyzed. Both near-term (year 2025) with project, and cumulative (year 2040) with project scenario forecasts of intersection turning movements were completed using the latest Menlo Park travel demand forecast model. The base model structure was refined for application within Menlo Park to add more detail to the zone structure and transportation network.

The cumulative with Dumbarton Rail scenario assumed that the Dumbarton Rail would be built and there would be a shift in vehicular trips to transit trips near the Project Site[6] as well as along the Dumbarton Rail corridor. Cumulative plus project conditions with Dumbarton Rail were evaluated relative to cumulative conditions with the Dumbarton Rail. This analysis is speculative since there is no current approved plan or financing to provide any Dumbarton transit service and is provided for informational purposes in the transportation analysis.

[5] 2025 is the earliest year for expected occupancy when this analysis started.
[6] *Dumbarton Rail Corridor Update Public Meeting*, Prepared by Facebook for the San Mateo County Transit District. March 15, 2021

The following intersections were adversely affected under either near term plus project or cumulative plus project scenarios during at least one peak hour (see Table ES-4 and ES-5):

City of Menlo Park:

1. Marsh Road and Bayfront Expressway [CMP]
5. Marsh Road and Bohannon Drive/Florence Street
13. Chilco Street and Hamilton Avenue
16. Willow Road and Bayfront Expressway [CMP]
17. Willow Road and Hamilton Avenue
18. Willow Road and Park Street
19. Willow Road and Ivy Drive
21. Willow Road and Newbridge Street
24. Willow Road and Bay Road
25. Willow Road and Hospital Plaza/Durham Street
30. O'Brien Drive and Kavanaugh Drive
32. Adam's Drive and O'Brien Drive

City of East Palo Alto:

39. University Avenue and Bay Road
42. University Avenue and Donohoe Street
44. Cooley Avenue and Donohoe Street
46. University Avenue and Woodland Avenue
47. E. Bayshore Road and Donohoe Street
49. Saratoga Avenue and Newbridge Street
50. East Bayshore Road and Euclid Avenue

Caltrans:

23. Willow Road and US 101 Southbound Ramps (AM peak hour)
43. US 101 Northbound Off-Ramp and Donohoe Street (AM and PM peak hours)
45. University Avenue and US 101 Southbound Ramps (AM peak hour)

Since the Cumulative with Dumbarton Rail scenario was analyzed for information only, analysis summary is presented only in Chapter 3.

Table ES- 4
Intersection Level of Service Summary (City of Menlo Park)

					Existing Conditions		Near-Term (2025) Conditions								Cumulative (2040) Conditions								
							No Project		Project Conditions				With Improvement			General Plan Conditions		Project Conditions				With Improvement			
#	Intersection	Peak Hour	Count Date	Traffic Control	Avg. Delay (sec)[1]	LOS	Avg. Delay (sec)[1]	LOS	Avg. Delay (sec)[1]	LOS	Incr. in Avg. Delay	Incr. in Avg. Critical Delay	Avg. Delay (sec)[1]	LOS	Incr. in Avg. Critical Delay	Avg. Delay (sec)[1]	LOS	Avg. Delay (sec)[1]	LOS	Incr. in Avg. Delay	Incr. in Avg. Critical Delay	Avg. Delay (sec)[1]	LOS	Incr. in Avg. Critical Delay
1	Marsh Road & Bayfront Expressway*	AM	4/16/2019	Signal	50.5	D	52.0	D	**56.2**	**E**	**4.2**	**5.4**	50.2	D	-	**68.7**	**E**	**65.6**	**E**	**<4**	**<0.8**			
	Haven Avenue Southbound	*AM*			***75.0***	***E***	***71.2***	***E***	***70.6***	***E***	***<4***	***<0.8***				***71.2***	***E***	***73.4***	***E***	***<4***	***<0.8***			
		PM	4/16/2019	Signal	31.6	C	34.9	C	38.7	D	<4	4.7	38.9	D	-	**65.0**	**E**	**77.9**	**E**	12.9	12.5			
	Haven Avenue Southbound	*PM*			***69.0***	***E***	***66.9***	***E***	***65.6***	***E***	***<4***	***<0.8***				***67.7***	***E***	***67.7***	***E***	***<4***	***<0.8***			
2	Marsh Road & US 101 Northbound Off-Ramp	AM	4/16/2019	Signal	15.8	B	23.1	C	39.0	D	15.9	25.1				**60.9**	**E**	**62.2**	**E**	**<4**	**1.5**			
		PM	4/16/2019		13.3	B	15.8	B	16.8	B	<4	1.6				22.9	C	22.8	C	<4	<0.8			
3	Marsh Road & US 101 Southbound Off-Ramp	AM	4/16/2019	Signal	19.0	B	20.7	C	20.7	C	<4	<0.8				22.8	C	24.4	C	<4	2.0			
		PM	4/16/2019		17.0	B	17.6	B	17.6	B	<4	<0.8				19.2	B	18.8	B	<4	<0.8			
4	Marsh Road & Scott Drive	AM	4/16/2019	Signal	18.5	B	20.3	C	20.5	C	<4	<0.8				31.9	C	31.8	C	<4	<0.8			
		PM	4/16/2019		15.3	B	15.9	B	15.9	B	<4	<0.8				17.9	B	18.1	B	<4	<0.8			
5	Marsh Road & Bohannon Drive/Florence Street	AM	3/21/2019	Signal	35.3	D	40.0	D	41.6	D	<4	2.3				**58.0**	**E**	**60.4**	**E**	**<4**	**4.9**	**56.7**	**E**	**<0.8**
		PM	3/21/2019		34.6	C	36.3	D	37.3	D	<4	2.2				52.5	D	53.6	D	<4	1.6	48.3	D	<0.8
6	Marsh Road & Bay Road	AM	3/21/2019	Signal	19.7	B	23.6	C	25.2	C	<4	2.8				**64.2**	**E**	**64.8**	**E**	**<4**	**<0.8**			
		PM	3/21/2019		18.6	B	18.7	B	19.1	B	<4	<0.8				47.6	D	54.9	D	7.3	14.4			
7	Chrysler Drive & Bayfront Expressway	AM	4/16/2019	Signal	8.4	A	9.1	A	9.4	A	<4	<0.8				13.1	B	12.8	B	<4	6.4			
		PM	4/16/2019		13.1	B	17.3	B	18.3	B	<4	1.5				39.5	D	36.3	D	<4	<0.8			
8	Chilco Street & Bayfront Expressway	AM	4/16/2019	Signal	10.9	B	23.7	C	25.6	C	<4	5.3				44.5	D	49.2	D	4.7	13.5			
	Chilco Street Eastbound	*AM*			*19.0*	*B*	*48.7*	*D*	***56.8***	***E***	***8.1***	***12.6***				***112.4***	***F***	***108.9***	***F***	***<4***	***<0.8***			
		PM	4/16/2019		13.1	B	34.1	C	35.9	D	<4	4.5				**69.6**	**E**	**66.9**	**E**	**<4**	**<0.8**			
	Chilco Street Eastbound	*PM*			*22.4*	*C*	***107.8***	***F***	***116.2***	***F***	***8.4***	***15.2***				***>120***	***F***	***>120***	***F***	***<4***	***<0.8***			
9	MPK 21 Driveway & Bayfront Expressway	AM	4/25/2019	Signal	7.9	A	7.3	A	7.4	A	<4	<0.8				5.7	A	5.6	A	<4	<0.8			
		PM	4/25/2019		10.2	B	13.7	B	15.0	B	<4	1.4				36.3	D	36.1	D	<4	<0.8			
10	MPK 20 Driveway (east) & Bayfront Expressway	AM	4/25/2019	Signal	10.0	A	7.3	A	7.5	A	<4	<0.8				10.0	B	9.9	A	<4	<0.8			
		PM	4/25/2019		8.2	A	9.7	A	9.4	A	<4	<0.8				18.7	B	18.8	B	<4	<0.8			
11	Chrysler Drive & Constitution Drive	AM	3/21/2019	Signal	**50.6**	**D**	**59.8**	**E**	**55.1**	**E**	**<4**	**<0.8**				**>120**	**F**	**>120**	**F**	**<4**	**<0.8**			
		PM	3/21/2019		28.0	C	28.5	C	30.4	C	<4	1.6				**>120**	**F**	**>120**	**F**	**<4**	**<0.8**			
12	Chilco Street & Constitution Drive/MPK 22 Driveway[4]	AM	3/21/2019	AWSC/Signal[3]	**32.1**	**D**	24.8	C	24.6	C	<4	<0.8				**52.9**	**D**	**51.1**	**D**	**<4**	**<0.8**			
		PM	3/21/2019		**32.5**	**D**	**42.9**	**D**	**54.3**	**D**	**11.4**	**11.5**				**113.5**	**F**	**101.8**	**F**	**<4**	**<0.8**			
13	Chilco Street & Hamilton Avenue	AM	1/0/1900	AWSC	9.2	A	10.5	B	10.8	B	<4	<0.8	*Traffic signal potentially feasible*			24.5	C	**27.1**	**D**	<4	2.6	*Traffic signal potentially feasible*		
		PM	1/0/1900		16.8	C	19.0	C	**38.0**	**E**	**19.0**	**19.0**				**>120**	**F**	**>120**	**F**	**24.7**	**24.7**			
14	Ravenswood Avenue & Middlefield Road	AM	3/19/2019	Signal	36.1	D	43.1	D	44.9	D	<4	3.0				49.7	D	49.7	D	<4	<0.8			
		PM	3/19/2019		16.1	B	17.6	B	17.9	B	<4	<0.8				20.2	C	19.5	B	<4	<0.8			
15	Ringwood Avenue & Middlefield Road	AM	3/19/2019	Signal	12.5	B	13.2	B	13.7	B	**<4**	**<0.8**				13.2	B	13.2	B	<4	<0.8			
		PM	3/19/2019		13.7	B	15.2	B	15.4	B	<4	<0.8				21.0	C	21.1	C	<4	<0.8			
16	Willow Road & Bayfront Expressway*[1]	AM	4/23/2019	Signal	**>120**	**F**	**OVERSAT**	**F**	**OVERSAT**	**F**	**14.0**	**6.7**	***No feasible Improvement***			**OVERSAT**	**F**	**OVERSAT**	**F**	**<4**	**<0.8**			
		PM	4/23/2019		**>120**	**F**	**OVERSAT**	**F**	**OVERSAT**	**F**	**<4**	**<0.8**				**OVERSAT**	**F**	**OVERSAT**	**F**	**<4**	**<0.8**			
17	Willow Road & Hamilton Avenue[1][2]	AM	3/21/2019	Signal	**73.3**	**E**	**OVERSAT**	**F**	**OVERSAT**	**F**	**44.1**	**54.0**				**OVERSAT**	**F**	**OVERSAT**	**F**	**<4**	**<0.8**			
	Hamilton Avenue Southbound	*AM*			***64.7***	***E***	***64.9***	***E***	***>120***	***F***	***117.9***	***<0.8***				***>120***	***F***	***>120***	***F***	***<4***	***<0.8***			
	Main Street Northbound	*AM*			***82.0***	***F***	***83.3***	***F***	***113.7***	***F***	***30.4***	***>120***	***No feasible Improvement***			***>120***	***F***	***>120***	***F***	***<4***	***<0.8***			
		PM	3/21/2019	Signal	**>120**	**F**	**OVERSAT**	**F**	**OVERSAT**	**F**	**>120**	**>120**				**OVERSAT**	**F**	**OVERSAT**	**F**	**<4**	**<0.8**			
	Hamilton Avenue Southbound	*PM*			***94.3***	***F***	***>120***	***F***	***>120***	***F***	***>120***	***<0.8***				***>120***	***F***	***>120***	***F***	***<4***	***<0.8***			
	Main Street Northbound	*PM*			***>120***	***F***	***>120***	***F***	***>120***	***F***	***<4***	***>120***				***>120***	***F***	***>120***	***F***	***<4***	***>120***			
18	Willow Road & Park Street (future intersection)[1]	AM	--	Signal	Project Intersection		Project Intersection		**OVERSAT**	**F**	**36.8**	**53.0**	***No feasible Improvement***			Project Intersection		**OVERSAT**	**F**	**34.2**	**49.1**	***No feasible Improvement***		
		PM	--						**OVERSAT**	**F**	**17.5**	**23.1**						**OVERSAT**	**F**	**17.2**	**23.1**			
19	Willow Road & Ivy Drive[1]	AM	3/21/2019	Signal	**75.2**	**E**	**OVERSAT**	**F**	**OVERSAT**	**F**	**20.9**	**46.6**				**OVERSAT**	**F**	**OVERSAT**	**F**	**46.2**	**98.7**	**OVERSAT**	**F**	
	Ivy Drive Southbound	*AM*			***88.2***	***F***	***88.2***	***F***	***75.0***	***E***	***<4***	***<0.8***				***70.9***	***E***	***69.6***	***E***	***<4***	***<0.8***	***61.2***	***E***	***<0.8***
		PM	3/21/2019	Signal	39.5	D	**OVERSAT**	**F**	**OVERSAT**	**F**	**50.1**	**70.9**				**OVERSAT**	**F**	**OVERSAT**	**F**	**80.8**	**102.4**	**OVERSAT**	**F**	
	Ivy Drive Southbound	*PM*			***69.7***	***E***	***68.4***	***E***	***66.1***	***E***	***<4***	***<0.8***				***68.1***	***E***	***71.7***	***E***	***<4***	***3.6***	*49.0*	*D*	*<0.8*
20	Willow Road & O'Brien Drive[1]	AM	3/21/2019	Signal	**58.9**	**E**	**OVERSAT**	**F**	**OVERSAT**	**F**	**<4**	**<0.8**				**OVERSAT**	**F**	**OVERSAT**	**F**	**<4**	**<0.8**			
	O'Brien Drive Northbound	*AM*			***66.4***	***E***	***72.6***	***E***	***66.4***	***E***	***<4***	***<0.8***				***>120***	***F***	***80.4***	***F***	***<4***	***<0.8***			
		PM	3/21/2019	Signal	**>120**	**F**	**OVERSAT**	**F**	**OVERSAT**	**F**	**<4**	**<0.8**				**OVERSAT**	**F**	**OVERSAT**	**F**	**<4**	**<0.8**			
	O'Brien Drive Northbound	*PM*			***>120***	***F***	***>120***	***F***	***>120***	***F***	***<4***	***<0.8***				***>120***	***F***	***>120***	***F***	***<4***	***<0.8***			
21	Willow Road & Newbridge Street[1]	AM	3/21/2019	Signal	**93.4**	**F**	**OVERSAT**	**F**	**OVERSAT**	**F**	**40.3**	**49.7**	**OVERSAT**	**F**		**OVERSAT**	**F**	**OVERSAT**	**F**	**25.9**	**74.2**	**OVERSAT**	**F**	
	Newbridge Street Southbound	*AM*			***62.9***	***E***	***69.3***	***E***	***104.2***	***F***	***34.9***	***43.0***	*79.6*	*F*	*9.0*	***>120***	***F***	***108.8***	***F***	***<4***	***<0.8***	***>120***	***F***	***67.3***
	Newbridge Street Northbound	*AM*			***>120***	***F***	***>120***	***F***	***>120***	***F***	***4.4***	***64.0***	*42.1*	*D*	*<0.8*	***>120***	***F***	***>120***	***F***	***101.4***	***>120***	***73.5***	***E***	***<0.8***
		PM	3/21/2019	Signal	**>120**	**F**	**OVERSAT**	**F**	**OVERSAT**	**F**	**<4**	**<0.8**	**OVERSAT**	**F**		**OVERSAT**	**F**	**OVERSAT**	**F**	**<4**	**<0.8**	**OVERSAT**	**F**	
	Newbridge Street Southbound	*PM*			***62.8***	***E***	***60.8***	***E***	***59.1***	***E***	***<4***	***1.5***	*74.5*	*E*	*26.0*	*84.3*	*F*	***>120***	***F***	***47.1***	***74.2***	***>120***	***F***	***>120***
	Newbridge Street Northbound	*PM*			***>120***	***F***	***>120***	***F***	***>120***	***F***	***<4***	***<0.8***	*51.3*	*D*	*<0.8*	***>120***	***F***	***>120***	***F***	***<4***	***<0.8***	*50.7*	*D*	*<0.8*
22	Willow Road & US 101 Northbound Ramps[1]	AM	3/13/2019	Signal	**92.8**	**F**	**OVERSAT**	**F**	**OVERSAT**	**F**	**<4**	**11.5**				**OVERSAT**	**F**	**OVERSAT**	**F**	**<4**	**<0.8**			
		PM	3/13/2019		**83.9**	**F**	**OVERSAT**	**F**	**OVERSAT**	**F**	**<4**	**<0.8**				**OVERSAT**	**F**	**OVERSAT**	**F**	**<4**	**<0.8**			
23	Willow Road & US 101 Southbound Ramps[1]	AM	3/13/2019	Signal	38.5	D	**OVERSAT**	**F**	**OVERSAT**	**F**	**18.3**	**<0.8**	***No feasible Improvement***			**OVERSAT**	**F**	**OVERSAT**	**F**	**<4**	**<0.8**			
		PM	3/13/2019		**98.9**	**F**	**OVERSAT**	**F**	**OVERSAT**	**F**	**<4**	**<0.8**				**OVERSAT**	**F**	**OVERSAT**	**F**	**<4**	**<0.8**			

Table ES-4 (Continued)
Intersection Level of Service Summary (City of Menlo Park)

					Existing Conditions		Near-Term (2025) Conditions									Cumulative (2040) Conditions								
							No Project		Project Conditions				With Improvement			General Plan Conditions		Project Conditions				With Improvement		
#	Intersection	Peak Hour	Count Date	Traffic Control	Avg. Delay (sec)[1]	LOS	Avg. Delay (sec)[1]	LOS	Avg. Delay (sec)[1]	LOS	Incr. in Avg. Delay	Incr. in Avg. Critical Delay	Avg. Delay (sec)[1]	LOS	Incr. in Avg. Critical Delay	Avg. Delay (sec)[1]	LOS	Avg. Delay (sec)[1]	LOS	Incr. in Avg. Delay	Incr. in Avg. Critical Delay	Avg. Delay (sec)[1]	LOS	Incr. in Avg. Critical Delay
24	Willow Road & Bay Road[1]	AM	4/23/2019	Signal	45.3	D	**OVERSAT**	**F**	**OVERSAT**	**F**	**<4**	**38.3**	**OVERSAT**	**F**		**OVERSAT**	**F**	**OVERSAT**	**F**	**<4**	**5.4**	**OVERSAT**	**F**	
	Bay Road Southbound	*AM*			***60.1***	***E***	***104.3***	***F***	***>120***	***F***	***31.7***	***31.7***	*27.0*	*C*	***<0.8***	***>120***	***F***	***>120***	***F***	***30.3***	***30.3***	*27.8*	*C*	*<0.8*
		PM	4/23/2019	Signal	**113.5**	**F**	**OVERSAT**	**F**	**OVERSAT**	**F**	**6.6**	**6.7**	**OVERSAT**	**F**		**OVERSAT**	**F**	**OVERSAT**	**F**	**<4**	**<0.8**	**OVERSAT**	**F**	
	Bay Road Southbound	*PM*			*29.0*	*C*	*49.2*	*D*	*53.5*	*D*	***4.3***	***4.3***	*23.9*	*C*	***<0.8***	***75.6***	***E***	***82.7***	***F***	***7.0***	***7.0***	*26.5*	*C*	*<0.8*
25	Willow Road & Hospital Plaza/Durham Street[1]	AM	4/16/2019	Signal	43.6	D	**OVERSAT**	**F**	**OVERSAT**	**F**	**<4**	**<0.8**				**OVERSAT**	**F**	**OVERSAT**	**F**	**<4**	**11.0**	**OVERSAT**	**F**	
	VA Medical Center Southbound	*AM*			***65.5***	***E***	***73.2***	***E***	***69.5***	***E***	***<4***	***<0.8***				***74.8***	***E***	***74.7***	***E***	***<4***	***<0.8***	***74.7***	***E***	***<0.8***
	Durham Street Northbound	*AM*			***73.9***	***E***	***93.6***	***F***	***79.6***	***E***	***<4***	***<0.8***				***>120***	***F***	***>120***	***F***	***6.0***	***5.4***	***>120***	***F***	***<0.8***
		PM	4/16/2019	Signal	**>120**	**F**	**OVERSAT**	**F**	**OVERSAT**	**F**	**<4**	**<0.8**				**OVERSAT**	**F**	**OVERSAT**	**F**	**<4**	**1.3**	**OVERSAT**	**F**	
	VA Medical Center Southbound	*PM*			***67.6***	***E***	***72.2***	***E***	***70.2***	***E***	***<4***	***<0.8***				***74.2***	***E***	***74.5***	***E***	***<4***	***<0.8***	***69.4***	***E***	***<0.8***
	Durham Street Northbound	*PM*			***73.5***	***E***	***84.6***	***F***	***79.8***	***E***	***<4***	***<0.8***				***88.1***	***F***	***90.3***	***F***	***<4***	***2.8***	***59.9***	***E***	***<0.8***
26	Willow Road & Coleman Avenue	AM	3/19/2019	Signal	18.6	B	25.1	C	23.9	C	<4	<0.8				34.9	C	34.3	C	<4	<0.8			
		PM	3/19/2019		9.2	A	11.0	B	10.8	B	<4	<0.8				13.1	B	13.2	B	<4	<0.8			
27	Willow Road & Gilbert Avenue	AM	3/19/2019	Signal	19.7	B	20.0	C	19.9	B	<4	<0.8				24.4	C	23.9	C	<4	<0.8			
		PM	3/19/2019		10.3	B	13.0	B	12.4	B	<4	<0.8				14.2	B	14.1	B	<4	<0.8			
28	Willow Road & Middlefield Road	AM	3/19/2019	Signal	**61.6**	**E**	**62.3**	**E**	**62.5**	**E**	**<4**	**<0.8**				**64.5**	**E**	**65.0**	**E**	**<4**	**<0.8**			
	Middlefield Road Southbound	*AM*			***67.9***	***E***	***69.8***	***E***	***70.1***	***E***	***<4***	***<0.8***				***69.9***	***E***	***70.4***	***E***	***<4***	***<0.8***			
	Middlefield Road Northbound	*AM*			***67.3***	***E***	***67.7***	***E***	***67.7***	***E***	***<4***	***<0.8***				***67.4***	***E***	***67.2***	***E***	***<4***	***<0.8***			
		PM	3/19/2019	Signal	31.5	C	34.5	C	34.7	C	<4	<0.8				42.5	D	42.4	D	<4	<0.8			
	Middlefield Road Southbound	*PM*			*31.7*	*C*	*34.5*	*C*	*34.7*	*C*	*<4*	*<0.8*				*42.1*	*D*	*42.2*	*D*	*<4*	*<0.8*			
	Middlefield Road Northbound	*PM*			*31.2*	*C*	*34.3*	*C*	*34.7*	*C*	*<4*	*<0.8*				*40.6*	*D*	*40.8*	*D*	*<4*	*<0.8*			
29	O'Brien Drive/Loop Road & Main Street/O'Brien Drive (future intersection)	AM	--	Roundabout	Project		Project		7.4	A	7.4	7.4				Project		8.8	A	8.8	8.8			
		PM	--		Intersection		Intersection		9.2	A	9.2	9.2				Intersection		11.0	B	11.0	11.0			
30	O'Brien Drive & Kavanaugh Drive	AM	4/25/2019	AWSC	11.8	B	12.7	B	**107.7**	**F**	**95.0**	**95.0**	*Traffic signal potentially*			**>120**	**F**	**>120**	**F**	**105.8**	**105.8**	*Traffic signal potentially*		
		PM	4/25/2019		15.2	C	29.6	D	**73.7**	**F**	**44.1**	**44.1**	*feasible*			**>120**	**F**	**>120**	**F**	**<4**	**<0.8**	*feasible*		
31	Adams Drive & Adams Court	AM	4/25/2019	TWSC	11.5	B	11.5	B	11.6	B	<4	<0.8				20.1	C	17.8	C	<4	<0.8			
		PM	4/25/2019		11.9	B	11.9	B	11.9	B	<4	<0.8				16.4	C	12.7	B	<4	<0.8			
32	Adams Drive & O'Brien Drive	AM	4/25/2019	TWSC	17.3	C	17.6	C	**62.5**	**F**	**44.9**	**44.9**	*Traffic signal potentially*			**62.4**	**F**	**>120**	**F**	**>120**	**>120**	*Traffic signal potentially*		
		PM	4/25/2019		**27.6**	**D**	34.0	D	**>120**	**F**	**>120**	**>120**	*feasible*			**>120**	**F**	**>120**	**F**	**>120**	**>120**	*feasible*		
33	University Avenue & Bayfront Expressway*	AM	4/25/2019	Signal	11.4	B	13.9	B	12.1	B	<4	<0.8				14.8	B	13.3	B	<4	<0.8			
		PM	4/25/2019		**94.1**	**F**	**105.8**	**F**	**108.7**	**F**	**<4**	**2.9**				**>120**	**F**	**>120**	**F**	**<4**	**3.1**			

Notes:
* Denotes CMP Intersection
AWSC - All Way Stop Control; TWSC - Two Way Stop Control
[1] Average delay is reported for signalized and AWSC intersections. For TWSC intersections, the delay for the worst stop-controlled movement is reported
"OVERSAT" indicates that the SimTraffic microsimulation model indicates that the intersection would experience capacity issues where the demand cannot be served by the intersection. Oversaturated intersections would operate at LOS F.
[1]Intersections were analyzed using Synchro/SimTraffic software due to the close proximity of these intersections. Changes in average delay and critical delay calculated using Vistro.
[2]The intersection is not considered as non-compliant under cumulative plus project conditions because the critical movement of the local approach shifts with the addition of project traffic.
[3]Intersection operates as an AWSC under existing conditions. It would operate as signalized under background conditions.
[4]The intersection is not considered as non-compliant under background plus project and cumulative plus project conditions because the critical movement of the local approach shifts with the addition of project traffic.
Bold indicates substandard level of service
Bold indicates noncompliance. The project exceeds thresholds in the City of Menlo Park's TIA Guidelines.

Table ES- 5
Intersection Level of Service Summary (City of East Palo Alto)

					Existing Conditions		Near-Term (2025) Conditions								Cumulative (2040) Conditions							
							No Project		with Project				With Improvement		General Plan Conditions		with Project				With Improvement	
#	Intersection	Peak Hour	Count Date	Traffic Control	Avg. Delay (sec)[1]	LOS	Avg. Delay (sec)	LOS	Avg. Delay (sec)*	LOS	Incr. in Avg/Crit Delay (sec)	Incr. in Critical V/C	Avg. Delay (sec)	LOS	Avg. Delay (sec)	LOS	Avg. Delay (sec)	LOS	Incr. in Critical Delay (sec)	Incr. in Critical V/C	Avg. Delay (sec)	LOS
34	University Avenue & Purdue Avenue	AM	6/5/2019	TWSC/	16.5	C	19.7	C	29	D	0.9	0.118			25.9	C	28.0	C	0.8	0.017		
		PM	6/5/2019	Signalized[2]	**47.0**	**E**	**>120**	**F**	**>120**	**F**	**3.8**	**-0.033**			37.1	D	40.8	D	4.2	0.031		
35	University Avenue & Adams Drive	AM	4/25/2019	TWSC	**88.1**	**F**	**91.5**	**F**	**>120**	**F**	**0.4**	**0.084**			**>120**	**F**	**>120**	**F**	**1.4**	**0.253**		
		PM	4/25/2019		**>120**	**F**	**>120**	**F**	**>120**	**F**	**-2.8**	**-0.070**			**>120**	**F**	**>120**	**F**	**-7.3**	**-0.13**		
36	University Avenue & O'Brien Drive	AM	4/23/2019	Signalized	9.6	A	9.5	A	28.9	C	26.1	0.261			21.1	C	43.1	D	29.3	0.245		
		PM	4/23/2019		15.3	B	15.4	B	30.5	C	16.7	0.275			21.3	C	32.6	C	14.1	0.175		
37	University Avenue & Notre Dame Avenue	AM	3/4/2020	Signalized	4.1	A	4.1	A	7.8	A	5.0	0.093			8.0	A	10.6	B	3.1	0.07		
		PM	3/4/2020		9.3	A	9.4	A	10.2	B	1.4	0.012			12.2	B	15.6	B	4.1	0.038		
38	University Avenue & Kavanaugh Drive	AM	4/25/2019	Signalized	6.3	A	6.9	A	7.9	A	1.3	0.014			26.8	C	17.5	B	-12.1	-0.11		
		PM	4/25/2019		12.0	B	15.1	B	16.5	B	1.6	0.015			23.1	C	24.8	C	0.8	0.009		
39	University Avenue & Bay Road	AM	4/25/2019	Signalized	40.4	D	52.4	D	54.7	D	6.7	0.046	40.4	D	48.8	D	53.5	D	8.9	0.054		
		PM	4/25/2019		49.9	D	**60.9**	**E**	**70.6**	**E**	**18.6**	**0.063**	**57.0**	**E**	**68.3**	**E**	**69.0**	**E**	**-1.9**	**-0.008**		
40	University Avenue & Runnymede Street	AM	4/25/2019	Signalized	6.1	A	6.4	A	6.6	A	1.5	0.053			9.7	A	11.7	B	11	0.075		
		PM	4/25/2019		8.7	A	8.8	A	8.8	A	-0.1	-0.009			8.9	A	8.9	A	3.6	0.102		
41	University Avenue & Bell Street	AM	4/25/2019	Signalized	11.3	B	11.7	B	11.6	B	0.0	0.006			14.9	B	16.2	B	2	0.067		
		PM	4/25/2019		16.8	B	18.3	B	18.8	B	1.1	0.038			26.4	C	34.8	C	13.4	0.069		
42	University Avenue & Donohoe Street*	AM	5/1/2019	Signalized	**107.1**	**F**	**OVERSAT**	**F**	**OVERSAT**	**F**	**7.1**	**0.017**	***Corridor***		**OVERSAT**	**F**	**OVERSAT**	**F**	**-1.4**	**-0.002**	***Corridor***	
		PM	5/1/2019		**75.2**	**E**	**OVERSAT**	**F**	**OVERSAT**	**F**	**3.0**	**0.008**	***Improvement***		**OVERSAT**	**F**	**OVERSAT**	**F**	**-4.9**	**-0.009**	***Improvement***	
43	US 101 Northbound Off-Ramp & Donohoe Street*	AM	4/25/2019	Signalized	49.8	D	**OVERSAT**	**F**	**OVERSAT**	**F**	**71.7**	**0.171**	***Corridor***		**OVERSAT**	**F**	**OVERSAT**	**F**	**77.2**	**0.158**	***Corridor***	
		PM	4/25/2019		**>120**	**F**	**OVERSAT**	**F**	**OVERSAT**	**F**	**56.4**	**0.130**	***Improvement***		**OVERSAT**	**F**	**OVERSAT**	**F**	**46.5**	**0.102**	***Improvement***	
44	Cooley Avenue & Donohoe Street*	AM	6/5/2019	Signalized	32.9	C	**OVERSAT**	**F**	**OVERSAT**	**F**	**8.7**	**0.091**	***Corridor***		**OVERSAT**	**F**	**OVERSAT**	**F**	**29.3**	**0.091**	***Corridor***	
		PM	6/5/2019		36.7	D	**OVERSAT**	**F**	**OVERSAT**	**F**	**18.8**	**0.074**	***Improvement***		**OVERSAT**	**F**	**OVERSAT**	**F**	**63.7**	**0.143**	***Improvement***	
45	University Avenue & US 101 Southbound Ramps*	AM	4/25/2019	Signalized	**98.9**	**F**	**OVERSAT**	**F**	**OVERSAT**	**F**	**7.8**	**0.019**	***Corridor***		**OVERSAT**	**F**	**OVERSAT**	**F**	**-2.0**	**-0.004**	***Corridor***	
		PM	4/25/2019		**87.1**	**F**	**OVERSAT**	**F**	**OVERSAT**	**F**	**1.6**	**0.004**	***Improvement***		**OVERSAT**	**F**	**OVERSAT**	**F**	**6.7**	**0.016**	***Improvement***	
46	University Avenue & Woodland Avenue*	AM	4/25/2019	Signalized	**67.1**	**E**	**OVERSAT**	**F**	**OVERSAT**	**F**	**0.1**	**0.000**	***Corridor***		**OVERSAT**	**F**	**OVERSAT**	**F**	**14.1**	**0.04**	***Corridor***	
		PM	4/25/2019		**>120**	**F**	**OVERSAT**	**F**	**OVERSAT**	**F**	**-7.8**	**-0.018**	***Improvement***		**OVERSAT**	**F**	**OVERSAT**	**F**	**19.1**	**0.045**	***Improvement***	
47	E. Bayshore Road & Donahoe Street*	AM	5/21/2019	Signalized	32.6	C	**OVERSAT**	**F**	**OVERSAT**	**F**	**5.7**	**0.013**	***Corridor***		**OVERSAT**	**F**	**OVERSAT**	**F**	**-22.4**	**-0.048**	***Corridor***	
		PM	5/21/2019		38.5	D	**OVERSAT**	**F**	**OVERSAT**	**F**	**5.8**	**0.015**	***Improvement***		**OVERSAT**	**F**	**OVERSAT**	**F**	**-5.3**	**-0.011**	***Improvement***	
48	E. Bayshore Road & Holland Street	AM	6/5/2019	TWSC	8.8	A	8.8	A	8.8	A	0.0	0.000			8.8	A	8.8	A	0.0	0.000		
		PM	6/5/2019		10.0	A	10	A	10	A	0.0	0.000			10	A	10.0	A	0.0	0.000		
49	Saratoga Avenue & Newbridge Street	AM	6/5/2019	TWSC	13.3	B	17.9	C	18.2	C	0.9	0.074			**>120**	**F**	**>120**	**F**	**9.8**	**0.061**	***No Feasible***	
		PM	6/5/2019		15.6	C	22.0	C	21.0	C	0.0	-0.024			**40.0**	**E**	28.6	D	**-2.2**	**-0.12**	***Improvement***	
50	E. Bayshore Road & Euclid Avenue*	AM	5/21/2019	AWSC	**52.4**	**F**	**OVERSAT**	**F**	**OVERSAT**	**F**	**3.6**	**0.028**	***Corridor***		**OVERSAT**	**F**	**OVERSAT**	**F**	**53.8**	**0.057**	***Corridor***	
		PM	5/21/2019		32.6	D	**OVERSAT**	**F**	**OVERSAT**	**F**	**-2.5**	**-0.016**	***Improvement***		**OVERSAT**	**F**	**OVERSAT**	**F**	**-2.7**	**-0.009**	***Improvement***	
51	Clarke Avenue & E. Bayshore Road	AM	9/25/2018	Signalized	13.9	B	13.9	B	14	B	0.2	0.008			14.1	B	14.2	B	0.2	0.014		
		PM	9/25/2018		10.7	B	10.7	B	12.5	B	1.7	0.031			13.9	B	14.0	B	0.2	0.007		
52	Pulgas Avenue & E. Bayshore Road	AM	6/5/2019	Signalized	20.4	C	20.9	C	21.7	C	1.7	0.042			25.4	C	26.5	C	1.4	0.017		
		PM	6/25/2019		19.9	B	33.1	C	37.6	D	5.7	0.034			48.1	D	47.3	D	-0.4	-0.002		

Note:
* Denotes a CMP interesection
AWSC - All Way Stop Control; TWSC - Two Way Stop Control
[1] Average delay is reported for signalized and AWSC intersections. For TWSC intersections, the delay for the worst stop-controlled movement is reported.
[2] Intersection is signalized under cumulative conditions.
"OVERSAT" indicates that the SimTraffic microsimulation model indicates that the intersection would experience capacity issues where the demand cannot be served by the intersection. Oversaturated intersections would operate at LOS F.
* Intersections were analyzed using Synchro/SimTraffic software due to the close proximity of these intersections. Changes in critical delay and v/c calculated using Traffix.
Bold indicates substandard level of service
Bold indicates adverse effect

Adverse Effects and Recommended Improvements

Improvement options were studied for each intersection that were found to be non-compliant under the near term plus project conditions, and cumulative plus project conditions, were compared to near term no project, and cumulative no project conditions, respectively. Potential improvement strategies are shown in Table ES-6.

Table ES- 6
Recommended Improvements

#	Intersection	Potential Improvement	Notes
1	Marsh Road & Bayfront Expressway	Modify the southbound approach to include a shared left-through lane, shared through-right lane, and a right turn only lane.	This improvement is in Menlo Park's traffic impact fee (TIF) program. With implementation of these intersection modifications, the intersection would be in compliance with the TIA Guidelines and address the Proposed Project's share of the non compliant operation.
5	Marsh Road & Bohannon Drive/Florence Street	Physical improvements at this intersection are considered infeasible due to right-of-way constraints and/or adverse effects on pedestrian and bicycle travel.	The City's TIF program includes multi-modal improvements along the Marsh Road corridor such as Class II buffered bike lanes along Marsh Road from Bay Road to Scott Road, and installing sidewalks along the north-side of Marsh Road between Page Street and Bohannon Drive/Florence Street. Implementing recommended multi-modal facilities along the corridor (from the City's TIF program) could shift some motor vehicle traffic to alternative modes of travel and reduce congestion. With implementation of these multi-modal improvements, the intersection deficiencies could be further reduced and partially address the Proposed Project's share of the non compliant operations at this intersection.
13	Chilco Street & Hamilton Avenue	A traffic signal is not recommended until signal warrants conducted with a future year's actual counts have been met	The recommended improvement includes conducting a signal warrant analyses for a period of five years after full Project completion to determine if a signal would be warranted and if warranted, install a new signal. This improvement is included in the City's TIF program. With implementation of the intersection modifications, the intersection would be in compliance with the TIA Guidelines which would address the Proposed Project's share of the non compliant operation.
16 17 18 23	Willow Road & Bayfront Expressway; Willow Road & Hamilton Avenue; Willow Road & Park Street; Willow Road & US 101 southbound ramps	Physical improvements at thes intersection are considered infeasible due to right-of-way constraints and/or adverse effects on pedestrian and bicycle travel.	The TIF program also proposes multimodal improvements along this section of Willow Road. Implementing recommended multi-modal facilities along the corridor (from the City's TIF program) could shift some motor vehicle traffic to alternative modes of travel and reduce congestion. With implementation of these multi-modal improvements, the intersection deficiencies could be further reduced and partially address the Proposed Project's share of the non compliant operations along Willow Road.
19	Willow Road & Ivy Drive	The Menlo Park TIF proposes to install a right-turn overlap phase on southbound Ivy Drive and restrict eastbound Willow Road U-turns.	This would improve the critical movement delay of the local approach to better than cumulative no project conditions. The Project is required to pay traffic impact fees according to the City's current TIF schedule.

Table ES-6 (Continued)
Recommended Improvements

#	Intersection	Potential Improvement	Notes
21	Willow Road & Newbridge Street	The TIF program proposes to modify the signal timing to a protected left-turn phasing operation on Newbridge Street, provide a leading left-turn phase on the southbound movement and a lagging left-turn phase on the northbound movement, and optimize signal timing.	With implementation of these intersection modifications under project conditions, the critical movement delay would be reduced for the northbound movement to lower than no project conditions. However, the improvement would not address the southbound deficiency. Further improvements to address the southbound deficiency are not feasible.
24	Willow Road & Bay Road	The TIF program proposes to modify the southbound approach at this intersection to two left-turn lanes and one right-turn lane and to modify the westbound approach to add a right-turn lane. With these improvements under project conditions, the critical movement delay at the local approach would be reduced to lower than no project conditions.	This improvement would address the adverse effect on the intersection due to Project traffic. With implementation of these intersection modifications, the Willow Road and Bay Road intersection would be in compliance with the TIA Guidelines which would address the Proposed Project's share of the non compliant operation. With implementation of the recommended improvements from the TIF program for the Willow Road and Bay Road intersection the deficiency attributable to the Proposed Project would be addressed.
25	Willow Road & Hospital Plaza/Durham Street	The recommended improvement measure for this intersection is restriping northbound Durham Street as a shared left-through lane and right-turn lane, and adding a northbound right turn overlap phase.	With this improvement, the critical movement delay of the local approach would improve to better than cumulative no project conditions in the AM peak hour. The PM peak hour would continue to be non-compliant. If this recommended improvement measure is implemented, the Project should contribute its fair share (25%) towards the improvement. Fair share is calculated as the percentage of net project traffic generated of the overall cumulative traffic growth at this intersection.
30	O'Brien Drive & Kavanaugh Drive	The recommended improvement to bring this intersection back to pre-Project conditions is the installation of the new traffic signal and appropriate pedestrian and bicycle accommodation. Alternatively, traffic calming measures could be installed to discourage the use of Kavanaugh Drive, which is a residential street, and encourage vehicles to use O'Brien Drive and Adam's Drive instead. Other measures such as peak period turning movement restrictions could be considered to discourage traffic from using Kavanaugh Drive and improve intersection operations.	Monitoring of traffic operations at this intersection for a period of five years after full Project completion should be conducted to determine if signalization or alternative improvements are needed. If warranted, implementation of the new traffic signal would address the Proposed Project's share of the non compliant operation and bring the intersection into compliance with the TIA Guidelines. If the alternative measures are implemented, the intersection may or may not be brought into compliance with the TIA Guidelines and address the Proposed Project's share of the non compliant operation.
32	Adams Drive & O'Brien Drive	The recommended improvement to bring this intersection back to pre-Project conditions is the installation of the new traffic signal and appropriate pedestrian and bicycle accommodations at this intersection and within the vicinity. The expected intersection operational issues would be due to the increased through traffic on O'Brien Drive between the Project Site and University Avenue. Menlo Park's TIF program identifies an improvement to signalize the nearby intersection at University Avenue and Adams Drive in East Palo Alto. This improvement may provide an alternative route for Project vehicles to access the Project Site via University Avenue.	Monitoring of traffic operations at this intersection for a period of five years after full Project completion should be conducted to determine if signalization or alternative improvements are needed. If warranted, implementation of the new traffic signal would address the Proposed Project's share of the non compliant operation and bring the intersection into compliance with the TIA Guidelines. If the alternative measures are implemented, the intersection may or may not be brought into compliance with the TIA Guidelines and address the Proposed Project's share of the non compliant operation.

Table ES-6 (Continued)
Recommended Improvements

#	Intersection	Potential Improvement	Notes
39	University Avenue & Bay Road	Potential modification to bring the intersection to pre-Project conditions would be to add an exclusive eastbound right-turn lane and a second eastbound left-turn lane on University Avenue, add a second northbound left-turn lane on Bay Road, add a second westbound left-turn lane on University Avenue, and modify signal phasing.	Since this intersection is located within the City of East Palo Alto, the recommended measure to bring the intersection back to pre-Project conditions and address the Project's share of the non compliant operation would be to make a fair share (34%) contribution towards this improvement. Fair share is calculated as the percentage of net project traffic generated divided by the overall cumulative traffic growth at this intersection. The Menlo Park TIF includes improvements at the University Avenue and Bay Road intersection, but not sufficient improvements to bring the intersection back to pre-Project conditions, as described above. However, the Project's fair share contribution towards this intersection would be calculated considering credit from its TIF payment.
42 43 44 45 46 47 50	University Avenue & Donohoe Street; US 101 Northbound Off-ramp & Donohoe Street; Cooley Avenue & Donohoe Street; University Avenue & US 101 Southbound Ramps; University Avenue & Woodland Avenue; E. Bayshore Road & Donohoe Street; Donohoe Street & Euclid Avenue	East Palo Alto plans to widen the northbound approach on Donohoe Street at the US 101 northbound off-ramp to accommodate four through lanes to improve the vehicular throughput at this intersection. This improvement will require median modifications and narrowing the southbound Donohoe Street approach to Cooley Avenue to include two through lanes and a full length left-turn lane. In addition, the traffic signals will be coordinated with adjacent traffic signals on Donohoe Street. East Palo Alto also plans to install a new traffic signal at the US 101 northbound on-ramp and Donohoe Street and Bayshore Road and Euclid Avenue to coordinate with other closely spaced traffic signals along Donohoe Street. Along with new traffic signals, appropriate pedestrian and bicycle accommodation will be provided. This includes pedestrian countdown timers, Americans with Disabilities Act (ADA) compliant curbs, and bicycle detection loops. In order to align with the proposed driveway for the University Plaza Phase II site on the north side of Donohoe Street, the US 101 on-ramp will be shifted approximately 30 feet to the south. In addition, the northbound approach on Donohoe Street will be restriped to accommodate a short exclusive left-turn pocket (approximately 60 feet in length), a shared left-through lane, and a shared through-right lane. These improvements would require widening of the US 101 northbound on-ramp to accommodate two lanes that taper down to a single lane before this ramp connects with the loop on-ramp from eastbound University Avenue. A northbound right turn only will also be added to Bayshore Road and Euclid Avenue.	Because the improvements in this corridor are all interconnected and dependent on each other to work, the recommended improvement measure would be for the Project sponsor to contribute its fair share to improvements at all six intersections in this corridor. Fair share is calculated as the percentage of net project traffic generated of the overall cumulative traffic growth at this intersection. • Donohoe Street & Cooley Avenue: 10% fair share • Donohoe Street & US 101 Northbound Off-Ramp: 24% fair share • Donohoe Street & University Avenue: 31% fair share • Donohoe Street & US 101 Northbound On-Ramp: 8% fair share • Donohoe Street/Bayshore Road & Euclid Avenue: 2% fair share • US 101 Southbound Ramps & University Avenue: 33% fair share The Menlo Park TIF includes improvements at the University Avenue and Donohoe Street and University Avenue and US 101 southbound ramps intersections, which funding would go toward the planned coordinated system of intersections. The Project's fair share contribution towards these two intersections would be calculated considering credit from its TIF payment.
49	Saratoga Avenue & Newbridge Street	Physical improvements at this intersection are considered infeasible due to proximity to Willow Road.	

Intersection Queuing Analysis

The analysis of intersection levels of service was supplemented with a vehicle queuing analysis for intersection left-turning movements where the proposed project would add significant trips per lane in the vicinity of the Project Site and affect intersection operations. Locations where the estimated 95th percentile queues would exceed the available storage capacity for the movement are discussed below. Queuing issues are operational issues resulting from signal timing and queue storage provisions. Queuing issues are not considered a CEQA issue related to hazards.

Eastbound Left-turn at Willow Road and Bayfront Expressway (#16)

Under near-term conditions, the 95th percentile queue would exceed the storage length of the turn pocket by 15 vehicles during the AM peak hour and four vehicles during the PM peak hour. The Proposed Project would add three vehicles to the 95th percentile queue during the AM peak hour and PM peak hour. There is no room to extend the left turn pocket due to the emergency vehicle only lane cut in the median.

Eastbound Left-turn at Willow Road and Ivy Drive (#19)

Under near-term conditions, the 95th percentile queue exceeds the storage length of the turn pocket by three vehicles during the AM peak hour. The Proposed Project would add one vehicle to the 95th percentile queue during the AM peak hour and one vehicle during the PM peak hour. There is no room to further extend this left-turn.

Southbound Left-turn at Willow Road and Bay Road (#24)

Under near-term conditions, the 95th percentile queue exceeds the storage length of the turn pocket by 13 vehicles during the AM peak hour and one vehicle during the PM peak hour. The Proposed Project would add six vehicles to the 95th percentile queue during the AM peak hour and three vehicles during the PM peak hour. Menlo Park's TIF has a project to add a second left-turn lane to this intersection, which would add additional storage for left-turning vehicles. The exact length of the addition will be determined during the design phase for the intersection improvement. Construction of the recommended improvement would reduce the queuing deficiency created by the Proposed Project.

Eastbound Left-turn and Southbound left-turn at University Avenue and O'Brien Drive (#36)

The existing vehicle storage for the eastbound left turn pocket on University Avenue at O'Brien Drive is 125 feet, which provides enough spaces for about 5 vehicles. Under existing conditions, the 95th percentile queue exceeds the storage length of the turn pocket by 3 vehicles during the AM peak hour. The Proposed Project would add 22 vehicles to the 95th percentile queue during the AM peak hour. There is no room to lengthen the eastbound left turn pocket.

The existing vehicle storage for the southbound left turn pocket on O'Brien Drive at University Avenue is 60 feet, which provides enough spaces for 2 vehicles. Under existing conditions, the 95th percentile queue exceeds the storage length of the turn pocket by one vehicle during the AM peak hour and 11 vehicles during the PM peak hour. The Project would add one vehicle to the 95th percentile queue during the AM peak hour. There would be no increase to the 95th percentile queue length during the PM peak hour. There is room to extend the left turn pocket to accommodate the estimated 95th percentile queue of 325 feet.

Menlo Park's Traffic Impact Fee (TIF) program identifies an improvement to signalize the nearby intersection at University Avenue and Adams Drive in East Palo Alto. This improvement may provide an alternative route for Project vehicles to access the Project Site via University Avenue, and alleviate potential queuing issues at this intersection.

Freeway Facilities Analysis

To determine the Proposed Project's potential freeway adverse effects, a select-zone analysis within the Menlo Park model was performed to estimate the increase in project traffic volume between existing conditions and near term with project conditions. Freeway segments that would experience a freeway adverse effect generated by the Proposed Project are identified below.

San Mateo County

The proposed project would add traffic greater than 1% capacity to the following study freeway segments operating below its LOS standard:

- SR 84 – from Willow Road to Alameda County Line – PM Peak Hour
- SR 84 – from Alameda County Line to Willow Road – AM Peak Hour
- US 101 – between Santa Clara County Line and Whipple Avenue – AM & PM Peak Hours
- US 101 – from Whipple Avenue to SR 92 – PM Peak Hour
- US 101 – from SR 92 to Whipple Avenue – AM Peak Hour

Santa Clara County

The proposed project would add traffic greater than 1% capacity to the following mixed-flow freeway segments operating below its LOS standard:

- US 101 – from SR 85 to Embarcadero Road – AM & PM Peak Hours
- US 101 – from Embarcadero Road to SR 85 – PM Peak hour

The proposed project would add traffic greater than 1% capacity to the following HOV freeway segment operating below its LOS standard:

- US 101 – from Oregon Expressway to Embarcadero Road – AM Peak Hour

Freeway Improvements

It should be noted that the near term plus project conditions model run assumed the US 101 express lane project in San Mateo County. Improvements to eliminate the adverse freeway effects on US 101 and on SR 84 within San Mateo County would require additional capacity improvements and/or additional TDM measures that would reduce peak-hour vehicle trip-making by more than 70%. San Mateo County currently has no plans to further improve US 101 beyond the identified express lane projects. There are also no identified plans to improve the Bayfront Expressway (SR 84) corridor. Such an aggressive TDM plan would also not be feasible.

Within Santa Clara County, Valley Transportation Authority's Valley Transportation Plan 2040 identifies freeway express lane projects along US 101 that would convert the existing HOV lanes to express lanes and add a second express lane in each direction. This improvement would increase the capacity of the freeway and would adequately address the freeway impacts.

The potential Dumbarton Rail corridor would slightly reduce the Project contribution to the identified adverse effects but would not eliminate any. Therefore, the Project's adverse effects on US 101 and on SR 84 freeway segments in San Mateo County would remain.

Freeway Ramp Analysis

A freeway ramp analysis is conducted under near term plus project conditions to determine whether freeway ramps would continue to have sufficient capacity to serve the forecasted traffic demand. Under near term plus project conditions, all study freeway ramps would continue to have sufficient capacity to serve the anticipated demand.

Roadway ADT Analysis

The roadway ADT analysis was conducted under cumulative with project conditions. To determine net Project added traffic, a select zone analysis was conducted using the Menlo Park model under cumulative with project conditions and existing conditions. The proposed project would generate non-compliance at the following roadway segments:

- Willow Road, east of Durham Street
- Willow Road, east of Blackburn Avenue
- Middlefield Road, south of Willow Road
- Marsh Road, east of Bohannon Drive
- O'Brien Drive, south of Willow Road
- O'Brien Drive, north of University Avenue
- Bay Road, north of Willow Road

Internal Site Access, Circulation, and Parking

Appendix H includes the analysis of the main Willow Village site as well as the Hamilton parcels. The site plan review evaluated the internal site's intersection operations, potential queuing issues, and general site access and circulation for the proposed seven new internal streets, 14 parking garage driveways, and 20 new intersections. The results of the level of service analysis show that the intersection of Driveway B & East Loop Road would operate at LOS D during the AM peak hour. Vehicles turning left out of Driveway B would be expected to experience an average delay of 31 seconds while waiting for a sufficient opening on East Loop Road. During the AM peak hour, approximately 101 vehicles (16 heading eastbound and 85 heading westbound) would be expected to exit the garage, which would be one to two vehicles per minute. Therefore, although exiting drivers would experience some wait time, operations at Driveway B are expected to be adequate. The results of the queuing analysis show that the intersection of Hamilton Avenue/Main Street & Willow Road is expected to have insufficient turn lane storage to accommodate the anticipated traffic volumes under near-term plus project conditions. However, it is assumed that vehicles would choose to instead enter the project site via Park Street. Hexagon recommends the following regarding the internal project circulation:

Circulation Related Recommendations

- To prevent southbound queues from spilling back onto Willow Road on Park Street and Main Street, Hexagon recommends coordinating the adjacent signals.

Sight Distance Related Recommendations

- As discussed under Mitigation Measure TRA-2 (see Transportation Chapter of the draft EIR), prior to issuance of the building permit for the North Garage, the applicant shall revise the access design to provide adequate sight distance for the eastern driveway or other design solutions to reduce hazards to a less than significant level, to the satisfaction of the Public Works Director. Potential solutions that would reduce hazards to a less than significant level include restricting the eastern driveway to inbound vehicles only or prohibiting exiting left turns, modifying landscaping or relocating the driveway to the west to allow for adequate sight distance for exiting vehicles, or installing an all-way stop or signal. If driveway A were restricted to inbound vehicles only, all outbound vehicles would use Driveway B, which would provide adequate sight distance for vehicles exiting the north office garage. Driveway B might need multiple exiting lanes to limit queuing inside the garage for exiting vehicles. Alternatively, Driveway A could be moved farther west on East Loop Road so that adequate sight distance could be provided.

- Prior to final design, the project applicant should ensure that landscaping and vegetation would not obstruct visibility at the parking garage driveways.
- Hexagon recommends including 30 feet of red curb on both sides of all garage driveways to prevent vehicles from parking and obstructing the vision of exiting drivers.
- If vehicles exiting the garages cannot see oncoming pedestrians on the sidewalk, Hexagon recommends installing warning signs to alert pedestrians when vehicles are exiting the garages.
- If any driveways are moved from their position on the current site plan, sight distance should be reevaluated.

Parking Garage Circulation Related Recommendations

- Prior to final design, it is recommended that all driveway widths meet the City's requirements.
- At garage driveways where gates and garage doors are proposed, Hexagon recommends conducting an operational analysis to ensure that gate opening and closing times would not create queuing issues or cause vehicles to spill onto the roadway network.
- Prior to final design, the residential parking on level P1 of building RS2 should be shown to be gated and separated from the retail parking on levels 1 and 2. In addition, the roll-up gate in building RS3 should be clearly shown to separate the retail parking in level B1 and the residential parking in level B2.
- It is recommended that all drive aisle and parking stall widths meet the City's requirements.
- It is recommended that adequate turnaround space is provided at all dead-end drive aisles.

Parking Related Recommendations

- If individual vehicles are not able to be retrieved in the tandem puzzle parking, the tandem spaces should be assigned to one residential unit.
- Prior to final design, Hexagon recommends that the required number of ADA and EV parking spaces be provided in all parking garages.

Pedestrian Related Recommendations

- Hexagon recommends that a crosswalk is provided at the intersection of Center Street & East Street and that midblock crosswalks are provided on Center Street and Park Street to reduce block size and improve pedestrian convenience.

Hamilton Parcels Recommendations

- The Hamilton Avenue Parcels are located within the C-2-S zoning district, which per Menlo Park Municipal Code Section 16.37(7), will have parking requirements established by the planning commission for each development. The Hamilton Avenue Parcel North proposes total potential development up to 22,402 square feet and 93 spaces. The Hamilton Avenue Parcel South proposes total development of 5,760 s.f. and 13 spaces. It is recommended that the project applicant confirm that sufficient parking is provided for the proposed total development as part of future architectural control and use permit applications with the City.

1. Introduction

This report presents the results of the Transportation Impact Analysis (TIA) conducted for the proposed Willow Village Master Plan Project in Menlo Park, California. Proposed Project would redevelop an approximately 59-acre industrial site plus two parcels north of Willow Road[7] (collectively, the Project Site) as a mixed-use development (Figure 1). The Proposed Project would demolish all existing onsite buildings and landscaping on the 59-acre portion of the Project Site and construct new buildings, provide open space areas, and install infrastructure within a new Residential/Shopping District, Town Square District, and Campus District. In addition, the Proposed Project would alter two parcels (Hamilton Avenue Parcels North and South[8]) to accommodate realignment of Hamilton Avenue at Willow Road for Project Site access.

The Proposed Project would provide up to 1.6 million sf of space for office and accessory use (consisting of up to 1.25 million sf of office uses and the balance (350,000 square if office use is maximized) of accessory uses[9]) and up to 200,000 sf of commercial/retail space. The Proposed Project would also include up to 1,730 multi-family housing units, an up to 193-room hotel, and open spaces, including publicly accessible parks (e.g. 3.5 acre publicly accessible park, elevated linear park, town square, and dog park).

The Project Site would be bisected by a new north–south street (Main Street) and an east–west street, which would provide access to all three districts. It would include a circulation network for vehicles, bicycles, and pedestrians, inclusive of both public rights-of-way and private streets, that would be generally aligned to an east-to-west and a north-to-south grid (Figure 2). The Proposed Project would also alter parcels north of the industrial site, across Willow Road, on both the east and west sides of Hamilton Avenue (Hamilton Avenue Parcels North and South) to support realignment of the Hamilton Avenue right-of-way and provide access to the new elevated park. This would require demolition and reconstruction of an existing service station (Chevron gas station) and potentially an increase in 1,000 sf on Hamilton Avenue Parcel South and enable the potential addition of up to 6,700 sf of retail uses at the existing neighborhood shopping center on the Hamilton Avenue Parcel North. A total of 7,700 sf could be added to the Hamilton Avenue Parcels (Figure 3).

[7] For transportation analysis, “North/South” is aligned to be parallel to US 101. Hence, Willow Road and University Avenue are considered east-west streets, whereas Hamilton Avenue and Bayfront Expressway are considered north-south streets.
[8] Hamilton Avenue Parcels North and South consider Hamilton Avenue an east to west street, which differs from the compass directions used for the transportation analysis discussion.
[9] Accessory uses could include the following types of spaces: meeting/collaboration space, orientation space, training space, event space, incubator space, a business partner center, an event building (including pre-function space, collaboration areas, and meeting/event rooms), a visitor center, product demonstration areas, film studio, gathering terraces and private gardens, and space for other Meta accessory uses. Accessory uses could occur in spaces located anywhere throughout the Campus District

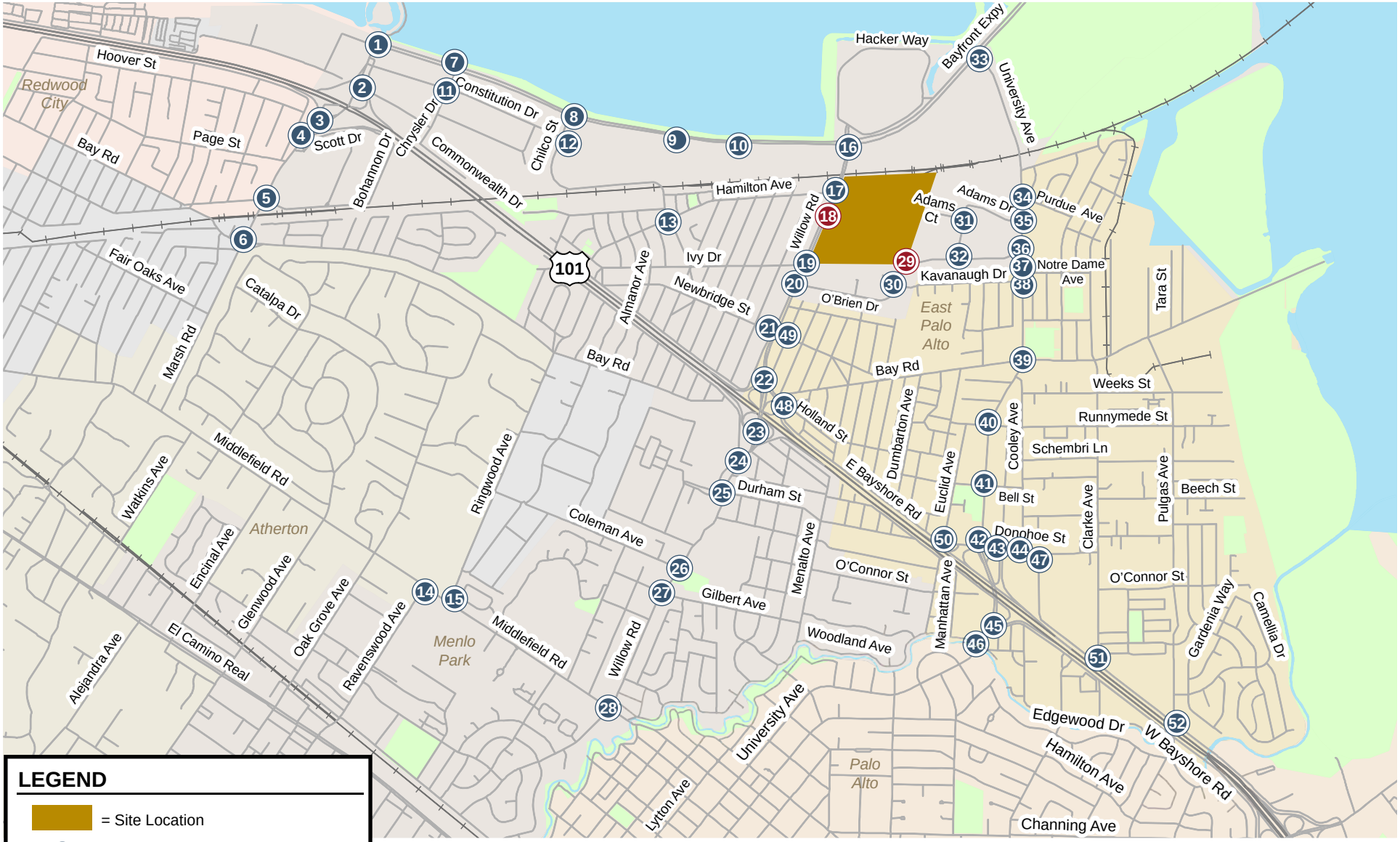


Figure 1
Site Location and Study Intersections

LEGEND	
1	Town Square
2	Grocery Store on Ground Level
3	Publicly Accessible Park
4	Publicly Accessible Dog Park
5	Elevated Park Access (Elevator and Stairs)
6	Elevated Park
7	Hotel
8	Mixed-Use Block
9	Residential Block
10a	Office Campus
10b	Meeting & Collaboration Space
11	Parking Garage with Transit Hub on Ground Level
12	Proposed Multi-use Pathway
13	Willow Road Tunnel
14	Realigned Hamilton Avenue

Figure 2
Site Plan

NORTH
Not to Scale

Figure 3
Hamilton Avenue Parcels Site Plan

NORTH
Not to Scale

Scope of Study

The purpose of the transportation study is to identify any transportation operational issues in accordance with City of Menlo Park standards and procedures. This report includes a CEQA VMT analysis, non-CEQA level of service (LOS) analysis (or roadway congestion analysis) and on-site access and circulation review to inform local planning efforts per the City's TIA Guidelines.

CEQA VMT Analysis

Per the City of Menlo Park VMT guidelines adopted in July 2020 and updated in January 2022, mixed-use projects will have each component analyzed independently against the appropriate thresholds. The Project proposes office, residential, hotel and retail land uses. OPR's *Technical Advisory on Evaluating Transportation Impacts in CEQA* recommends that VMT analysis for a mixed-use project should account for internal capture. Internal capture is defined as walking, bicycling, and tram trips between the various types of land use within the Project. By reducing external vehicle trips, internal capture reduces VMT for a mixed-use project in comparison to single-use developments. The project proposes office, residential, hotel and retail land uses. Each of the Project's land uses' VMT threshold of significance is listed below:

- An office project is considered to have a significant impact on VMT if the project's VMT exceeds a threshold of 15 percent below the regional average VMT per employee.
- A residential project is considered to have a significant impact on VMT if the project's VMT exceeds a threshold of 15 percent below the regional average VMT per capita.
- Hotel and retail projects are considered to have a significant impact on VMT if the project results in a net increase in total City VMT.

It should be noted that the City's VMT guidelines exempt local serving retail projects (defined as 50,000 square feet or less) from carrying out a VMT analysis. However, this project exceeds that size.[10]

Non-CEQA Level of Service (Roadway Congestion Analysis)

An LOS analysis was conducted to identify whether the proposed project would comply with local policies.

The traffic analysis is based on the AM and PM peak-hour level of service for 42 signalized intersections and 10 unsignalized intersections in the vicinity of the Project Site as illustrated in Figure 1. Traffic conditions at the study intersections were analyzed for the weekday AM and PM peak hours of adjacent street traffic. The AM peak hour is expected to occur between 7:00 AM and 10:00 AM, and the PM peak hour between 4:00 PM and 7:00 PM on a typical weekday. These are the hours during which most traffic congestion occurs on the roadways. Intersections within the City of East Palo Alto are also studied due to Menlo Park's settlement agreement with the City of East Palo Alto.

The proposed project would generate greater than 100 peak-hour trips. The San Mateo County City/County Association of Governments (C/CAG) administers the CMP. Therefore, an analysis in accordance with the C/CAG CMP guidelines is included.

[10] The VMT for the main Project Site was evaluated. The reconstruction of the service station would not increase VMT, and the modest increase in retail square footage at Hamilton Avenue Parcel North would be operated as a separate project and would be substantially below the City's threshold. Therefore, VMT was not studied for the reconstruction of the service station and the potential increase in square footage at Hamilton Parcel North.

Study Intersections

1. Marsh Road and Bayfront Expressway [Menlo Park]*
2. Marsh Road and US 101 Northbound Off-Ramp [Caltrans]
3. Marsh Road and US 101 Southbound Off-Ramp [Caltrans]
4. Marsh Road and Scott Drive [Menlo Park]
5. Marsh Road and Bohannon Drive/Florence Street [Menlo Park]
6. Marsh Road and Bay Road [Menlo Park]
7. Chrysler Drive and Bayfront Expressway [Menlo Park]
8. Chilco Street and Bayfront Expressway [Menlo Park]
9. MPK 21 Driveway and Bayfront Expressway [Menlo Park]
10. MPK 20 Driveway and Bayfront Expressway [Menlo Park]
11. Chrysler Drive and Constitution Drive [Menlo Park]
12. Chilco Street and Constitution Drive/MPK 22 Driveway (unsignalized) [Menlo Park]
13. Chilco Street and Hamilton Avenue (unsignalized) [Menlo Park]
14. Ravenswood Avenue and Middlefield Road [Menlo Park]
15. Ringwood Avenue and Middlefield Road [Menlo Park]
16. Willow Road and Bayfront Expressway [Menlo Park]*
17. Willow Road and Hamilton Avenue [Menlo Park]
18. Willow Road and Park Street (future intersection) [Menlo Park]
19. Willow Road and Ivy Drive [Menlo Park]
20. Willow Road and O'Brien Drive [Menlo Park]
21. Willow Road and Newbridge Street [Menlo Park]
22. Willow Road and US 101 Northbound Ramps [Caltrans]
23. Willow Road and US 101 Southbound Ramps [Caltrans]
24. Willow Road and Bay Road [Menlo Park]
25. Willow Road and Hospital Plaza/Durham Street [Menlo Park]
26. Willow Road and Coleman Avenue [Menlo Park]
27. Willow Road and Gilbert Avenue [Menlo Park]
28. Willow Road and Middlefield Road [Menlo Park]
29. O'Brien Drive/Loop Road and Main Street/O'Brien Drive (future intersection) [Menlo Park]
30. O'Brien Drive and Kavanaugh Drive (unsignalized) [Menlo Park]
31. Adams Drive and Adams Court (unsignalized) [Menlo Park]
32. Adams Drive and O'Brien Drive (unsignalized) [Menlo Park]
33. University Avenue and Bayfront Expressway [Menlo Park]*
34. University Avenue and Purdue Avenue (unsignalized) [East Palo Alto]
35. University Avenue and Adams Drive (unsignalized) [East Palo Alto]
36. University Avenue and O'Brien Drive [East Palo Alto]
37. University Avenue and Notre Dame Avenue [East Palo Alto]
38. University Avenue and Kavanaugh Drive [East Palo Alto]
39. University Avenue and Bay Road [East Palo Alto]
40. University Avenue and Runnymede Street [East Palo Alto]
41. University Avenue and Bell Street [East Palo Alto]
42. University Avenue and Donohoe Street [East Palo Alto]
43. US 101 Northbound Off-Ramp and Donohoe Street [Caltrans]
44. Cooley Avenue and Donohoe Street [East Palo Alto]
45. University Avenue and US 101 Southbound Ramps [Caltrans]
46. University Avenue and Woodland Avenue [East Palo Alto]
47. East Bayshore Road and Donohoe Street [East Palo Alto]
48. East Bayshore Road and Holland Street (unsignalized) [East Palo Alto]
49. Saratoga Avenue and Newbridge Street (unsignalized) [East Palo Alto]

50. East Bayshore Road and Euclid Avenue (unsignalized) [East Palo Alto]
51. Clarke Avenue and East Bayshore Road [East Palo Alto]
52. Puglas Avenue and East Bayshore Road [East Palo Alto]

*Denotes CMP facilities

Freeway Segments

San Mateo County

- SR 84 – between US 101 and Alameda County Line
- US 101 – between Santa Clara County Line and SR 92
- SR 109 (University Avenue) – between Kavanaugh Drive and SR 84
- SR 114 (Willow Road) – between US 101 and SR 84

Santa Clara County

- US 101 – between SR 85 and Embarcadero Road

Alameda County

- SR 84 – between San Mateo County Line and I-880

Freeway Ramps

US 101 & Marsh Road Interchange

- Southbound off-ramp to Marsh Road
- Northbound on-ramp from westbound Marsh Road

US 101 & Willow Road Interchange

- Northbound off-ramp to Willow Road
- Northbound on-ramp from westbound Willow Road
- Southbound on-ramp from westbound Willow Road
- Southbound off-ramp to Willow Road

US 101 & University Avenue Interchange

- Northbound off-ramp to Donohoe Street
- Southbound on-ramp from University Avenue

Traffic conditions were evaluated for the following scenarios:

Scenario 1: *Existing Conditions.* Existing traffic volumes at the study intersections are based on traffic counts obtained from the City of Menlo Park and/or previous studies for other nearby developments.

Scenario 2: *Near-term (2025) Conditions.* The near-term scenario assumed a year 2025 horizon[11] and was analyzed using the model. Traffic volumes were obtained from the Menlo Park Travel Demand Model and adjusted based on existing counts and model results. In addition, traffic and roadway improvements associated with the approved developments were assumed as directed by City Staff.

[11] 2025 is the earliest year for expected occupancy when this analysis started.

Scenario 3: *Near-term (2025) plus Project Conditions.* The near term plus project scenario was analyzed using the model. Traffic volumes were obtained from the Menlo Park Travel Demand Model and adjusted based on existing counts and model results. The near-term plus project scenario was evaluated relative to the near-term scenario.

Scenario 4: *Cumulative (2040) Conditions.* The cumulative scenario assumed a year 2040 horizon and represented the buildout of the adopted General Plan for the City of Menlo Park, including a pending General Plan Amendment for 123 Independence Drive. This scenario was analyzed using the model. Traffic volumes were obtained from the Menlo Park Travel Demand Model and adjusted based on existing counts and model results. In addition, traffic and roadway improvements associated with the approved developments were assumed as directed by City Staff.

Scenario 5: *Cumulative (2040) Plus Project Conditions.* The cumulative plus project scenario was analyzed using the model. Traffic volumes were obtained from the Menlo Park Travel Demand Model and adjusted based on existing counts and model results. The cumulative plus project scenario was evaluated relative to the cumulative scenario.

Scenario 6: *Cumulative (2040) with Dumbarton Rail.* The cumulative with Dumbarton Rail scenario assumed that the Dumbarton Rail would be built and there would be a shift in vehicular trips to transit trips near the Project Site[12] as well as along the Dumbarton Rail corridor. Cumulative plus project conditions with Dumbarton Rail were evaluated relative to cumulative conditions with the Dumbarton Rail. This analysis is speculative since there is no current approved plan or financing to provide any Dumbarton transit service and is provided for informational purposes in the transportation analysis.

Methodology

This section presents the methods used to determine the traffic conditions at study intersections for each scenario described above. It includes descriptions of the data requirements, the analysis methodologies, and the applicable level of service standards and criteria used to determine if a project is compliant with local policies.

Data Requirements

The data required for the analysis were obtained from the City of Menlo Park, field observations, and previous studies. The following data were obtained from these sources:

- existing peak-hour intersection turning-movement volumes,
- existing lane configurations,
- signal timing and phasing, and
- list of approved projects.

Existing counts and field observations were conducted prior to the COVID19 pandemic. No adjustments to the data were made based on pandemic conditions.

[12] *Dumbarton Rail Corridor Update Public Meeting*, Prepared by Facebook for the San Mateo County Transit District. March 15, 2021

Intersection Level of Service Methodologies

Traffic conditions were evaluated using level of service (LOS). Level of service is a qualitative description of operating conditions ranging from LOS A, or free-flow conditions with little or no delay, to LOS F, or forced-flow conditions with extreme delays.

As stated above, LOS is no longer a CEQA threshold. However, the General Plan and City's TIA Guidelines require that the TIA also analyze LOS for local planning purposes (per General Plan Program Circ-3.A Transportation Impact Metrics):

> Supplement Vehicle Miles Traveled (VMT) and greenhouse gas emissions per service population (or other efficiency metric) metrics with Level of Service (LOS) in the transportation impact review process, and utilize LOS for identification of potential operational improvements, such as traffic signal upgrades and coordination, as part of the Transportation Master Plan.

The LOS analysis would determine whether the project traffic would cause an intersection LOS to exceed the City's LOS thresholds or cause either the average delay or average critical delay to exceed the City's intersection delay thresholds under near term and cumulative conditions. The LOS and delay thresholds vary depending on the street classifications as well as whether the intersection is on a State route or not.

The City's TIA Guidelines further require an analysis of the Proposed Project in relation to relevant policies of the Circulation Element and consideration of specific measures to address noncompliance with local policies which may occur as a result of the addition of project traffic. The TIA identifies measures that could be applied as conditions of approval that would bring operations back to pre-Project levels. Although not included in the TIA for purposes of this EIR, an analysis may be prepared separately to determine if there are potential measures that could bring the Proposed Project into conformance with the LOS goals of Circulation Policy 3.4. Implementation of any such measures would require review and approval by City decision makers.

The level of service standard for the City of East Palo Alto at the study intersections is LOS D or better.

Microscopic Simulation of Study Intersections

Due to the close proximity of selected study intersections, six study intersections in the vicinity of the US 101/University Avenue interchange, and ten intersections along Willow Road, were analyzed using the Synchro/SimTraffic 9 software. Unlike macroscopic models of isolated intersection operations such as the Highway Capacity Manual methodology, SimTraffic is a microscopic model that measures the full impact of queuing and blocking of intersections. This software also provides a visual animation of the traffic operations. Simulated delay values were correlated to the level of service definitions set forth in the 2000 Highway Capacity Manual (HCM) methodology.

Macroscopic Analysis of Signalized Intersections

Traffic operations at the signalized study intersections in the City of Menlo Park were evaluated using the VISTRO software based on the level of service method described in the Highway Capacity Manual (HCM) 6th Edition. The study intersections in the City of East Palo Alto and the City of Palo Alto were evaluated using the TRAFFIX software based on the 2000 HCM methodology. The study intersections in Atherton were evaluated using the SYNCHRO software based on the HCM 6th Edition methodology. The 2000 HCM and HCM 6th Edition evaluate signalized intersection operations on the basis of average control delay time for all vehicles at the intersection. Table 1 shows the level of service definitions for signalized intersections.

Unsignalized Intersections

Peak-hour levels of motor vehicle delay at the unsignalized study intersections in the City of Menlo Park were evaluated using the VISTRO software based on the HCM 6th Edition. The study intersections in the City of East Palo Alto were evaluated using the TRAFFIX software based on the 2000 HCM methodology. With these methods, operations are defined by the average control delay per vehicle (measured in seconds) for each movement that must yield the right-of-way. At side-street controlled intersections (two-way or one-way stop control), the control delay (and LOS) is reported for the approach with the highest delay. For all-way stop-controlled intersections, the average delay (and LOS) for all movements is reported. Table 2 summarizes the relationship between average control delay per vehicle and LOS for unsignalized intersections.

Table 1
Signalized Intersection Level of Service Definitions Based on Control Delay

Level of Service	Description	Average Control Delay Per Vehicle (sec.)
A	Signal progression is extremely favorable. Most vehicles arrive during the green phase and do not stop at all. Short cycle lengths may also contribute to the very low vehicle delay.	10.0 or less
B	Operations characterized by good signal progression and/or short cycle lengths. More vehicles stop than with LOS A, causing higher levels of average vehicle delay.	10.1 to 20.0
C	Higher delays may result from fair signal progression and/or longer cycle lengths. Individual cycle failures may begin to appear at this level. The number of vehicles stopping is significant, though some vehicles may still pass through the intersection without stopping.	20.1 to 35.0
D	The influence of congestion becomes more noticeable. Longer delays may result from some combination of unfavorable signal progression, long cycle lengths, or high volume-to-capacity (V/C) ratios. Many vehicles stop and individual cycle failures are noticeable.	35.1 to 55.0
E	This is considered to be the limit of acceptable delay. These high delay values generally indicate poor signal progression, long cycle lengths, and high volume-to-capacity (V/C) ratios. Individual cycle failures occur frequently.	55.1 to 80.0
F	This level of delay is considered unacceptable by most drivers. This condition often occurs with oversaturation, that is, when arrival flow rates exceed the capacity of the intersection. Poor progression and long cycle lengths may also be major contributing causes of such delay levels.	greater than 80.0

Source: Transportation Research Board, *Highway Capacity Manual 6th Edition* (Washington, D.C., 2016), p.16-19.

Table 2
Unsignalized Intersection Level of Service Definition Based on Average Delay

Level of Service	Description	Average Delay Per Vehicle (Sec.)
A	Little or no traffic delay	10.0 or less
B	Short traffic delays	10.1 to 15.0
C	Average traffic delays	15.1 to 25.0
D	Long traffic delays	25.1 to 35.0
E	Very long traffic delays	35.1 to 50.0
F	Extreme traffic delays	greater than 50.0

Source: Transportation Research Board, *Highway Capacity Manual 6th Edition* (Washington D.C., 2016).

Freeway Segments

Freeway segments within the County of San Mateo are evaluated by using the volume-to-capacity (V/C) ratio method according to the City/County Association of Governments (C/CAG) CMP guidelines. The CMP specifies varying capacities be used based on the number of lanes and the free-flow travel speed. The County of San Mateo freeway segment V/C ratio is correlated to level of service as shown in Table 3.

Within Santa Clara County, freeway segments are analyzed as prescribed in the Santa Clara County CMP technical guidelines. The level of service for freeway segments is estimated based on vehicle density. Vehicle density on a segment is correlated to level of service as shown in Table 3. The CMP requires that mixed-flow lanes and auxiliary lanes be analyzed separately from high-occupancy vehicle (HOV) lanes. The CMP specifies that a capacity of 2,300 vehicles per hour per lane (vphpl) be used for segments three lanes or wider in one direction, and a capacity of 2,200 vphpl be used for segments two lanes wide in one direction. HOV lanes are specified as having a capacity of 1,650 vphpl.

Freeway segments within Alameda County are evaluated by using V/C ratios according to the Alameda County Transportation Commission (ACTC) guidelines. The CMP specifies that a capacity of 2,000 vehicles per hour per lane (vphpl) be used for all freeway segments. The Alameda County freeway segment V/C ratio is correlated to level of service as shown in Table 3.

Freeway Ramps

A freeway ramp analysis was performed in order to verify that the freeway ramps would have sufficient capacity to serve the expected traffic volumes with and without the project. This analysis consisted of a volume-to-capacity ratio evaluation of the freeway ramps at the study interchanges. The ramp capacities were obtained from the *Highway Capacity Manual 2000,* and considered the free-flow speed, number of lanes on the ramp, and ramp metering.

Table 3
Freeway Segment Level of Service Definition

Level of Service	Description	San Mateo County [1] Maximum V/C Ratio	Santa Clara County [2] Density (vehicles/mile/ lane)	Alameda County [3] Maximum V/C Ratio
A	Average operating speeds at the free-flow speed generally prevail. Vehicles are almost completely unimpeded in their ability to maneuver within the traffic stream.	0.28	11.0 or less	0.35
B	Speeds at the free-flow speed are generally maintained. The ability to maneuver within the traffic stream is only slightly restricted, and the general level of physical and psychological comfort provided to drivers is still high.	0.46	11.0 to 18.0	0.58
C	Speeds at or near the free-flow speed of the freeway prevail. Freedom to maneuver within the traffic stream is noticeably restricted, and lane changes require more vigilance on the part of the driver.	0.67	18.0 to 26.0	0.75
D	Speeds begin to decline slightly with increased flows at this level. Freedom to maneuver within the traffic stream is more noticeably limited, and the driver experiences reduced physical and psychological comfort levels.	0.85	26.0 to 46.0	0.90
E	At this level, the freeway operates at or near capacity. Operations in this level are volatile, because there are virtually no usable gaps in the traffic stream, leaving little room to maneuver within the traffic stream.	1	46.0 to 58.0	1
F	Vehicular flow breakdowns occurs. Large queues form behind breakdown points.	greater than 1	greater than 58.0	greater than 1

Source:

1. City/County Association of Governments of San Mateo County, Final San Mateo County Congestion Management Program 2019, Table B-1 (65 mph free-flow speed).
2. Santa Clara County Valley Transportation Authority, Transportation Impact Analysis Guidelines, Updated October 2014.
3. Alameda Cunty Congestion Management Agency, *2020 Multimodal Monitoring Report*, Table A-1.

Level of Service Standards and Adverse Effect Criteria

City of Menlo Park Definition of Adverse Effect

The following thresholds are from the City of Menlo Park's TIA Guidelines and the proposed project's compliance with local policies was evaluated based on these thresholds.

- A project is considered potentially noncompliant with local policies if the addition of project traffic causes an intersection on a collector street operating at LOS "A" through "C" to operate at an unacceptable level (LOS "D," "E" or "F") or have an increase of 23 seconds or greater in average vehicle delay, whichever comes first. Potential noncompliance shall also include a project that causes an intersection on arterial streets or local approaches to State controlled signalized intersections operating at LOS "A" through "D" to operate at an unacceptable level (LOS "E" or "F") or have an increase of 23 seconds or greater in average vehicle delay, whichever comes first.
- A project is also considered potentially noncompliant if the addition of project traffic causes an increase of more than 0.8 seconds of average delay to vehicles on all critical movements for intersections operating at a near-term LOS "D" through "F" for collector streets and at a near-term LOS "E" or "F" for arterial streets. For local approaches to State controlled signalized intersections, a project is considered to be potentially noncompliant if the addition of project traffic causes an increase of more than 0.8 seconds of delay to vehicles on the most critical movements for intersections operating at a near-term LOS "E" or "F."

State (Caltrans) Controlled Intersections Definition of Adverse Effect

For signalized intersections involving two state routes, the proposed project is considered potentially non-compliant with local policies if for any peak hour:

- The level of service degrades from an acceptable LOS D or better under existing conditions to an unacceptable LOS E or F under existing plus project conditions, and the average delay per vehicle increases by four seconds or more, or
- The level of service is an unacceptable LOS E or F under existing conditions and the addition of project trips causes an increase in the average control delay at the intersection by four seconds or more.

City of East Palo Alto Definition of Adverse Effect

The following thresholds are used in East Palo Alto, and the proposed project's compliance with local policies was evaluated based on these thresholds:

At a signalized intersection, the project is considered to have an adverse effect if it:

- Causes operations to degrade from LOS D (or better) to LOS E or F; or
- Exacerbates LOS E or F conditions by both increasing critical movement delay by four or more seconds and increasing volume-to-capacity ratio (V/C ratio) by 0.01 at an intersection evaluated using the TRAFFIX software; or
- Increases the V/C ratio by > 0.01 at an intersection that exhibits unacceptable operations, even if the calculated LOS is acceptable; or
- Causes planned future intersections to operate at LOS E or F.

At an unsignalized intersection, the proposed project is considered to have an adverse effect if it:

- Causes operations to degrade from LOS D or better to LOS E or F; or
- Exacerbates LOS E or F conditions by increasing control delay by five or more seconds; and
- Causes volumes under project conditions to exceed the Caltrans Peak-Hour Volume Warrant Criteria.

Intersection Vehicle Queuing Analysis

For selected high-demand movements at the study intersections, the estimated maximum vehicle queues were compared to the existing or planned storage capacity. The queuing analysis is used to determine the appropriate storage lengths for the high-demand turn lanes where the proposed project would add a substantial number of trips to these movements. Vehicle queues were estimated using Vistro or Synchro for intersections analyzed with this software and a Poisson probability distribution for intersections analyzed in Traffix. Poisson probability distribution estimates the probability of "n" vehicles for a vehicle movement using the following formula:

$$\text{Probability } (X=n) = \frac{\lambda^n e^{-(\lambda)}}{n!}$$

Where:

Probability (X=n) = probability of "n" vehicles in queue per lane

n = number of vehicles in the queue per lane

λ = Average number of vehicles in queue per lane (vehicles per hour per lane/signal cycles per hour)

The basis of the analysis is as follows: (1) the Poisson probability distribution, Vistro, or Synchro is used to estimate the 95th percentile maximum number of queued vehicles per signal cycle for a particular movement; (2) the estimated maximum number of vehicles in the queue is translated into a queue length, assuming 25 feet per vehicle; and (3) the estimated maximum queue length is compared to the existing or planned available storage capacity for the movement.

For signalized intersections, the 95th percentile queue length value indicates that during the peak hour, a queue of this length or less would occur on 95 percent of the signal cycles. In other words, a queue length larger than the 95th percentile queue would only occur on five percent of the signal cycles (about three cycles during the peak hour for a signal with a 60-second cycle length). Therefore, left-turn storage pocket designs based on the 95th percentile queue length would ensure that storage space would be exceeded only five percent of the time. The 95th percentile queue length is also known as the "design queue length."

2. CEQA VMT Analysis

Project VMT is defined as the total distance traveled by vehicles traveling to and from the Proposed Project over a typical day. In order to estimate VMT for the various land use components, the citywide travel demand forecast model was used. The citywide model is the best available model to represent travel within the City of Menlo Park, and serves as the primary forecasting tool for the City. The model is a mathematical representation of travel within the nine Bay Area counties, as well as the Santa Cruz, San Benito, Monterey and San Joaquin counties. The base model structure was developed by the Metropolitan Transportation Commission (MTC) and further refined by the City/County Association of Governments and Santa Clara Valley Transportation Authority for use within San Mateo County and Santa Clara County. The City further refined this model for application with Menlo Park to add more detail to the zone structure and transportation network. The model has a base year of year 2019 (see Appendix E, Transportation/Traffic, of this EIR for the model's calibration and validation memo).

There are four main components of the model: 1) trip generation, 2) trip distribution, 3) mode choice, and 4) trip assignment. The model uses socioeconomic inputs (i.e., population, income, employment) aggregated into geographic areas, called transportation analysis zones (TAZ) to estimate travel within the model area. There are 80 TAZs within the model to represent the City of Menlo Park. The model was used to estimate the Proposed Project's effect on VMT in accordance with the City's VMT guidelines.

VMT Evaluation

The most readily available long-range forecast year is the year-2040 conditions, which assumes the buildout of the City of Menlo Park General Plan and any pending General Plan Amendments, the buildout of the pending developments in the City of East Palo Alto (as of December 2020), and regional growth projected by the Association of Bay Area Governments (ABAG), modified by VTA/C/CAG for model land use inputs. Therefore, the project's VMT analysis was conducted under year-2040 conditions.

Office and Residential Land Uses

According to the City's VMT guidelines, office land use is evaluated based on a daily VMT per employee metric. Using the model, this metric is calculated only for home-based work trips, per OPR's Technical Advisory on Evaluating Transportation Impacts in CEQA. Based on the latest citywide travel demand model, the regional average office VMT is 15.9 per employee. Therefore, City's office VMT impact threshold, at 15% below regional average, would be 13.6 daily VMT per employee.

According to City VMT guidelines, the evaluation of residential land use is based on a daily VMT per capita metric. Using the model, this metric is calculated only for home-based trips, per OPR's technical advisory. Based on the latest citywide travel demand model, regional average residential VMT is 13.1

per capita. Therefore, the City's residential VMT impact threshold, at 15% below regional average, would be 11.2 daily VMT per capita.

Office and residential land uses were evaluated using the model under the year-2040 plus project scenario. For the Campus District, the applicant proposed a daily trip cap of 18,237 trips, which would be 20% below the standard ITE trip generation estimate. The model was adjusted to account for the proposed trip cap. As shown in Table 4 below, the project's Campus District land use would generate VMT at the City's VMT impact threshold and would thus not have a VMT impact.

For the residential land use, trip generation was adjusted to account for the Project's expected 2.03 people per unit compared to the ITE average of 2.46 people per unit. The VMT analysis also accounted for the applicant proposed TDM Plan for the mixed-use district. The TDM Plan proposed a 20% trip reduction from gross ITE trip generation through a combination of passive TDM measures and active TDM measures. Passive TDM measures include the project's proximity to complementary land uses, proximity to alternative transportation infrastructure, and the project's mixed-use nature. As discussed in Chapter 3 below, it is estimated that the passive TDM measures would achieve a 17% trip reduction from the gross ITE trip generation. Active TDM measures include TDM programs to be implemented to further promote alternative modes of travel. These TDM measures generally include providing transit, biking, and carpooling information to residents, assisting in ride-matching programs for residents, and could also include transit subsidies and other measures. To represent the applicant proposed 20% trip reduction goal and given that passive TDM measures are assumed to achieve a 17% trip reduction, the balance of 3% (20%-17%) trip reduction due to active TDM measures was assumed for the VMT analysis.

The Project's residential land use would require a 16% reduction in VMT to mitigate the significant VMT impact. The VMT analysis, as discussed above, already assumed 3% trip reduction due to active TDM measures. Therefore, mitigation of the VMT impact would require implementing a TDM Plan for the residential component that achieves at least 19% (3% + 16%) trip reduction via active TDM measures (see Figure 10 below in Chapter 3) or increases the effectiveness of passive TDM measures. According to the Project's proposed TDM Plan dated July 2021 and attached in Appendix G, the proposed active TDM measures for the residential component could achieve at least a 19% reduction in trips, with an estimated reduction between between 11% and 36% [13]. This range represents the potential low to high range of effectiveness of the proposed TDM measures, as calculated by research data from the California Air Pollution Control Officers Association (CAPCOA). This range depends on how each TDM measure is eventually implemented. Therefore, it is feasible for the Project to mitigate its residential VMT impact by implementing its proposed TDM Plan.

Table 4
Office and Residential VMT Evaluation

Land Use	Regional Average	VMT Threshold	Project VMT	VMT Impact	Additional TDM Mitigation needed to eliminate VMT impact
Office [1]	15.9	13.6	13.6	No	-
Residential [2]	13.1	11.2	13.3	Yes	16%

Notes:
** All data referenced the latest Menlo Park citywide travel demand forecast model.*
1. VMT for office land use is reported in VMT per employee.
2. VMT for residential land use is reported in VMT per capita.

[13] Willow Village TDM Plan. Prepared for Peninsula Innovation Partners. Fehr & Peers, Inc. July 2021

IMPACT (TRA-2 in Transportation Chapter): As shown in Table 4 above, the Proposed Project's residential land use VMT is estimated to be 13.3 daily miles per capita, which would exceed the VMT threshold and result in a VMT impact. The mitigation measure TRA-2 identified below would fully mitigate this impact.

MITIGATION MEASURE (TRA 2 in Transportation Chapter): The residential land use of the Project Site will be required to implement a TDM Plan achieving a 36% reduction from gross ITE trip generation rates (for the Proposed Project, this reduction equals 6,023 daily trips). Should a different number of residential units be built, the total daily trips will be adjusted accordingly. The required residential TDM Plan will include annual monitoring and reporting requirements on the effectiveness of the TDM program. The Project applicant submitted a draft residential TDM Plan, which contained specific measures that would meet this trip reduction requirement. The draft TDM Plan is subject to City review and approval . If the annual monitoring finds that the TDM reduction is not met, the TDM coordinator will be required to work with City staff to detail next steps to achieve the TDM reduction. With the implementation of the required residential TDM Plan, the residential VMT impact would be **less than significant with mitigation (LTS/M)**.

Hotel

Hotel land uses are not explicitly represented in the model. Therefore, the hotel rooms and jobs expected for the Proposed Project are accounted for separately. Hotel employees are represented in the model by service employees. To reflect trips by hotel patrons, residential land use was used as a proxy, as it most closely resembles the behavior pattern of a hotel guest. Trip making characteristics for these proxy residential land uses were restricted to offices and restaurants/shops to mimic patron activities at a typical business hotel (home-based work and home-based shopping trips). Other types of trip-making typical to an actual home such as school trips generally are not applicable to hotel guests. Given the model would only explicitly represent hotel employee VMT without this adjustment, this proxy evaluation provides a conservative analysis as it attributes more VMT (hotel guest VMT) to the Proposed Project. This methodology is undertaken only for VMT purposes.

Project Study Area

Based on consultation with the City and applicant, the hotel is expected to have a service area of approximately three (3) miles in radius. This means that most of the destinations of hotel patrons are expected to be within three miles of the hotel. While some trips are expected to be longer than three miles, the majority of the change in VMT is expected to occur within this three-mile radius. The evaluated daily VMT includes the entire length of the trip even when it extends beyond the three-mile radius.

Scenario Evaluation

The hotel VMT analysis was conducted using the City's transportation model. To evaluate the effect of the hotel component on total daily VMT, the analysis compared two scenarios: 1) with project, and 2) with project without the hotel component (or the "no hotel" scenario).

It was assumed that new hotels would not increase trips overall but would reorient existing trips. Therefore, when hotel trips were added in one zone, they must be subtracted from other zones. This process was represented in the model by redistribution of the hotel attractions from nearby existing hotels. Eleven comparable hotels were found within the area for this redistribution effort (see Figure 4). The proposed hotel would be located within very close proximity to major employment in the Bayfront area, such that hotel patrons may enjoy shorter travel distances to their business destinations. Its location within a mixed-use project, including complementary retail space, also would allow hotel patrons to shop/dine within walking distance.

Service employees were coded in the model under “no hotel” conditions for the zones representing the eleven existing hotels. Under the “with-project” model run, service employees at these zones were shifted to the project zone. According to the project applicant, the hotel would have 210 employees. Thus, approximately 19 service employees were shifted from each of the existing zones to the project zone under the “with-project” model run.

The zones representing the eleven existing hotels do not include any residential land use as a proxy for hotel patrons under the “no hotel” scenario. Thus, residential dwelling units were first added to these zones under the “no hotel” model run, so that under the “with-project” model run, shifting these residential land uses to the project zone would still maintain the same model-wide total land uses. Approximately 270 households were needed at the project zone in addition to the 210 service employees under the “with-project” model run for the model to compute trip generation roughly equivalent to the daily trip generation estimated for the hotel component based on ITE rates. Therefore, under the “no hotel” model run, 270 households were evenly distributed to the eleven zones with existing hotels. It should be noted that the project’s proposed TDM plan is accounted for in the daily trip generation estimates.

VMT Evaluation

The total daily VMT generated by land uses within a three-mile radius was compared under the “no hotel” and “with project” scenarios. As shown in Table 5, the proposed hotel component of the project was shown to slightly reduce the total daily VMT generated by land uses within a three-mile radius of the Project Site. Since the proposed hotel would be located within very close proximity to major employment in the Bayfront area, hotel patrons would enjoy shorter travel distances to their business destinations. It’s location within a mixed-use project, including complementary retail space, also would allow hotel patrons to shop/dine within walking distance.

Because the proposed hotel component of the Project would not cause an increase in total VMT generated within the analysis area, it is concluded that the proposed hotel component of the Project would have a less than significant impact on vehicle miles travelled.

Table 5
Hotel VMT Evaluation

	3-Mile Radius Area of Project Site		
	No Hotel Conditions [2]	With Project Conditions [2]	% Change
Total Daily VMT [1]	6,656,914	6,629,443	-0.4%

Notes:
1. Total daily VMT includes VMT generated by all trips having at least one trip-end in the analysis area, as estimated by the citywide travel demand model.
2. "No hotel conditions" represent conditions with the Proposed Project except the hotel component. "With project conditions" represent conditions with the Proposed Project including the hotel component.

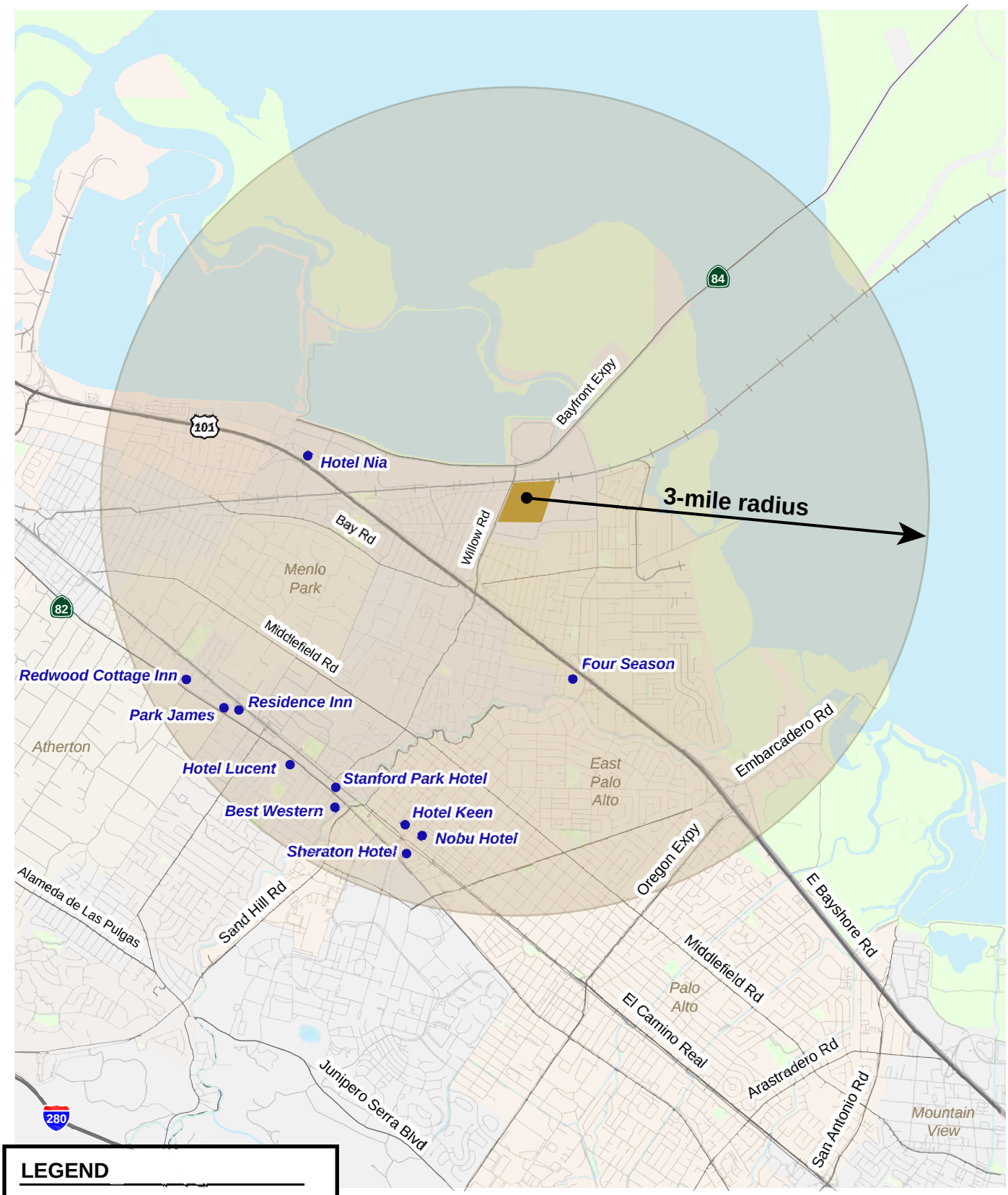


Figure 4
Locations of Comparable Hotel Land Use

Retail

The project has two areas of retail development. The main Project Site includes up to 200,000 s.f. of retail space within a mixed use development. North of Willow Road, as a result of the proposed Hamilton Avenue realignment, the two retail parcels adjacent to Hamilton Avenue at the intersection with Willow Road ("Hamilton Avenue Parcels") would be reconfigured. The Project proposes to increase the total retail square footage at the Hamilton Avenue parcels by up to 7,700 s.f. to approximately 23,400 s.f. Because the retail at the Hamilton Avenue Parcels will require a separate use permit and would be operated as a separate retail use from the retail uses at the main Project Site, the Hamilton Avenue Parcels retail is evaluated separately from the retail component of the main Project Site. According to the City's VMT policy, local serving retail (defined as having total square footage less than 50,000 s.f.) would be exempt from a VMT analysis. The Project's proposed net 7,700 s.f. of potential retail development at the Hamilton Avenue Parcels would thus be exempt from VMT analysis. The discussion below is focused on the 200,000 s.f. of retail space at the main Project Site.

Project Study Area

Based on the types of retail being proposed as well as nearby comparable retail stores, it is expected that the proposed retail would have a service area of approximately five (5) miles in radius. The 5-mile radius service area was selected based on engineering judgement, as it would cover most of Menlo Park, Palo Alto, as well as downtown Redwood City, and would include a mix of retail shops and restaurants comparable to the three cities. Assuming equal services, it is expected that people would patronize the closer store or restaurant. The five-mile radius service area also means that most of the destinations of the Project's retail patrons are expected to be within five miles of the project. While some trips are expected to be longer than five miles, the majority of the change in VMT is expected to occur within this five-mile radius.

Scenario Evaluation

The retail VMT analysis was conducted using the City's transportation model. To evaluate the effect of the retail component on total daily VMT, the analysis compared two scenarios: 1) with project, and 2) with project without the retail component (or the "no retail" scenario).

Similar to the hotel evaluation methodology discussed above, retail employees were redistributed from existing retail locations for the purpose of the VMT analysis. Six (6) comparable retail sites were found within the area for this redistribution effort (see Figure 5).

Retail employees were coded in the model under "no retail" conditions for the zones representing the six existing retail sites. Under the "with-project" model run, retail employees at these zones were shifted to the project zone. The retail land use is expected to generate 571 employees based on the City's default retail employees-per-square-foot conversion rate (1 employee per 350 square feet). Retail employees were shifted from each of the existing zones to the project zone under the "with-project" model run. The number of retail employees shifted from each existing zone was proportionally based on each zone's existing retail employment size (see Figure 6).

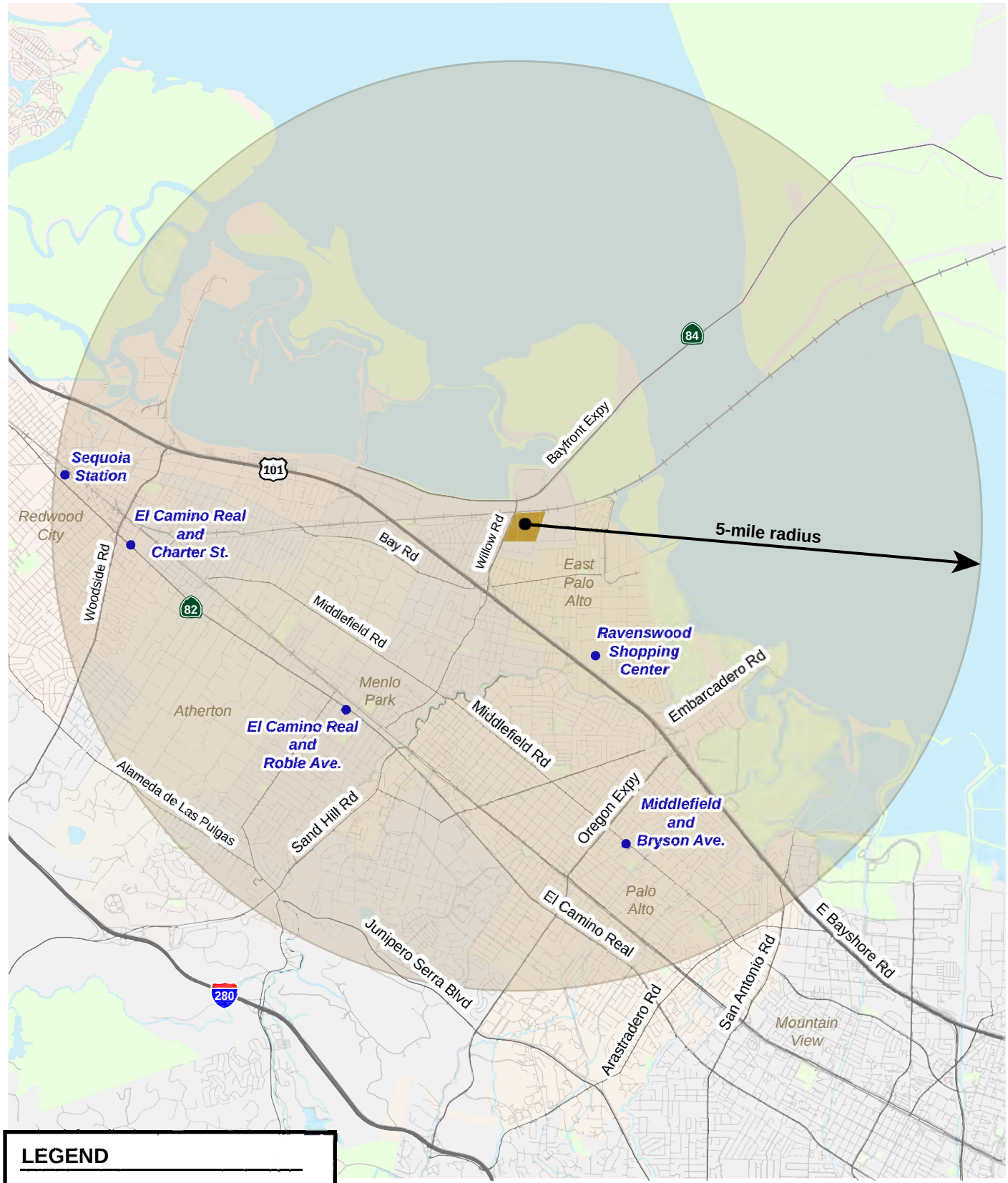


Figure 5
Locations of Comparable Retail Land Use

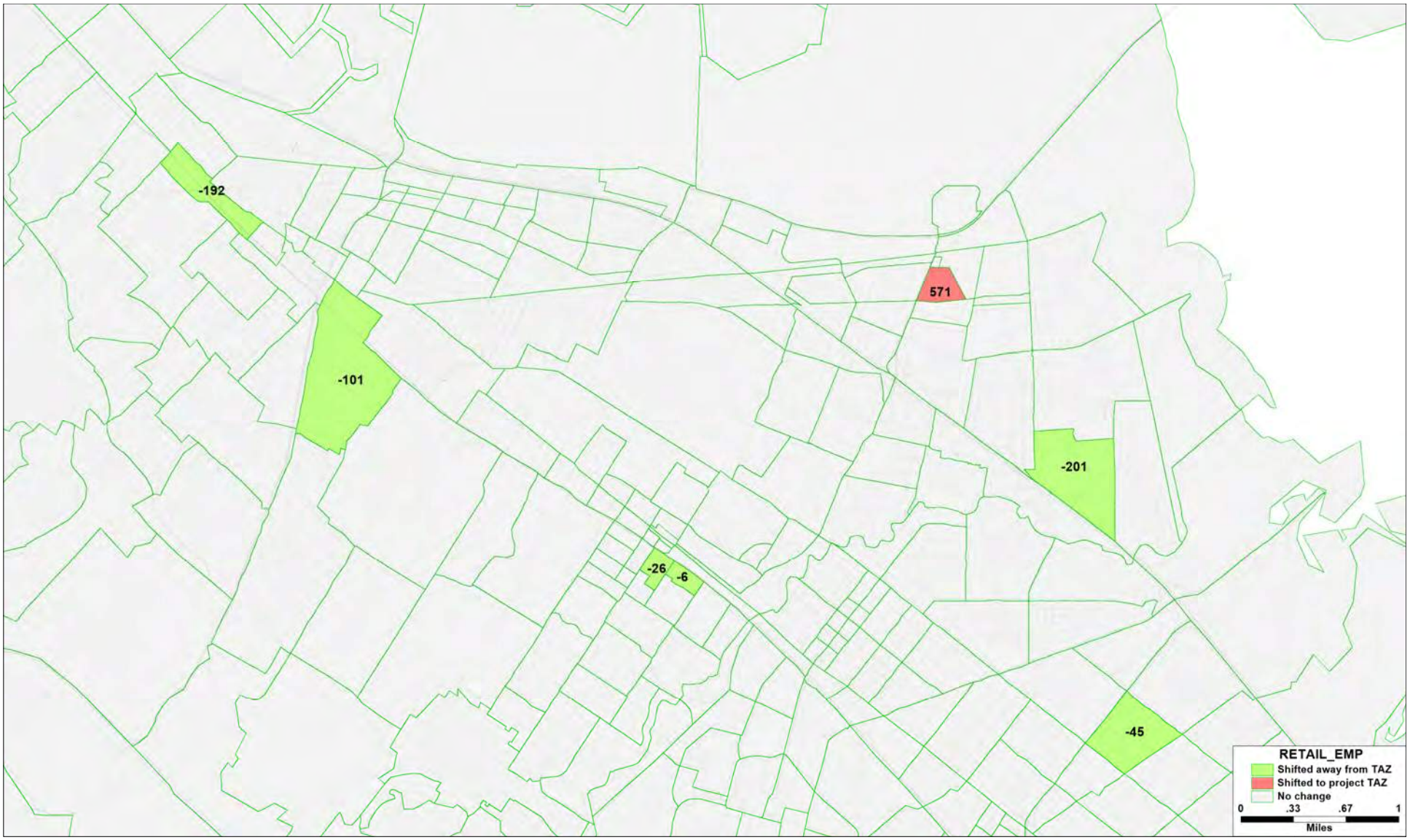


Figure 6
Retail Employment Shifts for VMT Analysis

VMT Evaluation

The total daily VMT generated by land uses within a five-mile radius was compared under the "no retail" and "with project" scenarios. As shown in Table 6, the proposed retail component of the project was shown to slightly reduce the total daily VMT generated by land uses within a five-mile radius of the Project Site. Since the proposed retail space would be located in close proximity to the Belle Haven neighborhood, a large number of offices and life sciences buildings in the Bayfront area, as well as the project's proposed residential land uses, the proposed retail component would provide retail stores closer to homes for nearby residents and closer to jobs for nearby workers.

Because the proposed retail component of the Project would not cause an increase in total VMT generated by the analysis area, it is concluded that the proposed retail component of the Project would have a less than significant impact on vehicle miles travelled.

Table 6
Retail VMT Evaluation

	5-Mile Radius Area of Project Site		
	No Retail Conditions [2]	With Project Conditions [2]	% Change
Total Daily VMT [1]	14,360,590	14,334,067	-0.2%

Notes:
1. Total daily VMT includes VMT generated by all trips having at least one trip-end in the analysis area, as estimated by the citywide travel demand model.
2. "No retail conditions" represent with the Proposed Project except the retail component. "With project conditions" represent with the Proposed Project including the retail component.

Event VMT

The Campus District would consist of up to 1.6 million square feet of space for office and accessory uses, consisting of up to 1.25 million sf of office uses and the balance (350,000 sf if office uses were maximized) of accessory uses[14]. In addition to serving as a gathering space for the surrounding campuses, the applicant proposes to host approximately 55 events per year, that would attract majority non-Menlo Park Meta workers and/or guests. Ten of these events are envisioned as large-sized events with attendance varying between 2,500 and 5,000 people. 15 of these events are envisioned as medium-sized events with attendance varying between 1,000 and 2,500 people. The remaining 30 events would be small-sized events with attendance lower than 1,000 people. It is anticipated that the small-sized events would generate a minimal number of trips that would not exceed the proposed Campus District trip cap. The Project is proposing an allowance of up to 25 exceptions to the trip cap for days when there are medium-size or large-size events. Due to the limited number of events that would exceed the proposed trip cap, it is deemed that such events are not typical conditions and do not require a VMT analysis for CEQA purposes. This impact would be ***less than significant***.

While some of these events could potentially generate substantial traffic that could affect intersection operations in the Project area, specific event details are not known. While congestion is not a CEQA impact, the Project would be required, as a condition of Project approval, to submit event traffic plans

[14] Accessory uses could include the following types of spaces: meeting/collaboration space, orientation space, training space, event space, incubator space, a business partner center, an event building (including pre-function space, collaboration areas, and meeting/event rooms), a visitor center, product demonstration areas, film studio, gathering terraces and private gardens, and space for other Meta accessory uses. Accessory uses could occur in spaces located anywhere throughout the Campus District.

for large events for City approval to demonstrate measures that would be taken to minimize the events' effect on roadway traffic conditions.

Impacts on Pedestrian, Bicycle and Transit Facilities

The project is consistent with all applicable pedestrian, bicycle and transit related plans, ordinances and policies, as listed below:

- City of Menlo Park Circulation Element of the General Plan
- City of Menlo Park Municipal Code, Sections 16.43.100 and 16.45.090
- City of Menlo Park Transportation Master Plan
- City of Menlo Park Transportation Impact Fee

Pedestrian and Bicycle Facilities

The Proposed Project would include multiple pedestrian and bicycle connections between the Project Site and the surrounding roadway network and within the Project Site. The planned bicycle and pedestrian facilities within the Project Site are discussed in Appendix H.

The proposed pedestrian connections to the surrounding roadway network include crosswalks at the proposed signalized intersections on Willow Road at Main Street and Park Street that would connect the Project Site to the Belle Haven neighborhood. The proposed bicycle connections include connections to the existing class II bike lane along Willow Road via Park Street and Main Street. In addition, the Proposed Project includes an elevated park that would provide grade separated pedestrian and bicycle access between the Project site and the Belle Haven neighborhood.

Menlo Park's TIF program also proposes the following bicycle and pedestrian facilities in the immediate vicinity of the Project Site which would improve connections between the Project Site and the surrounding neighborhoods:

- Bicycle signals, cross-bike markings, high visibility crosswalks, and pedestrian improvements at the eastbound right-turn channelizing island at Willow Road and Bayfront Expressway
- Class III bike routes, wider sidewalks, and narrower median on Ivy Drive
- Wider median on the west leg of Willow Road and Ivy Drive, increased pedestrian crossing time, and high visibility crosswalks at the intersection
- Curb ramps, high visibility crosswalks, increased pedestrian crossing times, and bulbouts on the southeast and southwest corners at Willow Road and O'Brien Drive
- Sidewalks and class II bike lanes on both sides of Adams Drive between O'Brien Drive and University Avenue
- Sidewalks and class II bike lanes on both sides of O'Brien Drive between Willow Road and University Avenue
- Install class IV protected bike lanes along Willow Road

The Proposed Project also includes a subgrade pedestrian, bicycle, and tram connection between the main Project Site and the Meta West Campus. This connection would be known as the Willow Road Tunnel. The Willow Road Tunnel would extend between Facebook Way in the Meta West Campus and North Loop Road in the Willow Village Campus underneath Willow Road. The proposed design of the tunnel includes a sidewalk along the eastern edge, a two-way class I bike path which would connect the Bay Trail to the Project Site, and a two-way tram connection between the West Campus and the Project Site. The tunnel would not allow vehicular traffic other than the trams and the bicycle and pedestrian access would be open to the public similar to the existing tunnel between the East and West Campuses.

Pedestrian and Bicycle Access to Schools

Schools in the immediate vicinity of the Project Site include Mid-Peninsula High School, Open Mind School, Cesar Chavez Ravenswood Middle School, San Francisco 49ers Academy, Creative Montessori learning, Belle Haven School, TIDE Academy, and Costano Elementary School. Bicycle and pedestrian access to each school is described below:

- **Mid-Peninsula High School.** This school is located immediately west of the Project Site. Pedestrian and bicycle access from the Project Site to the school would be via Willow Road, which has continuous sidewalks along the south side, and existing Class II bicycle facilities on both sides of the road.
- **Open Mind School.** This school is located immediately west of the Project Site on O'Brien Drive. There are currently no sidewalks or bicycle facilities on O'Brien Drive between the school and the Project Site. The Project proposes a sidewalk that would connect the Project Site with the school's driveway, as part of the Project proposed roundabout at the East Loop Road/O'Brien Drive location.
- **Cesar Chavez Ravenswood Middle School,** San Francisco 49ers Academy, Creative Montessori Learning. These schools are located on Bay Road between Willow Road and University Avenue. Pedestrian and bicycle access from the Project Site to these schools would be via Willow Road to Alberni Street and Ralmar Avenue. These streets have sidewalks along both sides. These are also residential streets with low vehicular speeds and volumes and therefore, bicycle friendly. Access to the San Francisco 49ers Academy and Creative Montessori is directly from Bay Road, which has sidewalks along both sides. Also, Bay Road has dedicated bicycle lanes.
- **Belle Haven School.** This school is located approximately 0.4 miles north of the Project Site. Pedestrian and bicycle access from the Project Site to this school would be via Ivy Drive or Hamilton Avenue. Pedestrian amenities include crosswalks and pedestrian push buttons at the intersections of Willow Road and Ivy Drive and Willow Road and Hamilton Avenue, a continuous sidewalk along the south side of Willow Road, a continuous sidewalk along both sides of Ivy Drive and Hamilton Avenue between the school and the Project Site, and bulbouts on Hamilton Avenue. However, there are no designated bicycle facilities on Ivy Drive or Hamilton Avenue.

- **Costano Elementary School.** The school is located 0.2 miles south of the Project Site on University Avenue at Adams Drive. Pedestrian and bicycle access from the Project Site is via Adams Drive or O'Brien Drive. There are limited pedestrian connections between the Project Site and the school. Sidewalk facilities are lacking along O'Brien Drive and Adams Drive, and there are no crosswalks at University Avenue and O'Brien Drive or University Avenue and Adams Drive. Class II bicycle lanes and sidewalks are proposed along O'Brien Drive and Adams Drive in Menlo Park's TIF, which would improve bicycle and pedestrian access to the school. Implementation of this improvement from the TIF Program would reduce this potential effect on bicyclists and pedestrians from the proposed project.
- **Tide Academy.** This school is located approximately 1.2 miles north of the Project Site. Pedestrian and bicycle access from the Project Site to this school would be via Ivy Drive or Hamilton Avenue. Chilco Street, and Jefferson Drive. Pedestrian amenities include crosswalks and pedestrian push buttons at the intersections of Willow Road and Ivy Drive and Willow Road and Hamilton Avenue, a continuous sidewalk along the south side of Willow Road, a continuous sidewalk along both sides of Ivy Drive, Hamilton Avenue, Chilco Street, and Jefferson Drive between the school and the Project Site, and bulbouts on Hamilton Avenue. There are also designated bicycle facilities on Chilco Street and Jefferson Drive, however, there are no designated bicycle facilities on Ivy Drive or Hamilton Avenue.

Transit Facilities

The Proposed Project would provide tram stops and shuttle stops on the Project Site for use by Meta workers. A detailed description of the tram and shuttle services is provided in Appendix I.

The Proposed Project is expected to generate an increase in transit demand, which could be accommodated by the available capacity of the SamTrans bus service. The SamTrans routes 81, 281, 296, 397, Dumbarton Express Lines, M2 Belle Haven Shuttle, and M4 Willow Road shuttle serve the immediate vicinity of the project area with approximately 15 to 25-minute headways during the AM and PM peak commute hours. Bus stops are within a typical walking distance (one-quarter mile or 5 minutes) of the Project Site. The Proposed Project would make no change to existing public transit facilities. However, by adding vehicle trips and increasing delay at intersections along bus routes, it would increase bus travel time. Bus services that would be affected in the vicinity of the Project Site include bus routes (DB, M2 Belle Haven Shuttle, M4 Willow Road Shuttle, SamTrans Route 81) along Willow Road, University Avenue, and O'Brien Drive.

Proposed intersection improvements to reduce intersection delay include improvements at Willow Road and Ivy Drive, Willow Road and Hospital Plaza/Durham Street, Willow Road and Newbridge Street, Willow Road and Bay Road, O'Brien Drive and Kavanaugh Drive, and Adam's Drive and O'Brien Drive. These improvements would help to reduce some bus delay along these routes. The City's TIF includes installing Transit Signal Priority (TSP) for queue jumps by shoulder running buses on northbound and southbound Bayfront Expressway and allowing the use of the existing right turn lane for queue jump with TSP at Willow Road and O'Brien Drive. The timing and implementation of these TSP projects are not certain

The Caltrain electrification project would enable Caltrain to provide more frequent train service at the Menlo Park, Palo Alto, and Redwood City Caltrain stations. Caltrain predicts an initial capacity increase of over 30%. It is expected that the Caltrain electrification project would accommodate the potential increase in transit ridership generated by the Proposed Project.

3. Non-CEQA Level of Service Transportation Analysis

This chapter describes the existing conditions level of service and observed traffic conditions at roadway facilities in the vicinity of the site. It also describes the method by which project traffic is estimated and any adverse effects to intersection levels of service caused by the proposed project under existing, near-term (2025), cumulative (2040), and cumulative (2040) with Dumbarton rail conditions.

Existing Intersection Lane Configurations and Traffic Volumes

The existing lane configurations at the study intersections were confirmed by observations in the field and are shown on Figure 7. Existing traffic volumes were obtained from new peak hour counts collected in year 2019 and year 2020. The existing AM and PM peak hour intersection volumes are shown in Figure 8. Intersection turning-movement count data are presented in Appendix A.

Existing Intersection Levels of Service

The results of the intersection level-of-service analysis under existing conditions show that many of the study intersections currently operate at an unacceptable level (see Table 7 and 8). As noted in the ConnectMenlo DEIR, the counted traffic volumes at the Menlo Park study intersections along Willow Road did not appropriately reflect the actual traffic demand, and isolated intersection analysis fails to capture these results. Similarly, the counted traffic volumes at the East Palo Alto study intersections in the vicinity of the US 101/University Avenue interchange do not reflect actual traffic demand. Therefore, instead of calculated level of service, the existing level of service results are reported based on level of service as identified by field observations and microsimulation to reflect “unserved demand”. The microsimulation methodology and assumptions for Willow Road are documented in Appendix B. Hexagon has also developed a microsimulation model for intersections in the vicinity of the US 101/University Avenue interchange, which has been used for other studies in East Palo Alto. This microsimulation model was used to analyze level of service for intersections near the US 101/University Avenue interchange.

The intersection level of service calculation sheets are included in Appendix C. The following study intersections (See Figure 9) currently operate at an unacceptable level of service during at least one peak hour:

11. Chrysler Drive and Constitution Drive (AM peak hour)
12. Chilco Street and Constitution Drive/MPK 22 Driveway (AM and PM peak hours)
16. Willow Road and Bayfront Expressway (AM and PM peak hours)
17. Willow Road and Hamilton Avenue (AM and PM peak hours)
19. Willow Road and Ivy Drive (AM peak hour)
20. Willow Road and O'Brien Drive (AM and PM peak hours)
21. Willow Road and Newbridge Street (AM and PM peak hours)
22. Willow Road and US 101 Northbound Ramps (AM and PM peak hours)
23. Willow Road and US 101 Southbound Ramps (PM peak hour)
24. Willow Road and Bay Road (PM peak hour)
25. Willow Road and Hospital Plaza/Durham Street (PM peak hour)
28. Willow Road and Middlefield Road (AM peak hour)
32. Adam's Drive and O'Brien Drive (PM peak hour)
33. University Avenue and Bayfront Expressway (PM peak hour)
34. University Avenue and Purdue Avenue (PM peak hour)
35. University Avenue and Adams Drive (AM and PM peak hours)
42. University Avenue and Donohoe Street (AM and PM peak hours)
43. US 101 Northbound Off-Ramp and Donohoe Street (PM peak hour)
45. University Avenue and US 101 Southbound Ramps (AM and PM peak hours)
46. University Avenue and Woodland Avenue (AM and PM peak hours)
50. E. Bayshore Road & Euclid Avenue (AM peak hour)

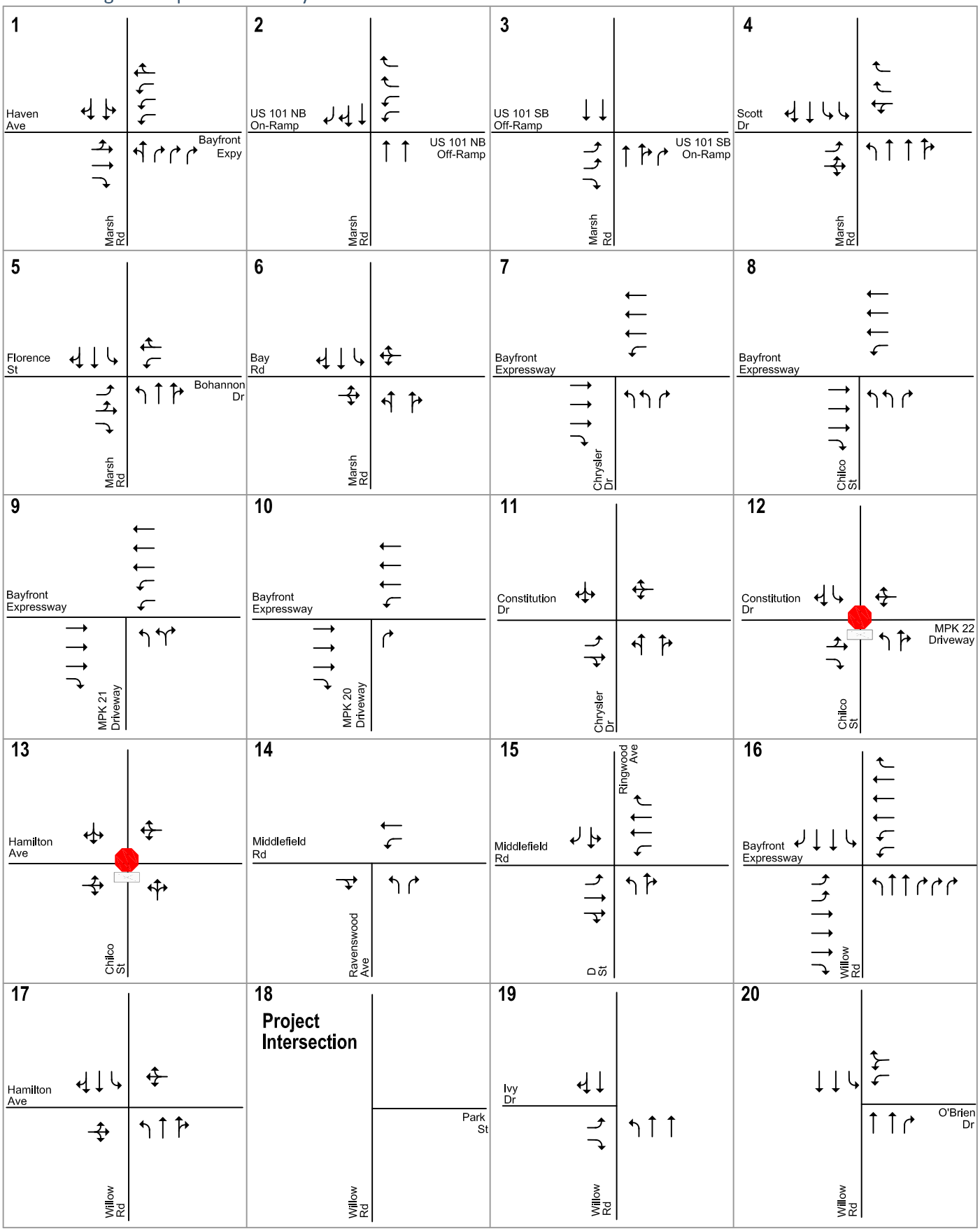


Figure 7
Existing Lane Configurations

NORTH
Not to Scale

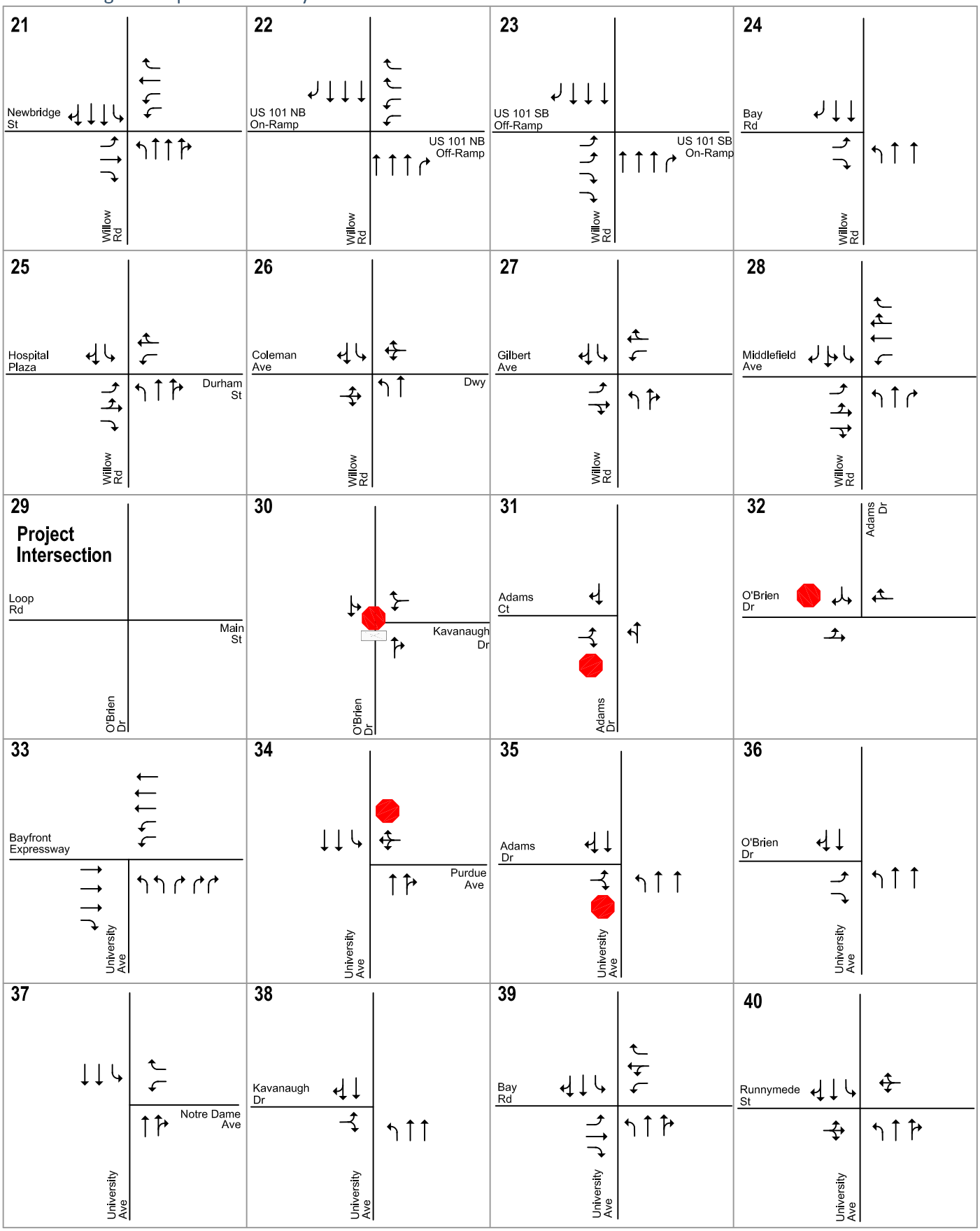
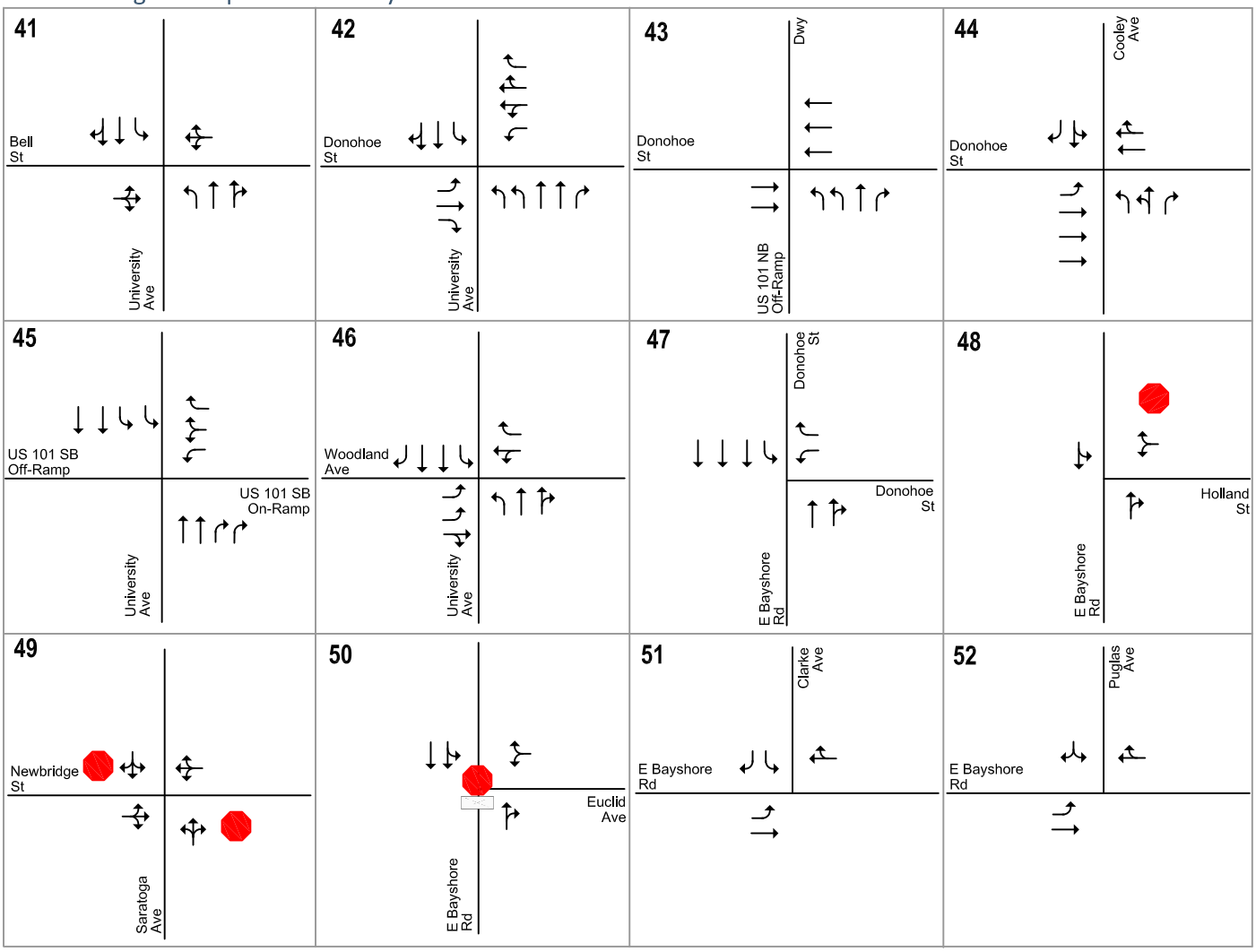


Figure 7
Existing Lane Configurations

NORTH
Not to Scale



LEGEND

= Stop Controlled Approach

= Stop Controlled Intersection

Figure 7
Existing Lane Configurations

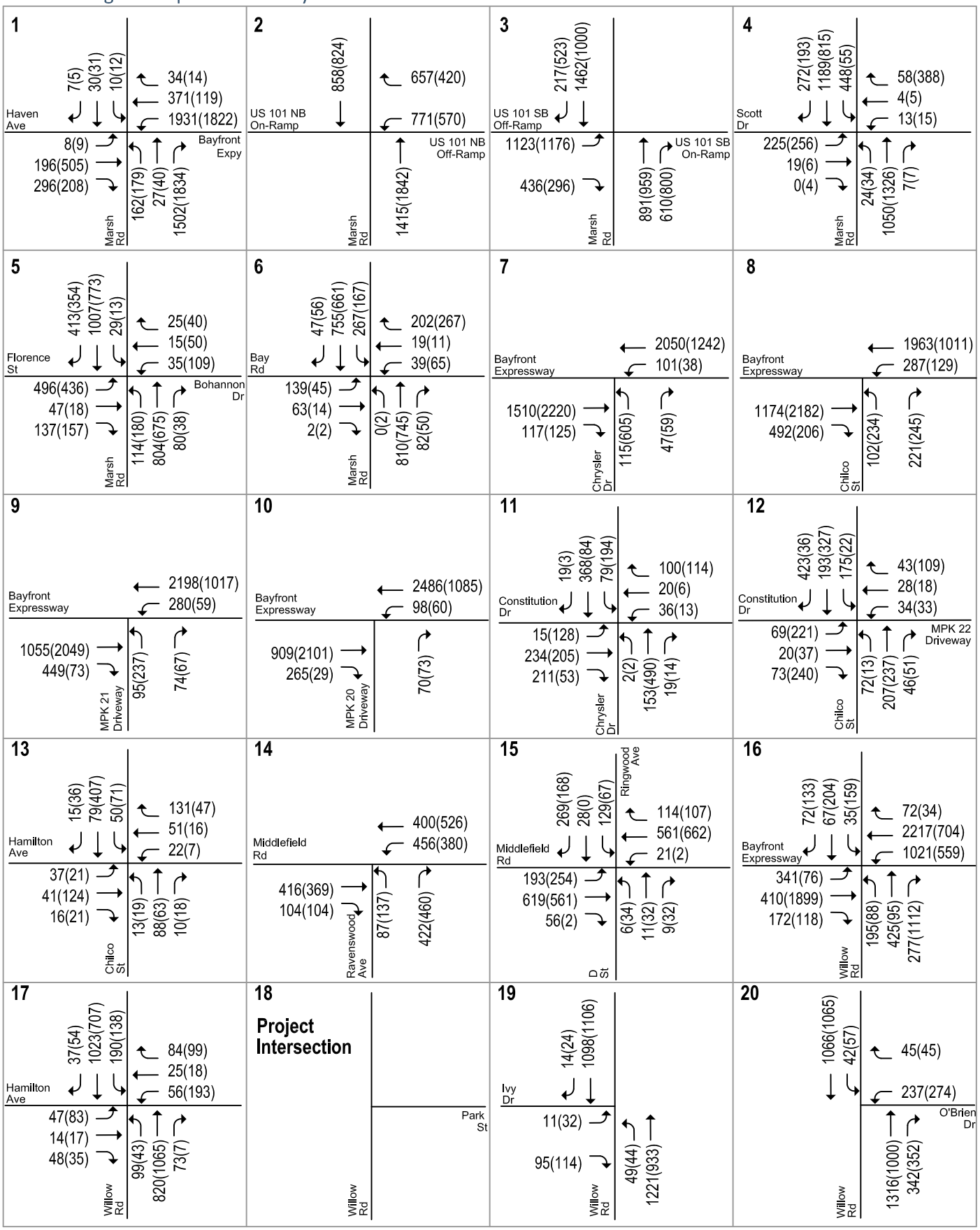


Figure 8
Existing Traffic Volumes

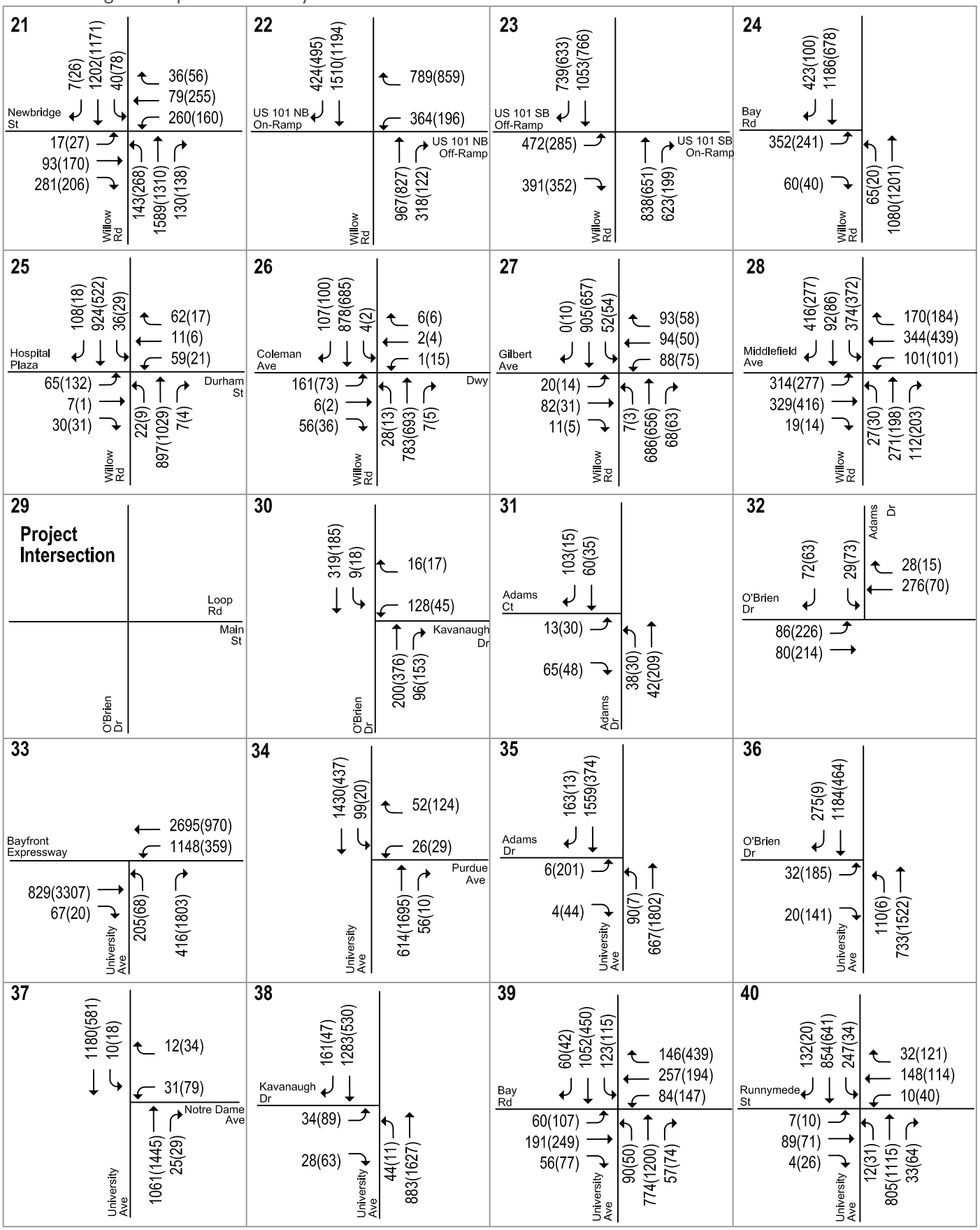
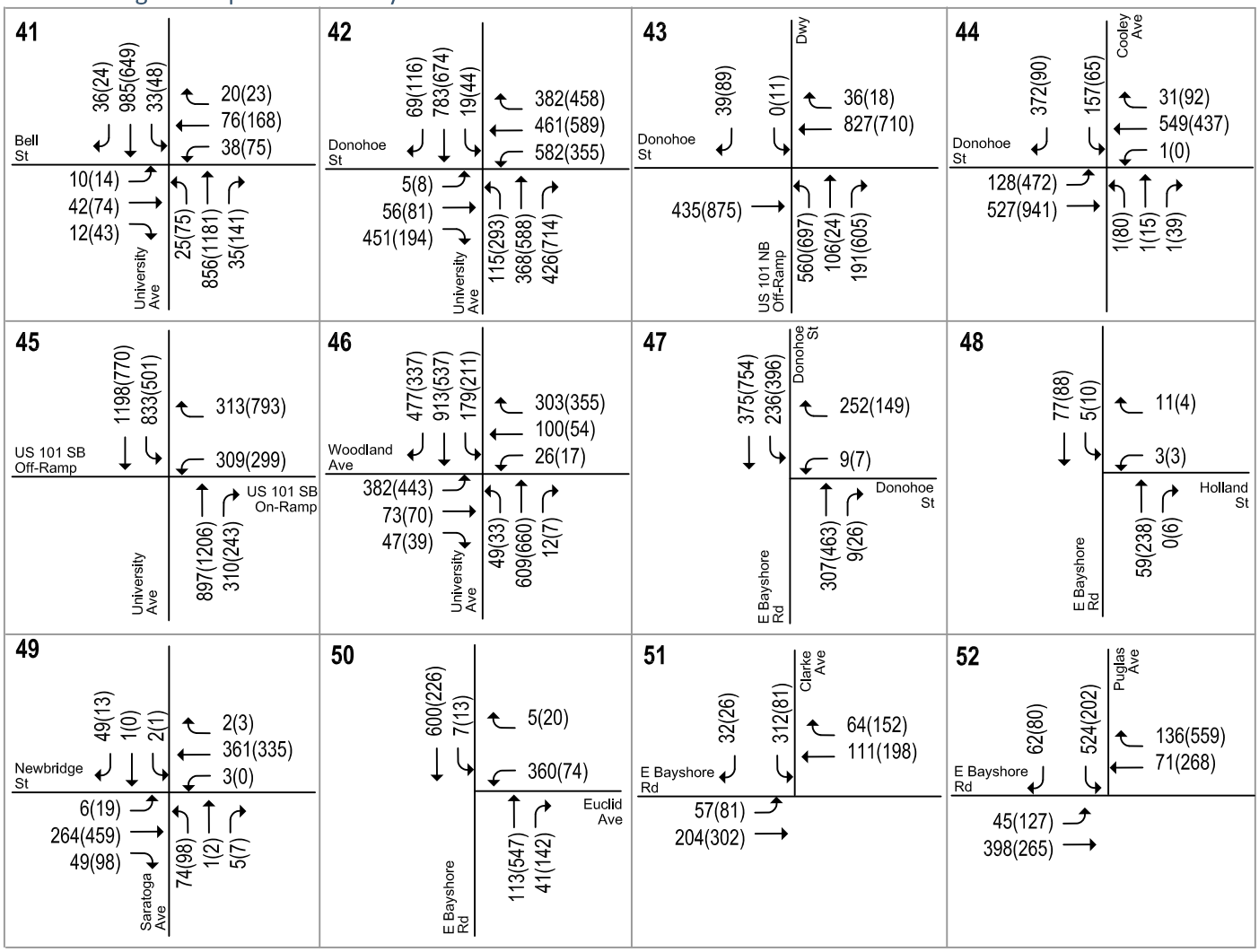


Figure 8
Existing Traffic Volumes

NORTH
Not to Scale



LEGEND

XX(XX) = AM(PM) Peak-Hour Traffic Volumes

Figure 8
Existing Traffic Volumes

Table 7
Existing Intersection Levels of Service (Menlo Park)

#	Intersection	Peak Hour	Count Date	Traffic Control	Existing Conditions Avg. Delay (sec)[1]	Existing Conditions LOS
1	Marsh Road & Bayfront Expressway*	AM	4/16/2019	Signal	50.5	D
		PM	4/16/2019		31.6	C
2	Marsh Road & US 101 Northbound Off-Ramp	AM	4/16/2019	Signal	15.8	B
		PM	4/16/2019		13.3	B
3	Marsh Road & US 101 Southbound Off-Ramp	AM	4/16/2019	Signal	19.0	B
		PM	4/16/2019		17.0	B
4	Marsh Road & Scott Drive	AM	4/16/2019	Signal	18.5	B
		PM	4/16/2019		15.3	B
5	Marsh Road & Bohannon Drive/Florence Street	AM	3/21/2019	Signal	35.3	D
		PM	3/21/2019		34.6	C
6	Marsh Road & Bay Road	AM	3/21/2019	Signal	19.7	B
		PM	3/21/2019		18.6	B
7	Chrysler Drive & Bayfront Expressway	AM	4/16/2019	Signal	8.4	A
		PM	4/16/2019		13.1	B
8	Chilco Street & Bayfront Expressway	AM	4/16/2019	Signal	10.9	B
		PM	4/16/2019		13.1	B
9	MPK 21 Driveway & Bayfront Expressway	AM	4/25/2019	Signal	7.9	A
		PM	4/25/2019		10.2	B
10	MPK 20 Driveway (east) & Bayfront Expressway	AM	4/25/2019	Signal	10.0	A
		PM	4/25/2019		8.2	A
11	Chrysler Drive & Constitution Drive	AM	3/21/2019	Signal	**50.6**	**D**
		PM	3/21/2019		28.0	C
12	Chilco Street & Constitution Drive/MPK 22 Driveway	AM	3/21/2019	AWSC	**32.1**	**D**
		PM	3/21/2019		**32.5**	**D**
13	Chilco Street & Hamilton Avenue	AM	1/0/1900	AWSC	9.2	A
		PM	1/0/1900		16.8	C
14	Ravenswood Avenue & Middlefield Road	AM	3/19/2019	Signal	36.1	D
		PM	3/19/2019		16.1	B
15	Ringwood Avenue & Middlefield Road	AM	3/19/2019	Signal	12.5	B
		PM	3/19/2019		13.7	B
16	Willow Road & Bayfront Expressway*[1]	AM	4/23/2019	Signal	**>120**	**F**
		PM	4/23/2019		**>120**	**F**
17	Willow Road & Hamilton Avenue[1]	AM	3/21/2019	Signal	**73.3**	**E**
		PM	3/21/2019		**>120**	**F**
18	Willow Road & Park Street (future intersection)[1]	AM	--		Project Intersection	
		PM	--			
19	Willow Road & Ivy Drive[1]	AM	3/21/2019	Signal	**75.2**	**E**
		PM	3/21/2019		39.5	D
20	Willow Road & O'Brien Drive[1]	AM	3/21/2019	Signal	**58.9**	**E**
		PM	3/21/2019		**>120**	**F**
21	Willow Road & Newbridge Street[1]	AM	3/21/2019	Signal	**93.4**	**F**
		PM	3/21/2019		**>120**	**F**
22	Willow Road & US 101 Northbound Ramps[1]	AM	3/13/2019	Signal	**92.8**	**F**
		PM	3/13/2019		**83.9**	**F**
23	Willow Road & US 101 Southbound Ramps[1]	AM	3/13/2019	Signal	38.5	D
		PM	3/13/2019		**98.9**	**F**
24	Willow Road & Bay Road[1]	AM	4/23/2019	Signal	45.3	D
		PM	4/23/2019		**113.5**	**F**

Table 7 (Continued)
Existing Intersection Levels of Service (Menlo Park)

#	Intersection	Peak Hour	Count Date	Traffic Control	Existing Conditions Avg. Delay (sec)[1]	Existing Conditions LOS
25	Willow Road & Hospital Plaza/Durham Street[1]	AM	4/16/2019	Signal	43.6	D
		PM	4/16/2019		**>120**	**F**
26	Willow Road & Coleman Avenue	AM	3/19/2019	Signal	18.6	B
		PM	3/19/2019		9.2	A
27	Willow Road & Gilbert Avenue	AM	3/19/2019	Signal	19.7	B
		PM	3/19/2019		10.3	B
28	Willow Road & Middlefield Road	AM	3/19/2019	Signal	**61.6**	**E**
		PM	3/19/2019		31.5	C
29	O'Brien Drive/Loop Road & Main Street/O'Brien Drive (future intersection)	AM	--		Project Intersection	
		PM	--			
30	O'Brien Drive & Kavanaugh Drive	AM	4/25/2019	TWSC	11.8	B
		PM	4/25/2019		15.2	C
31	Adams Drive & Adams Court	AM	4/25/2019	TWSC	11.5	B
		PM	4/25/2019		11.9	B
32	Adams Drive & O'Brien Drive	AM	4/25/2019	TWSC	17.3	C
		PM	4/25/2019		**27.6**	**D**
33	University Avenue & Bayfront Expressway*	AM	4/25/2019	Signal	11.4	B
		PM	4/25/2019		**94.1**	**F**

Notes:
* Denotes CMP Intersection
AWSC - All Way Stop Control; TWSC - Two Way Stop Control
[1] Average delay is reported for signalized and AWSC intersections. For TWSC intersections, the delay for the worst stop-controlled movement is reported
[1]Intersections were analyzed using Synchro/SimTraffic software due to the close proximity of these intersections.
Bold indicates substandard level of service

Table 8
Existing Intersection Levels of Service (East Palo Alto)

#	Intersection	Peak Hour	Count Date	Traffic Control	Existing Conditions Delay (sec)[1]	LOS
34	University Avenue & Purdue Avenue	AM	6/5/2019	TWSC	16.5	C
		PM	6/5/2019		**47.0**	**E**
35	University Avenue & Adams Drive	AM	4/25/2019	TWSC	**88.1**	**F**
		PM	4/25/2019		**>120**	**F**
36	University Avenue & O'Brien Drive	AM	4/23/2019	Signalized	9.6	A
		PM	4/23/2019		15.3	B
37	University Avenue & Notre Dame Avenue	AM	3/4/2020	Signalized	4.1	A
		PM	3/4/2020		9.3	A
38	University Avenue & Kavanaugh Drive	AM	4/25/2019	Signalized	6.3	A
		PM	4/25/2019		12.0	B
39	University Avenue & Bay Road	AM	4/25/2019	Signalized	40.4	D
		PM	4/25/2019		49.9	D
40	University Avenue & Runnymede Street	AM	4/25/2019	Signalized	6.1	A
		PM	4/25/2019		8.7	A
41	University Avenue & Bell Street	AM	4/25/2019	Signalized	11.3	B
		PM	4/25/2019		16.8	B
42	University Avenue & Donohoe Street*	AM	5/1/2019	Signalized	**107.1**	**F**
		PM	5/1/2019		**75.2**	**E**
43	US 101 Northbound Off-Ramp & Donohoe Street*	AM	4/25/2019	Signalized	49.8	D
		PM	4/25/2019		**>120**	**F**
44	Cooley Avenue & Donohoe Street*	AM	6/5/2019	Signalized	32.9	C
		PM	6/5/2019		36.7	D
45	University Avenue & US 101 Southbound Ramps*	AM	4/25/2019	Signalized	**98.9**	**F**
		PM	4/25/2019		**87.1**	**F**
46	University Avenue & Woodland Avenue*	AM	4/25/2019	Signalized	**67.1**	**E**
		PM	4/25/2019		**>120**	**F**
47	E. Bayshore Road & Donahoe Street*	AM	5/21/2019	Signalized	32.6	C
		PM	5/21/2019		38.5	D
48	E. Bayshore Road & Holland Street	AM	6/5/2019	TWSC	8.8	A
		PM	6/5/2019		10.0	A
49	Saratoga Avenue & Newbridge Street	AM	6/5/2019	TWSC	13.3	B
		PM	6/5/2019		15.6	C
50	E. Bayshore Road & Euclid Avenue*	AM	5/21/2019	AWSC	**52.4**	**F**
		PM	5/21/2019		32.6	D
51	Clarke Avenue & E. Bayshore Road	AM	9/25/2018	Signalized	13.9	B
		PM	9/25/2018		10.7	B
52	Pulgas Avenue & E. Bayshore Road	AM	6/5/2019	Signalized	20.4	C
		PM	6/25/2019		19.9	B

Note:
AWSC - All Way Stop Control; TWSC - Two Way Stop Control

[1] Average delay is reported for signalized and AWSC intersections. For TWSC intersections, the delay for the worst stop-controlled movement is reported.

* Intersections were analyzed using Synchro/SimTraffic software due to the close proximity of these intersections.
Bold indicates substandard level of service

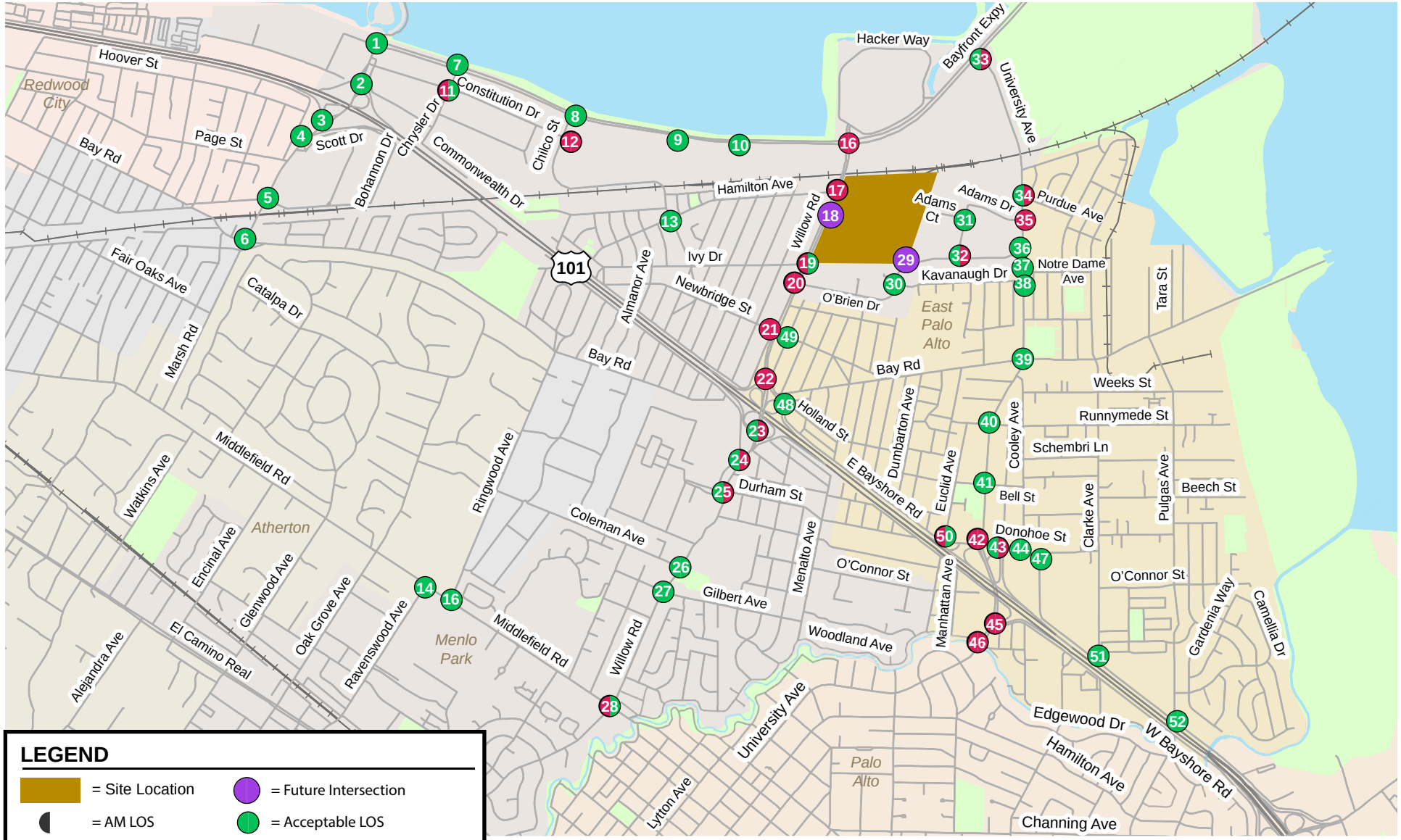


Figure 9
Existing Intersection Level of Service Summary

Existing Freeway Levels of Service

Existing weekday AM and PM peak hour traffic volumes on the study freeway segments were obtained from the *San Mateo County Congestion Management Program 2019* for segments within San Mateo County. The *Valley Transportation Authority 2018 CMP Monitoring Report* was referenced for segments within Santa Clara County. The *Alameda County Transportation Commission 2018 LOS Monitoring Report* was referenced for segments within Alameda County. As shown on Tables 9 to 11, the following freeway segments are currently operating below their respective level of service standards, or at LOS F:

San Mateo County

- SR 84 – between Willow Road and University Avenue, AM Peak Hour
- SR 84 – between University Avenue and Alameda County Line, AM & PM Peak Hours
- US 101 – between Santa Clara County Line and SR 92, AM & PM Peak Hours
- SR 109 – from SR 84 to Kavanaugh Drive, AM & PM Peak Hours

Santa Clara County

The following mixed-flow freeway segments are currently operating at LOS F:

- US 101 – from SR 85 to Rengstorff Avenue – AM & PM Peak Hours
- US 101 – from Rengstorff to San Antonio Avenue – PM Peak Hour
- US 101 – from San Antonio Avenue to Embarcadero Road – AM & PM Peak Hours
- US 101 – from Embarcadero Road to SR 85 – PM Peak Hour

The following HOV freeway segments are currently operating at LOS F:

- US 101 – from San Antonio Avenue to Embarcadero Road – PM Peak Hour
- US 101 – from Oregon Expressway to Embarcadero Road – AM Peak Hour

Alameda County

- SR 84 – Paseo Padre Parkway to San Mateo County Line – AM Peak Hour
- SR 84 – Newark Boulevard to I-880 – PM Peak Hour

Table 9
Existing Freeway LOS – San Mateo County

CMP Facility	Roadway Segment	Dir.	Pk Hr	LOS Standard	Capacity	Existing LOS
SR 84	US 101 to Willow Rd	SB	AM	D	1,100	C
		SB	PM	D	1,100	B
SR 84	Willow Rd to US 101	NB	AM	D	1,100	C
		NB	PM	D	1,100	B
SR 84	Willow Rd to University Ave	SB	AM	E	1,100	F
		SB	PM	E	1,100	E
SR 84	University Ave to Willow Rd	NB	AM	E	1,100	**F**
		NB	PM	E	1,100	E
SR 84	University Ave to Alameda County Line	SB	AM	F	2,100	**F**
		SB	PM	F	2,100	**F**
SR 84	Alameda County Line to University Ave	NB	AM	F	2,100	**F**
		NB	PM	F	2,100	**F**
US 101	Santa Clara County Line to Whipple Ave	NB	AM	F	2,300	**F**
		NB	PM	F	2,300	**F**
US 101	Whipple Ave to Santa Clara County Line	SB	AM	F	2,300	**F**
		SB	PM	F	2,300	**F**
US 101	Whipple Ave to SR 92	NB	AM	E	2,300	**F**
		NB	PM	E	2,300	**F**
US 101	SR 92 to Whipple Ave	SB	AM	E	2,300	**F**
		SB	PM	E	2,300	**F**
SR 109 (University Ave)	Kavanaugh Dr to SR 84	EB	AM	E	1,100	C
		EB	PM	E	1,100	C
SR 109 (University Ave)	SR 84 to Kavanaugh Dr	WB	AM	E	1,100	**F**
		WB	PM	E	1,100	**F**
SR 114 (Willow Rd)	US 101 to SR 84	EB	AM	E	1,100	B
		EB	PM	E	1,100	B
SR 114 (Willow Rd)	SR 84 to US 101	WB	AM	E	1,100	C
		WB	PM	E	1,100	C

Notes:
Data referenced San Mateo Couny City/County Association of Governments *Congestion Management Program 2019.*
Bold indicates non-compliant LOS

Table 10
Existing Freeway LOS – Santa Clara County

Freeway	Segment	Dir	Peak Hour	Existing Conditions					
				Mixed-Flow			HOV Lane		
				Capacity[1]	Volume[2] (pc/hr/ln)	LOS[2]	Capacity[1]	Volume[2] (pc/hr/ln)	LOS[2]
US 101	SR 85 to N. Shoreline Blvd	NB	AM	9,200	1,512	**F**	1,650	1,751	E
			PM	9,200	1,358	**F**	1,650	1,635	D
US 101	N. Shoreline Blvd to Rengstorff Ave	NB	AM	6,900	1,660	**F**	3,300	1,730	D
			PM	6,900	1,298	**F**	3,300	1,683	D
US 101	Rengstorff Ave to San Antonio Ave	NB	AM	6,900	1,747	E	3,300	1,716	D
			PM	6,900	1,333	**F**	3,300	1,646	D
US 101	San Antonio Ave to Oregon Expwy	NB	AM	6,900	1,262	**F**	3,300	1,693	D
			PM	6,900	1,083	**F**	3,300	1,482	**F**
US 101	Oregon Expwy to Embarcadero Rd	NB	AM	6,900	1,367	**F**	1,650	1,693	**F**
			PM	6,900	1,271	**F**	1,650	1,588	**F**
US 101	Embarcadero Rd to Oregon Expwy	SB	AM	6,900	1,991	D	1,650	n/a	A
			PM	6,900	1,135	**F**	1,650	1,627	D
US 101	Oregon Expwy to San Antonio Ave	SB	AM	6,900	1,989	D	3,300	919	A
			PM	6,900	1,050	**F**	3,300	1,693	D
US 101	San Antonio Ave to Rengstorff Ave	SB	AM	6,900	1,890	E	3,300	780	A
			PM	6,900	1,125	**F**	3,300	1,610	D
US 101	Rengstorff Ave to N. Shoreline Blvd	SB	AM	6,900	1,976	D	3,300	1,369	C
			PM	6,900	1,072	**F**	3,300	1,508	D
US 101	N. Shoreline Blvd to SR 85	SB	AM	6,900	1,950	D	1,650	1,068	A
			PM	6,900	1,115	**F**	1,650	1,752	E

Notes:
HOV = high-occupancy vehicle; LOS = level of service
1. Capacity is based on the capacities cited in VTA's *Transportation Impact Analysis Guidelines* (2014).
2. Volume, and Level of service (LOS) on each segment are taken from VTA's *2018 CMP Monitoring Report*. VTA did not report volume and density for segments with speed above 75.2 mph.
Bold indicates a substandard level of service.

Table 11
Existing Freeway LOS – Alameda County

CMP Facility	Roadway Segment	Dir.	Pk Hr	Capacity	Existing LOS
SR 84	San Mateo County Line to Toll Plaza	EB	AM	2,200	A
		EB	PM	2,200	C
SR 84	Toll Plaza to San Mateo County Line	WB	AM	2,200	F
		WB	PM	2,200	A
SR 84	Toll Plaza to Thornton Ave	EB	AM	2,200	A
		EB	PM	2,200	B
SR 84	Paseo Padre Pkwy to Toll Plaza	WB	AM	2,200	F
		WB	PM	2,200	C
SR 84	Thornton Ave to Newark Blvd	EB	AM	2,200	A
		EB	PM	2,200	C
SR 84	Newark Blvd to Paseo Padre Pkwy	WB	AM	2,200	E
		WB	PM	2,200	A
SR 84	Newark Blvd to I-880	EB	AM	2,200	D
		EB	PM	2,200	F
SR 84	I-880 to Newark Blvd	WB	AM	2,200	D
		WB	PM	2,200	D

Notes:

Data referenced the Alameda County Transportation Comission *2018 LOS Monitoring Report, Appendix B.*

Existing Freeway Ramp Capacity Analysis

This analysis consists of a volume-to-capacity ratio evaluation of the study freeway ramps. The ramp capacities were obtained from the *Highway Capacity Manual 2000 (Chapter 25),* which considers both the free-flow speed and the number of lanes on the study ramps. It was assumed that if ramp meter equipment is present, on-ramps on northbound US 101 would be metered during the AM peak hour, and on-ramps on southbound US 101 would be metered during the PM peak hour. Metered ramps are analyzed with a capacity of 900 vehicles per hour for the mixed-flow lanes. As shown on Table 12, the existing ramps currently have sufficient capacity to serve the existing traffic volumes.

Table 12
Freeway Ramp Capacity

Interchange	Ramp	Peak Hour	Lanes Type	Mixed	HOV	Meter [1]	Capacity [2]	Existing Conditions Volume [3]	V/C
US 101/Marsh Road	SB Off-ramp to Marsh Road	AM	Diagonal	2	-	-	3,800	1,332	0.35
		PM					3,800	1,156	0.30
	NB on-ramp from WB Marsh Road	AM	Diagonal	2	1	YES	1,800	1,559	0.87
		PM				-	2,000	1,472	0.74
US 101/Willow Road	NB off-ramp to Willow Road	AM	Diagonal	2	-	-	3,800	1,153	0.30
		PM					3,800	1,055	0.28
	NB on-ramp from WB Willow Road	AM	Diagonal	1	1	YES	1,800	424	0.24
		PM				-	2,000	495	0.25
	SB on-ramp from WB Willow Road	AM	Loop	1	-	-	1,900	739	0.39
		PM				YES	900	633	0.70
	SB off-ramp to Willow Road	AM	Diagonal	2	-	-	3,800	863	0.23
		PM					3,800	637	0.17
US 101/University Avenue	NB off-ramp to Donohoe Street	AM	Diagonal	1	-	-	2,000	857	0.43
		PM					2,000	1,326	0.66
	SB on-ramp from University Avenue	AM	Diagonal	2	-	-	1,800	1,143	0.64
		PM				YES	900	744	0.83

Notes:
NB = Northbound; SB = Southbound; EB = Eastbound; WB = Westbound
1. Northbound on-ramps are assumed metered during the AM peak hour. Southbound on-ramps are assumed metered during the PM peak hour.
2. Ramp capacities were obtained from *Highway Capacity Manual 2000* , and considered the free-flow speed, the number of lanes on the ramp, and ramp metering.
3. Existing volumes referenced intersection counts collected in 2019.

Observed Existing Traffic Conditions

Traffic conditions were observed in the field at each study intersection in order to identify existing operational deficiencies and to confirm the accuracy of the calculated level of service. The purpose of this effort was (1) to identify any existing traffic problems that may not be directly related to level of service, (2) identify any locations where the level of service analysis does not accurately reflect existing traffic conditions. Hexagon conducted field observations on a regular weekday during the AM and PM peak hours in May, October, and November of 2019. Some of the study intersections had no significant operational issues, and vehicular queues on all approaches were mostly able to clear in one cycle. The observed operational issues at the remaining study intersections are identified below.

Marsh Road between Bayfront Expressway and Bay Road

There were no operational deficiencies observed along this corridor during the AM peak hour.

During the PM peak hour, the eastbound traffic on Marsh Road queued from Bayfront Expressway past the 101 SB Off-Ramp. Most eastbound vehicles required more than one cycle to clear along this queue. The southbound left-turn movement at the Marsh Road/US 101 SB Off-Ramp intersection also received heavy demand. These vehicles usually waited through more than one queue to cross the intersection due to downstream spillback queues on eastbound Marsh Road.

Middlefield Road between Marsh Road and University Avenue

During the AM peak hour, southbound traffic was heavy. The southbound left-turn queue at the Ringwood Avenue/Middlefield Road intersection occasionally exceeded the left-turn pocket as vehicles traveled to Menlo-Atherton High School. The northbound left-turn queue at the Ravenswood Avenue/Middlefield Road intersection frequently filled the entire block and occasionally impacted operations at Ringwood Avenue, as vehicles in the through lane waited to merge into the left-turn lane.

During the PM peak hour, the northbound left-turn queue at the Ravenswood Avenue/Middlefield Road intersection sometimes filled the entire block and occasionally impacted operations at Ringwood Avenue as vehicles in the through lane waited to merge into the left-turn lane. Vehicles making an eastbound right-turn from Ravenswood Avenue were observed to wait to merge to the southbound left-turn lane at the Ringwood Avenue/Middlefield Road intersection. The northbound right-turn movement at the Willow Road/Middlefield Road intersection received heavy demand but was often observed to be blocked by the northbound through queue.

Bayfront Expressway between Marsh Road and University Avenue

Due to signal failures at the Bayfront Expressway and Marsh Road intersection during the day of observation, the observed AM peak hour conditions along this corridor were deemed atypical.

During the PM peak hour, the southbound traffic on Bayfront Expressway queued from University Avenue northward past upstream intersections. Most southbound vehicles required multiple cycles to clear intersections along this queue. The eastbound left-turn queue at the Chrysler Drive/Bayfront Expressway intersection extended past upstream intersections and required multiple cycles to clear. The southbound right-turn and northbound left-turn movements at the Chilco Street/Bayfront Expressway intersection sometimes required two signal cycles to clear due to eastbound spillback queues at the Chilco Street and Constitution Drive intersection. The eastbound left-turn movement frequently required two signal cycles to clear the Chilco Street/Bayfront Expressway intersection.

Chilco Street & Constitution Drive/MPK 22 Driveway

During the AM peak hour, all approaches of this unsignalized intersection were busy. Vehicles frequently made left turns at all approaches. The two unsignalized pedestrian crosswalks were heavily utilized. The westbound through-right lane frequently queued towards Bayfront Expressway and was observed to take up to a minute to clear. The queue was observed to occasionally extend to the end of the southbound right-turn pocket on Bayfront Expressway.

During the PM peak hour, eastbound spillback queues from the Chilco Street and Bayfront Expressway intersection affected traffic operations at this intersection. At the Chilco Street and Constitution Drive intersection, the westbound vehicles frequently queued towards, and sometimes onto, Bayfront Expressway.

Chrysler Drive & Constitution Drive

During the AM peak hour, there were no significant operational issues at this intersection.

During the PM peak hour, eastbound spillback queues from the Chrysler Drive and Bayfront Expressway intersection affected traffic operations at this intersection. At the Chrysler Drive and Constitution Drive intersection, the eastbound queues extended past upstream intersections. The westbound left-turn queue frequently extended into the southbound right-turn lane on Bayfront Expressway. The westbound left-turn queue was usually able to clear in one signal cycle, although it was observed to be sometimes blocked by the eastbound spillback queue. The northbound right-turn movement sometimes required multiple signal cycles to clear due to eastbound downstream queuing issues.

Willow Road between Hamilton Avenue and Gilbert Avenue

During the AM peak hour, there was heavy demand on westbound Willow Road along this corridor. Westbound vehicles often required multiple cycles to clear an intersection. As a result, the southbound right-turn and northbound left-turn movements on the side streets turning onto westbound Willow Road also required multiple cycles to clear the intersection. The westbound queue was usually able to clear at the Willow Road/Durham Street intersection due to the long through phase. The eastbound left-turn movement at the Newbridge Street intersection received heavy demand and occasionally required two signal cycles to clear. Vehicles at the US 101 northbound off-ramp turning right onto eastbound Willow Road frequently queued onto the auxiliary lane on US 101 and required multiple cycles to clear.

During the PM peak hour, there was heavy demand on eastbound Willow Road along this corridor. Eastbound vehicles often required multiple cycles to clear an intersection. As a result, the northbound right-turn and southbound left-turn movements on the side street turning onto eastbound Willow Road also required multiple cycles to clear the intersection. The westbound left-turn movement at the Hamilton Avenue intersection received heavy demand that often required two signal cycles to clear. Vehicles at the US 101 northbound off-ramp turning right onto eastbound Willow Road frequently queued onto the auxiliary lane on US 101 and required multiple cycles to clear. Vehicles at the US 101 southbound off-ramp turning left onto eastbound Willow Road were often impacted by eastbound spillback queues and were observed to block the westbound through movement. The westbound left-turn queue extended onto US 101 southbound and impacted freeway operations. Vehicles were observed to utilize the parking lane to access the westbound right-turn movement at the Willow Road/Coleman Avenue intersection.

University Avenue between Purdue Avenue and Woodland Avenue

During the AM peak hour, there was heavy demand on westbound University Avenue along this corridor. Westbound vehicles often required multiple cycles to clear an intersection between Adams Drive and Woodland Avenue. Eastbound traffic between Bay Road and the US 101 SB Ramps was also heavy and often required multiple cycles to clear. At the unsignalized intersection of University Avenue and Adams Drive, the eastbound and southbound left-turn movements occasionally had extended wait periods due to continuous westbound traffic. Protected signal phasing is recommended at the University Avenue and Runnymede Street intersection due to potentially hazardous interactions between vehicles performing permitted left-turns across heavy traffic and crossing pedestrians.

During the PM peak hour, there was heavy demand on eastbound University Avenue along this corridor. Eastbound vehicles often required multiple cycles to clear an intersection. As a result, the left-turn movements on the side streets also required multiple cycles or extended wait periods to clear the intersection. Eastbound traffic between Bay Road and Donohoe Street occasionally required more than one cycle to clear. At the unsignalized intersection of University Avenue and Purdue Avenue, vehicles were observed to make northbound right-turns, despite existing signage prohibiting that maneuver. At the University Avenue/Adams Drive intersection, vehicles were observed to pass through the intersection during a break in westbound traffic and wait in the median area until drivers allowed them to merge. The westbound left-turn movement at the University Avenue/Bay Road intersection sometimes required more than one cycle to clear. The eastbound left-turn movement at the University Avenue/Bell Street intersection frequently queued out of the turn pocket and required multiple cycles to clear.

Donohoe Street between University Avenue and Cooley Avenue

During the AM peak hour, there was heavy demand on northbound Donohoe Street along this corridor. Northbound vehicles often required multiple cycles to the clear an intersection. As a result, the westbound right-turn and eastbound left-turn movements on the side streets turning onto northbound Donohoe Street also required multiple cycles to clear the intersection. At the Cooley Avenue/Donohoe Street intersection, there was high demand for the number 1 lane. The congestion was due to spillback from the downstream intersections at University Avenue/Donohoe Street and US 101 NB Off-Ramp/Donohoe Street.

During the PM peak hour, there was heavy demand on northbound Donohoe Street along this corridor. Northbound vehicles often required multiple cycles to the clear an intersection. The eastbound left-turn vehicles at the US 101 NB Off-Ramp/Donohoe Street intersection were observed to frequently fail to clear the intersection in one green cycle due to high volume and northbound spillback queues. At the Cooley Avenue/Donohoe Street intersection, there was high demand for the number 1 lane. The congestion was due to spillback from the downstream.

Project Trips Estimates

Trip generation estimates for the mixed-use development are based on standard trip generation rates published in the Institute of Transportation Engineers (ITE) Trip Generation, 10th Edition manual. Below is a general discussion of the trip generation estimation methodology (see Table 13). Detailed trip generation analysis is provided in Appendix D.

Gross Project Trip Generation

A description of the source of trip generation rates for each land-use is provided below:

- ***Office***. Initial trip estimates for office and accessory uses are based on “ITE Land Use code 710: General Office Building”.
- ***Residential.*** The trip estimate is based on the “ITE Land Use code 221: Multifamily Housing (Mid-Rise)”, which includes apartments, townhouses, and condominiums located within the same building with at least three other dwelling units and that have between three to ten levels. Some of the apartments are designated as senior housing, which could have a lower trip rate. Thus, the trip generation estimate for the apartments is conservative.
- ***Retail.*** Trip estimates are based on “ITE Land Use code 820: Shopping Center”, which includes several types of retail uses like restaurants, movie theaters, bowling alleys etc. that are typically present in shopping centers.
- ***Hotel.*** Trip estimates are based on “ITE Land Use code 310: Hotel”.
- ***Publicly Accessible Park.*** Trip estimates are based on “ITE Land Use code 488: Soccer Complex”. The programmatic design of the park has not been determined. In order to provide a conservative estimate of potential traffic generation and allow for flexible programming for the project through the project review process, it is assumed that the park will have play structures and open field areas for warm-ups or casual play.

Transportation Demand Management (TDM)

The City of Menlo Park requires all new developments in the R-MU and O zoning districts to reduce their trip generation by 20 percent from standard trip generation rates via TDM strategies. The City has in practice applied the 20 percent reduction after crediting for any trip reductions based on a project's proximity to complimentary land uses, alternative transportation facilities, as well as reductions based on a project's mixed-use characteristics (see Appendix D for discussion on the project's trip reductions). As implemented by the City, this TDM ordinance is applied to daily trips, AM peak hour trips, and PM peak hour trips.

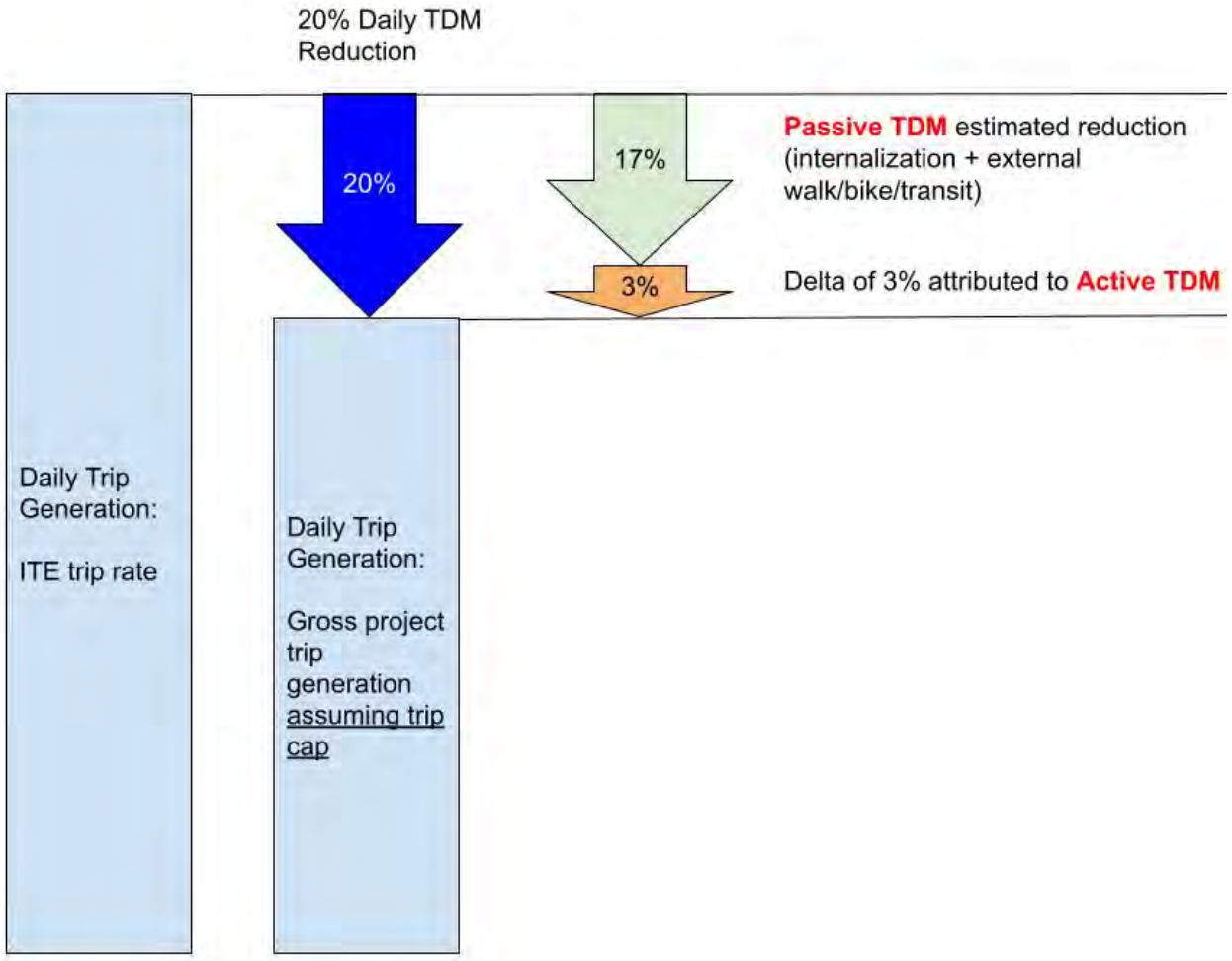
Per the Willow Village Adjustment Request: Transportation Demand Management, submitted by the applicant team, the applicant is proposing the following regarding TDM:

- For the Campus District, the applicant proposes a daily trip cap of 18,237 trips, and a trip cap of 1,670 trips during the AM and PM peak hours.
    - The daily trip cap represents a 20 percent reduction from gross ITE trip generation (see Figure 10).
    - The peak hour trip cap represents a 35-40 percent reduction from gross ITE trip generation.
- For the Residential/Shopping and Town Square Districts, the applicant proposes a 20 percent reduction from gross ITE trip generation for daily, and a 20 percent and 27 percent reduction from gross ITE trip generation during the AM and PM peak hours of commute, respectively.

TDM Monitoring

The City incorporates monitoring requirements into project conditions. The project's TDM plan is anticipated to be monitored annually to ensure effectiveness of the TDM plan. The details of the TDM monitoring plan will be developed as part of CDP, and will detail frequency and duration of monitoring for each land use, as well as the methodology to conduct monitoring. The monitoring plan will also specify corrective measures if the TDM plan is not achieving its stated effectiveness.

Figure 10
Graphical Representation of How the Transportation Analysis Modeled Daily Trip Generation for All Land Uses



Note: the TDM program would achieve a higher reduction, but only a 3% reduction from active TDM measures is needed to achieve a 20% reduction off of gross trip generation estimated using ITE trip generation rates (see discussion above).

Net Project Trip Generation

The project trip generation assumes the applicant's proposed TDM plans for the Campus District as well as for the Residential/Shopping and Town Square Districts. It should be noted that the trip reductions due to the applicant proposed TDM plans already accounted for trip reductions due to the Proposed Project's location efficiency, as well as internal capture due to the Proposed Project's mixed use nature (see Appendix D for details).

As shown in Table 13, the proposed project trips generated by the proposed land uses after accounting for the proposed TDM plans at the main Project Site would be 33,263 daily trips, 2,396 AM peak hour trips, and 2,907 PM peak hour trips.

Net project trip generation represents the number of new project trips added to the surrounding roadway network. The following categories of trips are credited from the site-specific trip cap to derive the net project trip generation.

Pass-By

The retail uses would attract some of their customers from people who are passing by the site on Willow Road or Bayfront Expressway heading towards their destination. These customers would not need to make a separate vehicle trip to come to the Project Site. Such vehicle trips are categorized as pass-by trips as they are not new trips generated on the roadway network and should be credited from the project trip generation. A pass-by trip reduction for retail trips was applied based on the average pass-by reduction rate published in the ITE Trip Generation Handbook, 3rd Edition. Pass-by data are typically available only for the PM peak hour. Hexagon assumed no pass-by trip reduction for the AM peak hour and half of the PM peak pass-by trip reduction for daily trip generation.

Existing Uses

Trips associated with the existing uses on the Project Site were credited against the new trip generation. The trips generated by the existing buildings on the site were estimated based on driveway counts conducted over three days in September 2019 per Facebook Willow Traffic Counts Memorandum, Fehr & Peers, March 26, 2020. The existing uses on the site generated an average of 11,700 trips daily, including 985 trips in the AM peak hour (699 inbound and 286 outbound trips), and 805 trips in the PM peak hour (250 inbound and 555 outbound trips).

As shown in Table 13, the net Proposed Project trips generated by the main Project Site on the roadway network would be 20,537 daily trips, including 1,411 AM peak hour trips (939 inbound trips and 472 outbound trips), and 1,914 PM peak hour trips (719 inbound trips and 1,195 outbound trips).

As shown in Table 14, the net trips generated by the Hamilton Parcels are estimated to be 218 daily trips, including 6 AM peak hour trips (3 inbound trips and 3 outbound trips), and 18 PM peak hour trips (9 inbound trips and 9 outbound trips)[15].

[15] The Hamilton Parcels are located within C-2-S zoning, which does not require implementation of a TDM Plan. Therefore, no TDM reductions were applied.

Table 13
Project Trip Generation Estimates (Main Project Site)

Land Use	ITE Land Use Code [1]	Size	Unit	Daily Rate [1]	Daily Total	AM Peak Hour Rate [1]	AM Peak Hour IN	AM Peak Hour OUT	AM Peak Hour Total	PM Peak Hour Rate [1]	PM Peak Hour IN	PM Peak Hour OUT	PM Peak Hour Total
Campus District													
Office	710	6,950	employees	3.28	22,796	0.37	2,135	437	2,572	0.40	556	2,224	2,780
TDM Reductions [2]					*(4,559)*		*(765)*	*(137)*	*(902)*		*(171)*	*(939)*	*(1,110)*
			Office Trip Cap [2]		**18,237**		**1,370**	**300**	**1,670**		**385**	**1,285**	**1,670**
Residential/Shopping and Town Square Districts													
Residential	221	1,730	d.u.	5.44	9,411	0.36	162	461	623	0.44	464	297	761
Retail	820	200	ksf	37.75	7,550	0.94	117	71	188	3.81	366	396	762
Hotel	310	193	rooms	8.36	1,613	0.47	54	37	91	0.60	59	57	116
Publicly Accessible Park [3]	488	3	fields	71.33	214	0.99	2	1	3	16.43	32	17	49
Subtotal					18,788		335	570	905		921	767	1,688
TDM Reductions [4]					*(3,762)*		*(67)*	*(112)*	*(179)*		*(245)*	*(206)*	*(451)*
Residential/Shopping and Town Square Districts Trips (MU)					**15,026**		**268**	**458**	**726**		**676**	**561**	**1,237**
Project Trips *after* TDM Reductions (Office + MU)					33,263		1,638	758	2,396		1,061	1,846	2,907
Retail Pass-By Reductions [5]					*(1,026)*		*0*	*0*	*0*		*(92)*	*(96)*	*(188)*
Total New Trips Generated by the Project					**32,237**		**1,638**	**758**	**2,396**		**969**	**1,750**	**2,719**
Existing Trip Generation Credit [6]					(11,700)		(699)	(286)	(985)		(250)	(555)	(805)
Net New Trips Generated on Roadway Network					**20,537**		**939**	**472**	**1,411**		**719**	**1,195**	**1,914**

Notes
d.u. = dwelling unit, ksf = 1,000 s.f.

1. Daily, AM, and PM peak hour average rates published in ITE Trip Generation Manual, 10th Edition, 2017 were used for each land use.
2. Office trip generation and TDM reductions reflect the proposed daily, AM and PM peak hour trip caps.
3. The publicly accessibleThe programmatic design of the park has not been determined. In order to provide a conservative estimate of potential traffic generation, it is assumed that the park will have play structures and open field areas for warm-ups or casual play. The park is planned for approximately 3.5 acres. Number of soccer fields on 3.5 acres of land was estimated based on the size of a standard soccer field. park is assumed to be programmable. ITE Land Use "Soccer Field" is analyzed as a proxy. Number of soccer fields was estimated based on the size of a standard soccer field.
4. For the Residential/Shopping and Town Square Districts, the applicant proposes a 20 percent reduction from gross ITE trip generation for daily, and a 20 percent and 27 percent reduction from gross ITE trip generation during the AM and PM peak hours of commute, respectively.
5. Pass-by trip reduction is based on the average pass-by trip reduction rate published in the ITE Trip Generation Handbook, 3rd Edition. Hexagon assumes no pass-by trip reduction during the AM peak hour and half of the PM peak pass-by reduction for daily trip generation.
6. Existing Use trip estimates based on driveway counts conducted over three days in September 2019 per Facebook Willow Traffic Counts Memorandum, Fehr & Peers, March 26, 2020. 8-9 AM in the AM peak period and 4-5 PM in the PM peak period have been considered as peak hours since they have the highest trips.

Table 14
Project Trip Generation Estimates (Hamilton Parcel)

Land Use	ITE Code [1]	Size		Daily Rate	Daily Trips	AM Peak Hour Rate	AM Peak Hour In	AM Peak Hour Out	AM Peak Hour Total	PM Peak Hour Rate	PM Peak Hour In	PM Peak Hour Out	PM Peak Hour Total
Proposed Use													
General Retail	820	7.7	ksf	37.75	291	0.94	4	3	7	3.81	14	15	29
External Walk, Bike, and Transit [2]					*(28)*		*(1)*	*0*	*(1)*		*(1)*	*(1)*	*(2)*
Retail Pass-By Reduction (34%) [3]					*(45)*		*0*	*0*	*0*		*(4)*	*(5)*	*(9)*
Net Project Trips on Project Network					**218**		**3**	**3**	**6**		**9**	**9**	**18**

Notes:
ksf = 1,000 square feet

[1] Daily, AM, and PM peak hour average rates published in *ITE Trip Generation Manual, 10th Edition, 2017* were used for each land use.

[2] External walk, bike, and transit reduction developed using *US EPA Mixed Use Trip Generation Model v.4, 2010* .

[3] Pass-by trip reduction is based on the average pass-by trip reduction rate published in the ITE Trip Generation Handbook, 3rd Edition. Hexagon assumes no pass-by trip reduction during the AM peak hour and half of the PM peak pass-by reduction for daily trip generation.

Trip Distribution and Assignment

The trip distribution pattern and trip assignment for the proposed uses were estimated based on the Menlo Park Travel Demand Model. The model estimated trip distribution pattern is summarized below:

- Dumbarton Bridge: approximately 11%
- US 101 to the north, including Haven Avenue: approximately 28%
- US 101 to the south, including Embarcadero Road: approximately 31%
- Marsh Road west of US 101: approximately 4%
- Willow Road west of US 101: approximately 8%
- University Avenue west of US 101: approximately 6%
- Menlo Park and East Palo Alto east of US 101: approximately 12%

Future Traffic Volumes

Both near-term (year 2025) and cumulative (year 2040) scenario forecasts of intersection turning movements, freeway traffic and ramp volumes were completed using the latest Menlo Park travel demand forecast model (citywide travel demand forecast model). The citywide model is the best available model to represent travel within the City of Menlo Park, and serves as the primary forecasting tool for the City. The model is a mathematical representation of travel within the nine Bay Area counties, as well as the Santa Cruz, San Benito, Monterey and San Joaquin counties. The base model structure was developed by the Metropolitan Transportation Commission (MTC) and further refined by the City/County Association of Governments and Santa Clara Valley Transportation Authority for use within San Mateo County and Santa Clara County. The City further refined this model for application with Menlo Park to add more detail to the zone structure and transportation network. There are 81 transportation analysis zones (TAZs) within the model to represent the City of Menlo Park.

Near-Term and Cumulative Traffic Volumes

Land use growth assumptions for Bay Area regions outside of Menlo Park and East Palo Alto for the near-term scenario (year 2025) are provided by the Association of Bay Area Governments (ABAG) and refined by VTA/C/CAG. Approved developments within the City of Menlo Park and the City of East Palo Alto were added to the existing land use to represent the year-2025 land use. The following approved projects within the City of Menlo Park and the City of East Palo Alto as of December 2020 were included:

- Menlo Gateway
- 1285 El Camino Real
- 123 Encinal Avenue
- 1010-1026 Alma Street
- 650-660 Live Oak Avenue
- 1275 El Camino Real
- Facebook Expansion Project (301-309 Constitution Drive)
- 500 El Camino Real
- New Magnet High School
- 1300 El Camino Real
- 1021 Evelyn Street
- 40 Middlefield Road
- 949 El Camino Real
- 1540 El Camino Real
- 115 El Camino Real

- 506-556 Santa Cruz Avenue
- 1125 Merrill Street
- 409 Glenwood Avenue
- 706-716 Santa Cruz Avenue
- 1345 Willow Road
- 201 El Camino Real
- 1021 Runnymede Street (East Palo Alto)

For the cumulative scenario, the City of Menlo Park land use assumed the buildout of the General Plan, as well as the portion of the proposed 123 Independence Drive project that would exceed the unrestricted dwelling units studied in the ConnectMenlo EIR. Pending developments as of December 2020 within the City of East Palo Alto were added to the near-term land use to represent the year-2040 land use for the city. Land use growth for other Bay Area regions for year 2040 were taken from Association of Bay Area Governments (ABAG) projections and refined by VTA/C/CAG. Table 15 shows the socioeconomic model inputs for the entire Bay Area separated by counties.

The forecasted intersection turning movements under all future scenarios were adjusted based on existing volumes to generate traffic volumes for near-term conditions (see Figure 11), near-term plus project conditions (see Figure 12), cumulative conditions (see Figure 13), and cumulative plus project conditions (see Figure 14).

Table 15
Socioeconomic Model Inputs for Bay Area

	Year 2040 Project Conditions Model Land Use Data			
County	Total Households	Total Population	Employed Residents	Total Jobs
San Francisco	447,340	1,076,365	559,923	759,509
San Mateo	320,377	909,511	444,478	481,116
Santa Clara	818,369	2,406,587	1,158,389	1,229,995
Alameda	705,337	1,965,356	891,473	947,642
Contra Costa	464,151	1,328,458	579,757	467,333
Solano	168,706	494,363	224,059	179,946
Napa	56,312	158,792	69,450	89,554
Sonoma	220,740	591,546	284,856	257,466
Marin	112,046	274,489	136,554	129,150
City of Menlo Park	18,532	46,741	21,369	60,969

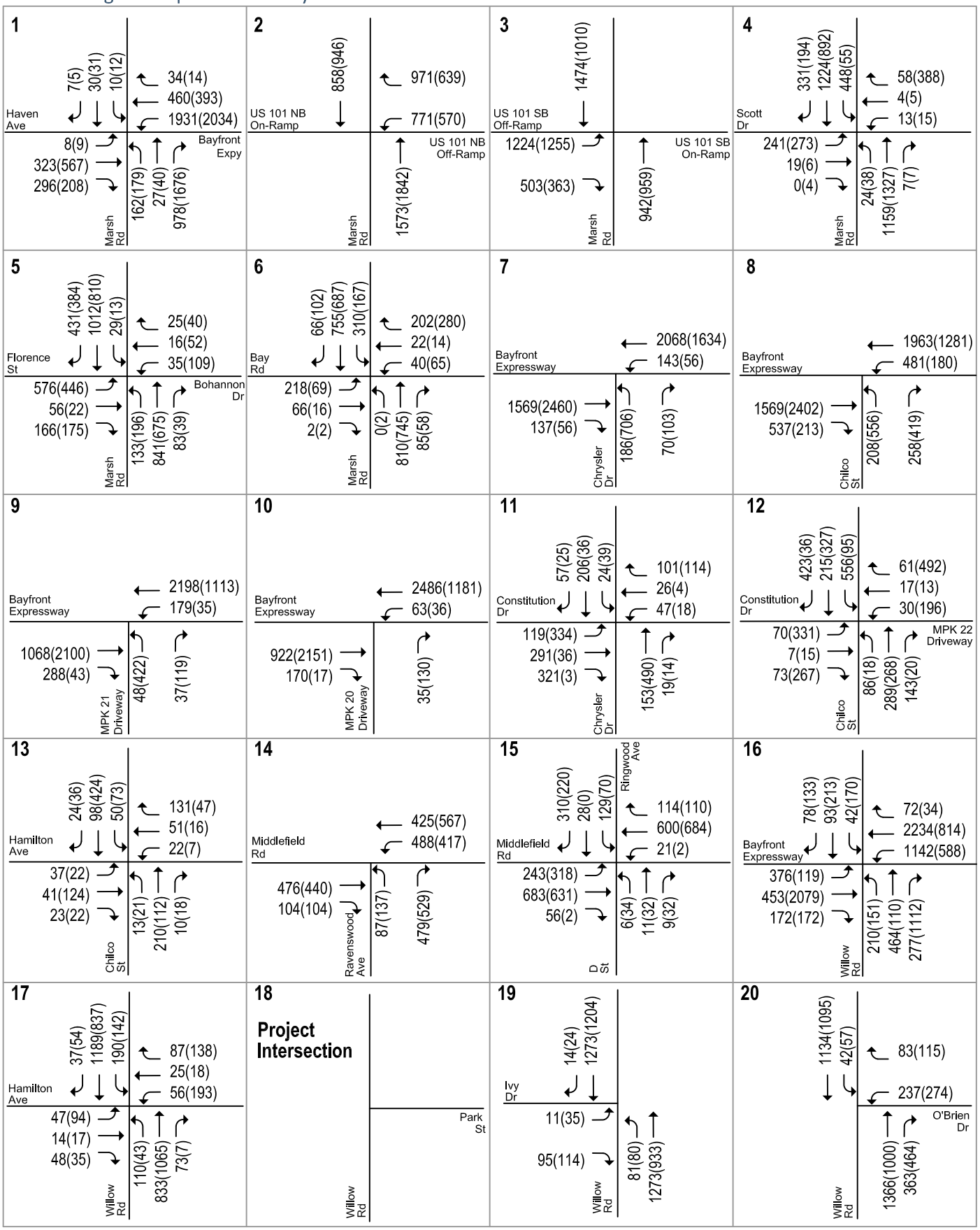


Figure 11
Near-Term Traffic Volumes

NORTH
Not to Scale

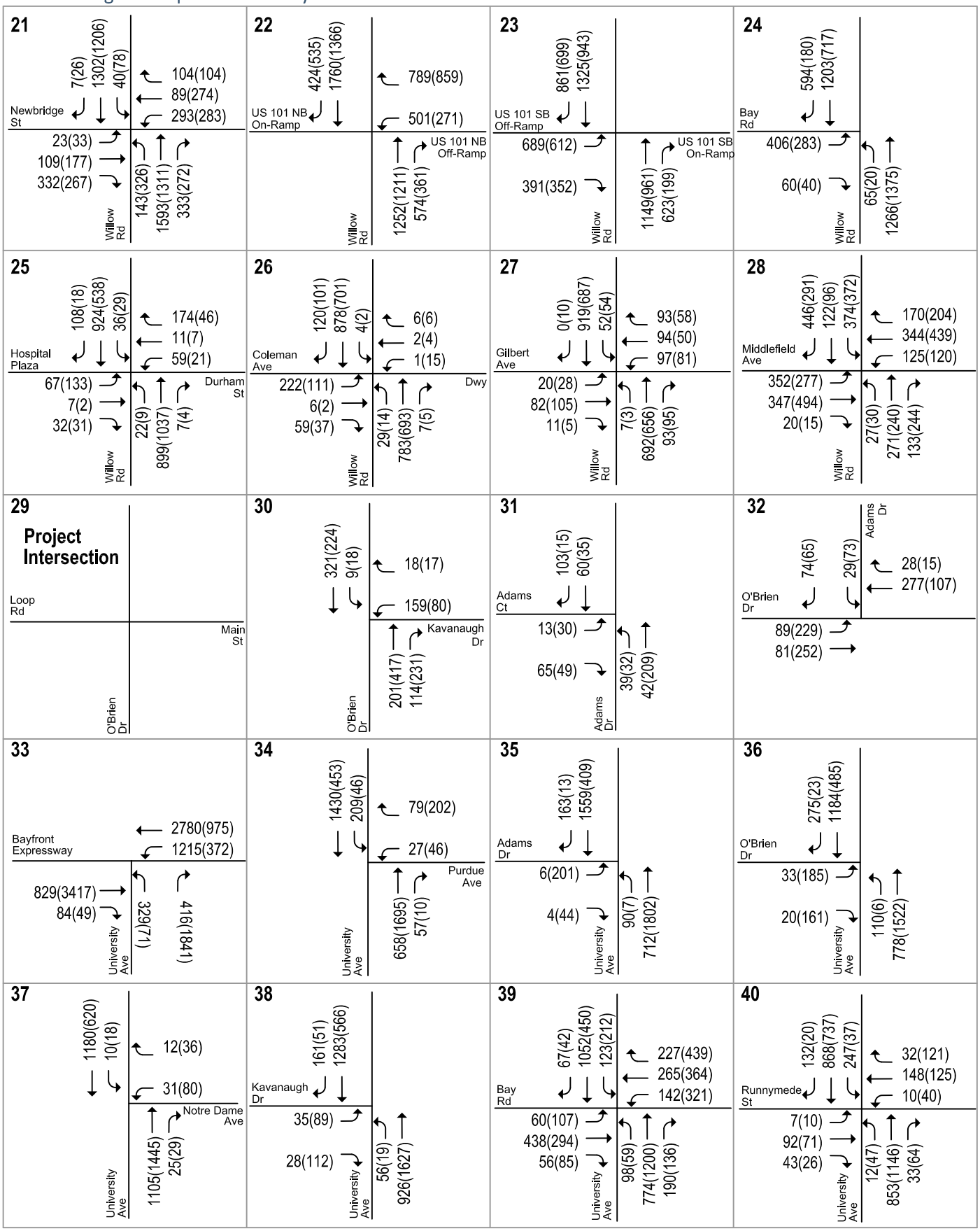


Figure 11
Near-Term Traffic Volumes

NORTH
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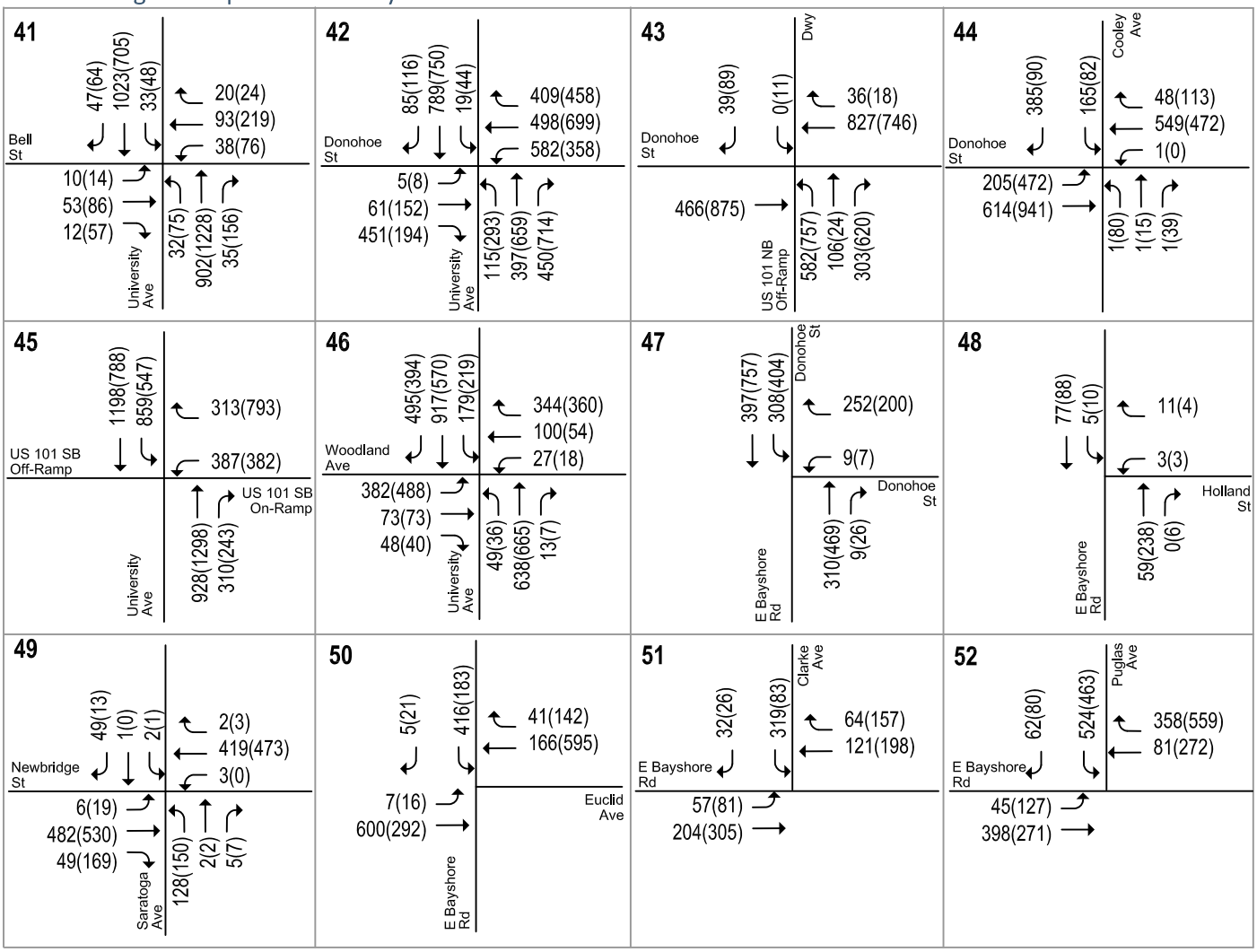


LEGEND

XX(XX) = AM(PM) Peak-Hour Traffic Volumes

Figure 11
Near-Term Traffic Volumes

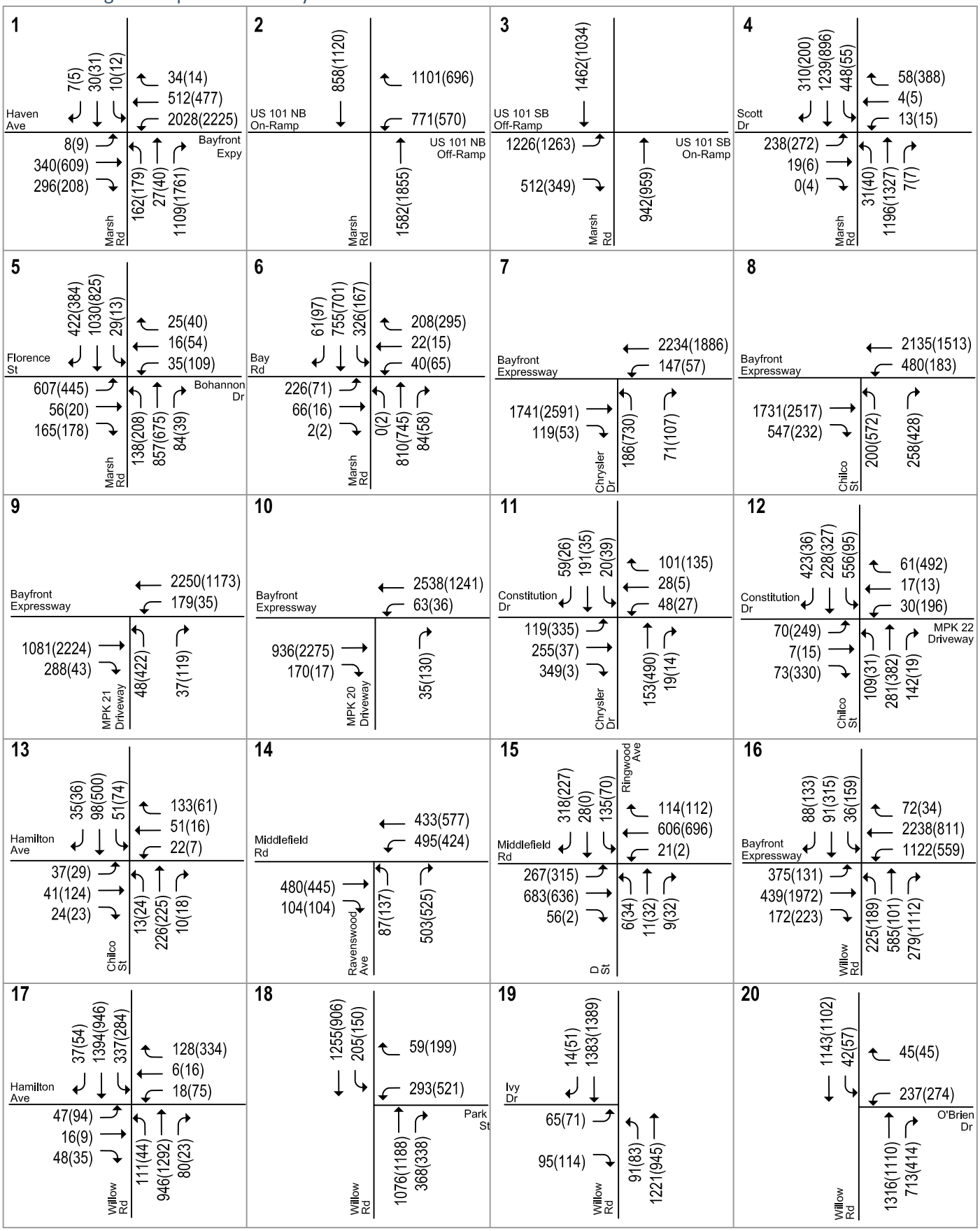


Figure 12
Near-Term Plus Project Traffic Volumes

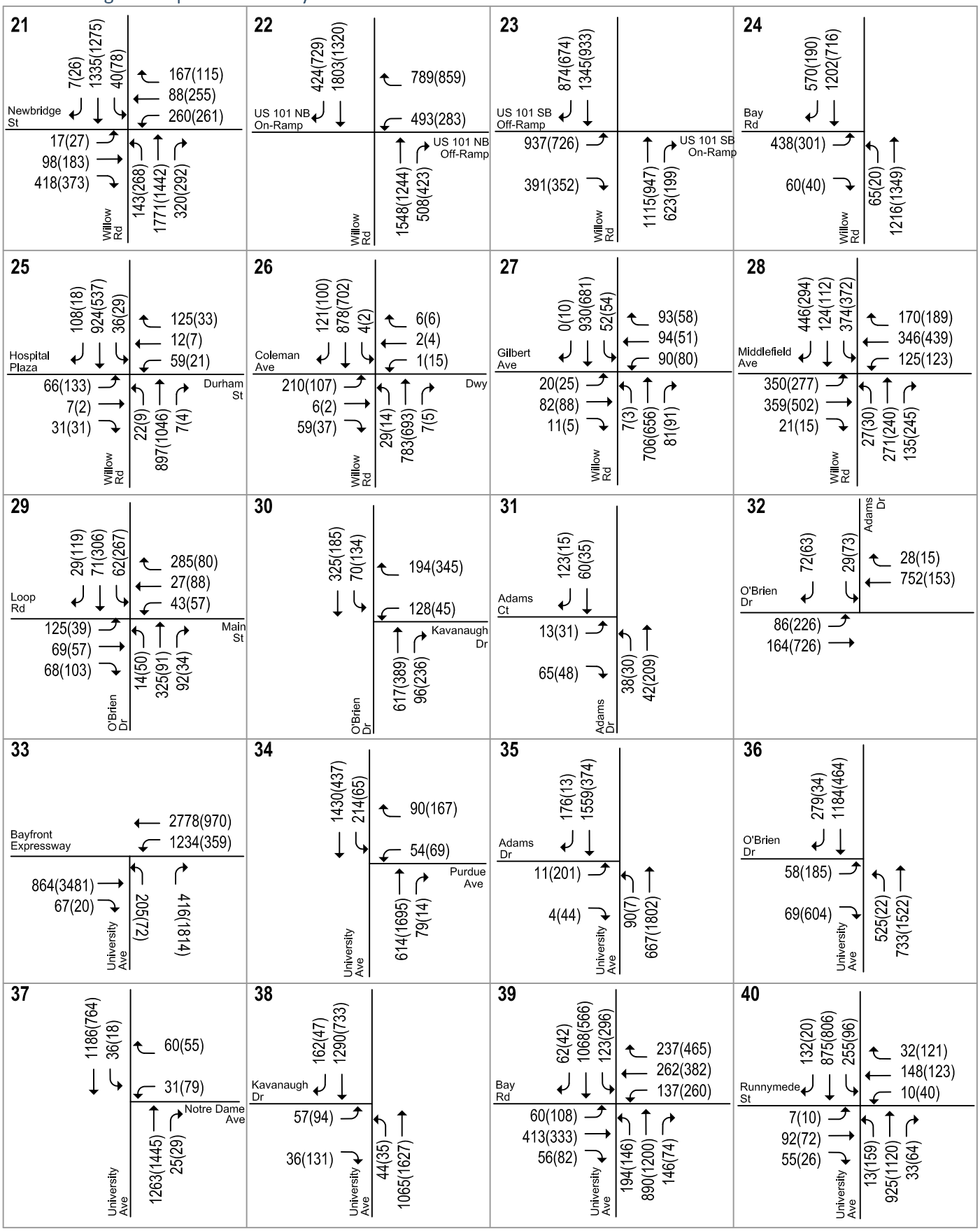
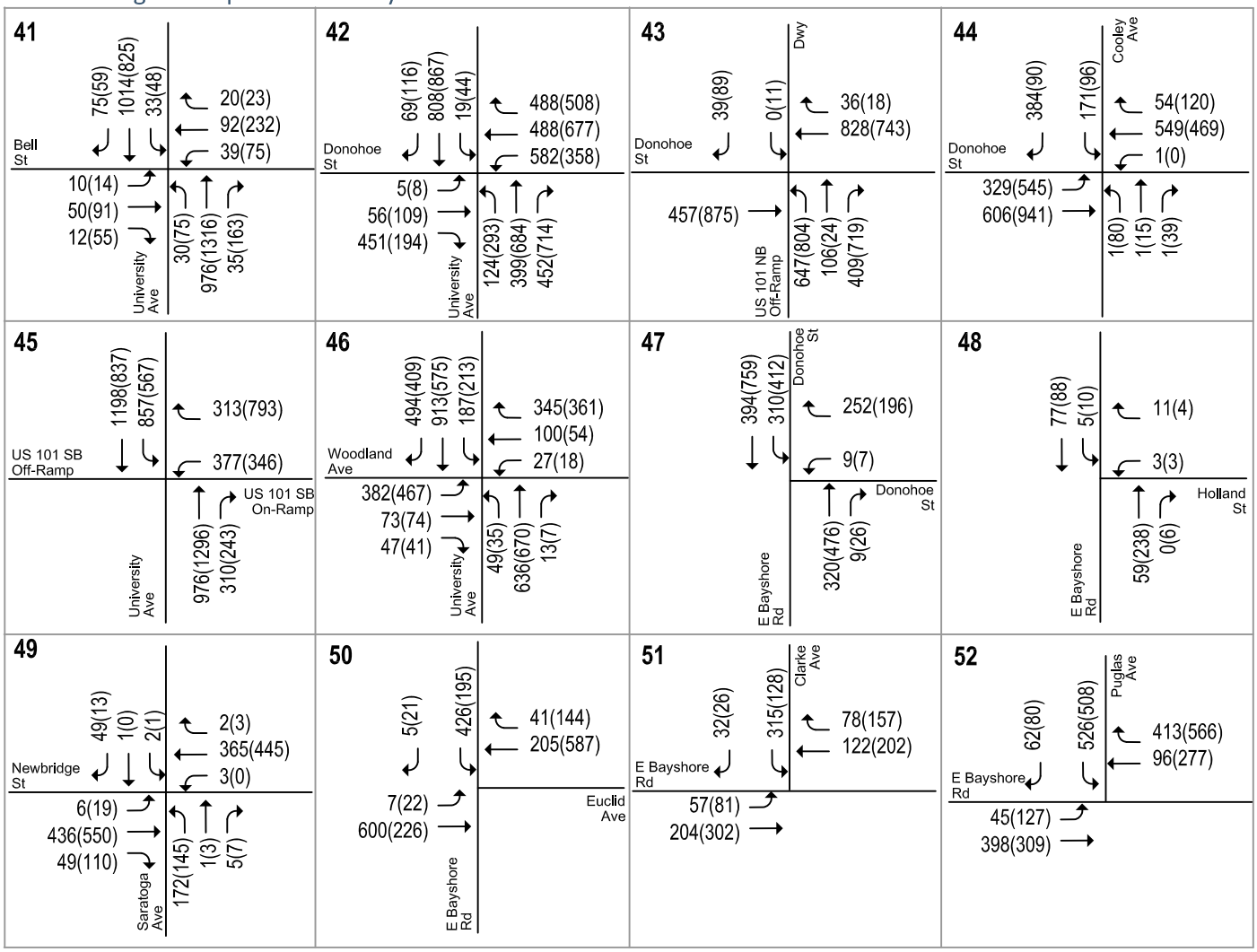


Figure 12
Near-Term Plus Project Traffic Volumes



LEGEND

XX(XX) = AM(PM) Peak-Hour Traffic Volumes

Figure 12
Near-Term Plus Project Traffic Volumes

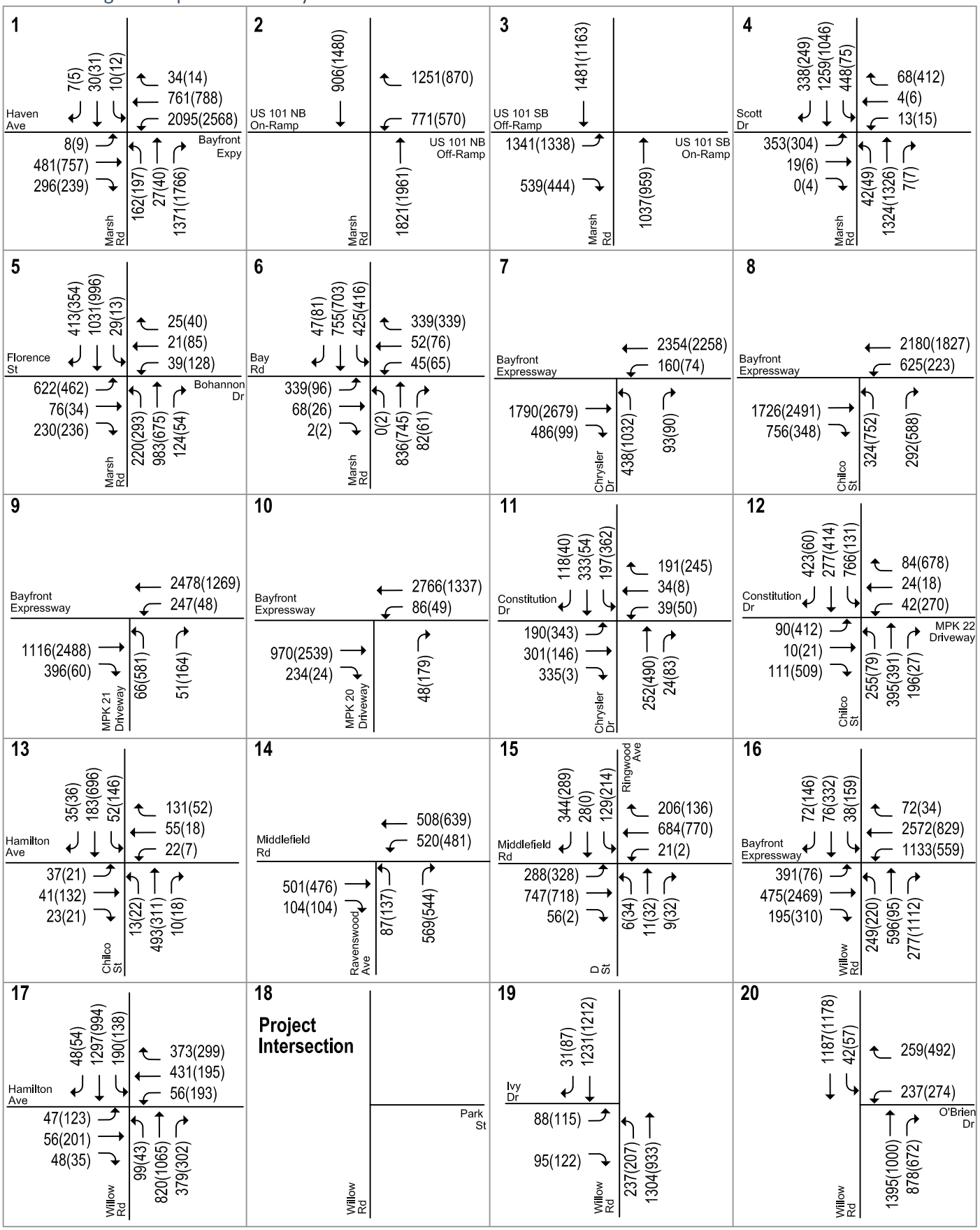


Figure 13
Cumulative Traffic Volumes

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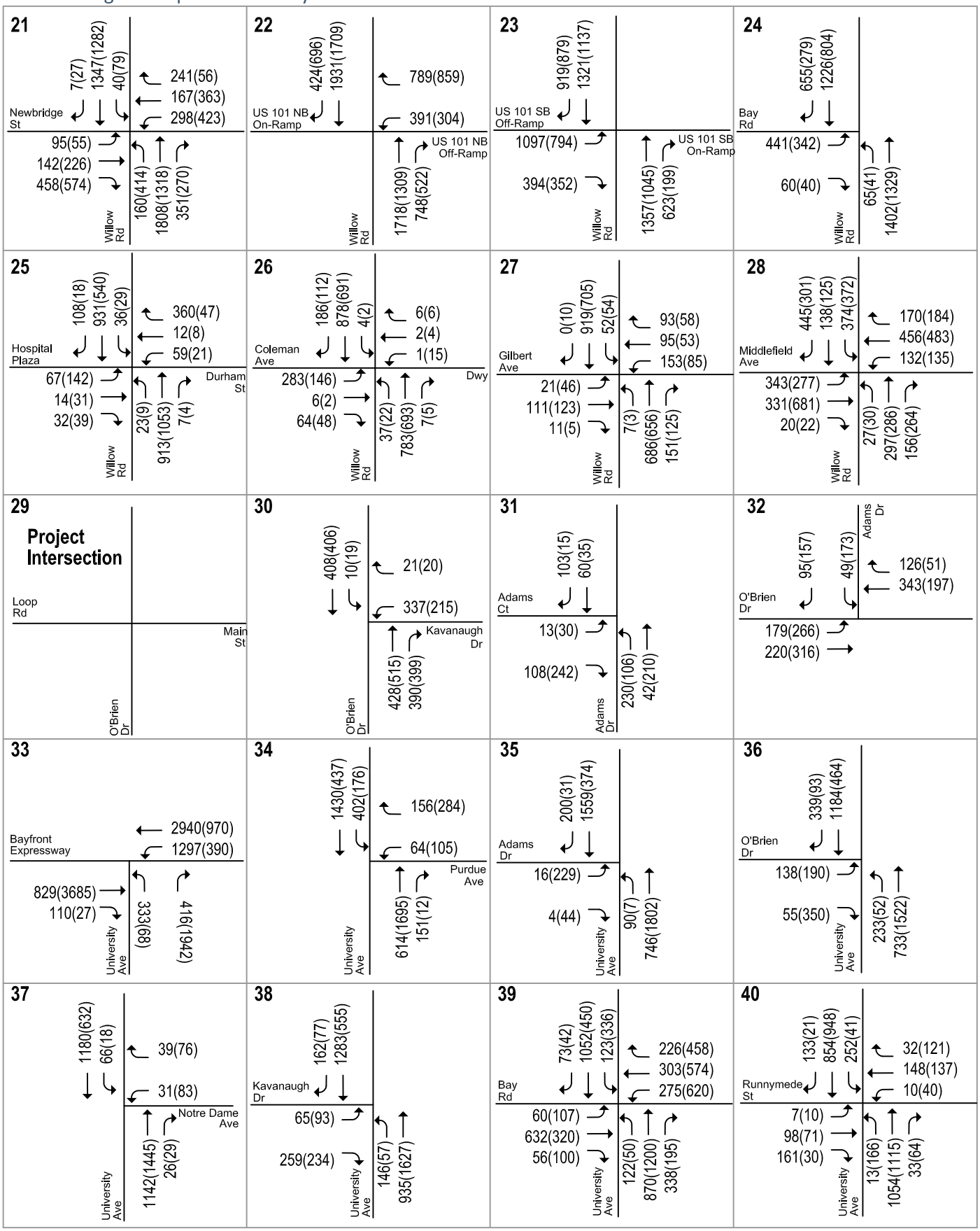

Figure 13
Cumulative Traffic Volumes

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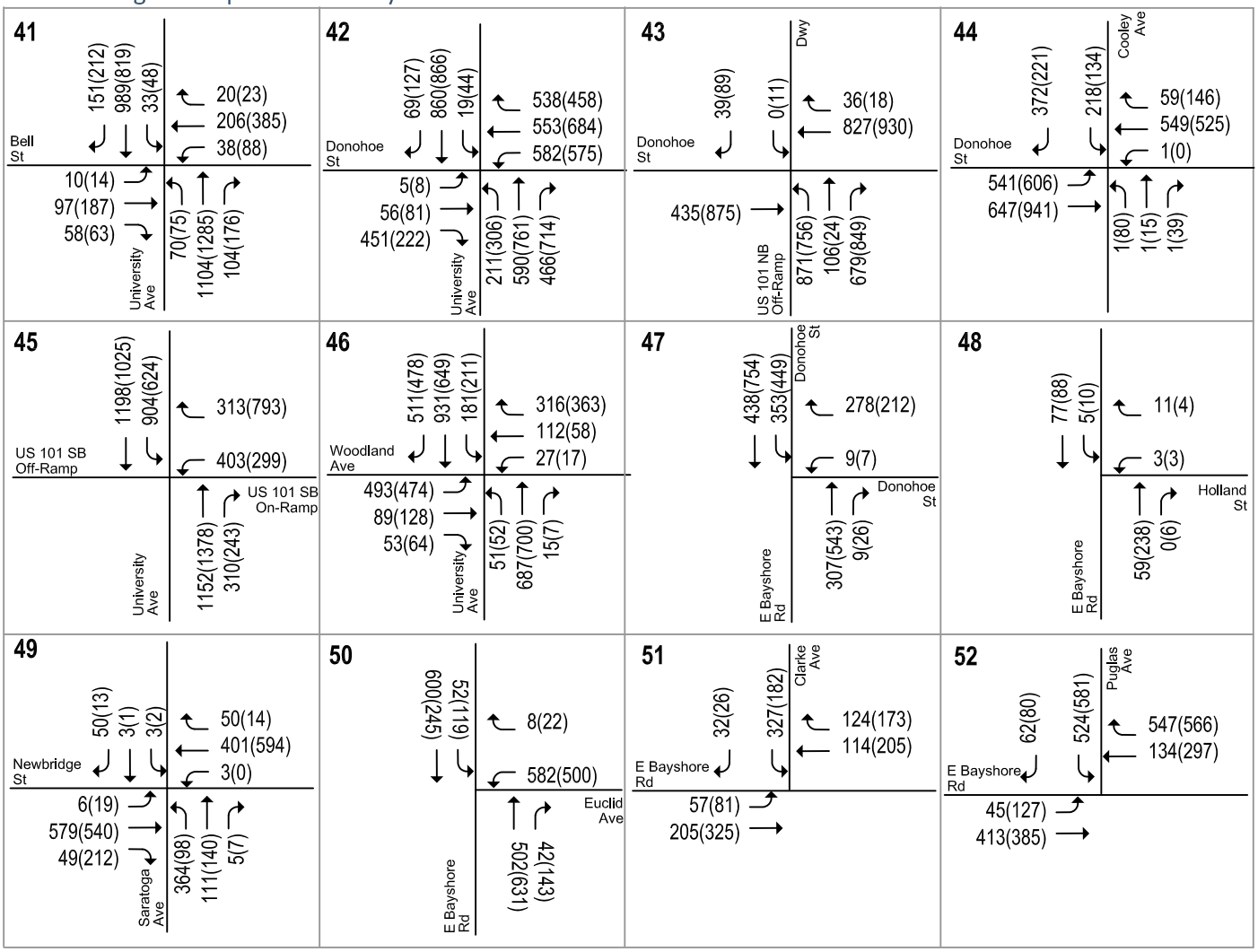


LEGEND

XX(XX) = AM(PM) Peak-Hour Traffic Volumes

Figure 13
Cumulative Traffic Volumes

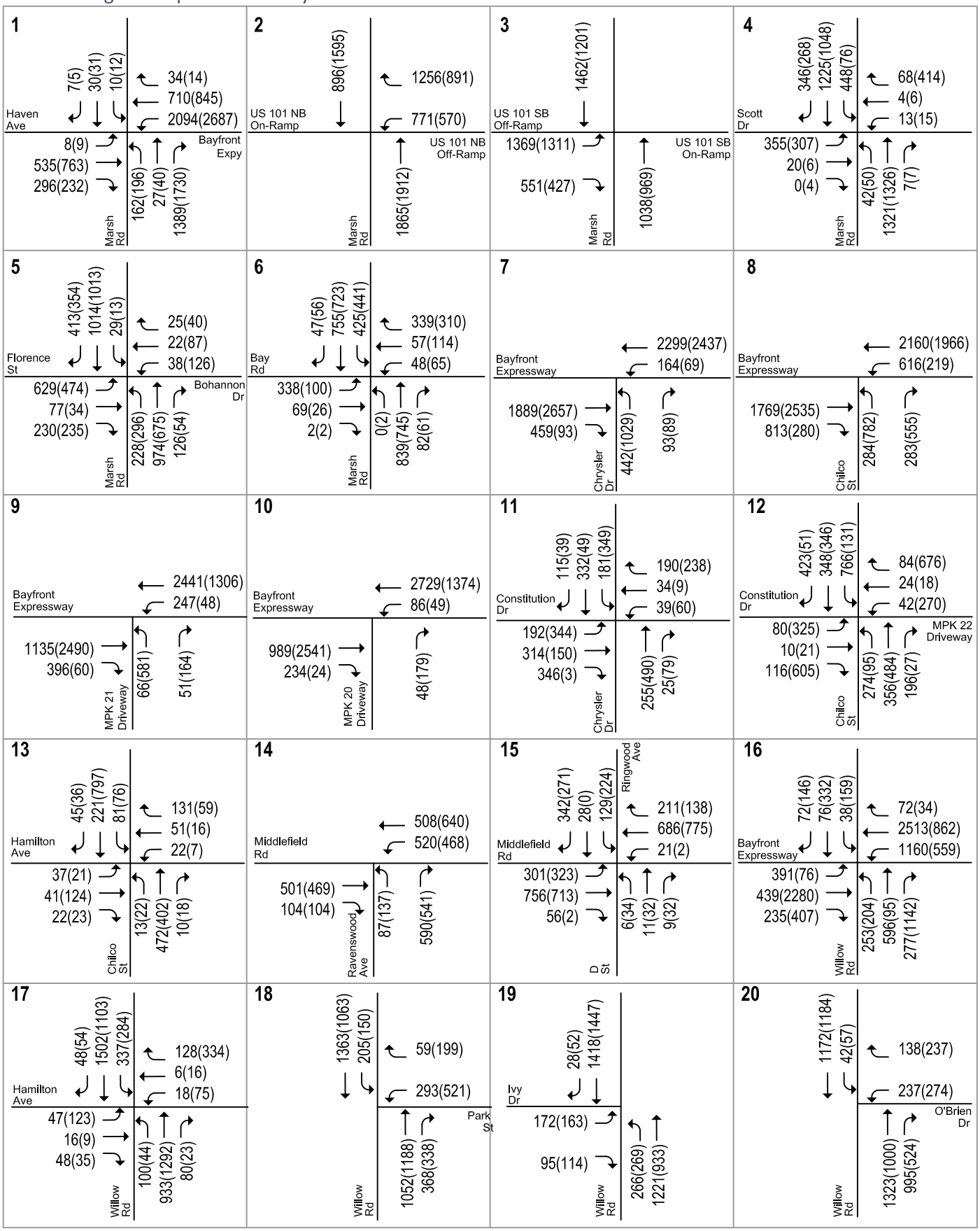


Figure 14
Cumulative Plus Project Traffic Volumes

NORTH
Not to Scale

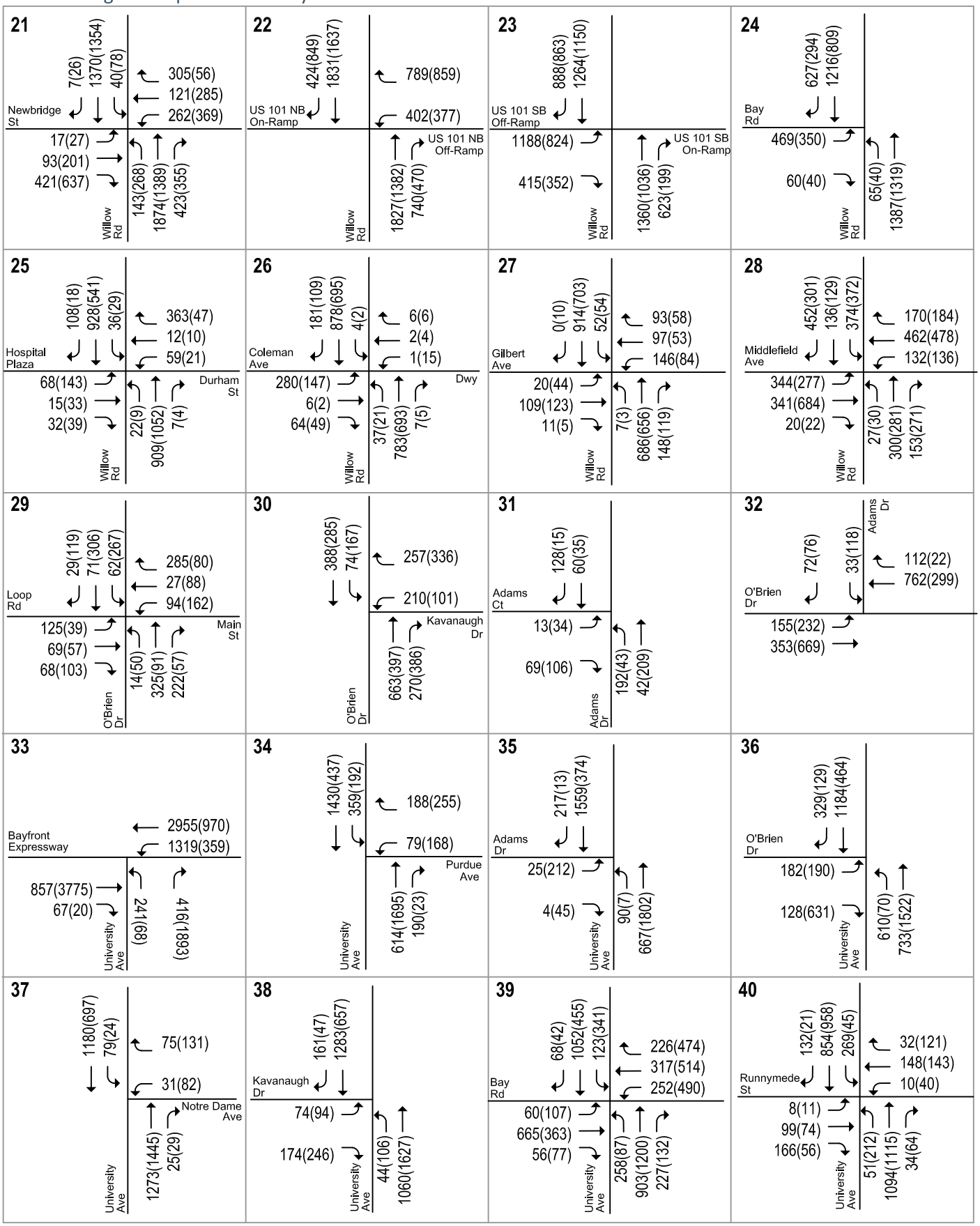
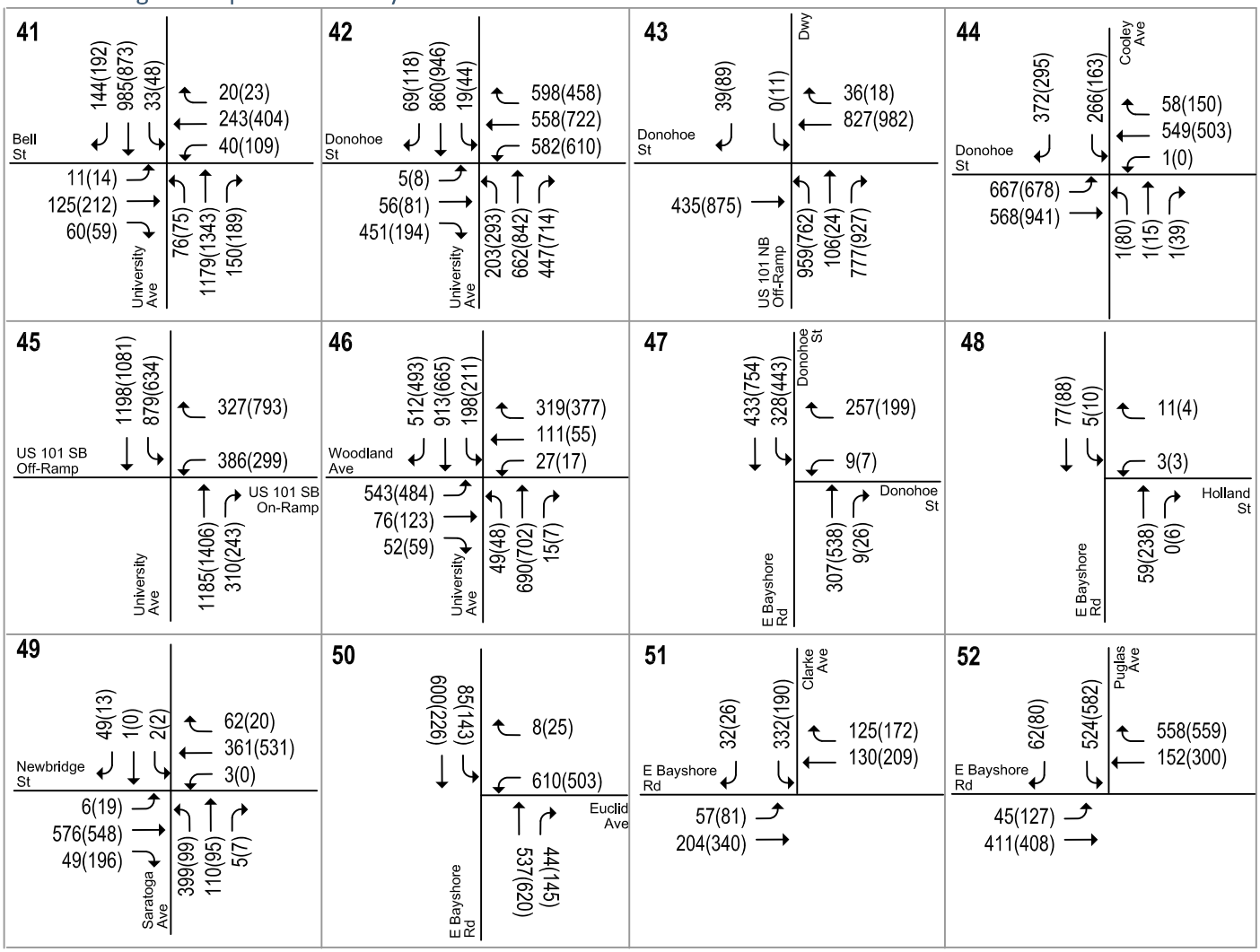


Figure 14
Cumulative Plus Project Traffic Volumes



LEGEND

XX(XX) = AM(PM) Peak-Hour Traffic Volumes

Figure 14
Cumulative Plus Project Traffic Volumes

Cumulative with Dumbarton Rail Scenario

Dumbarton rail service has not been designed, subjected to environmental review, approved, or funded. As a result, future Dumbarton rail service is speculative at this time and might or might not occur. If it does occur, capacity, frequency, ridership and other operational features are unknown at this time. As a result, any forecast of potential future traffic with Dumbarton rail service is speculative. The following analysis is provided for informational purposes to give the public and decision makers an idea of what impact Dumbarton rail might have on traffic based on a specific set of ridership assumptions. These impacts would occur instead of the impact identified above under Cumulative (2040) Plus Project Intersection Levels of Service.

A cumulative with Dumbarton rail scenario was evaluated where the model assumed the operation of potential Dumbarton Rail service. The purpose of this scenario was to provide information on the possible effects of future Dumbarton Rail on the transportation network based on the assumptions made herein about such future service. A cumulative plus project with Dumbarton Rail scenario was compared against the cumulative with Dumbarton Rail scenario to inform the potential effects of the Project-generated traffic assuming potential Dumbarton Rail service.

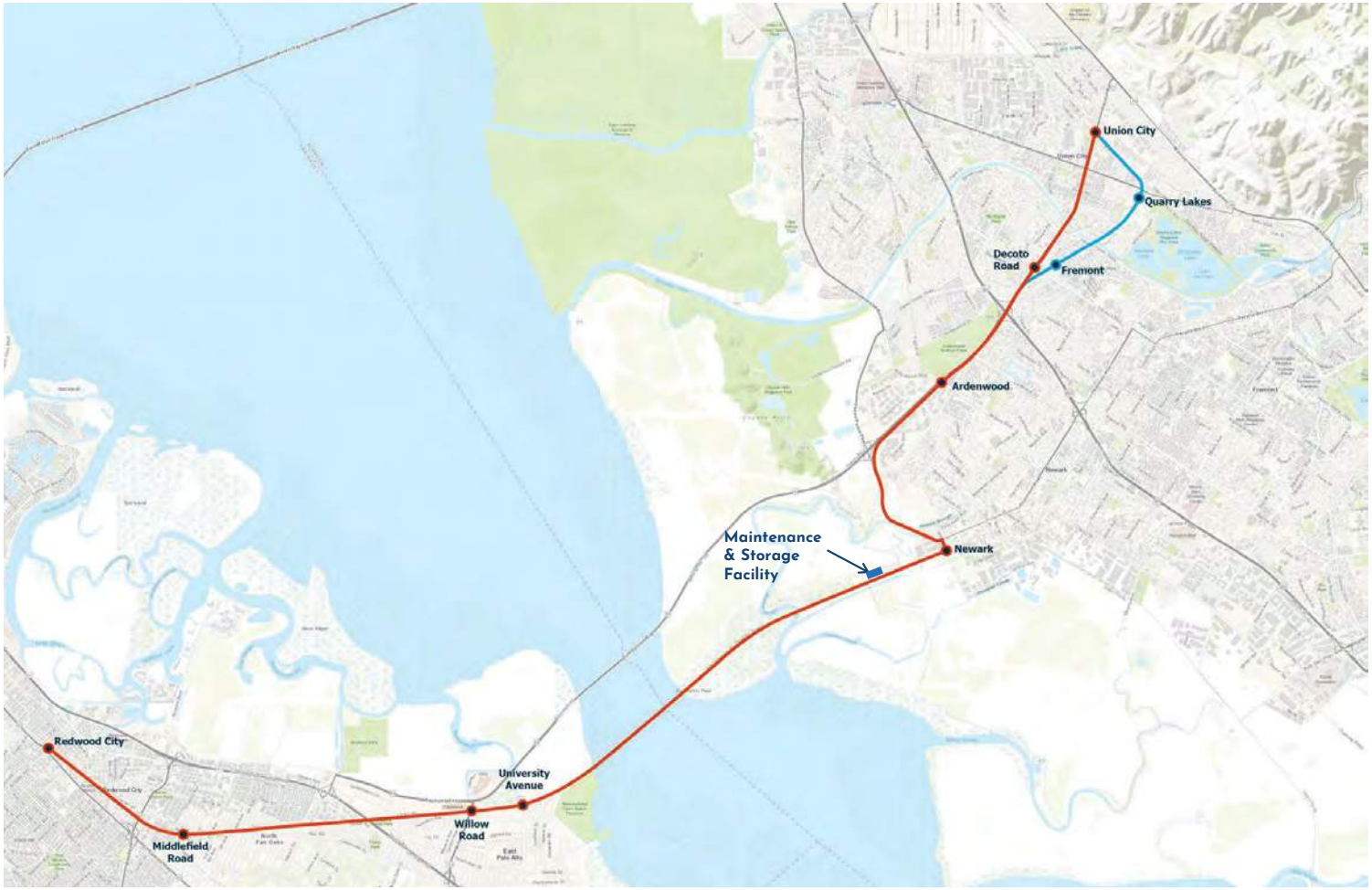
Based on the *Dumbarton Rail Corridor Update* in March 2021, preliminary forecasts suggest that under 2040 conditions, the high-end ridership projections for the highest-ridership alternative would be around 24,300 riders per day. In comparison, the low-end ridership projections for the lowest-ridership alternative would be around 14,600 riders per day. As shown on Figure 15, this highest ridership forecast would be realized over a potential corridor with 10 stations located between downtown Redwood City and the Union City BART station. It should be noted that this potential corridor includes a stop on Willow Road just north of the proposed Project Site. At the time of this study's initiation, the ability to park-and-ride at the stations along this potential corridor was not available.

This study assumed the highest ridership projections as well as no park-and-ride capability at the stations. More ridership along the Dumbarton Rail corridor would mean lower traffic volumes. Therefore, the assumptions of this study would equate to evaluating the largest potential reduction in traffic volumes assuming the operation of Dumbarton Rail service.

To represent the daily ridership in the model, daily travel between TAZs within a quarter-mile radius of the stations was reduced by 24,300 daily person-level driving trips, or roughly 19,000 daily vehicular-trips. During a one-hour peak hour, based on the highest ridership projections, the Dumbarton Rail corridor would reduce approximately 1,900 vehicular trips, of which approximately half of the trip reduction would occur within the study area. These trips are assumed to be between TAZ sets within a quarter-mile radius of different stations, as the stations are assumed to not contain park-and-ride capabilities. A quarter-mile radius from the stations represents walkable distances to the stations.

Figure 16 shows the model-adjusted intersection turning movement volumes for the cumulative with Dumbarton Rail scenario. Volumes under the cumulative plus project with Dumbarton Rail scenario are shown in Figure 17. The Dumbarton Rail was estimated to reduce the Proposed Project's vehicular trip generation by approximately 4%.

San Mateo County
TRANSIT DISTRICT



LRT, BRT, & AVT Alignment

Note: Alignments and stations are being studied for technical feasibility in regards to engineering, operations, land use, city and agency coordination

Figure 15
Proposed Dumbarton Rail Corridor Alignment

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Not to Scale

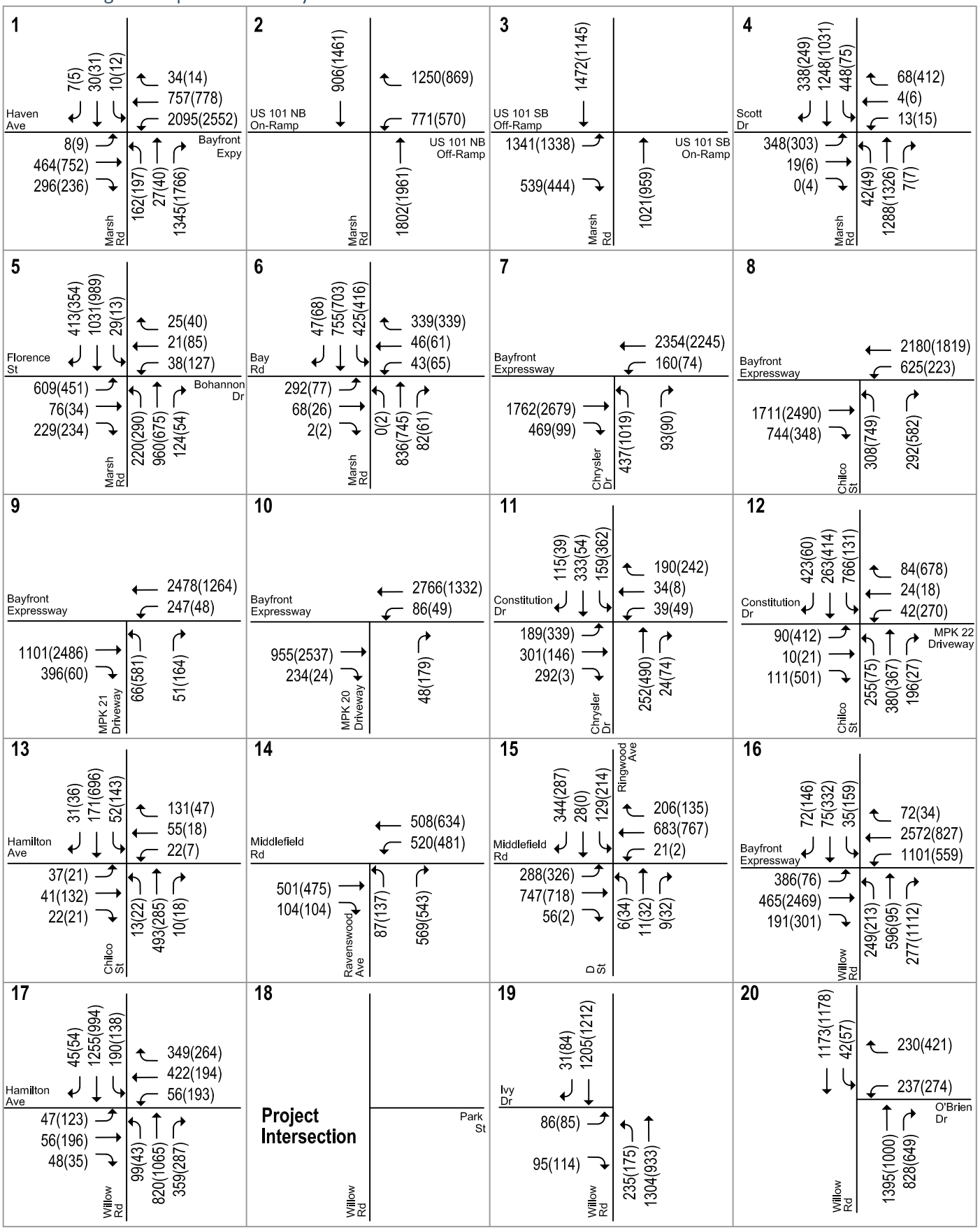


Figure 16
Cumulative Traffic Volumes with Dumbarton Rail Traffic Volumes

NORTH
Not to Scale

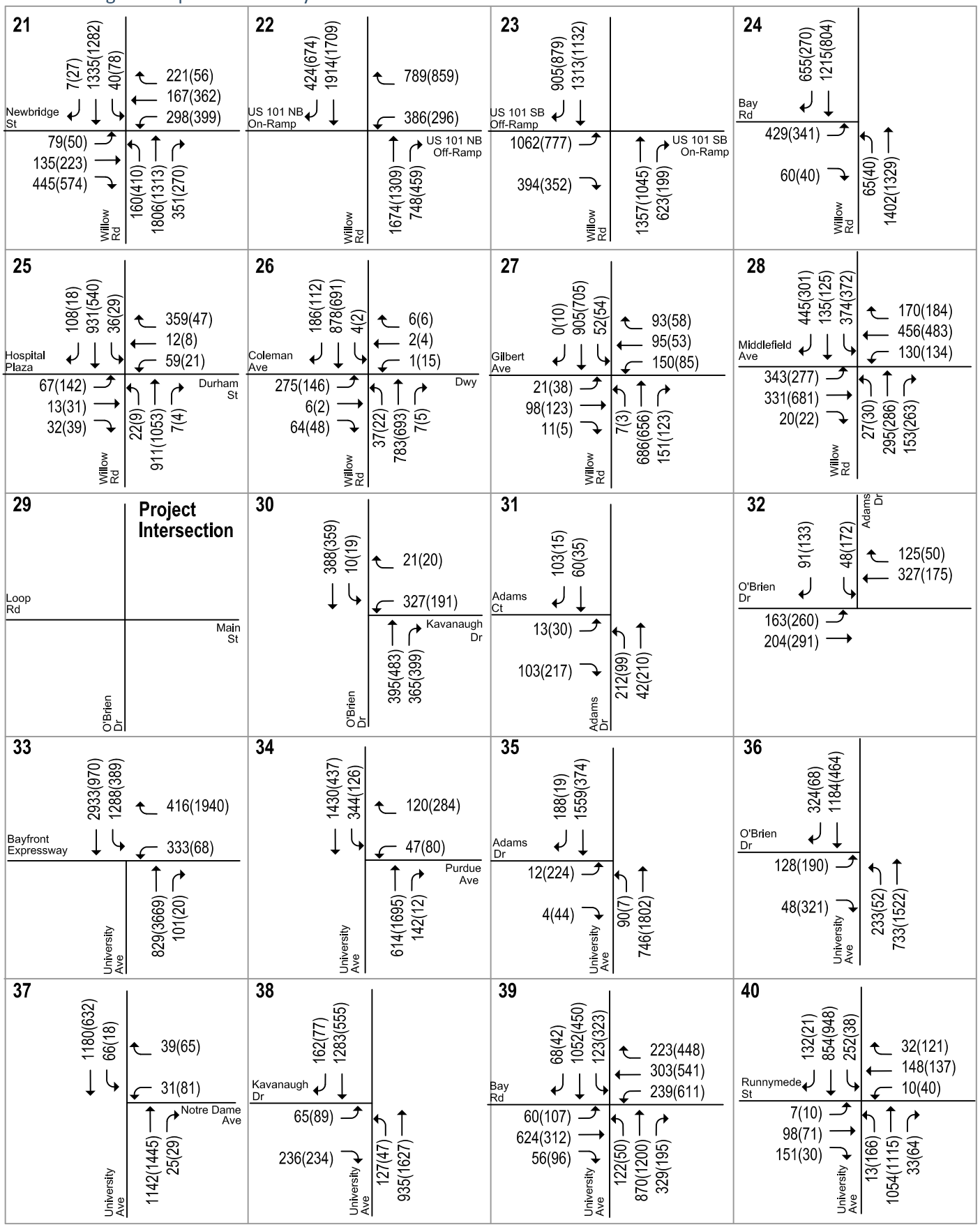
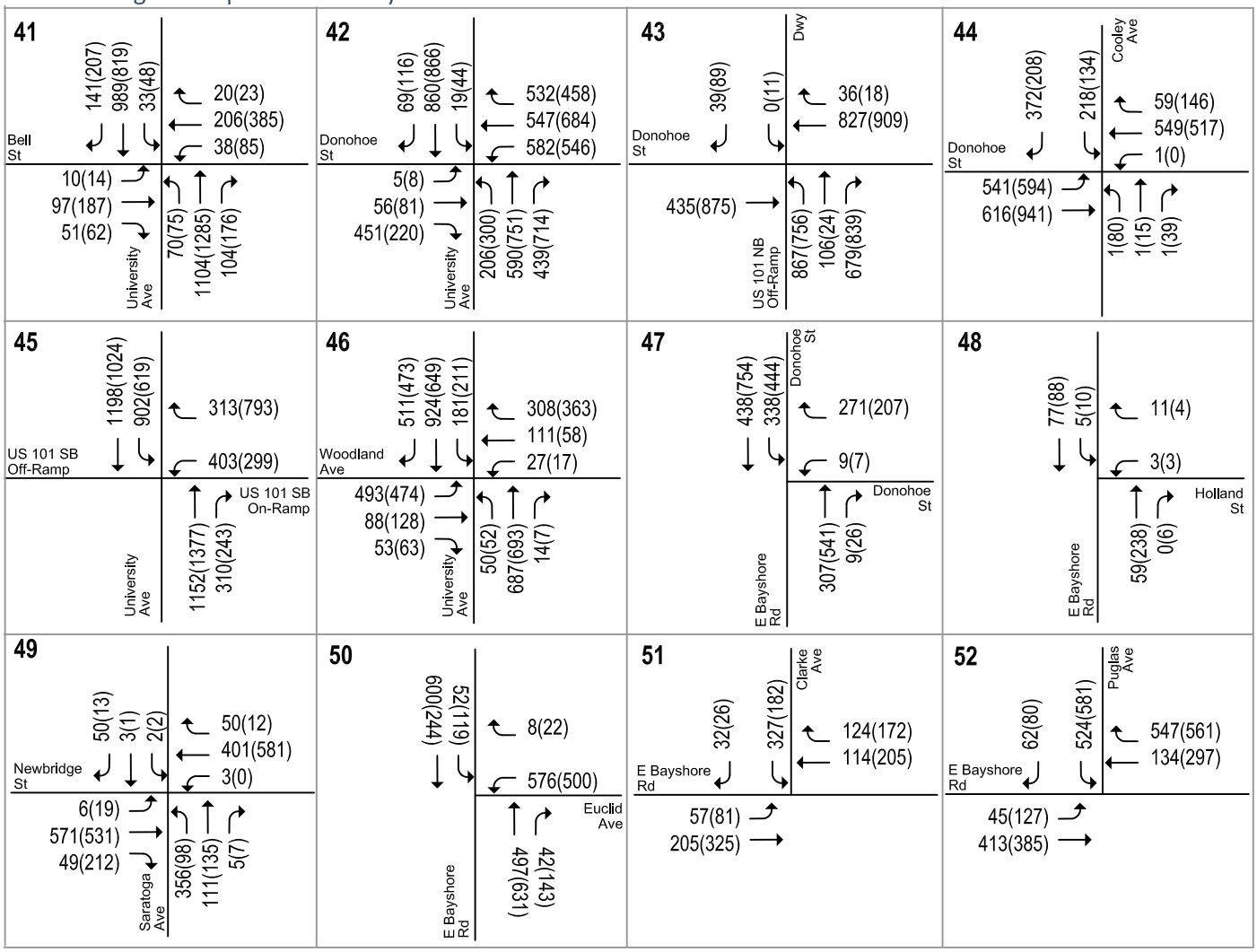


Figure 16
Cumulative Traffic Volumes with Dumbarton Rail Traffic Volumes

NORTH
Not to Scale



LEGEND

XX(XX) = AM(PM) Peak-Hour Traffic Volumes

Figure 16
Cumulative Traffic Volumes with Dumbarton Rail Traffic Volumes

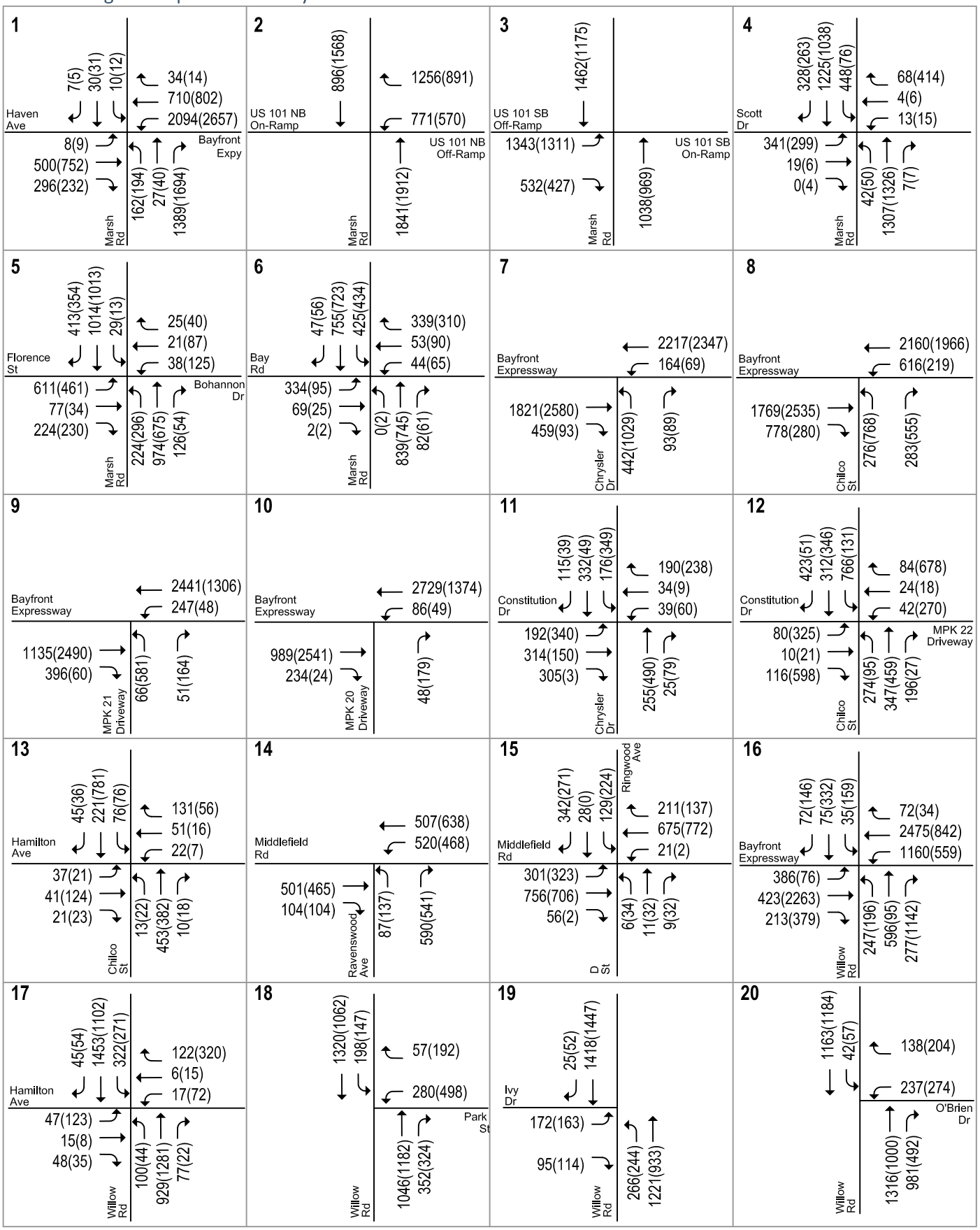


Figure 17
Cumulative Plus Project Traffic Volumes with Dumbarton Rail Traffic Volumes

NORTH
Not to Scale

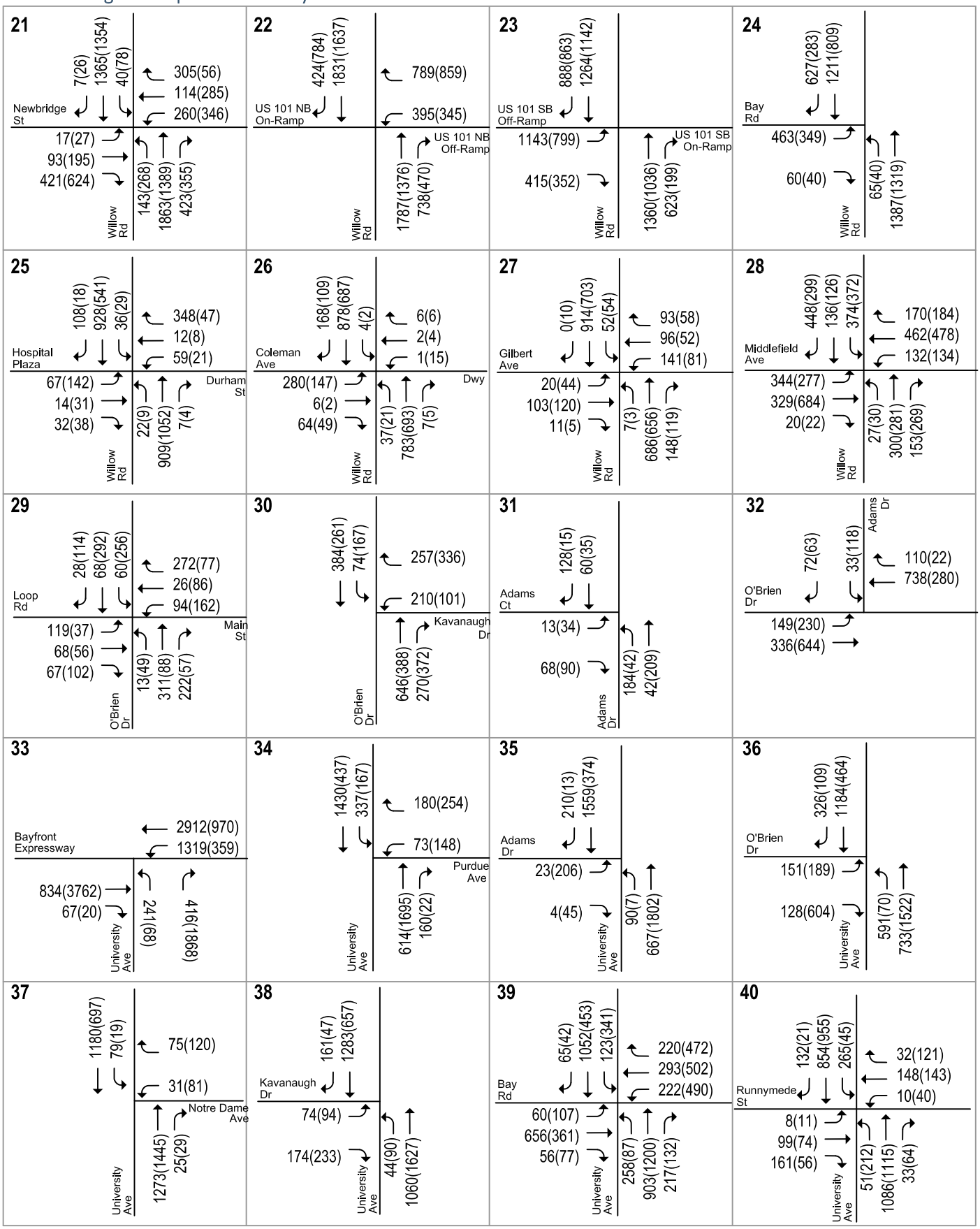
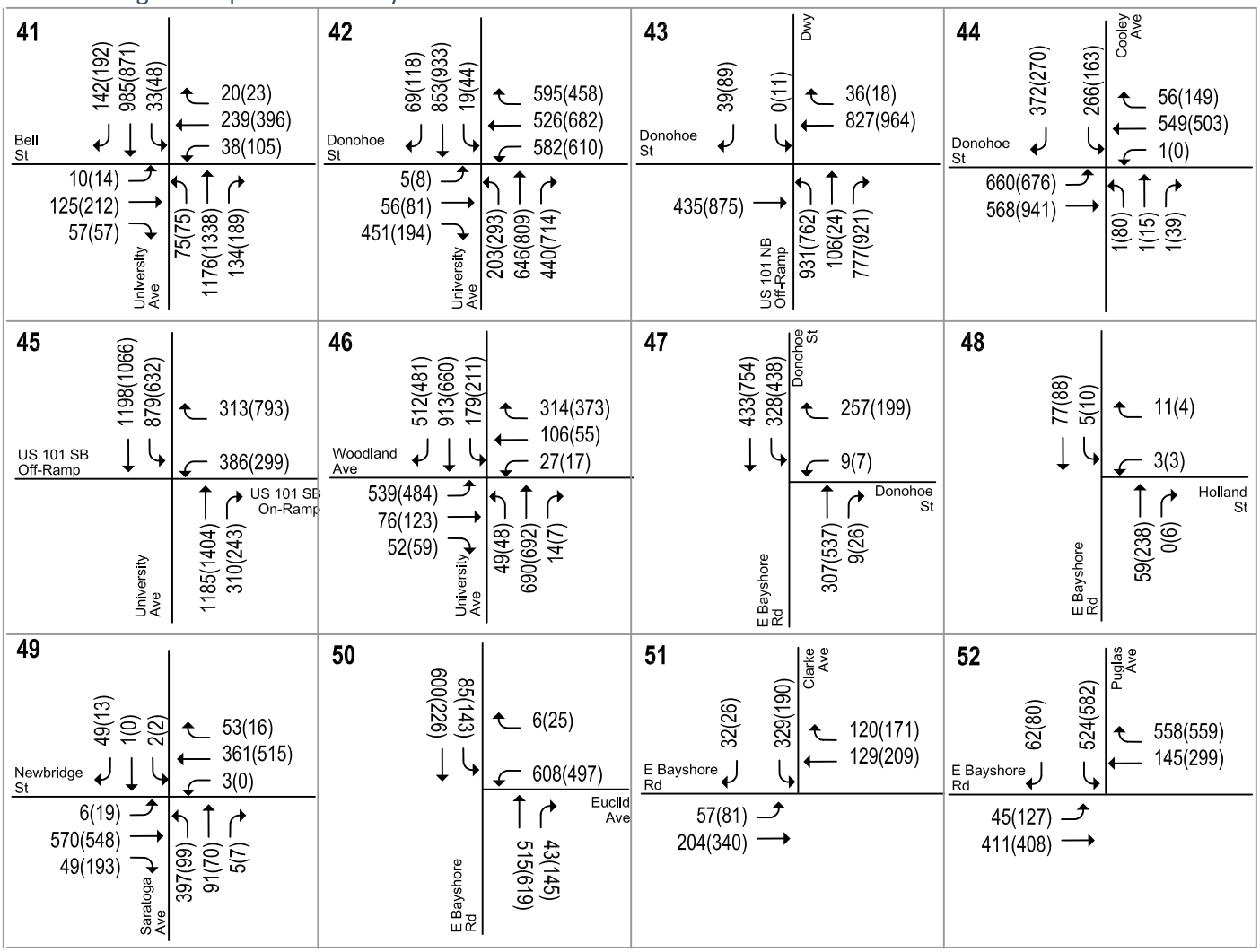


Figure 17
Cumulative Plus Project Traffic Volumes with Dumbarton Rail Traffic Volumes

NORTH
Not to Scale



LEGEND

XX(XX) = AM(PM) Peak-Hour Traffic Volumes

Figure 17
Cumulative Plus Project Traffic Volumes with Dumbarton Rail Traffic Volumes

Future Transportation Networks

Near-term (2025) Conditions

The transportation network under near term conditions assumes a signal at Chilco Street and Constitution Drive/MPK 22 Driveway, consistent with the Menlo Gateway EIR and the Bayfront Campus Expansion EIR. The intersection would be restriped to include an eastbound left-turn lane and a shared through-right lane, two westbound left-turn lanes and a shared through-right lane, a northbound shared through-left lane and a right-turn lane, and a southbound shared left-through-right lane and right-turn lane. The roadway network for other study intersections is assumed to be the same as under existing conditions.

Near-term (2025) plus Project Conditions

The following improvements are proposed to the Street network under plus project conditions:

- **Willow Road and Hamilton Avenue**: Hamilton Avenue would be realigned and a south leg that would provide access to the Project Site would be added to the intersection. The south leg is identified as Main Street. The proposed lane configuration for the intersection would be modified to a northbound left-turn lane and shared through-right lane, a southbound left-turn lane and shared through-right lane, an eastbound left-turn lane, through lane, and shared through-right lane, and two westbound left-turn lanes, a through lane, and a shared through-right turn lane.

- **Willow Road and Park Street**: This is a proposed new signalized intersection with Park Street providing access to the Project Site. The proposed lane configuration for the intersection would be a northbound left-turn lane and a shared left right lane, an eastbound through lane and shared through-right lane, and two westbound left-turn lanes and two through lanes.

- **O'Brien Drive/Loop Road and Main Street/O'Brien Drive**: This is a proposed new roundabout intersection. The proposed lane configuration for the intersection would be one shared left-through-right lane on all approaches.

Cumulative (2040) Conditions

The transportation network under cumulative (2040) conditions and cumulative (2040) conditions with Dumbarton rail is assumed to include the improvements under near term conditions. The following additional road improvements in East Palo Alto identified in the Ravenswood/4 Corners TOD Specific Plan Environmental Impact Report (February 22, 2013) are also assumed:

- **University Avenue and Purdue Avenue (Mitigation Measure TRA-CUM-3)**: Install a traffic signal at this intersection. Along with a new traffic signal, appropriate pedestrian and bicycle accommodation will be provided.
- **University Avenue and Bay Road (Mitigation Measure TRA-CUM-4):** Add an exclusive eastbound right-turn lane and a second eastbound left-turn lane on University Avenue, add a second northbound left-turn lane on Bay Road, add a second westbound left-turn lane on University Avenue, and modify signal phasing.
- **University Avenue and Donohoe Street (Mitigation Measure TRA-CUM-5):** Add an exclusive westbound right-turn lane on University Avenue.

Cumulative (2040) plus Project Conditions

The transportation network under cumulative (2040) plus project conditions and cumulative (2040) plus project conditions with Dumbarton rail is assumed to include the proposed project improvements described under the near term plus project conditions. The roadway network for other study intersections is assumed to be the same as under cumulative (2040) conditions.

Near-Term (2025) Intersection Levels of Service

The results of the intersection level of service analysis under near-term conditions are summarized in Tables 16 and 17. The Willow Road corridor and 101/University Avenue interchange were analyzed using the Simtraffic microsimulation model as described Chapter 2. The microsimulation model indicates that the intersections would experience capacity issues where the demand cannot be served by the intersections. Oversaturated conditions would operate at LOS F and are indicated using 'OVERSAT' in the tables below. Vistro and Traffix were used to calculate critical delay and volume to capacity ratio at the Willow Road and 101/University Avenue intersections, respectively. The intersection LOS calculation sheets are included in Appendix C. The following study intersections (see Figure 18) would operate at an unacceptable level of service during at least one peak hour:

11. Chrysler Drive and Constitution Drive (AM peak hour)
12. Chilco Street and Constitution Drive/MPK 22 Driveway (PM peak hour)
16. Willow Road and Bayfront Expressway (AM and PM peak hours)
17. Willow Road and Hamilton Avenue (AM and PM peak hours)
19. Willow Road and Ivy Drive (AM and PM peak hours)
20. Willow Road and O'Brien Drive (AM and PM peak hours)
21. Willow Road and Newbridge Street (AM and PM peak hours)
22. Willow Road and US 101 Northbound Ramps (AM and PM peak hours)
23. Willow Road and US 101 Southbound Ramps (AM and PM peak hours)
24. Willow Road and Bay Road (AM and PM peak hours)
25. Willow Road and Hospital Plaza/Durham Street (AM and PM peak hours)
28. Willow Road and Middlefield Road (AM peak hour)
30. O'Brien Drive and Kavanaugh Drive (PM peak hour)
32. Adam's Drive and O'Brien Drive (PM peak hour)
33. University Avenue and Bayfront Expressway (PM peak hour)
34. University Avenue and Purdue Avenue (PM peak hour)
35. University Avenue and Adams Drive (AM and PM peak hours)
39. University Avenue and Bay Road (PM peak hour)
42. University Avenue and Donohoe Street (AM and PM peak hours)
43. US 101 Northbound Off-Ramp and Donohoe Street (AM and PM peak hours)
44. Cooley Avenue and Donohoe Street (AM and PM peak hours)
45. University Avenue and US 101 Southbound Ramps (AM and PM peak hours)
46. University Avenue and Woodland Avenue (AM and PM peak hours)
47. East Bayshore Road and Donohoe Street (AM and PM peak hours)
50. East Bayshore Road and Euclid Avenue (AM and PM peak hours)

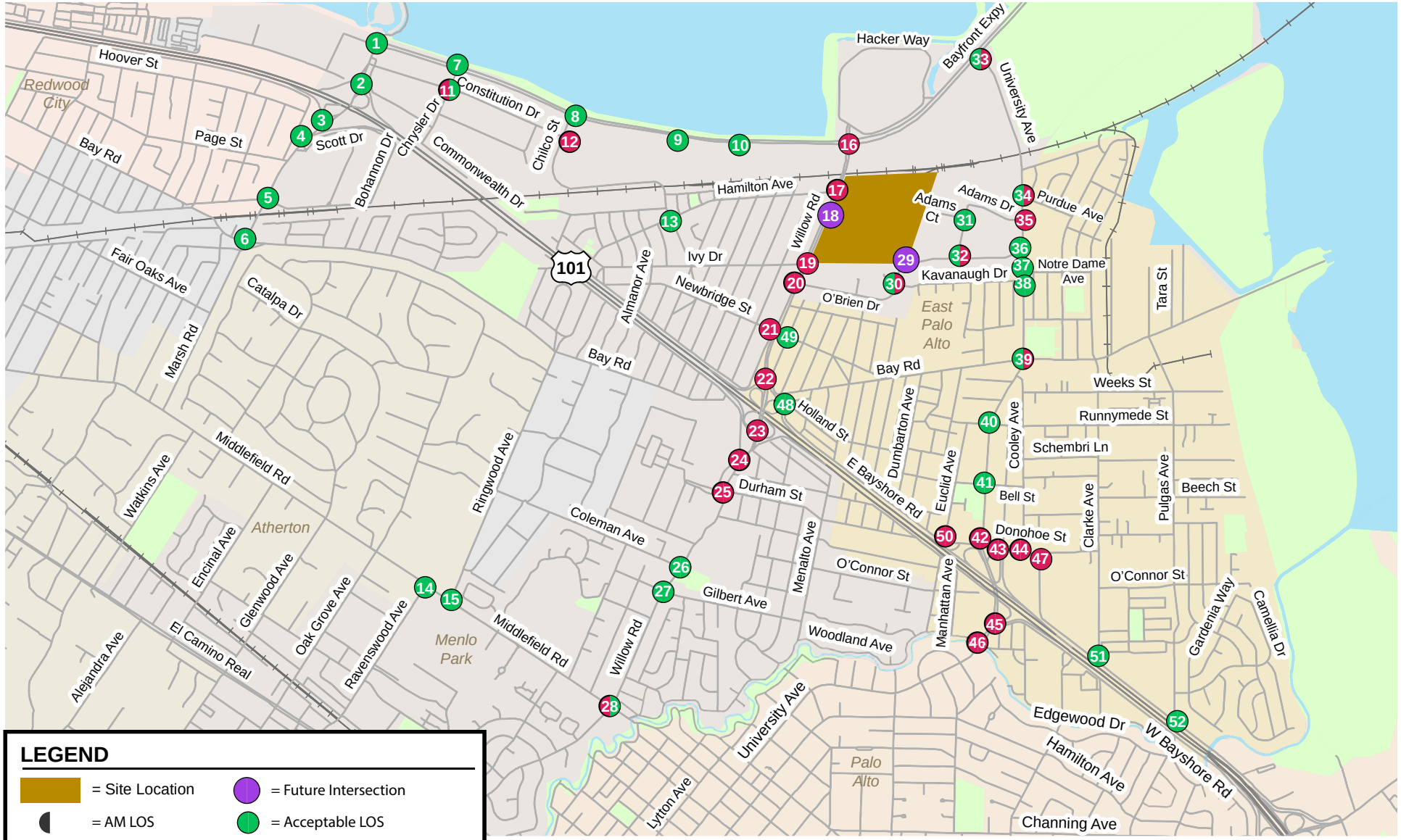


Figure 18
Near-Term Intersection Level of Service

Near-Term (2025) Plus Project Intersection Levels of Service

The results of the intersection level of service analysis under near term (2025) plus project conditions are summarized in Table 16 and 17. The Willow Road corridor and 101/University Avenue interchange were analyzed using the Simtraffic microsimulation model as described Chapter 2. The microsimulation model indicates that the intersections would experience capacity issues where the demand cannot be served by the intersections. Oversaturated conditions would operate at LOS F and are indicated using 'OVERSAT' in the tables below. Vistro and Traffix were used to calculate critical delay and volume to capacity ratio at the Willow Road and 101/University Avenue intersections, respectively. The intersection LOS calculation sheets are included in Appendix C.

Under near-term plus project conditions, the following 16 intersections (see Figure 19) would be non-compliant with local policies and would be adversely affected during either the AM or the PM peak hour as compared to near term conditions:

1. Marsh Road and Bayfront Expressway (AM peak hour)
13. Chilco Street and Hamilton Avenue (PM peak hour)
16. Willow Road and Bayfront Expressway (AM peak hour)
17. Willow Road and Hamilton Avenue (AM and PM peak hours)
18. Willow Road and Park Street (AM and PM peak hours)
21. Willow Road and Newbridge Street (AM and PM peak hours)
23. Willow Road and US 101 Southbound Ramps (AM peak hour)
24. Willow Road and Bay Road (AM peak hour)
30. O'Brien Drive and Kavanaugh Drive (AM and PM peak hours)
32. Adam's Drive and O'Brien Drive (AM and PM peak hours)
39. University Avenue and Bay Road (PM peak hour)
42. University Avenue and Donohoe Street (AM peak hour)
43. US 101 Northbound Off-Ramp and Donohoe Street (AM and PM peak hours)
44. Cooley Avenue and Donohoe Street (AM and PM peak hours)
45. University Avenue and US 101 Southbound Ramps (AM peak hour)
47. E. Bayshore Road and Donohoe Street (AM and PM peak hours)

Bold indicates intersections that already operate unacceptably under near-term conditions.

It should be noted that at some intersections the average delay is shown to decrease with the addition of Project traffic. This occurs because the intersection delay is a weighted average of all intersection movements. When traffic is added to movements with delays lower than the average intersection delay, the average delay for the entire intersection can decrease. Furthermore, the congestion and queue spillback at an adjacent intersection can constrain the traffic volume at some intersections resulting in a small decrease in average delay.

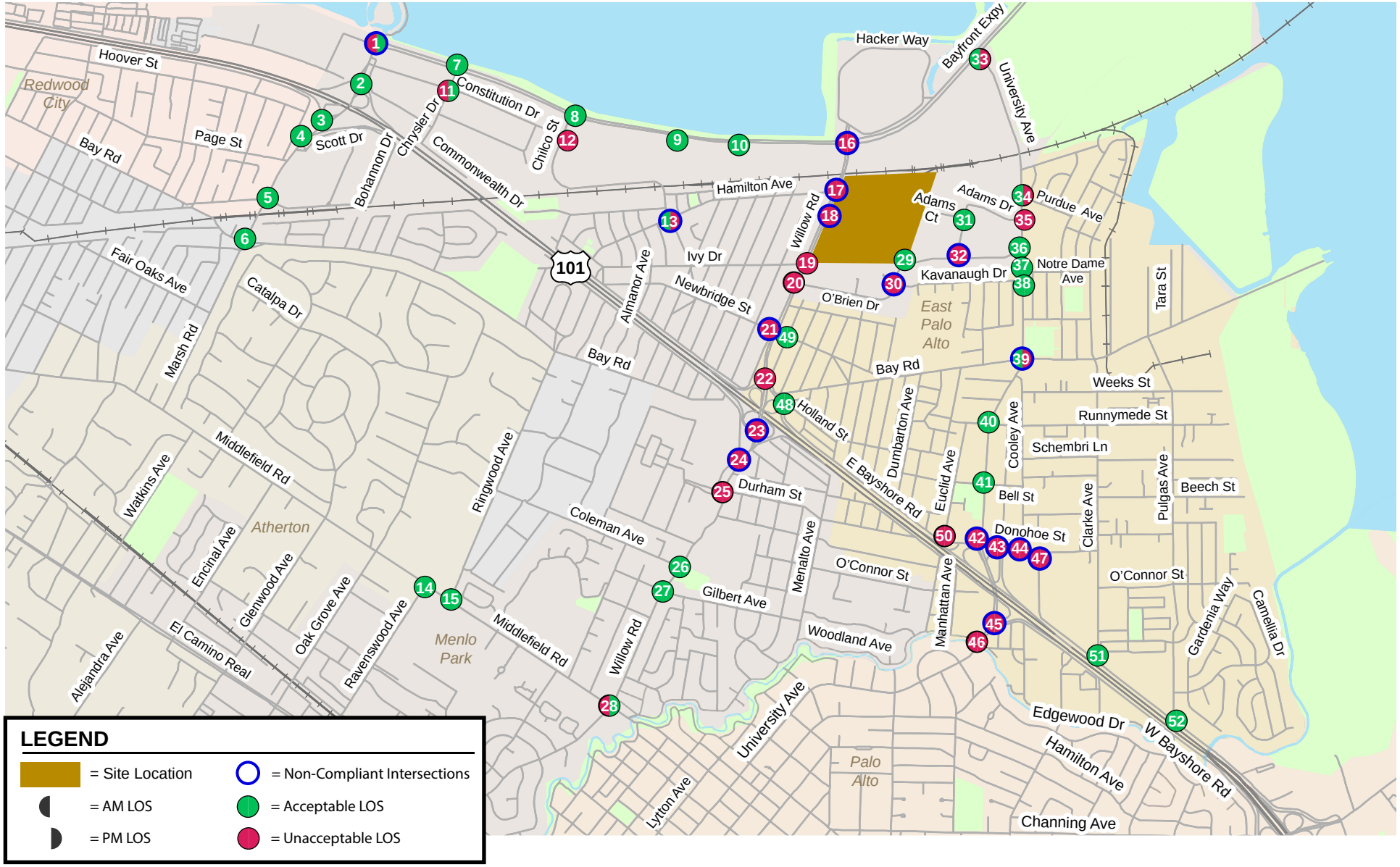


Figure 19
Near-Term Plus Project Intersection Level of Service Summary

Table 16
Near-Term (2025) Intersection Levels of Service (Menlo Park)

#	Intersection	Peak Hour	Traffic Control	Near-Term (2025) Conditions								
				No Project		Project Conditions				With Improvement		
				Avg. Delay (sec)[1]	LOS	Avg. Delay (sec)[1]	LOS	Incr. in Avg. Delay	Incr. in Avg. Critical Delay	Avg. Delay (sec)[1]	LOS	Incr. in Avg. Critical Delay
1	Marsh Road & Bayfront Expressway*	AM	Signal	52.0	D	**56.2**	**E**	**4.2**	**5.4**	50.2	D	-
	Haven Avenue Southbound	*AM*		***71.2***	***E***	***70.6***	***E***	***<4***	***<0.8***			
		PM	Signal	34.9	C	38.7	D	<4	4.7	38.9	D	-
	Haven Avenue Southbound	*PM*		***66.9***	***E***	***65.6***	***E***	***<4***	***<0.8***			
2	Marsh Road & US 101 Northbound Off-Ramp	AM	Signal	23.1	C	39.0	D	15.9	25.1			
		PM		15.8	B	16.8	B	<4	1.6			
3	Marsh Road & US 101 Southbound Off-Ramp	AM	Signal	20.7	C	20.7	C	<4	<0.8			
		PM		17.6	B	17.6	B	<4	<0.8			
4	Marsh Road & Scott Drive	AM	Signal	20.3	C	20.5	C	<4	<0.8			
		PM		15.9	B	15.9	B	<4	<0.8			
5	Marsh Road & Bohannon Drive/Florence Street	AM	Signal	40.0	D	41.6	D	<4	2.3			
		PM		36.3	D	37.3	D	<4	2.2			
6	Marsh Road & Bay Road	AM	Signal	23.6	C	25.2	C	<4	2.8			
		PM		18.7	B	19.1	B	<4	<0.8			
7	Chrysler Drive & Bayfront Expressway	AM	Signal	9.1	A	9.4	A	<4	<0.8			
		PM		17.3	B	18.3	B	<4	1.5			
8	Chilco Street & Bayfront Expressway	AM	Signal	23.7	C	25.6	C	<4	5.3			
		PM		34.1	C	35.9	D	<4	4.5			
9	MPK 21 Driveway & Bayfront Expressway	AM	Signal	7.3	A	7.4	A	<4	<0.8			
		PM		13.7	B	15.0	B	<4	1.4			
10	MPK 20 Driveway (east) & Bayfront Expressway	AM	Signal	7.3	A	7.5	A	<4	<0.8			
		PM		9.7	A	9.4	A	<4	<0.8			
11	Chrysler Drive & Constitution Drive	AM	Signal	**59.8**	**E**	**55.1**	**E**	**<4**	**<0.8**			
		PM		28.5	C	30.4	C	<4	1.6			
12	Chilco Street & Constitution Drive/MPK 22 Driveway[2]	AM	Signal	24.8	C	24.6	C	<4	<0.8			
		PM		**42.9**	**D**	**54.3**	**D**	**11.4**	**11.4**			
13	Chilco Street & Hamilton Avenue	AM	AWSC	10.5	B	10.8	B	<4	<0.8	*Traffic signal potentially feasible*		
		PM		19.0	C	**38.0**	**E**	**19.0**	**19.0**			
14	Ravenswood Avenue & Middlefield Road	AM	Signal	43.1	D	44.9	D	<4	3.0			
		PM		17.6	B	17.9	B	<4	<0.8			

Table 16 (Continued)
Near-Term (2025) Intersection Levels of Service (Menlo Park)

#	Intersection	Peak Hour	Traffic Control	Near-Term (2025) Conditions								
				No Project		Project Conditions				With Improvement		
				Avg. Delay (sec)[1]	LOS	Avg. Delay (sec)[1]	LOS	Incr. in Avg. Delay	Incr. in Avg. Critical Delay	Avg. Delay (sec)[1]	LOS	Incr. in Avg. Critical Delay
15	Ringwood Avenue & Middlefield Road	AM	Signal	13.2	B	13.7	B	<4	<0.8			
		PM		15.2	B	15.4	B	<4	<0.8			
16	Willow Road & Bayfront Expressway*[1]	AM	Signal	OVERSAT	F	OVERSAT	F	14.0	6.7	*No feasible Improvement*		
		PM		OVERSAT	F	OVERSAT	F	<4	<0.8			
17	Willow Road & Hamilton Avenue[1]	AM	Signal	OVERSAT	F	OVERSAT	F	44.1	54.0			
	Hamilton Avenue Southbound	*AM*		***64.9***	***E***	***>120***	***F***	***117.9***	***<0.8***			
	Main Street Northbound	*AM*		***83.3***	***F***	***113.7***	***F***	***30.4***	***>120***	*No feasible Improvement*		
		PM	Signal	OVERSAT	F	OVERSAT	F	>120	>120			
	Hamilton Avenue Southbound	*PM*		***>120***	***F***	***>120***	***F***	***>120***	***<0.8***			
	Main Street Northbound	*PM*		***>120***	***F***	***>120***	***F***	***<4***	***>120***			
18	Willow Road & Park Street (future intersection)[1]	AM	Signal	Project Intersection		OVERSAT	F	36.8	53.0	*No feasible Improvement*		
		PM				OVERSAT	F	17.5	23.1			
19	Willow Road & Ivy Drive[1]	AM	Signal	OVERSAT	F	OVERSAT	F	20.9	46.6			
	Ivy Drive Southbound	*AM*		***88.2***	***###***	***88.2***	***F***	***<4***	***4.7***			
		PM	Signal	OVERSAT	F	OVERSAT	F	50.1	70.9			
	Ivy Drive Southbound	*PM*		***68.4***	***E***	***66.1***	***E***	***<4***	***<0.8***			
20	Willow Road & O'Brien Drive[1]	AM	Signal	OVERSAT	F	OVERSAT	F	<4	<0.8			
	O'Brien Drive Northbound	*AM*		***72.6***	***E***	***66.4***	***E***	***<4***	***<0.8***			
		PM	Signal	OVERSAT	F	OVERSAT	F	<4	<0.8			
	O'Brien Drive Northbound	*PM*		***>120***	***F***	***>120***	***F***	***<4***	***<0.8***			
21	Willow Road & Newbridge Street[1]	AM	Signal	OVERSAT	F	OVERSAT	F	40.3	49.7	OVERSAT	F	
	Newbridge Street Southbound	*AM*		***69.3***	***E***	***104.2***	***F***	***34.9***	***43.0***	***79.6***	***F***	***9.0***
	Newbridge Street Northbound	*AM*		***>120***	***F***	***>120***	***F***	***4.4***	***64.0***	*42.1*	*D*	*<0.8*
		PM	Signal	OVERSAT	F	OVERSAT	F	<4	<0.8	OVERSAT	F	
	Newbridge Street Southbound	*PM*		***60.8***	***E***	***59.1***	***E***	***<4***	***1.5***	***74.5***	***E***	***26.0***
	Newbridge Street Northbound	*PM*		***>120***	***F***	***>120***	***F***	***<4***	***<0.8***	*51.3*	*D*	*<0.8*
22	Willow Road & US 101 Northbound Ramps[1]	AM	Signal	OVERSAT	F	OVERSAT	F	<4	11.5			
		PM		OVERSAT	F	OVERSAT	F	<4	<0.8			
23	Willow Road & US 101 Southbound Ramps[1]	AM	Signal	OVERSAT	F	OVERSAT	F	18.3	<0.8	*No feasible Improvement*		
		PM		OVERSAT	F	OVERSAT	F	<4	<0.8			
24	Willow Road & Bay Road[1]	AM	Signal	OVERSAT	F	OVERSAT	F	<4	38.3	OVERSAT	F	
	Bay Road Southbound	*AM*		***104.3***	***F***	***>120***	***F***	***31.7***	***31.7***	*27.0*	*C*	*<0.8*
		PM	Signal	OVERSAT	F	OVERSAT	F	6.6	6.7	OVERSAT	F	
	Bay Road Southbound	*PM*		*49.2*	*D*	*53.5*	*D*	*4.3*	*4.3*	*23.9*	*C*	*<0.8*

Table 16 (Continued)
Near-Term (2025) Intersection Levels of Service (Menlo Park)

#	Intersection	Peak Hour	Traffic Control	Near-Term (2025) Conditions								
				No Project		Project Conditions				With Improvement		
				Avg. Delay (sec)[1]	LOS	Avg. Delay (sec)[1]	LOS	Incr. in Avg. Delay	Incr. in Avg. Critical Delay	Avg. Delay (sec)[1]	LOS	Incr. in Avg. Critical Delay
25	Willow Road & Hospital Plaza/Durham Street[1]	AM	Signal	**OVERSAT**	**F**	**OVERSAT**	**F**	**<4**	**<0.8**			
	VA Medical Center Southbound	*AM*		***73.2***	***E***	***69.5***	***E***	***<4***	***<0.8***			
	Durham Street Northbound	*AM*		***93.6***	***F***	***79.6***	***E***	***<4***	***<0.8***			
		PM	Signal	**OVERSAT**	**F**	**OVERSAT**	**F**	**<4**	**<0.8**			
	VA Medical Center Southbound	*PM*		***72.2***	***E***	***70.2***	***E***	***<4***	***<0.8***			
	Durham Street Northbound	*PM*		***84.6***	***F***	***79.8***	***E***	***<4***	***<0.8***			
26	Willow Road & Coleman Avenue	AM	Signal	25.1	C	23.9	C	<4	<0.8			
		PM		11.0	B	10.8	B	<4	<0.8			
27	Willow Road & Gilbert Avenue	AM	Signal	20.0	C	19.9	B	<4	<0.8			
		PM		13.0	B	12.4	B	<4	<0.8			
28	Willow Road & Middlefield Road	AM	Signal	**62.3**	**E**	**62.5**	**E**	**<4**	**<0.8**			
	Middlefield Road Southbound	*AM*		***69.8***	***E***	***70.1***	***E***	***<4***	***<0.8***			
	Middlefield Road Northbound	*AM*		***67.7***	***E***	***67.7***	***E***	***<4***	***<0.8***			
		PM	Signal	34.5	C	34.7	C	<4	<0.8			
	Middlefield Road Southbound	*PM*		*34.5*	*C*	*34.7*	*C*	*<4*	*<0.8*			
	Middlefield Road Northbound	*PM*		*34.3*	*C*	*34.7*	*C*	*<4*	*<0.8*			
29	O'Brien Drive/Loop Road & Main Street/O'Brien Drive (future intersection)	AM	Roundabout	Project Intersection		7.4	A	7.4	7.4			
		PM				9.2	A	9.2	9.2			
30	O'Brien Drive & Kavanaugh Drive	AM	AWSC	12.7	B	**107.7**	**F**	**95.0**	**95.0**	*Traffic signal potentially feasible*		
		PM		**29.6**	**D**	**73.7**	**F**	**44.1**	**44.1**			
31	Adams Drive & Adams Court	AM	TWSC	11.5	B	11.6	B	<4	<0.8			
		PM		11.9	B	11.9	B	<4	<0.8			
32	Adams Drive & O'Brien Drive	AM	TWSC	17.6	C	**62.5**	**F**	**44.9**	**44.9**	*Traffic signal potentially feasible*		
		PM		**34.0**	**D**	**>120**	**F**	**>120**	**>120**			
33	University Avenue & Bayfront Expressway*	AM	Signal	13.9	B	12.1	B	<4	<0.8			
		PM		**105.8**	**F**	**108.7**	**F**	**<4**	**3.0**			

Notes:
* Denotes CMP Intersection
AWSC - All Way Stop Control; TWSC - Two Way Stop Control
[1] Average delay is reported for signalized and AWSC intersections. For TWSC intersections, the delay for the worst stop-controlled movement is reported
"OVERSAT" indicates that the SimTraffic microsimulation model indicates that the intersection would experience capacity issues where the demand cannot be served by the intersection. Oversaturated intersections would operate at LOS F.
[1]Intersections were analyzed using Synchro/SimTraffic software due to the close proximity of these intersections. Changes in average delay and critical delay calculated using
[2]The intersection is not considered as non-compliant under background plus project conditions because the critical movement of the local approach shifts with the addition of project traffic.
Bold indicates substandard level of service
Bold indicates noncompliance. The project exceeds thresholds in the City of Menlo Park's TIA Guidelines.

Table 17
Near-Term (2025) Intersection Levels of Service (East Palo Alto)

#	Intersection	Peak Hour	Traffic Control	Near-Term (2025) Conditions							
				No Project		with Project				With Improvement	
				Avg. Delay (sec)[1]	LOS	Avg. Delay (sec)[1]	LOS	Incr. in Avg/Crit Delay (sec)[1]	Incr. in Critical V/C	Avg. Delay (sec)[1]	LOS
34	University Avenue & Purdue Avenue	AM	TWSC	19.7	C	29	D	0.9	0.118		
		PM		**>120**	**F**	**>120**	**F**	**3.8**	**-0.033**		
35	University Avenue & Adams Drive	AM	TWSC	**91.5**	**F**	**>120**	**F**	**0.4**	**0.084**		
		PM		**>120**	**F**	**>120**	**F**	**-2.8**	**-0.070**		
36	University Avenue & O'Brien Drive	AM	Signalized	9.5	A	28.9	C	26.1	0.261		
		PM		15.4	B	30.5	C	16.7	0.275		
37	University Avenue & Notre Dame Avenue	AM	Signalized	4.1	A	7.8	A	5.0	0.093		
		PM		9.4	A	10.2	B	1.4	0.012		
38	University Avenue & Kavanaugh Drive	AM	Signalized	6.9	A	7.9	A	1.3	0.014		
		PM		15.1	B	16.5	B	1.6	0.015		
39	University Avenue & Bay Road	AM	Signalized	52.4	D	54.7	D	6.7	0.046	40.4	D
		PM		**60.9**	**E**	**70.6**	**E**	**18.6**	**0.063**	**57.0**	**E**
40	University Avenue & Runnymede Street	AM	Signalized	6.4	A	6.6	A	1.5	0.053		
		PM		8.8	A	8.8	A	-0.1	-0.009		
41	University Avenue & Bell Street	AM	Signalized	11.7	B	11.6	B	0.0	0.006		
		PM		18.3	B	18.8	B	1.1	0.038		
42	University Avenue & Donohoe Street*	AM	Signalized	**OVERSAT**	**F**	**OVERSAT**	**F**	**7.1**	**0.017**	***Corridor***	
		PM		**OVERSAT**	**F**	**OVERSAT**	**F**	**3.0**	**0.008**	***Improvement***	
43	US 101 Northbound Off-Ramp & Donohoe Street*	AM	Signalized	**OVERSAT**	**F**	**OVERSAT**	**F**	**71.7**	**0.171**	***Corridor***	
		PM		**OVERSAT**	**F**	**OVERSAT**	**F**	**56.4**	**0.130**	***Improvement***	
44	Cooley Avenue & Donohoe Street*	AM	Signalized	**OVERSAT**	**F**	**OVERSAT**	**F**	**8.7**	**0.091**	***Corridor***	
		PM		**OVERSAT**	**F**	**OVERSAT**	**F**	**18.8**	**0.074**	***Improvement***	
45	University Avenue & US 101 Southbound Ramps*	AM	Signalized	**OVERSAT**	**F**	**OVERSAT**	**F**	**7.8**	**0.019**	***Corridor***	
		PM		**OVERSAT**	**F**	**OVERSAT**	**F**	**1.6**	**0.004**	***Improvement***	
46	University Avenue & Woodland Avenue*	AM	Signalized	**OVERSAT**	**F**	**OVERSAT**	**F**	**0.1**	**0.000**	***Corridor***	
		PM		**OVERSAT**	**F**	**OVERSAT**	**F**	**-7.8**	**-0.018**	***Improvement***	
47	E. Bayshore Road & Donahoe Street*	AM	Signalized	**OVERSAT**	**F**	**>120**	**F**	**5.7**	**0.013**	***Corridor***	
		PM		**OVERSAT**	**F**	**>120**	**F**	**5.8**	**0.015**	***Improvement***	

Table 17 (Continued)
Near-Term (2025) Intersection Levels of Service (East Palo Alto)

#	Intersection	Peak Hour	Traffic Control	Near-Term (2025) Conditions							
				No Project		with Project				With Improvement	
				Avg. Delay (sec)	LOS	Avg. Delay (sec)*	LOS	Incr. in Avg/Crit Delay (sec)	Incr. in Critical V/C	Avg. Delay (sec)	LOS
48	E. Bayshore Road & Holland Street	AM	TWSC	8.8	A	8.8	A	0.0	0.000		
		PM		10	A	10	A	0.0	0.000		
49	Saratoga Avenue & Newbridge Street	AM	TWSC	17.9	C	18.2	C	0.9	0.074		
		PM		22.0	C	21.0	C	0.0	-0.024		
50	E. Bayshore Road & Euclid Avenue*	AM	AWSC	**OVERSAT**	**F**	**OVERSAT**	**F**	**3.6**	**0.028**	***Corridor***	
		PM		**OVERSAT**	**F**	**OVERSAT**	**F**	**-2.5**	**-0.016**	***Improvement***	
51	Clarke Avenue & E. Bayshore Road	AM	Signalized	13.9	B	14	B	0.2	0.008		
		PM		10.7	B	12.5	B	1.7	0.031		
52	Pulgas Avenue & E. Bayshore Road	AM	Signalized	20.9	C	21.7	C	1.7	0.042		
		PM		33.1	C	37.6	D	5.7	0.034		

Note:
* Denotes a CMP interesection
AWSC - All Way Stop Control; TWSC - Two Way Stop Control
[1] Average delay is reported for signalized and AWSC intersections. For TWSC intersections, the delay for the worst stop-controlled movement is reported.
"OVERSAT" indicates that the SimTraffic microsimulation model indicates that the intersection would experience capacity issues where the demand cannot be served by the intersection. Oversaturated intersections would operate at LOS F.
* Intersections were analyzed using Synchro/SimTraffic software due to the close proximity of these intersections. Changes in critical delay and v/c calculated using Traffix.
Bold indicates substandard level of service
Bold indicates adverse effect

Adverse Effects and Recommended Improvements

The intersection effects and recommended modifications to improve the intersections to pre-Project conditions or better are described below. It should be noted that the intersection analysis accounts for the Project's proposed trip reductions from gross ITE trip generation. The residential component's required TDM reduction to eliminate the VMT impact is partially accounted for as well (peak-hour trip generation assumed 10% active TDM reduction). The additional residential TDM reduction during the peak-hour resulting from the VMT impact mitigation would have resulted in approximately 50 (13 inbound and 37 outbound) fewer trips during the AM peak hour and 56 (34 inbound and 22 outbound) fewer trips during the PM peak hour. This level of trip reduction would not address any intersection adverse effects alone.

Marsh Road and Bayfront Expressway (#1)

This intersection is expected to operate at an acceptable LOS D during the AM peak hour and LOS C during the PM peak hour under near term conditions. The addition of Project traffic would cause the level of service at the intersection to worsen to an unacceptable LOS E during the AM peak hour. The intersection would operate at an acceptable LOS D during the PM peak hour. The deterioration of LOS from D to E constitutes non-compliance during the AM peak hour according to the thresholds established by the City of Menlo Park.

The recommended modification for this location is to modify the southbound approach to a shared left-through lane, shared through-right lane, and a right turn only lane. With this improvement, the intersection would operate acceptably at LOS D during both peak hours under near-term plus project conditions. This improvement is in Menlo Park's traffic impact fee (TIF) program. With implementation of these intersection modifications, the intersection would be in compliance with the TIA Guidelines and address the Proposed Project's share of the non-compliant operation.

Chilco Street and Hamilton Avenue (#13)

This intersection is expected to operate at an acceptable LOS B during the AM peak hour and LOS C during the PM peak hour under near term conditions. The addition of Project traffic would cause the level of service at the intersection to worsen to an unacceptable LOS E during the PM peak hour. The intersection would operate at an acceptable LOS B during the AM peak hour. The deterioration of LOS from C to E constitutes non-compliance during the PM peak hour according to the thresholds established by the City of Menlo Park.

Since the intersection currently operates as all-way-stop-controlled, potential modification to bring the intersection to pre-project conditions would be to signalize it. However, the intersection does not meet the signal warrant during either peak hour under near term plus project conditions. A traffic signal is not recommended for construction until signal warrants conducted with a future year's actual counts have been met. The recommended improvement includes conducting a signal warrant analyses for a period of five years after full Project completion to determine if a signal would be warranted and if warranted, install a new signal. This improvement is included in the City's TIF program.

Should the City pursue implementation of this improvement, the improvement would include new traffic signal and appropriate pedestrian and bicycle accommodation at this intersection including pedestrian countdown timers, Americans with Disabilities Act (ADA) compliant curbs, and bicycle detection loops. Signalization of this intersection could also encourage cut-through traffic along Chilco Street and on Hamilton Avenue when regional routes such as Bayfront Expressway, Willow Road or US 101 become congested. Potential traffic calming measures should also be considered in conjunction with a traffic signal if signal warrants are met in a future year.

With implementation of these intersection modifications (e.g. signal warrant analysis, potential signal installation, and related bicycle and pedestrian accommodations), the intersection would be in compliance with the TIA Guidelines which would address the Proposed Project's share of the non-compliant operation.

Willow Road Corridor (#16, #17, #18, #21, #23, #24)

Willow Road between Bayfront Expressway and Hospital Plaza/Durham Street is expected to experience capacity issues due to unserved demand at the intersections. These intersections would operate unacceptably under near term conditions during both peak hours. With the addition of Project traffic, intersections along the corridor would continue to operate unacceptably during both peak hours.

The intersections of Willow Road and Bayfront Expressway and Willow Road and US 101 southbound ramps would experience an increase in delay of over four seconds with the addition of project traffic in the AM peak hour and PM peak hour, respectively, and would be non-compliant per Menlo Park's guidelines for state-controlled intersections.

The intersections of Hamilton Avenue and Newbridge Street at Willow Road would experience an increase in delay of over 0.8 seconds with the addition of project traffic on the local approach to the intersection in both peak hours and the intersection of Bay Road at Willow Road would experience an increase in delay of over 0.8 seconds with the addition of Project traffic on the local approach to the intersection during the AM peak hour and would be non-compliant per Menlo Park's guidelines. Willow Road and Park Street, which is a new intersection under project conditions is also assumed to be non-compliant during both peak hours due to unserved demand at this intersection as determined in the microsimulation model developed for this corridor and described in Chapter 3.

The City of Menlo Park is implementing an adaptive traffic signal coordination system on the Willow Road corridor to improve traffic flow. Adaptive traffic control is a technology that automatically adjusts traffic signal timing based on actual traffic demand at an intersection. This measure will improve the intersection operations and could reduce the intersection delay. The reduction in delay due to adaptive signal coordination is not expected to bring the corridor intersections into compliance with the City's TIA guidelines or to substantially reduce the delay caused by the Project.

Physical intersection improvements (identified in the City's TIF program) that would improve intersection operations at the non-compliant intersections are:

- **Willow Road and Newbridge Street (#21)**- The TIF program proposes to modify the signal timing to a protected left-turn phasing operation on Newbridge Street, provide a leading left-turn phase on the southbound movement and a lagging left-turn phase on the northbound movement, and optimize signal timing. With implementation of these intersection modifications under project conditions, the critical movement delay would be reduced for the northbound movement to lower than no project conditions. However, the improvement would not address the southbound deficiency. Further improvements to address the southbound deficiency are not feasible.

- **Willow Road and Bay Road (#24) –** The TIF program proposes to modify the southbound approach at this intersection to two left-turn lanes and one right-turn lane and to modify the westbound approach to add a right-turn lane. With these improvements under project conditions, the critical movement delay at the local approach would be reduced to lower than no project conditions. This improvement would address the adverse effect on the intersection due to Project traffic. With implementation of these intersection modifications, the Willow Road and Bay Road intersection would be in compliance with the TIA Guidelines which would address the Proposed Project's share of the non- compliant operation. With implementation of the recommended improvements from the TIF program for the Willow Road and Bay Road intersection the deficiency attributable to the Proposed Project would be addressed. As mentioned previously, these improvements are included in the City's TIF program.

The Metropolitan Transportation Commission (MTC) Dumbarton Forward project would restripe Bayfront Expressway to add bus-only lanes on the shoulders during peak periods and implement signal timing improvements. The bus-only lanes would generally help the progression of shuttles and buses along the corridor. The signal timing improvements are also assumed to help with the general progression along Bayfront. However, specific details are unknown at this time regarding the improvements at the Willow Road and Bayfront Expressway intersection. The improvements' effectiveness in addressing the Project traffic generated adverse effect on traffic operations at this intersection cannot be determined. Furthermore, since this project is not led by the City of Menlo Park, implementation cannot be guaranteed.

Physical improvements are considered infeasible due to right-of-way constraints and/or adverse effects on pedestrian and bicycle travel at the intersections of Willow Road and Bayfront Expressway, Willow Road and US 101 southbound ramps, Willow Road and Hamilton Avenue, and Willow Road and Park Street.

The TIF program also proposes multimodal improvements along this section of Willow Road. These include an eastbound Willow Road one-way Class IV separated bikeway between Hamilton Avenue and the US 101/Willow Road Interchange, a westbound Willow Road one-way Class IV separated bikeway between the Dumbarton Rail Corridor and the US 101/Willow Road Interchange, high-visibility crosswalks and pedestrian signals on all legs at the intersection of Willow Road and O'Brien Drive, Class II bicycle lanes on eastbound Willow Road from O'Keefe Street to Bay Road, and Class II bicycle lanes on westbound Willow Road from Bay Road to Durham Street.

Implementing recommended multi-modal facilities along the corridor (from the City's TIF program) could shift some motor vehicle traffic to alternative modes of travel and reduce congestion. With implementation of these multi-modal improvements, the intersection deficiencies could be further reduced and partially address the Proposed Project's share of the non- compliant operations along Willow Road.

O'Brien Drive and Kavanaugh Drive (#30)

This intersection is expected to operate at an acceptable LOS B during the AM peak hour and an unacceptable LOS D during the PM peak hour under near term conditions. With the addition of project traffic, the intersection would operate at an unacceptable LOS F during both peak hours. This constitutes non-compliance during both peak hours according to the thresholds established by the City of Menlo Park.

Since the intersection currently operates as all-way-stop-controlled, potential modification to bring the intersection to pre-project conditions would be to signalize it. The intersection would meet the MUTCD signal warrant during both peak hours under project conditions (See Appendix F). The intersection lane configuration would need to be modified to a westbound left-turn lane and through lane, northbound left turn lane and right turn lane, and eastbound shared through-right lane. With this improvement, the intersection would operate acceptably at LOS B during the AM peak hour and LOS C during the PM peak hour under near term plus project conditions.

The recommended improvement to bring this intersection back to pre-Project conditions is the installation of the new traffic signal and appropriate pedestrian and bicycle accommodation. This includes the proposed Class II bicycle lanes along O'Brien Drive between Willow Road and University Avenue, pedestrian countdown timers, Americans with Disabilities Act (ADA) compliant curbs, and bicycle detection loops. However, a decision for signalization should not be made until signal warrants conducted with a future year's actual counts have been met. It is important to note that the intersection would be located approximately 300 feet west of the proposed roundabout at O'Brien Drive and Loop Road. Prior to a decision for signalizing this intersection, further analysis should be conducted to ensure that queues resulting from the signal would not back into the roundabout and cause a gridlock situation.

Alternatively, traffic calming measures could be installed to discourage the use of Kavanaugh Drive, which is a residential street, and encourage vehicles to use O'Brien Drive and Adam's Drive instead. Kavanaugh Drive is located within the City of East Palo Alto, and the City of Menlo Park does not have jurisdiction to install traffic calming along this street. Other measures such as peak period turning movement restrictions could be considered to discourage traffic from using Kavanaugh Drive and improve intersection operations.

Monitoring of traffic operations at this intersection for a period of five years after full Project completion should be conducted to determine if signalization or alternative improvements are needed. If warranted, implementation of the new traffic signal would address the Proposed Project's share of the non-compliant operation and bring the intersection into compliance with the TIA Guidelines. If the alternative measures are implemented, the intersection may or may not be brought into compliance with the TIA Guidelines and address the Proposed Project's share of the non-compliant operation.

Adams Drive and O'Brien Drive (#32)

This intersection is expected to operate at an acceptable LOS C during the AM peak hour and an unacceptable LOS D during the PM peak hour under near term conditions. With the addition of Project traffic, the intersection would operate at an unacceptable LOS F during both peak hours. This constitutes non-compliance during both peak hours according to the thresholds established by the City of Menlo Park.

Since the intersection currently operates as two-way-stop-controlled, potential modification to bring the intersection to pre-project conditions would be to signalize it. The intersection would meet the MUTCD signal warrant during the PM peak hour under project conditions (see Appendix F). The intersection lane configuration would need to be modified to a westbound shared left-right lane, southbound left-turn lane and through lane, and northbound shared through-right lane. With this improvement, the intersection would operate acceptably at LOS B during the AM peak hour and LOS C during the PM peak hour under near term plus project conditions.

The recommended improvement to bring this intersection back to pre-Project conditions is the installation of the new traffic signal and appropriate pedestrian and bicycle accommodations at this intersection and within the vicinity. This includes the proposed Class II bicycle lanes along O'Brien Drive between Willow Road and University Avenue, pedestrian countdown timers, Americans with Disabilities Act (ADA) compliant curbs, and bicycle detection loops.

The expected intersection operational issues under background plus project conditions would be due to the increased through traffic on O'Brien Drive between the Project Site and University Avenue. Menlo Park's TIF program identifies an improvement to signalize the nearby intersection at University Avenue and Adams Drive in East Palo Alto. This improvement may provide an alternative route for Project vehicles to access the Project Site via University Avenue.

Monitoring of traffic operations at this intersection for a period of five years after full Project completion should be conducted to determine if signalization or alternative improvements are needed. If warranted, implementation of the new traffic signal would address the Proposed Project's share of the non-compliant operation and bring the intersection into compliance with the TIA Guidelines. If the alternative measures are implemented, the intersection may or may not be brought into compliance with the TIA Guidelines and address the Proposed Project's share of the non-compliant operation.

University Avenue and Bay Road (#39)

This intersection is expected to operate at an acceptable LOS D during the AM peak hour and an unacceptable LOS E during the PM peak hour under near term conditions. With the addition of Project traffic, the intersection would continue to operate acceptably in the AM peak hour. In the PM peak hour, the increase in the average critical delay would be greater than four seconds. This constitutes non-compliance during the PM peak hour according to the thresholds established by the City of East Palo Alto.

Potential modification to bring the intersection to pre-Project conditions would be to add an exclusive eastbound right-turn lane and a second eastbound left-turn lane on University Avenue, add a second northbound left-turn lane on Bay Road, add a second westbound left-turn lane on University Avenue, and modify signal phasing. This is also a mitigation measure identified in the Ravenswood/4 Corners TOD Specific Plan Environmental Impact Report (February 22, 2013), which would be implemented under cumulative conditions. With this improvement under project conditions, the average delay at the intersection would be better than under near term no project conditions. Since this intersection is located within the City of East Palo Alto, the recommended measure to bring the intersection back to pre-Project conditions and address the Project's share of the non-compliant operation would be to make a fair share (34%) contribution towards this improvement. Fair share is calculated as the percentage of net project traffic generated divided by the overall cumulative traffic growth at this intersection. The Menlo Park TIF includes improvements at the University Avenue and Bay Road intersection, but not sufficient improvements to bring the intersection back to pre-Project conditions, as described above. However, the Project's fair share contribution towards this intersection would be calculated considering credit from its TIF payment.

US 101/University Avenue Interchange (#42, #43, #44, #45, #47)

The US 101/University Avenue interchange is expected to experience capacity issues due to unserved demand at the intersections in its vicinity including University Avenue and Donohoe Street, US 101 northbound off-ramp and Donohoe Street, Cooley Avenue and Donohoe Street, University Avenue and US 101 southbound ramps, University Avenue and Woodland Avenue, E. Bayshore Road and Donohoe Street, and E. Bayshore Road and Euclid Avenue. These intersections would operate unacceptably under near term conditions during both peak hours. With the addition of Project traffic, these intersections would continue to operate unacceptably during both peak hours. The increase in delay is expected to be greater than four seconds, and the increase in the volume to capacity ratio is expected to be greater than 0.01 under project conditions at University Avenue and Donohoe Street in the AM peak hour, US 101 northbound off-ramp and Donohoe Street during both peak hours, Cooley Avenue and Donohoe Street during both peak hours, E. Bayshore Road and Donohoe Street during both peak hours, and University Avenue and US 101 southbound ramps in the AM peak hour. This constitutes non-compliance according to the thresholds established by the City of East Palo Alto.

East Palo Alto plans to widen the northbound approach on Donohoe Street at the US 101 northbound off-ramp to accommodate four through lanes to improve the vehicular throughput at this intersection. This improvement will require median modifications and narrowing the southbound Donohoe Street approach to Cooley Avenue to include two through lanes and a full length left-turn lane. In addition, the traffic signals will be coordinated with adjacent traffic signals on Donohoe Street.

East Palo Alto also plans to install a new traffic signal at the US 101 northbound on-ramp and Donohoe Street and Bayshore Road and Euclid Avenue to coordinate with other closely spaced traffic signals along Donohoe Street. Along with new traffic signals, appropriate pedestrian and bicycle accommodation will be provided. This includes pedestrian countdown timers, Americans with Disabilities Act (ADA) compliant curbs, and bicycle detection loops. In order to align with the proposed driveway for the University Plaza Phase II site on the north side of Donohoe Street, the US 101 on-ramp will be shifted approximately 30 feet to the south. In addition, the northbound approach on Donohoe Street will be restriped to accommodate a short exclusive left-turn pocket (approximately 60 feet in length), a shared left-through lane, and a shared through-right lane. These improvements would require widening of the US 101 northbound on-ramp to accommodate two lanes that taper down to a single lane before this ramp connects with the loop on-ramp from eastbound University Avenue. A northbound right turn only will also be added to Bayshore Road and Euclid Avenue. Planned Donohoe Street improvements are included in Appendix E.

With these improvements, average delay at these intersections would be below that under near term conditions without the Project. Since this intersection is located within the City of East Palo Alto, the recommended improvement measure to bring the intersection/interchange back to pre-Project conditions and address the Project's share of the non- compliant operation would be for the Project sponsor to make a fair share contribution towards these improvements. Because the improvements in this corridor are all interconnected and dependent on each other to work, the recommended improvement measure would be for the Project sponsor to contribute its fair share to improvements at all six intersections in this corridor. Fair share is calculated as the percentage of net project traffic generated of the overall cumulative traffic growth at this intersection.

- Donohoe Street & Cooley Avenue: 10% fair share
- Donohoe Street & US 101 Northbound Off-Ramp: 24% fair share
- Donohoe Street & University Avenue: 31% fair share
- Donohoe Street & US 101 Northbound On-Ramp: 8% fair share
- Donohoe Street/Bayshore Road & Euclid Avenue: 2% fair share
- US 101 Southbound Ramps & University Avenue: 33% fair share

The Menlo Park TIF includes improvements at the University Avenue and Donohoe Street and University Avenue and US 101 southbound ramps intersections, which funding would go toward the planned coordinated system of intersections. The Project's fair share contribution towards these two intersections would be calculated considering credit from its TIF payment.

Cumulative (2040) Intersection Levels of Service

The results of the intersection level of service analysis under cumulative conditions are summarized in Tables 18 and 19. The Willow Road corridor and 101/University Avenue interchange were analyzed using the Simtraffic microsimulation model as described Chapter 2. The microsimulation model indicates that the intersections would experience capacity issues where the demand cannot be served by the intersections. Oversaturated conditions would operate at LOS F and are indicated using 'OVERSAT' in the tables below. Vistro and Traffix were used to calculate critical delay and volume to capacity ratio at the Willow Road and 101/University Avenue intersections, respectively. The intersection LOS calculation sheets are included in Appendix C. The following study intersections (see Figure 20) would operate at an unacceptable level of service during at least one peak hour:

1. Marsh Road and Bayfront Expressway (AM and PM peak hours)
2. Marsh Road and US 101 Northbound off-ramp (AM peak hour)
5. Marsh Road and Bohannon Drive/Florence Street (AM peak hour)
6. Marsh Road and Bay Road (AM peak hour)
8. Chilco Street and Bayfront Expressway (PM peak hour)
11. Chrysler Drive and Constitution Drive (AM and PM peak hours)
12. Chilco Street and Constitution Drive/MPK 22 Driveway (AM and PM peak hours)
13. Chilco Street and Hamilton Avenue (PM peak hour)
16. Willow Road and Bayfront Expressway (AM and PM peak hours)
17. Willow Road and Hamilton Avenue (AM and PM peak hours)
19. Willow Road and Ivy Drive (AM and PM peak hours)
20. Willow Road and O'Brien Drive (AM and PM peak hours)
21. Willow Road and Newbridge Street (AM and PM peak hours)
22. Willow Road and US 101 Northbound Ramps (AM and PM peak hours)
23. Willow Road and US 101 Southbound Ramps (AM and PM peak hours)
24. Willow Road and Bay Road (AM and PM peak hours)
25. Willow Road and Hospital Plaza/Durham Street (AM and PM peak hours)
28. Willow Road and Middlefield Road (AM peak hour)
30. O'Brien Drive and Kavanaugh Drive (AM and PM peak hours)
32. Adam's Drive and O'Brien Drive (AM and PM peak hours)
33. University Avenue and Bayfront Expressway (PM peak hour)
35. University Avenue and Adams Drive (AM and PM peak hours)
39. University Avenue and Bay Road (PM peak hour)
42. University Avenue and Donohoe Street (AM and PM peak hours)
43. US 101 Northbound Off-Ramp and Donohoe Street (AM and PM peak hours)
44. Cooley Avenue and Donohoe Street (AM and PM peak hours)
45. University Avenue and US 101 Southbound Ramps (AM and PM peak hours)
46. University Avenue and Woodland Avenue (AM and PM peak hours)
47. E. Bayshore Road and Donohoe Street (AM and PM peak hour)
49. Saratoga Avenue and Newbridge Street (AM and PM peak hours)
50. East Bayshore Road and Euclid Avenue (AM and PM peak hours)

Cumulative (2040) Plus Project Intersection Levels of Service

The results of the intersection level of service analysis under near cumulative (2040) plus project conditions are summarized in Tables 18 and 19. The intersection LOS calculation sheets are included in Appendix C. Under cumulative plus project conditions, the following 17 intersections (see Figure 21) would be non-compliant with local policies during either the AM or the PM peak hour as compared to cumulative conditions. All of these intersections would already be operating at unacceptable levels of service under cumulative conditions.

5. Marsh Road and Bohannon Drive/Florence Street (AM peak hour)
13. Chilco Street and Hamilton Avenue (AM and PM peak hours)
18. Willow Road and Park Street (AM and PM peak hours)
19. Willow Road and Ivy Drive (PM peak hour)
21. Willow Road and Newbridge Street (AM and PM peak hours)
24. Willow Road and Bay Road (AM and PM peak hours)
25. Willow Road and Hospital Plaza/Durham Street (AM and PM peak hours)
30. O'Brien Drive and Kavanaugh Drive (AM peak hour)
32. Adam's Drive and O'Brien Drive (AM and PM peak hours)
43. US 101 Northbound Off-Ramp and Donohoe Street (AM and PM peak hours)
44. Cooley Avenue and Donohoe Street (PM peak hour)
45. University Avenue and US 101 Southbound Ramps (PM peak hour)
46. University Avenue and Woodland Avenue (AM and PM peak hours)
49. Saratoga Avenue and Newbridge Street (AM peak hour)
50. East Bayshore Road and Euclid Avenue (AM peak hour)

Bold denotes intersections that would be non-compliant under cumulative plus project conditions during either AM or PM peak hours but are compliant under near-term plus project conditions during both peak hours.

It should be noted that at some intersections the average delay is shown to decrease with the addition of Project traffic. This occurs because the intersection delay is a weighted average of all intersection movements. When traffic is added to movements with delays lower than the average intersection delay, the average delay for the entire intersection can decrease. Furthermore, the congestion and queue spillback at an adjacent intersection can constrain the traffic volume at some intersections resulting in a small decrease in average delay.

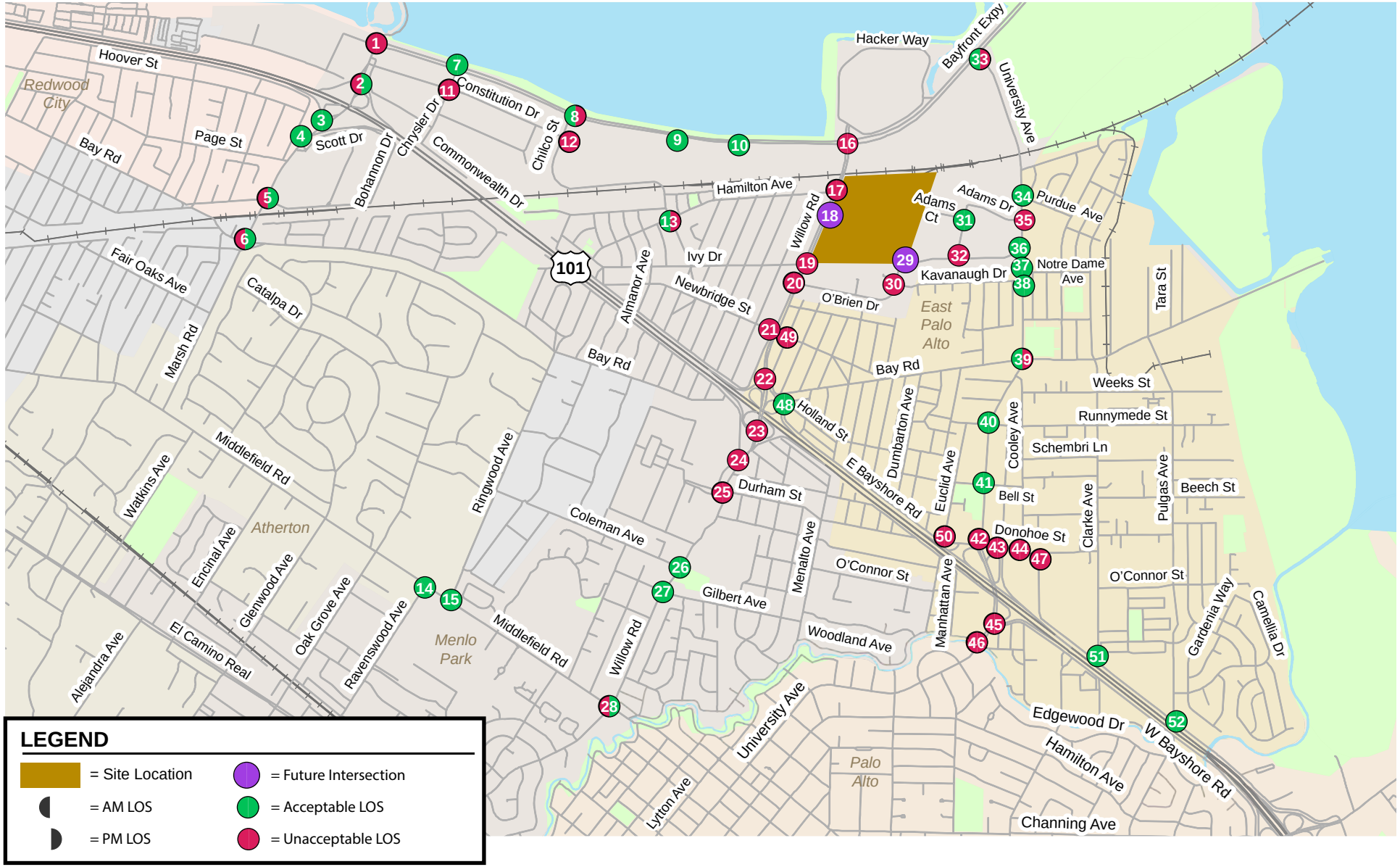
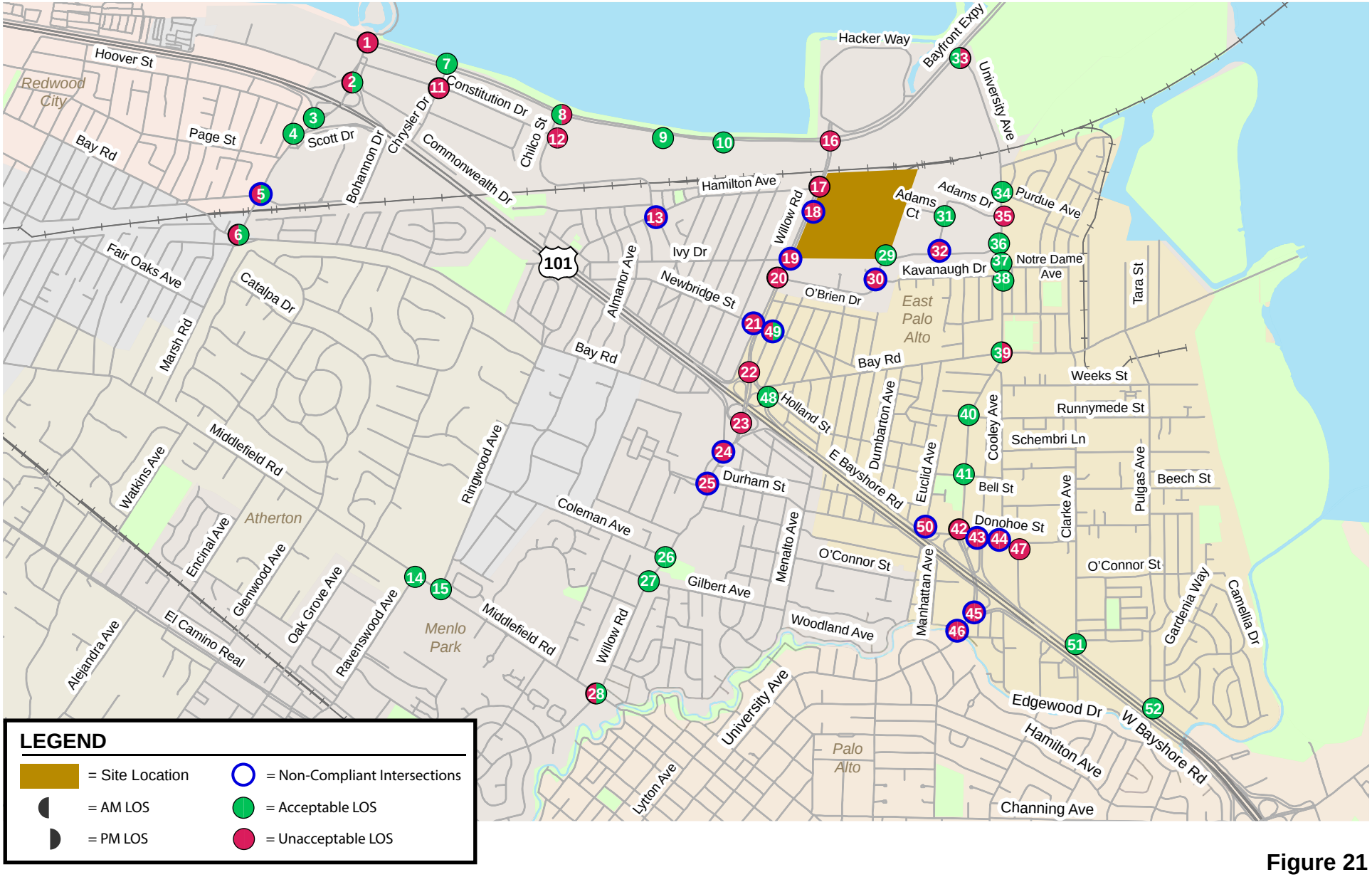


Figure 20
Cumulative (2040) Intersection Level of Service Summary

NORTH
Not to Scale



LEGEND

- = Site Location
- = AM LOS
- = PM LOS
- = Non-Compliant Intersections
- = Acceptable LOS
- = Unacceptable LOS

Figure 21
Cumulative (2040) Plus Project Intersection Level of Service Summary

NORTH
Not to Scale

Table 18
Cumulative (2040) Intersection Levels of Service (Menlo Park)

#	Intersection	Peak Hour	Traffic Control	Cumulative (2040) Conditions								
				General Plan Conditions		Project Conditions				With Improvement		
				Avg. Delay (sec)[1]	LOS	Avg. Delay (sec)[1]	LOS	Incr. in Avg. Delay	Incr. in Avg. Critical Delay	Avg. Delay (sec)[1]	LOS	Incr. in Avg. Critical Delay
1	Marsh Road & Bayfront Expressway*	AM	Signal	**68.7**	**E**	**65.6**	**E**	**<4**	**<0.8**			
	Haven Avenue Southbound	*AM*		***71.2***	***E***	***73.4***	***E***	***<4***	***<0.8***			
		PM	Signal	**65.0**	**E**	**77.9**	**E**	**12.9**	**12.5**			
	Haven Avenue Southbound	*PM*		***67.7***	***E***	***67.7***	***E***	***<4***	***<0.8***			
2	Marsh Road & US 101 Northbound Off-Ramp	AM	Signal	**60.9**	**E**	**62.2**	**E**	**<4**	**1.5**			
		PM		22.9	C	22.8	C	<4	<0.8			
3	Marsh Road & US 101 Southbound Off-Ramp	AM	Signal	22.8	C	24.4	C	<4	2.0			
		PM		19.2	B	18.8	B	<4	<0.8			
4	Marsh Road & Scott Drive	AM	Signal	31.9	C	31.8	C	<4	<0.8			
		PM		17.9	B	18.1	B	<4	<0.8			
5	Marsh Road & Bohannon Drive/Florence Street	AM	Signal	**58.0**	**E**	**60.4**	**E**	**<4**	**4.9**	**56.7**	**E**	**<0.8**
		PM		52.5	D	53.6	D	<4	1.6	48.3	D	<0.8
6	Marsh Road & Bay Road	AM	Signal	**64.2**	**E**	**64.8**	**E**	<4	<0.8			
		PM		47.6	D	54.9	D	7.3	14.4			
7	Chrysler Drive & Bayfront Expressway	AM	Signal	13.1	B	12.8	B	<4	6.4			
		PM		39.5	D	36.3	D	<4	<0.8			
8	Chilco Street & Bayfront Expressway	AM	Signal	44.5	D	49.2	D	4.7	13.5			
	Chilco Street Eastbound	*AM*		***112.4***	***F***	***108.9***	***F***	***<4***	***<0.8***			
		PM		**69.6**	**E**	**66.9**	**E**	**<4**	**<0.8**			
	Chilco Street Eastbound	*PM*		***>120***	***F***	***>120***	***F***	***<4***	***<0.8***			
9	MPK 21 Driveway & Bayfront Expressway	AM	Signal	5.7	A	5.6	A	<4	<0.8			
		PM		36.3	D	36.1	D	<4	<0.8			
10	MPK 20 Driveway (east) & Bayfront Expressway	AM	Signal	10.0	B	9.9	A	<4	<0.8			
		PM		18.7	B	18.8	B	<4	<0.8			
11	Chrysler Drive & Constitution Drive	AM	Signal	**>120**	**F**	**>120**	**F**	**<4**	**<0.8**			
		PM		**>120**	**F**	**>120**	**F**	**<4**	**<0.8**			
12	Chilco Street & Constitution Drive/MPK 22 Driveway[2]	AM	Signal	**52.9**	**D**	**51.1**	**D**	**<4**	**<0.8**			
		PM		**113.5**	**F**	**101.8**	**F**	**<4**	**<0.8**			
13	Chilco Street & Hamilton Avenue	AM	AWSC	24.5	C	**27.1**	**D**	<4	2.6	*Traffic signal potentially feasible*		
		PM		**>120**	**F**	**>120**	**F**	**24.7**	**24.7**			
14	Ravenswood Avenue & Middlefield Road	AM	Signal	49.7	D	49.7	D	<4	<0.8			
		PM		20.2	C	19.5	B	<4	<0.8			

Table 18 (continued)
Cumulative (2040) Intersection Levels of Service (Menlo Park)

#	Intersection	Peak Hour	Traffic Control	Cumulative (2040) Conditions								
				General Plan Conditions		Project Conditions				With Improvement		
				Avg. Delay (sec)[1]	LOS	Avg. Delay (sec)[1]	LOS	Incr. in Avg. Delay	Incr. in Avg. Critical Delay	Avg. Delay (sec)[1]	LOS	Incr. in Avg. Critical Delay
15	Ringwood Avenue & Middlefield Road	AM	Signal	13.2	B	13.2	B	<4	<0.8			
		PM		21.0	C	21.1	C	<4	<0.8			
16	Willow Road & Bayfront Expressway*[1]	AM	Signal	**OVERSAT**	**F**	**OVERSAT**	**F**	**<4**	**<0.8**			
		PM		**OVERSAT**	**F**	**OVERSAT**	**F**	**<4**	**<0.8**			
17	Willow Road & Hamilton Avenue[1][2]	AM	Signal	**OVERSAT**	**F**	**OVERSAT**	**F**	**<4**	**<0.8**			
	Hamilton Avenue Southbound	*AM*		***>120***	***F***	***>120***	***F***	***<4***	***<0.8***			
	Main Street Northbound	*AM*		***>120***	***F***	***>120***	***F***	***<4***	***<0.8***			
		PM	Signal	**OVERSAT**	**F**	**OVERSAT**	**F**	**<4**	**<0.8**			
	Hamilton Avenue Southbound	*PM*		***>120***	***F***	***>120***	***F***	***<4***	***<0.8***			
	Main Street Northbound	*PM*		***>120***	***F***	***>120***	***F***	***<4***	***>120***			
18	Willow Road & Park Street (future intersection)[1]	AM	Signal	Project Intersection		**OVERSAT**	**F**	**34.2**	**49.1**	***No feasible Improvement***		
		PM				**OVERSAT**	**F**	**17.2**	**23.1**			
19	Willow Road & Ivy Drive[1]	AM	Signal	**OVERSAT**	**F**	**OVERSAT**	**F**	**46.2**	**98.7**	**OVERSAT**	**F**	
	Ivy Drive Southbound	*AM*		***70.9***	***E***	***69.6***	***E***	***<4***	***<0.8***	***61.2***	***E***	***<0.8***
		PM	Signal	**OVERSAT**	**F**	**OVERSAT**	**F**	**80.8**	**102.4**	**OVERSAT**	**F**	
	Ivy Drive Southbound	*PM*		***68.1***	***E***	***71.7***	***E***	***<4***	***3.6***	*49.0*	*D*	*<0.8*
20	Willow Road & O'Brien Drive[1]	AM	Signal	**OVERSAT**	**F**	**OVERSAT**	**F**	**<4**	**<0.8**			
	O'Brien Drive Northbound	*AM*		***>120***	***F***	***80.4***	***F***	***<4***	***<0.8***			
		PM	Signal	**OVERSAT**	**F**	**OVERSAT**	**F**	**<4**	**<0.8**			
	O'Brien Drive Northbound	*PM*		***>120***	***F***	***>120***	***F***	***<4***	***<0.8***			
21	Willow Road & Newbridge Street[1]	AM	Signal	**OVERSAT**	**F**	**OVERSAT**	**F**	**25.9**	**74.2**	**OVERSAT**	**F**	
	Newbridge Street Southbound	*AM*		***>120***	***F***	***108.8***	***F***	***<4***	***<0.8***	***>120***	***F***	***67.3***
	Newbridge Street Northbound	*AM*		***>120***	***F***	***>120***	***F***	***101.4***	***>120***	***73.5***	***E***	***<0.8***
		PM	Signal	**OVERSAT**	**F**	**OVERSAT**	**F**	**<4**	**<0.8**	**OVERSAT**	**F**	
	Newbridge Street Southbound	*PM*		***84.3***	***F***	***>120***	***F***	***47.1***	***74.2***	***>120***	***F***	***>120***
	Newbridge Street Northbound	*PM*		***>120***	***F***	***>120***	***F***	***<4***	***<0.8***	*50.7*	*D*	*<0.8*
22	Willow Road & US 101 Northbound Ramps[1]	AM	Signal	**OVERSAT**	**F**	**OVERSAT**	**F**	**<4**	**<0.8**			
		PM		**OVERSAT**	**F**	**OVERSAT**	**F**	**<4**	**<0.8**			
23	Willow Road & US 101 Southbound Ramps[1]	AM	Signal	**OVERSAT**	**F**	**OVERSAT**	**F**	**<4**	**<0.8**			
		PM		**OVERSAT**	**F**	**OVERSAT**	**F**	**<4**	**<0.8**			
24	Willow Road & Bay Road[1]	AM	Signal	**OVERSAT**	**F**	**OVERSAT**	**F**	**<4**	**5.4**	**OVERSAT**	**F**	
	Bay Road Southbound	*AM*		***>120***	***F***	***>120***	***F***	***30.3***	***30.3***	*27.8*	*C*	*<0.8*
		PM	Signal	**OVERSAT**	**F**	**OVERSAT**	**F**	**<4**	**<0.8**	**OVERSAT**	**F**	
	Bay Road Southbound	*PM*		***75.6***	***E***	***82.7***	***F***	***7.0***	***7.0***	*26.5*	*C*	*<0.8*

Table 18 (continued)
Cumulative (2040) Intersection Levels of Service (Menlo Park)

#	Intersection	Peak Hour	Traffic Control	Cumulative (2040) Conditions								
				General Plan Conditions		Project Conditions				With Improvement		
				Avg. Delay (sec)[1]	LOS	Avg. Delay (sec)[1]	LOS	Incr. in Avg. Delay	Incr. in Avg. Critical Delay	Avg. Delay (sec)[1]	LOS	Incr. in Avg. Critical Delay
25	Willow Road & Hospital Plaza/Durham Street[1]	AM	Signal	**OVERSAT**	**F**	**OVERSAT**	**F**	**<4**	**11.0**	**OVERSAT**	**F**	
	VA Medical Center Southbound	*AM*		***74.8***	***E***	***74.7***	***E***	***<4***	***<0.8***	***74.7***	***E***	***<0.8***
	Durham Street Northbound	*AM*		***>120***	***F***	***>120***	***F***	***6.0***	***5.4***	***>120***	***F***	***<0.8***
		PM	Signal	**OVERSAT**	**F**	**OVERSAT**	**F**	**<4**	**1.3**	**OVERSAT**	**F**	
	VA Medical Center Southbound	*PM*		***74.2***	***E***	***74.5***	***E***	***<4***	***<0.8***	***69.4***	***E***	***<0.8***
	Durham Street Northbound	*PM*		***88.1***	***F***	***90.3***	***F***	***<4***	***2.8***	***59.9***	***E***	***<0.8***
26	Willow Road & Coleman Avenue	AM	Signal	34.9	C	34.3	C	<4	<0.8			
		PM		13.1	B	13.2	B	<4	<0.8			
27	Willow Road & Gilbert Avenue	AM	Signal	24.4	C	23.9	C	<4	<0.8			
		PM		14.2	B	14.1	B	<4	<0.8			
28	Willow Road & Middlefield Road	AM	Signal	**64.5**	**E**	**65.0**	**E**	**<4**	**<0.8**			
	Middlefield Road Southbound	*AM*		***69.9***	***E***	***70.4***	***E***	***<4***	***<0.8***			
	Middlefield Road Northbound	*AM*		***67.4***	***E***	***67.2***	***E***	***<4***	***<0.8***			
		PM	Signal	42.5	D	42.4	D	<4	<0.8			
	Middlefield Road Southbound	*PM*		*42.1*	*D*	*42.2*	*D*	*<4*	*<0.8*			
	Middlefield Road Northbound	*PM*		*40.6*	*D*	*40.8*	*D*	*<4*	*<0.8*			
29	O'Brien Drive/Loop Road & Main Street/O'Brien Drive (future intersection)	AM	Roundabout	Project Intersection		8.8	A	8.8	8.8			
		PM				11.0	B	11.0	11.0			
30	O'Brien Drive & Kavanaugh Drive	AM	AWSC	**>120**	**F**	**>120**	**F**	**105.8**	**105.8**	*Traffic signal potentially feasible*		
		PM		**>120**	**F**	**>120**	**F**	**<4**	**<0.8**			
31	Adams Drive & Adams Court	AM	TWSC	20.1	C	17.8	C	<4	<0.8			
		PM		16.4	C	12.7	B	<4	<0.8			
32	Adams Drive & O'Brien Drive	AM	TWSC	**62.4**	**F**	**>120**	**F**	**>120**	**>120**	*Traffic signal potentially feasible*		
		PM		**>120**	**F**	**>120**	**F**	**>120**	**>120**			
33	University Avenue & Bayfront Expressway*	AM	Signal	14.8	B	13.3	B	<4	<0.8			
		PM		**>120**	**F**	**>120**	**F**	**<4**	**2.9**			

Notes:
* Denotes CMP Intersection
AWSC - All Way Stop Control; TWSC - Two Way Stop Control
[1] Average delay is reported for signalized and AWSC intersections. For TWSC intersections, the delay for the worst stop-controlled movement is reported
"OVERSAT" indicates that the SimTraffic microsimulation model indicates that the intersection would experience capacity issues where the demand cannot be served by the intersection. Oversaturated intersections would operate at LOS F.
[1]Intersections were analyzed using Synchro/SimTraffic software due to the close proximity of these intersections. Changes in average delay and critical delay calculated using Vistro.

[2]The intersection is not considered as non-compliant under cumulative plus project conditions because the critical movement of the local approach shifts with the addition of project traffic.
Bold indicates substandard level of service
Bold indicates noncompliance. The project exceeds thresholds in the City of Menlo Park's TIA Guidelines.

Table 19
Cumulative (2040) Intersection Levels of Service (East Palo Alto)

#	Intersection	Peak Hour	Traffic Control	Cumulative (2040) Conditions: General Plan Conditions Avg. Delay (sec)	LOS	with Project Avg. Delay (sec)	LOS	Incr. in Critical Delay (sec)	Incr. in Critical V/C	With Improvement Avg. Delay (sec)	LOS
34	University Avenue & Purdue Avenue	AM	Signalized	25.9	C	28	C	0.8	0.017		
		PM		37.1	D	40.8	D	4.2	0.031		
35	University Avenue & Adams Drive	AM	TWSC	**>120**	**F**	**>120**	**F**	**1.4**	**0.253**		
		PM		**>120**	**F**	**>120**	**F**	**-7.3**	**-0.130**		
36	University Avenue & O'Brien Drive	AM	Signalized	21.1	C	43.1	D	29.3	0.245		
		PM		21.3	C	32.6	C	14.1	0.175		
37	University Avenue & Notre Dame Avenue	AM	Signalized	8.0	A	10.6	B	3.1	0.070		
		PM		12.2	B	15.6	B	4.1	0.038		
38	University Avenue & Kavanaugh Drive	AM	Signalized	26.8	C	17.5	B	-12.1	-0.110		
		PM		23.1	C	24.8	C	0.8	0.009		
39	University Avenue & Bay Road	AM	Signalized	48.8	D	53.5	D	8.9	0.054		
		PM		**68.3**	**E**	**69.0**	**E**	**-1.9**	**-0.008**		
40	University Avenue & Runnymede Street	AM	Signalized	9.7	A	11.7	B	11	0.075		
		PM		8.9	A	8.9	A	3.6	0.102		
41	University Avenue & Bell Street	AM	Signalized	14.9	B	16.2	B	2	0.067		
		PM		26.4	C	34.8	C	13.4	0.069		
42	University Avenue & Donohoe Street*	AM	Signalized	**OVERSAT**	**F**	**OVERSAT**	**F**	**-1.4**	**-0.002**	***Corridor***	
		PM		**OVERSAT**	**F**	**OVERSAT**	**F**	**-4.9**	**-0.009**	***Improvement***	
43	US 101 Northbound Off-Ramp & Donohoe Street*	AM	Signalized	**OVERSAT**	**F**	**OVERSAT**	**F**	**77.2**	**0.158**	***Corridor***	
		PM		**OVERSAT**	**F**	**OVERSAT**	**F**	**46.5**	**0.102**	***Improvement***	
44	Cooley Avenue & Donohoe Street*	AM	Signalized	**OVERSAT**	**F**	**OVERSAT**	**F**	**29.3**	**0.091**	***Corridor***	
		PM		**OVERSAT**	**F**	**OVERSAT**	**F**	**63.7**	**0.143**	***Improvement***	
45	University Avenue & US 101 Southbound Ramps*	AM	Signalized	**OVERSAT**	**F**	**OVERSAT**	**F**	**-2.0**	**-0.004**	***Corridor***	
		PM		**OVERSAT**	**F**	**OVERSAT**	**F**	**6.7**	**0.016**	***Improvement***	
46	University Avenue & Woodland Avenue*	AM	Signalized	**OVERSAT**	**F**	**OVERSAT**	**F**	**14.1**	**0.040**	***Corridor***	
		PM		**OVERSAT**	**F**	**OVERSAT**	**F**	**19.1**	**0.045**	***Improvement***	
47	E. Bayshore Road & Donahoe Street*	AM	Signalized	**>120**	**F**	**>120**	**F**	**-22.4**	**-0.048**	***Corridor***	
		PM		**>120**	**F**	**>120**	**F**	**-5.3**	**-0.011**	***Improvement***	

Table 19 (continued)
Cumulative (2040) Intersection Levels of Service (East Palo Alto)

#	Intersection	Peak Hour	Traffic Control	Cumulative (2040) Conditions: General Plan Conditions Avg. Delay (sec)	LOS	with Project Avg. Delay (sec)	LOS	Incr. in Critical Delay (sec)	Incr. in Critical V/C	With Improvement Avg. Delay (sec)	LOS
48	E. Bayshore Road & Holland Street	AM	TWSC	8.8	A	8.8	A	0.0	0.000		
		PM		10.0	A	10.0	A	0.0	0.000		
49	Saratoga Avenue & Newbridge Street	AM	TWSC	**>120**	**F**	**>120**	**F**	**9.8**	**0.061**	***No Feasible***	
		PM		**40.0**	**E**	28.6	D	**-2.2**	**-0.120**	***Improvement***	
50	E. Bayshore Road & Euclid Avenue*	AM	AWSC	**OVERSAT**	**F**	**OVERSAT**	**F**	**53.8**	**0.057**	***Corridor***	
		PM		**OVERSAT**	**F**	**OVERSAT**	**F**	**-2.7**	**-0.009**	***Improvement***	
51	Clarke Avenue & E. Bayshore Road	AM	Signalized	14.1	B	14.2	B	0.2	0.014		
		PM		13.9	B	14.0	B	0.2	0.007		
52	Pulgas Avenue & E. Bayshore Road	AM	Signalized	25.4	C	26.5	C	1.4	0.017		
		PM		48.1	D	47.3	D	-0.4	-0.002		

Note:
* Denotes a CMP interesection
AWSC - All Way Stop Control; TWSC - Two Way Stop Control
[1] Average delay is reported for signalized and AWSC intersections. For TWSC intersections, the delay for the worst stop-controlled movement is reported.
"OVERSAT" indicates that the SimTraffic microsimulation model indicates that the intersection would experience capacity issues where the demand cannot be served by the intersection. Oversaturated intersections would operate at LOS F.
* Intersections were analyzed using Synchro/SimTraffic software due to the close proximity of these intersections. Changes in critical delay and v/c calculated using Traffix.
Bold indicates substandard level of service
Bold indicates adverse effect

Adverse Effects and Recommended Improvements

For intersections that are non-compliant under both near-term plus project conditions and cumulative plus project conditions, the recommended improvements proposed under near term plus project conditions would be sufficient to address cumulative non-compliance. Improvements for intersections that are non-compliant only under cumulative plus project conditions are described below.

Marsh Road and Bohannon Drive/Florence Street (#5)

This intersection is expected to operate at an unacceptable LOS E during the AM peak hour and an acceptable LOS D during the PM peak hour under cumulative conditions. The addition of Project traffic would cause the average critical delay to increase by more than 0.8 during the AM peak hour. The intersection would continue to operate at an acceptable LOS D during the PM peak hour. This constitutes non-compliance during the AM peak hour according to the thresholds established by the City of Menlo Park.

Modification of the westbound approach at this intersection to a left-turn lane, two through lanes, and a right-turn lane would improve the average delay to better than cumulative no project conditions. Menlo Park's TIF program proposes Class II buffered bike lanes along Marsh Road from Bay Road to Scott Road in both directions and the removal of on-street parking in the eastbound direction. The restriping of the vehicle travel lanes to include a westbound right-turn only lane and the proposed Class II buffered bike lane would require narrowing the travel lanes to 11 feet and removal of the median. While this is possible, removal of the median would require removing at least one tree as well as the signal pole in the median. Upgrades to at least one mast arm would be required to replace the removed median signal. Physical improvements at this intersection are considered infeasible due to right-of-way constraints and/or adverse effects on pedestrian and bicycle travel. The City's TIF program includes multi-modal improvements along the Marsh Road corridor such as Class II buffered bike lanes along Marsh Road from Bay Road to Scott Road, and installing sidewalks along the north-side of Marsh Road between Page Street and Bohannon Drive/Florence Street. Implementing recommended multi-modal facilities along the corridor (from the City's TIF program) could shift some motor vehicle traffic to alternative modes of travel and reduce congestion. With implementation of these multi-modal improvements, the intersection deficiencies could be further reduced and partially address the Proposed Project's share of the non-compliant operations at this intersection.

Willow Road and Ivy Drive (#19)

Willow Road and Ivy Drive is an intersection on the Willow Road Corridor, which is expected to experience capacity issues due to unserved demand at the intersections. This intersection would operate unacceptably under cumulative conditions during both peak hours. With the addition of Project traffic, it would continue to operate unacceptable during both peak hours. In the PM peak hour, the increase in the critical movement delay of the local approach would be greater than 0.8 seconds. This constitutes non-compliance during the PM peak hour according to the thresholds established by the City of Menlo Park.

The Menlo Park TIF proposes to install a right-turn overlap phase on southbound Ivy Drive and restrict eastbound Willow Road U-turns. This would improve the critical movement delay of the local approach to better than cumulative no project conditions. The Project is required to pay traffic impact fees according to the City's current TIF schedule.

Willow Road and Hospital Plaza/Durham Street (#25)

Willow Road and Hospital Plaza/Durham Street is an intersection on the Willow Road Corridor, which is expected to experience capacity issues due to unserved demand at the intersections. This intersection would operate unacceptably under cumulative conditions during both peak hours. With the addition of Project traffic, it would continue to operate unacceptably during both peak hours. In the AM and PM peak hour, the increase in the critical movement delay of the local approach would be greater than 0.8 seconds. This constitutes non-compliance during both peak hours according to the thresholds established by the City of Menlo Park.

The recommended improvement measure for this intersection is restriping northbound Durham Street as a shared left-through lane and right-turn lane, and adding a northbound right turn overlap phase. With this improvement, the critical movement delay of the local approach would improve to better than cumulative no project conditions in the AM peak hour. The PM peak hour would continue to be non-compliant. If this recommended improvement measure is implemented, the Project should contribute its fair share (25%) towards the improvement. Fair share is calculated as the percentage of net project traffic generated of the overall cumulative traffic growth at this intersection.

University Avenue and Woodland Avenue (#46)

University Avenue and Woodland Avenue is in the vicinity of the US 101/University Avenue interchange and is expected to experience capacity issues due to unserved demand at the intersections. This intersection would operate unacceptably under cumulative conditions during both peak hours. With the addition of Project traffic, it would continue to operate unacceptably during both peak hours. In the AM and PM peak hour, the increase in the average critical delay would be greater than four seconds and the increase in the volume to capacity ratio would be greater than 0.01. This constitutes non-compliance during both peak hours according to the thresholds established by the City of East Palo Alto.

The recommended Donohoe Street improvements (see Appendix E) at Euclid Avenue and at the US 101 northbound on-ramp would improve traffic flow on University Avenue and eliminate the queue spillback that extends from Donohoe Street past Woodland Avenue. While the University Avenue and Woodland Avenue intersection is expected to continue to operate at LOS F during both peak hours, the Donohoe Street improvements would reduce the average delay at the intersection below cumulative conditions without the Project. With these improvements, the intersection would comply with the City of East Palo Alto's level of service policy. As discussed under the background plus Project discussion above, the project would pay its fair share costs towards the intersection improvements at the 6 intersections of the University Avenue/Donohoe Street/US 101 corridor.

Saratoga Avenue and Newbridge Street (#49)

This intersection is expected to operate at an acceptable LOS F during the AM peak hour and an unacceptable LOS E during the PM peak hour under cumulative conditions. With the addition of Project traffic, the intersection average critical delay at the intersection would increase by four seconds and the volume to capacity ratio would increase by 0.01 during the AM peak hour. This constitutes as non-compliance during the AM peak hour according to the thresholds established by the City of East Palo Alto.

Since the intersection currently operates as two-way-stop-controlled, potential modification to bring the intersection to pre-project conditions would be to signalize it. The intersection would meet the MUTCD signal warrant during both peak hours under project conditions (see Appendix F). With this improvement, the intersection would operate acceptably at LOS C during the AM peak hour and LOS B during the PM peak hour under cumulative plus project conditions. However, since the intersection is located only 200 feet south of Willow Road, signalization is not recommended. Short of signalization, no other improvements are feasible. Furthermore, given this intersection is located outside of the City of Menlo Park, the City cannot ensure implementation of any improvements. This intersection is also not listed with improvements in the City of East Palo Alto TIF.

Bayshore Road and Euclid Avenue (#50)

Bayshore Road and Euclid Avenue is in the vicinity of the US 101/University Avenue interchange and is expected to experience capacity issues due to unserved demand at the intersections. This intersection would operate unacceptably under cumulative conditions during both peak hours. With the addition of Project traffic, it would continue to operate unacceptably during both peak hours. In the AM peak hour, the increase in the average critical delay would be greater than four seconds and the increase in the volume to capacity ratio would be greater than 0.01. This constitutes non-compliance during the AM peak hour according to the thresholds established by the City of East Palo Alto.

Since the intersection currently operates as all-way-stop-controlled, potential modification to bring the intersection to pre-project conditions would be to signalize it and add a westbound right turn only lane. This improvement is included in the recommended Donohoe Street improvements (see Appendix E, Transportation/Traffic, of this EIR). The proposed improvements at Euclid Avenue and at the US 101 northbound on-ramp would improve traffic flow on University Avenue and eliminate the queue spillback that extends from Donohoe Street past Woodland Avenue. This would reduce the average delay at the intersection below cumulative conditions without the project. With these improvements, the intersection would be in compliance with the City of East Palo Alto's level of service policy. As discussed under the background plus project discussion above, the Project would pay its fair share costs towards the intersection improvements at the 6 intersections of the University Avenue/Donohoe Street/US 101 corridor, which includes the intersection at Bayshore Road and Euclid Avenue.

Cumulative (2040) Plus Dumbarton Rail Intersection Levels of Service

The results of the intersection level of service analysis under cumulative conditions with the Dumbarton Rail are summarized in Table 20 and 21. All study intersections are expected to operate better cumulative conditions with the Dumbarton rail than without the Dumbarton rail. The intersection LOS calculation sheets are included in Appendix C. The following study intersection would improve to acceptable LOS with the Dumbarton Rail during at least one peak hour:

6. Marsh Road and Bay Road (AM peak hour)

Cumulative (2040) Plus Project with Dumbarton Rail Intersection Levels of Service

The results of the intersection level of service analysis under cumulative (2040) plus project conditions with the Dumbarton rail are summarized in Tables 20 and 21. Compared to cumulative plus project conditions without the Dumbarton Rail, the delay at all of the intersections would improve with Dumbarton Rail. While the overall motor vehicle operations would experience reduced delay with Dumbarton Rail, when evaluating for intersection LOS compliance, the determination is based on the relative increase in delay due to the Project compared to no project conditions (cumulative conditions with Dumbarton Rail). Comparing “cumulative plus project with Dumbarton Rail” conditions to “cumulative plus project without Dumbarton Rail” conditions, the following study intersection would no longer be non-compliant:

25. Willow Road & Durham Street

The following additional study intersections would be non-compliant under cumulative plus project conditions with the Dumbarton rail as compared to cumulative plus project conditions without the Dumbarton Rail:

6. Marsh Road and Bay Road (AM peak hour)
11. Chrysler Drive and Constitution Drive (AM peak hour)
16. Willow Road and Bayfront Expressway (AM peak hour)

Under cumulative conditions with or without the Project, the road network is over saturated. Since the Dumbarton rail would reduce vehicular traffic in the area due to the increase in transit mode share, the Menlo Park Travel Demand model assigns more Project-generated traffic at some intersections where vehicular capacity is now available. Menlo Park’s level of service standards and adverse effect criteria are very stringent where a small change in traffic can trigger a non-compliance at an intersection. Therefore, the relative increase in delay due to the Project at some intersections between “cumulative with Dumbarton Rail” and “cumulative plus project with Dumbarton Rail” would be greater than the Menlo Park’s threshold, causing additional intersections to be non-compliant under cumulative plus project conditions with the Dumbarton rail.

Adverse Effects and Recommended Improvements

For intersections that are non-compliant under cumulative plus project conditions and cumulative plus project with Dumbarton rail conditions, the improvements proposed under cumulative plus project conditions would be sufficient to address cumulative non-compliance. Improvements for intersections that are non-compliant only under cumulative plus project with Dumbarton rail conditions are described below. As noted below, no additional feasible improvements are identified and the improvement measures identified below are for informational purposes only.

Marsh Road and Bay Road (#6)

This intersection is expected to operate at an acceptable LOS D during both peak hours under cumulative conditions with the Dumbarton rail. The addition of Project traffic would cause the intersection to operate at LOS E during the AM peak hour. The intersection would continue to operate at an acceptable LOS D during the PM peak hour. This constitutes non-compliance during the AM peak hour according to the thresholds established by the City of Menlo Park.

Physical improvements at this intersection are considered infeasible due to right-of-way constraints and/or adverse effects on pedestrian and bicycle travel. Menlo Park's TIF program proposes Class II buffered bike lanes along Marsh Road from Bay Road to Scott Road in both directions. The improvement may lead to an overall increase in bicycle mode share but would not offset the Project traffic.

Chrysler Drive and Constitution Drive (#11)

This intersection is expected to operate at an unacceptable LOS F during both peak hours under cumulative conditions with Dumbarton rail. With the addition of Project traffic, the average critical delay would increase by more than 0.8 seconds during the AM peak hour. The intersection would continue to operate acceptably during the PM peak hour. This constitutes non-compliance during the AM peak hour according to the thresholds established by the City of Menlo Park.

Physical improvements at this intersection are considered infeasible due to right-of-way constraints and/or adverse effects on pedestrian and bicycle travel.

Willow Road and Bayfront Expressway 9#16)

Improvements for this intersection are discussed under the near term plus project section as part of the Willow Road corridor improvements, and is not repeated here.

Table 20
Cumulative (2040) With Dumbarton Rail Intersection Levels of Service (Menlo Park)

#	Intersection	Peak Hour	Traffic Control	Cumulative Conditions (With Dumbarton Rail)								
				No Project Conditions		Project Conditions				With Improvement		
				Avg. Delay (sec)[1]	LOS	Avg. Delay (sec)[1]	LOS	Incr. in Avg. Delay	Incr. in Avg. Critical Delay	Avg. Delay (sec)[1]	LOS	Incr. in Avg. Critical Delay
1	Marsh Road & Bayfront Expressway*	AM	Signal	**68.5**	**E**	**65.3**	**E**	**<4**	**<0.8**			
	Haven Avenue Southbound	*AM*		***70.5***	***E***	***71.7***	***E***	***<4***	***<0.8***			
		PM	Signal	**63.2**	**E**	**72.8**	**E**	**9.6**	**11.4**			
	Haven Avenue Southbound	*PM*		***67.6***	***E***	***67.6***	***E***	***<4***	***<0.8***			
2	Marsh Road & US 101 Northbound Off-Ramp	AM	Signal	**60.7**	**E**	**61.9**	**E**	**<4**	**1.4**			
		PM		22.9	C	22.7	C	<4	<0.8			
3	Marsh Road & US 101 Southbound Off-Ramp	AM	Signal	22.8	C	22.6	C	<4	<0.8			
		PM		19.2	B	18.7	B	<4	<0.8			
4	Marsh Road & Scott Drive	AM	Signal	31.2	C	30.4	C	<4	<0.8			
		PM		17.8	B	17.8	B	<4	<0.8			
5	Marsh Road & Bohannon Drive/Florence Street	AM	Signal	**57.8**	**E**	**58.7**	**E**	**<4**	**2.7**	**55.1**	**E**	**<0.8**
		PM		51.5	D	53.1	D	<4	2.7	48.1	D	<0.8
6	Marsh Road & Bay Road	AM	Signal	54.5	D	**63.5**	**E**	**9.0**	**18.9**	***No feasible Improvement***		
		PM		47.9	D	51.2	D	<4	6.8			
7	Chrysler Drive & Bayfront Expressway	AM	Signal	13.0	B	12.5	B	<4	6.0			
		PM		38.3	D	33.5	C	<4	<0.8			
8	Chilco Street & Bayfront Expressway	AM	Signal	43.2	D	45.5	D	<4	7.3			
	Chilco Street Eastbound	*AM*		***116.3***	***F***	***108.8***	***F***	***<4***	***<0.8***			
		PM		**68.3**	**E**	**65.6**	**E**	**<4**	**<0.8**			
	Chilco Street Eastbound	*PM*		*>120*	*F*	***>120***	***F***	***<4***	***<0.8***			
9	MPK 21 Driveway & Bayfront Expressway	AM	Signal	5.7	A	5.6	A	<4	<0.8			
		PM		36.3	D	36.1	D	<4	<0.8			
10	MPK 20 Driveway (east) & Bayfront Expressway	AM	Signal	10.1	B	9.9	A	<4	<0.8			
		PM		18.6	B	18.8	B	<4	<0.8			
11	Chrysler Drive & Constitution Drive	AM	Signal	**>120**	**F**	**>120**	**F**	**31.2**	**50.3**	***No feasible Improvement***		
		PM		**>120**	**F**	**>120**	**F**	**<4**	**<0.8**			
12	Chilco Street & Constitution Drive/MPK 22 Driveway[2]	AM	Signal	**50.1**	**D**	**53.9**	**D**	**<4**	**<0.8**			
		PM		**111.8**	**F**	**99.2**	**F**	**<4**	**<0.8**			
13	Chilco Street & Hamilton Avenue	AM	AWSC	23.6	C	24.3	C	<4	<0.8	*Traffic signal potentially feasible*		
		PM		**>120**	**F**	**>120**	**F**	**18.2**	**18.2**			
14	Ravenswood Avenue & Middlefield Road	AM	Signal	49.7	D	49.7	D	<4	<0.8			
		PM		20.3	C	19.5	B	<4	<0.8			

Table 20 (continued)
Cumulative (2040) with Dumbarton Rail Intersection Levels of Service (Menlo Park)

#	Intersection	Peak Hour	Traffic Control	Cumulative Conditions (With Dumbarton Rail)								
				No Project Conditions		Project Conditions				With Improvement		
				Avg. Delay (sec)[1]	LOS	Avg. Delay (sec)[1]	LOS	Incr. in Avg. Delay	Incr. in Avg. Critical Delay	Avg. Delay (sec)[1]	LOS	Incr. in Avg. Critical Delay
15	Ringwood Avenue & Middlefield Road	AM	Signal	13.2	B	13.2	B	<4	<0.8			
		PM		21.0	C	21.1	C	<4	<0.8			
16	Willow Road & Bayfront Expressway*[1]	AM	Signal	OVERSAT	F	OVERSAT	F	5.3	<0.8	*No feasible Improvement*		
		PM		OVERSAT	F	OVERSAT	F	<4	<0.8			
17	Willow Road & Hamilton Avenue[1][2]	AM	Signal	OVERSAT	F	OVERSAT	F	<4	<0.8			
	Hamilton Avenue Southbound	*AM*		*>120*	*F*	*>120*	*F*	*<4*	*<0.8*			
	Main Street Northbound	*AM*		*>120*	*F*	*>120*	*F*	*<4*	*<0.8*			
		PM	Signal	OVERSAT	F	OVERSAT	F	<4	<0.8			
	Hamilton Avenue Southbound	*PM*		*>120*	*F*	*>120*	*F*	*27.4*	*<0.8*			
	Main Street Northbound	*PM*		*>120*	*F*	*>120*	*F*	*<4*	*>120*			
18	Willow Road & Park Street (future intersection)[1]	AM	Signal	Project Intersection		OVERSAT	F	33.6	47.8	*No feasible Improvement*		
		PM				OVERSAT	F	16.2	21.7			
19	Willow Road & Ivy Drive[1]	AM	Signal	OVERSAT	F	OVERSAT	F	52.0	105.8	OVERSAT	F	
	Ivy Drive Southbound	*AM*		*72.8*	*E*	*69.6*	*E*	*<4*	*<0.8*	*61.3*	*E*	*<0.8*
		PM	Signal	OVERSAT	F	OVERSAT	F	85.2	107.3	OVERSAT	F	
	Ivy Drive Southbound	*PM*		*65.2*	*E*	*71.7*	*E*	*6.5*	*7.9*	*60.4*	*E*	*<0.8*
20	Willow Road & O'Brien Drive[1]	AM	Signal	OVERSAT	F	OVERSAT	F	<4	<0.8			
	O'Brien Drive Northbound	*AM*		*108.2*	*F*	*80.4*	*F*	*<4*	*<0.8*			
		PM	Signal	OVERSAT	F	OVERSAT	F	<4	<0.8			
	O'Brien Drive Northbound	*PM*		*>120*	*F*	*>120*	*F*	*<4*	*<0.8*			
21	Willow Road & Newbridge Street[1]	AM	Signal	OVERSAT	F	OVERSAT	F	31.5	97.3	OVERSAT	F	
	Newbridge Street Southbound	*AM*		*115.1*	*F*	*108.8*	*F*	*<4*	*<0.8*	*>120*	*F*	*103.1*
	Newbridge Street Northbound	*AM*		*>120*	*F*	*>120*	*F*	*>120*	*>120*	*23.2*	*C*	*<0.8*
		PM	Signal	OVERSAT	F	OVERSAT	F	<4	<0.8	OVERSAT	F	
	Newbridge Street Southbound	*PM*		*83.5*	*F*	*>120*	*F*	*42.8*	*67.4*	*>120*	*F*	*101.1*
	Newbridge Street Northbound	*PM*		*>120*	*F*	*>120*	*F*	*<4*	*<0.8*	*31.2*	*C*	*<0.8*
22	Willow Road & US 101 Northbound Ramps[1]	AM	Signal	OVERSAT	F	OVERSAT	F	<4	<0.8			
		PM		OVERSAT	F	OVERSAT	F	<4	<0.8			
23	Willow Road & US 101 Southbound Ramps[1]	AM	Signal	OVERSAT	F	OVERSAT	F	<4	<0.8			
		PM		OVERSAT	F	OVERSAT	F	<4	<0.8			
24	Willow Road & Bay Road[1]	AM	Signal	OVERSAT	F	OVERSAT	F	<4	6.7	OVERSAT	F	
	Bay Road Southbound	*AM*		*>120*	*F*	*>120*	*F*	*36.1*	*36.1*	*27.6*	*C*	*<0.8*
		PM	Signal	OVERSAT	F	OVERSAT	F	<4	<0.8	OVERSAT	F	
	Bay Road Southbound	*PM*		*74.5*	*E*	*81.7*	*F*	*7.2*	*7.2*	*26.5*	*C*	*<0.8*

Table 20 (continued)
Cumulative (2040) With Dumbarton Rail Intersection Levels of Service (Menlo Park)

#	Intersection	Peak Hour	Traffic Control	Cumulative Conditions (With Dumbarton Rail)								
				No Project Conditions		Project Conditions				With Improvement		
				Avg. Delay (sec)[1]	LOS	Avg. Delay (sec)[1]	LOS	Incr. in Avg. Delay	Incr. in Avg. Critical Delay	Avg. Delay (sec)[1]	LOS	Incr. in Avg. Critical Delay
25	Willow Road & Hospital Plaza/Durham Street[1]	AM	Signal	**OVERSAT**	**F**	**OVERSAT**	**F**	**<4**	**<0.8**			
	VA Medical Center Southbound	*AM*		***74.7***	***E***	***74.7***	***E***	***<4***	***<0.8***			
	Durham Street Northbound	*AM*		***>120***	***F***	***>120***	***F***	***<4***	***<0.8***			
		PM	Signal	**OVERSAT**	**F**	**OVERSAT**	**F**	**<4**	**<0.8**			
	VA Medical Center Southbound	*PM*		***74.2***	***E***	***74.0***	***E***	***<4***	***<0.8***			
	Durham Street Northbound	*PM*		***88.1***	***F***	***88.1***	***F***	***<4***	***<0.8***			
26	Willow Road & Coleman Avenue	AM	Signal	33.9	C	33.6	C	<4	3.4			
		PM		13.1	B	13.2	B	<4	<0.8			
27	Willow Road & Gilbert Avenue	AM	Signal	23.7	C	23.4	C	<4	<0.8			
		PM		14.1	B	13.9	B	<4	<0.8			
28	Willow Road & Middlefield Road	AM	Signal	**64.4**	**E**	**64.8**	**E**	**<4**	**0.8**			
	Middlefield Road Southbound	*AM*		***69.8***	***E***	***70.0***	***E***	***<4***	***<0.8***			
	Middlefield Road Northbound	*AM*		***67.4***	***E***	***67.2***	***E***	***<4***	***<0.8***			
		PM	Signal	42.5	D	42.3	D	<4	<0.8			
	Middlefield Road Southbound	*PM*		*42.1*	*D*	*42.1*	*D*	*<4*	*<0.8*			
	Middlefield Road Northbound	*PM*		*40.6*	*D*	*40.7*	*D*	*<4*	*<0.8*			
29	O'Brien Drive/Loop Road & Main Street/O'Brien Drive (future intersection)	AM	Roundabout	Project Intersection		8.4	A	8.4	8.4			
		PM				10.2	B	10.2	10.2			
30	O'Brien Drive & Kavanaugh Drive	AM	AWSC	**>120**	**F**	**>120**	**F**	**>120**	**>120**	*Traffic signal potentially feasible*		
		PM		**>120**	**F**	**>120**	**F**	**10.9**	**10.9**			
31	Adams Drive & Adams Court	AM	TWSC	18.9	C	17.3	C	<4	<0.8			
		PM		15.8	C	12.6	B	<4	<0.8			
32	Adams Drive & O'Brien Drive	AM	TWSC	**47.2**	**E**	**>120**	**F**	**>120**	**>120**	*Traffic signal potentially feasible*		
		PM		**>120**	**F**	**>120**	**F**	**>120**	**>120**			
33	University Avenue & Bayfront Expressway*	AM	Signal	14.7	B	13.1	B	<4	<0.8			
		PM		**>120**	**F**	**>120**	**F**	**<4**	**<0.8**			

Notes:
* Denotes CMP Intersection
AWSC - All Way Stop Control; TWSC - Two Way Stop Control
[1] Average delay is reported for signalized and AWSC intersections. For TWSC intersections, the delay for the worst stop-controlled movement is reported
"OVERSAT" indicates that the SimTraffic microsimulation model indicates that the intersection would experience capacity issues where the demand cannot be served by the intersection. Oversaturated intersections would operate at LOS F.
[1]Intersections were analyzed using Synchro/SimTraffic software due to the close proximity of these intersections. Changes in average delay and critical delay calculated using Vistro.
[2]The intersection is not considered as non-compliant under cumulative plus project conditions because the critical movement of the local approach shifts with the addition of project traffic.
Bold indicates substandard level of service
Bold indicates noncompliance. The project exceeds thresholds in the City of Menlo Park's TIA Guidelines.

Table 21
Cumulative (2040) With Dumbarton Rail Intersection Levels of Service (East Palo Alto)

#	Intersection	Peak Hour	Traffic Control	Cumulative (2040) Conditions (Dumbarton Rail)							
				No Project		with Project				With Improvement	
				Avg. Delay (sec)	LOS	Avg. Delay (sec)	LOS	Incr. in Critical Delay (sec)	Incr. in Critical V/C	Avg. Delay (sec)	LOS
34	University Avenue & Purdue Avenue	AM	Signalized	25.9	C	22.3	C	-3.8	-0.071		
		PM		28.0	C	24.2	C	-3.6	-0.081		
35	University Avenue & Adams Drive	AM	TWSC	**>120**	**F**	**>120**	**F**	**1.5**	**0.322**		
		PM		**>120**	**F**	**>120**	**F**	**-6.9**	**-0.122**		
36	University Avenue & O'Brien Drive	AM	Signalized	20.4	C	38.7	D	24.3	0.225		
		PM		20.1	C	31.4	C	14.4	0.176		
37	University Avenue & Notre Dame Avenue	AM	Signalized	8.0	A	10.6	B	3.1	0.070		
		PM		11.3	B	14.8	B	4.1	0.036		
38	University Avenue & Kavanaugh Drive	AM	Signalized	24.7	C	17.5	B	3.1	0.070		
		PM		22.7	C	23.5	C	4.4	0.039		
39	University Avenue & Bay Road	AM	Signalized	47.4	D	52	D	8.4	0.056		
		PM		**64.0**	**E**	**67.7**	**E**	**3.7**	**0.012**		
40	University Avenue & Runnymede Street	AM	Signalized	9.4	A	10.9	B	8.1	0.062		
		PM		8.9	A	8.9	A	3.5	0.100		
41	University Avenue & Bell Street	AM	Signalized	14.9	B	15.9	B	1.6	0.055		
		PM		26.1	C	32.9	C	10.9	0.062		
42	University Avenue & Donohoe Street*	AM	Signalized	**OVERSAT**	**F**	**OVERSAT**	**F**	**4.6**	**0.011**	***Corridor***	
		PM		**OVERSAT**	**F**	**OVERSAT**	**F**	**-4.9**	**-0.009**	***Improvement***	
43	US 101 Northbound Off-Ramp & Donohoe Street*	AM	Signalized	**OVERSAT**	**F**	**OVERSAT**	**F**	**77.2**	**0.158**	***Corridor***	
		PM		**OVERSAT**	**F**	**OVERSAT**	**F**	**48.9**	**0.108**	***Improvement***	
44	Cooley Avenue & Donohoe Street*	AM	Signalized	**OVERSAT**	**F**	**OVERSAT**	**F**	**27.2**	**0.085**	***Corridor***	
		PM		**OVERSAT**	**F**	**OVERSAT**	**F**	**62.9**	**0.143**	***Improvement***	
45	University Avenue & US 101 Southbound Ramps*	AM	Signalized	**OVERSAT**	**F**	**OVERSAT**	**F**	**-2.5**	**-0.005**	***Corridor***	
		PM		**OVERSAT**	**F**	**OVERSAT**	**F**	**7.0**	**0.017**	***Improvement***	
46	University Avenue & Woodland Avenue*	AM	Signalized	**OVERSAT**	**E**	**OVERSAT**	**E**	**14.1**	**0.040**	***Corridor***	
		PM		**OVERSAT**	**F**	**OVERSAT**	**F**	**12.0**	**0.028**	***Improvement***	
47	E. Bayshore Road & Donahoe Street*	AM	Signalized	**>120**	**F**	**>120**	**F**	**-8.8**	**-0.019**	***Corridor***	
		PM		**>120**	**F**	**>120**	**F**	**-4.9**	**-0.010**	***Improvement***	

Table 21 (continued)
Cumulative (2040) With Dumbarton Rail Intersection Levels of Service (East Palo Alto)

#	Intersection	Peak Hour	Traffic Control	Cumulative (2040) Conditions (Dumbarton Rail)							
				No Project		with Project				With Improvement	
				Avg. Delay (sec)	LOS	Avg. Delay (sec)	LOS	Incr. in Critical Delay (sec)	Incr. in Critical V/C	Avg. Delay (sec)	LOS
48	E. Bayshore Road & Holland Street	AM	TWSC	8.8	A	8.8	A	0.0	0.000		
		PM		10.0	A	10.0	A	0.0	0.000		
49	Saratoga Avenue & Newbridge Street	AM	TWSC	**>120**	**F**	**>120**	**F**	**4.7**	**0.075**	***No Feasible***	
		PM		**37.2**	**E**	25.0	D	-2.6	-0.103	***Improvement***	
50	E. Bayshore Road & Euclid Avenue*	AM	AWSC	**OVERSAT**	**F**	**OVERSAT**	**F**	**42.4**	**0.062**	***Corridor***	
		PM		**OVERSAT**	**F**	**OVERSAT**	**F**	**-5.7**	**-0.016**	***Improvement***	
51	Clarke Avenue & E. Bayshore Road	AM	Signalized	14.1	B	14.2	B	0.1	0.008		
		PM		13.9	B	14.0	B	0.1	0.007		
52	Pulgas Avenue & E. Bayshore Road	AM	Signalized	25.4	C	26.2	C	1.1	0.013		
		PM		47.4	D	47.2	D	0.2	0.001		

Note:
* Denotes a CMP interesection
AWSC - All Way Stop Control; TWSC - Two Way Stop Control
[1] Average delay is reported for signalized and AWSC intersections. For TWSC intersections, the delay for the worst stop-controlled movement is reported.
"OVERSAT" indicates that the SimTraffic microsimulation model indicates that the intersection would experience capacity issues where the demand cannot be served by the intersection. Oversaturated intersections would operate at LOS F.
[*] Intersections were analyzed using Synchro/SimTraffic software due to the close proximity of these intersections. Changes in critical delay and v/c calculated using Traffix.
Bold indicates substandard level of service
Bold indicates adverse effect

Intersection Vehicle Queuing

The analysis of intersection levels of service was supplemented with a vehicle queuing analysis for intersection left-turning movements where the proposed project would add significant trips per lane in the vicinity of the Project Site and affect intersection operations (see Figure 22). This analysis provides a basis for estimating future storage requirements at these intersections (see Table 22). Vehicle queues were estimated using the methodology described in Chapter 1. The following turn movements were selected for evaluation:

- Northbound left-turn at Marsh Road and Bayfront Expressway
- Eastbound left-turn at Willow Road and Bayfront Expressway
- Eastbound left-turn and Southbound left-turn at Willow Road and Ivy Drive
- Southbound left-turn at Willow Road and US 101 southbound ramps
- Southbound left-turn at Willow Road and Bay Road
- Westbound shared left-through lane and Eastbound shared through-right lane at O'Brien Drive and Kavanaugh Drive
- Southbound shared left/through lane at Adams Drive and O'Brien Drive
- Eastbound left-turn and Southbound left-turn at University Avenue and O'Brien Drive
- Eastbound left-turn at University Avenue and Kavanaugh Drive

Locations where the estimated 95th percentile queues would exceed the available storage capacity for the movement are discussed below. Queuing issues are operational issues resulting from signal timing and queue storage provisions. Queuing issues are not considered a CEQA issue related to hazards.

Eastbound Left-turn at Willow Road and Bayfront Expressway (#16)

The existing vehicle storage for the eastbound left turn pocket on Willow Road at Bayfront Expressway is 300 feet, which provides enough space for about 12 vehicles. Under existing conditions, the 95th percentile queue would exceed the storage of the left turn pocket by 12 vehicles in the AM peak hour. Under near-term conditions, the 95th percentile queue would exceed the storage length of the turn pocket by 15 vehicles during the AM peak hour and four vehicles during the PM peak hour. The Proposed Project would add three vehicles to the 95th percentile queue during the AM peak hour and PM peak hour. There is no room to extend the left turn pocket due to the emergency vehicle only lane cut in the median.

Eastbound Left-turn at Willow Road and Ivy Drive (#19)

The existing vehicle storage for the eastbound left turn pocket on Willow Road at Ivy Drive is 125 feet, which provides enough space for about 5 vehicles. Under existing conditions, the 95th percentile queue would be accommodated by the left turn pocket. Under near-term conditions, the 95th percentile queue exceeds the storage length of the turn pocket by three vehicles during the AM peak hour. The Proposed Project would add one vehicle to the 95th percentile queue during the AM peak hour and one vehicle during the PM peak hour. There is no room to further extend this left-turn.

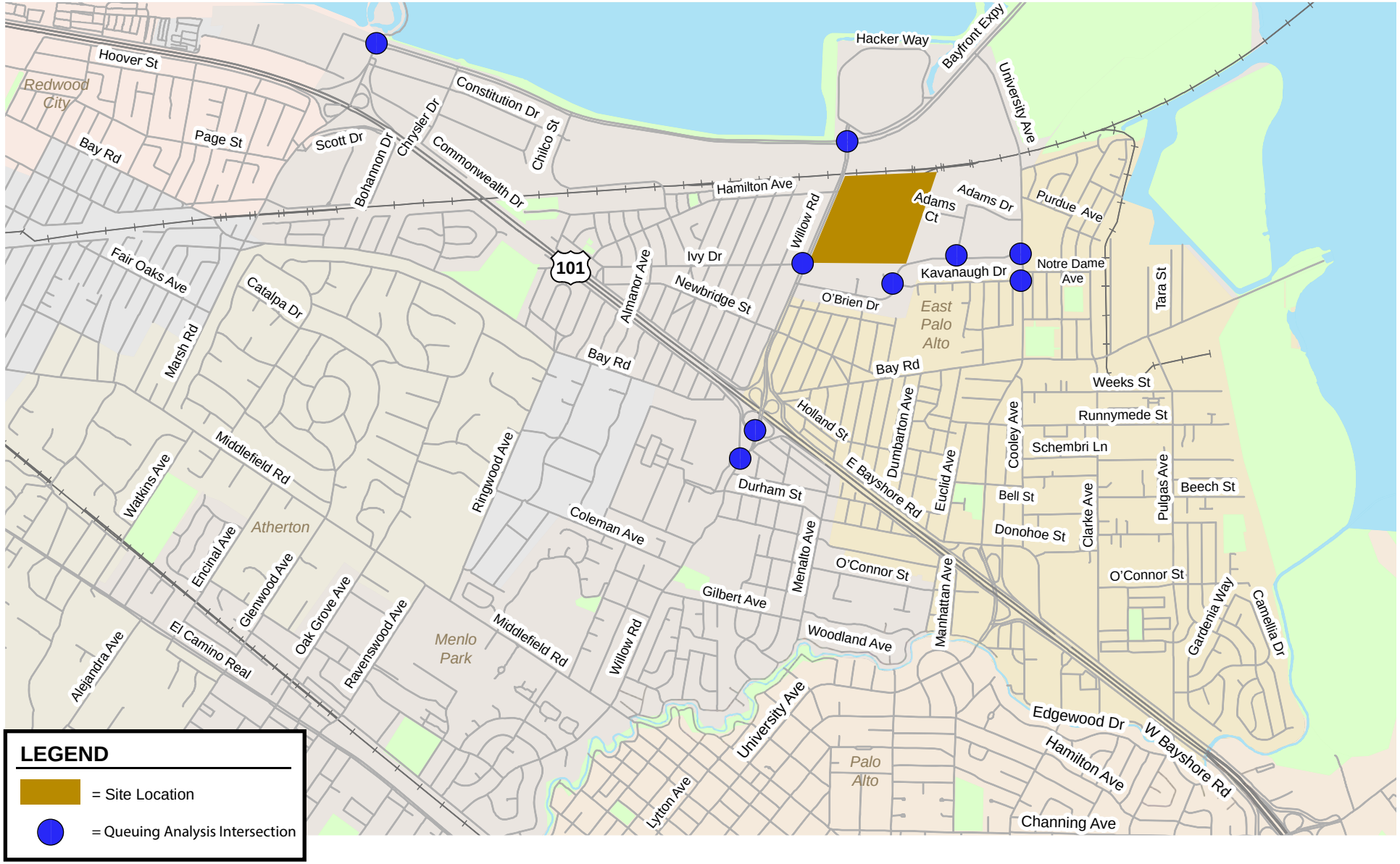


Figure 22
Queuing Analysis Locations

Southbound Left-turn at Willow Road and Bay Road (#24)

The existing vehicle storage for the southbound left turn pocket on Willow Road at Bay Road is 250 feet, which provides enough space for about 10 vehicles. Under existing conditions, the 95th percentile queue would exceed the storage length of the left turn pocket by 6 vehicles. Under near-term conditions, the 95th percentile queue exceeds the storage length of the turn pocket by 13 vehicles during the AM peak hour and one vehicle during the PM peak hour. The Proposed Project would add six vehicles to the 95th percentile queue during the AM peak hour and three vehicles during the PM peak hour. Menlo Park's TIF has a project to add a second left-turn lane to this intersection, which would add additional storage for left-turning vehicles. The exact length of the addition will be determined during the design phase for the intersection improvement. Construction of the recommended improvement would reduce the queuing deficiency created by the Proposed Project.

Eastbound Left-turn and Southbound left-turn at University Avenue and O'Brien Drive (#36)

The existing vehicle storage for the eastbound left turn pocket on University Avenue at O'Brien Drive is 125 feet, which provides enough spaces for about 5 vehicles. Under existing conditions, the 95th percentile queue exceeds the storage length of the turn pocket by 3 vehicles during the AM peak hour. The Proposed Project would add 22 vehicles to the 95th percentile queue during the AM peak hour. There is no room to lengthen the eastbound left turn pocket.

The existing vehicle storage for the southbound left turn pocket on O'Brien Drive at University Avenue is 60 feet, which provides enough spaces for 2 vehicles. Under existing conditions, the 95th percentile queue exceeds the storage length of the turn pocket by one vehicle during the AM peak hour and 11 vehicles during the PM peak hour. The Project would add one vehicle to the 95th percentile queue during the AM peak hour. There would be no increase to the 95th percentile queue length during the PM peak hour. There is room to extend the left turn pocket to accommodate the estimated 95th percentile queue of 325 feet.

Menlo Park's Traffic Impact Fee (TIF) program identifies an improvement to signalize the nearby intersection at University Avenue and Adams Drive in East Palo Alto. This improvement may provide an alternative route for Project vehicles to access the Project Site via University Avenue, and alleviate potential queuing issues at this intersection.

Table 22
Intersection Vehicle Queuing Results

Intersection	Marsh Road & Bayfront Expressway[4]		Willow Road & Bayfront Expressway[4]		Willow Road & Ivy Drive[4]			
Movement	NBLT		EBLT		EBLT		SBLT	
Peak Hour Period	AM	PM	AM	PM	AM	PM	AM	PM
Existing								
Cycle/Delay[1] (sec)	160	160	140	140	130	130	130	130
Lanes	3	3	1	1	1	1	1	1
Volume (vph)	1931	1822	195	88	49	44	11	32
95th% Queue (veh/ln)	36	29	24	5	4	3	1	2
95th% Queue (ft/ln)	900	725	600	125	100	75	25	50
Storage (ft/ ln)	1350	1350	300	300	125	125	125	125
Adequate (Y/N)	Y	Y	***N***	Y	Y	Y	Y	Y
Near-Term								
Cycle/Delay[1] (sec)	160	160	140	140	130	130	130	130
Lanes	3	3	1	1	1	1	1	1
Volume (vph)	1931	2034	210	151	81	80	11	35
95th% Queue (veh/ln)	36	34	27	8	8	5	1	2
95th% Queue (ft/ln)	900	850	675	200	200	125	25	50
Storage (ft/ ln)	1350	1350	300	300	125	125	125	125
Adequate (Y/N)	Y	Y	***N***	Y	***N***	Y	Y	Y
Near-Term Plus Project								
Cycle/Delay[1] (sec)	160	160	140	140	130	130	130	130
Lanes	3	3	1	1	1	1	1	1
Volume (vph)	2028	2225	225	189	91	83	65	71
95th% Queue (veh/ln)	41	40	30	9	11	6	4	4
95th% Queue (ft/ln)	1025	1000	750	225	275	150	100	100
Storage (ft/ ln)	1350	1350	300	300	125	125	125	125
Adequate (Y/N)	Y	Y	***N***	Y	***N***	***N***	Y	Y

Notes:
NB = northbound; SB = southbound; WB = westbound; EB = eastbound; L/T/R = shared left-through-right; RT = right turn movement; LT = left turn movement
[1] Vehicle queue calculations based on cycle length for signalized intersections and delay for the approach for unsignalized intersections.
[2] Assumes 25 feet per vehicle queued.
[3] Intersection is all-way-stop-controlled under existing conditions and signalized under background condiitions.
[4] 95th Percentile queue length used from Vistro software.
[5] 95th Percentile queue length developed using Poisson Distribution.

Table 22
Intersection Vehicle Queuing Results (Continued)

Intersection	Willow Road & US 101 Southbound Ramps[4]		Willow Road & Bay Road[4]		O'Brien Drive & Kavanugh Drive[4]			
Movement	SBLT		SBLT		WBL/T		EBT/R	
Peak Hour Period	AM	PM	AM	PM	AM	PM	AM	PM
Existing								
Cycle/Delay[1] (sec)	80	80	48	48	12.7	10.1	11.4	17.9
Lanes	2	2	1	1	1	1	1	1
Volume (vph)	472	285	352	241	328	203	296	529
95th% Queue (veh/ln)	8	3	16	7	3	2	3	7
95th% Queue (ft/ln)	200	75	400	175	75	50	75	175
Storage (ft/ ln)	400	400	250	250	330	330	1800	1800
Adequate (Y/N)	Y	Y	***N***	Y	Y	Y	Y	Y
Near-Term								
Cycle/Delay[1] (sec)	80	80	48	48	13.6	11.8	12.4	39
Lanes	2	2	1	1	1	1	1	1
Volume (vph)	689	612	406	283	330	242	315	648
95th% Queue (veh/ln)	10	8	23	11	3	2	3	14
95th% Queue (ft/ln)	250	200	575	275	75	50	75	350
Storage (ft/ ln)	400	400	250	250	330	330	1800	1800
Adequate (Y/N)	Y	Y	***N***	***N***	Y	Y	Y	Y
Near-Term Plus Project								
Cycle/Delay[1] (sec)	80	80	48	48	28.6	22.4	190.5	129.2
Lanes	2	2	1	1	1	1	1	1
Volume (vph)	937	726	438	301	395	319	713	625
95th% Queue (veh/ln)	13	9	29	13	7	5	35	26
95th% Queue (ft/ln)	325	225	725	325	175	125	875	650
Storage (ft/ ln)	400	400	250	250	330	330	1800	1800
Adequate (Y/N)	Y	Y	***N***	***N***	Y	Y	Y	Y

Notes:
NB = northbound; SB = southbound; WB = westbound; EB = eastbound; L/T/R = shared left-through-right; RT = right turn movement; LT = left turn movement
[1] Vehicle queue calculations based on cycle length for signalized intersections and delay for the approach for unsignalized intersections.
[2] Assumes 25 feet per vehicle queued.
[3] Intersection is all-way-stop-controlled under existing conditions and signalized under background condiitions.
[4] 95th Percentile queue length used from Vistro software.
[5] 95th Percentile queue length developed using Poisson Distribution.

Table 22
Intersection Vehicle Queuing Results (Continued)

Intersection	Adams Drive and O'Brien Drive[4]		University Avenue & Purdue Avenue[5]			
Movement	SBL/T		WBLT		NBLT	
Peak Hour Period	AM	PM	AM	PM	AM	PM
Existing						
Cycle/Delay[1] (sec)	4.4	4.1	16.5	16.5	16.5	16.5
Lanes	1	1	1	1	1	1
Volume (vph)	166	440	99	20	26	29
95th% Queue (veh/ln)	1	1	2	1	1	1
95th% Queue (ft/ln)	25	25	50	25	25	25
Storage (ft/ ln)	625	625	75	75	50	50
Adequate (Y/N)	Y	Y	Y	Y	Y	Y
Near-Term						
Cycle/Delay[1] (sec)	4.5	3.9	16.5	16.5	16.5	16.5
Lanes	1	1	1	1	1	1
Volume (vph)	170	481	209	46	27	46
95th% Queue (veh/ln)	1	1	3	1	1	1
95th% Queue (ft/ln)	25	25	75	25	25	25
Storage (ft/ ln)	625	625	75	75	50	50
Adequate (Y/N)	Y	Y	Y	Y	Y	Y
Near-Term Plus Project						
Cycle/Delay[1] (sec)	3.9	1.2	16.5	16.5	16.5	16.5
Lanes	1	1	1	1	1	1
Volume (vph)	250	952	214	65	54	69
95th% Queue (veh/ln)	1	1	3	1	1	1
95th% Queue (ft/ln)	25	25	75	25	25	25
Storage (ft/ ln)	625	625	75	75	50	50
Adequate (Y/N)	Y	Y	Y	Y	Y	Y

Notes:
NB = northbound; SB = southbound; WB = westbound; EB = eastbound; L/T/R = shared left-through-right; RT = right turn movement; LT = left turn movement
[1] Vehicle queue calculations based on cycle length for signalized intersections and delay for the approach for unsignalized intersections.
[2] Assumes 25 feet per vehicle queued.
[3] Intersection is all-way-stop-controlled under existing conditions and signalized under background condiitions.
[4] 95th Percentile queue length used from Vistro software.
[5] 95th Percentile queue length developed using Poisson Distribution.

Table 22
Intersection Vehicle Queuing Results (Continued)

Intersection	University Avenue & O'Brien Drive[5]				University Avenue & Kavanaugh Drive[5]	
Movement	EBLT		SBLT		EBLT	
Peak Hour Period	AM	PM	AM	PM	AM	PM
Existing						
Cycle/Delay[1] (sec)	150	150	150	150	150	150
Lanes	1	1	1	1	1	1
Volume (vph)	110	6	32	185	44	11
95th% Queue (veh/ln)	8	1	3	13	4	2
95th% Queue (ft/ln)	200	25	75	325	100	50
Storage (ft/ ln)	125	125	50	50	100	100
Adequate (Y/N)	***N***	Y	***N***	***N***	Y	Y
Near-Term						
Cycle/Delay[1] (sec)	150	150	150	150	150	150
Lanes	1	1	1	1	1	1
Volume (vph)	110	6	33	185	56	19
95th% Queue (veh/ln)	8	1	4	13	5	2
95th% Queue (ft/ln)	200	25	100	325	125	50
Storage (ft/ ln)	125	125	50	50	100	100
Adequate (Y/N)	***N***	Y	***N***	***N***	***N***	Y
Near-Term Plus Project						
Cycle/Delay[1] (sec)	150	150	150	150	150	150
Lanes	1	1	1	1	1	1
Volume (vph)	525	22	58	185	44	35
95th% Queue (veh/ln)	30	3	5	13	4	4
95th% Queue (ft/ln)	750	75	125	325	100	100
Storage (ft/ ln)	125	125	50	50	100	100
Adequate (Y/N)	***N***	Y	***N***	***N***	Y	Y

Notes:
NB = northbound; SB = southbound; WB = westbound; EB = eastbound; L/T/R = shared left-through-right; RT = right turn movement; LT = left turn movement
[1] Vehicle queue calculations based on cycle length for signalized intersections and delay for the approach for unsignalized intersections.
[2] Assumes 25 feet per vehicle queued.
[3] Intersection is all-way-stop-controlled under existing conditions and signalized under background condiitions.
[4] 95th Percentile queue length used from Vistro software.
[5] 95th Percentile queue length developed using Poisson Distribution.

Freeway Facilities Analysis

In analyzing the freeway segments, the citywide travel demand forecast model was used to forecast the increase in traffic volumes between existing and near term plus project conditions. For the purpose of this study, freeway levels of service under cumulative conditions are calculated based on volume to capacity (V/C) ratio. A freeway segment is assumed to operate at LOS F under future conditions if,

- The freeway segment already operates at LOS F under existing conditions, or
- The ConnectMenlo model forecasts the freeway segment to operate at a V/C ratio above 1 under future conditions.

Definition of Adverse Freeway Effects

San Mateo County

Within San Mateo County, the project is said to create an adverse effect on traffic conditions on a freeway segment if for either peak hour:

1. The analysis indicates that the combination of the proposed project and future traffic demand will result in the freeway segment operating at a level of service that exceeds the standard adopted by the current CMP and the proposed project increases traffic demand on the freeway segment by an amount equal to one percent (1%) or more of the segment capacity, or
2. The project will add traffic demand equal to one percent (1%) or more of the segment capacity if the freeway segment is currently not in compliance with the adopted LOS standard.

Santa Clara County

VTA CMP guidelines define that a project would cause an adverse effect on freeway operations if for either peak hour:

1. The project would deteriorate freeway levels of service from an acceptable level to an unacceptable level, or
2. If the freeway already operates at an unacceptable level under existing conditions, and the project would add traffic exceeding one percent (1%) of the freeway capacity.

Alameda County

The Alameda County CMP does not have a policy for determining a threshold of significance for CMP requirements. The freeway segment analysis (see Table 25 below) is provided only for information.

Freeway Analysis

To determine the Proposed Project's potential freeway adverse effects, a select-zone analysis within the Menlo Park model was performed to estimate the increase in project traffic volume between existing conditions and near term with project conditions. Freeway segments that would experience a freeway adverse effect generated by the Proposed Project are identified below.

San Mateo County

As shown on Table 23, the proposed project would add traffic greater than 1% capacity to the following study freeway segments operating below its LOS standard:

- SR 84 – from Willow Road to Alameda County Line – PM Peak Hour
- SR 84 – from Alameda County Line to Willow Road – AM Peak Hour
- US 101 – between Santa Clara County Line and Whipple Avenue – AM & PM Peak Hours
- US 101 – from Whipple Avenue to SR 92 – PM Peak Hour
- US 101 – from SR 92 to Whipple Avenue – AM Peak Hour

Santa Clara County

As shown on Table 24, the proposed project would add traffic greater than 1% capacity to the following mixed-flow freeway segments operating below its LOS standard:

- US 101 – from SR 85 to Embarcadero Road – AM & PM Peak Hours
- US 101 – from Embarcadero Road to SR 85 – PM Peak hour

The proposed project would add traffic greater than 1% capacity to the following HOV freeway segment operating below its LOS standard:

- US 101 – from Oregon Expressway to Embarcadero Road – AM Peak Hour

Freeway Improvements

It should be noted that the near term plus project conditions model run assumed the US 101 express lane project in San Mateo County. Improvements to eliminate the adverse freeway effects on US 101 and on SR 84 within San Mateo County would require additional capacity improvements and/or additional TDM measures that would reduce peak-hour vehicle trip-making by more than 70%. San Mateo County currently has no plans to further improve US 101 beyond the identified express lane projects. There are also no identified plans to improve the Bayfront Expressway (SR 84) corridor. Such an aggressive TDM plan would also not be feasible.

Within Santa Clara County, Valley Transportation Authority's Valley Transportation Plan 2040 identifies freeway express lane projects along US 101 that would convert the existing HOV lanes to express lanes and add a second express lane in each direction. This improvement would increase the capacity of the freeway and would adequately address the freeway impacts.

The potential Dumbarton Rail corridor would slightly reduce the Project contribution to the identified adverse effects but would not eliminate any. Therefore, the Project's adverse effects on US 101 and on SR 84 freeway segments in San Mateo County would remain.

Table 23
Freeway Analysis – San Mateo County

CMP Facility	Roadway Segment	Dir.	Pk Hr	LOS Standard	Capacity	Existing LOS	Near Term + Project	
							LOS	% Project Added
SR 84	US 101 to Willow Rd	SB	AM	D	1,100	C	C	0.0%
		SB	PM	D	1,100	B	D	2.2%
SR 84	Willow Rd to US 101	NB	AM	D	1,100	C	D	4.3%
		NB	PM	D	1,100	B	B	2.1%
SR 84	Willow Rd to University Ave	SB	AM	E	1,100	F	**F**	**0.9%**
		SB	PM	E	1,100	E	**F**	**4.0%**
SR 84	University Ave to Willow Rd	NB	AM	E	1,100	**F**	**F**	**3.2%**
		NB	PM	E	1,100	E	E	1.0%
SR 84	University Ave to Alameda County Line	SB	AM	F	2,100	**F**	**F**	**0.5%**
		SB	PM	F	2,100	**F**	**F**	**2.1%**
SR 84	Alameda County Line to University Ave	NB	AM	F	2,100	**F**	**F**	**1.7%**
		NB	PM	F	2,100	**F**	**F**	**0.5%**
US 101	Santa Clara County Line to Whipple Ave	NB	AM	F	2,300	**F**	**F**	**1.1%**
		NB	PM	F	2,300	**F**	**F**	**2.7%**
US 101	Whipple Ave to Santa Clara County Line	SB	AM	F	2,300	**F**	**F**	**2.3%**
		SB	PM	F	2,300	**F**	**F**	**1.4%**
US 101	Whipple Ave to SR 92	NB	AM	E	2,300	**F**	**F**	**0.7%**
		NB	PM	E	2,300	**F**	**F**	**1.6%**
US 101	SR 92 to Whipple Ave	SB	AM	E	2,300	**F**	**F**	**1.2%**
		SB	PM	E	2,300	**F**	**F**	**0.9%**
SR 109 (University Ave)	Kavanaugh Dr to SR 84	EB	AM	E	1,100	C	C	0.0%
		EB	PM	E	1,100	C	D	0.1%
SR 109 (University Ave)	SR 84 to Kavanaugh Dr	WB	AM	E	1,100	**F**	**F**	**0.1%**
		WB	PM	E	1,100	**F**	**F**	**0.0%**
SR 114 (Willow Rd)	US 101 to SR 84	EB	AM	E	1,100	B	B	9.6%
		EB	PM	E	1,100	B	B	9.6%
SR 114 (Willow Rd)	SR 84 to US 101	WB	AM	E	1,100	C	C	5.2%
		WB	PM	E	1,100	C	C	5.7%

Notes:

Data referenced San Mateo Couny City/County Association of Governments *Congestion Management Program 2019.*

Bold indicates non-compliant LOS

box and BOLD indicates adverse effect

Table 24
Freeway Analysis – Santa Clara County

Freeway	Segment	Dir	Peak Hour	Existing Conditions: Mixed-Flow Capacity[1]	Mixed-Flow Volume[2] (pc/hr/ln)	Mixed-Flow LOS[2]	HOV Lane Capacity[1]	HOV Lane Volume[2] (pc/hr/ln)	HOV Lane LOS[2]	Near Term + Project Conditions: Mixed Flow LOS	Mixed Flow Project added	Mixed Flow % Capacity	HOV LOS	HOV Project added	HOV % Capacity
US 101	SR 85 to N. Shoreline Blvd	NB	AM	9,200	1,512	**F**	1,650	1,751	E	**F**	**187**	**2.0%**	E	8	0.5%
			PM	9,200	1,358	**F**	1,650	1,635	D	**F**	**118**	**1.3%**	D	6	0.4%
US 101	N. Shoreline Blvd to Rengstorff Ave	NB	AM	6,900	1,660	**F**	3,300	1,730	D	**F**	**198**	**2.9%**	D	16	0.5%
			PM	6,900	1,298	**F**	3,300	1,683	D	**F**	**124**	**1.8%**	D	12	0.4%
US 101	Rengstorff Ave to San Antonio Ave	NB	AM	6,900	1,747	E	3,300	1,716	D	**F**	**208**	**3.0%**	D	17	0.5%
			PM	6,900	1,333	**F**	3,300	1,646	D	**F**	**132**	**1.9%**	D	14	0.4%
US 101	San Antonio Ave to Oregon Expwy	NB	AM	6,900	1,262	**F**	3,300	1,693	D	**F**	**232**	**3.4%**	D	12	0.4%
			PM	6,900	1,083	**F**	3,300	1,482	**F**	**F**	**152**	**2.2%**	**F**	**15**	**0.4%**
US 101	Oregon Expwy to Embarcadero Rd	NB	AM	6,900	1,367	**F**	1,650	1,693	**F**	**F**	**224**	**3.3%**	**F**	**19**	**1.1%**
			PM	6,900	1,271	**F**	1,650	1,588	**F**	**F**	**151**	**2.2%**	**F**	**16**	**0.9%**
US 101	Embarcadero Rd to Oregon Expwy	SB	AM	6,900	1,991	D	1,650	n/a	A	D	118	1.7%	C	11	0.7%
			PM	6,900	1,135	**F**	1,650	1,627	D	**F**	**190**	**2.8%**	D	17	1.0%
US 101	Oregon Expwy to San Antonio Ave	SB	AM	6,900	1,989	D	3,300	919	A	D	118	1.7%	B	11	0.3%
			PM	6,900	1,050	**F**	3,300	1,693	D	**F**	**191**	**2.8%**	D	17	0.5%
US 101	San Antonio Ave to Rengstorff Ave	SB	AM	6,900	1,890	E	3,300	780	A	E	104	1.5%	B	10	0.3%
			PM	6,900	1,125	**F**	3,300	1,610	D	**F**	**201**	**2.9%**	D	15	0.5%
US 101	Rengstorff Ave to N. Shoreline Blvd	SB	AM	6,900	1,976	D	3,300	1,369	C	D	101	1.5%	C	10	0.3%
			PM	6,900	1,072	**F**	3,300	1,508	D	**F**	**195**	**2.8%**	D	15	0.4%
US 101	N. Shoreline Blvd to SR 85	SB	AM	6,900	1,950	D	1,650	1,068	A	E	56	0.8%	A	4	0.3%
			PM	6,900	1,115	**F**	1,650	1,752	E	**F**	**93**	**1.3%**	E	7	0.4%

Notes:
HOV = high-occupancy vehicle; LOS = level of service
1. Capacity is based on the capacities cited in VTA's *Transportation Impact Analysis Guidelines* (2014).
2. Volume, and Level of service (LOS) on each segment are taken from VTA's *2018 CMP Monitoring Report*. VTA did not report volume and density for segments with speed above 75.2
Bold indicates a substandard level of service.
Outline indicates an adverse effect

Table 25
Freeway Analysis – Alameda County

CMP Facility	Roadway Segment	Dir.	Pk Hr	Capacity	Existing LOS	Near Term + Project Conditions	
						Project Traffic	% Capacity
SR 84	San Mateo County Line to Toll Plaza	EB	AM	2,200	A	30	0.5%
		EB	PM	2,200	C	131	2.0%
SR 84	Toll Plaza to San Mateo County Line	WB	AM	2,200	F	109	1.7%
		WB	PM	2,200	A	33	0.5%
SR 84	Toll Plaza to Thornton Ave	EB	AM	2,200	A	30	0.5%
		EB	PM	2,200	B	131	2.0%
SR 84	Paseo Padre Pkwy to Toll Plaza	WB	AM	2,200	F	108	1.2%
		WB	PM	2,200	C	33	0.4%
SR 84	Thornton Ave to Newark Blvd	EB	AM	2,200	A	21	0.3%
		EB	PM	2,200	C	99	1.5%
SR 84	Newark Blvd to Paseo Padre Pkwy	WB	AM	2,200	E	74	0.8%
		WB	PM	2,200	A	25	0.3%
SR 84	Newark Blvd to I-880	EB	AM	2,200	D	17	0.3%
		EB	PM	2,200	F	75	1.1%
SR 84	I-880 to Newark Blvd	WB	AM	2,200	D	57	0.6%
		WB	PM	2,200	D	22	0.3%

Notes:
Data referenced the Alameda County Transportation Comission *2018 LOS Monitoring Report, Appendix B.*

Freeway Ramp Analysis

A freeway ramp analysis is conducted under near term plus project conditions to determine whether freeway ramps would continue to have sufficient capacity to serve the forecasted traffic demand. For the purpose of this study, the project is said to create an adverse effect on a freeway ramp if:

- The project would cause the volume-to-capacity (V/C) ratio of the freeway ramp to exceed 1.0; or
- The project would increase the amount of traffic on a freeway ramp that is already exceeding its capacity by more than one percent (1%) of the ramp's capacity.

As shown on Table 26, under near term plus project conditions, all study freeway ramps would continue to have sufficient capacity to serve the anticipated demand.

Table 26
Freeway Ramp Capacity Analysis

Interchange	Ramp	Peak Hour	Lanes				Capacity [2]	Existing Conditions		Near Term + Project Conditions	
			Type	Mixed	HOV	Meter [1]		Volume [3]	V/C	Volume	V/C
US 101/Marsh Road	SB Off-ramp to Marsh Road	AM	Diagonal	2	-	-	3,800	1,332	0.35	1,441	0.38
		PM					3,800	1,156	0.30	1,212	0.32
	NB on-ramp from WB Marsh Road	AM	Diagonal	2	1	YES	1,800	1,559	0.87	1,738	0.97
		PM				-	2,000	1,472	0.74	1,612	0.81
US 101/Willow Road	NB off-ramp to Willow Road	AM	Diagonal	2	-	-	3,800	1,153	0.30	1,282	0.34
		PM					3,800	1,055	0.28	1,142	0.30
	NB on-ramp from WB Willow Road	AM	Diagonal	1	1	YES	1,800	424	0.24	424	0.24
		PM				-	2,000	495	0.25	729	0.36
	SB on-ramp from WB Willow Road	AM	Loop	1	-	-	1,900	739	0.39	874	0.46
		PM				YES	900	633	0.70	674	0.75
	SB off-ramp to Willow Road	AM	Diagonal	2	-	-	3,800	863	0.23	1,328	0.35
		PM					3,800	637	0.17	1,078	0.28
US 101/University Avenue	NB off-ramp to Donohoe Street	AM	Diagonal	1	-	-	2,000	857	0.43	1,162	0.58
		PM					2,000	1,326	0.66	1,547	0.77
	SB on-ramp from University Avenue	AM	Diagonal	2	-	-	1,800	1,143	0.64	1,167	0.65
		PM				YES	900	744	0.83	810	0.90

Notes:
NB = Northbound; SB = Southbound; EB = Eastbound; WB = Westbound
1. Northbound on-ramps are assumed metered during the AM peak hour. Southbound on-ramps are assumed metered during the PM peak hour.
2. Ramp capacities were obtained from *Highway Capacity Manual 2000* , and considered the free-flow speed, the number of lanes on the ramp, and ramp metering.
3. Existing volumes referenced intersection counts collected in 2019.

Roadway ADT Analysis

This analysis included the evaluation of roadway average daily traffic (ADT) for 10 roadway segments (see Table 27 below) to determine the project's effect on City street segments. According to the City of Menlo Park *Transportation Impact Analysis Guidelines* published in July 2020, a project-generated traffic impact on City street segments would be considered potentially noncompliant if:

1. On Main Street, Avenue-Mixed Use, and Avenue-Neighborhood, a traffic impact may be considered potentially noncompliant if the existing ADT is:
    1) Greater than 19,000, and there is a net increase of 100 trips or more in ADT due to project related traffic;
    2) The ADT is greater than 10,000 but less than 18,000, and the project related traffic increases the ADT by 12.5%, or the ADT becomes 18,000 or more; or
    3) The ADT is less than 10,000, and the project related traffic increases the ADT by 25%.
2. On Mixed-Use Collector, and Neighborhood Collector, a traffic impact may be considered potentially noncompliant if the existing ADT is:
    1) Greater than 9,000, and there is a net increase of 50 trips or more in ADT due to project related traffic;
    2) The ADT is greater than 5,000 but less than 9,000, and the project related traffic increases the ADT by 12.5% or the ADT becomes 9,000 or more; or
    3) The ADT is less than 5,000, and the project related traffic increases the ADT by 25%.
3. On Neighborhood Connector, Bicycle Boulevard, and Local Access, a traffic impact may be considered potentially noncompliant if the existing ADT is:
    1) Greater than 1,350, and there is a net increase of 25 trips or more in ADT due to project related traffic;
    2) The ADT is greater than 750 but less than 1,350, and the project related traffic increases the ADT by 12.5% or the ADT becomes 1,350; or
    3) The ADT is less than 740, and the project related traffic increases the ADT by 25%.

The roadway ADT analysis was conducted under cumulative with project conditions. To determine net Project added traffic, a select zone analysis was conducted using the Menlo Park model under cumulative with project conditions and existing conditions. As shown on Table 27, the Project would generate non-compliance at the following roadway segments:

- Willow Road, east of Durham Street
- Willow Road, east of Blackburn Avenue
- Middlefield Road, south of Willow Road
- Marsh Road, east of Bohannon Drive
- O'Brien Drive, south of Willow Road
- O'Brien Drive, north of University Avenue
- Bay Road, north of Willow Road

Table 27
Roadway ADT Analysis

Roadway	Classification	Average Daily Traffic			Compliance Analysis	
		Existing [1]	Cumulative with Project	Net Increase in Project Traffic	Applicable Criteria	Compliant?
Willow Road, east of Durham Street	Avenue - Mixed Use	28,875	31,400	550	7.B.1(1)	**No**
Willow Road, east of Blackburn Avenue	Avenue - Mixed Use	22,962	24,050	410	7.B.1(1)	**No**
Middlefield Road, north of Willow Road	Avenue - Mixed Use	18,188	20,037	64	7.B.1(1)	Yes
Middlefield Road, south of Willow Road	Avenue - Mixed Use	21,058	23,687	285	7.B.1(1)	**No**
Marsh Road, east of Bohannon Drive	Mixed Use Collector	33,128	39,213	669	7.B.2(1)	**No**
Hamilton Avenue, south of Madera Avenue	Neighborhood Collector	2,866	3,589	265	7.B.2(3)	Yes
O'Brien Drive, south of Willow Road	Mixed Use Collector	7,409	13,942	2,600	7.B.2(2)	**No**
O'Brien Drive, north of University Avenue	Mixed Use Collector	4,635	16,232	6,457	7.B.2(3)	**No**
Adams Drive, north of University Avenue [2]	Mixed Use Collector	3,265	3,763	84	7.B.2(3)	Yes
Bay Road, north of Willow Road	Neighborhood Collector	6,362	12,637	841	7.B.2(2)	**No**

Notes:
[1] Average Daily Traffic data was obtained from the City of Menlo Park
[2] Average Daily Traffic was estimated using factors derived from ADT data and peak hour counts
Bold indicates a project-generated non-compliance for study roadway

Internal Site Access, Circulation, and Parking

Appendix H includes the analysis of the main Willow Village site as well as the Hamilton parcels. The site plan review evaluated the internal site's intersection operations, potential queuing issues, and general site access and circulation for the proposed seven new internal streets, 14 parking garage driveways, and 20 new intersections. The results of the level of service analysis show that the intersection of Driveway B & East Loop Road would operate at LOS D during the AM peak hour. Vehicles turning left out of Driveway B would be expected to experience an average delay of 31 seconds while waiting for a sufficient opening on East Loop Road. During the AM peak hour, approximately 101 vehicles (16 heading eastbound and 85 heading westbound) would be expected to exit the garage, which would be one to two vehicles per minute. Therefore, although exiting drivers would experience some wait time, operations at Driveway B are expected to be adequate. The results of the queuing analysis show that the intersection of Hamilton Avenue/Main Street & Willow Road is expected to have insufficient turn lane storage to accommodate the anticipated traffic volumes under near-term plus project conditions. However, it is assumed that vehicles would choose to instead enter the project site via Park Street. Hexagon recommends the following regarding the internal project circulation:

Circulation Related Recommendations

- To prevent southbound queues from spilling back onto Willow Road on Park Street and Main Street, Hexagon recommends coordinating the adjacent signals.

Sight Distance Related Recommendations

- As discussed under Mitigation Measure TRA-3 (see Transportation Chapter of the draft EIR), prior to issuance of the building permit for the North Garage, the applicant shall revise the access design to provide adequate sight distance for the eastern driveway or other design solutions to reduce hazards to a less than significant level, to the satisfaction of the Public Works Director. Potential solutions that would reduce hazards to a less than significant level include restricting the eastern driveway to inbound vehicles only or prohibiting exiting left turns, modifying landscaping or relocating the driveway to the west to allow for adequate sight distance for exiting vehicles, or installing an all-way stop or signal. If driveway A were restricted to inbound vehicles only, all outbound vehicles would use Driveway B, which would provide adequate sight distance for vehicles exiting the north office garage. Driveway B might need multiple exiting lanes to limit queuing inside the garage for exiting vehicles. Alternatively, Driveway A could be moved farther west on East Loop Road so that adequate sight distance could be provided.
- Prior to final design, the project applicant should ensure that landscaping and vegetation would not obstruct visibility at the parking garage driveways.
- Hexagon recommends including 30 feet of red curb on both sides of all garage driveways to prevent vehicles from parking and obstructing the vision of exiting drivers.
- If vehicles exiting the garages cannot see oncoming pedestrians on the sidewalk, Hexagon recommends installing warning signs to alert pedestrians when vehicles are exiting the garages.
- If any driveways are moved from their position on the current site plan, sight distance should be reevaluated.

Parking Garage Circulation Related Recommendations

- Prior to final design, it is recommended that all driveway widths meet the City's requirements.
- At garage driveways where gates and garage doors are proposed, Hexagon recommends conducting an operational analysis to ensure that gate opening and closing times would not create queuing issues or cause vehicles to spill onto the roadway network.
- Prior to final design, the residential parking on level P1 of building RS2 should be shown to be gated and separated from the retail parking on levels 1 and 2. In addition, the roll-up gate in building RS3 should be clearly shown to separate the retail parking in level B1 and the residential parking in level B2.
- It is recommended that all drive aisle and parking stall widths meet the City's requirements.
- It is recommended that adequate turnaround space is provided at all dead-end drive aisles.

Parking Related Recommendations

- If individual vehicles are not able to be retrieved in the tandem puzzle parking, the tandem spaces should be assigned to one residential unit.
- Prior to final design, Hexagon recommends that the required number of ADA and EV parking spaces be provided in all parking garages.

Pedestrian Related Recommendations

- Hexagon recommends that a crosswalk is provided at the intersection of Center Street & East Street and that midblock crosswalks are provided on Center Street and Park Street to reduce block size and improve pedestrian convenience.

Hamilton Parcels Recommendations

- The Hamilton Avenue Parcels are located within the C-2-S zoning district, which per Menlo Park Municipal Code Section 16.37(7), will have parking requirements established by the planning commission for each development. The Hamilton Avenue Parcel North proposes total potential development up to 22,402 square feet and 93 spaces. The Hamilton Avenue Parcel South proposes total development of 5,760 s.f. and 13 spaces. It is recommended that the project applicant confirm that sufficient parking is provided for the proposed total development as part of future architectural control and use permit applications with the City.

Willow Village Master Plan Project

Technical Appendices

April 5, 2022

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Appendix B
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Air Quality Technical Report

D R A F T

Prepared for
Peninsula Innovation Partners, LLC

Prepared by
Ramboll US Corporation
San Francisco, California

Project Number
1690010687

Date
March 2022

CEQA AIR QUALITY, GREENHOUSE GAS AND HEALTH RISK ASSESSMENT TECHNICAL REPORT

WILLOW VILLAGE

MENLO PARK, CALIFORNIA

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Acronyms and Abbreviations

AB32	Assembly Bill 32
ACC	Advanced Clean Cars
AERMET	American Meteorological Society/Environmental Protection Agency Regulatory Model Meteorological Processor
AERMOD	USEPA's atmospheric dispersion modeling system
APCO	Air Pollution Control Officer
ARB	(California) Air Resources Board
ASF	Age Sensitivity Factor
BAAQMD	Bay Area Air Quality Management District
BMP	Best Management Practice
Cal/EPA	California Environmental Protection Agency
CalEEMod	California Emissions Estimator Model
CAP	Criteria Air Pollutant
CEQA	California Environmental Quality Act
CH_4	methane
City	City of Menlo Park, California
CO	carbon monoxide
CO_2e	carbon dioxide equivalents
cREL	chronic reference exposure level
CPF	Cancer Potency Factor
DPF	Diesel Particulate Filter
DPM	Diesel Particulate Matter
EIR	Environmental Impact Report
EV	electric vehicle
EMFAC	EMission FACtor model
eVMTs	Electric Vehicle Miles Traveled
GHG	Greenhouse Gas
g/trip	grams per trip
g/s	gram per second
HRA	Health Risk Assessment
HQ	hazard quotient
KPAO	Palo Alto Airport
KSQL	San Carlos Airport
kWh	kilowatt-hour
Lbs	pounds
m	meter
MAF	modeling adjustment factor
MSS	Mobile Source Strategy
MEISR	Maximally Exposed Individual Sensitive Receptor
NED	National Elevation Dataset
NMHC	non-methane hydrocarbon
N_2O	nitrous oxide
NOx	oxides of nitrogen
OEHHA	Office of Environmental Health Hazard Assessment
OFFROAD2011	(ARB) In-Use Off-Road Equipment model

OPR	Office of Planning and Research
PCE	Peninsula Clean Energy
PG&E	Pacific Gas & Electric
PHEV	plug-in hybrid vehicles
PM	Fine Particulate Matter
$PM_{2.5}$	Fine Particulate Matter Less than 2.5 Micrometers in Aerodynamic Diameter
PM_{10}	Particulate Matter Less than 10 Micrometers in Aerodynamic Diameter
Ramboll	Ramboll US Corporation
ROG	reactive organic gases
RPS	Renewables Portfolio Standard
SB	Senate Bill
SCAQMD	South Coast Air Quality Management District
TAC	Toxic Air Contaminant
TDM	Transportation Demand Management
TOG	total organic gases
tpy	tons per year
$\mu g/m^3$	microgram per cubic meter
USEPA	United States Environmental Protection Agency
USGS	United States Geological Survey
VMT	vehicle miles traveled
VOC	volatile organic compound
ZEV	zero-emissions vehicles

1. INTRODUCTION

Ramboll US Consulting Inc. conducted an air quality and greenhouse gas (GHG) assessment for the construction and operation of the proposed mixed-use development at Willow Village in Menlo Park, California (referred to hereafter as the “Proposed Project” or “Project”) for Peninsula Innovation Partners, LLC. The scope and methods used in this assessment are consistent with recommended analyses for projects requiring review under California Environmental Quality Act (CEQA). The CEQA analysis in this report addresses criteria air pollutants (CAP) and CAP precursors, GHGs, toxic air contaminants (TACs) and local air quality and health impacts associated with the Project construction and operation at off-site sensitive receptors. For informational purposes, this report also includes analysis of the health impacts associated with Project construction and operation at on-site sensitive receptors. The analysis in this report will be independently reviewed by the City of Menlo Park, California (referred to as the "City") and peer reviewed by ICF, the City's environmental consultant for possible incorporation into the Environmental Impact Report (EIR) for the Project.

This emissions and Health Risk Assessment (HRA) methodology document describes the scope and methodology for evaluation of air quality, GHG, and health impacts from Project construction and operational emissions, and cumulative impacts at on-site and adjacent off-site sensitive receptors. This document also describes the thresholds of significance that were used, which were consistent with the 2017 Bay Area Air Quality Management District (BAAQMD) CEQA Air Quality Guidelines where appropriate.

1.1 Project Description

1.1.1 Existing Conditions

The main Project site is a 59-acre plot adjacent to Willow Road between the Dumbarton Corridor and O’Brien Avenue. The Project site also includes three parcels west of Willow Road on both sides of Hamilton Avenue, referred to as the Hamilton Avenue Parcels North and South. The main Project site includes 20 existing office, commercial, industrial and warehouse buildings totalling approximately 1,000,000 square feet, along with associated parking. One emergency diesel generator is currently on-site. The area in the general vicinity of the Project consists primarily of residential, mixed-use, commercial, industrial, and educational/institutional uses. The educational/institutional buildings of Mid-Peninsula High School’s campus are adjacent to the Project site to the southwest. To the west is a residential neighborhood. South of the main Project site are mixed-use commercial, industrial, and residential buildings. Though there are commercial operations in the general vicinity of the Project site, there is a lack of amenities in the site vicinity such as grocery stores, pharmacies, and public gathering spaces. **Figure 1** shows the location and boundary of the Proposed Project in Menlo Park and **Figure 2** shows sensitive receptor locations.

1.1.2 Proposed Project

The Proposed Project on the main Project Site would be a mixed-use development that would include up to 1,730 residential units, up to 200,000 square feet of retail uses, a 193-room hotel, up to 1,600,000 square feet of space for office and accessory uses consisting of up to 1.25 million square feet of office uses and the balance (350,000 square feet of office use is maximized) of accessory uses, a publicly accessible park, a dog park, a town square, and

associated parking spaces.[1] The proposed land use summary is shown in **Table 1**. The main Project Site would consist of three planning districts: The Town Square District, the Residential/Shopping District, and the Campus District. The Town Square District would allow space for a range of activities and events from recreation to seasonal markets. The Residential/Shopping District would provide multifamily rental residences and parking, retail, grocery, and park space. The Campus District is planned to consist of office space organized around a pedestrian promenade as well as accessory space and public-serving retail amenities. The Project also would include the re-alignment of Hamilton Avenue, relocation of the existing services station and addition of retail area on the Hamilton Avenue Parcels North and South. The Project Applicant has committed to powering all buildings entirely by electricity. Natural gas may be used for commercial culinary uses only, as allowed under Menlo Park building code.

Project construction would include demolition of all existing structures (including existing buildings, parking spaces, and other features on the main Project Site) and removal of the generator on-site. It is assumed that the earliest-constructed residential buildings would be occupied during the construction activities associated with the subsequent construction activities and, even though not required by CEQA, future residents are considered as on-site receptors for purposes of this air quality analysis.

The Project would also include off-site improvements. To serve the Project's requested electrical demand, four 12 kilovolt feeders need to be installed from Ravenswood Substation. This includes work at the substation itself, which is northeast of the Project site along Bayfront Expressway, and installing the underground feeders from the substation to the Project. The Project would also include intersection improvements in the form of signal changes, lane stripping, and sidewalk improvements.

Land uses for the existing conditions to be demolished and the Proposed Project are shown in **Table 1**.

1.2 Objective and Methodology

The purpose of the air quality and GHG analysis is to assess potential criteria air pollutant and GHG emissions, as well as health risks and hazards that would result from the construction and operation of the Proposed Project consistent with guidelines and methodologies from air quality regulatory agencies, specifically, the BAAQMD, the California Air Resources Board (ARB), the California Office of Environmental Health Hazard Assessment (OEHHA), and the US Environmental Protection Agency (USEPA). The analysis in this report followed the BAAQMD 2017 CEQA Guidelines where appropriate. In addition to the evaluation of an individual project, the CEQA Guidelines recommend an analysis of cumulative impacts when the project's incremental effect is cumulatively considerable. (14 Cal. Code Regs., § 15130, subd. (a).) For an air quality HRA, the cumulative analysis is performed when a project is in an area that includes other air emissions sources within a "zone of influence" of 1,000 feet surrounding the project. This report evaluates the risks and hazards associated with Project construction and operational activities on on-site receptors,

[1] Only actively programmed open space, such as parks, were evaluated in this analysis. The remainder of the open space would not generate new emissions outside emissions covered in other land uses.

off-site receptors and the cumulative impact to both on-site and off-site sensitive receptors from Project construction and surrounding sources.

1.2.1 Resources

Ramboll directly or indirectly relied on emissions estimation guidance from government sponsored organizations, government-commissioned studies of energy use patterns, Project-specific studies, and emissions estimation software as described below. In cases noted below, third-party studies were also relied upon to support analyses and assumptions made outside of the approach described above. Where Project-specific data estimates were available, they were used preferentially instead of model defaults. The methodology used to calculate this emissions inventory is described in detail in the following sections, including citations to information used in this inventory.

1.2.1.1 CalEEMod

Ramboll primarily utilized the methodology from the California Emissions Estimator Model (CalEEMod) version 2020.4.0 to assist in quantifying the criteria pollutant emissions in the inventories presented in this report for the Project. CalEEMod is a statewide program designed to calculate both criteria and GHG emissions from development projects in California. This model was developed under the auspices of the South Coast Air Quality Management District (SCAQMD) and received input from other California air districts. It is currently supported by numerous lead agencies for use in quantifying the emissions associated with development projects undergoing environmental review. CalEEMod utilizes widely accepted models for emission estimates combined with appropriate default data that can be used if site-specific information is not available.

CalEEMod provides a platform to calculate annual operational criteria pollutant emissions from a land use development project. Specifically, the model aids the user in estimating operational emissions associated with a fully built out land use development. This includes emissions from on-road mobile vehicle traffic associated with the land uses, emissions from landscaping equipment and other off-road mobile sources, emissions from natural gas usage in the buildings, emissions associated with electricity usage in the buildings and electricity usage associated with water usage. This also includes emissions associated with solid waste disposal.

CalEEMod uses sources such as the USEPA AP-42 emission factors,[2] ARB's approved on-road and off-road equipment emission models such as the EMission FACtor model (EMFAC) and In-Use Off-Road Equipment model (OFFROAD), and studies commissioned by California agencies such as the California Energy Commission and CalRecycle. OFFROAD is an emission factor model used to calculate emission rates from off-road mobile sources (e.g., construction equipment, agricultural equipment) (CARB 2011a). The off-road diesel equipment emission factors used by CalEEMod are based on the ARB OFFROAD2011 program. ARB has released an updated OFFROAD version, OFFROAD2017, that includes updates to population information and emission factors. OFFROAD2017 was used in this analysis. EMFAC is an emission factor model used to calculate emissions rates from on-road

[2] The USEPA maintains a compilation of Air Pollutant Emission Factors and process information for several air pollution source categories. The data is based on source test data, material balance studies, and engineering estimates. Available at: https://www.epa.gov/air-emissions-factors-and-quantification/ap-42-compilation-air-emissions-factors. Accessed: October 2021.

vehicles (e.g. passenger vehicles) (CARB 2011b). The emission factors used by CalEEMod for on-road vehicles are based on the ARB EMFAC2017 program. ARB recently released EMFAC2021, an update to EMFAC2017, that includes various changes, notably the incorporation of USEPA and ARB regulations and standards (e.g., Advanced Clean Trucks and the Heavy Duty Omnibus). EMFAC2021 was incorporated into this analysis.

In addition, CalEEMod contains default values and existing regulatory methodologies to use in each specific local air district or county. Appropriate state-wide default values can be utilized if regional default values are not defined. Ramboll used default factors for San Mateo County for the emissions inventory, unless otherwise noted in the methodology descriptions below.

1.3 Thresholds for Evaluation

1.3.1 Criteria Pollutants and Precursors

Project construction and operation emissions of CAPs and precursors were evaluated and compared with the BAAQMD's 2017 CEQA Guidelines thresholds of significance. Project operational emissions at full buildout were compared to the annual and daily operational thresholds of 54 pounds (lbs) per day and 10 tons per year (tpy)of Reactive Organic Gases (ROG), oxides of nitrogen (NO_X), and $PM_{2.5}$ and 82 lbs per day and 15 tpy of fine particulate matter less than 10 micrometers in aerodynamic diameter (PM_{10}). Project construction emissions were compared to the average daily construction thresholds of 54 lbs per day of ROG, NO_X, and $PM_{2.5}$ and 82 lbs per day of PM_{10}. BAAQMD thresholds of significance for construction-related PM_{10} and $PM_{2.5}$ mass emissions apply to exhaust emissions only and do not include fugitive dust emissions, which are addressed through BAAQMD's Best Management Practices (BMPs). Because construction would overlap with operations of other components of the Project, emissions during construction were combined with the operational emissions that are expected to occur during that calendar year and then compared to operational thresholds.

As noted above, the BAAQMD threshold for fugitive dust emissions during construction is compliance with its BMPs.

CEQA also requires evaluation of whether the Project would conflict with or obstruct implementation of the applicable air quality plan. Analysis of the Project's consistency with the applicable air quality plan is shown in Appendix A.

1.3.2 Greenhouse Gases

BAAQMD's 2017 CEQA Guidelines do not recommend a threshold for GHG emissions from construction. BAAQMD recommends quantifying and disclosing construction GHG emissions. Emissions from Project construction are estimated and disclosed.

BAAQMD's 2017 CEQA Guidelines include a recommendation for a GHG emissions threshold for operations for the year 2020. Since the project will be built out after 2020, this operational threshold is not appropriate for use. Due to lack of a recommended threshold from BAAQMD, the Project is evaluated against a two-tiered threshold that is based on guidance from expert agencies, including CARB and the Office of Planning and Research (OPR).

Building emissions, such as energy use, water use, area sources, and solid waste, are evaluated against a net zero threshold because a project that does not alter the existing environment has no impact on the environment.

GHG impacts from vehicles are evaluated using the City's VMT threshold. This threshold provides information on whether the project is consistent with applicable plans and goals to reduce GHG emissions by reducing VMT, including Plan Bay Area. In addition, using the same VMT threshold for both transportation and mobile-source GHG impacts ensures consistency throughout the EIR.

CEQA also requires evaluation of a project's consistency with an applicable plan, policy or regulation adopted for the purpose of reducing environmental impacts, including plans adopted to reduce the emissions of GHGs. The analysis of the Project's consistency with applicable plans to reduce GHG emissions is shown in Appendix B.

1.3.3 Health Risks and Hazards

The HRA evaluates the estimated cancer risk, non-cancer chronic and acute hazard index (HI), and fine particulate matter less than 2.5 micrometers in aerodynamic diameter ($PM_{2.5}$) concentration associated with construction and operation of the Project. The cumulative analysis estimates the total excess lifetime cancer risks, non-cancer HI, and $PM_{2.5}$ concentrations that are attributable to off-site rail, mobile, and stationary sources within the 1,000-foot "zone of influence" in addition to effects from the construction and operation of the Project.

The HRA evaluates potential sensitive receptor locations including "people—children, adults, and seniors—occupying or residing in:

- Residential dwellings, including apartments, houses, condominiums;
- Schools;
- Daycare centers;
- Parks;
- Hospitals; and
- Senior-care facilities." (BAAQMD 2012a)

To meet these objectives, this HRA was conducted consistent with the following guidance:

- Air Toxics Hot Spots Program Risk Assessment Guidelines (Office of Environmental Health Hazard Assessment [OEHHA] 2015a);
- May 2017 BAAQMD CEQA Guidelines (BAAQMD 2017);
- BAAQMD Recommended Methods for Screening and Modeling Local Risks and Hazards (BAAQMD 2012a); and
- BAAQMD Health Risk Assessment Modeling Protocol (BAAQMD 2020c).

The results of the construction and operational health risk analyses are compared with the BAAQMD 2017 CEQA significance thresholds for single sources separately. Then the impacts from construction and operations combined, during the time that construction and operations would overlap, are compared to the single source thresholds. Finally, the maximum scenario for the combined construction and operational impacts are combined with the impacts of off-site sources of toxic air contaminants TACs and compared against the BAAQMD 2017 CEQA cumulative thresholds. The thresholds are:

Single Source Impacts:

- An excess lifetime cancer risk level of more than 10 in one million;
- Non-cancer chronic and acute HIs greater than 1.0; and
- An incremental increase in the annual average $PM_{2.5}$ of greater than 0.3 micrograms per cubic meter ($\mu g/m^3$).

Cumulative Impacts:

- An excess lifetime cancer risk level of more than 100 in one million;
- A chronic non-cancer HI greater than 10.0; and
- An incremental increase in the annual average $PM_{2.5}$ concentration of greater than 0.8 $\mu g/m^3$.

As discussed in detail in **Section 3**, health impacts from the Project are based on emissions of TACs from diesel and gasoline combustion. Diesel particulate matter (DPM) does not have an acute non-cancer toxicity value, so an acute HI from diesel exhaust is not estimated. BAAQMD does not estimate acute HI from roadways in its Roadway Screening Analysis Calculator (BAAQMD 2015) since impacts from all roadways were well below thresholds.[3] Therefore, acute HI from Project traffic also was not estimated.

We understand the City received guidance from BAAQMD that $PM_{2.5}$ from fugitive dust from earth movement activity during construction should be included in the comparison to the $PM_{2.5}$ concentration threshold, which contradicts previous guidance Ramboll received from BAAQMD. To be conservative, fugitive dust is included in this analysis. Additionally, resuspended road dust from Project traffic is included in this analysis.

1.3.4 Odor

To evaluate odor impacts, the ConnectMenlo EIR identifies a three-pronged approach "[r]eview of projects using BAAQMD's odor screening distances during future CEQA review, implementation of the [General Plan Policies], and compliance with BAAQMD Regulation 7 would ensure that odor impacts are minimized and are *less than significant*." (City of Menlo Park 2016)

The Project was evaluated against this three-prong approach in **Section 3**.

1.4 Document Organization

This scope of work is divided into seven sections as follows:

Section 1.0 – Introduction: describes the purpose and scope of the air quality analysis, the objectives and methodology used, and outlines the document organization.

Section 2.0 – Criteria Air Pollutant and Greenhouse Gas Emission Estimates: describes the methods used to estimate CAP, TAC, and GHG emissions from the Project, and includes the Project CAP and GHG emissions results and comparison to the applicable thresholds of significance.

[3] A previous version of BAAQMD's tools for estimating health impacts from roadways stated that the maximum acute and chronic HI from all traffic on roadways was well below 0.1, so screening values were not provided by BAAQMD. In the current version of its tools, acute and chronic HI are not provided.

Section 3.0 – Estimated Air Concentrations: discusses the air dispersion modeling, the selection of the dispersion models, the data used in the dispersion models (*e.g.*, terrain, meteorology, source characterization), and identifies receptor locations evaluated in the HRA.

Section 4.0 – Carbon Monoxide Analysis: discusses evaluation of potential carbon monoxide impacts.

Section 5.0 – Odor Analysis: discusses potential odor sources and the evaluation of the Project against the three-pronged approach proposed in the ConnectMenlo EIR.

Section 6.0 – Health Risk Assessment : provides an overview of the methodology for conducting the HRA, and includes the Project HRA results and comparison to the BAAQMD threshold of significance.

Section 7.0 – Cumulative Analysis: summarizes the approach used in the HRA cumulative analysis. The analysis of criteria air pollutants and GHG emissions is inherently cumulative.

Section 8.0 – References: includes a listing of all references cited in this report.

2. CRITERIA AIR POLLUTANT, TOXIC AIR CONTAMINANT, AND GREENHOUSE GAS EMISSION ESTIMATES

Project and net incremental (Project minus Existing) CAP, TAC, and GHG emissions from Proposed Project construction and operational sources were estimated. Methodologies used to calculate CAP, TAC, and GHG emissions are summarized below.

2.1 Existing Conditions Calculation Methodology

All CAP, TAC and GHG emissions for existing operations on the Project site were calculated for year 2019 as data from 2020 and 2021 would not be representative of normal operations due to reduced activity resulting from the COVID-19 pandemic. Emissions estimates include activity in existing buildings slated for demolition, use of emergency generators, and traffic associated with these buildings. Existing land uses at the Project site include offices, warehouses, and parking lots, as well as retail at the Hamilton Avenue Parcels North and South. Emissions from existing offices, warehouses, and parking lots slated for demolition were estimated using CalEEMod with default data assumptions and data provided by the Project Applicant. The carbon intensity factor was adjusted for 2019 as described in **Section 2.3.4.1**. Existing retail, located at the Hamilton Parcels North and South, were not included in the existing emissions calculation, which is conservative because any retail that is replaced would likely be more efficient and less emissions intensive than the existing uses due to stricter building codes. Existing emergency generator information was provided by the Project Applicant. Existing operational traffic information was provided by the Transportation Engineer.[4]

2.2 Calculation Methodologies for Construction Emissions

A detailed construction equipment list was provided by the Project Applicant, which includes the type, quantity, construction schedule and hours of operation anticipated for each piece of equipment for each year of construction.[5] This data was used to estimate construction emissions using calculation methodologies consistent with CalEEMod2020.4.0. It was assumed that all construction off-road equipment is diesel powered except for those specified as electric powered by the Project Applicant. All diesel-fueled off-road equipment emissions of PM_{10} were assumed to be DPM, which is a TAC.

The Proposed Project construction is assumed to start after project entitlements and last roughly five years.[6] A mix of construction equipment would operate over the course of any given day. **Table 2** shows a summary of the expected construction schedule provided by the Project Applicant. Construction of the Project includes construction on-site and at the off-

[4] The Transportation Engineer, Hexagon, provided daily Project VMT and trip rates on October 5, 2021.

[5] This schedule and equipment list is subject to change as Project details evolve. A conservative construction start date and schedule was analyzed to identify maximum impacts of Project construction.

[6] Construction is conservatively assumed to start December 15, 2021. The analysis uses a start date that is earlier than possible to be sure that the impact analysis is conservative. Emissions and impacts would decrease the later the actual construction start date is due to the incorporation of cleaner equipment into the construction fleet with time.

site improvements.[7] Construction emissions were calculated for off-road equipment, on-road vehicles, and off-gassing activities.

As discussed in **Section 1.3.1**, BAAQMD thresholds for fugitive dust are compliance with its Best Management Practices. However, as discussed in **Section 1.3.3**, emissions from fugitive dust are included in the estimation of $PM_{2.5}$ concentration.

2.2.1 Construction Phasing

The analysis described here does not rely on the default construction phasing schedule from CalEEMod, as a detailed schedule was provided by the Project Applicant. **Table 2**, provided by the Project Applicant, summarizes the expected construction schedule.

This analysis assumes that construction of buildings will overlap, that the complete build out would occur in roughly five years and that the buildings constructed would be occupied and fully operational as soon as construction of each building is completed. This is conservative because occupancy and operation of each building would likely ramp up over time, rather than immediately upon completion of construction. The analysis also assumes that operational emissions from completed buildings would overlap with construction emissions from buildings that are still being constructed.

The construction program would commence after existing uses have vacated from the Willow Village site.[8,9] The preliminary construction schedule assumes that construction would begin after project entitlements and would last for roughly five years, as indicated in **Table 2**. Construction diesel equipment would be expected to operate between the hours of 7 AM to 6 PM, consistent with the Menlo Park noise ordinance,[10] with construction with heavy duty equipment exceeding 60 decibels (dBA) occurring Monday through Friday from 8 AM to 6 PM. However, equipment would not be expected to run its engine during this entire period. The equipment list for the construction of the Campus and Town Square Districts is shown in **Table 3**. The equipment list for the construction of the Residential/Shopping District is shown in **Table 4**.

Initial construction activities affecting the full site area include demolition of the existing buildings and parking lots, followed by grading and utilities.

2.2.2 Emissions from Diesel Construction Off-road Equipment

Emissions calculations associated with off-road construction equipment were based on the construction schedule and the type, size, fuel type, tier level, hours of operation and

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[7] Off-site improvements considered are construction at the Ravenswood Substation, underground installation of the feeder lines, and intersection improvements that include diesel equipment operation.

[8] The existing dialysis center may remain open for several months after demolition commences. If this were to occur, changes to the analysis would be negligible. The dialysis center would not be considered a sensitive receptor based on BAAQMD guidance, so the impacts of construction on the dialysis center do not need to be analyzed. The existing operational emissions associated with the dialysis center remaining and the shifting of emissions from the demolition of the dialysis center would not change conclusions as these would be minor changes.

[9] The analysis only considers net new retail in the Hamilton Avenue Parcels North and South, so does not consider the existing retail in this area to be vacated.

[10] Construction activity is assumed to start at 7 AM to conservatively consider more morning hours in the dispersion analysis, but no equipment will be operated that would violate the Menlo Park noise ordinance, which has low noise level thresholds for construction equipment prior to 8 AM.

utilization factor for each piece of equipment submitted by the Project Applicant. A Project-specific construction equipment list is presented in **Table 3** and **Table 4**.[11] For diesel-powered off-road construction equipment, methodologies consistent with CalEEMod are used to estimate emissions. Where Project-specific equipment information was not available, CalEEMod default horsepower were used. Load factors for each piece of equipment were based on the default load factor from CalEEMod.

The CalEEMod methodology for off-road construction equipment emissions relied on the ARB In-Use Off-Road Equipment model (OFFROAD2011) as well as specific emission factors by engine tier. However, ARB released a new version of its off-road emissions estimator model, OFFROAD2017, which was used to estimate emissions from the Project. Emission factors from OFFROAD2017 that are used in this analysis are shown in **Table 5**.

Emissions are calculated outside of CalEEMod using the same methodologies and emissions factors as CalEEMod. Emissions were calculated using the following formula, which is consistent with CalEEMod.

$$E_C = \sum (EF_C * HP * LF * Hr * Red * C)$$

Where:

E_C: off-road equipment exhaust emissions in pounds (lbs.)

EF_C: emission factor (g/bhp-hr) (CalEEMod defaults)

HP: equipment horsepower (CalEEMod defaults or Project-specific)

LF: equipment load factor (CalEEMod defaults)

Hr: equipment operating hours

Red: reduction from Diesel Particulate Filter (DPF), as applicable

C: unit conversion factor

Unmitigated emissions were based on fleetwide average emission factors from OFFROAD2017, as shown in **Table 5**. For mitigated emissions, emission factors from CalEEMod associated with Tier 4 final engines are used for 95 percent of the equipment operation before residents move on-site in Year 5 and 98 percent of the equipment after residents move on-site in Year 5. The other 5 percent and 2 percent of equipment (before and after on-site residents, respectively) are assumed to have Tier 2 engines. Mitigated emission factors are based on the weighted average of 95 percent and 98 percent (before and after on-site residents, respectively) Tier 4 final emission factors and 5 percent and 2 percent (before and after on-site residents, respectively) Tier 2 emission factors, since all equipment may not be available as Tier 4 final. This equates to equipment with Tier 2 engines or better operating for up to 618,028 horsepower-hours before residents occupy the on-site buildings and up to 34,716 horsepower-hours after residents occupy the on-site buildings.

[11] Emissions are not estimated for intersection improvements without diesel equipment use. Emissions are assumed to be minor since the activity duration is short and trucks would not be idling at the intersection for long periods of time. Travel to the site is assumed to be included in the worker trip counts.

2.2.3 Emissions from Electric Construction Equipment

GHG emissions from the use of electrical off-road equipment were estimated based on type and usage of each equipment. The Project Applicant provided the equipment that will be electrically powered. Yearly electricity consumption by construction equipment was estimated to calculate emissions by multiplying the carbon dioxide equivalents (CO_2e) intensity factor with the electricity consumption for each year. Emissions from electric construction equipment are shown in **Table 6**.

2.2.4 On-road Construction Trips

Construction trip rates were provided by the Project Applicant for each general area. Construction trips by area are shown in **Table 7a**. Trip lengths are shown in **Table 7b**. For demolition and grading hauling trip generation rates, total haul truck trip counts were provided by Project Applicant.

Emission factors from EMFAC2021,[12] the ARB Emission Factors model for on-road emissions, were used for emissions of CAPs and GHGs. The emission factors used for on-road construction trips of the Proposed Project cover the anticipated years of construction. EMFAC2021 incorporates the Pavley Clean Car Standards and the Advanced Clean Cars (ACC) program.

Running exhaust, running loss, tire wear, and brake wear emission factors were estimated with a gram/mile factor. These emissions were calculated as shown below:

$$E_M = \sum (EF_M * VMT)$$

Where:

VMT or Vehicle Miles Traveled: Trip Length*Trip Number

EF_M: emission factor (g/mile) from EMFAC2021

Emissions from vehicle idling exhaust, starting exhaust, and evaporative emissions were estimated with a gram/trip emission factor. Idling emission factors were only estimated for heavy duty trucks as idling emissions occur during extended idling events while the truck is operating but not traveling any significant distance (e.g., during loading and unloading). In EMFAC2021, an extended idling event is defined as "a continuous segment of vehicle activity that meets three criteria: all instantaneous vehicle speeds being lower than 5 mph, the total distance of less than 1 mile, and the total duration of more than 5 minutes" (CARB, 2021). EMFAC takes account of idling emissions from light duty vehicles and other vehicle types in running emissions estimates. These emissions were estimated as shown below:

$$E_T = \sum (EF_T * Trip\ Number)$$

Where:

EF_T = emissions factor (g/trip) from EMFAC2021.

[12] ARB has published off-model adjustment factors to account for the "Safer Affordable Fuel-Efficient Vehicles Rule Part One: One National Program" (SAFE 1) adopted by the USEPA and the National Highway Traffic Safety Administration (NHTSA). These adjustment factors will not be incorporated into this analysis as this regulation is currently under litigation and the USEPA and NHTSA have proposed rulemakings to repeal SAFE 1.

Trip Number = trips provided by Project Applicant

Idling time is modeled to be consistent with California Airborne Toxics Control Measure (ATCM) to limit diesel-fueled commercial motor vehicle idling (California ARB 2016).

Road dust emissions are calculated using ARB methodology. The on-road entrained dust emission factor derivation is shown in **Table 8**.

2.2.5 Fugitive Dust

Fugitive dust contributes to PM_{10} and $PM_{2.5}$ emissions and is generated by the various activities occurring at the Project site. The following subsections describe the methodology used to calculate fugitive dust emissions from Project activities.

Fugitive dust emissions are not included in the comparison to thresholds for mass emissions as these thresholds for construction are for exhaust only. However, to be conservative, fugitive dust emissions are included in the estimation of $PM_{2.5}$ concentration based on recent guidance provide to the City by the BAAQMD.

2.2.5.1 Demolition

Fugitive dust emissions from mechanical dismemberment and debris loading during demolition were estimated using CalEEMod methodology and assumptions. The emission factor is calculated on a per-ton of building waste weight. Building waste weight was estimated based on the volume of building waste from demolition provided by the Project Applicant. Mitigated emissions assume a 55% reduction due to watering two times a day. Dust emissions from demolition are presented in **Table 9a.**

2.2.5.2 Grading

Fugitive dust emissions from grading equipment (i.e., graders and scrapers) occur during the grading and utility phases. Grading emissions were estimated using CalEEMod methodology and assumptions. The emission factor for grading is calculated on a per-VMT basis. Equipment VMT was calculated using the maximum area disturbed per day, based on Project-specific data and CalEEMod default assumptions. Mitigated emissions assume a 55% reduction due to watering two times a day. Grading emissions are presented in **Table 9b.**

2.2.5.3 Material Loading

Fugitive dust from material loading activities includes the unloading of materials construction and loading of soil onto the haul trucks during the grading and utilities excavation phases. Material loading fugitive dust emissions were estimated using CalEEMod methodology and assumptions. The emission factor for material loading is calculated on a per-ton basis. Material loaded in cubic yards is based on Project-specific data. Mitigated emissions assume a 55% reduction due to watering two times a day. Emissions from material loading are presented in **Table 9c.**

2.2.6 Watering for Dust Control

GHG emissions associated with the electricity consumed during watering for construction dust control were calculated based on the total water consumption, electricity used for watering, and the electricity carbon intensity for water supply, distribution and treatment over the construction period using CalEEMod equivalent methodologies. Total water consumption is from the Project Applicant. The electricity intensity used is Pacific Gas and

Electric's (PG&E) GHG emission factor.[13] Emissions from construction water use are presented in **Table 10**.

CAP and GHG emissions from water trucks operation were calculated using EMFAC2021 emission factors with other on-road construction trips as described in **Section 2.2.4**.

2.2.7 Architectural Coatings and Paving Off-Gas Emissions

Emissions from architectural coating and paving off-gas emissions were estimated using methodologies consistent with CalEEMod.

Paving emissions were based on the square footage of roadway and parking lots that need to be paved. This square footage was provided by the Project Applicant. The parking lot and the estimated square footage of roadways were summed together to determine the overall paved surface area assumed for the Project. This was used to calculate asphalt off-gassing emissions from the Project using default CalEEMod methodologies and factors, as shown in **Table 11**.

Architectural coating emissions were based on the square footage of different land uses as well as CalEEMod defaults regarding the amount of coated areas for the various land uses, as shown in **Table 12**. Unmitigated emissions from architectural coating during Project construction assumed compliance with BAAQMD paint volatile organic compound (VOC) regulations, while mitigated emissions assume that Project indoor painting during construction will utilize super-compliant coatings, which are paints that have been reformulated to exceed the SCAQMD's Rule 1113 (Architectural Coatings) requirements.

2.2.8 Construction CAP and GHG Emissions Summary

A summary of maximum annual average daily construction CAP emissions is shown in **Summary Table A**, below. More detail on unmitigated construction CAP emissions from the Project are summarized in **Table 13** and mitigated construction CAP emissions from the Project are summarized in **Table 14**. CAP emissions are reported in units of annual average daily emissions for each year of construction. For construction that will occur throughout the full year, annual emissions were averaged over 365 days of construction each year to give average daily emissions in lbs per day to get an average emission rate to compare against thresholds.[14] Construction will not occur throughout the full year during the first and last years of construction. In these scenarios, the annual construction emissions for the first and last years were averaged over the number of days construction will occur in the respective year. Mitigated emissions assume 95 percent of construction equipment before residents move on-site and 98 percent of construction equipment after residents move on-site has Tier 4 Final engines. The remaining equipment could have Tier 2 engines or better. Mitigated emissions also assume indoor painting during construction will utilize super-compliant coatings, which are paints that have been reformulated to exceed the SCAQMD's Rule 1113 (Architectural Coatings) requirements.

[13] The Project would receive its power from Peninsula Clean Energy. However, the electricity to pump water from its source to the Project is not under control of the Project, so the carbon intensity of electricity from PG&E powered electricity will be used.

[14] Activity is expected on most Saturdays. Even if 6 days per week (312 days per year) were used to average emissions, conclusions would not change.

Total GHG emissions for construction are summarized in **Table 15**. GHG emissions are reported in total metric tons of carbon dioxide equivalents.

Summary Table A. Summary of Maximum Annual Average Daily Construction CAP Emissions and Annual Construction GHG Emissions

	ROG	NO_X	PM_{10}	$PM_{2.5}$	CO_2e
	lb/day				MT/year
BAAQMD Threshold of Significance	54	54	82	54	N/A
Unmitigated Emissions	63	124	5.8	5.4	23,050
Exceed Threshold?	*Yes*	*Yes*	*No*	*No*	*N/A*
Mitigated Emissions	28	47	0.78	0.77	23,050
Exceed Threshold?	*No*	*No*	*No*	*No*	*N/A*
Source: Table 13, Table 14, and Table 15					

2.3 Calculation Methodologies for Operational Emissions

The net (Project minus Baseline) CAP, GHG and TAC operational emissions were evaluated. Sources of operational emissions from the existing site improvements (Baseline) and Project include operation of the buildings (area, energy, water, waste), emergency diesel generators, and on-road vehicles. The Baseline condition has one emergency diesel generator, and the Project would have thirteen emergency diesel generators.

Operational emissions that are concurrent with construction activities are presented by year in order to determine the combined construction and operational emissions for each year of construction, as discussed further in **Section 2.4**. Partial buildout emissions for both operational and mobile sources were scaled using the portion of each building area that becomes operational for each year of construction, as shown in **Table 16**.

Project and Baseline operational emissions were estimated using CalEEMod equivalent methodologies, as discussed below.

2.3.1 On-road Mobile Sources

Vehicles on the roadway emit CAPs, GHGs[15] and TACs in their exhaust and through evaporation, tire and brake wear, and fugitive dust from roadways. Mobile emissions were calculated using Project-specific trip generation and VMT by vehicle type and emission factors from EMFAC2021 for San Mateo County. To estimate annual emissions, trips and

[15] GHG emissions from mobile sources are estimated for informational purposes. GHG impacts are evaluated based on VMT, as discussed in Section 1.3.2.

VMT were multiplied by the relevant emission factor of pollutants. More details on this calculation are provided below. The fleet mix and trip generation for the Project, and the Campus District in particular, are unique to the Project due to the Project's unique Transportation Demand Management (TDM) program, trip cap, and vehicle fleets. Therefore, using generalized approaches in CalEEMod would not appropriately estimate emissions for the Project. Project specific information was used to develop emissions calculations using EMFAC2021 directly.

2.3.1.1 Vehicle Trips and VMT

Project traffic included residential and worker trips as well as service vehicle and vendor trips, and retail and commercial trips. The Transportation Engineer provided project-specific daily vehicle trips and vehicle miles travelled (VMT) for the Campus District and Baseline conditions at the Project site broken down by fleet category and the total daily vehicle trips and VMT in the Town Square and Residential/Shopping District broken down by land use. The trip rates and VMT of the Hamilton Avenue Parcels North and South were provided separately and combined with retail land use totals in the mobile emission calculations. These trip rates account for the Project-specific TDM program proposed for the Campus District, the Town Square District, and the Residential/Shopping District and the trip cap proposed for the Campus District.

We understand the Project's TDM program will reduce the amount of vehicle traffic generated by creating measures, strategies and incentives to encourage workers and residents to use alternate modes of transportation. The TDM measures include, but are not limited to the following measures:

- Improve Biking/Walking Network
- Provide Bicycle Amenities
- Improved public transit service (coordinated with San Mateo County Transit District)
- Car Share Program
- Tram Service
- Commuter Shuttles
- Parking Management
- Emergency Ride-Home Program
- Carpool and Vanpool Programs
- A Commute Assistance Center
- On-Site Housing

The Transportation Engineer provided weekday trip rates provided in Appendix C; therefore average daily trip rates for each land use and fleet category were estimated by scaling the Project specific trip rates with a ratio derived from CalEEMod weekday and weekend trip rates by land use. Average daily trip rates were calculated as a weighted average of the weekday and weekend trip rates. For partial buildout years, the trips and VMT were scaled by the proportion that each land use was operational during each year of construction, as shown in **Table 16.**

The weekday trip rates and daily VMT as provided by the Transportation Engineer are shown in **Table 17**. The trip rates and VMT are summarized in **Table 18** for baseline, full buildout and partial buildout.

Campus District. Trips and VMT for the Campus District were calculated using Project-specific fleet mixes and Project specific trip and VMT information from the Transportation Engineer.

The Project TDM program will employ several methods of reducing vehicle emissions including: commuter shuttles that take workers to and from work, a fleet of trams that move employees between campuses reducing the number of worker cars on the road, and on-demand vehicles that workers can summon for short trips around the campuses. These measures would reduce Campus District VMT. Specific trip rates and VMT were developed for each of these unique fleets and matched with fleet appropriate emission factors. Trams are proposed to operate at the same level of activity as the Baseline conditions; therefore, tram trips and VMTs are not considered in the emissions analysis because no net increase is proposed.

Campus District emissions were broken down into the following categories:

- Cars
- Trucks
- Shuttles
- On-Demand Vehicles

Cars, Trucks, Shuttles, and On-Demand Vehicle fleets are Project-specific fleets associated with the Campus District land use. It is anticipated that the shuttles, and on-demand vehicles will service all of Meta Platforms, Inc, ("Meta") campuses and often make multiple stops on one trip. Trip rates and VMT associated with the Campus District were provided by the Transportation Engineer.

Town Square District and Residential/Shopping District. Trips and VMT for the Town Square District and Residential/Shopping District were also provided by the Transportation Engineer and account for TDM reductions required by the City. These Mixed-Use trips and VMTs are assigned to the San Mateo County Mix fleet type, which includes all vehicle categories. The trips associated with the Hamilton Avenue Parcels North and South are added to the trips associated with the Town Square and Residential/Shopping Districts.

Existing site. Trips and VMT at the existing site were estimated by the Transportation Engineer for the same vehicle categories as the Campus District.

2.3.1.2 Fleet Mixes

As mentioned above, the existing site has, and Campus District is anticipated to have, a unique fleet mix due to Meta's proposed trip cap and extensive TDM program. The vehicle fleets for the Town Square District, Residential/Shopping District, and Hamilton Avenue Parcels North and South are based on the default fleet mix for San Mateo County in EMFAC2021, consistent with the methodology used in CalEEMod. A summary of the fleet mix categories is shown in **Table 19**. Where a mix of EMFAC vehicle categories is used, the mix is based on the ratio of EMFAC2021 VMT for each vehicle type. The Shuttle fleet mix was assumed to be all diesel to conservatively estimate health risks.

2.3.1.3 Emission Factors

Mobile emission factors from running, idling, and starting vehicle exhaust, as well as evaporative running loss, tire wear, and brake wear emissions were calculated using EMFAC2021 in San Mateo County for each of the fleet mix categories. Running exhaust, running loss evaporative, tire wear, and brake wear emissions were determined using factors with units of g/mile while idling and starting exhaust and other evaporative emissions were determined using factors with units of g/trip.

Total emissions from EMFAC2021 were converted to emission factors using the total VMT or trips for the relevant vehicle classes. The average emission factor for each fleet mix category was then calculated using the ratio of VMT or trips between vehicle classes.

Emission factors were calculated for each fleet mix category for the baseline year of 2019, full buildout, and each intermediate year where the Project would be operating concurrent with construction. For the purposes of this analysis, this is assumed to be 2024-2026, consistent with buildout of specific buildings in the construction analysis. The fleet-average mobile emission factors decrease over time due to fleet turnover and regulations such as ACC. For fleet mix categories associated with the Campus District, vehicles are assumed to be either gasoline or diesel, or natural gas in the case of certain vehicles in the fleet for trucks. Electric vehicles (EVs) were not included in the Campus District fleets because Project-specific reductions for vehicle charging were applied later, as discussed in **Section 2.3.2.1.** Emission factors for fleet mix categories associated with the Town Square District, Residential/Shopping District, and Hamilton Avenue Parcels North and South include gasoline, diesel, natural gas, and EVs based on default EV penetration for San Mateo County from EMFAC2021. EVs do not emit CAPs beyond PM from brake wear and tire wear. **Table 20a** and **Table 20b** show the CAP and GHG emission factors from EMFAC that were used in the analysis for Project and Baseline.

Vehicles driving on roadways would also emit $PM_{2.5}$ and PM_{10} in the form of re-suspended road dust as described in **Section 2.2.5**. Road dust $PM_{2.5}$ and PM_{10} emissions were added to exhaust $PM_{2.5}$ and PM_{10} emissions for comparison against BAAQMD's total operational $PM_{2.5}$ and PM_{10} mass emissions significance thresholds. The re-suspended road dust emission factors are summarized in **Table 8.**

2.3.1.4 Emissions

Emission factors for each vehicle class were multiplied by the annual trips and VMT calculated as described above. For partial buildout years, the emissions were scaled by the proportion that each land use was operational during each year of construction, as shown in **Table 16**.

Mobile CAP and GHG emissions before reductions associated with the EV charging are summarized in **Table 21a** and **Table 21b**.

2.3.2 EV Charging Emissions Reductions

The Project will have a comprehensive EV charging network. Emissions reductions associated with the increase in EV miles traveled (eVMTs) due to the addition of EV charging at the Project are taken into account. EVs emit fine particulate matter (PM) brake wear and tire wear at the same rate as other vehicles (per EMFAC2021); therefore, these emissions are excluded from the emissions reductions taken for EVs.

The reductions associated with increased eVMT due to Project charging infrastructure are addressed differently for the Town Square and the Residential/Shopping District and the Campus District. The EV chargers in Town Square and the Residential/Shopping District would be utilized by the general public where there is less control over the use. The Campus District has a comprehensive program to for EV charging for its workers, as discussed below.

The reductions associated with EV charging are based on ARB's VISION program (California ARB 2020), which evaluates various scenarios regarding California's growth and adoption of technologies in the transportation sector. The program has developed and enhanced predictive traffic models since 2012. The VISION traffic models have been used by CARB to support transportation policy decisions and inform air quality and climate planners.

2.3.2.1 EV Charging Emissions Reductions for Campus District

As discussed above, Meta offers an advanced EV charging program to its workers. Charging on campus is free and valets move cars into chargers to maximize charging time. Therefore, the Campus District would be expected to produce more EV penetration in its fleet than would be seen in the general public in the Town Square and the Residential/Shopping District. This is a further benefit to the community because workers can charge their EVs on campus using carbon free electricity instead of in their homes where electricity may not be carbon free.

The Project Applicant provided the annual electricity use for charging at Meta's existing campuses in 2019 in Menlo Park, including the existing charging at the Project site. The existing main Project site electricity use was used to estimate reductions associated with the baseline conditions, as shown in **Table 22**.

The anticipated amount of charging in the Campus District was calculated based on the historical charging in 2019, as shown in **Table 22**. The provided studies were used to calculate an average ratio of kilowatt-hours to square footage from the existing campuses. This ratio was applied to the projected square footage of the Campus District at full buildout to determine anticipated energy usage. To account for expected increases in fleet EV penetration by full buildout, the anticipated energy usage was scaled by the increase in eVMT 2026 in the Mobile Source Strategy (MSS) scenario of CARB's VISION program compared to the percentage of eVMT associated with the existing main Project site. The more aggressive MSS scenario was used to scale the Campus District eVMT because the EV incentives offered by Meta are expected to contribute to greater EV adoption by Meta workers when compared to the fleet average.

The electricity use for charging in baseline and full buildout was used to estimate the number of miles driven by EVs charged at the Campus District based on a fuel economy of 0.30 kilowatt-hours (kWhs) per mile.[16] The eVMT for the Campus District is shown in **Table 22.**

The electricity for EV charging at the Project would be supplied with 100% carbon-free energy, as discussed in more detail in **Section 2.3.2.2.** Mobile emissions for the Campus District were calculated assuming all VMT and trips were gasoline or diesel and then removing the equivalent gasoline or diesel emissions that are replaced by eVMT and EV trips, for both baseline and the Project. Therefore, the associated reductions in CAP and GHG

[16] The fuel economy is based on electric fleet data from fueleconomy.gov. Available at: https://www.fueleconomy.gov/.

emissions are calculated from the replacement of gasoline and diesel-powered vehicles with EVs for the same travel.

2.3.2.2 EV Charging Reductions for Town Square and the Residential/Shopping District

The EV chargers installed with the Project in the Town Square and the Residential/Shopping District contribute to emissions reductions due to increased eVMT charged by the Project chargers, similar to reductions associated with the Campus District. However, the Town Square and the Residential/Shopping District is not controlled by one employer, and vehicular travel associated with this area is largely from the general public. Therefore, reductions associated with eVMT were estimated using data derived from statewide trends in ARB's VISION program.

ARB is currently preparing the 2020 MSS model as part of the VISION program to anticipate fleet changes in accordance with the ambitious targets set by recent legislative actions. The new model incorporates the 2020 MSS scenario, which estimates eVMTs reflecting the target identified in EO N-79-20, assuming 100% of passenger vehicle sales in California are zero emissions vehicles (ZEV) or plug-in hybrid vehicles (PHEV), and GHG emissions assumed to have reduced by 2.0% per year from 2026 to 2035. The emissions reductions associated with this Project were determined to be the difference between the eVMT under the reference or "as-is" scenario and the MSS scenario, since the additional charging infrastructure associated with the Project will be an essential link towards reaching the targets set in the MSS.

As discussed in **Section 2.3.1.1**, the Town Square and the Residential/Shopping District fleet mix is based on EMFAC2021 and includes the default percentage of EV travel. To calculate the respective reductions from the Project chargers in the Town Square and the Residential/Shopping District, the percent of eVMT under the 2020 MSS model was determined for both the reference and MSS scenarios based on the model. The percentage of EV travel in the reference scenario is assumed to be similar to the EV travel in EMFAC2021. Because the 2020 MSS model only accounts for passenger vehicles, the percent of eVMT from the model was multiplied by the percentage of passenger vehicle VMT of the total fleet VMT from EMFAC2021. The resulting percentage, representing the vehicles within the fleet that could use the Project's chargers was then multiplied by the trip rates and VMT associated with the Town Square and the Residential/Shopping District by year. The eVMT offered by the Project chargers was then calculated based on usage assumptions for the charger of 10 hours per day and 365 days per year, where 1 hour of charging offers on average 25 miles of eVMT, as shown in **Table 23**. Charger usage was assumed based on typical operating time for retail charging. However, as shown in Table 23, emissions reductions are limited by projected demand of eVMT and EV trips, not charger availability.

The emissions reductions associated with the installation of the EV chargers in the Town Square and the Residential/Shopping District was calculated using the difference in charger eVMT between the reference and MSS scenarios. The reductions in CAP and GHG emissions were calculated using the emission factors and methodologies described in **Section 2.3.1.3** for the Town Square and the Residential/Shopping District.

The combined EV CAP and GHG emissions reductions from the Campus District and the Town Square and the Residential/Shopping District are shown in **Table 24a** and **Table 24b**. A

summary of the total mobile CAP and GHG emissions with and without reductions associated with EV vehicles are in **Table 25a** and **Table25b**.

2.3.3 On-site Generators

The Project would include thirteen new emergency generators and the removal of the single existing emergency generator. Project and Baseline emissions for the emergency generators are based on the BAAQMD rule limiting the hours of non-emergency operation for emergency standby diesel engines to a maximum of 50 hours per year of testing and maintenance, which is consistent with the maximum allowed testing time from the ATCM for Stationary Compression Ignition Engines (CARB 2011). $PM_{2.5}$ and PM_{10} emissions were calculated using emission factors based on ARB engine tier standards for diesel generator engines. NOx and ROG emissions were calculated by converting non-methane hydrocarbon (NMHC) emission factor values provided in ARB's Tier standards to the intended emission factors using EPA conversion factors (USEPA 2010) if explicit values are not provided for the specific tier level. When an emission factor was specified as a combined NMHC+NOx factor, the NMHC/NOx ratio of 5%/95% were taken from BAAQMD guidance (BAAQMD 2004). GHG emissions were calculated using CalEEMod default emission factors. All emission factors can be found in **Table 26**. Generator information, such as size of engine, quantity, and engine tier, was provided by the Project Applicant, as shown in **Table 27**. A summary of on-site generator emissions can be found in **Table 27**.

2.3.4 Energy

Energy emissions include indirect emissions from electricity used by buildings and direct natural gas combustion emissions. Indirect emissions are typically due to electricity generation from off-site power plant locations. Emissions from natural gas combustion can be generated from commercial usage (e.g., cooking and heating) and industrial usage (e.g., boilers).

CAP and GHG emissions from energy sources at the existing main Project site were evaluated based on energy use at the site in 2019, as shown in Appendix A. Existing land uses at the site include offices, a health center, industrial, commercial, and warehouse buildings, and parking lots. Emissions were estimated using CalEEMod equivalent methodologies with energy usage data provided by the Project Applicant. The carbon intensity factor for 2019 was used as described in **Section 2.3.4.1**.

Electricity usage rates for the Project were provided by the Project Applicant based on Project-specific estimates, as shown in Appendix A, which assume space heating and cooling, domestic hot water heating, and residential cooking equipment would be powered by electricity rather than natural gas. Natural gas would be used in supermarket and restaurant land uses for commercial cooking equipment only. Energy use associated with the net new retail at the Hamilton Avenue Parcels North and South are based on CalEEMod defaults. A portion of the retail in these parcels would be demolished and rebuilt. Evaluating only the net new area is conservative because newer, more energy efficient buildings will replace older buildings built under an older version of building energy code.

In an effort to reduce GHG emissions, the Project would be entirely electrically powered, with the exception of commercial culinary uses. The residential buildings would be entirely electrically powered. Therefore, energy use totals for the Project are based on Project-specific electricity and natural gas usage studies provided by the Project Applicant. A summary of energy use provided is shown in **Table 28**.

The Project also would include the installation of solar PV arrays that would generate about 3,900,000 kWh per year of electricity.

The buildings on the main Project Site also must comply with applicable Menlo Park Municipal Code requirements, stating:

> *For all new construction, a project will meet 100 percent of energy demand (electricity and natural gas) through any combination of the following measures:*
>
> *(i) Onsite energy generation,*
>
> *(ii) Purchase of 100 percent renewable electricity through Peninsula Clean Energy or Pacific Gas and Electric Company (PG&E) in an amount equal to the annual energy demand of the project,*
>
> *(iii) Purchase of local renewable energy generation in Menlo Park in an amount equal to the annual energy demand of the project, and*
>
> *(iv) Purchase of certified renewable energy credits and/or certified renewable energy offsets annually in an amount equal to the annual energy demand of the project.*

The Campus District would meet this code requirement by eliminating the use of natural gas, except for culinary purposes (limited to the restaurant uses), and committing to purchasing 100 percent carbon free electricity from Peninsula Clean Energy (PCE).

Portions of the Town Square, Campus, and/or the Residential/Shopping District would include natural gas for cooking in the retail area. To meet this code requirement, the on-site solar would offset any emissions from the natural gas combustion for cooking and any electricity that may not be carbon free.

The compliance method is discussed further in the memorandum from Signature Development Group to the City of Menlo Park dated December 2, 2021 regarding Willow Village 100% Renewable Energy Memo.

The analysis accounts for state laws that require municipal utility providers, such as PG&E, to incrementally increase the percent of electricity it supplies from carbon free sources between now and 2045, when the electricity mix must be 100 percent carbon-free.

2.3.4.1 Electricity

To estimate emissions, the estimated electricity usage of the Project was multiplied by the carbon intensity of the electrical grid. Carbon intensities of electricity are GHG emission rates from a given source in terms of the amount of GHG released in pounds per megawatt hour (MWh) of energy produced and are different depending on the source of electricity.

Electrical power is supplied to the study area by PCE, although the option to purchase electricity from PG&E is available. The carbon intensity from the PCE Standard plan, using the PCE power sources that supply energy under that plan, were used to estimate emissions from existing conditions and is shown in **Table 29**. The PCE Standard plan currently utilizes - and is committed to utilizing 86% renewable sources of energy through 2030.[17]

[17] Peninsula Clean Energy comes from 51% renewable sources, 35% hydroelectric sources and 14% unspecified sources. Unspecified sources were assumed to have the same carbon intensity as the non-renewable PG&E mix of power. Available at: https://www.peninsulacleanenergy.com/energy-sources/

As discussed above, as part of its sustainability strategy, the Project Applicant has committed to purchasing 100 percent carbon free energy from PCE for Campus District uses to reduce its GHG emissions, which is also consistent with the City zoning code. Any electricity in the Town Square, Campus and/or the Residential/Shopping District that is not carbon free would be offset with on-site solar. Therefore, a carbon intensity factor of zero was used for Project emissions.

As discussed above, the on-site solar would produce more electricity than would be needed to offset the non-carbon-free portion of electricity use and the natural gas use. Therefore, the additional electricity generated from the on-site solar PV would offset electricity that would have been generated by the utility, likely through non-renewable sources or peaker plants. The renewable energy generated onsite that is not consumed by the Project would thus be available for other projects, further reducing GHG emissions from electricity for the Project. However, to be conservative, this additional reduction in non-renewable energy was not taken into account in this analysis.

Indirect electricity emissions for the Project were estimated by combining the carbon intensity and projected usage for each year using methodologies consistent with CalEEMod as shown in **Table 30**.

2.3.4.2 Natural Gas

Natural gas combustion emits GHGs and CAPs. Natural gas usage rates are based on Project-specific estimates provided by the Project Applicant and reflect the fact that all buildings would be primarily electric and would use natural gas only for culinary purposes in the supermarket and restaurant land uses. Residential units would be electric, including space heating and cooling, domestic hot water heating, and residential cooking equipment.

As discussed above, compliance with the City Municipal Code requires any natural gas usage to be offset by on-site renewable energy generation, off-site new renewable energy generation or offsets. However, to be conservative, GHG emissions from natural gas combustion are estimated for the Project since the carbon intensity of the reduction in grid electricity production due to the on-site solar is not known at this time.

For years before full buildout, the natural gas used at full buildout was multiplied by the percent of retail land uses that would be completed during each year.

CalEEMod default emission factors for natural gas combustion were used, as shown in **Table 29**. Direct emissions from the combustion of natural gas for both existing conditions and Project conditions can be found in **Table 30**.

2.3.5 Water and Wastewater

Water and wastewater use emits GHGs from the electricity used to convey, treat, and distribute water and wastewater and the release of methane (CH_4) and nitrous oxide (N_2O) directly from the wastewater.

The amount of electricity required to convey, treat, and distribute water depends on the volume of water as well as the sources of the water. Indirect emissions from electricity to supply, treat, and distribute water decrease over time as the average carbon intensity of electricity use decreases due to the California Renewables Portfolio Standard (RPS), a law designed to meet statewide GHG reduction targets. The electricity used to pump the water to the site is not under the control of the Project and therefore cannot be guaranteed to be

generated with 100% renewable or carbon free energy from PCE. Therefore, GHG emissions from water transport are based on the carbon intensity of PG&E. The RPS required 33% of electricity supplied by utilities to come from renewable sources by 2020. The RPS was recently expanded with Senate Bill SB 100 to require 60% of electricity to be from renewable sources by 2030 and 100% of electricity to be from carbon neutral sources by 2045 (SB-100 2018). PG&E's estimated carbon intensity factor was adjusted for existing conditions, for each year of concurrent construction and operation and for full buildout based on the criteria established in the California RPS, as shown in **Table 29**.

GHG emissions from water and wastewater sources at the existing site were evaluated based on 2019 data. Existing land uses at the site include retail, offices, a health center, industrial manufacturing, research and development, and warehouse buildings, and parking lots. As discussed above, only net new square footage at the Hamilton Avenue Parcels North and South were included in the Project analysis because that represents the change from existing, baseline conditions.

Water use rates for the Project were provided by the Project Applicant, as shown in **Appendix C**. Water use at the Hamilton Avenue Parcels North and South were estimated using CalEEMod default rates. Summarized usage rates can be found in **Table 31**.

Emissions from water and wastewater use at existing offices, warehouses, and parking lots were estimated using CalEEMod equivalent methodologies with default data assumptions for San Mateo County, based on existing land use areas as listed in **Table 1**.

Water and wastewater emissions are summarized in **Table 32**.

2.3.6 Solid Waste Disposal

Indirect GHG emissions associated with waste disposal include CH_4 generation from the decomposition of waste and the CO_2 emissions associated with the combustion of CH_4, if applicable. GHG emissions associated with non-landfill diverted waste streams were not considered because it is generally assumed that these diversions do not result in any appreciable amounts of GHG emissions. Waste diversion alternatives may result in differences in life-cycle emissions of GHGs, but it is not appropriate to combine life-cycle emissions for only one category of emissions.

Biogenic CO_2 emissions were not included when the ARB analyzed the GHG emissions inventory under Assembly Bill 32 (AB32). Therefore, they were not included in the emissions inventory.

Emissions from the disposal of solid waste were calculated using default solid waste generation rates from CalEEMod for San Mateo County. In order to reduce waste disposal, Meta diverts 82% of solid waste from landfill disposal.[18] The diverted waste would be composted or recycled. As a result, an 82% reduction was applied to the default solid waste generation rates for the Campus District, as shown in **Table 33**. In 2016, the City implemented zero waste management plan with the goal of diverting 90% of waste from Life Sciences, Office, and Mixed Use Residential zoning districts by 2035 (City of Menlo Park); however, these diversion rates were conservatively excluded from the analysis.

[18] The 82% diversion rate was determined using waste disposal and diversion data for 2019 provided by the Project Applicant via email communication on August 2, 2021, as shown in **Appendix A**.

GHG emissions from solid waste disposal sources at the existing site were evaluated. Existing land uses at the site include offices, a health center, industrial, commercial, and warehouse buildings, and parking lots. Emissions from existing land uses that would be affected by the Project and Project emissions were estimated using CalEEMod equivalent methodologies with default data assumptions based on existing land use areas as listed in **Table 1.**. A diversion rate of 82% was also applied to the existing office building land use since the waste diversion program is currently in place.

Solid waste disposal emissions from both the existing site and the Project can be found in **Table 34**.

2.3.7 Area Sources

GHG and CAP emissions from area sources, such as landscaping equipment, consumer products, and architectural coating, were estimated using CalEEMod default values and equivalent methodologies based on the type and size of land uses associated with the Proposed Project. The residential units would not include any hearths, so emissions from hearths were not estimated.

GHG emissions from area sources at the existing site were evaluated for 2019.[19] Emissions were estimated using CalEEMod equivalent methodologies with default data assumptions based on existing land use areas as listed in **Table 1**.

2.3.7.1 Architectural Coating

Operational architectural coatings include the reapplication of paint and coatings on interior and exterior surfaces, which result in emissions of ROGs. CalEEMod default assumptions were used to calculate the building surface area that would be coated, as well as the application rate and indoor and outdoor ROG emission factors based on BAAQMD Regulation 8 Rule 3 paint VOC regulations (BAAQMD 2009). The unmitigated architectural coating emissions are summarized in **Table 35**. Mitigated emissions assume that Project indoor painting will utilize super-compliant coatings, which are paints that have been reformulated to exceed the SCAQMD's Rule 1113 (Architectural Coatings) requirements,[20] as shown in **Table 36**Table 36.

2.3.7.2 Consumer Products

Consumer product emissions come from various non-industrial solvents, including cleaning supplies, kitchen aerosols, cosmetics, and toiletries, which emit ROGs during their use.

CalEEMod provides a statewide consumer products emission factor based on the ARB 2008 emissions inventory. (CAPCOA 2020b) For this analysis, a San Mateo County specific emission factor was developed based on the emissions from consumer products from the ARB 2020 emissions inventory for San Mateo County and the building square footage in the county using the same methodologies utilized in CalEEMod, as shown in **Table 37.**Table 37

[19] As discussed above, only net new square footage at the Hamilton Avenue Parcels North and South were included in the Project analysis because "net new" represents the change from baseline.

[20] Assumes "super compliant" architectural coatings for indoor building surfaces based on more stringent VOC limits from South Coast Air Quality Management District (SCAQMD) Rule 1113. South Coast Air Quality Management District. Super Compliant Architectural Coatings per Rule 1113. Available at: http://www.aqmd.gov/home/programs/business/business-detail?title=super-compliant-coatings&parent=other-low-voc-products.

The emission factor for the parking area and parks are the default values for the land uses from the CalEEMod User's Guide.

Consumer product emissions are summarized in **Table 38**.

2.3.7.3 Landscaping Equipment

Emissions from landscaping equipment were calculated using CalEEMod and based on information regarding building square footage and acreage, as well as CalEEMod defaults. The recent law (Assembly Bill 1346) banning the sale of gasoline-powered landscaping equipment by 2024 was conservatively not accounted for, since it is unknown how the law will affect emissions due to non-electric equipment already in operation. These emissions are shown in **Table 39** and CalEEMod output files are shown in **Appendix D.**[21]

2.3.8 Net Operational CAP and GHG Emissions Summary

As discussed above, the Project would replace existing office, recreational, commercial, industrial and warehouse buildings, and surface parking facilities. Therefore, total operational emissions associated with the Proposed Project are the difference between emissions from the new land uses and emissions from existing land uses that would no longer be present. Existing emissions were subtracted from Proposed Project emissions for total net emissions from the Project. During Project operation, annual operational emissions were averaged over 365 days to give average daily operational emissions.

Net unmitigated and mitigated CAP emissions are summarized in **Table 40** and **Table 41**, respectively. Operational GHG emissions are summarized in **Table 42**. Mobile GHG emissions are 16,766 MT/yr. These emissions are not included in the estimate of net GHG emissions since GHG impacts from mobile sources are evaluated based on VMT, as discussed in Section 1.3.2.

Summary **Table B**, below, summarizes these emissions.

Summary Table B. Summary of Maximum Annual Average Daily Net Operational CAP Emissions and Annual Net Operational GHG Emissions

	ROG	**NO_X**	**PM_{10}**	**$PM_{2.5}$**	**CO_2e**
	lb/day				MT/year
BAAQMD Threshold of Significance	54	54	82	54	N/A
Unmitigated Emissions	88	21	37	7.0	-1,056
Exceed Threshold?	*Yes*	*No*	*No*	*No*	*N/A*

[21] CalEEMod was only used to estimate landscape emissions only. Appendix D contains the non-default inputs to CalEEMod used to calculate these landscape emissions.

Mitigated Emissions	80	21	37	7.0	-1,056
Exceed Threshold?	*Yes*	*No*	*No*	*No*	*N/A*
Source: Table 40, Table 41, and Table 42.					

2.4 Combined Construction and Operational Emissions Summary

This analysis conservatively assumed that the buildings constructed in each year of the construction program would be occupied and fully operational upon completion. This is conservative because occupancy and operation of each phase would likely ramp up over time.

Construction is expected to occur during Project operation because the Project will be constructed over a period of several years. In years when construction is scheduled to coincide with Project operation, construction emissions were combined with operational emissions. The combined construction and operational emissions were compared with average daily emissions thresholds, using the 365 days per year to average annual emissions for both construction and operations, as shown in **Table 43** and **Table 44**.[22]

Summary Table C. Summary of Annual Average Daily Net Construction and Operational CAP Emissions for Maximum Year

	ROG	**NO_X**	**PM_{10}**	**$PM_{2.5}$**
	lb/day			
BAAQMD Threshold of Significance	54	54	82	54
Unmitigated Emissions	97	72	37	7.0
Exceed Threshold?	*Yes*	*Yes*	*No*	*No*
Mitigated Emissions	80	21	37	7.0
Exceed Threshold?	*Yes*	*No*	*No*	*No*
Source: Table 43 and Table 44				

[22] As discussed above, activity is expected on most Saturdays. Even if 6 days per week (312 days per year) were used to average emissions for construction, conclusions would not change.

2.5 Proposed Mitigation Measures

As discussed, several mitigation measures were incorporated into the analysis. The measures are summarized below

Architectural Coatings. The applicant shall use super-compliant architectural coatings during construction and operation for all buildings, which shall have VOC content that meet SCAQMD Rule 1113 Architectural Coatings as revised on February 5, 2016.

Tier 4 Construction Equipment. To reduce construction emissions to below the 2017 BAAQMD CEQA Air Quality Guidelines, the Project Applicant shall either:

- Ensure all off-road construction equipment with greater than 25 hp and operating for more than 20 hours total over the entire duration of construction activities have engines that meet or exceed either USEPA or ARB Tier 4 Final offroad emission standards. The exception to this requirement is for a cumulative total 618,028 horsepower-hours over the duration of construction activities before residents move on-site in Year 5 and 34,716 horsepower-hours over the duration of construction activities after residents move on-site in Year 5 can be operated with off-road construction equipment that meets Tier 2 standards or better.

or

- Prior to commencing construction, provide supplemental analysis prepared by a qualified air quality specialist to the City for approval that shows that emissions of ROG and NO_X, excess lifetime cancer risk, and $PM_{2.5}$ concentration would not exceed the thresholds from the 2017 BAAQMD CEQA Air Quality Guidelines using the mix of equipment proposed by the applicant.

Construction Fugitive Dust Emissions. The following BAAQMD Best Management Practices (BMPs) for fugitive dust control shall be required for all construction activities within the project area. These measures would reduce fugitive dust emissions primarily during soil movement and grading, but also during vehicle and equipment movement on unpaved project sites.

Basic BMPs that Apply to All Construction Sites

1. All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day.

2. All haul trucks transporting soil, sand, or other loose material off site shall be covered.

3. All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited.

4. All vehicle speeds on unpaved roads shall be limited to 15 miles per hour (mph).

5. All streets, driveways, and sidewalks to be paved shall be completed as soon as possible. Building pads shall be laid as soon as possible after grading unless seeding or soil binders are used.

6. Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to five minutes (as required by the California airborne

toxics control measure Title 13, Section 2485 of CCR). Clear signage shall be provided for construction workers at all access points.

7. All construction equipment shall be maintained and properly tuned in accordance with manufacturer's specifications. All equipment shall be checked by a certified mechanic and determined to be running in proper condition prior to operation.

8. A publicly visible sign shall be posted with the telephone number and person to contact regarding dust complaints. This person shall respond and take corrective action, if necessary, within 48 hours. BAAQMD's phone number shall also be visible to ensure compliance with applicable regulations.

3. ESTIMATED AIR CONCENTRATIONS

To evaluate the health risks and concentration of air toxics upon the surrounding community, BAAQMD recommends estimating concentrations using air pollution dispersion modeling. The methodologies used to evaluate emissions for the Proposed Project and cumulative HRA impacts are based on the most recent BAAQMD CEQA Guidelines (BAAQMD 2017) and the most recent Air Toxics Hot Spots Program Risk Assessment Guidelines (OEHHA 2015a).

3.1 Chemical Selection and Sources of Emissions

The Project would emit TACs from the combustion of gasoline and diesel fuels. The cancer risk and chronic non-cancer analyses in the HRA for the Project were based on DPM concentrations from diesel combustion and total organic gases (TOG) concentrations from gasoline combustion.

Diesel exhaust, a complex mixture that includes hundreds of individual constituents, is identified by the State of California as a known carcinogen (California Environmental Protection Agency [Cal/EPA], OEHHA 1998). Under California regulatory guidelines, DPM is used as a surrogate measure of exposure for the mixture of chemicals that make up diesel exhaust as a whole. Cal/EPA and other proponents of using the surrogate approach to quantifying cancer risks and non-cancer chronic HI associated with the diesel mixture indicate that this method is preferable to use of a component-based approach. A component-based approach involves estimating risks for each of the individual components of a mixture. Critics of the component-based approach believe it will underestimate the risks and HI associated with diesel as a whole mixture because the identity of all chemicals in the mixture may not be known and/or exposure and health effects information for all chemicals identified within the mixture may not be available. Furthermore, Cal/EPA has concluded that "potential cancer risk from inhalation exposure to whole diesel exhaust will outweigh the multi-pathway cancer risk from the speciated components" (OEHHA 2015b). BAAQMD states "diesel exhaust particulate matter should be used as a surrogate for all TAC emissions from diesel-fueled compression-ignition internal combustion engines" (BAAQMD Rule 2-5).

The Cal/EPA-approved toxicity values for DPM were used to evaluate health impacts from construction and operational diesel fueled sources (Cal/EPA 2020).

Health effects from exhaust and evaporation from gasoline combustion were based on specific TAC emissions. Emissions of TOG from gasoline-fueled vehicles were speciated using organic chemical profiles from BAAQMD as shown in **Table 45** (BAAQMD 2012a).[23] The Cal/EPA-approved toxicity values for each TAC were used to evaluate health impacts from operational gasoline fueled sources (Cal/EPA 2020) as shown in **Table 46**.

There is currently no acute non-cancer toxicity value available for DPM and acute HI from roadways is expected to be minimal, as discussed in **Section 1.3**. Thus, an acute HI from the Project was not estimated.

[23] Speciation profile is from BAAQMD's Recommended Methods for Screening and Modeling Local Risks and Hazards (BAAQMD 2021a), Table 14, Toxic Speciation of TOG due to Tailpipe Emissions, and Table 15, Toxic Speciation of TOG due to Evaporative Losses.

3.1.1 Construction Phase

The cancer risk and chronic hazards in the HRA for the Project construction were based on TAC emissions from off-road diesel construction equipment, on-road vendor vehicles, and on-road diesel hauling trucks. Accordingly, the chemicals evaluated in the HRA for the construction phase were DPM emissions in diesel exhaust and $PM_{2.5}$ emissions from exhaust, tire wear and brake wear, and fugitive dust. DPM emissions are assumed to be equal to exhaust PM_{10} from on- and off-road construction equipment.

Demolition of existing buildings has the potential to release additional TACs from the release of TACs in the buildings themselves. TACs that should be considered in building demolition include lead and asbestos. Before demolition, we understand the potential for lead paint or asbestos will be identified and all lead paint and asbestos will be removed in accordance with ARB and BAAQMD rules and regulations before demolition of the building occurs. Because the lead and asbestos remediation would occur before demolition and construction and would follow all regulations to reduce impacts to below a level of concern, these sources were not included in the HRA.

3.1.2 Operational Phase

The cancer risk and chronic non-cancer analysis for the Project operation are based on TAC emissions from on-road traffic and diesel-powered emergency generators. The chemicals evaluated in the HRA include $PM_{2.5}$ emissions (assumed to be engine exhaust from vehicles and generators, and brake wear, tire wear, and entrained dust from vehicles), DPM emissions (assumed to be exhaust PM_{10} from combustion from diesel vehicles and on-site generators) and speciated evaporative and exhaust TOGs from on-road emissions from gasoline vehicles.

BAAQMD recommends evaluating impacts from all roadways with traffic of over 10,000 vehicles per day. Major roadways around the Project site include Bayfront Expressway, University Ave, and Willow Road. In addition, vehicles associated with the Project are also expected to use Adams Drive, Adams Court, and O'Brien Drive. Regardless of whether Project traffic exceeds 10,000 vehicles per day on these roadways, health impacts from Project traffic on these roadways were evaluated at on- and off-site receptors in the vicinity of these roadways.

Project traffic consists of on-site, off-site, and shuttle traffic. Onsite traffic is represented by the Cars fleet type and shuttle traffic is represented by the Shuttles fleet type. Offsite traffic for the Campus District is represented by a unique fleet mix, as described in **Section 2.3.1.1**, which combines Cars, Trucks, On-Demand, and Shuttles fleet types; however, shuttles are represented in its own fleet mix, as described above. Offsite traffic for the Town Square and Residential/Shopping District is represented by the default San Mateo County Mix. A summary of traffic volumes by roadway segment and fleet is summarized in **Table 47.**[24]

All fleet types except the Shuttle fleet mix are expected to contain vehicles that run on both diesel, whose health impacts are evaluated using DPM, and gasoline, whose health impacts are evaluated using evaporative and exhaust TOG. The Shuttle fleet mix is conservatively

[24] An on-site assessment of Hamilton Avenue Parcels North and South was not analyzed because volumes are minor and driving distance on-site are short.

assumed to be comprised of all diesel, as a result, all emissions from the Shuttle fleet mix contain only DPM emissions while emissions from all other fleet types contain both DPM emissions and evaporative and exhaust TOG. The DPM emission factor for Cars, On-Demand, Trucks, and the San Mateo Default Fleet vehicle types was determined from the PM_{10} running and idling exhaust emission factors discussed above. These PM_{10} emission factors account for emissions from both gasoline and diesel; however, DPM emissions are only attributable to diesel-run vehicles. Therefore, the portion of the total PM_{10} that is actually DPM was calculated as the sum of PM_{10} running and idling exhaust emissions from diesel vehicles divided by the sum of all PM_{10} running and idling exhaust emissions for vehicles. A summary of traffic emission factors can be found in **Table 48**.

3.2 AERMOD Modeling

The most recent version of the American Meteorological Society/Environmental Protection Agency regulatory air dispersion model (AERMOD Version 21112) was used to evaluate ambient air concentrations of DPM, $PM_{2.5}$ and TOGs at on- and off-site receptors (USEPA 2021). For each receptor location, the model generates air concentrations that result from emissions from multiple sources. In this case, air dispersion factors as unit emissions were modeled and air concentrations were calculated in a subsequent post-processing step.

Air dispersion models such as AERMOD require a variety of inputs such as source parameters, meteorological data, topographical data, and receptor parameters. When site-specific information is unknown, default parameter sets that are designed to produce conservative (i.e., overestimates of) air concentrations were used (USEPA 2021).

3.2.1 Meteorological Data

Air dispersion modeling applications require the use of meteorological data that ideally are spatially and temporally representative of conditions in the immediate vicinity of the site under consideration. For this analysis, meteorological data collected from Palo Alto Airport (KPAO) and San Carlos Airport (KSQL) were used.

The Palo Alto Airport is located approximately 2.2 miles southeast of the Project site, making it a good candidate for representative meteorological data for dispersion modeling. The meteorological conditions shown in the data from Palo Alto Airport most closely matched on-site measurements observed adjacent to the Project site, which makes it the preferred station for representative data. Unfortunately, like many smaller Automated Surface Observing System (ASOS) stations, meteorological data are only collected during daylight hours. However, the San Carlos Airport collects data 24-hours per day. San Carlos Airport is 6 miles north west of the Project site and is the next closest meteorological station to the Project Site.

In an effort to develop a complete data set, in AERMET the Palo Alto Airport was selected as the “on-site” meteorological station and the San Carlos Airport, was selected as the “surface” station in AERMET. With these assumptions, data from the Palo Alto Airport will be used when available and data from the San Carlos Airport will be used when data is not available from Palo Alto Airport (i.e., non-daylight hours).

Meteorological data from 2012-2016 was used as these years were the most recent years with the most complete data set of meteorological data. A precipitation analysis was performed for both the on-site and surface stations using surface parameters obtained using the latest version of AERSURFACE, v20060. The data were processed using the Adjust U*

option (ADJ_U*), a method that reduces overprediction of modeled concentrations that occur in stable conditions with low wind speeds due to underprediction of the surface friction velocity (u*).

3.2.2 Terrain and Land Use Considerations

Elevation and land use data were imported from the National Elevation Dataset (NED) maintained by the United States Geological Survey ([USGS] 2013) in NED 1/3 arc sec.

An important consideration in an air dispersion modeling analysis is whether or not to model an area as urban. Due to the proximity of the project to the San Francisco Bay and marshland, the default rural option was used in the modeling. The rural option tends to produce more conservative concentrations than the urban option due to the enhanced turbulence associated with urban environments due to the additional mixing associated with the heat island effect.

3.2.3 Building Downwash

Turbulent eddies can form on the downwind side of buildings and may cause a plume from a stack or point source located near the building to be drawn towards the ground to a greater degree than if the building were not present. This is referred to as the "building downwash" effect. The effect can increase the resulting ground-level pollutant concentrations downwind of a building. AERMOD takes this effect into account for sources modeled as point sources. The dimensions and locations of all on-site buildings were used, to allow AERMOD to incorporate algorithms to evaluate the downwash effect on dispersion of point sources. Building heights were obtained from the proposed Willow Village Master Plan Conditional Development Permit (Peninsula Innovation Partners 2021). The direction-specific building downwash dimensions were determined by the latest version (04274) of the Building Profile Input Program, PRIME (BPIP PRIME). As discussed in **Section 3.2.5**, point sources were used only to model the Project generators, so building downwash was only evaluated in the Project operational generator modeling.

3.2.4 Emission Rates

Emissions were modeled using the χ/Q ("chi over q") method, such that each source has a unit emission rate (i.e., 1 gram per second [g/s]), and the model estimates dispersion factors (with units of micrograms per cubic meter (([µg/m^3])/[g/s]). Actual emission rates were multiplied by the dispersion factors to obtain concentrations.

3.2.4.1 Construction Emission Rates

For the construction phase, emitting activities were modeled to reflect the actual hours of the day that construction activity would occur. Emissions were modeled as occurring between 7 AM and 6 PM, consistent with the expected construction hours for the Project.[25] The AERMOD EMISFACT option was used to limit emissions to this time period.

For annual average ambient air concentrations over the construction phase, the estimated annual average dispersion factors were multiplied by the annual average emission rates. The emission rates would vary day to day, with some days having no emissions. To estimate an annual average, the model assumes a constant emission rate during the entire year. Thus,

[25] Construction activity is assumed to start at 7 AM to conservatively consider more morning hours in the dispersion analysis, but no equipment will be operated that will violate the Menlo Park noise ordinance, which has a lower construction noise threshold from 7 AM to 8 AM than from 8 AM to 6 PM.

the average emissions rates were calculated by taking the total mass of emissions and dividing by the hours considered in the model (11 hours per day, 365 days per year). The equipment would be expected to operate at most 8 hours per day, but this 8-hour period can occur anytime in the 11-hour window from 7 AM to 6 PM. Because the exact timing of when the equipment would operate is not known, the eight hours of emissions were averaged over these 11 hours of meteorology. While construction using heavy equipment is expected to generally occur Monday through Friday, the emissions were averaged over 365 days per year as meteorology conditions are not dependent upon day of the week. Weekends were not excluded from the meteorology data in order to generate more representative averages.

3.2.4.2 Operational Emission Rates

Emergency generators were assumed to be tested at any hour of day; as a result, no variable emission rate factor was applied.

Traffic emission rates were calculated based on the actual fleet breakdown, as provided by the Project Applicant. The diurnal pattern of traffic volumes for operations (high volumes during rush hour and during the day, with low volumes overnight) was incorporated using the AERMOD EMISFACT option and percentage of traffic by hour. The traffic by hour was developed using ratios of hourly trip rates from EMFAC2021 in San Mateo County for all vehicle types, as shown in **Table 49**. Traffic by hour for the shuttles were developed using the shuttle schedule, as shown in **Table 49**.

3.2.5 Source Parameters

3.2.5.1 Construction Sources

Source location and parameters are necessary to model the dispersion of air emissions. For construction, area sources were used to represent the on-site activity in AERMOD. The on-site construction exhaust sources were modeled with a release height of 5 meters (m) (SCAQMD 2008) and an initial vertical dimension of 1.16 m (USEPA 2019). Fugitive dust sources from grading, demolition, and truck hauling during construction were modeled with a release height of 0 meters and an initial vertical dimension of 1 m (SCAQMD 2008). Construction activity associated with off-site feeder lines were represented as adjacent volume sources. Construction area source group locations are presented in **Figures 3, 4a and 4b**.[26]

Exhaust and fugitive dust emissions from heavy-duty haul and vendor trucks on roadways were modeled using line sources. The line source width was the width of the road plus six meters, the modeled release height was 2.55 m, and the initial vertical dimension was 2.37 m, consistent with the USEPA haul road guidance (USEPA 2012). On-road construction worker trips would have negligible impact and therefore were not included in the HRA analysis for excess lifetime cancer risk and chronic HI. $PM_{2.5}$ emissions associated with on-road construction worker trips were included in the construction HRA analysis for $PM_{2.5}$ concentration modeling. Construction on-road source group locations are presented in **Figure 5**. **Table 50** summarizes the construction modeling parameters that were used in AERMOD.

[26] Since it is not known whether the feeder lines associated with the PG&E work for off-site improvements would be installed in University Avenue or Willow Road, emissions were conservatively applied to both routes, essentially doubling the emissions for the health risk assessment for this activity.

3.2.5.2 Operational Sources

The Project generators were modeled as point sources. Project-specific stack heights, taken as the height of the building, were used in combination with default modeling parameters for generator sources, including stack diameter, temperature, and velocity, as reported by BAAQMD (STI 2011). The impact of the existing generator that will be removed was modeled using specifications provided by the Project Applicant and subtracted from the impact of the proposed new generators.

On-road traffic sources were modeled as line sources following USEPA guidelines for this type of activity (USEPA 2012). Onsite passenger vehicles were modeled with a release height of 1.70 m, consistent with the San Francisco Community Risk Reduction Plan – HRA (SFDPH). Modeled on-site vehicle routes can be found in **Figure 6**. Since passenger vehicles occupy the majority of off-site Project traffic, off-site traffic was modeled with a release height of 1.70 m, consistent with the San Francisco Community Risk Reduction Plan (SFDPH). Modeled off-site traffic routes can be found in **Figure 7**; as discussed, modeled roadways include Bayfront Expressway, Willow Road, University Avenue, and O'Brien Drive.

Intercampus shuttles were modeled separately, using a release height of 3.39 m, based on the actual vehicle type provided by the Project Applicant, as discussed in more detail in **Table 51.** Modeled shuttle routes can be found in **Figure 8**. The initial vertical dimensions for all pollutants were calculated consistent with USEPA Haul Road Guidance (i.e., plume height/2.15).

Table 51 summarizes the operational phase modeling parameters that were used in AERMOD.

3.2.6 Receptors

TAC concentrations were estimated at both on-site and off-site sensitive receptor populations. As discussed in **Section 1.3.3**, sensitive receptors include areas with residents, schools, daycare centers, parks, hospitals and senior care facilities. Recreational areas near the Project site were also evaluated.

Residential and recreational receptors were identified using zoning maps for Menlo Park (City of Menlo Park 2019) and East Palo Alto (City of East Palo Alto 2017). Residential and recreational areas were modeled as a grid with 20 m (65.6 feet) spacing within 500 m of the Project site and 40 m spacing within 1,000 m of the project site.

Other sensitive receptor locations were identified using a report from Environmental Data Resources (EDR). The EDR report identified schools, daycare centers, nursing homes and hospitals near the Project site. These locations were modeled as discrete locations.

Off-site receptors were modeled at the breathing height of 1.8 m, consistent with the BAAQMD CEQA Air Quality Guidelines (BAAQMD 2017).

On-site receptors were modeled at the breathing height for each floor of the proposed buildings.

Maximum average annual dispersion factors were estimated for each receptor location.

Figure 2 includes a map of both off-site and on-site sensitive receptor locations that were used in the HRA.

3.2.7 Modeling Adjustment Factor

OEHHA (2015a) recommends applying an adjustment factor to the annual average concentration modeled assuming continuous emissions (i.e., 24 hours per day, seven days per week), when the actual emissions are less than 24 hours per day and exposures are concurrent with activities occurring as part of the Project.

For construction activities, emissions only impact receptors during certain hours of the day when activities are occurring. However, the emissions modeled during those hours were annualized assuming 24 hour per day in the modeling outputs. Thus, a modeling adjustment factor (MAF) was applied to the annual average concentration used in the evaluation to account for an emissions schedule that is not occurring 24 hours per day, seven days per week, where the exposure takes place preferentially during construction hours.

Operational activities are expected to occur all day; therefore, the annual average concentration was not adjusted for concentrations from operational activities.

Resident children were assumed to be exposed to annual construction and operational emissions (averaged from actual operating hours) 24 hours per day, seven days per week. This assumption is consistent with the modeled annual average air concentration for construction (24 hours per day, seven days per week). Thus, the annual average concentration for construction was not adjusted for the residential population.

The MAF for the daycare center and school receptors assumes receptors are present only during the hours of the day emissions are occurring. Therefore, a MAF of 2.55 was applied to the annual average concentration for construction ([24 hours/11 hours] * [7 days/6 days]) for the daycare and school populations, since construction would occur seven days per week.[27]

The MAF for the recreational receptor assumes receptors may be present throughout the hours of the day emissions are occurring. A MAF of 2.55 was applied to the annual average concentration for construction ([24 hours/11 hours] * [7 days/6 days]) for the recreational population, since construction would occur seven days per week. The MAFs are presented in **Table 52**. [28]

[27] Even if the MAF was based on a construction schedule of 5 days per week, conclusions would not change. The maximally exposed individual receptor is a resident, which is not affected by the MAF.

[28] Even if the MAF was based on a construction schedule of 5 days per week, conclusions would not change. The maximally exposed individual receptor is a resident, which is not affected by the MAF.

4. CARBON MONOXIDE ANALYSIS

Carbon Monoxide (CO) emissions from traffic are expected to be below significance levels if the following criteria is met:

1. Project is consistent with an applicable congestion management program established by the county congestion management agency for designated roads or highways, regional transportation plan, and local congestion management agency plans.
2. The project traffic would not increase traffic volumes at affected intersections to more than 44,000 vehicles per hour.
3. The project traffic would not increase traffic volumes at affected intersections to more than 24,000 vehicles per hour where vertical and/or horizontal mixing is substantially limited (e.g., tunnel, parking garage, bridge underpass, natural or urban street canyon, below-grade roadway). (BAAQMD 2017)

The San Mateo County Congestion Management Program (CMP) requires new development projected to add 100 or more peak hour trips to the CMP roadway network to implement Transportation Demand Management (TDM) measures that would reduce project impacts. As discussed above, the Project has a comprehensive TDM program that reduces VMT consistent with City requirements and with the TDM program, the Project would not conflict with the CMP. As shown in **Table 47,** traffic at all roadways around the Project are expected to be lower than 44,000 vehicles per hour. The Willow Road Tunnel may be considered an intersection where vertical and/or horizontal mixing is limited. Traffic through the Willow Road Tunnel would be much below 24,000 vehicles per hour since this tunnel is only used by Project shuttles and trams, bicycles, and pedestrians. The Project is not projected to produce more than 24,000 trips per hour. Therefore, additional analysis is not needed. As such, operational traffic is expected to be a minor contributor to operational CO emissions.

Emergency generators would also emit CO. Emergency generators are subject to permitting with the BAAQMD and are subject to federal and state emissions standards that are designed to avoid impacts on the community and environment. Therefore, emergency generators are not expected to cause CO hotspots.

5. ODOR ANALYSIS

The Project is a mixed use commercial and residential development, and therefore is not anticipated to be a potential odor source. However, the Project was evaluated against the three-pronged approach proposed in the ConnectMenlo EIR.

First, the Project was evaluated against the land uses identified in BAAQMD's Odor Screening Distances (BAAQMD 2017). BAAQMD's Odor Screening Distances Table identifies land uses that could create objectional odors and distances where odors are not expected to be experienced. The Project may contain minor composting and recycling operations typical of a mixed-use development. Recycling and composting facilities are land uses listed in BAAQMD's Odor Screening Distances Table. However, these operations at the Project would not be considered similar in size to what would be considered a Composting Facility or Recycling Facility and therefore should not be considered.

The Project would also contain a wastewater pump station in the southwest corner of the site. Wastewater Pumping Facilities are land uses listed in BAAQMD's Odor Screening Distances Table. While the Wastewater Pumping Facilities considered in the Odor Screening Distance is likely a much larger scale than the one envisioned for the Project, the pumping station at Willow Village may have the potential to emit objectionable odors. Therefore, the pump station design should include a molecular neutralizer that would convert hydrogen sulfide to harmless, biodegradable effluent, ensuring that odors from the pump station would be appropriate for urban areas. With the installation of the molecular neutralizer, the Project is not expected to expose sensitive land uses to objectionable odors expected in urban areas.

As stated in the ConnectMenlo EIR, the following General Plan goals and policies would serve to minimize potential conflicts between land uses:

- Goal LU-2: Maintain and enhance the character, variety and stability of Menlo Park's residential neighborhoods.
    - Policy LU-2.3: Mixed Use Design. Allow mixed-use projects with residential units if project design addresses potential compatibility issues such as traffic, parking, light spillover, dust, odors, and transport and use of potentially hazardous materials.
- Goal LU-4: Promote the development and retention of business uses that provide goods or services needed by the community that generate benefits to the City, and avoid or minimize potential environmental and traffic impacts.
    - Policy LU-4.5: Business Uses and Environmental Impacts. Allow modifications to business operations and structures that promote revenue generating uses for which potential environmental impacts can be mitigated.

As stated above, the Project is not expected to create objectionable odors to sensitive receptors and thus would not create compatibility uses related to odor as stated in Policy LU-2.3. Specifically, the office, residential, and commercial uses proposed by the Project are compatible with each other because none produce substantial objectionable odors. All cooking areas in commercial kitchens will be covered with hoods. The exhaust from culinary uses is intended to go to the roof of the buildings and be disbursed with grease rated fans. In this case the odors dissipate before they can get back to occupied areas. For areas with

low roofs needing grease exhaust that is adjacent to occupied areas, the Project proposes to use a pollution control unit (PCU) to clean the air. The wastewater pumping station would be equipped with a molecular neutralizer, which would reduce odors before release to the environment to acceptable levels in urban areas. Further, consistent with Policy LU-4.5, the Project would develop and retain business uses without creating objectionable odors. Therefore, the Project is consistent with the goals and policies in the General Plan related to odor.

Last, BAAQMD Regulation 7 contains requirements on the discharge of odorous substances after the Air Pollution Control Officer (APCO) receives odor complaints from ten or more complainants within a 90-day period, alleging that a person has caused odors perceived at or beyond the property line of such person and deemed to be objectionable by the complainants in the normal course of their work, travel or residence [BAAQMD 7-102]. The operations within the Project will be subject to this regulation and will comply with the requirements if the regulation becomes applicable via BAAQMD 7-102, which is not expected. Therefore, the Project would be in compliance with BAAQMD Regulation 7.

Because the Project does not contain land uses in BAAQMD's odor screening distances, is consistent with the goals and policies of the General Plan related to odor, and would be in compliance with BAAQMD Regulation 7, the impact of the Project would be considered less than significant with respect to odors.

6. HEALTH RISK ASSESSMENT

In February 2015, OEHHA released the updated Air Toxics Hot Spots Program Guidance Manual for Preparation of Health Risk Assessments (OEHHA 2015a), which combines information from previously released and adopted technical support documents to delineate OEHHA's revised risk assessment methodologies based on current science. The BAAQMD issued guidelines on adopting the OEHHA 2015 Guidance Manual (BAAQMD 2020c). This evaluation utilizes the 2015 methodology; details of which are discussed below.

6.1 Project Construction Sources Evaluated

As discussed in **Section 3.1**, excess lifetime cancer risk, non-cancer chronic hazard index and $PM_{2.5}$ concentration were evaluated for on-site and off-site sensitive receptor exposure to emissions from Proposed Project construction (construction off-road equipment and nearby off-site vehicles). Because buildings will be completed with residents moving in as construction occurs around them, the impact of subsequent construction on on-site residents was evaluated, as discussed below. All modeled construction source groups included in the HRA are presented in **Table 53**. Construction source group locations are presented in **Figures 3, 4,** and **5**.

6.2 Project Operational Sources Evaluated

For Project operations, excess lifetime cancer risk, non-cancer chronic hazard index and $PM_{2.5}$ concentration from on-site and off-site sensitive receptor exposure to emissions from Proposed Project generators and Proposed Project operational-related traffic were evaluated. The existing generator currently located at the Project site and existing traffic counts from uses that will be removed as part of the Project were evaluated and subtracted from Project risks in the HRA analysis, resulting in health impacts from net new operational emissions. Operational source group locations are presented in **Figures 6**, **7**, and **8**.

Health risks were estimated from construction and operations, separately as well as together to conservatively estimate the combined cancer risk effect of construction activities and Project operation.

6.3 Exposure Assessment

Potentially Exposed Populations: This analysis evaluates on- and off-site sensitive receptors based on OEHHA 2015 Hot Spots Guidelines.

Emissions and exposure to sensitive populations would vary across the four year and eleven-month construction period. Therefore, multiple exposure scenarios were evaluated to capture the period of maximum impact on each sensitive population and location. Health impacts were evaluated in four exposure scenarios: 1) exposure beginning at the start of construction; 2) exposure beginning at the start of Grading and Utilities construction for the second area; 3) exposure beginning at the conclusion of Town Square and Residential/Shopping District construction when residents would move in; and 4) exposure beginning at the conclusion of Project construction when the Project is fully operational. **Figure 9** shows a Gantt chart of the construction schedule and the four exposure scenarios.

The four exposure scenarios were developed to capture the maximum risks from Project construction and operations. Due to the complex timing of Project construction, the selection of exposure scenarios took into consideration the magnitude of potential activity associated with each year. Scenario 1 starts at the beginning of construction and captures initial

demolition and grading. Scenario 2 starts after construction has begun and is intended to capture the maximum amount of overlapping construction activities that would occur during Project construction. Starting a receptor's exposure any time after these two scenarios would ignore the heaviest construction that occurs at the beginning of the Project. Therefore, these two exposure scenarios are designed to capture the maximum construction impacts. Scenario 3 starts when on-site residents move into the completed buildings while construction is still ongoing around them and captures overlapping construction and operational impacts on on-site residents for informational purposes. Lastly, Scenario 4 captures the fully operational Project once construction has concluded. The four exposure scenarios capture the maximum amount of health risk for on- and off-site receptors experiencing impacts from construction and operations.

For Scenarios 1 and 2, the following off-site receptor types were analyzed: resident child, daycare child, elementary school child, high school child. For Scenario 3, the following on-site receptor types were analyzed: resident child and recreational child. Senior residents living in the affordable senior building were conservatively analyzed using the resident child receptor type, since children have higher exposure parameters (including breathing rate and age sensitivity factor) than seniors. Scenario 3 analyzes the risk experienced by on-site receptors that would move into the completed buildings while construction is still ongoing around them. Maximum construction risks for off-site receptors are captured in Scenarios 1 and 2 since those exposure scenarios start closer to the start of construction and include more activity, which corresponds to higher impacts. Therefore, off-site receptor types are not included in Scenario 3. For Scenario 4, all of the above receptor types were analyzed. Similar to Scenario 3, senior residents living in the affordable senior building conservatively analyzed using the resident child receptor type. Two daycare receptor types were analyzed. One daycare child receptor type assumed infants could attend the daycare. One daycare child receptor type assumed only children over 18 months could attend, which is the age range for the daycare at Wund3r School located south of the Project site.[29]

Exposure Assumptions: The exposure parameters used to estimate excess lifetime cancer risks for all potentially exposed populations for the construction evaluation for this analysis were obtained using risk assessment guidelines from OEHHA (OEHHA 2015a) and BAAQMD (BAAQMD 2020c). **Table 54** shows the proposed exposure parameters that were used for the HRA.

Calculation of Intake: The dose estimated for each exposure pathway is a function of the concentration of a chemical and the intake of that chemical. The intake factor for inhalation, IF_{inh}, can be calculated as follows:

$$IF_{inh} = \frac{DBR * FAH * EF * ED * CF}{AT}$$

Where:

IF_{inh} = Intake Factor for Inhalation (m^3/kg-day)

DBR = Daily Breathing Rate (L/kg-day)

[29] The Wund3r School is a year-round academic and play-based program for children ages 18-months through Pre-K.

FAH = Frequency of time at home (unitless)

EF = Exposure Frequency (days/year)

ED = Exposure Duration (years)

AT = Averaging Time (days)

CF = Conversion Factor, 0.001 (m^3/L)

The chemical intake or dose was estimated by multiplying the inhalation intake factor, IF_{inh}, by the chemical concentration in air, C_i. When coupled with the chemical concentration, this calculation is mathematically equivalent to the dose algorithm given in the current OEHHA Hot Spots guidance (OEHHA 2015a).

6.3.1 Toxicity Assessment

The toxicity assessment characterizes the relationship between the magnitude of exposure and the nature and magnitude of adverse health effects that may result from such exposure. For purposes of calculating exposure criteria to be used in risk assessments, adverse health effects are classified into two broad categories – cancer and non-cancer endpoints. Toxicity values that are used to estimate the likelihood of adverse effects occurring in humans at different exposure levels are identified as part of the toxicity assessment component of a risk assessment.

Toxicity values for all TACs are summarized in **Table 46**.

6.3.2 Age Sensitivity Factors

The estimated excess lifetime cancer risks for a resident were adjusted using age sensitivity factors (ASFs) that account for an "anticipated special sensitivity to carcinogens" of infants and children as recommended in the OEHHA Technical Support Document (OEHHA 2009) and OEHHA 2015 Guidance (2015a). Cancer risk estimates were weighted by a factor of 10 for exposures that occur from the third trimester of pregnancy to two years of age and by a factor of three for exposures that occur from two years through 15 years of age. No weighting factor (i.e., an ASF of one, which is equivalent to no adjustment) was applied to ages 16 and older. **Table 54** presents the ASF values that were used for the HRA. **Table 55** through **Table 58** show the age sensitivity weighted intake factors by year and age bin by exposure scenario.

6.4 Risk Characterization

6.4.1 Estimation of Cancer Risks

Excess lifetime cancer risks are estimated as the upper-bound incremental probability that an individual will develop cancer over a lifetime as a direct result of exposure to potential carcinogens. The estimated risk is expressed as a unitless probability. The cancer risk attributed to a chemical is calculated by multiplying the chemical intake or dose at the human exchange boundaries (e.g., lungs) by the chemical-specific cancer potency factor (CPF).

The equation that was used to calculate the potential excess lifetime cancer risk for the inhalation pathway is as follows:

$$Risk_{inh} = C_i \times CF \times IF_{inh} \times CPF \times ASF$$

Where:

$Risk_{inh}$ = Cancer risk; the incremental probability of an individual developing cancer as a result of inhalation exposure to a particular potential carcinogen (unitless)

C_i = Annual average air concentration for $chemical_i$ ($\mu g/m^3$)

CF = Conversion factor (mg/µg)

IF_{inh} = Intake factor for inhalation (m^3/kg-day)

CPF_i = Cancer potency factor for $chemical_i$
$(mg\ chemical/kg\ body\ weight\text{-}day)^{-1}$

6.5 Estimation of Chronic Noncancer Hazard Indices

The potential for exposure to result in adverse chronic noncancer effects was evaluated by comparing the estimated annual average air concentration (which is equivalent to the average daily air concentration) to the noncancer chronic reference exposure level (cREL) for each chemical. When calculated for a single chemical, the comparison yields a ratio termed a hazard quotient (HQ).

$$HQ_i = C_i / cREL$$

Where:

HQ_i = Chronic hazard quotient for chemical i

C_i = Annual average concentration of chemical i ($\mu g/m^3$)

$cREL_i$ = Chronic noncancer reference exposure level for chemical i ($\mu g/m^3$)

6.6 Comparison to Thresholds

Health impacts from construction for each exposure scenario were compared to BAAQMD thresholds discussed in **Section 1.3.3**. Health impacts from operation starting at full buildout were compared to BAAQMD thresholds. Health impacts from Project construction and overlapping Project operations were added together to estimate the combined health risk impacts of construction activities and Project operation for each exposure scenario and were compared to the BAAQMD thresholds.

6.7 Health Risk Assessment Results

Health impacts from Project construction and Project operations were added together to estimate the combined health risk impacts of construction activities and operation for Scenarios 1, 2, and 3 discussed above.

6.7.1 Impacts from the Project

A summary of results from the HRA is shown in **Summary Table D**. A breakdown of excess lifetime cancer risk from Project construction, operational generators, and operational traffic at the MEIR is shown in **Table 59**. The table also shows the Scenario for which the maximum was identified. Similar breakdowns for chronic HI and $PM_{2.5}$ concentration are shown in **Table 60** and **Table 61**, respectively. These tables also show the Scenario for which the maximums were identified, as well as the year for which the maximum occurred since chronic HI and $PM_{2.5}$ concentrations are annual impacts. Mitigated impacts assume construction equipment have an average of 95 percent and 98 percent Tier 4 Final engines before and after residents move on-site, respectively, and 5 percent and 2 percent Tier 2

engines before and after residents move on-site, respectively. Mitigated impacts include reductions to fugitive dust due to watering.

Summary Table D. Summary of Health Risk Assessment Results

	BAAQMD Threshold of Significance	Unmitigated				Mitigated			
		On-site MEIR	*Exceed Threshold?*	Off-site MEIR	*Exceed Threshold?*	On-site MEIR	*Exceed Threshold?*	Off-site MEIR	*Exceed Threshold?*
Excess Lifetime Cancer Risk (in a million)	10	172	*Yes*	58	*Yes*	9.8	*No*	9.2	*No*
Chronic HI	1	0.23	*No*	0.11	*No*	0.011	*No*	0.014	*No*
$PM_{2.5}$ Concentration ($\mu g/m^3$)	0.3	1.1	*Yes*	0.56	*Yes*	0.13	*No*	0.18	*No*
Source: Table 59, Table 60, and Table 61 of the Appendix									

7. CUMULATIVE ANALYSIS

Consistent with the BAAQMD CEQA guidelines, the combined impacts from off-site and on-site sources were evaluated within the "zone of influence" of the Project. Off-site sources include BAAQMD permitted stationary sources, roadways with over 10,000 vehicles per day, and railways.

The cumulative impact was evaluated at the maximally exposed individual sensitive receptor (MEISR) for Project construction and operations. There is an on-site MEISR for informational purposes and, as required by CEQA, an off-site MEISR. The MEISR is the receptor with the highest incremental cancer risk, chronic HQ, and $PM_{2.5}$ concentration from the Project across all populations and exposure scenarios.

Health impacts from all identified sources within 1,000 feet of the Project were evaluated at this single location and added to the results from the Project's impacts. The sources that were considered in this analysis are described below.

Results at the MEISR were compared to the significance thresholds for cumulative impacts:

- An excess lifetime cancer risk level of more than 100 in one million;
- A chronic non-cancer HI greater than 10; and
- An incremental increase in the annual average $PM_{2.5}$ concentration of greater than 0.8 µg/m^3.

7.1 Stationary Sources

BAAQMD provides a stationary source GIS map tool to use to evaluate the impacts of off-site stationary sources (BAAQMD 2020a). Consistent with BAAQMD guidance, a request was sent to BAAQMD to provide the emissions from nearby stationary sources within 1,000 feet of the Project boundary. Using emissions made available by BAAQMD, risks, chronic hazard index, and $PM_{2.5}$ concentrations were estimated through the Risk and Hazards Emissions Screening Calculator, Beta Version 4.0 (BAAQMD 2020b).

Where appropriate, the impacts calculated using emissions provided by BAAQMD were scaled by the Diesel Internal Combustion Engine Distance Multiplier (BAAQMD 2012b) or Gasoline Dispensing Facility Multiplier (BAAQMD 2012c), per BAAQMD guidance. A summary of nearby stationary source impacts at the Project MEIR is summarized in **Table 62**.

7.2 Roadway Sources

BAAQMD recommends evaluating impacts from all roadways with traffic of over 10,000 vehicles per day within the "zone of influence." To evaluate potential health risk impacts from existing traffic on major roadways above 30,000 AADT and highways, BAAQMD provides raster files of health impacts. Ramboll pulled the corresponding values for the on-site and off-site MEISRs from the raster file. The BAAQMD tool represents the impact from the background traffic on the roadways as opposed to the impacts of net Project traffic as described in **Section 6.2**. These tools were used to estimate cancer risk and $PM_{2.5}$ concentrations from vehicle travel on major roadways and highways surrounding the Project. These tools do not provide specific estimates for chronic HI because the screening levels were found to be extremely low (BAAQMD 2015). Thus, there are no chronic hazard values associated with highways or major streets over 30,000 AADT. The tools developed by BAAQMD are based on an older version of EMFAC, traffic data that is a few years old, and an

operational start year of 2017. However, they represent a conservative estimate of health impacts, largely due to the reduction in emissions of the vehicle fleet between 2017 and when project buildout will occur.

BAAQMD recommends evaluating roadways in the area where existing traffic is over 10,000 vehicles per day and under 30,000 vehicles per day, which is the limit for roadways to consider in their raster tool. The Transportation Engineer provided background trip volumes for nearby roadways with volumes between 10,000 and 30,000 vehicles per day. Of the roadways with background traffic in this range, only O'Brien Drive was located within the zone of influence. A summary of background traffic volumes on O'Brien Drive is summarized in **Table 63**. The impacts associated with background traffic on O'Brien Drive were quantified and included in the cumulative analysis. To perform this analysis, Ramboll used methodology consistent with the Project traffic HRA, as described in **Sections 3.1.2** and **3.2.5.2**.

7.3 Railway Sources

BAAMQD provides raster files with health impacts from railways. The Project is adjacent to a railway that is rarely used and Caltrain is over 1,000 feet from the Project. The health impacts from the raster file were used to estimate the potential impact from railways at the MEISRs.

7.4 Cumulative Summary

As described above, nearby cumulative sources include existing stationary sources, highways, major streets, and railways. Impacts from these cumulative sources are combined with Project construction, operational generator, and operational traffic impacts at the on-site and off-site Project MEIRs. A summary of cumulative impacts at the Project MEIR is shown in **Table 64** and **Summary Table E** below.

Summary Table E. Summary of Cumulative Health Risk Assessment Results

	BAAQMD Threshold of Significance	**Mitigated**			
		On-site MEIR	***Exceed Threshold?***	**Off-site MEIR**	***Exceed Threshold?***
Excess Lifetime Cancer Risk (in a million)	100	25	*No*	23	*No*
Chronic HI	10	0.015	*No*	0.016	*No*
$PM_{2.5}$ Concentration ($\mu g/m^3$)	0.8	0.44	*No*	0.68	*No*
Source: Table 64 of the Appendix					

8. REFERENCES

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TABLES

Table 1
Land Use Summary
Willow Village
Menlo Park, California

Land Use[1]	CalEEMod® Land Use	Size	Units[2]	Square Footage
Existing Conditions (2019)				
Office	General Office Building	252	ksf	251,530
R&D	Research and Development	124	ksf	123,870
Warehouse	Unrefrigerated Warehouse-No Rail	501	ksf	500,780
Lab & Manufacture	Manufacturing	24	ksf	23,570
Health Center	Health Club	24	ksf	24,060
Former Fire Department Building	General Light Industry	80	ksf	80,100
Parking	Enclosed Parking with Elevator	2,300	Spaces	920,000

Partial Buildout by Year[3]			
Land Use Type[4]	**Percent Operational by Year**		
	Year 4	**Year 5**	**Year 6**
Office	3.1%	58%	95%
Retail	10%	59%	98%
Residential	0%	16%	64%
Hotel	0%	41%	100%
Parking	53%	75%	96%
Park	89%	95%	100%

Full Buildout			
Land Use Type[4]	**Size**	**Units[2]**	**Square Footage**
Office	1,600	ksf	1,600,000
Retail	208	ksf	207,690
Residential	1,730	DU	1,695,976
Hotel	193	Rooms	172,000
Parking	1,869	ksf	1,869,240
Park	404	ksf	403,837

Notes:

1. Land uses analyzed based on information provided by the Project Applicant, as found in the Project Description. "Office" land use mapped to General Office Building and Research and Development; "Office/Lab" mapped to General Office Building, Research and Development, Health Club, and Manufacturing; "Warehouse" mapped to Unrefrigerated Warehouse-No Rail and General Light Industry, and "Warehouse/Office" mapped to Unrefrigerated Warehouse-No Rail and Research and Development CalEEMod land use types on a building-by-building basis.
2. The Project Applicant provided Project land uses in units of square footage, hotel rooms, and dwelling units. For the existing parking land use, each parking space is assumed to be 400 sqft. This assumption is based on CalEEMod defaults.
3. Partial buildout for Year 4, Year 5, and Year 6 were calculated based on the portion of building area for each land use type that becomes operational each year, based on the construction schedule, as shown in Table 2.
4. For Hamilton Avenue Parcels North and South, only net new square footage was included in the analysis. This is under the conservative assumption that the existing retail area and the retail land use that will replace it have similar operational emissions.

Abbreviations:

DU - dwelling unit
sqft - square foot
ksf - 1,000 square feet
CalEEMod® - California Emissions Estimator Model

References:

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Table 2
Construction Phasing Schedule
Willow Village
Menlo Park, California

Construction Area[1]	Construction Subphase	Start Month[2]	End Month[2]	Number of Days[3]
Area 1	Demolition	Month 1	Month 5	97
	Grading and Utilities	Month 4	Month 11	143
Parcel 2 Foundations		Month 15	Month 23	161
Parcel 2 Core and Shell		Month 23	Month 31	180
Parcel 2 Tenant Improvements		Month 31	Month 43	261
Parcel 2 Landscaping		Month 43	Month 45	59
Parcel 3 Foundations		Month 18	Month 26	161
Parcel 3 Core and Shell		Month 26	Month 34	180
Parcel 3 Tenant Improvements		Month 34	Month 46	260
Parcel 3 Landscaping		Month 46	Month 48	58
North Garage		Month 12	Month 25	300
Office Building 4		Month 14	Month 35	449
Meeting, Collaboration, Park		Month 12	Month 52	871
Hotel Excavation		Month 12	Month 25	299
Hotel Construction		Month 30	Month 45	329
Town Square		Month 15	Month 43	610
Area 2	Demolition	Month 7	Month 9	48
	Grading and Utilities	Month 11	Month 16	130
Parcel 7 Foundations		Month 26	Month 31	116
Parcel 7 Core and Shell		Month 31	Month 37	129
Parcel 7 Tenant Improvements		Month 37	Month 45	188
Parcel 7 Landscaping		Month 45	Month 48	58
Parcel 6 Foundations		Month 29	Month 34	116
Parcel 6 Core and Shell		Month 34	Month 40	129
Parcel 6 Tenant Improvements		Month 40	Month 48	187
Parcel 6 Landscaping		Month 48	Month 51	59
South Garage		Month 16	Month 34	390
Office Building 3		Month 17	Month 40	501
Office Building 1		Month 17	Month 37	428
Office Building 2		Month 18	Month 38	426
Office Building 5		Month 16	Month 40	521
Office Building 6		Month 19	Month 43	520
Area 3	Grading and Utilities	Month 16	Month 18	22
	Tunnel Construction	Month 18	Month 29	262
	Foundations	Month 36	Month 42	123
	Core and Shell	Month 42	Month 48	139
	Tenant Improvements	Month 48	Month 58	199
	Landscaping	Month 58	Month 60	59
Hamilton Avenue Parcel North and South	Demolition	Month 37	Month 37	22
	Grading and Utilities	Month 37	Month 38	23
	Foundations	Month 38	Month 40	22
	Core and Shell	Month 40	Month 41	43
	Tenant Improvements	Month 41	Month 43	33
Substation Upgrade	PG&E Substation Work	Month 14	Month 19	109
Feeder Line	PG&E Offsite Work	Month 14	Month 25	240
	Surface Improvements	Month 14	Month 15	23
Intersection Improvements	O'Brien and Kavanaugh	Month 14	Month 14	15
	Adams and O'Brien	Month 14	Month 14	10
	Willow Road and Ivy Drive	Month 14	Month 14	10

Notes:

1. Area 1 includes Parcel 2, Parcel 3, North Garage, Office Building 4, Hotel, Town Square, and Meeting, Collaboration, Park. Area 2 includes Parcel 6, Parcel 7, South Garage, Office Building 1, Office Building 2, Office Building 3, Office Building 5, and Office Building 6. Area 3 includes Parcel 4 and Parcel 5, along with the Tunnel Construction.

[2.] Construction schedule and phasing information were provided by the Project Applicant. Construction is conservatively assumed to start December 15, 2021. The analysis uses the earliest possible start date to assess conservative impacts. Emissions and impacts would decrease if the construction start date is delayed due to the incorporation of cleaner equipment into the construction fleet with time.

[3.] Project construction will generally occur on Mondays through Fridays between the hours of 7 AM and 6 PM.

Table 3
Equipment List for Campus and Town Square District Construction
Willow Village
Menlo Park, California

Construction Subphase	Equipment Type[1]	CalEEMod® Equipment Category[2]	Horsepower[1]	Cumulative Hours per Building[1]	Year 2 Average Equipment Hours/Day[1]	Year 3 Average Equipment Hours/Day[1]	Year 4 Average Equipment Hours/Day[1]	Year 5 Average Equipment Hours/Day[1]	Year 6 Average Equipment Hours/Day[1]
North Garage	Air Compressor	Air Compressors	150	144	0.47	0.48	0	0	0
	Backhoe	Tractors/Loaders/Backhoes	350	10	0	0.039	0	0	0
	Bob Cat	Tractors/Loaders/Backhoes	200	10	0	0.039	0	0	0
	Boom Lift	Aerial Lifts	40	345	0	1.3	0	0	0
	Concrete Pump	Pumps	450	163	0.33	0.58	0	0	0
	Concrete Truck	Onsite HHDT	400	163	0.33	0.58	0	0	0
	Dump Truck	Onsite HHDT	450	31	0.59	0.023	0	0	0
	Excavator	Excavators	500	612	12	0.47	0	0	0
	Generator	Generator Sets	25	654	4.7	1.8	0	0	0
	Gradall	Forklifts	350	900	2.9	3.0	0	0	0
	Hydro/Crawler Crane	Cranes	550	1,421	2.9	5.0	0	0	0
	Loader	Tractors/Loaders/Backhoes	100	306	5.9	0.23	0	0	0
	Pile Rig	Bore/Drill Rigs	600	174	4.1	0	0	0	0
	Pressure Washer	Pressure Washers	25	32	0	0.12	0	0	0
	Semi Dump Truck	Onsite HHDT	450	459	8.8	0.35	0	0	0
	Semi Truck	Onsite HHDT	450	580	1.0	2.1	0	0	0
	Tire Wash	Other Construction Equipment	100	438	1.2	1.5	0	0	0
	Water Truck	Onsite HHDT	300	219	2.9	0.37	0	0	0
	Work Truck	Onsite LHDT1	200	111	0.15	0.41	0	0	0
Office Building 4	Air Compressor	Air Compressors	150	12	0	0.049	0	0	0
	Backhoe	Tractors/Loaders/Backhoes	350	306	0	1.3	0	0	0
	Bob Cat	Tractors/Loaders/Backhoes	200	306	0	1.3	0	0	0
	Boom Lift	Aerial Lifts	40	2,091	0	7.4	1.4	0	0
	Compactor	Other Construction Equipment	250	24	0	0.10	0	0	0
	Concrete Pump	Pumps	450	18	0	0.075	0	0	0
	Concrete Truck	Onsite HHDT	400	34	0	0.14	0	0	0
	Dump Truck	Onsite HHDT	450	9.2	0	0.04	0	0	0
	Excavator	Excavators	500	15	0	0.06	0	0	0
	Generator	Generator Sets	25	702	0	2.9	0	0	0
	Gradall	Forklifts	350	216	0	0.48	0.48	0	0
	Hydro/Crawler Crane	Cranes	550	438	0	1.8	0	0	0
	Loader	Tractors/Loaders/Backhoes	100	174	0	0.72	0	0	0
	Pile Rig	Bore/Drill Rigs	600	174	0	0.72	0	0	0
	Semi Truck	Onsite HHDT	450	1,120	0	2.3	2.7	0	0
	Tire Wash	Other Construction Equipment	100	674	0	1.5	1.5	0	0
	Water Truck	Onsite HHDT	300	219	0	0.90	0	0	0
	Work Truck	Onsite LHDT1	200	190	0	0.36	0.50	0	0
Meeting, Collaboration, Park	Air Compressor	Air Compressors	150	79	0	0.30	0	0	0
	Backhoe	Tractors/Loaders/Backhoes	350	1,098	5.9	3.3	0	0	0
	Bob Cat	Tractors/Loaders/Backhoes	200	1,098	5.9	3.3	0	0	0
	Boom Lift	Aerial Lifts	40	7,749	0	0.89	19	9.4	0
	Compactor	Other Construction Equipment	250	53	0.31	0.15	0	0	0
	Concrete Pump	Pumps	450	79	0	0.30	0	0	0
	Concrete Truck	Onsite HHDT	400	158	0	0.61	0	0	0
	Dump Truck	Onsite HHDT	450	639	5.9	1.5	0	0	0
	Excavator	Excavators	500	2,412	23	5.5	0	0	0
	Generator	Generator Sets	25	1,992	5.9	6.7	0	0	0

Table 3
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Menlo Park, California

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Meeting, Collaboration, Park	Gradall	Forklifts	350	8,661	8.8	7.7	10	12	12
	Hydro/Crawler Crane	Cranes	550	2,553	1.6	7.2	0.50	0.77	5.9
	Loader	Tractors/Loaders/Backhoes	100	660	4.4	1.8	0	0	0
	Pile Rig	Bore/Drill Rigs	600	654	3.1	2.0	0	0	0
	Pressure Washer	Pressure Washers	25	40	0	0.15	0	0	0
	Semi Dump Truck	Onsite HHDT	450	570	5.9	1.2	0	0	0
	Semi Truck	Onsite HHDT	450	2,603	0.39	1.4	4.2	4.2	1.0
	Tire Wash	Other Construction Equipment	100	275	1.5	0.82	0	0	0
	Water Truck	Onsite HHDT	300	718	2.9	1.9	0.37	0	0
	Work Truck	Onsite LHDT1	200	1,425	0.73	1.0	2.0	2.0	2.0
Hotel Excavation	Air Compressor	Air Compressors	150	705	2.6	2.3	0	0	0
	Backhoe	Tractors/Loaders/Backhoes	350	111	2.6	0	0	0	0
	Bob Cat	Tractors/Loaders/Backhoes	200	303	2.9	0.70	0	0	0
	Boom Lift	Aerial Lifts	40	152	1.5	0.35	0	0	0
	Concrete Pump	Pumps	450	612	0.42	2.3	0	0	0
	Concrete Truck	Onsite HHDT	400	612	0.42	2.3	0	0	0
	Dump Truck	Onsite HHDT	450	303	2.9	0.70	0	0	0
	Excavator	Excavators	500	1,212	12	2.8	0	0	0
	Generator	Generator Sets	25	2,982	5.9	11	0	0	0
	Gradall	Forklifts	350	2,982	5.9	11	0	0	0
	Hydro/Crawler Crane	Cranes	550	2,487	2.6	9.2	0	0	0
	Loader	Tractors/Loaders/Backhoes	100	1,212	12	2.8	0	0	0
	Pile Rig	Bore/Drill Rigs	600	444	11	0	0	0	0
	Pressure Washer	Pressure Washers	25	12	0	0.046	0	0	0
	Semi Dump Truck	Onsite HHDT	450	606	5.9	1.4	0	0	0
	Semi Truck	Onsite HHDT	450	115	0.16	0.42	0	0	0
	Tire Wash	Other Construction Equipment	100	600	2.9	1.9	0	0	0
	Water Truck	Onsite HHDT	300	398	2.9	1.1	0	0	0
	Work Truck	Onsite LHDT1	200	796	2.0	2.8	0	0	0
Hotel Construction	Air Compressor	Air Compressors	150	654	0	0	3.0	0.84	0
	Boom Lift	Aerial Lifts	40	6,768	0	0	21	20	0
	Concrete Pump	Pumps	450	654	0	0	3.0	0.84	0
	Concrete Truck	Onsite HHDT	400	654	0	0	3.0	0.84	0
	Gradall	Forklifts	350	3,960	0	0	12	12	0
	Pressure Washer	Pressure Washers	25	13	0	0	0.060	0.017	0
	Semi Truck	Onsite HHDT	450	1,733	0	0	1.9	9.1	0
	Tire Wash	Other Construction Equipment	100	495	0	0	1.5	1.5	0
	Water Truck	Onsite HHDT	300	158	0	0	0.48	0.48	0
	Work Truck	Onsite LHDT1	200	400	0	0	1.4	1.0	0
Town Square	Bob Cat	Tractors/Loaders/Backhoes	200	975	0	3.0	1.0	0	0
	Boom Lift	Aerial Lifts	40	848	0	1.5	1.9	0	0
	Concrete Pump	Pumps	450	5.3	0	0	0.020	0	0
	Concrete Truck	Onsite HHDT	400	5.3	0	0	0.020	0	0
	Dump Truck	Onsite HHDT	450	975	0	3.0	1.0	0	0
	Excavator	Excavators	500	3,900	0	12	4.0	0	0
	Generator	Generator Sets	25	1,572	0	6.0	0.55	0	0
	Gradall	Forklifts	350	4,788	0	6.0	5.3	18	0

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Construction Subphase	Equipment Type[1]	CalEEMod® Equipment Category[2]	Horsepower[1]	Cumulative Hours per Building[1]	Year 2 Average Equipment Hours/Day[1]	Year 3 Average Equipment Hours/Day[1]	Year 4 Average Equipment Hours/Day[1]	Year 5 Average Equipment Hours/Day[1]	Year 6 Average Equipment Hours/Day[1]
Town Square	Hydro/Crawler Crane	Cranes	550	290	0	0	1.0	0.18	0
	Loader	Tractors/Loaders/Backhoes	100	3,900	0	12.0	4.0	0	0
	Semi Dump Truck	Onsite HHDT	450	1,950	0	6.0	2.0	0	0
	Semi Truck	Onsite HHDT	450	397	0	0.16	0.53	2.0	0
	Tire Wash	Other Construction Equipment	100	975	0	3.0	1.0	0	0
	Water Truck	Onsite HHDT	300	975	0	3.0	1.0	0	0
	Work Truck	Onsite LHDT1	200	1,084	0	2.0	1.5	2.0	0
South Garage	Air Compressor	Air Compressors	150	187	0	0.48	0.48	0	0
	Backhoe	Tractors/Loaders/Backhoes	350	11	0	0.055	0	0	0
	Bob Cat	Tractors/Loaders/Backhoes	200	11	0	0.055	0	0	0
	Boom Lift	Aerial Lifts	40	891	0	0	4.7	0	0
	Concrete Pump	Pumps	450	204	0	0.45	0.60	0	0
	Concrete Truck	Onsite HHDT	400	218	0	0.52	0.60	0	0
	Dump Truck	Onsite HHDT	450	30	0	0.15	0	0	0
	Excavator	Excavators	500	600	0	3.0	0	0	0
	Generator	Generator Sets	25	654	0	3.2	0	0	0
	Gradall	Forklifts	350	1,170	0	3.0	3.0	0	0
	Hydro/Crawler Crane	Cranes	550	1,688	0	4.9	3.7	0	0
	Loader	Tractors/Loaders/Backhoes	100	300	0	1.5	0	0	0
	Pile Rig	Bore/Drill Rigs	600	174	0	0.86	0	0	0
	Pressure Washer	Pressure Washers	25	32	0	0.16	0	0	0
	Semi Dump Truck	Onsite HHDT	450	450	0	2.2	0	0	0
	Semi Truck	Onsite HHDT	450	873	0	1.9	2.6	0	0
	Tire Wash	Other Construction Equipment	100	575	0	1.4	1.5	0	0
	Water Truck	Onsite HHDT	300	216	0	1.1	0	0	0
	Work Truck	Onsite LHDT1	200	159	0	0.32	0.50	0	0
Office Building 3	Air Compressor	Air Compressors	150	12	0	0.067	0	0	0
	Backhoe	Tractors/Loaders/Backhoes	350	456	0	2.6	0	0	0
	Bob Cat	Tractors/Loaders/Backhoes	200	456	0	2.6	0	0	0
	Boom Lift	Aerial Lifts	40	2,097	0	1.7	6.9	0	0
	Compactor	Other Construction Equipment	250	36	0	0.21	0	0	0
	Concrete Pump	Pumps	450	23	0	0.12	5.0E-03	0	0
	Concrete Truck	Onsite HHDT	400	46	0	0.25	5.0E-03	0	0
	Dump Truck	Onsite HHDT	450	14	0	0.077	0	0	0
	Excavator	Excavators	500	23	0	0.13	0	0	0
	Generator	Generator Sets	25	852	0	4.8	0	0	0
	Gradall	Forklifts	350	240	0	0.48	0.48	0.48	0
	Hydro/Crawler Crane	Cranes	550	588	0	3.3	0	0	0
	Loader	Tractors/Loaders/Backhoes	100	330	0	1.9	0	0	0
	Pile Rig	Bore/Drill Rigs	600	330	0	1.9	0	0	0
	Semi Truck	Onsite HHDT	450	1,223	0	1.8	2.8	3.0	0
	Tire Wash	Other Construction Equipment	100	752	0	1.5	1.5	1.5	0
	Water Truck	Onsite HHDT	300	294	0	1.7	0	0	0
	Work Truck	Onsite LHDT1	200	210	0	0.27	0.50	0.50	0
Office Building 1	Air Compressor	Air Compressors	150	12	0	0.07	0	0	0
	Backhoe	Tractors/Loaders/Backhoes	350	402	0	2.2	0	0	0
	Bob Cat	Tractors/Loaders/Backhoes	200	402	0	2.2	0	0	0

Table 3
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Willow Village
Menlo Park, California

Construction Subphase	Equipment Type[1]	CalEEMod® Equipment Category[2]	Horsepower[1]	Cumulative Hours per Building[1]	Year 2 Average Equipment Hours/Day[1]	Year 3 Average Equipment Hours/Day[1]	Year 4 Average Equipment Hours/Day[1]	Year 5 Average Equipment Hours/Day[1]	Year 6 Average Equipment Hours/Day[1]
Office Building 1	Boom Lift	Aerial Lifts	40	2,076	0	2.5	6.6	0	0
	Compactor	Other Construction Equipment	250	32	0	0.18	0	0	0
	Concrete Pump	Pumps	450	21	0	0.11	5.3E-03	0	0
	Concrete Truck	Onsite HHDT	400	41	0	0.22	5.3E-03	0	0
	Dump Truck	Onsite HHDT	450	12	0	0.067	0	0	0
	Excavator	Excavators	500	20	0	0.11	0	0	0
	Generator	Generator Sets	25	792	0	4.4	0	0	0
	Gradall	Forklifts	350	205	0	0.48	0.48	0	0
	Hydro/Crawler Crane	Cranes	550	522	0	2.9	0	0	0
	Loader	Tractors/Loaders/Backhoes	100	264	0	1.5	0	0	0
	Pile Rig	Bore/Drill Rigs	600	264	0	1.5	0	0	0
	Semi Truck	Onsite HHDT	450	1,025	0	1.9	2.7	0	0
	Tire Wash	Other Construction Equipment	100	642	0	1.5	1.5	0	0
	Water Truck	Onsite HHDT	300	261	0	1.5	0	0	0
	Work Truck	Onsite LHDT1	200	176	0	0.29	0.50	0	0
Office Building 2	Air Compressor	Air Compressors	150	12	0	0.076	0	0	0
	Backhoe	Tractors/Loaders/Backhoes	350	390	0	2.5	0	0	0
	Bob Cat	Tractors/Loaders/Backhoes	200	390	0	2.5	0	0	0
	Boom Lift	Aerial Lifts	40	2,097	0	1.2	7.3	0	0
	Compactor	Other Construction Equipment	250	31	0	0.20	0	0	0
	Concrete Pump	Pumps	450	21	0	0.12	5.0E-03	0	0
	Concrete Truck	Onsite HHDT	400	40	0	0.25	5.0E-03	0	0
	Dump Truck	Onsite HHDT	450	12	0	0.075	0	0	0
	Excavator	Excavators	500	20	0	0.12	0	0	0
	Generator	Generator Sets	25	786	0	5.0	0	0	0
	Gradall	Forklifts	350	204	0	0.48	0.48	0.48	0
	Hydro/Crawler Crane	Cranes	550	522	0	3.3	0	0	0
	Loader	Tractors/Loaders/Backhoes	100	264	0	1.7	0	0	0
	Pile Rig	Bore/Drill Rigs	600	264	0	1.7	0	0	0
	Semi Truck	Onsite HHDT	450	1,020	0	1.8	2.8	3.0	0
	Tire Wash	Other Construction Equipment	100	639	0	1.5	1.5	1.5	0
	Water Truck	Onsite HHDT	300	261	0	1.7	0	0	0
	Work Truck	Onsite LHDT1	200	175	0	0.26	0.50	0.50	0
Office Building 5	Air Compressor	Air Compressors	150	12	0	0.059	0	0	0
	Backhoe	Tractors/Loaders/Backhoes	350	534	0	2.6	0	0	0
	Bob Cat	Tractors/Loaders/Backhoes	200	534	0	2.6	0	0	0
	Boom Lift	Aerial Lifts	40	2,067	0	2.2	6.2	0	0
	Compactor	Other Construction Equipment	250	43	0	0.21	0	0	0
	Concrete Pump	Pumps	450	25	0	0.12	4.8E-03	0	0
	Concrete Truck	Onsite HHDT	400	52	0	0.25	4.8E-03	0	0
	Dump Truck	Onsite HHDT	450	16	0	0.08	0	0	0
	Excavator	Excavators	500	27	0	0.13	0	0	0
	Generator	Generator Sets	25	930	0	4.6	0	0	0
	Gradall	Forklifts	350	250	0	0.48	0.48	0.48	0
	Hydro/Crawler Crane	Cranes	550	660	0	3.3	0	0	0
	Loader	Tractors/Loaders/Backhoes	100	396	0	2.0	0	0	0
	Pile Rig	Bore/Drill Rigs	600	396	0	2.0	0	0	0

Table 3
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Construction Subphase	Equipment Type[1]	CalEEMod® Equipment Category[2]	Horsepower[1]	Cumulative Hours per Building[1]	Year 2 Average Equipment Hours/Day[1]	Year 3 Average Equipment Hours/Day[1]	Year 4 Average Equipment Hours/Day[1]	Year 5 Average Equipment Hours/Day[1]	Year 6 Average Equipment Hours/Day[1]
Office Building 5	Semi Truck	Onsite HHDT	450	1,260	0	1.8	2.8	3.0	0
	Tire Wash	Other Construction Equipment	100	782	0	1.5	1.5	1.5	0
	Water Truck	Onsite HHDT	300	330	0	1.6	0	0	0
	Work Truck	Onsite LHDT1	200	217	0	0.28	0.50	0.50	0
Office Building 6	Air Compressor	Air Compressors	150	12	0	0.062	0.013	0	0
	Backhoe	Tractors/Loaders/Backhoes	350	534	0	3.9	0	0	0
	Bob Cat	Tractors/Loaders/Backhoes	200	534	0	3.9	0	0	0
	Boom Lift	Aerial Lifts	40	2,097	0	0	8.0	0	0
	Compactor	Other Construction Equipment	250	43	0	0.31	0	0	0
	Concrete Pump	Pumps	450	25	0	0.16	0.014	0	0
	Concrete Truck	Onsite HHDT	400	52	0	0.35	0.014	0	0
	Dump Truck	Onsite HHDT	450	16	0	0.12	0	0	0
	Excavator	Excavators	500	27	0	0.20	0	0	0
	Generator	Generator Sets	25	930	0	6.0	0.44	0	0
	Gradall	Forklifts	350	250	0	0.48	0.48	0.48	0
	Hydro/Crawler Crane	Cranes	550	666	0	4.9	0	0	0
	Loader	Tractors/Loaders/Backhoes	100	408	0	3.0	0	0	0
	Pile Rig	Bore/Drill Rigs	600	408	0	3.0	0	0	0
	Semi Truck	Onsite HHDT	450	1,254	0	1.2	2.8	3.0	0
	Tire Wash	Other Construction Equipment	100	780	0	1.5	1.5	1.5	0
	Water Truck	Onsite HHDT	300	333	0	2.4	0	0	0
	Work Truck	Onsite LHDT1	200	216	0	0.25	0.46	0.50	0

Notes:

1. Information on Project equipment list, horsepower, quantity, and hours per equipment per year were provided by the Project Applicant. Cumulative hours per building represents the sum of hours per equipment across all years. All off-road equipment is assumed to have diesel engines except aerial lifts and cranes which were assumed to be electric, as designated by Project Applicant.

2. Work trucks are assumed to be similar to light-heavy duty trucks (Onsite LHDT1) as defined in EMFAC2021. Concrete Trucks, Dump Trucks, Semi Trucks, and Water Trucks are assumed to be similar to heavy-heavy duty trucks (Onsite HHDT). Emission factors are from EMFAC2021 ("Emission Rates" mode) for LHDT1 and HHDT diesel vehicles (aggregated model year) in San Mateo County. RUNEX emission factors (and IDLEX emission factors for HHDT) are specific to vehicle speed of 15 mph. All other emission factor types are for aggregated speed. Emission factors were multiplied by the appropriate usage parameter based on the units. Emission factors in units of g/trip, g/mi, and g/vehicle/day, were multiplied by trips, miles, and total vehicles, respectively, in order to obtain mass emissions.

   An average emission factors is calculated using the following criteria:
   - Number of LHDT1/HHDT vehicles and schedule are provided by the client.
   - Hours are calculated as number of equipment * utilization percent * number of construction days * hours/day as provided by the client.
   - Miles are calculated as hours * the speed limit (15 miles per hour).
   - Trips are calculated assuming there is one trip per hour, calculated as number of hours * 1 trip/hour.
   - Total Vehicles are calculated as number of equipment for a given subphase * equipment utilization percent * number of construction subphase days as provided by the client.

Abbreviations:

CalEEMod® - CALifornia Emissions Estimator MODel

Table 4
Equipment List for Residential / Shopping District Construction
Willow Village
Menlo Park, California

Construction Area[1]	Construction Subphase	Equipment Type[2]	CalEEMod® Equipment Category[3]	Number[2]	Horsepower[2]	Hours / Day[2]	Utilization Percent[2]
Area 1	Demolition	Excavator	Excavators	4	131	8	90%
		Semi Truck	Onsite HHDT	12	450	8	25%
		Generator	Generator Sets	2	25	6	50%
		Tire Wash	Other Construction Equipment	2	100	4	90%
		Work Truck	Onsite LHDT1	24	250	0.5	100%
		Water Truck	Onsite HHDT	2	300	8	50%
		Bob Cat	Tractors/Loaders/Backhoes	6	150	8	80%
		Pressure Washer	Pressure Washers	2	25	8	100%
		Air Compressor	Air Compressors	1	140	6	70%
	Grading and Utilities	Blade	Graders	2	359	8	15%
		Semi Dump Truck	Onsite HHDT	10	450	8	25%
		Scraper	Scrapers	2	41	8	15%
		Loader	Tractors/Loaders/Backhoes	4	100	4	90%
		Tire Wash	Other Construction Equipment	2	100	4	90%
		Excavator	Excavators	4	359	8	60%
		Backhoe	Tractors/Loaders/Backhoes	4	350	8	60%
		Gradall	Forklifts	4	350	4	60%
		Compactor	Other Construction Equipment	4	250	0.5	20%
		Paver	Pavers	2	250	8	1%
		Water Truck	Onsite HHDT	2	300	8	50%
		Work Truck	Onsite LHDT1	38	250	0.5	100%
		Generator	Generator Sets	1	600	2	10%
		Concrete Truck	Onsite HHDT	2	400	2	10%
Parcel 2 Foundations		Dump Truck	Onsite HHDT	3	450	8	25%
		Tire Wash	Other Construction Equipment	1	100	4	90%
		Excavator	Excavators	1	131	8	60%
		Semi Trucks	Onsite HHDT	2	450	8	25%
		Backhoe	Tractors/Loaders/Backhoes	1	90	8	60%
		Bob Cat	Tractors/Loaders/Backhoes	1	70	8	80%
		Gradall	Forklifts	1	74	4	80%
		Crane	Cranes	1	215	4	50%
		Work Truck	Onsite LHDT1	4	250	0.5	100%
		Concrete Truck	Onsite HHDT	8	400	8	15%
		Concrete Pump	Pumps	1	450	8	15%
Parcel 2 Core and Shell		Semi Truck	Onsite HHDT	1	450	8	25%
		Tire Wash	Other Construction Equipment	1	100	4	90%
		Crane	Cranes	1	600	8	20%
		Gradall	Forklifts	1	74	4	80%
		Manlift	Aerial Lifts	1	48	8	40%
		Work Truck	Onsite LHDT1	8	250	0.5	100%
Parcel 2 Tenant Improvements		Semi Truck	Onsite HHDT	1	450	8	25%
		Tire Wash	Other Construction Equipment	1	100	4	90%
		Manlift	Aerial Lifts	1	48	0.5	90%
		Scissor Lift	Aerial Lifts	1	3	4	80%
		Gradall	Forklifts	1	74	4	80%
		Work Truck	Onsite LHDT1	6	250	0.5	90%
Parcel 2 Landscaping		Excavator	Excavators	1	25	8	90%
		Semi Truck	Onsite HHDT	3	450	8	25%
		Tire Wash	Other Construction Equipment	1	100	4	90%
		Backhoe	Tractors/Loaders/Backhoes	1	90	8	100%
		Work Truck	Onsite LHDT1	5	250	0.5	100%
		Bob Cat	Tractors/Loaders/Backhoes	1	70	8	80%
Parcel 3 Foundations		Dump Truck	Onsite HHDT	4	450	8	25%
		Tire Wash	Other Construction Equipment	1	100	4	90%
		Excavator	Excavators	1	131	8	60%
		Semi Trucks	Onsite HHDT	2	450	8	25%
		Backhoe	Tractors/Loaders/Backhoes	2	90	8	60%
		Bob Cat	Tractors/Loaders/Backhoes	1	70	8	80%
		Gradall	Forklifts	1	74	4	80%
		Crane	Cranes	1	215	4	50%
		Work Truck	Onsite LHDT1	4	250	0.5	100%
		Concrete Truck	Onsite HHDT	8	400	8	15%
		Concrete Pump	Pumps	1	450	8	15%
Parcel 3 Core and Shell		Semi Truck	Onsite HHDT	2	450	8	25%
		Tire Wash	Other Construction Equipment	1	100	4	90%
		Crane	Cranes	1	600	8	20%
		Gradall	Forklifts	2	74	4	80%
		Manlift	Aerial Lifts	2	48	8	40%
		Work Truck	Onsite LHDT1	8	250	0.5	100%

Table 4
Equipment List for Residential / Shopping District Construction
Willow Village
Menlo Park, California

Construction Area[1]	Construction Subphase	Equipment Type[2]	CalEEMod® Equipment Category[3]	Number[2]	Horsepower[2]	Hours / Day[2]	Utilization Percent[2]
Parcel 3 Tenant Improvements		Semi Truck	Onsite HHDT	2	450	8	25%
		Tire Wash	Other Construction Equipment	1	100	4	90%
		Manlift	Aerial Lifts	2	48	0.5	90%
		Scissor Lift	Aerial Lifts	2	3	4	80%
		Gradall	Forklifts	1	74	4	80%
		Work Truck	Onsite LHDT1	7	250	0.5	90%
Parcel 3 Landscaping		Excavator	Excavators	1	25	8	90%
		Semi Truck	Onsite HHDT	3	450	8	25%
		Backhoe	Tractors/Loaders/Backhoes	1	90	8	100%
		Work Truck	Onsite LHDT1	5	250	0.5	100%
		Bob Cat	Tractors/Loaders/Backhoes	2	70	8	80%
Area 2	Demolition	Excavator	Excavators	4	131	8	90%
		Semi Truck	Onsite HHDT	12	450	8	25%
		Generator	Generator Sets	2	25	6	50%
		Tire Wash	Other Construction Equipment	2	100	4	90%
		Work Truck	Onsite LHDT1	24	250	0.5	100%
		Water Truck	Onsite HHDT	2	300	8	50%
		Bob Cat	Tractors/Loaders/Backhoes	6	150	8	80%
		Pressure Washer	Pressure Washers	2	25	8	100%
		Air Compressor	Air Compressors	1	140	6	70%
	Grading and Utilities	Blade	Graders	2	359	8	15%
		Semi Dump Truck	Onsite HHDT	10	450	8	25%
		Scraper	Scrapers	2	41	8	15%
		Loader	Tractors/Loaders/Backhoes	4	100	4	90%
		Tire Wash	Other Construction Equipment	2	100	4	90%
		Excavator	Excavators	4	359	8	60%
		Backhoe	Tractors/Loaders/Backhoes	4	350	8	60%
		Gradall	Forklifts	4	350	4	60%
		Compactor	Other Construction Equipment	4	250	0.5	20%
		Paver	Pavers	2	250	8	1%
		Water Truck	Onsite HHDT	2	300	8	50%
		Work Truck	Onsite LHDT1	38	250	0.5	100%
		Generator	Generator Sets	1	600	2	10%
		Concrete Truck	Onsite HHDT	2	400	2	10%
Parcel 7 Foundations		Dump Truck	Onsite HHDT	3	450	8	25%
		Tire Wash	Other Construction Equipment	1	100	4	90%
		Excavator	Excavators	1	131	8	60%
		Semi Trucks	Onsite HHDT	1	450	8	25%
		Backhoe	Tractors/Loaders/Backhoes	1	90	8	60%
		Bob Cat	Tractors/Loaders/Backhoes	1	70	8	80%
		Gradall	Forklifts	1	74	4	80%
		Crane	Cranes	1	215	4	50%
		Work Truck	Onsite LHDT1	4	250	0.5	100%
		Concrete Truck	Onsite HHDT	1	400	1.5	70%
		Concrete Pump	Pumps	1	450	0.25	50%
Parcel 7 Core and Shell		Semi Truck	Onsite HHDT	1	450	8	25%
		Tire Wash	Other Construction Equipment	1	100	4	90%
		Crane	Cranes	1	600	8	20%
		Gradall	Forklifts	1	74	4	80%
		Manlift	Aerial Lifts	1	48	8	40%
		Work Truck	Onsite LHDT1	8	250	0.5	100%
Parcel 7 Tenant Improvements		Semi Truck	Onsite HHDT	1	450	8	25%
		Tire Wash	Other Construction Equipment	1	100	4	90%
		Manlift	Aerial Lifts	1	48	0.5	90%
		Scissor Lift	Aerial Lifts	1	3	4	80%
		Gradall	Forklifts	1	74	4	80%
		Work Truck	Onsite LHDT1	6	250	0.5	90%
Parcel 7 Landscaping		Excavator	Excavators	1	25	8	90%
		Semi Truck	Onsite HHDT	3	450	8	25%
		Tire Wash	Other Construction Equipment	1	100	4	90%
		Backhoe	Tractors/Loaders/Backhoes	1	90	8	60%
		Work Truck	Onsite LHDT1	5	250	0.5	100%
		Bob Cat	Tractors/Loaders/Backhoes	1	70	8	80%
Parcel 6 Foundations		Dump Truck	Onsite HHDT	3	450	8	25%
		Tire Wash	Other Construction Equipment	1	100	4	90%
		Excavator	Excavators	1	131	8	60%
		Semi Trucks	Onsite HHDT	2	450	8	25%
		Backhoe	Tractors/Loaders/Backhoes	1	90	8	60%
		Bob Cat	Tractors/Loaders/Backhoes	1	70	8	80%
		Gradall	Forklifts	1	74	4	80%

Table 4
Equipment List for Residential / Shopping District Construction
Willow Village
Menlo Park, California

Construction Area[1]	Construction Subphase	Equipment Type[2]	CalEEMod® Equipment Category[3]	Number[2]	Horsepower[2]	Hours / Day[2]	Utilization Percent[2]
Parcel 6 Foundations		Crane	Cranes	1	215	4	50%
		Work Truck	Onsite LHDT1	4	250	0.5	100%
		Concrete Truck	Onsite HHDT	1	400	3	70%
		Concrete Pump	Pumps	1	450	0.5	50%
Parcel 6 Core and Shell		Semi Truck	Onsite HHDT	2	450	8	25%
		Tire Wash	Other Construction Equipment	1	100	4	90%
		Crane	Cranes	1	600	8	20%
		Gradall	Forklifts	2	74	4	80%
		Manlift	Aerial Lifts	1	48	8	40%
		Work Truck	Onsite LHDT1	8	250	0.5	100%
Parcel 6 Tenant Improvements		Semi Truck	Onsite HHDT	2	450	8	25%
		Tire Wash	Other Construction Equipment	1	100	4	90%
		Manlift	Aerial Lifts	1	48	0.5	90%
		Scissor Lift	Aerial Lifts	2	3	4	80%
		Gradall	Forklifts	1	74	4	80%
		Work Truck	Onsite LHDT1	7	250	0.5	90%
Parcel 6 Landscaping		Excavator	Excavators	1	25	8	90%
		Semi Truck	Onsite HHDT	3	450	8	25%
		Backhoe	Tractors/Loaders/Backhoes	1	90	8	60%
		Work Truck	Onsite LHDT1	5	250	0.5	100%
		Bob Cat	Tractors/Loaders/Backhoes	2	70	8	80%
Area 3	Grading and Utilities	Blade	Graders	1	359	8	15%
		Semi Dump Truck	Onsite HHDT	6	450	8	25%
		Scraper	Scrapers	1	41	8	15%
		Loader	Tractors/Loaders/Backhoes	2	100	4	90%
		Tire Wash	Other Construction Equipment	1	100	4	90%
		Excavator	Excavators	2	359	8	60%
		Backhoe	Tractors/Loaders/Backhoes	2	350	8	60%
		Gradall	Forklifts	2	350	4	60%
		Compactor	Other Construction Equipment	2	250	0.5	20%
		Paver	Pavers	1	250	8	1%
		Water Truck	Onsite HHDT	1	300	8	50%
		Work Truck	Onsite LHDT1	20	250	0.5	100%
		Generator	Generator Sets	1	600	2	10%
		Concrete Truck	Onsite HHDT	2	400	2	10%
	Tunnel Construction	Crane	Cranes	1	290	6	35%
		Excavator	Excavators	2	170	6	45%
		Loader	Tractors/Loaders/Backhoes	1	250	6	45%
		Backhoe	Tractors/Loaders/Backhoes	1	103	6	40%
		Gradall	Forklifts	1	130	6	35%
		Boom Truck	Onsite HHDT	1	200	6	35%
		Concrete Truck	Onsite HHDT	3	300	5	25%
		Dump Truck	Onsite HHDT	4	300	5	25%
		Work Truck	Onsite LHDT1	5	250	4	30%
		Compressor	Air Compressors	2	50	6	30%
	Foundations	Dump Truck	Onsite HHDT	4	450	8	25%
		Generator	Generator Sets	2	25	6	100%
		Tire Wash	Other Construction Equipment	2	100	4	90%
		Excavator	Excavators	2	131	8	60%
		Semi Trucks	Onsite HHDT	4	450	8	25%
		Backhoe	Tractors/Loaders/Backhoes	2	90	8	60%
		Bob Cat	Tractors/Loaders/Backhoes	2	70	8	80%
		Gradall	Forklifts	2	74	4	80%
		Crane	Cranes	2	215	4	50%
		Work Truck	Onsite LHDT1	4	250	0.5	100%
		Concrete Truck	Onsite HHDT	3	400	3	70%
		Concrete Pump	Pumps	3	450	0.5	50%
	Core and Shell	Semi Truck	Onsite HHDT	3	450	8	25%
		Generator	Generator Sets	2	25	6	100%
		Tire Wash	Other Construction Equipment	2	100	4	90%
		Crane	Cranes	2	600	8	20%
		Gradall	Forklifts	3	74	4	80%
		Manlift	Aerial Lifts	3	48	8	40%
		Work Truck	Onsite LHDT1	16	250	0.5	100%
	Tenant Improvements	Semi Truck	Onsite HHDT	3	450	8	25%
		Generator	Generator Sets	2	25	6	85%
		Tire Wash	Other Construction Equipment	2	100	4	90%
		Manlift	Aerial Lifts	3	48	0.5	90%
		Scissor Lift	Aerial Lifts	3	3	4	80%
		Gradall	Forklifts	1	74	4	80%

Table 4
Equipment List for Residential / Shopping District Construction
Willow Village
Menlo Park, California

Construction Area[1]	Construction Subphase	Equipment Type[2]	CalEEMod® Equipment Category[3]	Number[2]	Horsepower[2]	Hours / Day[2]	Utilization Percent[2]
Area 3	Tenant Improvements	Work Truck	Onsite LHDT1	13	250	0.5	90%
	Landscaping	Excavator	Excavators	1	25	8	90%
		Semi Truck	Onsite HHDT	6	450	8	25%
		Tire Wash	Other Construction Equipment	1	100	4	90%
		Backhoe	Tractors/Loaders/Backhoes	2	90	8	60%
		Work Truck	Onsite LHDT1	10	250	0.5	100%
		Bob Cat	Tractors/Loaders/Backhoes	3	70	8	80%
Hamilton Avenue Parcels North and South	Demolition	Excavator	Excavators	1	131	8	90%
		Semi Truck	Onsite HHDT	3	450	8	80%
		Generator	Generator Sets	1	25	6	50%
		Tire Wash	Other Construction Equipment	2	100	4	90%
		Work Truck	Onsite LHDT1	6	250	0.5	100%
		Water Truck	Onsite HHDT	1	300	8	100%
		Bob Cat	Tractors/Loaders/Backhoes	2	70	8	80%
		Pressure Washer	Pressure Washers	2	25	8	100%
		Air Compressor	Air Compressors	1	140	6	70%
	Grading and Utilities	Semi Dump Truck	Onsite HHDT	3	450	8	80%
		Loader	Tractors/Loaders/Backhoes	2	100	4	90%
		Tire Wash	Other Construction Equipment	1	100	4	90%
		Excavator	Excavators	1	359	8	60%
		Backhoe	Tractors/Loaders/Backhoes	1	90	8	60%
		Gradall	Forklifts	1	74	4	60%
		Compactor	Other Construction Equipment	1	250	0.5	20%
		Paver	Pavers	1	250	8	1%
		Water Truck	Onsite HHDT	1	300	8	100%
		Work Truck	Onsite LHDT1	8	250	0.5	100%
		Generator	Generator Sets	1	600	2	10%
		Concrete Truck	Onsite HHDT	2	400	2	10%
	Foundations	Dump Truck	Onsite HHDT	1	450	8	60%
		Generator	Generator Sets	1	25	6	100%
		Tire Wash	Other Construction Equipment	1	100	4	90%
		Semi Trucks	Onsite HHDT	1	450	8	80%
		Backhoe	Tractors/Loaders/Backhoes	1	90	8	60%
		Bob Cat	Tractors/Loaders/Backhoes	1	70	8	80%
		Gradall	Forklifts	1	74	4	80%
		Work Truck	Onsite LHDT1	2	250	0.5	100%
		Concrete Truck	Onsite HHDT	1	400	3	60%
		Concrete Pump	Pumps	1	450	6	30%
	Core and Shell	Semi Truck	Onsite HHDT	1	450	8	75%
		Generator	Generator Sets	1	25	6	100%
		Tire Wash	Other Construction Equipment	1	100	4	90%
		Gradall	Forklifts	1	74	4	80%
		Work Truck	Onsite LHDT1	4	250	0.5	100%
		Concrete Truck	Onsite HHDT	1	400	6	30%
		Concrete Pump	Pumps	1	450	6	45%
	Tenant Improvements	Semi Truck	Onsite HHDT	1	450	8	60%
		Generator	Generator Sets	1	25	6	85%
		Tire Wash	Other Construction Equipment	2	100	4	90%
		Scissor Lift	Aerial Lifts	1	3	6	80%
		Gradall	Forklifts	1	74	4	80%
		Work Truck	Onsite LHDT1	3	250	0.5	90%
Substation Upgrade	PG&E Substation Work	Backhoe	Tractors/Loaders/Backhoes	2	90	8	60%
		Loader	Tractors/Loaders/Backhoes	2	100	8	45%
Feeder Line	PG&E Offsite Work	Excavator	Excavators	2	131	8	90%
		Loader	Tractors/Loaders/Backhoes	1	100	8	45%
	Surface Improvements	Paver	Pavers	1	250	8	60%
		Backhoe	Tractors/Loaders/Backhoes	1	90	8	60%
		Vibratory Roller	Other Construction Equipment	1	250	8	20%
		Finish Roller	Other Construction Equipment	1	250	8	20%

Table 4
Equipment List for Residential / Shopping District Construction
Willow Village
Menlo Park, California

Construction Area[1]	Construction Subphase	Equipment Type[2]	CalEEMod® Equipment Category[3]	Number[2]	Horsepower[2]	Hours / Day[2]	Utilization Percent[2]
Intersection Improvements	O'Brien and Kavanaugh	Backhoe	Tractors/Loaders/Backhoes	1	90	8	60%
	Adams and O'Brien	Backhoe	Tractors/Loaders/Backhoes	1	90	8	60%
	Willow Road and Ivy Drive	Backhoe	Tractors/Loaders/Backhoes	1	90	8	60%

Notes:

1. Area 1 includes Parcel 2, Parcel 3, North Garage, Office Building 4, Hotel, Town Square, and Meeting, Collaboration, Park. Area 2 includes Parcel 6, Parcel 7, South Garage, Office Building 1, Office Building 2, Office Building 3, Office Building 5, and Office Building 6. Area 3 includes Parcel 4 and Parcel 5, along with the Tunnel Construction.
2. Information on Project equipment list, horsepower, quantity, and utilization factor were provided by the Project Applicant. All off-road equipment is assumed to have diesel engines except aerial lifts which were assumed to be electric, as designated by Project Applicant. Utilizations for duration represent the usage percentage during the indicated equipment date range. Utilization percentage is multiplied by the number of hours per day in the calculation of off-road emissions.
3. Work trucks are assumed to be similar to light-heavy duty trucks (Onsite LHDT1) as defined in EMFAC2021. Concrete Trucks, Dump Trucks, Semi Trucks, and Water Trucks are assumed to be similar to heavy-heavy duty trucks (Onsite HHDT). Emission factors are from EMFAC2021 ("Emission Rates" mode) for LHDT1 and HHDT diesel vehicles (aggregated model year) in San Mateo County. RUNEX emission factors (and IDLEX emission factors for HHDT) are specific to vehicle speed of 15 mph. All other emission factor types are for aggregated speed. Emission factors were multiplied by the appropriate usage parameter based on the units. Emission factors in units of g/trip, g/mi, and g/vehicle/day, were multiplied by trips, miles, and total vehicles, respectively, in order to obtain mass emissions.

   An average emission factors is calculated using the following criteria:
   - Number of LHDT1/HHDT vehicles and schedule are provided by the client.
   - Hours are calculated as number of equipment * utilization percent * number of construction days * hours/day as provided by the client.
   - Miles are calculated as hours * the speed limit (15 miles per hour).
   - Trips are calculated assuming there is one trip per hour, calculated as number of hours * 1 trip/hour.
   - Total Vehicles are calculated as number of equipment for a given subphase * equipment utilization percent * number of construction subphase days as provided by the client.

Abbreviations:

CalEEMod® - CALifornia Emissions Estimator MODel

Table 5
Construction Equipment OFFROAD Emission Factors
Willow Village
Menlo Park, California

CalEEMod Equipment Name	Year[1]	HP	Emission Factor (g/bhp-hr)[2]				
			ROG	NOx	CO_2	PM_{10}	$PM_{2.5}$
Aerial Lifts	2022	50	0.35	4.0	639	0.12	0.11
Aerial Lifts	2023	50	0.33	3.9	639	0.11	0.10
Aerial Lifts	2024	50	0.35	3.9	639	0.11	0.10
Aerial Lifts	2025	50	0.36	3.9	639	0.11	0.10
Aerial Lifts	2026	50	0.35	3.8	639	0.091	0.083
Air Compressors	2023	50	0.18	2.0	370	0.052	0.048
Air Compressors	2024	50	0.18	2.1	374	0.075	0.069
Air Compressors	2021	175	0.085	1.1	326	0.044	0.040
Air Compressors	2022	175	0.077	0.87	329	0.033	0.030
Air Compressors	2023	175	0.069	0.64	333	0.024	0.022
Air Compressors	2024	175	0.071	0.67	336	0.025	0.023
Air Compressors	2025	175	0.068	0.58	340	0.020	0.018
Air Compressors	2026	175	0.069	0.57	344	0.020	0.018
Bore/Drill Rigs	2022	600	0.10	0.94	521	0.032	0.029
Bore/Drill Rigs	2023	600	0.10	0.81	521	0.028	0.026
Bore/Drill Rigs	2024	600	0.10	0.77	522	0.028	0.025
Bore/Drill Rigs	2025	600	0.10	0.83	521	0.030	0.027
Bore/Drill Rigs	2026	600	0.10	0.76	521	0.027	0.025
Cranes	2023	300	0.31	3.5	527	0.15	0.13
Cranes	2024	300	0.29	3.2	528	0.13	0.12
Cranes	2025	300	0.27	2.8	528	0.12	0.11
Cranes	2022	600	0.24	2.6	527	0.10	0.10
Cranes	2023	600	0.21	2.2	528	0.089	0.082
Cranes	2024	600	0.21	2.1	528	0.086	0.079
Cranes	2025	600	0.20	2.0	528	0.079	0.073
Cranes	2026	600	0.20	1.8	527	0.075	0.069
Crushing/Proc. Equipment	2021	300	0.10	1.2	232	0.040	0.037
Crushing/Proc. Equipment	2022	300	0.10	1.0	232	0.033	0.031
Crushing/Proc. Equipment	2022	600	0.069	0.50	231	0.017	0.016
Crushing/Proc. Equipment	2023	600	0.068	0.47	231	0.016	0.015
Crushing/Proc. Equipment	2024	600	0.064	0.42	231	0.014	0.013
Crushing/Proc. Equipment	2025	600	0.062	0.38	231	0.013	0.012
Crushing/Proc. Equipment	2026	600	0.060	0.34	231	0.011	0.010
Excavators	2025	25	4.0	7.6	590	1.1	1.0
Excavators	2026	25	4.0	7.6	589	1.1	1.0
Excavators	2021	175	0.22	2.1	531	0.10	0.092
Excavators	2022	175	0.19	1.7	531	0.083	0.076
Excavators	2023	175	0.18	1.5	531	0.073	0.067
Excavators	2024	175	0.17	1.3	531	0.067	0.061

Table 5
Construction Equipment OFFROAD Emission Factors
Willow Village
Menlo Park, California

CalEEMod Equipment Name	Year[1]	HP	Emission Factor (g/bhp-hr)[2]				
			ROG	NOx	CO_2	PM_{10}	$PM_{2.5}$
Excavators	2025	175	0.16	1.2	531	0.058	0.053
Excavators	2022	600	0.13	1.0	529	0.035	0.032
Excavators	2023	600	0.12	0.89	529	0.030	0.028
Excavators	2024	600	0.12	0.83	530	0.028	0.026
Excavators	2025	600	0.12	0.72	530	0.025	0.023
Excavators	2026	600	0.12	0.69	530	0.024	0.022
Forklifts	2023	75	1.8	15	528	1.0	0.92
Forklifts	2024	75	2.0	10	562	0.83	0.76
Forklifts	2025	75	1.5	12	530	0.88	0.81
Forklifts	2026	75	1.5	12	530	0.89	0.82
Forklifts	2023	175	0.23	2.0	528	0.13	0.12
Forklifts	2024	175	0.20	1.7	528	0.11	0.10
Forklifts	2022	600	0.069	0.59	525	0.0089	0.0082
Forklifts	2023	600	0.072	0.59	524	0.0090	0.0083
Forklifts	2024	600	0.071	0.53	528	0.0091	0.0084
Forklifts	2025	600	0.074	0.53	528	0.0092	0.0084
Forklifts	2026	600	0.077	0.53	528	0.0093	0.0085
Generator Sets	2021	50	0.20	1.3	235	0.019	0.018
Generator Sets	2022	50	0.20	1.3	237	0.019	0.018
Generator Sets	2023	50	0.21	1.3	240	0.019	0.018
Generator Sets	2024	50	0.21	1.3	243	0.020	0.018
Generator Sets	2025	50	0.21	1.4	245	0.020	0.018
Generator Sets	2026	50	0.21	1.4	248	0.020	0.019
Generator Sets	2022	600	0.085	0.53	213	0.023	0.021
Generator Sets	2023	600	0.083	0.50	216	0.022	0.020
Generator Sets	2024	600	0.083	0.49	218	0.021	0.020
Generator Sets	2025	600	0.077	0.36	221	0.017	0.015
Graders	2022	600	0.34	4.5	530	0.14	0.13
Graders	2023	600	0.34	3.8	526	0.14	0.12
Graders	2024	600	0.29	3.1	525	0.12	0.11
Graders	2025	600	0.29	3.1	526	0.11	0.10
Graders	2026	600	0.22	2.1	524	0.078	0.072
Other Construction Equipment	2021	100	0.46	4.3	528	0.31	0.29
Other Construction Equipment	2022	100	0.41	3.9	527	0.27	0.25
Other Construction Equipment	2023	100	0.38	3.5	528	0.24	0.22
Other Construction Equipment	2024	100	0.34	3.2	528	0.21	0.19
Other Construction Equipment	2025	100	0.30	2.9	528	0.17	0.16
Other Construction Equipment	2026	100	0.28	2.7	528	0.16	0.15
Other Construction Equipment	2022	300	0.24	2.7	529	0.10	0.10

Table 5
Construction Equipment OFFROAD Emission Factors
Willow Village
Menlo Park, California

CalEEMod Equipment Name	Year[1]	HP	Emission Factor (g/bhp-hr)[2]				
			ROG	NOx	CO_2	PM_{10}	$PM_{2.5}$
Other Construction Equipment	2023	300	0.22	2.4	529	0.094	0.086
Other Construction Equipment	2024	300	0.21	2.2	529	0.087	0.080
Other Construction Equipment	2025	300	0.21	2.2	529	0.085	0.078
Other Construction Equipment	2026	300	0.20	2.0	529	0.081	0.075
Pavers	2022	300	0.15	2.0	528	0.061	0.056
Pavers	2023	300	0.14	1.7	528	0.054	0.050
Pavers	2024	300	0.13	1.5	528	0.048	0.044
Pavers	2025	300	0.11	1.1	528	0.036	0.033
Pavers	2026	300	0.11	1.0	528	0.034	0.031
Pressure Washers	2021	25	0.53	4.4	564	0.20	0.18
Pressure Washers	2022	25	0.53	4.4	572	0.19	0.18
Pressure Washers	2023	25	0.53	4.4	570	0.18	0.17
Pressure Washers	2024	25	0.53	4.3	572	0.18	0.17
Pressure Washers	2025	25	0.52	4.3	568	0.18	0.16
Pressure Washers	2026	25	0.52	4.3	573	0.17	0.16
Pumps	2022	600	0.043	0.46	213	0.018	0.017
Pumps	2023	600	0.043	0.45	216	0.018	0.016
Pumps	2024	600	0.041	0.39	218	0.016	0.014
Pumps	2025	600	0.038	0.27	221	0.012	0.011
Pumps	2026	600	0.039	0.27	223	0.012	0.011
Scrapers	2022	75	1.0	7.8	528	0.67	0.62
Scrapers	2023	75	0.88	6.8	528	0.58	0.53
Scrapers	2022	600	0.24	2.7	529	0.10	0.093
Scrapers	2023	600	0.24	2.5	529	0.095	0.087
Scrapers	2024	600	0.23	2.3	529	0.089	0.081
Scrapers	2025	600	0.20	1.9	529	0.074	0.068
Scrapers	2026	600	0.20	1.7	529	0.068	0.062
Tractors/Loaders/Backhoes	2023	75	1.6	12	529	1.0	0.93
Tractors/Loaders/Backhoes	2024	75	1.6	13	528	1.0	0.94
Tractors/Loaders/Backhoes	2025	75	1.6	13	527	1.0	0.94
Tractors/Loaders/Backhoes	2026	75	1.6	12	528	1.0	0.92
Tractors/Loaders/Backhoes	2022	100	0.25	2.5	530	0.13	0.12
Tractors/Loaders/Backhoes	2023	100	0.23	2.3	530	0.11	0.10
Tractors/Loaders/Backhoes	2024	100	0.22	2.2	530	0.10	0.089
Tractors/Loaders/Backhoes	2025	100	0.20	2.0	530	0.077	0.071
Tractors/Loaders/Backhoes	2026	100	0.18	1.9	530	0.063	0.058
Tractors/Loaders/Backhoes	2021	175	0.22	2.1	525	0.10	0.10
Tractors/Loaders/Backhoes	2022	175	0.20	1.8	525	0.089	0.082
Tractors/Loaders/Backhoes	2023	175	0.18	1.5	526	0.077	0.071

Table 5
Construction Equipment OFFROAD Emission Factors
Willow Village
Menlo Park, California

CalEEMod Equipment Name	Year[1]	HP	Emission Factor (g/bhp-hr)[2]				
			ROG	NOx	CO_2	PM_{10}	$PM_{2.5}$
Tractors/Loaders/Backhoes	2024	175	0.18	1.4	526	0.069	0.063
Tractors/Loaders/Backhoes	2022	300	0.19	2.0	527	0.070	0.065
Tractors/Loaders/Backhoes	2023	300	0.18	1.8	527	0.064	0.059
Tractors/Loaders/Backhoes	2024	300	0.18	1.6	526	0.060	0.055
Tractors/Loaders/Backhoes	2025	300	0.16	1.4	527	0.053	0.049
Tractors/Loaders/Backhoes	2026	300	0.16	1.3	528	0.050	0.046
Tractors/Loaders/Backhoes	2022	600	0.16	1.5	524	0.055	0.050
Tractors/Loaders/Backhoes	2023	600	0.15	1.2	525	0.047	0.043
Tractors/Loaders/Backhoes	2024	600	0.15	1.2	526	0.044	0.041
Tractors/Loaders/Backhoes	2025	600	0.14	1.0	526	0.038	0.035
Tractors/Loaders/Backhoes	2026	600	0.14	0.88	526	0.034	0.031

Notes:

1. Construction schedule and phasing information were provided by the Project Applicant. Construction is conservatively assumed to start December 15, 2021 and full buildout is expected to occur in 2027. The analysis uses the earliest possible start date to assess conservative impacts. Emissions and impacts would decrease if the construction start date is delayed due to the incorporation of cleaner equipment into the construction fleet with time.
2. Emission factors in (g/bhp-hr) were calculated by dividing OFFROAD's pollutant emissions by both OFFROAD's equipment horsepower hours per year and the equipment's default load factor from CalEEMod.

References:

CARB. OFFROAD 2017 - ORION v1.0.1. Available at: https://www.arb.ca.gov/orion/.

CAPCOA. 2021. CalEEMOD Appendix D Default Data Tables. Available at: http://www.aqmd.gov/docs/default-source/caleemod/user-guide-2021/appendix-d2020-4-0-full-merge.pdf?sfvrsn=12 [Appendix D-11].

Abbreviations:

ROG - reactive organic gases

HP - horsepower

PM - particulate matter

Table 6
Offroad Electric Construction Equipment Emissions
Willow Village
Menlo Park, CA

Construction Area[1]	Construction Subphase[2]	Equipment Type[2]	CalEEMod® Equipment Category	Fuel[2]	Number[2]	Horsepower[2]	kW[2]	Hours of Operation per Day[2]	Utilization Percent[2]	Usage (kWh/day)
Parcel 2 Core and Shell		Manlift	Aerial Lifts	Electric	1	48	36	8.0	40%	115
Parcel 2 TI		Manlift	Aerial Lifts	Electric	1	48	36	0.50	90%	16
		Scissor Lift	Aerial Lifts	Electric	1	3.0	2.2	4.0	80%	7.2
Parcel 3 Core and Shell		Manlift	Aerial Lifts	Electric	2	48	36	8.0	40%	229
Parcel 3 TI		Manlift	Aerial Lifts	Electric	2	48	36	0.50	90%	32
		Scissor Lift	Aerial Lifts	Electric	2	3.0	2.2	4.0	80%	14
Parcel 7 Core and Shell		Manlift	Aerial Lifts	Electric	1	48	36	8.0	40%	115
Parcel 7 TI		Manlift	Aerial Lifts	Electric	1	48	36	0.50	90%	16
		Scissor Lift	Aerial Lifts	Electric	1	3.0	2.2	4.0	80%	7.2
Parcel 6 Core and Shell		Manlift	Aerial Lifts	Electric	1	48	36	8.0	40%	115
Parcel 6 TI		Manlift	Aerial Lifts	Electric	1	48	36	0.50	90%	16
		Scissor Lift	Aerial Lifts	Electric	2	3.0	2.2	4.0	80%	14
Area 3	Core and Shell	Manlift	Aerial Lifts	Electric	3	48	36	8.0	40%	344
	TI	Manlift	Aerial Lifts	Electric	3	48	36	0.50	90%	48
		Scissor Lift	Aerial Lifts	Electric	3	3.0	2.2	4.0	80%	21
Hamilton Avenue Parcels North and South	Core and Shell	Manlift	Aerial Lifts	Electric	0	48	36	8.0	40%	0
	TI	Scissor Lift	Aerial Lifts	Electric	1	3.0	2.2	6.0	80%	11

Construction Area[1]	Construction Subphase[2]	Days in Each Construction Year (Days/Year)				Usage in Each Construction Year (kWh/Year)			
		Year 3	Year 4	Year 5	Year 6	Year 3	Year 4	Year 5	Year 6
Parcel 2 Core and Shell		64	116	0	0	7,331	13,287	0	0
Parcel 2 TI		0	147	114	0	0	3,420	2,652	0
Parcel 3 Core and Shell		0	180	0	0	0	41,234	0	0
Parcel TI		0	82	178	0	0	3,816	8,283	0
Parcel 7 Core and Shell		0	129	0	0	0	14,776	0	0
Parcel 7 TI		0	17	171	0	0	396	3,978	0
Parcel 6 Core and Shell		0	81	48	0	0	9,278	5,498	0
Parcel 6 TI		0	0	187	0	0	0	5,689	0
Area 3	Core and Shell	0	0	139	0	0	0	47,763	0
	TI	0	0	25	174	0	0	1,745	12,145
Hamilton Avenue Parcels North and South	Core and Shell	0	0	43	0	0	0	0	0
	TI	0	0	33	0	0	0	354	0
Total - Equipment		**64**	**752**	**938**	**174**	**7,331**	**86,205**	**75,963**	**12,145**

Year	CO_2e Intensity Factor[3]	Usage	Electric Equipment CO_2e Emissions
	lb/MWh	MWh/Year	MT/Year
Year 3	215	7.3	0.71
Year 4	204	86	8.0
Year 5	194	76	6.7
Year 6	183	12	1.0
Total		**182**	**16**

Notes:

1. Area 1 includes Parcel 2, Parcel 3, North Garage, Office Building 4, Hotel, Town Square, and Meeting, Collaboration, Park. Area 2 includes Parcel 6, Parcel 7, South Garage, Office Building 1, Office Building 2, Office Building 3, Office Building 5, and Office Building 6. Area 3 includes Parcel 4 and Parcel 5, along with the Tunnel Construction.
2. Information on Project equipment list, fuel type, quantity, horsepower, and utilization factor were provided by the Project Applicant. The equipment kilowatt usage was determined by converting from horsepower to kilowatts.
3. The energy intensity factors were taken from the local utility Pacific Gas & Electric. See Table 29 for derivation of factors. Values shown above are scaled linearly between the 2020 and 2026 values. Values were scaled to meet the requirements for 33% of energy from renewable sources in 2020 and 50% of energy from renewable sources in 2026 as required under Senate Bill 100.

Abbreviations:

CalEEMod® - CALifornia Emissions Estimator MODel
kW - kilowatt
kWh - kilowatt-hour
MWh - megawatt-hour
MT - metric tons
lb - pound
CO_2e - carbon dioxide equivalent

Table 7a
Construction Trips
Willow Village
Menlo Park, California

Construction Area[1]	Construction Subphase	Year	Construction Roundtrips[2]		
			Average Worker Trips[3,4] (trips/day)	Average Vendor Trips[3] (trips/day)	Hauling Trips[3] (trips/phase)
Area 1	Demolition	Year 1	20	--	1,252
		Year 2	20	--	8,092
	Grading and Utilities	Year 2	60	--	16,320
Campus District	Foundations + Core and Shell	Year 2	--	5.6	--
		Year 3	--	5.6	--
		Year 4	--	5.6	--
		Year 5	--	5.6	--
	Tenant Improvements	Year 4	--	3.1	--
		Year 5	--	3.1	--
		Year 6	--	3.1	--
Area 1 Town Square and Residential/Shopping District	Foundations	Year 3	--	0.86	--
		Year 4	--	0.86	--
	Core and Shell	Year 3	--	1.0	--
		Year 4	--	1.0	--
	Tenant Improvements	Year 4	--	1.1	--
		Year 5	--	1.1	--
	Landscaping	Year 5	--	0.78	--
Campus District	O4 and NG Worker Mobile Trips	Year 2	200	--	--
		Year 3	200	--	--
		Year 4	200	--	--
	MCS Worker Mobile Trips	Year 2	150	--	--
		Year 3	150	--	--
		Year 4	150	--	--
		Year 5	150	--	--
		Year 6	150	--	--
Area 1 Town Square and Residential/Shopping District	Town Square and Residential/Shopping District Worker Mobile Trips	Year 3	225	--	--
		Year 4	225	--	--
		Year 5	225	--	--
	Landscaping Worker Mobile Trips	Year 5	60	--	--
Area 2	Demolition	Year 2	20	--	9,344
	Grading and Utilities	Year 2	60	--	8,160
		Year 3	60	--	8,160
Campus District	Foundations + Core and Shell	Year 3	--	5.5	--
		Year 4	--	5.5	--
	Tenant Improvements	Year 4	--	7.2	--
		Year 5	--	7.2	--
Area 2 Town Square and Residential/Shopping District	Foundations	Year 4	--	1.1	--
	Core and Shell	Year 4	--	1.3	--
		Year 5	--	1.3	--
	Tenant Improvements	Year 4	--	1.4	--
		Year 5	--	1.4	--
	Landscaping	Year 5	--	0.78	--
		Year 6	--	0.78	--
Campus District	Worker Mobile Trips	Year 3	430	--	--
		Year 4	430	--	--
		Year 5	430	--	--
Area 2 Town Square and Residential/Shopping District	Town Square and Residential/Shopping District Worker Mobile Trips	Year 4	225	--	--
		Year 5	225	--	--
	Landscaping Worker Mobile Trips	Year 5	60	--	--
		Year 6	60	--	--
Area 3	Grading and Utilities	Year 3	296	--	1,232
	Tunnel Construction	Year 3	655	4.0	--
		Year 4	655	4.0	--
	Foundations	Year 4	655	5.0	--
		Year 5	655	5.0	--
	Core and Shell	Year 5	655	5.8	--

Table 7a
Construction Trips
Willow Village
Menlo Park, California

Construction Area[1]	Construction Subphase	Year	Construction Roundtrips[2]		
			Average Worker Trips[3,4] (trips/day)	Average Vendor Trips[3] (trips/day)	Hauling Trips[3] (trips/phase)
Area 3	Tenant Improvements	Year 5	655	5.9	--
		Year 6	655	5.9	--
	Landscaping	Year 6	30	3.3	--
Hamilton Avenue Parcels North and South	Demolition	Year 4	10	--	211
	Grading and Utilities	Year 4	10	--	9
		Year 5	10	--	204
	Foundations	Year 5	--	6.2	--
	Core and Shell	Year 5	--	2.8	--
	Tenant Improvements	Year 5	--	4.6	--
	Worker Mobile Trips	Year 5	141	--	--
Substation Upgrade	PG&E Substation Work	Year 3	8	0.5	--
Feeder Line	PG&E Offsite Work	Year 3	10	0.5	--
	Surface Improvements	Year 3	10	0.5	--
Intersection Improvements	O'Brien and Kavanaugh	Year 3	6	1.7	--
	Adams and O'Brien	Year 3	6	2.5	--
	Willow Road and Ivy Drive	Year 3	6	2.5	--

Notes:

1. Area 1 includes Parcel 2, Parcel 3, North Garage, Office Building 4, Hotel, Town Square, and Meeting, Collaboration, Park. Area 2 includes Parcel 6, Parcel 7, South Garage, Office Building 1, Office Building 2, Office Building 3, Office Building 5, and Office Building 6. Area 3 includes Parcel 4 and Parcel 5, along with the Tunnel Construction.
2. Construction trip rates were provided by the Project Applicant for each subphase.
3. CalEEMod® default fleet mixes were used for Worker (LD_Mix), Vendor (MHDT/HHDT), and Hauling (HHDT) trips. LD_Mix was assumed to be 100% gasoline vehicles and MHDT/HHDT and HHDT were assumed to be 100% diesel vehicles.
4. Worker mobile trips for Town Square and Residential/Shopping District and Campus District phases are presented in separate phase-wide subphases as reported by the Project Applicant.

Abbreviations:

LD_Mix - light duty mix
MHDT - medium-heavy duty trucks
HHDT - heavy-heavy duty trucks
CalEEMod® - CALifornia Emissions Estimator MODel
VMT - vehicle miles traveled

Table 7b
Construction Trip Lengths
Willow Village
Menlo Park, CA

Trip Type	One-Way Trip Length (mi)
Worker[1]	10.8
Vendor[2]	40.0
Haul[3]	22.9
Haul - Grading & Utilities Subphases[4]	8.2

Notes:

1. Consistent with CalEEMod methodology, worker trip length is based on the default Home-to-Work trip length for San Mateo County as reported in the CalEEMod® user guide, Appendix D.
2. Vendor trip length was provided by the Project Applicant. Most construction supplies will be available within 40 miles of the Project site. This is a conservative assumption as it is twice the default vendor trip length reported in CalEEMod.
3. Haul trip length was provided by the Project Applicant. A 50/25/25 split was assumed between Zanker Landfill, Ox Mountain Landfill, and Kirby Canyon landfill. The primary landfill was assumed to be Zanker Landfill, due to proximity.
4. Haul trip length for Grading & Utilities subphases was provided by the Project Applicant.

Abbreviations:

CalEEMod - CALifornia Emissions Estimator MODel

mi - mile

Table 8
Fugitive Road Dust Emission Factors
Willow Village
Menlo Park, California

Road Dust Equation[1]

E [lb/VMT] = k*(sL)^0.91 * (W)^1.02 * (1-P/4N)

Parameter	Value
k = particle size multiplier for PM_{10} [lb/VMT]	0.0022
sL = roadway silt loading [grams per square meter - g/m^2]	0.032
W = average weight of vehicles traveling the road [tons]	2.4
P = number of "wet" days in county with at least 0.01 in of precipitation during the annual averaging period	74
N = number of days in the averaging period	365
PM_{10} speciation profile fraction	0.46
$PM_{2.5}$ speciation profile fraction	0.069
E = Fugitive PM_{10} Emission Factor [g/VMT]	0.10
E = Fugitive $PM_{2.5}$ Emission Factor [g/VMT][2]	0.015
E = Fugitive PM_{10} Emission Factor with Street Sweeping Reduction [g/VMT][3]	0.075
E = Fugitive $PM_{2.5}$ Emission Factor with Street Sweeping Reduction [g/VMT][3]	0.011

Notes:

1. Road dust equation is based on the U.S. EPA AP-42 Chapter 13.2.1: Paved Roads. Parameter values were obtained from the 2021 California ARB Miscellaneous Process Methodology using major roadways silt loading, annual San Mateo county "wet" days, and statewide average vehicle fleet weight.
2. $PM_{2.5}$ emission factor was scaled from the PM_{10} value based on the ARB's guidance.
3. A 26% reduction in the PM_{10} emission factor was taken for street sweeping of arterial/collector streets, based on SCAQMD's Fugitive Dust Table XI-C. The $PM_{2.5}$ emissions factor was scaled from the PM_{10} value based on the ARB's guidance.

Abbreviations:

ARB - Air Resource Board
lb - pounds
g - grams
m^2 - square meters
PM - particulate matter
$PM_{2.5}$ - particulate matter less than 2.5 microns in diameter
PM_{10} - particulate matter less than 10 microns in diameter
SCAQMD - South Coast Air Quality Management District
USEPA - United States Environmental Protection Agency
VMT - vehicle miles traveled

References:

USEPA. 2011. AP 42. Compilation of Air Pollutant Emission Factors, Volume 1. Fifth Edition. Chapter 13.2.1, Paved Roads. Available online at: https://www3.epa.gov/ttn/chief/ap42/ch13/final/c13s0201.pdf

California ARB. 2021. Miscellaneous Processes Methodologies - Paved Entrained Road Dust. Available online at: https://ww3.arb.ca.gov/ei/areasrc/fullpdf/2021_paved_roads_7_9.pdf

SCAQMD. 2007. Table XI-C Mitigation Measure Examples: Dust From Paved Roads. Available online at: http://www.aqmd.gov/home/rules-compliance/ceqa/air-quality-analysis-handbook/mitigation-measures-and-control-efficiencies/fugitive-dust

Table 9a
Fugitive Dust Emissions from Building Demolition Waste
Willow Village
Menlo Park, CA

Construction Area[1,2,3]	Year	Number of Days	Building Waste	Building Waste[4]	Emission Factor - Mechanical or Explosive Dismemberment[5]	Emission Factor - Debris Loading[6]	Uncontrolled Emissions[7,8]		Controlled Emissions[7,8]	
					$PM_{2.5}$	$PM_{2.5}$	$PM_{2.5}$		$PM_{2.5}$	
		days	cy	ton	lb/ton	lb/ton	lb/day	ton/yr	lb/day	ton/yr
Area 1	Year 1	13	123,169	155,706	1.7E-04	0.0031	3.48	0.023	1.6	0.010
	Year 2	84						0.15		0.066
Area 2	Year 2	48						0.08		0.038
Hamilton Avenue Parcels North and South	Year 4	22	3,563	4,504			0.66	0.0073	0.30	0.0033

Notes:

1. Area 1 includes Parcel 2, Parcel 3, North Garage, Office Building 4, Hotel, Town Square, and Meeting, Collaboration, Park. Area 2 includes Parcel 6, Parcel 7, South Garage, Office Building 1, Office Building 2, Office Building 3, Office Building 5, and Office Building 6. Area 3 includes Parcel 4 and Parcel 5, along with the Tunnel Construction.
2. The modeled fugitive dust source groups included in the health risk assessment are shown in Figures 3 and 4. Figure 3 shows the modeled locations of Area 1 and Area 2, and Figure 4 shows the modeled location of Hamilton Avenue Parcels North and South (which is labeled as "RETAIL" in the figure).
3. Area 3 (Parcels 4, 5, and Tunnel Construction) do not require demolition, and thus do not have any associated fugitive dust emissions from demolition activities.
4. Conversion of building waste to tons assumes an average soil density of 1.5 grams per cubic centimeter, per the CalEEMod® User's Guide, Appendix A Truck Loading.
5. Emission factor calculated following guidance in the CalEEMod® User's Guide, Appendix A Mechanical or Explosive Dismemberment, which is based of AP 42 Section 13.2.4.3 for batch drop operations. The equation is:
   $EF = k*(0.0032)*(U/5)^{1.3}/(M/2)^{1.4}$ (lb/ton of debris)
   - 0.053 = $k_{PM2.5}$ Particle size multiplier (dimensionless)
   - 4.92 = U, mean wind speed (mph)
   - 2 = M, material moisture content (%)
6. Emission factor calculated following guidance in the CalEEMod® User's Guide, Appendix A Debris Loading, which is based of AP 42 Section 13.2. The equation is:
   $EF = k*EF_{L\text{-}TSP}$
   - 0.35 = k_{PM10} Particle size multiplier (dimensionless)
   - 0.053 = $k_{PM2.5}$ Particle size multiplier (dimensionless)
   - 0.058 = $EF_{L\text{-}TSP}$, lb/ton
7. Fugitive $PM_{2.5}$ emissions from demolition will be controlled by watering the construction site two times per day, which is estimated to reduce emissions by 55% per CalEEMod® recommendation.
8. The mass emissions shown below are converted from ton per year to gram per second for the health risk assessment. The conversion is based on 365 days per year and 11 hours per day, consistent with the modeled hours from 7 AM - 6 PM.

Abbreviations:

CalEEMod® - California Emissions Estimator Model
cy - cubic yards
EF - emission factor
lb - pounds
$PM_{2.5}$ - particulate matter less than 2.5 microns in aerodynamic diameter
VMT - vehicle miles traveled
yr - years

Table 9b
Fugitive Dust Emissions from Grading Activity
Willow Village
Menlo Park, CA

Construction Area[1,2]	Year	Maximum Area Disturbed[3]	VMT[4]	Uncontrolled $PM_{2.5}$ Emission Factor[5]	Uncontrolled Emissions[6,7]		Controlled Emissions[6,7]	
					$PM_{2.5}$		$PM_{2.5}$	
		acre/day	mile/day	lb/VMT	lb/day	ton/yr	lb/day	ton/yr
Area 1	Year 2	1	0.69	0.17	0.11	0.0082	0.052	0.0037
Area 2	Year 2	1	0.69	0.17	0.11	0.0037	0.052	0.0017
	Year 3	1	0.69	0.17	0.11	0.0037	0.052	0.0017
Area 3	Year 3	1	0.69	0.17	0.11	0.0013	0.052	5.7E-04
Hamilton Avenue Parcels North and South	Year 4	1	0.69	0.17	0.11	5.7E-05	0.052	2.6E-05
	Year 5	1	0.69	0.17	0.11	0.0013	0.052	5.7E-04

Notes:

1. Area 1 includes Parcel 2, Parcel 3, North Garage, Office Building 4, Hotel, Town Square, and Meeting, Collaboration, Park. Area 2 includes Parcel 6, Parcel 7, South Garage, Office Building 1, Office Building 2, Office Building 3, Office Building 5, and Office Building 6. Area 3 includes Parcel 4 and Parcel 5, along with the Tunnel Construction.
2. The modeled fugitive dust source groups included in the health risk assessment are shown in Figures 3. The name of the construction area aligns with the name of the source groups presented in the figure.
3. Maximum graded area is based on Project-specific estimate.
4. VMT per day calculated following guidance in the CalEEMod® User's Guide, Appendix A, which is based on AP-42, Section 11.9 for grading equipment. The equation is:
   $VMT = A_S/W_b \times (43{,}560 \text{ sqft/acre})/(5{,}280 \text{ ft/mile})$, where:
   A_S = A_S, acres graded per day (varies by sub-activity)
   12 = W_b, blade width of grading equipment (CalEEMod® default)
5. Emission factor calculated following guidance in the CalEEMod® User's Guide, Appendix A, which is based on AP-42, Section 11.9 for grading equipment. The equation is:
   $EF_{PM2.5} = 0.04 \times (S)^{2.5} \times F_{PM2.5}$, where:
   7.1 = S, mean vehicle speed (mph) (AP-42 default)
   0.031 = $F_{PM2.5}$, $PM_{2.5}$ scaling factor (AP-42 default)
6. Fugitive $PM_{2.5}$ emissions from demolition will be controlled by watering the construction site two times per day, which is estimated to reduce emissions by 55% per CalEEMod® recommendation.
7. The mass emissions shown below are converted from ton per year to gram per second for the health risk assessment. The conversion is based on 365 days per year and 11 hours per day, consistent with the modeled hours from 7 AM - 6 PM.

Abbreviations:

CalEEMod® - California Emissions Estimator Model
EF - emission factor
ft - feet
lb - pounds
mph - miles per hour
$PM_{2.5}$ - particulate matter less than 2.5 microns in aerodynamic diameter
VMT - vehicle miles traveled
yr - years

Table 9c
Fugitive Dust Emissions from Truck Loading Activity
Willow Village
Menlo Park, CA

Construction Area[1,2]	Construction Subphase	Year	Material Loaded	Uncontrolled Emission Factor[3]	Uncontrolled Emissions[4,5]		Controlled Emissions[4,5]	
				$PM_{2.5}$	$PM_{2.5}$		$PM_{2.5}$	
			ton	lb/ton	lb/day	ton/yr	lb/day	ton/yr
Area 1	Demolition	Year 1	3,786	1.35E-05	3.9E-03	2.6E-05	1.8E-03	1.2E-05
		Year 2	24,468		3.9E-03	1.7E-04	1.8E-03	7.4E-05
	Grading and Utilities	Year 2	49,348		4.7E-03	3.3E-04	2.1E-03	1.5E-04
Area 2	Demolition	Year 2	28,254		8.0E-03	1.9E-04	3.6E-03	8.6E-05
	Grading and Utilities	Year 2	24,674		5.1E-03	1.7E-04	2.3E-03	7.5E-05
		Year 3	24,674		5.1E-03	1.7E-04	2.3E-03	7.5E-05
Area 3	Grading and Utilities	Year 3	3,725		1.2E-03	2.5E-05	5.4E-04	1.1E-05
Hamilton Avenue Parcels North and South	Demolition	Year 4	638		3.9E-04	4.3E-06	1.8E-04	1.9E-06
	Grading and Utilities	Year 4	27		3.7E-04	1.8E-07	1.7E-04	8.3E-08
		Year 5	617		3.8E-04	4.2E-06	1.7E-04	1.9E-06

Notes:

1. Area 1 includes Parcel 2, Parcel 3, North Garage, Office Building 4, Hotel, Town Square, and Meeting, Collaboration, Park. Area 2 includes Parcel 6, Parcel 7, South Garage, Office Building 1, Office Building 2, Office Building 3, Office Building 5, and Office Building 6. Area 3 includes Parcel 4 and Parcel 5, along with the Tunnel Construction.
2. The modeled fugitive dust source groups included in the health risk assessment are shown in Figures 3 and 4. Figure 3 shows the modeled locations of Area 1, Area 2, and Area 3, and Figure 4 shows the modeled location of Hamilton Avenue Parcels North and South (which is labeled as "RETAIL" in the figure).
3. Emission factor calculated following guidance in the CalEEMod® User's Guide, Appendix A, which is based on AP-42, Section 13.2.4 for aggregate handling. The equation is:
   $EF = k \times (0.0032) \times (U/5)^{1.3} / (M/2)^{1.4}$, where the following default values are used:
   0.053 = $k_{PM2.5}$, $PM_{2.5}$ particle size multiplier
   2.2 = mean wind speed (U), meters per second
   4.9 = mean wind speed (U), miles per hour
   12 = material moisture content (M), %
4. Fugitive $PM_{2.5}$ emissions from demolition will be controlled by watering the construction site two times per day, which is estimated to reduce emissions by 55% per CalEEMod® recommendation.
5. The mass emissions shown below are converted from ton per year to gram per second for the health risk assessment. The conversion is based on 365 days per year and 11 hours per day, consistent with the modeled hours from 7 AM - 6 PM.

Abbreviations:

CalEEMod® - California Emissions Estimator Model
EF - emission factor
lbs - pounds
$PM_{2.5}$ - particulate matter less than 2.5 microns in aerodynamic diameter

Table 10
Construction Water Use Emissions
Willow Village
Menlo Park, CA

Construction Area[1]	Construction Subphase	Year	Number of Work Days	Average Acreage Needing Water[2]	Water Usage[2]	Total Water Usage	Electricity Usage[3]	PG&E Energy Intensity Factor[4]	Total CO_2e Emissions
			days	acre	gal/acre/day	million gal	MWh	lbs CO_2e/MWh	MT
Area 1	Demolition	Year 1	13	18	500	0.11	0.40	235	0.043
		Year 2	84	18	500	0.74	2.6	225	0.27
	Grading and Utilities	Year 2	143	18	500	1.3	4.4	225	0.45
Area 1 Town Square and Residential/Shopping District	Foundations	Year 3	224	4.0	143	0.13	0.45	215	0.044
		Year 4	1	4.0	143	0.0006	0.0	204	1.9E-04
	Core and Shell	Year 3	64	4.0	148	0.038	0.1	215	0.013
		Year 4	180	4.0	148	0.11	0.372	204	0.034
	Tenant Improvements	Year 4	147	4.0	161	0.094	0.3	204	0.031
		Year 5	178	4.0	161	0.11	0.40	194	0.035
	Landscaping	Year 5	123	4.0	130	0.064	0.22	194	0.020
Campus District	Vertical Construction	Year 2	42	4.5	200	0.038	0.13	225	0.014
		Year 3	260	4.5	200	0.24	0.82	215	0.080
		Year 4	262	4.5	200	0.24	0.83	204	0.077
		Year 5	261	4.5	200	0.24	0.83	194	0.073
		Year 6	46	4.5	200	0.042	0.15	183	0.012
Area 2	Demolition	Year 2	48	13	500	0.31	1.1	225	0.11
	Grading and Utilities	Year 2	65	13	500	0.42	1.5	225	0.15
		Year 3	65	13	500	0.42	1.5	215	0.14
Area 2 Town Square and Residential/Shopping District	Foundations	Year 4	180	4.0	129	0.093	0.32	204	0.030
	Core and Shell	Year 4	145	4.0	134	0.078	0.27	204	0.025
		Year 5	48	4.0	134	0.026	0.090	194	0.0079
	Tenant Improvements	Year 4	17	4.0	148	0.010	0.035	204	0.0033
		Year 5	235	4.0	148	0.14	0.49	194	0.043
	Landscaping	Year 5	91	4.0	96	0.035	0.12	194	0.011
		Year 6	32	4.0	96	0.012	0.043	183	0.0036
Campus District	Vertical Construction	Year 3	202	5.6	200	0.23	0.79	215	0.077
		Year 4	262	5.6	200	0.29	1.0	204	0.095
		Year 5	122	5.6	200	0.14	0.48	194	0.042
Area 3	Grading and Utilities	Year 3	22	5.0	500	0.055	0.19	215	0.019
	Tunnel Construction	Year 3	175	5.0	500	0.44	1.5	215	0.15
		Year 4	87	5.0	500	0.22	0.76	204	0.071
	Foundations	Year 4	24	5.0	200	0.024	0.084	204	0.0078
		Year 5	99	5.0	200	0.10	0.35	194	0.030
	Core and Shell	Year 5	139	5.0	200	0.14	0.487	194	0.043
	Tenant Improvements	Year 5	25	5.0	200	0.025	0.088	194	0.0077
		Year 6	174	5.0	200	0.17	0.61	183	0.051
	Landscaping	Year 6	59	8.0	200	0.09	0.33	183	0.027
Hamilton Avenue Parcels North and South	Demolition	Year 4	22	3.7	682	0.056	0.19	204	0.018
	Grading and Utilities	Year 4	1	3.7	2891	0.011	0.037	204	0.0035
		Year 5	22	3.7	2891	0.24	0.82	194	0.072
	Foundations	Year 5	22	3.7	518	0.042	0.15	194	0.013
	Core and Shell	Year 5	43	3.7	316	0.050	0.18	194	0.015
	Tenant Improvements	Year 5	33	3.7	515	0.063	0.22	194	0.019
Feeder Line	PG&E Offsite Work	Year 3	240	--	--	0.250	0.88	215	0.085
								Year 1	**0.043**
								Year 2	**1.0**
							Total	**Year 3**	**0.61**
								Year 4	**0.40**
								Year 5	**0.43**
								Year 6	**0.094**

Notes:

[1] Area 1 includes Parcel 2, Parcel 3, North Garage, Office Building 4, Hotel, Town Square, and Meeting, Collaboration, Park. Area 2 includes Parcel 6, Parcel 7, South Garage, Office Building 1, Office Building 2, Office Building 3, Office Building 5, and Office Building 6. Area 3 includes Parcel 4 and Parcel 5, along with the Tunnel Construction.

[2] Information on Project water use was provided by the Project Applicant.

[3] Energy usage is calculated by applying the electric intensity factor for outdoor water to total water usage. An electric intensity factor of 3,500 kWh/million gallons was taken from Table 9.2 in Appendix D of the CalEEMod User's Guide as the sum of supply water, treat water and distribute water electric intensity factors. Since the water use reported here is only for construction fugitive dust control, operational indoor water use-related emissions and wastewater treatment-related emissions are not estimated here.

[4] The energy intensity factors were taken from the local utility Pacific Gas & Electric. See Table 29 for derivation of factors. Values shown above are scaled linearly between the 2020 and 2026 values. Values were scaled to meet the requirements for 33% of energy from renewable sources in 2020 and 50% of energy from renewable sources in 2026 as required under Senate Bill 100.

Abbreviations:

CO_2e - Carbon dioxide-equivalent
gal - Gallons
GHG - Greenhouse gases
kWh - kilowatt-hours
MWh - megawatt-hours
lbs - pounds
MT - Metric Tons
CalEEMod - California Emissions Estimate Model

References:

CalEEMod User's Guide (Available online at: http://www.aqmd.gov/caleemod/user's-guide)
PG&E, Pacific Gas and Electric - Gas and power company for California (https://www.pge.com/)

Table 11
Project Construction Asphalt Paving Off-Gassing Emissions
Willow Village
Menlo Park, CA

Construction Area[1]	Construction Subphase[2]	Land Use	Asphalt-Paved Area	Asphalt Paving ROG Off-Gassing Emission Factor[3]	ROG Off-Gassing Emissions
			acre	lb / acre	lb / subphase
Area 1	Grading and Utilities	Roadway	11.7	2.62	31
Area 3	Grading and Utilities	Roadway	1.1	2.62	2.9
Hamilton Avenue Parcels North and South	Grading and Utilities	Roadway	1.3	2.62	3.4
Feeder Line	Surface Improvements	Roadway	1.09	2.62	2.9
Intersection Improvements	O'Brien and Kavanaugh	Roadway	0.11	2.62	0.3
	Adams and O'Brien	Roadway	0.11	2.62	0.3
	Willow Road and Ivy Drive	Roadway	0.11	2.62	0.3
				Total Year 2	**31**
				Total Year 3	**6.6**
				Total Year 5	**3.4**

Notes:

1. Area 1 includes Parcel 2, Parcel 3, North Garage, Office Building 4, Hotel, Town Square, and Meeting, Collaboration, Park. Area 2 includes Parcel 6, Parcel 7, South Garage, Office Building 1, Office Building 2, Office Building 3, Office Building 5, and Office Building 6. Area 3 includes Parcel 4 and Parcel 5, along with the Tunnel Construction. No paving occurs in Area 2.
2. Asphalt-paved roadway area was provided by the Project Applicant.
3. The VOC off-gassing emission factor is from CalEEMod User's Guide, Appendix A. VOC is assumed to be equivalent to ROG for these purposes.

Abbreviations:

lb - pound
VOC - volatile organic compound
ROG - reactive organic gas

References:

California Air Pollution Control Officers Association (CAPCOA). California Emissions Estimator Model (CalEEMod), Version 2016.3.2. Available online at http://www.caleemod.com/

Table 12
Project Construction Architectural Coating Off-Gassing Emissions
Willow Village
Menlo Park, CA

Coating Category	Unmitigated Interior	Mitigated Interior	Exterior
VOC Content (g/L)[1,2]	100	10	150
Emission Factor (lb/ft^2)[3]	0.0046	0.00046	0.0070

Land Use	Fraction of Surface Area Painted[3] (%)		Painted Area Multiplier[3]
	Interior	Exterior	
Residential	75%	25%	2.7
Non-Residential	75%	25%	2
Parking	0%	6%	--

Building or Parcel	Land Use[4]	Start Year	End Year	Building Square Footage[5]			Painted Surface Area		Unmitigated ROG Emissions	Mitigated ROG Emissions
				Residential Area	Non-Residential Area	Parking Area	Interior	Exterior		
				ft^2	ft^2	ft^2	ft^2	ft^2	tons	tons
Parcel 2	Residential	Year 4	Year 5	320,569	--	--	649,152	216,384	2.3	0.90
	Non-Residential			--	40,000	--	60,000	20,000	0.21	0.083
	Parking			--	--	216,862	--	13,012	0.045	0.045
Parcel 3	Residential	Year 4	Year 5	410,760	--	--	831,788	277,263	2.9	1.2
	Non-Residential			--	55,000	--	82,500	27,500	0.29	0.11
	Parking			--	--	233,000	--	13,980	0.049	0.049
North Garage	Parking	Year 2	Year 3	--	--	840,056	--	50,403	0.18	0.18
Office Building 4	Non-Residential	Year 4		--	269,934	--	404,902	134,967	1.4	0.56
Meeting, Collaboration, Park	Non-Residential	Year 5	Year 6	--	454,563	--	681,844	227,281	2.4	0.95
Hotel	Non-Residential	Year 5		--	172,000	--	258,000	86,000	0.90	0.36
Other	Non-Residential	Year 4		--	6,085	--	9,127	3,042	0.032	0.013
	Parking			--	--	13,600	--	816	2.8E-03	2.8E-03
Parcel 7	Residential	Year 4	Year 5	117,640	--	--	238,221	79,407	0.83	0.33
	Parking			--	--	9,547	--	573	2.0E-03	2.0E-03
Parcel 6	Residential	Year 5		174,499	--	--	353,361	117,787	1.2	0.49
	Parking			--	--	26,809	--	1,609	5.6E-03	5.6E-03
South Garage	Parking	Year 3	Year 4	--	--	446,830	--	26,810	0.093	0.093
Office Building 3	Non-Residential	Year 4	Year 5	--	212,805	--	319,207	106,402	1.1	0.44
Office Building 1	Non-Residential	Year 4		--	134,237	--	201,355	67,118	0.70	0.28
Office Building 2	Non-Residential	Year 4	Year 5	--	164,078	--	246,118	82,039	0.86	0.34
Office Building 5	Non-Residential	Year 4	Year 5	--	236,320	--	354,481	118,160	1.2	0.49
Office Building 6	Non-Residential	Year 4	Year 5	--	221,978	--	332,967	110,989	1.2	0.46
Parcels 4 + 5	Residential	Year 5	Year 6	672,508	--	--	1,361,830	453,943	4.7	1.9
	Non-Residential			--	5,000	--	7,500	2,500	0.026	0.010
	Parking			--	--	82,536	--	4,952	0.017	0.017
Hamilton Avenues Parcels North and South	Non-Residential	Year 5		--	7,690	--	11,535	3,845	0.040	0.016
								Total Year 2[6]	**0.025**	**0.025**
								Total Year 3[6]	**0.20**	**0.20**
								Total Year 4[6]	**7.5**	**3.1**
								Total Year 5[6]	**9.7**	**3.9**
								Total Year 6[6]	**5.2**	**2.1**

Table 12
Project Construction Architectural Coating Off-Gassing Emissions
Willow Village
Menlo Park, CA

Notes:

1. VOC content of paint is assumed to be consistent with BAAQMD Regulation 8, Rule 3 for flat and nonflat coatings. VOC is assumed to be equivalent to ROG for these purposes.
2. Paint VOC content is consistent with or more stringent than BAAQMD Regulation 8 Rule 3 (Architectural Coatings). Emissions are estimated assuming that indoor painting will utilize "super-compliant" VOC architectural coatings that meet the more stringent limits in South Coast Air Quality Management District Rule 1113. For outdoor paint, assumes use of coatings with VOC content of 150 g/L, consistent with BAAQMD requirements. VOC is assumed to be equivalent to ROG for these purposes.
3. The emission factor is calculated using CalEEMod default architectural coating emissions parameters. The default assumptions account for the painting surface area relative to the floor square footage assuming 1 gallon of paint covers 180 sqft of surface area.
4. Consistent with CalEEMod Appendix A, recreational areas were excluded from the floor square footage in calculating VOC emissions due to architectural coatings.
5. Project square footage by land use was provided by the Project Applicant.
6. ROG emissions are allocated to each year based on the construction schedule for each building or parcel.

Abbreviations:

BAAQMD - Bay Area Air Quality Management District
CalEEMod - California Emissions Estimator MODel
CEQA - California Environmental Quality Act
ft^2 - square feet
g - gram
gal - gallons
L - liters
lb - pounds
ROG - reactive organic gas
sqft - square feet
VOC - volatile organic compound

References:

BAAQMD. 2009. Regulation 8 Rule 3 Architectural Coatings. Accessed November 2020. Available at: https://www.baaqmd.gov/~/media/dotgov/files/rules/reg-8-rule-3-architectural-coatings/documents/rg0803_0709.pdf?la=en.

California Air Pollution Control Officers Association (CAPCOA). 2016. Appendix A. Available at: http://www.caleemod.com

Table 13
Summary of Unmitigated Project Construction Criteria Air Pollutant Emissions
Willow Village
Menlo Park, CA

Off-Road Emissions[1,2]

Construction Area[3]	Construction Subphase	Year	Unmitigated Construction CAP Emissions			
			ROG	NO_x	PM_{10}	$PM_{2.5}$
			lb/year			
Area 1	Demolition	Year 1	34	376	15	14
		Year 2	196	2,133	82	76
	Grading and Utilities	Year 2	436	4,632	159	146
Parcel 2 Foundations		Year 3	285	2,758	163	150
Parcel 2 Core and Shell		Year 3	31	296	16	15
		Year 4	57	451	25	23
Parcel 2 Tenant Improvements		Year 4	52	371	24	22
		Year 5	32	302	18	16
Parcel 2 Landscaping		Year 5	134	896	70	65
Parcel 3 Foundations		Year 3	373	3,494	219	202
		Year 4	2.4	21	1.3	1.2
Parcel 3 Core and Shell		Year 4	128	938	54	50
Parcel 3 Tenant Improvements		Year 4	30	235	13	12.2
		Year 5	52	531	28	25
Parcel 3 Landscaping		Year 5	160	1,093	87	80
North Garage		Year 2	62	644	20	19
		Year 3	152	1,615	62	57
Office Building 4		Year 3	132	1,355	54	50
		Year 4	17	227	7.3	6.8
Meeting, Collaboration, Park		Year 2	102	992	31	29
		Year 3	433	4,090	159	147
		Year 4	96	1,075	24	22
		Year 5	81	842	18	17
		Year 6	26	229	8.0	7.4
Hotel Excavation		Year 2	99	995	34	31
		Year 3	421	4,048	173	160
Hotel Construction		Year 4	94	1,011	27	25
		Year 5	71	845	18	16
Town Square		Year 3	608	5,208	301	277
		Year 4	256	2,207	120	111
		Year 5	26	218	3.7	3.4
Area 2	Demolition	Year 2	112	1,219	47	43
	Grading and Utilities	Year 2	198	2,106	72	67
		Year 3	289	2,620	132	122
Parcel 7 Foundations		Year 4	200	1,666	113	104
Parcel 7 Core and Shell		Year 4	63	482	28	26
Parcel 7 Tenant Improvements		Year 4	6.0	41	2.7	2.5
		Year 5	48	438	26	24
Parcel 7 Landscaping		Year 5	110	704	55	51
Parcel 6 Foundations		Year 4	202	1,728	113	104
Parcel 6 Core and Shell		Year 4	58	410	24	22
		Year 5	27	256	14	13
Parcel 6 Tenant Improvements		Year 5	54	538	29	27
Parcel 6 Landscaping		Year 5	64	426	34	32
		Year 6	74	488	40	37
South Garage		Year 3	188	1,854	77	71
		Year 4	83	889	32	29
Office Building 3		Year 3	168	1,611	72	66
		Year 4	35	442	13	12
		Year 5	3.9	58	1.6	1.5
Office Building 1		Year 3	147	1,427	62	57
		Year 4	33	411	13	12
Office Building 2		Year 3	142	1,366	60	56
		Year 4	36	448	14	13
		Year 5	0.44	6.4	0.18	0.17
Office Building 5		Year 3	197	1,875	84	78
		Year 4	33	418	13	12
		Year 5	3.6	52	1.5	1.4

Table 13
Summary of Unmitigated Project Construction Criteria Air Pollutant Emissions
Willow Village
Menlo Park, CA

Construction Area[3]	Construction Subphase	Year	Unmitigated Construction CAP Emissions			
			ROG	NO_X	PM_{10}	$PM_{2.5}$
			lb/year			
Office Building 6		Year 3	189	1,775	82	75
		Year 4	39	476	14	13
		Year 5	7.6	112	3.2	3.0
Area 3	Grading and Utilities	Year 3	49	443	22	21
	Tunnel Construction	Year 3	145	1,476	68	63
		Year 4	71	710	33	31
	Foundations	Year 4	86	725	47	43
		Year 5	333	2,939	190	174
	Core and Shell	Year 5	151	1,358	71	65
	Tenant Improvements	Year 5	13	118	5.6	5.2
		Year 6	85	803	38	35
	Landscaping	Year 6	210	1,522	119	110
Hamilton Avenue Parcels North and South	Demolition	Year 4	42	428	23	21
	Grading and Utilities	Year 4	2.1	20	1.2	1.1
		Year 5	45	441	25	23
	Foundations	Year 5	35	309	20	18
	Core and Shell	Year 5	18	189	7.9	7.3
	Tenant Improvements	Year 5	14	141	7.1	6.5
Substation Upgrade	PG&E Substation Work	Year 3	223	1,749	142	131
Feeder Line	PG&E Offsite Work	Year 3	180	1,438	99	91
	Surface Improvements	Year 3	20	186	11	10
Intersection Improvements	O'Brien and Kavanaugh	Year 3	8.4	66	5.3	4.9
	Adams and O'Brien	Year 3	5.6	44	3.6	3.3
	Willow Road and Ivy Drive	Year 3	5.6	44	3.6	3.3

On-Road and Paving[1]

Construction Area[3]	Construction Subphase	Year	Unmitigated Construction CAP Emissions			
			ROG	NO_X	PM_{10}	$PM_{2.5}$
			lb/year			
Area 1	Demolition	Year 1	10	513	4.6	4.4
		Year 2	56	3,017	23	22
	Grading and Utilities	Year 2	132	2,549	17	17
Area 1 Town Square and Residential/Shopping District	Foundations	Year 3	1.6	90	0.92	0.88
		Year 4	0.0064	0.38	3.8E-03	3.7E-03
	Core and Shell	Year 3	0.45	26	0.26	0.25
		Year 4	1.2	68	0.69	0.66
	Tenant Improvements	Year 4	0.95	56	0.56	0.54
		Year 5	1.0	64	0.63	0.61
	Landscaping	Year 5	0.72	44	0.44	0.42
	Town Square and Residential/Shopping District Worker Mobile Trips	Year 3	300	219	3.9	3.6
		Year 4	328	230	4.4	4.1
		Year 5	210	142	2.9	2.6
	Landscaping Worker Mobile Trips	Year 5	39	26	0.53	0.49
Campus District	Foundations + Core and Shell	Year 2	2.3	111	1.1	1.0
		Year 3	10	576	5.9	5.6
		Year 4	9.3	548	5.5	5.3
		Year 5	8.4	515	5.1	4.9
	Tenant Improvements	Year 4	3.8	223	2.2	2.1
		Year 5	4.6	281	2.8	2.7
		Year 6	0.74	47	0.46	0.44
	O4 and NG Worker Mobile Trips	Year 2	53	41	0.69	0.64
		Year 3	309	226	4.1	3.7
		Year 4	230	162	3.1	2.8
	MCS Worker Mobile Trips	Year 2	40	31	0.52	0.48
		Year 3	232	169	3.1	2.8
		Year 4	219	153	2.9	2.7
		Year 5	205	139	2.8	2.6
		Year 6	34	22	0.47	0.43
Area 2	Demolition	Year 2	58	3,480	27	25
	Grading and Utilities	Year 2	48	1,273	8.7	8.3
		Year 3	43	1,129	8.3	7.9
Area 2 Town Square and Residential/Shopping District	Foundations	Year 4	1.2	68	0.69	0.66
	Core and Shell	Year 4	1.4	83	0.83	0.79
		Year 5	0.42	26	0.26	0.25

Table 13
Summary of Unmitigated Project Construction Criteria Air Pollutant Emissions
Willow Village
Menlo Park, CA

Construction Area[3]	Construction Subphase	Year	Unmitigated Construction CAP Emissions			
			ROG	NO_X	PM_{10}	$PM_{2.5}$
			lb/year			
Area 2 Town Square and Residential/Shopping District	Tenant Improvements	Year 4	0.16	10	0.10	0.093
		Year 5	2.1	126	1.3	1.2
	Landscaping	Year 5	0.54	33	0.32	0.31
		Year 6	0.17	11	0.11	0.10
	Town Square and Residential/Shopping District Worker Mobile Trips	Year 4	326	228	4.4	4.0
		Year 5	277	187	3.8	3.5
	Landscaping Worker Mobile Trips	Year 5	29	19	0.39	0.36
		Year 6	10	6.2	0.13	0.12
Campus District	Foundations + Core and Shell	Year 3	7.8	447	4.5	4.3
		Year 4	8.2	486	4.9	4.7
	Tenant Improvements	Year 4	7.0	410	4.1	3.9
		Year 5	5.0	306	3.0	2.9
	Worker Mobile Trips	Year 3	516	377	6.8	6.3
		Year 4	627	440	8.4	7.7
		Year 5	275	186	3.8	3.5
Area 3	Grading and Utilities	Year 3	45	196	1.7	1.6
	Tunnel Construction	Year 3	686	779	12	11
		Year 4	319	355	5.6	5.2
	Foundations	Year 4	88	107	1.6	1.5
		Year 5	343	407	6.4	6.0
	Core and Shell	Year 5	483	622	9.5	8.8
	Tenant Improvements	Year 5	87	112	1.7	1.6
		Year 6	571	724	11	10
	Landscaping	Year 6	10	71	0.77	0.73
Hamilton Avenue Parcels North and South	Demolition	Year 4	2.1	66.3	0.58	0.55
	Grading and Utilities	Year 4	0.077	1.3	0.010	9.2E-03
		Year 5	5.0	27	0.21	0.20
	Foundations	Year 5	0.80	49	0.49	0.47
	Core and Shell	Year 5	0.72	44	0.44	0.42
	Tenant Improvements	Year 5	0.90	55	0.55	0.52
	Worker Mobile Trips	Year 5	72	48	1.0	0.90
Substation Upgrade	PG&E Substation Work	Year 3	5.5	24	0.27	0.26
Feeder Line	PG&E Offsite Work	Year 3	15	56	0.65	0.62
	Surface Improvements	Year 3	4.3	5.4	0.063	0.059
Intersection Improvements	O'Brien and Kavanaugh	Year 3	1.0	10	0.11	0.10
	Adams and O'Brien	Year 3	0.83	10	0.11	0.10
	Willow Road and Ivy Drive	Year 3	0.83	10	0.11	0.10

Summary of Project Construction Unmitigated Annual CAP Emissions by Year				
Year	Emissions[4]			
	ROG	NO_X	PM_{10}	$PM_{2.5}$
	ton/year			
Year 1	0.022	0.44	0.010	9.0E-03
Year 2	0.82	12	0.26	0.24
Year 3	3.5	23	1.06	0.98
Year 4	9.5	9.8	0.41	0.38
Year 5	11	8.1	0.39	0.36
Year 6	5.7	2.0	0.11	0.10
Total	31	55	2.2	2.1

Summary of Project Construction Unmitigated Daily CAP Emissions by Year				
Year	Emissions			
	ROG	NO_X	PM_{10}	$PM_{2.5}$
	lb/day			
Year 1	2.8	**56**	1.2	1.1
Year 2	4.5	**64**	1.4	1.3
Year 3	19	**124**	5.8	5.4
Year 4	52	53	2.3	2.1
Year 5	**63**	45	2.1	2.0
Year 6	35	12	0.68	0.62
Threshold[5]	54	54	82	54

Notes:

1. Construction emissions were estimated with methodology equivalent to CalEEMod 2020.4.0. Emissions were estimated using on-road emissions factors from EMFAC2021 and off-road construction equipment emission factors from OFFROAD2017. Onroad trips and offroad construction equipment use were provided by the Project Applicant.
2. Unmitigated construction emissions from offroad equipment are calculated using fleet-average emission factors.
3. Area 1 includes Parcel 2, Parcel 3, North Garage, Office Building 4, Hotel, Town Square, and Meeting, Collaboration, Park. Area 2 includes Parcel 6, Parcel 7, South Garage, Office Building 1, Office Building 2, Office Building 3, Office Building 5, and Office Building 6. Area 3 includes Parcel 4 and Parcel 5, along with the Tunnel Construction.
4. The mass emissions shown above are converted from pound per year to gram per second for the health risk assessment. The conversion is based on 365 days per year and 11 hours per day, consistent with the modeled hours from 7 AM - 6 PM.
5. Thresholds are from BAAQMD California Environmental Quality Act (CEQA) Guidelines. Bolded values indicate threshold exceedances. Fugitive emissions sources are excluded from comparison to this threshold.

Abbreviations:

CAP - criteria air pollutant
CalEEMod - California Emissions Estimate Model
ROG - reactive organic gases
NO_X - nitrous oxide

Table 14
Summary of Mitigated Project Construction Criteria Air Pollutant Emissions
Willow Village
Menlo Park, CA

Off-Road Emissions[1,2]

Construction Area[3]	Construction Subphase	Year	Mitigated Construction CAP Emissions			
			ROG	NO_X	PM_{10}	$PM_{2.5}$
			lb/year			
Area 1	Demolition	Year 1	13	168	2.4	2.4
		Year 2	79	1,045	15	15
	Grading and Utilities	Year 2	189	2,033	36	35
Parcel 2 Foundations		Year 3	48	933	8.4	8.4
Parcel 2 Core and Shell		Year 3	7.3	81	1.4	1.4
		Year 4	13	143	2.5	2.4
Parcel 2 Tenant Improvements		Year 4	9.3	133	1.8	1.7
		Year 5	6.8	95	1.1	1.0
Parcel 2 Landscaping		Year 5	10	165	1.3	1.3
Parcel 3 Foundations		Year 3	53	1,008	9.5	9.4
		Year 4	0.33	6.2	0.059	0.058
Parcel 3 Core and Shell		Year 4	24	333	4.3	4.2
Parcel 3 Tenant Improvements		Year 4	6.1	102	1.11	1.09
		Year 5	13	207	1.9	1.9
Parcel 3 Landscaping		Year 5	11	215	1.3	1.3
North Garage		Year 2	31	310	5.7	5.7
		Year 3	57	568	11	11.0
Office Building 4		Year 3	46	562	8.4	8.4
		Year 4	7.0	138	1.2	1.2
Meeting, Collaboration, Park		Year 2	50	453	9.3	9.3
		Year 3	172	1,532	32	32
		Year 4	55	818	10	10
		Year 5	50	561	7.2	7.2
		Year 6	12	69	1.8	1.8
Hotel Excavation		Year 2	50	441	10	9
		Year 3	160	1,462	32	32
Hotel Construction		Year 4	63	814	13	13
		Year 5	42	643	6.1	6.1
Town Square		Year 3	141	1,493	27	27
		Year 4	67	676	13	13
		Year 5	21	147	3.4	3.4
Area 2	Demolition	Year 2	45	597	8.7	8.6
	Grading and Utilities	Year 2	86	924	16	16
		Year 3	83	886	16	16
Parcel 7 Foundations		Year 4	25	412	4.4	4.4
Parcel 7 Core and Shell		Year 4	14	139	2.7	2.7
Parcel 7 Tenant Improvements		Year 4	1.1	14	0.21	0.20
		Year 5	10	126	1.6	1.6
Parcel 7 Landscaping		Year 5	8.6	153	1.1	1.1
Parcel 6 Foundations		Year 4	27	474	4.7	4.6
Parcel 6 Core and Shell		Year 4	11	138	1.9	1.9
		Year 5	6.1	75	0.91	0.89
Parcel 6 Tenant Improvements		Year 5	13	198	2.0	2.0
Parcel 6 Landscaping		Year 5	4.6	96	0.54	0.54
		Year 6	5.4	112	0.63	0.63
South Garage		Year 3	68	674	13	13
		Year 4	34	372	6.5	6.5
Office Building 3		Year 3	55	532	10	10
		Year 4	14	289	2.4	2.4
		Year 5	1.8	35	0.25	0.25
Office Building 1		Year 3	48	492	9.2	9.1
		Year 4	13	269	2.2	2.2
Office Building 2		Year 3	46	454	8.8	8.8
		Year 4	14	293	2.5	2.4
		Year 5	0.20	3.8	0.029	0.028
Office Building 5		Year 3	63	617	12	12
		Year 4	13	271	2.3	2.3
		Year 5	1.7	31	0.23	0.23

Table 14
Summary of Mitigated Project Construction Criteria Air Pollutant Emissions
Willow Village
Menlo Park, CA

Construction Area[3]	Construction Subphase	Year	Mitigated Construction CAP Emissions			
			ROG	NO_X	PM_{10}	$PM_{2.5}$
			lb/year			
Office Building 6		Year 3	60	540	11	11
		Year 4	16	316	2.7	2.7
		Year 5	3.6	67	0.50	0.49
Area 3	Grading and Utilities	Year 3	14	150	2.7	2.7
	Tunnel Construction	Year 3	43	557	7.6	7.5
		Year 4	21	275	3.7	3.7
	Foundations	Year 4	12	208	2.2	2.1
		Year 5	49	796	6.5	6.5
	Core and Shell	Year 5	41	445	5.9	5.8
	Tenant Improvements	Year 5	4.2	52	0.61	0.60
		Year 6	29	361	4.1	4.1
	Landscaping	Year 6	18	336	2.2	2.2
Hamilton Avenue Parcels North and South	Demolition	Year 4	9.0	200	1.5	1.5
	Grading and Utilities	Year 4	0.34	6.8	0.062	0.061
		Year 5	7.2	138	1.1	1.1
	Foundations	Year 5	5.4	97	0.78	0.78
	Core and Shell	Year 5	8.1	117	1.4	1.4
	Tenant Improvements	Year 5	3.6	54	0.51	0.50
Substation Upgrade	PG&E Substation Work	Year 3	10	68	2.4	2.4
Feeder Line	PG&E Offsite Work	Year 3	30	207	6.5	6.5
	Surface Improvements	Year 3	3.3	22	0.66	0.65
Intersection Improvements	O'Brien and Kavanaugh	Year 3	0.36	2.6	0.091	0.091
	Adams and O'Brien	Year 3	0.24	1.7	0.061	0.061
	Willow Road and Ivy Drive	Year 3	0.24	1.7	0.061	0.061

On-Road and Paving[1]

Construction Area[3]	Construction Subphase	Year	Mitigated Construction CAP Emissions			
			ROG	NO_X	PM_{10}	$PM_{2.5}$
			lb/year			
Area 1	Demolition	Year 1	10	513	4.6	4.4
		Year 2	56	3,017	23	22
	Grading and Utilities	Year 2	132	2,549	17	17
Area 1 Town Square and Residential/Shopping District	Foundations	Year 3	1.6	90	0.92	0.88
		Year 4	6.4E-03	0.38	3.8E-03	3.7E-03
	Core and Shell	Year 3	0.45	26	0.26	0.25
		Year 4	1.2	68	0.69	0.66
	Tenant Improvements	Year 4	0.95	56	0.56	0.54
		Year 5	1.0	64	0.63	0.61
	Landscaping	Year 5	0.72	44	0.44	0.42
	Town Square and Residential/Shopping District Worker Mobile Trips	Year 3	300	219	3.9	3.6
		Year 4	328	230	4.4	4.1
		Year 5	210	142	2.9	2.6
	Landscaping Worker Mobile Trips	Year 5	39	26	0.53	0.49
Area 1 Campus District	Foundations + Core and Shell	Year 2	2.3	111	1.1	1.0
		Year 3	10	576	5.9	5.6
		Year 4	9.3	548	5.5	5.3
		Year 5	8.4	515	5.1	4.9
	Tenant Improvements	Year 4	3.8	223	2.2	2.1
		Year 5	4.6	281	2.8	2.7
		Year 6	0.74	47	0.46	0.44
	O4 and NG Worker Mobile Trips	Year 2	53	41	0.69	0.64
		Year 3	309	226	4.1	3.7
		Year 4	230	162	3.1	2.8
	MCS Worker Mobile Trips	Year 2	40	31	0.52	0.48
		Year 3	232	169	3.1	2.8
		Year 4	219	153	2.9	2.7
		Year 5	205	139	2.8	2.6
		Year 6	34	22	0.47	0.43
Area 2	Demolition	Year 2	58	3,480	27	25
	Grading and Utilities	Year 2	48	1,273	8.7	8.3
		Year 3	43	1,129	8.3	7.9
Area 2 Town Square and Residential/Shopping District	Foundations	Year 4	1.2	68	0.69	0.66
	Core and Shell	Year 4	1.4	83	0.83	0.79
		Year 5	0.42	26	0.26	0.25

Table 14
Summary of Mitigated Project Construction Criteria Air Pollutant Emissions
Willow Village
Menlo Park, CA

Construction Area[3]	Construction Subphase	Year	Mitigated Construction CAP Emissions			
			ROG	NO_X	PM_{10}	$PM_{2.5}$
			lb/year			
Area 2 Town Square and Residential/Shopping District	Tenant Improvements	Year 4	0.16	10	0.10	0.093
		Year 5	2.1	126	1.3	1.2
	Landscaping	Year 5	0.54	33	0.3	0.31
		Year 6	0.17	11	0.11	0.10
	Town Square and Residential/Shopping District Worker Mobile Trips	Year 4	326	228	4.4	4.0
		Year 5	277	187	3.8	3.5
	Landscaping Worker Mobile Trips	Year 5	29	19	0.39	0.36
		Year 6	10	6.2	0.13	0.12
Campus District	Foundations + Core and Shell	Year 3	7.8	447	4.5	4.3
		Year 4	8.2	486	4.9	4.7
	Tenant Improvements	Year 4	7.0	410	4.1	3.9
		Year 5	5.0	306	3.0	2.9
	Worker Mobile Trips	Year 3	516	377	6.8	6.3
		Year 4	627	440	8.4	7.7
		Year 5	275	186	3.8	3.5
Area 3	Grading and Utilities	Year 3	45	196	1.7	1.6
	Tunnel Construction	Year 3	686	779	12	11
		Year 4	319	355	5.6	5.2
	Foundations	Year 4	88	107	1.6	1.5
		Year 5	343	407	6.4	6.0
	Core and Shell	Year 5	483	622	9.5	8.8
	Tenant Improvements	Year 5	87	112	1.7	1.6
		Year 6	571	724	11	10
	Landscaping	Year 6	10	71	0.77	0.73
Hamilton Avenue Parcels North and South	Demolition	Year 4	2.1	66.3	0.58	0.55
	Grading and Utilities	Year 4	0.077	1.3	0.010	9.2E-03
		Year 5	5.0	27	0.21	0.20
	Foundations	Year 5	0.80	49	0.49	0.47
	Core and Shell	Year 5	0.72	44	0.44	0.42
	Tenant Improvements	Year 5	0.90	55	0.55	0.52
	Worker Mobile Trips	Year 5	72	48	0.98	0.90
Substation Upgrade	PG&E Substation Work	Year 3	5.5	24	0.27	0.26
Feeder Line	PG&E Offsite Work	Year 3	15	56	0.65	0.62
	Surface Improvements	Year 3	4.3	5.4	0.063	0.059
Intersection Improvements	O'Brien and Kavanaugh	Year 3	1.0	10	0.11	0.10
	Adams and O'Brien	Year 3	0.83	10	0.11	0.10
	Willow Road and Ivy Drive	Year 3	0.83	10	0.11	0.10

Summary of Project Construction Mitigated Annual CAP Emissions by Year				
Year	Emissions[4]			
	ROG	NO_X	PM_{10}	$PM_{2.5}$
	ton/year			
Year 1	0.012	0.34	3.5E-03	3.4E-03
Year 2	0.48	8.2	0.089	0.087
Year 3	1.9	8.6	0.142	0.140
Year 4	4.4	5.3	0.069	0.067
Year 5	5.1	4.0	0.047	0.046
Year 6	2.4	0.88	0.011	0.011
Total	14	27	0.36	0.35

Summary of Project Construction Mitigated Daily CAP Emissions by Year				
Year	Emissions			
	ROG	NO_X	PM_{10}	$PM_{2.5}$
	lb/day			
Year 1	1.5	43	0.44	0.42
Year 2	2.7	45	0.49	0.48
Year 3	10	47	0.78	0.77
Year 4	24	29	0.38	0.37
Year 5	28	22	0.26	0.25
Year 6	15	5.4	0.068	0.065
Threshold[5]	54	54	82	54

Notes:

1. Construction emissions were estimated with methodology equivalent to CalEEMod® 2020.4.0. Emissions were estimated using on-road emissions factors from EMFAC2021 and off-road construction equipment emission factors from OFFROAD. Onroad trips and offroad construction equipment use were provided by the Project Applicant.
2. Mitigated construction emissions from offroad equipment are calculated using Tier 4 Final emission factors for 95 percent of the equipment before residents move on-site in Year 5 and 98 percent of the equipment after residents move on-site in Year 5. The other 5 percent and 2 percent (before and after on-site residents, repspectively) of non-Tier 4 equipment are assumed to be Tier 2.
3. Area 1 includes Parcel 2, Parcel 3, North Garage, Office Building 4, Hotel, Town Square, and Meeting, Collaboration, Park. Area 2 includes Parcel 6, Parcel 7, South Garage, Office Building 1, Office Building 2, Office Building 3, Office Building 5, and Office Building 6. Area 3 includes Parcel 4 and Parcel 5, along with the Tunnel Construction.
4. The mass emissions shown above are converted from pound per year to gram per second for the health risk assessment. The conversion is based on 365 days per year and 11 hours per day, consistent with the modeled hours from 7 AM - 6 PM.
5. Thresholds are from BAAQMD California Environmental Quality Act (CEQA) Guidelines. Fugitive emissions sources are excluded from comparison to this threshold.

Abbreviations:

CAP - criteria air pollutant
CalEEMod® - California Emissions Estimate Model
ROG - reactive organic gases
NO_X - nitrous oxide

Table 15
Summary of Project Construction Greenhouse Gas Emissions
Willow Village
Menlo Park, CA

Off-Road Emissions[1]

Construction Area[2]	Construction Subphase	Year	Construction GHG Emissions[3]			
			CO_2	CH_4	N_2O	CO_2e
			MT/year			
Area 1	Demolition	Year 1	45	8.0E-03	2.3E-03	46
		Year 2	287	5.2E-02	1.5E-02	292
	Grading and Utilities	Year 2	705	1.5E-01	2.5E-02	716
Parcel 2 Foundations		Year 3	179	2.3E-02	1.3E-02	184
Parcel 2 Core and Shell		Year 3	24	4.7E-03	1.0E-03	24
		Year 4	43	8.5E-03	1.8E-03	44
Parcel 2 Tenant Improvements		Year 4	29	4.5E-03	1.9E-03	30
		Year 5	22	3.5E-03	1.5E-03	23
Parcel 2 Landscaping		Year 5	32	6.0E-03	1.6E-03	32
Parcel 3 Foundations		Year 3	200	2.7E-02	1.4E-02	205
		Year 4	1.2	1.7E-04	8.5E-05	1.3
Parcel 3 Core and Shell		Year 4	83	1.5E-02	4.2E-03	84
Parcel 3 Tenant Improvements		Year 4	21	2.6E-03	1.8E-03	22
		Year 5	45	5.5E-03	3.7E-03	46
Parcel 3 Landscaping		Year 5	32	6.1E-03	1.6E-03	32
North Garage		Year 2	118	2.9E-02	2.6E-03	119
		Year 3	206	4.9E-02	3.9E-03	208
Office Building 4		Year 3	162	3.8E-02	4.0E-03	164
		Year 4	29	3.7E-03	2.3E-03	29.7
Meeting, Collaboration, Park		Year 2	192	4.9E-02	2.9E-03	194
		Year 3	640	1.7E-01	8.6E-03	647
		Year 4	190	4.3E-02	5.8E-03	193
		Year 5	185	4.3E-02	5.0E-03	187
		Year 6	45	1.2E-02	3.4E-04	45
Hotel Excavation		Year 2	185	4.8E-02	2.6E-03	187
		Year 3	529	1.2E-01	8.1E-03	535
Hotel Construction		Year 4	193	3.5E-02	4.2E-03	195
		Year 5	156	2.9E-02	6.4E-03	158
Town Square		Year 3	545	1.3E-01	1.4E-02	553
		Year 4	261	6.3E-02	6.0E-03	264
		Year 5	83	2.2E-02	1.2E-03	84
Area 2	Demolition	Year 2	164	3.0E-02	8.4E-03	167
	Grading and Utilities	Year 2	320	7.0E-02	1.1E-02	326
		Year 3	319	7.0E-02	1.1E-02	324
Parcel 7 Foundations		Year 4	87	1.6E-02	4.4E-03	88
Parcel 7 Core and Shell		Year 4	48	9.5E-03	2.0E-03	48
Parcel 7 Tenant Improvements		Year 4	3.3	5.2E-04	2.2E-04	3.4
		Year 5	33	5.3E-03	2.2E-03	34
Parcel 7 Landscaping		Year 5	28	5.0E-03	1.6E-03	28
Parcel 6 Foundations		Year 4	97	1.6E-02	5.7E-03	99
Parcel 6 Core and Shell		Year 4	36	6.5E-03	1.9E-03	37
		Year 5	21	3.9E-03	1.1E-03	22
Parcel 6 Tenant Improvements		Year 5	47	5.8E-03	3.9E-03	48
Parcel 6 Landscaping		Year 5	13	2.4E-03	7.2E-04	13
		Year 6	15	2.8E-03	8.4E-04	16
South Garage		Year 3	255	6.2E-02	5.3E-03	258
		Year 4	120	2.7E-02	2.5E-03	122
Office Building 3		Year 3	201	5.1E-02	3.5E-03	204
		Year 4	49	7.7E-03	3.0E-03	50
		Year 5	8.4	9.4E-04	7.4E-04	8.6
Office Building 1		Year 3	178	4.4E-02	3.4E-03	180
		Year 4	45	7.2E-03	2.8E-03	46
Office Building 2		Year 3	171	4.3E-02	3.1E-03	173
		Year 4	49	8.0E-03	3.0E-03	50
		Year 5	0.94	1.1E-04	8.3E-05	0.97
Office Building 5		Year 3	234	5.9E-02	4.0E-03	237
		Year 4	47	7.4E-03	3.0E-03	48
		Year 5	7.7	8.6E-04	6.8E-04	7.9

Table 15
Summary of Project Construction Greenhouse Gas Emissions
Willow Village
Menlo Park, CA

Off-Road Emissions[1]

Phase	Construction Subphase	Year	Construction GHG Emissions[3]			
			CO_2	CH_4	N_2O	CO_2e
			MT/year			
Office Building 6		Year 3	224	5.8E-02	3.2E-03	226
		Year 4	52	8.5E-03	2.9E-03	53
		Year 5	16	1.8E-03	1.5E-03	17
Area 3	Grading and Utilities	Year 3	56	1.2E-02	2.1E-03	57
	Tunnel Construction	Year 3	156	2.6E-02	9.4E-03	159
		Year 4	77	1.3E-02	4.6E-03	79
	Foundations	Year 4	40	7.0E-03	2.1E-03	41
		Year 5	163	2.9E-02	8.4E-03	167
	Core and Shell	Year 5	121	2.3E-02	5.3E-03	123
	Tenant Improvements	Year 5	12	1.7E-03	8.4E-04	12
		Year 6	81	1.2E-02	5.8E-03	83
	Landscaping	Year 6	54	9.6E-03	3.1E-03	55
Hamilton Avenue Parcels North and South	Demolition	Year 4	35	3.8E-03	2.9E-03	36
	Grading and Utilities	Year 4	1.6	2.0E-04	1.3E-04	1.7
		Year 5	35	4.4E-03	2.9E-03	36
	Foundations	Year 5	17	2.1E-03	1.1E-03	18
	Core and Shell	Year 5	24	2.2E-03	1.4E-03	24
	Tenant Improvements	Year 5	12	2.0E-03	6.6E-04	12
Substation Upgrade	PG&E Substation Work	Year 3	34	9.8E-03	0	34
Feeder Line	PG&E Offsite Work	Year 3	108	3.1E-02	0	109
	Surface Improvements	Year 3	12	2.3E-03	0	12
Intersection Improvements	O'Brien and Kavanaugh	Year 3	1.3	3.7E-04	0	1.3
	Adams and O'Brien	Year 3	0.85	2.5E-04	0	0.85
	Willow Road and Ivy Drive	Year 3	0.85	2.5E-04	0	0.85

On-Road Emissions[1]

Phase[2]	Construction Subphase	Year	Construction GHG Emissions[3]			
			CO_2	CH_4	N_2O	CO_2e
			MT/year			
Area 1	Demolition	Year 1	112	2.5E-04	1.7E-02	117
		Year 2	717	1.4E-03	1.1E-01	750
	Grading and Utilities	Year 2	585	3.1E-03	8.5E-02	610
Area 1 Town Square and Residential/Shopping District	Foundations	Year 3	27	3.3E-05	4.3E-03	28
		Year 4	0.12	1.4E-07	1.9E-05	0.13
	Core and Shell	Year 3	7.7	9.5E-06	1.2E-03	8.1
		Year 4	22	2.4E-05	3.4E-03	23
	Tenant Improvements	Year 4	18	2.0E-05	2.8E-03	18
		Year 5	21	2.2E-05	3.3E-03	22
	Landscaping	Year 5	15	1.5E-05	2.3E-03	15
	Town Square and Residential/Shopping District Worker Mobile Trips	Year 3	340	1.1E-02	9.6E-03	344
		Year 4	391	1.2E-02	1.0E-02	395
		Year 5	261	7.7E-03	6.7E-03	263
	Landscaping Worker Mobile Trips	Year 5	48	1.4E-03	1.2E-03	49
Campus District	Foundations + Core and Shell	Year 2	28	4.8E-05	4.5E-03	30
		Year 3	173	2.1E-04	2.7E-02	181
		Year 4	172	2.0E-04	2.7E-02	180
		Year 5	170	1.8E-04	2.7E-02	177
	Tenant Improvements	Year 4	70	7.9E-05	1.1E-02	73
		Year 5	92	9.7E-05	1.5E-02	97
		Year 6	16	1.6E-05	2.5E-03	17
	O4 and NG Worker Mobile Trips	Year 2	58	2.1E-03	1.7E-03	58
		Year 3	351	1.2E-02	9.9E-03	355
		Year 4	275	8.6E-03	7.3E-03	277
	MCS Worker Mobile Trips	Year 2	43	1.6E-03	1.3E-03	44
		Year 3	263	8.9E-03	7.4E-03	266
		Year 4	261	8.2E-03	7.0E-03	263
		Year 5	255	7.5E-03	6.5E-03	257
		Year 6	44	1.2E-03	1.1E-03	45

Table 15
Summary of Project Construction Greenhouse Gas Emissions
Willow Village
Menlo Park, CA

On-Road Emissions[1]

Phase[2]	Construction Subphase	Year	Construction GHG Emissions[3]			
			CO_2	CH_4	N_2O	CO_2e
			MT/year			
Area 2	Demolition	Year 2	821	1.3E-03	1.3E-01	859
	Grading and Utilities	Year 2	290	1.5E-03	4.2E-02	302
		Year 3	286	1.3E-03	4.2E-02	298
Area 2 Town Square and Residential/Shopping District	Foundations	Year 4	22	2.4E-05	3.4E-03	23
	Core and Shell	Year 4	26	3.0E-05	4.1E-03	27
		Year 5	8.5	8.9E-06	1.3E-03	8.9
	Tenant Improvements	Year 4	3.1	3.5E-06	4.8E-04	3.2
		Year 5	42	4.4E-05	6.6E-03	44
	Landscaping	Year 5	11	1.1E-05	1.7E-03	11
		Year 6	3.7	3.6E-06	5.9E-04	3.9
	Town Square and Residential/Shopping District Worker Mobile Trips	Year 4	388	1.2E-02	1.0E-02	392
		Year 5	345	1.0E-02	8.8E-03	348
	Landscaping Worker Mobile Trips	Year 5	36	1.0E-03	9.1E-04	36
		Year 6	12	3.4E-04	3.0E-04	12
Campus District	Foundations + Core and Shell	Year 3	134	1.7E-04	2.1E-02	141
		Year 4	153	1.7E-04	2.4E-02	160
	Tenant Improvements	Year 4	129	1.5E-04	2.0E-02	135
		Year 5	101	1.1E-04	1.6E-02	106
	Worker Mobile Trips	Year 3	587	2.0E-02	1.6E-02	592
		Year 4	748	2.4E-02	2.0E-02	754
		Year 5	342	1.0E-02	8.8E-03	345
Area 3	Grading and Utilities	Year 3	83	1.5E-03	7.4E-03	85
	Tunnel Construction	Year 3	859	2.6E-02	3.5E-02	870
		Year 4	420	1.2E-02	1.7E-02	425
	Foundations	Year 4	119	3.3E-03	5.1E-03	120
		Year 5	481	1.3E-02	2.0E-02	487
	Core and Shell	Year 5	692	1.8E-02	3.1E-02	702
	Tenant Improvements	Year 5	124	3.2E-03	5.5E-03	126
		Year 6	852	2.0E-02	3.7E-02	863
	Landscaping	Year 6	34	3.4E-04	3.8E-03	35
Hamilton Avenue Parcels North and South	Demolition	Year 4	19	6.4E-05	2.9E-03	20
	Grading and Utilities	Year 4	0.36	2.5E-06	4.7E-05	0.37
		Year 5	7.7	5.2E-05	1.0E-03	8.0
	Foundations	Year 5	16	1.7E-05	2.5E-03	17
	Core and Shell	Year 5	14	1.5E-05	2.3E-03	15
	Tenant Improvements	Year 5	18	1.9E-05	2.8E-03	19
	Worker Mobile Trips	Year 5	89	2.6E-03	2.3E-03	90
Substation Upgrade	PG&E Substation Work	Year 3	12	2.1E-04	1.1E-03	12
Feeder Line	PG&E Offsite Work	Year 3	30	5.6E-04	2.6E-03	31
	Surface Improvements	Year 3	2.9	5.4E-05	2.5E-04	3.0
Intersection Improvements	O'Brien and Kavanaugh	Year 3	3.6	2.4E-05	4.9E-04	3.8
	Adams and O'Brien	Year 3	3.4	1.7E-05	4.9E-04	3.6
	Willow Road and Ivy Drive	Year 3	3.4	1.7E-05	4.9E-04	3.6

Summary of Project Construction Annual GHG Emissions by Year

Year	Emissions[4,5]			
	CO_2	CH_4	N_2O	CO_2e
	MT/year			
Year 1	157	0.0083	0.020	163
Year 2	4,514	0.44	0.44	4,657
Year 3	7,605	1.1	0.30	7,722
Year 4	4,871	0.40	0.25	4,954
Year 5	4,304	0.28	0.23	4,379
Year 6	1,157	0.059	0.056	1,175
			Total	**23,050**

Notes:

1. Emissions were estimated using onroad emissions factors from EMFAC2021 and offroad construction equipment emission factors from OFFROAD. Onroad trips and offroad construction equipment use were provided by the Project Applicant.
2. Area 1 includes Parcel 2, Parcel 3, North Garage, Office Building 4, Hotel, Town Square, and Meeting, Collaboration, Park. Area 2 includes Parcel 6, Parcel 7, South Garage, Office Building 1, Office Building 2, Office Building 3, Office Building 5, and Office Building 6. Area 3 includes Parcel 4 and Parcel 5, along with the Tunnel Construction.
3. Carbon dioxide equivalent emissions were determined using IPCC 5th Assessment Report Global Warming Potentials for CH_4 and N_2O.
4. The Summary of Project Construction Annual GHG Emissions by Year is the sum of the values represented above as well as Construction Water Use Emissions, shown in Table 10.
5. The BAAQMD does not have an adopted Threshold of Significance for construction-related GHG emissions.

Abbreviations:

CalEEMod® - California Emissions Estimate Model
GHG - greenhouse gases
CH_4 - methane
CO_2 - carbon dioxide
N_2O - nitrous oxide
CO_2e - carbon dioxide equivalent
MT - metric ton
IPCC - Intergovernmental Panel on Climate Change

Table 16
Building Operational Capacity For Emissions Scaling
Willow Village
Menlo Park, California

Building or Parcel[1]		Percent Breakdown of Land Use Type by Building						Percent of Year Building is Operational[2]		
		Office	Retail	Residential	Hotel	Parking	Park	Year 4	Year 5	Year 6
North Garage		--	--	--	--	45%	--	100%	100%	100%
Office Building 4		11%	48%	--	--	--	--	21%	100%	100%
Meeting, Collaboration, Park		28%	--	--	--	--	--	0%	0%	82%
Hotel Construction		--	--	--	100%	--	--	0%	41%	100%
Town Square		--	--	--	--	--	14%	0%	58%	100%
Parcel 2		--	19%	19%	--	12%	--	0%	34%	100%
Parcel 3		--	26%	24%	--	12%	--	0%	10%	100%
Other		0.38%	--	--	--	0.73%	86%	100%	100%	100%
South Garage		--	--	--	--	23.9%	--	29%	100%	100%
Office Building 3		13%	--	--	--	--	--	0%	76%	100%
Office Building 1		8.4%	--	--	--	--	--	5%	100%	100%
Office Building 2		10%	--	--	--	--	--	0%	98%	100%
Office Building 5		15%	--	--	--	--	--	0%	78%	100%
Office Building 6		14%	--	--	--	--	--	0%	53%	100%
Parcel 6		--	--	10%	--	1.4%	--	0%	0%	88%
Parcel 7		--	--	6.9%	--	0.5%	--	0%	99%	100%
Parcels 4 + 5		--	2.4%	40%	--	4.4%	--	0%	0%	11%
Hamilton Avenue Parcels North and South		--	3.7%	--	--	--	--	0%	54%	100%
Partial Buildout by Year and Land Use Type[3]	**Year 4**	3.1%	10%	0%	0%	53%	86%			
	Year 5	58%	59%	16%	41%	75%	94%			
	Year 6	95%	98%	64%	100%	96%	100%			

Notes:

1. Construction area/subphasing information and full buildout square footage by building provided by Project Applicant.
2. The percentage of year that each building is operational is calculated using the last day of construction for each building. For each partial year of construction, the building is assumed to be operational during the fraction of the year between the last day of construction and the end of that year. The building is assumed to be 0% operational for each full year of construction and 100% operational for each year full year after the end of construction.
3. Partial buildout for Year 4, Year 5, and Year 6 were calculated based on the portion of building area that becomes operational each year over the total building area for each land use type.

Abbreviations:

% - percent

Table 17
Traffic Data Provided by the Transportation Engineer
Willow Village
Menlo Park, California

Daily Trips Rates and VMT

Land Use	Fleet Type / Land Use	Trip Rate Units[1]	Weekday Trips per Day per Unit[1]	Weekday daily VMT[2]
			TOTAL	TOTAL
Main Project Site - Existing Conditions	Cars	per 1,000 s.f.	9.19	110,860
	Trucks	per 1,000 s.f.	0.22	2,640
	Shuttles	per 1,000 s.f.	0.66	21,088
	On-Demand	per 1,000 s.f.	0.66	7,919
Campus District - Full Buildout	Cars	per 1,000 s.f.	10.05	178,766
	Trucks	per 1,000 s.f.	0.23	4,056
	Shuttles	per 1,000 s.f.	0.44	21,088
	On-Demand	per 1,000 s.f.	0.68	12,168
Town Square and the Residential/Shopping District - Full Buildout	Residential	per d.u.	4.35	71,524
	Retail[3]	per 1,000 s.f.	25.07	33,594
	Hamilton Avenue Parcels North and South[3]	per 1,000 s.f.	28.31	1,461
	Park	per acre	42.80	1,147
	Hotel	per room	6.69	14,814

Notes:

1. Daily project trip rates were provided by the Transportation Engineer in terms of trip rates per land use amount.
2. Daily Project VMT provided by the Transportation Engineer include reductions for pass-by and diverted trips. Daily VMT is given in VMT per day.
3. The trip rates and VMT for Hamilton Avenue Parcels North and South were provided separately and added to retail totals in calculations.

Abbreviations:

VMT - Vehicle miles traveled
s.f. - Square feet
d.u. - Dwelling unit

Table 18
Trip Rates and VMT for Existing Conditions and Project Operations
Willow Village
Menlo Park, California

Project Area[1]	Land Use	Fleet Type[2]	Total Weekday Daily VMT[3]	Total Weekday Daily Trips[3]	Total Average Daily VMT[4]	Total Average Daily Trips[4]	Total Annual VMT[5]	Total Annual Trips[5]
			VMT/day	trips/day	VMT/day	trips/day	VMT/year	trips/year
Existing Conditions	Campus District	Cars	110,860	9,221	84,225	7,006	30,742,244	2,557,040
		Trucks	2,640	220	2,005	167	731,958	60,882
		Shuttles	21,088	659	15,063	470	3,916,358	122,319
		On-Demand	7,919	659	5,656	470	1,470,590	122,319
Year 4	Campus District	Cars	5,480	493	4,079	367	1,488,677	133,874
		Trucks	124	11	93	8.3	33,776	3,037
		Shuttles	646	22	462	15	120,048	3,996
		On-Demand	373	34	266	24	69,267	6,229
	Residential	San Mateo	0	0	0	0	0	0
	Retail	San Mateo	3,563	510	3,442	492	1,256,238	179,684
	Park	San Mateo	987	147	3,652	545	1,332,917	198,943
	Hotel	San Mateo	0	0	0	0	0	0
Year 5	Campus District	Cars	104,523	9,400	77,797	6,996	28,395,923	2,553,590
		Trucks	2,371	213	1,765	159	644,259	57,937
		Shuttles	12,330	410	8,807	293	2,289,859	76,227
		On-Demand	7,114	640	5,082	457	1,321,238	118,816
	Residential	San Mateo	11,209	1,180	10,956	1,153	3,999,096	420,957
	Retail	San Mateo	20,794	2,974	20,085	2,873	7,331,178	1,048,602
	Park	San Mateo	1,080	161	3,993	596	1,457,557	217,546
	Hotel	San Mateo	6,049	527	5,816	507	2,122,939	184,925
Year 6	Campus District	Cars	169,737	15,264	126,336	11,361	46,112,784	4,146,833
		Trucks	3,851	346	2,866	258	1,046,226	94,085
		Shuttles	20,023	667	14,302	476	3,718,554	123,787
		On-Demand	11,553	1,039	8,252	742	2,145,589	192,949
	Residential	San Mateo	45,534	4,793	44,507	4,685	16,244,920	1,709,992
	Retail	San Mateo	34,307	4,907	33,137	4,740	12,095,154	1,730,009
	Park	San Mateo	1,147	171	4,243	633	1,548,641	231,140
	Hotel	San Mateo	14,814	1,290	14,244	1,241	5,199,035	452,878
Full Buildout	Campus District	Cars	178,766	16,076	133,057	11,966	48,565,689	4,367,418
		Trucks	4,056	365	3,019	271	1,101,879	99,090
		Shuttles	21,088	702	15,063	501	3,916,358	130,371
		On-Demand	12,168	1,094	8,691	782	2,259,721	203,212
	Residential	San Mateo	71,524	7,529	69,910	7,359	25,517,254	2,686,027
	Retail	San Mateo	35,055	5,014	33,860	4,843	12,358,799	1,767,718
	Park	San Mateo	1,147	171	4,243	633	1,548,641	231,140
	Hotel	San Mateo	14,814	1,290	14,244	1,241	5,199,035	452,878

Table 18
Trip Rates and VMT for Existing Conditions and Project Operations
Willow Village
Menlo Park, California

Notes:

1. Partial years are scaled from the full buildout based on the portion of each land use that becomes operational for each year of construction. See Table 16 for more details.
2. The fleet type for each land use was provided by the Transportation Engineer. The Campus District will have various fleets for specific uses. Town Square and the Residential/Shopping District land uses (Residential, Retail, Park, and Hotel) are analyzed assuming a default San Mateo fleet. Hamilton Avenue Parcels North and South are combined with retail land uses. See Table 19 for more information.
3. Daily VMT and trip rates were provided by the Transportation Engineer on October 5, 2021. Total trip rates are calculated using land uses in Table 1.
4. Weekday VMT and trip rates provided by the Transportation Engineer were scaled to average trip rates using the ratio between CalEEMod® weekday and weekend one-way trip rates.
5. Annual trips and VMT are calculated by multiplying daily values by 365 for all fleets with the exception of shuttles and on-demand, which are multiplied by 260 days/year.

Abbreviations:

VMT - vehicle miles traveled

References:

California Air Pollution Control Officers Association (CAPCOA). California Emissions Estimator Model (CalEEMod®), Version 2020.4.0. Available online at http://www.caleemod.com/

Table 19
Summary of Fleet Mix Categories
Willow Village
Menlo Park, California

Land Use	Fleet Type	EMFAC2007 Category[1]	Fuel[1,2]
Town Square and the Residential/Shopping District[3]	San Mateo County Mix	All	Mix of Gasoline, Diesel, Electric, and Natural Gas
Campus District[4]	Cars	LDA, LDT1, LDT2, MCY Mix	Mix of Gasoline and Diesel
	On-Demand	LDA	Gasoline
	Shuttles	Motor Coach, All Other Buses Mix	Diesel
	Trams	LDT1, LDT2	Mix of Gasoline and Diesel
	Trucks	HHDT, LHDT1, LHDT2, MHDT Mix	Mix of Gasoline, Diesel, and Natural Gas

Notes:

1. EMFAC2007 categories and fuel types were chosen to match vehicle type descriptions provided by Meta Transportation Operations Team.
2. Electric vehicles were not considered in the emission factors of the Campus District fleets because Campus District-specific emissions reductions are applied later.
3. Land uses other than the Campus District were assumed to have the same distribution of vehicle types as San Mateo County, per EMFAC2021. Hamilton Avenue Parcels North and South were combined with the retail land uses having the EMFAC2021 fleet for San Mateo County.
4. Default split between EMFAC categories assumed for all fleets associated with the Office (Existing and Full Buildout).

Abbreviations:

HHDT - heavy-heavy duty trucks
LDA - light duty auto (passenger cars)
LDT- light duty trucks
LHDT - light-heavy duty trucks
LHDT - light-heavy duty trucks
MHDT - medium-heavy duty trucks
MCY - motorcycles

References:

California Air Resources Board. EMFAC2021. Available at: https://arb.ca.gov/emfac/

Table 20a
Mobile CAP Emission Factors
Willow Village
Menlo Park, California

Fleet Type[2]	Calendar Year[3]	CAPs Emission Factors[1]																			
		ROG						NO_x			PM_{10}					$PM_{2.5}$					
		RUNEX	RUNLOSS	STREX	IDLEX	DIURN	HOTSOAK	RUNEX	STREX	IDLEX	RUNEX	PMTW	PMBW	STREX	IDLEX	RUNEX	PMTW	PMBW	STREX	IDLEX	
		g/mile		g/trip				g/mile	g/trip		g/mile			g/trip		g/mile			g/trip		
San Mateo Fleet	2019	0.031	0.038	0.46	0.0057	0.29	0.12	0.23	0.41	0.088	0.0041	0.0083	0.011	0.0023	4.7E-04	0.0039	0.0021	0.0039	0.0022	4.5E-04	
	2024	0.016	0.033	0.30	0.0046	0.23	0.10	0.10	0.32	0.050	0.0020	0.0083	0.012	0.0018	1.4E-04	0.0019	0.0021	0.0041	0.0017	1.4E-04	
	2025	0.015	0.033	0.28	0.0045	0.22	0.094	0.092	0.30	0.048	0.0019	0.0083	0.012	0.0017	1.3E-04	0.0018	0.0021	0.0041	0.0016	1.3E-04	
	2026	0.014	0.033	0.26	0.0044	0.21	0.091	0.085	0.29	0.046	0.0018	0.0084	0.012	0.0017	1.3E-04	0.0017	0.0021	0.0041	0.0015	1.2E-04	
Cars	2019	0.024	0.039	0.50	0	0.33	0.14	0.090	0.36	0	0.0017	0.0080	0.0072	0.0027	0	0.0016	0.0020	0.0025	0.0025	0	
	2024	0.014	0.037	0.34	0	0.27	0.12	0.048	0.26	0	0.0013	0.0080	0.0072	0.0021	0	0.0012	0.0020	0.0025	0.0020	0	
	2025	0.014	0.037	0.32	0	0.26	0.12	0.044	0.25	0	0.0013	0.0080	0.0072	0.0021	0	0.0012	0.0020	0.0025	0.0019	0	
	2026	0.013	0.037	0.30	0	0.25	0.12	0.041	0.24	0	0.0012	0.0080	0.0073	0.0020	0	0.0011	0.0020	0.0025	0.0018	0	
Trucks	2019	0.15	0.050	0.12	0.045	0.10	0.030	2.3	0.62	0.72	0.046	0.014	0.074	2.8E-04	0.0040	0.044	0.0034	0.026	2.6E-04	0.0038	
	2024	0.057	0.035	0.083	0.034	0.070	0.019	0.84	0.66	0.37	0.013	0.013	0.075	1.5E-04	0.0011	0.012	0.0033	0.026	1.4E-04	0.0011	
	2025	0.053	0.034	0.078	0.032	0.065	0.017	0.76	0.64	0.35	0.012	0.013	0.075	1.4E-04	0.0010	0.011	0.0033	0.026	1.3E-04	0.0010	
	2026	0.049	0.033	0.073	0.031	0.061	0.016	0.69	0.62	0.33	0.011	0.013	0.075	1.3E-04	0.0010	0.011	0.0033	0.026	1.2E-04	9.3E-04	
Shuttles	2019	0.0056	0	0	0.021	0	0	0.36	1.5	0.48	0.0029	0.012	0.048	0	1.4E-04	0.0028	0.0030	0.017	0	1.3E-04	
	2024	0.0072	0	0	0.024	0	0	0.47	1.5	0.51	0.0040	0.012	0.049	0	1.5E-04	0.0038	0.0030	0.017	0	1.4E-04	
	2025	0.0073	0	0	0.025	0	0	0.47	1.5	0.48	0.0041	0.012	0.049	0	1.6E-04	0.0039	0.0030	0.017	0	1.5E-04	
	2026	0.0075	0	0	0.026	0	0	0.47	1.5	0.46	0.0043	0.012	0.049	0	1.6E-04	0.0041	0.0030	0.017	0	1.5E-04	
On Demand	2019	0.015	0.033	0.45	0	0.31	0.10	0.069	0.32	0	0.0016	0.0080	0.0068	0.0027	0	0.0015	0.0020	0.0024	0.0024	0	
	2024	0.0078	0.032	0.32	0	0.27	0.083	0.038	0.25	0	0.0013	0.0080	0.0067	0.0021	0	0.0012	0.0020	0.0023	0.0020	0	
	2025	0.0070	0.032	0.30	0	0.27	0.081	0.035	0.24	0	0.0012	0.0080	0.0067	0.0021	0	0.0011	0.0020	0.0023	0.0019	0	
	2026	0.0063	0.032	0.28	0	0.26	0.077	0.032	0.23	0	0.0012	0.0080	0.0067	0.0020	0	0.0011	0.0020	0.0023	0.0018	0	

Notes:

1. Emission factors for each fleet type were developed by creating weighted emission factors based on the vehicle classes in each fleet type. EMFAC emissions were summed across each year for each vehicle class within a fleet type, then a vehicle class emission factor based on VMT and trip counts for the vehicle class was calculated. Emission factors for each vehicle class within a fleet type were weighted based on total VMTs and trips to create a fleet-wide emission factor for each year.
2. Emission factors for the Project fleets (all except the San Mateo Fleet) were calculated without electric vehicles because electric vehicle reductions are calculated separately.
3. The existing conditions for this analysis used emission factors from 2019. Partial buildout years 4, 5, and 6 used emission factors from years 2024, 2025, and 2026, respectively. Full buildout emissions used emission factors from 2026 to conservatively estimate emissions.

Abbreviations:

ROG - Reactive organic gases
NO_x - Nitrogen oxides
PM_{10} - Particulate matter less than 10 microns in diameter
$PM_{2.5}$ - Particulate matter less than 2.5 microns in diameter
RUNEX - Running exhaust emissions
RUNLOSS - Evaporative losses
STREX - Start exhaust tailpipe emissions
IDLEX - Idle exhaust emissions
DIURN - Diurnal Evaporative Hydrocarbon Emissions
HOTSOAK - Hot soak evaporative hydrocarbon emissions

References

California Air Resources Board. EMFAC2021. Available at: https://arb.ca.gov/emfac/

Table 20b
Mobile GHG Emission Factors
Willow Village
Menlo Park, California

Fleet Type[2,3]	Calendar Year	GHG Emission Factors[1]											
		CO_2			CH_4			N_2O			CO_2e		
		RUNEX	STREX	IDLEX	RUNEX	STREX	IDLEX	RUNEX	STREX	IDLEX	RUNEX	STREX	IDLEX
		g/mile	g/trip		g/mile	g/trip		g/mile	g/trip		g/mile	g/trip	
San Mateo Fleet	2019	377	76	11	0.0076	0.091	0.0024	0.014	0.037	0.0016	382	89	11
	2026	341	65	8.9	0.0055	0.055	0.0023	0.011	0.028	0.0013	345	75	9.4
Cars	2019	318	82	0	0.0050	0.10	0	0.0073	0.038	0	321	96	0
	2026	289	72	0	0.0028	0.063	0	0.0044	0.030	0	290	83	0
Trucks	2019	1,131	17	86	0.056	0.024	0.019	0.11	0.031	0.013	1,164	27	90
	2026	979	15	65	0.034	0.015	0.017	0.093	0.025	0.010	1,007	23	68
Shuttles	2019	1,264	0	138	0.0047	0	0.0025	0.20	0	0.022	1,323	0	144
	2026	1,214	0	123	9.0E-04	0	0.0015	0.19	0	0.019	1,271	0	128
On Demand	2019	295	76	0	0.0037	0.092	0	0.0062	0.036	0	297	89	0
	2026	264	67	0	0.0017	0.060	0	0.0038	0.029	0	266	77	0

Notes:

1. Emission factors for each fleet type were developed by creating weighted emission factors based on the vehicle classes in each fleet type. EMFAC emissions were summed across each year for each vehicle class within a fleet type, then a vehicle class emission factor based on VMT and trip counts for the vehicle class was calculated. Emission factors for each vehicle class within a fleet type were weighted based on total VMTs and trips to create a fleet-wide emission factor for each year.
2. Vehicle classes within a fleet type were determined as the best match based on information provided from the Project Applicant.
3. Emission factors for all fleets except the San Mateo Fleet were calculated without electric vehicles because reductions are calculated separately.

Abbreviations:

GHG - Greenhouse Gas
CO_2 - Carbon Dioxide
N_2O - Nitrous Oxide
CH_4 - Methane
CO_2e - Carbon dioxide equivalent
RUNEX - Running exhaust emissions
STREX - Start exhaust tailpipe emissions
IDLEX - Idle exhaust emissions

References:

California Air Resources Board. EMFAC2021. Available at: https://arb.ca.gov/emfac/

Table 21a
Mobile CAP Emissions Before EV Reductions
Willow Village
Menlo Park, California

Year	Land Use[1]	Fleet Type	Annual Trips[2]	Annual VMT[2]	CAP Emissions[3,4]							
					ROG	NOX	PM_{10}	$PM_{2.5}$	ROG	NOX	PM_{10}	$PM_{2.5}$
			trips/year	VMT/year	tons/year				lb/day			
Existing Conditions	Campus District	Cars	2,557,040	30,742,244	4.9	4.1	3.1	0.59	27	22	17	3.3
		Trucks	60,882	731,958	0.18	2.0	0.17	0.068	1.0	11	0.92	0.37
		Shuttles	122,319	3,916,358	0.027	1.8	0.59	0.15	0.15	10	3.3	0.80
		On-Demand	122,319	1,470,590	0.19	0.15	0.15	0.028	1.1	0.8	0.81	0.15
			2,862,559	**36,861,150**	**5.3**	**8.0**	**4.0**	**0.84**	**29**	**44**	**22**	**4.6**
Partial Buildout - Year 4	Campus District	Cars	133,874	1,488,677	0.19	0.12	0.15	0.028	1.1	0.65	0.82	0.15
		Trucks	3,037	33,776	0.0041	0.035	0.0065	0.0020	0.023	0.19	0.036	0.011
		Shuttles	3,996	120,048	0.0011	0.071	0.018	0.0046	0.0058	0.39	0.10	0.025
		On-Demand	6,229	69,267	0.0077	0.0046	0.0069	0.0013	0.042	0.025	0.038	0.0071
	Residential	San Mateo	0	0	0	0	0	0	0	0	0	0
	Retail	San Mateo	179,684	1,256,238	0.19	0.21	0.13	0.027	1.1	1.2	0.74	0.15
	Park	San Mateo	198,943	1,332,917	0.21	0.23	0.14	0.029	1.2	1.2	0.78	0.16
	Hotel	San Mateo	0	0	0	0	0	0	0	0	0	0
			525,763	**4,300,922**	**0.61**	**0.67**	**0.46**	**0.092**	**3.4**	**3.7**	**2.5**	**0.50**
Partial Buildout - Year 5	Campus District	Cars	2,553,590	28,395,923	3.6	2.1	2.9	0.53	20	11	16	2.9
		Trucks	57,937	644,259	0.073	0.60	0.12	0.037	0.40	3.3	0.68	0.20
		Shuttles	76,227	2,289,859	0.021	1.4	0.35	0.089	0.11	7.4	1.9	0.49
		On-Demand	118,816	1,321,238	0.14	0.081	0.13	0.025	0.78	0.45	0.72	0.13
	Residential	San Mateo	420,957	3,999,096	0.49	0.57	0.43	0.085	2.7	3.1	2.3	0.47
	Retail	San Mateo	1,048,602	7,331,178	1.1	1.1	0.78	0.16	5.9	6.3	4.3	0.86
	Park	San Mateo	217,546	1,457,557	0.22	0.23	0.16	0.031	1.2	1.3	0.85	0.17
	Hotel	San Mateo	184,925	2,122,939	0.23	0.29	0.23	0.045	1.3	1.6	1.2	0.25
			4,678,601	**47,562,050**	**5.8**	**6.3**	**5.1**	**1.0**	**32**	**35**	**28**	**5.5**
Partial Buildout - Year 6	Campus District	Cars	4,146,833	46,112,784	5.6	3.1	4.6	0.86	31	17	25	4.7
		Trucks	94,085	1,046,226	0.11	0.89	0.20	0.059	0.62	4.9	1.1	0.33
		Shuttles	123,787	3,718,554	0.034	2.2	0.57	0.15	0.19	12	3.1	0.80
		On-Demand	192,949	2,145,589	0.22	0.12	0.21	0.040	1.2	0.68	1.2	0.22
	Residential	San Mateo	1,709,992	16,244,920	1.9	2.1	1.7	0.35	10	12	9.5	1.9
	Retail	San Mateo	1,730,009	12,095,154	1.7	1.8	1.3	0.26	9.3	10	7.1	1.4
	Park	San Mateo	231,140	1,548,641	0.22	0.23	0.17	0.033	1.2	1.3	0.91	0.18
	Hotel	San Mateo	452,878	5,199,035	0.55	0.65	0.55	0.11	3.0	3.6	3.0	0.60
			8,681,672	**88,110,903**	**10**	**11**	**9.4**	**1.9**	**57**	**61**	**51**	**10**
Full Buildout	Campus District	Cars	4,367,418	48,565,689	5.9	3.3	4.9	0.91	32	18	27	5.0
		Trucks	99,090	1,101,879	0.12	0.94	0.21	0.062	0.65	5.2	1.2	0.34
		Shuttles	130,371	3,916,358	0.036	2.3	0.61	0.15	0.20	13	3.3	0.84
		On-Demand	203,212	2,259,721	0.23	0.13	0.23	0.042	1.3	0.71	1.2	0.23
	Residential	San Mateo	2,686,027	25,517,254	3.0	3.4	2.7	0.54	16	18	15	3.0
	Retail	San Mateo	1,767,718	12,358,799	1.7	1.8	1.3	0.26	9.5	10	7.2	1.4
	Park	San Mateo	231,140	1,548,641	0.22	0.23	0.17	0.033	1.2	1.3	0.91	0.18
	Hotel	San Mateo	452,878	5,199,035	0.55	0.65	0.55	0.11	3.0	3.6	3.0	0.60
			9,937,855	**100,467,375**	**12**	**13**	**11**	**2.1**	**64**	**70**	**59**	**12**

Table 21a
Mobile CAP Emissions Before EV Reductions
Willow Village
Menlo Park, California

Notes:

1. Hamilton Avenue Parcels North and South were provided separately and added to the retail land use totals.
2. Trip counts and VMTs by land use type were broken out by year using a scaling factor representing the percent of each fleet that is operational in a given year leading up to full buildout. This percent was determined based on the square footage of the land use associated with each fleet that is operational in a given year relative to that land use's full buildout square footage. See Table 16 for more details on scaling. See Table 18 for Project Trip Rates and VMT.
3. Criteria air pollutants are calculated by year using emission factors for the associated year and fleet from EMFAC2021. Electric vehicles are not included in the emission factors for Campus District fleets (all fleet types except San Mateo Fleet), as reductions associated with EVs are considered separately. Project emission factors are shown in Table 20a.
4. Full buildout emissions are conservatively calculated using 2026 emission factors.

Abbreviations:

EV - electric vehicle
lb - pound
NO_x - nitrogen oxides
VMT- vehicle miles traveled
PM_{10} - particulate matter less than 10 microns in diameter
$PM_{2.5}$ - particulate matter less than 2.5 microns in diameter
ROG - reactive organic gases

References:

California Air Resources Board. EMFAC2021. Available at: https://arb.ca.gov/emfac/

Table 21b
Summary of Mobile GHG Emissions Before EV Reductions
Willow Village
Menlo Park, California

Year	Land Use[1]	Fleet Type	Annual Trips[2]	Annual VMT[2]	GHGs Emissions[3,4]			
					CO_2	CH_4	N_2O	CO_2e
			trips/year	VMT/year	MT/year			
Existing Conditions	Campus District	Cars	2,557,040	30,742,244	9,997	0.41	0.32	10,104
		Trucks	60,882	731,958	834	0.043	0.082	859
		Shuttles	122,319	3,916,358	4,965	0.019	0.78	5,199
		On-Demand	122,319	1,470,590	444	0.017	0.014	448
			2,862,559	**36,861,150**	**16,240**	**0.48**	**1.2**	**16,610**
Full Buildout	Campus District	Cars	4,367,418	48,565,689	14,353	0.41	0.34	14,465
		Trucks	99,090	1,101,879	1,086	0.040	0.11	1,119
		Shuttles	130,371	3,916,358	4,772	0.0037	0.75	4,996
		On-Demand	203,212	2,259,721	611	0.016	0.015	616
	Residential	San Mateo	2,686,027	25,517,254	8,912	0.29	0.36	9,025
	Retail	San Mateo	1,767,718	12,358,799	4,351	0.17	0.19	4,411
	Park	San Mateo	231,140	1,548,641	546	0.022	0.024	554
	Hotel	San Mateo	452,878	5,199,035	1,809	0.055	0.070	1,831
			9,937,855	**100,467,375**	**36,439**	**1.0**	**1.9**	**37,016**

Notes:

1. Hamilton Avenue Parcels North and South were provided separately and added to the retail land use totals.
2. VMT and trip rates were provided by the Transportation Engineer on October 5, 2021 and are summarized in Table 18.
3. Greenhouse Gases are calculated by year using emission factors for the associated year and fleet from EMFAC2021. Electric vehicles are not included in the emission factors for Campus District fleets (all fleet types except San Mateo Fleet), as reductions associated with EVs are considered separately. Project emission factors are shown in Table 20b.
4. Full buildout emissions are conservatively calculated using 2026 emission factors.

Abbreviations:

GHG - Greenhouse Gas
CO_2 - carbon dioxide
CH_4 - methane
N_2O - Nitrous Oxide
CO_2e - Carbon dioxide equivalent
EV - electric vehicle
MT - Metric Ton
VMT- vehicle miles traveled

References:

California Air Resources Board. EMFAC2021. Available at: https://arb.ca.gov/emfac/

Table 22
EV Assumptions for Campus District
Willow Village
Menlo Park, California

Campus District EV Parameters

Description	Units	Value
Electricity required per mile charged[1]	kWh/mi	0.30
Total Charging Energy of Meta Campuses[2]	kWh/year	3,791,856
Total Area of Meta Campuses[2]	sqf	4,753,594
Total Meta Campus Energy per Area[2]	kWh/sqf	0.80
Existing Conditions Fleet eVMT per Total VMT[3]	Percent	5.5%
Full Buildout Fleet MSS eVMT per Total VMT[4]	Percent	14%
Electricity Loss Factor[5]	Percent	10%
Existing Conditions Charging Energy Usage[6]	kWh/year	534,955
Full Buildout Charging Energy Usage[7]	kWh/year	2,925,608

eVMTs from Project Chargers at the proposed Campus District

Year	Land Use Category[8]	Project Increase in Annual eVMTs[9]
		eVMT/year
Existing Conditions	Campus District	1,783,182
Partial Buildout - Year 4		298,927
Partial Buildout - Year 5		5,701,922
Partial Buildout - Year 6		9,259,481
Full Buildout		9,752,026

Notes:

1. An average EV fuel economy of 0.30 kWh per mile was used. The fuel economy is based on electric fleet data from fueleconomy.gov. Available at: https://www.fueleconomy.gov/.
2. Meta provided energy usage and areas for EV charging at their existing campuses: Classic, Bayfront, Chilco, Willow, Gateway. The provided data was used to evaluate an average ratio of EV charging energy usage per campus area.
3. The percent eVMT for existing conditions is calculated by dividing the eVMT in existing conditions by the annual VMT from the 'Car' and 'On-Demand' vehicle types in existing conditions. For existing conditions VMT, see Table 18.
4. ARB is currently preparing its 2020 Mobile Source Strategy (MSS) update to the ARB VISION Model (version 2.1) estimating future fleet characteristics. The Mobile Source Strategy projects eVMTs reflecting the aspirational target identified in EO N-79-20, assuming 100% of passenger vehicle sales in California are ZEV or PHEV, and GHG emissions assumed to have reduced by 2.0% per year from 2026 to 2035. The increase in annual eVMTs charged by the Campus District is scaled from the increase in fleet eVMT from existing conditions to full buildout.
5. A 10% Loss Factor was applied to the annual project energy uses to account for expected losses. Source available at: https://www.fueleconomy.gov/

Table 22
EV Assumptions for Campus District
Willow Village
Menlo Park, California

6. The EV charging energy consumption for existing conditions was based on existing charger energy usage data for Willow Village for 2019 provided by the Project applicant. The total energy usage was reduced assuming a 10% loss factor.

7. The EV charging energy consumption for the Project at full buildout was determined using an average ratio of existing charging sites kWh/sqf and multiplying it by the Campus District land use area at full buildout (1.6 million sqf). This number was scaled by the increase in fleet eVMT from existing conditions to full buildout based on the MSS scenario of the VISION model. A 10% loss factor was applied to the total energy usage per year. All relevant data sources were provided by the Project applicant.

8. Meta offers an EV charging program to its workers. Charging on campus is free and valets move cars into chargers to maximize charging time. Therefore, the EV charging annual electricity for the Campus District was provided based on studies from Meta's existing campuses in the area. The electricity for EV charging at the Project would be supplied with 100% renewable energy.

9. For years where the Campus District is only operational a proportion of the year, the annual kWh is multiplied by a scaling fraction for the Campus District land use, found in Table 16.

Abbreviations:

EV - Electric vehicle (includes battery electric or plug-in hybrid technology)
eVMT- Electric vehicle miles traveled
kWh - Kilowatt hour
sqf- Square foot
MSS - Mobile Source Strategy

References:

City of Menlo Park Nonresidential EV Charging Requirements. Published July 17, 2019. Available at: https://www.menlopark.org/DocumentCenter/View/22382/Nonresidential-EV-Charging-Requirements

California Air Resources Board. Vision Scenario Planning. Available at: https://ww2.arb.ca.gov/resources/documents/vision-scenario-planning

CalEEMod Appendix D. Available at: http://www.aqmd.gov/docs/default-source/caleemod/user-guide-2021/appendix-d2020-4-0-full-merge.pdf?sfvrsn=12

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Table 23
EV Assumptions for Town Square and the Residential/Shopping District
Willow Village
Menlo Park, CA

EV Assumptions

Description	Units	Input
Miles Charged per Hour Charged[1]	(miles/hr)	21
Scenario1[2]	-	Reference
Scenario 2[2]	-	MSS
Number of Chargers[3]	Total #	249
Average Daily Hours for Charging per Charger[4]	hr	10
Annual Days of Charger Activity[4]	days/yr	365

eVMTs from Project Chargers - Reference Scenario

Year	Total Annual Project Trips[5,6]	Total Annual Project VMT[5,6]	% of total Fleet using Electric Fuel[2]	Annual Project EV Trips[6]	Annual Project Electric VMT[6]	Number of Project EV Chargers Available[7]	Total Annual EV Charge Hours Available from Project Chargers[8]	Number of EV Annual VMT Available from Project Chargers[8]	Project Chargers at Capacity Relative to Project Electric VMT[9]	Total Annual eVMTs Charged by Project[9]
	trips/year	VMT/year		trips/year	eVMT/year		hours/year	eVMT/year		
Partial Buildout - Year 4	378,626	2,589,154	**4.7%**	17,714	121,137	131	477,218	10,021,583	Under Capacity	**121,137**
Partial Buildout - Year 5	1,872,030	14,910,770	**5.2%**	97,457	776,244	187	683,944	14,362,828	Under Capacity	**776,244**
Partial Buildout - Year 6	4,124,018	35,087,750	**5.6%**	229,894	1,955,968	239	871,770	18,307,160	Under Capacity	**1,955,968**
Full Buildout	5,137,763	44,623,729	**5.9%**	304,407	2,643,906	249	908,850	19,085,850	Under Capacity	**2,643,906**

eVMTs from Project Chargers - Mobile Source Strategy (MSS) Scenario

Year	Total Annual Project Trips[5,6]	Total Annual Project VMT[5,6]	% of total Fleet using Electric Fuel[2]	Annual Project EV Trips[6]	Annual Project Electric VMT[6]	Number of Project EV Chargers Available[7]	Total Annual EV Charge Hours Available from Project Chargers[8]	Number of EV Annual VMT Available from Project Chargers[8]	Project Chargers at Capacity Relative to Project Electric VMT[9]	Total Annual eVMTs Charged by Project[9]
	trips/year	VMT/year		trips/year	eVMT/year		hours/year	eVMT/year		
Partial Buildout - Year 4	378,626	2,589,154	**8.3%**	31,482	215,280	131	477,218	10,021,583	Under Capacity	**215,280**
Partial Buildout - Year 5	1,872,030	14,910,770	**10.6%**	198,125	1,578,074	187	683,944	14,362,828	Under Capacity	**1,578,074**
Partial Buildout - Year 6	4,124,018	35,087,750	**13.1%**	538,834	4,584,475	239	871,770	18,307,160	Under Capacity	**4,584,475**
Full Buildout	5,137,763	44,623,729	**15.8%**	811,528	7,048,476	249	908850	19,085,850	Under Capacity	**7,048,476**

Notes:

1. The miles charged per hour charged is representative of a typical charge rate for an EV of 6.25 kWh per hour and a fuel economy of 0.30 kWh per mile. The charge rate is based on capability of existing battery-electric vehicles and Level 2 charging stations. Reference: Chargepoint. 2017. Level Up Your EV Charging Knowledge. Available at: https://www.chargepoint.com/blog/level-your-ev-charging-knowledge/. The fuel economy is based on electric fleet data from fueleconomy.gov. Available at: https://www.fueleconomy.gov/.
2. The two scenarios analyzed are the Reference and the Mobile Source Strategy scenarios. ARB is currently preparing its 2020 Mobile Source Strategy (MSS) update to the ARB VISION Model (version 2.1). The 2020 MSS uses "scenario planning to take an integrated approach to identifying the technology trajectories and programmatic concepts" to model projected years of electric vehicle miles for assessed scenarios. The Mobile Source Strategy projects eVMTs reflecting the aspirational target identified in EO N-79-20, assuming 100% of passenger vehicle sales in California are ZEV or PHEV, and GHG emissions assumed to have reduced by 2.0% per year from 2026 to 2035. The 2020 update only considers passenger vehicles (LDA, LDT1, LDT2, and MDV). To determine the eVMT percent of the passenger vehicle fleets, the 2020 MSS update was downloaded in July 13, 2021. The increase in annual eVMTs charged by the Project from the Reference Scenario to the MSS Scenario is used to determine the eVMTs the Project can take credit for based on providing additional charging infrastructure for the state to reach aspirational EV fleet penetration.
3. The number of chargers in the Town Square and the Residential/Shopping District was provided by the Project Applicant in the Willow Village Mixed Use Development Concept Level Energy Use Summary, dated June 14, 2021, detailing chargers available for all mixed-use traffic. 249 EV Charging Stations are available to serve the 1,694 residential spaces and 500 commercial spaces.
4. Meta offers a valet service to charge EVs from 7am to 7pm, average daily hours of availability for charging per charger is conservatively assumed to be 10 hours per day. When demand is met, the full 10 hours will be used for charging, with each vehicle cycling out of the charging spot before or as the car reaches full charge. The number of chargers are available for all Town Square and the Residential/Shopping District land uses, and it is expected that there will be 10 hours a day of active charging taking place due to the frequency of turnover associated with retail, restaurant, hotel, and park land uses. Town Square and the Residential/Shopping District land uses are assumed to operate 365 days per year. Any charging inefficiencies associated with cars remaining plugged in after reaching full charge is assumed to balance out due the likelihood of more than 10 hours of activity a day associated with Town Square and the Residential/Shopping District activity.
5. Town Square and the Residential/Shopping District Total VMT and trips includes all proposed Project residential, retail, park, and hotel land uses, consistent with Table 18. Retail land uses include Hamilton Parcels North and South and are added to total VMT and trips.
6. EV Annual Trips and EV Annual VMT are determined based on Project trips and VMTs and the VISION Reference Scenario percent of Electric Fleet. These eVMTs (electric vehicle miles traveled) represents the number of project VMTs that are driven by electric vehicles.
7. 249 EV Charging Stations are proposed for the full buildout. To reflect the EV charging stations that will come online during construction in the partial years leading up to full buildout, a scaling factor was applied based on the ratio of square feet of the parking land use that is built out in a given year to the total square feet that will be built. The scaling factor for a given year was applied to the 249 chargers at full buildout. To see scaling factors used, refer to the parking land use from Table 16.
8. Total annual charge hours available from the project are determined by multiplying the average daily hours of charging per charger (10 hours) by the annual days of charger activity (365 days). The annual charge hours available from the project are then multiplied by 25 miles charged per charge hour to determine the number of eVMT available from the project.
9. The Project EV chargers for Town Square and the Residential/Shopping District land uses are determined to be at capacity, meaning used fully for all available charge hours per day, when the electric vehicle miles associated with the Project are in excess of the maximum electric vehicle miles the Project chargers can charge. If there is a surplus of chargers relative to EVs coming to the site, then the Project chargers are under-capacity, and only a fraction of chargers will be used as the number of EVs coming to the site are fewer than the total number of charger capacity. If there is a surplus of EVs coming to the site relative to the chargers at the site, all chargers will be used and the site will be at capacity. In the scenario when the chargers are at capacity, the full capacity of VMTs the site can charge are assumed to be charged.

Abbreviations:

EV - electric vehicle (includes battery electric or plug-in hybrid technology)
Hr - hour
TDM - Transportation Demand Management
VMT - vehicle miles travelled
eVMT - electric vehicle mile traveled

References:

U.S. Census. 2019. Factfinder. Available at: https://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?src=bkmk
California Air Pollution Control Officers Association (CAPCOA). California Emissions Estimator Model (CalEEMod), Version 2016.3.2. Available online at http://www.caleemod.com/
California Air Resources Board. EMFAC2021. Available at: https://arb.ca.gov/emfac/
California Air Resources Board. Vision Scenario Planning. Available at: https://ww2.arb.ca.gov/resources/documents/vision-scenario-planning

RAMBOLL

Table 24a
EV CAP Emissions Reductions Summary
Willow Village
Menlo Park, California

Town Square and the Residential/Shopping District

Year	Scenario	Miles Charged by Project Chargers[1]	EV Trips Charged by Project Chargers[1]	eVMT from Additional Project Chargers[2]	Trip Counts from additional Project Chargers[2]	Electric VMT CAP Emissions Reduction (lb/year)[3,4]			
				eVMT/year	trips/year	ROG	NOx	PM_{10}	$PM_{2.5}$
Existing Conditions	Reference	0	0	0	0	0	0	0	0
	MSS	0	0						
Year 4	Reference	121,137	17,714	94,143	13,767	-33	-18	-0.34	-0.31
	MSS	215,280	31,482						
Year 5	Reference	776,244	97,457	801,830	100,669	-246	-133	-2.7	-2.5
	MSS	1,578,074	198,125						
Year 6	Reference	1,955,968	229,894	2,628,507	308,940	-746	-396	-8.3	-7.7
	MSS	4,584,475	538,834						
Full Buildout	Reference	2,643,906	304,407	4,404,570	507,121	-1,234	-658	-14	-13
	MSS	7,048,476	811,528						

Campus District

Year	eVMT from Additional Project Chargers[5]	Trip Counts from additional Project Chargers[5,6]	Electric VMT CAP Emissions Reduction (lb/year)[3,4]			
	eVMT/year	trips/year	ROG	NOx	PM_{10}	$PM_{2.5}$
Existing Conditions	1,783,182	148,319	-564	-472	-7.6	-7.0
Year 4	298,927	26,882	-78	-47	-1.0	-0.91
Year 5	5,701,922	512,763	-1,432	-833	-18	-17
Year 6	9,259,481	832,687	-2,249	-1,262	-28	-26
Full Buildout	9,752,026	876,981	-2,369	-1,329	-30	-27

Year	Electric VMT CAP Emissions Reduction (lb/year)			
	ROG	NOx	PM_{10}	$PM_{2.5}$
Existing Conditions	-564	-472	-7.6	-7.0
Partial Buildout- Year 4	-111	-65	-1.3	-1.2
Partial Buildout- Year 5	-1,677	-966	-21	-19
Partial Buildout- Year 6	-2,995	-1,658	-37	-34
Full Buildout	-3,603	-1,988	-44	-40

Notes:

1. Expected eVMT and trips charged by the Project chargers in Town Square and the Residential/Shopping District land uses are calculated based on the San Mateo Fleet, charger usage assumptions, ARB's Vision Model, and traffic data provided by the Transportation Engineer. For calculation details, see Table 23.

2. Emissions reductions from EV charging represent the decrease in emissions from increases in electric vehicle use due to the installation of EV chargers throughout the site. For Town Square and the Residential/Shopping District land uses, the eVMT and trips from additional Project chargers is calculated based on the difference between the MSS scenario and the baseline scenario, representing the additional eVMT due to the installation of additional chargers.

3. Emissions reductions use emission factors developed in EMFAC2021 that represent passenger vehicles (LDA, LDT1, LDT2, MCY). The eVMTs determined for Town Square and the Residential/Shopping District are based on ARB's VISION Model, which includes expected electric vehicle fleet % for passenger vehicles only (LDA, LDT1, LDT2, MCY).

4. EVs emit particulate matter brake wear and tire wear, therefore those emissions are not considered in the reductions.

5. Expected eVMT charged by additional Project chargers is measured based on anticipated charging energy usage provided by the Project Applicant. For calculation details see Table 22.

6. Trip counts from Project chargers were calculated by dividing the increased eVMTs from project chargers by the average VMTs per trip for the passenger vehicles (Cars) in a given year, based on traffic data provided by the Transportation Engineer.

Abbreviations:

eVMT - electric vehicle miles traveled
lb - pound
EV - electric vehicle
ROG - reactive organic gases
NOx - nitrogen oxides
PM_{10} - particulate matter less than 10 microns in diameter
$PM_{2.5}$ - particulate matter less than 2.5 microns in diameter

References:

California Air Resources Board. Vision Scenario Planning. Available at: https://ww2.arb.ca.gov/resources/documents/vision-scenario-planning

Table 24b
EV GHG Emissions Reductions Summary
Willow Village
Menlo Park, California

Town Square and the Residential/Shopping District

Year	Scenario	Miles Charged by Project Chargers[1]	EV Trips Charged by Project Chargers[1]	eVMT from Additional Project Chargers[2]	Trip Counts from additional Project Chargers[2]	Electric VMT GHG Emissions Reduction (MT/year)[3,4]			
				eVMT/year	trips/year	CO_2	CH_4	N_2O	CO_2e
Full Buildout	Reference	2,643,906	304,407	4,404,570	507,121	-1,310	-0.044	-0.034	-1,321
	MSS	7,048,476	811,528						

Campus District

Year	eVMT from Additional Project Chargers[4]	Trip Counts from additional Project Chargers[4,5]	Electric VMT GHG Emissions Reduction (MT/year)[3]			
	eVMT/year	trips/year	CO_2	CH_4	N_2O	CO_2e
Existing Conditions	1,783,182	148,319	-580	-0.024	-0.019	-586
Full Buildout	9,752,026	876,981	-2,882	-0.082	-0.069	-2,905

Year	Electric VMT GHG Emissions Reduction (MT/year)			
	CO_2	CH_4	N_2O	CO_2e
Existing Conditions	-580	-0.024	-0.019	-586
Full Buildout	-4,192	-0.13	-0.10	-4,226

Notes:

1. Expected eVMT and trips charged by the Project chargers in Town Square and the Residential/Shopping District land uses are calculated based on the San Mateo Fleet, charger usage assumptions, ARB's Vision Model, and traffic data provided by the Transportation Engineer. For calculation details, see Table 23.

2. Emissions reductions from EV charging represent the decrease in emissions from increases in electric vehicle use due to the installation of EV chargers throughout the site. For Town Square and the Residential/Shopping District land uses, the eVMT and trips from additional Project chargers is calculated based on the difference between the MSS scenario and the baseline scenario, representing the additional eVMT due to the installation of additional chargers.

3. Emissions reductions use emission factors developed in EMFAC2021 that represent passenger vehicles (LDA, LDT1, LDT2, MCY). The eVMTs determined for Town Square and the Residential/Shopping District are based on ARB's VISION Model, which includes expected electric vehicle fleet % for passenger vehicles only (LDA, LDT1, LDT2, MCY).

4. Expected eVMT charged by additional Project chargers is measured based on anticipated charging energy usage provided by the Project Applicant. For calculation details see Table 22.

5. Trip counts from Project chargers were calculated by dividing the increased eVMTs from project chargers by the average VMTs per trip for the passenger vehicles (Cars) in a given year, based on traffic data provided by the Transportation Engineer.

Abbreviations:

GHG - Greenhouse Gas
CO_2 - carbon dioxide
CH_4 - methane
N_2O - Nitrous Oxide
CO_2e - Carbon dioxide equivalent
eVMT - electric vehicle miles traveled
MT - metric ton
EV - electric vehicle

References:

California Air Resources Board. Vision Scenario Planning. Available at: https://ww2.arb.ca.gov/resources/documents/vision-scenario-planning

Table 25a
Summary of Mobile CAP Emissions
Willow Village
Menlo Park, California

Total Emissions Before Reductions:[1]

Year	CAP Emissions without Reductions (ton/year)			
	ROG	NO_x	PM_{10}[2]	$PM_{2.5}$[2]
Total Emissions by Year				
Existing Conditions[3]	5.0	8.0	4.0	0.84
Year 4	0.61	0.67	0.46	0.092
Year 5	5.8	6.3	5.1	1.0
Year 6	10	11	9.4	1.9
Full Buildout	12	13	11	2.1
Net Emissions by Year				
Year 4	-4.4	-7.3	-3.6	-0.74
Year 5	0.8	-1.7	1.0	0.17
Year 6	5.3	3.1	5.4	1.0
Full Buildout	**6.8**	**4.7**	**6.7**	**1.3**

Total Emissions with Reductions:[4]

Year	CAP Emissions with Reductions (ton/year)			
	ROG	NO_x	PM_{10}[2]	$PM_{2.5}$[2]
Total Emissions by Year				
Existing Conditions[3]	5.0	8.0	4.0	0.84
Year 4	0.56	0.64	0.46	0.091
Year 5	5.0	5.9	5.1	1.0
Year 6	8.8	10	9.4	1.8
Full Buildout	**10**	**12**	**11**	**2.1**
Net Emissions by Year				
Year 4	-4.4	-7.4	-3.6	-0.74
Year 5	0.0	-2.2	1.0	0.16
Year 6	3.9	2.3	5.3	1.0
Full Buildout	**5.0**	**3.7**	**6.6**	**1.3**

Notes:

1. Calculations of CAP emissions before reductions are shown in detail in Table 21a. Net emissions subtract the emissions from the existing conditions in 2019.
2. PM10 and PM2.5 emissions include exhaust, tire wear, brake wear, and fugitive dust. Fugitive dust emissions factors are calculated in Table 8.
3. The Existing Conditions includes EV reductions associated with existing Project Site chargers.
4. CAP Emissions after reductions account for the reductions associated with EVs as shown in Table 24a. The emissions reductions are subtracted from the total Project emissions.

Abbreviations:

lb - pound
MT - metric ton
EV - electric vehicle
ROG - reactive organic gases
NOx - nitrogen oxides
PM_{10} - particulate matter less than 10 microns in diameter
$PM_{2.5}$ - particulate matter less than 2.5 microns in diameter

References:

California ARB. 2021. Miscellaneous Processes Methodologies - Paved Entrained Road Dust. Available online at: https://ww3.arb.ca.gov/ei/areasrc/fullpdf/2021_paved_roads_7_9.pdf

California Air Resources Board. EMFAC2021. Available at: https://arb.ca.gov/emfac/

Table 25b
Summary of Mobile GHG Emissions
Willow Village
Menlo Park, California

Total Emissions Before Reductions:[1]

Year	GHG Emissions without Reductions (MT/year)			
	CO_2	CH_4	N_2O	CO_2e
Total Emissions by Year				
Existing Conditions[2]	15,660	0.46	1.2	16,024
Full Buildout	36,439	1.0	1.9	37,016
Net Emissions				
Full Buildout	**20,779**	**0.55**	**0.67**	**20,992**

Total Emissions with Reductions:[3]

Year	GHG Emissions with Reductions (MT/year)			
	CO_2	CH_4	N_2O	CO_2e
Total Emissions by Year				
Existing Conditions[2]	15,660	0.46	1.2	16,024
Full Buildout	32,247	0.88	1.7	32,790
Net Emissions				
Full Buildout	**16,587**	**0.42**	**0.57**	**16,766**

Notes:

1. Calculations of GHG emissions before reductions are shown in detail in Table 21b. Net emissions subtract the emissions from the existing conditions in 2019.
2. The Existing Conditions includes EV reductions associated with existing Project Site chargers.
3. GHG Emissions after reductions account for the reductions associated with EVs as shown in Table 24b. The emissions reductions are subtracted from the total Project emissions.

Abbreviations:

GHG - Greenhouse Gas
CO_2 - carbon dioxide
CH_4 - methane
N_2O - Nitrous Oxide
CO_2e - Carbon dioxide equivalent
MT - metric ton
EV - electric vehicle

References:

California ARB. 2021. Miscellaneous Processes Methodologies - Paved Entrained Road Dust. Available online at: https://ww3.arb.ca.gov/ei/areasrc/fullpdf/2021_paved_roads_7_9.pdf

California Air Resources Board. EMFAC2021. Available at: https://arb.ca.gov/emfac/

Table 26
Generator Emission Factors for Diesel Engines
Willow Village
Menlo Park, California

Fuel	Engine Tier	Generator Size Range (hp)		Engine Emission Factors[1] (g/bhp-hr)				
		Minimum	Maximum	ROG	NO_x	PM_{10}	$PM_{2.5}$	CO_2e
Diesel	Tier 2	750	1,200	0.26	4.6	0.15	0.15	523
Diesel	Tier 3	300	600	0.16	2.9	0.15	0.15	523
Diesel	Tier 4	1,200	--	0.15	0.50	0.020	0.020	523

Notes:

1. Engine emission factors for PM_{10} and $PM_{2.5}$ (assumed all engines are diesel fueled and that all PM_{10} is diesel particulate matter) based on ARB standards for diesel generator engines. Emission factors for TOG and ROG were converted from NMHC values provided in the Tier standards using EPA hydrocarbon conversion factors. When an emission factor was specified as a combined NMHC+NOx factor, the NMHC/NOx ratio of 5%/95% were taken from BAAQMD guidance. The emission factors for CO_2e are based on diesel emergency generator CO_2 and CH_4 emission factors from CalEEMod User's Guide Appendix D, Table 12.1, along with a GWP of 25 for CH_4.

Abbreviations:

ARB - [California] Air Resources Board

BAAQMD - Bay Area Air Quality Management District

CalEEMod - CALifornia Emissions Estimator MODel

CEIDERS - California Emission Inventory Data and Reporting System

CO_2e - carbon dioxide equivalents

EPA - US Environmental Protection Agency

g/bhp-hr - Grams per Brake Horsepower Hour

GWP - global warming potential

References:

CalEEMod Version 2020.4.0. Available online at: http://www.caleemod.com

Californi Air Resources Board. Non-road Diesel Engine Certification Tier Chart. Available online at: https://ww2.arb.ca.gov/resources/documents/non-road-diesel-engine-certification-tier-chart

USEPA. 2010. Conversion Factors for Hydrocarbon Emission Components, NR-002d. EPA-420-R-10-015. July. Available online at: https://nepis.epa.gov/Exe/ZyPDF.cgi/P10081RP.PDF?Dockey=P10081RP.PDF

BAAQMD. 2004. CARB Emission Factors for CI Diesel Engines - Percent HC in Relation to NMHC + NOx. Available at: https://www.baaqmd.gov/~/media/files/engineering/policy_and_procedures/engines/emissionfactorsfordieselengines.pdf

Table 27
Generator Emissions from Existing Conditions and Project Operations
Willow Village
Menlo Park, California

Generator Information[1]

Scenario	Number of Generators	Engine Control[2]	Size	Fuel Type	Annual Operation[3]
			HP		hr/yr
Existing Conditions	1	Tier 3	324	Diesel	50
Full Buildout	2	Tier 3	324	Diesel	50
	1	Tier 3	464	Diesel	50
	3	Tier 2	755	Diesel	50
	1	Tier 2	900	Diesel	50
	3	Tier 4	1,220	Diesel	50
	1	Tier 4	1,490	Diesel	50
	2	Tier 4	2,900	Diesel	50

Generator Emissions

Size (hp)	Quantity	Annual Emissions (ton/yr)				(MT/yr)
		ROG	NO_x	PM_{10}	$PM_{2.5}$	CO_2e
Existing Conditions Generator Emissions[3]						
324	1	0.0029	0.051	2.7E-03	2.7E-03	8.5
Total Emissions		0.0029	0.051	0.0027	0.0027	8.5
Full Buildout Conditions Generator Emissions[3]						
324	2	5.7E-03	1.0E-01	5.4E-03	5.4E-03	17
464	1	4.1E-03	7.3E-02	3.8E-03	3.8E-03	12
755	3	3.2E-02	5.7E-01	1.9E-02	1.9E-02	59
900	1	1.3E-02	2.3E-01	7.4E-03	7.4E-03	24
1,220	3	3.0E-02	1.0E-01	4.0E-03	4.0E-03	96
1,490	1	1.2E-02	4.1E-02	1.6E-03	1.6E-03	39
2,900	2	4.8E-02	1.6E-01	6.4E-03	6.4E-03	152
Total Emissions		0.15	1.3	0.047	0.047	399

Notes:

1. Number, size, and fuel of emergency generators were provided by the Project Applicant.
2. All generators over 1,000 HP were assumed to be Tier 4, consistent with BAAQMD BACT guidelines.
3. Operation for routine maintenance and testing was conservatively assumed to be 50 hours per year, the maximum allowable by the Airborne Toxics Control Measure (ATCM) for Stationary Compression Ignition Engines (17 CCR 93115).

Abbreviations:

BACT - Best Available Control Technology
CO_2 - carbon dioxide
CO_2e - carbon dioxide equivalents
g - grams
hp - horsepower
hr - hour
MT - metric tons
NOx - oxides of nitrogen
PM - particulate matter
PM_{10} - PM less than 10 microns in diameter
$PM_{2.5}$ - PM matter less than 2.5 microns in diameter
ROG - reactive organic gases
yr - year

References:

BAAQMD. Best Available Constrol Technology (BACT) Guideline. Available online at: https://www.baaqmd.gov/~/media/files/engineering/bact-tbact-workshop/combustion/96-1-5.pdf?la=en.

Table 28
Energy Usage for Existing Conditions and Project Operations
Willow Village
Menlo Park, California

Land Use	Floor Area (sqft) (DU - Residential)	Annual Electricity Use (MWh/yr)	Annual Natural Gas Use (MMBtu/yr)
Existing Conditions (2019)[1]			
All	1,923,910	12,050	30,039
Total Existing Energy Usage		12,050	30,039
Full Buildout[2,3]			
Office	1,600,000	23,828	0
Retail	207,690	4,517	2,195
Residential	1,730	16,855	0
Hotel	172,000	2,528	0
Parking	1,869,240	32,183	0
Park	403,837	38	0
Total Full Buildout Energy Usage		79,950	2,195

Notes:

1. Energy use rates for existing conditions were provided for 2019 by the Project Applicant via email on August 10, 2021.
2. Electricity and natural gas usage rates for the retail, residential, and parking land uses were provided by PAE in the June 14, 2021 memorandum. Electricity usage rates for Office, Hotel, and Park were provided by Hines on June 21, 2021. The hotel and office do not use natural gas. The electricity usage includes 27,986 MWh/year of electricity use associated with the Campus District EV charging stations, which is summarized in the parking land use category. Electricity and energy use rates for the Willow Road Retail were calculated based on the CalEEMod defaults the retail land use type in Climate Zone 5.
3. Natural gas for the project is only used for Hamilton Avenue Parcels North and South and the supermarket and restaurant land uses, which are summarized in the retail category.

Abbreviations:

CalEEMod - California Emissions Estimator Model
DU - dwelling unit
kBTU - thousand British Thermal Units
kWh - kilowatt-hour
MMBTU - million British Thermal Units
MWh - Megawatt-hour
sqft - square feet
yr - year

References:

California Air Pollution Control Officers Association (CAPCOA). California Emissions Estimator Model (CalEEMod), Version 2020.4.0. Available online at http://www.caleemod.com

Table 29
Energy Usage Emission Factors
Willow Village
Menlo Park, California

Historical Electricity Intensity - PG&E

Annual Electricity Data	2016	2017	2018	Average[1]	Units
CO_2 Intensity Factor per Total Energy Delivered[2]	294	210	206	237	lbs CO_2/MWh delivered
CO2e Intensity Factor per Total Energy Delivered	296	213	209	239	lbs CO_2e/MWh delivered
% of Total Energy From RPS-Eligible Renewables[3]	33%	33%	39%	35%	-
CO_2 Intensity Factor per Total Non-RPS-Eligible Energy[4]	437	314	338	364	lbs CO_2/MWh delivered
CO_2e Intensity Factor per Total Non-RPS-Eligible Energy[4]	441	318	342	368	lbs CO_2e/MWh delivered

Estimated Intensity Factor for Total Energy Delivered by PG&E[5]

Year	2016	2017	2018	Average[5]	Units
2019 (35%)	294	210	206	237	lbs CO_2/MWh delivered
	296	213	209	239	lbs CO_2e/MWh delivered
2024 (44%)	240	173	186	200	lbs CO_2/MWh delivered
	242	175	188	202	lbs CO_2e/MWh delivered
2025 (47%)	229	165	177	191	lbs CO_2/MWh delivered
	231	167	179	193	lbs CO_2e/MWh delivered
2026 (50%)	219	157	169	181	lbs CO_2/MWh delivered
	220	159	171	183	lbs CO_2e/MWh delivered
2030 (60%)	175	126	135	145	lbs CO_2/MWh delivered
	176	127	137	147	lbs CO_2e/MWh delivered

Estimated Intensity Factor for Total Energy Delivered by PCE[6]

Model Year	2016	2017	2018	Average[1]	Units
86% Renewable (2019 - 2030)	59	42	45	49	lbs CO_2/MWh delivered
	62	45	48	51	lbs CO_2e/MWh delivered
100% Renewable (Campus District)	0	0	0	0	lbs CO_2/MWh delivered
	0	0	0	0	lbs CO_2e/MWh delivered

Greenhouse Gas Energy Emission Factors

Greenhouse Gas	CO_2	CH_4	N_2O	CO_2e	Units
Global Warming Potential[7]	1	25	298	-	-
2019 - 2030 Electricity Use Emission Factor[8]	49	0.029	0.0062	51	lb/MWh
	2.2E-02	1.3E-05	2.8E-06	2.3E-02	MT/MWh
Natural Gas Use Emission Factor[9]	118	0.0023	0.0022	118	lb/MMBTU
	0.0053	0.0000	0.0000	0.0054	MT/therm

Criteria Air Pollutant Energy Emission Factors[v]

Land Use Type	ROG	NOx	PM_{10}	$PM_{2.5}$	Units
Residential	0.011	0.092	0.0075	0.0075	lb/MMBtu
Nonresidential	0.011	0.10	0.0075	0.0075	lb/MMBtu

Notes:

1. This average uses the most recent three years of data.
2. Total CO_2 intensity factors from The Climate Registry. Available at: https://www.theclimateregistry.org/our-members/cris-public-reports/. Accessed: April 2021.
3. Percent of total energy from eligible renewables is from the PG&E 2017, 2018, and 2019 Corporate Responsibility Report.
4. The emissions metric presented here was calculated based on the total CO2 intensity factor divided by the percent of energy delivered from non-RPS-eligible sources. This CO2 intensity factor includes both fossil fuel and carbon-free sources of energy, such as largescale hydro and nuclear. Diablo Canyon Nuclear Plant, which accounts for a portion of the carbon-free energy in this CO2 intensity factor, is planned to be closed by 2024-2025 (https://www.pge.com/en_US/safety/how-the-system-works/diablo-canyon-power-plant/diablo-canyon-power-plant/engagement-panel.page). According to SB 1090 (approved 9/2018), "The [California Public Utilities] commission shall ensure that integrated resource plans are designed to avoid any increase in emissions of greenhouse gases as a result of the retirement of the Diablo Canyon Units 1 and 2 powerplant." This was incorporated into CPUC section 712.7(2)(b). Based on this information, the total Non-RPS-Eligible energy CO2 intensity factor was assumed to remain constant.
5. The RPS of 44% by 2024, 52% by 2027, and 60% for 2030 are consistent with SB 100. The RPS for 2026 and 2027 were estimated by assuming a linear increase between 2024 and 2027. Available at: https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=201720180SB100. The average percentage of energy from renewables for 2016-2018 is greater than the 2020 RPS of 33% as required by SB100. Thus, it is assumed that the 2016-2018 average CO2 and CO2e intensity factors remain constant through 2020, at which point the carbon intensity then decreases each year to comply with the future RPS requirements.
6. The intensity factor for total energy delivered was estimated by multiplying the percentage of energy delivered from non-RPS-eligible renewable energy by the CO_2 emissions per total non-RPS-eligible energy metric calculated above.

Table 29
Energy Usage Emission Factors
Willow Village
Menlo Park, California

7. Global Warming Potentials (GWP) are based on the IPCC Fourth Assessment Report. CH4 and N2O emission factors are from the CalEEMod® version 2020.4.0 defaults for PGE, and are conservatively assumed not to change from these estimates. As more renewable energy is integrated into the electricity grid, these intensity factors will also decrease.
8. Peninsula Clean Energy comes from 51% renewable sources, 35% hydro electric and 14% unspecified sources. The 14% unspecified sources were assumed to come from the same mix as the non-renewable PG&E mix of power. This is assumed to remain constant until 2030, after which the renewable percentage of the power mix is assumed to linearly increase to 100% in 2045, conistent with SB 100. Available at:
9. Natural Gas Use emission factors from Table 8.2 of CalEEMod User's Guide Appendix D.

Abbreviations:

CalEEMod - California Emissions Estimator Model
CH_4 - methane
CO_2 - carbon dioxide
CO_2e - carbon dioxide equivalents
CPUC - California Public Utilities Commission
GWP - global warming potential
lb - pound(s)
MMBtu - million British Thermal Units
MT - metric ton(s)
MWh - megawatt-hour
N_2O - nitrous oxide
NO_x - nitrogen oxides
PCE - Peninsula Clean Energy
PG&E - Pacific Gas & Electric
PM - particulate matter
$PM_{2.5}$ - PM less than 2.5 microns in diameter
PM_{10} - PM less than 10 microns in diameter
ROG - reactive organic gases
RPS - Renewable Portolio Standard
SB - Senate Bill

References:

California Air Pollution Control Officers Association (CAPCOA). California Emissions Estimator Model (CalEEMod), Version 2020.4.0. Available online at http://www.caleemod.com/

IPCC. 2007. AR4 Climate Change 2007: The Physical Science Basis. Available online at: https://www.ipcc.ch/report/ar4/wg1/

PG&E 2017 Corporate Resonsibility Report. Available at: https://www.pgecorp.com/corp_responsibility/reports/2017/assets/PGE_CRSR_2017.pdf. Accessed: July 2021.

PG&E 2018 Corporate Responsibility Report. Available at: https://www.pgecorp.com/corp_responsibility/reports/2018/assets/PGE_CRSR_2018.pdf. Accessed: July 2021

PG&E 2019 Corporate Responsibility Report. Available at: https://www.pgecorp.com/corp_responsibility/reports/2019/assets/PGE_CRSR_2019.pdf. Accessed: July 2021

The Climate Registry. Available at: https://www.theclimateregistry.org/our-members/cris-public-reports/. Accessed: July 2021.

Peninsula Clean Energy. Energy Sources. Available at: https://www.peninsulacleanenergy.com/energy-sources/ Accessed: April 2021

SB-100 California Renewables Portfolio Standard Program. Available at: https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=201720180SB100.

Table 30
Energy Usage Emissions from Existing Conditions and Project Operations
Willow Village
Menlo Park, California

Location	Natural Gas Emissions[1,2]					Electricity Emissions[1,2]
	ROG	NOx	PM_{10}	$PM_{2.5}$	CO_2e	
	(tons/yr)				(MT/yr)	
Existing Conditions (2019)						
All	0.16	1.5	0.11	0.11	1,613	0
Total Existing Emissions	0.16	1.5	0.11	0.11	1,613	0
Full Buildout						
Retail	0.012	0.11	8.2E-03	8.2E-03	118	0
Total Full Buildout Emissions	0.012	0.11	8.2E-03	8.2E-03	118	0
Partial Buildout[3]						
Total Year 4 Emissions	0.0012	0.011	8.3E-04	8.3E-04	12	0
Total Year 5 Emissions	0.0070	0.064	4.9E-03	4.9E-03	70	0
Total Year 6 Emissions	0.012	0.11	8.0E-03	8.0E-03	115	0

Notes:

1. CAP emissions result from the combustion of natural gas. As a result, CAP emissions were only calculated for natural gas usage. In compliance with the City of Menlo Park Municipal Code, natural gas usage for the Project will be offset; however, since the carbon intensity of the offset production is not known at this time, GHG emissions from natural gas were conservatively included alongside electricity GHG emissions.
2. Emissions were calculated based on energy use, shown in Table 28, and energy emission factors, shown in Table 29. Existing electricity is sourced from PCE. Project electricity will be sourced from 100% renewable sources; as such, emissions from Project electricity use are expected to be zero. Project natural gas will only be used in retail land uses for commercial cooking equipment.
3. Partial buildout emissions were calculated from full buildout using scaling factors by land use type and year, as shown in Table 16.

Abbreviations:

CAP - Criteria Air Pollutants
CO_2e - carbon dioxide equivalents
GHG - Greenhouse Gas
MT - metric ton(s)
NOx - nitrogen oxides
PM - particulate matter
$PM_{2.5}$ - PM less than 2.5 microns in diameter
PM_{10} - PM less than 10 microns in diameter
ROG - reactive organic gases
yr - year

References:

California Air Pollution Control Officers Association (CAPCOA). California Emissions Estimator Model (CalEEMod), Version 2020.4.0. Available online at http://www.caleemod.com

Table 31
Water Usage for Existing Conditions and Project Operations
Willow Village
Menlo Park, California

Water Usage

Land Use	CalEEMod® Land Use Subtype	Size	Size Metric	Indoor Water (million gal/year)	Outdoor Water (million gal/year)
Existing Conditions (2019)[1]					
Office	General Office Building	251,530	sqft	45	27
Commercial	Research and Development	123,870	sqft	61	0
Industrial - Warehouse	Unrefrigerated Warehouse-No Rail	500,780	sqft	116	0
Industrial - Manufacturing	Manufacturing	23,570	sqft	5.5	0
Recreational	Health Club	24,060	sqft	1.4	0.87
Light Industrial	General Light Industry	80,100	sqft	19	0
Parking	Enclosed Parking with Elevator	920,000	sqft	0	0
Full Buildout[2]					
Office		1,600,000	sqft	35	10
Retail		207,690	sqft	4.2	0.36
Residential		1,695,976	sqft	67	6.3
Hotel		172,000	sqft	7.6	2.5
Parking		1,869,240	sqft	0	1.4
Park		403,837	sqft	0	14
Partial Buildout[3]					
			Total Year 4 Usage[3]	1.5	13
			Total Year 5 Usage[3]	37	23
			Total Year 6 Usage[3]	88	32

Notes:

1. Existing water use was calculated using the CalEEMod default water consumption profile for each land use.
2. Project indoor water use rates and outdoor water use for all parcels except Hamilton Avenue Parcels North and South were provided by the Project Applicant on June 14, 2021. Indoor and outdoor water use rates for Hamilton Avenue Parcels North and South were calculated using the CalEEMod default water consumption profile for the retail land use type.
3. Partial buildout usage rates were calculated from full buildout using scaling factors by land use type and year, as shown in Table 16.

Abbreviations:

CalEEMod - California Emissions Estimator Model
gal - gallon
kWh - kilowatt-hours
ksf - thousand square feet
sqft - square feet

References:

California Air Pollution Control Officers Association (CAPCOA). California Emissions Estimator Model (CalEEMod®), Version 2020.4.0. Available online at http://www.caleemod.com

Table 32
Water Usage and Wastewater Emissions from Existing Conditions and Project Operations
Willow Village
Menlo Park, California

Land Use	Electricity Indirect Emissions[1,2] (MT CO_2e/yr)	Septic Tank Direct Emissions[1,2] (MT CO_2e/yr)	Aerobic Direct Emissions[1,2] (MT CO_2e/yr)	Facultative Lagoon Direct Emissions[1,2] (MT CO_2e/yr)	Total Emissions (MT CO2e/yr)
Existing Conditions (2019)					
Office	37	27	24	10	98
Commercial	36	37	33	13.1	119
Industrial - Warehouse	68	71	62	25	226
Industrial - Manufacturing	3.2	3.3	2.9	1.2	10.6
Recreational	1.2	0.87	0.76	0.30	3.1
Light Industrial	11	11.3	9.9	4.0	36
Parking	0	0	0	0	0
Total Existing Emissions	156	151	132	53	492
Full Buildout					
Office	19	21	19	7.5	67
Retail	2.0	2.6	2.3	0.91	7.8
Residential	32	41	36	14	123
Hotel	4.1	4.6	4.1	1.6	14
Parking	0.42	0	0	0	0.42
Park	4.2	0	0	0	4.2
Total Full Buildout Emissions	62	70	61	24	217
Partial Buildout[3]					
Total Year 4 Emissions[3]	5.0	0.92	0.81	0.32	7.1
Total Year 5 Emissions[3]	24	22	20	7.9	74
Total Year 6 Emissions[3]	49	54	47	19	168

Notes:

1. Emissions shown in this table were calculated using default values and methods from CalEEMod Version 2020.4.0. The Water Electricity Intensity, Water Treatment Types, and Wastewater Treatment Direct Emission Factors used in the calculation can be found in Tables 9.2, 9.3 and 9.4 of Appendix D of the CalEEMod user guide, respectively. These calculations were performed using water use rates, shown in Table 31, and energy emission factors, shown in Table 29.
2. Consistent with CalEEMod, indoor water use was assumed to be processed as wastewater and outdoor water use was assumed to not be processed as wastewater.
3. Partial buildout direct emissions from Septic Tank, Aerobic, and Facultative Lagoon wastewater treatment were calculated from full buildout using scaling factors by land use type and year, as shown in Table 1. For partial buildout indirect electricity emissions from water usage and wastewater treatment, usage rates rather than emission were scaled to account for year specific energy emission factors from PG&E, as shown in Table 29.

Abbreviations:

CalEEMod - California Emissions Estimator Model
CO_2e - carbon dioxide equivalents
MT - metric ton
yr - year

References:

California Air Pollution Control Officers Association (CAPCOA). California Emissions Estimator Model (CalEEMod®), Version 2020.4.0. Available online at http://www.caleemod.com

Table 33
Solid Waste Generation for Existing Conditions and Project Operations
Willow Village
Menlo Park, California

Solid Waste Generation[1]

Land Use	Size	Units	Solid Waste Disposal Rate (ton/year)
Existing Conditions (2019)			
Office	251,530	sqft	42
Commercial	123,870	sqft	10
Industrial - Warehouse	500,780	sqft	471
Industrial - Manufacturing	23,570	sqft	29
Recreational	24,060	sqft	137
Light Industrial	80,100	sqft	99
Parking	920,000	sqft	0
Full Buildout Conditions			
Office	1,600,000	sqft	268
Retail	207,690	sqft	218
Residential	1,730	DU	796
Hotel	0,193	sqft	106
Parking	1,869,240	sqft	0
Park	403,837	sqft	0.83

Notes:

1. Solid Waste Generation Rates are from Table 10.1 of Appendix D of the CalEEMod User's Guide. An 82% diversion rate, provided by the Project Applicant via email communication dated August 2, 2021, is applied to default solid waste generation rates for the existing and project office land use to account for recycling and composting. The diversion rate is generated using data from Recology with the assumption that all bins are at 100% capacity and 0% contamination.

Abbreviations:

CalEEMod - California Emissions Estimator Model

DU - dwelling unit

sqft - square feet

References

California Air Pollution Control Officers Association (CAPCOA). California Emissions Estimator Model (CalEEMod®), Version 2020.4.0. Available online at http://www.caleemod.com

Table 34
Solid Waste Emissions from Existing Conditions and Project Operations
Willow Village
Menlo Park, California

Solid Waste Emissions[1]

Location	CalEEMod® Land Use Subtype	CO_2 (MT/year)	CH_4 (MT/year)	CO_2e (MT/year)
Existing Conditions (2019)				
Office	General Office Building	8.5	0.51	21
Commercial	Research and Development	2.0	0.12	5.0
Industrial - Warehouse	Unrefrigerated Warehouse-No Rail	96	5.6	237
Industrial - Manufacturing	Manufacturing	5.9	0.35	15
Recreational	Health Club	28	1.6	69
Light Industrial	General Light Industry	20	1.2	50
Parking	Enclosed Parking with Elevator	0	0	0
Total Existing Emissions		160	9.5	397
Full Buildout Conditions				
Office		54	3.2	135
Retail		44	2.6	110
Residential		162	9.5	400
Hotel		22	1.3	53
Parking		0	0	0
Park		0.17	0.010	0.42
Total Full Buildout Emissions		282	17	698
Partial Buildout[2]				
Total Year 4 Emissions[2]		6.3	0.37	16
Total Year 5 Emissions[2]		92	5.5	229
Total Year 6 Emissions[2]		220	13	544

Notes:

1. Emissions shown in this table were calculated using default values and methods from CalEEMod Version 2020.4.0. These calculations were performed using default waste use rates by land use type and an 82% diversion rate for office land use types provided by the Project Applicant, shown in Table 33, and default solid waste landfill gas emission factors from Table 10.2 of CalEEMod User's Guide Appendix D.

2. Partial buildout emissions were calculated from full buildout using scaling factors by land use type and year, as shown in Table 16.

Abbreviations:

CalEEMod - California Emissions Estimator Model
CH_4 - methane
CO_2 - carbon dioxide
CO_2e - carbon dioxide equivalents
LFG - Landfill Gas
MT - metric ton

References:

California Air Pollution Control Officers Association (CAPCOA). California Emissions Estimator Model (CalEEMod®), Version 2020.4.0. Available online at http://www.caleemod.com

Table 35
Unmitigated Architectural Coating Emissions from Existing Conditions and Project Operations
Willow Village
Menlo Park, California

Land Use	Floor Area	Building Surface Area[1]	Application Rate[2]	Indoor Paint VOC EF[3]	Outdoor Paint VOC EF[3]	Architectural Coating VOC Emissions[4]
	(sqft)	(sqft)		(g/L)	(g/L)	(lb/yr)
Existing Conditions (2019)						
Office	251,530	503,060	10%	100	150	262
Commercial	123,870	247,740	10%	100	150	129
Industrial - Warehouse	500,780	1,001,560	10%	100	150	522
Industrial - Manufacturing	23,570	47,140	10%	100	150	25
Recreational	24,060	48,120	10%	100	150	25
Light Industrial	80,100	160,200	10%	100	150	84
Parking	920,000	55,200	10%	0	150	9.6
Total Existing Conditions Emissions						1,057
Full Buildout						
Office	1,600,000	3,200,000	10%	100	150	1,669
Retail	207,690	415,380	10%	100	150	217
Residential	1,695,976	4,579,135	10%	100	150	2,388
Hotel	172,000	344,000	10%	100	150	179
Parking	1,869,240	112,154	10%	0	150	19
Park	403,837	0	10%	0	0	0
Total Full Buildout Emissions						4,473
Partial Buildout[5]						
Total Year 4 Emissions[5]						83
Total Year 5 Emissions[5]						1,567
Total Year 6 Emissions[5]						3,515

Notes:

1. Consistent with CalEEMod Appendix A, residential building surface area was assumed to be 2.7 times the floor area, and non-residential 2 times the floor area. Also consistent with CalEEMod Appendix E, the parking painted area was assumed to be 6% of the total surface area for surface lots.
2. Consistent with CalEEMod Appendix A, 10% of all surfaces were assumed to be coated each year.
3. Consistent with CalEEMod Appendix D Table 6.1, which is based on BAAQMD Regulation 8 Rule 3 paint VOC regulations, use VOC EF of 100 g/L for flat paints, generally used indoors, and 150 g/L for all other architectural coatings.
4. Uses CalEEMod Appendix A assumption that 1 gallon of paint covers 180 square feet. Building surface area is assumed to be 75% indoors and 25% outdoors, consistent with CalEEMod Appendix A. Parking garages are assumed to have no indoor surfaces.
5. Partial buildout emissions were calculated from full buildout using scaling factors by land use type and year, as shown in Table 16.

Abbreviations:

BAAQMD - Bay Area Air Quality Management District
CalEEMod - California Emissions Estimator Model
EF - emission factor
g - grams
L - liters
lb - pound
sqft - square feet
VOC - volatile organic compound
yr - year

References:

BAAQMD. 2009. Regulation 8 Rule 3 Architectural Coatings. Accessed November 2020. Available at: https://www.baaqmd.gov/~/media/dotgov/files/rules/reg-8-rule-3-architectural-coatings/documents/rg0803_0709.pdf?la=en.

California Air Pollution Control Officers Association (CAPCOA). California Emissions Estimator Model (CalEEMod®), Version 2020.4.0. Available online at http://www.caleemod.com/

Table 36
Mitigated Architectural Coating Emissions from Existing Conditions and Project Operations
Willow Village
Menlo Park, California

Land Use	Floor Area	Building Surface Area[1]	Application Rate[2]	Indoor Paint VOC EF[3]	Outdoor Paint VOC EF[3]	Architectural Coating VOC Emissions[4]
	(sqft)	(sqft)		(g/L)	(g/L)	(lb/yr)
Full Buildout						
Office	1,600,000	3,200,000	10%	10	150	668
Retail	207,690	415,380	10%	10	150	87
Residential	1,695,976	4,579,135	10%	10	150	955
Hotel	172,000	344,000	10%	10	150	72
Parking	1,869,240	112,154	10%	0	150	19
Park	403,837	0	10%	0	0	0
					Total Full Buildout Emissions	1,801
Partial Buildout[5]						
					Total Year 4 Emissions[5]	40
					Total Year 5 Emissions[5]	635
					Total Year 6 Emissions[5]	1,417

Notes:

1. Consistent with CalEEMod Appendix A, residential building surface area was assumed to be 2.7 times the floor area, and non-residential 2 times the floor area. Also consistent with CalEEMod Appendix E, the parking painted area was assumed to be 6% of the total surface area for surface lots.
2. Consistent with CalEEMod Appendix A, 10% of all surfaces were assumed to be coated each year.
3. Paint VOC content is consistent with or more stringent than BAAQMD Regulation 8 Rule 3 (Architectural Coatings). Emissions were estimated assuming that indoor painting will utilize "super-compliant" VOC architectural coatings that meet the more stringent limits in South Coast Air Quality Management District Rule 1113. For outdoor paint, assumed use of coatings with VOC content of 150 g/L, consistent with BAAQMD requirements. VOC was assumed to be equivalent to ROG for these purposes.
4. Uses CalEEMod Appendix A assumption that 1 gallon of paint covers 180 square feet. Building surface area is assumed to be 75% indoors and 25% outdoors, consistent with CalEEMod Appendix A. Parking garages are assumed to have no indoor surfaces.
5. Partial buildout emissions were calculated from full buildout using scaling factors by land use type and year, as shown in Table 16.

Abbreviations:

BAAQMD - Bay Area Air Quality Management District
CalEEMod - California Emissions Estimator Model
EF - emission factor
g - grams
L - liters
lb - pound
sqft - square feet
VOC - volatile organic compound
yr - year

References:

BAAQMD. 2009. Regulation 8 Rule 3 Architectural Coatings. Accessed November 2020. Available at: https://www.baaqmd.gov/~/media/dotgov/files/rules/reg-8-rule-3-architectural-coatings/documents/rg0803_0709.pdf?la=en.

California Air Pollution Control Officers Association (CAPCOA). California Emissions Estimator Model (CalEEMod®), Version 2020.4.0. Available online at http://www.caleemod.com/

South Coast Air Quality Management District. Super Compliant Architectural Coatings per Rule 1113. Accessed July 2021. Available at: http://www.aqmd.gov/home/programs/business/business-detail?title=super-compliant-coatings&parent=other-low-voc-products.

Table 37
Consumer Product Emission Factor Refinement
Willow Village
Menlo Park, California

Year[1]	Consumer Products VOC inventory (tons/day)[2]	San Mateo County Population[3]	Total Building Square Footage[4]	Consumer Products VOC Emission Factor (lb/square foot/day)
2010	4.93	718,451	537,446,060	1.83E-05
2020	5.20	764,442	571,850,190	1.82E-05

Notes:

1. 2010 data are used because total building square footage was available only for 2010. Building square footage for 2020 was estimated by multiplying 2010 building square footage with the ratio of population in 2020 to that in 2010.
2. VOC inventory obtained from California Air Resources Board's emission inventory for Consumer Products under Solvent Evaporation for the respective years.
3. Population estimates obtained from US Census Bureau's QuickFacts for San Mateo County for the respective years.
4. Total building square footage for 2010 obtained from FEMA HAZUS-MH software.

Abbreviations:

lb - pound

VOC - Volatile Organic Compound

References:

California Air Resources Board. Almanac Emission Projection Data. Available online at https://www.arb.ca.gov/app/emsinv/emssumcat.php. Accessed November 2021.

US Census Bureau QuickFacts. Available online at https://www.census.gov/quickfacts/fact/table/US/PST045219. Accessed November 2021.

US Federal Emergency Management Agency's Hazus software (HAZUS-MH), Version 5.1. Available online at https://msc.fema.gov/portal/resources/hazus.

Table 38
Consumer Product Emissions from Existing Conditions and Project Operations
Willow Village
Menlo Park, California

Land Use	Building Area	Consumer Products VOC EF[1,2]	Days per Year	Consumer Products VOC emissions
	(sqft)	(lb/sqft/day)		(lb/yr)
Existing Conditions (2019)				
Office	251,530	1.8E-05	365	1,670
Commercial	123,870	1.8E-05	365	822
Industrial - Warehouse	500,780	1.8E-05	365	3,324
Industrial - Manufacturing	23,570	1.8E-05	365	156
Recreational	24,060	1.8E-05	365	160
Light Industrial	80,100	1.8E-05	365	532
Parking	920,000	3.5E-07	365	119
Existing Conditions Emissions				6,783
Full Buildout				
Office	1,600,000	1.8E-05	365	10,621
Retail	207,690	1.8E-05	365	1,379
Residential	1,695,976	1.8E-05	365	11,258
Hotel	172,000	1.8E-05	365	1,142
Parking	1,869,240	3.5E-07	365	242
Park	403,837	5.2E-08	365	7.6
Total Full Buildout Emissions				24,649
Partial Buildout[3]				
Total Year 4 Emissions[3]				599
Total Year 5 Emissions[3]				9,447
Total Year 6 Emissions[3]				19,982

Notes:

1. The consumer products VOC EF for office, retail, and residential land uses was derived using methodology consistent with CalEEMod with adjusted parameters for San Mateo County, as described in Table 37. The default emissions factor assumes 2020 consumer products VOC inventory for San Mateo County. The default building square footage used is from 2010, which was updated to 2020 using population growth of San Mateo County, as shown in Table 37.
2. Consumer product VOC EFs for parking and open space were taken from CalEEMod 2020.4.0. These defaults take into account pesticide and fertilizer use in city parks and degreaser use in parking areas.
3. Partial buildout emissions were calculated from full buildout using scaling factors by land use type and year, as shown in Table 16.

Abbreviations:

ARB - Air Resources Board
CalEEMod - California Emissions Estimator Model
EF - emission factor
lb - pound
sqft - square feet
VOC - volatile organic compound
yr - year

References:

California Air Pollution Control Officers Association (CAPCOA). California Emissions Estimator Model (CalEEMod®), Version 2020.4.0. Available online at http://www.caleemod.com/

Table 39
Landscaping Emissions from Existing Conditions and Project Operations
Willow Village
Menlo Park, California

Year[2]	Emissions from Landscaping Equipment[1]				
	ROG	NOx	PM_{10}	$PM_{2.5}$	CO_2e
	(tons/yr)				(MT/yr)
Existing Conditions	2.9E-03	2.8E-04	1.1E-04	1.1E-04	0.063
Year 4	0.33	0.13	0.061	0.061	19
Year 5	0.37	0.14	0.067	0.067	20
Year 6	0.39	0.15	0.071	0.071	22
Full Buildout	0.39	0.15	0.071	0.071	22

Notes:

1. Landscape emissions calculated using CalEEMod 2020.4.0 based on information regarding building square footage and acreage, shown in Appendix D.
2. Emissions in partial years were calculated by scaling full buildout emissions by the maximum percentage of land uses operational during that year.

Abbreviations:

CalEEMod - California Emissions Estimator Model
CO_2e - carbon dioxide equivalents
MT - metric ton(s)
NO_x - nitrogen oxides
PM - particulate matter
$PM_{2.5}$ - PM less than 2.5 microns in diameter
PM_{10} - PM less than 10 microns in diameter
ROG - reactive organic gases
yr - year

References:

California Air Pollution Control Officers Association (CAPCOA). California Emissions Estimator Model (CalEEMod®), Version 2020.4.0. Available online at http://www.caleemod.com

Table 40
Summary of Unmitigated Operational CAP Emissions
Willow Village
Menlo Park, California

Emissions Source	CAP Emissions[1]							
	(ton/year)				(lb/day)[2]			
	ROG	NO_x	PM_{10}	$PM_{2.5}$	ROG	NO_x	PM_{10}	$PM_{2.5}$
Existing Conditions (2019)[3]								
Architectural Coating	0.53	--	--	--	2.9	--	--	--
Consumer Products	3.4	--	--	--	19	--	--	--
Landscaping	2.9E-03	2.8E-04	1.1E-04	1.1E-04	0.016	1.5E-03	6.0E-04	6.0E-04
Natural Gas Use	0.16	1.5	0.11	0.11	0.89	8.1	0.61	0.61
Mobile	5.0	8.0	4.0	0.84	27	44	22	4.6
Emergency Generators	2.9E-03	0.051	2.7E-03	2.7E-03	0.016	0.28	0.015	0.015
Total Emissions	**9.1**	**10**	**4.1**	**0.95**	**50**	**52**	**23**	**5.2**
Full Buildout Conditions[4]								
Architectural Coating	2.2	--	--	--	12	--	--	--
Consumer Products	12	--	--	--	68	--	--	--
Landscaping	0.39	0.15	0.071	0.071	2.1	0.81	0.39	0.39
Natural Gas Use[5]	0.012	0.11	8.2E-03	8.2E-03	0.065	0.59	0.045	0.045
Mobile	10	12	11	2.1	55	64	58	11
Emergency Generators	0.15	1.3	0.047	0.047	0.79	7.0	0.26	0.26
Total Emissions	**25**	**13**	**11**	**2.2**	**137**	**73**	**59**	**12**
Partial Buildout Emissions[6]								
Total Year 4 Emissions	1.3	1.1	0.53	0.16	7.0	5.9	2.9	0.90
Total Year 5 Emissions	11	6.7	5.1	1.1	60	37	28	6.0
Total Year 6 Emissions	21	11	9.5	2.0	116	63	52	11
Net Emissions[7]								
Net Year 4 Emissions	-7.8	-8.5	-3.6	-0.79	-43	-46	-20	-4.3
Net Year 5 Emissions	1.9	-2.8	1.0	0.14	10	-16	5.5	0.76
Net Year 6 Emissions	12	2.0	5.3	1.0	66	11	29	5.5
Net Full Buildout Emissions	**16**	**3.7**	**6.7**	**1.3**	**88**	**21**	**37**	**7.0**

Notes:

1. Emissions estimated using methods consistent with CalEEMod® version 2020.4.0.
2. Operational emissions shown represent activity and emissions across 365 days per year.
3. Operational emissions from existing conditions were calculated using CalEEMod® default data and emission factors based on the existing land use type and energy use rates provided by the Project Applicant.
4. Full buildout operational emissions are based on electricity, natural gas, and water usage rates provided by the Project Applicant alongside CalEEMod® defaults for architectural coating, consumer product, landscaping, and waste emissions. Net emissions were calculated as the difference between full buildout emissions and existing condition emissions.
5. Natural gas usage for the project would be used exclusively for supermarket and commercial cooking.
6. Partial buildout emissions were calculated from full buildout using scaling factors by land use type and year, as shown in Table 16.
7. Net emissions were calculated as the difference between partial buildout emissions for each year and existing condition emissions.

Abbreviations:

BAAQMD - Bay Area Air Quality Management District
CalEEMod® - California Emissions Estimator Model
CAP - Criteria Air Pollutant
CO_2e - carbon dioxide equivalent
GHG - greenhouse gas
lb - pounds
MT - metric ton
NOx - nitrogen oxides
PM - particulate matter
$PM_{2.5}$ - PM less than 2.5 microns in diameter
PM_{10} - PM less than 10 microns in diameter
PM - particulate matter
ROG - reactive organic gases
yr - year

References:

CalEEMod® Version 2020.4.0 Available Online at: http://www.caleemod.com

Table 41
Summary of Mitigated Operational CAP Emissions
Willow Village
Menlo Park, California

Emissions Source	CAP Emissions[1]							
	(ton/year)				(lb/day)[2]			
	ROG	NO_x	PM_{10}	$PM_{2.5}$	ROG	NO_x	PM_{10}	$PM_{2.5}$
Existing Conditions (2019)[3]								
Architectural Coating	0.53	--	--	--	2.9	--	--	--
Consumer Products	3.4	--	--	--	19	--	--	--
Landscaping	2.9E-03	2.8E-04	1.1E-04	1.1E-04	0.016	1.5E-03	6.0E-04	6.0E-04
Natural Gas Use	0.16	1.5	0.11	0.11	0.89	8.1	0.61	0.61
Mobile	5.0	8.0	4.0	0.84	27	44	22	4.6
Emergency Generators	2.9E-03	0.051	2.7E-03	2.7E-03	0.016	0.28	0.015	0.015
Total Emissions	**9.1**	**9.5**	**4.1**	**0.95**	**50**	**52**	**23**	**5.2**
Full Buildout Conditions[4]								
Architectural Coating	0.90	--	--	--	4.9	--	--	--
Consumer Products	12	--	--	--	68	--	--	--
Landscaping	0.39	0.15	0.071	0.071	2.1	0.81	0.39	0.39
Natural Gas Use[5]	0.012	0.11	8.2E-03	8.2E-03	0.065	0.59	0.045	0.045
Mobile	10	12	11	2.1	55	64	58	11
Emergency Generators	0.15	1.3	0.047	0.047	0.79	7.0	0.26	0.26
Total Emissions	**24**	**13**	**11**	**2.2**	**130**	**73**	**59**	**12**
Partial Buildout Emissions[6]								
Total Year 4 Emissions	1.3	1.1	0.53	0.16	6.9	5.9	2.9	0.90
Total Year 5 Emissions	10.5	6.7	5.1	1.1	57	37	28	6.0
Total Year 6 Emissions	20	11.5	9.5	2.0	110	63	52	11
Net Emissions[7]								
Net Year 4 Emissions	-7.8	-8.5	-3.6	-0.79	-43	-46	-20	-4.3
Net Year 5 Emissions	1.4	-2.8	1.0	0.14	7.8	-16	5.5	0.76
Net Year 6 Emissions	11.0	2.0	5.3	1.0	60	10.8	29	5.5
Net Full Buildout Emissions	**15**	**3.7**	**6.7**	**1.3**	**80**	**21**	**37**	**7.0**

Notes:

1. Emissions estimated using methods consistent with CalEEMod® version 2020.4.0. The mitigated scenario for the Project is equivalent to the unmitigated scenario for all sources except Architectural Coating, as shown in Table 36.
2. Operational emissions shown represent activity and emissions across 365 days per year.
3. Operational emissions from existing conditions were calculated using CalEEMod® default data and emission factors based on the existing land use type and energy use rates provided by the Project Applicant.
4. Full buildout operational emissions are based on electricity, natural gas, and water usage rates provided by the Project Applicant alongside CalEEMod® defaults for architectural coating, consumer product, landscaping, and waste emissions.
5. Natural gas usage for the project would be used exclusively for supermarket and commercial cooking.
6. Partial buildout emissions were calculated from full buildout using scaling factors by land use type and year, as shown in Table 16.
7. Net emissions were calculated as the difference between partial buildout emissions for each year and existing condition emissions.

Abbreviations:

BAAQMD - Bay Area Air Quality Management District
CalEEMod® - California Emissions Estimator Model
CAP - Criteria Air Pollutant
CO_2e - carbon dioxide equivalent
GHG - greenhouse gas
lb - pounds
MT - metric ton
NOx - nitrogen oxides
PM - particulate matter
$PM_{2.5}$ - PM less than 2.5 microns in diameter
PM_{10} - PM less than 10 microns in diameter
PM - particulate matter
ROG - reactive organic gases
yr - year

References:

CalEEMod Version 2020.4.0 Available Online at: http://www.caleemod.com

Table 42
Summary of Operational GHG Emissions
Willow Village
Menlo Park, California

Emissions Source	GHG Emissions[1] (MT/yr) CO_2e	
	Existing Conditions (2019)[2]	Full Buildout Conditions[3]
Landscaping	0.063	22
Electricity Use	0	0
Natural Gas Use[4]	1613	118
Water Use	492	217
Waste Disposed	397	698
Emergency Generators	8.5	399
Total Emissions	**2,509**	**1,453**
	Net Emissions[5]	**-1,056**

Notes:

1. Emissions estimated using methods consistent with CalEEMod® version 2020.4.0.
2. Operational emissions from existing conditions were calculated using CalEEMod® default data and emission factors based on the existing land use type and energy use rates provided by the Project Applicant.
3. Full buildout operational emissions are based on electricity, natural gas, and water usage rates provided by the Project Applicant alongside CalEEMod® defaults for architectural coating, consumer product, landscaping, and waste emissions.
4. Natural gas usage for the project would be used exclusively for supermarket and commercial cooking.
5. Net emissions were calculated as the difference between partial buildout emissions for each year and existing condition emissions.

Abbreviations:

CalEEMod® - California Emissions Estimator Model
CO_2e - carbon dioxide equivalent
GHG - greenhouse gas
MT - metric ton
yr - year

References:

CalEEMod® Version 2020.4.0 Available Online at: http://www.caleemod.com

Table 43
Unmitigated Construction and Net New Operational CAP Emissions by Year
Willow Village
Menlo Park, California

Year	Average Daily CAP Emissions[1,2] (lb/day)											
	Construction Emissions Only				Net Operational Emissions[3]				Construction and Net Operational Emissions[3]			
	ROG	NO_x	PM_{10}	$PM_{2.5}$	ROG	NO_x	PM_{10}	$PM_{2.5}$	ROG	NO_x	PM_{10}	$PM_{2.5}$
Year 1	0.12	2.4	0.053	0.050	-50	-52	-23	-5.2	-50	-50	-23	-5.2
Year 2	4.5	64	1.4	1.3	-50	-52	-23	-5.2	-45	11	-21	-3.9
Year 3	19	124	5.8	5.4	-50	-52	-23	-5.2	-31	72	-17	0.15
Year 4	52	53	2.3	2.1	-43	-46	-20	-4.3	9.3	7.2	-17	-2.2
Year 5	63	45	2.1	2.0	10	-16	5.5	0.76	73	29	7.7	2.7
Year 6	31	11	0.60	0.55	66	11	29	5.5	97	21	30	6.1
Full Buildout	--	--	--	--	88	21	37	7.0	88	21	37	7.0
BAAQMD Significance Threshold									54	54	82	54

Notes:

1. Emissions estimated using methods consistent with CalEEMod® version 2020.4.0.
2. Net new operational emissions are scaled for partial years of phased operations by the percent that each parcel is operational for each year relative to full buildout, as shown in Table 16.
3. Unmitigated construction emissions can be found in Table 13. Net unmitigated operational emissions were calculated by subtracting the emissions from the existing conditions from the project emissions, as reported in Table 42.

Abbreviations:

CalEEMod - California Emissions Estimator Model
CAP - Criteria Air Pollutant
lb - pounds
NO_x - nitrogen oxides
PM - particulate matter
$PM_{2.5}$ - PM less than 2.5 microns in diameter
PM_{10} - PM less than 10 microns in diameter
ROG - reactive organic gases
yr - year

References:

CalEEMod Version 2020.4.0 Available Online at: http://www.caleemod.com

Table 44
Mitigated Construction and Net New Operational CAP Emissions by Year
Willow Village
Menlo Park, California

Year	Average Daily CAP Emissions[1,2] (lb/day)											
	Construction Emissions Only[3]				Net Operational Emissions Only[3]				Construction and Net Operational Emissions[3]			
	ROG	NO_x	PM_{10}	$PM_{2.5}$	ROG	NO_x	PM_{10}	$PM_{2.5}$	ROG	NO_x	PM_{10}	$PM_{2.5}$
Year 1	0.064	1.9	0.019	0.019	-50	-52	-23	-5.2	-50	-50	-23	-5.2
Year 2	2.7	45	0.49	0.48	-50	-52	-23	-5.2	-47	-7.6	-22	-4.7
Year 3	10	47	0.78	0.77	-50	-52	-23	-5.2	-39	-5.1	-22	-4.4
Year 4	24	29	0.38	0.37	-43	-46	-20	-4.3	-19	-17	-19	-3.9
Year 5	28	22	0.26	0.25	8	-16	5.5	0.76	36	6.3	5.8	1.0
Year 6	13	4.8	0.060	0.058	60	10.8	29	5.5	74	16	29	5.6
Full Buildout	--	--	--	--	80	20.5	37	7.0	80	21	37	7.0
BAAQMD Significance Threshold									54	54	82	54

Notes:

1. Emissions estimated using methods consistent with CalEEMod® version 2020.4.0.
2. Net new operational emissions are scaled for partial years of phased operations by the percent that each parcel is operational for each year relative to full buildout, as shown in Table 16.
3. Mitigated construction emissions can be found in Table 14. Net mitigated operational emissions were calculated by subtracting the emissions from the existing conditions from the project emissions, as reported in Table 43.

Abbreviations:

CalEEMod - California Emissions Estimator Model
CAP - Criteria Air Pollutant
lb - pounds
NO_x - nitrogen oxides
PM - particulate matter
$PM_{2.5}$ - PM less than 2.5 microns in diameter
PM_{10} - PM less than 10 microns in diameter
ROG - reactive organic gases
yr - year

References:

CalEEMod Version 2020.4.0 Available Online at: http://www.caleemod.com

Table 45
Speciation Profiles
Willow Village
Menlo Park, California

TAC	CAS	Weight Fraction of Emissions by Pollutant[1]	
		TOG	
		Evaporate	Exhaust
Ethylbenzene	100414	0.0012	0.011
Toluene	108883	0.017	0.058
Hexane	110543	0.015	0.016
Xylenes	1330207	0.0058	0.048
Benzene	71432	0.0036	0.025
Styrene	100425	--	0.0012
1,3-Butadiene	106990	--	0.0055
Acrolein	107028	--	0.0013
Propylene	115071	--	0.031
Formaldehyde	50000	--	0.016
Methanol	67561	--	0.0012
Acetaldehyde	75070	--	0.0028
Methyl Ethyl Ketone	78933	--	0.0002
Naphthalene	91203	--	0.0005

Notes:

1. Speciation profiles are taken from the BAAQMD's guidance on Recommended Methods for Screening and Modeling Local Risks and Hazards. Speciation profiles for Gasoline Exhaust are located in Table 14 and Gasoline Evaporative are located in Table 15 of the BAAQMD's guidance.

Abbreviations:

BAAQMD - Bay Area Air Quality Management District

CAS - chemical abstract services

TAC - toxic air contaminant

TOG - total organic gases

Reference:

BAAQMD. 2011. Recommended Methods for Screening and Modeling Local Risks and Hazards. Table 14 and Table 15. Available at: https://www.baaqmd.gov/~/media/Files/Planning%20and%20Research/CEQA/BAAQMD%20Modeling%20Approach.ashx

Table 46
Toxicity Values
Willow Village
Menlo Park, California

Source	Chemical[1]	CAS Number	Cancer Potency Factor	Chronic Noncancer Reference Exposure Level
			$(mg/kg\text{-}day)^{-1}$	$(\mu g/m^3)$
PM_{10}	Diesel PM	9-90-1	1.1	5.0
TOG	Acetaldehyde	75-07-0	0.010	140
	Acrolein	107-02-8	--	0.35
	Benzene	71-43-2	0.1	3.0
	1,3-Butadiene	106-99-0	0.6	2.0
	Ethylbenzene	100-41-4	0.0087	2000
	Formaldehyde	50-00-0	0.021	9.0
	Hexane	110-54-3	--	7000
	Methanol	67-56-1	--	4000
	Methyl Ethyl Ketone	78-93-3	--	--
	Naphthalene	91-20-3	0.12	9.0
	Propylene	115-07-1	--	3000
	Styrene	100-42-5	--	900
	Toluene	108-88-3	--	420
	Xylenes	1330-20-7	--	700

Notes:

[1] Toxicity values are taken from ARB's Consolidated Table of OEHHA/ARB Approved Risk Assessment Health Values.

Abbreviations:

ARB - Air Resources Board

Cal/EPA - California Environmental Protection Agency

CAS - chemical abstract services

mg/kg-day - milligrams per kilogram per day

OEHHA - Office of Environmental Health Hazard Assessment

$\mu g/m^3$ - micrograms per cubic meter

Reference:

Cal/EPA. 2020. OEHHA/ARB Consolidated Table of Approved Risk Assessment Health Values. March. Available at: http://www.arb.ca.gov/toxics/healthval/contable.pdf.

Table 47
Summary of Full Buildout Traffic Volumes by Roadway Segment
Willow Village
Menlo Park, CA

Offsite Roadways[1]

Source Group Name	Distance (m)	Campus District						Town Square and Residential/Shopping District	
		Cars		On-Demand		Trucks		San Mateo Default Fleet	
		Volume (vehicles/day)	VMT (mi/day)	Volume (vehicles/day)	VMT (mi/day)	Volume (vehicles/day)	VMT (mi/day)	Volume (vehicles/day)	VMT (mi/day)
ADAMS_CT	223	62	8.6	4	0.58	1	0.19	87	12
ADAMSD01	57	0	0	0	0	0	0	80	2.9
ADAMSD02	160	0	0	0	0	0	0	80	8.0
ADAMSD03	76	66	3.1	5	0.21	2	0.071	8	0.35
ADAMSD04	83	66	3.4	5	0.23	2	0.077	8	0.38
ADAMSD05	147	66	6.0	5	0.41	2	0.14	8	0.68
ADAMSD06	81	66	3.3	5	0.23	2	0.076	8	0.38
BAY_EAST	1185	657	484	45	33	15	11	1,536	1,131
BAY_EFB	718	0	0	0	0	0	0	1,566	698
BAY_M01	110	525	36	36	2.4	12	0.81	1,557	106
BAY_M02	135	525	44	36	3.0	12	1.0	1,557	131
BAY_M03	117	525	38	36	2.6	12	0.86	1,557	113
BAY_M04	143	525	47	36	3.2	12	1.1	1,557	138
BAY_M05	350	525	114	36	7.8	12	2.6	1,557	338
BAY_WFB1	419	0	0	0	0	0	0	1,284	334
BAY_WFB2	210	0	0	0	0	0	0	1,284	168
BAY_WFB3	124	0	0	0	0	0	0	1,284	99
BAY_WFB4	328	0	0	0	0	0	0	1,284	262
BAY_WFB5	113	0	0	0	0	0	0	1,566	110
BAY_WFB6	542	0	0	0	0	0	0	1,566	527
BAY_WFB7	136	0	0	0	0	0	0	1,566	132
OBRIEN01	320	1,480	294	101	20	34	6.7	991	197
OBRIEN02	138	1,480	127	101	8.7	34	2.9	991	85
OBRIEN03	35	1,480	33	101	2.2	34	0.74	991	22
OBRIEN04	29	1,480	27	101	1.8	34	0.61	991	18
OBRIEN05	28	1,480	26	101	1.8	34	0.59	991	17
OBRIEN06	52	1,480	48	101	3.3	34	1.1	991	32
OBRIEN07	43	3,842	103	262	7.0	87	2.3	2,398	64
OBRIEN08	20	3,842	49	262	3.3	87	1.1	2,398	30
OBRIEN09	20	3,842	47	262	3.2	87	1.1	2,398	30
OBRIEN10	21	3,842	50	262	3.4	87	1.1	2,398	31
OBRIEN11	44	3,842	105	262	7.2	87	2.4	2,398	66
OBRIEN12	102	3,842	243	262	17	87	5.5	2,398	151
OBRIEN13	32	3,842	76	262	5.2	87	1.7	2,398	47
OBRIEN14	112	3,842	268	262	18	87	6.1	2,398	167
OBRIEN15	242	3,870	581	263	40	88	13	2,325	349
OBRIEN16	48	3,870	115	263	7.8	88	2.6	2,325	69
OBRIEN17	54	3,870	130	263	8.8	88	2.9	2,325	78
UNIV_01	110	339	23	23	1.6	8	0.53	309	21
UNIV_02	91	339	19	23	1.3	8	0.43	309	17
UNIV_03	222	339	47	23	3.2	8	1.1	309	43
UNIV_04	121	339	26	23	1.7	8	0.58	309	23
UNIV_05	80	339	17	23	1.2	8	0.38	309	15
UNIV_06	69	339	15	23	0.99	8	0.33	309	13
UNIV_07	258	339	54	23	3.7	8	1.2	309	49
UNIV_08	185	410	47	28	3.2	9	1.1	516	59
UNIV_09	142	3,255	287	222	20	74	6.5	1,707	150
UNIV_10	310	3,243	624	221	42	74	14	1,737	334
UNIV_11	115	3,243	232	221	16	74	5.3	1,737	124
UNIV_12	63	3,243	232	221	16	74	5	1,737	124
UNIV_13	128	3,243	232	221	16	74	5	1,737	124
UNIV_14	201	3,243	232	221	16	74	5	1,737	124
UNIV_15	647	3,243	232	221	16	74	5	1,737	124
WILLOW01	97	89	5.3	6	0.36	2	0.12	2,976	179
WILLOW02	174	89	10	6	0.65	2	0.22	2,976	321
WILLOW03	45	0	0	0	0	0	0	0	0
WILLOW04	185	0	0	0	0	0	0	0	0
WILLOW05	201	0	0	0	0	0	0	6,362	796
WILLOW06	110	0	0	0	0	0	0	6,362	436
WILLOW07	281	580	101	39	6.9	13	2.3	6,875	1,201
WILLOW08	93	580	101	39	7	13	2	6,875	1,201
WILLOW09	39	580	101	39	7	13	2	6,875	1,201
WILLOW10	31	580	101	39	7	13	2	6,875	1,201
WILLOW11	180	580	101	39	7	13	2	6,875	1,201
WILLOW12	256	580	101	39	7	13	2	6,875	1,201
WILLOW13	216	580	101	39	7	13	2	6,875	1,201

Onsite Roadways[2]

Source Group Name	Distance (m)	Volume (vehicles/day)	VMT (mi/day)
ONSITE	2570	10,782	17,217

Intercampus Shuttles[3]

Source Group Name	Distance (m)	Volume (vehicles/day)	VMT (mi/day)
SHUTTLES	7278	361	1,633

Notes:

1. Net new offsite traffic volumes for both the Campus District and the Town Square were provided by Hexagon in the data request received in October 2021. Offsite traffic for the Campus District was modeled using a percent breakdown of the fleet (88% cars, 6% on-demand, 2% trucks), provided by Hexagon. Offsite traffic for the Town Square and Residential/Shopping District was modeled as the default San Mateo fleet. A summary of fleet mix categories can be found in Table 19. Modeled offsite roadway segments can be found in Figure 8.

2. Net new onsite traffic volumes were provided by Hexagon in the data request received in October 2021. Onsite traffic volumes were taken as the sum of all net new onsite traffic volumes divided by two to account for round trips. Onsite traffic was modeled exclusively as the cars fleet type. A summary of the cars fleet mix can be found in Table 19. Modeled onsite roadway segments can be found in Figure 7.

3. Shuttle traffic volumes, which account for the remaining 4% of the offsite fleet mix, were conservatively modeled as the sum of all inbound and outbound vehicle trips across all regions and routes, divided by two to account for round trips. Inbound and outbound vehicle trips were provided by the Project Applicant in June 2021. A summary of the shuttles fleet mix can be found in Table 19. Modeled shuttle roadway segments can be found in Figure 9.

Abbreviations:

VMT - Vehicle Miles Traveled m - meter mi - mile

Table 48
Traffic Emission Factors
Willow Village
Menlo Park, California

Vehicle Type	% Diesel[1]	DPM[1,2]	$PM_{2.5}$[2]	TOG[2]	
				Evaporate	Exhaust
		g/mi			
San Mateo Default Fleet	41%	7.4E-04	0.019	0.033	0.021
Cars	2%	1.9E-05	0.017	0.037	0.017
Trucks	94%	0.011	0.051	0.033	0.089
Shuttles	100%	0.0043	0.024	--	--
On-Demand	2%	2.0E-05	0.017	0.032	0.0091

Notes:

1. The DPM emission factor for Cars, On-Demand, Trucks, and the San Mateo Default Fleet vehicle types is reduced by the the fraction of total PM_{10} emissions that are from diesel for each fleet type. This fraction was calculated as the sum of PM_{10} running and idling exhaust emissions from all diesel vehicles in the fleet over the sum of all PM_{10} running and idling exhaust emissions for all vehicles in the fleet.
2. A detailed description of mobile emission factors can be found in Table 20. DPM emissions are represented by the running exhaust PM_{10} emission factor for 2026; $PM_{2.5}$ emissions are represented by the sum of the running exhaust, brake wear, tire wear, and controlled resuspended road dust emission factors for 2026; TOG exaporate emissions are represented by the TOG running loss emission factor for 2026; and TOG exhaust emissions are represented by the TOG running exhaust emission factor for 2026.

Abbreviations:

DPM - diesel particulate matter

g - gram

mi - mile

$PM_{2.5}$ - particulate matter less than 2.5 microns in diameter

PM_{10} - particulate matter less than 10 microns in diameter

TOG - total organic gases

Table 49
Diurnal Traffic Patterns for San Mateo Fleet and Shuttles
Willow Village
Menlo Park, California

Hour of Day	Percent of Total Daily San Mateo Fleet VMT[1]	Shuttle Schedule[2] (number of shuttles)
1	1.1%	0
2	0.5%	0
3	0.6%	0
4	0.2%	0
5	0.5%	16
6	0.9%	44
7	3.7%	130
8	7.7%	115
9	7.1%	52
10	4.4%	2
11	4.7%	0
12	5.9%	0
13	6.1%	0
14	6.0%	2
15	7.0%	41
16	7.1%	92
17	7.5%	102
18	8.2%	83
19	5.7%	36
20	4.3%	6
21	3.2%	1
22	3.2%	0
23	2.4%	0
24	1.9%	0

Notes:

1. The percent of total daily VMT is calculated using EMFAC2021 data for all vehicle types in San Mateo County in 2026. It is equal to the hourly VMT divided by total daily VMT.

2. Daily shuttle schedule was provided by the Project Applicant in June 2021.

Abbreviations:

VMT - Vehicle Miles Traveled

References:

California Air Resources Board. EMFAC2021. Available at: https://arb.ca.gov/emfac/

Table 50
Construction Source Parameters
Willow Village
Menlo Park, California

Source	Source Type	Number of Sources[1]	Release Height[2] (m)	Source Width (m)	Initial Horizontal Dimension (m)	Initial Vertical Dimension[3] (m)
Construction Equipment	Area	Multiple	5.0	--	--	1.16
On-Road Trucks	Line	Multiple	2.55	Width of Road + 6	--	2.37
Feeder Line Equipment	Volume	Multiple	5.0	2.0	0.93	1.16

Notes:

1. The number of modeled construction equipment sources is based on the number of distinct construction work areas. The number of on-road vehicle sources is based on the geometry of the truck or traffic routes.

2. BAAQMD does not have guidance on construction modeling, therefore construction equipment parameters used are based on BAAQMD's San Francisco Citywide Health Risk Assessment (SFDPH). According to the SFDPH methodology, release height of a modeled area source representing construction equipment is set to 5 meters. On-road truck release height will be based on USEPA haul road guidance, assuming vehicle heights of 3 meters for heavy-duty vehicles and 2 meters for light-duty vehicles.

3. According to USEPA's AERMOD guidance, initial vertical dimension of the modeled construction equipment area sources is the release height divided by 4.3. According to the USEPA Haul Road Guidance, the initial vertical dimension for line sources is the top of plume height divided by 2.15, where the top of the plume is equal to 2*Release Height. According to USEPA's AERMOD guidance, the initial horizontal dimension for construction volume sources is the source width divided by 2.15.

Abbreviations:

AERMOD - Atmospheric Dispersion MODeling
BAAQMD - Bay Area Air Quality Management District
m - meter
SFDPH - San Francisco Department of Public Health
USEPA - United States Environmental Protection Agency

References:

San Francisco Department of Public Health. February 2020. San Francisco Citywide Health Risk Assessment: Technical Support Documentation. Available online at: https://www.sfdph.org/dph/files/EHSdocs/AirQuality/Air_Pollutant_Exposure_Zone_Technical_Documentation_2020.pdf

BAAQMD. 2017. California Environmental Quality Act: Air Quality Guidelines. May. Available at: http://www.baaqmd.gov/~/media/files/planning-and-research/ceqa/ceqa_guidelines_may2017-pdf.pdf?la=en. Accessed November 2018.

United States Environmental Protection Agency (USEPA). 2012. Haul Road Workgroup Final Report Submission to EPA-OAQPS. U.S. EPA Office of Air Quality and Planning Standards, Research Triangle Park, North Carolina. Available at: https://www3.epa.gov/scram001/reports/Haul_Road_Workgroup-Final_Report_Package-20120302.pdf

USEPA. 2012. Haul Road Workgroup Final Report Submission to EPA-OAQPS. U.S. EPA Office of Air Quality and Planning Standards, Research Triangle Park, North Carolina. Available at: https://www3.epa.gov/scram001/reports/Haul_Road_Workgroup-Final_Report_Package-20120302.pdf

USEPA. 2019. User's Guide for the AMS/EPA Regulatory Model (AERMOD). U.S. EPA Office of Air Quality Planning and Standards, Research Triangle Park, North Carolina. Available at: https://www3.epa.gov/ttn/scram/models/aermod/aermod_userguide.pdf

Table 51
Operational Source Parameters
Willow Village
Menlo Park, California

Source[1,2,3]	Source Type	Number of Sources	Release Height	Exit Temperature	Exit Velocity	Exit Diameter	Initial Vertical Dimension
			(m)	(K)	(m/s)	(m)	(m)
On-Road Passenger Vehicles	Line	Multiple	1.7	--	--	--	1.58
Shuttles	Line	Multiple	3.39	--	--	--	3.15
Existing Generator	Point	1	3.7	804	26	0.19	--
North Garage Generators	Point	2	27.74	739.82	45.3	0.18	--
Parcel 2 and 5 Generators	Point	2	23.47	739.82	45.3	0.18	--
Parcel 3 Generator	Point	1	26.82	739.82	45.3	0.18	--
Parcel 4 Generator	Point	1	23.77	739.82	45.3	0.18	--
Parcel 6 Generator	Point	1	24.38	739.82	45.3	0.18	--
Parcel 7 Generator	Point	1	23.16	739.82	45.3	0.18	--
South Garage Generators	Point	2	24.69	739.82	45.3	0.18	--
Pumping Station Generator	Point	1	2.9	739.82	45.3	0.18	--
Hamilton Avenue Generator	Point	1	2.99	739.82	45.3	0.18	--
Town Square Generator	Point	1	25.91	739.82	45.3	0.18	--

Notes:

1. Since passenger vehicles occupy the majority of offsite and onsite vehicle traffic, the on-road passenger vehicle source parameters were used to model cars, trucks and on-demand vehicle traffic. The source parameters are consistent with the San Francisco Citywide Health Risk Assessment Technical Support Document (SFDPH) and a vehicle height of 2 meters and USEPA Haul Road Guidance. The source width is the width of the road plus 6 meters to account for the turbulent mixing of air behind vehicles.
2. Intercampus shuttles were modeled using the actual vehicle height of 4 meters as provided by the Project Applicant and USEPA Haul Road Guidance. The source width is the width of the road plus 6 meters to account for the turbulent mixing of air behind vehicles.
3. Project generators were modeled using default values for exit temperature, velocity, and diameter from the San Francisco Citywide Health Risk Assessment Technical Support Document, which are consistent with median stack parameters from the BAAQMD technical memorandum. Release heights of the exhaust are assumed to be the height of the building.

Abbreviations:

AERMOD - Atmospheric Dispersion MODeling
BAAQMD - Bay Area Air Quality Management District
K - Kelvin
m - meter
s - second
USEPA - United States Environmental Protection Agency

References:

BAAQMD. 2012. San Francisco Community Risk Reduction Plan (SFCRRP). Available at: https://www.gsweventcenter.com/Appeal_Response_References/2012_1201_BAAQMD.pdf

SFDPH. 2020. San Francisco Citywide Health Risk Assessment Technical Support Document. February. Available at: https://www.sfdph.org/dph/files/EHSdocs/AirQuality/Air_Pollutant_Exposure_Zone_Technical_Documentation_2020.pdf

Sonoma Technology, Inc. 2011. Default modeling Parameters for Stationary Sources. Technical Memorandum. April 1.

USEPA. 2012. Haul Road Guidance. Available at: https://www.epa.gov/sites/default/files/2020-10/documents/haul_road_workgroup-final_report_package-20120302.pdf

Table 52
Modeling Adjustment Factor
Willow Village
Menlo Park, California

Receptor Type	Modeling Adjustment Factor
Residential	1
Recreational	2.55
Daycare Child	2.55
Daycare Child (18 months +)	2.55
Elementary School	2.55
High School	2.55

Notes:

1. Modeling adjustment factors are calculated based on the methodology from BAAQMD's Health Risk Assessment Modeling Protocol (2020).
2. The MAF for all non-residential receptor types is calculated to adjust from 24 hours/day to 11 hours/day and from 7 days/week to 6 days/week ([24 hours/11 hours] * [7 days/6 days] = 2.55).

References:

BAAQMD. 2020. Health Risk Assessment Modeling Protocol. Available at: https://www.baaqmd.gov/~/media/files/ab617-community-health/facility-risk-reduction/documents/baaqmd_hra_modeling_protocol_august_2020-pdf.pdf?la=en

Table 53
Summary of Construction Source Groups
Willow Village
Menlo Park, California

Off-Road Emissions:

Construction Area[1]	Subphase	Off-Road Source Group[2,3,4,5]
Area 1	Demolition	PHS_1A
	Grading and Utilities	PHS_1A
Area 1 Campus District	North Garage	NG
	Office Building 4	O4
	Meeting, Collaboration, Park	MCP
	Hotel Excavation	EXCAVATE
	Hotel Construction	HTL
	Town Square	TS
Area 1 Town Square and Residential/Shopping District	Parcel 2 Foundations	RS2
	Parcel 2 Core and Shell	RS2
	Parcel 2 Tenant Improvements	RS2
	Parcel 2 Landscaping	RS2
	Parcel 3 Foundations	RS3
	Parcel 3 Core and Shell	RS3
	Parcel 3 Tenant Improvements	RS3
	Parcel 3 Landscaping	RS3
Area 2	Demolition	PHS_1B
	Grading and Utilities	PHS_1B
Area 2 Campus District	South Garage	SG
	Office Building 3	O3
	Office Building 1	O1
	Office Building 2	O2
	Office Building 5	O5
	Office Building 6	O6
Area 2 Town Square and Residential/Shopping District	Parcel 7 Foundations	RS7
	Parcel 7 Core and Shell	RS7
	Parcel 7 Tenant Improvements	RS7
	Parcel 7 Landscaping	RS7
	Parcel 6 Foundations	RS6
	Parcel 6 Core and Shell	RS6
	Parcel 6 Tenant Improvements	RS6
	Parcel 6 Landscaping	RS6
Area 3	Grading and Utilities	PHS_2X
	Tunnel Construction	TUNNEL
	Foundations	RS45
	Core and Shell	RS45
	Tenant Improvements	RS45
	Landscaping	RS45
Hamilton Avenue Parcels North and South	Demolition	RETAIL
	Grading and Utilities	RETAIL
	Foundations	RETAIL
	Core and Shell	RETAIL
	Tenant Improvements	RETAIL
Substation Upgrade	PG&E Substation Work	RVWSS
Feeder Line	PG&E Offsite Work	ROUTE1/ROUTE2
	Surface Improvements	ROUTE1/ROUTE2
Intersection Improvements	O'Brien and Kavanaugh	CCODKD
	Adams and O'Brien	ADOD
	Willow Road and Ivy Drive	WRID

On-Road Emissions:

Construction Area	Subphase	Off-Road Source Group[1,3,5]	On-Road Source Group[1,3,5]	Trip Type[6]
Area 1	Demolition	PHS_1A	TRUCKS	Hauling trips
	Grading and Utilities	PHS_1A	TRUCKS	Hauling trips
Area 1 Campus District	Foundations + Core and Shell	PHS_1A	TRUCKS	Vendor trips
	Tenant Improvements	PHS_1A	TRUCKS	Vendor trips
	O4 and NG Worker Mobile Trips	--	TRUCKS	Worker trips
	MCS Worker Mobile Trips	--	TRUCKS	Worker trips
Area 1 Town Square and Residential/Shopping District	Foundations	PHS_1A	TRUCKS	Vendor trips

Table 53
Summary of Construction Source Groups
Willow Village
Menlo Park, California

Construction Area[1]	Subphase	Off-Road Source Group[1,3,5]	On-Road Source Group[1,3,5]	Trip Type[6]
Area 1 Town Square and Residential/Shopping District	Core and Shell	PHS_1A	TRUCKS	Vendor trips
	Tenant Improvements	PHS_1A	TRUCKS	Vendor trips
	Landscaping	PHS_1A	TRUCKS	Vendor trips
	Town Square and Residential/Shopping District Worker Mobile Trips	--	TRUCKS	Worker trips
	Landscaping Worker Mobile Trips	--	TRUCKS	Worker trips
Area 2	Demolition	PHS_1B	TRUCKS	Hauling trips
	Grading and Utilities	PHS_1B	TRUCKS	Hauling trips
Area 2 Campus District	Foundations + Core and Shell	PHS_1B	TRUCKS	Vendor trips
	Tenant Improvements	PHS_1B	TRUCKS	Vendor trips
	Worker Mobile Trips	--	TRUCKS	Worker trips
Area 2 Town Square and Residential/Shopping District	Foundations	PHS_1B	TRUCKS	Vendor trips
	Core and Shell	PHS_1B	TRUCKS	Vendor trips
	Tenant Improvements	PHS_1B	TRUCKS	Vendor trips
	Landscaping	PHS_1B	TRUCKS	Vendor trips
	Town Square and Residential/Shopping District Worker Mobile Trips	--	TRUCKS	Worker trips
	Landscaping Worker Mobile Trips	--	TRUCKS	Worker trips
Area 3	Grading and Utilities	PHS_2X	TRUCKS	Hauling trips
	Tunnel Construction	PHS_2X	TRUCKS	Vendor trips and Worker trips
	Foundations	PHS_2X	TRUCKS	Vendor trips and Worker trips
	Core and Shell	PHS_2X	TRUCKS	Vendor trips and Worker trips
	Tenant Improvements	PHS_2X	TRUCKS	Vendor trips and Worker trips
	Landscaping	PHS_2X	TRUCKS	Vendor trips and Worker trips
Hamilton Avenue Parcels North and South	Demolition	RETAIL	TRUCKS	Hauling trips and Worker trips
	Grading and Utilities	RETAIL	TRUCKS	Hauling trips and Worker trips
	Foundations	RETAIL	TRUCKS	Vendor trips
	Core and Shell	RETAIL	TRUCKS	Vendor trips
	Tenant Improvements	RETAIL	TRUCKS	Vendor trips
	Worker Mobile Trips	RETAIL	TRUCKS	Worker trips
Substation Upgrade	PG&E Substation Work	--	TRUCKS	Vendor trips and Worker trips
Feeder Line	PG&E Offsite Work	--	TRUCKS	Vendor trips and Worker trips
	Surface Improvements	--	TRUCKS	Vendor trips and Worker trips
Intersection Improvements	O'Brien and Kavanaugh	--	TRUCKS	Vendor trips and Worker trips
	Adams and O'Brien	--	TRUCKS	Vendor trips and Worker trips
	Willow Road and Ivy Drive	--	TRUCKS	Vendor trips and Worker trips

Notes:

1. Area 1 includes Parcel 2, Parcel 3, North Garage, Office Building 4, Hotel, Town Square, and Meeting, Collaboration, Park. Area 2 includes Parcel 6, Parcel 7, South Garage, Office Building 1, Office Building 2, Office Building 3, Office Building 5, and Office Building 6. Area 3 includes Parcel 4 and Parcel 5, along with the Tunnel Construction.
2. Source group locations are presented in Figures 3, 4, and 5.
3. Source groups RS4 and RS5 are modeled together as RS45.
4. All on-road source groups are modeled as On-Road Trucks and all off-road source groups are modeled as Construction Equipment.
5. The EXCAVATE source group is modeled as the HTL and TS source groups combined, as excavation will occur near the proposed Hotel and Town Square. This is shown as the Specific Hotel Excavation Area in Figure 3.
6. On-road emissions from hauling and vendor trips are allocated to an on-road source group and off-road source group. Any emissions derived from a g/mile process (e.g., running, brakewear, tirewear, runloss) are allocated to the phase's corresponding on-road source group. Any emissions derived from a g/trip process (e.g., idling, startup, etc.) are allocated to the phase's corresponding off-road source group. This allocation allows for a more accurate representation of where emissions from the g/trip processes occur, since they would be happening on-site.
7. On-road construction worker trips were expected to have negligible impact and were therefore not included in the HRA analysis for excess lifetime cancer risk and chronic HI. $PM_{2.5}$ emissions associated with on-road construction worker trips were included in the construction HRA analysis for $PM_{2.5}$ concentration modeling.

Abbreviations:

HI - hazard index

HRA - health risk assessment

$PM_{2.5}$ - particulate matter less than 2.5 microns in diameter

Table 54
Exposure Parameters
Willow Village
Menlo Park, California

Receptor Type	Receptor Age Group[1]	Exposure Parameters						
		Daily Breathing Rate (DBR)[2,3,4,5]	Annual Exposure Duration (ED)[6]	Fraction of Time at Home (FAH)[7]	Exposure Frequency (EF)[8]	Averaging Time (AT)	Intake Factor, Inhalation (If_{inh})	Age Sensitivity Factor (ASF)[9,10]
		(L/kg-day)	(years)	(unitless)	(days/year)	(days)	(m^3/kg-day)	(unitless)
Resident	3rd Trimester	361	1	1	350	25,550	0.0049	10
	Age 0-<2 Years	1090	1	1			0.015	10
	Age 2-<9 Years	631	1	1			0.0086	3
	Age 2-<16 Years	572	1	1			0.0078	3
	Age 16-30 Years	261	1	0.73			0.0026	1
Daycare Child	Age 0-<2 Years	750	1	1	250		0.0073	10
	Age 2-<9 Years	415	1	1			0.0041	3
Daycare Child (18 months +)	Age 0-<2 Years	750	1	1	250		0.0073	10
	Age 2-<9 Years	415	1	1			0.0041	3
Elementary School Child	Age 2-<9 Years	640	1	1	180		0.0045	3
High School Child	Age 2-<16 Years	520	1	1	180		0.0037	3
Recreational	Age 0-<2 Years	300	1	1	180		0.0021	10
	Age 2-<9 Years	160	1	1			0.0011	3
	Age 2-<16 Years	130	1	1			9.2E-04	3
	Age 16-30 Years	60	1	0.73			3.1E-04	1

Notes:

1. Age bin 2-<9 Years will be used where applicable, and age bin 2-<16 Years will be conservatively used for ages 9-<16 Years.
2. Daily breathing rates for residents reflect default breathing rates from Cal/EPA 2015 as follows:
   95th percentile 24-hour daily breathing rate for age 3rd trimester and 0-<2 years
   80th percentile 24-hour daily breathing rate for age 2-<9 years
   80th percentile 24-hour daily breathing rate for age 2-<16 years
   80th percentile 24-hour daily breathing rate for age 16-30 years
3. Daily breathing rates for daycare children assumes 2 hour moderate intensity and 6 hour light intensity activity.
4. Daily breathing rates for elementary and high school children assume 95th Percentile Eight-Hour Breathing Rates for Moderate Intensity Activities.
5. Daily breathing rates for recreational receptors assume 95th Percentile Eight-Hour Breathing Rates for Moderate Intensity Activities, scaled to 2 hours per day.
6. Annual exposure duration represents one full year. Specific exposure durations in each age bin are given in Tables 55, 56, 57, and 58.
7. Fraction of time spent at home is conservatively assumed to be 1 (i.e. 24 hours/day) for all age bins except Age 16-30 Years. Fraction of time spent at home is assumed to be 0.73 for Ages 16-30 Years.
8. Exposure frequency was determined as follows:
   Residents: reflects default residential exposure frequency from Cal/EPA 2015.
   Daycare: reflects default worker exposure frequency from Cal/EPA 2015, assuming a daycare child is at the daycare center when the parents are at work.
   School: reflects default number of school days per year.
   Recreational: reflects default number of school days per year, assuming 2 hours of exposure each day.
9. Age sensitivity factors account for an "anticipated special sensitivity to carcinogens" of infants and children as recommended in the OEHHA Technical Support Document (Cal/EPA 2009) and current OEHHA guidance (Cal/EPA 2015). This approach is consistent with the cancer risk adjustment factor calculations recommended by BAAQMD (BAAQMD 2016).
10. Adjustment factor is applicable to each receptor type listed for the age group relevant to that receptor type.

Abbreviations:

AT - averaging time
Cal/EPA - California Environmental Protection Agency
DBR - daily breathing rate
EF - exposure frequency
FAH - fraction of time at home
kg - kilogram
L - liter

Reference:

Cal/EPA. 2015. Air Toxics Hot Spots Program Risk Assessment Guidelines. Guidance Manual for Preparation of Health Risk Assessments. February.

RAMBOLL

Table 55
Age Sensitivity Weighted Intake Factors by Year and Age Bin for Scenario 1
Willow Village
Menlo Park, California

Year[1]	Resident						Recreational					Daycare Child			Daycare Child (18 months +)			Elementary School		High School	
	Fraction of Year in Age Bin[2,3]					Age Sensitivity Weighted Intake Factor by Year, Inhalation[4,5]	Fraction of Year in Age Bin				Age Sensitivity Weighted Intake Factor by Year, Inhalation[4,5]	Fraction of Year in Age Bin		Age Sensitivity Weighted Intake Factor by Year, Inhalation[4,5]	Fraction of Year in Age Bin		Age Sensitivity Weighted Intake Factor by Year, Inhalation[4,5]	Fraction of Year in Age Bin	Age Sensitivity Weighted Intake Factor by Year, Inhalation[4,5]	Fraction of Year in Age Bin[6]	Age Sensitivity Weighted Intake Factor by Year, Inhalation[4,5]
	3rd Trimester	0-2	2-9	2-16	16-30	(m^3/kg-day)	0-2	2-9	2-16	16-30	(m^3/kg-day)	0-2	2-9	(m^3/kg-day)	0-2	2-9	(m^3/kg-day)	2-9	(m^3/kg-day)	2-16	(m^3/kg-day)
Year 1	1					0.049	1				0.021	1		0.073	1		0.073	1	0.014	1	0.011
Year 2	0.20	0.80				0.13	1				0.021	1		0.073	0.45	0.55	0.040	1	0.014	1	0.011
Year 3		1				0.15	0.95	0.05			0.020	0.95	0.05	0.071		1	0.012	1	0.014	1	0.011
Year 4		0.20	0.80			0.051		1			0.0034		1	0.012		1	0.012	1	0.014	1	0.011
Year 5			1			0.026		1			0.0034		1	0.012		1	0.012	1	0.014	1	0.011
Year 6			1			0.026		1			0.0034		1	0.012		1	0.012	1	0.014		
Year 7			1			0.026		1			0.0034		1	0.012		1	0.012	1	0.014		
Year 8			1			0.026		1			0.0034		1	0.012		1	0.012	1	0.014		
Year 9			1			0.026		1			0.0034		1	0.012		1	0.0122				
Year 10			1			0.026		0.95	0.05		0.0034		1	0.012							
Year 11			0.20	0.80		0.024			1		0.0027										
Year 12				1		0.024			1		0.0027										
Year 13				1		0.024			1		0.0027										
Year 14				1		0.024			1		0.0027										
Year 15				1		0.024			1		0.0027										
Year 16				1		0.024			1		0.0027										
Year 17				1		0.0235			0.95	0.05	0.00263										
Year 18				0.20	0.80	0.0069				1	0.00031										
Year 19					1	0.0026				1	0.00031										
Year 20					1	0.0026				1	0.00031										
Year 21					1	0.0026				1	0.00031										
Year 22					1	0.0026				1	0.00031										
Year 23					1	0.0026				1	0.00031										
Year 24					1	0.0026				1	0.00031										
Year 25					1	0.0026				1	0.00031										
Year 26					1	0.0026				1	0.00031										
Year 27					1	0.0026				1	0.00031										
Year 28					1	0.0026				1	0.00031										
Year 29					1	0.0026				1	0.00031										
Year 30					1	0.0026				1	0.00031										
Year 31					1	0.0026				1	0.00031										
Year 32					1	0.0026															

Notes:

1. Exposure Scenario 1 begins at the start of construction in Year 1.
2. The exposure duration for all years is 1, as the health risk assessment is based on annual emissions. While the 3rd Trimester is only 3 months, the exposure duration for the first year is set to 1 since annual average concentrations are used to calculate risks.
3. Age bin 2-16 Years was selected to conservatively represent ages 9-16.
4. The Intake Factors have been multiplied by the Age Sensitivity Factors and weighted by the exposure duration for each age bin.
5. Intake Factors are based on exposure assumptions in Table 44.
6. Exposure for High School receptors is conservatively included in the 2-16 age bin.

Abbreviations:

IF - intake factor
m^3 - cubic meter
kg - kilogram

References:

OEHHA. 2015. Air Toxics Hot Spots Program Risk Assessment Guidelines. Guidance Manual for Preparation of Health Risk Assessments. February.

Table 56
Age Sensitivity Weighted Intake Factors by Year and Age Bin for Scenario 2
Willow Village
Menlo Park, California

Year[1]	Resident						Recreational					Daycare Child			Daycare Child (18 months +)			Elementary School		High School	
	Fraction of Year in Age Bin[2,3]					Age Sensitivity Weighted Intake Factor by Year, Inhalation[4,5]	Fraction of Year in Age Bin				Age Sensitivity Weighted Intake Factor by Year, Inhalation[4,5]	Fraction of Year in Age Bin		Age Sensitivity Weighted Intake Factor by Year, Inhalation[4,5]	Fraction of Year in Age Bin		Age Sensitivity Weighted Intake Factor by Year, Inhalation[4,5]	Fraction of Year in Age Bin	Age Sensitivity Weighted Intake Factor by Year, Inhalation[4,5]	Fraction of Year in Age Bin[6]	Age Sensitivity Weighted Intake Factor by Year, Inhalation[4,5]
	3rd Trimester	0-2	2-9	2-16	16-30	(m^3/kg-day)	0-2	2-9	2-16	16-30	(m^3/kg-day)	0-2	2-9	(m^3/kg-day)	0-2	2-9	(m^3/kg-day)	2-9	(m^3/kg-day)	2-16	(m^3/kg-day)
Year 2	0.99	0.0082				0.050	1				0.021	1		0.073	1		0.073	1	0.014	1	0.011
Year 3		1				0.15	1				0.021	1		0.073	0.25	0.75	0.027	1	0.014	1	0.011
Year 4		0.998	0.0021			0.15	0.75	0.25			0.017	0.75	0.25	0.058		1	0.012	1	0.014	1	0.011
Year 5			1			0.026		1			0.0034		1	0.012		1	0.012	1	0.014	1	0.011
Year 6			1			0.026		1			0.0034		1	0.012		1	0.012	1	0.014	1	0.011
Year 7			1			0.026		1			0.0034		1	0.012		1	0.012	1	0.014		
Year 8			1			0.026		1			0.0034		1	0.012		1	0.012	1	0.014		
Year 9			1			0.026		1			0.0034		1	0.012		1	0.012	1	0.014		
Year 10			1			0.026		1			0.0034		1	0.012		1	0.012				
Year 11			0.998	0.0021		0.026		0.75	0.25		0.0032		1	0.012							
Year 12				1		0.024			1		0.0027										
Year 13				1		0.024			1		0.0027										
Year 14				1		0.024			1		0.0027										
Year 15				1		0.024			1		0.0027										
Year 16				1		0.024			1		0.0027										
Year 17				1		0.024			1		0.0027										
Year 18				0.998	0.0021	0.023			0.75	0.25	0.0021										
Year 19					1	0.0026				1	0.00031										
Year 20					1	0.0026				1	0.00031										
Year 21					1	0.0026				1	0.00031										
Year 22					1	0.0026				1	0.00031										
Year 23					1	0.0026				1	0.00031										
Year 24					1	0.0026				1	0.00031										
Year 25					1	0.0026				1	0.00031										
Year 26					1	0.0026				1	0.00031										
Year 27					1	0.0026				1	0.00031										
Year 28					1	0.0026				1	0.00031										
Year 29					1	0.0026				1	0.00031										
Year 30					1	0.0026				1	0.00031										
Year 31					1	0.0026				1	0.00031										
Year 32					1	0.0026				1	0.00031										

Notes:

1. Exposure Scenario 2 begins at the start of Grading and Utilities for Area 2 construction in Year 2.
2. The exposure duration for all years is 1, as the health risk assessment is based on annual emissions. While the 3rd Trimester is only 3 months, the exposure duration for the first year is set to 1 since annual average concentrations are used to calculate risks.
3. Age bin 2-16 Years was selected to conservatively represent ages 9-16.
4. The Intake Factors have been multiplied by the Age Sensitivity Factors and weighted by the exposure duration for each age bin.
5. Intake Factors are based on exposure assumptions in Table 44.
6. Exposure for High School receptors is conservatively included in the 2-16 age bin.

Abbreviations:

IF - intake factor
m^3 - cubic meter
kg - kilogram

References:

OEHHA. 2015. Air Toxics Hot Spots Program Risk Assessment Guidelines. Guidance Manual for Preparation of Health Risk Assessments. February.

Table 57
Age Sensitivity Weighted Intake Factors by Year and Age Bin for Scenario 3
Willow Village
Menlo Park, California

Year[1]	Resident						Recreational				
	Fraction of Year in Age Bin[2,3]					Age Sensitivity Weighted Intake Factor by Year, Inhalation[4,5]	Fraction of Year in Age Bin				Age Sensitivity Weighted Intake Factor by Year, Inhalation[4,5]
	3rd Trimester	0-2	2-9	2-16	16-30	(m^3/kg-day)	0-2	2-9	2-16	16-30	(m^3/kg-day)
Year 5	0.37	0.63				0.11	1				0.021
Year 6		1				0.15	1				0.021
Year 7		0.58	0.42			0.097	0.33	0.67			0.0093
Year 8			1			0.026		1			0.0034
Year 9			1			0.026		1			0.0034
Year 10			1			0.026		1			0.0034
Year 11			1			0.026		1			0.0034
Year 12			1			0.026		1			0.0034
Year 13			1			0.026		1			0.0034
Year 14			0.58	0.42		0.025		0.33	0.67		0.0030
Year 15				1		0.024			1		0.0027
Year 16				1		0.024			1		0.0027
Year 17				1		0.024			1		0.0027
Year 18				1		0.024			1		0.0027
Year 19				1		0.024			1		0.0027
Year 20				1		0.024			1		0.0027
Year 21				0.58	0.42	0.015			0.33	0.67	0.0011
Year 22					1	0.0026				1	0.00031
Year 23					1	0.0026				1	0.00031
Year 24					1	0.0026				1	0.00031
Year 25					1	0.0026				1	0.00031
Year 26					1	0.0026				1	0.00031
Year 27					1	0.0026				1	0.00031
Year 28					1	0.0026				1	0.00031
Year 29					1	0.0026				1	0.00031
Year 30					1	0.0026				1	0.00031
Year 31					1	0.0026				1	0.00031
Year 32					1	0.0026				1	0.00031
Year 33					1	0.0026				1	0.00031
Year 34					1	0.0026				1	0.00031
Year 35					0.58	0.0015				1	0.00031

Notes:

1. Exposure Scenario 3 begins at the conclusion of Town Center and Residential/Shopping District construction when residents move onsite in 2025.
2. The exposure duration for all years is 1, as the health risk assessment is based on annual emissions. While the 3rd Trimester is only 3 months, the exposure duration for the first year is set to 1 since annual average concentrations are used to calculate risks.
3. Age bin 2-16 Years was selected to conservatively represent ages 9-16.
4. The Intake Factors have been multiplied by the Age Sensitivity Factors and weighted by the exposure duration for each age bin.
5. Intake Factors are based on exposure assumptions in Table 44.

Abbreviations:

IF - intake factor

m^3 - cubic meter

kg - kilogram

References:

OEHHA. 2015. Air Toxics Hot Spots Program Risk Assessment Guidelines. Guidance Manual for Preparation of Health Risk Assessments. February.

Table 58
Age Sensitivity Weighted Intake Factors by Year and Age Bin for Scenario 4
Willow Village
Menlo Park, California

Year[1]	Resident						Recreational					Daycare Child			Daycare Child (18 months +)			Elementary School		High School	
	Fraction of Year in Age Bin[2,3]					Age Sensitivity Weighted Intake Factor by Year, Inhalation[4,5]	Fraction of Year in Age Bin				Age Sensitivity Weighted Intake Factor by Year, Inhalation[4,5]	Fraction of Year in Age Bin		Age Sensitivity Weighted Intake Factor by Year, Inhalation[4,5]	Fraction of Year in Age Bin		Age Sensitivity Weighted Intake Factor by Year, Inhalation[4,5]	Fraction of Year in Age Bin	Age Sensitivity Weighted Intake Factor by Year, Inhalation[4,5]	Fraction of Year in Age Bin[6]	Age Sensitivity Weighted Intake Factor by Year, Inhalation[4,5]
	3rd Trimester	0-2	2-9	2-16	16-30	(m^3/kg-day)	0-2	2-9	2-16	16-30	(m^3/kg-day)	0-2	2-9	(m^3/kg-day)	0-2	2-9	(m^3/kg-day)	2-9	(m^3/kg-day)	2-16	(m^3/kg-day)
Year 7	0.25	0.75				0.12	1				0.021	1		0.073	0.5	0.5	0.043	1	0.014	1	0.011
Year 8		1				0.15	1				0.0211	1		0.073		1	0.012	1	0.014	1	0.011
Year 9		0.25	0.75			0.057		1			0.0034		1	0.012		1	0.012	1	0.014	1	0.011
Year 10			1			0.026		1			0.0034		1	0.012		1	0.012	1	0.014	1	0.011
Year 11			1			0.026		1			0.0034		1	0.012		1	0.012	1	0.014		
Year 12			1			0.026		1			0.0034		1	0.012		1	0.012	1	0.014		
Year 13			1			0.026		1			0.0034		1	0.012		1	0.012	1	0.014		
Year 14			1			0.026		1			0.0034		1	0.012		1	0.012				
Year 15			1			0.026		1			0.0034		1	0.012							
Year 16			0.25	0.75		0.024			1		0.0027										
Year 17				1		0.024			1		0.0027										
Year 18				1		0.024			1		0.0027										
Year 19				1		0.024			1		0.0027										
Year 20				1		0.024			1		0.0027										
Year 21				1		0.024			1		0.0027										
Year 22				1		0.0235			1		0.00275										
Year 23				0.25	0.75	0.0078				1	0.00031										
Year 24					1	0.0026				1	0.00031										
Year 25					1	0.0026				1	0.00031										
Year 26					1	0.0026				1	0.00031										
Year 27					1	0.0026				1	0.00031										
Year 28					1	0.0026				1	0.00031										
Year 29					1	0.0026				1	0.00031										
Year 30					1	0.0026				1	0.00031										
Year 31					1	0.0026				1	0.00031										
Year 32					1	0.0026				1	0.00031										
Year 33					1	0.0026				1	0.00031										
Year 34					1	0.0026				1	0.00031										
Year 35					1	0.0026				1	0.00031										
Year 36					1	0.0026				1	0.00031										
Year 37					0.25	0.00065															

Notes:

1. Scenario 4 begins at the conclusion of Project construction when the Project is fully operational in 2027.
2. The exposure duration for all years is 1, as the health risk assessment is based on annual emissions. While the 3rd Trimester is only 3 months, the exposure duration for the first year is set to 1 since annual average concentrations are used to calculate risks.
3. Age bin 2-16 Years was selected to conservatively represent ages 9-16.
4. The Intake Factors have been multiplied by the Age Sensitivity Factors and weighted by the exposure duration for each age bin.
5. Intake Factors are based on exposure assumptions in Table 44.
6. Exposure for High School receptors is conservatively included in the 2-16 age bin.

Abbreviations:

IF - intake factor
m^3 - cubic meter
kg - kilogram

References:

OEHHA. 2015. Air Toxics Hot Spots Program Risk Assessment Guidelines. Guidance Manual for Preparation of Health Risk Assessments. February.

Table 59
Project Cancer Risk at Off-Site and On-Site MEIR
Willow Village
Menlo Park, California

Source Category	Lifetime Excess Cancer Risk[1] (in a million)					
	Construction + Operations				Operations Only	
	Unmitigated[2]		Mitigated[2]			
Project Contribution	On-Site MEIR[3,5]	Off-Site MEIR[4,5]	On-Site MEIR[3,5]	Off-Site MEIR[4,5]	On-Site MEIR[3,5]	Off-Site MEIR[4,5]
	Scenario 3	Scenario 2	Scenario 3	Scenario 2	Scenario 3	Scenario 4
Construction	170	57	7.2	7.6	--	--
Operational Generators	1.6	0.65	1.4	0.65	1.4	0.55
Operational Traffic	1.1	0.89	1.1	0.89	2.0	2.9
Total Project Contribution	172	58	9.8	9.2	3.3	3.4

Notes:

1. Excess lifetime cancer risk from construction and operations are combined since cancer risk is evaluated over a 30-year lifetime. Thus, the risk takes into account exposure to Project emissions beginning during construction and continuing through operations. Off-site receptors are exposed to all Project construction and subsequent Project operations. On-site receptors are exposed to overlapping construction emissions and subsequent Project operations.

   The cancer risks were estimated using the following equation:

   Riskinh = Ci x CF x IFinh x CPFi x ASF
   Where:
   Riskinh = Cancer Risk for the Inhalation Pathway (unitless)
   Ci = Annual Average Air Concentration for Chemical "i" (µg/m3)
   CF = Conversion Factor (mg/µg)
   IFinh = Intake Factor for Inhalation (m3/kg-day)
   CPFi = Cancer Potency Factor for Chemical "i" (mg/kg-day)-1
   ASF = Age Sensitivity Factor (unitless)

2. The Unmitigated Project reflects default construction off-road equipment fleet. The Mitigated Project reflects use of 95 percent Tier 4 construction off-road equipment before residents move on-site and 98 percent Tier 4 construction off-road equipment after residents move on-site. The other 5 percent and 2 percent (before and after on-site residents, respectively) are assumed to have Tier 2 engines. Unmitigated emissions are estimated to be much larger than mitigated emissions as a result of two assumptions made during the calculations: 1) the emission factor for Tractors/Loaders/Backhoes with low HP ratings is significantly higher than that of subsequently higher HP ranges and many construction equipment fall under this classification; and 2) many pieces of construction equipment such as Bobcats were conservatively classified as Tractors/Loaders/Backhoes rather than other equipment types with lower emission factors.

3. On-site Project MEIR was identified as the on-site sensitive receptor location with the maximum total cancer risk attributed to the emissions associated with the Project.

4. Off-site Project MEIR was identified as the off-site sensitive receptor location with the maximum total cancer risk attributed to the emissions associated with the Project.

5. On-site and off-site MEIR locations are documented below:

Table 59
Project Cancer Risk at Off-Site and On-Site MEIR
Willow Village
Menlo Park, California

MEIR by Scenario	MEIR Location[6]					
	Construction + Operations				Operations Only	
	On-Site MEIR[3]	Off-Site MEIR[4]	On-Site MEIR[3]	Off-Site MEIR[4]	On-Site MEIR[3]	Off-Site MEIR[4]
	Scenario 3	Scenario 2	Scenario 3	Scenario 2	Scenario 3	Scenario 4
UTMx (m)	575,225	575,500	575,245	575,500	575,275	574,840
UTMy (m)	4,148,065	4,147,960	4,148,135	4,147,960	4,148,145	4,147,800
Receptor Height (m)	4.8	1.8	4.8	1.8	1.8	1.8
Receptor Type	Residential	Residential	Residential	Residential	Residential	Residential

6. Three exposure scenarios were modeled. Scenario 1 evaluates off-site receptors and begins at the start of construction. Scenario 2 evaluates off-site receptors and begins at the start of Area 2 Grading and Utilities construction. Scenario 3 evaluates on-site receptors and begins at the conclusion of Town Center and Residential/Shopping District construction when Area 1 residents move in.

Abbreviations:

kg - kilogram
m - meter
MEIR - maximally exposed individual receptor
mg - miligram
UTMx - Universal Transverse Mercator x-coordinate
UTMy - Universal Transverse Mercator y-coordinate
ug - microgram

References:

OEHHA. 2015. Air Toxics Hot Spots Program. Risk Assessment Guidelines. Guidance Manual for Preparation of Health Risk Assessments. February. Available online at: https://oehha.ca.gov/media/downloads/crnr/2015guidancemanual.pdf

Table 60
Project Chronic Hazard Index at Off-Site and On-Site MEIR
Willow Village
Menlo Park, California

Source Category	Lifetime Excess Chronic Hazard Index[1] (unitless)					
	Construction + Operations				Operations Only	
	Unmitigated[2]		Mitigated[2]			
Project Contribution	On-Site MEIR[3,5] Scenario 3	Off-Site MEIR[4,5] Scenario 1	On-Site MEIR[3,5] Scenario 3	Off-Site MEIR[4,5] Scenario 1	On-Site MEIR[3,5] Scenario 3	Off-Site MEIR[4,5] Scenario 1
Construction	0.23	0.11	8.9E-03	0.011	--	--
Operational Generators	4.0E-04	6.6E-04	4.0E-04	2.1E-04	3.3E-04	3.0E-03
Operational Traffic	2.1E-03	1.4E-03	2.1E-03	3.3E-03	6.0E-03	1.3E-03
Total Project Contribution	**0.23**	**0.11**	**0.011**	**0.014**	**6.3E-03**	**4.3E-03**

Notes:

1. The potential for exposure to result in adverse chronic non-cancer effects is evaluated by comparing the estimated annual average air concentration (which is equivalent to the average daily air concentration) from construction and operations to the non-cancer chronic REL for each chemical. When calculated for a single chemical, the comparison yields a ratio termed a hazard quotient or HQ. To evaluate the potential for adverse chronic non-cancer health effects from simultaneous exposure to multiple chemicals, the hazard quotients for all chemicals are summed, yielding a hazard index or HI.

   The chronic HI for each receptor was estimated using the following equation:

   $HI_{inh} = C_i / cREL$

   Where:

   HI_{inh} = Chronic HI for the Inhalation Pathway (unitless)

   C_i = Annual Average Air Concentration for Chemical "i" ($\mu g/m^3$)

   cREL = Chronic Reference Exposure Level ($\mu g/m^3$)

2. The Unmitigated Project reflects default construction off-road equipment fleet. The Mitigated Project reflects use of 95 percent Tier 4 construction off-road equipment before residents move on-site and 98 percent Tier 4 construction off-road equipment after residents move on-site. The other 5 percent and 2 percent (before and after on-site residents, respectively) are assumed to have Tier 2 engines. Unmitigated emissions are estimated to be much larger than mitigated emissions as a result of two assumptions made during the calculations: 1) the emission factor for Tractors/Loaders/Backhoes with low HP ratings is significantly higher than that of subsequently higher HP ranges and many construction equipment fall under this classification; and 2) many pieces of construction equipment such as Bobcats were conservatively classified as Tractors/Loaders/Backhoes rather than other equipment types with lower emission factors.

3. On-site Project MEIR was identified as the on-site sensitive receptor location with the maximum chronic HI attributed to the emissions associated with the Project.

4. Off-site Project MEIR was identified as the off-site sensitive receptor location with the maximum chronic HI attributed to the emissions associated with the Project.

5. On-site and off-site MEIR locations are documented below:

Table 60
Project Chronic Hazard Index at Off-Site and On-Site MEIR
Willow Village
Menlo Park, California

MEIR by Scenario	MEIR Location					
	Construction + Operations				Operations Only	
	On-Site MEIR[3]	Off-Site MEIR[4]	On-Site MEIR[3]	Off-Site MEIR[4]	On-Site MEIR[3]	Off-Site MEIR[4]
	Scenario 3	Scenario 1	Scenario 3	Scenario 1	Scenario 3	Scenario 1
UTMx (m)	575,235	575,160	575,235	575,400	575,385	574,980
UTMy (m)	4,148,065	4,148,040	4,148,065	4,148,040	4,148,085	4,148,040
Receptor Height (m)	4.8	1.8	4.8	1.8	1.8	1.8
Receptor Type	Residential	High School	Residential	Elementary School	Recreational	High School
Year	Year 5	Year 4	Year 5	Year 3	Year l	Year l

Abbreviations:

µg - microgram
kg - kilogram
m - meter
MEIR - maximally exposed individual receptor
TRU - Transportation Refrigeration Unit
UTMx - Universal Transverse Mercator x-coordinate
UTMy - Universal Transverse Mercator y-coordinate

References:

OEHHA. 2015. Air Toxics Hot Spots Program. Risk Assessment Guidelines. Guidance Manual for Preparation of Health Risk Assessments. February. Available online at: https://oehha.ca.gov/media/downloads/crnr/2015guidancemanual.pdf

RAMBOLL

Table 61
Project $PM_{2.5}$ Concentration at Off-Site and On-Site MEIR
Willow Village
Menlo Park, California

Source Category	Excess $PM_{2.5}$ Concentration[1] ($\mu g/m^3$)					
	Construction + Operations				Operations Only	
	Unmitigated[2]		Mitigated[2]			
Project Contribution	On-Site MEIR[3,5]	Off-Site MEIR[4,5]	On-Site MEIR[3,5]	Off-Site MEIR[4,5]	On-Site MEIR[3,5]	Off-Site MEIR[4,5]
	Scenario 3	Scenario 1	Scenario 3	Scenario 1	Scenario 3	Scenario 1
Construction	1.1	0.52	0.038	0.063	--	--
Operational Generators	2.0E-03	3.3E-03	1.7E-03	1.3E-03	1.6E-03	1.3E-03
Operational Traffic	0.040	0.030	0.092	0.12	0.11	0.12
Total Project Contribution	**1.1**	**0.56**	**0.13**	**0.18**	**0.11**	**0.12**

Notes:

1. $PM_{2.5}$ concentrations at off-site receptors include contributions from multiple phases of Project construction and subsequent Project operations. $PM_{2.5}$ concentrations at on-site receptors include contributions from overlapping construction emissions and subsequent Project operations.

   The $PM_{2.5}$ concentration at each receptor was estimated using the following equation:

   $C_i = E \times D_i$

   Where:

   C = Concentration of $PM_{2.5}$ at receptor "i" ($\mu g/m^3$)

   D_i = Dispersion factor associated with unit emissions at receptor "i" ($\mu g/m^3$)/(g/s)

   E = Emission Rate (g/s)

2. The Unmitigated Project reflects default construction off-road equipment fleet. The Mitigated Project reflects use of 95 percent Tier 4 construction off-road equipment before residents move on-site and 98 percent Tier 4 construction off-road equipment after residents move on-site. The other 5 percent and 2 percent (before and after on-site residents, respectively) are assumed to have Tier 2 engines. Unmitigated emissions are estimated to be much larger than mitigated emissions as a result of two assumptions made during the calculations: 1) the emission factor for Tractors/Loaders/Backhoes with low HP ratings is significantly higher than that of subsequently higher HP ranges and many construction equipment fall under this classification; and 2) many pieces of construction equipment such as Bobcats were conservatively classified as Tractors/Loaders/Backhoes rather than other equipment types with lower emission factors.

3. On-site Project MEIR was identified as the on-site sensitive receptor location with the maximum chronic HI attributed to the emissions associated with the Project.

4. Off-site Project MEIR was identified as the off-site sensitive receptor location with the maximum chronic HI attributed to the emissions associated with the Project.

5. On-site and off-site MEIR locations are documented below:

Table 61
Project $PM_{2.5}$ Concentration at Off-Site and On-Site MEIR
Willow Village
Menlo Park, California

MEIR by Scenario	MEIR Location					
	Construction + Operations				Operations Only	
	On-Site MEIR[3]	Off-Site MEIR[4]	On-Site MEIR[3]	Off-Site MEIR[4]	On-Site MEIR[3]	Off-Site MEIR[4]
	Scenario 3	Scenario 1	Scenario 3	Scenario 1	Scenario 3	Scenario 1
UTMx (m)	575,235	575,160	575,265	575,420	575,385	575,420
UTMy (m)	4,148,065	4,148,040	4,148,115	4,147,980	4,148,085	4,147,980
Receptor Height (m)	4.8	1.8	1.8	1.8	1.8	1.8
Receptor Type	Residential	High School	Residential	Daycare Child (18 months +)	Recreational	Daycare Child (18 months +)

Abbreviations:

µg - microgram
kg - kilogram
m - meter
MEIR - maximally exposed individual receptor
TRU - Transportation Refrigeration Unit
UTMx - Universal Transverse Mercator x-coordinate
UTMy - Universal Transverse Mercator y-coordinate

References:

OEHHA. 2015. Air Toxics Hot Spots Program. Risk Assessment Guidelines. Guidance Manual for Preparation of Health Risk Assessments. February. Available online at: https://oehha.ca.gov/media/downloads/crnr/2015guidancemanual.pdf

Table 62
Summary of Nearby Stationary Source Impacts at Project MEIR
Willow Village
Menlo Park, California

Off-Site MEIR

Facility ID (Plant Number)[1]	Facility Name[1]	Unscaled Values[2]			Distance from MEIR (ft)			Decay Type[2]	Decay Factor[2]			Scaled Values[2]		
		Cancer Risk	Hazard Risk	$PM_{2.5}$	Cancer Risk MEIR	Hazard Risk MEIR	$PM_{2.5}$ MEIR		Cancer Risk MEIR	Hazard Risk MEIR	$PM_{2.5}$ MEIR	Cancer Risk	Hazard Risk	$PM_{2.5}$
		in a million	--	$\mu g/m^3$	feet				unitless			in a million	unitless	$\mu g/m^3$
18066	Menlo Business Park	0.58	3.6	0	1,327	1,469	1,503	Diesel ICE	0	0	0	0	0	0
20079	Pacific Biosciences	1.5	0.057	0.54	1,759	1,339	1,520	Diesel ICE	0	0	0	0	0	0
21312	West Bay Sanitary District	0.033	0.0013	0	1,988	1,696	1,731	Diesel ICE	0	0	0	0	0	0
22664	CS Bio Company	0.13	0.0052	0	980	677	715	Diesel ICE	0.040	0.080	0.080	5.3E-03	4.2E-04	0
100092	Chevron	15	0.073	0	2,150	1,730	1,908	Generic Decay	0	0	0	0	0	0
108593	United Parcel Service	4.7	0.023	0	1,460	1,379	1,509	Generic Decay	0	0	0	0	0	0
											Total:	**5.3E-03**	**4.2E-04**	**0**

On-Site MEIR

Facility ID (Plant Number)[1]	Facility Name[1]	Unscaled Values[2]			Distance from MEIR (ft)			Decay Type[2]	Decay Factor[2]			Scaled Values[2]		
		Cancer Risk	Hazard Risk	$PM_{2.5}$	Cancer Risk MEIR	Hazard Risk MEIR	$PM_{2.5}$ MEIR		Cancer Risk MEIR	Hazard Risk MEIR	$PM_{2.5}$ MEIR	Cancer Risk	Hazard Risk	$PM_{2.5}$
		in a million	--	$\mu g/m^3$	feet				unitless			in a million	unitless	$\mu g/m^3$
18066	Menlo Business Park	0.58	3.6	0	1,875	1,875	1,822	Diesel ICE	0	0	0	0	0	0
20079	Pacific Biosciences	1.5	0.057	0.54	755	755	848	Diesel ICE	0.070	0.070	0.060	0.11	4.0E-03	0.033
21312	West Bay Sanitary District	0.033	0.0013	0	1,331	1,331	1,357	Diesel ICE	0	0	0	0	0	0
22664	CS Bio Company	0.13	0.0052	0	523	523	484	Diesel ICE	0.12	0.12	0.14	0.016	6.3E-04	0
100092	Chevron	15	0.073	0	1,141	1,141	1,234	Generic Decay	0	0	0	0	0	0
108593	United Parcel Service	4.7	0.023	0	1,545	1,545	1,525	Generic Decay	0	0	0	0	0	0
											Total:	**0.12**	**4.6E-03**	**0.033**

Notes:

1. Consistent with BAAQMD guidance, Ramboll included all facilities within 1,000 feet of the Project boundary as per the BAAQMD Permitted Stationary Sources Risks and Hazards Map. Facility information was obtained from the Permitted Stationary Sources Risks and Hazards Map with additional details provided by BAAQMD.

2. Unscaled health risk values were estimated using facility emissions provided by BAAQMD and BAAQMD's Health Risk Calculator Tool. These values were scaled by distance using the diesel IC engines multiplier tool or the BAAQMD's generic distance decay curve, as indicated above. If a stationary source is located over 1,000 feet away from the MEIR, the decay factor is zero (i.e., the impact of the stationary source is zero at the MEIR).

Abbreviations:

IC - internal combustion

ICE - internal combustion engine

MEIR - maximally exposed individual receptor

$\mu g/m^3$ - micrograms per cubic meters

$PM_{2.5}$ - particulate matter less than 2.5 micrometers in diameter

References

Bay Area Air Quality Management District (BAAQMD). 2020. Permitted Sources Risk and Hazards Map. June. Available at: https://baaqmd.maps.arcgis.com/apps/webappviewer/index.html?id=2387ae674013413f987b1071715daa65

Bay Area Air Quality Management District (BAAQMD). 2020. Health Risk Calculator Beta 4.0. March. Available at: https://www.baaqmd.gov/~/media/files/planning-and-research/ceqa/tools/baaqmd-health-risk-calculator-beta-4-0-xlsx.xlsx?la=en&rev=dab7d85a772d45caa9c99e59395bf12d

Table 63
Background Traffic Volumes
Willow Village
Menlo Park, California

Source Group Name	Distance (m)	San Mateo Default Fleet	
		Volume (vehicles/day)	VMT (mi/day)
OBRIEN01	320	14,729	2,929
OBRIEN02	138	14,729	1,265
OBRIEN03	35	14,729	324
OBRIEN04	29	14,729	266
OBRIEN05	28	14,729	259
OBRIEN06	52	14,729	476
OBRIEN07	43	14,729	394
OBRIEN08	20	14,729	186
OBRIEN09	20	14,729	182
OBRIEN10	21	14,729	191
OBRIEN11	44	14,729	403
OBRIEN12	102	14,729	930
OBRIEN13	32	14,729	290
OBRIEN14	112	14,729	1,026
OBRIEN15	242	14,729	2,211
OBRIEN16	48	14,729	438
OBRIEN17	54	14,729	493

Notes:

1. The background traffic volumes were provided by Hexagon in the data request received in October 2021.
2. Modeled roadway segments are shown in Figures 7.

Abbreviations:

VMT - Vehicle Miles Traveled

m - meter

mi - mile

Table 64
Summary of Cumulative Impacts at Project MEIR
Willow Village
Menlo Park, California

Nearby Sources[1]	Offsite MEIR			Onsite MEIR		
	Excess Lifetime Cancer Risk	Noncancer Chronic HI	$PM_{2.5}$ Concentration	Excess Lifetime Cancer Risk	Noncancer Chronic HI	$PM_{2.5}$ Concentration
	(in a million)	(unitless)	($\mu g/m^3$)	(in a million)	(unitless)	($\mu g/m^3$)
Existing Stationary Sources[2]	5.3E-03	4.2E-04	0.0	0.12	3.8E-03	0.033
Roadways[3]	1.3	8.5E-04	0.20	0.22	2.2E-04	7.6E-03
Highways[4]	8.0	--	0.21	9.1	--	0.19
Major Streets[4,5]	2.1	--	0.086	3.9	--	0.077
Railways[4]	2.5	--	4.6E-03	2.4	--	4.6E-03
Project Construction	7.6	0.011	0.063	7.2	8.9E-03	0.038
Project Operational Generators	0.65	2.1E-04	1.3E-03	1.4	4.0E-04	1.7E-03
Project Operational Traffic	0.89	3.3E-03	0.12	1.1	2.1E-03	0.092
Total	**23**	**0.016**	**0.68**	**25**	**0.015**	**0.44**
BAAQMD Threshold	**100**	**10**	**0.80**	**100**	**10**	**0.80**

Notes:

1. Details for existing stationary sources are shown in the preceeding table. If the cell is marked with "--", no risk was calculated. For roadways, highways, major streets, and railways, chronic HI is not calculated in the BAAQMD screening tools.
2. Consistent with BAAQMD guidance, Ramboll included all facilities within 1,000 feet of the Project boundary as per the BAAQMD Permitted Stationary Sources Risks and Hazards Map. Facility information was obtained from the Permitted Stationary Sources Risks and Hazards Map with additional details provided by BAAQMD. Values have been adjusted accordingly for distance from the MEIRs using BAAQMD guidance.
3. BAAQMD recommends evaluating roadways in the area where existing traffic is over 10,000 vehicles per day and under 30,000 vehicles per day, which is the limit for roadways to consider in their raster tool. Hexagon provided background trip volumes for nearby roadways with volumes between 10,000 and 30,000 vehicles per day. Of the roadways with background traffic in this range, only O'Brien Drive was located within the zone of influence. The impacts associated with background traffic on O'Brien Drive were quantified and included in the cumulative analysis.
4. Nearby major streets, highway, and railway cancer and $PM_{2.5}$ impacts were taken from BAAQMD raster files for the Project area. The BAAQMD's raster screening tools do not estimate chronic hazards since the screening levels were found to be extremely low. Thus, there are no chronic hazard values associated with highways, railways, or major streets.
5. Major streets, as evaluated in the BAAQMD raster screening tools, include all streets with average daily traffic above 30,000 vehicles per day.

Abbreviations:

µg - microgram
HI - hazard index
m^3 - cubic meter
MEIR - maximum exposed individual receptor
$PM_{2.5}$ - fine particulate matter less than 2.5 micrometers in diameter

References

Bay Area Air Quality Management District (BAAQMD). 2020. Permitted Sources Risk and Hazards Map. June. Available at: https://baaqmd.maps.arcgis.com/apps/webappviewer/index.html?id=2387ae674013413f987b1071715daa65

City of Menlo Park. Traffic volume data. Available at: https://www.menlopark.org/1543/Traffic-volume-data

FIGURES

PROJECT: 1690010687-004| DATED: 9/15/2021 | DESIGNER: MMCCARTHY

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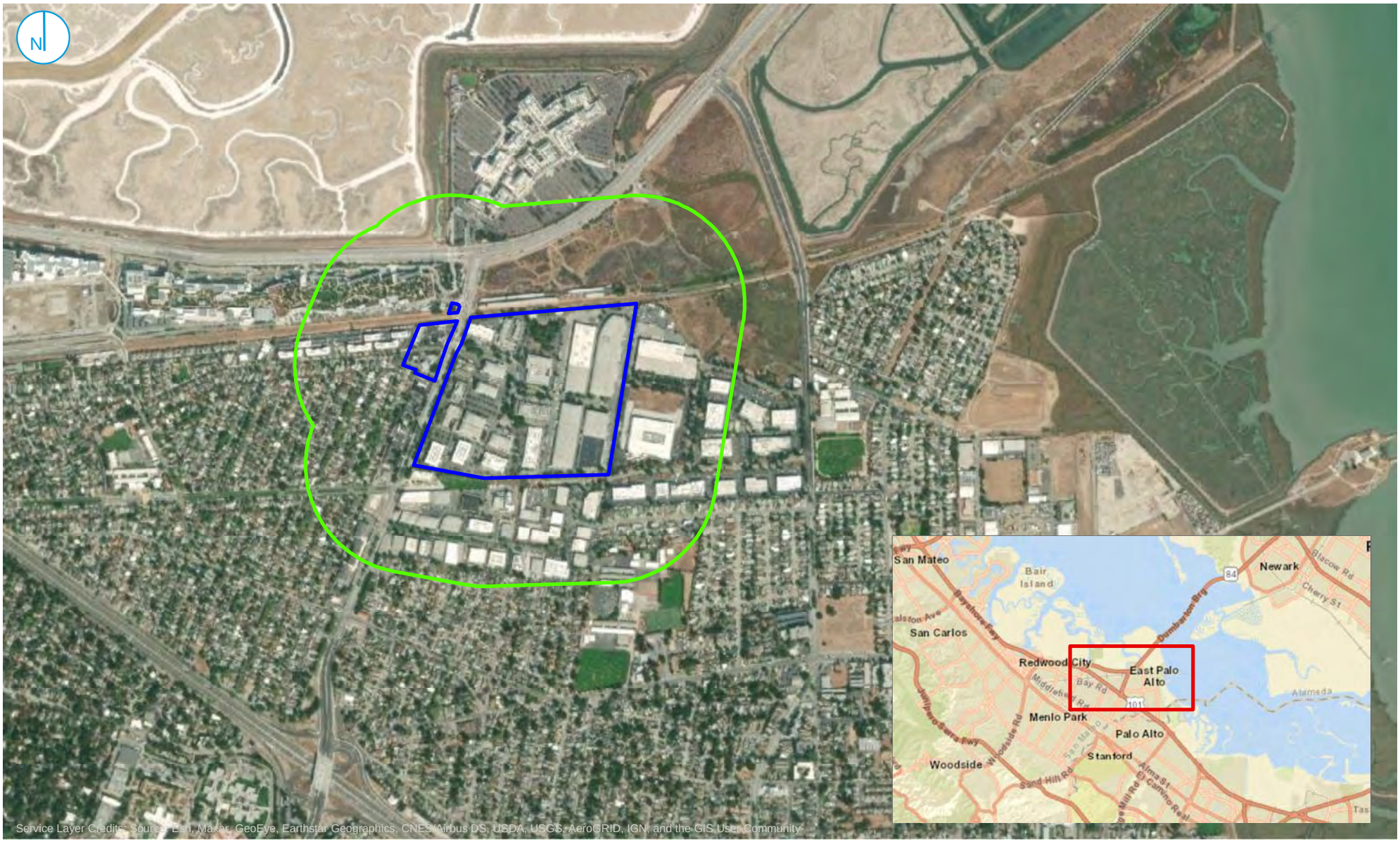

Project Boundary
1000 ft Buffer

0 500 1,000 2,000 Meters

PROJECT AREA AND BOUNDARY

Willow Village
Menlo Park, California

FIGURE 01

RAMBOLL US CONSULTING, INC.
A RAMBOLL COMPANY

RAMBOLL

PROJECT: 1690010687-004 | DATED: 9/15/2021 | DESIGNER: MMCCARTHY

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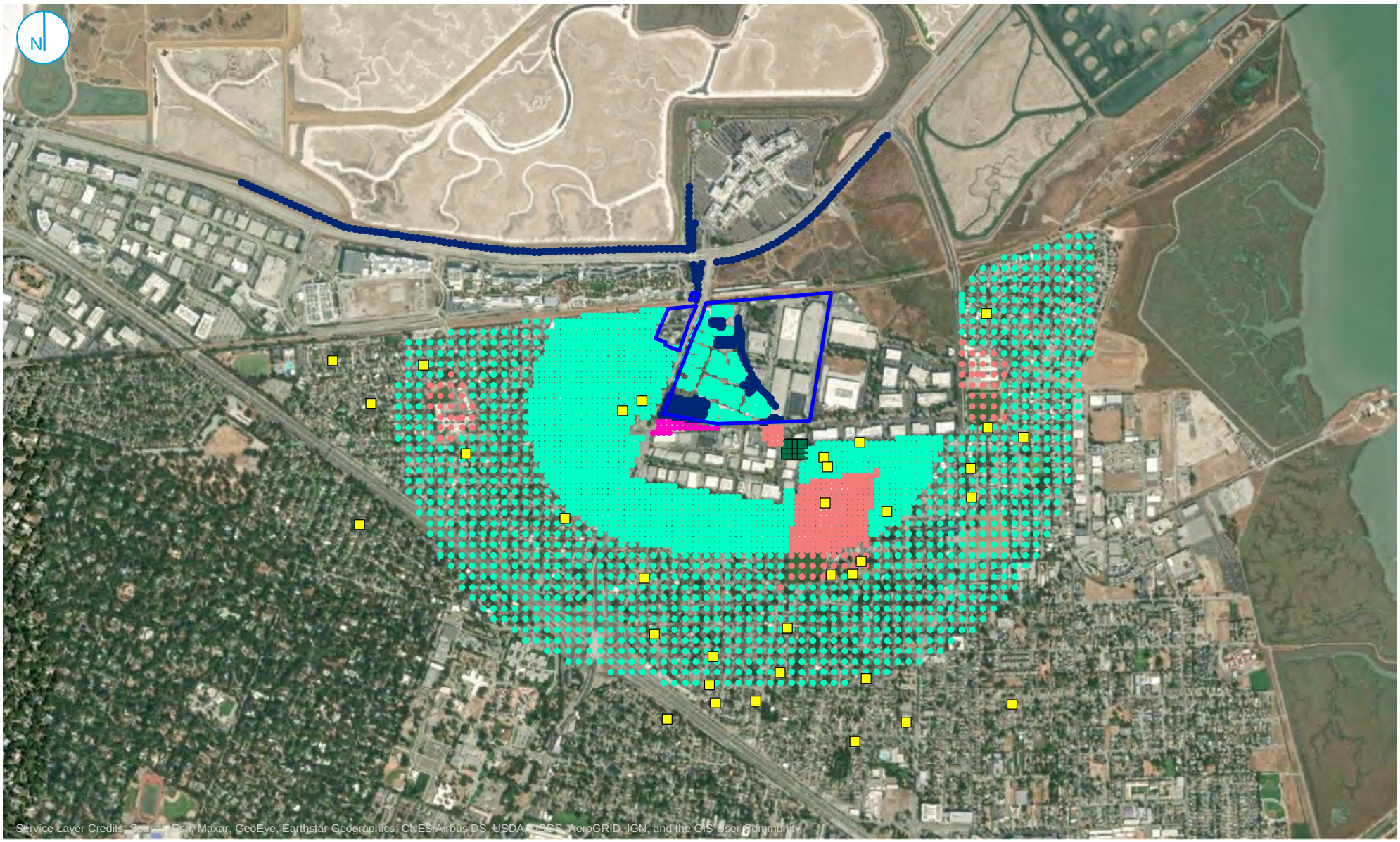

- Daycare Child (18+ months)
- Daycare Child
- Elementary School Child
- High School Child
- Recreational
- Resident
- Project Boundary

0 500 1,000 Meters

MODELED RECEPTOR LOCATIONS

Willow Village
Menlo Park, California

FIGURE 02

RAMBOLL US CONSULTING, INC.
A RAMBOLL COMPANY

RAMBOLL

DRAFT

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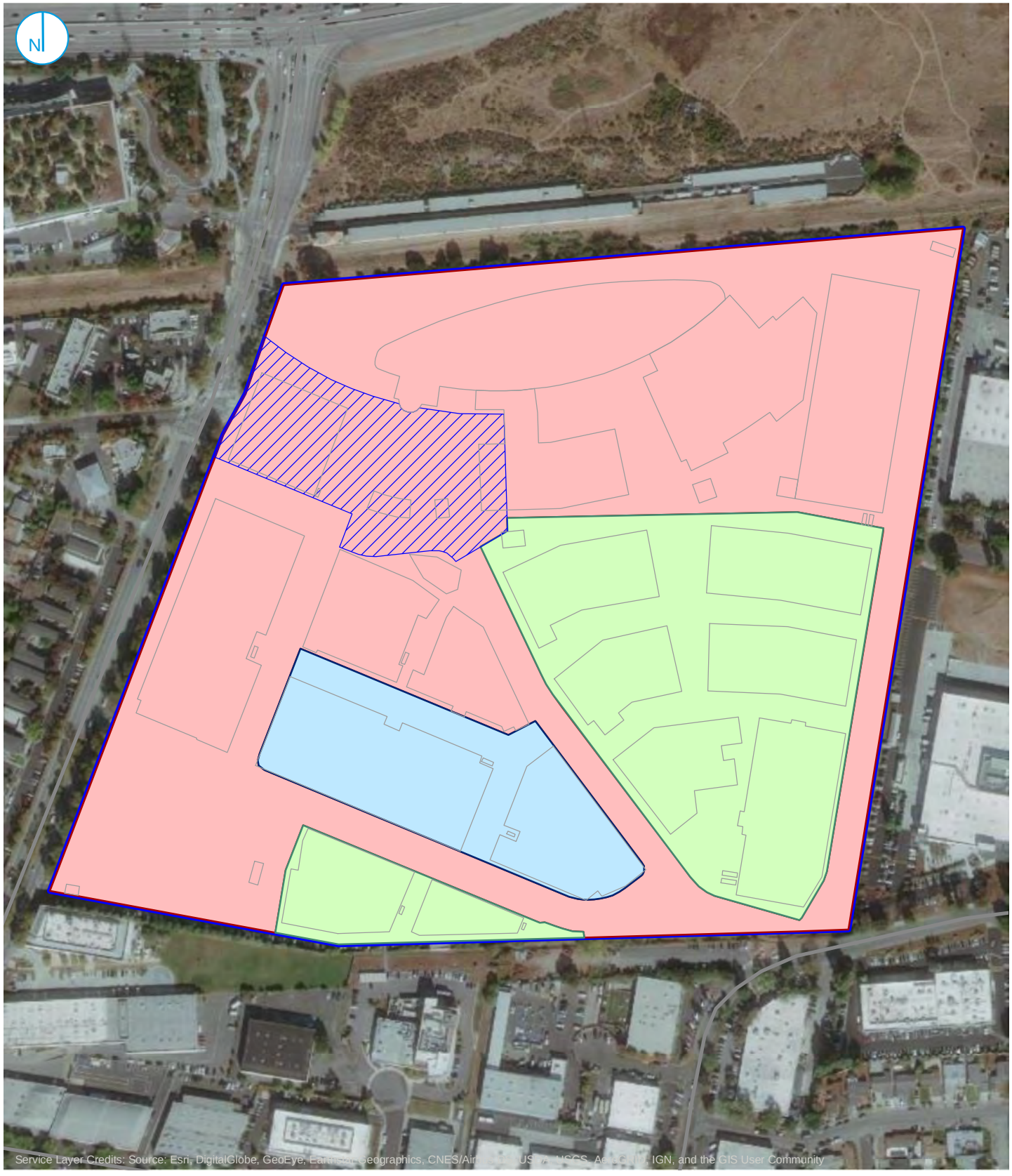


PROJECT: 1690010687-004 | DATED: 6/29/2021 | DESIGNER: DWILTON

Project Boundary Grading Phases

Area 1
Area 2
Area 3
Specific Hotel Excavation Area
(Excavation for RS2 and RS3 are in the areas shown in Figure 4)

0 100 200 Meters

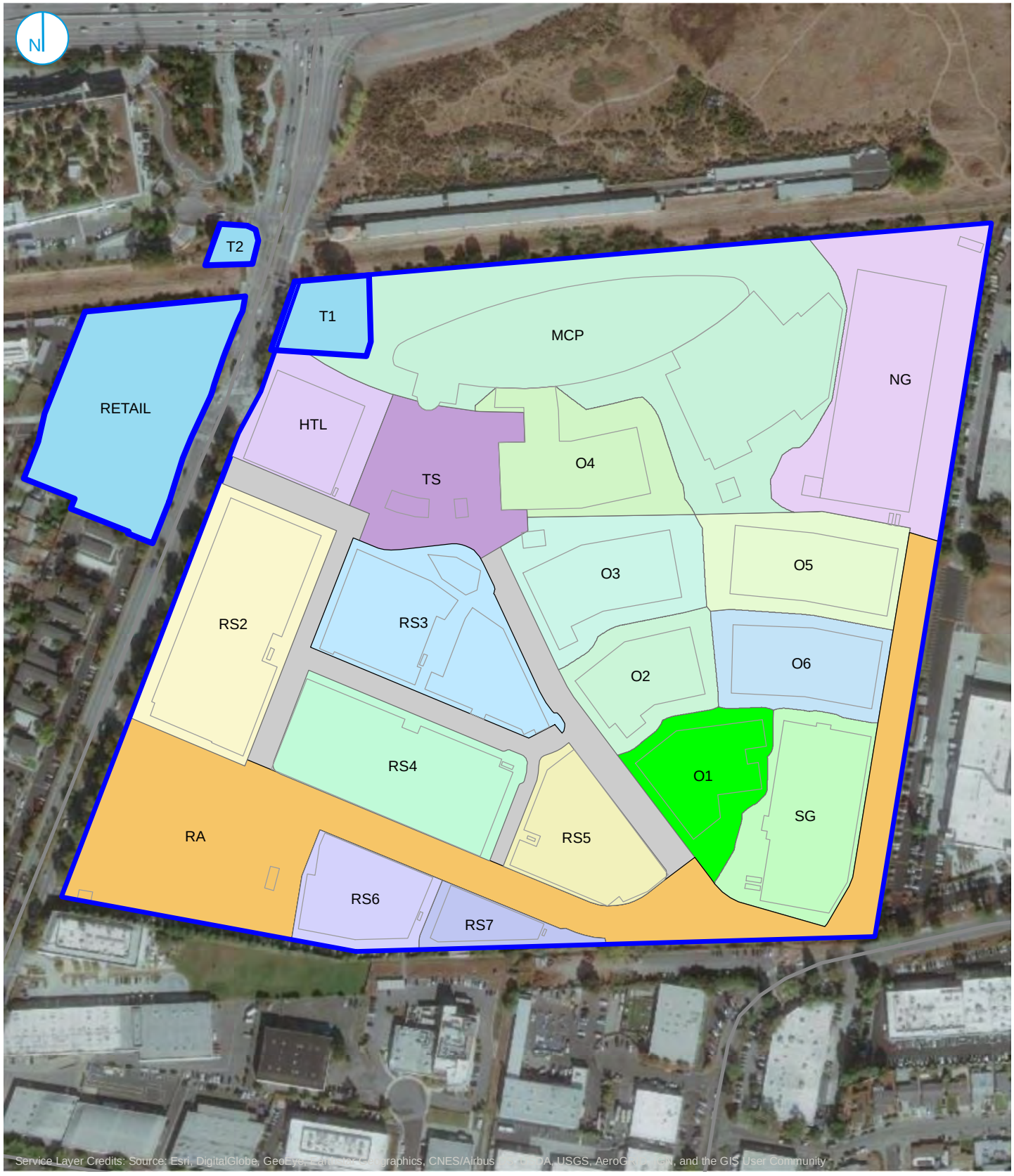
CONSTRUCTION SOURCES (GRADING AND EXCAVATION)

Willow Village
Menlo Park, California

FIGURE 03

RAMBOLL US CONSULTING, INC.
A RAMBOLL COMPANY

RAMBOLL



PROJECT: 1690010687-004 | DATED: 6/29/2021 | DESIGNER: DWILTON

Project Boundary

Buildings & Structures

CONSTRUCTION SOURCES

Area source abbreviations are defined in Table 46 of the report.

FIGURE 4A

RAMBOLL US CONSULTING, INC.
A RAMBOLL COMPANY

0 100 200 Meters

Willow Village
Menlo Park, California

RAMBOLL

DRAFT

Substation Improvements

Feeder Line North Route

Feeder Line East Route

Intersection Improvements

OFF-SITE CONSTRUCTION SOURCES

FIGURE 4B

Willow Village
Menlo Park, California

RAMBOLL US CONSULTING, INC.
A RAMBOLL COMPANY

RAMBOLL

PROJECT: 169000XXXX | DATED: 6/29/2021 | DESIGNER: DWILTON

Project Boundary
Haul Roads

0 250 500 Meters

CONSTRUCTION SOURCES
HAUL ROADS

FIGURE 05

Willow Village
Menlo Park, California

RAMBOLL US CONSULTING, INC.
A RAMBOLL COMPANY

RAMBOLL

PROJECT: 1690010687-004 | DATED: 11/11/2021 | DESIGNER: SBISOGNO

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Project Boundary

1000 ft Buffer

Onsite Vehicle Routes

0 500 1,000 Meters

MODELED ONSITE TRAFFIC ROUTES

Willow Village
Menlo Park, California

FIGURE 06

RAMBOLL US CONSULTING, INC.
A RAMBOLL COMPANY

RAMBOLL

PROJECT: 1690010687-004 | DATED: 11/11/2021 | DESIGNER: SBISOGNO

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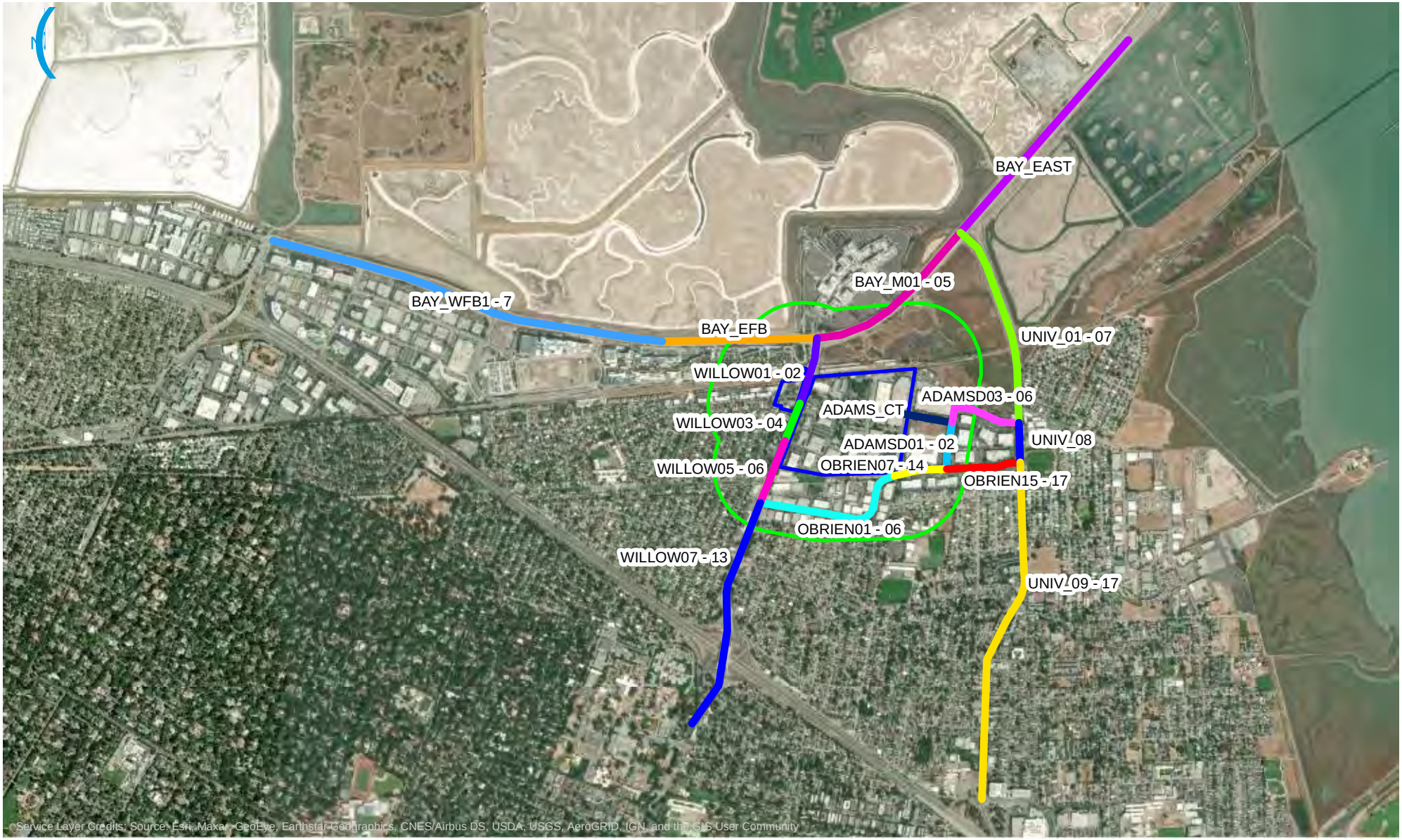

Project Boundary

1000 ft Buffer

0 500 1,000 Meters

MODELED OFFSITE TRAFFIC ROUTES

Willow Village
Menlo Park, California

FIGURE 07

RAMBOLL US CONSULTING, INC.
A RAMBOLL COMPANY

PROJECT: 1690010687-004 | DATED: 11/11/2021 | DESIGNER: SBISOGNO

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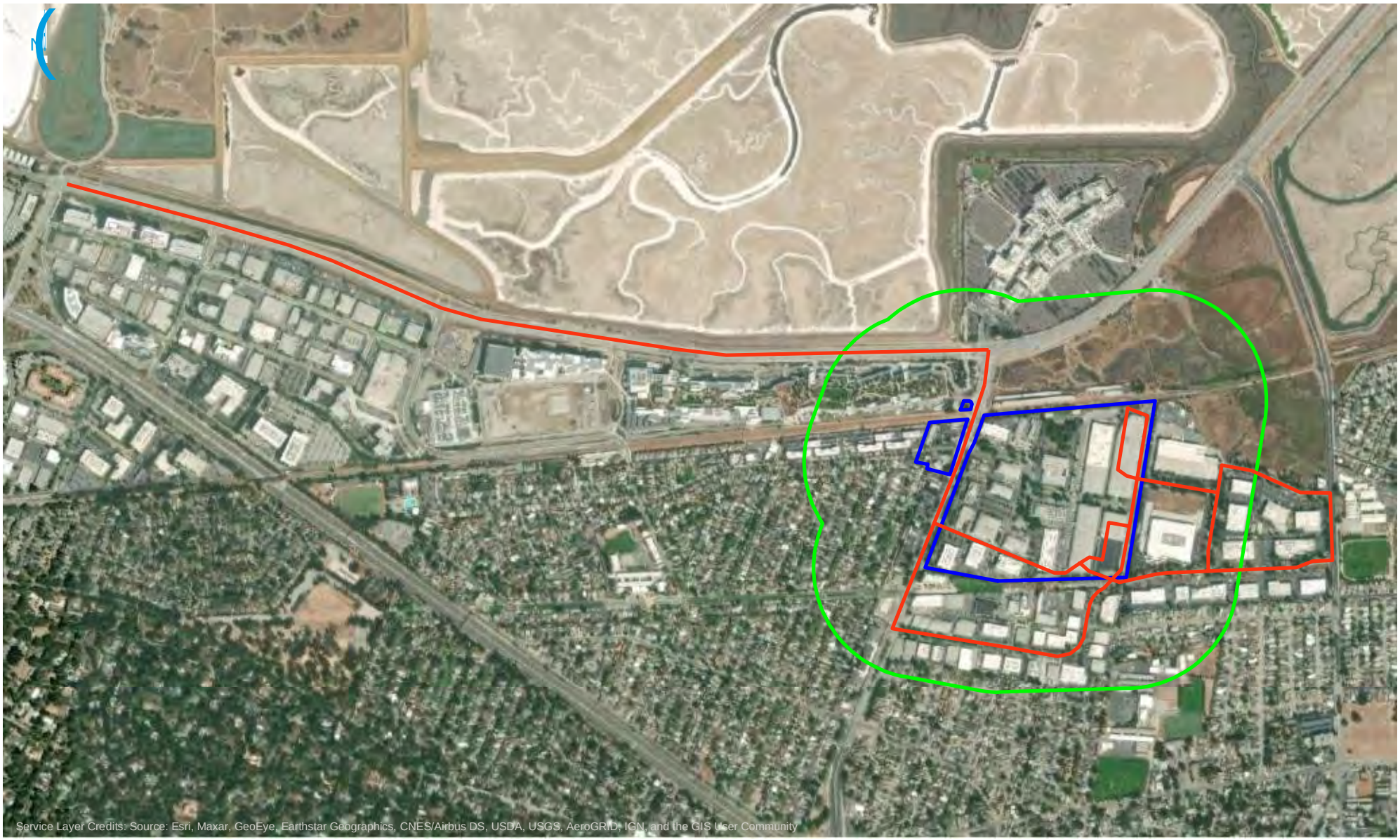


Shuttles
Project Boundary
1000 ft Buffer

0 500 1,000 Meters

MODELED SHUTTLE ROUTES

Willow Village
Menlo Park, California

FIGURE 08

RAMBOLL US CONSULTING, INC.
A RAMBOLL COMPANY

RAMBOLL

Figure 9
Exposure Scenarios
Willow Village
Menlo Park, CA

Area	Subphase	Construction Schedule		Number of Days	Operational Year	Year 1				Year 2				Year 3				Year 4				Year 5				Year 6				Year 7			
		Start Month	End Month			Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Area 1	Demolition	Month 1	Month 5	97	--																										
	Grading and Utilities	Month 4	Month 11	143	--																										
Area 1 Campus District	North Garage	Month 12	Month 25	300	Year 3																										
	Office Building 4	Month 14	Month 35	449	Year 4																										
	Meeting, Collaboration, Park	Month 12	Month 52	871	Year 6																										
	Hotel Excavation	Month 12	Month 25	299	--																										
	Hotel Construction	Month 30	Month 45	329	Year 5																										
	Town Square	Month 15	Month 43	610	Year 5																										
Area 1 Town Square and Residential / Shopping District	Parcel 2 Foundations	Month 15	Month 23	161	--																										
	Parcel 2 Core and Shell	Month 23	Month 31	180	--																										
	Parcel 2 Tenant Improvements	Month 31	Month 43	261	--																										
	Parcel 2 Landscaping	Month 43	Month 45	59	Year 5																										
	Parcel 3 Foundations	Month 18	Month 26	161	--																										
	Parcel 3 Core and Shell	Month 26	Month 34	180	--																										
	Parcel 3 Tenant Improvements	Month 34	Month 46	260	--																										
	Parcel 3 Landscaping	Month 46	Month 48	58	Year 5																										
Area 2	Demolition	Month 7	Month 9	48	--																										
	Grading and Utilities	Month 11	Month 16	130	--																										
Area 2 Campus District	South Garage	Month 16	Month 34	390	Year 4																										
	Office Building 3	Month 17	Month 40	501	Year 5																										
	Office Building 1	Month 17	Month 37	428	Year 4																										
	Office Building 2	Month 18	Month 38	426	Year 5																										
	Office Building 5	Month 16	Month 40	521	Year 5																										
	Office Building 6	Month 19	Month 43	520	Year 5																										
Area 2 Town Square and Residential / Shopping District	Parcel 7 Foundations	Month 26	Month 31	116	--																										
	Parcel 7 Core and Shell	Month 31	Month 37	129	--																										
	Parcel 7 Tenant Improvements	Month 37	Month 45	188	--																										
	Parcel 7 Landscaping	Month 45	Month 48	58	Year 5																										
	Parcel 6 Foundations	Month 29	Month 34	116	--																										
	Parcel 6 Core and Shell	Month 34	Month 40	129	--																										
	Parcel 6 Tenant Improvements	Month 40	Month 48	187	--																										
	Parcel 6 Landscaping	Month 48	Month 51	59	Year 6																										
Area 3	Grading and Utilities	Month 16	Month 18	22	--																										
	Foundations	Month 36	Month 42	123	--																										
	Core & Shell	Month 42	Month 48	139	--																										
	Tenant Improvements	Month 48	Month 58	199	--																										
	Landscaping	Month 58	Month 60	59	Year 6																										
Hamilton Avenue Parcels North and South	Demolition	Month 37	Month 37	22	--																										
	Grading and Utilities	Month 37	Month 38	23	--																										
	Foundations	Month 38	Month 40	22	--																										
	Core & Shell	Month 40	Month 41	43	--																										
	Tenant Improvements	Month 41	Month 43	33	Year 5																										

Key:

Active Construction Period

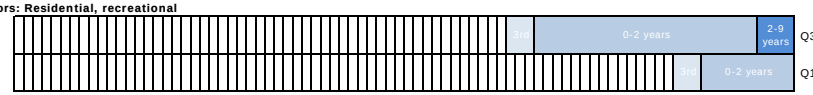
Full Operation

Age bins:

- 3rd trimester
- 0-2 years
- 2-9 years
- 2-16 years
- 16-30 years

Offsite Receptors: Residential, daycare, school, recreational

Onsite Receptors: Residential, recreational



Notes:

1. Additional details on exposure scenarios are presented in AQTR Tables 55 through 58.

APPENDIX A
CONSISTENCY WITH APPLICABLE AIR PLANS

CEQA ANALYSIS
CONFLICT WITH OR OBSTRUCT IMPLEMENTATION OF THE APPLICABLE AIR QUALITY PLAN
WILLOW VILLAGE
MENLO PARK, CALIFORNIA

San Mateo County is currently designated a nonattainment area for the federal ozone standard, a maintenance area for the federal CO standard, and nonattainment for state ozone, PM_{10}, and $PM_{2.5}$ standards. The most recently adopted regional air quality plan is the Bay Area Air Quality Management District (BAAQMD) 2017 Clean Air Plan, which includes all feasible measures to reduce emissions of NO_X and ROG, which are ozone precursors, reduce transport of ozone and its precursors, and reduce emissions of fine particulate matter and toxic air contaminants. The Plan focuses on protecting public health and the climate. The Plan is established pursuant to air quality panning requirements defined in the California Health and Safety Code.

In determining consistency with the Clean Air Plan, this analysis considers whether the Project would (1) support the primary goals of the Clean Air Plan, (2) include applicable control measures from the Clean Air Plan, and (3) avoid disrupting or hindering implementation of control measures identified in the Clean Air Plan.

The 2017 Clean Air Plan defines a control strategy based on reducing emissions from all key sources, reducing "super-GHGs",[1] decreasing demand for fossil fuels, and decarbonizing the energy system. The control strategy contains 85 control measures that are specific actions to reduce air pollutants and GHGs in the San Francisco Bay Area Air Basin. These control strategies are grouped into the following categories:

- Stationary source measures;
- Transportation control measures;
- Energy control measures;
- Building control measures;
- Agricultural control measures;
- Natural and working lands control measures;
- Waste management control measures;
- Water control measures; and
- Super-GHG control measures

Many of the 85 control measures are beyond the scope and control of the Project. Some address stationary sources and will be implemented by BAAQMD using its permit authority and therefore are not suited to implementation through local planning efforts or project approval actions. The Clean Air Plan measures potentially applicable to the Project are listed below along with how the Project would be consistent with the measures. The measures are largely directed at BAAQMD action. The summary below describes how Project features would support the BAAQMD's implementation of the measures.

[1] "Super-GHGs" are defined in the Clean Air Plan as methane, black carbon, and fluorinated gases.

Table 1. Consistency of Project with CAP Community Strategies		
Measure	**Measure Description**[2]	**Project Consistency**
TR1 - Clean Air Teleworking Initiative	Develop teleworking best practices for employers and develop additional strategies to promote telecommuting. Promote teleworking on Spare the Air Days.	**Supporting.** Many of the Project's employees have the ability to telecommute and the Project promotes commuting by non-single-occupancy vehicles through its TDM (see below).
TR2 - Trip Reduction Programs	Implement the regional Commuter Benefits Program (Rule 14-1) that requires employers with 50 or more Bay Area employees to provide commuter benefits. Encourage trip reduction policies and programs in local plans, e.g., general and specific plans while providing grants to support trip reduction efforts. Encourage local governments to require mitigation of vehicle travel as part of new development approval, to adopt transit benefits ordinances in order to reduce transit costs to employees, and to develop innovative ways to encourage rideshare, transit, cycling, and walking for work trips. Fund various employer-based trip reduction programs.	**Supporting.** The Project would implement Transportation Demand Management (TDM) programs for the Campus District, Town Square District, and Residential/Shopping District. The Project's TDM programs may include, but is not limited to, the following measures: • Improve biking/walking network • Provide bicycle amenities • Improve public transit service • Car share program • Tram service • Commuter shuttles • Parking management • Emergency ride-home program • Carpool and vanpool programs • Commute assistance center • On-site housing The Project would include a commuter shuttle service for Campus District workers and a Campus District trip cap.
TR5 - Transit Efficiency and Use	Improve transit efficiency and make transit more convenient for riders through continued operation of 511 Transit, full implementation of Clipper® fare payment system and the Transit Hub Signage Program.	**Supporting**. While the explicit requirements of this measure are outside the control of the Project, the Project would be making improvements to intersections, bike lanes and pedestrian connections that will upgrade infrastructure that will benefit roadways, pedestrian and bicycle circulation systems, which will benefit transit efficiency.
TR8 - Ridesharing	Promote carpooling and vanpooling by providing funding to continue regional and local ridesharing programs, and support the expansion of carsharing programs. Provide incentive funding for pilot	**Supporting.** The proposed Project would implement trip reduction programs as part of the TDM programs that may include, but is not limited to, carpool and vanpool programs, tram service, and commuter shuttles.

[2] Bay Area Air Quality Management District, 2017. Spare the Air Cool the Climate: Final 2017 Clean Air Plan. Available at: https://www.baaqmd.gov/~/media/files/planning-and-research/plans/2017-clean-air-plan/attachment-a_-proposed-final-cap-vol-1-pdf.pdf

	projects to evaluate the feasibility and cost-effectiveness of innovative ridesharing and other last-mile solution trip reduction strategies. Encourage employers to promote ridesharing and carsharing to their employees.	
TR9 - Bicycle and Pedestrian Access and Facilities	Encourage planning for bicycle and pedestrian facilities in local plans, e.g., general and specific plans, fund bike lanes, routes, paths and bicycle parking facilities.	**Supporting.** The Project promotes walking, biking, and other sustainable transportation through approximately two miles of dedicated pedestrian walks, one mile of bicycle paths and lanes, and a two-acre elevated park that provides safe and convenient access to Willow Village while relieving traffic circulation on the road below. The elevated park would connect the Project Site to the adjacent Belle Haven neighborhood via an overpass at Willow Road with bicycle and pedestrian access from Hamilton Avenue Parcel North. The Project would create a bicycle- and pedestrian-friendly environment that enhances connectivity between the Project Site and surrounding areas. The Project would also include the addition of the Willow Tunnel, which would provide pedestrian and bicycle access to the Bay Trail via a separate path, reducing the use of surface streets. The Project provides a connection from existing pedestrian and bicycle paths to the Bay Trail. Safety lighting for vehicles and pedestrians would be provided. Passenger loading and building servicing would be designed to minimize conflicts between pedestrians and vehicles.
TR10 - Land Use Strategies	Support implementation of Plan Bay Area, maintain and disseminate information on current climate action plans and other local best practices, and collaborate with regional partners to identify innovative funding mechanisms to help local governments address air quality and climate change in their general plans.	**Supporting.** The Project consists of a dense, walkable, mixed-used development that balances jobs and housing while considering safety, traffic, retail amenities, and other community needs. The Project would be designed to meet LEED Gold standards or equivalent, and implements features that reduce air pollutant and greenhouse gas emissions, such as extensive TDM program, electrification of buildings, besides culinary, and purchase of 100% carbon-free electricity. More discussion on the Project's consistency with Plan Bay Area can be found in Appendix B.
TR13 - Parking Policies	Encourage parking policies and programs in local plans, e.g., reduce minimum parking requirements; limit the supply of off-street parking in transit-oriented areas; unbundle the price of parking spaces; support implementation of demand-based pricing (such as "SF Park") in high-traffic areas.	**Supporting.** The Project would limit parking below permitted City code maximum and would include shared parking. The Project also proposes a reduced parking ratio for senior housing. The price of parking spaces would be unbundled for market-rate housing.
TR14 - Cars and Light Trucks	Commit regional clean air funds toward qualifying vehicle purchases and infrastructure development. Partner with private, local, state and federal	**Supporting.** The Project would offer an advanced EV charging program to Campus District employees. Electric vehicle (EV) charging in the Campus District is free and valets move cars into chargers to maximize charging time.

	programs to promote the purchase and lease of battery-electric and plug-in hybrid electric vehicles.	The proposed Project would also install EV charging stations in the Residential/Shopping District and Town Square District.
TR22 - Construction, Freight and Farming Equipment	Provide incentives for the early deployment of electric, Tier 3 and 4 off-road engines used in construction, freight and farming equipment. Support field demonstrations of advanced technology for off-road engines and hybrid drive trains.	**Supporting**. The majority of the construction equipment used during the construction of the Project would have Tier 4 engines.
EN1 - Decarbonize Electricity Production	Engage with PG&E, municipal electric utilities and CCEs to maximize the amount of renewable energy contributing to the production of electricity within the Bay Area as well as electricity imported into the region. Work with local governments to implement local renewable energy programs. Engage with stakeholders including dairy farms, forest managers, water treatment facilities, food processors, public works agencies and waste management to increase use of biomass in electricity production.	**Supporting.** The Project would install solar photovoltaic that would be designed to produce approximately 3,900,000 kWh per year of renewable electricity. The Project would purchase 100% carbon free electricity for the Campus District and any non-carbon free power used in the Residential/Shopping and Town Square Districts would be offset by the solar produced onsite.
BL1 - Green Buildings	Collaborate with partners such as KyotoUSA to identify energy-related improvements and opportunities for onsite renewable energy systems in school districts; investigate funding strategies to implement upgrades. Identify barriers to effective local implementation of the CALGreen (Title 24) statewide building energy code; develop solutions to improve implementation/enforcement. Work with ABAG's BayREN program to make additional funding available for energy-related projects in the buildings sector. Engage with additional partners to target reducing emissions from specific types of buildings.	**Supporting**. This action is directed at the Air District. However, the Project incorporates the goals associated with this measure. The Project would comply with building energy code and would be designed to meet LEED Gold standards or equivalent.
BL2 - Decarbonize Buildings	Explore potential Air District rulemaking options regarding the sale of fossil fuel-based space and water heating systems for both residential and commercial use. Explore incentives for property owners to replace their furnace, water heater or natural-gas powered appliances with zero-carbon alternatives. Update Air District guidance documents to recommend that commercial and multi-family	**Supporting**. This action is directed at the Air District. However, the Project incorporates the goals associated with this measure. The Project would be entirely electrically powered with the exception of commercial culinary uses, which supports the decarbonization of buildings.

	developments install ground source heat pumps and solar hot water heaters.	
BL4 - Urban Heat Island Mitigation	Develop and urge adoption of a model ordinance for "cool parking" that promotes the use of cool surface treatments for new parking facilities, as well existing surface lots undergoing resurfacing. Develop and promote adoption of model building code requirements for new construction or re-roofing/roofing upgrades for commercial and residential multi-family housing. Collaborate with expert partners to perform outreach to cities and counties to make them aware of cool roofing and cool paving techniques, and of new tools available.	**Supporting**. The Project would include cool roofs and may include cool parking. The Project would demolish existing parking lots and would provide parks and vegetation lined roadways. Surface parking would largely be replaced by parking structures with solar ready rooftops.
NW2 - Urban Tree Planting	Develop or identify an existing model municipal tree planting ordinance and encourage local governments to adopt such an ordinance. Include tree planting recommendations the Air District's technical guidance, best practices for local plans and CEQA review.	**Supporting.** The Project would install approximately 700 new trees in the streets, parks and planned open spaces. Trees would be on average a 36" box or greater at the time of installation.
WA3 - Green Waste Diversion	Develop model policies to facilitate local adoption of ordinances and programs to reduce the amount of green waste going to landfills.	**Supporting**. The Project would implement a waste reduction strategy in the Campus District that has shown to divert over 80 percent of waste in existing campuses.
WA4 - Recycle and Waste Reduction	Develop or identify and promote model ordinances on community-wide zero waste goals and recycling of construction and demolition materials in commercial and public construction projects.	
WR2 - Support Water Conservation	Develop a list of best practices that reduce water consumption and increase on-site water recycling in new and existing buildings; incorporate into local planning guidance.	**Supporting**. The Project would be designed to meet LEED Gold standards or equivalent and would implement features that reduce water consumption. The Project would also utilize recycled water. The source of recycled water for Willow Village is West Bay Sanitary District's Bayfront Recycled Water Plant that is anticipated to generate recycled water to accommodate existing and future development within Menlo Park's Bayfront District. In the event that West Bay Sanitary District is unable to advance the Bayfront Recycled Water Plant, as an alternative the project proposes on-site recycled water facilities consisting of four plants; one serving the office district, one serving the town square district and two

		serving the residential/shopping district. Combined the four on-site plants would meet the peak non-potable water demands for the project.

The Project would meet community needs through planned local retail spaces, restaurants, a grocery store and pharmacy, as well as publicly accessible parks and planned open spaces. Construction phasing prioritizes amenities that serve the community, such as the grocery store and the park, which will serve to reduce VMT, particularly since the existing community is underserved with respect to grocery stores and pharmacies.

In addition, as discussed in the Transportation Impact Study, the TDM programs would meet City of Menlo Park Municipal Code requirements. The Project would also add new retail and a grocery store and pharmacy to an area that lacks these resources. The TDM programs would reduce traffic in the area, but also reduce emissions of criteria air pollutants and toxic air contaminants locally.

The Project plan includes these numerous design and operational measures to promote sustainability and environmental stewardship, which would act to reduce Project-related area and mobile source emissions. By implementing these measures while also considering community needs, the Project supports the goals of the Clean Air Plan and is consistent with applicable control measures from the plan. As discussed above, the Project includes many applicable control measures in its plan, as summarized in Table 1 above.

APPENDIX B
CONSISTENCY WITH GREENHOUSE GAS PLANS

CEQA ANALYSIS
CONFLICT WITH APPLICABLE PLANS, POLICIES OR REGULATIONS ADOPTED FOR THE PURPOSE OF REDUCING THE EMISSIONS OF GREENHOUSE GASES
WILLOW VILLAGE
MENLO PARK, CALIFORNIA

There are local, regional, and state policies, plans and regulations aimed at reducing emissions of greenhouse gases. The Project's consistency with the City of Menlo Park Climate Action Plan (CAP), along with SB 743, Plan Bay Area 2040, Plan Bay Area 2050, Advanced Clean Cars Initiative and the State's Zero-Emission Vehicles Mandate, and CARB's 2017 Scoping Plan Update is reviewed. Final Plan Bay Area 2050 was approved on October 21, 2021, but consistency with both Plan Bay Area 2040 and Plan Bay Area 2050 are presented to be conservative.

The City of Menlo Park CAP has been adopted for the purposes of reducing GHG emissions locally. Although not legislatively adopted, Executive Order S-03-05 establishes a long-term statewide goal to reduce GHG emissions to 80 percent below 1990 levels by 2050. SB 743 was passed to reduce greenhouse gas emissions and promote multi-modal transportation networks, providing clean, efficient access to destinations and improving public heath through active transportation. Plan Bay Area has been adopted to establish targets and strategies intended to meet the region's needs for housing at all income levels, while reducing GHGs associated with private passenger and light duty truck traffic. The Advanced Clean Cars Initiative and the State's Zero-Emission Vehicles Mandate were established to set a target of reaching 1.5 million ZEVs (meaning battery electric vehicles and fuel cell electric vehicles) and plug-in hybrid electric vehicles on California's roadways by 2025. CARB's 2017 Scoping Plan outlines the main strategies for California to achieve the legislated GHG emissions target for 2030 and "substantially advance toward our 2050 climate goals." It identifies the reductions needed by each GHG emissions sector (e.g., industry, transportation, electricity generation).

Consistency with City of Menlo Park Climate Action Plan

As discussed above, the City of Menlo Park adopted a CAP in 2009 to reduce municipal government and community GHG emissions. In July 2020, the City released a report[1] that updated the CAP with emissions for the years 2005 and 2017 and forecasted emissions to 2030. The 2030 Climate Action Plan provided a list of CAP projects intended to achieve a goal of "zero emissions by 2030". The report was amended in April 2021 to incorporate the scope of work for 2021 implementation. As such, the Project is evaluated for consistency with the 2030 Climate Action Plan Amended 2021, as shown in Table 1.

As shown in Table 3.5-6, the Project would not conflict with any of the applicable measures in the City's CAP. Further, because the Project would not result in GHG emissions that exceed the applicable thresholds, the Project would not impede achievement of the City's CAP GHG emissions reduction target. For the reasons described below, the Project does not conflict with the implementation of the CAP.

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[1] City of Menlo Park. 2020. 2030 Climate Action Plan; A 2030 Plan to Eliminate Carbon Emissions & Protect Our Community from Climate Change. June. Available at: https://www.menlopark.org/ArchiveCenter/ViewFile/Item/11486

Table 1. Consistency of Project with CAP Community Strategies		
Category	**Strategy**	**Project Consistency**
Energy	Explore policy/program options to convert 95% of existing buildings to all-electric by 2030	**Not applicable.** The Project is new construction and would not convert any existing buildings. The proposed Project would be entirely electrically powered with the exception of commercial culinary uses. The residential buildings would be entirely electrically powered.
	Eliminate the use of fossil fuels from municipal operations	**Not applicable.** The proposed Project is not a municipal project.
Transportation	Support setting citywide goal for increasing EVs and decreasing gasoline sales	**Consistent.** The proposed Project would offer an advanced EV charging program to Campus employees. EV charging in the Campus District is free and valets move cars into chargers to maximize charging time. The proposed Project would also install EV charging stations in the Residential/Shopping District.
	Expand access to EV charging for multifamily and commercial properties	**Consistent.** The proposed Project would install EV charging capabilities consistent with the City of Menlo Park Code, including residential and commercial areas on the main Project Site, expanding access to EV chargers.
	Reduce vehicle miles traveled (VMT) by 25% or an amount recommended by the Complete Streets Commission	**Consistent.** The proposed Project would implement TDM programs for the Campus District, Town Square District, and Residential/Shopping District. The Project's TDM programs may include, but are not limited to, the following measures: • Improve biking/walking network • Provide bicycle amenities • Improve public transit service • Car share program • Tram service • Commuter shuttles • Parking management • Emergency ride-home program • Carpool and vanpool programs • Commute assistance center • On-site housing The TDM programs would meet City of Menlo Park Municipal Code TDM requirements. The Project would also add new retail and a grocery store to an area that lacks these resources.
Water	Develop a climate adaptation plan to protect	**Not applicable.** This action is directed toward the City. However, the proposed Project is incorporating resiliency with respect to sea level rise and flooding into its civil plan. As part of the

	the community from sea level rise and flooding	design effort, building finished floor elevations will be proposed to meet City of Menlo Park code and to accommodate a future rise in sea levels: • Raise the building sites through grading activities to a minimum grade elevation of 13 ft NAVD, a minimum of 2 feet above the Base Flood Elevation of 11 ft NAVD. • Proposed buildings will have a minimum finished floor elevation of at least 14 ft NAVD88 and are set high enough such that it is likely site adaptations would not be necessary for even the highest estimates of sea level rise for the useful life of the project. • The entire project storm drain system is designed to drain to the City storm drain main in willow, which in turn drains to the Ravenswood Pump Station (operated by CalTrans) located northeast of the Project site along Bayfront Expressway. The storm drain system is therefore not hydraulically connected to the Bay and will not be impacted by sea level rise.

Consistency with SB 743

SB 743 eliminated vehicular congestion, traditionally expressed as Level of Service (LOS), as the operative metric for identifying transportation impacts, and replaced it with Vehicle Miles Traveled (VMT). The Project would not exceed the City's thresholds of significance for VMT, which are consistent with OPR's 2018 Technical Advisory on Evaluating Transportation Impacts in CEQA, which OPR published to address the changes from SB 743.[2] Therefore, the Project does not conflict with the implementation of SB 743.

Consistency with Plan Bay Area 2040 and Plan Bay Area 2050

Pursuant to California Senate Bill 375, the Association of Bay Area Governments (ABAG) and the Metropolitan Transportation Commission (MTC) adopted *Plan Bay Area 2050* to establish the region's long-term strategic plan focused on the interrelated elements of housing, the economy, transportation, and the environment. *Plan Bay Area 2050*'s core strategy is encouraging growth in existing communities along the existing transportation network, focusing new development in Priority Development Areas (PDAs) and Transit Priority Areas (TPAs) within urbanized centers where there is more public transit and other mobility options available to reduce driving by cars and light trucks. In addition to significant transit and roadway performance investments to encourage focused growth, *Plan Bay Area 2050* directs funding to neighborhood active transportation and complete streets projects, climate initiatives, lifeline transportation and access initiatives, pedestrian and bicycle safety programs, and PDA planning. The *Plan Bay Area 2050* report was recently approved in October 2021, before which *Plan Bay Area 2040* was the most recent final version. The Project is conservatively evaluated for consistency with *Plan Bay Area 2040* and *Plan Bay Area 2050*, as shown in Tables 2 and 3 below. For the reasons described below, the Project does not conflict with the implementation of *Plan Bay Area 2040* or *Plan Bay Area 2050*.

[2] Governor's Office of Planning and Research, State of California. 2018. Technical Advisory on Evaluating Transportation Impacts in CEQA. December. Available at: http://opr.ca.gov/docs/20190122-743_Technical_Advisory.pdf

Table 2. Consistency of Project with Plan Bay Area 2040		
Category	**Strategy**	**Project Consistency**
Climate Protection	Reduce per-capita CO_2 emissions	**Consistent**. The proposed Project would be entirely electrically powered with the exception of commercial culinary uses. The residential buildings would be entirely electrically powered. The proposed Project would offer an advanced EV charging program to Facebook employees. EV charging in the Campus District is free and valets move cars into chargers to maximize charging time. The proposed Project would also install EV charging stations in the Residential/Shopping District. The proposed Project would implement a TDM program for the entire project. The Project's TDM program may include, but is not limited to, the following measures: • Improve biking/walking network • Provide bicycle amenities • Improve public transit service • Car share program • Tram service • Commuter shuttles • Parking management • Emergency ride-home program • Carpool and vanpool programs • Commute assistance center • On-site housing
Adequate Housing	House the region's population	**Consistent**. The proposed Project would include up to 1,730 residential dwelling units.
Healthy and Safe Communities	Reduce adverse health impacts	**Consistent**. The proposed Project would not result in the exposure of future residents or nearby off-site sensitive receptors to adverse health effects exceeding BAAQMD thresholds for excess cancer risk, chronic HI, or $PM_{2.5}$ concentration. Furthermore, the Project would use Tier 4 construction equipment for the majority of Project construction activities, as specified in the mitigation measure, which reduces the health impact on the community. The Project's TDM and EV programs also reduce the health impact from mobile sources.
Open Space and Agricultural Preservation	Direct development within urban footprint	**Consistent**. The proposed Project would include a publicly accessible park, a dog park, an elevated park, and a town square to provide green space to the residents, employees, visitors, and surrounding neighborhood. The proposed Project is redevelopment of an underutilized site in the urban footprint.

Equitable Access	Decrease share of lower-income households' budgets spent on housing and transportation	**Consistent**. The proposed Project would include 308 units of affordable housing. Furthermore, the Project would bring amenities (e.g., local serving retail like a grocery store and pharmacy) to an existing neighborhood that does not have amenities, which would reduce transportation needs.
	Increase share of affordable housing	**Consistent**. The proposed Project would include 308 units of affordable housing.
	Do not increase share of households at risk of displacement	**Consistent**. The proposed Project would include the demolition of existing office, industrial, and warehouse buildings and construction of up to 1,730 new residential dwelling units. The Project would not result in displacement of existing housing.
Economic Vitality	Increase share of jobs accessible in congested conditions	**Consistent**. The proposed Project would collocate jobs and housing in a congested area.
	Increase jobs in middle-wage industries	**Consistent**. The proposed Project would add up to 200,000 square feet of retail in an area currently without amenities, and a hotel, increasing middle-wage jobs.
	Reduce per-capita delay on freight network	**Not applicable.** This action is not directly applicable to the proposed Project.
Transportation System Effectiveness	Increase non-auto mode share	**Consistent**. The proposed Project would develop housing units, retail and office space near existing residential, office, commercial, and light manufacturing uses, reducing the demand for travel by single occupancy vehicles. The proposed Project would also implement a TDM program that may include, but is not limited to, the following measures: • Improve biking/walking network • Provide bicycle amenities • Improve public transit service • Car share program • Tram service • Commuter shuttles • Parking management • Emergency ride-home program • Carpool and vanpool programs • Commute assistance center • On-site housing
	Reduce vehicle operating and maintenance costs due to pavement conditions	**Consistent.** The roads would be maintained consistent with municipal requirements.

	Reduce per-rider transit delay due to aged infrastructure	**Not applicable.** This action is not directly applicable to the proposed Project. The Project will be making improvements to intersections, bike lanes and pedestrian connections that will upgrade infrastructure that will benefit transit.

Table 3. Consistency of Project with Plan Bay Area 2050

Category		Strategy	Project Consistency
Housing Strategies	Protect and Preserve Affordable Housing	Further strengthen renter protections beyond state law	**Not applicable**. This action is not directly applicable to the proposed Project as this requires Municipal action.
		Preserve existing affordable housing	**Not applicable**. This action is not directly applicable to the proposed Project. The proposed Project would include the demolition of existing office, industrial, and warehouse buildings and construction of up to 1,730 new residential dwelling units. The Project would not result in displacement of existing affordable housing and would add additional affordable housing to the area.
	Spur Housing Production for Residents of All Income Levels	Allow a greater mix of housing densities and types in Growth Geographies	**Not applicable.** This action is not directly applicable to the proposed Project as it is not located in a Growth Geography; however, the proposed Project would develop housing units, retail, and office space near existing residential, office, commercial, and light manufacturing uses.
		Build adequate affordable housing to ensure homes for all	**Consistent**. The proposed Project would include 308 units of affordable housing.
		Integrate affordable housing into all major housing projects	**Consistent**. The proposed Project would include 308 units of affordable housing.
		Transform aging malls and office parks into neighborhoods	**Consistent**. The proposed Project would demolish aging office, industrial, and warehouse buildings and would include construction of up to 1,730 new residential dwelling units as part of a mix use neighborhood also including retail, hotel, and office uses.

	Create Inclusive Communities	Provide targeted mortgage, rental and small business assistance to Equity Priority Communities	**Not applicable**. This action is not directly applicable to the proposed Project as this requires Municipal action.
		Accelerate reuse of public and community-owned land for mixed-income housing	**Not applicable**. This action is not directly applicable to the proposed Project as it does not utilize any public or community-owned land.
Economic Strategies	Improve Economic Mobility	Implement a statewide universal basic income	**Not applicable**. This action is not directly applicable to the proposed Project as it requires statewide action.
		Expand job training and incubator programs	**Not applicable**. This action is not directly applicable to the proposed Project as this requires Municipal action.
		Invest in high-speed internet in underserved low-income communities	**Not applicable**. This action is not directly applicable to the proposed Project as this requires Municipal action.
	Shift the Location of Jobs	Allow greater commercial densities in Growth Geographies	**Not applicable**. This action is not directly applicable to the proposed Project; however, the proposed Project would add up to 200,000 square feet of retail in an area currently without amenities, and a hotel.
		Provide incentives to employers to shift jobs to housing-rich areas well served by transit	**Not applicable**. This action is not directly applicable to the proposed Project; however, the proposed Project would co-locate jobs and housing.
		Retain and invest in key industrial lands	**Not applicable**. This action is not directly applicable to the proposed Project which is not located on key industrial lands.
Transportation Strategies	Maintain and Optimize the Existing System	Restore, operate and maintain the existing system	**Not applicable**. This action is not directly applicable to the proposed Project. However, the Project would be making improvements to intersections, bike lanes and pedestrian connections that will upgrade infrastructure that will benefit roadways, pedestrian and bicycle circulation systems.
		Support community-led transportation enhancements in Equity Priority Communities.	**Not applicable.** This action is not directly applicable to the proposed Project. However, the Project would be making improvements to intersections, bike lanes and pedestrian connections that will enhance transportation in the community.

		Enable a seamless mobility experience	**Not applicable**. This action is not directly applicable to the proposed Project as it requires coordination among the regions existing transit agencies.
		Reform regional transit fare policy	**Not applicable**. This action is not directly applicable to the proposed Project as it requires coordination among the regions existing transit agencies.
		Implement per-mile tolling on congested freeways with transit alternatives	**Not applicable**. This action is not directly applicable to the proposed Project as it requires regional/Caltrans action.
		Improve interchanges and address highway bottlenecks	**Not applicable**. This action is not directly applicable to the proposed Project. The Project would be implementing TDM programs and making improvements to intersections, bike lanes and pedestrian connections that will improve transportation and decrease single-occupancy commuter vehicles.
		Advance other regional programs and local priorities	**Not applicable**. This action is not directly applicable to the proposed Project. The Project will be making improvements to local intersections, bike lanes and pedestrian connections, which help fulfill local transportation priorities.
	Create Healthy and Safe Streets	Build a Complete Streets network	**Consistent**. The proposed Project would enhance streets to promote walking, biking, and other micro-mobility by improving biking and walking networks and providing bicycle amenities.
		Advance regional Vision Zero policy through street design and reduced speeds	**Consistent.** The Project would comply with City of Menlo Park requirements in support of Vision Zero.
	Build a Next-Generation Transit Network	Enhance local transit frequency, capacity and reliability	**Not applicable.** This action is not directly applicable to the proposed Project; however, the proposed Project would include a private shuttle and tram system for the office uses.
		Expand and modernize the regional rail network	**Not applicable.** This action is not directly applicable to the proposed Project as this requires regional and state level action.

		Build an integrated regional express lanes and express bus network	**Not applicable.** This action is not directly applicable to the proposed Project as this requires regional and Caltrans action.
Environmental Strategies	Reduce Risks from Hazards	Adapt to sea level rise	**Not applicable.** This action is directed toward the City. However, the proposed Project is incorporating resiliency with respect to sea level rise and flooding into its civil plan. As part of the design effort, building finished floor elevations will be proposed to meet City of Menlo Park code and to accommodate a future rise in sea levels: • Raise the building sites through grading activities to a minimum grade elevation of 13 ft NAVD, a minimum of 2 feet above the Base Flood Elevation of 11 ft NAVD. • Proposed buildings will have a minimum finished floor elevation of at least 14 ft NAVD88 and are set high enough such that it is likely site adaptations would not be necessary for even the highest estimates of sea level rise for the useful life of the buildings. • • The entire project storm drain system is designed to drain to the City storm drain main in willow, which in turn drains to the Ravenswood Pump Station (operated by CalTrans) located northeast of the Project site along Bayfront Expressway. The storm drain system is not hydraulically connected to the Bay and will not be impacted by sea level rise.
		Provide means-based financial support to retrofit existing residential buildings	**Not applicable.** This action is not directly applicable to the proposed Project as it does not include retrofit of any existing buildings.
		Fund energy upgrades to enable carbon neutrality in all existing commercial and public buildings	**Not applicable.** The Project is new construction and would not convert any existing buildings; however, the proposed Project would be entirely electrically powered with the exception of commercial culinary uses, with a commitment to purchase 100% carbon free power, where

			possible. The Project also would replace old less efficient buildings with new efficient buildings.
	Expand Access to Parks and Open Space	Maintain urban growth boundaries	**Consistent**. The proposed Project would be constructed within an incorporated city on a site currently developed with urban uses.
		Protect and manage high-value conservation lands	**Not applicable.** This action is not directly applicable to the proposed Project as the Project would re-develop aging buildings and is not located in high-value conservation lands.
		Modernize and expand parks, trails and recreation facilities	**Consistent**. The proposed Project would include a publicly accessible park, a dog park, an elevated park, and a town square to provide green space to the residents, employees, visitors, and community members. Streetscapes would also be lined with vegetation. The Project would also provide a connection for the Bay Trail, which is across Bayfront Expressway.
	Reduce Climate Emissions	Expand commute trip reduction programs at major employers	**Consistent**. The proposed Project would implement trip reduction programs as part of the TDM programs that may include, but is not limited to, carpool and vanpool programs, tram service, and commuter shuttles.
		Expand clean vehicle initiatives	**Consistent.** The proposed Project would install EV charging capabilities consistent with the City of Menlo Park Code, expanding access to EV chargers.
		Expand transportation demand management initiatives	**Consistent**. The proposed Project would implement TDM programs that may include, but is not limited to, the following measures: • Improve biking/walking network • Provide bicycle amenities • Improve public transit service • Car share program • Tram service • Commuter shuttles • Parking management • Emergency ride-home program • Carpool and vanpool programs • Commute assistance center • On-site housing

Consistency with Advanced Clean Cars Initiative and the State's Zero-Emission Vehicles Mandate

The Project is consistent with State goals for zero-emission vehicles (ZEVs) as expressed in the Advanced Clean Cars Initiative and the ZEV goal established by Executive Order B-16-12, which sets a target of reaching 1.5 million ZEVs (meaning battery electric vehicles and fuel cell electric vehicles) and plug-in hybrid electric vehicles on California's roadways by 2025. The Project is also consistent with State goals established by Executive Order N-79-20, which sets a target that 100 percent of in-state sales of new passenger cars and trucks will be zero-emission by 2035.

The Project supports these ZEV goals by installing EV charging capabilities consistent with the City of Menlo Park Code. The Project would also have a comprehensive EV charging program in its Campus District, which would incentivize the further penetration of EVs into the fleet. EV chargers would also be installed with the Project in Mixed Use land uses, including residential areas, contributing to emissions reductions due to increased eVMT charged by the Project chargers. Therefore, the Project does not conflict with the implementation of this initiative.

Consistency with 2017 Scoping Plan Update

As directed by SB 32, CARB's 2017 Scoping Plan Update describes how the State plans to achieve the 2030 GHG emission reduction goal for California of 40 percent below 1990 levels by 2030. The 2017 Scoping Plan Update's strategy for meeting the State's 2030 GHG target incorporates the full range of legislative actions and state-developed plans that have relevance to the year 2030, including the LCFS, SB 350, the 2016 Mobile Source Strategy, the Sustainable Freight Action Plan, SB 1383, and the State's Cap-and-Trade Program (AB 398). The 2017 Scoping Plan Update does not regulate local land use projects. The 2017 Scoping Plan Update regulates the emissions associated with such projects (i.e., electricity, fuel, etc.), but not the projects themselves.

The Project would be consistent with key State plans and regulatory requirements referenced in the 2017 Scoping Plan Update designed to reduce statewide emissions. According to the 2017 Scoping Plan Update, reductions needed to achieve the 2030 target are expected to be achieved by increasing the RPS to 50 percent of the State's electricity by 2030, greatly increasing the fuel economy of vehicles and the number of zero-emission or hybrid vehicles, reducing the rate of growth in VMT, supporting high speed rail and other alternative transportation options, and increasing the use of high efficiency appliances, water heaters, and HVAC systems. The Project would support and would not impede implementation of these potential reduction strategies identified by CARB, and it would benefit from statewide and utility-provider efforts towards increasing the portion of electricity provided from renewable resources.[3] The Project would also benefit from statewide efforts towards increasing the fuel economy standards of vehicles and reducing the carbon content of fuels. The Project would utilize energy efficiency appliances and equipment, as required by Title 24, and it would provide EV charging stations to support the future use of electric and hybrid-electric vehicles by employees and visitors traveling to and from the site. The Project would install EV charging capabilities consistent with the City of Menlo Park Code. The electricity for EV charging at the Project would be supplied with 100% renewable and/or carbon free energy. For these reasons, the Project would be consistent with the objectives of the 2017 Scoping Plan Update.

[3] As discussed previously, with the passage of SB 100, California's RPS has been increased over what is prescribed by the 2017 Scoping Plan Update, requiring retail sellers and local publicly-owned electric utilities to procure eligible renewable electricity for 44 percent of retail sales by the end of 2024, 52 percent by the end of 2027, and 60 percent by the end of 2030; and requires that CARB should plan for 100 percent eligible renewable energy resources and zero-carbon resources by the end of 2045.

The Project will be much more efficient on average than existing development in the City and far more efficient than what the Scoping Plan assumes for new development throughout the state.

In addition, the Project is consistent with the 2017 Scoping Plan Update's guidance on mitigation measures: "To the degree a project relies on GHG mitigation measures, CARB recommends that lead agencies prioritize on-site design features that reduce emissions, especially from VMT, and direct investments in GHG reductions within the project's region that contribute potential air quality, health, and economic co-benefits locally. For example, on-site design features to be considered at the planning stage include land use and community design options that reduce VMT, promote transit-oriented development, promote street design policies that prioritize transit, biking, and walking, and increase low carbon mobility choices, including improved access to viable and affordable public transportation, and active transportation opportunities." (CARB, 2017). The Project's design reduces VMT because it provides a mix of land uses and includes pedestrian features to promote walking. The Project would include multiuse pathways to promote bicycle and pedestrian connectivity both within and through the main Project Site. The Project would also provide retail land uses in a retail desert, placing a grocery and pharmacy in close proximity to the adjacent Belle Haven neighborhood. In addition, the Project's TDM Plan include features to reduce VMT.

For the reasons described above, the Project does not conflict with the implementation of the 2017 Scoping Plan Update.

APPENDIX C
DATA RECEIVED

Instructions: Please fill in all cells highlighted in yellow. Please confirm or update cells highlighted in orange

Daily Trips Rates and VMT

Land Use	Fleet Type / Land Use	Daily Project Trip Rates (Weekday)				Daily Project VMT (Weekday) (including reductions for passby and diverted trips)				EV Percentage of Fleet[1]
		End of Phase 1a	End of Phase 1b	End of Phase 2	TOTAL (trips/1,000 sf)	End of Phase 1a	End of Phase 1b	End of Phase 2	TOTAL	
Faceook Office - Existing 2019	Cars (per 1,000 s.f.)				9.19				110,860	--
	Trucks (per 1,000 s.f.)				0.22				2,640	N/A
	Shuttles (per 1,000 s.f.)				0.66				21,088	0%
	On-Demand (per 1,000 s.f.)				0.66				7,919	38%
Facebook Office	Cars (per 1,000 s.f.)	9.16	10.05	10.05		53,996	178,766	178,766		--
	Trucks (per 1,000 s.f.)	0.23	0.23	0.23		1,344	4,056	4,056		N/A
	Shuttles (per 1,000 s.f.)	1.32	0.44	0.44		21,088	21,088	21,088		0%
	On-Demand (per 1,000 s.f.)	0.68	0.68	0.68		4,031	12,168	12,168		38%
Mixed Use	Residential (per d.u.)	4.35	4.35	4.35		30,841	43,077	71,524		EMFAC2021 Default
	Retail[3] (per 1,000 s.f.)	25.07	25.07	25.07		25,195	33,587	33,594		EMFAC2021 Default
	Park (per acre)	42.80	42.80	42.80		860	860	1,147		EMFAC2021 Default
	Hotel (per room)	--	6.69	6.69		--	14,814	14,814		EMFAC2021 Default

Notes:

1. Dashes indicate EV percentage will be calculated elsewhere based on charger usage data provided by Facebook.
   Trucks are marked N/A as none of the vehicle categories within the fleet are electric (as shown in the upper table).
   Assume EV percentage of On-Demand remains the same between existing conditions and full buildout. Existing EV Percentage previously provided by Facebook.
   The default EMFAC2021 electrification for San Mateo county will be assumed for vehicles operating in the Mixed Use district.
2. Estimate of trip rate reductions due to implementation of Transportation Demand Management measures.
3. All non-Facebook office space is classified as Retail.

Instructions

Please provide <u>background</u> traffic volumes for any roadway with over 10,000 vehicles per day in the vicinity of the project.

Roadway	Segment Limit		Vehicles Per Day
Chrysler Drive	Bayfront	Constitution	20,049
Chrysler Drive	Constitution	Jefferson	14,148
Chilco St	Mayfront	Consitution	15,522
O'Brien Dr	Willow	Kavanaugh	14,729
Ivy Drive	Chilco	Willow	12,813
Newbridge St	Chilco	Willow	13,662
Newbridge St	Willow	Ralmar	15,143
Newbridge St	Ralmar	University	12,250

<u>Notes:</u>

1. Segment limits are the cross streets on each link. Please add additional rows to include all necessary segment limits.

Instructions:

Please provide segment limits for each link location listed below, in addition to traffic volumes at full buildout and the fleet make-up of the traffic. Please add additional link locations and rows as needed.

Facebook Office

* HEX - net new volumes based on model assignment. Negative values are zeroed for a conservative approach

Link Location	Segment Limits[1]		Net New Traffic Volumes - Full Buildout (Vehicles/day)	Percentage of Total Traffic (total Facebook traffic under Project Conditions)			
				Cars	On-Demand	Shuttles	Trucks
Willow Road	Bayfront	Hamilton	101	88%	6%	4%	2.0%
Willow Road	Hamilton	Park	0				
Willow Road	Park	O'Brien	0				
Willow Road	O'Brien	Newbridge	658				
Bayfront Expressway	Marsh	Chilco	0				
Bayfront Expressway	Chilco	Willow	0				
Bayfront Expressway	Willow	University	596				
Bayfront Expressway	University	County lim	745				
University Avenue	Bayfront	Adams	385				
University Avenue	Adams	O'Brien	465				
University Avenue	O'Brien	Kavanaugh	3,693				
University Avenue	Kavanaugh	Bay	3,679				
O'Brien Drive	Willow	Kavanaugh	1,679				
O'Brien Drive	Kavanaugh	Adams	4,358				
O'Brien Drive	Adams	University	4,390				
Adams Dr	University	Adams Ct	75				
Adams Dr	Adams Ct	O'Brien	0				
Adams Ct			70				

Notes:

1. Segment limits are the cross streets on each link. Please add additional rows to include all necessary segment limits. If additional link locations (i.e. modeled roadways) are needed, please add them in.

Please provide the total traffic volumes entering the site, broken down by entrance. This should include cars, on-demand and trucks. The shuttles will be considered separately, based on the schedules as provided by Facebook.

Entrance	Net New Traffic Volumes - Full Buildout (Vehicles/day)
Willow/North	**28**
Willow/Hamilton	**-541**
Willow/Park	**-1,043**
O'Brien/Park	**7,914**
Adams Court	**179**

Instructions:

Please provide segment limits for each link location listed below, in addition to traffic volumes at full buildout and the fleet make-up of the traffic. Please add additional link locations and rows as needed.

Mixed Use

Link Location	Segment Limits[1]		Total Traffic Volumes - Full Buildout (Vehicles/day)
Willow Road	Bayfront	Hamilton	2,976
Willow Road	Hamilton	Park	0
Willow Road	Park	O'Brien	6,362
Willow Road	O'Brien	Newbridge	6,875
Bayfront Expressway	Marsh	Chilco	1,284
Bayfront Expressway	Chilco	Willow	1,566
Bayfront Expressway	Willow	University	1,557
Bayfront Expressway	University	County limit	1,536
University Avenue	Bayfront	Adams	309
University Avenue	Adams	O'Brien	516
University Avenue	O'Brien	Kavanaugh	1,707
University Avenue	Kavanaugh	Bay	1,737
O'Brien Drive	Willow	Kavanaugh	991
O'Brien Drive	Kavanaugh	Adams	2,398
O'Brien Drive	Adams	University	2,325
Adams Dr	University	Adams Ct	8
Adams Dr	Adams Ct	O'Brien	80
Adams Ct			87

Notes:

1. Segment limits are the cross streets on each link. Please add additional rows to include all necessary segment limits. If additional link locations (i.e. modeled roadways) are needed, please add them in.

Please provide the total traffic volumes entering the site, broken down by entrance.

Entrance	Net New Traffic Volumes - Full Buildout (Vehicles/day)
Willow/North	**0**
Willow/Hamilton	**1,720**
Willow/Park	**8,691**
O'Brien/Park	**4,592**
Adams Court	**23**

SIGNATURE DEVELOPMENT GROUP

MEMORANDUM

To: Kyle Perata, City of Menlo Park

From: Faye Brandin, Signature Development Group

Subject: Emergency Backup Generator Memorandum

Date: October 20, 2020 (REVISED December 21, 2021, revisions in red)

Dear Kyle:

This is a memorandum following up the email you sent on July 24th, requesting an update to previously submitted documents on June 5th.

Staff comment:

On June 5th you provided two generator supplemental forms that are slightly different. Can you take a look and let me know why two different forms were submitted? Is one of the forms for the grocery store generator and one for the Office Campus generators?

In addition to the forms, the submittal also included a narrative response that included the detailed specifications for two different generators. I also attached that document for reference.

Would you please review the attached documents and provide me with clarification on the number of generators, general size/specs for the generators, and a site plan showing the anticipated locations of the generators.

In addition to the generator supplemental form, the City also requires submittal of its hazardous materials information form (HMIF), and a chemical inventory (inventory would identify the approximate amount of diesel fuel for each generator) for review of applications involving hazardous materials.

Response:

The information has been updated to include a total of twelve emergency backup generators across Willow Village, four in the Campus District, one in the Town Square District, six for the Residential/Shopping District, and one at the Willow Hamilton North Parcel.

The following items are provided are part of this response:

- Site Plan with anticipated locations of the emergency backup generators (updated)
- Campus District emergency backup generator supplements with the following:
    - Two emergency backup generators to service Meeting, Collaboration, and Conference Space, located inside the north garage, sizes: 103”(W)x201”(L)x119”(H) each;
    - Two emergency backup generators servicing Office Buildings 1, 2, 3, 4, 5, and 6, sizes: 110”(W)x270”(L)x164”(H) each;

- Town Square District: one emergency backup generator to service the Hotel, located inside the basement level of the hotel, size: 77”(W)x167”(L)x78”(H).
- For the Residential/Shopping District, refer to the Preliminary Mixed-Use Emergency Backup Generator Summary and Generator Supplements:
    - Each of the six residential/mixed-use buildings will have their own emergency backup generator
    - Sizes included in the summary from PAE Engineers
- Cut sheet for one generator at the Willow Hamilton North Parcel.

If hazardous materials are associated with emergency backup generator use, we propose submitting the hazardous materials form (HMIF) at the time we submit permits to commence construction on all buildings, but prior to any hazardous materials incidental to all uses, being stored and used on site.

Please do not hesitate to contact me with any questions. I can be reached at (510) 862-5629.

Sincerely,

Faye Brandin

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APPLICATIONS INVOLVING HAZARDOUS MATERIALS – GENERATOR SUPPLEMENT

The following information is required for hazardous materials applications that include generators.

GENERATOR PURPOSE (for example, whether it is an emergency generator dedicated to life safety egress lighting and other life safety devices, or a standby generator to allow continued operations in the event of a power outage)

Generator(s) will be used for life safety egress lighting, accessible egress elevator loads and other misc. standby loads.

FUEL TANK SIZE (in gallons) **AND FUEL TYPE** Estimated Diesel tank capacity is 4,000 Gallons	**NOISE RATING** 85 dBA
SIZE (output in both kW (kilowatt) and hp (horsepower) measurements) Estimated generator size (2) @ 750kW	**ENCLOSURE COLOR** Generators located interior of parking garage
ROUTE FOR FUELING HOSE ACCESS Remote fuel station located on exterior of the building	**PARKING LOCATION OF FUELING TRUCK** Exterior, drive up to remote fill station
FREQUENCY OF REFUELING Two times per year	**HOURS OF SERVICE ON A FULL TANK** 24 hours at 100% generator capacity

PROPOSED TESTING SCHEDULE (including frequency, days of week, and time of day)

Monthly, Sunday AM

ALARMS AND/OR AUTOMATIC SHUTOFFS (for leaks during use and/or spills/over-filling during fueling, if applicable)

Double-wall fuel tank with leak detection and remote fuel fill station with automatic shut off and alarms

OTHER APPLICATION SUBMITTAL REQUIREMENTS (please attach)

- Section showing the height of the pad, the isolation base (if there is one), the height of the generator with the appropriate belly (fuel storage tank) and exhaust stack
- Status of required Bay Area Air Qualify Management District (BAAQMD) permit, including confirmation of parental notification for any proposals within 1,000 feet of a school

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APPLICATIONS INVOLVING HAZARDOUS MATERIALS – GENERATOR SUPPLEMENT

The following information is required for hazardous materials applications that include generators.

GENERATOR PURPOSE (for example, whether it is an emergency generator dedicated to life safety egress lighting and other life safety devices, or a standby generator to allow continued operations in the event of a power outage)

Generator(s) will be used for life safety egress lighting, accessible egress elevator loads and other misc. standby loads.

FUEL TANK SIZE (in gallons) **AND FUEL TYPE**

Estimated Diesel tank size is 3,200 gallons.

NOISE RATING

Internal acoustical dampening to 75db at 23'

SIZE (output in both kW (kilowatt) and hp (horsepower) measurements)

Estimated generator size (2) @ 1750kW; 2900hp

ENCLOSURE COLOR

Generators located interior of parking garage

ROUTE FOR FUELING HOSE ACCESS

Remote fuel fill station located on exterior of buildling

PARKING LOCATION OF FUELING TRUCK

Exterior, drive up to remote fuel fill station

FREQUENCY OF REFUELING

two times per year

HOURS OF SERVICE ON A FULL TANK

8 hours at 100% generator capacity

PROPOSED TESTING SCHEDULE (including frequency, days of week, and time of day)

Monthly, Sunday AM

ALARMS AND/OR AUTOMATIC SHUTOFFS (for leaks during use and/or spills/over-filling during fueling, if applicable)

Double-wall fuel tank with leak detection and remote fuel fill station with automatic shut off and alarms

OTHER APPLICATION SUBMITTAL REQUIREMENTS (please attach)

- Section showing the height of the pad, the isolation base (if there is one), the height of the generator with the appropriate belly (fuel storage tank) and exhaust stack
- Status of required Bay Area Air Qualify Management District (BAAQMD) permit, including confirmation of parental notification for any proposals within 1,000 feet of a school

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APPLICATIONS INVOLVING HAZARDOUS MATERIALS – GENERATOR SUPPLEMENT

The following information is required for hazardous materials applications that include generators.

GENERATOR PURPOSE (for example, whether it is an emergency generator dedicated to life safety egress lighting and other life safety devices, or a standby generator to allow continued operations in the event of a power outage)

Generator(s) will be used for life safety egress lighting, accessible egress elevator loads and other misc. standby loads.

FUEL TANK SIZE (in gallons) **AND FUEL TYPE**

Estimated Diesel tank size is 1,350 gallons.

NOISE RATING

Internal acoustical dampening to 75db at 23'

SIZE (output in both kW (kilowatt) and hp (horsepower) measurements)

Estimated generator size (1) @ 600kW, 900hp

ENCLOSURE COLOR

Generators located interior of parking garage basement level

ROUTE FOR FUELING HOSE ACCESS

Remote fuel fill station located on exterior of buildling

PARKING LOCATION OF FUELING TRUCK

Exterior, drive up to remote fuel fill station

FREQUENCY OF REFUELING

two times per year

HOURS OF SERVICE ON A FULL TANK

24 hours at 100% generator capacity

PROPOSED TESTING SCHEDULE (including frequency, days of week, and time of day)

Monthly, Sunday AM

ALARMS AND/OR AUTOMATIC SHUTOFFS (for leaks during use and/or spills/over-filling during fueling, if applicable)

Double-wall fuel tank with leak detection and remote fuel fill station with automatic shut off and alarms

OTHER APPLICATION SUBMITTAL REQUIREMENTS (please attach)

- Section showing the height of the pad, the isolation base (if there is one), the height of the generator with the appropriate belly (fuel storage tank) and exhaust stack
- Status of required Bay Area Air Qualify Management District (BAAQMD) permit, including confirmation of parental notification for any proposals within 1,000 feet of a school

Memo

Date:	September 23, 2020
Project:	Willow Village Mixed-Use Development
Project Number:	18-1489
To:	Faye Brandin (SDG)
From:	Scott Bevan, PE
Subject:	Mixed-Use Generator Summary (Preliminary)
Distribution:	PAE Team

The purpose of this memo is to provide preliminary on-site emergency power system description and sizing for the mixed-use buildings of the Willow Village Mixed-Use District in Menlo Park, CA.

EMERGENCY POWER SYSTEM SUMMARY

Based on preliminary information, PAE assumes that each mixed-use building will require certain loads to be backed up by generator power due to building codes, operational requirements and owner preference. A dedicated standby generator power system will be provided at each mixed-use building.

Specific loads and tenant requirements are unknown at this time, but it is assumed each generator system will include capacity for (1) fire pump, (1-2) elevator(s), and a provision for non-emergency backup power to Optional Standby tenant loads as determined by tenant. The table below summarizes the load types assumed to require generator backup.

Table 1: Generator Load Types

Classification	System Description	Notes
Life Safety / Emergency (EM)	Emergency Lighting	
	Fire Alarm Panels	
	Fire Pump	Assumed to be required for all buildings.
Legally Required Standby (LRS)	Elevator(s)	All buildings assumed to be five stories or greater.
Optional Standby (OS)	Optional Standby Provision	
	Grocery Tenant (RS2 only)	

Fire pumps are required to have a reliable source of power per CEC 695.3 and NFPA 20. The determination of whether the PG&E service is a reliable source of power is an issue for the AHJ. If the service is deemed to be unreliable, then an alternate source is required, and typically this is a standby diesel generator. Given all the PG&E issues lately, PAE currently assumes that if fire pump is needed at a building, then a generator will be required.

Each standby generator is anticipated to be diesel-engine driven with integral base fuel tank, located within a dedicated indoor equipment room or within an exterior custom acoustic enclosure, constructed in compliance with NFPA 110 requirements. The desired run-time of the generator is unknown at this time but can be approximated to be 8 hours or less.

The generator equipment will be provided with custom acoustic enclosure and/or treatment systems to maintain nighttime and daytime acoustic thresholds at the property line as determined by City of Menlo Park zoning and noise ordinances.

The generator system will operate during utility power interruption in order to maintain critical building operation, or on a monthly basis for testing purposes. The generator system will be selected to meet Tier 2 emission standards and have engine exhaust to the exterior meeting all local city ordinance and code requirements.

Refer to the attached standby generator equipment cutsheets for information on fuel tank volume, acoustic enclosure dimensions, sound data, and weights. These cutsheets are meant to be representative of this equipment. Actual manufacturer equipment shown, and specific equipment attributes are used for preliminary coordination purposes only.

EMERGENCY POWER SYSTEM LOAD SUMMARY

The preliminary generator load summary and recommended generator sizes are shown in the table below. Refer to the appendix for more information. These loads will be refined as the design progresses.

Table 2: Generator Load Summary

BUILDING ID	GENERATOR LOAD (KW)	RECOMMENDED GENERATOR SIZE (KW)
RS2	741	1,000
RS3	571	750
RS4	407	500
RS5	361	500
RS6	199	250
RS7	125	150

End of memo.

Appendix

Facebook Willow Village Generator Load Summary							
	Area (SF)	**Load (W/SF)**	**Quantity**	**Unit Load (kW)**	**Total Load**	**Generator Branch**	**Notes**
Mixed Use RS2							
Emergency Lighting	631,657	0.25			158	EM	
Fire Alarm Panels			1	15	15	EM	
Fire Pump			1	150	150	EM	150 HP
Elevators			2	34	68	LRS	30 HP
Optional Standby Provision			1	150	150	OPT	
Grocery Provision			1	200	200	OPT	
				Sub-Total	**741**		
Mixed Use RS3							
Emergency Lighting	753,901	0.25			188	EM	
Fire Alarm Panels			1	15	15	EM	
Fire Pump			1	150	150	EM	150 HP
Elevators			2	34	68	LRS	30 HP
Optional Standby Provision			1	150	150	OPT	
				Sub-Total	**571**		
Mixed Use RS4							
Emergency Lighting	499,573	0.25			125	EM	
Fire Alarm Panels			1	10	10	EM	
Fire Pump			1	104	104	EM	100 HP
Elevators			2	34	68	LRS	30 HP
Optional Standby Provision			1	100	100	OPT	
				Sub-Total	**407**		
Mixed Use RS5							
Emergency Lighting	316,257	0.25			79	EM	
Fire Alarm Panels			1	10	10	EM	
Fire Pump			1	104	104	EM	100 HP
Elevators			2	34	68	LRS	30 HP
Optional Standby Provision			1	100	100	OPT	
				Sub-Total	**361**		
Mixed Use RS6							
Emergency Lighting	225,800	0.25			56	EM	
Fire Alarm Panels			1	5	5	EM	
Fire Pump			1	54	54	EM	50 HP
Elevators			1	34	34	LRS	30 HP
Optional Standby Provision			1	50	50	OPT	
				Sub-Total	**199**		
Mixed Use RS7							
Emergency Lighting	86,600	0.25			22	EM	
Fire Alarm Panels			1	5	5	EM	
Fire Pump			1	34	34	EM	30 HP
Elevators			1	34	34	LRS	30 HP
Optional Standby Provision			1	30	30	OPT	
				Sub-Total	**125**		

BUILDING ID: RS2

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APPLICATIONS INVOLVING HAZARDOUS MATERIALS – GENERATOR SUPPLEMENT

The following information is required for hazardous materials applications that include generators.

GENERATOR PURPOSE (for example, whether it is an emergency generator dedicated to life safety egress lighting and other life safety devices, or a standby generator to allow continued operations in the event of a power outage)

Generator is intended to provide backup power to Emergency, Legally Required and Optional Standby loads to support continued facility operations in the event of a utility power outage.

FUEL TANK SIZE (in gallons) **AND FUEL TYPE** Fuel tank size: 660 gallons (approx) Fuel type: diesel	**NOISE RATING** 75.3db(A) @ 7meters
SIZE (output in both kW (kilowatt) and hp (horsepower) measurements) Power output: 1000 kW (approx) Engine output: 1490 hp	**ENCLOSURE COLOR** Green or gray
ROUTE FOR FUELING HOSE ACCESS 75ft max distance, direct from fueling truck to generator fuel tank	**PARKING LOCATION OF FUELING TRUCK** Building exterior at drivable surface
FREQUENCY OF REFUELING 2 times / year	**HOURS OF SERVICE ON A FULL TANK** 9 hours at generator fully rated load

PROPOSED TESTING SCHEDULE (including frequency, days of week, and time of day)

Monthly, Sunday, AM

ALARMS AND/OR AUTOMATIC SHUTOFFS (for leaks during use and/or spills/over-filling during fueling, if applicable)

Fuel system alarms and/or shutdowns: overfill, low fuel, fuel-in-rupture basin alarm.
Engine alarms and/or shutdowns: overspeed, fail start, low oil pressure, high coolant temp, etc.

OTHER APPLICATION SUBMITTAL REQUIREMENTS (please attach)

- Section showing the height of the pad, the isolation base (if there is one), the height of the generator with the appropriate belly (fuel storage tank) and exhaust stack
- Status of required Bay Area Air Qualify Management District (BAAQMD) permit, including confirmation of parental notification for any proposals within 1,000 feet of a school

BUILDING ID: RS3

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APPLICATIONS INVOLVING HAZARDOUS MATERIALS – GENERATOR SUPPLEMENT

The following information is required for hazardous materials applications that include generators.

GENERATOR PURPOSE (for example, whether it is an emergency generator dedicated to life safety egress lighting and other life safety devices, or a standby generator to allow continued operations in the event of a power outage)

Generator is intended to provide backup power to Emergency, Legally Required and Optional Standby loads to support continued facility operations in the event of a utility power outage.

FUEL TANK SIZE (in gallons) **AND FUEL TYPE** Fuel tank size: 660 gallons (approx) Fuel type: diesel	**NOISE RATING** 75.3db(A) @ 7meters
SIZE (output in both kW (kilowatt) and hp (horsepower) measurements) Power output: 750 kW (approx) Engine output: 1220 hp	**ENCLOSURE COLOR** Green or gray
ROUTE FOR FUELING HOSE ACCESS 75ft max distance, direct from fueling truck to generator fuel tank	**PARKING LOCATION OF FUELING TRUCK** Building exterior at drivable surface
FREQUENCY OF REFUELING 2 times / year	**HOURS OF SERVICE ON A FULL TANK** 13 hours at generator fully rated load

PROPOSED TESTING SCHEDULE (including frequency, days of week, and time of day)

Monthly, Sunday, AM

ALARMS AND/OR AUTOMATIC SHUTOFFS (for leaks during use and/or spills/over-filling during fueling, if applicable)

Fuel system alarms and/or shutdowns: overfill, low fuel, fuel-in-rupture basin alarm.
Engine alarms and/or shutdowns: overspeed, fail start, low oil pressure, high coolant temp, etc.

OTHER APPLICATION SUBMITTAL REQUIREMENTS (please attach)

- Section showing the height of the pad, the isolation base (if there is one), the height of the generator with the appropriate belly (fuel storage tank) and exhaust stack
- Status of required Bay Area Air Qualify Management District (BAAQMD) permit, including confirmation of parental notification for any proposals within 1,000 feet of a school

BUILDING ID: RS4

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APPLICATIONS INVOLVING HAZARDOUS MATERIALS – GENERATOR SUPPLEMENT

The following information is required for hazardous materials applications that include generators.

GENERATOR PURPOSE (for example, whether it is an emergency generator dedicated to life safety egress lighting and other life safety devices, or a standby generator to allow continued operations in the event of a power outage)

Generator is intended to provide backup power to Emergency, Legally Required and Optional Standby loads to support continued facility operations in the event of a utility power outage.

FUEL TANK SIZE (in gallons) **AND FUEL TYPE** Fuel tank size: 270 gallons (approx) Fuel type: diesel	**NOISE RATING** 73db(A) @ 7meters
SIZE (output in both kW (kilowatt) and hp (horsepower) measurements) Power output: 500 kW (approx) Engine output: 755 hp	**ENCLOSURE COLOR** Green or gray
ROUTE FOR FUELING HOSE ACCESS 75ft max distance, direct from fueling truck to generator fuel tank	**PARKING LOCATION OF FUELING TRUCK** Building exterior at drivable surface
FREQUENCY OF REFUELING 2 times / year	**HOURS OF SERVICE ON A FULL TANK** 8 hours at generator fully rated load

PROPOSED TESTING SCHEDULE (including frequency, days of week, and time of day)

Monthly, Sunday, AM

ALARMS AND/OR AUTOMATIC SHUTOFFS (for leaks during use and/or spills/over-filling during fueling, if applicable)

Fuel system alarms and/or shutdowns: overfill, low fuel, fuel-in-rupture basin alarm.
Engine alarms and/or shutdowns: overspeed, fail start, low oil pressure, high coolant temp, etc.

OTHER APPLICATION SUBMITTAL REQUIREMENTS (please attach)

- Section showing the height of the pad, the isolation base (if there is one), the height of the generator with the appropriate belly (fuel storage tank) and exhaust stack
- Status of required Bay Area Air Qualify Management District (BAAQMD) permit, including confirmation of parental notification for any proposals within 1,000 feet of a school

BUILDING ID: RS5

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APPLICATIONS INVOLVING HAZARDOUS MATERIALS – GENERATOR SUPPLEMENT

The following information is required for hazardous materials applications that include generators.

GENERATOR PURPOSE (for example, whether it is an emergency generator dedicated to life safety egress lighting and other life safety devices, or a standby generator to allow continued operations in the event of a power outage)

Generator is intended to provide backup power to Emergency, Legally Required and Optional Standby loads to support continued facility operations in the event of a utility power outage.

FUEL TANK SIZE (in gallons) **AND FUEL TYPE** Fuel tank size: 270 gallons (approx) Fuel type: diesel	**NOISE RATING** 73db(A) @ 7meters
SIZE (output in both kW (kilowatt) and hp (horsepower) measurements) Power output: 500 kW (approx) Engine output: 755 hp	**ENCLOSURE COLOR** Green or gray
ROUTE FOR FUELING HOSE ACCESS 75ft max distance, direct from fueling truck to generator fuel tank	**PARKING LOCATION OF FUELING TRUCK** Building exterior at drivable surface
FREQUENCY OF REFUELING 2 times / year	**HOURS OF SERVICE ON A FULL TANK** 8 hours at generator fully rated load

PROPOSED TESTING SCHEDULE (including frequency, days of week, and time of day)

Monthly, Sunday, AM

ALARMS AND/OR AUTOMATIC SHUTOFFS (for leaks during use and/or spills/over-filling during fueling, if applicable)

Fuel system alarms and/or shutdowns: overfill, low fuel, fuel-in-rupture basin alarm.
Engine alarms and/or shutdowns: overspeed, fail start, low oil pressure, high coolant temp, etc.

OTHER APPLICATION SUBMITTAL REQUIREMENTS (please attach)

- Section showing the height of the pad, the isolation base (if there is one), the height of the generator with the appropriate belly (fuel storage tank) and exhaust stack
- Status of required Bay Area Air Qualify Management District (BAAQMD) permit, including confirmation of parental notification for any proposals within 1,000 feet of a school

BUILDING ID: RS6

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APPLICATIONS INVOLVING HAZARDOUS MATERIALS – GENERATOR SUPPLEMENT

The following information is required for hazardous materials applications that include generators.

GENERATOR PURPOSE (for example, whether it is an emergency generator dedicated to life safety egress lighting and other life safety devices, or a standby generator to allow continued operations in the event of a power outage)

Generator is intended to provide backup power to Emergency, Legally Required and Optional Standby loads to support continued facility operations in the event of a utility power outage.

FUEL TANK SIZE (in gallons) **AND FUEL TYPE** Fuel tank size: 270 gallons (approx) Fuel type: diesel	**NOISE RATING** 72db(A) @ 7meters
SIZE (output in both kW (kilowatt) and hp (horsepower) measurements) Power output: 250 kW (approx) Engine output: 464 hp	**ENCLOSURE COLOR** Green or gray
ROUTE FOR FUELING HOSE ACCESS 75ft max distance, direct from fueling truck to generator fuel tank	**PARKING LOCATION OF FUELING TRUCK** Building exterior at drivable surface
FREQUENCY OF REFUELING 2 times / year	**HOURS OF SERVICE ON A FULL TANK** 14 hours at generator fully rated load

PROPOSED TESTING SCHEDULE (including frequency, days of week, and time of day)

Monthly, Sunday, AM

ALARMS AND/OR AUTOMATIC SHUTOFFS (for leaks during use and/or spills/over-filling during fueling, if applicable)

Fuel system alarms and/or shutdowns: overfill, low fuel, fuel-in-rupture basin alarm.
Engine alarms and/or shutdowns: overspeed, fail start, low oil pressure, high coolant temp, etc.

OTHER APPLICATION SUBMITTAL REQUIREMENTS (please attach)

- Section showing the height of the pad, the isolation base (if there is one), the height of the generator with the appropriate belly (fuel storage tank) and exhaust stack
- Status of required Bay Area Air Qualify Management District (BAAQMD) permit, including confirmation of parental notification for any proposals within 1,000 feet of a school

BUILDING ID: RS7

COMMUNITY DEVELOPMENT DEPARTMENT
PLANNING DIVISION
701 Laurel Street
Menlo Park, CA 94025
phone: (650) 330-6702
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APPLICATIONS INVOLVING HAZARDOUS MATERIALS – GENERATOR SUPPLEMENT

The following information is required for hazardous materials applications that include generators.

GENERATOR PURPOSE (for example, whether it is an emergency generator dedicated to life safety egress lighting and other life safety devices, or a standby generator to allow continued operations in the event of a power outage)

Generator is intended to provide backup power to Emergency, Legally Required and Optional Standby loads to support continued facility operations in the event of a utility power outage.

FUEL TANK SIZE (in gallons) **AND FUEL TYPE** Fuel tank size: 270 gallons (approx) Fuel type: diesel	**NOISE RATING** 72db(A) @ 7meters
SIZE (output in both kW (kilowatt) and hp (horsepower) measurements) Power output: 150 kW (approx) Engine output: 324 hp	**ENCLOSURE COLOR** Green or gray
ROUTE FOR FUELING HOSE ACCESS 75ft max distance, direct from fueling truck to generator fuel tank	**PARKING LOCATION OF FUELING TRUCK** Building exterior at drivable surface
FREQUENCY OF REFUELING 2 times / year	**HOURS OF SERVICE ON A FULL TANK** 24 hours at generator fully rated load

PROPOSED TESTING SCHEDULE (including frequency, days of week, and time of day)

Monthly, Sunday, AM

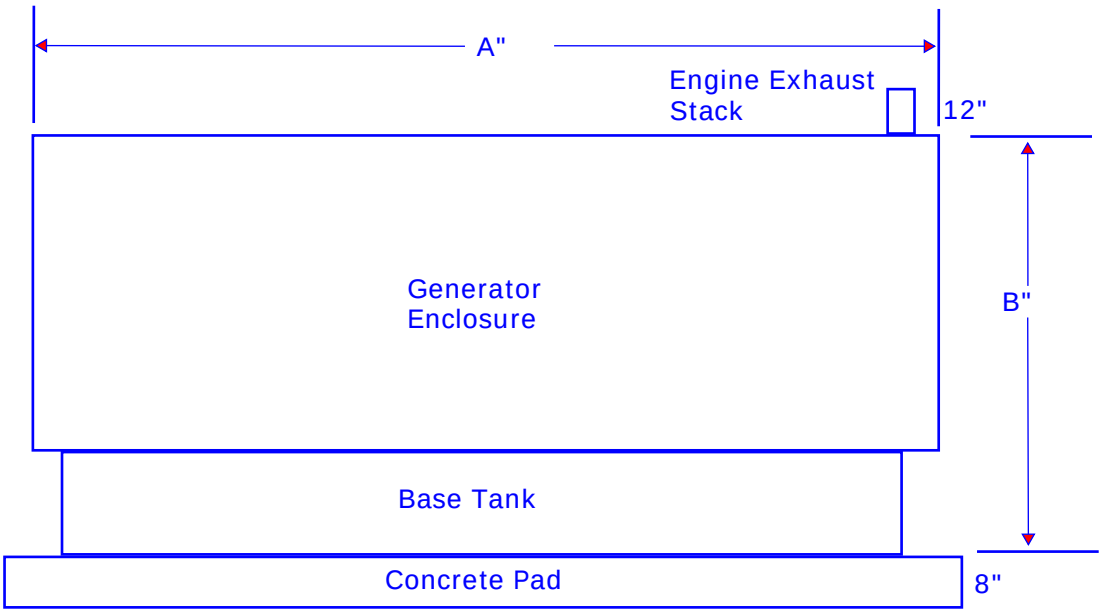
ALARMS AND/OR AUTOMATIC SHUTOFFS (for leaks during use and/or spills/over-filling during fueling, if applicable)

Fuel system alarms and/or shutdowns: overfill, low fuel, fuel-in-rupture basin alarm.
Engine alarms and/or shutdowns: overspeed, fail start, low oil pressure, high coolant temp, etc.

OTHER APPLICATION SUBMITTAL REQUIREMENTS (please attach)

- Section showing the height of the pad, the isolation base (if there is one), the height of the generator with the appropriate belly (fuel storage tank) and exhaust stack
- Status of required Bay Area Air Qualify Management District (BAAQMD) permit, including confirmation of parental notification for any proposals within 1,000 feet of a school

GENERATOR SIZE (kW)	DIMENSION 'A' (")	DIMENSION 'B' (")
1000	315	137
750	315	137
500	222	106
250	222	106
150	180	93



Section
(NTS)

1000KW GENERATOR

Specification sheet

Diesel generator set QST30 series engine

680 kW - 1000 kW 60 Hz

Description

Cummins® commercial generator sets are fully integrated power generation systems providing optimum performance, reliability and versatility for stationary Standby and Prime power applications.

Features

Cummins heavy-duty engine - Rugged 4-cycle, industrial diesel delivers reliable power, low emissions and fast response to load changes.

Alternator - Several alternator sizes offer selectable motor starting capability with low reactance 2/3 pitch windings, low waveform distortion with non-linear loads and fault clearing short-circuit capability.

Permanent Magnet Generator (PMG) - Offers enhanced motor starting and fault clearing short circuit capability.

Circuit breakers - Option for manually-and/or electrically-operated circuit breakers.

Control system - The PowerCommand® electronic control is standard equipment and provides total generator set system integration including automatic remote starting/stopping, precise frequency and voltage regulation, alarm and status message display, AmpSentry™ protection, output metering, auto-shutdown at fault detection and NFPA 110 Level 1 compliance.

Masterless Paralleling - An optional electrically operated circuit breaker can be added for a simple masterless paralleling solution.

Cooling system - Standard integral set-mounted radiator system, designed and tested for rated ambient temperatures, simplifies facility design requirements for rejected heat.

NFPA - The generator set accepts full rated load in a single step in accordance with NFPA 110 for Level 1 systems.

Warranty and service - Backed by a comprehensive warranty and worldwide distributor network.

	Standby rating	Prime rating	Continuous rating	Data sheets
Model	60 Hz kW (kVA)	60 Hz kW (kVA)	60 Hz kW (kVA)	60 Hz
DQFAA	750 (938)	680 (850)		D-3329
DQFAB	800 (1000)	725 (907)		D-3330
DQFAC	900 (1125)	818 (1023)		D-3331
DQFAD	1000 (1250)	900 (1125)		D-3332

Generator set specifications

Governor regulation class	ISO 8528 Part 1 Class G3
Voltage regulation, no load to full load	± 0.5%
Random voltage variation	± 0.5%
Frequency regulation	Isochronous
Random frequency variation	± 0.25%
Radio frequency emissions compliance	IEC 61000-4-2: Level 4 Electrostatic discharge IEC 61000-4-3: Level 3 Radiated susceptibility

Engine specifications

Bore	140 mm (5.51 in.)
Stroke	165.0 mm (6.5 in.)
Displacement	30.5 L (1860 in^3)
Cylinder block	Cast iron, V 12 cylinder
Battery capacity	1800 amps minimum at ambient temperature of -18 °C to 0 °C (0 °F to 32 °F)
Battery charging alternator	35 amps
Starting voltage	24 volt, negative ground
Fuel system	Direct injection: number 2 diesel fuel, fuel filter, automatic electric fuel shutoff
Fuel filter	Triple element, 10 micron filtration, spin-on fuel filters with water separator
Air cleaner type	Dry replaceable element
Lube oil filter type(s)	Four spin-on, combination full flow filter and bypass filters
Standard cooling system	High ambient radiator

Alternator specifications

Design	Brushless, 4 pole, drip-proof, revolving field
Stator	2/3 pitch
Rotor	Single bearing flexible discs
Insulation system	Class H on low and medium voltage, Class F on high voltage
Standard temperature rise	150 °C Standby at 40 °C ambient
Exciter type	PMG (Permanent Magnet Generator)
Phase rotation	A (U), B (V), C (W)
Alternator cooling	Direct drive centrifugal blower fan
AC waveform Total Harmonic Distortion (THDV)	< 5% no load to full linear load, < 3% for any single harmonic
Telephone Influence Factor (TIF)	< 50 per NEMA MG1-22.43
Telephone Harmonic Factor (THF)	< 3

Available voltages

60 Hz Line – Neutral/Line - Line

• 120/208	• 220/380	• 240/416	• 347/600
• 139/240	• 230/400	• 277/480	

Note: Consult factory for other voltages.

Generator set options

Engine

- 208/240/480 V coolant heater for ambient above 4.5 °C (40 °F)
- 208/240/480 V coolant heater for ambient below 4.5 °C (40 °F)

Control panel

- PowerCommand 3.3 with Masterless Load Demand (MLD)
- Run relay package
- Ground fault indication
- Paralleling configuration
- Remote fault signal package
- Exhaust gas temperature sensor
- 120/240 V 100 W control anti-condensation heater

Alternator

- 80 °C rise
- 105 °C rise
- 150 °C rise
- 120/240 V 300 W anti-condensation heater
- Temperature sensor - RTDs, 2-phase
- Temperature sensor – alternator bearing RTD
- Differential current transformers

Exhaust system

- Critical grade exhaust silencer
- Exhaust packages
- Industrial grade exhaust silencer
- Residential grade exhaust silencer

Cooling system

- High ambient 50 °C radiator

Generator set

- AC entrance box
- Battery
- Battery rack with hold-down - floor standing
- Circuit breaker - set mounted
- Disconnect switch - set mounted
- PowerCommand network
- Remote annunciator panel
- Spring isolators
- 2 year warranty
- 5 year warranty
- 10 year major components warranty

Note: Some options may not be available on all models - consult factory for availability.

PowerCommand 3.3 Control System

An integrated microprocessor based generator set control system providing voltage regulation, engine protection, alternator protection, operator interface and isochronous governing. Refer to document S-1570 for more detailed information on the control.

AmpSentry – Includes integral AmpSentry protection, which provides a full range of alternator protection functions that are matched to the alternator provided.

Power management – Control function provides battery monitoring and testing features and smart starting control system.

Advanced control methodology – Three phase sensing, full wave rectified voltage regulation, with a PWM output for stable operation with all load types.

Communications interface – Control comes standard with PCCNet and Modbus® interface.

Regulation compliant – Prototype tested: UL, CSA and CE compliant.

Service - InPower™ PC-based service tool available for detailed diagnostics, setup, data logging and fault simulation.

Easily upgradeable – PowerCommand controls are designed with common control interfaces.

Reliable design – The control system is designed for reliable operation in harsh environment.

Multi-language support

Operator panel features

Operator/display functions

- Displays paralleling breaker status
- Provides direct control of the paralleling breaker
- 320 x 240 pixels graphic LED backlight LCD
- Auto, manual, start, stop, fault reset and lamp test/panel lamp switches
- Alpha-numeric display with pushbuttons
- LED lamps indicating generator set running, remote start, not in auto, common shutdown, common warning, manual run mode, auto mode and stop

Paralleling control functions

- First Start Sensor System selects first generator set to close to bus
- Phase Lock Loop Synchronizer with voltage matching
- Sync check relay
- Isochronous kW and kVar load sharing
- Load govern control for utility paralleling
- Extended Paralleling (Base Load/Peak Shave) Mode
- Digital power transfer control, for use with a breaker pair to provide open transition, closed transition, ramping closed transition, peaking and base load functions,
- Alternator data
- Line-to-Neutral and Line-to-Line AC volts
- 3-phase AC current
- Frequency
- kW, kVar, power factor kVA (three phase and total)
- Engine data
- DC voltage
- Engine speed
- Lube oil pressure and temperature
- Coolant temperature
- Comprehensive FAE data (where applicable)
- Other data
- Genset model data
- Start attempts, starts, running hours, kW hours
- Load profile (operating hours at % load in 5% increments)
- Fault history
- Data logging and fault simulation (requires InPower)

Standard control functions

Digital governing

- Integrated digital electronic isochronous governor
- Temperature dynamic governing

Digital voltage regulation

- Integrated digital electronic voltage regulator
- 3-phase, 4-wire Line-to-Line sensing
- Configurable torque matching

AmpSentry AC protection

- AmpSentry protective relay
- Over current and short circuit shutdown
- Over current warning
- Single and three phase fault regulation
- Over and under voltage shutdown
- Over and under frequency shutdown
- Overload warning with alarm contact
- Reverse power and reverse Var shutdown
- Field overload shutdown

Engine protection

- Battery voltage monitoring, protection and testing
- Overspeed shutdown
- Low oil pressure warning and shutdown
- High coolant temperature warning and shutdown
- Low coolant level warning or shutdown
- Low coolant temperature warning
- Fail to start (overcrank) shutdown
- Fail to crank shutdown
- Cranking lockout
- Sensor failure indication
- Low fuel level warning or shutdown
- Fuel-in-rupture-basin warning or shutdown
- Full authority electronic engine protection

Control functions

- Time delay start and cool down
- Real time clock for fault and event time stamping
- Exerciser clock and time of day start/stop
- Data logging
- Cycle cranking
- Load shed
- Configurable inputs and outputs (4)
- Remote emergency stop

Options

- Auxiliary output relays (2)

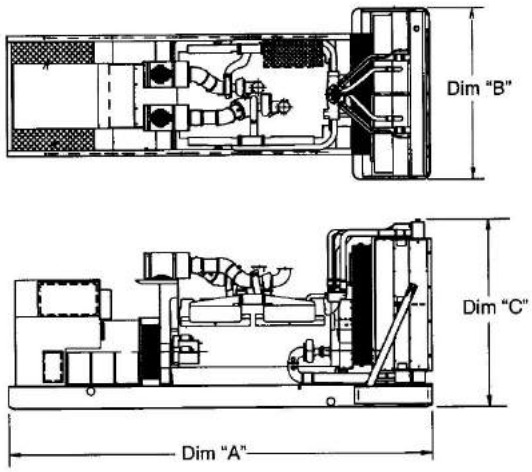
Ratings definitions

Emergency Standby Power (ESP):
Applicable for supplying power to varying electrical load for the duration of power interruption of a reliable utility source. Emergency Standby Power (ESP) is in accordance with ISO 8528. Fuel Stop power in accordance with ISO 3046, AS 2789, DIN 6271 and BS 5514.

Limited-Time Running Power (LTP):
Applicable for supplying power to a constant electrical load for limited hours. Limited-Time running Power (LTP) is in accordance with ISO 8528.

Prime Power (PRP):
Applicable for supplying power to varying electrical load for unlimited hours. Prime Power (PRP) is in accordance with ISO 8528. Ten percent overload capability is available in accordance with ISO 3046, AS 2789, DIN 6271 and BS 5514.

Base Load (Continuous) Power (COP):
Applicable for supplying power continuously to a constant electrical load for unlimited hours. Continuous Power (COP) in accordance with ISO 8528, ISO 3046, AS 2789, DIN 6271 and BS 5514.



- This outline drawing is for reference only. See respective model data sheet for specific model outline drawing number.

Model	Dim 'A' mm (in.)	Dim 'B' mm (in.)	Dim 'C' mm (in.)	Set Weight dry* (lb)	Set Weight wet* (lb)
DQFAA	4287 (168.8)	1990 (78.3)	2355 (92.7)	6671 (14707)	6969 (15363)
DQFAB	4287 (168.8)	1990 (78.3)	2355 (92.7)	6894 (15199)	7192 (15855)
DQFAC	4287 (168.8)	1990 (78.3)	2355 (92.7)	7373 (16254)	7670 (16910)
DQFAD	4287 (168.8)	1990 (78.3)	2355 (92.7)	7631 (16824)	7929 (17480)

* Weights represent a set with standard features. See outline drawings for weights of other configurations.

Codes and standards

Codes or standards compliance may not be available with all model configurations – consult factory for availability.

	This generator set is designed in facilities certified to ISO 9001 and manufactured in facilities certified to ISO 9001 or ISO 9002.		The generator set is available listed to UL 2200, Stationary Engine Generator Assemblies for all 60 Hz low voltage models. The PowerCommand control is Listed to UL 508 - Category NITW7 for U.S. and Canadian usage. Circuit breaker assemblies are UL 489 Listed for 100% Continuous operation and also UL 869A Listed Service Equipment.
	The Prototype Test Support (PTS) program verifies the performance integrity of the generator set design. Cummins products bearing the PTS symbol meet the prototype test requirements of NFPA 110 for Level 1 systems.	**U.S. EPA**	Engine certified to Stationary Emergency U.S. EPA New Source Performance Standards, 40 CFR 60 subpart IIII Tier 2 exhaust emission levels. U.S. applications must be applied per this EPA regulation.
	All low voltage models are CSA certified to product class 4215-01.	**International Building Code**	The generator set package is available certified for seismic application in accordance with the following International Building Code: IBC2000, IBC2003, IBC2006, IBC2009 and IBC2012.

Warning: Back feed to a utility system can cause electrocution and/or property damage. Do not connect to any building's electrical system except through an approved device or after building main switch is open.

For more information contact your local Cummins distributor or visit power.cummins.com

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S-1508 (05/20)

Generator set data sheet

Model:	**DQFAD**
Frequency:	**60 Hz**
Fuel type:	**Diesel**
kW rating:	**1000 Standby** **900 Prime**
Emissions level:	**EPA NSPS Stationary Emergency Tier 2**

Exhaust emission data sheet:	**EDS-1063**
Exhaust emission compliance sheet:	**EPA-1097**
Sound performance data sheet:	**MSP-1038**
Cooling performance data sheet:	**MCP-156**
Prototype test summary data sheet:	**PTS-266**
Standard set-mounted radiator cooling outline:	**A049K674**
Optional remote radiator cooling outline:	**A053G787**

Fuel consumption

	Standby				Prime				Continuous
	kW (kVA)				**kW (kVA)**				**kW (kVA)**
Ratings	1000 (1250)				900 (1125)				
Load	**1/4**	**1/2**	**3/4**	**Full**	**1/4**	**1/2**	**3/4**	**Full**	**Full**
US gph	18.7	36.4	54.2	71.9	16.9	32.4	48.0	63.5	
L/hr	70.6	137.8	205.1	272.3	64.0	122.8	181.5	240.3	

Engine

	Standby rating	**Prime rating**	**Continuous rating**
Engine manufacturer	Cummins Inc.		
Engine model	QST30-G5 NR2		
Configuration	Cast iron, V 12 cylinder		
Aspiration	Turbocharged and low temperature after-cooled		
Gross engine power output, kWm (bhp)	1112 (1490)	1007 (1350)	
BMEP at set rated load, kPa (psi)	2417 (351)	2160 (313)	
Bore, mm (in.)	140 (5.51)		
Stroke, mm (in.)	165 (6.5)		
Rated speed, rpm	1800		
Piston speed, m/s (ft/min)	9.91 (1950)		
Compression ratio	14.7:1		
Lube oil capacity, L (qt)	154 (162.8)		
Overspeed limit, rpm	2100 ±50		
Regenerative power, kW	82		

Fuel flow

Maximum fuel flow, L/hr (US gph)	570 (150)
Maximum fuel inlet restriction, kPa (in Hg)	27 (8.0)
Maximum fuel inlet temperature, °C (°F)	66 (150)

Air	Standby rating	Prime rating	Continuous rating
Combustion air, m^3/min (scfm)	88 (3150)	81 (2880)	
Maximum air cleaner restriction, kPa (in H_2O)	6.2 (25)		
Alternator cooling air, m^3/min (cfm)	204 (7300)		

Exhaust

Exhaust flow at set rated load, m^3/min (cfm)	211 (7540)	195 (6950)	
Exhaust temperature, °C (°F)	477 (890)	467 (873)	
Maximum back pressure, kPa (in H_2O)	6.8 (27)		

Standard set-mounted radiator cooling

Ambient design, °C (°F)	56 (132.8)		
Fan load, kW_m (HP)	33.1 (44.4)		
Coolant capacity (with radiator), L (US gal)	167 (44)		
Cooling system air flow, m^3/min (scfm)	1097.5 (38753)		
Total heat rejection, MJ/min (Btu/min)	48.9 (46455)	43.9 (41660)	
Maximum cooling air flow static restriction, kPa (in H_2O)	0.12 (0.5)		
Maximum fuel return line restriction kPa (in Hg)	67.5 (20)		

Optional heat exchanger cooling

Set coolant capacity, L (US gal)	
Heat rejected, jacket water circuit, MJ/min (Btu/min)	
Heat rejected, aftercooler circuit, MJ/min (Btu/min)	
Heat rejected, fuel circuit, MJ/min (Btu/min)	
Total heat radiated to room, MJ/min (Btu/min)	
Maximum raw water pressure, jacket water circuit, kPa (psi)	
Maximum raw water pressure, aftercooler circuit, kPa (psi)	
Maximum raw water pressure, fuel circuit, kPa (psi)	
Maximum raw water flow, jacket water circuit, L/min (US gal/min)	
Maximum raw water flow, aftercooler circuit, L/min (US gal/min)	
Maximum raw water flow, fuel circuit, L/min (US gal/min)	
Minimum raw water flow at 27 °C (80 °F) inlet temp, jacket water circuit, L/min (US gal/min)	
Minimum raw water flow at 27 °C (80 °F) inlet temp, aftercooler circuit, L/min (US gal/min)	
Minimum raw water flow at 27 °C (80 °F) inlet temp, fuel circuit, L/min (US gal/min)	
Raw water delta P at min flow, jacket water circuit, kPa (psi)	
Raw water delta P at min flow, aftercooler circuit, kPa (psi)	
Raw water delta P at min flow, fuel circuit, kPa (psi)	
Maximum jacket water outlet temp, °C (°F)	
Maximum aftercooler inlet temp, °C (°F)	
Maximum aftercooler inlet temp at 25 °C (77 °F) ambient, °C (°F)	
Maximum fuel return line restriction, kPa (in Hg)	

Optional remote radiator cooling[1]	Standby rating	Prime rating	Continuous rating
Set coolant capacity, L (US gal)			
Max flow rate at max friction head, jacket water circuit, L/min (US gal/min)	992 (262)		
Max flow rate at max friction head, aftercooler circuit, L/min (US gal/min)	303 (80)		
Heat rejected, jacket water circuit, MJ/min (Btu/min)	22.67 (21500)	21.01 (19925)	
Heat rejected, aftercooler circuit, MJ/min (Btu/min)	18.35 (17400)	15.69 (14885)	
Heat rejected, fuel circuit, MJ/min (Btu/min)			
Total heat radiated to room, MJ/min (Btu/min)	6.1 (5753)	5.6 (5301)	
Maximum friction head, jacket water circuit, kPa (psi)	69 (10)		
Maximum friction head, aftercooler circuit, kPa (psi)	48 (7)		
Maximum static head, jacket water circuit, m (ft)	14 (46)		
Maximum static head, aftercooler circuit, m (ft)	14 (46)		
Maximum jacket water outlet temp, °C (°F)	104 (220)	100 (212)	
Maximum aftercooler inlet temp at 25 °C (77 °F) ambient, °C (°F)	41 (105)		
Maximum aftercooler inlet temp, °C (°F)	62 (143)	56 (133)	
Maximum fuel flow, L/hr (US gph)			
Maximum fuel return line restriction, kPa (in Hg)	67.5 (20)		

Weights[2]

Unit dry weight kgs (lbs)	7594 (16742)
Unit wet weight kgs (lbs)	7857 (17322)

Notes:

[1] For non-standard remote installations contact your local Cummins representative.

[2] Weights represent a set with standard features. See outline drawing for weights of other configurations.

Derating factors

Standby	Engine power available up to 701 m (2300 ft) at ambient temperatures up to 40 °C (104 °F). Above these elevations, derate at 3.5% per 305 m (1000 ft) and 7% per 10 °C (18°F).
Prime	Engine power available up to 727 m (2385 ft) at ambient temperatures up to 40 °C (104 °F). Above these elevations, derate at 3.5% per 305 m (1000 ft) and 7% per 10 °C (18 °F).
Continuous	

Ratings definitions

Emergency Standby Power (ESP):	Limited-Time Running Power (LTP):	Prime Power (PRP):	Base Load (Continuous) Power (COP):
Applicable for supplying power to varying electrical load for the duration of power interruption of a reliable utility source. Emergency Standby Power (ESP) is in accordance with ISO 8528. Fuel stop power in accordance with ISO 3046, AS 2789, DIN 6271 and BS 5514.	Applicable for supplying power to a constant electrical load for limited hours. Limited-Time Running Power (LTP) is in accordance with ISO 8528.	Applicable for supplying power to varying electrical load for unlimited hours. Prime Power (PRP) is in accordance with ISO 8528. Ten percent overload capability is available in accordance with ISO 3046, AS 2789, DIN 6271 and BS 5514.	Applicable for supplying power continuously to a constant electrical load for unlimited hours. Continuous Power (COP) is in accordance with ISO 8528, ISO 3046, AS 2789, DIN 6271 and BS 5514. No sustained overload capability is available at this rating.

Alternator data

Voltage	Connection[1]	Temp rise degrees C	Duty[2]	Single phase factor[3]	Max surge kVA[4]	Surge kW	Alternator data sheet	Feature code
120/208-139/240	12-lead	125/105	S/P		4234	1019	ADS-312	B252
240/416-277/480	12-lead	125/105	S/P		4234	1019	ADS-312	B252
277/480	Wye, 3-phase	125/105	S/P		3866	1018	ADS-311	B276
220/380-277/480	Wye, 3-phase	125/105	S/P		4602	1018	ADS-330	B282
220/380-277/480	Wye, 3-phase	105/80	S/P		4602	1018	ADS-330	B283
210/380-277/480	Wye, 3-phase	80	S		5521	1024	ADS-331	B284
240/416-277/480	Wye	125/105	S/P		4234	1019	ADS-312	B288
347/600	3-phase	125/105	S/P		3866	1021	ADS-311	B300
347/600	3-phase	105/80	S/P		4234	1024	ADS-312	B301
347/600	3-phase	80	S		4602	1004	ADS-330	B604

Notes:

[1] Limited single phase capability is available from some three phase rated configurations. To obtain single phase rating, multiply the three phase kW rating by the Single Phase Factor[3]. All single phase ratings are at unity power factor.

[2] Standby (S), Prime (P) and Continuous ratings (C).

[3] Factor for the *Single phase output from Three phase alternator* formula listed below.

[4] Maximum rated starting kVA that results in a minimum of 90% of rated sustained voltage during starting.

Formulas for calculating full load currents:

Three phase output

$$\frac{\text{kW} \times 1000}{\text{Voltage} \times 1.73 \times 0.8}$$

Single phase output

$$\frac{\text{kW} \times \text{SinglePhaseFactor} \times 1000}{\text{Voltage}}$$

Warning: Back feed to a utility system can cause electrocution and/or property damage. Do not connect to any building's electrical system except through an approved device or after building main switch is open.

For more information contact your local Cummins distributor or visit power.cummins.com

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D-3332 (09/17)

750KW GENERATOR

Specification sheet

Diesel generator set QSK23 series engine

600 kW - 800 kW 60 Hz

Standby

Description

Cummins® commercial generator sets are fully integrated power generation systems providing optimum performance, reliability and versatility for stationary Standby and Prime Power applications.

Features

Cummins heavy-duty engine - Rugged 4-cycle, industrial diesel delivers reliable power, low emissions and fast response to load changes.

Alternator - Several alternator sizes offer selectable motor starting capability with low reactance 2/3 pitch windings, low waveform distortion with non-linear loads and fault clearing short-circuit capability.

Permanent Magnet Generator (PMG) - Offers enhanced motor starting and fault clearing short circuit capability.

Circuit breakers - Option for manually-and/or electrically-operated circuit breakers.

Control system - The PowerCommand® electronic control is standard equipment and provides total genset system integration including automatic remote starting/stopping, precise frequency, and voltage regulation, alarm and status message display, AmpSentry™ protection, output metering, auto-shutdown at fault detection and NFPA 110 Level 1 compliance.

Peer-to-peer paralleling - For applications where two or more generators with PowerCommand 3.3 control can be combined with an electrically operated circuit breaker and a combination of transfer switch(s).

Cooling system - Standard integral set-mounted radiator system, designed and tested for rated ambient temperatures, simplifies facility design requirements for rejected heat.

Enclosures - Optional weather protective and sound attenuated enclosures are available.

NFPA - The genset accepts full rated load in a single step in accordance with NFPA 110 for Level 1 systems.

Warranty and service - Backed by a comprehensive warranty and worldwide distributor network.

	Standby rating	Prime rating	Continuous rating	Data sheets
Model	60 Hz kW (kVA)	60 Hz kW (kVA)	60 Hz kW (kVA)	60 Hz
DQCA	600 (750)	545 (681)		D-3352
DQCB	750 (938)	680 (850)		D-3353
DQCC	800 (1000)	725 (906)		D-3354

Generator set specifications

Governor regulation class	ISO8528 Part 1 Class G3
Voltage regulation, no load to full load	± 0.5%
Random voltage variation	± 0.5%
Frequency regulation	Isochronous
Random frequency variation	± 0.25%
Radio frequency emissions compliance	IEC 61000-4-2: Level 4 electrostatic discharge IEC 61000-4-3: Level 3 radiated susceptibility

Engine specifications

Bore	169.9 mm (6.69 in)
Stroke	169.9 mm (6.69 in)
Displacement	23.15 liters (1413 in^3)
Configuration	Cast iron, in line 6 cylinder
Battery capacity	1400 amps minimum at ambient temperature of 0 °C to 10 °C (32 °F to 50 °F)
Battery charging alternator	35 amps
Starting voltage	24 volt, negative ground
Fuel system	Direct injection: number 2 diesel fuel, fuel filter, automatic electric fuel shutoff
Fuel filter	Spin-on fuel filters with water separator
Air cleaner type	Dry replaceable element with restriction indicator
Lube oil filter type(s)	Fleet guard dual venturi spin-on, combination full flow and bypass filters
Standard cooling system	High ambient radiator

Alternator specifications

Design	Brushless, 4 pole, drip proof, revolving field
Stator	2/3 pitch
Rotor	Single bearing flexible disc
Insulation system	Class H
Standard temperature rise	125 ºC Standby at 40 °C ambient
Exciter type	Permanent Magnet Generator (PMG)
Phase rotation	A (U), B (V), C (W)
Alternator cooling	Direct drive centrifugal blower fan
AC waveform Total Harmonic Distortion (THDV)	< 5% no load to full linear load, < 3% for any single harmonic
Telephone Influence Factor (TIF)	< 50 per NEMA MG1-22.43
Telephone Harmonic Factor (THF)	< 3%

Available voltages

60 Hz Line-Neutral/Line-Line

- 110/190
- 115/200
- 120/208
- 127/220
- 139/240
- 220/380
- 230/380
- 240/416
- 255/440
- 277/480
- 347/600

Note: Consult factory for other voltages.

Generator set options and accessories

Engine

- 208/240/480 V coolant heater for ambient above 4.5 ºC (40 ºF)
- Fuel/water separator
- Heavy duty air cleaner

Alternator

- 80 °C rise
- 105 °C rise
- 125 °C rise
- 120/240 V anti-condensation heater
- Temperature sensor - alternator bearing RTD

Control panel

- PC3.3
- PC3.3 with MLD
- 120/240 V 100 W control anti-condensation heater
- Ground fault indication
- Remote fault signal package
- Run relay package
- Run time display

Cooling system

- 50 °C ambient

Generator set options and accessories (continued)

Exhaust system

- Industrial grade exhaust silencer (12 to 18 dBA)
- Residential grade exhaust silencer (18 to 25 dBA)
- Critical grade exhaust silencer (25 to 35 dBA)
- Super critical exhaust silencer (35 to 45 dBA)

Generator set

- AC entrance box
- Battery
- Battery rack with hold-down
- Circuit breaker - set mounted
- Remote annunciator panel
- Spring isolators

- 2 year warranty
- 5 year warranty
- 10 year major components warranty

Note: Some options may not be available on all models - consult factory for availability.

PowerCommand 2.3 – control system

PowerCommand 2.3 control - An integrated generator set control system providing voltage regulation, engine protection, generator protection, operator interface, and isochronous governing (optional).

Control - Provides battery monitoring and testing features and smart-starting control system.

InPower™ - PC based service tool available for detailed diagnostics.

PCCNet RS485 - Network interface (standard) to devices such as remote annunciator for NFPA 110 applications.

Control boards - Potted for environmental protection.

Ambient operation - Suitable for operation in ambient temperatures from -40 °C to +70 °C and altitudes to 13,000 feet (5000 meters).

Prototype tested - UL, CSA, and CE compliant.

AC protection

- AmpSentry protective relay
- Over current warning and shutdown
- Over and under voltage shutdown
- Over and under frequency shutdown
- Over excitation (loss of sensing) fault
- Field overload
- Overload warning
- Reverse kW shutdown
- Reverse Var shutdown
- Short circuit protection

Engine protection

- Overspeed shutdown
- Low oil pressure warning and shutdown
- High coolant temperature warning and shutdown
- Low coolant level warning or shutdown
- Low coolant temperature warning
- High, low and weak battery voltage warning
- Fail to start (over crank) shutdown
- Fail to crank shutdown
- Redundant start disconnect
- Cranking lockout
- Sensor failure indication
- Low fuel level warning or shutdown
- Fuel-in-rupture-basin warning or shutdown

Operator/display panel

- Manual off switch
- 128 x 128 alpha-numeric display with push button access for viewing engine and alternator data and providing setup, controls and adjustments (English or international symbols)
- LED lamps indicating generator set running, not in auto, common warning, common shutdown, manual run mode and remote start
- Suitable for operation in ambient temperatures from -20 ºC to +70 ºC

Alternator data

- Line-to-Neutral AC volts
- Line-to-Line AC volts
- 3-phase AC current
- Frequency
- kVA, kW, power factor

Engine data

- DC voltage
- Lube oil pressure
- Coolant temperature

Other data

- Generator set model data
- Start attempts, starts, running hours
- Fault history
- RS485 Modbus® interface
- Data logging and fault simulation (requires InPower service tool)
- Total kilowatt hours
- Load profile

Digital governing (optional)

- Integrated digital electronic isochronous governor
- Temperature dynamic governing

Digital voltage regulation

- Integrated digital electronic voltage regulator
- 3-phase Line-to-Line sensing
- Configurable torque matching
- Fault current regulation under single or three phase fault conditions

Control functions

- Time delay start and cool down
- Glow plug control (some models)
- Cycle cranking
- PCCNet interface
- (4) Configurable inputs
- (4) Configurable outputs
- Remote emergency stop
- Battle short mode
- Load shed
- Real time clock with exerciser
- Derate

Options

- Auxiliary output relays (2)
- 120/240 V, 100 W anti-condensation heater
- Remote annunciator with (3) configurable inputs and (4) configurable outputs
- PMG alternator excitation
- PowerCommand for Windows® remote monitoring software (direct connect)
- AC output analogue meters
- PowerCommand 2.3 and 3.3 control with AmpSentry protection

For further detail on PC 2.3, see document S-1569.
For further detail on PC 3.3, see document S-1570.

Ratings definitions

Emergency Standby Power (ESP):

Applicable for supplying power to varying electrical loads for the duration of power interruption of a reliable utility source. Emergency Standby Power (ESP) is in accordance with ISO 8528. Fuel Stop power in accordance with ISO 3046, AS 2789, DIN 6271 and BS 5514.

Limited-Time Running Power (LTP):

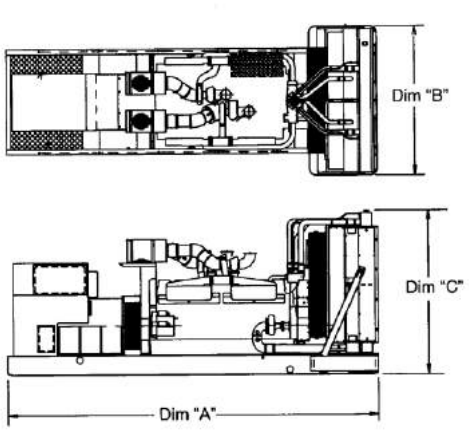
Applicable for supplying power to a constant electrical load for limited hours. Limited-Time Running Power (LTP) is in accordance with ISO 8528.

Prime Power (PRP):

Applicable for supplying power to varying electrical loads for unlimited hours. Prime Power (PRP) is in accordance with ISO 8528. Ten percent overload capability is available in accordance with ISO 3046, AS 2789, DIN 6271 and BS 5514.

Base Load (Continuous) Power (COP):

Applicable for supplying power continuously to a constant electrical load for unlimited hours. Continuous Power (COP) in accordance with ISO 8528, ISO 3046, AS 2789, DIN 6271 and BS 5514.



This outline drawing is for reference only. See respective model data sheet for specific model outline drawing number.

Do not use for installation design

Dimensions and weights with standard cooling system

Model	Dim 'A' (mm) (in.)	Dim 'B' (mm) (in.)	Dim 'C' (mm) (in.)	Set weight* dry (kg) (lbs)	Set weight* wet (kg) (lbs)
DQCA	4395.4 (173)	1855.5 (73)	2065.7 (81)	6075 (13395)	6337 (13973)
DQCB	4395.4 (173)	1855.5 (73)	2065.7 (81)	6075 (13395)	6337 (13973)
DQCC	4395.4 (173)	1855.5 (73)	2065.7 (81)	6075 (13395)	6337 (13973)

Dimensions and weights with optional cooling system with seismic feature codes L228-2 and/or L225-2

Model	Dim 'A' (mm) (in.)	Dim 'B' (mm) (in.)	Dim 'C' (mm) (in.)	Set weight* dry (kg) (lbs)	Set weight* wet (kg) (lbs)
DQCA	4395.4 (173)	1715 (68)	2060.1 (81.1)	6377 (14061)	6518 (14372)
DQCB	4395.4 (173)	1715 (68)	2060.1 (81.1)	6377 (14061)	6518 (14372)
DQCC	4395.4 (173)	1715 (68)	2060.1 (81.1)	6377 (14061)	6518 (14372)

* Weights represent a set with standard features. See outline drawings for weights of other configurations.

Codes and standards

Codes or standards compliance may not be available with all model configurations – consult factory for availability.

	This generator set is designed in facilities certified to ISO 9001 and manufactured in facilities certified to ISO 9001 or ISO 9002.		The generator set is available listed to UL 2200 for all 60 Hz low voltage models, Stationary Engine Generator Assemblies. The PowerCommand control is Listed to UL 508 - Category NITW7 for U.S. and Canadian usage. Circuit breaker assemblies are UL 489 Listed for 100% continuous operation and also UL 869A Listed Service Equipment.
	The Prototype Test Support (PTS) program verifies the performance integrity of the generator set design. Cummins products bearing the PTS symbol meet the prototype test requirements of NFPA 110 for Level 1 systems.	**U.S. EPA**	Engine certified to Stationary Emergency U.S. EPA New Source Performance Standards, 40 CFR 60 subpart IIII Tier 2 exhaust emission levels. U.S. applications must be applied per this EPA regulation.
	All low voltage models are CSA certified to product class 4215-01.	**International Building Code**	The generator set package is available certified for seismic application in accordance with the following International Building Code: IBC2000, IBC2003, IBC2006, IBC2009, and IBC2012.

Warning: Back feed to a utility system can cause electrocution and/or property damage. Do not connect to any building's electrical system except through an approved device or after building main switch is open.

For more information contact your local Cummins distributor or visit power.cummins.com

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S-1551 (09/17)

Generator Set Data Sheet

Model: DQCB
Frequency: 60 Hz
Fuel Type: Diesel
kW Rating: 750 Standby
680 Prime
Emissions Level: EPA NSPS Stationary Emergency Tier 2

Exhaust Emission Data Sheet:	**EDS-1087**
Exhaust Emission Compliance Sheet:	**EPA-1121**
Sound Data Sheet:	**MSP-1159**
Sound Data Sheet – with Seismic Feature Codes L228-2 (IBC) and/or L225-2 (OSHPD):	**MSP-1013**
Cooling System Data in various Ambient Conditions:	**MCP-248**
Cooling System Data in various Ambient Conditions – with Seismic Feature Codes L228-2 (IBC) and/or L225-2 (OSHPD):	**MCP-174**
Prototype Test Summary Data Sheet:	**PTS-160**

Fuel Consumption

	Standby				Prime				Continuous
	kW (kVA)				kW (kVA)				kW (kVA)
Ratings	750 (938)				680 (850)				
Load	**1/4**	**1/2**	**3/4**	**Full**	**1/4**	**1/2**	**3/4**	**Full**	**Full**
US gph	16.0	28.0	40.0	51.0	15.0	25.0	36.5	48.0	
L/hr	60.6	106.0	151.4	193.1	56.8	94.6	138.2	181.7	

Engine

	Standby Rating	Prime Rating	Continuous Rating
Engine manufacturer	Cummins Inc.		
Engine model	QSK23-G7 NR2		
Configuration	Cast Iron, in line, 6 cylinder		
Aspiration	Turbocharged and low temperature after-cooled		
Gross engine power output, kWm (bhp)	910 (1220)	808 (1085)	
BMEP at set rated load, kPa (psi)	2435 (353)	2214 (321)	
Bore, mm (in.)	170 (6.69)		
Stroke, mm (in.)	170 (6.69)		
Rated speed, rpm	1800		
Piston speed, m/s (ft/min)	10.21 (2010)		
Compression ratio	16:1		
Lube oil capacity, L (qt)	102 (108)		
Overspeed limit, rpm	2100		
Regenerative power, kW	93		

Fuel Flow

Maximum fuel flow, L/hr (US gph)	685 (181)	
Maximum fuel inlet restriction, kPa (in Hg)	13.44 (4)	
Maximum fuel inlet temperature, °C (°F)	71 (160)	

Air	Standby Rating	Prime Rating	Continuous Rating
Combustion air, m^3/min (scfm)	64 (2242)	62 (2189)	
Maximum air cleaner restriction, kPa (in H_2O)	6.2 (25)		
Alternator cooling air, m^3/min (cfm)	117 (4156)		

Exhaust

Exhaust flow at set rated load, m^3/min (cfm)	152 (5358)	146 (5147)	
Exhaust temperature, °C (°F)	476 (888)	458 (856)	
Maximum back pressure, kPa (in H_2O)	10.1 (40.8)		

Standard Set-Mounted Radiator Cooling (Non-Seismic)

Ambient design, °C (°F)	50 (122)		
Fan load, kW_m (HP)	24 (32)		
Coolant capacity (with radiator), L (US gal)	109.5 (29)		
Cooling system air flow, m^3/min (scfm)	1069.8 (37779.6)		
Total heat rejection, MJ/min (Btu/min)	32.3 (30655)	29.6 (28065)	
Maximum cooling air flow static restriction, kPa (in H_2O)	0.12 (0.5)		
Maximum fuel return line restriction kPa (in Hg)	30.47 (9)		

Optional Set-Mounted Radiator Cooling (with Seismic Feature Codes L228-2 (IBC) and/or L225-2 (OSHPD))

Ambient design, °C (°F)	50 (122)		
Fan load, kW_m (HP)	27 (36)		
Coolant capacity (with radiator), L (US gal)	89 (23.5)		
Cooling system air flow, m^3/min (scfm)	1252 (44183)		
Total heat rejection, MJ/min (Btu/min)	32.3 (30655)	29.6 (28065)	
Maximum cooling air flow static restriction, kPa (in H_2O)	0.12 (0.5)		
Maximum fuel return line restriction, kPa (in Hg)	30.47 (9)		

Optional Heat Exchanger Cooling

Set coolant capacity, L (US gal)			
Heat rejected, jacket water circuit, MJ/min (Btu/min)			
Heat rejected, aftercooler circuit, MJ/min (Btu/min)			
Heat rejected, fuel circuit, MJ/min (Btu/min)			
Total heat radiated to room, MJ/min (Btu/min)			
Maximum raw water pressure, jacket water circuit, kPa (psi)			
Maximum raw water pressure, aftercooler circuit, kPa (psi)			
Maximum raw water pressure, fuel circuit, kPa (psi)			
Maximum raw water flow, jacket water circuit, L/min (US gal/min)			
Maximum raw water flow, aftercooler circuit, L/min (US gal/min)			
Maximum raw water flow, fuel circuit, L/min (US gal/min)			
Minimum raw water flow at 27 °C (80 °F) inlet temp, jacket water circuit, L/min (US gal/min)			
Minimum raw water flow at 27 °C (80 °F) inlet temp, aftercooler circuit, L/min (US gal/min)			
Minimum raw water flow at 27 °C (80 °F) inlet temp, fuel circuit, L/min (US gal/min)			
Raw water delta P at min flow, jacket water circuit, kPa (psi)			

	Standby rating	Prime rating	Continuous rating
Raw water delta P at min flow, aftercooler circuit, kPa (psi)			
Raw water delta P at min flow, fuel circuit, kPa (psi)			
Maximum jacket water outlet temp, ℃ (℉)			
Maximum aftercooler inlet temp, ℃ (℉)			
Maximum aftercooler inlet temp at 25 ℃ (77 ℉) ambient, ℃ (℉)			
Maximum fuel return line restriction, kPa (in Hg)			

Optional Remote Radiator Cooling[1]

Set coolant capacity, L (US gal)			
Max flow rate at max friction head, jacket water circuit, L/min (US gal/min)			
Max flow rate at max friction head, aftercooler circuit, L/min (US gal/min)			
Heat rejected, jacket water circuit, MJ/min (Btu/min)			
Heat rejected, aftercooler circuit, MJ/min (Btu/min)			
Heat rejected, fuel circuit, MJ/min (Btu/min)			
Total heat radiated to room, MJ/min (Btu/min)			
Maximum friction head, jacket water circuit, kPa (psi)			
Maximum friction head, aftercooler circuit, kPa (psi)			
Maximum static head, jacket water circuit, m (ft)			
Maximum static head, aftercooler circuit, m (ft)			
Maximum jacket water outlet temp, ℃ (℉)			
Maximum aftercooler inlet temp at 25 ℃ (77 ℉) ambient, ℃ (℉)			
Maximum aftercooler inlet temp, ℃ (℉)			
Maximum fuel flow, L/hr (US gph)			
Maximum fuel return line restriction, kPa (in Hg)			

Weights[2]

Unit dry weight kgs (lbs)	6075 (13395)
Unit wet weight kgs (lbs)	6337 (13973)

Notes:

[1] For non-standard remote installations contact your local Cummins representative.

[2] Weights represent a set with standard features. See outline drawing for weights of other configurations.

Derating Factors

Standby	Engine power available up to 1371 m (4497 ft) at ambient temperatures up to 40 ℃ (104 ℉). Above these elevations, derate at 4.4% per 305 m (1000 ft). Above 40 ℃ (104 ℉), derate 10% per 10 ℃ (18 ℉).
Prime	Engine power available up to 1084 m (3555 ft) at ambient temperatures up to 40 ℃ (104 ℉). Above these elevations, derate at 4.5% per 305 m (1000 ft). Above 40 ℃ (104 ℉), derate 20.9% per 10 ℃ (18 ℉).
Continuous	

Ratings Definitions

Emergency Standby Power (ESP):	Limited-Time Running Power (LTP):	Prime Power (PRP):	Base Load (Continuous) Power (COP):
Applicable for supplying power to varying electrical load for the duration of power interruption of a reliable utility source. Emergency Standby Power (ESP) is in accordance with ISO 8528. Fuel stop power in accordance with ISO 3046, AS 2789, DIN 6271 and BS 5514.	Applicable for supplying power to a constant electrical load for limited hours. Limited-Time Running Power (LTP) is in accordance with ISO 8528.	Applicable for supplying power to varying electrical load for unlimited hours. Prime Power (PRP) is in accordance with ISO 8528. Ten percent overload capability is available in accordance with ISO 3046, AS 2789, DIN 6271 and BS 5514.	Applicable for supplying power continuously to a constant electrical load for unlimited hours. Continuous Power (COP) is in accordance with ISO 8528, ISO 3046, AS 2789, DIN 6271 and BS 5514. No sustained overload capability is available at this rating.

Alternator Data

Voltage	Connection[1]	Temp Rise Degrees C	Duty[2]	Single Phase Factor[3]	Max surge kVA[4]	Winding No.	Alternator Data Sheet	Feature Code
380-480	Wye	125/105	S/P		3313	312	ADS-310	B282-2
220/380	Wye	105/80	S/P		4234	311	ADS-312	B599-2
480	Wye	105/80	S/P		3313	312	ADS-310	B600-2
480	Wye	80	S		3866	312	ADS-311	B601-2
600	Wye	105/80	S/P		3313	7	ADS-310	B603-2
600	Wye	80	S/P		3866	7	ADS-311	B604-2
380	Wye	80	S		4234	312	ADS-312	B660-2
480	Wye	125	P		2944	312	ADS-309	B718-2
600	Wye	125	P		2944	7	ADS-309	B720-2
190-480	Wye	125/105	S/P		2944	311	ADS-309	B720-2
380-480	Wye	125/105	S/P		3313	311	ADS-310	B731-2
208/416	Wye	105/80	S/P		3866	311	ADS-311	B733-2
208/416	Wye	80	S		4234	311	ADS-312	B734-2
400	Wye	105	S		3866	312	ADS-311	B735-2
480	Wye	125	S		2944	312	ADS-309	B738-2
600	Wye	125	S		2944	7	ADS-309	B739-2
416	Wye	125/105	S/P		3313	312	ADS-310	B741-2

Notes:

[1] Limited single phase capability is available from some three phase rated configurations. To obtain single phase rating, multiply the three phase kW rating by the Single Phase Factor[3]. All single phase ratings are at unity power factor.

[2] Standby (S), Prime (P) and Continuous ratings (C).

[3] Factor for the *Single phase output from Three phase alternator* formula listed below.

[4] Maximum rated starting kVA that results in a minimum of 90% of rated sustained voltage during starting.

Formulas for Calculating Full Load Currents:

Three phase output

$$\frac{\text{kW} \times 1000}{\text{Voltage} \times 1.73 \times 0.8}$$

Single phase output

$$\frac{\text{kW} \times \text{SinglePhaseFactor} \times 1000}{\text{Voltage}}$$

Warning: Back feed to a utility system can cause electrocution and/or property damage. Do not connect to any building's electrical system except through an approved device or after building main switch is open.

For more information contact your local Cummins distributor or visit power.cummins.com

Our energy working for you.™

D-3353 PDA056P768 (06/19)

500KW GENERATOR

Specification sheet

Diesel generator set QSX15 series engine

450 kW – 500 kW Standby

Description

Cummins® commercial generator sets are fully integrated power generation systems providing optimum performance, reliability and versatility for stationary standby and prime power applications.

Features

Cummins heavy-duty engine - Rugged 4-cycle, industrial diesel delivers reliable power, low emissions and fast response to load changes.

Alternator - Several alternator sizes offer selectable motor starting capability with low reactance 2/3 pitch windings, low waveform distortion with non-linear loads and fault clearing short-circuit capability.

Permanent Magnet Generator (PMG) - Offers enhanced motor starting and fault clearing short-circuit capability.

Control system - The PowerCommand® electronic control is standard equipment and provides total genset system integration including automatic remote starting/stopping, precise frequency and voltage regulation, alarm and status message display, AmpSentry™ protection, output metering, auto-shutdown at fault detection and NFPA 110 Level 1 compliance.

Cooling system - Standard integral set-mounted radiator system, designed and tested for rated ambient temperatures, simplifies facility design requirements for rejected heat.

Enclosures - Optional weather protective and sound attenuated enclosures are available.

Fuel tanks - Dual wall sub-base fuel tanks are also available.

NFPA - The genset accepts full rated load in a single step in accordance with NFPA 110 for Level 1 systems.

Warranty and service - Backed by a comprehensive warranty and worldwide distributor network.

	Standby rating	Prime rating	Continuous rating	Data sheets
Model	60 Hz kW (kVA)	60 Hz kW (kVA)	60 Hz kW (kVA)	60 Hz
DFEJ	450 (563)	410 (513)		D-3400
DFEK	500 (625)	455 (569)		D-3401

Generator set specifications

Governor regulation class	ISO 8528 part 1 Class G3
Voltage regulation, no load to full load	± 0.5%
Random voltage variation	± 0.5%
Frequency regulation	Isochronous
Random frequency variation	± 0.25%
EMS compatibility	IEC 61000-4-2: Level 4 Electrostatic discharge IEC 61000-4-3: Level 3 Radiated susceptibility

Engine specifications

Design	Turbocharged with air-to-air charge air-cooling
Bore	136.9 mm (5.39 in.)
Stroke	168.9 mm (6.65 in.)
Displacement	14.9 L (912.0 in^3)
Cylinder block	Cast iron with replaceable wet liners, in-line 6 cylinder
Battery capacity	1400 Amps minimum at ambient temperature 0 ℃ (32 ℉)
Battery charging alternator	35 Amps
Starting voltage	24 volt, negative ground
Fuel system	Full authority electronic (FAE) Cummins HPI-TP
Fuel filter	
Air cleaner type	
Lube oil filter type(s)	Single spin-on combination full flow and bypass filters
Standard cooling system	40 ºC (104 ºF) ambient radiator

Alternator specifications

Design	Brushless, 4 pole, drip-proof revolving field
Stator	2/3 pitch
Rotor	Single bearing, flexible discs
Insulation system	Class H
Standard temperature rise	125 ℃ standby at 40 ℃ ambient
Exciter type	PMG (Permanent Magnet Generator)
Phase rotation	A (U), B (V), C (W)
Alternator cooling	Direct drive centrifugal blower fan
AC waveform total harmonic distortion (THDV)	< 5% no load to full linear load, < 3% for any single harmonic
Telephone influence factor (TIF)	< 50% per NEMA MG1-22.43
Telephone harmonic factor (THF)	< 3%

Available voltages

60 Hz Line – Neutral/Line - Line

- 110/190
- 110/220
- 115/200
- 115/230
- 120/208
- 127/220
- 139/240
- 220/380
- 230/400
- 240/416
- 255/440
- 277/480
- 347/600

Note: Consult factory for other voltages.

Generator set options

Engine

- 208/240/480 V thermostatically controlled coolant heater for ambient above 4.5 ℃ (40℉)
- 208/240/480 V thermostatically controlled coolant heater for ambient below 4.5 ℃ (40℉)
- 120 V 300 W lube oil heater
- Heavy duty air cleaner with safety element

Alternator

- 80 ℃ rise
- 105 ℃ rise
- 150 ℃ rise
- 120/240 V 200 W anti-condensation heater

Exhaust system

- Critical grade exhaust silencer
- Exhaust packages
- Industrial grade exhaust silencer
- Residential grade exhaust silencer

Fuel system

- 1022 L (270 gal) sub-base tank
- 1136 L (300 gal) sub-base tank
- 1514 L (400 gal) sub-base tank
- 1893 L (500 gal) sub-base tank
- 2271 L (600 gal) sub-base tank
- 2498 L (660 gal) sub-base tank
- 3218 L (850 gal) sub-base tank
- 6435 L (1700 gal) sub-base tank
- 9558 L (2525 gal) sub-base tank

Cooling system

- High ambient 50 ℃ radiator

Control panel

- PC 3.3
- PC 3.3 with MLD
- 120/240 V 100 W control anti-condensation heater
- Ground fault indication
- Remote fault signal package
- Run relay package

Generator set

- AC entrance box
- Battery
- Battery charger
- Export box packaging
- UL 2200 Listed
- Main line circuit breaker
- Paralleling accessories
- Remote annunciator panel
- Spring isolators
- Enclosure: aluminium, steel, weather protective or sound attenuated
- 2 year standby power warranty
- 2 year prime power warranty
- 5 year basic power warranty
- 10 year major components warranty

*Note: Some options may not be available on all models - consult factory for availability.

Control system 2.3

The PowerCommand 2.3 control system - An integrated generator set control system providing voltage regulation, engine protection, generator protection, operator interface and isochronous governing (optional).

Control – Provides battery monitoring and testing features and smart-starting control system.

InPower™ – PC-based service tool available for detailed diagnostics.

PCCNet RS485 – Network interface (standard) to devices such as remote annunciator for NFPA 110 applications.

Control boards – Potted for environmental protection.

Ambient operation – Suitable for operation in ambient temperatures from -40 ℃ to +70 ℃ and altitudes to 13,000 feet (5000 meters). Prototype tested - UL, CSA and CE compliant.

AC protection

- AmpSentry protective relay
- Over current warning and shutdown
- Over and under voltage shutdown
- Over and under frequency shutdown
- Over excitation (loss of sensing) fault
- Field overload
- Overload warning
- Reverse kW shutdown
- Reverse Var shutdown
- Short circuit protection

Engine protection

- Overspeed shutdown
- Low oil pressure warning and shutdown
- High coolant temperature warning and shutdown
- Low coolant level warning or shutdown
- Low coolant temperature warning
- High, low and weak battery voltage warning
- Fail to start (overcrank) shutdown
- Fail to crank shutdown
- Redundant start disconnect
- Cranking lockout
- Sensor failure indication
- Low fuel level warning or shutdown
- Fuel-in-rupture-basin warning or shutdown

Operator/display panel

- Manual off switch
- 128 x 128 Alpha-numeric display with push button access for viewing engine and alternator data and providing setup, controls and adjustments (English or international symbols)
- LED lamps indicating genset running, not in auto, common warning, common shutdown, manual run mode and remote start
- Suitable for operation in ambient temperatures from -20 ºC to +70 ºC

Alternator data

- Line-to-Neutral AC volts
- Line-to-Line AC volts
- 3-phase AC current
- Frequency
- kVA, kW, power factor

Engine data

- DC voltage
- Lube oil pressure
- Coolant temperature

Control functions

- Time delay start and cool down
- Glow plug control (some models)
- Cycle cranking
- PCCNet interface
- (4) Configurable inputs
- (4) Configurable outputs
- Remote emergency stop
- Battle short mode
- Load shed
- Real time clock with exerciser
- Derate

Digital governing (optional)

- Integrated digital electronic isochronous governor
- Temperature dynamic governing

Digital voltage regulation

- Integrated digital electronic voltage regulator
- 3-phase Line-to-Line sensing
- Configurable torque matching
- Fault current regulation under single or three phase fault conditions

Other data

- Genset model data
- Start attempts, starts, running hours
- Fault history
- RS485 Modbus® interface
- Data logging and fault simulation (requires InPower service tool)
- Total kilowatt hours
- Load profile

Options

- Auxiliary output relays (2)
- 120/240 V, 100 W anti-condensation heater
- Remote annunciator with (3) configurable inputs and (4) configurable outputs
- PMG alternator excitation
- PowerCommand for Windows® remote monitoring software (direct connect)
- AC output analogue meters
- PowerCommand 2.3 and 3.3 control with AmpSentry protection

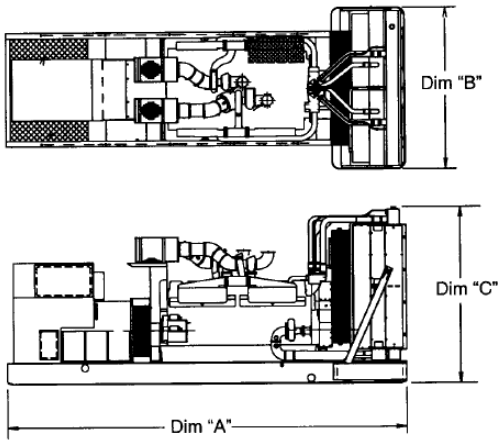
For further detail on PC 2.3 see document S-1569.
For further detail on PC 3.3 see document S-1570.

Emergency Standby Power (ESP):
Applicable for supplying power to varying electrical load for the duration of power interruption of a reliable utility source. Emergency Standby Power (ESP) is in accordance with ISO 8528. Fuel Stop power in accordance with ISO 3046, AS 2789, DIN 6271 and BS 5514.

Limited-Time running Power (LTP):
Applicable for supplying power to a constant electrical load for limited hours. Limited Time Running Power (LTP) is in accordance with ISO 8528.

Prime Power (PRP):
Applicable for supplying power to varying electrical load for unlimited hours. Prime Power (PRP) is in accordance with ISO 8528. Ten percent overload capability is available in accordance with ISO 3046, AS 2789, DIN 6271 and BS 5514.

Base Load (Continuous) Power (COP):
Applicable for supplying power continuously to a constant electrical load for unlimited hours. Continuous Power (COP) in accordance with ISO 8528, ISO 3046, AS 2789, DIN 6271 and BS 5514.



This outline drawing if for reference only. See respective model data sheet for specific model outline drawing number.

Do not use for installation design

Model	Dim 'A' mm (in.)	Dim 'B' mm (in.)	Dim 'C' mm (in.)	Set weight dry* kg (lbs)	Set weight wet* kg (lbs)
DFEJ	3864 (152.1)	1524 (60.0)	1812 (71.3)	4098 (9035)	4234 (9335)
DFEK	3864 (152.1)	1524 (60.0)	1812 (71.3)	4325 (9535)	4461 (9835)

*Weights represent a set with standard features. See outline drawings for weights of other configurations.

Codes and standards

Codes or standards compliance may not be available with all model configurations – consult factory for availability.

	This generator set is designed in facilities certified to ISO 9001 and manufactured in facilities certified to ISO 9001 or ISO 9002.		The generator set is available listed to UL 2200, Stationary Engine Generator Assemblies for all 60 Hz low voltage models. The PowerCommand control is Listed to UL 508 - Category NITW7 for U.S. and Canadian usage. Circuit breaker assemblies are UL 489 Listed for 100% continuous operation and also UL 869A Listed Service Equipment.
	The Prototype Test Support (PTS) program verifies the performance integrity of the generator set design. Cummins products bearing the PTS symbol meet the prototype test requirements of NFPA 110 for Level 1 systems.	**U.S EPA**	Engine certified to Stationary Emergency U.S. EPA New Source Performance Standards, 40 CFR 60 subpart IIII Tier 2 exhaust emission levels. U.S. applications must be applied per this EPA regulation.
	All low voltage models are CSA certified to product class 4215-01.	**International Building Code**	The generator set package is available certified for seismic application in accordance with the following International Building Code: IBC2000, IBC2003, IBC2006, IBC2009 and IBC2012.

Warning: Back feed to a utility system can cause electrocution and/or property damage. Do not connect to any building's electrical system except through an approved device or after building main switch is open.

For more information contact your local Cummins distributor or visit power.cummins.com

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S-1582 (08/17)

Generator set data sheet

Power Generation

Model: DFEK
Frequency: 60
Fuel type: Diesel
KW rating: 500 standby
455 prime
Emissions level: EPA NSPS Stationary Emergency Tier 2

Exhaust emission data sheet:	**EDS-173**
Exhaust emission compliance sheet:	**EPA-1005**
Sound performance data sheet:	**MSP-177**
Cooling performance data sheet:	**MCP-105**
Prototype test summary data sheet:	**PTS-145**
Standard set-mounted radiator cooling outline:	**0500-3326**
Optional set-mounted radiator cooling outline:	
Optional heat exchanger cooling outline:	
Optional remote radiator cooling outline:	

Fuel consumption

	Standby				Prime				Continuous
	kW (kVA)				kW (kVA)				kW (kVA)
Ratings	500 (625)				455 (569)				
Load	**1/4**	**1/2**	**3/4**	**Full**	**1/4**	**1/2**	**3/4**	**Full**	**Full**
US gph	11.6	18.8	25.7	34.4	10.9	17.6	23.7	30.4	
L/hr	44	71	97	130	41	67	90	115	

Engine

	Standby rating	Prime rating	Continuous rating
Engine manufacturer	Cummins Inc.		
Engine model	QSX15-G9		
Configuration	Cast iron with replaceable wet cylinder liners, in-line 6 cylinder		
Aspiration	Turbocharged with air-to-air charge air cooling		
Gross engine power output, kWm (bhp)	563.0 (755.0)	507.3 (680.0)	
BMEP at set rated load, kPa (psi)	2433.9 (353.0)	2213.2 (321.0)	
Bore, mm (in)	136.9 (5.39)		
Stroke, mm (in)	168.9 (6.65)		
Rated speed, rpm	1800		
Piston speed, m/s (ft/min)	10.1 (1995.0)		
Compression ratio	17.0:1		
Lube oil capacity, L (qt)	83.3 (88.0)		
Overspeed limit, rpm	2150 ± 50		
Regenerative power, kW	52.00		

Fuel flow

Fuel flow at rated load, L/hr (US gph)	423.9 (112.0)
Maximum inlet restriction, mm Hg (in Hg)	127.0 (5.0)
Maximum return restriction, mm Hg (in Hg)	165.1 (6.5)

Air

	Standby rating	Prime rating	Continuous rating
Combustion air, m3/min (scfm)	41.6 (1470.0)	38.8 (1370.0)	
Maximum air cleaner restriction, kPa (in H2O)	6.2 (25.0)		
Alternator cooling air, m3/min (scfm)	62.0 (2190.0)		

Exhaust

Exhaust flow at set rated load, m^3/min (cfm)	102.6 (3625.0)	88.7 (3135.0)	
Exhaust temperature, ° C (° F)	482.8 (901.0)	466.7 (872.0)	
Maximum back pressure, kPa (in H_2O)	10.2 (41.0)		

Standard set-mounted radiator cooling

Ambient design, ° C (° F)	40 (104)		
Fan load, kW_m (HP)	19 (25.5)		
Coolant capacity (with radiator), L (US Gal)	57.9 (15.3)		
Cooling system air flow, m^3/min (scfm)	707.5 (25000.0)		
Total heat rejection, MJ/min (Btu/min)	19.6 (18485.0)	17.7 (16680.0)	
Maximum cooling air flow static restriction, kPa (in H_2O)	0.12 (0.5)		

Optional set-mounted radiator cooling

Ambient design, °C (°F)	50 (122)		
Fan load, kW_m (HP)	19 (25.5)		
Coolant capacity (with radiator), L (US gal)	57.9 (15.3)		
Cooling system air flow, m^3/min (scfm)	707.5 (25000.0)		
Total heat rejection, MJ/min (Btu/min)	19.6 (18485.0)	17.7 (16680.0)	
Maximum cooling air flow static restriction, kPa (in H_2O)	0.12 (0.5)		

Optional heat exchanger cooling

Set coolant capacity, L (US Gal.)			
Heat rejected, jacket water circuit, MJ/min (Btu/min)			
Heat rejected, aftercooler circuit, MJ/min (Btu/min)			
Heat rejected, fuel circuit, MJ/min (Btu/min)			
Total heat radiated to room, MJ/min (Btu/min)			
Maximum raw water pressure, jacket water circuit, kPa (psi)			
Maximum raw water pressure, aftercooler circuit, kPa (psi)			
Maximum raw water pressure, fuel circuit, kPa (psi)			
Maximum raw water flow, jacket water circuit, L/min (US Gal/min)			
Maximum raw water flow, aftercooler circuit, L/min (US Gal/min)			
Maximum raw water flow, fuel circuit, L/min (US Gal/min)			
Minimum raw water flow at 27 °C (80 °F) inlet temp, jacket water circuit, L/min (US Gal/min)			
Minimum raw water flow at 27 °C (80 °F) inlet temp, aftercooler circuit, L/min (US Gal/min)			
Minimum raw water flow at 27 °C (80 °F) inlet temp, fuel circuit, L/min (US Gal/min)			
Raw water delta P at min flow, jacket water circuit, kPa (psi)			
Raw water delta P at min flow, aftercooler circuit, kPa (psi)			
Raw water delta P at min flow, fuel circuit, kPa (psi)			
Maximum jacket water outlet temp, °C (°F)			
Maximum aftercooler inlet temp, °C (°F)			
Maximum aftercooler inlet temp at 25 °C (77 °F) ambient, °C (°F)			

Optional remote radiator cooling[1]	Standby rating	Prime rating	Continuous rating
Set coolant capacity, L (US gal)			
Max flow rate at max friction head, jacket water circuit, L/min (US gal/min)			
Max flow rate at max friction head, aftercooler circuit, L/min (US gal/min)			
Heat rejected, jacket water circuit, MJ/min (Btu/min)			
Heat rejected, aftercooler circuit, MJ/min (Btu/min)			
Heat rejected, fuel circuit, MJ/min (Btu/min)			
Total heat radiated to room, MJ/min (Btu/min)			
Maximum friction head, jacket water circuit, kPa (psi)			
Maximum friction head, aftercooler circuit, kPa (psi)			
Maximum static head, jacket water circuit, m (ft)			
Maximum static head, aftercooler circuit, m (ft)			
Maximum jacket water outlet temp, °C (°F)			
Maximum aftercooler inlet temp at 25 °C (77 °F) ambient, °C (°F)			
Maximum aftercooler inlet temp, °C (°F)			
Maximum fuel flow, L/hr (US gph)			
Maximum fuel return line restriction, kPa (in Hg)			

Weights[2]

Unit dry weight kgs (lbs)	4325 (9535)
Unit wet weight kgs (lbs)	4461 (9835)

Notes:
[1] For non-standard remote installations contact your local Cummins Power Generation representative.
[2] Weights represent a set with standard features. See outline drawing for weights of other configurations.

Derating factors

Standby	Genset may be operated up to 640 m (2100 ft) and 40 °C (104 °F) without power deration. For sustained operation above these conditions up to 1150 m (3770 ft), derate by 3.8% per 305 m (1000 ft), and 6.1% per 10 °C (3.4% per 10 °F). Above 1150 m (3770 ft) up to 1680 m (5510 ft), derate 6.3% total for 1150 m (3770 ft) plus 1.6% per 305 m (1000 ft) over 1150 m (3770 ft) and 3.8% per 10 °C (2.2% per 10 °F). Above 1680 m (5510 ft), up to 3000 m (9840 ft), derate 9.0% total for 1680 m (5510 ft) plus 3.7% per 305 m (1000 ft) and 5.7% per 10 °C (3.2% per 10 °F). Above 3000 m (9840 ft), derate 24.8% total for 3000 m (9840 ft) plus 1.8% per 305 m (1000 ft) above 3000 m (9840 ft) and 10% per 10 °C (5.6% per 10 °F).
Prime	Genset may be operated up to 640 m (2100 ft) and 40 °C (104 °F) without power deration. For sustained operation above these conditions up to 1150 m (3770 ft), derate by 3.8% per 305 m (1000 ft), and 6.1% per 10 °C (3.4% per 10 °F). Above 1150 m (3770 ft) up to 1680 m (5510 ft), derate 6.3% total for 1150 m (3770 ft) plus 1.6% per 305 m (1000 ft) over 1150 m (3770 ft) and 3.8% per 10 °C (2.2% per 10 °F). Above 1680 m (5510 ft), up to 3000 m (9840 ft), derate 9.0% total for 1680 m (5510 ft) plus 3.7% per 305 m (1000 ft) and 5.7% per 10 °C (3.2% per 10 °F). Above 3000 m (9840 ft), derate 24.8% total for 3000 m (9840 ft) plus 1.8% per 305 m (1000 ft) above 3000 m (9840 ft) and 10% per 10 °C (5.6% per 10 °F).
Continuous	

Ratings definitions

Emergency standby power (ESP):	Limited-time running power (LTP):	Prime power (PRP):	Base load (continuous) power (COP):
Applicable for supplying power to varying electrical load for the duration of power interruption of a reliable utility source. Emergency Standby Power (ESP) is in accordance with ISO 8528. Fuel Stop power in accordance with ISO 3046, AS 2789, DIN 6271 and BS 5514.	Applicable for supplying power to a constant electrical load for limited hours. Limited Time Running Power (LTP) is in accordance with ISO 8528.	Applicable for supplying power to varying electrical load for unlimited hours. Prime Power (PRP) is in accordance with ISO 8528. Ten percent overload capability is available in accordance with ISO 3046, AS 2789, DIN 6271 and BS 5514.	Applicable for supplying power continuously to a constant electrical load for unlimited hours. Continuous Power (COP) is in accordance with ISO 8528, ISO 3046, AS 2789, DIN 6271 and BS 5514.

Alternator data

Three Phase Table[1]		105 °C	105 °C	105 °C	125 °C	125 °C	125 °C	125 °C	125 °C	150 °C	150 °C	150 °C	150 °C
Feature Code		B262	B301	B252	B258	B252	B414	B246	B300	B426	B413	B424	B419
Alternator Data Sheet Number		308	307	307	308	307	308	306	306	307	307	305	306
Voltage Ranges		110/190 thru 139/240 220/380 Thru 277/480	347/600	120/208 Thru 139/240 240/416 Thru 277/480	110/190 Thru 139/240 220/380 Thru 277/480	120/208 Thru 139/240 240/416 Thru 277/480	120/208 Thru 139/240 240/416 Thru 277/480	277/480	347/600	110/190 Thru 139/240 220/380 Thru 277/480	120/208 Thru 139/240 240/416 Thru 277/480	277/480	347/600
Surge kW		514	517	514	514	514	516	515	515	512	514	512	515
Motor Starting kVA (at 90% sustained voltage)	Shunt												
	PMG	2429	2208	2208	2429	2208	2429	1896	1896	2208	2208	1749	1896

Full Load Current Amps at Standby Rating	110/190	120/208	110/220	115/230	139/240	220/380	230/400	240/416	255/440	277/480	347/600	
	1901	1737	1642	1571	1505	951	903	868	821	753	602	

Note:

[1] Single phase power can be taken from a three phase generator set at up to 40% of the generator set nameplate kW rating at unity power factor.

Formulas for calculating full load currents:

Three phase output

$$\frac{\text{kW} \times 1000}{\text{Voltage} \times 1.73 \times 0.8}$$

Single phase output

$$\frac{\text{kW} \times \text{SinglePhaseFactor} \times 1000}{\text{Voltage}}$$

Warning: Back feed to a utility system can cause electrocution and/or property damage. Do not connect to any building's electrical system except through an approved device or after building main switch is open.

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D-3401d (6/15)

Power Generation

power.cummins.com

250KW GENERATOR

Specification Sheet

Diesel Generator Set QSL9-G7 Series Engine

250 kW - 300 kW Standby

Description

Cummins® commercial generator sets are fully integrated power generation systems providing optimum performance, reliability and versatility for stationary Standby and Prime Power applications.

Features

Cummins heavy-duty engine - Rugged 4-cycle, industrial diesel delivers reliable power, low emissions and fast response to load changes.

Alternator - Several alternator sizes offer selectable motor starting capability with low reactance 2/3 pitch windings, low waveform distortion with non-linear loads and fault clearing short-circuit capability.

Control system - The PowerCommand® electronic control is standard equipment and provides total genset system integration including automatic remote starting/stopping, precise frequency and voltage regulation, alarm and status message display, AmpSentry™ protection, output metering, auto-shutdown at fault detection and NFPA 110 Level 1 compliance.

Cooling system - Standard cooling package provides reliable running at the rated power level.

Enclosures - Optional weather protective and sound attenuated enclosures are available.

Fuel tanks - Dual wall sub-base fuel tanks are also available.

NFPA - The genset accepts full rated load in a single step in accordance with NFPA 110 for Level 1 systems.

Warranty and service - Backed by a comprehensive warranty and worldwide distributor network.

	Standby rating		Prime rating		Continuous rating		Data sheets	
Model	60 Hz kW (kVA)	50 Hz kW (kVA)	60 Hz kW (kVA)	50 Hz kW (kVA)	60 Hz kW (kVA)	50 Hz kW (kVA)	60 Hz	50 Hz
DQDAA	250 (313)		225 (281)				D-3442	
DQDAB	275 (344)		250 (313)				D-3443	
DQDAC	300 (375)		270 (338)				D-3444	

Generator Set Specifications

Governor regulation class	ISO 8528 Part 1 Class G3
Voltage regulation, no load to full load	± 0.5%
Random voltage variation	± 0.5%
Frequency regulation	Isochronous
Random frequency variation	± 0.5%
Radio frequency emissions compliance	IEC 801.2 through IEC 801.5; MIL-STD-461C, Part 9

Engine Specifications

Bore	114.0 mm (4.49 in)
Stroke	145 mm (5.69 in)
Displacement	8.9 L (543 in^3)
Configuration	Cast iron, in-line 6 cylinder
Battery capacity	750 amps minimum at ambient temperature of -18 ºC (-0.4 ºF) and above
Battery charging alternator	70 amps
Starting voltage	24 volt, negative ground
Fuel system	Direct injection: number 2 diesel fuel, fuel filter, automatic electric fuel shutoff
Fuel filter	Dual element with water separator
Air cleaner type	Normal duty
Lube oil filter type(s)	Single spin-on, combination full flow and bypass filters
Standard cooling system	High ambient radiator

Alternator Specifications

Design	Brushless, 4 pole, drip proof revolving field
Stator	2/3 pitch
Rotor	Single bearing, flexible discs
Insulation system	Class H
Standard temperature rise	125 ºC Standby, 105 ºC Prime
Exciter type	Permanent Magnet Generator (PMG)
Phase rotation	A (U), B (V), C (W)
Alternator cooling	Direct drive centrifugal blower
AC waveform Total Harmonic Distortion (THDV)	< 5% no load to full linear load, < 3% for any single harmonic
Telephone Influence Factor (TIF)	< 50 per NEMA MG1-22.43
Telephone Harmonic Factor (THF)	< 3

Available Voltages

60 Hz 3-phase			**50 Hz** 3-phase	
Reconnectable		Non-Reconnectable	Reconnectable	Non-Reconnectable
• 110/90 • 139/240 • 240/416	• 120/208 • 120/240 • 254/440	• 277/480 • 347/600		

Note: Consult factory for other voltages.

Generator Set Options and Accessories

Engine

- 120/240 V 1500 W coolant heater
- 120/240 V 150 W lube oil heater
- Heavy duty air cleaner
- Engine oil temperature

Control panel

- 120/240 V 100 W control anti-condensation heater
- Exhaust pyrometer
- Ground fault indication
- Remote fault signal package
- Run relay package
- Paralleling configuration

Alternator

- 105 ℃ rise
- 125 ℃ rise
- 120/240 V 100 W anti-condensation heater
- PMG excitation
- Single phase

Exhaust system

- Genset mounted muffler
- Heavy duty exhaust elbow
- Slip on exhaust connection
- NPT exhaust connection

Fuel system

- 1022 L (270 gal) sub-base tank
- 1136 L (300 gal) sub-base tank
- 1514 L (400 gal) sub-base tank
- 1893 L (500 gal) sub-base tank
- 2271 L (600 gal) sub-base tank
- 2498 L (660 gal) sub-base tank
- 2725 L (720 gal) sub-base tank
- 5565 L (1470 gal) sub-base tank

Generator set

- AC entrance box
- Battery
- Battery charger
- Export box packaging
- UL 2200 Listed
- Main line circuit breaker
- PowerCommand network
- Communications Module (NCM)
- Remote annunciator panel
- Spring isolators
- Enclosure: aluminum, steel, weather protective or sound attenuated
- 2 year Standby power warranty
- 2 year Prime power warranty
- 5 year Basic power warranty
- 10 year major components warranty

Note: Some options may not be available on all models - consult factory for availability.

Control System PCC 2100

PowerCommand control is an integrated generator set control system providing governing, voltage regulation, engine protection and operator interface functions. Major features include:

- Integral AmpSentry™ protective relay providing a full range of alternator protection functions that are matched to the alternator provided.
- Battery monitoring and testing features and smart starting control system.
- Three phase sensing, full wave rectified voltage regulation system, with a PWM output for stable operation with all load types.
- Standard PCCNet™ and optional Echelon® LonWorks® network interface.
- Control suitable for operation in ambient temperatures from -40 °C to +70 °C (-40 °F to +158 °F) and altitudes to 5000 meters (13,000 feet).
- Prototype tested; UL, CSA, and CE compliant.
- InPower™ PC-based service tool available for detailed diagnostics.

Operator/display panel

- Off/manual/auto mode switch
- Manual run/stop switch
- Panel lamp test switch
- Emergency stop switch
- Alpha-numeric display with pushbutton access for viewing engine and alternator data and providing setup, controls and adjustments
- LED lamps indicating genset running, not in auto, common warning, common shutdown
- Configurable LED lamps (5)
- Configurable for local language

Engine protection

- Overspeed shut down
- Low oil pressure warning and shut down
- High coolant temperature warning and shut down
- High oil temperature warning (some models)
- Low coolant level warning or shut down
- Low coolant temperature warning
- High and low battery voltage warning
- Weak battery warning
- Dead battery shut down
- Fail to start (overcrank) shut down
- Fail to crank shut down
- Redundant -start disconnect
- Cranking lockout
- Sensor failure indication

Engine data

- DC voltage
- Lube oil pressure
- Coolant temperature
- Lube oil temperature (some models)
- Engine speed

AmpSentry AC protection

- Over current and short-circuit shut down
- Over current warning
- Single and three phase fault regulation
- Over and under voltage shut down
- Over and under frequency shut down
- Overload warning with alarm contact
- Reverse power and reverse Var shut down
- Excitation fault

Alternator data

- Line-to-Line and Line-to-Neutral AC volts
- Three phase AC current
- Frequency
- Total and individual phase power factor, kW and kVA

Other data

- Genset model data
- Start attempts, starts, running hours
- kW hours (total and since reset)
- Fault history
- Load profile (hours less than 30% and hours more than 90% load)
- System data display (optional with network and other PowerCommand gensets or transfer switches)

Governing

- Digital electronic isochronous governor
- Temperature dynamic governing
- Smart idle speed mode
- Glow plug control (some models)

Voltage regulation

- Digital PWM electronic voltage regulation
- Three phase Line-to-Neutral sensing
- Suitable for PMG or shunt excitation
- Single and three phase fault regulation
- Configurable torque matching

Control functions

- Data logging on faults
- Fault simulation (requires InPower)
- Time delay start and cooldown
- Cycle cranking
- PCCNet interface
- Configurable customer inputs (4)
- Configurable customer outputs (4)
- Configurable network inputs (8) and outputs (16) (with optional network)
- Remote emergency stop

Options

- LED bargraph AC data display
- Thermostatically controlled space heater
- Key-type mode switch
- Ground fault module
- Auxiliary relays (3)
- Echelon LONWORKS interface
- Modlon Gateway to convert to Modbus (loose)
- PowerCommand iWatch web server for remote monitoring and alarm notification (loose)
- Digital input and output module(s) (loose)
- Remote annunciator (loose)

For further detail see document S-1409.

Ratings Definitions

Emergency Standby Power (ESP):

Applicable for supplying power to varying electrical load for the duration of power interruption of a reliable utility source. Emergency Standby Power (ESP) is in accordance with ISO 8528. Fuel Stop power in accordance with ISO 3046, AS 2789, DIN 6271 and BS 5514.

Limited-Time Running Power (LTP):

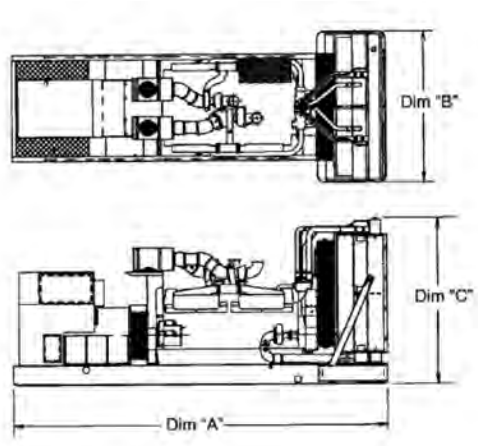
Applicable for supplying power to a constant electrical load for limited hours. Limited Time Running Power (LTP) is in accordance with ISO 8528.

Prime Power (PRP):

Applicable for supplying power to varying electrical load for unlimited hours. Prime Power (PRP) is in accordance with ISO 8528. Ten percent overload capability is available in accordance with ISO 3046, AS 2789, DIN 6271 and BS 5514.

Base Load (Continuous) Power (COP):

Applicable for supplying power continuously to a constant electrical load for unlimited hours. Continuous Power (COP) in accordance with ISO 8528, ISO 3046, AS 2789, DIN 6271 and BS 5514.



This outline drawing is for reference only. See respective model data sheet for specific model outline drawing number.

Do not use for installation design

Dimensions and weights with standard cooling system

Model	Dim "A" mm (in.)	Dim "B" mm (in.)	Dim "C" mm (in.)	Estimated set weight* dry kg (lbs)	Estimated set weight* wet kg (lbs)
DQDAA	3023 (119.0)	1270 (50.0)	1617 (64.0)	2184 (4814)	2234 (4926)
DQDAB	3023 (119.0)	1270 (50.0)	1617 (64.0)	2184 (4814)	2234 (4926)
DQDAC	3023 (119.0)	1270 (50.0)	1617 (64.0)	2319 (5113)	2370 (5225)

Dimensions and weights with optional cooling system with seismic feature codes L228-2 and/or L225-2

Model	Dim "A" mm (in.)	Dim "B" mm (in.)	Dim "C" mm (in.)	Estimated set weight* dry kg (lbs)	Estimated set weight* wet kg (lbs)
DQDAA	3023 (119.0)	1270 (50.0)	1676 (66.0)	2184 (4814)	2234 (4926)
DQDAB	3023 (119.0)	1270 (50.0)	1676 (66.0)	2184 (4814)	2234 (4926)
DQDAC	3023 (119.0)	1270 (50.0)	1676 (66.0)	2319 (5113)	2370 (5225)

*Note: Weights represent a set with standard features. See outline drawings for weights of other configurations.

Codes and Standards

Codes or standards compliance may not be available with all model configurations – consult factory for availability.

	This generator set is designed in facilities certified to ISO 9001 and manufactured in facilities certified to ISO 9001 or ISO 9002.		The PowerCommand control is Listed to UL 508 - Category NITW7 for U.S. and Canadian usage.
	The Prototype Test Support (PTS) program verifies the performance integrity of the generator set design. Cummins products bearing the PTS symbol meet the prototype test requirements of NFPA 110 for Level 1 systems.	U.S. EPA	Engine certified to Stationary Emergency U.S. EPA New Source Performance Standards,40 CFR 60 subpart IIII Tier 3 exhaust emission levels. U.S. applications must be applied per this EPA regulation.
	All low voltage models are CSA certified to product class 4215-01.	International Building Code	The generator set package is available certified for seismic application in accordance with the following International Building Code: IBC2000, IBC2003, IBC2006, IBC2009 and IBC2012.

Warning: Back feed to a utility system can cause electrocution and/or property damage. Do not connect to any building's electrical system except through an approved device or after building main switch is open.

For more information contact your local Cummins distributor or visit power.cummins.com

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S-1585 (8/18)

Generator set data sheet

Model:	**DQDAA**
Frequency:	**60 Hz**
Fuel type:	**Diesel**
kW rating:	**250 Standby** **225 Prime**
Emissions level:	**EPA NSPS Stationary Emergency Tier 3**

Exhaust emission data sheet:	**EDS-1073**
Exhaust emission compliance sheet:	**EPA-1101**
Sound performance data sheet:	**MSP-1026**
Cooling performance data sheet:	**MCP-163**
Prototype test summary data sheet:	**PTS-164**
Standard set-mounted radiator cooling outline:	**A048R355**
Optional set-mounted radiator cooling outline with seismic feature codes L228-2 (IBC) or L225-2 (OSHPD):	**A041F591**

Fuel consumption

	Standby				Prime				Continuous
	kW (kVA)				kW (kVA)				kW (kVA)
Ratings	250 (313)				225 (281)				
Load	**1/4**	**1/2**	**3/4**	**Full**	**1/4**	**1/2**	**3/4**	**Full**	**Full**
US gph	6.0	10.5	15.1	19.6	5.5	9.5	13.6	17.7	
L/hr	22.5	39.7	56.9	74.2	20.7	36.1	51.5	67.0	

Engine

	Standby rating	Prime rating	Continuous rating
Engine manufacturer	Cummins Inc.		
Engine model	QSL9-G7		
Configuration	Cast iron, in-line 6 cylinder		
Aspiration	Turbocharged and after-cooled		
Gross engine power output, kW_m (bhp)	346 (464)	312 (419)	
BMEP at set rated load, kPa (psi)	2606 (378)	2351 (341)	
Bore, mm (in.)	114.0 (4.49)		
Stroke, mm (in.)	145 (5.69)		
Rated speed, rpm	1800		
Piston speed, m/s (ft/min)	8.7 (1707.0)		
Compression ratio	16.1:1		
Lube oil capacity, L (qt)	30.0 (31.7)		
Overspeed limit, rpm	2070 ± 50		
Regenerative power, kW	35.00		

Fuel flow

Maximum fuel flow, L/hr (US gph)	138.1 (36.5)	
Maximum fuel inlet restriction, mm Hg (in Hg)	152.4 (6.0)	
Maximum return restriction, mm Hg (in Hg)	254.0 (10.0)	

Air	Standby rating	Prime rating	Continuous rating
Combustion air, m^3/min (scfm)	22.3 (787)	20.8 (733)	
Maximum air cleaner restriction, kPa (in H_2O)	6.2 (25.0)		
Alternator cooling air, m^3/min (cfm)	59.4 (2100.0)		

Exhaust

Exhaust flow at set rated load, m^3/min (cfm)	54.6 (1927)	50.8 (1796)	
Exhaust temperature, °C (°F)	525 (977)	495 (923)	
Maximum back pressure, kPa (in H_2O)	10.2 (41.0)		

Standard set-mounted radiator cooling (non-seismic)

Ambient design, °C (°F)	50 (122)		
Fan load, kW_m (HP)	26.09 (35)		
Coolant capacity (with radiator), L (US gal)	34.29 (9.06)		
Cooling system air flow, m^3/min (scfm)	427.58 (15100)		
Total heat rejection, MJ/min (Btu/min)	8.93 (8467.0)	8.55 (8104.0)	
Maximum cooling air flow static restriction, kPa (in H_2O)	0.12 (0.5)		

Optional set-mounted radiator cooling (with seismic feature codes L228-2 (IBC) and/or L225-2 (OSHPD)

Ambient design, °C (°F)	50 (122)		
Fan load, kW_m (HP)	27.8 (37.2)		
Coolant capacity (with radiator), L (US gal)	30.3 (8.0)		
Cooling system air flow, m^3/min (scfm)	568.1 (20075.0)		
Total heat rejection, MJ/min (Btu/min)	8.93 (8467.0)	8.55 (8104.0)	
Maximum cooling air flow static restriction, kPa (in H_2O)	0.12 (0.5)		

Optional heat exchanger cooling	Standby rating	Prime rating	Continuous rating
Set coolant capacity, L (US gal)			
Heat rejected, jacket water circuit, MJ/min (Btu/min)			
Heat rejected, aftercooler circuit, MJ/min (Btu/min)			
Heat rejected, fuel circuit, MJ/min (Btu/min)			
Total heat radiated to room, MJ/min (Btu/min)			
Maximum raw water pressure, jacket water circuit, kPa (psi)			
Maximum raw water pressure, aftercooler circuit, kPa (psi)			
Maximum raw water pressure, fuel circuit, kPa (psi)			
Maximum raw water flow, jacket water circuit, L/min (US gal/min)			
Maximum raw water flow, aftercooler circuit, L/min (US gal/min)			
Maximum raw water flow, fuel circuit, L/min (US gal/min)			
Minimum raw water flow at 27 °C (80 °F) inlet temp, jacket water circuit, L/min (US gal/min)			
Minimum raw water flow at 27 °C (80 °F) inlet temp, aftercooler circuit, L/min (US gal/min)			
Minimum raw water flow at 27 °C (80 °F) inlet temp, fuel circuit, L/min (US gal/min)			
Raw water delta P at min flow, jacket water circuit, kPa (psi)			
Raw water delta P at min flow, aftercooler circuit, kPa (psi)			
Raw water delta P at min flow, fuel circuit, kPa (psi)			
Maximum jacket water outlet temp, °C (°F)			
Maximum aftercooler inlet temp, °C (°F)			
Maximum aftercooler inlet temp at 25 °C (77 °F) ambient, °C (°F)			

Optional remote radiator cooling[1]			
Set coolant capacity, L (US gal)			
Max flow rate at max friction head, jacket water circuit, L/min (US gal/min)			
Max flow rate at max friction head, aftercooler circuit, L/min (US gal/min)			
Heat rejected, jacket water circuit, MJ/min (Btu/min)			
Heat rejected, aftercooler circuit, MJ/min (Btu/min)			
Heat rejected, fuel circuit, MJ/min (Btu/min)			
Total heat radiated to room, MJ/min (Btu/min)			
Maximum friction head, jacket water circuit, kPa (psi)			
Maximum friction head, aftercooler circuit, kPa (psi)			
Maximum static head, jacket water circuit, m (ft)			
Maximum static head, aftercooler circuit, m (ft)			
Maximum jacket water outlet temp, °C (°F)			
Maximum aftercooler inlet temp at 25 °C (77 °F) ambient, °C (°F)			
Maximum aftercooler inlet temp, °C (°F)			
Maximum fuel flow, L/hr (US gph)			
Maximum fuel return line restriction, kPa (in Hg)			

Weights[2]

Unit dry weight kgs (lbs)	2184 (4814)
Unit wet weight kgs (lbs)	2234 (4926)

Notes:
[1] For non-standard remote installations contact your local Cummins representative.
[2] Weights represent a set with standard features. See outline drawing for weights of other configurations.

Derating factors

Standby	Engine power available up to 1494 m (4900 ft) at ambient temperature up to 40 °C (104 °F). Above these elevations, derate at 7% per 400m (1312 ft). Above 40 °C (104 °F) derate 5.5% per 10 °C (18 °F). Derates must be combined when both altitude of 1494 m (4900 ft) and temperature of 40 °C (104 °F) are exceeded.
Prime	Engine power available up to 1452 m (4764 ft) at ambient temperature up to 40 °C (104 °F). Above these elevations, derate at 7% per 400m (1312 ft). Above 40 °C (104 °F) derate 5.5% per 10 °C (18 °F). Derates must be combined when both altitude of 1452 m (4764 ft) and temperature of 40 °C (104 °F) are exceeded.
Continuous	

Ratings definitions

Emergency Standby Power (ESP):	**Limited-Time Running Power (LTP):**	**Prime Power (PRP):**	**Base Load (Continuous) Power (COP):**
Applicable for supplying power to varying electrical load for the duration of power interruption of a reliable utility source. Emergency Standby Power (ESP) is in accordance with ISO 8528. Fuel stop power in accordance with ISO 3046, AS 2789, DIN 6271 and BS 5514.	Applicable for supplying power to a constant electrical load for limited hours. Limited-Time Running Power (LTP) is in accordance with ISO 8528.	Applicable for supplying power to varying electrical load for unlimited hours. Prime Power (PRP) is in accordance with ISO 8528. Ten percent overload capability is available in accordance with ISO 3046, AS 2789, DIN 6271 and BS 5514.	Applicable for supplying power continuously to a constant electrical load for unlimited hours. Continuous Power (COP) is in accordance with ISO 8528, ISO 3046, AS 2789, DIN 6271 and BS 5514.

Alternator data

Three phase table[1]		**80 °C**	**80 °C**	**80 °C**	**80 °C**	**105 °C**	**105 °C**	**105 °C**	**125 °C**	**125 °C**	**125 °C**	**125 °C**	**125 °C**
Feature code		B260	B257	B251	B302	B259	B256	B301	B258	B252	B246	B247	B300
Alternator data sheet number		342	341	341	341	341	341	340	341	340	340	340	340
Voltage ranges		110/190 thru 139/240 220/380 thru 277/480	120/208 thru 139/240 240/416 thru 277/480	277/480	347/600	110/190 thru 139/240 220/380 thru 277/480	120/208 thru 139/240 240/416 thru 277/480	347/600	110/190 thru 139/240 220/380 thru 277/480	120/208 thru 139/240 240/416 thru 277/480	277/480	277/480	347/600
Surge kW		322	322	322	322	322	322	322	322	322	322	322	322
Motor starting kVA (at 90% sustained voltage)	Shunt												
	PMG	1372	1210	1210	1210	1210	1210	1028	1210	1028	1028	1028	1028

Full load current - amps at Standby rating	120/208 867	127/220 820	139/240 752	220/380 475	240/416 434	254/440 410	277/480 376	347/600 301

Note:
[1] Single phase power can be taken from a three phase generator set at up to 2/3 set rated 3-phase kW at 1.0 power factor. Also see Note 3 below

Formulas for calculating full load currents:

Three phase output	Single phase output
$\frac{kW \times 1000}{Voltage \times 1.73 \times 0.8}$	$\frac{kW \times SinglePhaseFactor \times 1000}{Voltage}$

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For more information contact your local Cummins distributor or visit power.cummins.com

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D-3442 (10/17)

Specification Sheet

Enclosures and Tanks

250-1000 kW Gensets

Enclosure Standard Features

- 14-gauge steel construction (panels)
- Stainless steel hardware
- Zinc phosphate pretreatment, e-coat primer and super durable powder topcoat paint minimize corrosion and color fade
- Package listed to UL 2200
- Designed to satisfy national electrical code installation requirements
- Fuel and electrical stub-up area within enclosure perimeter
- Fixed louvers
- Cambered roof prevents water accumulation
- Recessed, lockable doors in two sides
- Retainers hold doors open for easy access
- Enclosed exhaust silencer ensures safety and protects against rust
- Rain cap
- Exterior oil and coolant drains with interior valves for ease of service
- Rodent barriers on inlet
- Non-hydroscopic sound attenuating material
- Side mounted controls and circuit breakers
- Easy access lifting points for spreader bars
- Dual vibration isolation system (250-500 kW)
- Spring vibration isolation system (600-1000 kW)
- Enclosure mounts to lifting base or fuel tank (250-500 kW)
- Enclosure mounts to lifting base (600-1000 kW)
- Factory pre-assembled package
- Designed for outdoor use only
- Externally mounted emergency stop button for operator safety (optional on 250-500 kW)
- Horizontal air discharge to prevent leaf and snow accumulation (600-1000 kW)

Options

- Three levels of sound attenuation
- Motorized louvers to protect from ice and snow accumulation (available on air inlet for all models and on air outlet on level II, 250-500 kW enclosures only)
- Horizontal air discharge, sound level 2 only (250-500 kW)
- Aluminium construction with roll-coated polymer paint
- Wind rated to 150 mph
- Neutral sandstone paint color
- Factory mounted battery charger
- External 120 VAC service outlet
- Rain hoods for air inlet (250-500 kW)
- Lifting base in lieu of a sub-base tank (250-500 kW)
  - Pre-wired AC distribution package
  - 100 amp (250-500 kW) or 150 amp (600-1000 kW) main circuit breaker; connected to 120 VAC Line-Neutral and 208 or 240 VAC Line-Line, spare breaker positions and capacity for future upgrades (600-1000 kW)
  - GFCI protected internal 120 VAC service receptacle
  - GFCI protected weather proof external 120 volt service receptacle
  - All factory installed AC powered features pre-wired into load center
- Interior lights – 120 volt (600-1000 kW)
- Rain hoods for air inlet (250-500 kW)
- Seismic isolators available (600-1000 kW)

Fuel Tanks

Standard sub-base tank features

- UL 142 Listed
- ULC-S601-07 Listed
- NFPA37 compliant
- Dual walled, steel construction
- Emergency tank and rupture basin vents
- Tank mounted mechanical fuel gauge
- Fuel supply and return tubes
- Top mounted leak detection float switch
- Low and high level fuel switches
- Mounting brackets for optional pump and control (250-500 kW)
- Integral lifting points

Sub-base tank options

- Pre-wired fuel pump and control
- Fuel overfill alarm – internal or external
- Overflow and tank fill plugs
- Five gallon spill fill box – internal or external
- Fill pipe extender
- Local code approvals available

200-500 kW Dual Wall Sub-base Fuel Tanks – usable operating hours

Genset model (60 Hz)	Gallons /hour at full load	270 gallon tank	300 gallon tank	400 gallon tank	500 gallon tank	600 gallon tank	660 gallon tank	720 gallon tank	850 gallon tank	1420 gallon tank	1470 gallon tank	1700 gallon tank	2050 gallon tank	2525 gallon tank
250 DQDAA	20	14	15	20	25	30	33	36		72	74		104	
275 DQDAB	21	13	14	19	24	29	31	34		66	70		96	
300 DQDAC	23	12	13	17	22	26	29	31		61	64		88	
300 DQHAB	23	12	13	17	22	26	29		37			74		
450 DFEJ	30	9	10	13	17	20	22		28			57		84
500 DFEK	34	8	9	11	15	18	19		25			50		74

Operating hours are measured at 60 Hz, standby rating.

600-1000 kW Dual Wall Sub-base Fuel Tanks – usable operating hours

Genset model	Gallons /hour at full load	200 gallon tank	660 gallon tank	1000 gallon tank	1500 gallon tank	2000 gallon tank	2400 gallon tank
600 DQCA	42	5	16	24	36	48	57
600 DQPAA	45	4	15	22	33	44	53
650 DQPAB	50	4	13	20	30	40	48
750 DQCB	51	4	13	20	29	39	47
750 DQFAA	53	4	12	19	28	38	45
800 DQCC	53	4	12	19	28	38	45
800 DQFAB	56	4	12	18	27	36	43
900 DQFAC	64	3	10	16	23	31	38
1000 DQFAD	72	3	9	14	21	28	33

*3000 gallon tank offered as an accessory kit – refer to NAAC-5853 spec sheet.

- Operating hours are measured at 60 Hz, standby rating.
- Up to 90% fill alarm to comply with NFPA30, operating capacity is reduced by 10%.

Enclosure Package Sound Pressure Levels @ 7 meters dB(A)

Genset model	Weather protective enclosure (F200, F203)	QuietSite level 1 sound attenuated enclosure (F201, F204)	QuietSite level 2 sound attenuated enclosure (F202, F205)
250 DQDAA	90	88	72
275 DQDAB	90	88	73
300 DQDAC	90	88	73
300 DQHAB	89	88	76
450 DFEJ	88	85	74
500 DFEK	89	87	73
600 DQCA	90.6/86*	79.3/78*	74.1/73*
600 DQPAA	89.10	80.70	74.70
650 DQPAB	89.70	81.40	75
750 DQCB	91.1/87*	79.9/79*	75.3/74*
750 DQFAA	87.8	77.8	73.8
800 DQCC	91.3/87*	80.2/79*	75.7/74*
800 DQFAB	88.1	78.3	74
900 DQFAC	88.8	79.1	74.6
1000 DQFAD	89.6	80.1	75.3

- All data is 60 Hz, full load standby rating, steel enclosures only.
- Data is a measured average of 8 positions.
- Sound levels for aluminium enclosures are approximately 2 dB(A) higher than listed sound levels for steel enclosures.

* Sound data with seismic feature codes L228-2 (IBC) and/or L225-2 (OSHPD)

Package Dimensions of Enclosure, Exhaust System, and UL Tank

250-500 kW

For 250kW & 500kW

Tank size (gal)	Weather protective package length (in)	QuietSite level I package length (in)	QuietSite level 2 package length (in)	Width (in)	Height (in)	Weather protective package weight (lbs)	QuietSite level 1 package weight (lbs)	QuietSite level 2 package weight (lbs)
270	188	188	222	82	106	4991	5471	6711
300	188	188	222	82	104	5648	6073	6991
400	188	188	222	82	106	5833	6258	7176
500	188	188	222	82	108	5956	6381	7299
600	188	188	222	82	111	6116	6541	7459
660	188	188	222	82	113	6235	6660	7578
720	188	188	222	82	114	6174	6599	7517
850	188	188	222	82	118	6529	6954	7872
1420	200	200	222	82	128	6863	7343	8583
1470	192	192	222	82	128	7253	7733	8973
1700	234	234	234	82	128	7982	8407	9325
2050	284	284	284	82	128	8383	8863	10103
2525	346	346	346	82	128	9391	9871	11111
Lifting base	188	188	222	82	100	4335	4760	5678

600-1000 kW

For 750kW & 1000kW

Tank size (gal)	Weather protective package length (in)	QuietSite level I package length (in)	QuietSite level 2 package length (in)	Width (in)	Height (in)	Weather protective package weight (lbs)	QuietSite level 1 package weight (lbs)	QuietSite level 2 package weight (lbs)
200	260	303	315	98	137	10194	13074	14954
660	260	303	315	98	137	9586	12466	14346
1000	260	303	315	98	141	10117	12997	14877
1500	260	303	315	98	146	10677	13557	15437
2000	292	327	327	98	143	11959	14839	16719
2400	338	338	338	98	143	12961	15841	17721

- This weight does not include the generator set. Consult your local Cummins distributor or the appropriate generator specification sheet.
- Width is 86” lifting eye to lifting eye (250-500 kW), 102” lifting eye to lifting eye (600-1000 kW).
- Height - Florida, Michigan, and Suffolk add 6.4” (250-500 kW) or 2” (600-1000 kW) for bottom space.
- Maximum length emergency vent removed.

CSA	CSA - The generator set is CSA certified to product class 4215-01.
UL	UL - The generator set is available listed to UL 2200, stationary engine generator assemblies. The PowerCommand® control is listed to UL 508 - Category NITW7 for U.S. and Canadian usage.

For more information contact your local Cummins distributor or visit power.cummins.com

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S-1443 (11/18)

150KW GENERATOR

Specification sheet

Diesel generator set

QSB7 series engine
125-200 kW @ 60 Hz
EPA Tier 3 emissions

Description

Cummins® generator sets are fully integrated power generation systems providing optimum performance, reliability and versatility for stationary Standby applications.

Features

Heavy duty engine - Rugged 4-cycle industrial diesel delivers reliable power and fast response to load changes.

Alternator - Several alternator sizes offer selectable motor starting capability with low reactance 2/3 pitch windings, low waveform distortion with non-linear loads and fault clearing short-circuit capability.

Control system - The PowerCommand® 1.1 electronic control is standard equipment and provides total generator set system integration including automatic remote starting/stopping, precise frequency and voltage regulation, alarm and status message display, output metering, auto-shutdown at fault detection and NFPA 110 Level 1 compliance.

Cooling system - Standard cooling package provides reliable running at up to 50 ℃ (122 ℉) ambient temperature.

Enclosures - The aesthetically appealing enclosure incorporates special designs that deliver one of the quietest generators of its kind. Aluminium material plus durable powder coat paint provides the best anti-corrosion performance. The generator set enclosure has been evaluated to withstand 180 MPH wind loads in accordance with ASCE7 -10. The design has hinged doors to provide easy access for service and maintenance.

Fuel tanks - Dual wall sub-base fuel tanks are offered as optional features, providing economical and flexible solutions to meet extensive code requirements on diesel fuel tanks.

NFPA - The generator set accepts full rated load in a single step in accordance with NFPA 110 for Level 1 systems.

Warranty and service - Backed by a comprehensive warranty and worldwide distributor network.

	Standby 60 Hz		Prime 60 Hz		
Model	**kW**	**kVA**	**kW**	**kVA**	**Data sheets**
C125D6D	125	156	113	141	NAD-6371-EN
C150D6D	150	188	135	169	NAD-6372-EN
C175D6D	175	219	158	197	NAD-6373-EN
C200D6D	200	250	180	225	NAD-6374-EN

Generator set specifications

Governor regulation class	ISO8528 Part 1 Class G3
Voltage regulation, no load to full load	± 1.0%
Random voltage variation	± 1.0%
Frequency regulation	Isochronous
Random frequency variation	± 0.50%
Radio frequency emissions compliance	FCC code title 47 part 15 class A and B

Engine specifications

Design	Turbocharged and charge air cooled
Bore	107 mm (4.21 in.)
Stroke	124 mm (4.88 in.)
Displacement	6.7 L (408 in^3)
Cylinder block	Cast iron, in-line 6 cylinder
Battery capacity	2 x 850 amps per battery at ambient temperature of 0 ℃ (32 ℉)
Battery charging alternator	100 amps
Starting voltage	2 x 12 volt in parallel, negative ground
Lube oil filter type(s)	Spin-on with relief valve
Standard cooling system	High ambient radiator
Rated speed	1800 rpm

Alternator specifications

Design	Brushless, 4 pole, drip proof, revolving field
Stator	2/3 pitch
Rotor	Direct coupled, flexible disc
Insulation system	Class H per NEMA MG1-1.65
Standard temperature rise	120 ºC (248 ℉) Standby
Exciter type	Torque match (shunt) with PMG as option
Alternator cooling	Direct drive centrifugal blower
AC waveform Total Harmonic Distortion (THDV)	< 5% no load to full linear load, < 3% for any single harmonic
Telephone Influence Factor (TIF)	< 50 per NEMA MG1-22.43
Telephone Harmonic Factor (THF)	< 3%

Available voltages

1-phase	3-phase				
• 120/240	• 120/208	• 120/240	• 277/480	• 347/600	• 127/220

Generator set options

Fuel system
- Basic fuel tanks
- Regional fuel tanks

Engine
- Engine air cleaner – normal or heavy duty
- Shut down – low oil pressure
- Extension – oil drain
- Engine oil heater

Alternator
- 120 ℃ temperature rise alternator
- 105 ℃ temperature rise alternator
- PMG excitation
- Alternator heater, 120 V
- Reconnectable full 1 phase output alternator upto 175 kWe

Control
- AC output analog meters
- Stop switch – emergency
- Auxiliary output relays (2)
- Auxiliary configurable signal inputs (8) and relay outputs (8)

Electrical
- One, two or three circuit breaker configurations
- 80% rated circuit breakers
- 80% or 100% rated LSI circuit breakers
- Battery charger

Enclosure
- Aluminium enclosure Sound Level 1 or Level 2, green color
- Aluminium weather protective enclosure with muffler installed, green color

Cooling system
- Shutdown – low coolant level
- Warning – low coolant level
- Extension – coolant drain
- Coolant heater options:
  - <4 ℃ (40 ℉) – cold weather
  - <-18 ℃ (0 ℉) – extreme cold

Exhaust system
- Exhaust connector NPT
- Exhaust muffler mounted

Generator set application
- Base barrier – elevated genset
- Radiator outlet duct adapter

Warranty
- Base warranty – 2 year/1000 hours, Standby
- Base warranty – 1 year/unlimited hours, Prime
- 3 & 5 year Standby warranty options

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Generator set accessories

- Coolant heater
- Battery heater kit
- Engine oil heater
- Remote control displays
- Auxiliary output relays (2)
- Auxiliary configurable signal inputs (8) and relay outputs (8)
- Annunciator – RS485
- Audible alarm
- Remote monitoring device – PowerCommand 500/550
- Battery charger – stand-alone, 12 V
- Circuit breakers
- Enclosure Sound Level 1 to Sound Level 2 upgrade kit
- Base barrier – elevated generator set
- Mufflers – industrial, residential or critical
- Alternator PMG excitation
- Alternator heater
- Improved PC1.1 display readability
- Top conduit entry access

Control system PowerCommand 1.1

PowerCommand control is an integrated generator set control system providing voltage regulation, engine protection, operator interface and isochronous governing (optional). Major features include:

- Battery monitoring and testing features and smart starting control system.
- Standard PCCNet interface to devices such as remote annunciator for NFPA 110 applications.
- Control boards potted for environmental protection.
- Control suitable for operation in ambient temperatures from -40 ℃ to +70 ℃ (-40 ℉ to +158 ℉) and altitudes to 5000 meters (13,000 feet).
- Prototype tested; UL, CSA, and CE compliant.
- InPower™ PC-based service tool available for detailed diagnostics.

Operator/display panel

- Manual off switch
- Alpha-numeric display with pushbutton access for viewing engine and alternator data and providing setup, controls and adjustments (English or international symbols)
- LED lamps indicating generator set running, not in auto, common warning, common shutdown, manual run mode and remote start
- Suitable for operation in ambient temperatures from -40 ℃ to +70 ℃
- Bargraph display (optional)

AC protection

- Over current warning and shutdown
- Over and under voltage shutdown
- Over and under frequency shutdown
- Over excitation (loss of sensing) fault
- Field overload

Engine protection

- Overspeed shutdown
- Low oil pressure warning and shutdown
- High coolant temperature warning and shutdown
- Low coolant level warning or shutdown
- Low coolant temperature warning
- High, low and weak battery voltage warning
- Fail to start (overcrank) shutdown
- Fail to crank shutdown
- Redundant start disconnect
- Cranking lockout
- Sensor failure indication
- Low fuel level warning or shutdown

Alternator data

- Line-to-Line and Line-to-neutral AC volts
- 3-phase AC current
- Frequency
- Total kVa

Engine data

- DC voltage
- Lube oil pressure
- Coolant temperature
- Engine speed

Other data

- Generator set model data
- Start attempts, starts, running hours
- Fault history
- RS485 Modbus® interface
- Data logging and fault simulation (requires InPower service tool)

Digital governing (optional)

- Integrated digital electronic isochronous governor
- Temperature dynamic governing

Digital voltage regulation

- Integrated digital electronic voltage regulator
- 2-phase Line-to-Line sensing
- Configurable torque matching

Control functions

- Time delay start and cooldown
- Cycle cranking
- PCCNet interface
- (2) Configurable inputs
- (2) Configurable outputs
- Remote emergency stop
- Automatic Transfer Switch (ATS) control
- Generator set exercise, field adjustable

Options

- Auxiliary output relays (2)
- Remote annunciator with (3) configurable inputs and (4) configurable outputs
- PMG alternator excitation
- PowerCommand 500/550 for remote monitoring and alarm notification (accessory)
- Auxiliary, configurable signal inputs (8) and configurable relay outputs (8)
- AC output analog meters (bargraph)
  - Color-coded graphical display of:
    - 3-phase AC voltage
    - 3-phase current
    - Frequency
    - kVa
- Remote operator panel
- PowerCommand 2.3 control with AmpSentry protection

Ratings definitions

Emergency Standby Power (ESP):

Applicable for supplying power to varying electrical load for the duration of power interruption of a reliable utility source. Emergency Standby Power (ESP) is in accordance with ISO 8528. Fuel Stop power in accordance with ISO 3046, AS 2789, DIN 6271 and BS 5514.

Limited-Time Running Power (LTP):

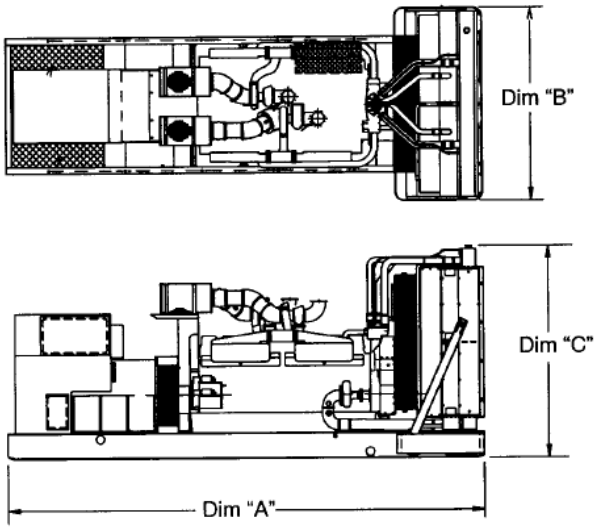
Applicable for supplying power to a constant electrical load for limited hours. Limited Time Running Power (LTP) is in accordance with ISO 8528.

Prime Power (PRP):

Applicable for supplying power to varying electrical load for unlimited hours. Prime Power (PRP) is in accordance with ISO 8528. Ten percent overload capability is available in accordance with ISO 3046, AS 2789, DIN 6271 and BS 5514.

Base Load (Continuous) Power (COP):

Applicable for supplying power continuously to a constant electrical load for unlimited hours. Continuous Power (COP) in accordance with ISO 8528, ISO 3046, AS 2789, DIN 6271 and BS 5514.



This outline drawing is for reference only. See respective model data sheet for specific model outline drawing number.

Do not use for installation design

Model	Dim “A” mm (in.)	Dim “B” mm (in.)	Dim “C” mm (in.)	Set weight*wet kg (lbs.)
Open set				
C125D6D	2867 (113)	1016 (40)	1415 (56)	1470 (3240)
C150D6D	2867 (113)	1016 (40)	1415 (56)	1470 (3240)
C175D6D	2867 (113)	1016 (40)	1415 (56)	1470 (3240)
C200D6D	2867 (113)	1016 (40)	1415 (56)	1470 (3240)
Weather protective enclosure				
C125D6D	2867 (113)	1016 (40)	1836 (72)	1600 (3527)
C150D6D	2867 (113)	1016 (40)	1836 (72)	1600 (3527)
C175D6D	2867 (113)	1016 (40)	1836 (72)	1600 (3527)
C200D6D	2867 (113)	1016 (40)	1836 (72)	1600 (3527)
Sound attenuated enclosure Level 1				
C125D6D	3621 (143)	1016 (40)	1836 (72)	1649 (3635)
C150D6D	3621 (143)	1016 (40)	1836 (72)	1649 (3635)
C175D6D	3621 (143)	1016 (40)	1836 (72)	1649 (3635)
C200D6D	3621 (143)	1016 (40)	1836 (72)	1649 (3635)
Sound attenuated enclosure Level 2				
C125D6D	4061 (160)	1016 (40)	1836 (72)	1665 (3671)
C150D6D	4061 (160)	1016 (40)	1836 (72)	1665 (3671)
C175D6D	4061 (160)	1016 (40)	1836 (72)	1665 (3671)
C200D6D	4061 (160)	1016 (40)	1836 (72)	1665 (3671)

* Weights above are average. Actual weight varies with product configuration.

Codes and standards

Codes or standards compliance may not be available with all model configurations – consult factory for availability.

	This generator set is designed in facilities certified to ISO 9001 and manufactured in facilities certified to ISO 9001 or ISO 9002.		The generator set is available Listed to UL 2200, Stationary Engine Generator Assemblies.
	The Prototype Test Support (PTS) program verifies the performance integrity of the generator set design. Cummins products bearing the PTS symbol meet the prototype test requirements of NFPA 110 for Level 1 systems.	**U.S. EPA**	Engine certified to U.S. EPA SI Stationary Emission Regulation 40 CFR, Part 60.
	All low voltage models are CSA certified to product class 4215-01.	**International Building Code**	The generator set is certified to International Building Code (IBC) 2012.

Warning: Back feed to a utility system can cause electrocution and/or property damage. Do not connect to any building's electrical system except through an approved device or after building main switch is open.

For more information contact your local Cummins distributor or visit power.cummins.com

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NAS-6370-EN.DOCX (04/19) A061F585

Generator Set Data Sheet

Model:	C150D6D
Frequency:	60 Hz
Fuel Type:	Diesel
KW Rating:	150 Standby
	135 Prime
Emissions level:	EPA Tier 3, Stationary Emergency

Exhaust Emission Data Sheet:	EDS-3044
Exhaust Emission Compliance Sheet:	EPA-2033
Sound Performance Data Sheet:	MSP-4008
Cooling Performance Data Sheet:	MCP-2048
Prototype Test Summary Data Sheet:	PTS-636

Fuel Consumption

	Standby				Prime			
	kW (kVA)				kW (kVA)			
Ratings	150 (188)				135 (169)			
Load	1/4	1/2	3/4	Full	1/4	1/2	3/4	Full
US gph	4.7	6.9	9.2	11.7	4.4	6.4	8.4	10.7
L/hr	17.78	26.11	34.82	44.28	16.65	24.22	31.79	40.49

Engine

	Standby rating	Prime rating
Engine Manufacturer	Cummins Inc.	
Engine Model	QSB7-G5	
Configuration	Cast iron, in-line, 6 cylinders	
Aspiration	Turbocharged and charge air cooled	
Gross Engine Power Output, kWm (bhp)	242 (324)	208 (279)
BMEP at set rated load, kPa (psi)	1763 (255.7)	1601 (232)
Bore, mm (in)	107 (4.21)	
Stroke, mm (in)	124 (4.88)	
Rated Speed, rpm	1800	
Piston Speed, m/s (ft/min)	7.44 (1464)	
Compression Ratio	17.2:1	
Lube Oil Capacity, L (qt)	17.4 (18.38)	
Overspeed Limit, rpm	2250	

Fuel Flow

Maximum Fuel Flow, L/hr (US gph)	103 (27.0)
Maximum Fuel Inlet Restriction with Clean Filter, mm Hg (in Hg)	127 (5.0)

Air

	Standby rating	Prime rating
Combustion Air, m3/min (scfm)	14.78 (522)	14.22 (502)
Maximum Air Cleaner Restriction with Clean Filter, kPa (in H2O)	3.7 (15)	

Exhaust

Exhaust Flow at set rated load, m^3/min (cfm)	35.62 (1258)	33.66 (1189)
Exhaust Temperature, °C (°F)	466.67 (872)	453.89 (849)
Maximum Back Pressure, kPa (in H_2O)	10 (40.19)	10 (40.19)
Actual Exhaust Back Pressure with CPG Sound level 2 Enclosure Muffler, kPa (in H_2O)	9.5 (38.18)	8.6 (34.36)
Actual Exhaust Back Pressure with CPG Weather Enclosure Muffler, kPa (in H_2O)	7.2 (28.93)	6.5 (26)

Standard Set-mounted Radiator Cooling

Ambient Design, ° C (° F)	50 (122)	
Fan Load, kW_m (HP)	14.02 (18.8)	
Coolant Capacity (with radiator), L (US Gal)	22 (5.9)	
Cooling System Air Flow, m^3/min (scfm)	305.82 (10800)	
Total Heat Rejection, MJ/min (Btu/min)	7.91 (7499)	7.25 (6871)
Maximum Cooling Air Flow Static Restriction, kPa (in H_2O)	0.12 (0.5)	

Weight[2]

Unit Wet Weight kgs (lbs)	1390 (3064)

Notes:
[1] For non-standard remote installations contact your local Cummins Power Generation representative.
[2] Weights represent a set with standard features. See outline drawing for weights of other configurations.

Derating Factors

Standby	Engine power available up to 3425 m (11237 ft.) at ambient temperatures up to 40° C (104° F) and 2298 m (7540 ft.) at 50° C (122° F). Consult your Cummins distributor for temperature and ambient requirements outside these parameters.
Prime	Engine power available up to 2743 m (9000 ft.) at ambient temperatures up to 40° C (104° F) and 2151 m (7057 ft.) at 50° C (122° F). Consult your Cummins distributor for temperature and ambient requirements outside these parameters.

Ratings Definitions

Emergency Standby Power (ESP):	Limited-time Running Power (LTP):	Prime Power (PRP):	Base Load (continuous) Power (COP):
Applicable for supplying power to varying electrical load for the duration of power interruption of a reliable utility source. Emergency Standby Power (ESP) is in accordance with ISO 8528. Fuel Stop power in accordance with ISO 3046, AS 2789, DIN 6271 and BS 5514.	Applicable for supplying power to a constant electrical load for limited hours. Limited Time Running Power (LTP) is in accordance with ISO 8528.	Applicable for supplying power to varying electrical load for unlimited hours. Prime Power (PRP) is in accordance with ISO 8528. Ten percent overload capability is available in accordance with ISO 3046, AS 2789, DIN 6271 and BS 5514.	Applicable for supplying power continuously to a constant electrical load for unlimited hours. Continuous Power (COP) is in accordance with ISO 8528, ISO 3046, AS 2789, DIN 6271 and BS 5514.

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Alternator Data

Standard Alternators	Single phase[2]	Three Phase[1]					
Maximum Temperature Rise above 40 °C Ambient	120 °C	120 °C					
Feature Code	BB88-2	B946-2	B986-2	B952-2	B943-2	BB86-2	BB88-2
Alternator Data Sheet Number	ADS212	ADS-210	ADS-210	ADS-209	ADS-209	ADS-210	ADS-212
Voltage Ranges	120/240	120/208	120/240	347/600	277/480	127/220	120/208, 127/220, 277/480
Voltage Feature Code	R104	R098-2	R106-2	R114-2	R002-2	R020-2	R098-2, R020-2, R106-2, R002-2
Surge kW	205.9	210.2	211.4	211.1	211.4	210.7	211.6
Motor Starting kVA (at 90% sustained voltage) Shunt	770	563	563	516	516	563	770
Motor Starting kVA (at 90% sustained voltage) PMG	920	663	663	607	607	663	920
Full Load Current Amps at Standby Rating	625	520	451	180	226	492	226 to 520

Alternator Data

Standard Alternators	Single phase[2]	Three phase[1]				
Maximum Temperature Rise above 40 °C Ambient	105 °C	105 °C	105 °C	105 °C	105 °C	105 °C
Feature Code	BB87-2	BB93-2	BB94-2	BB95-2	BB92-2	BB85-2
Alternator Data Sheet Number	ADS-212	ADS-210	ADS-210	ADS-209	ADS-209	ADS-210
Voltage Ranges	120/208, 120/240, 127/220, 277/480, 347/600	120/208	120/240	277/480	347/600	127/220
Voltage Feature Code	R098-2, R020-2, R002-2, R104-2, R106-2, R114-2	R098-2	R106-2	R002-2	R114-2	R020-2
Surge kW	205.9	210.2	211.4	211.4	210.7	211.6
Motor Starting kVA (at 90% sustained voltage) Shunt	770	563	563	516	516	563
Motor Starting kVA (at 90% sustained voltage) PMG	920	663	663	607	607	663
Full Load Current Amps at Standby Rating	625	520	451	226	180	492

Notes:

[1] Single phase power can be taken from a three phase generator set at up to 2/3 set rated 3-phase kW at 1.0 power factor

[2] Full single phase output up to full set rated 3-phase kW at 1.0 power factor

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Formulas for Calculating Full Load Currents:

Three phase output	Single phase output
$\frac{kW \times 1000}{Voltage \times 1.73 \times 0.8}$	$\frac{kW \times SinglePhaseFactor \times 1000}{Voltage}$

Warning: Back feed to a utility system can cause electrocution and/or property damage. Do not connect to any building's electrical system except through an approved device or after building main switch is open.

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Sound Data
C150D6D
QSB7-G5 NR3 60Hz Diesel

A-weighted Sound Pressure Level @ 7 meters, dB(A)

See notes 2, 5 and 7-11 listed below

Configuration	Exhaust	Applied Load	Position (Note 2)								8 Position Average
			1	2	3	4	5	6	7	8	
Standard – Unhoused	Infinite Exhaust	100% Standby	84	86	88	88	83	90	88	88	87
F216-2 Weather Aluminum	Mounted	100% Standby	86	85	83	87	84	89	83	86	86
F231-2 Sound Attenuated Level 1, Aluminum	Mounted	100% Standby	83	79	74	74	74	75	75	80	78
F217-2 Sound Attenuated Level 2, Aluminum	Mounted	100% Standby	72	72	71	72	73	72	71	73	72

Average A-weighted Sound Pressure Level @ 1 meter, dB(A)

See notes 1, 5 and 7-14 listed below

Configuration	Exhaust	Applied Load	Octave Band Center Frequency (Hz)										Overall Sound Pressure Level
			16	31.5	63	125	250	500	1000	2000	4000	8000	16000	
Standard – Unhoused	Infinite Exhaust	100% Standby	N/A	46	68	81	89	91	91	90	88	86	90	98
F216-2 Weather Aluminum	Mounted	100% Standby	N/A	42	67	83	90	89	90	87	84	80	81	96
F231-2 Sound Attenuated Level 1, Aluminum	Mounted	100% Standby	N/A	45	62	74	80	80	81	79	76	77	73	88
F217-2 Sound Attenuated Level 2, Aluminum	Mounted	100% Standby	N/A	45	63	72	77	76	77	76	73	71	65	84

A-weighted Sound Pressure Level @ Operator Location, dB(A)

See notes 1, 3, 5 and 7-14 listed below

Configuration	Exhaust	Applied Load	Octave Band Center Frequency (Hz)										Overall Sound Pressure Level
			16	31.5	63	125	250	500	1000	2000	4000	8000	16000	
Standard – Unhoused	Infinite Exhaust	100% Standby	N/A	43	68	79	85	89	89	90	89	88	95	99
F216-2 Weather Aluminum	Mounted	100% Standby	N/A	42	67	79	84	84	82	81	78	75	78	90
F231-2 Sound Attenuated Level 1, Aluminum	Mounted	100% Standby	N/A	50	66	75	81	82	81	78	75	74	69	87
F217-2 Sound Attenuated Level 2, Aluminum	Mounted	100% Standby	N/A	50	67	76	80	79	79	76	73	72	61	86

Sound Data
C150D6D
QSB7-G5 NR3 60Hz Diesel

A-weighted Sound Power Level, dB(A)

See notes 1, 3 and 6-14 listed below

Configuration	Exhaust	Applied Load	Octave Band Center Frequency (Hz)											Overall Sound Power Level
			16	31.5	63	125	250	500	1000	2000	4000	8000	16000	
Standard – Unhoused	Infinite Exhaust	100% Standby	N/A	63	86	98	106	108	109	107	106	103	107	116
F216-2 Weather Aluminum	Mounted	100% Standby	N/A	60	85	101	108	107	107	105	102	97	99	114
F231-2 Sound Attenuated Level 1, Aluminum	Mounted	100% Standby	N/A	63	80	92	99	99	99	97	94	95	91	106
F217-2 Sound Attenuated Level 2, Aluminum	Mounted	100% Standby	N/A	64	81	91	95	94	95	94	91	90	84	102

Exhaust Sound Power Level, dB(A)

See notes 4 and 6-14 listed below

Configuration	Applied Load	Octave Band Center Frequency (Hz)											Overall Sound Power Level
		16	31.5	63	125	250	500	1000	2000	4000	8000	16000	
Open Exhaust (No Muffler)	100% Standby	N/A	64	93	106	115	117	114	113	113	105	94	122

Global Notes:

1. Sound pressure levels at 1 meter are measured per the requirements of ISO 3744, ISO 8528-10, and European Communities Directive 2000/14/EC as applicable. The microphone measurement locations are 1 meter from a reference parallelepiped just enclosing the generator set (enclosed or unenclosed).

2. Seven-meter measurement location 1 is 7 meters (23 feet) from the generator (alternator) end of the generator set, and the locations proceed counterclockwise around the generator set at 45° angles at a height of 1.2 meters (48 inches) above the ground surface.

3. Sound Power Levels are calculated according to ISO 3744, ISO 8528-10, and/or CE (European Union) requirements.

4. Exhaust Sound Levels are measured and calculated per ISO 6798, Annex A.

5. Reference Sound Pressure Level is 20 µPa

6. Reference Sound Power Level is 1 pW (10^{-12} Watt)

7. Sound data for remote-cooled generator sets are based on rated load without cooling fan noise.

8. Sound data for the generator set with infinite exhaust do not include the exhaust noise contribution

9. Published sound levels are measured at CE certified test site and are subject to instrumentation measurement, installation, and manufacturing variability.

10. Unhoused/Open configuration generator sets refers to generator sets with no sound enclosures of any kind.

11. Housed/Enclosed/Closed/Canopy configuration generator sets refer to generator sets that have noise reduction sound enclosure installed over the generator set and usually integrally attached to the skid base/base frame/fuel container base of the generator set.

12. Published sound levels meet the requirements India's Central Pollution Control Board (Ministry of Environment & Forests), vide GSR 371 (E), which states the A-weighted sound level at 1 meter from any diesel generator set up to a power output rating of 1000kVA shall not exceed 75 dB(A).

13. For updated noise pollution information for India see website: http://www.envfor.nic.in/legis/legis.html

14. Sound levels must meet India's Ambient Air Noise Quality Standards detailed for Daytime/Nighttime operation in Noise Pollution (Regulation and Control) Rules, 2000

Specification sheet

Dual wall sub-base diesel fuel tanks -

10-200 kW generator sets

Description

Cummins® offers two series of fuel tanks (basic series and regional series) for the 10~125 kW diesel generator sets. The “basic” series of fuel tanks provide economical solutions for areas with no or minimal local/regional code requirements on diesel fuel tanks. The footprint of “basic” tanks matches the generator set’s footprint. The “regional” series of fuel tanks provide flexible and upgradable solutions for areas with extensive local/regional code requirements on diesel fuel tanks. The footprint of the “regional” series of fuel tanks extends beyond the generator set to allow room for installation of optional features at factory or accessories in the field for meeting local/regional code requirements or customer specification on diesel fuel tanks. All fuel tanks and optional features are compatible with factory installed enclosures.

These tanks are constructed of heavy gauge steel and include an internally reinforced baffle structure for supporting the generator set. The fuel tank design features fewer seams and welds for better corrosion resistance performance.

These tanks are pre-treated with a conversion coating and then finished with a textured powder paint. The paint has superior UV and chemical resistance with best-in-class adhesion, flexibility, and durability to resist chipping and substrate corrosion. Both interior compartments are treated with a rust preventative for extended corrosion protection.

These tanks are UL and ULC Listed as secondary containment generator base tanks. Inner and outer containments are leak checked per UL and ULC testing procedures to ensure their integrity.

These fuel tanks are offered in various sizes to satisfy different fuel capacities requirements.

Compatible generator set model

Engine	D1703M	V2203M	4BT3.3-G5	4BTAA3.3-G7	QSB5-G5	QSB7-G5
Generator set model names	C10D6	C20D6	C25D6	C50D6	C50D6C	C125D6D
	C15D6		C30D6	C60D6	C60D6C	C150D6D
			C35D6		C80D6C	C175D6D
			C40D6		C100D6C	C200D6D
					C125D6C	

Basic fuel tanks

Standard features:

UL 142 and ULC-S601 listed - Minimum 110% secondary containment capacity.

NFPA and IFC - Capable of meeting NFPA 30 and NFPA 110 codes with available factory installed optional features.

Emergency pressure relief vents - Ensure adequate ventilation of the primary and secondary tank compartments under extreme temperature and emergency conditions.

Normal atmospheric vent - “Mushroom” style vent ensures adequate venting of the primary tank during fill, generator set running and temperature variations. Raised above fuel fill.

Raised fuel fill - includes lockable sealed fuel cap.

Lifting eyes - Allow lifting of fuel tank with generator set installed.

Optional features:

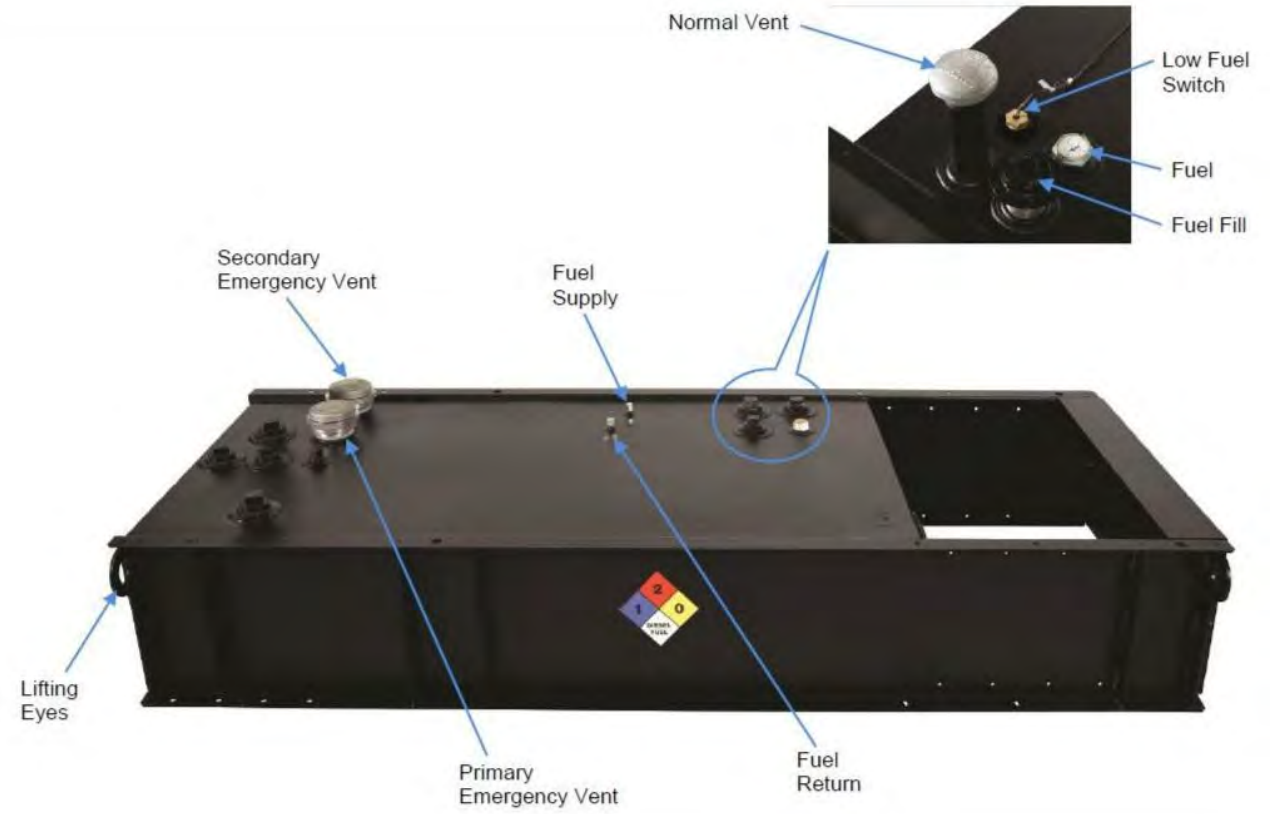
Secondary containment basin switch (rupture switch) - Activates a warning in the event of a primary tank leak. Side mounted.

Low fuel level switch - Activates a warning when 40% of the fuel is left in the tank.

Fuel level gauge - Provides direct reading of fuel level. Top mounted.

Electric fuel level sender with gauge - Allows remote electrical monitoring of fuel tank level. Flying leads for customer connection.

Tank to foundation clearance - 2-inch bolt-thru risers allow visual inspection under tank including rodent barrier.



*Picture is for reference only. See outline drawing for tank specific information by model.

Basic tanks

Generator set Standby power output	Generator set model	Engine model	Fuel consumption (100% load, Standby)	Tank feature code	Minimum run time feature	Tank dimensions (L x W x H)	Nominal dry weight*	Tank usable volume	Actual run time
kW			gal/hr		hr	inch	lbs	gal	hr
10	C10D6	D1703M	1.12	C319-2	24	65.7 x 34 x 13	310	46	41
				C320-2	48	65.7 x 34 x 23	583	91	81
15	C15D6	D1703M	1.38	C319-2	24	65.7 x 34 x 13	310	46	33
				C320-2	48	65.7 x 34 x 23	583	91	66
20	C20D6	V2203M	1.81	C319-2	24	65.7 x 34 x 13	310	46	25
				C320-2	48	65.7 x 34 x 23	583	91	50
25	C25D6	4BT3.3-G5	2.42	C319-2	24	87.6 x 34 x 15	456	74	31
				C320-2	48	87.6 x 34 x 23	669	132	54
30	C30D6	4BT3.3-G5	2.81	C319-2	24	87.6 x 34 x 15	456	74	26
				C320-2	48	87.6 x 34 x 32	908	195	69
35	C35D6	4BT3.3-G5	3.16	C319-2	24	87.6 x 34 x 23	669	132	42
				C320-2	48	87.6 x 34 x 32	908	195	62
40	C40D6	4BT3.3-G5	3.66	C319-2	24	87.6 x 34 x 23	669	132	36
				C320-2	48	87.6 x 34 x 32	908	195	53
50	C50D6	4BTAA3.3-G7	4.25	C319-2	24	87.6 x 34 x 23	669	132	31
				C320-2	48	87.6 x 34 x 42	977	263	62
60	C60D6	4BTAA3.3-G7	5.04	C319-2	24	87.6 x 34 x 23	669	132	26
				C320-2	48	87.6 x 34 x 42	977	263	52
50	C50D6C	QSB5-G5	5.30	C319-2	24	117 x 40 x 25	809	260	49
				C320-2	48	117 x 40 x 25	809	260	49
60	C60D6C	QSB5-G5	6.10	C319-2	24	117 x 40 x 25	809	260	42
				C320-2	48	117 x 40 x 33	966	353	57
80	C80D6C	QSB5-G5	7.30	C319-2	24	117 x 40 x 25	809	260	35
				C320-2	48	117 x 40 x 33	966	353	48
100	C100D6C	QSB5-G5	8.90	C319-2	24	117 x 40 x 25	809	260	29
				C320-2	48	117 x 40 x 48	1471	526	59
125	C125D6C	QSB5-G6	10.30	C319-2	24	117 x 40 x 25	809	260	25
				C320-2	48	117 x 40 x 48	1471	526	51
125	C125D6D	QSB7-G5	10.1	C319-2	24	117x40x25	809	258	25
				C320-2	48	117x40x48	1471	520	51
150	C150D6D		11.7	C319-2	24	117x40x33	966	350	29
				C320-2	48	180x40x42	2302	737	62
175	C175D6D		13.3	C319-2	24	117x40x33	966	350	26
				C320-2	48	180x40x42	2302	737	55
200	C200D6D		14.9	C319-2	24	117x40x48	1471	520	34
				C320-2	48	180x40x42	2302	737	49

Note: No OFPV is offered on basic fuel tanks.

* All weights are approximate.

Regional fuel tanks

Standard features:

UL 142 and ULC-S601 listed - Minimum 110% secondary IBC 2012 and 2015 certified - All optional features are seismically certified with this range of tanks and generator sets. Requires factory-installed 2 ft vent extensions or higher.

UL 142 & ULC-S601 listed - Minimum 125% secondary containment capacity.

NFPA & IFC - Capable of meeting NFPA 30, NFPA 110, and IFC codes with available factory-installed optional features.

Emergency pressure relief vents - Ensure adequate ventilation of the primary and secondary tank compartments under extreme temperature and emergency conditions.

Normal atmospheric vent - "Mushroom" style vent ensures adequate venting of the primary tank during fill, generator set running, and temperature variations. Raised above fuel fill.

Raised fuel fill - Includes lockable sealed fuel cap.

Lifting eyes - Allow lifting of fuel tank with generator set installed.

Optional features:

Secondary containment basin switch (rupture switch) - Activates a warning in the event of a primary tank leak. Side Mounted.

Low fuel level switch - Activates a warning when 40% of the fuel is left in the tank.

Fuel level gauge - Provides direct reading of fuel level. Top mounted.

Electric fuel level sender with gauge - Allows remote electrical monitoring of fuel tank level. Flying leads for customer connection.

Tank to foundation clearance - 2-inch bolt-thru risers allow visual inspection under tank including rodent barrier.

Spill containment box for fuel fill - 5 gallon capacity with integral drain (to tank). Lockable lid.

Overfill prevention valve - Shuts off fuel flow during filling at approximately 95% full*. Includes fill down tube, as needed, to terminate within 6" of the bottom of the fuel tank. Uses a 2 inch type "F" cam lock adapter for filling.

High fuel switch - Activates at 90% of full fuel level. Flying leads for customer connection.

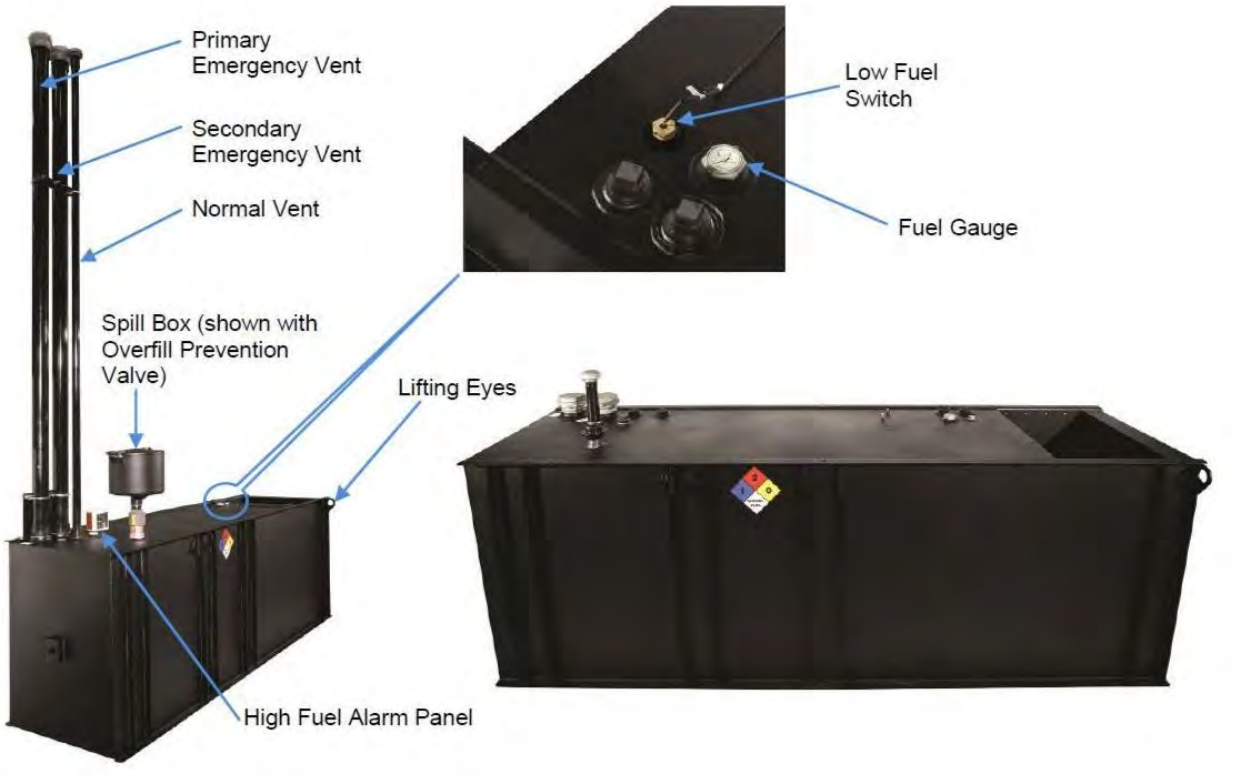
High fuel alarm panel - Provides audible & visual alarm when fuel level reaches 90% of full fuel level.

Fill drop tube - Terminates fuel fill location within 6" of the bottom of the fuel tank.

Vent extensions - Terminate normal and emergency vents (both primary and secondary) a minimum of 12 ft above the bottom of tank.

Seismic vent extensions - 2 ft normal and emergency (both primary & secondary) extensions to meet IBC/OSHPD seismic requirements.

* The OFPV inherently shuts off fuel at approximately 2" below the top of the fuel tank. Some tanks will shut off below this 95% fill level.



*Picture is for reference only. See outline drawing for tank specific information by model.

Regional tanks

Generator set Standby power output	Generator set model	Engine model	Fuel consumption (100% load, Standby)	Tank feature code	Minimum run time feature	Tank dimensions (L x W x H)	Nominal dry weight*	Tank usable volume	Actual run time w/o OFPV	Actual run time w/OFPV
kW			gal/hr		hr	inch	lbs	gal	hr	hr
10	C10 D6	D1703M	1.12	C301-2	24	87.6 x 34 x 15	510	74	66	56
				C303-2	48	87.6 x 34 x 15	510	74	66	56
				C305-2	72	87.6 x 34 x 23	723	132	118	107
				C307-2	96	87.6 x 34 x 23	723	132	118	107
15	C15 D6	D1703M	1.38	C301-2	24	87.6 x 34 x 15	510	74	53	45
				C303-2	48	87.6 x 34 x 15	510	74	53	45
				C305-2	72	87.6 x 34 x 23	723	132	95	86
				C307-2	96	87.6 x 34 x 32	962	195	141	132
20	C20 D6	V2203M	1.81	C301-2	24	87.6 x 34 x 15	510	74	41	35
				C303-2	48	87.6 x 34 x 23	723	132	73	66
				C305-2	72	87.6 x 34 x 32	962	195	108	101
				C307-2	96	87.6 x 34 x 32	962	195	108	101
25	C25 D6	4BT3.3-G5	2.42	C301-2	24	121 x 34 x 10.5	514	74	31	25
				C303-2	48	121 x 34 x 16.2	686	132	54	47
				C305-2	72	121 x 34 x 22.1	879	195	80	73
				C307-2	96	121 x 34 x 29.5	1120	263	109	101
30	C30 D6	4BT3.3-G5	2.81	C301-2	24	121 x 34 x 10.5	514	74	26	21
				C303-2	48	121 x 34 x 22.1	879	195	69	63
				C305-2	72	121 x 34 x 29.5	1120	263	94	87
				C307-2	96	121 x 34 x 42.0	1461	389	138	132
35	C35 D6	4BT3.3-G5	3.16	C301-2	24	121 x 34 x 16.2	686	132	42	36
				C303-2	48	121 x 34 x 22.1	879	195	62	56
				C305-2	72	121 x 34 x 29.5	1120	263	83	77
				C307-2	96	121 x 34 x 42.0	1461	389	123	117
40	C40 D6	4BT3.3-G5	3.66	C301-2	24	121 x 34 x 16.2	686	132	36	31
				C303-2	48	121 x 34 x 22.1	879	195	53	48
				C305-2	72	121 x 34 x 42.0	1461	389	106	101
				C307-2	96	121 x 34 x 42.0	1461	389	106	101
50	C50 D6	4BTAA3.3-G7	4.25	C301-2	24	121 x 34 x 16.2	686	132	31	27
				C303-2	48	121 x 34 x 29.5	1120	263	62	58
				C305-2	72	121 x 34 x 42.0	1461	389	92	87
60	C60 D6	4BTAA3.3-G7	5.04	C301-2	24	121 x 34 x 16.2	686	132	26	23
				C303-2	48	121 x 34 x 29.5	1120	263	52	49
				C305-2	72	121 x 34 x 42.0	1461	389	77	73
50	C50D6C	QSB5-G5	5.30	C301-2	24	154 x 40 x 22	1388	250	47	45
				C303-2	48	154 x 40 x 32	1657	425	80	76
				C305-2	72	154 x 40 x 32	1657	425	80	76
				C307-2	96	154 x 40 x 46	2096	625	118	112
60	C60D6C	QSB5-G5	6.10	C301-2	24	154 x 40 x 22	1388	250	41	39
				C303-2	48	154 x 40 x 32	1657	425	70	66
				C305-2	72	154 x 40 x 46	2096	625	102	97
				C307-2	96	154 x 40 x 46	2096	625	102	97
80	C80D6C	QSB5-G5	7.30	C301-2	24	154 x 40 x 22	1388	250	34	33
				C303-2	48	154 x 40 x 32	1657	425	58	55
				C305-2	72	154 x 40 x 46	2096	625	85	81
100	C100D6C	QSB5-G5	8.90	C301-2	24	154 x 40 x 22	1388	250	28	27
				C303-2	48	154 x 40 x 32	1657	425	48	45
				C305-2	72	154 x 40 x 46	2096	625	70	66
125	C125D6C	QSB5-G6	10.30	C301-2	24	154 x 40 x 22	1388	250	24	23
				C303-2	48	154 x 40 x 46	2096	625	60	58

* All weights are approximate.

Regional tanks

Generator set Standby power output	Generator set model	Engine model	Fuel consumption (100% load, Standby)	Tank feature code	Minimum run time feature	Tank dimensions (L x W x H)	Nominal dry weight*	Tank usable volume	Actual run time w/o OFPV	Actual run time w/OFPV
kW			gal/hr		hr	inch	lbs	gal	hr	hr
125	C125D6D	QSB7-G5	10.1	C301-2	24	180x40x21	1477	351	34	30
				C303-2	48	180x40x42	2302	737	72	69
				C305-2	72	180x40x42	2302	737	72	69
				C307-2	96	180x65.5x35.3	3552	1055	104	98
150	C150D6D		11.7	C301-2	24	180x40x21	1477	351	30	26
				C303-2	48	180x40x42	2302	737	63	59
				C305-2	72	180x65.5x35.3	3552	1055	90	84
175	C175D6D		13.3	C301-2	24	180x40x21	1477	351	26	23
				C303-2	48	180x40x42	2302	737	55	52
				C305-2	72	180x65.5x35.3	3552	1055	79	74
200	C200D6D		14.9	C301-2	24	180x40x21	1477	351	24	21
				C303-2	48	180x40x42	2302	737	49	47
				C305-2	72	180x65.5x35.3	3552	1055	72	66

Certifications/standards/codes

UL 142 Listed - Cummins dual wall sub-base tanks are UL Listed and constructed in accordance with Underwriters Laboratories Standard UL 142 “steel aboveground tanks for flammable and combustible liquids,” as a “secondary containment generator base tank”

NFPA - Cummins tanks are built in accordance with all applicable NFPA codes:

- NFPA 30 - Flammable and Combustible Liquids code
- NFPA 37 - Standard for Installation and use of Stationary Combustible Engine and Gas Turbines
- NFPA 110 - Standard for Emergency and Standby Power Systems

ISO9001 - This product was designed and manufactured in facilities certified to ISO9001.

ULC - Cummins tanks are built in accordance with all applicable ULC codes

For more information contact your local Cummins distributor or visit power.cummins.com

Our energy working for you.™

NAAC-5868-EN (02/18)

BUILDING ID: RS7

COMMUNITY DEVELOPMENT DEPARTMENT
PLANNING DIVISION
701 Laurel Street
Menlo Park, CA 94025
phone: (650) 330-6702
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http://www.menlopark.org

APPLICATIONS INVOLVING HAZARDOUS MATERIALS – GENERATOR SUPPLEMENT

The following information is required for hazardous materials applications that include generators.

GENERATOR PURPOSE (for example, whether it is an emergency generator dedicated to life safety egress lighting and other life safety devices, or a standby generator to allow continued operations in the event of a power outage)

Generator is intended to provide backup power to Emergency, Legally Required and Optional Standby loads to support continued facility operations in the event of a utility power outage.

FUEL TANK SIZE (in gallons) **AND FUEL TYPE** Fuel tank size: 270 gallons (approx) Fuel type: diesel	**NOISE RATING** 72db(A) @ 7meters
SIZE (output in both kW (kilowatt) and hp (horsepower) measurements) Power output: 150 kW (approx) Engine output: 324 hp	**ENCLOSURE COLOR** Green or gray
ROUTE FOR FUELING HOSE ACCESS 75ft max distance, direct from fueling truck to generator fuel tank	**PARKING LOCATION OF FUELING TRUCK** Building exterior at drivable surface
FREQUENCY OF REFUELING 2 times / year	**HOURS OF SERVICE ON A FULL TANK** 24 hours at generator fully rated load

PROPOSED TESTING SCHEDULE (including frequency, days of week, and time of day)

Monthly, Sunday, AM

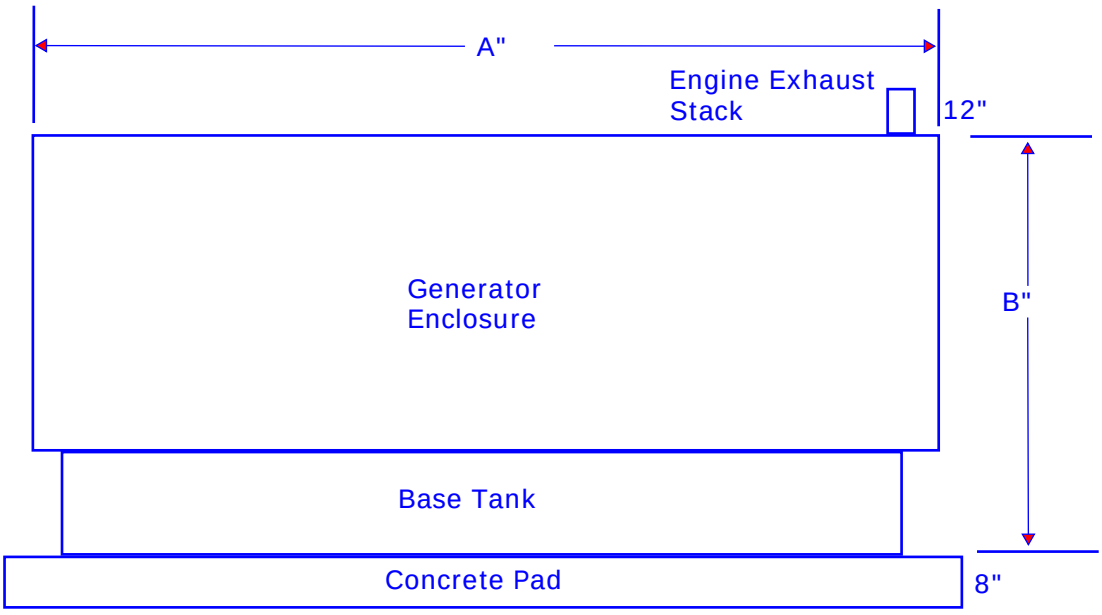
ALARMS AND/OR AUTOMATIC SHUTOFFS (for leaks during use and/or spills/over-filling during fueling, if applicable)

Fuel system alarms and/or shutdowns: overfill, low fuel, fuel-in-rupture basin alarm.
Engine alarms and/or shutdowns: overspeed, fail start, low oil pressure, high coolant temp, etc.

OTHER APPLICATION SUBMITTAL REQUIREMENTS (please attach)

- Section showing the height of the pad, the isolation base (if there is one), the height of the generator with the appropriate belly (fuel storage tank) and exhaust stack
- Status of required Bay Area Air Qualify Management District (BAAQMD) permit, including confirmation of parental notification for any proposals within 1,000 feet of a school

GENERATOR SIZE (kW)	DIMENSION 'A' (")	DIMENSION 'B' (")
1000	315	137
750	315	137
500	222	106
250	222	106
150	180	93



Section
(NTS)

150KW GENERATOR

Specification sheet

Diesel generator set

QSB7 series engine
125-200 kW @ 60 Hz
EPA Tier 3 emissions

Description

Cummins® generator sets are fully integrated power generation systems providing optimum performance, reliability and versatility for stationary Standby applications.

Features

Heavy duty engine - Rugged 4-cycle industrial diesel delivers reliable power and fast response to load changes.

Alternator - Several alternator sizes offer selectable motor starting capability with low reactance 2/3 pitch windings, low waveform distortion with non-linear loads and fault clearing short-circuit capability.

Control system - The PowerCommand® 1.1 electronic control is standard equipment and provides total generator set system integration including automatic remote starting/stopping, precise frequency and voltage regulation, alarm and status message display, output metering, auto-shutdown at fault detection and NFPA 110 Level 1 compliance.

Cooling system - Standard cooling package provides reliable running at up to 50 ℃ (122 ℉) ambient temperature.

Enclosures - The aesthetically appealing enclosure incorporates special designs that deliver one of the quietest generators of its kind. Aluminium material plus durable powder coat paint provides the best anti-corrosion performance. The generator set enclosure has been evaluated to withstand 180 MPH wind loads in accordance with ASCE7 -10. The design has hinged doors to provide easy access for service and maintenance.

Fuel tanks - Dual wall sub-base fuel tanks are offered as optional features, providing economical and flexible solutions to meet extensive code requirements on diesel fuel tanks.

NFPA - The generator set accepts full rated load in a single step in accordance with NFPA 110 for Level 1 systems.

Warranty and service - Backed by a comprehensive warranty and worldwide distributor network.

	Standby 60 Hz		Prime 60 Hz		
Model	**kW**	**kVA**	**kW**	**kVA**	**Data sheets**
C125D6D	125	156	113	141	NAD-6371-EN
C150D6D	150	188	135	169	NAD-6372-EN
C175D6D	175	219	158	197	NAD-6373-EN
C200D6D	200	250	180	225	NAD-6374-EN

Generator set specifications

Governor regulation class	ISO8528 Part 1 Class G3
Voltage regulation, no load to full load	± 1.0%
Random voltage variation	± 1.0%
Frequency regulation	Isochronous
Random frequency variation	± 0.50%
Radio frequency emissions compliance	FCC code title 47 part 15 class A and B

Engine specifications

Design	Turbocharged and charge air cooled
Bore	107 mm (4.21 in.)
Stroke	124 mm (4.88 in.)
Displacement	6.7 L (408 in^3)
Cylinder block	Cast iron, in-line 6 cylinder
Battery capacity	2 x 850 amps per battery at ambient temperature of 0 ℃ (32 ℉)
Battery charging alternator	100 amps
Starting voltage	2 x 12 volt in parallel, negative ground
Lube oil filter type(s)	Spin-on with relief valve
Standard cooling system	High ambient radiator
Rated speed	1800 rpm

Alternator specifications

Design	Brushless, 4 pole, drip proof, revolving field
Stator	2/3 pitch
Rotor	Direct coupled, flexible disc
Insulation system	Class H per NEMA MG1-1.65
Standard temperature rise	120 ºC (248 ℉) Standby
Exciter type	Torque match (shunt) with PMG as option
Alternator cooling	Direct drive centrifugal blower
AC waveform Total Harmonic Distortion (THDV)	< 5% no load to full linear load, < 3% for any single harmonic
Telephone Influence Factor (TIF)	< 50 per NEMA MG1-22.43
Telephone Harmonic Factor (THF)	< 3%

Available voltages

1-phase	3-phase				
• 120/240	• 120/208	• 120/240	• 277/480	• 347/600	• 127/220

Generator set options

Fuel system
- Basic fuel tanks
- Regional fuel tanks

Engine
- Engine air cleaner – normal or heavy duty
- Shut down – low oil pressure
- Extension – oil drain
- Engine oil heater

Alternator
- 120 ℃ temperature rise alternator
- 105 ℃ temperature rise alternator
- PMG excitation
- Alternator heater, 120 V
- Reconnectable full 1 phase output alternator upto 175 kWe

Control
- AC output analog meters
- Stop switch – emergency
- Auxiliary output relays (2)
- Auxiliary configurable signal inputs (8) and relay outputs (8)

Electrical
- One, two or three circuit breaker configurations
- 80% rated circuit breakers
- 80% or 100% rated LSI circuit breakers
- Battery charger

Enclosure
- Aluminium enclosure Sound Level 1 or Level 2, green color
- Aluminium weather protective enclosure with muffler installed, green color

Cooling system
- Shutdown – low coolant level
- Warning – low coolant level
- Extension – coolant drain
- Coolant heater options:
  - <4 ℃ (40 ℉) – cold weather
  - <-18 ℃ (0 ℉) – extreme cold

Exhaust system
- Exhaust connector NPT
- Exhaust muffler mounted

Generator set application
- Base barrier – elevated genset
- Radiator outlet duct adapter

Warranty
- Base warranty – 2 year/1000 hours, Standby
- Base warranty – 1 year/unlimited hours, Prime
- 3 & 5 year Standby warranty options

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Generator set accessories

- Coolant heater
- Battery heater kit
- Engine oil heater
- Remote control displays
- Auxiliary output relays (2)
- Auxiliary configurable signal inputs (8) and relay outputs (8)
- Annunciator – RS485
- Audible alarm
- Remote monitoring device – PowerCommand 500/550
- Battery charger – stand-alone, 12 V
- Circuit breakers
- Enclosure Sound Level 1 to Sound Level 2 upgrade kit
- Base barrier – elevated generator set
- Mufflers – industrial, residential or critical
- Alternator PMG excitation
- Alternator heater
- Improved PC1.1 display readability
- Top conduit entry access

Control system PowerCommand 1.1

PowerCommand control is an integrated generator set control system providing voltage regulation, engine protection, operator interface and isochronous governing (optional). Major features include:

- Battery monitoring and testing features and smart starting control system.
- Standard PCCNet interface to devices such as remote annunciator for NFPA 110 applications.
- Control boards potted for environmental protection.
- Control suitable for operation in ambient temperatures from -40 ℃ to +70 ℃ (-40 ℉ to +158 ℉) and altitudes to 5000 meters (13,000 feet).
- Prototype tested; UL, CSA, and CE compliant.
- InPower™ PC-based service tool available for detailed diagnostics.

Operator/display panel

- Manual off switch
- Alpha-numeric display with pushbutton access for viewing engine and alternator data and providing setup, controls and adjustments (English or international symbols)
- LED lamps indicating generator set running, not in auto, common warning, common shutdown, manual run mode and remote start
- Suitable for operation in ambient temperatures from -40 ℃ to +70 ℃
- Bargraph display (optional)

AC protection

- Over current warning and shutdown
- Over and under voltage shutdown
- Over and under frequency shutdown
- Over excitation (loss of sensing) fault
- Field overload

Engine protection

- Overspeed shutdown
- Low oil pressure warning and shutdown
- High coolant temperature warning and shutdown
- Low coolant level warning or shutdown
- Low coolant temperature warning
- High, low and weak battery voltage warning
- Fail to start (overcrank) shutdown
- Fail to crank shutdown
- Redundant start disconnect
- Cranking lockout
- Sensor failure indication
- Low fuel level warning or shutdown

Alternator data

- Line-to-Line and Line-to-neutral AC volts
- 3-phase AC current
- Frequency
- Total kVa

Engine data

- DC voltage
- Lube oil pressure
- Coolant temperature
- Engine speed

Other data

- Generator set model data
- Start attempts, starts, running hours
- Fault history
- RS485 Modbus® interface
- Data logging and fault simulation (requires InPower service tool)

Digital governing (optional)

- Integrated digital electronic isochronous governor
- Temperature dynamic governing

Digital voltage regulation

- Integrated digital electronic voltage regulator
- 2-phase Line-to-Line sensing
- Configurable torque matching

Control functions

- Time delay start and cooldown
- Cycle cranking
- PCCNet interface
- (2) Configurable inputs
- (2) Configurable outputs
- Remote emergency stop
- Automatic Transfer Switch (ATS) control
- Generator set exercise, field adjustable

Options

- Auxiliary output relays (2)
- Remote annunciator with (3) configurable inputs and (4) configurable outputs
- PMG alternator excitation
- PowerCommand 500/550 for remote monitoring and alarm notification (accessory)
- Auxiliary, configurable signal inputs (8) and configurable relay outputs (8)
- AC output analog meters (bargraph)
  - Color-coded graphical display of:
    - 3-phase AC voltage
    - 3-phase current
    - Frequency
    - kVa
- Remote operator panel
- PowerCommand 2.3 control with AmpSentry protection

Ratings definitions

Emergency Standby Power (ESP):

Applicable for supplying power to varying electrical load for the duration of power interruption of a reliable utility source. Emergency Standby Power (ESP) is in accordance with ISO 8528. Fuel Stop power in accordance with ISO 3046, AS 2789, DIN 6271 and BS 5514.

Limited-Time Running Power (LTP):

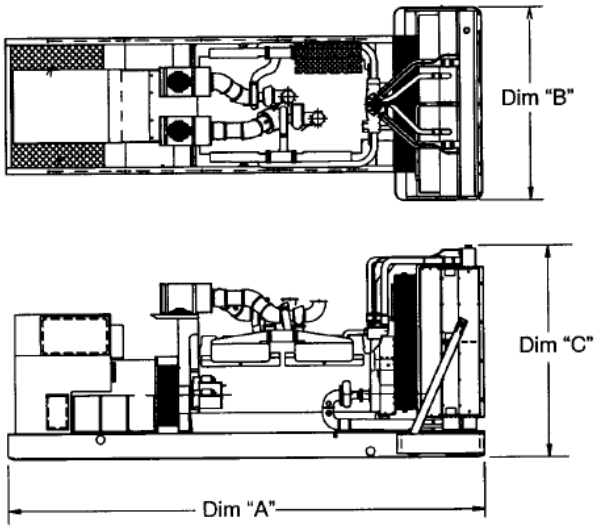
Applicable for supplying power to a constant electrical load for limited hours. Limited Time Running Power (LTP) is in accordance with ISO 8528.

Prime Power (PRP):

Applicable for supplying power to varying electrical load for unlimited hours. Prime Power (PRP) is in accordance with ISO 8528. Ten percent overload capability is available in accordance with ISO 3046, AS 2789, DIN 6271 and BS 5514.

Base Load (Continuous) Power (COP):

Applicable for supplying power continuously to a constant electrical load for unlimited hours. Continuous Power (COP) in accordance with ISO 8528, ISO 3046, AS 2789, DIN 6271 and BS 5514.



This outline drawing is for reference only. See respective model data sheet for specific model outline drawing number.

Do not use for installation design

Model	Dim “A” mm (in.)	Dim “B” mm (in.)	Dim “C” mm (in.)	Set weight*wet kg (lbs.)
Open set				
C125D6D	2867 (113)	1016 (40)	1415 (56)	1470 (3240)
C150D6D	2867 (113)	1016 (40)	1415 (56)	1470 (3240)
C175D6D	2867 (113)	1016 (40)	1415 (56)	1470 (3240)
C200D6D	2867 (113)	1016 (40)	1415 (56)	1470 (3240)
Weather protective enclosure				
C125D6D	2867 (113)	1016 (40)	1836 (72)	1600 (3527)
C150D6D	2867 (113)	1016 (40)	1836 (72)	1600 (3527)
C175D6D	2867 (113)	1016 (40)	1836 (72)	1600 (3527)
C200D6D	2867 (113)	1016 (40)	1836 (72)	1600 (3527)
Sound attenuated enclosure Level 1				
C125D6D	3621 (143)	1016 (40)	1836 (72)	1649 (3635)
C150D6D	3621 (143)	1016 (40)	1836 (72)	1649 (3635)
C175D6D	3621 (143)	1016 (40)	1836 (72)	1649 (3635)
C200D6D	3621 (143)	1016 (40)	1836 (72)	1649 (3635)
Sound attenuated enclosure Level 2				
C125D6D	4061 (160)	1016 (40)	1836 (72)	1665 (3671)
C150D6D	4061 (160)	1016 (40)	1836 (72)	1665 (3671)
C175D6D	4061 (160)	1016 (40)	1836 (72)	1665 (3671)
C200D6D	4061 (160)	1016 (40)	1836 (72)	1665 (3671)

* Weights above are average. Actual weight varies with product configuration.

Codes and standards

Codes or standards compliance may not be available with all model configurations – consult factory for availability.

	This generator set is designed in facilities certified to ISO 9001 and manufactured in facilities certified to ISO 9001 or ISO 9002.		The generator set is available Listed to UL 2200, Stationary Engine Generator Assemblies.
	The Prototype Test Support (PTS) program verifies the performance integrity of the generator set design. Cummins products bearing the PTS symbol meet the prototype test requirements of NFPA 110 for Level 1 systems.	**U.S. EPA**	Engine certified to U.S. EPA SI Stationary Emission Regulation 40 CFR, Part 60.
	All low voltage models are CSA certified to product class 4215-01.	**International Building Code**	The generator set is certified to International Building Code (IBC) 2012.

Warning: Back feed to a utility system can cause electrocution and/or property damage. Do not connect to any building's electrical system except through an approved device or after building main switch is open.

For more information contact your local Cummins distributor or visit power.cummins.com

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NAS-6370-EN.DOCX (04/19) A061F585

Generator Set Data Sheet

Model:	C150D6D
Frequency:	60 Hz
Fuel Type:	Diesel
KW Rating:	150 Standby
	135 Prime
Emissions level:	EPA Tier 3, Stationary Emergency

Exhaust Emission Data Sheet:	EDS-3044
Exhaust Emission Compliance Sheet:	EPA-2033
Sound Performance Data Sheet:	MSP-4008
Cooling Performance Data Sheet:	MCP-2048
Prototype Test Summary Data Sheet:	PTS-636

Fuel Consumption

	Standby				Prime			
	kW (kVA)				kW (kVA)			
Ratings	150 (188)				135 (169)			
Load	1/4	1/2	3/4	Full	1/4	1/2	3/4	Full
US gph	4.7	6.9	9.2	11.7	4.4	6.4	8.4	10.7
L/hr	17.78	26.11	34.82	44.28	16.65	24.22	31.79	40.49

Engine

	Standby rating	Prime rating
Engine Manufacturer	Cummins Inc.	
Engine Model	QSB7-G5	
Configuration	Cast iron, in-line, 6 cylinders	
Aspiration	Turbocharged and charge air cooled	
Gross Engine Power Output, kWm (bhp)	242 (324)	208 (279)
BMEP at set rated load, kPa (psi)	1763 (255.7)	1601 (232)
Bore, mm (in)	107 (4.21)	
Stroke, mm (in)	124 (4.88)	
Rated Speed, rpm	1800	
Piston Speed, m/s (ft/min)	7.44 (1464)	
Compression Ratio	17.2:1	
Lube Oil Capacity, L (qt)	17.4 (18.38)	
Overspeed Limit, rpm	2250	

Fuel Flow

Maximum Fuel Flow, L/hr (US gph)	103 (27.0)
Maximum Fuel Inlet Restriction with Clean Filter, mm Hg (in Hg)	127 (5.0)

Air

	Standby rating	Prime rating
Combustion Air, m3/min (scfm)	14.78 (522)	14.22 (502)
Maximum Air Cleaner Restriction with Clean Filter, kPa (in H2O)	3.7 (15)	

Exhaust

Exhaust Flow at set rated load, m^3/min (cfm)	35.62 (1258)	33.66 (1189)
Exhaust Temperature, °C (°F)	466.67 (872)	453.89 (849)
Maximum Back Pressure, kPa (in H_2O)	10 (40.19)	10 (40.19)
Actual Exhaust Back Pressure with CPG Sound level 2 Enclosure Muffler, kPa (in H_2O)	9.5 (38.18)	8.6 (34.36)
Actual Exhaust Back Pressure with CPG Weather Enclosure Muffler, kPa (in H_2O)	7.2 (28.93)	6.5 (26)

Standard Set-mounted Radiator Cooling

Ambient Design, ° C (° F)	50 (122)	
Fan Load, kW_m (HP)	14.02 (18.8)	
Coolant Capacity (with radiator), L (US Gal)	22 (5.9)	
Cooling System Air Flow, m^3/min (scfm)	305.82 (10800)	
Total Heat Rejection, MJ/min (Btu/min)	7.91 (7499)	7.25 (6871)
Maximum Cooling Air Flow Static Restriction, kPa (in H_2O)	0.12 (0.5)	

Weight[2]

Unit Wet Weight kgs (lbs)	1390 (3064)

Notes:
[1] For non-standard remote installations contact your local Cummins Power Generation representative.
[2] Weights represent a set with standard features. See outline drawing for weights of other configurations.

Derating Factors

Standby	Engine power available up to 3425 m (11237 ft.) at ambient temperatures up to 40° C (104° F) and 2298 m (7540 ft.) at 50° C (122° F). Consult your Cummins distributor for temperature and ambient requirements outside these parameters.
Prime	Engine power available up to 2743 m (9000 ft.) at ambient temperatures up to 40° C (104° F) and 2151 m (7057 ft.) at 50° C (122° F). Consult your Cummins distributor for temperature and ambient requirements outside these parameters.

Ratings Definitions

Emergency Standby Power (ESP):	Limited-time Running Power (LTP):	Prime Power (PRP):	Base Load (continuous) Power (COP):
Applicable for supplying power to varying electrical load for the duration of power interruption of a reliable utility source. Emergency Standby Power (ESP) is in accordance with ISO 8528. Fuel Stop power in accordance with ISO 3046, AS 2789, DIN 6271 and BS 5514.	Applicable for supplying power to a constant electrical load for limited hours. Limited Time Running Power (LTP) is in accordance with ISO 8528.	Applicable for supplying power to varying electrical load for unlimited hours. Prime Power (PRP) is in accordance with ISO 8528. Ten percent overload capability is available in accordance with ISO 3046, AS 2789, DIN 6271 and BS 5514.	Applicable for supplying power continuously to a constant electrical load for unlimited hours. Continuous Power (COP) is in accordance with ISO 8528, ISO 3046, AS 2789, DIN 6271 and BS 5514.

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Alternator Data

Standard Alternators	Single phase[2]	Three Phase[1]					
Maximum Temperature Rise above 40 °C Ambient	120 °C	120 °C					
Feature Code	BB88-2	B946-2	B986-2	B952-2	B943-2	BB86-2	BB88-2
Alternator Data Sheet Number	ADS212	ADS-210	ADS-210	ADS-209	ADS-209	ADS-210	ADS-212
Voltage Ranges	120/240	120/208	120/240	347/600	277/480	127/220	120/208, 127/220, 277/480
Voltage Feature Code	R104	R098-2	R106-2	R114-2	R002-2	R020-2	R098-2, R020-2, R106-2, R002-2
Surge kW	205.9	210.2	211.4	211.1	211.4	210.7	211.6
Motor Starting kVA (at 90% sustained voltage) Shunt	770	563	563	516	516	563	770
Motor Starting kVA (at 90% sustained voltage) PMG	920	663	663	607	607	663	920
Full Load Current Amps at Standby Rating	625	520	451	180	226	492	226 to 520

Alternator Data

Standard Alternators	Single phase[2]	Three phase[1]				
Maximum Temperature Rise above 40 °C Ambient	105 °C	105 °C	105 °C	105 °C	105 °C	105 °C
Feature Code	BB87-2	BB93-2	BB94-2	BB95-2	BB92-2	BB85-2
Alternator Data Sheet Number	ADS-212	ADS-210	ADS-210	ADS-209	ADS-209	ADS-210
Voltage Ranges	120/208, 120/240, 127/220, 277/480, 347/600	120/208	120/240	277/480	347/600	127/220
Voltage Feature Code	R098-2, R020-2, R002-2, R104-2, R106-2, R114-2	R098-2	R106-2	R002-2	R114-2	R020-2
Surge kW	205.9	210.2	211.4	211.4	210.7	211.6
Motor Starting kVA (at 90% sustained voltage) Shunt	770	563	563	516	516	563
Motor Starting kVA (at 90% sustained voltage) PMG	920	663	663	607	607	663
Full Load Current Amps at Standby Rating	625	520	451	226	180	492

Notes:

[1] Single phase power can be taken from a three phase generator set at up to 2/3 set rated 3-phase kW at 1.0 power factor

[2] Full single phase output up to full set rated 3-phase kW at 1.0 power factor

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Formulas for Calculating Full Load Currents:

Three phase output	Single phase output
$\frac{kW \times 1000}{Voltage \times 1.73 \times 0.8}$	$\frac{kW \times SinglePhaseFactor \times 1000}{Voltage}$

Warning: Back feed to a utility system can cause electrocution and/or property damage. Do not connect to any building's electrical system except through an approved device or after building main switch is open.

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Sound Data
C150D6D
QSB7-G5 NR3 60Hz Diesel

A-weighted Sound Pressure Level @ 7 meters, dB(A)

See notes 2, 5 and 7-11 listed below

Configuration	Exhaust	Applied Load	Position (Note 2)								8 Position Average
			1	2	3	4	5	6	7	8	
Standard – Unhoused	Infinite Exhaust	100% Standby	84	86	88	88	83	90	88	88	87
F216-2 Weather Aluminum	Mounted	100% Standby	86	85	83	87	84	89	83	86	86
F231-2 Sound Attenuated Level 1, Aluminum	Mounted	100% Standby	83	79	74	74	74	75	75	80	78
F217-2 Sound Attenuated Level 2, Aluminum	Mounted	100% Standby	72	72	71	72	73	72	71	73	72

Average A-weighted Sound Pressure Level @ 1 meter, dB(A)

See notes 1, 5 and 7-14 listed below

Configuration	Exhaust	Applied Load	Octave Band Center Frequency (Hz)										Overall Sound Pressure Level
			16	31.5	63	125	250	500	1000	2000	4000	8000	16000	
Standard – Unhoused	Infinite Exhaust	100% Standby	N/A	46	68	81	89	91	91	90	88	86	90	98
F216-2 Weather Aluminum	Mounted	100% Standby	N/A	42	67	83	90	89	90	87	84	80	81	96
F231-2 Sound Attenuated Level 1, Aluminum	Mounted	100% Standby	N/A	45	62	74	80	80	81	79	76	77	73	88
F217-2 Sound Attenuated Level 2, Aluminum	Mounted	100% Standby	N/A	45	63	72	77	76	77	76	73	71	65	84

A-weighted Sound Pressure Level @ Operator Location, dB(A)

See notes 1, 3, 5 and 7-14 listed below

Configuration	Exhaust	Applied Load	Octave Band Center Frequency (Hz)										Overall Sound Pressure Level
			16	31.5	63	125	250	500	1000	2000	4000	8000	16000	
Standard – Unhoused	Infinite Exhaust	100% Standby	N/A	43	68	79	85	89	89	90	89	88	95	99
F216-2 Weather Aluminum	Mounted	100% Standby	N/A	42	67	79	84	84	82	81	78	75	78	90
F231-2 Sound Attenuated Level 1, Aluminum	Mounted	100% Standby	N/A	50	66	75	81	82	81	78	75	74	69	87
F217-2 Sound Attenuated Level 2, Aluminum	Mounted	100% Standby	N/A	50	67	76	80	79	79	76	73	72	61	86

Sound Data
C150D6D
QSB7-G5 NR3 60Hz Diesel

A-weighted Sound Power Level, dB(A)

See notes 1, 3 and 6-14 listed below

Configuration	Exhaust	Applied Load	Octave Band Center Frequency (Hz)											Overall Sound Power Level
			16	31.5	63	125	250	500	1000	2000	4000	8000	16000	
Standard – Unhoused	Infinite Exhaust	100% Standby	N/A	63	86	98	106	108	109	107	106	103	107	116
F216-2 Weather Aluminum	Mounted	100% Standby	N/A	60	85	101	108	107	107	105	102	97	99	114
F231-2 Sound Attenuated Level 1, Aluminum	Mounted	100% Standby	N/A	63	80	92	99	99	99	97	94	95	91	106
F217-2 Sound Attenuated Level 2, Aluminum	Mounted	100% Standby	N/A	64	81	91	95	94	95	94	91	90	84	102

Exhaust Sound Power Level, dB(A)

See notes 4 and 6-14 listed below

Configuration	Applied Load	Octave Band Center Frequency (Hz)											Overall Sound Power Level
		16	31.5	63	125	250	500	1000	2000	4000	8000	16000	
Open Exhaust (No Muffler)	100% Standby	N/A	64	93	106	115	117	114	113	113	105	94	122

Global Notes:

1. Sound pressure levels at 1 meter are measured per the requirements of ISO 3744, ISO 8528-10, and European Communities Directive 2000/14/EC as applicable. The microphone measurement locations are 1 meter from a reference parallelepiped just enclosing the generator set (enclosed or unenclosed).

2. Seven-meter measurement location 1 is 7 meters (23 feet) from the generator (alternator) end of the generator set, and the locations proceed counterclockwise around the generator set at 45° angles at a height of 1.2 meters (48 inches) above the ground surface.

3. Sound Power Levels are calculated according to ISO 3744, ISO 8528-10, and/or CE (European Union) requirements.

4. Exhaust Sound Levels are measured and calculated per ISO 6798, Annex A.

5. Reference Sound Pressure Level is 20 µPa

6. Reference Sound Power Level is 1 pW (10^{-12} Watt)

7. Sound data for remote-cooled generator sets are based on rated load without cooling fan noise.

8. Sound data for the generator set with infinite exhaust do not include the exhaust noise contribution

9. Published sound levels are measured at CE certified test site and are subject to instrumentation measurement, installation, and manufacturing variability.

10. Unhoused/Open configuration generator sets refers to generator sets with no sound enclosures of any kind.

11. Housed/Enclosed/Closed/Canopy configuration generator sets refer to generator sets that have noise reduction sound enclosure installed over the generator set and usually integrally attached to the skid base/base frame/fuel container base of the generator set.

12. Published sound levels meet the requirements India's Central Pollution Control Board (Ministry of Environment & Forests), vide GSR 371 (E), which states the A-weighted sound level at 1 meter from any diesel generator set up to a power output rating of 1000kVA shall not exceed 75 dB(A).

13. For updated noise pollution information for India see website: http://www.envfor.nic.in/legis/legis.html

14. Sound levels must meet India's Ambient Air Noise Quality Standards detailed for Daytime/Nighttime operation in Noise Pollution (Regulation and Control) Rules, 2000

Specification sheet

Dual wall sub-base diesel fuel tanks -

10-200 kW generator sets

Description

Cummins® offers two series of fuel tanks (basic series and regional series) for the 10~125 kW diesel generator sets. The “basic” series of fuel tanks provide economical solutions for areas with no or minimal local/regional code requirements on diesel fuel tanks. The footprint of “basic” tanks matches the generator set’s footprint. The “regional” series of fuel tanks provide flexible and upgradable solutions for areas with extensive local/regional code requirements on diesel fuel tanks. The footprint of the “regional” series of fuel tanks extends beyond the generator set to allow room for installation of optional features at factory or accessories in the field for meeting local/regional code requirements or customer specification on diesel fuel tanks. All fuel tanks and optional features are compatible with factory installed enclosures.

These tanks are constructed of heavy gauge steel and include an internally reinforced baffle structure for supporting the generator set. The fuel tank design features fewer seams and welds for better corrosion resistance performance.

These tanks are pre-treated with a conversion coating and then finished with a textured powder paint. The paint has superior UV and chemical resistance with best-in-class adhesion, flexibility, and durability to resist chipping and substrate corrosion. Both interior compartments are treated with a rust preventative for extended corrosion protection.

These tanks are UL and ULC Listed as secondary containment generator base tanks. Inner and outer containments are leak checked per UL and ULC testing procedures to ensure their integrity.

These fuel tanks are offered in various sizes to satisfy different fuel capacities requirements.

Compatible generator set model

Engine	D1703M	V2203M	4BT3.3-G5	4BTAA3.3-G7	QSB5-G5	QSB7-G5
Generator set model names	C10D6	C20D6	C25D6	C50D6	C50D6C	C125D6D
	C15D6		C30D6	C60D6	C60D6C	C150D6D
			C35D6		C80D6C	C175D6D
			C40D6		C100D6C	C200D6D
					C125D6C	

Basic fuel tanks

Standard features:

UL 142 and ULC-S601 listed - Minimum 110% secondary containment capacity.

NFPA and IFC - Capable of meeting NFPA 30 and NFPA 110 codes with available factory installed optional features.

Emergency pressure relief vents - Ensure adequate ventilation of the primary and secondary tank compartments under extreme temperature and emergency conditions.

Normal atmospheric vent - “Mushroom” style vent ensures adequate venting of the primary tank during fill, generator set running and temperature variations. Raised above fuel fill.

Raised fuel fill - includes lockable sealed fuel cap.

Lifting eyes - Allow lifting of fuel tank with generator set installed.

Optional features:

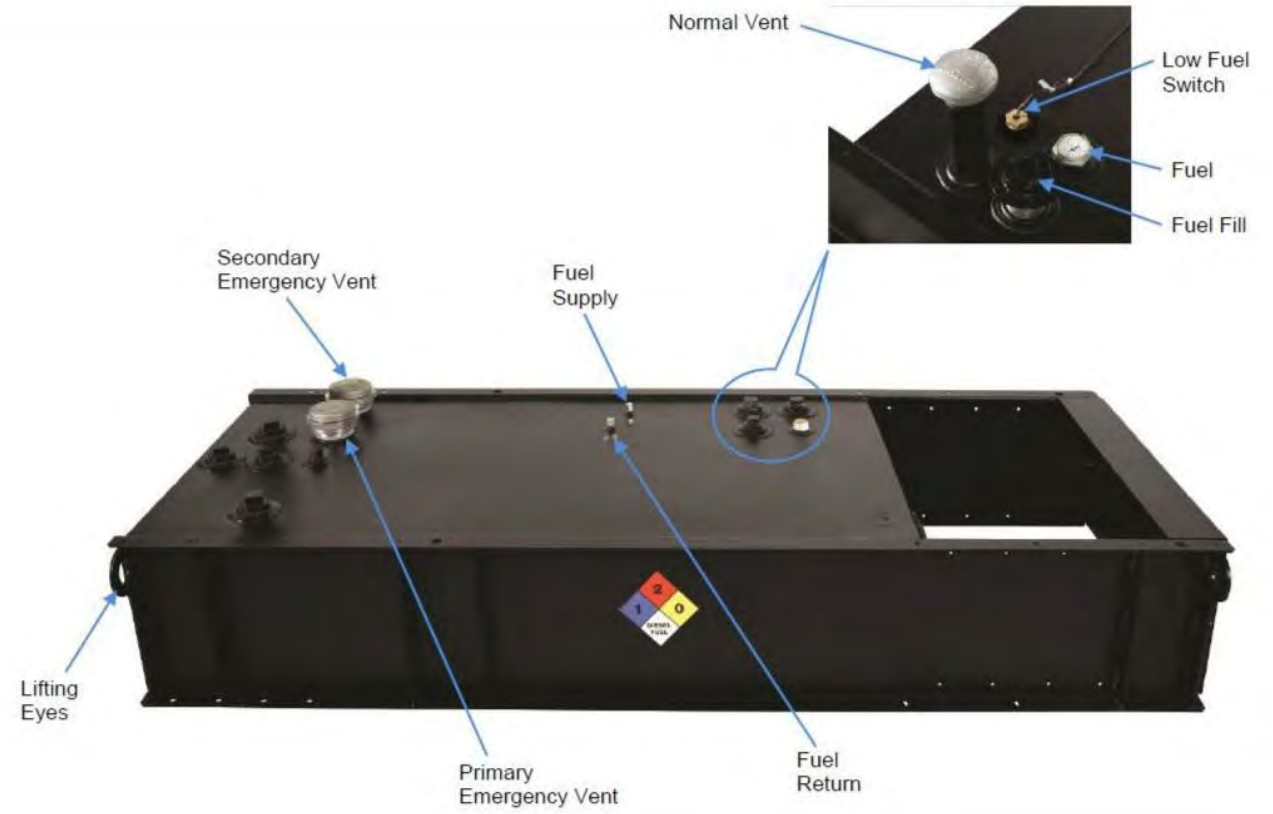
Secondary containment basin switch (rupture switch) - Activates a warning in the event of a primary tank leak. Side mounted.

Low fuel level switch - Activates a warning when 40% of the fuel is left in the tank.

Fuel level gauge - Provides direct reading of fuel level. Top mounted.

Electric fuel level sender with gauge - Allows remote electrical monitoring of fuel tank level. Flying leads for customer connection.

Tank to foundation clearance - 2-inch bolt-thru risers allow visual inspection under tank including rodent barrier.



*Picture is for reference only. See outline drawing for tank specific information by model.

Basic tanks

Generator set Standby power output	Generator set model	Engine model	Fuel consumption (100% load, Standby)	Tank feature code	Minimum run time feature	Tank dimensions (L x W x H)	Nominal dry weight*	Tank usable volume	Actual run time
kW			gal/hr		hr	inch	lbs	gal	hr
10	C10D6	D1703M	1.12	C319-2	24	65.7 x 34 x 13	310	46	41
				C320-2	48	65.7 x 34 x 23	583	91	81
15	C15D6	D1703M	1.38	C319-2	24	65.7 x 34 x 13	310	46	33
				C320-2	48	65.7 x 34 x 23	583	91	66
20	C20D6	V2203M	1.81	C319-2	24	65.7 x 34 x 13	310	46	25
				C320-2	48	65.7 x 34 x 23	583	91	50
25	C25D6	4BT3.3-G5	2.42	C319-2	24	87.6 x 34 x 15	456	74	31
				C320-2	48	87.6 x 34 x 23	669	132	54
30	C30D6	4BT3.3-G5	2.81	C319-2	24	87.6 x 34 x 15	456	74	26
				C320-2	48	87.6 x 34 x 32	908	195	69
35	C35D6	4BT3.3-G5	3.16	C319-2	24	87.6 x 34 x 23	669	132	42
				C320-2	48	87.6 x 34 x 32	908	195	62
40	C40D6	4BT3.3-G5	3.66	C319-2	24	87.6 x 34 x 23	669	132	36
				C320-2	48	87.6 x 34 x 32	908	195	53
50	C50D6	4BTAA3.3-G7	4.25	C319-2	24	87.6 x 34 x 23	669	132	31
				C320-2	48	87.6 x 34 x 42	977	263	62
60	C60D6	4BTAA3.3-G7	5.04	C319-2	24	87.6 x 34 x 23	669	132	26
				C320-2	48	87.6 x 34 x 42	977	263	52
50	C50D6C	QSB5-G5	5.30	C319-2	24	117 x 40 x 25	809	260	49
				C320-2	48	117 x 40 x 25	809	260	49
60	C60D6C	QSB5-G5	6.10	C319-2	24	117 x 40 x 25	809	260	42
				C320-2	48	117 x 40 x 33	966	353	57
80	C80D6C	QSB5-G5	7.30	C319-2	24	117 x 40 x 25	809	260	35
				C320-2	48	117 x 40 x 33	966	353	48
100	C100D6C	QSB5-G5	8.90	C319-2	24	117 x 40 x 25	809	260	29
				C320-2	48	117 x 40 x 48	1471	526	59
125	C125D6C	QSB5-G6	10.30	C319-2	24	117 x 40 x 25	809	260	25
				C320-2	48	117 x 40 x 48	1471	526	51
125	C125D6D	QSB7-G5	10.1	C319-2	24	117x40x25	809	258	25
				C320-2	48	117x40x48	1471	520	51
150	C150D6D		11.7	C319-2	24	117x40x33	966	350	29
				C320-2	48	180x40x42	2302	737	62
175	C175D6D		13.3	C319-2	24	117x40x33	966	350	26
				C320-2	48	180x40x42	2302	737	55
200	C200D6D		14.9	C319-2	24	117x40x48	1471	520	34
				C320-2	48	180x40x42	2302	737	49

Note: No OFPV is offered on basic fuel tanks.

* All weights are approximate.

Regional fuel tanks

Standard features:

UL 142 and ULC-S601 listed - Minimum 110% secondary IBC 2012 and 2015 certified - All optional features are seismically certified with this range of tanks and generator sets. Requires factory-installed 2 ft vent extensions or higher.

UL 142 & ULC-S601 listed - Minimum 125% secondary containment capacity.

NFPA & IFC - Capable of meeting NFPA 30, NFPA 110, and IFC codes with available factory-installed optional features.

Emergency pressure relief vents - Ensure adequate ventilation of the primary and secondary tank compartments under extreme temperature and emergency conditions.

Normal atmospheric vent - "Mushroom" style vent ensures adequate venting of the primary tank during fill, generator set running, and temperature variations. Raised above fuel fill.

Raised fuel fill - Includes lockable sealed fuel cap.

Lifting eyes - Allow lifting of fuel tank with generator set installed.

Optional features:

Secondary containment basin switch (rupture switch) - Activates a warning in the event of a primary tank leak. Side Mounted.

Low fuel level switch - Activates a warning when 40% of the fuel is left in the tank.

Fuel level gauge - Provides direct reading of fuel level. Top mounted.

Electric fuel level sender with gauge - Allows remote electrical monitoring of fuel tank level. Flying leads for customer connection.

Tank to foundation clearance - 2-inch bolt-thru risers allow visual inspection under tank including rodent barrier.

Spill containment box for fuel fill - 5 gallon capacity with integral drain (to tank). Lockable lid.

Overfill prevention valve - Shuts off fuel flow during filling at approximately 95% full*. Includes fill down tube, as needed, to terminate within 6" of the bottom of the fuel tank. Uses a 2 inch type "F" cam lock adapter for filling.

High fuel switch - Activates at 90% of full fuel level. Flying leads for customer connection.

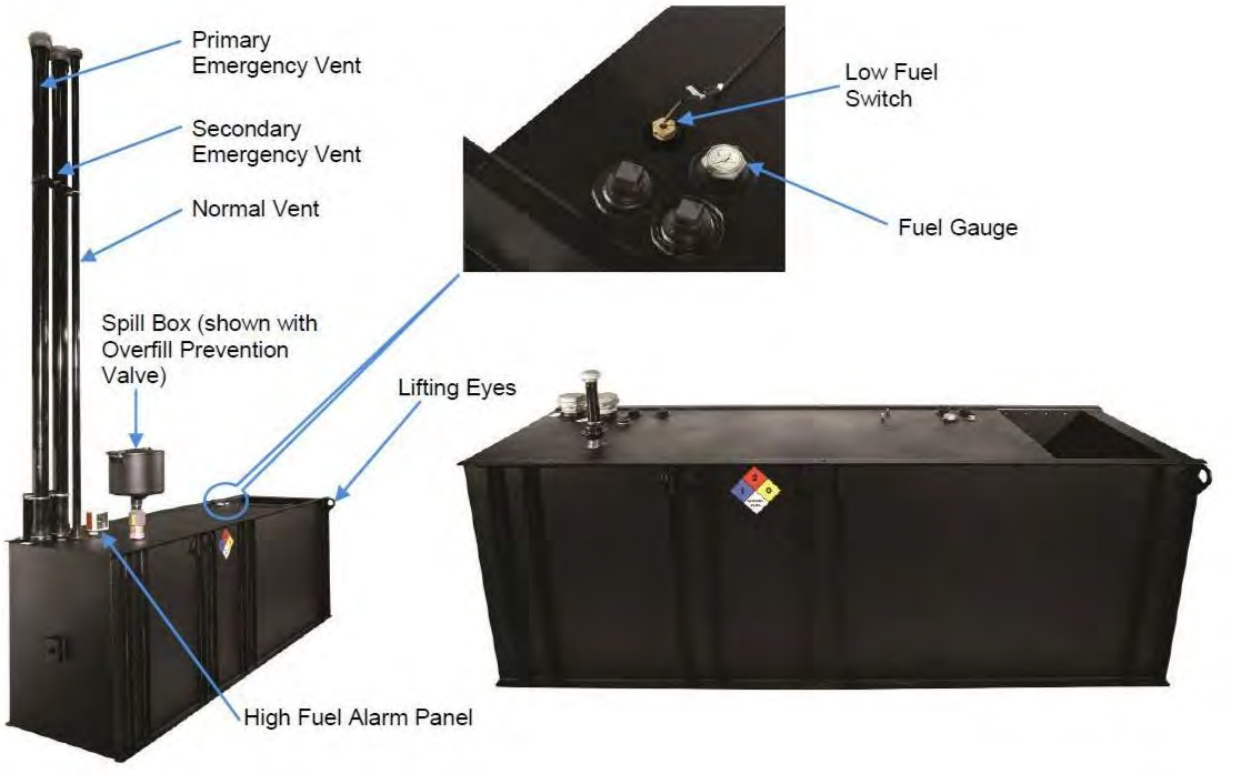
High fuel alarm panel - Provides audible & visual alarm when fuel level reaches 90% of full fuel level.

Fill drop tube - Terminates fuel fill location within 6" of the bottom of the fuel tank.

Vent extensions - Terminate normal and emergency vents (both primary and secondary) a minimum of 12 ft above the bottom of tank.

Seismic vent extensions - 2 ft normal and emergency (both primary & secondary) extensions to meet IBC/OSHPD seismic requirements.

* The OFPV inherently shuts off fuel at approximately 2" below the top of the fuel tank. Some tanks will shut off below this 95% fill level.



*Picture is for reference only. See outline drawing for tank specific information by model.

Regional tanks

Generator set Standby power output	Generator set model	Engine model	Fuel consumption (100% load, Standby)	Tank feature code	Minimum run time feature	Tank dimensions (L x W x H)	Nominal dry weight*	Tank usable volume	Actual run time w/o OFPV	Actual run time w/OFPV
kW			gal/hr		hr	inch	lbs	gal	hr	hr
10	C10 D6	D1703M	1.12	C301-2	24	87.6 x 34 x 15	510	74	66	56
				C303-2	48	87.6 x 34 x 15	510	74	66	56
				C305-2	72	87.6 x 34 x 23	723	132	118	107
				C307-2	96	87.6 x 34 x 23	723	132	118	107
15	C15 D6	D1703M	1.38	C301-2	24	87.6 x 34 x 15	510	74	53	45
				C303-2	48	87.6 x 34 x 15	510	74	53	45
				C305-2	72	87.6 x 34 x 23	723	132	95	86
				C307-2	96	87.6 x 34 x 32	962	195	141	132
20	C20 D6	V2203M	1.81	C301-2	24	87.6 x 34 x 15	510	74	41	35
				C303-2	48	87.6 x 34 x 23	723	132	73	66
				C305-2	72	87.6 x 34 x 32	962	195	108	101
				C307-2	96	87.6 x 34 x 32	962	195	108	101
25	C25 D6	4BT3.3-G5	2.42	C301-2	24	121 x 34 x 10.5	514	74	31	25
				C303-2	48	121 x 34 x 16.2	686	132	54	47
				C305-2	72	121 x 34 x 22.1	879	195	80	73
				C307-2	96	121 x 34 x 29.5	1120	263	109	101
30	C30 D6	4BT3.3-G5	2.81	C301-2	24	121 x 34 x 10.5	514	74	26	21
				C303-2	48	121 x 34 x 22.1	879	195	69	63
				C305-2	72	121 x 34 x 29.5	1120	263	94	87
				C307-2	96	121 x 34 x 42.0	1461	389	138	132
35	C35 D6	4BT3.3-G5	3.16	C301-2	24	121 x 34 x 16.2	686	132	42	36
				C303-2	48	121 x 34 x 22.1	879	195	62	56
				C305-2	72	121 x 34 x 29.5	1120	263	83	77
				C307-2	96	121 x 34 x 42.0	1461	389	123	117
40	C40 D6	4BT3.3-G5	3.66	C301-2	24	121 x 34 x 16.2	686	132	36	31
				C303-2	48	121 x 34 x 22.1	879	195	53	48
				C305-2	72	121 x 34 x 42.0	1461	389	106	101
				C307-2	96	121 x 34 x 42.0	1461	389	106	101
50	C50 D6	4BTAA3.3-G7	4.25	C301-2	24	121 x 34 x 16.2	686	132	31	27
				C303-2	48	121 x 34 x 29.5	1120	263	62	58
				C305-2	72	121 x 34 x 42.0	1461	389	92	87
60	C60 D6	4BTAA3.3-G7	5.04	C301-2	24	121 x 34 x 16.2	686	132	26	23
				C303-2	48	121 x 34 x 29.5	1120	263	52	49
				C305-2	72	121 x 34 x 42.0	1461	389	77	73
50	C50D6C	QSB5-G5	5.30	C301-2	24	154 x 40 x 22	1388	250	47	45
				C303-2	48	154 x 40 x 32	1657	425	80	76
				C305-2	72	154 x 40 x 32	1657	425	80	76
				C307-2	96	154 x 40 x 46	2096	625	118	112
60	C60D6C	QSB5-G5	6.10	C301-2	24	154 x 40 x 22	1388	250	41	39
				C303-2	48	154 x 40 x 32	1657	425	70	66
				C305-2	72	154 x 40 x 46	2096	625	102	97
				C307-2	96	154 x 40 x 46	2096	625	102	97
80	C80D6C	QSB5-G5	7.30	C301-2	24	154 x 40 x 22	1388	250	34	33
				C303-2	48	154 x 40 x 32	1657	425	58	55
				C305-2	72	154 x 40 x 46	2096	625	85	81
100	C100D6C	QSB5-G5	8.90	C301-2	24	154 x 40 x 22	1388	250	28	27
				C303-2	48	154 x 40 x 32	1657	425	48	45
				C305-2	72	154 x 40 x 46	2096	625	70	66
125	C125D6C	QSB5-G6	10.30	C301-2	24	154 x 40 x 22	1388	250	24	23
				C303-2	48	154 x 40 x 46	2096	625	60	58

* All weights are approximate.

Regional tanks

Generator set Standby power output	Generator set model	Engine model	Fuel consumption (100% load, Standby)	Tank feature code	Minimum run time feature	Tank dimensions (L x W x H)	Nominal dry weight*	Tank usable volume	Actual run time w/o OFPV	Actual run time w/OFPV
kW			gal/hr		hr	inch	lbs	gal	hr	hr
125	C125D6D	QSB7-G5	10.1	C301-2	24	180x40x21	1477	351	34	30
				C303-2	48	180x40x42	2302	737	72	69
				C305-2	72	180x40x42	2302	737	72	69
				C307-2	96	180x65.5x35.3	3552	1055	104	98
150	C150D6D		11.7	C301-2	24	180x40x21	1477	351	30	26
				C303-2	48	180x40x42	2302	737	63	59
				C305-2	72	180x65.5x35.3	3552	1055	90	84
175	C175D6D		13.3	C301-2	24	180x40x21	1477	351	26	23
				C303-2	48	180x40x42	2302	737	55	52
				C305-2	72	180x65.5x35.3	3552	1055	79	74
200	C200D6D		14.9	C301-2	24	180x40x21	1477	351	24	21
				C303-2	48	180x40x42	2302	737	49	47
				C305-2	72	180x65.5x35.3	3552	1055	72	66

Certifications/standards/codes

UL 142 Listed - Cummins dual wall sub-base tanks are UL Listed and constructed in accordance with Underwriters Laboratories Standard UL 142 “steel aboveground tanks for flammable and combustible liquids,” as a “secondary containment generator base tank”

NFPA - Cummins tanks are built in accordance with all applicable NFPA codes:

- NFPA 30 - Flammable and Combustible Liquids code
- NFPA 37 - Standard for Installation and use of Stationary Combustible Engine and Gas Turbines
- NFPA 110 - Standard for Emergency and Standby Power Systems

ISO9001 - This product was designed and manufactured in facilities certified to ISO9001.

ULC - Cummins tanks are built in accordance with all applicable ULC codes

For more information contact your local Cummins distributor or visit power.cummins.com

Our energy working for you.™

NAAC-5868-EN (02/18)

HAMILTON AVENUE

CARLTON AVENUE

HAMILTON AVENUE (REALIGNED)

WILLOW ROAD (RTE 114)

30'

14' S.S.E. EASEMENT
71 PM 15

CAR WASH

PROPOSED EXTRA MILE STORE
4,785 SQUARE FEET

50'-0"

24'-0"

45'x86' CANOPY

35'-0"

OPTIONAL
E.V. CHARGING

NEW TANKS

TRASH

WILLOW FRONTAGE ROAD ABANDONED
P.U.E. & A.E. RESERVED
DOC. 98-144569

N

0 5 10 20

GRAPHIC SCALE

REVISIONS			
NO.	DATE	DR.	NATURE

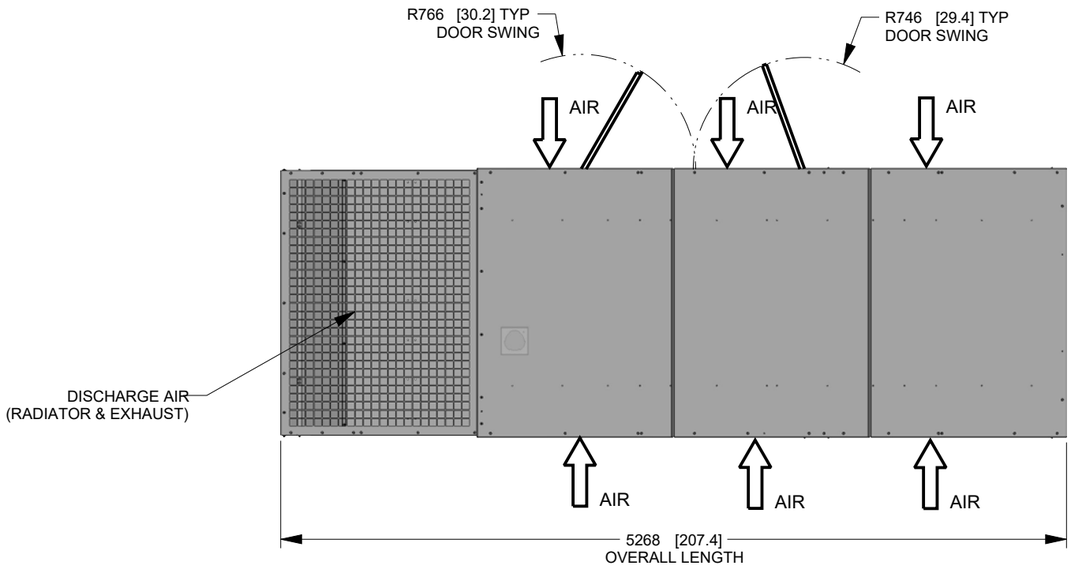
SITE PLAN

SERVICE STATION #207718
1399 WILLOW ROAD
MENLO PARK, CA 94025

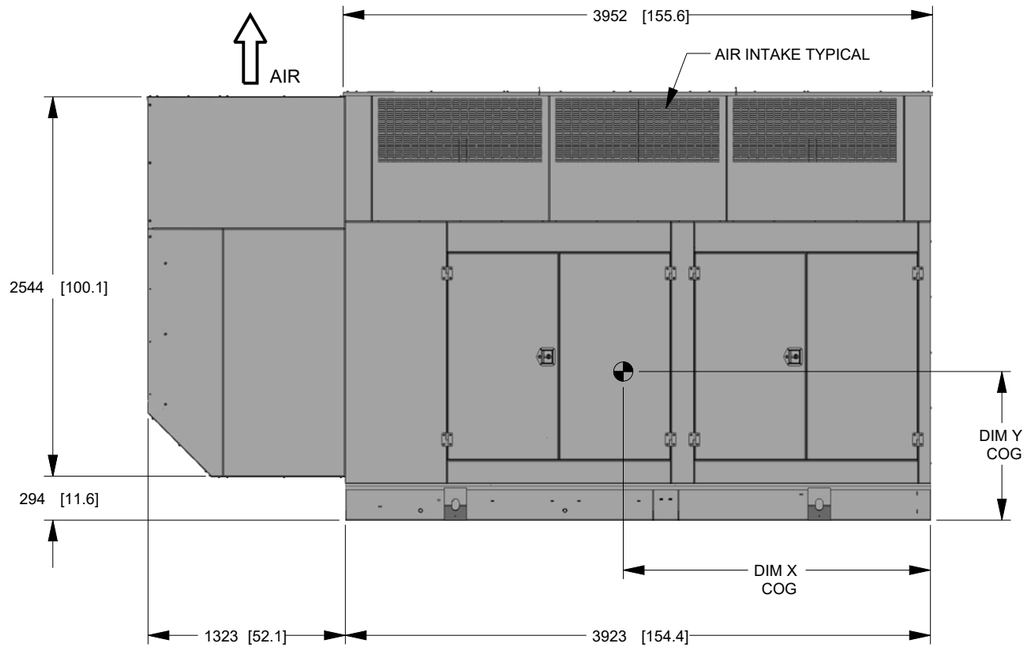
Chevron

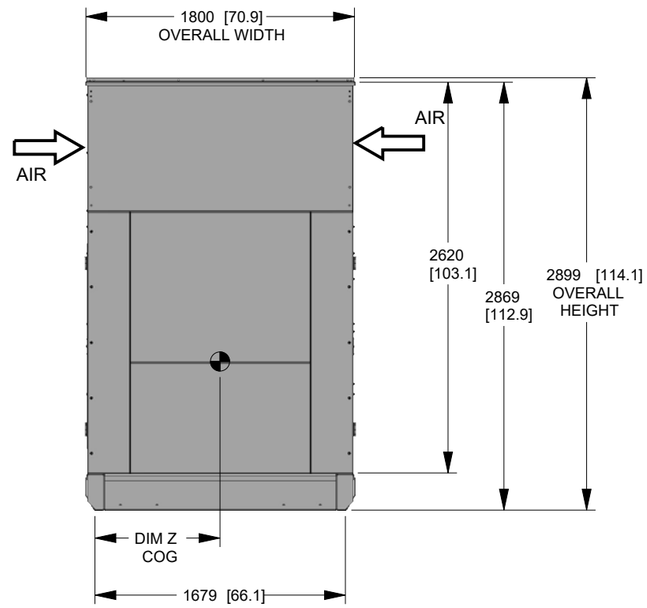
DATE: 08/26/20
DRAWN BY: GRH
SCALE: 1"=10'-0"
FILENAME: 207718RCIP6

SH	REV	WINDCHILL VERSION	
1/1	D	D.1	



FOR ALL STUB-UP, WEIGHT, AND COG DETAILS, SEE CORRESPONDING OPEN SET DRAWING PER UNIT CONFIGURATION.





DRAWING CREATED FROM PRO/ENGINEER 3D FILE. ECO MODIFICATION TO BE APPLIED TO SOLID MODEL ONLY.

DIMENSIONS ARE IN MILLIMETERS [INCHES]

INSTALLATION DRAWING

ELECTRONICALLY APPROVED
INSIDE WINDCHILL

GENERAC

TITLE

L2A ENCLOSURE
D15.2L SD/MD 500 & SB/MB 500
PD/WD 450 & PB/WB 450

ISSUE DATE:	03/21/14		
SIZE B	CAGE NO N/A	DWG NO 0K1606C	REV D
SCALE 0.025	WT-KG	SHEET 1 of 1	

SD500 | 15.2L | 500 kW

INDUSTRIAL DIESEL GENERATOR SET

EPA Certified Stationary Emergency

GENERAC | INDUSTRIAL POWER

Standby Power Rating
500 kW, 625 kVA, 60 Hz

Prime Power Rating*
450 kW, 563 kVA, 60 Hz

ISO 9001:2008

USA ENGINEERED & BUILT*

*Assembled in the USA using domestic and foreign parts

*EPA Certified Prime ratings are not available in the US or its Territories

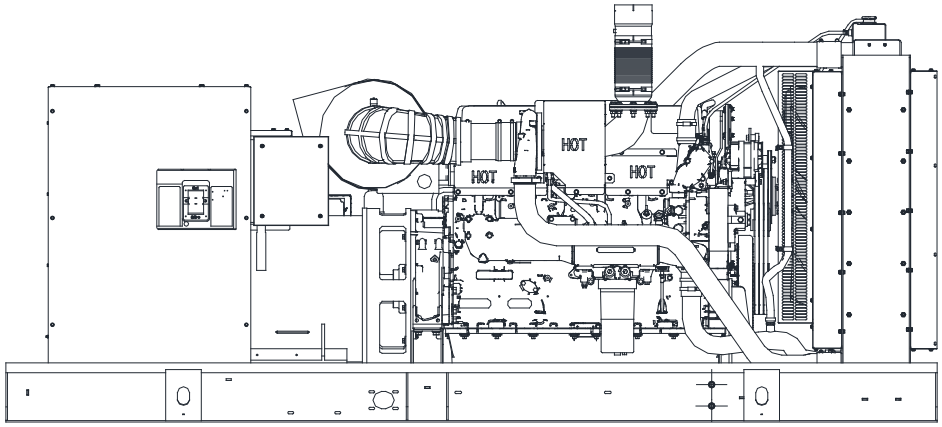


Image used for illustration purposes only

Codes and Standards

Not all codes and standards apply to all configurations. Contact factory for details.

- UL2200, UL6200, UL1236, UL142
- CSA C22.2
- BS5514 and DIN 6271
- SAE J1349
- NFPA 37, 70, 99, 110
- NEC700, 701, 702, 708
- ISO 3046, 7637, 8528, 9001
- NEMA ICS10, MG1, 250, ICS6, AB1
- ANSI C62.41
- IBC 2009, CBC 2010, IBC 2012, ASCE 7-05, ASCE 7-10, ICC-ES AC-156 (2012)

Powering Ahead

For over 50 years, Generac has provided innovative design and superior manufacturing.

Generac ensures superior quality by designing and manufacturing most of its generator components, including alternators, enclosures and base tanks, control systems and communications software.

Generac gensets utilize a wide variety of options, configurations and arrangements, allowing us to meet the standby power needs of practically every application.

Generac searched globally to ensure the most reliable engines power our generators. We choose only engines that have already been proven in heavy-duty industrial applications under adverse conditions.

Generac is committed to ensuring our customers' service support continues after their generator purchase.

SD500 | 15.2L | 500 kW

INDUSTRIAL DIESEL GENERATOR SET

EPA Certified Stationary Emergency

GENERAC | INDUSTRIAL POWER

STANDARD FEATURES

ENGINE SYSTEM

- Oil Drain Extension
- Heavy Duty Air Cleaner
- Fan Guard
- Stainless Steel Flexible Exhaust Connection
- Critical Silencer (Enclosed Units Only)
- Factory Filled Oil and Coolant
- Radiator Duct Adapter (Open Set Only)

Fuel System

- Primary Fuel Filter

Cooling System

- Closed Coolant Recovery System
- UV/Ozone Resistant Hoses
- Factory-Installed Radiator
- 50/50 Ethylene Glycol Antifreeze
- Radiator Drain Extension

Electrical System

- Battery Charging Alternator
- Battery Cables
- Battery Tray
- Rubber-Booted Engine Electrical Connections
- Solenoid Activated Starter Motor

ALTERNATOR SYSTEM

- UL2200 GENprotect™
- Class H Insulation Material
- Vented Rotor
- 2/3 Pitch
- Skewed Stator
- Amortisseur Winding
- Permanent Magnet Excitation
- Sealed Bearing
- Full Load Capacity Alternator
- Protective Thermal Switch

GENERATOR SET

- Internal Genset Vibration Isolation
- Separation of Circuits - High/Low Voltage
- Separation of Circuits - Multiple Breakers
- Wrapped Exhaust Piping (Enclosed Units Only)
- Standard Factory Testing
- 2 Year Limited Warranty (Standby Rated Units)
- 1 Year Limited Warranty (Prime Rated Units)
- Silencer Mounted in the Discharge Hood (Enclosed Units Only)

ENCLOSURE (If Selected)

- Rust-Proof Fasteners with Nylon Washers to Protect Finish
- High Performance Sound-Absorbing Material (Sound Attenuated Enclosures)
- Gasketed Doors
- Stamped Air-Intake Louvers
- Upward Facing Discharge Hoods (Radiator and Exhaust)
- Stainless Steel Lift Off Door Hinges
- Stainless Steel Lockable Handles
- RhinoCoat™ - Textured Polyester Powder Coat Paint

FUEL TANKS (If Selected)

- UL 142/ULC S-601
- Double Wall
- Vents
- Sloped Top
- Sloped Bottom
- Factory Pressure Tested (2 psi)
- Rupture Basin Alarm
- Fuel Level
- Check Valve in Supply and Return Lines
- RhinoCoat™ - Textured Polyester Powder Coat Paint
- Stainless Hardware

CONTROL SYSTEM

Digital H Control Panel- Dual 4x20 Display

Program Functions

- Programmable Crank Limiter
- 7-Day Programmable Exerciser
- Special Applications Programmable Logic Controller
- RS-232/485 Communications
- All Phase Sensing Digital Voltage Regulator
- 2-Wire Start Capability
- Date/Time Fault History (Event Log)
- Isochronous Governor Control
- Waterproof/Sealed Connectors
- Audible Alarms and Shutdowns
- Not in Auto (Flashing Light)
- Auto/Off/Manual Switch
- E-Stop (Red Mushroom-Type)
- NFPA110 Level I and II (Programmable)
- Customizable Alarms, Warnings, and Events
- Modbus® protocol
- Predictive Maintenance Algorithm
- Sealed Boards
- Password Parameter Adjustment Protection
- Single Point Ground
- 16 Channel Remote Trending
- 0.2 msec High Speed Remote Trending
- Alarm Information Automatically Annunciated on the Display

Full System Status Display

- Power Output (kW)
- Power Factor
- kW Hours, Total and Last Run
- Real/Reactive/Apparent Power
- All Phase AC Voltage
- All Phase Currents
- Oil Pressure
- Coolant Temperature
- Coolant Level
- Engine Speed
- Battery Voltage
- Frequency

Alarms and Warnings

- Oil Pressure
- Coolant Temperature
- Coolant Level
- Low Fuel Pressure
- Engine Overspeed
- Battery Voltage
- Alarms and Warnings Time and Date Stamped
- Snap Shots of Key Operation Parameters During Alarms and Warnings
- Alarms and Warnings Spelled Out (No Alarm Codes)

SD500 | 15.2L | 500 kW

INDUSTRIAL DIESEL GENERATOR SET

EPA Certified Stationary Emergency

GENERAC | INDUSTRIAL POWER

CONFIGURABLE OPTIONS

ENGINE SYSTEM

- ○ Engine Coolant Heater
- ○ Oil Heater
- ○ Level 1 Fan and Belt Guards (Open Set Only)
- ○ Radiator Stone Guard (Open Set Only)

FUEL SYSTEM

- ○ NPT Flexible Fuel Line

ELECTRICAL SYSTEM

- ○ 10A UL Listed Battery Charger
- ○ Battery Warmer

ALTERNATOR SYSTEM

- ○ Alternator Upsizing
- ○ Anti-Condensation Heater

CIRCUIT BREAKER OPTIONS

- ○ Main Line Circuit Breaker
- ○ 2nd Main Line Circuit Breaker
- ○ Shunt Trip and Auxiliary Contact
- ○ Electronic Trip Breakers

GENERATOR SET

- ○ 12 Position Load Center
- ○ Extended Factory Testing

ENCLOSURE

- ○ Weather Protected Enclosure
- ○ Level 1 Sound Attenuated
- ○ Level 2 Sound Attenuated
- ○ Level 2 Sound Attenuated with Motorized Dampers
- ○ Steel Enclosure
- ○ Aluminum Enclosure
- ○ IBC Seismic Certification/OSHPD Preapproval
- ○ Up to 200 MPH Wind Load Rating (Contact Factory for Availability)
- ○ AC/DC Enclosure Lighting Kit
- ○ Enclosure Heater

FUEL TANKS (Size On Last Page)

- ○ 8 in Fill Extension
- ○ 13 in Fill Extension
- ○ 19 in Fill Extension

CONTROL SYSTEM

- ○ NFPA 110 Compliant 21-Light Remote Annunciator
- ○ Remote Relay Assembly (8 or 16)
- ○ Oil Temperature Indication and Alarm
- ○ Ground Fault Annunciator
- ○ 10A Engine Run Relay
- ○ 120V GFCI and 240V Outlets
- ○ Remote E-Stop (Break Glass-Type, Surface Mount)
- ○ Remote E-Stop (Red Mushroom-Type, Surface Mount)
- ○ Remote E-Stop (Red Mushroom-Type, Flush Mount)
- ○ Damper Alarm Contacts (Motorized Dampers Only)
- ○ 100dB Alarm Horn

WARRANTY (Standby Gensets Only)

- ○ 2 Year Extended Limited Warranty
- ○ 5 Year Limited Warranty
- ○ 5 Year Extended Limited Warranty
- ○ 7 Year Extended Limited Warranty
- ○ 10 Year Extended Limited Warranty

ENGINEERED OPTIONS

ENGINE SYSTEM

- ○ Fluid Containment Pan
- ○ Coolant Heater Ball Valves

ALTERNATOR SYSTEM

- ○ 3rd Breaker Systems

CONTROL SYSTEM

- ○ Spare Inputs (x4) / Outputs (x4)
- ○ Battery Disconnect Switch

GENERATOR SET

- ○ Special Testing
- ○ Battery Box

ENCLOSURE

- ○ Door Open Alarm Switch

TANKS

- ○ Overfill Protection Valve
- ○ UL 2085 Tank
- ○ Stainless Steel Tank
- ○ Special Fuel Tanks
- ○ Vent Extensions
- ○ 5 Gallon Spill Containment Box
- ○ Dealer Supplied AHJ Requirements

SD500 | 15.2L | 500 kW

INDUSTRIAL DIESEL GENERATOR SET

EPA Certified Stationary Emergency

GENERAC | INDUSTRIAL POWER

APPLICATION AND ENGINEERING DATA

ENGINE SPECIFICATIONS

General

Make	Perkins
EPA Emissions Compliance	Stationary Emergency
EPA Emission Reference	See Emission Data Sheet
Cylinder #	6
Type	In-Line
Displacement - in^3 (L)	927.56 (15.2)
Bore - in (mm)	5.39 (137)
Stroke - in (mm)	6.73 (171)
Compression Ratio	16.0:1
Intake Air Method	Turbocharged/Aftercooled
Cylinder Head Type	4-Valve
Piston Type	Aluminum
Crankshaft Type	I-Beam Section

Engine Governing

Governor	Electronic Isochronous
Frequency Regulation (Steady State)	±0.25%

Lubrication System

Oil Pump Type	Gear
Oil Filter Type	Full-Flow
Crankcase Capacity - qt (L)	47.55 (45)

Cooling System

Cooling System Type	Closed Recovery
Water Pump Type	Centrifugal Type, Belt-Driven
Fan Type	Pusher
Fan Speed - RPM	1,658
Fan Diameter - in (mm)	36.5 (927)

Fuel System

Fuel Type	Ultra Low Sulfur Diesel #2
Carburetor	ASTM
Fuel Filtering (Microns)	Primary 10 - Secondary 2
Fuel Inject Pump Make	Electronic
Injector Type	MEUI
Engine Type	Pre-Combustion
Fuel Supply Line - in (mm)	0.5 (12.7) NPT
Fuel Return Line - in (mm)	0.5 (12.7) NPT

Engine Electrical System

System Voltage	24 VDC
Battery Charger Alternator	Standard
Battery Size	See Battery Index 0161970SBY
Battery Voltage	(2)-12 VDC
Ground Polarity	Negative

ALTERNATOR SPECIFICATIONS

Standard Model	K0500124Y23
Poles	4
Field Type	Revolving
Insulation Class - Rotor	H
Insulation Class - Stator	H
Total Harmonic Distortion	<3% (3-Phase)
Telephone Interference Factor (TIF)	<50

Standard Excitation	Permanent Magnet
Bearings	Single Sealed Cartridge
Coupling	Direct via Flexible Disc
Prototype Short Circuit Test	Yes
Voltage Regulator Type	Digital
Number of Sensed Phases	All
Regulation Accuracy (Steady State)	±0.25%

SD500 | 15.2L | 500 kW

INDUSTRIAL DIESEL GENERATOR SET

EPA Certified Stationary Emergency

OPERATING DATA

POWER RATINGS - DIESEL

		Standby
Three-Phase 120/208 VAC @0.8pf	500 kW	Amps: 1,735
Three-Phase 120/240 VAC @0.8pf	500 kW	Amps: 1,504
Three-Phase 277/480 VAC @0.8pf	500 kW	Amps: 752
Three-Phase 346/600 VAC @0.8pf	500 kW	Amps: 601

MOTOR STARTING CAPABILITIES (skVA)

skVA vs. Voltage Dip

277/480 VAC	30%	208/240 VAC	30%
K0500124Y23	1,050	K0600124Y23	1,120
K0600124Y23	1,560	K0792124Y23	2,130
K0832124Y23	2,800	K0832124Y23	2,090

FUEL CONSUMPTION RATES*

Fuel Pump Lift - ft (m)
12 (3.7)
Total Fuel Pump Flow (Combustion + Return) gph (Lph)
121 (457)

Diesel - gph (Lph)

Percent Load	Standby
25%	11.2 (42.3)
50%	17.5 (66.3)
75%	24.2 (91.4)
100%	32.0 (121.1)

* Fuel supply installation must accommodate fuel consumption rates at 100% load.

COOLING

		Standby
Coolant Flow	gpm (Lpm)	114.1 (432)
Coolant System Capacity	gal (L)	15.5 (586)
Heat Rejection to Coolant	BTU/hr (kW)	648,307 (190)
Inlet Air	scfm (m^3/min)	30,582 (866)
Maximum Radiator Backpressure	in H_2O (kPa)	0.5 (0.12)

COMBUSTION AIR REQUIREMENTS

	Standby
Flow at Rated Power scfm (m^3/min)	1,483 (42)

ENGINE

		Standby
Rated Engine Speed	RPM	1,800
Horsepower at Rated kW**	hp	755
Piston Speed	ft/min (m/min)	2,020 (616)
BMEP	psi (kPa)	358 (2,468)

EXHAUST

		Standby
Exhaust Flow (Rated Output)	scfm (m^3/min)	3,955 (112)
Maximum Exhaust Backpressure	inHg (kPa)	2.01 (6.8)
Exhaust Temp (Rated Output - Post Silencer)	°F (°C)	1,022 (550)

** Refer to "Emissions Data Sheet" for maximum bHP for EPA and SCAQMD permitting purposes.

Deration – Operational characteristics consider maximum ambient conditions. Derate factors may apply under atypical site conditions.
Please contact a Generac Power Systems Industrial Dealer for additional details. All performance ratings in accordance with ISO3046, BS5514, ISO8528, and DIN6271 standards.

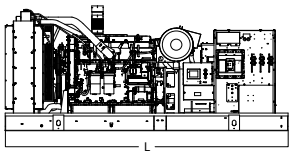
SD500 | 15.2L | 500 kW

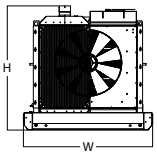
INDUSTRIAL DIESEL GENERATOR SET

EPA Certified Stationary Emergency

GENERAC | INDUSTRIAL POWER

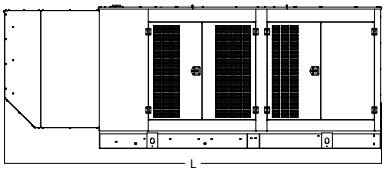
DIMENSIONS AND WEIGHTS*

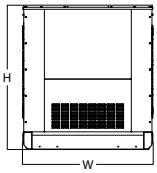




OPEN SET (Includes Exhaust Flex)

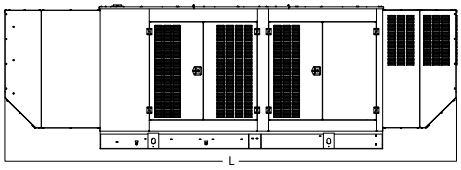
Run Time Hours	Usable Capacity Gal (L)	L x W x H - in (mm)	Weight - lbs (kg)
No Tank	-	154.4 (3,923) x 71.0 (1,803) x 67.3 (1,709)	10,435 (4,733)
9	334	158.5 (4,025) x 71.0 (1,803) x 81.3 (2,065)	12,110 (5,493)
28	1,001	158.5 (4,025) x 71.0 (1,803) x 103.3 (2,623)	15,272 (6,927)
28	1,001	228.0 (5,791) x 71.0 (1,803) x 92.3 (2,344)	13,585 (6,162)
57	2,002	290.0 (7,366) x 71.0 (1,803) x 103.3 (2,623)	15,285 (6,933)

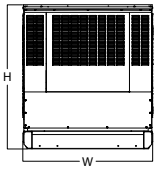




WEATHER PROTECTED ENCLOSURE

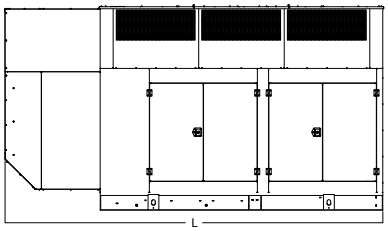
Run Time Hours	Usable Capacity Gal (L)	L x W x H - in (mm)	Weight - lbs (kg)	
			Steel	Aluminum
No Tank	-	207.4 (5,268) x 70.9 (1,800) x 79.9 (2,031)	12,672 (5,748)	12,017 (5,451)
9	334	207.4 (5,268) x 70.9 (1,800) x 93.9 (2,387)	14,347 (6,508)	13,692 (6,211)
28	1,001	207.4 (5,268) x 70.9 (1,800) x 115.9 (2,945)	15,272 (6,927)	14,617 (6,630)
28	1,001	228.0 (5,791) x 70.9 (1,800) x 104.9 (2,666)	15,822 (7,177)	15,167 (6,880)
57	2,002	290.0 (7,366) x 70.9 (1,803) x 115.9 (2,945)	17,522 (7,948)	16,867 (7,651)

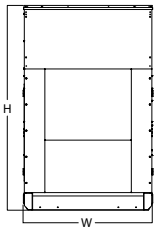




LEVEL 1 SOUND ATTENUATED ENCLOSURE

Run Time Hours	Usable Capacity Gal (L)	L x W x H - in (mm)	Weight - lbs (kg)	
			Steel	Aluminum
No Tank	-	247.5 (6,285) x 70.9 (1,800) x 80.0 (2,032)	13,677 (6,204)	12,017 (5,451)
9	334	247.5 (6,285) x 70.9 (1,800) x 94.0 (2,388)	15,352 (6,964)	13,692 (6,211)
28	1,001	247.5 (6,285) x 70.9 (1,800) x 116.0 (2,946)	16,277 (7,383)	14,617 (6,630)
28	1,001	247.5 (6,285) x 70.9 (1,800) x 105.0 (2,667)	16,827 (7,633)	15,167 (6,880)
57	2,002	290.0 (7,366) x 70.9 (1,800) x 116.0 (2,946)	18,527 (8,404)	16,867 (7,651)





LEVEL 2 SOUND ATTENUATED ENCLOSURE

Run Time Hours	Usable Capacity Gal (L)	L x W x H - in (mm)	Weight - lbs (kg)	
			Steel	Aluminum
No Tank	-	207.4 (5,268) x 70.9 (1,800) x 114.1 (2,899)	14,016 (6,357)	12,161 (5,516)
9	334	207.4 (5,268) x 70.9 (1,800) x 128.1 (3,255)	15,691 (7,117)	13,836 (6,276)
28	1,001	207.4 (5,268) x 70.9 (1,800) x 150.1 (3,813)	16,616 (7,536)	14,761 (6,695)
28	1,001	228.0 (5,791) x 70.9 (1,800) x 139.1 (3,534)	17,166 (7,786)	15,311 (6,945)
57	2,002	290.0 (7,366) x 70.9 (1,800) x 150.1 (3,813)	18,866 (8,557)	17,011 (7,716)

* All measurements are approximate and for estimation purposes only.

YOUR FACTORY RECOGNIZED GENERAC INDUSTRIAL DEALER

Specification characteristics may change without notice. Dimensions and weights are for preliminary purposes only. Please contact a Generac Power Systems Industrial Dealer for detailed installation drawings.

SPEC SHEET

Generac Power Systems, Inc. | P.O.Box 8 | Waukesha, WI 53189
P: (262) 544-4811

Part No 0197160SBY
Rev. E 08/09/19

Sarah Manzano

From: Faye Brandin <fbrandin@signaturedevelopment.com>
Sent: Tuesday, October 26, 2021 10:34 PM
To: Sarah Manzano
Cc: Eric Harrison
Subject: RE: Backup Generator for Pump Station

Hi Sarah,

Here is a crude map of where the pump station generator is located. It is at the southwestern corner of the public park. Do you need something more formal?

Faye Brandin
Direct 510.251.9284 | Cell 510.862.5629

From: Sarah Manzano <smanzano@ramboll.com>
Sent: Tuesday, October 26, 2021 4:11 PM
To: Faye Brandin <fbrandin@signaturedevelopment.com>
Cc: Eric Harrison <eharrison@signaturedevelopment.com>
Subject: RE: Backup Generator for Pump Station

Hi Faye,

Thank you for sending along the information. Can you provide a map of where the generator would be? All we need is a dot on the site plan.

Thanks!

Electricity, Data Analysis and Trends

Jan 2019 - Dec 2019

Usage(kWh)

Site Name	Site Code	Jan 2019	Feb 2019	Mar 2019	Apr 2019	May 2019	Jun 2019	Jul 2019	Aug 2019	Sep 2019	Oct 2019	Nov 2019	Dec 2019	Total	ENERGY STAR
1050 HAMILTON CT	MPK 40	145,953	145,263	162,013	156,527	162,933	175,343	178,721	187,565	179,652	135,045	107,455	107,514	1,843,983	87
1100 HAMILTON CT	MPK 41	50,950	46,370	49,638	46,095	45,923	50,824	53,887	54,247	49,813	42,988	39,645	41,132	571,511	98
1200 HAMILTON CT	MPK 42	23,512	23,448	28,449	27,082	28,417	29,779	30,041	30,721	28,957	28,102	27,168	28,547	334,223	100
1010 HAMILTON CT	MPK 43	50,250	46,498	53,941	55,193	56,699	59,805	63,222	61,207	55,127	56,244	49,385	50,766	658,339	55
1205 HAMILTON CT	MPK 44	49,721	45,058	40,020	32,497	30,693	32,089	35,474	36,586	35,386	34,089	32,930	37,316	441,861	88
1105 HAMILTON CT	MPK 45	61,723	57,876	58,759	55,056	57,157	61,179	63,880	67,915	67,461	64,228	60,035	64,794	740,064	54
1005 HAMILTON CT	MPK 46	87,803	80,066	92,308	89,897	76,744	88,837	87,501	92,777	89,462	87,672	68,530	68,144	1,009,741	99
959-967 HAMILTON AV	MPK 47	19,152	20,803	20,239	19,620	23,368	23,990	23,890	26,746	25,471	24,240	23,985	22,970	274,475	5
927 HAMILTON AVE	MPK 48	25,025	23,807	26,911	26,542	27,515	30,947	31,945	32,896	31,616	32,054	28,709	28,156	346,123	57
923-925 HAMILTON AV	MPK 49	44,952	45,281	51,081	49,454	47,717	48,510	50,052	51,565	47,896	44,900	40,546	40,344	562,298	1
1390 WILLOW RD	MPK 50	10,763	9,749	11,591	11,433	12,161	10,679	8,127	7,921	7,090	7,277	8,041	9,123	113,956	91
1394 HAMILTON CT	MPK 51	1,504	1,296	1,007	970	1,146	1,416	1,446	1,022	898	2,540	3,967	4,422	21,633	100
1380 WILLOW ROAD #	MPK 52	40,830	38,180	43,811	43,022	43,499	45,486	44,014	47,182	44,070	42,519	35,516	35,888	504,017	100
	MPK 53										22,560	64,640	88,640	175,840	
1370-1380 WILLOW RD	MPK 54	15,738	21,766	24,498	23,787	24,551	29,974	29,697	31,022	29,810	25,061	20,117	20,806	296,826	57
1374 WILLOW ROAD	MPK 55	9,684	8,828	9,787	9,431	9,675	9,306	9,363	9,078	9,170	9,101	8,472	8,655	110,550	100
980 HAMILTON AVE	MPK 56	110,472	105,821	125,000	115,740	110,782	121,348	126,895	126,359	118,548	125,756	107,663	115,299	1,409,683	
1350 WILLOW RD	MPK 57	76,444	78,905	86,172	78,428	89,544	95,149	102,594	111,826	109,011	105,362	97,645	94,947	1,126,027	99
1360 WILLOW RD	MPK 58	60,443	55,346	61,902	60,953	60,442	60,565	65,172	68,043	66,940	82,510	69,082	70,329	781,726	100
990-998 HAMILTON AV	MPK 59	73,800	66,883	73,712	71,491	74,473	78,242	82,210	85,704	80,398	78,601	68,707	68,701	902,924	88
Total		958,719	921,244	1,020,840	973,219	983,439	1,053,469	1,088,132	1,130,382	1,076,777	1,028,290	897,598	917,852	12,049,961	73

Natural Gas, Data Analysis and Trends

Jan 2019 - Dec 2019

Usage(therms)

Site Code	Site Name	Jan 2019	Feb 2019	Mar 2019	Apr 2019	May 2019	Jun 2019	Jul 2019	Aug 2019	Sep 2019	Oct 2019	Nov 2019	Dec 2019	Total	ENERGY STAR
1050 HAMILTON CT	MPK 40	6,877	7,864	7,752	6,228	6,187	5,279	5,572	5,485	5,270	3,268	3,017	3,526	66,326	87
1100 HAMILTON CT	MPK 41	3,132	2,852	2,079	818	214	23	4	4	51	298	571	782	10,829	98
1200 HAMILTON CT	MPK 42	379	379	268	115	1	0	0	0	7	39	242	197	1,629	100
1010 HAMILTON CT	MPK 43	2,983	2,865	2,310	1,541	1,500	781	654	462	436	1,123	1,721	2,253	18,628	55
1205 HAMILTON CT	MPK 44	1,198	902	1,183	513	142	33	29	15	21	98	1,319	1,267	6,722	88
1105 HAMILTON CT	MPK 45	2,846	2,817	2,053	1,245	473	123	11	0	0	25	381	1,016	10,990	54
1005 HAMILTON CT	MPK 46	6,047	5,407	5,697	3,983	2,093	1,633	1,297	1,169	1,552	3,647	4,969	6,001	43,495	99
959-967 HAMILTON A\	MPK 47	1,661	1,525	1,637	1,546	1,342	482	11	11	11	13	13	13	8,265	5
927 HAMILTON AVE	MPK 48	1,530	1,375	1,111	565	277	121	112	97	165	341	511	640	6,846	57
923-925 HAMILTON A\	MPK 49	0	0	0	0	0	0	0	0	0	0	0	0	0	1
1390 WILLOW RD	MPK 50	74	345	379	128	62	2	0	1	12	96	158	11	1,267	91
	MPK 51	0	0	0	0	0	0	0	0	0	0	0	0	0	
1380 WILLOW ROAD #	MPK 52	3,158	2,738	2,820	1,920	1,685	1,195	694	623	676	1,072	1,151	1,316	19,047	100
	MPK 53	1,466	1,473	1,565	1,481	1,560	161	10	10	10	12	10	17	7,775	
1370-1380 WILLOW R	MPK 54	493	425	290	89	13	12	13	13	13	22	217	374	1,972	57
1374 WILLOW ROAD	MPK 55	0	0	0	0	0	0	0	0	0	0	0	0	0	100
980 HAMILTON AVE	MPK 56	4,379	3,504	3,654	3,027	2,533	2,312	2,529	2,424	2,192	2,508	2,377	2,514	33,953	
1350 WILLOW RD	MPK 57	2,531	3,029	2,638	1,843	1,397	908	927	881	972	1,207	2,929	2,932	22,194	99
1360 WILLOW RD	MPK 58	4,138	3,458	3,553	2,653	2,025	1,700	1,576	1,820	2,423	2,775	2,707	2,916	31,744	100
990-998 HAMILTON A\	MPK 59	2,341	2,563	2,533	1,787	1,025	492	365	703	794	1,128	1,299	1,457	16,487	88
	Total	43,767	42,049	39,958	28,002	20,970	15,095	13,795	13,708	14,596	17,659	23,581	27,214	300,393	73

Site Code	Site Name
1 FACEBOOK WAY - MPK 20	MPK0020
1 HACKER BLDG 10	MPK0010
1 HACKER BLDG 11	MPK0011
1 HACKER BLDG 12	MPK0012
1 HACKER BLDG 14	MPK0014
1 HACKER BLDG 15	MPK0015
1 HACKER BLDG 16	MPK0016
1 HACKER BLDG 17	MPK0017
1 HACKER BLDG 18	MPK0018
1 HACKER BLDG 19	MPK0019
100 INDEPENDENCE DR	MPK0061
1005 HAMILTON CT	MPK 46
1010 HAMILTON CT	MPK 43
1010 O BRIEN	84 1010 O BRIEN
1010 OBRIEN DR	MPK0400
105 CONSTITUTION PARKING STRUC	MPK00P1
1050 HAMILTON CT	MPK 40
1100 HAMILTON CT	MPK 41
1105 HAMILTON CT	MPK 45
1180 DISCOVERY WAY STE A	SUN0102
1190 DISCOVERY WAY	SUN0102
1200 HAMILTON CT	MPK 42
1200 MISSISSIPPI ST	SAF1200
1205 HAMILTON CT	MPK 44
125 CONSTITUTION DR A	MPK0062
135 COMMONWEALTH DR	MPK0064
135 CONSTITUTION DR B	MPK0063
1350 WILLOW RD	MPK 57
1360 WILLOW RD	MPK 58
1370-1380 WILLOW RD	MPK 54
1374 WILLOW ROAD	MPK 55
1380 WILLOW ROAD #1	MPK 52
1390 WILLOW RD	MPK 50
1394 HAMILTON CT	MPK 51
150 INDEPENDENCE DR	MPK0060
155 CONSTITUTION PARKING GARAG	MPK00P2
162 JEFFERSON DR	MPK0027
164 JEFFERSON DR	MPK0028
171 JEFFERSON DR - BU 37	MPK0280
173 JEFFERSON DR - BU 37	37 BOH 173
175 JEFFERSON DR - BU 02	02 BOH 175
177 JEFFERSON DR - BU 02	02 BOH 177
179 JEFFERSON DR - BU 37	MPK0280
180 JEFFERSON DR	MPK0026
1831 E BAYSHORE ROAD - BU 83	RWC0860
190 JEFFERSON DR	MPK0025

191 JEFFERSON DR - BU77	MPK0281
193 JEFFERSON DR - BU77	MPK0281
195 JEFFERSON DR - BU77	MPK0281
199 JEFFERSON DR - BU77	MPK0281
200 JEFFERSON DR	MPK0024
205 CONSTITUTION DR - BU 02	02 BOH 205
209 CONSTITUTION DR - BU 37	MPK0284
220 JEFFERSON DR	MPK0029
250 BRYANT ST	32 250 BRYANT
300 CONSTITUTION DR	MPK0023
322 AIRPORT BLVD	BUR0102
333 AIRPORT BLVD	BUR0101
34700 CAMPUS DR	FRE0113
34750 CAMPUS DR	FRE0112
34800 CAMPUS DR	FRE0111
42700 BOYCE RD	NEW8130
6422 COMMERCE DR	FRE6422
6503 DUMBARTON CIR	FRE0124
6504 KAISER DR # H	FRE0120
6511 DUMBARTON CIR	FRE0124
6512 KAISER DR	FRE0120
6519 DUMBARTON CIR # A	FRE0123
6520 KAISER DR	FRE0119
6524 KAISER DR	FRE0119
6530 PASEO PADRE PKWY	FRE6530
6536 KAISER DR	35 FRE 115
6539 DUMBARTON CIR	FRE0122
6540 KAISER DR	FRE0115
6552 KAISER DR	FRE0114
6591 DUMBARTON CIR	FRE0118
6607 DUMBARTON CIR	FRE0117
6700 DUMBARTON CIR	36 FRE 125
6700 DUMBARTON CIR # 200	FRE0125
6700 DUMBARTON CIR #100	FRE0125
6750 DUMBARTON CIR	FRE0125
6800 DUMBARTON CIR	FRE0125
6900 DUMBARTON CIR	FRE0125
7380 MORTON AVE	NEW0100
7601 DUMBARTON CIR	FRE0110
8130 ENTERPRISE DR	NEW8130
860 CHARTER ST - BU 83	RWC0860
879 HAMILTION AVE. - BU 01	01 BELLE HAVEN
900 VILLA ST	31 900 VILLA
923-925 HAMILTON AVE	MPK 49
927 HAMILTON AVE	MPK 48
950 5TH AVE PARKING STRUCTUREC	SUN0102
950 5TH AVE PARKINGSTRUCTUREC	SUN0102

959-967 HAMILTON AVE	MPK 47
980 HAMILTON AVE	MPK 56
990-998 HAMILTON AVE	MPK 59
BURLINGAME	BUR1846
SAF 250	SAF250

Memo

Date:	December 1, 2021
Project:	Willow Village Mixed-Use Development
Project Number:	18-1489
To:	Faye Brandin (Signature Development Group)
From:	Ian Seagren, PE Forest Tanier-Gesner, PE
Subject:	Concept Level Energy Use and Production Summary
Distribution:	Eric Harrison (SDG), PAE Team

The purpose of this memo is to summarize a preliminary estimate of energy consumption by programming and fuel type, to summarize a preliminary estimate of photovoltaic (PV) energy production and to summarize the key assumptions of the preliminary analysis for the Willow Village Mixed-Use Development.

ENERGY CONSUMPTION SUMMARY BY PROGRAM AND FUEL

The preliminary energy use estimates by land-use category and fuel type for the mixed-use portion of Willow Village are summarized below.

Table 1| Concept Level Consumption Estimates

Land Use	Estimated Annual Electricity Usage (kWh/yr)	Estimated Annual Natural Gas Usage (Therms/yr)
Residential	16,855,000	0
Supermarket	1,562,000	3,000
Retail	269,000	0
Dining	1,150,000	18,500
Parking Infrastructure	1,280,000	0
Total	21,116,000	21,500

ENERGY PRODUCTION OPPORTUNITY SUMMARY BY BUILDING

The preliminary production for the on-site solar photovoltaic (PV) has been estimated by building as summarized below. PV systems are sized to comply with the Solar PV requirements described under Title 24 and Menlo Park Municipal code ordinances.

Table 2| Concept Level Production Estimates

BUILDING ID	SOLAR PV SYSTEM (kW)	ESTIMATED ENERGY PRODUCTION[i] (kWh/yr)
RS2	62	100,000
RS3	57	92,000
RS4	64	103,000
RS5	34	55,000
RS6	35	56,000
RS7	13	21,000
Total		427,000

SUMMARY OF ANALYSIS AND KEY ASSUMPTIONS

Land Use

Land use gross area estimates are based on the programming estimates provided on Jan 5, 2021, as summarized in Table 3 below.

Table 3| Land Use Gross Area Estimates

Land Use	Proposed Area (GSF)	Note
Residential	1,695,976	1730 Units Total
Supermarket	40,000	
Retail	30,000	60,000 GSF Retail allocation assumed to be 50% Dining
Dining	30,000	
Parking Infrastructure	617,715	1,883 residential spaces and 502 commercial spaces @ 259 SF/Space (308 EV Charging Stations)

Energy Data Sources

The estimates provided in Tables 1 utilize prototypical energy models for ASHRAE 90.1[ii] and Title 24[iii] along with supplemental existing building stock data[iv] and Title 24 exterior lighting power[v] allowances. Key characteristics of these data sources are:

- The prototype models utilize regional climate data (SFO or Oakland).
- Averaged estimates were taken from both ASHRAE 90.1-2016 prototypes and T-24 – 2016 prototypes when available. (Midrise Apartment; Restaurant; Retail)
- The Supermarket reference is an average of the DOE reference model and regional existing building stock data, due to a lack of cooking/baking energy in the reference model.
- The exterior lighting calculations only account for the General Hardscape allowance of 0.04 W/SF and does not include any "Special Security Lighting for Retail Parking and Pedestrian Hardscape" allowance.
- Electrification impacts are based on conservative heat pump space heating (2.5 COP) and electric tank water heating (0.93 EF). No efficiency credit estimated for conversion from gas cooking appliances to electric.
- Gas use in Supermarket and Dining is for commercial cooking equipment only. Smaller supermarkets may include minimal or no in-house food prep.
- Residential prototype includes in-unit air conditioning.

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[i] Energy production based on PV Watt calculations for the specified system capacity.
[ii] AHRAE 90.1-2016 Commercial Prototype Building Models and 90.1-2004 DOE reference Model (supermarket) https://www.energycodes.gov/development/commercial/prototype_models; https://www.energy.gov/eere/buildings/new-construction-commercial-reference-buildings
[iii] Title-24-2016 Prototype Models http://bees.archenergy.com/resources.html
[iv] Existing building data: Building Performance Database https://bpd.lbl.gov/#explore
[v] Title-24-2016 exterior lighting allowance https://energycodeace.com/site/custom/public/reference-ace-2016/index.html#!Documents/section1407requirementsforoutdoorlighting.htm

End of memo.

Sarah Manzano

From: Jeff Bean <jtbean@fb.com>
Sent: Monday, November 8, 2021 1:07 PM
To: Sarah Manzano
Cc: Eric Harrison; Faye Brandin
Subject: Willow Village - Consolidated Data Request

Hi Sarah,

There have been a number of data requests related to Willow Village recently, and I wanted to consolidate a summary of our projected energy use and solar capabilities here in one place.

First, here are the estimates provided by our electrical engineering team. This is predominantly going off the 100% SD set – some of it based off modeled information, some off educated guesses and EV charging is still an evolving field:

	Estimated KWH/YR*
Office Buildings (6)	23,828,000
North Garage	397,120
NG EV Charging	17,100,000
South Garage	268,098
SG EV Charging	10,885,500
Town Square Garage	268,181
TS EV Charging	1,984,500
Retail	1,450,000
Hotel (w/no garage)	2,528,400
Town Square Plaza	38,000

**note that the office buildings, N&S garages and hotel will have solar PV installed. The hotel will also have solar hot water generation. This onsite renewable energy generation will have an impact on the KWH numbers listed above.*

EV – connected loads and consumption based on the following assumptions:

- North Garage: 30% of the parking stalls (had 20% in the SD set but increased to 30% in case more are desired)
- South Garage: 30% of the parking stalls (had 20% in the SD set but increased to 30% in case more are desired)
- TS Garage: 20% of the parking stalls (remains as per SD set)

Second, assuming usage of 21,500 therms/year for both the Mixed-Use (including the supermarket) and public-facing retail on the office campus (the owner-occupied campus will be all-electric), the question was asked if "all natural gas usage in the commercial cooking areas be offset by on-site solar capabilities to be in compliance with the Municipal Code?" The answer is below:

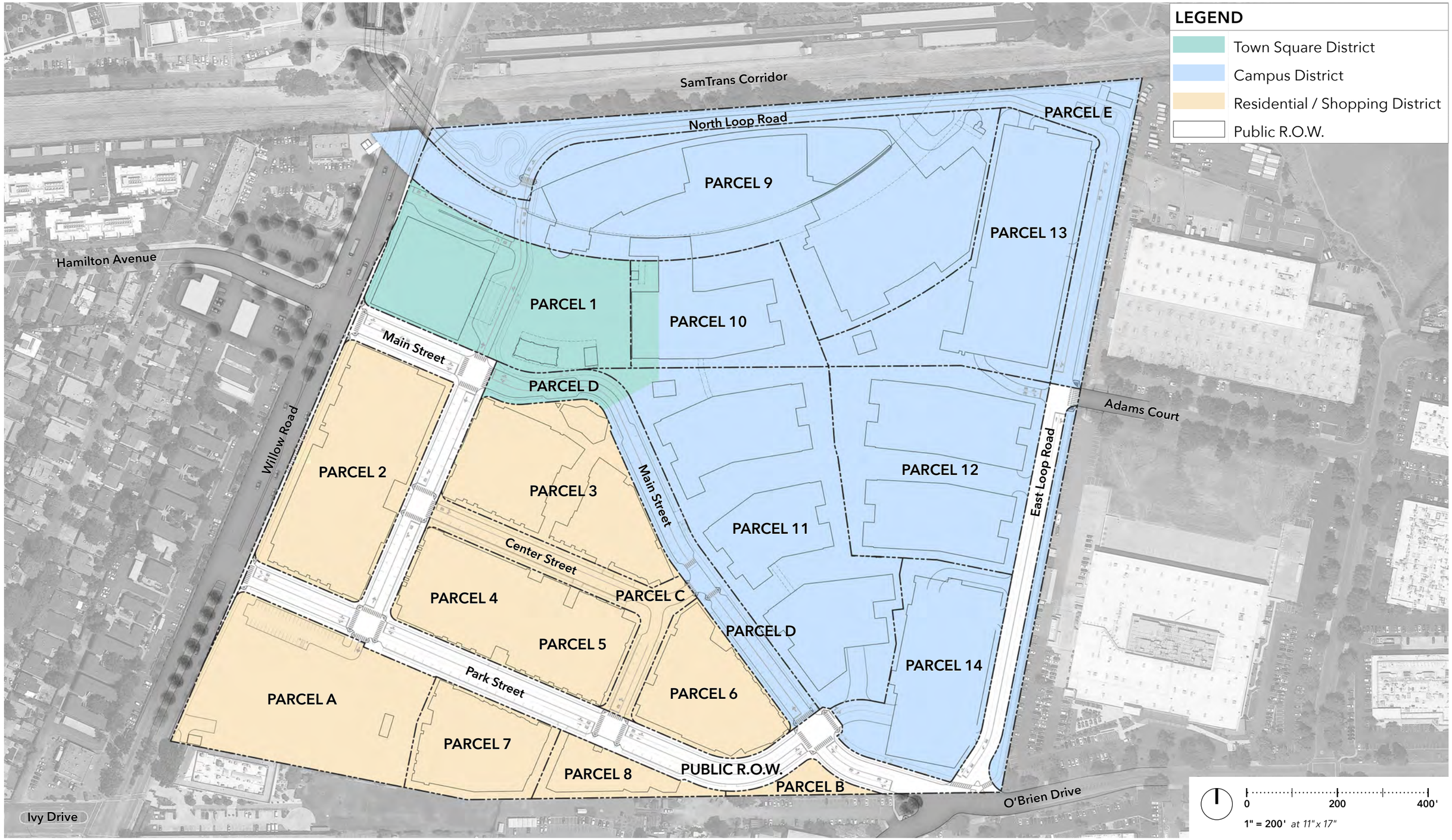
Yes, currently the office campus (6 offices + 2 garages) is on track to have enough solar PV to offset this gas usage. We are estimating producing approx. 3.5M kWh/year from solar PV.

Please let me know if there is anything else you need.

Regards,

Jeff

Jeff Bean
(308) 530-9538 | jtbean@fb.com



Water Demand by Parcel | Plan

Peninsula Innovation Partners

PARCEL BY PARCEL

Land Use	Parcel	Demand (MGY)				
		Indoor Water Use		Irrigation	Cooling	Total
		Potable	NP			
Retail	Parcel 1	5.77	1.13	3.00	0.00	9.90
Park + Open Space	Parcel A	0.00	0.00	4.86	0.00	4.86
Park + Open Space	Parcel B	0.00	0.00	0.40	0.00	0.40
Roads	Parcel C	0.00	0.00	0.14	0.00	0.14
Retail + Residential	Parcel 2	11.50	2.24	1.54	0.00	15.27
Retail + Residential	Parcel 3	16.28	3.77	1.38	0.00	21.43
Residential	Parcel 4	5.70	0.97	0.64	0.00	7.31
Residential	Parcel 5	5.54	0.94	0.64	0.00	7.12
Retail + Residential	Parcel 6	7.93	1.48	0.78	0.00	10.19
Residential	Parcel 7	4.55	0.78	0.72	0.00	6.04
Residential	Parcel 8	2.74	0.47	0.36	0.00	3.57
Roads	Public ROW	0.00	0.00	0.23	0.00	0.23
Meeting and Conference Facilities	Parcel 9	1.25	0.35	4.99	2.04	8.63
Office Campus	Parcel 10	3.08	0.85	0.27	0.77	4.97
Office Campus	Parcel 11	7.69	2.11	1.48	1.93	13.21
Office Campus	Parcel 12	5.78	1.59	0.51	1.45	9.34
Office Campus	Parcel 13	4.20	1.15	0.37	1.06	6.78
Office Campus	Parcel 14	3.02	0.83	0.58	0.76	5.19
Roads	Parcel D	0.00	0.00	0.37	0.00	0.37
Roads	Parcel E	0.00	0.00	0.56	0.00	0.56
Sub-Total		85.04	18.65	23.80	8.00	135.49
Plus Leakage Factor		10%	10%	10%	10%	10%
TOTAL		**93.54**	**20.52**	**26.18**	**8.80**	**149.03**

APPENDIX D
CALEEMOD ANALYSIS

Facebook Willow Village - CEQA

San Mateo County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	251.53	1000sqft	5.77	251,530.00	0
Research & Development	123.87	1000sqft	2.84	123,870.00	0
General Light Industry	80.10	1000sqft	1.84	80,100.00	0
Manufacturing	23.57	1000sqft	0.54	23,570.00	0
Unrefrigerated Warehouse-No Rail	500.78	1000sqft	11.50	500,780.00	0
Enclosed Parking with Elevator	2,300.00	Space	20.70	920,000.00	0
Health Club	24.06	1000sqft	0.55	24,060.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	70
Climate Zone	5			**Operational Year**	2019
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	243	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - CO2 intensity factor changed to reflect Renewable Portfolio Standard (RPS) adjustments.

Land Use - Assumes 400 sqft/parking space, 2300 spaces total.

Energy Use -

Land Use Change -

Sequestration -

Table Name	Column Name	Default Value	New Value
tblProjectCharacteristics	CO2IntensityFactor	641.35	243
tblSequestration	NumberOfNewTrees	0.00	7.00

FB Willow Village Full Buildout

San Mateo County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Apartments Mid Rise	1,730.00	Dwelling Unit	45.53	1,730,000.00	4948
Regional Shopping Center	200.00	1000sqft	4.59	200,000.00	0
Office Park	1,600.00	1000sqft	36.73	1,600,000.00	0
Hotel	119.00	Room	3.97	172,788.00	0
Enclosed Parking with Elevator	1,855.64	1000sqft	42.60	1,855,640.00	0
City Park	11.59	Acre	11.59	504,702.00	0
Parking Lot	13.60	1000sqft	0.31	13,600.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	70
Climate Zone	5			**Operational Year**	2026
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	49	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - PCE intensity factors used.

Land Use -

Table Name	Column Name	Default Value	New Value
tblLandUse	LandUseSquareFeet	504,703.58	504,702.00
tblProjectCharacteristics	CO2IntensityFactor	641.35	49

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

Appendix 3.4.2

Emissions and Modeling Calculations

ONSITE MEIR

RID	R02968
UTMx	575,245
UTMy	4,148,135
Scenario	3

Source Group	Dispersion Factor
EXCAVATE	8.90376
HTL	6.87441
MCP	3.13909
NG	0.830208
O1	2.57998
O2	6.53736
O3	8.52868
O4	5.89373
O5	1.55107
O6	1.51476
PHS_1A	6.98184
PHS_1B	4.21203
PHS_2X	73.5981
RETAIL	3.1027
RS2	6.49526
RS3	27.327
RS45	73.5981
RS6	6.77239
RS7	10.2483
SG	0.962467
TRUCKS	1.29605
TS	10.3699
TUNNEL	4.47513
PHS1A_FD	7.36575
PHS1B_FD	4.43493
PHS2X_FD	40.4279
RTAIL_FD	3.15795
TRCKS_FD	1.29484

OFFSITE MEIR

RID	R01084
UTMx	575,500
UTMy	4,147,960
Scenario	2

Source Group	Dispersion Factor
EXCAVATE	1.77869
HTL	1.3115
MCP	2.15222
NG	2.36197
O1	10.5137
O2	5.94605
O3	4.01936
O4	2.94803
O5	4.5772
O6	7.03205
PHS_1A	3.02658
PHS_1B	7.71402
PHS_2X	3.39239
RETAIL	0.840095
RS2	1.20941
RS3	2.31736
RS45	3.39239
RS6	1.87171
RS7	3.40722
SG	18.1945
TRUCKS	0.444516
TS	2.05018
TUNNEL	1.2231
PHS1A_FD	3.16781
PHS1B_FD	8.2004
PHS2X_FD	3.45794
RTAIL_FD	0.832633
TRCKS_FD	0.444516

SOURCE GROUP	POLLUTANT	CAS	EMISSIONS_G_S	YEAR	PHASE	CONTROLSCEN	DETAIL	AVE
RETAIL	DPM	9901	1.25E-04	2025	Alternate 1	UNMIT	Core and Shell_Forklifts	PERIOD
RETAIL	DPM	9901	6.57E-06	2025	Alternate 1	UNMIT	Core and Shell_Generator Sets	PERIOD
RETAIL	DPM	9901	7.75E-05	2025	Alternate 1	UNMIT	Core and Shell_Other Construction Equipment	PERIOD
RETAIL	DPM	9901	3.11E-05	2025	Alternate 1	UNMIT	Core and Shell_Pumps	PERIOD
RETAIL	DPM	9901	1.07E-05	2024	Alternate 1	UNMIT	Demolition_Air Compressors	PERIOD
RETAIL	DPM	9901	3.63E-05	2024	Alternate 1	UNMIT	Demolition_Excavators	PERIOD
RETAIL	DPM	9901	1.66E-06	2024	Alternate 1	UNMIT	Demolition_Generator Sets	PERIOD
RETAIL	DPM	9901	9.60E-05	2024	Alternate 1	UNMIT	Demolition_Other Construction Equipment	PERIOD
RETAIL	DPM	9901	3.28E-05	2024	Alternate 1	UNMIT	Demolition_Pressure Washers	PERIOD
RETAIL	DPM	9901	5.17E-04	2024	Alternate 1	UNMIT	Demolition_Tractors/Loaders/Backhoes	PERIOD
RETAIL	DPM	9901	6.37E-05	2025	Alternate 1	UNMIT	Foundations_Forklifts	PERIOD
RETAIL	DPM	9901	3.36E-06	2025	Alternate 1	UNMIT	Foundations_Generator Sets	PERIOD
RETAIL	DPM	9901	3.97E-05	2025	Alternate 1	UNMIT	Foundations_Other Construction Equipment	PERIOD
RETAIL	DPM	9901	1.06E-05	2025	Alternate 1	UNMIT	Foundations_Pumps	PERIOD
RETAIL	DPM	9901	5.05E-04	2025	Alternate 1	UNMIT	Foundations_Tractors/Loaders/Backhoes	PERIOD
RETAIL	DPM	9901	1.29E-06	2024	Alternate 1	UNMIT	Grading and Utilities_Excavators	PERIOD
RETAIL	DPM	9901	2.03E-06	2024	Alternate 1	UNMIT	Grading and Utilities_Forklifts	PERIOD
RETAIL	DPM	9901	1.32E-07	2024	Alternate 1	UNMIT	Grading and Utilities_Generator Sets	PERIOD
RETAIL	DPM	9901	2.24E-06	2024	Alternate 1	UNMIT	Grading and Utilities_Other Construction Equipment	PERIOD
RETAIL	DPM	9901	2.79E-08	2024	Alternate 1	UNMIT	Grading and Utilities_Pavers	PERIOD
RETAIL	DPM	9901	3.02E-05	2024	Alternate 1	UNMIT	Grading and Utilities_Tractors/Loaders/Backhoes	PERIOD
RETAIL	DPM	9901	2.53E-05	2025	Alternate 1	UNMIT	Grading and Utilities_Excavators	PERIOD
RETAIL	DPM	9901	4.78E-05	2025	Alternate 1	UNMIT	Grading and Utilities_Forklifts	PERIOD
RETAIL	DPM	9901	2.25E-06	2025	Alternate 1	UNMIT	Grading and Utilities_Generator Sets	PERIOD
RETAIL	DPM	9901	4.10E-05	2025	Alternate 1	UNMIT	Grading and Utilities_Other Construction Equipment	PERIOD
RETAIL	DPM	9901	4.61E-07	2025	Alternate 1	UNMIT	Grading and Utilities_Pavers	PERIOD
RETAIL	DPM	9901	6.61E-04	2025	Alternate 1	UNMIT	Grading and Utilities_Tractors/Loaders/Backhoes	PERIOD
RETAIL	DPM	9901	9.56E-05	2025	Alternate 1	UNMIT	Tenant Improvements_Forklifts	PERIOD
RETAIL	DPM	9901	4.29E-06	2025	Alternate 1	UNMIT	Tenant Improvements_Generator Sets	PERIOD
RETAIL	DPM	9901	1.19E-04	2025	Alternate 1	UNMIT	Tenant Improvements_Other Construction Equipment	PERIOD
PHS_1A	DPM	9901	1.11E-05	2021	Phase 1a	UNMIT	Demolition_Air Compressors	PERIOD
PHS_1A	DPM	9901	0.00E+00	2021	Phase 1a	UNMIT	Demolition_Crushing/Proc. Equipment	PERIOD
PHS_1A	DPM	9901	1.29E-04	2021	Phase 1a	UNMIT	Demolition_Excavators	PERIOD
PHS_1A	DPM	9901	1.90E-06	2021	Phase 1a	UNMIT	Demolition_Generator Sets	PERIOD
PHS_1A	DPM	9901	8.46E-05	2021	Phase 1a	UNMIT	Demolition_Other Construction Equipment	PERIOD
PHS_1A	DPM	9901	2.11E-05	2021	Phase 1a	UNMIT	Demolition_Pressure Washers	PERIOD
PHS_1A	DPM	9901	2.00E-04	2021	Phase 1a	UNMIT	Demolition_Tractors/Loaders/Backhoes	PERIOD
PHS_1A	DPM	9901	5.43E-05	2022	Phase 1a	UNMIT	Demolition_Air Compressors	PERIOD
PHS_1A	DPM	9901	0.00E+00	2022	Phase 1a	UNMIT	Demolition_Crushing/Proc. Equipment	PERIOD
PHS_1A	DPM	9901	6.88E-04	2022	Phase 1a	UNMIT	Demolition_Excavators	PERIOD
PHS_1A	DPM	9901	1.24E-05	2022	Phase 1a	UNMIT	Demolition_Generator Sets	PERIOD
PHS_1A	DPM	9901	4.73E-04	2022	Phase 1a	UNMIT	Demolition_Other Construction Equipment	PERIOD
PHS_1A	DPM	9901	1.33E-04	2022	Phase 1a	UNMIT	Demolition_Pressure Washers	PERIOD
PHS_1A	DPM	9901	1.11E-03	2022	Phase 1a	UNMIT	Demolition_Tractors/Loaders/Backhoes	PERIOD
PHS_1A	DPM	9901	8.95E-04	2022	Phase 1a	UNMIT	Grading and Utilities_Excavators	PERIOD
PHS_1A	DPM	9901	5.94E-05	2022	Phase 1a	UNMIT	Grading and Utilities_Forklifts	PERIOD

PHS_1A	DPM	9901	2.05E-05	2022	Phase 1a	UNMIT	Grading and Utilities_Generator Sets	PERIOD
PHS_1A	DPM	9901	4.80E-04	2022	Phase 1a	UNMIT	Grading and Utilities_Graders	PERIOD
PHS_1A	DPM	9901	8.49E-04	2022	Phase 1a	UNMIT	Grading and Utilities_Other Construction Equipment	PERIOD
PHS_1A	DPM	9901	1.01E-05	2022	Phase 1a	UNMIT	Grading and Utilities_Pavers	PERIOD
PHS_1A	DPM	9901	3.99E-04	2022	Phase 1a	UNMIT	Grading and Utilities_Scrapers	PERIOD
PHS_1A	DPM	9901	2.05E-03	2022	Phase 1a	UNMIT	Grading and Utilities_Tractors/Loaders/Backhoes	PERIOD
RS2	DPM	9901	0.00E+00	2023	Phase 1a Mixed Use	UNMIT	Core and Shell_Aerial Lifts	PERIOD
RS2	DPM	9901	0.00E+00	2023	Phase 1a Mixed Use	UNMIT	Core and Shell_Air Compressors	PERIOD
RS2	DPM	9901	1.10E-04	2023	Phase 1a Mixed Use	UNMIT	Core and Shell_Cranes	PERIOD
RS2	DPM	9901	2.10E-04	2023	Phase 1a Mixed Use	UNMIT	Core and Shell_Forklifts	PERIOD
RS2	DPM	9901	0.00E+00	2023	Phase 1a Mixed Use	UNMIT	Core and Shell_Generator Sets	PERIOD
RS2	DPM	9901	1.61E-04	2023	Phase 1a Mixed Use	UNMIT	Core and Shell_Other Construction Equipment	PERIOD
RS2	DPM	9901	0.00E+00	2023	Phase 1a Mixed Use	UNMIT	Core and Shell_Pumps	PERIOD
RS2	DPM	9901	0.00E+00	2024	Phase 1a Mixed Use	UNMIT	Core and Shell_Aerial Lifts	PERIOD
RS2	DPM	9901	0.00E+00	2024	Phase 1a Mixed Use	UNMIT	Core and Shell_Air Compressors	PERIOD
RS2	DPM	9901	1.92E-04	2024	Phase 1a Mixed Use	UNMIT	Core and Shell_Cranes	PERIOD
RS2	DPM	9901	3.14E-04	2024	Phase 1a Mixed Use	UNMIT	Core and Shell_Forklifts	PERIOD
RS2	DPM	9901	0.00E+00	2024	Phase 1a Mixed Use	UNMIT	Core and Shell_Generator Sets	PERIOD
RS2	DPM	9901	2.53E-04	2024	Phase 1a Mixed Use	UNMIT	Core and Shell_Other Construction Equipment	PERIOD
RS2	DPM	9901	0.00E+00	2024	Phase 1a Mixed Use	UNMIT	Core and Shell_Pumps	PERIOD
RS2	DPM	9901	0.00E+00	2023	Phase 1a Mixed Use	UNMIT	Foundations_Bore/Drill Rigs	PERIOD
RS2	DPM	9901	2.02E-04	2023	Phase 1a Mixed Use	UNMIT	Foundations_Cranes	PERIOD
RS2	DPM	9901	1.94E-04	2023	Phase 1a Mixed Use	UNMIT	Foundations_Excavators	PERIOD
RS2	DPM	9901	5.28E-04	2023	Phase 1a Mixed Use	UNMIT	Foundations_Forklifts	PERIOD
RS2	DPM	9901	0.00E+00	2023	Phase 1a Mixed Use	UNMIT	Foundations_Generator Sets	PERIOD
RS2	DPM	9901	4.04E-04	2023	Phase 1a Mixed Use	UNMIT	Foundations_Other Construction Equipment	PERIOD
RS2	DPM	9901	7.89E-05	2023	Phase 1a Mixed Use	UNMIT	Foundations_Pumps	PERIOD
RS2	DPM	9901	3.66E-03	2023	Phase 1a Mixed Use	UNMIT	Foundations_Tractors/Loaders/Backhoes	PERIOD
RS2	DPM	9901	2.96E-04	2025	Phase 1a Mixed Use	UNMIT	Landscaping_Excavators	PERIOD
RS2	DPM	9901	0.00E+00	2025	Phase 1a Mixed Use	UNMIT	Landscaping_Generator Sets	PERIOD
RS2	DPM	9901	1.06E-04	2025	Phase 1a Mixed Use	UNMIT	Landscaping_Other Construction Equipment	PERIOD
RS2	DPM	9901	1.80E-03	2025	Phase 1a Mixed Use	UNMIT	Landscaping_Tractors/Loaders/Backhoes	PERIOD
RS2	DPM	9901	3.97E-04	2024	Phase 1a Mixed Use	UNMIT	Tenant Improvements_Forklifts	PERIOD
RS2	DPM	9901	0.00E+00	2024	Phase 1a Mixed Use	UNMIT	Tenant Improvements_Generator Sets	PERIOD
RS2	DPM	9901	3.21E-04	2024	Phase 1a Mixed Use	UNMIT	Tenant Improvements_Other Construction Equipment	PERIOD
RS2	DPM	9901	3.30E-04	2025	Phase 1a Mixed Use	UNMIT	Tenant Improvements_Forklifts	PERIOD
RS2	DPM	9901	0.00E+00	2025	Phase 1a Mixed Use	UNMIT	Tenant Improvements_Generator Sets	PERIOD
RS2	DPM	9901	2.05E-04	2025	Phase 1a Mixed Use	UNMIT	Tenant Improvements_Other Construction Equipment	PERIOD
RS3	DPM	9901	0.00E+00	2024	Phase 1a Mixed Use	UNMIT	Core and Shell_Aerial Lifts	PERIOD
RS3	DPM	9901	0.00E+00	2024	Phase 1a Mixed Use	UNMIT	Core and Shell_Air Compressors	PERIOD
RS3	DPM	9901	2.97E-04	2024	Phase 1a Mixed Use	UNMIT	Core and Shell_Cranes	PERIOD
RS3	DPM	9901	9.73E-04	2024	Phase 1a Mixed Use	UNMIT	Core and Shell_Forklifts	PERIOD
RS3	DPM	9901	0.00E+00	2024	Phase 1a Mixed Use	UNMIT	Core and Shell_Generator Sets	PERIOD
RS3	DPM	9901	3.93E-04	2024	Phase 1a Mixed Use	UNMIT	Core and Shell_Other Construction Equipment	PERIOD
RS3	DPM	9901	0.00E+00	2024	Phase 1a Mixed Use	UNMIT	Core and Shell_Pumps	PERIOD
RS3	DPM	9901	0.00E+00	2023	Phase 1a Mixed Use	UNMIT	Foundations_Bore/Drill Rigs	PERIOD
RS3	DPM	9901	2.00E-04	2023	Phase 1a Mixed Use	UNMIT	Foundations_Cranes	PERIOD

RS3	DPM	9901	1.93E-04	2023	Phase 1a Mixed Use	UNMIT	Foundations_Excavators	PERIOD
RS3	DPM	9901	5.25E-04	2023	Phase 1a Mixed Use	UNMIT	Foundations_Forklifts	PERIOD
RS3	DPM	9901	0.00E+00	2023	Phase 1a Mixed Use	UNMIT	Foundations_Generator Sets	PERIOD
RS3	DPM	9901	4.01E-04	2023	Phase 1a Mixed Use	UNMIT	Foundations_Other Construction Equipment	PERIOD
RS3	DPM	9901	7.84E-05	2023	Phase 1a Mixed Use	UNMIT	Foundations_Pumps	PERIOD
RS3	DPM	9901	5.42E-03	2023	Phase 1a Mixed Use	UNMIT	Foundations_Tractors/Loaders/Backhoes	PERIOD
RS3	DPM	9901	0.00E+00	2024	Phase 1a Mixed Use	UNMIT	Foundations_Bore/Drill Rigs	PERIOD
RS3	DPM	9901	1.13E-06	2024	Phase 1a Mixed Use	UNMIT	Foundations_Cranes	PERIOD
RS3	DPM	9901	1.10E-06	2024	Phase 1a Mixed Use	UNMIT	Foundations_Excavators	PERIOD
RS3	DPM	9901	2.70E-06	2024	Phase 1a Mixed Use	UNMIT	Foundations_Forklifts	PERIOD
RS3	DPM	9901	0.00E+00	2024	Phase 1a Mixed Use	UNMIT	Foundations_Generator Sets	PERIOD
RS3	DPM	9901	2.18E-06	2024	Phase 1a Mixed Use	UNMIT	Foundations_Other Construction Equipment	PERIOD
RS3	DPM	9901	4.30E-07	2024	Phase 1a Mixed Use	UNMIT	Foundations_Pumps	PERIOD
RS3	DPM	9901	3.44E-05	2024	Phase 1a Mixed Use	UNMIT	Foundations_Tractors/Loaders/Backhoes	PERIOD
RS3	DPM	9901	2.91E-04	2025	Phase 1a Mixed Use	UNMIT	Landscaping_Excavators	PERIOD
RS3	DPM	9901	0.00E+00	2025	Phase 1a Mixed Use	UNMIT	Landscaping_Generator Sets	PERIOD
RS3	DPM	9901	0.00E+00	2025	Phase 1a Mixed Use	UNMIT	Landscaping_Other Construction Equipment	PERIOD
RS3	DPM	9901	2.44E-03	2025	Phase 1a Mixed Use	UNMIT	Landscaping_Tractors/Loaders/Backhoes	PERIOD
RS3	DPM	9901	2.22E-04	2024	Phase 1a Mixed Use	UNMIT	Tenant Improvements_Forklifts	PERIOD
RS3	DPM	9901	0.00E+00	2024	Phase 1a Mixed Use	UNMIT	Tenant Improvements_Generator Sets	PERIOD
RS3	DPM	9901	1.79E-04	2024	Phase 1a Mixed Use	UNMIT	Tenant Improvements_Other Construction Equipment	PERIOD
RS3	DPM	9901	5.16E-04	2025	Phase 1a Mixed Use	UNMIT	Tenant Improvements_Forklifts	PERIOD
RS3	DPM	9901	0.00E+00	2025	Phase 1a Mixed Use	UNMIT	Tenant Improvements_Generator Sets	PERIOD
RS3	DPM	9901	3.21E-04	2025	Phase 1a Mixed Use	UNMIT	Tenant Improvements_Other Construction Equipment	PERIOD
HTL	DPM	9901	3.31E-04	2024	Phase 1a Office	UNMIT	Vertical_Aerial Lifts	PERIOD
HTL	DPM	9901	6.49E-05	2024	Phase 1a Office	UNMIT	Vertical_Air Compressors	PERIOD
HTL	DPM	9901	0.00E+00	2024	Phase 1a Office	UNMIT	Vertical_Bore/Drill Rigs	PERIOD
HTL	DPM	9901	0.00E+00	2024	Phase 1a Office	UNMIT	Vertical_Cranes	PERIOD
HTL	DPM	9901	0.00E+00	2024	Phase 1a Office	UNMIT	Vertical_Crushing/Proc. Equipment	PERIOD
HTL	DPM	9901	0.00E+00	2024	Phase 1a Office	UNMIT	Vertical_Excavators	PERIOD
HTL	DPM	9901	9.25E-05	2024	Phase 1a Office	UNMIT	Vertical_Forklifts	PERIOD
HTL	DPM	9901	0.00E+00	2024	Phase 1a Office	UNMIT	Vertical_Generator Sets	PERIOD
HTL	DPM	9901	0.00E+00	2024	Phase 1a Office	UNMIT	Vertical_Graders	PERIOD
HTL	DPM	9901	1.59E-04	2024	Phase 1a Office	UNMIT	Vertical_Other Construction Equipment	PERIOD
HTL	DPM	9901	0.00E+00	2024	Phase 1a Office	UNMIT	Vertical_Pavers	PERIOD
HTL	DPM	9901	9.79E-07	2024	Phase 1a Office	UNMIT	Vertical_Pressure Washers	PERIOD
HTL	DPM	9901	1.88E-04	2024	Phase 1a Office	UNMIT	Vertical_Pumps	PERIOD
HTL	DPM	9901	0.00E+00	2024	Phase 1a Office	UNMIT	Vertical_Scrapers	PERIOD
HTL	DPM	9901	0.00E+00	2024	Phase 1a Office	UNMIT	Vertical_Tractors/Loaders/Backhoes	PERIOD
HTL	DPM	9901	2.81E-04	2025	Phase 1a Office	UNMIT	Vertical_Aerial Lifts	PERIOD
HTL	DPM	9901	1.27E-05	2025	Phase 1a Office	UNMIT	Vertical_Air Compressors	PERIOD
HTL	DPM	9901	0.00E+00	2025	Phase 1a Office	UNMIT	Vertical_Bore/Drill Rigs	PERIOD
HTL	DPM	9901	0.00E+00	2025	Phase 1a Office	UNMIT	Vertical_Cranes	PERIOD
HTL	DPM	9901	0.00E+00	2025	Phase 1a Office	UNMIT	Vertical_Crushing/Proc. Equipment	PERIOD
HTL	DPM	9901	0.00E+00	2025	Phase 1a Office	UNMIT	Vertical_Excavators	PERIOD
HTL	DPM	9901	8.27E-05	2025	Phase 1a Office	UNMIT	Vertical_Forklifts	PERIOD
HTL	DPM	9901	0.00E+00	2025	Phase 1a Office	UNMIT	Vertical_Generator Sets	PERIOD

HTL	DPM	9901	0.00E+00	2025	Phase 1a Office	UNMIT	Vertical_Graders	PERIOD
HTL	DPM	9901	1.16E-04	2025	Phase 1a Office	UNMIT	Vertical_Other Construction Equipment	PERIOD
HTL	DPM	9901	0.00E+00	2025	Phase 1a Office	UNMIT	Vertical_Pavers	PERIOD
HTL	DPM	9901	2.35E-07	2025	Phase 1a Office	UNMIT	Vertical_Pressure Washers	PERIOD
HTL	DPM	9901	3.46E-05	2025	Phase 1a Office	UNMIT	Vertical_Pumps	PERIOD
HTL	DPM	9901	0.00E+00	2025	Phase 1a Office	UNMIT	Vertical_Scrapers	PERIOD
HTL	DPM	9901	0.00E+00	2025	Phase 1a Office	UNMIT	Vertical_Tractors/Loaders/Backhoes	PERIOD
EXCAVATE	DPM	9901	6.58E-06	2022	Phase 1a Office	UNMIT	Hotel Excavation_Aerial Lifts	PERIOD
EXCAVATE	DPM	9901	1.83E-05	2022	Phase 1a Office	UNMIT	Hotel Excavation_Air Compressors	PERIOD
EXCAVATE	DPM	9901	2.90E-04	2022	Phase 1a Office	UNMIT	Hotel Excavation_Bore/Drill Rigs	PERIOD
EXCAVATE	DPM	9901	1.28E-04	2022	Phase 1a Office	UNMIT	Hotel Excavation_Cranes	PERIOD
EXCAVATE	DPM	9901	0.00E+00	2022	Phase 1a Office	UNMIT	Hotel Excavation_Crushing/Proc. Equipment	PERIOD
EXCAVATE	DPM	9901	2.23E-04	2022	Phase 1a Office	UNMIT	Hotel Excavation_Excavators	PERIOD
EXCAVATE	DPM	9901	1.06E-05	2022	Phase 1a Office	UNMIT	Hotel Excavation_Forklifts	PERIOD
EXCAVATE	DPM	9901	6.06E-06	2022	Phase 1a Office	UNMIT	Hotel Excavation_Generator Sets	PERIOD
EXCAVATE	DPM	9901	0.00E+00	2022	Phase 1a Office	UNMIT	Hotel Excavation_Graders	PERIOD
EXCAVATE	DPM	9901	9.62E-05	2022	Phase 1a Office	UNMIT	Hotel Excavation_Other Construction Equipment	PERIOD
EXCAVATE	DPM	9901	0.00E+00	2022	Phase 1a Office	UNMIT	Hotel Excavation_Pavers	PERIOD
EXCAVATE	DPM	9901	0.00E+00	2022	Phase 1a Office	UNMIT	Hotel Excavation_Pressure Washers	PERIOD
EXCAVATE	DPM	9901	7.35E-06	2022	Phase 1a Office	UNMIT	Hotel Excavation_Pumps	PERIOD
EXCAVATE	DPM	9901	0.00E+00	2022	Phase 1a Office	UNMIT	Hotel Excavation_Scrapers	PERIOD
EXCAVATE	DPM	9901	2.67E-04	2022	Phase 1a Office	UNMIT	Hotel Excavation_Tractors/Loaders/Backhoes	PERIOD
EXCAVATE	DPM	9901	8.30E-06	2023	Phase 1a Office	UNMIT	Hotel Excavation_Aerial Lifts	PERIOD
EXCAVATE	DPM	9901	7.14E-05	2023	Phase 1a Office	UNMIT	Hotel Excavation_Air Compressors	PERIOD
EXCAVATE	DPM	9901	0.00E+00	2023	Phase 1a Office	UNMIT	Hotel Excavation_Bore/Drill Rigs	PERIOD
EXCAVATE	DPM	9901	2.34E-03	2023	Phase 1a Office	UNMIT	Hotel Excavation_Cranes	PERIOD
EXCAVATE	DPM	9901	0.00E+00	2023	Phase 1a Office	UNMIT	Hotel Excavation_Crushing/Proc. Equipment	PERIOD
EXCAVATE	DPM	9901	2.85E-04	2023	Phase 1a Office	UNMIT	Hotel Excavation_Excavators	PERIOD
EXCAVATE	DPM	9901	1.19E-04	2023	Phase 1a Office	UNMIT	Hotel Excavation_Forklifts	PERIOD
EXCAVATE	DPM	9901	6.82E-05	2023	Phase 1a Office	UNMIT	Hotel Excavation_Generator Sets	PERIOD
EXCAVATE	DPM	9901	0.00E+00	2023	Phase 1a Office	UNMIT	Hotel Excavation_Graders	PERIOD
EXCAVATE	DPM	9901	3.32E-04	2023	Phase 1a Office	UNMIT	Hotel Excavation_Other Construction Equipment	PERIOD
EXCAVATE	DPM	9901	0.00E+00	2023	Phase 1a Office	UNMIT	Hotel Excavation_Pavers	PERIOD
EXCAVATE	DPM	9901	1.13E-06	2023	Phase 1a Office	UNMIT	Hotel Excavation_Pressure Washers	PERIOD
EXCAVATE	DPM	9901	2.42E-04	2023	Phase 1a Office	UNMIT	Hotel Excavation_Pumps	PERIOD
EXCAVATE	DPM	9901	0.00E+00	2023	Phase 1a Office	UNMIT	Hotel Excavation_Scrapers	PERIOD
EXCAVATE	DPM	9901	1.92E-03	2023	Phase 1a Office	UNMIT	Hotel Excavation_Tractors/Loaders/Backhoes	PERIOD
MCP	DPM	9901	0.00E+00	2022	Phase 1a Office	UNMIT	Vertical_Aerial Lifts	PERIOD
MCP	DPM	9901	0.00E+00	2022	Phase 1a Office	UNMIT	Vertical_Air Compressors	PERIOD
MCP	DPM	9901	8.64E-05	2022	Phase 1a Office	UNMIT	Vertical_Bore/Drill Rigs	PERIOD
MCP	DPM	9901	7.60E-05	2022	Phase 1a Office	UNMIT	Vertical_Cranes	PERIOD
MCP	DPM	9901	0.00E+00	2022	Phase 1a Office	UNMIT	Vertical_Crushing/Proc. Equipment	PERIOD
MCP	DPM	9901	4.47E-04	2022	Phase 1a Office	UNMIT	Vertical_Excavators	PERIOD
MCP	DPM	9901	1.60E-05	2022	Phase 1a Office	UNMIT	Vertical_Forklifts	PERIOD
MCP	DPM	9901	6.06E-06	2022	Phase 1a Office	UNMIT	Vertical_Generator Sets	PERIOD
MCP	DPM	9901	0.00E+00	2022	Phase 1a Office	UNMIT	Vertical_Graders	PERIOD
MCP	DPM	9901	5.81E-05	2022	Phase 1a Office	UNMIT	Vertical_Other Construction Equipment	PERIOD

MCP	DPM	9901	0.00E+00	2022	Phase 1a Office	UNMIT	Vertical_Pavers	PERIOD
MCP	DPM	9901	0.00E+00	2022	Phase 1a Office	UNMIT	Vertical_Pressure Washers	PERIOD
MCP	DPM	9901	0.00E+00	2022	Phase 1a Office	UNMIT	Vertical_Pumps	PERIOD
MCP	DPM	9901	0.00E+00	2022	Phase 1a Office	UNMIT	Vertical_Scrapers	PERIOD
MCP	DPM	9901	2.72E-04	2022	Phase 1a Office	UNMIT	Vertical_Tractors/Loaders/Backhoes	PERIOD
MCP	DPM	9901	2.13E-05	2023	Phase 1a Office	UNMIT	Vertical_Aerial Lifts	PERIOD
MCP	DPM	9901	9.52E-06	2023	Phase 1a Office	UNMIT	Vertical_Air Compressors	PERIOD
MCP	DPM	9901	3.02E-04	2023	Phase 1a Office	UNMIT	Vertical_Bore/Drill Rigs	PERIOD
MCP	DPM	9901	1.85E-03	2023	Phase 1a Office	UNMIT	Vertical_Cranes	PERIOD
MCP	DPM	9901	0.00E+00	2023	Phase 1a Office	UNMIT	Vertical_Crushing/Proc. Equipment	PERIOD
MCP	DPM	9901	5.66E-04	2023	Phase 1a Office	UNMIT	Vertical_Excavators	PERIOD
MCP	DPM	9901	8.68E-05	2023	Phase 1a Office	UNMIT	Vertical_Forklifts	PERIOD
MCP	DPM	9901	4.35E-05	2023	Phase 1a Office	UNMIT	Vertical_Generator Sets	PERIOD
MCP	DPM	9901	0.00E+00	2023	Phase 1a Office	UNMIT	Vertical_Graders	PERIOD
MCP	DPM	9901	1.75E-04	2023	Phase 1a Office	UNMIT	Vertical_Other Construction Equipment	PERIOD
MCP	DPM	9901	0.00E+00	2023	Phase 1a Office	UNMIT	Vertical_Pavers	PERIOD
MCP	DPM	9901	3.77E-06	2023	Phase 1a Office	UNMIT	Vertical_Pressure Washers	PERIOD
MCP	DPM	9901	3.23E-05	2023	Phase 1a Office	UNMIT	Vertical_Pumps	PERIOD
MCP	DPM	9901	0.00E+00	2023	Phase 1a Office	UNMIT	Vertical_Scrapers	PERIOD
MCP	DPM	9901	1.87E-03	2023	Phase 1a Office	UNMIT	Vertical_Tractors/Loaders/Backhoes	PERIOD
MCP	DPM	9901	4.58E-04	2024	Phase 1a Office	UNMIT	Vertical_Aerial Lifts	PERIOD
MCP	DPM	9901	0.00E+00	2024	Phase 1a Office	UNMIT	Vertical_Air Compressors	PERIOD
MCP	DPM	9901	0.00E+00	2024	Phase 1a Office	UNMIT	Vertical_Bore/Drill Rigs	PERIOD
MCP	DPM	9901	1.25E-04	2024	Phase 1a Office	UNMIT	Vertical_Cranes	PERIOD
MCP	DPM	9901	0.00E+00	2024	Phase 1a Office	UNMIT	Vertical_Crushing/Proc. Equipment	PERIOD
MCP	DPM	9901	0.00E+00	2024	Phase 1a Office	UNMIT	Vertical_Excavators	PERIOD
MCP	DPM	9901	1.18E-04	2024	Phase 1a Office	UNMIT	Vertical_Forklifts	PERIOD
MCP	DPM	9901	0.00E+00	2024	Phase 1a Office	UNMIT	Vertical_Generator Sets	PERIOD
MCP	DPM	9901	0.00E+00	2024	Phase 1a Office	UNMIT	Vertical_Graders	PERIOD
MCP	DPM	9901	0.00E+00	2024	Phase 1a Office	UNMIT	Vertical_Other Construction Equipment	PERIOD
MCP	DPM	9901	0.00E+00	2024	Phase 1a Office	UNMIT	Vertical_Pavers	PERIOD
MCP	DPM	9901	0.00E+00	2024	Phase 1a Office	UNMIT	Vertical_Pressure Washers	PERIOD
MCP	DPM	9901	0.00E+00	2024	Phase 1a Office	UNMIT	Vertical_Pumps	PERIOD
MCP	DPM	9901	0.00E+00	2024	Phase 1a Office	UNMIT	Vertical_Scrapers	PERIOD
MCP	DPM	9901	0.00E+00	2024	Phase 1a Office	UNMIT	Vertical_Tractors/Loaders/Backhoes	PERIOD
MCP	DPM	9901	2.23E-04	2025	Phase 1a Office	UNMIT	Vertical_Aerial Lifts	PERIOD
MCP	DPM	9901	0.00E+00	2025	Phase 1a Office	UNMIT	Vertical_Air Compressors	PERIOD
MCP	DPM	9901	0.00E+00	2025	Phase 1a Office	UNMIT	Vertical_Bore/Drill Rigs	PERIOD
MCP	DPM	9901	1.75E-04	2025	Phase 1a Office	UNMIT	Vertical_Cranes	PERIOD
MCP	DPM	9901	0.00E+00	2025	Phase 1a Office	UNMIT	Vertical_Crushing/Proc. Equipment	PERIOD
MCP	DPM	9901	0.00E+00	2025	Phase 1a Office	UNMIT	Vertical_Excavators	PERIOD
MCP	DPM	9901	1.37E-04	2025	Phase 1a Office	UNMIT	Vertical_Forklifts	PERIOD
MCP	DPM	9901	0.00E+00	2025	Phase 1a Office	UNMIT	Vertical_Generator Sets	PERIOD
MCP	DPM	9901	0.00E+00	2025	Phase 1a Office	UNMIT	Vertical_Graders	PERIOD
MCP	DPM	9901	0.00E+00	2025	Phase 1a Office	UNMIT	Vertical_Other Construction Equipment	PERIOD
MCP	DPM	9901	0.00E+00	2025	Phase 1a Office	UNMIT	Vertical_Pavers	PERIOD
MCP	DPM	9901	0.00E+00	2025	Phase 1a Office	UNMIT	Vertical_Pressure Washers	PERIOD

MCP	DPM	9901	0.00E+00	2025	Phase 1a Office	UNMIT	Vertical_Pumps	PERIOD
MCP	DPM	9901	0.00E+00	2025	Phase 1a Office	UNMIT	Vertical_Scrapers	PERIOD
MCP	DPM	9901	0.00E+00	2025	Phase 1a Office	UNMIT	Vertical_Tractors/Loaders/Backhoes	PERIOD
MCP	DPM	9901	0.00E+00	2026	Phase 1a Office	UNMIT	Vertical_Aerial Lifts	PERIOD
MCP	DPM	9901	0.00E+00	2026	Phase 1a Office	UNMIT	Vertical_Air Compressors	PERIOD
MCP	DPM	9901	0.00E+00	2026	Phase 1a Office	UNMIT	Vertical_Bore/Drill Rigs	PERIOD
MCP	DPM	9901	2.24E-04	2026	Phase 1a Office	UNMIT	Vertical_Cranes	PERIOD
MCP	DPM	9901	0.00E+00	2026	Phase 1a Office	UNMIT	Vertical_Crushing/Proc. Equipment	PERIOD
MCP	DPM	9901	0.00E+00	2026	Phase 1a Office	UNMIT	Vertical_Excavators	PERIOD
MCP	DPM	9901	2.42E-05	2026	Phase 1a Office	UNMIT	Vertical_Forklifts	PERIOD
MCP	DPM	9901	0.00E+00	2026	Phase 1a Office	UNMIT	Vertical_Generator Sets	PERIOD
MCP	DPM	9901	0.00E+00	2026	Phase 1a Office	UNMIT	Vertical_Graders	PERIOD
MCP	DPM	9901	0.00E+00	2026	Phase 1a Office	UNMIT	Vertical_Other Construction Equipment	PERIOD
MCP	DPM	9901	0.00E+00	2026	Phase 1a Office	UNMIT	Vertical_Pavers	PERIOD
MCP	DPM	9901	0.00E+00	2026	Phase 1a Office	UNMIT	Vertical_Pressure Washers	PERIOD
MCP	DPM	9901	0.00E+00	2026	Phase 1a Office	UNMIT	Vertical_Pumps	PERIOD
MCP	DPM	9901	0.00E+00	2026	Phase 1a Office	UNMIT	Vertical_Scrapers	PERIOD
MCP	DPM	9901	0.00E+00	2026	Phase 1a Office	UNMIT	Vertical_Tractors/Loaders/Backhoes	PERIOD
NG	DPM	9901	0.00E+00	2022	Phase 1a Office	UNMIT	Vertical_Aerial Lifts	PERIOD
NG	DPM	9901	3.25E-06	2022	Phase 1a Office	UNMIT	Vertical_Air Compressors	PERIOD
NG	DPM	9901	1.14E-04	2022	Phase 1a Office	UNMIT	Vertical_Bore/Drill Rigs	PERIOD
NG	DPM	9901	1.42E-04	2022	Phase 1a Office	UNMIT	Vertical_Cranes	PERIOD
NG	DPM	9901	0.00E+00	2022	Phase 1a Office	UNMIT	Vertical_Crushing/Proc. Equipment	PERIOD
NG	DPM	9901	2.23E-04	2022	Phase 1a Office	UNMIT	Vertical_Excavators	PERIOD
NG	DPM	9901	5.32E-06	2022	Phase 1a Office	UNMIT	Vertical_Forklifts	PERIOD
NG	DPM	9901	4.88E-06	2022	Phase 1a Office	UNMIT	Vertical_Generator Sets	PERIOD
NG	DPM	9901	0.00E+00	2022	Phase 1a Office	UNMIT	Vertical_Graders	PERIOD
NG	DPM	9901	3.87E-05	2022	Phase 1a Office	UNMIT	Vertical_Other Construction Equipment	PERIOD
NG	DPM	9901	0.00E+00	2022	Phase 1a Office	UNMIT	Vertical_Pavers	PERIOD
NG	DPM	9901	0.00E+00	2022	Phase 1a Office	UNMIT	Vertical_Pressure Washers	PERIOD
NG	DPM	9901	5.73E-06	2022	Phase 1a Office	UNMIT	Vertical_Pumps	PERIOD
NG	DPM	9901	0.00E+00	2022	Phase 1a Office	UNMIT	Vertical_Scrapers	PERIOD
NG	DPM	9901	8.42E-05	2022	Phase 1a Office	UNMIT	Vertical_Tractors/Loaders/Backhoes	PERIOD
NG	DPM	9901	3.18E-05	2023	Phase 1a Office	UNMIT	Vertical_Aerial Lifts	PERIOD
NG	DPM	9901	1.49E-05	2023	Phase 1a Office	UNMIT	Vertical_Air Compressors	PERIOD
NG	DPM	9901	0.00E+00	2023	Phase 1a Office	UNMIT	Vertical_Bore/Drill Rigs	PERIOD
NG	DPM	9901	1.28E-03	2023	Phase 1a Office	UNMIT	Vertical_Cranes	PERIOD
NG	DPM	9901	0.00E+00	2023	Phase 1a Office	UNMIT	Vertical_Crushing/Proc. Equipment	PERIOD
NG	DPM	9901	4.75E-05	2023	Phase 1a Office	UNMIT	Vertical_Excavators	PERIOD
NG	DPM	9901	3.39E-05	2023	Phase 1a Office	UNMIT	Vertical_Forklifts	PERIOD
NG	DPM	9901	1.14E-05	2023	Phase 1a Office	UNMIT	Vertical_Generator Sets	PERIOD
NG	DPM	9901	0.00E+00	2023	Phase 1a Office	UNMIT	Vertical_Graders	PERIOD
NG	DPM	9901	2.71E-04	2023	Phase 1a Office	UNMIT	Vertical_Other Construction Equipment	PERIOD
NG	DPM	9901	0.00E+00	2023	Phase 1a Office	UNMIT	Vertical_Pavers	PERIOD
NG	DPM	9901	3.02E-06	2023	Phase 1a Office	UNMIT	Vertical_Pressure Washers	PERIOD
NG	DPM	9901	6.10E-05	2023	Phase 1a Office	UNMIT	Vertical_Pumps	PERIOD
NG	DPM	9901	0.00E+00	2023	Phase 1a Office	UNMIT	Vertical_Scrapers	PERIOD

NG	DPM	9901	1.63E-04	2023	Phase 1a Office	UNMIT	Vertical_Tractors/Loaders/Backhoes	PERIOD
O4	DPM	9901	1.66E-04	2023	Phase 1a Office	UNMIT	Vertical_Aerial Lifts	PERIOD
O4	DPM	9901	1.43E-06	2023	Phase 1a Office	UNMIT	Vertical_Air Compressors	PERIOD
O4	DPM	9901	1.01E-04	2023	Phase 1a Office	UNMIT	Vertical_Bore/Drill Rigs	PERIOD
O4	DPM	9901	4.31E-04	2023	Phase 1a Office	UNMIT	Vertical_Cranes	PERIOD
O4	DPM	9901	0.00E+00	2023	Phase 1a Office	UNMIT	Vertical_Crushing/Proc. Equipment	PERIOD
O4	DPM	9901	6.06E-06	2023	Phase 1a Office	UNMIT	Vertical_Excavators	PERIOD
O4	DPM	9901	5.06E-06	2023	Phase 1a Office	UNMIT	Vertical_Forklifts	PERIOD
O4	DPM	9901	1.75E-05	2023	Phase 1a Office	UNMIT	Vertical_Generator Sets	PERIOD
O4	DPM	9901	0.00E+00	2023	Phase 1a Office	UNMIT	Vertical_Graders	PERIOD
O4	DPM	9901	2.70E-04	2023	Phase 1a Office	UNMIT	Vertical_Other Construction Equipment	PERIOD
O4	DPM	9901	0.00E+00	2023	Phase 1a Office	UNMIT	Vertical_Pavers	PERIOD
O4	DPM	9901	0.00E+00	2023	Phase 1a Office	UNMIT	Vertical_Pressure Washers	PERIOD
O4	DPM	9901	7.45E-06	2023	Phase 1a Office	UNMIT	Vertical_Pumps	PERIOD
O4	DPM	9901	0.00E+00	2023	Phase 1a Office	UNMIT	Vertical_Scrapers	PERIOD
O4	DPM	9901	6.80E-04	2023	Phase 1a Office	UNMIT	Vertical_Tractors/Loaders/Backhoes	PERIOD
O4	DPM	9901	2.63E-05	2024	Phase 1a Office	UNMIT	Vertical_Aerial Lifts	PERIOD
O4	DPM	9901	0.00E+00	2024	Phase 1a Office	UNMIT	Vertical_Air Compressors	PERIOD
O4	DPM	9901	0.00E+00	2024	Phase 1a Office	UNMIT	Vertical_Bore/Drill Rigs	PERIOD
O4	DPM	9901	0.00E+00	2024	Phase 1a Office	UNMIT	Vertical_Cranes	PERIOD
O4	DPM	9901	0.00E+00	2024	Phase 1a Office	UNMIT	Vertical_Crushing/Proc. Equipment	PERIOD
O4	DPM	9901	0.00E+00	2024	Phase 1a Office	UNMIT	Vertical_Excavators	PERIOD
O4	DPM	9901	4.38E-06	2024	Phase 1a Office	UNMIT	Vertical_Forklifts	PERIOD
O4	DPM	9901	0.00E+00	2024	Phase 1a Office	UNMIT	Vertical_Generator Sets	PERIOD
O4	DPM	9901	0.00E+00	2024	Phase 1a Office	UNMIT	Vertical_Graders	PERIOD
O4	DPM	9901	1.88E-04	2024	Phase 1a Office	UNMIT	Vertical_Other Construction Equipment	PERIOD
O4	DPM	9901	0.00E+00	2024	Phase 1a Office	UNMIT	Vertical_Pavers	PERIOD
O4	DPM	9901	0.00E+00	2024	Phase 1a Office	UNMIT	Vertical_Pressure Washers	PERIOD
O4	DPM	9901	0.00E+00	2024	Phase 1a Office	UNMIT	Vertical_Pumps	PERIOD
O4	DPM	9901	0.00E+00	2024	Phase 1a Office	UNMIT	Vertical_Scrapers	PERIOD
O4	DPM	9901	0.00E+00	2024	Phase 1a Office	UNMIT	Vertical_Tractors/Loaders/Backhoes	PERIOD
TS	DPM	9901	3.29E-05	2023	Phase 1a Office	UNMIT	Vertical_Aerial Lifts	PERIOD
TS	DPM	9901	0.00E+00	2023	Phase 1a Office	UNMIT	Vertical_Air Compressors	PERIOD
TS	DPM	9901	0.00E+00	2023	Phase 1a Office	UNMIT	Vertical_Bore/Drill Rigs	PERIOD
TS	DPM	9901	0.00E+00	2023	Phase 1a Office	UNMIT	Vertical_Cranes	PERIOD
TS	DPM	9901	0.00E+00	2023	Phase 1a Office	UNMIT	Vertical_Crushing/Proc. Equipment	PERIOD
TS	DPM	9901	1.13E-03	2023	Phase 1a Office	UNMIT	Vertical_Excavators	PERIOD
TS	DPM	9901	6.22E-05	2023	Phase 1a Office	UNMIT	Vertical_Forklifts	PERIOD
TS	DPM	9901	3.56E-05	2023	Phase 1a Office	UNMIT	Vertical_Generator Sets	PERIOD
TS	DPM	9901	0.00E+00	2023	Phase 1a Office	UNMIT	Vertical_Graders	PERIOD
TS	DPM	9901	4.97E-04	2023	Phase 1a Office	UNMIT	Vertical_Other Construction Equipment	PERIOD
TS	DPM	9901	0.00E+00	2023	Phase 1a Office	UNMIT	Vertical_Pavers	PERIOD
TS	DPM	9901	0.00E+00	2023	Phase 1a Office	UNMIT	Vertical_Pressure Washers	PERIOD
TS	DPM	9901	0.00E+00	2023	Phase 1a Office	UNMIT	Vertical_Pumps	PERIOD
TS	DPM	9901	0.00E+00	2023	Phase 1a Office	UNMIT	Vertical_Scrapers	PERIOD
TS	DPM	9901	7.61E-03	2023	Phase 1a Office	UNMIT	Vertical_Tractors/Loaders/Backhoes	PERIOD
TS	DPM	9901	4.44E-05	2024	Phase 1a Office	UNMIT	Vertical_Aerial Lifts	PERIOD

TS	DPM	9901	0.00E+00	2024	Phase 1a Office	UNMIT	Vertical_Air Compressors	PERIOD
TS	DPM	9901	0.00E+00	2024	Phase 1a Office	UNMIT	Vertical_Bore/Drill Rigs	PERIOD
TS	DPM	9901	2.56E-04	2024	Phase 1a Office	UNMIT	Vertical_Cranes	PERIOD
TS	DPM	9901	0.00E+00	2024	Phase 1a Office	UNMIT	Vertical_Crushing/Proc. Equipment	PERIOD
TS	DPM	9901	3.91E-04	2024	Phase 1a Office	UNMIT	Vertical_Excavators	PERIOD
TS	DPM	9901	6.08E-05	2024	Phase 1a Office	UNMIT	Vertical_Forklifts	PERIOD
TS	DPM	9901	3.63E-06	2024	Phase 1a Office	UNMIT	Vertical_Generator Sets	PERIOD
TS	DPM	9901	0.00E+00	2024	Phase 1a Office	UNMIT	Vertical_Graders	PERIOD
TS	DPM	9901	1.58E-04	2024	Phase 1a Office	UNMIT	Vertical_Other Construction Equipment	PERIOD
TS	DPM	9901	0.00E+00	2024	Phase 1a Office	UNMIT	Vertical_Pavers	PERIOD
TS	DPM	9901	0.00E+00	2024	Phase 1a Office	UNMIT	Vertical_Pressure Washers	PERIOD
TS	DPM	9901	1.91E-06	2024	Phase 1a Office	UNMIT	Vertical_Pumps	PERIOD
TS	DPM	9901	0.00E+00	2024	Phase 1a Office	UNMIT	Vertical_Scrapers	PERIOD
TS	DPM	9901	2.82E-03	2024	Phase 1a Office	UNMIT	Vertical_Tractors/Loaders/Backhoes	PERIOD
TS	DPM	9901	0.00E+00	2025	Phase 1a Office	UNMIT	Vertical_Aerial Lifts	PERIOD
TS	DPM	9901	0.00E+00	2025	Phase 1a Office	UNMIT	Vertical_Air Compressors	PERIOD
TS	DPM	9901	0.00E+00	2025	Phase 1a Office	UNMIT	Vertical_Bore/Drill Rigs	PERIOD
TS	DPM	9901	1.73E-05	2025	Phase 1a Office	UNMIT	Vertical_Cranes	PERIOD
TS	DPM	9901	0.00E+00	2025	Phase 1a Office	UNMIT	Vertical_Crushing/Proc. Equipment	PERIOD
TS	DPM	9901	0.00E+00	2025	Phase 1a Office	UNMIT	Vertical_Excavators	PERIOD
TS	DPM	9901	8.80E-05	2025	Phase 1a Office	UNMIT	Vertical_Forklifts	PERIOD
TS	DPM	9901	0.00E+00	2025	Phase 1a Office	UNMIT	Vertical_Generator Sets	PERIOD
TS	DPM	9901	0.00E+00	2025	Phase 1a Office	UNMIT	Vertical_Graders	PERIOD
TS	DPM	9901	0.00E+00	2025	Phase 1a Office	UNMIT	Vertical_Other Construction Equipment	PERIOD
TS	DPM	9901	0.00E+00	2025	Phase 1a Office	UNMIT	Vertical_Pavers	PERIOD
TS	DPM	9901	0.00E+00	2025	Phase 1a Office	UNMIT	Vertical_Pressure Washers	PERIOD
TS	DPM	9901	0.00E+00	2025	Phase 1a Office	UNMIT	Vertical_Pumps	PERIOD
TS	DPM	9901	0.00E+00	2025	Phase 1a Office	UNMIT	Vertical_Scrapers	PERIOD
TS	DPM	9901	0.00E+00	2025	Phase 1a Office	UNMIT	Vertical_Tractors/Loaders/Backhoes	PERIOD
PHS_1B	DPM	9901	3.11E-05	2022	Phase 1b	UNMIT	Demolition_Air Compressors	PERIOD
PHS_1B	DPM	9901	0.00E+00	2022	Phase 1b	UNMIT	Demolition_Crushing/Proc. Equipment	PERIOD
PHS_1B	DPM	9901	3.93E-04	2022	Phase 1b	UNMIT	Demolition_Excavators	PERIOD
PHS_1B	DPM	9901	7.10E-06	2022	Phase 1b	UNMIT	Demolition_Generator Sets	PERIOD
PHS_1B	DPM	9901	2.70E-04	2022	Phase 1b	UNMIT	Demolition_Other Construction Equipment	PERIOD
PHS_1B	DPM	9901	7.60E-05	2022	Phase 1b	UNMIT	Demolition_Pressure Washers	PERIOD
PHS_1B	DPM	9901	6.33E-04	2022	Phase 1b	UNMIT	Demolition_Tractors/Loaders/Backhoes	PERIOD
PHS_1B	DPM	9901	4.07E-04	2022	Phase 1b	UNMIT	Grading and Utilities_Excavators	PERIOD
PHS_1B	DPM	9901	2.70E-05	2022	Phase 1b	UNMIT	Grading and Utilities_Forklifts	PERIOD
PHS_1B	DPM	9901	9.33E-06	2022	Phase 1b	UNMIT	Grading and Utilities_Generator Sets	PERIOD
PHS_1B	DPM	9901	2.18E-04	2022	Phase 1b	UNMIT	Grading and Utilities_Graders	PERIOD
PHS_1B	DPM	9901	3.86E-04	2022	Phase 1b	UNMIT	Grading and Utilities_Other Construction Equipment	PERIOD
PHS_1B	DPM	9901	4.60E-06	2022	Phase 1b	UNMIT	Grading and Utilities_Pavers	PERIOD
PHS_1B	DPM	9901	1.81E-04	2022	Phase 1b	UNMIT	Grading and Utilities_Scrapers	PERIOD
PHS_1B	DPM	9901	9.30E-04	2022	Phase 1b	UNMIT	Grading and Utilities_Tractors/Loaders/Backhoes	PERIOD
PHS_1B	DPM	9901	3.55E-04	2023	Phase 1b	UNMIT	Grading and Utilities_Excavators	PERIOD
PHS_1B	DPM	9901	2.72E-05	2023	Phase 1b	UNMIT	Grading and Utilities_Forklifts	PERIOD
PHS_1B	DPM	9901	8.59E-06	2023	Phase 1b	UNMIT	Grading and Utilities_Generator Sets	PERIOD

PHS_1B	DPM	9901	2.15E-04	2023	Phase 1b	UNMIT	Grading and Utilities_Graders	PERIOD
PHS_1B	DPM	9901	3.44E-04	2023	Phase 1b	UNMIT	Grading and Utilities_Other Construction Equipment	PERIOD
PHS_1B	DPM	9901	4.08E-06	2023	Phase 1b	UNMIT	Grading and Utilities_Pavers	PERIOD
PHS_1B	DPM	9901	1.56E-04	2023	Phase 1b	UNMIT	Grading and Utilities_Scrapers	PERIOD
PHS_1B	DPM	9901	2.95E-03	2023	Phase 1b	UNMIT	Grading and Utilities_Tractors/Loaders/Backhoes	PERIOD
RS6	DPM	9901	0.00E+00	2024	Phase 1b Mixed Use	UNMIT	Core and Shell_Aerial Lifts	PERIOD
RS6	DPM	9901	0.00E+00	2024	Phase 1b Mixed Use	UNMIT	Core and Shell_Air Compressors	PERIOD
RS6	DPM	9901	1.34E-04	2024	Phase 1b Mixed Use	UNMIT	Core and Shell_Cranes	PERIOD
RS6	DPM	9901	4.38E-04	2024	Phase 1b Mixed Use	UNMIT	Core and Shell_Forklifts	PERIOD
RS6	DPM	9901	0.00E+00	2024	Phase 1b Mixed Use	UNMIT	Core and Shell_Generator Sets	PERIOD
RS6	DPM	9901	1.77E-04	2024	Phase 1b Mixed Use	UNMIT	Core and Shell_Other Construction Equipment	PERIOD
RS6	DPM	9901	0.00E+00	2024	Phase 1b Mixed Use	UNMIT	Core and Shell_Pumps	PERIOD
RS6	DPM	9901	0.00E+00	2025	Phase 1b Mixed Use	UNMIT	Core and Shell_Aerial Lifts	PERIOD
RS6	DPM	9901	0.00E+00	2025	Phase 1b Mixed Use	UNMIT	Core and Shell_Air Compressors	PERIOD
RS6	DPM	9901	7.31E-05	2025	Phase 1b Mixed Use	UNMIT	Core and Shell_Cranes	PERIOD
RS6	DPM	9901	2.78E-04	2025	Phase 1b Mixed Use	UNMIT	Core and Shell_Forklifts	PERIOD
RS6	DPM	9901	0.00E+00	2025	Phase 1b Mixed Use	UNMIT	Core and Shell_Generator Sets	PERIOD
RS6	DPM	9901	8.65E-05	2025	Phase 1b Mixed Use	UNMIT	Core and Shell_Other Construction Equipment	PERIOD
RS6	DPM	9901	0.00E+00	2025	Phase 1b Mixed Use	UNMIT	Core and Shell_Pumps	PERIOD
RS6	DPM	9901	0.00E+00	2024	Phase 1b Mixed Use	UNMIT	Foundations_Bore/Drill Rigs	PERIOD
RS6	DPM	9901	1.31E-04	2024	Phase 1b Mixed Use	UNMIT	Foundations_Cranes	PERIOD
RS6	DPM	9901	1.28E-04	2024	Phase 1b Mixed Use	UNMIT	Foundations_Excavators	PERIOD
RS6	DPM	9901	3.14E-04	2024	Phase 1b Mixed Use	UNMIT	Foundations_Forklifts	PERIOD
RS6	DPM	9901	0.00E+00	2024	Phase 1b Mixed Use	UNMIT	Foundations_Generator Sets	PERIOD
RS6	DPM	9901	2.53E-04	2024	Phase 1b Mixed Use	UNMIT	Foundations_Other Construction Equipment	PERIOD
RS6	DPM	9901	1.04E-05	2024	Phase 1b Mixed Use	UNMIT	Foundations_Pumps	PERIOD
RS6	DPM	9901	2.68E-03	2024	Phase 1b Mixed Use	UNMIT	Foundations_Tractors/Loaders/Backhoes	PERIOD
RS6	DPM	9901	1.36E-04	2025	Phase 1b Mixed Use	UNMIT	Landscaping_Excavators	PERIOD
RS6	DPM	9901	0.00E+00	2025	Phase 1b Mixed Use	UNMIT	Landscaping_Generator Sets	PERIOD
RS6	DPM	9901	0.00E+00	2025	Phase 1b Mixed Use	UNMIT	Landscaping_Other Construction Equipment	PERIOD
RS6	DPM	9901	9.35E-04	2025	Phase 1b Mixed Use	UNMIT	Landscaping_Tractors/Loaders/Backhoes	PERIOD
RS6	DPM	9901	1.61E-04	2026	Phase 1b Mixed Use	UNMIT	Landscaping_Excavators	PERIOD
RS6	DPM	9901	0.00E+00	2026	Phase 1b Mixed Use	UNMIT	Landscaping_Generator Sets	PERIOD
RS6	DPM	9901	0.00E+00	2026	Phase 1b Mixed Use	UNMIT	Landscaping_Other Construction Equipment	PERIOD
RS6	DPM	9901	1.09E-03	2026	Phase 1b Mixed Use	UNMIT	Landscaping_Tractors/Loaders/Backhoes	PERIOD
RS6	DPM	9901	5.42E-04	2025	Phase 1b Mixed Use	UNMIT	Tenant Improvements_Forklifts	PERIOD
RS6	DPM	9901	0.00E+00	2025	Phase 1b Mixed Use	UNMIT	Tenant Improvements_Generator Sets	PERIOD
RS6	DPM	9901	3.37E-04	2025	Phase 1b Mixed Use	UNMIT	Tenant Improvements_Other Construction Equipment	PERIOD
RS7	DPM	9901	0.00E+00	2024	Phase 1b Mixed Use	UNMIT	Core and Shell_Aerial Lifts	PERIOD
RS7	DPM	9901	0.00E+00	2024	Phase 1b Mixed Use	UNMIT	Core and Shell_Air Compressors	PERIOD
RS7	DPM	9901	2.13E-04	2024	Phase 1b Mixed Use	UNMIT	Core and Shell_Cranes	PERIOD
RS7	DPM	9901	3.49E-04	2024	Phase 1b Mixed Use	UNMIT	Core and Shell_Forklifts	PERIOD
RS7	DPM	9901	0.00E+00	2024	Phase 1b Mixed Use	UNMIT	Core and Shell_Generator Sets	PERIOD
RS7	DPM	9901	2.81E-04	2024	Phase 1b Mixed Use	UNMIT	Core and Shell_Other Construction Equipment	PERIOD
RS7	DPM	9901	0.00E+00	2024	Phase 1b Mixed Use	UNMIT	Core and Shell_Pumps	PERIOD
RS7	DPM	9901	0.00E+00	2024	Phase 1b Mixed Use	UNMIT	Foundations_Bore/Drill Rigs	PERIOD
RS7	DPM	9901	1.31E-04	2024	Phase 1b Mixed Use	UNMIT	Foundations_Cranes	PERIOD

RS7	DPM	9901	1.28E-04	2024	Phase 1b Mixed Use	UNMIT	Foundations_Excavators	PERIOD
RS7	DPM	9901	3.14E-04	2024	Phase 1b Mixed Use	UNMIT	Foundations_Forklifts	PERIOD
RS7	DPM	9901	0.00E+00	2024	Phase 1b Mixed Use	UNMIT	Foundations_Generator Sets	PERIOD
RS7	DPM	9901	2.53E-04	2024	Phase 1b Mixed Use	UNMIT	Foundations_Other Construction Equipment	PERIOD
RS7	DPM	9901	5.19E-06	2024	Phase 1b Mixed Use	UNMIT	Foundations_Pumps	PERIOD
RS7	DPM	9901	2.68E-03	2024	Phase 1b Mixed Use	UNMIT	Foundations_Tractors/Loaders/Backhoes	PERIOD
RS7	DPM	9901	2.91E-04	2025	Phase 1b Mixed Use	UNMIT	Landscaping_Excavators	PERIOD
RS7	DPM	9901	0.00E+00	2025	Phase 1b Mixed Use	UNMIT	Landscaping_Generator Sets	PERIOD
RS7	DPM	9901	1.05E-04	2025	Phase 1b Mixed Use	UNMIT	Landscaping_Other Construction Equipment	PERIOD
RS7	DPM	9901	1.33E-03	2025	Phase 1b Mixed Use	UNMIT	Landscaping_Tractors/Loaders/Backhoes	PERIOD
RS7	DPM	9901	4.60E-05	2024	Phase 1b Mixed Use	UNMIT	Tenant Improvements_Forklifts	PERIOD
RS7	DPM	9901	0.00E+00	2024	Phase 1b Mixed Use	UNMIT	Tenant Improvements_Generator Sets	PERIOD
RS7	DPM	9901	3.71E-05	2024	Phase 1b Mixed Use	UNMIT	Tenant Improvements_Other Construction Equipment	PERIOD
RS7	DPM	9901	4.95E-04	2025	Phase 1b Mixed Use	UNMIT	Tenant Improvements_Forklifts	PERIOD
RS7	DPM	9901	0.00E+00	2025	Phase 1b Mixed Use	UNMIT	Tenant Improvements_Generator Sets	PERIOD
RS7	DPM	9901	3.08E-04	2025	Phase 1b Mixed Use	UNMIT	Tenant Improvements_Other Construction Equipment	PERIOD
O1	DPM	9901	4.10E-05	2023	Phase 1b Office	UNMIT	Vertical_Aerial Lifts	PERIOD
O1	DPM	9901	1.41E-06	2023	Phase 1b Office	UNMIT	Vertical_Air Compressors	PERIOD
O1	DPM	9901	1.52E-04	2023	Phase 1b Office	UNMIT	Vertical_Bore/Drill Rigs	PERIOD
O1	DPM	9901	5.13E-04	2023	Phase 1b Office	UNMIT	Vertical_Cranes	PERIOD
O1	DPM	9901	0.00E+00	2023	Phase 1b Office	UNMIT	Vertical_Crushing/Proc. Equipment	PERIOD
O1	DPM	9901	7.96E-06	2023	Phase 1b Office	UNMIT	Vertical_Excavators	PERIOD
O1	DPM	9901	3.74E-06	2023	Phase 1b Office	UNMIT	Vertical_Forklifts	PERIOD
O1	DPM	9901	1.97E-05	2023	Phase 1b Office	UNMIT	Vertical_Generator Sets	PERIOD
O1	DPM	9901	0.00E+00	2023	Phase 1b Office	UNMIT	Vertical_Graders	PERIOD
O1	DPM	9901	2.09E-04	2023	Phase 1b Office	UNMIT	Vertical_Other Construction Equipment	PERIOD
O1	DPM	9901	0.00E+00	2023	Phase 1b Office	UNMIT	Vertical_Pavers	PERIOD
O1	DPM	9901	0.00E+00	2023	Phase 1b Office	UNMIT	Vertical_Pressure Washers	PERIOD
O1	DPM	9901	7.98E-06	2023	Phase 1b Office	UNMIT	Vertical_Pumps	PERIOD
O1	DPM	9901	0.00E+00	2023	Phase 1b Office	UNMIT	Vertical_Scrapers	PERIOD
O1	DPM	9901	9.84E-04	2023	Phase 1b Office	UNMIT	Vertical_Tractors/Loaders/Backhoes	PERIOD
O1	DPM	9901	1.48E-04	2024	Phase 1b Office	UNMIT	Vertical_Aerial Lifts	PERIOD
O1	DPM	9901	0.00E+00	2024	Phase 1b Office	UNMIT	Vertical_Air Compressors	PERIOD
O1	DPM	9901	0.00E+00	2024	Phase 1b Office	UNMIT	Vertical_Bore/Drill Rigs	PERIOD
O1	DPM	9901	0.00E+00	2024	Phase 1b Office	UNMIT	Vertical_Cranes	PERIOD
O1	DPM	9901	0.00E+00	2024	Phase 1b Office	UNMIT	Vertical_Crushing/Proc. Equipment	PERIOD
O1	DPM	9901	0.00E+00	2024	Phase 1b Office	UNMIT	Vertical_Excavators	PERIOD
O1	DPM	9901	5.24E-06	2024	Phase 1b Office	UNMIT	Vertical_Forklifts	PERIOD
O1	DPM	9901	0.00E+00	2024	Phase 1b Office	UNMIT	Vertical_Generator Sets	PERIOD
O1	DPM	9901	0.00E+00	2024	Phase 1b Office	UNMIT	Vertical_Graders	PERIOD
O1	DPM	9901	2.26E-04	2024	Phase 1b Office	UNMIT	Vertical_Other Construction Equipment	PERIOD
O1	DPM	9901	0.00E+00	2024	Phase 1b Office	UNMIT	Vertical_Pavers	PERIOD
O1	DPM	9901	0.00E+00	2024	Phase 1b Office	UNMIT	Vertical_Pressure Washers	PERIOD
O1	DPM	9901	4.73E-07	2024	Phase 1b Office	UNMIT	Vertical_Pumps	PERIOD
O1	DPM	9901	0.00E+00	2024	Phase 1b Office	UNMIT	Vertical_Scrapers	PERIOD
O1	DPM	9901	0.00E+00	2024	Phase 1b Office	UNMIT	Vertical_Tractors/Loaders/Backhoes	PERIOD
O2	DPM	9901	1.77E-05	2023	Phase 1b Office	UNMIT	Vertical_Aerial Lifts	PERIOD

O2	DPM	9901	1.43E-06	2023	Phase 1b Office	UNMIT	Vertical_Air Compressors	PERIOD
O2	DPM	9901	1.52E-04	2023	Phase 1b Office	UNMIT	Vertical_Bore/Drill Rigs	PERIOD
O2	DPM	9901	5.13E-04	2023	Phase 1b Office	UNMIT	Vertical_Cranes	PERIOD
O2	DPM	9901	0.00E+00	2023	Phase 1b Office	UNMIT	Vertical_Crushing/Proc. Equipment	PERIOD
O2	DPM	9901	7.72E-06	2023	Phase 1b Office	UNMIT	Vertical_Excavators	PERIOD
O2	DPM	9901	3.28E-06	2023	Phase 1b Office	UNMIT	Vertical_Forklifts	PERIOD
O2	DPM	9901	1.96E-05	2023	Phase 1b Office	UNMIT	Vertical_Generator Sets	PERIOD
O2	DPM	9901	0.00E+00	2023	Phase 1b Office	UNMIT	Vertical_Graders	PERIOD
O2	DPM	9901	1.85E-04	2023	Phase 1b Office	UNMIT	Vertical_Other Construction Equipment	PERIOD
O2	DPM	9901	0.00E+00	2023	Phase 1b Office	UNMIT	Vertical_Pavers	PERIOD
O2	DPM	9901	0.00E+00	2023	Phase 1b Office	UNMIT	Vertical_Pressure Washers	PERIOD
O2	DPM	9901	7.96E-06	2023	Phase 1b Office	UNMIT	Vertical_Pumps	PERIOD
O2	DPM	9901	0.00E+00	2023	Phase 1b Office	UNMIT	Vertical_Scrapers	PERIOD
O2	DPM	9901	9.75E-04	2023	Phase 1b Office	UNMIT	Vertical_Tractors/Loaders/Backhoes	PERIOD
O2	DPM	9901	1.72E-04	2024	Phase 1b Office	UNMIT	Vertical_Aerial Lifts	PERIOD
O2	DPM	9901	0.00E+00	2024	Phase 1b Office	UNMIT	Vertical_Air Compressors	PERIOD
O2	DPM	9901	0.00E+00	2024	Phase 1b Office	UNMIT	Vertical_Bore/Drill Rigs	PERIOD
O2	DPM	9901	0.00E+00	2024	Phase 1b Office	UNMIT	Vertical_Cranes	PERIOD
O2	DPM	9901	0.00E+00	2024	Phase 1b Office	UNMIT	Vertical_Crushing/Proc. Equipment	PERIOD
O2	DPM	9901	0.00E+00	2024	Phase 1b Office	UNMIT	Vertical_Excavators	PERIOD
O2	DPM	9901	5.54E-06	2024	Phase 1b Office	UNMIT	Vertical_Forklifts	PERIOD
O2	DPM	9901	0.00E+00	2024	Phase 1b Office	UNMIT	Vertical_Generator Sets	PERIOD
O2	DPM	9901	0.00E+00	2024	Phase 1b Office	UNMIT	Vertical_Graders	PERIOD
O2	DPM	9901	2.38E-04	2024	Phase 1b Office	UNMIT	Vertical_Other Construction Equipment	PERIOD
O2	DPM	9901	0.00E+00	2024	Phase 1b Office	UNMIT	Vertical_Pavers	PERIOD
O2	DPM	9901	0.00E+00	2024	Phase 1b Office	UNMIT	Vertical_Pressure Washers	PERIOD
O2	DPM	9901	4.73E-07	2024	Phase 1b Office	UNMIT	Vertical_Pumps	PERIOD
O2	DPM	9901	0.00E+00	2024	Phase 1b Office	UNMIT	Vertical_Scrapers	PERIOD
O2	DPM	9901	0.00E+00	2024	Phase 1b Office	UNMIT	Vertical_Tractors/Loaders/Backhoes	PERIOD
O2	DPM	9901	0.00E+00	2025	Phase 1b Office	UNMIT	Vertical_Aerial Lifts	PERIOD
O2	DPM	9901	0.00E+00	2025	Phase 1b Office	UNMIT	Vertical_Air Compressors	PERIOD
O2	DPM	9901	0.00E+00	2025	Phase 1b Office	UNMIT	Vertical_Bore/Drill Rigs	PERIOD
O2	DPM	9901	0.00E+00	2025	Phase 1b Office	UNMIT	Vertical_Cranes	PERIOD
O2	DPM	9901	0.00E+00	2025	Phase 1b Office	UNMIT	Vertical_Crushing/Proc. Equipment	PERIOD
O2	DPM	9901	0.00E+00	2025	Phase 1b Office	UNMIT	Vertical_Excavators	PERIOD
O2	DPM	9901	1.49E-07	2025	Phase 1b Office	UNMIT	Vertical_Forklifts	PERIOD
O2	DPM	9901	0.00E+00	2025	Phase 1b Office	UNMIT	Vertical_Generator Sets	PERIOD
O2	DPM	9901	0.00E+00	2025	Phase 1b Office	UNMIT	Vertical_Graders	PERIOD
O2	DPM	9901	5.26E-06	2025	Phase 1b Office	UNMIT	Vertical_Other Construction Equipment	PERIOD
O2	DPM	9901	0.00E+00	2025	Phase 1b Office	UNMIT	Vertical_Pavers	PERIOD
O2	DPM	9901	0.00E+00	2025	Phase 1b Office	UNMIT	Vertical_Pressure Washers	PERIOD
O2	DPM	9901	0.00E+00	2025	Phase 1b Office	UNMIT	Vertical_Pumps	PERIOD
O2	DPM	9901	0.00E+00	2025	Phase 1b Office	UNMIT	Vertical_Scrapers	PERIOD
O2	DPM	9901	0.00E+00	2025	Phase 1b Office	UNMIT	Vertical_Tractors/Loaders/Backhoes	PERIOD
O3	DPM	9901	2.77E-05	2023	Phase 1b Office	UNMIT	Vertical_Aerial Lifts	PERIOD
O3	DPM	9901	1.43E-06	2023	Phase 1b Office	UNMIT	Vertical_Air Compressors	PERIOD
O3	DPM	9901	1.91E-04	2023	Phase 1b Office	UNMIT	Vertical_Bore/Drill Rigs	PERIOD

O3	DPM	9901	5.78E-04	2023	Phase 1b Office	UNMIT	Vertical_Cranes	PERIOD
O3	DPM	9901	0.00E+00	2023	Phase 1b Office	UNMIT	Vertical_Crushing/Proc. Equipment	PERIOD
O3	DPM	9901	9.03E-06	2023	Phase 1b Office	UNMIT	Vertical_Excavators	PERIOD
O3	DPM	9901	3.70E-06	2023	Phase 1b Office	UNMIT	Vertical_Forklifts	PERIOD
O3	DPM	9901	2.12E-05	2023	Phase 1b Office	UNMIT	Vertical_Generator Sets	PERIOD
O3	DPM	9901	0.00E+00	2023	Phase 1b Office	UNMIT	Vertical_Graders	PERIOD
O3	DPM	9901	2.10E-04	2023	Phase 1b Office	UNMIT	Vertical_Other Construction Equipment	PERIOD
O3	DPM	9901	0.00E+00	2023	Phase 1b Office	UNMIT	Vertical_Pavers	PERIOD
O3	DPM	9901	0.00E+00	2023	Phase 1b Office	UNMIT	Vertical_Pressure Washers	PERIOD
O3	DPM	9901	8.77E-06	2023	Phase 1b Office	UNMIT	Vertical_Pumps	PERIOD
O3	DPM	9901	0.00E+00	2023	Phase 1b Office	UNMIT	Vertical_Scrapers	PERIOD
O3	DPM	9901	1.20E-03	2023	Phase 1b Office	UNMIT	Vertical_Tractors/Loaders/Backhoes	PERIOD
O3	DPM	9901	1.63E-04	2024	Phase 1b Office	UNMIT	Vertical_Aerial Lifts	PERIOD
O3	DPM	9901	0.00E+00	2024	Phase 1b Office	UNMIT	Vertical_Air Compressors	PERIOD
O3	DPM	9901	0.00E+00	2024	Phase 1b Office	UNMIT	Vertical_Bore/Drill Rigs	PERIOD
O3	DPM	9901	0.00E+00	2024	Phase 1b Office	UNMIT	Vertical_Cranes	PERIOD
O3	DPM	9901	0.00E+00	2024	Phase 1b Office	UNMIT	Vertical_Crushing/Proc. Equipment	PERIOD
O3	DPM	9901	0.00E+00	2024	Phase 1b Office	UNMIT	Vertical_Excavators	PERIOD
O3	DPM	9901	5.54E-06	2024	Phase 1b Office	UNMIT	Vertical_Forklifts	PERIOD
O3	DPM	9901	0.00E+00	2024	Phase 1b Office	UNMIT	Vertical_Generator Sets	PERIOD
O3	DPM	9901	0.00E+00	2024	Phase 1b Office	UNMIT	Vertical_Graders	PERIOD
O3	DPM	9901	2.38E-04	2024	Phase 1b Office	UNMIT	Vertical_Other Construction Equipment	PERIOD
O3	DPM	9901	0.00E+00	2024	Phase 1b Office	UNMIT	Vertical_Pavers	PERIOD
O3	DPM	9901	0.00E+00	2024	Phase 1b Office	UNMIT	Vertical_Pressure Washers	PERIOD
O3	DPM	9901	4.73E-07	2024	Phase 1b Office	UNMIT	Vertical_Pumps	PERIOD
O3	DPM	9901	0.00E+00	2024	Phase 1b Office	UNMIT	Vertical_Scrapers	PERIOD
O3	DPM	9901	0.00E+00	2024	Phase 1b Office	UNMIT	Vertical_Tractors/Loaders/Backhoes	PERIOD
O3	DPM	9901	0.00E+00	2025	Phase 1b Office	UNMIT	Vertical_Aerial Lifts	PERIOD
O3	DPM	9901	0.00E+00	2025	Phase 1b Office	UNMIT	Vertical_Air Compressors	PERIOD
O3	DPM	9901	0.00E+00	2025	Phase 1b Office	UNMIT	Vertical_Bore/Drill Rigs	PERIOD
O3	DPM	9901	0.00E+00	2025	Phase 1b Office	UNMIT	Vertical_Cranes	PERIOD
O3	DPM	9901	0.00E+00	2025	Phase 1b Office	UNMIT	Vertical_Crushing/Proc. Equipment	PERIOD
O3	DPM	9901	0.00E+00	2025	Phase 1b Office	UNMIT	Vertical_Excavators	PERIOD
O3	DPM	9901	1.32E-06	2025	Phase 1b Office	UNMIT	Vertical_Forklifts	PERIOD
O3	DPM	9901	0.00E+00	2025	Phase 1b Office	UNMIT	Vertical_Generator Sets	PERIOD
O3	DPM	9901	0.00E+00	2025	Phase 1b Office	UNMIT	Vertical_Graders	PERIOD
O3	DPM	9901	4.66E-05	2025	Phase 1b Office	UNMIT	Vertical_Other Construction Equipment	PERIOD
O3	DPM	9901	0.00E+00	2025	Phase 1b Office	UNMIT	Vertical_Pavers	PERIOD
O3	DPM	9901	0.00E+00	2025	Phase 1b Office	UNMIT	Vertical_Pressure Washers	PERIOD
O3	DPM	9901	0.00E+00	2025	Phase 1b Office	UNMIT	Vertical_Pumps	PERIOD
O3	DPM	9901	0.00E+00	2025	Phase 1b Office	UNMIT	Vertical_Scrapers	PERIOD
O3	DPM	9901	0.00E+00	2025	Phase 1b Office	UNMIT	Vertical_Tractors/Loaders/Backhoes	PERIOD
O5	DPM	9901	4.10E-05	2023	Phase 1b Office	UNMIT	Vertical_Aerial Lifts	PERIOD
O5	DPM	9901	1.43E-06	2023	Phase 1b Office	UNMIT	Vertical_Air Compressors	PERIOD
O5	DPM	9901	2.29E-04	2023	Phase 1b Office	UNMIT	Vertical_Bore/Drill Rigs	PERIOD
O5	DPM	9901	6.49E-04	2023	Phase 1b Office	UNMIT	Vertical_Cranes	PERIOD
O5	DPM	9901	0.00E+00	2023	Phase 1b Office	UNMIT	Vertical_Crushing/Proc. Equipment	PERIOD

O5	DPM	9901	1.06E-05	2023	Phase 1b Office	UNMIT	Vertical_Excavators	PERIOD
O5	DPM	9901	4.23E-06	2023	Phase 1b Office	UNMIT	Vertical_Forklifts	PERIOD
O5	DPM	9901	2.32E-05	2023	Phase 1b Office	UNMIT	Vertical_Generator Sets	PERIOD
O5	DPM	9901	0.00E+00	2023	Phase 1b Office	UNMIT	Vertical_Graders	PERIOD
O5	DPM	9901	2.40E-04	2023	Phase 1b Office	UNMIT	Vertical_Other Construction Equipment	PERIOD
O5	DPM	9901	0.00E+00	2023	Phase 1b Office	UNMIT	Vertical_Pavers	PERIOD
O5	DPM	9901	0.00E+00	2023	Phase 1b Office	UNMIT	Vertical_Pressure Washers	PERIOD
O5	DPM	9901	9.67E-06	2023	Phase 1b Office	UNMIT	Vertical_Pumps	PERIOD
O5	DPM	9901	0.00E+00	2023	Phase 1b Office	UNMIT	Vertical_Scrapers	PERIOD
O5	DPM	9901	1.42E-03	2023	Phase 1b Office	UNMIT	Vertical_Tractors/Loaders/Backhoes	PERIOD
O5	DPM	9901	1.47E-04	2024	Phase 1b Office	UNMIT	Vertical_Aerial Lifts	PERIOD
O5	DPM	9901	0.00E+00	2024	Phase 1b Office	UNMIT	Vertical_Air Compressors	PERIOD
O5	DPM	9901	0.00E+00	2024	Phase 1b Office	UNMIT	Vertical_Bore/Drill Rigs	PERIOD
O5	DPM	9901	0.00E+00	2024	Phase 1b Office	UNMIT	Vertical_Cranes	PERIOD
O5	DPM	9901	0.00E+00	2024	Phase 1b Office	UNMIT	Vertical_Crushing/Proc. Equipment	PERIOD
O5	DPM	9901	0.00E+00	2024	Phase 1b Office	UNMIT	Vertical_Excavators	PERIOD
O5	DPM	9901	5.54E-06	2024	Phase 1b Office	UNMIT	Vertical_Forklifts	PERIOD
O5	DPM	9901	0.00E+00	2024	Phase 1b Office	UNMIT	Vertical_Generator Sets	PERIOD
O5	DPM	9901	0.00E+00	2024	Phase 1b Office	UNMIT	Vertical_Graders	PERIOD
O5	DPM	9901	2.38E-04	2024	Phase 1b Office	UNMIT	Vertical_Other Construction Equipment	PERIOD
O5	DPM	9901	0.00E+00	2024	Phase 1b Office	UNMIT	Vertical_Pavers	PERIOD
O5	DPM	9901	0.00E+00	2024	Phase 1b Office	UNMIT	Vertical_Pressure Washers	PERIOD
O5	DPM	9901	4.51E-07	2024	Phase 1b Office	UNMIT	Vertical_Pumps	PERIOD
O5	DPM	9901	0.00E+00	2024	Phase 1b Office	UNMIT	Vertical_Scrapers	PERIOD
O5	DPM	9901	0.00E+00	2024	Phase 1b Office	UNMIT	Vertical_Tractors/Loaders/Backhoes	PERIOD
O5	DPM	9901	0.00E+00	2025	Phase 1b Office	UNMIT	Vertical_Aerial Lifts	PERIOD
O5	DPM	9901	0.00E+00	2025	Phase 1b Office	UNMIT	Vertical_Air Compressors	PERIOD
O5	DPM	9901	0.00E+00	2025	Phase 1b Office	UNMIT	Vertical_Bore/Drill Rigs	PERIOD
O5	DPM	9901	0.00E+00	2025	Phase 1b Office	UNMIT	Vertical_Cranes	PERIOD
O5	DPM	9901	0.00E+00	2025	Phase 1b Office	UNMIT	Vertical_Crushing/Proc. Equipment	PERIOD
O5	DPM	9901	0.00E+00	2025	Phase 1b Office	UNMIT	Vertical_Excavators	PERIOD
O5	DPM	9901	1.22E-06	2025	Phase 1b Office	UNMIT	Vertical_Forklifts	PERIOD
O5	DPM	9901	0.00E+00	2025	Phase 1b Office	UNMIT	Vertical_Generator Sets	PERIOD
O5	DPM	9901	0.00E+00	2025	Phase 1b Office	UNMIT	Vertical_Graders	PERIOD
O5	DPM	9901	4.28E-05	2025	Phase 1b Office	UNMIT	Vertical_Other Construction Equipment	PERIOD
O5	DPM	9901	0.00E+00	2025	Phase 1b Office	UNMIT	Vertical_Pavers	PERIOD
O5	DPM	9901	0.00E+00	2025	Phase 1b Office	UNMIT	Vertical_Pressure Washers	PERIOD
O5	DPM	9901	0.00E+00	2025	Phase 1b Office	UNMIT	Vertical_Pumps	PERIOD
O5	DPM	9901	0.00E+00	2025	Phase 1b Office	UNMIT	Vertical_Scrapers	PERIOD
O5	DPM	9901	0.00E+00	2025	Phase 1b Office	UNMIT	Vertical_Tractors/Loaders/Backhoes	PERIOD
O6	DPM	9901	0.00E+00	2023	Phase 1b Office	UNMIT	Vertical_Aerial Lifts	PERIOD
O6	DPM	9901	1.02E-06	2023	Phase 1b Office	UNMIT	Vertical_Air Compressors	PERIOD
O6	DPM	9901	2.36E-04	2023	Phase 1b Office	UNMIT	Vertical_Bore/Drill Rigs	PERIOD
O6	DPM	9901	6.55E-04	2023	Phase 1b Office	UNMIT	Vertical_Cranes	PERIOD
O6	DPM	9901	0.00E+00	2023	Phase 1b Office	UNMIT	Vertical_Crushing/Proc. Equipment	PERIOD
O6	DPM	9901	1.06E-05	2023	Phase 1b Office	UNMIT	Vertical_Excavators	PERIOD
O6	DPM	9901	2.84E-06	2023	Phase 1b Office	UNMIT	Vertical_Forklifts	PERIOD

O6	DPM	9901	2.03E-05	2023	Phase 1b Office	UNMIT	Vertical_Generator Sets	PERIOD
O6	DPM	9901	0.00E+00	2023	Phase 1b Office	UNMIT	Vertical_Graders	PERIOD
O6	DPM	9901	1.71E-04	2023	Phase 1b Office	UNMIT	Vertical_Other Construction Equipment	PERIOD
O6	DPM	9901	0.00E+00	2023	Phase 1b Office	UNMIT	Vertical_Pavers	PERIOD
O6	DPM	9901	0.00E+00	2023	Phase 1b Office	UNMIT	Vertical_Pressure Washers	PERIOD
O6	DPM	9901	8.77E-06	2023	Phase 1b Office	UNMIT	Vertical_Pumps	PERIOD
O6	DPM	9901	0.00E+00	2023	Phase 1b Office	UNMIT	Vertical_Scrapers	PERIOD
O6	DPM	9901	1.46E-03	2023	Phase 1b Office	UNMIT	Vertical_Tractors/Loaders/Backhoes	PERIOD
O6	DPM	9901	1.90E-04	2024	Phase 1b Office	UNMIT	Vertical_Aerial Lifts	PERIOD
O6	DPM	9901	4.22E-07	2024	Phase 1b Office	UNMIT	Vertical_Air Compressors	PERIOD
O6	DPM	9901	0.00E+00	2024	Phase 1b Office	UNMIT	Vertical_Bore/Drill Rigs	PERIOD
O6	DPM	9901	0.00E+00	2024	Phase 1b Office	UNMIT	Vertical_Cranes	PERIOD
O6	DPM	9901	0.00E+00	2024	Phase 1b Office	UNMIT	Vertical_Crushing/Proc. Equipment	PERIOD
O6	DPM	9901	0.00E+00	2024	Phase 1b Office	UNMIT	Vertical_Excavators	PERIOD
O6	DPM	9901	5.54E-06	2024	Phase 1b Office	UNMIT	Vertical_Forklifts	PERIOD
O6	DPM	9901	2.87E-06	2024	Phase 1b Office	UNMIT	Vertical_Generator Sets	PERIOD
O6	DPM	9901	0.00E+00	2024	Phase 1b Office	UNMIT	Vertical_Graders	PERIOD
O6	DPM	9901	2.38E-04	2024	Phase 1b Office	UNMIT	Vertical_Other Construction Equipment	PERIOD
O6	DPM	9901	0.00E+00	2024	Phase 1b Office	UNMIT	Vertical_Pavers	PERIOD
O6	DPM	9901	0.00E+00	2024	Phase 1b Office	UNMIT	Vertical_Pressure Washers	PERIOD
O6	DPM	9901	1.31E-06	2024	Phase 1b Office	UNMIT	Vertical_Pumps	PERIOD
O6	DPM	9901	0.00E+00	2024	Phase 1b Office	UNMIT	Vertical_Scrapers	PERIOD
O6	DPM	9901	0.00E+00	2024	Phase 1b Office	UNMIT	Vertical_Tractors/Loaders/Backhoes	PERIOD
O6	DPM	9901	0.00E+00	2025	Phase 1b Office	UNMIT	Vertical_Aerial Lifts	PERIOD
O6	DPM	9901	0.00E+00	2025	Phase 1b Office	UNMIT	Vertical_Air Compressors	PERIOD
O6	DPM	9901	0.00E+00	2025	Phase 1b Office	UNMIT	Vertical_Bore/Drill Rigs	PERIOD
O6	DPM	9901	0.00E+00	2025	Phase 1b Office	UNMIT	Vertical_Cranes	PERIOD
O6	DPM	9901	0.00E+00	2025	Phase 1b Office	UNMIT	Vertical_Crushing/Proc. Equipment	PERIOD
O6	DPM	9901	0.00E+00	2025	Phase 1b Office	UNMIT	Vertical_Excavators	PERIOD
O6	DPM	9901	2.60E-06	2025	Phase 1b Office	UNMIT	Vertical_Forklifts	PERIOD
O6	DPM	9901	0.00E+00	2025	Phase 1b Office	UNMIT	Vertical_Generator Sets	PERIOD
O6	DPM	9901	0.00E+00	2025	Phase 1b Office	UNMIT	Vertical_Graders	PERIOD
O6	DPM	9901	9.16E-05	2025	Phase 1b Office	UNMIT	Vertical_Other Construction Equipment	PERIOD
O6	DPM	9901	0.00E+00	2025	Phase 1b Office	UNMIT	Vertical_Pavers	PERIOD
O6	DPM	9901	0.00E+00	2025	Phase 1b Office	UNMIT	Vertical_Pressure Washers	PERIOD
O6	DPM	9901	0.00E+00	2025	Phase 1b Office	UNMIT	Vertical_Pumps	PERIOD
O6	DPM	9901	0.00E+00	2025	Phase 1b Office	UNMIT	Vertical_Scrapers	PERIOD
O6	DPM	9901	0.00E+00	2025	Phase 1b Office	UNMIT	Vertical_Tractors/Loaders/Backhoes	PERIOD
SG	DPM	9901	0.00E+00	2023	Phase 1b Office	UNMIT	Vertical_Aerial Lifts	PERIOD
SG	DPM	9901	1.17E-05	2023	Phase 1b Office	UNMIT	Vertical_Air Compressors	PERIOD
SG	DPM	9901	1.01E-04	2023	Phase 1b Office	UNMIT	Vertical_Bore/Drill Rigs	PERIOD
SG	DPM	9901	9.78E-04	2023	Phase 1b Office	UNMIT	Vertical_Cranes	PERIOD
SG	DPM	9901	0.00E+00	2023	Phase 1b Office	UNMIT	Vertical_Crushing/Proc. Equipment	PERIOD
SG	DPM	9901	2.38E-04	2023	Phase 1b Office	UNMIT	Vertical_Excavators	PERIOD
SG	DPM	9901	2.64E-05	2023	Phase 1b Office	UNMIT	Vertical_Forklifts	PERIOD
SG	DPM	9901	1.63E-05	2023	Phase 1b Office	UNMIT	Vertical_Generator Sets	PERIOD
SG	DPM	9901	0.00E+00	2023	Phase 1b Office	UNMIT	Vertical_Graders	PERIOD

SG	DPM	9901	2.04E-04	2023	Phase 1b Office	UNMIT	Vertical_Other Construction Equipment	PERIOD
SG	DPM	9901	0.00E+00	2023	Phase 1b Office	UNMIT	Vertical_Pavers	PERIOD
SG	DPM	9901	3.02E-06	2023	Phase 1b Office	UNMIT	Vertical_Pressure Washers	PERIOD
SG	DPM	9901	3.72E-05	2023	Phase 1b Office	UNMIT	Vertical_Pumps	PERIOD
SG	DPM	9901	0.00E+00	2023	Phase 1b Office	UNMIT	Vertical_Scrapers	PERIOD
SG	DPM	9901	7.83E-04	2023	Phase 1b Office	UNMIT	Vertical_Tractors/Loaders/Backhoes	PERIOD
SG	DPM	9901	8.06E-05	2024	Phase 1b Office	UNMIT	Vertical_Aerial Lifts	PERIOD
SG	DPM	9901	1.11E-05	2024	Phase 1b Office	UNMIT	Vertical_Air Compressors	PERIOD
SG	DPM	9901	0.00E+00	2024	Phase 1b Office	UNMIT	Vertical_Bore/Drill Rigs	PERIOD
SG	DPM	9901	6.56E-04	2024	Phase 1b Office	UNMIT	Vertical_Cranes	PERIOD
SG	DPM	9901	0.00E+00	2024	Phase 1b Office	UNMIT	Vertical_Crushing/Proc. Equipment	PERIOD
SG	DPM	9901	0.00E+00	2024	Phase 1b Office	UNMIT	Vertical_Excavators	PERIOD
SG	DPM	9901	2.48E-05	2024	Phase 1b Office	UNMIT	Vertical_Forklifts	PERIOD
SG	DPM	9901	0.00E+00	2024	Phase 1b Office	UNMIT	Vertical_Generator Sets	PERIOD
SG	DPM	9901	0.00E+00	2024	Phase 1b Office	UNMIT	Vertical_Graders	PERIOD
SG	DPM	9901	1.71E-04	2024	Phase 1b Office	UNMIT	Vertical_Other Construction Equipment	PERIOD
SG	DPM	9901	0.00E+00	2024	Phase 1b Office	UNMIT	Vertical_Pavers	PERIOD
SG	DPM	9901	0.00E+00	2024	Phase 1b Office	UNMIT	Vertical_Pressure Washers	PERIOD
SG	DPM	9901	4.04E-05	2024	Phase 1b Office	UNMIT	Vertical_Pumps	PERIOD
SG	DPM	9901	0.00E+00	2024	Phase 1b Office	UNMIT	Vertical_Scrapers	PERIOD
SG	DPM	9901	0.00E+00	2024	Phase 1b Office	UNMIT	Vertical_Tractors/Loaders/Backhoes	PERIOD
RS45	DPM	9901	0.00E+00	2025	Phase 2 Mixed Use	UNMIT	Core and Shell_Aerial Lifts	PERIOD
RS45	DPM	9901	0.00E+00	2025	Phase 2 Mixed Use	UNMIT	Core and Shell_Air Compressors	PERIOD
RS45	DPM	9901	4.24E-04	2025	Phase 2 Mixed Use	UNMIT	Core and Shell_Cranes	PERIOD
RS45	DPM	9901	1.21E-03	2025	Phase 2 Mixed Use	UNMIT	Core and Shell_Forklifts	PERIOD
RS45	DPM	9901	4.25E-05	2025	Phase 2 Mixed Use	UNMIT	Core and Shell_Generator Sets	PERIOD
RS45	DPM	9901	5.01E-04	2025	Phase 2 Mixed Use	UNMIT	Core and Shell_Other Construction Equipment	PERIOD
RS45	DPM	9901	0.00E+00	2025	Phase 2 Mixed Use	UNMIT	Core and Shell_Pumps	PERIOD
RS45	DPM	9901	0.00E+00	2024	Phase 2 Mixed Use	UNMIT	Foundations_Bore/Drill Rigs	PERIOD
RS45	DPM	9901	5.44E-05	2024	Phase 2 Mixed Use	UNMIT	Foundations_Cranes	PERIOD
RS45	DPM	9901	5.28E-05	2024	Phase 2 Mixed Use	UNMIT	Foundations_Excavators	PERIOD
RS45	DPM	9901	1.30E-04	2024	Phase 2 Mixed Use	UNMIT	Foundations_Forklifts	PERIOD
RS45	DPM	9901	7.26E-06	2024	Phase 2 Mixed Use	UNMIT	Foundations_Generator Sets	PERIOD
RS45	DPM	9901	1.05E-04	2024	Phase 2 Mixed Use	UNMIT	Foundations_Other Construction Equipment	PERIOD
RS45	DPM	9901	6.45E-06	2024	Phase 2 Mixed Use	UNMIT	Foundations_Pumps	PERIOD
RS45	DPM	9901	1.11E-03	2024	Phase 2 Mixed Use	UNMIT	Foundations_Tractors/Loaders/Backhoes	PERIOD
RS45	DPM	9901	0.00E+00	2025	Phase 2 Mixed Use	UNMIT	Foundations_Bore/Drill Rigs	PERIOD
RS45	DPM	9901	2.01E-04	2025	Phase 2 Mixed Use	UNMIT	Foundations_Cranes	PERIOD
RS45	DPM	9901	1.89E-04	2025	Phase 2 Mixed Use	UNMIT	Foundations_Excavators	PERIOD
RS45	DPM	9901	5.73E-04	2025	Phase 2 Mixed Use	UNMIT	Foundations_Forklifts	PERIOD
RS45	DPM	9901	3.03E-05	2025	Phase 2 Mixed Use	UNMIT	Foundations_Generator Sets	PERIOD
RS45	DPM	9901	3.57E-04	2025	Phase 2 Mixed Use	UNMIT	Foundations_Other Construction Equipment	PERIOD
RS45	DPM	9901	1.99E-05	2025	Phase 2 Mixed Use	UNMIT	Foundations_Pumps	PERIOD
RS45	DPM	9901	4.54E-03	2025	Phase 2 Mixed Use	UNMIT	Foundations_Tractors/Loaders/Backhoes	PERIOD
PHS_2X	DPM	9901	6.01E-05	2023	Phase 2 Mixed Use	UNMIT	Grading and Utilities_Excavators	PERIOD
PHS_2X	DPM	9901	4.60E-06	2023	Phase 2 Mixed Use	UNMIT	Grading and Utilities_Forklifts	PERIOD
PHS_2X	DPM	9901	2.91E-06	2023	Phase 2 Mixed Use	UNMIT	Grading and Utilities_Generator Sets	PERIOD

PHS_2X	DPM	9901	3.64E-05	2023	Phase 2 Mixed Use	UNMIT	Grading and Utilities_Graders	PERIOD
PHS_2X	DPM	9901	5.82E-05	2023	Phase 2 Mixed Use	UNMIT	Grading and Utilities_Other Construction Equipment	PERIOD
PHS_2X	DPM	9901	6.91E-07	2023	Phase 2 Mixed Use	UNMIT	Grading and Utilities_Pavers	PERIOD
PHS_2X	DPM	9901	2.64E-05	2023	Phase 2 Mixed Use	UNMIT	Grading and Utilities_Scrapers	PERIOD
PHS_2X	DPM	9901	4.99E-04	2023	Phase 2 Mixed Use	UNMIT	Grading and Utilities_Tractors/Loaders/Backhoes	PERIOD
RS45	DPM	9901	2.96E-04	2026	Phase 2 Mixed Use	UNMIT	Landscaping_Excavators	PERIOD
RS45	DPM	9901	0.00E+00	2026	Phase 2 Mixed Use	UNMIT	Landscaping_Generator Sets	PERIOD
RS45	DPM	9901	9.76E-05	2026	Phase 2 Mixed Use	UNMIT	Landscaping_Other Construction Equipment	PERIOD
RS45	DPM	9901	3.33E-03	2026	Phase 2 Mixed Use	UNMIT	Landscaping_Tractors/Loaders/Backhoes	PERIOD
RS45	DPM	9901	7.24E-05	2025	Phase 2 Mixed Use	UNMIT	Tenant Improvements_Forklifts	PERIOD
RS45	DPM	9901	6.49E-06	2025	Phase 2 Mixed Use	UNMIT	Tenant Improvements_Generator Sets	PERIOD
RS45	DPM	9901	9.01E-05	2025	Phase 2 Mixed Use	UNMIT	Tenant Improvements_Other Construction Equipment	PERIOD
RS45	DPM	9901	5.08E-04	2026	Phase 2 Mixed Use	UNMIT	Tenant Improvements_Forklifts	PERIOD
RS45	DPM	9901	4.57E-05	2026	Phase 2 Mixed Use	UNMIT	Tenant Improvements_Generator Sets	PERIOD
RS45	DPM	9901	5.76E-04	2026	Phase 2 Mixed Use	UNMIT	Tenant Improvements_Other Construction Equipment	PERIOD
TUNNEL	DPM	9901	5.46E-05	2023	Phase 2 Mixed Use	UNMIT	Tunnel Construction_Air Compressors	PERIOD
TUNNEL	DPM	9901	3.10E-04	2023	Phase 2 Mixed Use	UNMIT	Tunnel Construction_Cranes	PERIOD
TUNNEL	DPM	9901	3.08E-04	2023	Phase 2 Mixed Use	UNMIT	Tunnel Construction_Excavators	PERIOD
TUNNEL	DPM	9901	8.67E-05	2023	Phase 2 Mixed Use	UNMIT	Tunnel Construction_Forklifts	PERIOD
TUNNEL	DPM	9901	1.31E-03	2023	Phase 2 Mixed Use	UNMIT	Tunnel Construction_Tractors/Loaders/Backhoes	PERIOD
TUNNEL	DPM	9901	3.88E-05	2024	Phase 2 Mixed Use	UNMIT	Tunnel Construction_Air Compressors	PERIOD
TUNNEL	DPM	9901	1.40E-04	2024	Phase 2 Mixed Use	UNMIT	Tunnel Construction_Cranes	PERIOD
TUNNEL	DPM	9901	1.40E-04	2024	Phase 2 Mixed Use	UNMIT	Tunnel Construction_Excavators	PERIOD
TUNNEL	DPM	9901	3.66E-05	2024	Phase 2 Mixed Use	UNMIT	Tunnel Construction_Forklifts	PERIOD
TUNNEL	DPM	9901	6.55E-04	2024	Phase 2 Mixed Use	UNMIT	Tunnel Construction_Tractors/Loaders/Backhoes	PERIOD
RETAIL	DPM	9901	4.70E-08	2025	Alternate 1	UNMIT	Core and Shell_Vendor	PERIOD
TRUCKS	DPM	9901	2.85E-07	2025	Alternate 1	UNMIT	Core and Shell_Vendor	PERIOD
RETAIL	DPM	9901	9.85E-08	2024	Alternate 1	UNMIT	Demolition_Hauling	PERIOD
TRUCKS	DPM	9901	6.38E-07	2024	Alternate 1	UNMIT	Demolition_Hauling	PERIOD
RETAIL	DPM	9901	5.25E-08	2025	Alternate 1	UNMIT	Foundations_Vendor	PERIOD
TRUCKS	DPM	9901	3.19E-07	2025	Alternate 1	UNMIT	Foundations_Vendor	PERIOD
RETAIL	DPM	9901	4.32E-09	2024	Alternate 1	UNMIT	Grading and Utilities_Hauling	PERIOD
TRUCKS	DPM	9901	2.80E-08	2024	Alternate 1	UNMIT	Grading and Utilities_Hauling	PERIOD
RETAIL	DPM	9901	8.87E-08	2025	Alternate 1	UNMIT	Grading and Utilities_Hauling	PERIOD
TRUCKS	DPM	9901	6.05E-07	2025	Alternate 1	UNMIT	Grading and Utilities_Hauling	PERIOD
RETAIL	DPM	9901	5.87E-08	2025	Alternate 1	UNMIT	Tenant Improvements_Vendor	PERIOD
TRUCKS	DPM	9901	3.56E-07	2025	Alternate 1	UNMIT	Tenant Improvements_Vendor	PERIOD
PHS_1A	DPM	9901	9.60E-07	2021	Phase 1a	UNMIT	Demolition_Hauling	PERIOD
TRUCKS	DPM	9901	5.16E-06	2021	Phase 1a	UNMIT	Demolition_Hauling	PERIOD
PHS_1A	DPM	9901	0.00E+00	2021	Phase 1a	UNMIT	Demolition_Vendor	PERIOD
TRUCKS	DPM	9901	0.00E+00	2021	Phase 1a	UNMIT	Demolition_Vendor	PERIOD
PHS_1A	DPM	9901	4.46E-06	2022	Phase 1a	UNMIT	Demolition_Hauling	PERIOD
TRUCKS	DPM	9901	2.61E-05	2022	Phase 1a	UNMIT	Demolition_Hauling	PERIOD
PHS_1A	DPM	9901	0.00E+00	2022	Phase 1a	UNMIT	Demolition_Vendor	PERIOD
TRUCKS	DPM	9901	0.00E+00	2022	Phase 1a	UNMIT	Demolition_Vendor	PERIOD
PHS_1A	DPM	9901	9.00E-06	2022	Phase 1a	UNMIT	Grading and Utilities_Hauling	PERIOD
TRUCKS	DPM	9901	5.26E-05	2022	Phase 1a	UNMIT	Grading and Utilities_Hauling	PERIOD

PHS_1A	DPM	9901	0.00E+00	2022	Phase 1a	UNMIT	Grading and Utilities_Vendor	PERIOD
TRUCKS	DPM	9901	0.00E+00	2022	Phase 1a	UNMIT	Grading and Utilities_Vendor	PERIOD
PHS_1A	DPM	9901	0.00E+00	2023	Phase 1a Mixed Use	UNMIT	Core and Shell_Hauling	PERIOD
TRUCKS	DPM	9901	0.00E+00	2023	Phase 1a Mixed Use	UNMIT	Core and Shell_Hauling	PERIOD
PHS_1A	DPM	9901	3.16E-08	2023	Phase 1a Mixed Use	UNMIT	Core and Shell_Vendor	PERIOD
TRUCKS	DPM	9901	1.71E-07	2023	Phase 1a Mixed Use	UNMIT	Core and Shell_Vendor	PERIOD
PHS_1A	DPM	9901	0.00E+00	2024	Phase 1a Mixed Use	UNMIT	Core and Shell_Hauling	PERIOD
TRUCKS	DPM	9901	0.00E+00	2024	Phase 1a Mixed Use	UNMIT	Core and Shell_Hauling	PERIOD
PHS_1A	DPM	9901	7.82E-08	2024	Phase 1a Mixed Use	UNMIT	Core and Shell_Vendor	PERIOD
TRUCKS	DPM	9901	4.49E-07	2024	Phase 1a Mixed Use	UNMIT	Core and Shell_Vendor	PERIOD
PHS_1A	DPM	9901	0.00E+00	2023	Phase 1a Mixed Use	UNMIT	Foundations_Hauling	PERIOD
TRUCKS	DPM	9901	0.00E+00	2023	Phase 1a Mixed Use	UNMIT	Foundations_Hauling	PERIOD
PHS_1A	DPM	9901	1.10E-07	2023	Phase 1a Mixed Use	UNMIT	Foundations_Vendor	PERIOD
TRUCKS	DPM	9901	5.98E-07	2023	Phase 1a Mixed Use	UNMIT	Foundations_Vendor	PERIOD
PHS_1A	DPM	9901	0.00E+00	2024	Phase 1a Mixed Use	UNMIT	Foundations_Hauling	PERIOD
TRUCKS	DPM	9901	0.00E+00	2024	Phase 1a Mixed Use	UNMIT	Foundations_Hauling	PERIOD
PHS_1A	DPM	9901	4.34E-10	2024	Phase 1a Mixed Use	UNMIT	Foundations_Vendor	PERIOD
TRUCKS	DPM	9901	2.49E-09	2024	Phase 1a Mixed Use	UNMIT	Foundations_Vendor	PERIOD
PHS_1A	DPM	9901	0.00E+00	2025	Phase 1a Mixed Use	UNMIT	Landscaping_Hauling	PERIOD
TRUCKS	DPM	9901	0.00E+00	2025	Phase 1a Mixed Use	UNMIT	Landscaping_Hauling	PERIOD
PHS_1A	DPM	9901	4.72E-08	2025	Phase 1a Mixed Use	UNMIT	Landscaping_Vendor	PERIOD
TRUCKS	DPM	9901	2.86E-07	2025	Phase 1a Mixed Use	UNMIT	Landscaping_Vendor	PERIOD
PHS_1A	DPM	9901	0.00E+00	2024	Phase 1a Mixed Use	UNMIT	Tenant Improvements_Hauling	PERIOD
TRUCKS	DPM	9901	0.00E+00	2024	Phase 1a Mixed Use	UNMIT	Tenant Improvements_Hauling	PERIOD
PHS_1A	DPM	9901	6.39E-08	2024	Phase 1a Mixed Use	UNMIT	Tenant Improvements_Vendor	PERIOD
TRUCKS	DPM	9901	3.66E-07	2024	Phase 1a Mixed Use	UNMIT	Tenant Improvements_Vendor	PERIOD
PHS_1A	DPM	9901	0.00E+00	2025	Phase 1a Mixed Use	UNMIT	Tenant Improvements_Hauling	PERIOD
TRUCKS	DPM	9901	0.00E+00	2025	Phase 1a Mixed Use	UNMIT	Tenant Improvements_Hauling	PERIOD
PHS_1A	DPM	9901	6.83E-08	2025	Phase 1a Mixed Use	UNMIT	Tenant Improvements_Vendor	PERIOD
TRUCKS	DPM	9901	4.14E-07	2025	Phase 1a Mixed Use	UNMIT	Tenant Improvements_Vendor	PERIOD
PHS_1A	DPM	9901	0.00E+00	2022	Phase 1a Office	UNMIT	Foundations + Core and Shell_Hauling	PERIOD
TRUCKS	DPM	9901	0.00E+00	2022	Phase 1a Office	UNMIT	Foundations + Core and Shell_Hauling	PERIOD
PHS_1A	DPM	9901	1.30E-07	2022	Phase 1a Office	UNMIT	Foundations + Core and Shell_Vendor	PERIOD
TRUCKS	DPM	9901	6.96E-07	2022	Phase 1a Office	UNMIT	Foundations + Core and Shell_Vendor	PERIOD
PHS_1A	DPM	9901	0.00E+00	2023	Phase 1a Office	UNMIT	Foundations + Core and Shell_Hauling	PERIOD
TRUCKS	DPM	9901	0.00E+00	2023	Phase 1a Office	UNMIT	Foundations + Core and Shell_Hauling	PERIOD
PHS_1A	DPM	9901	7.05E-07	2023	Phase 1a Office	UNMIT	Foundations + Core and Shell_Vendor	PERIOD
TRUCKS	DPM	9901	3.82E-06	2023	Phase 1a Office	UNMIT	Foundations + Core and Shell_Vendor	PERIOD
PHS_1A	DPM	9901	0.00E+00	2024	Phase 1a Office	UNMIT	Foundations + Core and Shell_Hauling	PERIOD
TRUCKS	DPM	9901	0.00E+00	2024	Phase 1a Office	UNMIT	Foundations + Core and Shell_Hauling	PERIOD
PHS_1A	DPM	9901	6.26E-07	2024	Phase 1a Office	UNMIT	Foundations + Core and Shell_Vendor	PERIOD
TRUCKS	DPM	9901	3.59E-06	2024	Phase 1a Office	UNMIT	Foundations + Core and Shell_Vendor	PERIOD
PHS_1A	DPM	9901	0.00E+00	2025	Phase 1a Office	UNMIT	Foundations + Core and Shell_Hauling	PERIOD
TRUCKS	DPM	9901	0.00E+00	2025	Phase 1a Office	UNMIT	Foundations + Core and Shell_Hauling	PERIOD
PHS_1A	DPM	9901	5.51E-07	2025	Phase 1a Office	UNMIT	Foundations + Core and Shell_Vendor	PERIOD
TRUCKS	DPM	9901	3.34E-06	2025	Phase 1a Office	UNMIT	Foundations + Core and Shell_Vendor	PERIOD
PHS_1A	DPM	9901	0.00E+00	2024	Phase 1a Office	UNMIT	Tenant Improvements_Hauling	PERIOD

TRUCKS	DPM	9901	0.00E+00	2024	Phase 1a Office	UNMIT	Tenant Improvements_Hauling	PERIOD
PHS_1A	DPM	9901	2.54E-07	2024	Phase 1a Office	UNMIT	Tenant Improvements_Vendor	PERIOD
TRUCKS	DPM	9901	1.46E-06	2024	Phase 1a Office	UNMIT	Tenant Improvements_Vendor	PERIOD
PHS_1A	DPM	9901	0.00E+00	2025	Phase 1a Office	UNMIT	Tenant Improvements_Hauling	PERIOD
TRUCKS	DPM	9901	0.00E+00	2025	Phase 1a Office	UNMIT	Tenant Improvements_Hauling	PERIOD
PHS_1A	DPM	9901	3.00E-07	2025	Phase 1a Office	UNMIT	Tenant Improvements_Vendor	PERIOD
TRUCKS	DPM	9901	1.82E-06	2025	Phase 1a Office	UNMIT	Tenant Improvements_Vendor	PERIOD
PHS_1A	DPM	9901	0.00E+00	2026	Phase 1a Office	UNMIT	Tenant Improvements_Hauling	PERIOD
TRUCKS	DPM	9901	0.00E+00	2026	Phase 1a Office	UNMIT	Tenant Improvements_Hauling	PERIOD
PHS_1A	DPM	9901	4.67E-08	2026	Phase 1a Office	UNMIT	Tenant Improvements_Vendor	PERIOD
TRUCKS	DPM	9901	3.03E-07	2026	Phase 1a Office	UNMIT	Tenant Improvements_Vendor	PERIOD
PHS_1B	DPM	9901	5.15E-06	2022	Phase 1b	UNMIT	Demolition_Hauling	PERIOD
TRUCKS	DPM	9901	3.01E-05	2022	Phase 1b	UNMIT	Demolition_Hauling	PERIOD
PHS_1B	DPM	9901	0.00E+00	2022	Phase 1b	UNMIT	Demolition_Vendor	PERIOD
TRUCKS	DPM	9901	0.00E+00	2022	Phase 1b	UNMIT	Demolition_Vendor	PERIOD
PHS_1B	DPM	9901	4.50E-06	2022	Phase 1b	UNMIT	Grading and Utilities_Hauling	PERIOD
TRUCKS	DPM	9901	2.63E-05	2022	Phase 1b	UNMIT	Grading and Utilities_Hauling	PERIOD
PHS_1B	DPM	9901	0.00E+00	2022	Phase 1b	UNMIT	Grading and Utilities_Vendor	PERIOD
TRUCKS	DPM	9901	0.00E+00	2022	Phase 1b	UNMIT	Grading and Utilities_Vendor	PERIOD
PHS_1B	DPM	9901	4.13E-06	2023	Phase 1b	UNMIT	Grading and Utilities_Hauling	PERIOD
TRUCKS	DPM	9901	2.51E-05	2023	Phase 1b	UNMIT	Grading and Utilities_Hauling	PERIOD
PHS_1B	DPM	9901	0.00E+00	2023	Phase 1b	UNMIT	Grading and Utilities_Vendor	PERIOD
TRUCKS	DPM	9901	0.00E+00	2023	Phase 1b	UNMIT	Grading and Utilities_Vendor	PERIOD
PHS_1B	DPM	9901	0.00E+00	2024	Phase 1b Mixed Use	UNMIT	Core and Shell_Hauling	PERIOD
TRUCKS	DPM	9901	0.00E+00	2024	Phase 1b Mixed Use	UNMIT	Core and Shell_Hauling	PERIOD
PHS_1B	DPM	9901	9.45E-08	2024	Phase 1b Mixed Use	UNMIT	Core and Shell_Vendor	PERIOD
TRUCKS	DPM	9901	5.42E-07	2024	Phase 1b Mixed Use	UNMIT	Core and Shell_Vendor	PERIOD
PHS_1B	DPM	9901	0.00E+00	2025	Phase 1b Mixed Use	UNMIT	Core and Shell_Hauling	PERIOD
TRUCKS	DPM	9901	0.00E+00	2025	Phase 1b Mixed Use	UNMIT	Core and Shell_Hauling	PERIOD
PHS_1B	DPM	9901	2.76E-08	2025	Phase 1b Mixed Use	UNMIT	Core and Shell_Vendor	PERIOD
TRUCKS	DPM	9901	1.68E-07	2025	Phase 1b Mixed Use	UNMIT	Core and Shell_Vendor	PERIOD
PHS_1B	DPM	9901	0.00E+00	2024	Phase 1b Mixed Use	UNMIT	Foundations_Hauling	PERIOD
TRUCKS	DPM	9901	0.00E+00	2024	Phase 1b Mixed Use	UNMIT	Foundations_Hauling	PERIOD
PHS_1B	DPM	9901	7.82E-08	2024	Phase 1b Mixed Use	UNMIT	Foundations_Vendor	PERIOD
TRUCKS	DPM	9901	4.49E-07	2024	Phase 1b Mixed Use	UNMIT	Foundations_Vendor	PERIOD
PHS_1B	DPM	9901	0.00E+00	2025	Phase 1b Mixed Use	UNMIT	Landscaping_Hauling	PERIOD
TRUCKS	DPM	9901	0.00E+00	2025	Phase 1b Mixed Use	UNMIT	Landscaping_Hauling	PERIOD
PHS_1B	DPM	9901	3.49E-08	2025	Phase 1b Mixed Use	UNMIT	Landscaping_Vendor	PERIOD
TRUCKS	DPM	9901	2.12E-07	2025	Phase 1b Mixed Use	UNMIT	Landscaping_Vendor	PERIOD
PHS_1B	DPM	9901	0.00E+00	2026	Phase 1b Mixed Use	UNMIT	Landscaping_Hauling	PERIOD
TRUCKS	DPM	9901	0.00E+00	2026	Phase 1b Mixed Use	UNMIT	Landscaping_Hauling	PERIOD
PHS_1B	DPM	9901	1.08E-08	2026	Phase 1b Mixed Use	UNMIT	Landscaping_Vendor	PERIOD
TRUCKS	DPM	9901	7.02E-08	2026	Phase 1b Mixed Use	UNMIT	Landscaping_Vendor	PERIOD
PHS_1B	DPM	9901	0.00E+00	2024	Phase 1b Mixed Use	UNMIT	Tenant Improvements_Hauling	PERIOD
TRUCKS	DPM	9901	0.00E+00	2024	Phase 1b Mixed Use	UNMIT	Tenant Improvements_Hauling	PERIOD
PHS_1B	DPM	9901	1.11E-08	2024	Phase 1b Mixed Use	UNMIT	Tenant Improvements_Vendor	PERIOD
TRUCKS	DPM	9901	6.36E-08	2024	Phase 1b Mixed Use	UNMIT	Tenant Improvements_Vendor	PERIOD

PHS_1B	DPM	9901	0.00E+00	2025	Phase 1b Mixed Use	UNMIT	Tenant Improvements_Hauling	PERIOD
TRUCKS	DPM	9901	0.00E+00	2025	Phase 1b Mixed Use	UNMIT	Tenant Improvements_Hauling	PERIOD
PHS_1B	DPM	9901	1.35E-07	2025	Phase 1b Mixed Use	UNMIT	Tenant Improvements_Vendor	PERIOD
TRUCKS	DPM	9901	8.21E-07	2025	Phase 1b Mixed Use	UNMIT	Tenant Improvements_Vendor	PERIOD
PHS_1B	DPM	9901	0.00E+00	2023	Phase 1b Office	UNMIT	Foundations + Core and Shell_Hauling	PERIOD
TRUCKS	DPM	9901	0.00E+00	2023	Phase 1b Office	UNMIT	Foundations + Core and Shell_Hauling	PERIOD
PHS_1B	DPM	9901	5.48E-07	2023	Phase 1b Office	UNMIT	Foundations + Core and Shell_Vendor	PERIOD
TRUCKS	DPM	9901	2.97E-06	2023	Phase 1b Office	UNMIT	Foundations + Core and Shell_Vendor	PERIOD
PHS_1B	DPM	9901	0.00E+00	2024	Phase 1b Office	UNMIT	Foundations + Core and Shell_Hauling	PERIOD
TRUCKS	DPM	9901	0.00E+00	2024	Phase 1b Office	UNMIT	Foundations + Core and Shell_Hauling	PERIOD
PHS_1B	DPM	9901	5.54E-07	2024	Phase 1b Office	UNMIT	Foundations + Core and Shell_Vendor	PERIOD
TRUCKS	DPM	9901	3.18E-06	2024	Phase 1b Office	UNMIT	Foundations + Core and Shell_Vendor	PERIOD
PHS_1B	DPM	9901	0.00E+00	2024	Phase 1b Office	UNMIT	Tenant Improvements_Hauling	PERIOD
TRUCKS	DPM	9901	0.00E+00	2024	Phase 1b Office	UNMIT	Tenant Improvements_Hauling	PERIOD
PHS_1B	DPM	9901	4.68E-07	2024	Phase 1b Office	UNMIT	Tenant Improvements_Vendor	PERIOD
TRUCKS	DPM	9901	2.69E-06	2024	Phase 1b Office	UNMIT	Tenant Improvements_Vendor	PERIOD
PHS_1B	DPM	9901	0.00E+00	2025	Phase 1b Office	UNMIT	Tenant Improvements_Hauling	PERIOD
TRUCKS	DPM	9901	0.00E+00	2025	Phase 1b Office	UNMIT	Tenant Improvements_Hauling	PERIOD
PHS_1B	DPM	9901	3.28E-07	2025	Phase 1b Office	UNMIT	Tenant Improvements_Vendor	PERIOD
TRUCKS	DPM	9901	1.99E-06	2025	Phase 1b Office	UNMIT	Tenant Improvements_Vendor	PERIOD
RS45	DPM	9901	0.00E+00	2025	Phase 2 Mixed Use	UNMIT	Core and Shell_Hauling	PERIOD
TRUCKS	DPM	9901	0.00E+00	2025	Phase 2 Mixed Use	UNMIT	Core and Shell_Hauling	PERIOD
RS45	DPM	9901	3.20E-07	2025	Phase 2 Mixed Use	UNMIT	Core and Shell_Vendor	PERIOD
TRUCKS	DPM	9901	1.94E-06	2025	Phase 2 Mixed Use	UNMIT	Core and Shell_Vendor	PERIOD
RS45	DPM	9901	0.00E+00	2024	Phase 2 Mixed Use	UNMIT	Foundations_Hauling	PERIOD
TRUCKS	DPM	9901	0.00E+00	2024	Phase 2 Mixed Use	UNMIT	Foundations_Hauling	PERIOD
RS45	DPM	9901	5.21E-08	2024	Phase 2 Mixed Use	UNMIT	Foundations_Vendor	PERIOD
TRUCKS	DPM	9901	2.99E-07	2024	Phase 2 Mixed Use	UNMIT	Foundations_Vendor	PERIOD
RS45	DPM	9901	0.00E+00	2025	Phase 2 Mixed Use	UNMIT	Foundations_Hauling	PERIOD
TRUCKS	DPM	9901	0.00E+00	2025	Phase 2 Mixed Use	UNMIT	Foundations_Hauling	PERIOD
RS45	DPM	9901	1.90E-07	2025	Phase 2 Mixed Use	UNMIT	Foundations_Vendor	PERIOD
TRUCKS	DPM	9901	1.15E-06	2025	Phase 2 Mixed Use	UNMIT	Foundations_Vendor	PERIOD
PHS_2X	DPM	9901	6.23E-07	2023	Phase 2 Mixed Use	UNMIT	Grading and Utilities_Hauling	PERIOD
TRUCKS	DPM	9901	3.78E-06	2023	Phase 2 Mixed Use	UNMIT	Grading and Utilities_Hauling	PERIOD
PHS_2X	DPM	9901	0.00E+00	2023	Phase 2 Mixed Use	UNMIT	Grading and Utilities_Vendor	PERIOD
TRUCKS	DPM	9901	0.00E+00	2023	Phase 2 Mixed Use	UNMIT	Grading and Utilities_Vendor	PERIOD
RS45	DPM	9901	0.00E+00	2026	Phase 2 Mixed Use	UNMIT	Landscaping_Hauling	PERIOD
TRUCKS	DPM	9901	0.00E+00	2026	Phase 2 Mixed Use	UNMIT	Landscaping_Hauling	PERIOD
RS45	DPM	9901	6.49E-08	2026	Phase 2 Mixed Use	UNMIT	Landscaping_Vendor	PERIOD
TRUCKS	DPM	9901	4.21E-07	2026	Phase 2 Mixed Use	UNMIT	Landscaping_Vendor	PERIOD
RS45	DPM	9901	0.00E+00	2025	Phase 2 Mixed Use	UNMIT	Tenant Improvements_Hauling	PERIOD
TRUCKS	DPM	9901	0.00E+00	2025	Phase 2 Mixed Use	UNMIT	Tenant Improvements_Hauling	PERIOD
RS45	DPM	9901	5.75E-08	2025	Phase 2 Mixed Use	UNMIT	Tenant Improvements_Vendor	PERIOD
TRUCKS	DPM	9901	3.49E-07	2025	Phase 2 Mixed Use	UNMIT	Tenant Improvements_Vendor	PERIOD
RS45	DPM	9901	0.00E+00	2026	Phase 2 Mixed Use	UNMIT	Tenant Improvements_Hauling	PERIOD
TRUCKS	DPM	9901	0.00E+00	2026	Phase 2 Mixed Use	UNMIT	Tenant Improvements_Hauling	PERIOD
RS45	DPM	9901	3.53E-07	2026	Phase 2 Mixed Use	UNMIT	Tenant Improvements_Vendor	PERIOD

TRUCKS	DPM	9901	2.29E-06	2026	Phase 2 Mixed Use	UNMIT	Tenant Improvements_Vendor	PERIOD
TRUCKS	DPM	9901	0.00E+00	2023	Phase 2 Mixed Use	UNMIT	Tunnel Construction_Hauling	PERIOD
TUNNEL	DPM	9901	0.00E+00	2023	Phase 2 Mixed Use	UNMIT	Tunnel Construction_Hauling	PERIOD
TRUCKS	DPM	9901	1.87E-06	2023	Phase 2 Mixed Use	UNMIT	Tunnel Construction_Vendor	PERIOD
TUNNEL	DPM	9901	3.45E-07	2023	Phase 2 Mixed Use	UNMIT	Tunnel Construction_Vendor	PERIOD
TRUCKS	DPM	9901	0.00E+00	2024	Phase 2 Mixed Use	UNMIT	Tunnel Construction_Hauling	PERIOD
TUNNEL	DPM	9901	0.00E+00	2024	Phase 2 Mixed Use	UNMIT	Tunnel Construction_Hauling	PERIOD
TRUCKS	DPM	9901	8.67E-07	2024	Phase 2 Mixed Use	UNMIT	Tunnel Construction_Vendor	PERIOD
TUNNEL	DPM	9901	1.51E-07	2024	Phase 2 Mixed Use	UNMIT	Tunnel Construction_Vendor	PERIOD
PHS_1A	DPM	9901	8.63E-06	2021	Phase 1a	UNMIT	Demolition_Onsite HHDT	PERIOD
PHS_1A	DPM	9901	4.70E-05	2022	Phase 1a	UNMIT	Demolition_Onsite HHDT	PERIOD
PHS_1A	DPM	9901	7.24E-05	2022	Phase 1a	UNMIT	Grading and Utilities_Onsite HHDT	PERIOD
RS2	DPM	9901	4.15E-05	2023	Phase 1a Mixed Use	UNMIT	Foundations_Onsite HHDT	PERIOD
RS2	DPM	9901	1.68E-06	2023	Phase 1a Mixed Use	UNMIT	Core and Shell_Onsite HHDT	PERIOD
RS2	DPM	9901	2.89E-06	2024	Phase 1a Mixed Use	UNMIT	Core and Shell_Onsite HHDT	PERIOD
RS2	DPM	9901	3.66E-06	2024	Phase 1a Mixed Use	UNMIT	Tenant Improvements_Onsite HHDT	PERIOD
RS2	DPM	9901	2.71E-06	2025	Phase 1a Mixed Use	UNMIT	Tenant Improvements_Onsite HHDT	PERIOD
RS2	DPM	9901	4.20E-06	2025	Phase 1a Mixed Use	UNMIT	Landscaping_Onsite HHDT	PERIOD
RS3	DPM	9901	4.54E-05	2023	Phase 1a Mixed Use	UNMIT	Foundations_Onsite HHDT	PERIOD
RS3	DPM	9901	2.69E-07	2024	Phase 1a Mixed Use	UNMIT	Foundations_Onsite HHDT	PERIOD
RS3	DPM	9901	8.96E-06	2024	Phase 1a Mixed Use	UNMIT	Core and Shell_Onsite HHDT	PERIOD
RS3	DPM	9901	4.08E-06	2024	Phase 1a Mixed Use	UNMIT	Tenant Improvements_Onsite HHDT	PERIOD
RS3	DPM	9901	8.45E-06	2025	Phase 1a Mixed Use	UNMIT	Tenant Improvements_Onsite HHDT	PERIOD
RS3	DPM	9901	4.13E-06	2025	Phase 1a Mixed Use	UNMIT	Landscaping_Onsite HHDT	PERIOD
NG	DPM	9901	9.80E-06	2022	Phase 1a Office	UNMIT	Vertical_Onsite HHDT	PERIOD
NG	DPM	9901	1.24E-05	2023	Phase 1a Office	UNMIT	Vertical_Onsite HHDT	PERIOD
O4	DPM	9901	1.28E-05	2023	Phase 1a Office	UNMIT	Vertical_Onsite HHDT	PERIOD
O4	DPM	9901	6.92E-06	2024	Phase 1a Office	UNMIT	Vertical_Onsite HHDT	PERIOD
MCP	DPM	9901	1.07E-05	2022	Phase 1a Office	UNMIT	Vertical_Onsite HHDT	PERIOD
MCP	DPM	9901	2.72E-05	2023	Phase 1a Office	UNMIT	Vertical_Onsite HHDT	PERIOD
MCP	DPM	9901	1.56E-05	2024	Phase 1a Office	UNMIT	Vertical_Onsite HHDT	PERIOD
MCP	DPM	9901	1.30E-05	2025	Phase 1a Office	UNMIT	Vertical_Onsite HHDT	PERIOD
MCP	DPM	9901	5.08E-07	2026	Phase 1a Office	UNMIT	Vertical_Onsite HHDT	PERIOD
EXCAVATE	DPM	9901	8.97E-06	2022	Phase 1a Office	UNMIT	Hotel Excavation_Onsite HHDT	PERIOD
EXCAVATE	DPM	9901	2.24E-05	2023	Phase 1a Office	UNMIT	Hotel Excavation_Onsite HHDT	PERIOD
HTL	DPM	9901	1.24E-05	2024	Phase 1a Office	UNMIT	Vertical_Onsite HHDT	PERIOD
HTL	DPM	9901	1.97E-05	2025	Phase 1a Office	UNMIT	Vertical_Onsite HHDT	PERIOD
TS	DPM	9901	4.45E-05	2023	Phase 1a Office	UNMIT	Vertical_Onsite HHDT	PERIOD
TS	DPM	9901	1.70E-05	2024	Phase 1a Office	UNMIT	Vertical_Onsite HHDT	PERIOD
TS	DPM	9901	2.61E-06	2025	Phase 1a Office	UNMIT	Vertical_Onsite HHDT	PERIOD
PHS_1B	DPM	9901	2.69E-05	2022	Phase 1b	UNMIT	Demolition_Onsite HHDT	PERIOD
PHS_1B	DPM	9901	3.29E-05	2022	Phase 1b	UNMIT	Grading and Utilities_Onsite HHDT	PERIOD
PHS_1B	DPM	9901	2.89E-05	2023	Phase 1b	UNMIT	Grading and Utilities_Onsite HHDT	PERIOD
SG	DPM	9901	1.74E-05	2023	Phase 1b Office	UNMIT	Vertical_Onsite HHDT	PERIOD
SG	DPM	9901	7.60E-06	2024	Phase 1b Office	UNMIT	Vertical_Onsite HHDT	PERIOD
O3	DPM	9901	1.14E-05	2023	Phase 1b Office	UNMIT	Vertical_Onsite HHDT	PERIOD
O3	DPM	9901	8.99E-06	2024	Phase 1b Office	UNMIT	Vertical_Onsite HHDT	PERIOD

O3	DPM	9901	2.21E-06	2025	Phase 1b Office	UNMIT	Vertical_Onsite HHDT	PERIOD
O1	DPM	9901	1.10E-05	2023	Phase 1b Office	UNMIT	Vertical_Onsite HHDT	PERIOD
O1	DPM	9901	8.50E-06	2024	Phase 1b Office	UNMIT	Vertical_Onsite HHDT	PERIOD
O2	DPM	9901	1.01E-05	2023	Phase 1b Office	UNMIT	Vertical_Onsite HHDT	PERIOD
O2	DPM	9901	8.99E-06	2024	Phase 1b Office	UNMIT	Vertical_Onsite HHDT	PERIOD
O2	DPM	9901	2.49E-07	2025	Phase 1b Office	UNMIT	Vertical_Onsite HHDT	PERIOD
O5	DPM	9901	1.30E-05	2023	Phase 1b Office	UNMIT	Vertical_Onsite HHDT	PERIOD
O5	DPM	9901	8.99E-06	2024	Phase 1b Office	UNMIT	Vertical_Onsite HHDT	PERIOD
O5	DPM	9901	2.03E-06	2025	Phase 1b Office	UNMIT	Vertical_Onsite HHDT	PERIOD
O6	DPM	9901	1.04E-05	2023	Phase 1b Office	UNMIT	Vertical_Onsite HHDT	PERIOD
O6	DPM	9901	9.02E-06	2024	Phase 1b Office	UNMIT	Vertical_Onsite HHDT	PERIOD
O6	DPM	9901	4.35E-06	2025	Phase 1b Office	UNMIT	Vertical_Onsite HHDT	PERIOD
RS7	DPM	9901	1.31E-05	2024	Phase 1b Mixed Use	UNMIT	Foundations_Onsite HHDT	PERIOD
RS7	DPM	9901	3.21E-06	2024	Phase 1b Mixed Use	UNMIT	Core and Shell_Onsite HHDT	PERIOD
RS7	DPM	9901	4.23E-07	2024	Phase 1b Mixed Use	UNMIT	Tenant Improvements_Onsite HHDT	PERIOD
RS7	DPM	9901	4.06E-06	2025	Phase 1b Mixed Use	UNMIT	Tenant Improvements_Onsite HHDT	PERIOD
RS7	DPM	9901	4.13E-06	2025	Phase 1b Mixed Use	UNMIT	Landscaping_Onsite HHDT	PERIOD
RS6	DPM	9901	1.75E-05	2024	Phase 1b Mixed Use	UNMIT	Foundations_Onsite HHDT	PERIOD
RS6	DPM	9901	4.03E-06	2024	Phase 1b Mixed Use	UNMIT	Core and Shell_Onsite HHDT	PERIOD
RS6	DPM	9901	2.28E-06	2025	Phase 1b Mixed Use	UNMIT	Core and Shell_Onsite HHDT	PERIOD
RS6	DPM	9901	8.88E-06	2025	Phase 1b Mixed Use	UNMIT	Tenant Improvements_Onsite HHDT	PERIOD
RS6	DPM	9901	1.92E-06	2025	Phase 1b Mixed Use	UNMIT	Landscaping_Onsite HHDT	PERIOD
RS6	DPM	9901	2.17E-06	2026	Phase 1b Mixed Use	UNMIT	Landscaping_Onsite HHDT	PERIOD
PHS_2X	DPM	9901	5.54E-06	2023	Phase 2 Mixed Use	UNMIT	Grading and Utilities_Onsite HHDT	PERIOD
TUNNEL	DPM	9901	2.50E-05	2023	Phase 2 Mixed Use	UNMIT	Tunnel Construction_Onsite HHDT	PERIOD
TUNNEL	DPM	9901	1.17E-05	2024	Phase 2 Mixed Use	UNMIT	Tunnel Construction_Onsite HHDT	PERIOD
RS45	DPM	9901	6.66E-06	2024	Phase 2 Mixed Use	UNMIT	Foundations_Onsite HHDT	PERIOD
RS45	DPM	9901	2.62E-05	2025	Phase 2 Mixed Use	UNMIT	Foundations_Onsite HHDT	PERIOD
RS45	DPM	9901	9.90E-06	2025	Phase 2 Mixed Use	UNMIT	Core and Shell_Onsite HHDT	PERIOD
RS45	DPM	9901	1.78E-06	2025	Phase 2 Mixed Use	UNMIT	Tenant Improvements_Onsite HHDT	PERIOD
RS45	DPM	9901	1.18E-05	2026	Phase 2 Mixed Use	UNMIT	Tenant Improvements_Onsite HHDT	PERIOD
RS45	DPM	9901	7.99E-06	2026	Phase 2 Mixed Use	UNMIT	Landscaping_Onsite HHDT	PERIOD
RETAIL	DPM	9901	8.95E-06	2024	Alternate 1	UNMIT	Demolition_Onsite HHDT	PERIOD
RETAIL	DPM	9901	4.12E-07	2024	Alternate 1	UNMIT	Grading and Utilities_Onsite HHDT	PERIOD
RETAIL	DPM	9901	8.65E-06	2025	Alternate 1	UNMIT	Grading and Utilities_Onsite HHDT	PERIOD
RETAIL	DPM	9901	3.40E-06	2025	Alternate 1	UNMIT	Foundations_Onsite HHDT	PERIOD
RETAIL	DPM	9901	3.98E-06	2025	Alternate 1	UNMIT	Core and Shell_Onsite HHDT	PERIOD
RETAIL	DPM	9901	1.88E-06	2025	Alternate 1	UNMIT	Tenant Improvements_Onsite HHDT	PERIOD
PHS_1A	DPM	9901	1.03E-05	2021	Phase 1a	UNMIT	Demolition_Onsite LHDT1	PERIOD
PHS_1A	DPM	9901	5.63E-05	2022	Phase 1a	UNMIT	Demolition_Onsite LHDT1	PERIOD
PHS_1A	DPM	9901	1.52E-04	2022	Phase 1a	UNMIT	Grading and Utilities_Onsite LHDT1	PERIOD
RS2	DPM	9901	1.57E-05	2023	Phase 1a Mixed Use	UNMIT	Foundations_Onsite LHDT1	PERIOD
RS2	DPM	9901	1.25E-05	2023	Phase 1a Mixed Use	UNMIT	Core and Shell_Onsite LHDT1	PERIOD
RS2	DPM	9901	2.04E-05	2024	Phase 1a Mixed Use	UNMIT	Core and Shell_Onsite LHDT1	PERIOD
RS2	DPM	9901	1.74E-05	2024	Phase 1a Mixed Use	UNMIT	Tenant Improvements_Onsite LHDT1	PERIOD
RS2	DPM	9901	1.24E-05	2025	Phase 1a Mixed Use	UNMIT	Tenant Improvements_Onsite LHDT1	PERIOD
RS2	DPM	9901	5.95E-06	2025	Phase 1a Mixed Use	UNMIT	Landscaping_Onsite LHDT1	PERIOD

RS3	DPM	9901	1.56E-05	2023	Phase 1a Mixed Use	UNMIT	Foundations_Onsite LHDT1	PERIOD
RS3	DPM	9901	8.78E-08	2024	Phase 1a Mixed Use	UNMIT	Foundations_Onsite LHDT1	PERIOD
RS3	DPM	9901	3.16E-05	2024	Phase 1a Mixed Use	UNMIT	Core and Shell_Onsite LHDT1	PERIOD
RS3	DPM	9901	1.13E-05	2024	Phase 1a Mixed Use	UNMIT	Tenant Improvements_Onsite LHDT1	PERIOD
RS3	DPM	9901	2.26E-05	2025	Phase 1a Mixed Use	UNMIT	Tenant Improvements_Onsite LHDT1	PERIOD
RS3	DPM	9901	5.85E-06	2025	Phase 1a Mixed Use	UNMIT	Landscaping_Onsite LHDT1	PERIOD
NG	DPM	9901	3.44E-07	2022	Phase 1a Office	UNMIT	Vertical_Onsite LHDT1	PERIOD
NG	DPM	9901	5.12E-06	2023	Phase 1a Office	UNMIT	Vertical_Onsite LHDT1	PERIOD
O4	DPM	9901	4.23E-06	2023	Phase 1a Office	UNMIT	Vertical_Onsite LHDT1	PERIOD
O4	DPM	9901	4.55E-06	2024	Phase 1a Office	UNMIT	Vertical_Onsite LHDT1	PERIOD
MCP	DPM	9901	1.72E-06	2022	Phase 1a Office	UNMIT	Vertical_Onsite LHDT1	PERIOD
MCP	DPM	9901	1.26E-05	2023	Phase 1a Office	UNMIT	Vertical_Onsite LHDT1	PERIOD
MCP	DPM	9901	2.30E-05	2024	Phase 1a Office	UNMIT	Vertical_Onsite LHDT1	PERIOD
MCP	DPM	9901	2.11E-05	2025	Phase 1a Office	UNMIT	Vertical_Onsite LHDT1	PERIOD
MCP	DPM	9901	3.39E-06	2026	Phase 1a Office	UNMIT	Vertical_Onsite LHDT1	PERIOD
EXCAVATE	DPM	9901	4.58E-06	2022	Phase 1a Office	UNMIT	Hotel Excavation_Onsite LHDT1	PERIOD
EXCAVATE	DPM	9901	3.48E-05	2023	Phase 1a Office	UNMIT	Hotel Excavation_Onsite LHDT1	PERIOD
HTL	DPM	9901	1.08E-05	2024	Phase 1a Office	UNMIT	Vertical_Onsite LHDT1	PERIOD
HTL	DPM	9901	6.25E-06	2025	Phase 1a Office	UNMIT	Vertical_Onsite LHDT1	PERIOD
TS	DPM	9901	2.32E-05	2023	Phase 1a Office	UNMIT	Vertical_Onsite LHDT1	PERIOD
TS	DPM	9901	1.70E-05	2024	Phase 1a Office	UNMIT	Vertical_Onsite LHDT1	PERIOD
TS	DPM	9901	8.88E-06	2025	Phase 1a Office	UNMIT	Vertical_Onsite LHDT1	PERIOD
PHS_1B	DPM	9901	3.22E-05	2022	Phase 1b	UNMIT	Demolition_Onsite LHDT1	PERIOD
PHS_1B	DPM	9901	6.90E-05	2022	Phase 1b	UNMIT	Grading and Utilities_Onsite LHDT1	PERIOD
PHS_1B	DPM	9901	6.02E-05	2023	Phase 1b	UNMIT	Grading and Utilities_Onsite LHDT1	PERIOD
SG	DPM	9901	3.17E-06	2023	Phase 1b Office	UNMIT	Vertical_Onsite LHDT1	PERIOD
SG	DPM	9901	4.13E-06	2024	Phase 1b Office	UNMIT	Vertical_Onsite LHDT1	PERIOD
O3	DPM	9901	2.34E-06	2023	Phase 1b Office	UNMIT	Vertical_Onsite LHDT1	PERIOD
O3	DPM	9901	5.75E-06	2024	Phase 1b Office	UNMIT	Vertical_Onsite LHDT1	PERIOD
O3	DPM	9901	1.25E-06	2025	Phase 1b Office	UNMIT	Vertical_Onsite LHDT1	PERIOD
O1	DPM	9901	2.51E-06	2023	Phase 1b Office	UNMIT	Vertical_Onsite LHDT1	PERIOD
O1	DPM	9901	5.47E-06	2024	Phase 1b Office	UNMIT	Vertical_Onsite LHDT1	PERIOD
O2	DPM	9901	1.99E-06	2023	Phase 1b Office	UNMIT	Vertical_Onsite LHDT1	PERIOD
O2	DPM	9901	5.75E-06	2024	Phase 1b Office	UNMIT	Vertical_Onsite LHDT1	PERIOD
O2	DPM	9901	1.41E-07	2025	Phase 1b Office	UNMIT	Vertical_Onsite LHDT1	PERIOD
O5	DPM	9901	2.79E-06	2023	Phase 1b Office	UNMIT	Vertical_Onsite LHDT1	PERIOD
O5	DPM	9901	5.75E-06	2024	Phase 1b Office	UNMIT	Vertical_Onsite LHDT1	PERIOD
O5	DPM	9901	1.15E-06	2025	Phase 1b Office	UNMIT	Vertical_Onsite LHDT1	PERIOD
O6	DPM	9901	1.66E-06	2023	Phase 1b Office	UNMIT	Vertical_Onsite LHDT1	PERIOD
O6	DPM	9901	5.32E-06	2024	Phase 1b Office	UNMIT	Vertical_Onsite LHDT1	PERIOD
O6	DPM	9901	2.46E-06	2025	Phase 1b Office	UNMIT	Vertical_Onsite LHDT1	PERIOD
RS7	DPM	9901	1.02E-05	2024	Phase 1b Mixed Use	UNMIT	Foundations_Onsite LHDT1	PERIOD
RS7	DPM	9901	2.27E-05	2024	Phase 1b Mixed Use	UNMIT	Core and Shell_Onsite LHDT1	PERIOD
RS7	DPM	9901	2.02E-06	2024	Phase 1b Mixed Use	UNMIT	Tenant Improvements_Onsite LHDT1	PERIOD
RS7	DPM	9901	1.86E-05	2025	Phase 1b Mixed Use	UNMIT	Tenant Improvements_Onsite LHDT1	PERIOD
RS7	DPM	9901	5.85E-06	2025	Phase 1b Mixed Use	UNMIT	Landscaping_Onsite LHDT1	PERIOD
RS6	DPM	9901	1.02E-05	2024	Phase 1b Mixed Use	UNMIT	Foundations_Onsite LHDT1	PERIOD

RS6	DPM	9901	1.42E-05	2024	Phase 1b Mixed Use	UNMIT	Core and Shell_Onsite LHDT1	PERIOD
RS6	DPM	9901	7.75E-06	2025	Phase 1b Mixed Use	UNMIT	Core and Shell_Onsite LHDT1	PERIOD
RS6	DPM	9901	2.38E-05	2025	Phase 1b Mixed Use	UNMIT	Tenant Improvements_Onsite LHDT1	PERIOD
RS6	DPM	9901	2.72E-06	2025	Phase 1b Mixed Use	UNMIT	Landscaping_Onsite LHDT1	PERIOD
RS6	DPM	9901	3.01E-06	2026	Phase 1b Mixed Use	UNMIT	Landscaping_Onsite LHDT1	PERIOD
PHS_2X	DPM	9901	1.07E-05	2023	Phase 2 Mixed Use	UNMIT	Grading and Utilities_Onsite LHDT1	PERIOD
TUNNEL	DPM	9901	4.76E-05	2023	Phase 2 Mixed Use	UNMIT	Tunnel Construction_Onsite LHDT1	PERIOD
TUNNEL	DPM	9901	2.12E-05	2024	Phase 2 Mixed Use	UNMIT	Tunnel Construction_Onsite LHDT1	PERIOD
RS45	DPM	9901	2.11E-06	2024	Phase 2 Mixed Use	UNMIT	Foundations_Onsite LHDT1	PERIOD
RS45	DPM	9901	7.99E-06	2025	Phase 2 Mixed Use	UNMIT	Foundations_Onsite LHDT1	PERIOD
RS45	DPM	9901	4.49E-05	2025	Phase 2 Mixed Use	UNMIT	Core and Shell_Onsite LHDT1	PERIOD
RS45	DPM	9901	5.90E-06	2025	Phase 2 Mixed Use	UNMIT	Tenant Improvements_Onsite LHDT1	PERIOD
RS45	DPM	9901	3.83E-05	2026	Phase 2 Mixed Use	UNMIT	Tenant Improvements_Onsite LHDT1	PERIOD
RS45	DPM	9901	1.11E-05	2026	Phase 2 Mixed Use	UNMIT	Landscaping_Onsite LHDT1	PERIOD
RETAIL	DPM	9901	2.90E-06	2024	Alternate 1	UNMIT	Demolition_Onsite LHDT1	PERIOD
RETAIL	DPM	9901	1.76E-07	2024	Alternate 1	UNMIT	Grading and Utilities_Onsite LHDT1	PERIOD
RETAIL	DPM	9901	3.55E-06	2025	Alternate 1	UNMIT	Grading and Utilities_Onsite LHDT1	PERIOD
RETAIL	DPM	9901	8.88E-07	2025	Alternate 1	UNMIT	Foundations_Onsite LHDT1	PERIOD
RETAIL	DPM	9901	3.47E-06	2025	Alternate 1	UNMIT	Core and Shell_Onsite LHDT1	PERIOD
RETAIL	DPM	9901	1.80E-06	2025	Alternate 1	UNMIT	Tenant Improvements_Onsite LHDT1	PERIOD
RETAIL	DPM	9901	1.65E-06	2025	Alternate 1	MIT	Core and Shell_Forklifts	PERIOD
RETAIL	DPM	9901	4.44E-06	2025	Alternate 1	MIT	Core and Shell_Generator Sets	PERIOD
RETAIL	DPM	9901	5.25E-06	2025	Alternate 1	MIT	Core and Shell_Other Construction Equipment	PERIOD
RETAIL	DPM	9901	2.57E-05	2025	Alternate 1	MIT	Core and Shell_Pumps	PERIOD
RETAIL	DPM	9901	6.01E-06	2024	Alternate 1	MIT	Demolition_Air Compressors	PERIOD
RETAIL	DPM	9901	7.64E-06	2024	Alternate 1	MIT	Demolition_Excavators	PERIOD
RETAIL	DPM	9901	1.82E-06	2024	Alternate 1	MIT	Demolition_Generator Sets	PERIOD
RETAIL	DPM	9901	7.92E-06	2024	Alternate 1	MIT	Demolition_Other Construction Equipment	PERIOD
RETAIL	DPM	9901	3.95E-06	2024	Alternate 1	MIT	Demolition_Pressure Washers	PERIOD
RETAIL	DPM	9901	8.68E-06	2024	Alternate 1	MIT	Demolition_Tractors/Loaders/Backhoes	PERIOD
RETAIL	DPM	9901	8.42E-07	2025	Alternate 1	MIT	Foundations_Forklifts	PERIOD
RETAIL	DPM	9901	2.27E-06	2025	Alternate 1	MIT	Foundations_Generator Sets	PERIOD
RETAIL	DPM	9901	2.69E-06	2025	Alternate 1	MIT	Foundations_Other Construction Equipment	PERIOD
RETAIL	DPM	9901	8.76E-06	2025	Alternate 1	MIT	Foundations_Pumps	PERIOD
RETAIL	DPM	9901	5.79E-06	2025	Alternate 1	MIT	Foundations_Tractors/Loaders/Backhoes	PERIOD
RETAIL	DPM	9901	5.44E-07	2024	Alternate 1	MIT	Grading and Utilities_Excavators	PERIOD
RETAIL	DPM	9901	4.23E-08	2024	Alternate 1	MIT	Grading and Utilities_Forklifts	PERIOD
RETAIL	DPM	9901	7.37E-08	2024	Alternate 1	MIT	Grading and Utilities_Generator Sets	PERIOD
RETAIL	DPM	9901	1.89E-07	2024	Alternate 1	MIT	Grading and Utilities_Other Construction Equipment	PERIOD
RETAIL	DPM	9901	6.97E-09	2024	Alternate 1	MIT	Grading and Utilities_Pavers	PERIOD
RETAIL	DPM	9901	5.07E-07	2024	Alternate 1	MIT	Grading and Utilities_Tractors/Loaders/Backhoes	PERIOD
RETAIL	DPM	9901	9.57E-06	2025	Alternate 1	MIT	Grading and Utilities_Excavators	PERIOD
RETAIL	DPM	9901	6.31E-07	2025	Alternate 1	MIT	Grading and Utilities_Forklifts	PERIOD
RETAIL	DPM	9901	1.30E-06	2025	Alternate 1	MIT	Grading and Utilities_Generator Sets	PERIOD
RETAIL	DPM	9901	2.84E-06	2025	Alternate 1	MIT	Grading and Utilities_Other Construction Equipment	PERIOD
RETAIL	DPM	9901	1.23E-07	2025	Alternate 1	MIT	Grading and Utilities_Pavers	PERIOD
RETAIL	DPM	9901	7.58E-06	2025	Alternate 1	MIT	Grading and Utilities_Tractors/Loaders/Backhoes	PERIOD

RETAIL	DPM	9901	1.26E-06	2025	Alternate 1	MIT	Tenant Improvements_Forklifts	PERIOD
RETAIL	DPM	9901	2.90E-06	2025	Alternate 1	MIT	Tenant Improvements_Generator Sets	PERIOD
RETAIL	DPM	9901	8.06E-06	2025	Alternate 1	MIT	Tenant Improvements_Other Construction Equipment	PERIOD
PHS_1A	DPM	9901	3.55E-06	2021	Phase 1a	MIT	Demolition_Air Compressors	PERIOD
PHS_1A	DPM	9901	0.00E+00	2021	Phase 1a	MIT	Demolition_Crushing/Proc. Equipment	PERIOD
PHS_1A	DPM	9901	1.81E-05	2021	Phase 1a	MIT	Demolition_Excavators	PERIOD
PHS_1A	DPM	9901	2.16E-06	2021	Phase 1a	MIT	Demolition_Generator Sets	PERIOD
PHS_1A	DPM	9901	4.68E-06	2021	Phase 1a	MIT	Demolition_Other Construction Equipment	PERIOD
PHS_1A	DPM	9901	2.33E-06	2021	Phase 1a	MIT	Demolition_Pressure Washers	PERIOD
PHS_1A	DPM	9901	2.68E-05	2021	Phase 1a	MIT	Demolition_Tractors/Loaders/Backhoes	PERIOD
PHS_1A	DPM	9901	2.30E-05	2022	Phase 1a	MIT	Demolition_Air Compressors	PERIOD
PHS_1A	DPM	9901	0.00E+00	2022	Phase 1a	MIT	Demolition_Crushing/Proc. Equipment	PERIOD
PHS_1A	DPM	9901	1.17E-04	2022	Phase 1a	MIT	Demolition_Excavators	PERIOD
PHS_1A	DPM	9901	1.39E-05	2022	Phase 1a	MIT	Demolition_Generator Sets	PERIOD
PHS_1A	DPM	9901	3.02E-05	2022	Phase 1a	MIT	Demolition_Other Construction Equipment	PERIOD
PHS_1A	DPM	9901	1.51E-05	2022	Phase 1a	MIT	Demolition_Pressure Washers	PERIOD
PHS_1A	DPM	9901	1.73E-04	2022	Phase 1a	MIT	Demolition_Tractors/Loaders/Backhoes	PERIOD
PHS_1A	DPM	9901	3.11E-04	2022	Phase 1a	MIT	Grading and Utilities_Excavators	PERIOD
PHS_1A	DPM	9901	7.98E-05	2022	Phase 1a	MIT	Grading and Utilities_Forklifts	PERIOD
PHS_1A	DPM	9901	1.05E-05	2022	Phase 1a	MIT	Grading and Utilities_Generator Sets	PERIOD
PHS_1A	DPM	9901	4.19E-05	2022	Phase 1a	MIT	Grading and Utilities_Graders	PERIOD
PHS_1A	DPM	9901	5.64E-05	2022	Phase 1a	MIT	Grading and Utilities_Other Construction Equipment	PERIOD
PHS_1A	DPM	9901	1.99E-06	2022	Phase 1a	MIT	Grading and Utilities_Pavers	PERIOD
PHS_1A	DPM	9901	1.02E-05	2022	Phase 1a	MIT	Grading and Utilities_Scrapers	PERIOD
PHS_1A	DPM	9901	3.86E-04	2022	Phase 1a	MIT	Grading and Utilities_Tractors/Loaders/Backhoes	PERIOD
RS2	DPM	9901	0.00E+00	2023	Phase 1a Mixed Use	MIT	Core and Shell_Aerial Lifts	PERIOD
RS2	DPM	9901	0.00E+00	2023	Phase 1a Mixed Use	MIT	Core and Shell_Air Compressors	PERIOD
RS2	DPM	9901	1.48E-05	2023	Phase 1a Mixed Use	MIT	Core and Shell_Cranes	PERIOD
RS2	DPM	9901	3.61E-06	2023	Phase 1a Mixed Use	MIT	Core and Shell_Forklifts	PERIOD
RS2	DPM	9901	0.00E+00	2023	Phase 1a Mixed Use	MIT	Core and Shell_Generator Sets	PERIOD
RS2	DPM	9901	1.15E-05	2023	Phase 1a Mixed Use	MIT	Core and Shell_Other Construction Equipment	PERIOD
RS2	DPM	9901	0.00E+00	2023	Phase 1a Mixed Use	MIT	Core and Shell_Pumps	PERIOD
RS2	DPM	9901	0.00E+00	2024	Phase 1a Mixed Use	MIT	Core and Shell_Aerial Lifts	PERIOD
RS2	DPM	9901	0.00E+00	2024	Phase 1a Mixed Use	MIT	Core and Shell_Air Compressors	PERIOD
RS2	DPM	9901	2.68E-05	2024	Phase 1a Mixed Use	MIT	Core and Shell_Cranes	PERIOD
RS2	DPM	9901	6.54E-06	2024	Phase 1a Mixed Use	MIT	Core and Shell_Forklifts	PERIOD
RS2	DPM	9901	0.00E+00	2024	Phase 1a Mixed Use	MIT	Core and Shell_Generator Sets	PERIOD
RS2	DPM	9901	2.09E-05	2024	Phase 1a Mixed Use	MIT	Core and Shell_Other Construction Equipment	PERIOD
RS2	DPM	9901	0.00E+00	2024	Phase 1a Mixed Use	MIT	Core and Shell_Pumps	PERIOD
RS2	DPM	9901	0.00E+00	2023	Phase 1a Mixed Use	MIT	Foundations_Bore/Drill Rigs	PERIOD
RS2	DPM	9901	1.67E-05	2023	Phase 1a Mixed Use	MIT	Foundations_Cranes	PERIOD
RS2	DPM	9901	3.73E-05	2023	Phase 1a Mixed Use	MIT	Foundations_Excavators	PERIOD
RS2	DPM	9901	9.07E-06	2023	Phase 1a Mixed Use	MIT	Foundations_Forklifts	PERIOD
RS2	DPM	9901	0.00E+00	2023	Phase 1a Mixed Use	MIT	Foundations_Generator Sets	PERIOD
RS2	DPM	9901	2.90E-05	2023	Phase 1a Mixed Use	MIT	Foundations_Other Construction Equipment	PERIOD
RS2	DPM	9901	5.34E-05	2023	Phase 1a Mixed Use	MIT	Foundations_Pumps	PERIOD
RS2	DPM	9901	6.24E-05	2023	Phase 1a Mixed Use	MIT	Foundations_Tractors/Loaders/Backhoes	PERIOD

RS2	DPM	9901	3.75E-06	2025	Phase 1a Mixed Use	MIT	Landscaping_Excavators	PERIOD
RS2	DPM	9901	0.00E+00	2025	Phase 1a Mixed Use	MIT	Landscaping_Generator Sets	PERIOD
RS2	DPM	9901	7.21E-06	2025	Phase 1a Mixed Use	MIT	Landscaping_Other Construction Equipment	PERIOD
RS2	DPM	9901	2.06E-05	2025	Phase 1a Mixed Use	MIT	Landscaping_Tractors/Loaders/Backhoes	PERIOD
RS2	DPM	9901	8.28E-06	2024	Phase 1a Mixed Use	MIT	Tenant Improvements_Forklifts	PERIOD
RS2	DPM	9901	0.00E+00	2024	Phase 1a Mixed Use	MIT	Tenant Improvements_Generator Sets	PERIOD
RS2	DPM	9901	2.64E-05	2024	Phase 1a Mixed Use	MIT	Tenant Improvements_Other Construction Equipment	PERIOD
RS2	DPM	9901	4.36E-06	2025	Phase 1a Mixed Use	MIT	Tenant Improvements_Forklifts	PERIOD
RS2	DPM	9901	0.00E+00	2025	Phase 1a Mixed Use	MIT	Tenant Improvements_Generator Sets	PERIOD
RS2	DPM	9901	1.39E-05	2025	Phase 1a Mixed Use	MIT	Tenant Improvements_Other Construction Equipment	PERIOD
RS3	DPM	9901	0.00E+00	2024	Phase 1a Mixed Use	MIT	Core and Shell_Aerial Lifts	PERIOD
RS3	DPM	9901	0.00E+00	2024	Phase 1a Mixed Use	MIT	Core and Shell_Air Compressors	PERIOD
RS3	DPM	9901	4.16E-05	2024	Phase 1a Mixed Use	MIT	Core and Shell_Cranes	PERIOD
RS3	DPM	9901	2.03E-05	2024	Phase 1a Mixed Use	MIT	Core and Shell_Forklifts	PERIOD
RS3	DPM	9901	0.00E+00	2024	Phase 1a Mixed Use	MIT	Core and Shell_Generator Sets	PERIOD
RS3	DPM	9901	3.24E-05	2024	Phase 1a Mixed Use	MIT	Core and Shell_Other Construction Equipment	PERIOD
RS3	DPM	9901	0.00E+00	2024	Phase 1a Mixed Use	MIT	Core and Shell_Pumps	PERIOD
RS3	DPM	9901	0.00E+00	2023	Phase 1a Mixed Use	MIT	Foundations_Bore/Drill Rigs	PERIOD
RS3	DPM	9901	1.66E-05	2023	Phase 1a Mixed Use	MIT	Foundations_Cranes	PERIOD
RS3	DPM	9901	3.70E-05	2023	Phase 1a Mixed Use	MIT	Foundations_Excavators	PERIOD
RS3	DPM	9901	9.02E-06	2023	Phase 1a Mixed Use	MIT	Foundations_Forklifts	PERIOD
RS3	DPM	9901	0.00E+00	2023	Phase 1a Mixed Use	MIT	Foundations_Generator Sets	PERIOD
RS3	DPM	9901	2.88E-05	2023	Phase 1a Mixed Use	MIT	Foundations_Other Construction Equipment	PERIOD
RS3	DPM	9901	5.31E-05	2023	Phase 1a Mixed Use	MIT	Foundations_Pumps	PERIOD
RS3	DPM	9901	9.24E-05	2023	Phase 1a Mixed Use	MIT	Foundations_Tractors/Loaders/Backhoes	PERIOD
RS3	DPM	9901	0.00E+00	2024	Phase 1a Mixed Use	MIT	Foundations_Bore/Drill Rigs	PERIOD
RS3	DPM	9901	1.04E-07	2024	Phase 1a Mixed Use	MIT	Foundations_Cranes	PERIOD
RS3	DPM	9901	2.31E-07	2024	Phase 1a Mixed Use	MIT	Foundations_Excavators	PERIOD
RS3	DPM	9901	5.64E-08	2024	Phase 1a Mixed Use	MIT	Foundations_Forklifts	PERIOD
RS3	DPM	9901	0.00E+00	2024	Phase 1a Mixed Use	MIT	Foundations_Generator Sets	PERIOD
RS3	DPM	9901	1.80E-07	2024	Phase 1a Mixed Use	MIT	Foundations_Other Construction Equipment	PERIOD
RS3	DPM	9901	3.32E-07	2024	Phase 1a Mixed Use	MIT	Foundations_Pumps	PERIOD
RS3	DPM	9901	5.78E-07	2024	Phase 1a Mixed Use	MIT	Foundations_Tractors/Loaders/Backhoes	PERIOD
RS3	DPM	9901	3.69E-06	2025	Phase 1a Mixed Use	MIT	Landscaping_Excavators	PERIOD
RS3	DPM	9901	0.00E+00	2025	Phase 1a Mixed Use	MIT	Landscaping_Generator Sets	PERIOD
RS3	DPM	9901	0.00E+00	2025	Phase 1a Mixed Use	MIT	Landscaping_Other Construction Equipment	PERIOD
RS3	DPM	9901	2.80E-05	2025	Phase 1a Mixed Use	MIT	Landscaping_Tractors/Loaders/Backhoes	PERIOD
RS3	DPM	9901	4.62E-06	2024	Phase 1a Mixed Use	MIT	Tenant Improvements_Forklifts	PERIOD
RS3	DPM	9901	0.00E+00	2024	Phase 1a Mixed Use	MIT	Tenant Improvements_Generator Sets	PERIOD
RS3	DPM	9901	1.48E-05	2024	Phase 1a Mixed Use	MIT	Tenant Improvements_Other Construction Equipment	PERIOD
RS3	DPM	9901	6.81E-06	2025	Phase 1a Mixed Use	MIT	Tenant Improvements_Forklifts	PERIOD
RS3	DPM	9901	0.00E+00	2025	Phase 1a Mixed Use	MIT	Tenant Improvements_Generator Sets	PERIOD
RS3	DPM	9901	2.17E-05	2025	Phase 1a Mixed Use	MIT	Tenant Improvements_Other Construction Equipment	PERIOD
HTL	DPM	9901	6.78E-05	2024	Phase 1a Office	MIT	Vertical_Aerial Lifts	PERIOD
HTL	DPM	9901	3.66E-05	2024	Phase 1a Office	MIT	Vertical_Air Compressors	PERIOD
HTL	DPM	9901	0.00E+00	2024	Phase 1a Office	MIT	Vertical_Bore/Drill Rigs	PERIOD
HTL	DPM	9901	0.00E+00	2024	Phase 1a Office	MIT	Vertical_Cranes	PERIOD

HTL	DPM	9901	0.00E+00	2024	Phase 1a Office	MIT	Vertical_Crushing/Proc. Equipment	PERIOD
HTL	DPM	9901	0.00E+00	2024	Phase 1a Office	MIT	Vertical_Excavators	PERIOD
HTL	DPM	9901	1.22E-04	2024	Phase 1a Office	MIT	Vertical_Forklifts	PERIOD
HTL	DPM	9901	0.00E+00	2024	Phase 1a Office	MIT	Vertical_Generator Sets	PERIOD
HTL	DPM	9901	0.00E+00	2024	Phase 1a Office	MIT	Vertical_Graders	PERIOD
HTL	DPM	9901	1.31E-05	2024	Phase 1a Office	MIT	Vertical_Other Construction Equipment	PERIOD
HTL	DPM	9901	0.00E+00	2024	Phase 1a Office	MIT	Vertical_Pavers	PERIOD
HTL	DPM	9901	1.18E-07	2024	Phase 1a Office	MIT	Vertical_Pressure Washers	PERIOD
HTL	DPM	9901	1.45E-04	2024	Phase 1a Office	MIT	Vertical_Pumps	PERIOD
HTL	DPM	9901	0.00E+00	2024	Phase 1a Office	MIT	Vertical_Scrapers	PERIOD
HTL	DPM	9901	0.00E+00	2024	Phase 1a Office	MIT	Vertical_Tractors/Loaders/Backhoes	PERIOD
HTL	DPM	9901	3.58E-05	2025	Phase 1a Office	MIT	Vertical_Aerial Lifts	PERIOD
HTL	DPM	9901	6.68E-06	2025	Phase 1a Office	MIT	Vertical_Air Compressors	PERIOD
HTL	DPM	9901	0.00E+00	2025	Phase 1a Office	MIT	Vertical_Bore/Drill Rigs	PERIOD
HTL	DPM	9901	0.00E+00	2025	Phase 1a Office	MIT	Vertical_Cranes	PERIOD
HTL	DPM	9901	0.00E+00	2025	Phase 1a Office	MIT	Vertical_Crushing/Proc. Equipment	PERIOD
HTL	DPM	9901	0.00E+00	2025	Phase 1a Office	MIT	Vertical_Excavators	PERIOD
HTL	DPM	9901	8.65E-05	2025	Phase 1a Office	MIT	Vertical_Forklifts	PERIOD
HTL	DPM	9901	0.00E+00	2025	Phase 1a Office	MIT	Vertical_Generator Sets	PERIOD
HTL	DPM	9901	0.00E+00	2025	Phase 1a Office	MIT	Vertical_Graders	PERIOD
HTL	DPM	9901	7.89E-06	2025	Phase 1a Office	MIT	Vertical_Other Construction Equipment	PERIOD
HTL	DPM	9901	0.00E+00	2025	Phase 1a Office	MIT	Vertical_Pavers	PERIOD
HTL	DPM	9901	1.80E-08	2025	Phase 1a Office	MIT	Vertical_Pressure Washers	PERIOD
HTL	DPM	9901	2.85E-05	2025	Phase 1a Office	MIT	Vertical_Pumps	PERIOD
HTL	DPM	9901	0.00E+00	2025	Phase 1a Office	MIT	Vertical_Scrapers	PERIOD
HTL	DPM	9901	0.00E+00	2025	Phase 1a Office	MIT	Vertical_Tractors/Loaders/Backhoes	PERIOD
EXCAVATE	DPM	9901	1.14E-06	2022	Phase 1a Office	MIT	Hotel Excavation_Aerial Lifts	PERIOD
EXCAVATE	DPM	9901	7.74E-06	2022	Phase 1a Office	MIT	Hotel Excavation_Air Compressors	PERIOD
EXCAVATE	DPM	9901	1.11E-04	2022	Phase 1a Office	MIT	Hotel Excavation_Bore/Drill Rigs	PERIOD
EXCAVATE	DPM	9901	1.47E-05	2022	Phase 1a Office	MIT	Hotel Excavation_Cranes	PERIOD
EXCAVATE	DPM	9901	0.00E+00	2022	Phase 1a Office	MIT	Hotel Excavation_Crushing/Proc. Equipment	PERIOD
EXCAVATE	DPM	9901	7.76E-05	2022	Phase 1a Office	MIT	Hotel Excavation_Excavators	PERIOD
EXCAVATE	DPM	9901	1.43E-05	2022	Phase 1a Office	MIT	Hotel Excavation_Forklifts	PERIOD
EXCAVATE	DPM	9901	6.80E-06	2022	Phase 1a Office	MIT	Hotel Excavation_Generator Sets	PERIOD
EXCAVATE	DPM	9901	0.00E+00	2022	Phase 1a Office	MIT	Hotel Excavation_Graders	PERIOD
EXCAVATE	DPM	9901	6.15E-06	2022	Phase 1a Office	MIT	Hotel Excavation_Other Construction Equipment	PERIOD
EXCAVATE	DPM	9901	0.00E+00	2022	Phase 1a Office	MIT	Hotel Excavation_Pavers	PERIOD
EXCAVATE	DPM	9901	0.00E+00	2022	Phase 1a Office	MIT	Hotel Excavation_Pressure Washers	PERIOD
EXCAVATE	DPM	9901	4.91E-06	2022	Phase 1a Office	MIT	Hotel Excavation_Pumps	PERIOD
EXCAVATE	DPM	9901	0.00E+00	2022	Phase 1a Office	MIT	Hotel Excavation_Scrapers	PERIOD
EXCAVATE	DPM	9901	4.12E-05	2022	Phase 1a Office	MIT	Hotel Excavation_Tractors/Loaders/Backhoes	PERIOD
EXCAVATE	DPM	9901	1.67E-06	2023	Phase 1a Office	MIT	Hotel Excavation_Aerial Lifts	PERIOD
EXCAVATE	DPM	9901	4.14E-05	2023	Phase 1a Office	MIT	Hotel Excavation_Air Compressors	PERIOD
EXCAVATE	DPM	9901	0.00E+00	2023	Phase 1a Office	MIT	Hotel Excavation_Bore/Drill Rigs	PERIOD
EXCAVATE	DPM	9901	3.15E-04	2023	Phase 1a Office	MIT	Hotel Excavation_Cranes	PERIOD
EXCAVATE	DPM	9901	0.00E+00	2023	Phase 1a Office	MIT	Hotel Excavation_Crushing/Proc. Equipment	PERIOD
EXCAVATE	DPM	9901	1.14E-04	2023	Phase 1a Office	MIT	Hotel Excavation_Excavators	PERIOD

EXCAVATE	DPM	9901	1.59E-04	2023	Phase 1a Office	MIT	Hotel Excavation_Forklifts	PERIOD
EXCAVATE	DPM	9901	7.56E-05	2023	Phase 1a Office	MIT	Hotel Excavation_Generator Sets	PERIOD
EXCAVATE	DPM	9901	0.00E+00	2023	Phase 1a Office	MIT	Hotel Excavation_Graders	PERIOD
EXCAVATE	DPM	9901	2.38E-05	2023	Phase 1a Office	MIT	Hotel Excavation_Other Construction Equipment	PERIOD
EXCAVATE	DPM	9901	0.00E+00	2023	Phase 1a Office	MIT	Hotel Excavation_Pavers	PERIOD
EXCAVATE	DPM	9901	1.33E-07	2023	Phase 1a Office	MIT	Hotel Excavation_Pressure Washers	PERIOD
EXCAVATE	DPM	9901	1.64E-04	2023	Phase 1a Office	MIT	Hotel Excavation_Pumps	PERIOD
EXCAVATE	DPM	9901	0.00E+00	2023	Phase 1a Office	MIT	Hotel Excavation_Scrapers	PERIOD
EXCAVATE	DPM	9901	4.28E-05	2023	Phase 1a Office	MIT	Hotel Excavation_Tractors/Loaders/Backhoes	PERIOD
MCP	DPM	9901	0.00E+00	2022	Phase 1a Office	MIT	Vertical_Aerial Lifts	PERIOD
MCP	DPM	9901	0.00E+00	2022	Phase 1a Office	MIT	Vertical_Air Compressors	PERIOD
MCP	DPM	9901	3.29E-05	2022	Phase 1a Office	MIT	Vertical_Bore/Drill Rigs	PERIOD
MCP	DPM	9901	8.74E-06	2022	Phase 1a Office	MIT	Vertical_Cranes	PERIOD
MCP	DPM	9901	0.00E+00	2022	Phase 1a Office	MIT	Vertical_Crushing/Proc. Equipment	PERIOD
MCP	DPM	9901	1.55E-04	2022	Phase 1a Office	MIT	Vertical_Excavators	PERIOD
MCP	DPM	9901	2.14E-05	2022	Phase 1a Office	MIT	Vertical_Forklifts	PERIOD
MCP	DPM	9901	6.80E-06	2022	Phase 1a Office	MIT	Vertical_Generator Sets	PERIOD
MCP	DPM	9901	0.00E+00	2022	Phase 1a Office	MIT	Vertical_Graders	PERIOD
MCP	DPM	9901	4.22E-06	2022	Phase 1a Office	MIT	Vertical_Other Construction Equipment	PERIOD
MCP	DPM	9901	0.00E+00	2022	Phase 1a Office	MIT	Vertical_Pavers	PERIOD
MCP	DPM	9901	0.00E+00	2022	Phase 1a Office	MIT	Vertical_Pressure Washers	PERIOD
MCP	DPM	9901	0.00E+00	2022	Phase 1a Office	MIT	Vertical_Pumps	PERIOD
MCP	DPM	9901	0.00E+00	2022	Phase 1a Office	MIT	Vertical_Scrapers	PERIOD
MCP	DPM	9901	4.97E-05	2022	Phase 1a Office	MIT	Vertical_Tractors/Loaders/Backhoes	PERIOD
MCP	DPM	9901	4.28E-06	2023	Phase 1a Office	MIT	Vertical_Aerial Lifts	PERIOD
MCP	DPM	9901	5.52E-06	2023	Phase 1a Office	MIT	Vertical_Air Compressors	PERIOD
MCP	DPM	9901	1.30E-04	2023	Phase 1a Office	MIT	Vertical_Bore/Drill Rigs	PERIOD
MCP	DPM	9901	2.49E-04	2023	Phase 1a Office	MIT	Vertical_Cranes	PERIOD
MCP	DPM	9901	0.00E+00	2023	Phase 1a Office	MIT	Vertical_Crushing/Proc. Equipment	PERIOD
MCP	DPM	9901	2.25E-04	2023	Phase 1a Office	MIT	Vertical_Excavators	PERIOD
MCP	DPM	9901	1.16E-04	2023	Phase 1a Office	MIT	Vertical_Forklifts	PERIOD
MCP	DPM	9901	4.83E-05	2023	Phase 1a Office	MIT	Vertical_Generator Sets	PERIOD
MCP	DPM	9901	0.00E+00	2023	Phase 1a Office	MIT	Vertical_Graders	PERIOD
MCP	DPM	9901	1.41E-05	2023	Phase 1a Office	MIT	Vertical_Other Construction Equipment	PERIOD
MCP	DPM	9901	0.00E+00	2023	Phase 1a Office	MIT	Vertical_Pavers	PERIOD
MCP	DPM	9901	4.44E-07	2023	Phase 1a Office	MIT	Vertical_Pressure Washers	PERIOD
MCP	DPM	9901	2.19E-05	2023	Phase 1a Office	MIT	Vertical_Pumps	PERIOD
MCP	DPM	9901	0.00E+00	2023	Phase 1a Office	MIT	Vertical_Scrapers	PERIOD
MCP	DPM	9901	1.65E-04	2023	Phase 1a Office	MIT	Vertical_Tractors/Loaders/Backhoes	PERIOD
MCP	DPM	9901	9.37E-05	2024	Phase 1a Office	MIT	Vertical_Aerial Lifts	PERIOD
MCP	DPM	9901	0.00E+00	2024	Phase 1a Office	MIT	Vertical_Air Compressors	PERIOD
MCP	DPM	9901	0.00E+00	2024	Phase 1a Office	MIT	Vertical_Bore/Drill Rigs	PERIOD
MCP	DPM	9901	1.75E-05	2024	Phase 1a Office	MIT	Vertical_Cranes	PERIOD
MCP	DPM	9901	0.00E+00	2024	Phase 1a Office	MIT	Vertical_Crushing/Proc. Equipment	PERIOD
MCP	DPM	9901	0.00E+00	2024	Phase 1a Office	MIT	Vertical_Excavators	PERIOD
MCP	DPM	9901	1.56E-04	2024	Phase 1a Office	MIT	Vertical_Forklifts	PERIOD
MCP	DPM	9901	0.00E+00	2024	Phase 1a Office	MIT	Vertical_Generator Sets	PERIOD

MCP	DPM	9901	0.00E+00	2024	Phase 1a Office	MIT	Vertical_Graders	PERIOD
MCP	DPM	9901	0.00E+00	2024	Phase 1a Office	MIT	Vertical_Other Construction Equipment	PERIOD
MCP	DPM	9901	0.00E+00	2024	Phase 1a Office	MIT	Vertical_Pavers	PERIOD
MCP	DPM	9901	0.00E+00	2024	Phase 1a Office	MIT	Vertical_Pressure Washers	PERIOD
MCP	DPM	9901	0.00E+00	2024	Phase 1a Office	MIT	Vertical_Pumps	PERIOD
MCP	DPM	9901	0.00E+00	2024	Phase 1a Office	MIT	Vertical_Scrapers	PERIOD
MCP	DPM	9901	0.00E+00	2024	Phase 1a Office	MIT	Vertical_Tractors/Loaders/Backhoes	PERIOD
MCP	DPM	9901	2.84E-05	2025	Phase 1a Office	MIT	Vertical_Aerial Lifts	PERIOD
MCP	DPM	9901	0.00E+00	2025	Phase 1a Office	MIT	Vertical_Air Compressors	PERIOD
MCP	DPM	9901	0.00E+00	2025	Phase 1a Office	MIT	Vertical_Bore/Drill Rigs	PERIOD
MCP	DPM	9901	2.13E-05	2025	Phase 1a Office	MIT	Vertical_Cranes	PERIOD
MCP	DPM	9901	0.00E+00	2025	Phase 1a Office	MIT	Vertical_Crushing/Proc. Equipment	PERIOD
MCP	DPM	9901	0.00E+00	2025	Phase 1a Office	MIT	Vertical_Excavators	PERIOD
MCP	DPM	9901	1.43E-04	2025	Phase 1a Office	MIT	Vertical_Forklifts	PERIOD
MCP	DPM	9901	0.00E+00	2025	Phase 1a Office	MIT	Vertical_Generator Sets	PERIOD
MCP	DPM	9901	0.00E+00	2025	Phase 1a Office	MIT	Vertical_Graders	PERIOD
MCP	DPM	9901	0.00E+00	2025	Phase 1a Office	MIT	Vertical_Other Construction Equipment	PERIOD
MCP	DPM	9901	0.00E+00	2025	Phase 1a Office	MIT	Vertical_Pavers	PERIOD
MCP	DPM	9901	0.00E+00	2025	Phase 1a Office	MIT	Vertical_Pressure Washers	PERIOD
MCP	DPM	9901	0.00E+00	2025	Phase 1a Office	MIT	Vertical_Pumps	PERIOD
MCP	DPM	9901	0.00E+00	2025	Phase 1a Office	MIT	Vertical_Scrapers	PERIOD
MCP	DPM	9901	0.00E+00	2025	Phase 1a Office	MIT	Vertical_Tractors/Loaders/Backhoes	PERIOD
MCP	DPM	9901	0.00E+00	2026	Phase 1a Office	MIT	Vertical_Aerial Lifts	PERIOD
MCP	DPM	9901	0.00E+00	2026	Phase 1a Office	MIT	Vertical_Air Compressors	PERIOD
MCP	DPM	9901	0.00E+00	2026	Phase 1a Office	MIT	Vertical_Bore/Drill Rigs	PERIOD
MCP	DPM	9901	2.86E-05	2026	Phase 1a Office	MIT	Vertical_Cranes	PERIOD
MCP	DPM	9901	0.00E+00	2026	Phase 1a Office	MIT	Vertical_Crushing/Proc. Equipment	PERIOD
MCP	DPM	9901	0.00E+00	2026	Phase 1a Office	MIT	Vertical_Excavators	PERIOD
MCP	DPM	9901	2.51E-05	2026	Phase 1a Office	MIT	Vertical_Forklifts	PERIOD
MCP	DPM	9901	0.00E+00	2026	Phase 1a Office	MIT	Vertical_Generator Sets	PERIOD
MCP	DPM	9901	0.00E+00	2026	Phase 1a Office	MIT	Vertical_Graders	PERIOD
MCP	DPM	9901	0.00E+00	2026	Phase 1a Office	MIT	Vertical_Other Construction Equipment	PERIOD
MCP	DPM	9901	0.00E+00	2026	Phase 1a Office	MIT	Vertical_Pavers	PERIOD
MCP	DPM	9901	0.00E+00	2026	Phase 1a Office	MIT	Vertical_Pressure Washers	PERIOD
MCP	DPM	9901	0.00E+00	2026	Phase 1a Office	MIT	Vertical_Pumps	PERIOD
MCP	DPM	9901	0.00E+00	2026	Phase 1a Office	MIT	Vertical_Scrapers	PERIOD
MCP	DPM	9901	0.00E+00	2026	Phase 1a Office	MIT	Vertical_Tractors/Loaders/Backhoes	PERIOD
NG	DPM	9901	0.00E+00	2022	Phase 1a Office	MIT	Vertical_Aerial Lifts	PERIOD
NG	DPM	9901	1.37E-06	2022	Phase 1a Office	MIT	Vertical_Air Compressors	PERIOD
NG	DPM	9901	4.33E-05	2022	Phase 1a Office	MIT	Vertical_Bore/Drill Rigs	PERIOD
NG	DPM	9901	1.63E-05	2022	Phase 1a Office	MIT	Vertical_Cranes	PERIOD
NG	DPM	9901	0.00E+00	2022	Phase 1a Office	MIT	Vertical_Crushing/Proc. Equipment	PERIOD
NG	DPM	9901	7.76E-05	2022	Phase 1a Office	MIT	Vertical_Excavators	PERIOD
NG	DPM	9901	7.15E-06	2022	Phase 1a Office	MIT	Vertical_Forklifts	PERIOD
NG	DPM	9901	5.47E-06	2022	Phase 1a Office	MIT	Vertical_Generator Sets	PERIOD
NG	DPM	9901	0.00E+00	2022	Phase 1a Office	MIT	Vertical_Graders	PERIOD
NG	DPM	9901	2.47E-06	2022	Phase 1a Office	MIT	Vertical_Other Construction Equipment	PERIOD

NG	DPM	9901	0.00E+00	2022	Phase 1a Office	MIT	Vertical_Pavers	PERIOD
NG	DPM	9901	0.00E+00	2022	Phase 1a Office	MIT	Vertical_Pressure Washers	PERIOD
NG	DPM	9901	3.83E-06	2022	Phase 1a Office	MIT	Vertical_Pumps	PERIOD
NG	DPM	9901	0.00E+00	2022	Phase 1a Office	MIT	Vertical_Scrapers	PERIOD
NG	DPM	9901	1.08E-05	2022	Phase 1a Office	MIT	Vertical_Tractors/Loaders/Backhoes	PERIOD
NG	DPM	9901	6.39E-06	2023	Phase 1a Office	MIT	Vertical_Aerial Lifts	PERIOD
NG	DPM	9901	8.67E-06	2023	Phase 1a Office	MIT	Vertical_Air Compressors	PERIOD
NG	DPM	9901	0.00E+00	2023	Phase 1a Office	MIT	Vertical_Bore/Drill Rigs	PERIOD
NG	DPM	9901	1.72E-04	2023	Phase 1a Office	MIT	Vertical_Cranes	PERIOD
NG	DPM	9901	0.00E+00	2023	Phase 1a Office	MIT	Vertical_Crushing/Proc. Equipment	PERIOD
NG	DPM	9901	1.89E-05	2023	Phase 1a Office	MIT	Vertical_Excavators	PERIOD
NG	DPM	9901	4.52E-05	2023	Phase 1a Office	MIT	Vertical_Forklifts	PERIOD
NG	DPM	9901	1.26E-05	2023	Phase 1a Office	MIT	Vertical_Generator Sets	PERIOD
NG	DPM	9901	0.00E+00	2023	Phase 1a Office	MIT	Vertical_Graders	PERIOD
NG	DPM	9901	1.94E-05	2023	Phase 1a Office	MIT	Vertical_Other Construction Equipment	PERIOD
NG	DPM	9901	0.00E+00	2023	Phase 1a Office	MIT	Vertical_Pavers	PERIOD
NG	DPM	9901	3.55E-07	2023	Phase 1a Office	MIT	Vertical_Pressure Washers	PERIOD
NG	DPM	9901	4.13E-05	2023	Phase 1a Office	MIT	Vertical_Pumps	PERIOD
NG	DPM	9901	0.00E+00	2023	Phase 1a Office	MIT	Vertical_Scrapers	PERIOD
NG	DPM	9901	4.34E-06	2023	Phase 1a Office	MIT	Vertical_Tractors/Loaders/Backhoes	PERIOD
O4	DPM	9901	3.34E-05	2023	Phase 1a Office	MIT	Vertical_Aerial Lifts	PERIOD
O4	DPM	9901	8.28E-07	2023	Phase 1a Office	MIT	Vertical_Air Compressors	PERIOD
O4	DPM	9901	4.33E-05	2023	Phase 1a Office	MIT	Vertical_Bore/Drill Rigs	PERIOD
O4	DPM	9901	5.80E-05	2023	Phase 1a Office	MIT	Vertical_Cranes	PERIOD
O4	DPM	9901	0.00E+00	2023	Phase 1a Office	MIT	Vertical_Crushing/Proc. Equipment	PERIOD
O4	DPM	9901	2.41E-06	2023	Phase 1a Office	MIT	Vertical_Excavators	PERIOD
O4	DPM	9901	6.75E-06	2023	Phase 1a Office	MIT	Vertical_Forklifts	PERIOD
O4	DPM	9901	1.94E-05	2023	Phase 1a Office	MIT	Vertical_Generator Sets	PERIOD
O4	DPM	9901	0.00E+00	2023	Phase 1a Office	MIT	Vertical_Graders	PERIOD
O4	DPM	9901	2.03E-05	2023	Phase 1a Office	MIT	Vertical_Other Construction Equipment	PERIOD
O4	DPM	9901	0.00E+00	2023	Phase 1a Office	MIT	Vertical_Pavers	PERIOD
O4	DPM	9901	0.00E+00	2023	Phase 1a Office	MIT	Vertical_Pressure Washers	PERIOD
O4	DPM	9901	5.04E-06	2023	Phase 1a Office	MIT	Vertical_Pumps	PERIOD
O4	DPM	9901	0.00E+00	2023	Phase 1a Office	MIT	Vertical_Scrapers	PERIOD
O4	DPM	9901	5.94E-05	2023	Phase 1a Office	MIT	Vertical_Tractors/Loaders/Backhoes	PERIOD
O4	DPM	9901	5.39E-06	2024	Phase 1a Office	MIT	Vertical_Aerial Lifts	PERIOD
O4	DPM	9901	0.00E+00	2024	Phase 1a Office	MIT	Vertical_Air Compressors	PERIOD
O4	DPM	9901	0.00E+00	2024	Phase 1a Office	MIT	Vertical_Bore/Drill Rigs	PERIOD
O4	DPM	9901	0.00E+00	2024	Phase 1a Office	MIT	Vertical_Cranes	PERIOD
O4	DPM	9901	0.00E+00	2024	Phase 1a Office	MIT	Vertical_Crushing/Proc. Equipment	PERIOD
O4	DPM	9901	0.00E+00	2024	Phase 1a Office	MIT	Vertical_Excavators	PERIOD
O4	DPM	9901	5.77E-06	2024	Phase 1a Office	MIT	Vertical_Forklifts	PERIOD
O4	DPM	9901	0.00E+00	2024	Phase 1a Office	MIT	Vertical_Generator Sets	PERIOD
O4	DPM	9901	0.00E+00	2024	Phase 1a Office	MIT	Vertical_Graders	PERIOD
O4	DPM	9901	1.55E-05	2024	Phase 1a Office	MIT	Vertical_Other Construction Equipment	PERIOD
O4	DPM	9901	0.00E+00	2024	Phase 1a Office	MIT	Vertical_Pavers	PERIOD
O4	DPM	9901	0.00E+00	2024	Phase 1a Office	MIT	Vertical_Pressure Washers	PERIOD

O4	DPM	9901	0.00E+00	2024	Phase 1a Office	MIT	Vertical_Pumps	PERIOD
O4	DPM	9901	0.00E+00	2024	Phase 1a Office	MIT	Vertical_Scrapers	PERIOD
O4	DPM	9901	0.00E+00	2024	Phase 1a Office	MIT	Vertical_Tractors/Loaders/Backhoes	PERIOD
TS	DPM	9901	6.62E-06	2023	Phase 1a Office	MIT	Vertical_Aerial Lifts	PERIOD
TS	DPM	9901	0.00E+00	2023	Phase 1a Office	MIT	Vertical_Air Compressors	PERIOD
TS	DPM	9901	0.00E+00	2023	Phase 1a Office	MIT	Vertical_Bore/Drill Rigs	PERIOD
TS	DPM	9901	0.00E+00	2023	Phase 1a Office	MIT	Vertical_Cranes	PERIOD
TS	DPM	9901	0.00E+00	2023	Phase 1a Office	MIT	Vertical_Crushing/Proc. Equipment	PERIOD
TS	DPM	9901	4.51E-04	2023	Phase 1a Office	MIT	Vertical_Excavators	PERIOD
TS	DPM	9901	8.30E-05	2023	Phase 1a Office	MIT	Vertical_Forklifts	PERIOD
TS	DPM	9901	3.95E-05	2023	Phase 1a Office	MIT	Vertical_Generator Sets	PERIOD
TS	DPM	9901	0.00E+00	2023	Phase 1a Office	MIT	Vertical_Graders	PERIOD
TS	DPM	9901	3.57E-05	2023	Phase 1a Office	MIT	Vertical_Other Construction Equipment	PERIOD
TS	DPM	9901	0.00E+00	2023	Phase 1a Office	MIT	Vertical_Pavers	PERIOD
TS	DPM	9901	0.00E+00	2023	Phase 1a Office	MIT	Vertical_Pressure Washers	PERIOD
TS	DPM	9901	0.00E+00	2023	Phase 1a Office	MIT	Vertical_Pumps	PERIOD
TS	DPM	9901	0.00E+00	2023	Phase 1a Office	MIT	Vertical_Scrapers	PERIOD
TS	DPM	9901	1.70E-04	2023	Phase 1a Office	MIT	Vertical_Tractors/Loaders/Backhoes	PERIOD
TS	DPM	9901	9.09E-06	2024	Phase 1a Office	MIT	Vertical_Aerial Lifts	PERIOD
TS	DPM	9901	0.00E+00	2024	Phase 1a Office	MIT	Vertical_Air Compressors	PERIOD
TS	DPM	9901	0.00E+00	2024	Phase 1a Office	MIT	Vertical_Bore/Drill Rigs	PERIOD
TS	DPM	9901	3.58E-05	2024	Phase 1a Office	MIT	Vertical_Cranes	PERIOD
TS	DPM	9901	0.00E+00	2024	Phase 1a Office	MIT	Vertical_Crushing/Proc. Equipment	PERIOD
TS	DPM	9901	1.65E-04	2024	Phase 1a Office	MIT	Vertical_Excavators	PERIOD
TS	DPM	9901	8.02E-05	2024	Phase 1a Office	MIT	Vertical_Forklifts	PERIOD
TS	DPM	9901	3.98E-06	2024	Phase 1a Office	MIT	Vertical_Generator Sets	PERIOD
TS	DPM	9901	0.00E+00	2024	Phase 1a Office	MIT	Vertical_Graders	PERIOD
TS	DPM	9901	1.30E-05	2024	Phase 1a Office	MIT	Vertical_Other Construction Equipment	PERIOD
TS	DPM	9901	0.00E+00	2024	Phase 1a Office	MIT	Vertical_Pavers	PERIOD
TS	DPM	9901	0.00E+00	2024	Phase 1a Office	MIT	Vertical_Pressure Washers	PERIOD
TS	DPM	9901	1.48E-06	2024	Phase 1a Office	MIT	Vertical_Pumps	PERIOD
TS	DPM	9901	0.00E+00	2024	Phase 1a Office	MIT	Vertical_Scrapers	PERIOD
TS	DPM	9901	6.20E-05	2024	Phase 1a Office	MIT	Vertical_Tractors/Loaders/Backhoes	PERIOD
TS	DPM	9901	0.00E+00	2025	Phase 1a Office	MIT	Vertical_Aerial Lifts	PERIOD
TS	DPM	9901	0.00E+00	2025	Phase 1a Office	MIT	Vertical_Air Compressors	PERIOD
TS	DPM	9901	0.00E+00	2025	Phase 1a Office	MIT	Vertical_Bore/Drill Rigs	PERIOD
TS	DPM	9901	2.10E-06	2025	Phase 1a Office	MIT	Vertical_Cranes	PERIOD
TS	DPM	9901	0.00E+00	2025	Phase 1a Office	MIT	Vertical_Crushing/Proc. Equipment	PERIOD
TS	DPM	9901	0.00E+00	2025	Phase 1a Office	MIT	Vertical_Excavators	PERIOD
TS	DPM	9901	9.21E-05	2025	Phase 1a Office	MIT	Vertical_Forklifts	PERIOD
TS	DPM	9901	0.00E+00	2025	Phase 1a Office	MIT	Vertical_Generator Sets	PERIOD
TS	DPM	9901	0.00E+00	2025	Phase 1a Office	MIT	Vertical_Graders	PERIOD
TS	DPM	9901	0.00E+00	2025	Phase 1a Office	MIT	Vertical_Other Construction Equipment	PERIOD
TS	DPM	9901	0.00E+00	2025	Phase 1a Office	MIT	Vertical_Pavers	PERIOD
TS	DPM	9901	0.00E+00	2025	Phase 1a Office	MIT	Vertical_Pressure Washers	PERIOD
TS	DPM	9901	0.00E+00	2025	Phase 1a Office	MIT	Vertical_Pumps	PERIOD
TS	DPM	9901	0.00E+00	2025	Phase 1a Office	MIT	Vertical_Scrapers	PERIOD

TS	DPM	9901	0.00E+00	2025	Phase 1a Office	MIT	Vertical_Tractors/Loaders/Backhoes	PERIOD
PHS_1B	DPM	9901	1.31E-05	2022	Phase 1b	MIT	Demolition_Air Compressors	PERIOD
PHS_1B	DPM	9901	0.00E+00	2022	Phase 1b	MIT	Demolition_Crushing/Proc. Equipment	PERIOD
PHS_1B	DPM	9901	6.67E-05	2022	Phase 1b	MIT	Demolition_Excavators	PERIOD
PHS_1B	DPM	9901	7.96E-06	2022	Phase 1b	MIT	Demolition_Generator Sets	PERIOD
PHS_1B	DPM	9901	1.73E-05	2022	Phase 1b	MIT	Demolition_Other Construction Equipment	PERIOD
PHS_1B	DPM	9901	8.61E-06	2022	Phase 1b	MIT	Demolition_Pressure Washers	PERIOD
PHS_1B	DPM	9901	9.91E-05	2022	Phase 1b	MIT	Demolition_Tractors/Loaders/Backhoes	PERIOD
PHS_1B	DPM	9901	1.41E-04	2022	Phase 1b	MIT	Grading and Utilities_Excavators	PERIOD
PHS_1B	DPM	9901	3.63E-05	2022	Phase 1b	MIT	Grading and Utilities_Forklifts	PERIOD
PHS_1B	DPM	9901	4.79E-06	2022	Phase 1b	MIT	Grading and Utilities_Generator Sets	PERIOD
PHS_1B	DPM	9901	1.91E-05	2022	Phase 1b	MIT	Grading and Utilities_Graders	PERIOD
PHS_1B	DPM	9901	2.57E-05	2022	Phase 1b	MIT	Grading and Utilities_Other Construction Equipment	PERIOD
PHS_1B	DPM	9901	9.07E-07	2022	Phase 1b	MIT	Grading and Utilities_Pavers	PERIOD
PHS_1B	DPM	9901	4.63E-06	2022	Phase 1b	MIT	Grading and Utilities_Scrapers	PERIOD
PHS_1B	DPM	9901	1.75E-04	2022	Phase 1b	MIT	Grading and Utilities_Tractors/Loaders/Backhoes	PERIOD
PHS_1B	DPM	9901	1.41E-04	2023	Phase 1b	MIT	Grading and Utilities_Excavators	PERIOD
PHS_1B	DPM	9901	3.63E-05	2023	Phase 1b	MIT	Grading and Utilities_Forklifts	PERIOD
PHS_1B	DPM	9901	4.79E-06	2023	Phase 1b	MIT	Grading and Utilities_Generator Sets	PERIOD
PHS_1B	DPM	9901	1.91E-05	2023	Phase 1b	MIT	Grading and Utilities_Graders	PERIOD
PHS_1B	DPM	9901	2.57E-05	2023	Phase 1b	MIT	Grading and Utilities_Other Construction Equipment	PERIOD
PHS_1B	DPM	9901	9.07E-07	2023	Phase 1b	MIT	Grading and Utilities_Pavers	PERIOD
PHS_1B	DPM	9901	4.63E-06	2023	Phase 1b	MIT	Grading and Utilities_Scrapers	PERIOD
PHS_1B	DPM	9901	1.75E-04	2023	Phase 1b	MIT	Grading and Utilities_Tractors/Loaders/Backhoes	PERIOD
RS6	DPM	9901	0.00E+00	2024	Phase 1b Mixed Use	MIT	Core and Shell_Aerial Lifts	PERIOD
RS6	DPM	9901	0.00E+00	2024	Phase 1b Mixed Use	MIT	Core and Shell_Air Compressors	PERIOD
RS6	DPM	9901	1.87E-05	2024	Phase 1b Mixed Use	MIT	Core and Shell_Cranes	PERIOD
RS6	DPM	9901	9.13E-06	2024	Phase 1b Mixed Use	MIT	Core and Shell_Forklifts	PERIOD
RS6	DPM	9901	0.00E+00	2024	Phase 1b Mixed Use	MIT	Core and Shell_Generator Sets	PERIOD
RS6	DPM	9901	1.46E-05	2024	Phase 1b Mixed Use	MIT	Core and Shell_Other Construction Equipment	PERIOD
RS6	DPM	9901	0.00E+00	2024	Phase 1b Mixed Use	MIT	Core and Shell_Pumps	PERIOD
RS6	DPM	9901	0.00E+00	2025	Phase 1b Mixed Use	MIT	Core and Shell_Aerial Lifts	PERIOD
RS6	DPM	9901	0.00E+00	2025	Phase 1b Mixed Use	MIT	Core and Shell_Air Compressors	PERIOD
RS6	DPM	9901	8.88E-06	2025	Phase 1b Mixed Use	MIT	Core and Shell_Cranes	PERIOD
RS6	DPM	9901	3.67E-06	2025	Phase 1b Mixed Use	MIT	Core and Shell_Forklifts	PERIOD
RS6	DPM	9901	0.00E+00	2025	Phase 1b Mixed Use	MIT	Core and Shell_Generator Sets	PERIOD
RS6	DPM	9901	5.86E-06	2025	Phase 1b Mixed Use	MIT	Core and Shell_Other Construction Equipment	PERIOD
RS6	DPM	9901	0.00E+00	2025	Phase 1b Mixed Use	MIT	Core and Shell_Pumps	PERIOD
RS6	DPM	9901	0.00E+00	2024	Phase 1b Mixed Use	MIT	Foundations_Bore/Drill Rigs	PERIOD
RS6	DPM	9901	1.20E-05	2024	Phase 1b Mixed Use	MIT	Foundations_Cranes	PERIOD
RS6	DPM	9901	2.68E-05	2024	Phase 1b Mixed Use	MIT	Foundations_Excavators	PERIOD
RS6	DPM	9901	6.54E-06	2024	Phase 1b Mixed Use	MIT	Foundations_Forklifts	PERIOD
RS6	DPM	9901	0.00E+00	2024	Phase 1b Mixed Use	MIT	Foundations_Generator Sets	PERIOD
RS6	DPM	9901	2.09E-05	2024	Phase 1b Mixed Use	MIT	Foundations_Other Construction Equipment	PERIOD
RS6	DPM	9901	8.02E-06	2024	Phase 1b Mixed Use	MIT	Foundations_Pumps	PERIOD
RS6	DPM	9901	4.49E-05	2024	Phase 1b Mixed Use	MIT	Foundations_Tractors/Loaders/Backhoes	PERIOD
RS6	DPM	9901	1.72E-06	2025	Phase 1b Mixed Use	MIT	Landscaping_Excavators	PERIOD

RS6	DPM	9901	0.00E+00	2025	Phase 1b Mixed Use	MIT	Landscaping_Generator Sets	PERIOD
RS6	DPM	9901	0.00E+00	2025	Phase 1b Mixed Use	MIT	Landscaping_Other Construction Equipment	PERIOD
RS6	DPM	9901	1.07E-05	2025	Phase 1b Mixed Use	MIT	Landscaping_Tractors/Loaders/Backhoes	PERIOD
RS6	DPM	9901	2.04E-06	2026	Phase 1b Mixed Use	MIT	Landscaping_Excavators	PERIOD
RS6	DPM	9901	0.00E+00	2026	Phase 1b Mixed Use	MIT	Landscaping_Generator Sets	PERIOD
RS6	DPM	9901	0.00E+00	2026	Phase 1b Mixed Use	MIT	Landscaping_Other Construction Equipment	PERIOD
RS6	DPM	9901	1.27E-05	2026	Phase 1b Mixed Use	MIT	Landscaping_Tractors/Loaders/Backhoes	PERIOD
RS6	DPM	9901	7.16E-06	2025	Phase 1b Mixed Use	MIT	Tenant Improvements_Forklifts	PERIOD
RS6	DPM	9901	0.00E+00	2025	Phase 1b Mixed Use	MIT	Tenant Improvements_Generator Sets	PERIOD
RS6	DPM	9901	2.28E-05	2025	Phase 1b Mixed Use	MIT	Tenant Improvements_Other Construction Equipment	PERIOD
RS7	DPM	9901	0.00E+00	2024	Phase 1b Mixed Use	MIT	Core and Shell_Aerial Lifts	PERIOD
RS7	DPM	9901	0.00E+00	2024	Phase 1b Mixed Use	MIT	Core and Shell_Air Compressors	PERIOD
RS7	DPM	9901	2.98E-05	2024	Phase 1b Mixed Use	MIT	Core and Shell_Cranes	PERIOD
RS7	DPM	9901	7.27E-06	2024	Phase 1b Mixed Use	MIT	Core and Shell_Forklifts	PERIOD
RS7	DPM	9901	0.00E+00	2024	Phase 1b Mixed Use	MIT	Core and Shell_Generator Sets	PERIOD
RS7	DPM	9901	2.32E-05	2024	Phase 1b Mixed Use	MIT	Core and Shell_Other Construction Equipment	PERIOD
RS7	DPM	9901	0.00E+00	2024	Phase 1b Mixed Use	MIT	Core and Shell_Pumps	PERIOD
RS7	DPM	9901	0.00E+00	2024	Phase 1b Mixed Use	MIT	Foundations_Bore/Drill Rigs	PERIOD
RS7	DPM	9901	1.20E-05	2024	Phase 1b Mixed Use	MIT	Foundations_Cranes	PERIOD
RS7	DPM	9901	2.68E-05	2024	Phase 1b Mixed Use	MIT	Foundations_Excavators	PERIOD
RS7	DPM	9901	6.54E-06	2024	Phase 1b Mixed Use	MIT	Foundations_Forklifts	PERIOD
RS7	DPM	9901	0.00E+00	2024	Phase 1b Mixed Use	MIT	Foundations_Generator Sets	PERIOD
RS7	DPM	9901	2.09E-05	2024	Phase 1b Mixed Use	MIT	Foundations_Other Construction Equipment	PERIOD
RS7	DPM	9901	4.01E-06	2024	Phase 1b Mixed Use	MIT	Foundations_Pumps	PERIOD
RS7	DPM	9901	4.49E-05	2024	Phase 1b Mixed Use	MIT	Foundations_Tractors/Loaders/Backhoes	PERIOD
RS7	DPM	9901	3.69E-06	2025	Phase 1b Mixed Use	MIT	Landscaping_Excavators	PERIOD
RS7	DPM	9901	0.00E+00	2025	Phase 1b Mixed Use	MIT	Landscaping_Generator Sets	PERIOD
RS7	DPM	9901	7.09E-06	2025	Phase 1b Mixed Use	MIT	Landscaping_Other Construction Equipment	PERIOD
RS7	DPM	9901	1.53E-05	2025	Phase 1b Mixed Use	MIT	Landscaping_Tractors/Loaders/Backhoes	PERIOD
RS7	DPM	9901	9.58E-07	2024	Phase 1b Mixed Use	MIT	Tenant Improvements_Forklifts	PERIOD
RS7	DPM	9901	0.00E+00	2024	Phase 1b Mixed Use	MIT	Tenant Improvements_Generator Sets	PERIOD
RS7	DPM	9901	3.06E-06	2024	Phase 1b Mixed Use	MIT	Tenant Improvements_Other Construction Equipment	PERIOD
RS7	DPM	9901	6.54E-06	2025	Phase 1b Mixed Use	MIT	Tenant Improvements_Forklifts	PERIOD
RS7	DPM	9901	0.00E+00	2025	Phase 1b Mixed Use	MIT	Tenant Improvements_Generator Sets	PERIOD
RS7	DPM	9901	2.09E-05	2025	Phase 1b Mixed Use	MIT	Tenant Improvements_Other Construction Equipment	PERIOD
O1	DPM	9901	8.23E-06	2023	Phase 1b Office	MIT	Vertical_Aerial Lifts	PERIOD
O1	DPM	9901	8.16E-07	2023	Phase 1b Office	MIT	Vertical_Air Compressors	PERIOD
O1	DPM	9901	6.58E-05	2023	Phase 1b Office	MIT	Vertical_Bore/Drill Rigs	PERIOD
O1	DPM	9901	6.91E-05	2023	Phase 1b Office	MIT	Vertical_Cranes	PERIOD
O1	DPM	9901	0.00E+00	2023	Phase 1b Office	MIT	Vertical_Crushing/Proc. Equipment	PERIOD
O1	DPM	9901	3.17E-06	2023	Phase 1b Office	MIT	Vertical_Excavators	PERIOD
O1	DPM	9901	4.99E-06	2023	Phase 1b Office	MIT	Vertical_Forklifts	PERIOD
O1	DPM	9901	2.19E-05	2023	Phase 1b Office	MIT	Vertical_Generator Sets	PERIOD
O1	DPM	9901	0.00E+00	2023	Phase 1b Office	MIT	Vertical_Graders	PERIOD
O1	DPM	9901	1.62E-05	2023	Phase 1b Office	MIT	Vertical_Other Construction Equipment	PERIOD
O1	DPM	9901	0.00E+00	2023	Phase 1b Office	MIT	Vertical_Pavers	PERIOD
O1	DPM	9901	0.00E+00	2023	Phase 1b Office	MIT	Vertical_Pressure Washers	PERIOD

O1	DPM	9901	5.41E-06	2023	Phase 1b Office	MIT	Vertical_Pumps	PERIOD
O1	DPM	9901	0.00E+00	2023	Phase 1b Office	MIT	Vertical_Scrapers	PERIOD
O1	DPM	9901	7.95E-05	2023	Phase 1b Office	MIT	Vertical_Tractors/Loaders/Backhoes	PERIOD
O1	DPM	9901	3.02E-05	2024	Phase 1b Office	MIT	Vertical_Aerial Lifts	PERIOD
O1	DPM	9901	0.00E+00	2024	Phase 1b Office	MIT	Vertical_Air Compressors	PERIOD
O1	DPM	9901	0.00E+00	2024	Phase 1b Office	MIT	Vertical_Bore/Drill Rigs	PERIOD
O1	DPM	9901	0.00E+00	2024	Phase 1b Office	MIT	Vertical_Cranes	PERIOD
O1	DPM	9901	0.00E+00	2024	Phase 1b Office	MIT	Vertical_Crushing/Proc. Equipment	PERIOD
O1	DPM	9901	0.00E+00	2024	Phase 1b Office	MIT	Vertical_Excavators	PERIOD
O1	DPM	9901	6.92E-06	2024	Phase 1b Office	MIT	Vertical_Forklifts	PERIOD
O1	DPM	9901	0.00E+00	2024	Phase 1b Office	MIT	Vertical_Generator Sets	PERIOD
O1	DPM	9901	0.00E+00	2024	Phase 1b Office	MIT	Vertical_Graders	PERIOD
O1	DPM	9901	1.87E-05	2024	Phase 1b Office	MIT	Vertical_Other Construction Equipment	PERIOD
O1	DPM	9901	0.00E+00	2024	Phase 1b Office	MIT	Vertical_Pavers	PERIOD
O1	DPM	9901	0.00E+00	2024	Phase 1b Office	MIT	Vertical_Pressure Washers	PERIOD
O1	DPM	9901	3.65E-07	2024	Phase 1b Office	MIT	Vertical_Pumps	PERIOD
O1	DPM	9901	0.00E+00	2024	Phase 1b Office	MIT	Vertical_Scrapers	PERIOD
O1	DPM	9901	0.00E+00	2024	Phase 1b Office	MIT	Vertical_Tractors/Loaders/Backhoes	PERIOD
O2	DPM	9901	3.56E-06	2023	Phase 1b Office	MIT	Vertical_Aerial Lifts	PERIOD
O2	DPM	9901	8.28E-07	2023	Phase 1b Office	MIT	Vertical_Air Compressors	PERIOD
O2	DPM	9901	6.58E-05	2023	Phase 1b Office	MIT	Vertical_Bore/Drill Rigs	PERIOD
O2	DPM	9901	6.91E-05	2023	Phase 1b Office	MIT	Vertical_Cranes	PERIOD
O2	DPM	9901	0.00E+00	2023	Phase 1b Office	MIT	Vertical_Crushing/Proc. Equipment	PERIOD
O2	DPM	9901	3.08E-06	2023	Phase 1b Office	MIT	Vertical_Excavators	PERIOD
O2	DPM	9901	4.38E-06	2023	Phase 1b Office	MIT	Vertical_Forklifts	PERIOD
O2	DPM	9901	2.17E-05	2023	Phase 1b Office	MIT	Vertical_Generator Sets	PERIOD
O2	DPM	9901	0.00E+00	2023	Phase 1b Office	MIT	Vertical_Graders	PERIOD
O2	DPM	9901	1.45E-05	2023	Phase 1b Office	MIT	Vertical_Other Construction Equipment	PERIOD
O2	DPM	9901	0.00E+00	2023	Phase 1b Office	MIT	Vertical_Pavers	PERIOD
O2	DPM	9901	0.00E+00	2023	Phase 1b Office	MIT	Vertical_Pressure Washers	PERIOD
O2	DPM	9901	5.39E-06	2023	Phase 1b Office	MIT	Vertical_Pumps	PERIOD
O2	DPM	9901	0.00E+00	2023	Phase 1b Office	MIT	Vertical_Scrapers	PERIOD
O2	DPM	9901	7.75E-05	2023	Phase 1b Office	MIT	Vertical_Tractors/Loaders/Backhoes	PERIOD
O2	DPM	9901	3.53E-05	2024	Phase 1b Office	MIT	Vertical_Aerial Lifts	PERIOD
O2	DPM	9901	0.00E+00	2024	Phase 1b Office	MIT	Vertical_Air Compressors	PERIOD
O2	DPM	9901	0.00E+00	2024	Phase 1b Office	MIT	Vertical_Bore/Drill Rigs	PERIOD
O2	DPM	9901	0.00E+00	2024	Phase 1b Office	MIT	Vertical_Cranes	PERIOD
O2	DPM	9901	0.00E+00	2024	Phase 1b Office	MIT	Vertical_Crushing/Proc. Equipment	PERIOD
O2	DPM	9901	0.00E+00	2024	Phase 1b Office	MIT	Vertical_Excavators	PERIOD
O2	DPM	9901	7.31E-06	2024	Phase 1b Office	MIT	Vertical_Forklifts	PERIOD
O2	DPM	9901	0.00E+00	2024	Phase 1b Office	MIT	Vertical_Generator Sets	PERIOD
O2	DPM	9901	0.00E+00	2024	Phase 1b Office	MIT	Vertical_Graders	PERIOD
O2	DPM	9901	1.96E-05	2024	Phase 1b Office	MIT	Vertical_Other Construction Equipment	PERIOD
O2	DPM	9901	0.00E+00	2024	Phase 1b Office	MIT	Vertical_Pavers	PERIOD
O2	DPM	9901	0.00E+00	2024	Phase 1b Office	MIT	Vertical_Pressure Washers	PERIOD
O2	DPM	9901	3.65E-07	2024	Phase 1b Office	MIT	Vertical_Pumps	PERIOD
O2	DPM	9901	0.00E+00	2024	Phase 1b Office	MIT	Vertical_Scrapers	PERIOD

O2	DPM	9901	0.00E+00	2024	Phase 1b Office	MIT	Vertical_Tractors/Loaders/Backhoes	PERIOD
O2	DPM	9901	0.00E+00	2025	Phase 1b Office	MIT	Vertical_Aerial Lifts	PERIOD
O2	DPM	9901	0.00E+00	2025	Phase 1b Office	MIT	Vertical_Air Compressors	PERIOD
O2	DPM	9901	0.00E+00	2025	Phase 1b Office	MIT	Vertical_Bore/Drill Rigs	PERIOD
O2	DPM	9901	0.00E+00	2025	Phase 1b Office	MIT	Vertical_Cranes	PERIOD
O2	DPM	9901	0.00E+00	2025	Phase 1b Office	MIT	Vertical_Crushing/Proc. Equipment	PERIOD
O2	DPM	9901	0.00E+00	2025	Phase 1b Office	MIT	Vertical_Excavators	PERIOD
O2	DPM	9901	1.56E-07	2025	Phase 1b Office	MIT	Vertical_Forklifts	PERIOD
O2	DPM	9901	0.00E+00	2025	Phase 1b Office	MIT	Vertical_Generator Sets	PERIOD
O2	DPM	9901	0.00E+00	2025	Phase 1b Office	MIT	Vertical_Graders	PERIOD
O2	DPM	9901	3.56E-07	2025	Phase 1b Office	MIT	Vertical_Other Construction Equipment	PERIOD
O2	DPM	9901	0.00E+00	2025	Phase 1b Office	MIT	Vertical_Pavers	PERIOD
O2	DPM	9901	0.00E+00	2025	Phase 1b Office	MIT	Vertical_Pressure Washers	PERIOD
O2	DPM	9901	0.00E+00	2025	Phase 1b Office	MIT	Vertical_Pumps	PERIOD
O2	DPM	9901	0.00E+00	2025	Phase 1b Office	MIT	Vertical_Scrapers	PERIOD
O2	DPM	9901	0.00E+00	2025	Phase 1b Office	MIT	Vertical_Tractors/Loaders/Backhoes	PERIOD
O3	DPM	9901	5.56E-06	2023	Phase 1b Office	MIT	Vertical_Aerial Lifts	PERIOD
O3	DPM	9901	8.28E-07	2023	Phase 1b Office	MIT	Vertical_Air Compressors	PERIOD
O3	DPM	9901	8.22E-05	2023	Phase 1b Office	MIT	Vertical_Bore/Drill Rigs	PERIOD
O3	DPM	9901	7.79E-05	2023	Phase 1b Office	MIT	Vertical_Cranes	PERIOD
O3	DPM	9901	0.00E+00	2023	Phase 1b Office	MIT	Vertical_Crushing/Proc. Equipment	PERIOD
O3	DPM	9901	3.60E-06	2023	Phase 1b Office	MIT	Vertical_Excavators	PERIOD
O3	DPM	9901	4.94E-06	2023	Phase 1b Office	MIT	Vertical_Forklifts	PERIOD
O3	DPM	9901	2.36E-05	2023	Phase 1b Office	MIT	Vertical_Generator Sets	PERIOD
O3	DPM	9901	0.00E+00	2023	Phase 1b Office	MIT	Vertical_Graders	PERIOD
O3	DPM	9901	1.64E-05	2023	Phase 1b Office	MIT	Vertical_Other Construction Equipment	PERIOD
O3	DPM	9901	0.00E+00	2023	Phase 1b Office	MIT	Vertical_Pavers	PERIOD
O3	DPM	9901	0.00E+00	2023	Phase 1b Office	MIT	Vertical_Pressure Washers	PERIOD
O3	DPM	9901	5.94E-06	2023	Phase 1b Office	MIT	Vertical_Pumps	PERIOD
O3	DPM	9901	0.00E+00	2023	Phase 1b Office	MIT	Vertical_Scrapers	PERIOD
O3	DPM	9901	9.16E-05	2023	Phase 1b Office	MIT	Vertical_Tractors/Loaders/Backhoes	PERIOD
O3	DPM	9901	3.33E-05	2024	Phase 1b Office	MIT	Vertical_Aerial Lifts	PERIOD
O3	DPM	9901	0.00E+00	2024	Phase 1b Office	MIT	Vertical_Air Compressors	PERIOD
O3	DPM	9901	0.00E+00	2024	Phase 1b Office	MIT	Vertical_Bore/Drill Rigs	PERIOD
O3	DPM	9901	0.00E+00	2024	Phase 1b Office	MIT	Vertical_Cranes	PERIOD
O3	DPM	9901	0.00E+00	2024	Phase 1b Office	MIT	Vertical_Crushing/Proc. Equipment	PERIOD
O3	DPM	9901	0.00E+00	2024	Phase 1b Office	MIT	Vertical_Excavators	PERIOD
O3	DPM	9901	7.31E-06	2024	Phase 1b Office	MIT	Vertical_Forklifts	PERIOD
O3	DPM	9901	0.00E+00	2024	Phase 1b Office	MIT	Vertical_Generator Sets	PERIOD
O3	DPM	9901	0.00E+00	2024	Phase 1b Office	MIT	Vertical_Graders	PERIOD
O3	DPM	9901	1.96E-05	2024	Phase 1b Office	MIT	Vertical_Other Construction Equipment	PERIOD
O3	DPM	9901	0.00E+00	2024	Phase 1b Office	MIT	Vertical_Pavers	PERIOD
O3	DPM	9901	0.00E+00	2024	Phase 1b Office	MIT	Vertical_Pressure Washers	PERIOD
O3	DPM	9901	3.65E-07	2024	Phase 1b Office	MIT	Vertical_Pumps	PERIOD
O3	DPM	9901	0.00E+00	2024	Phase 1b Office	MIT	Vertical_Scrapers	PERIOD
O3	DPM	9901	0.00E+00	2024	Phase 1b Office	MIT	Vertical_Tractors/Loaders/Backhoes	PERIOD
O3	DPM	9901	0.00E+00	2025	Phase 1b Office	MIT	Vertical_Aerial Lifts	PERIOD

O3	DPM	9901	0.00E+00	2025	Phase 1b Office	MIT	Vertical_Air Compressors	PERIOD
O3	DPM	9901	0.00E+00	2025	Phase 1b Office	MIT	Vertical_Bore/Drill Rigs	PERIOD
O3	DPM	9901	0.00E+00	2025	Phase 1b Office	MIT	Vertical_Cranes	PERIOD
O3	DPM	9901	0.00E+00	2025	Phase 1b Office	MIT	Vertical_Crushing/Proc. Equipment	PERIOD
O3	DPM	9901	0.00E+00	2025	Phase 1b Office	MIT	Vertical_Excavators	PERIOD
O3	DPM	9901	1.38E-06	2025	Phase 1b Office	MIT	Vertical_Forklifts	PERIOD
O3	DPM	9901	0.00E+00	2025	Phase 1b Office	MIT	Vertical_Generator Sets	PERIOD
O3	DPM	9901	0.00E+00	2025	Phase 1b Office	MIT	Vertical_Graders	PERIOD
O3	DPM	9901	3.16E-06	2025	Phase 1b Office	MIT	Vertical_Other Construction Equipment	PERIOD
O3	DPM	9901	0.00E+00	2025	Phase 1b Office	MIT	Vertical_Pavers	PERIOD
O3	DPM	9901	0.00E+00	2025	Phase 1b Office	MIT	Vertical_Pressure Washers	PERIOD
O3	DPM	9901	0.00E+00	2025	Phase 1b Office	MIT	Vertical_Pumps	PERIOD
O3	DPM	9901	0.00E+00	2025	Phase 1b Office	MIT	Vertical_Scrapers	PERIOD
O3	DPM	9901	0.00E+00	2025	Phase 1b Office	MIT	Vertical_Tractors/Loaders/Backhoes	PERIOD
O5	DPM	9901	8.23E-06	2023	Phase 1b Office	MIT	Vertical_Aerial Lifts	PERIOD
O5	DPM	9901	8.28E-07	2023	Phase 1b Office	MIT	Vertical_Air Compressors	PERIOD
O5	DPM	9901	9.86E-05	2023	Phase 1b Office	MIT	Vertical_Bore/Drill Rigs	PERIOD
O5	DPM	9901	8.74E-05	2023	Phase 1b Office	MIT	Vertical_Cranes	PERIOD
O5	DPM	9901	0.00E+00	2023	Phase 1b Office	MIT	Vertical_Crushing/Proc. Equipment	PERIOD
O5	DPM	9901	4.21E-06	2023	Phase 1b Office	MIT	Vertical_Excavators	PERIOD
O5	DPM	9901	5.63E-06	2023	Phase 1b Office	MIT	Vertical_Forklifts	PERIOD
O5	DPM	9901	2.57E-05	2023	Phase 1b Office	MIT	Vertical_Generator Sets	PERIOD
O5	DPM	9901	0.00E+00	2023	Phase 1b Office	MIT	Vertical_Graders	PERIOD
O5	DPM	9901	1.89E-05	2023	Phase 1b Office	MIT	Vertical_Other Construction Equipment	PERIOD
O5	DPM	9901	0.00E+00	2023	Phase 1b Office	MIT	Vertical_Pavers	PERIOD
O5	DPM	9901	0.00E+00	2023	Phase 1b Office	MIT	Vertical_Pressure Washers	PERIOD
O5	DPM	9901	6.55E-06	2023	Phase 1b Office	MIT	Vertical_Pumps	PERIOD
O5	DPM	9901	0.00E+00	2023	Phase 1b Office	MIT	Vertical_Scrapers	PERIOD
O5	DPM	9901	1.08E-04	2023	Phase 1b Office	MIT	Vertical_Tractors/Loaders/Backhoes	PERIOD
O5	DPM	9901	3.01E-05	2024	Phase 1b Office	MIT	Vertical_Aerial Lifts	PERIOD
O5	DPM	9901	0.00E+00	2024	Phase 1b Office	MIT	Vertical_Air Compressors	PERIOD
O5	DPM	9901	0.00E+00	2024	Phase 1b Office	MIT	Vertical_Bore/Drill Rigs	PERIOD
O5	DPM	9901	0.00E+00	2024	Phase 1b Office	MIT	Vertical_Cranes	PERIOD
O5	DPM	9901	0.00E+00	2024	Phase 1b Office	MIT	Vertical_Crushing/Proc. Equipment	PERIOD
O5	DPM	9901	0.00E+00	2024	Phase 1b Office	MIT	Vertical_Excavators	PERIOD
O5	DPM	9901	7.31E-06	2024	Phase 1b Office	MIT	Vertical_Forklifts	PERIOD
O5	DPM	9901	0.00E+00	2024	Phase 1b Office	MIT	Vertical_Generator Sets	PERIOD
O5	DPM	9901	0.00E+00	2024	Phase 1b Office	MIT	Vertical_Graders	PERIOD
O5	DPM	9901	1.96E-05	2024	Phase 1b Office	MIT	Vertical_Other Construction Equipment	PERIOD
O5	DPM	9901	0.00E+00	2024	Phase 1b Office	MIT	Vertical_Pavers	PERIOD
O5	DPM	9901	0.00E+00	2024	Phase 1b Office	MIT	Vertical_Pressure Washers	PERIOD
O5	DPM	9901	3.48E-07	2024	Phase 1b Office	MIT	Vertical_Pumps	PERIOD
O5	DPM	9901	0.00E+00	2024	Phase 1b Office	MIT	Vertical_Scrapers	PERIOD
O5	DPM	9901	0.00E+00	2024	Phase 1b Office	MIT	Vertical_Tractors/Loaders/Backhoes	PERIOD
O5	DPM	9901	0.00E+00	2025	Phase 1b Office	MIT	Vertical_Aerial Lifts	PERIOD
O5	DPM	9901	0.00E+00	2025	Phase 1b Office	MIT	Vertical_Air Compressors	PERIOD
O5	DPM	9901	0.00E+00	2025	Phase 1b Office	MIT	Vertical_Bore/Drill Rigs	PERIOD

O5	DPM	9901	0.00E+00	2025	Phase 1b Office	MIT	Vertical_Cranes	PERIOD
O5	DPM	9901	0.00E+00	2025	Phase 1b Office	MIT	Vertical_Crushing/Proc. Equipment	PERIOD
O5	DPM	9901	0.00E+00	2025	Phase 1b Office	MIT	Vertical_Excavators	PERIOD
O5	DPM	9901	1.27E-06	2025	Phase 1b Office	MIT	Vertical_Forklifts	PERIOD
O5	DPM	9901	0.00E+00	2025	Phase 1b Office	MIT	Vertical_Generator Sets	PERIOD
O5	DPM	9901	0.00E+00	2025	Phase 1b Office	MIT	Vertical_Graders	PERIOD
O5	DPM	9901	2.90E-06	2025	Phase 1b Office	MIT	Vertical_Other Construction Equipment	PERIOD
O5	DPM	9901	0.00E+00	2025	Phase 1b Office	MIT	Vertical_Pavers	PERIOD
O5	DPM	9901	0.00E+00	2025	Phase 1b Office	MIT	Vertical_Pressure Washers	PERIOD
O5	DPM	9901	0.00E+00	2025	Phase 1b Office	MIT	Vertical_Pumps	PERIOD
O5	DPM	9901	0.00E+00	2025	Phase 1b Office	MIT	Vertical_Scrapers	PERIOD
O5	DPM	9901	0.00E+00	2025	Phase 1b Office	MIT	Vertical_Tractors/Loaders/Backhoes	PERIOD
O6	DPM	9901	0.00E+00	2023	Phase 1b Office	MIT	Vertical_Aerial Lifts	PERIOD
O6	DPM	9901	5.90E-07	2023	Phase 1b Office	MIT	Vertical_Air Compressors	PERIOD
O6	DPM	9901	1.02E-04	2023	Phase 1b Office	MIT	Vertical_Bore/Drill Rigs	PERIOD
O6	DPM	9901	8.82E-05	2023	Phase 1b Office	MIT	Vertical_Cranes	PERIOD
O6	DPM	9901	0.00E+00	2023	Phase 1b Office	MIT	Vertical_Crushing/Proc. Equipment	PERIOD
O6	DPM	9901	4.21E-06	2023	Phase 1b Office	MIT	Vertical_Excavators	PERIOD
O6	DPM	9901	3.79E-06	2023	Phase 1b Office	MIT	Vertical_Forklifts	PERIOD
O6	DPM	9901	2.26E-05	2023	Phase 1b Office	MIT	Vertical_Generator Sets	PERIOD
O6	DPM	9901	0.00E+00	2023	Phase 1b Office	MIT	Vertical_Graders	PERIOD
O6	DPM	9901	1.39E-05	2023	Phase 1b Office	MIT	Vertical_Other Construction Equipment	PERIOD
O6	DPM	9901	0.00E+00	2023	Phase 1b Office	MIT	Vertical_Pavers	PERIOD
O6	DPM	9901	0.00E+00	2023	Phase 1b Office	MIT	Vertical_Pressure Washers	PERIOD
O6	DPM	9901	5.94E-06	2023	Phase 1b Office	MIT	Vertical_Pumps	PERIOD
O6	DPM	9901	0.00E+00	2023	Phase 1b Office	MIT	Vertical_Scrapers	PERIOD
O6	DPM	9901	1.08E-04	2023	Phase 1b Office	MIT	Vertical_Tractors/Loaders/Backhoes	PERIOD
O6	DPM	9901	3.89E-05	2024	Phase 1b Office	MIT	Vertical_Aerial Lifts	PERIOD
O6	DPM	9901	2.39E-07	2024	Phase 1b Office	MIT	Vertical_Air Compressors	PERIOD
O6	DPM	9901	0.00E+00	2024	Phase 1b Office	MIT	Vertical_Bore/Drill Rigs	PERIOD
O6	DPM	9901	0.00E+00	2024	Phase 1b Office	MIT	Vertical_Cranes	PERIOD
O6	DPM	9901	0.00E+00	2024	Phase 1b Office	MIT	Vertical_Crushing/Proc. Equipment	PERIOD
O6	DPM	9901	0.00E+00	2024	Phase 1b Office	MIT	Vertical_Excavators	PERIOD
O6	DPM	9901	7.31E-06	2024	Phase 1b Office	MIT	Vertical_Forklifts	PERIOD
O6	DPM	9901	3.15E-06	2024	Phase 1b Office	MIT	Vertical_Generator Sets	PERIOD
O6	DPM	9901	0.00E+00	2024	Phase 1b Office	MIT	Vertical_Graders	PERIOD
O6	DPM	9901	1.96E-05	2024	Phase 1b Office	MIT	Vertical_Other Construction Equipment	PERIOD
O6	DPM	9901	0.00E+00	2024	Phase 1b Office	MIT	Vertical_Pavers	PERIOD
O6	DPM	9901	0.00E+00	2024	Phase 1b Office	MIT	Vertical_Pressure Washers	PERIOD
O6	DPM	9901	1.01E-06	2024	Phase 1b Office	MIT	Vertical_Pumps	PERIOD
O6	DPM	9901	0.00E+00	2024	Phase 1b Office	MIT	Vertical_Scrapers	PERIOD
O6	DPM	9901	0.00E+00	2024	Phase 1b Office	MIT	Vertical_Tractors/Loaders/Backhoes	PERIOD
O6	DPM	9901	0.00E+00	2025	Phase 1b Office	MIT	Vertical_Aerial Lifts	PERIOD
O6	DPM	9901	0.00E+00	2025	Phase 1b Office	MIT	Vertical_Air Compressors	PERIOD
O6	DPM	9901	0.00E+00	2025	Phase 1b Office	MIT	Vertical_Bore/Drill Rigs	PERIOD
O6	DPM	9901	0.00E+00	2025	Phase 1b Office	MIT	Vertical_Cranes	PERIOD
O6	DPM	9901	0.00E+00	2025	Phase 1b Office	MIT	Vertical_Crushing/Proc. Equipment	PERIOD

O6	DPM	9901	0.00E+00	2025	Phase 1b Office	MIT	Vertical_Excavators	PERIOD
O6	DPM	9901	2.72E-06	2025	Phase 1b Office	MIT	Vertical_Forklifts	PERIOD
O6	DPM	9901	0.00E+00	2025	Phase 1b Office	MIT	Vertical_Generator Sets	PERIOD
O6	DPM	9901	0.00E+00	2025	Phase 1b Office	MIT	Vertical_Graders	PERIOD
O6	DPM	9901	6.21E-06	2025	Phase 1b Office	MIT	Vertical_Other Construction Equipment	PERIOD
O6	DPM	9901	0.00E+00	2025	Phase 1b Office	MIT	Vertical_Pavers	PERIOD
O6	DPM	9901	0.00E+00	2025	Phase 1b Office	MIT	Vertical_Pressure Washers	PERIOD
O6	DPM	9901	0.00E+00	2025	Phase 1b Office	MIT	Vertical_Pumps	PERIOD
O6	DPM	9901	0.00E+00	2025	Phase 1b Office	MIT	Vertical_Scrapers	PERIOD
O6	DPM	9901	0.00E+00	2025	Phase 1b Office	MIT	Vertical_Tractors/Loaders/Backhoes	PERIOD
SG	DPM	9901	0.00E+00	2023	Phase 1b Office	MIT	Vertical_Aerial Lifts	PERIOD
SG	DPM	9901	6.76E-06	2023	Phase 1b Office	MIT	Vertical_Air Compressors	PERIOD
SG	DPM	9901	4.33E-05	2023	Phase 1b Office	MIT	Vertical_Bore/Drill Rigs	PERIOD
SG	DPM	9901	1.32E-04	2023	Phase 1b Office	MIT	Vertical_Cranes	PERIOD
SG	DPM	9901	0.00E+00	2023	Phase 1b Office	MIT	Vertical_Crushing/Proc. Equipment	PERIOD
SG	DPM	9901	9.46E-05	2023	Phase 1b Office	MIT	Vertical_Excavators	PERIOD
SG	DPM	9901	3.52E-05	2023	Phase 1b Office	MIT	Vertical_Forklifts	PERIOD
SG	DPM	9901	1.81E-05	2023	Phase 1b Office	MIT	Vertical_Generator Sets	PERIOD
SG	DPM	9901	0.00E+00	2023	Phase 1b Office	MIT	Vertical_Graders	PERIOD
SG	DPM	9901	1.46E-05	2023	Phase 1b Office	MIT	Vertical_Other Construction Equipment	PERIOD
SG	DPM	9901	0.00E+00	2023	Phase 1b Office	MIT	Vertical_Pavers	PERIOD
SG	DPM	9901	3.55E-07	2023	Phase 1b Office	MIT	Vertical_Pressure Washers	PERIOD
SG	DPM	9901	2.52E-05	2023	Phase 1b Office	MIT	Vertical_Pumps	PERIOD
SG	DPM	9901	0.00E+00	2023	Phase 1b Office	MIT	Vertical_Scrapers	PERIOD
SG	DPM	9901	1.51E-05	2023	Phase 1b Office	MIT	Vertical_Tractors/Loaders/Backhoes	PERIOD
SG	DPM	9901	1.65E-05	2024	Phase 1b Office	MIT	Vertical_Aerial Lifts	PERIOD
SG	DPM	9901	6.29E-06	2024	Phase 1b Office	MIT	Vertical_Air Compressors	PERIOD
SG	DPM	9901	0.00E+00	2024	Phase 1b Office	MIT	Vertical_Bore/Drill Rigs	PERIOD
SG	DPM	9901	9.18E-05	2024	Phase 1b Office	MIT	Vertical_Cranes	PERIOD
SG	DPM	9901	0.00E+00	2024	Phase 1b Office	MIT	Vertical_Crushing/Proc. Equipment	PERIOD
SG	DPM	9901	0.00E+00	2024	Phase 1b Office	MIT	Vertical_Excavators	PERIOD
SG	DPM	9901	3.28E-05	2024	Phase 1b Office	MIT	Vertical_Forklifts	PERIOD
SG	DPM	9901	0.00E+00	2024	Phase 1b Office	MIT	Vertical_Generator Sets	PERIOD
SG	DPM	9901	0.00E+00	2024	Phase 1b Office	MIT	Vertical_Graders	PERIOD
SG	DPM	9901	1.41E-05	2024	Phase 1b Office	MIT	Vertical_Other Construction Equipment	PERIOD
SG	DPM	9901	0.00E+00	2024	Phase 1b Office	MIT	Vertical_Pavers	PERIOD
SG	DPM	9901	0.00E+00	2024	Phase 1b Office	MIT	Vertical_Pressure Washers	PERIOD
SG	DPM	9901	3.12E-05	2024	Phase 1b Office	MIT	Vertical_Pumps	PERIOD
SG	DPM	9901	0.00E+00	2024	Phase 1b Office	MIT	Vertical_Scrapers	PERIOD
SG	DPM	9901	0.00E+00	2024	Phase 1b Office	MIT	Vertical_Tractors/Loaders/Backhoes	PERIOD
RS45	DPM	9901	0.00E+00	2025	Phase 2 Mixed Use	MIT	Core and Shell_Aerial Lifts	PERIOD
RS45	DPM	9901	0.00E+00	2025	Phase 2 Mixed Use	MIT	Core and Shell_Air Compressors	PERIOD
RS45	DPM	9901	5.14E-05	2025	Phase 2 Mixed Use	MIT	Core and Shell_Cranes	PERIOD
RS45	DPM	9901	1.60E-05	2025	Phase 2 Mixed Use	MIT	Core and Shell_Forklifts	PERIOD
RS45	DPM	9901	2.87E-05	2025	Phase 2 Mixed Use	MIT	Core and Shell_Generator Sets	PERIOD
RS45	DPM	9901	3.40E-05	2025	Phase 2 Mixed Use	MIT	Core and Shell_Other Construction Equipment	PERIOD
RS45	DPM	9901	0.00E+00	2025	Phase 2 Mixed Use	MIT	Core and Shell_Pumps	PERIOD

RS45	DPM	9901	0.00E+00	2024	Phase 2 Mixed Use	MIT	Foundations_Bore/Drill Rigs	PERIOD
RS45	DPM	9901	4.97E-06	2024	Phase 2 Mixed Use	MIT	Foundations_Cranes	PERIOD
RS45	DPM	9901	1.11E-05	2024	Phase 2 Mixed Use	MIT	Foundations_Excavators	PERIOD
RS45	DPM	9901	2.71E-06	2024	Phase 2 Mixed Use	MIT	Foundations_Forklifts	PERIOD
RS45	DPM	9901	7.96E-06	2024	Phase 2 Mixed Use	MIT	Foundations_Generator Sets	PERIOD
RS45	DPM	9901	8.64E-06	2024	Phase 2 Mixed Use	MIT	Foundations_Other Construction Equipment	PERIOD
RS45	DPM	9901	4.98E-06	2024	Phase 2 Mixed Use	MIT	Foundations_Pumps	PERIOD
RS45	DPM	9901	1.86E-05	2024	Phase 2 Mixed Use	MIT	Foundations_Tractors/Loaders/Backhoes	PERIOD
RS45	DPM	9901	0.00E+00	2025	Phase 2 Mixed Use	MIT	Foundations_Bore/Drill Rigs	PERIOD
RS45	DPM	9901	1.64E-05	2025	Phase 2 Mixed Use	MIT	Foundations_Cranes	PERIOD
RS45	DPM	9901	3.40E-05	2025	Phase 2 Mixed Use	MIT	Foundations_Excavators	PERIOD
RS45	DPM	9901	7.58E-06	2025	Phase 2 Mixed Use	MIT	Foundations_Forklifts	PERIOD
RS45	DPM	9901	2.04E-05	2025	Phase 2 Mixed Use	MIT	Foundations_Generator Sets	PERIOD
RS45	DPM	9901	2.42E-05	2025	Phase 2 Mixed Use	MIT	Foundations_Other Construction Equipment	PERIOD
RS45	DPM	9901	1.64E-05	2025	Phase 2 Mixed Use	MIT	Foundations_Pumps	PERIOD
RS45	DPM	9901	5.21E-05	2025	Phase 2 Mixed Use	MIT	Foundations_Tractors/Loaders/Backhoes	PERIOD
PHS_2X	DPM	9901	2.39E-05	2023	Phase 2 Mixed Use	MIT	Grading and Utilities_Excavators	PERIOD
PHS_2X	DPM	9901	6.14E-06	2023	Phase 2 Mixed Use	MIT	Grading and Utilities_Forklifts	PERIOD
PHS_2X	DPM	9901	1.62E-06	2023	Phase 2 Mixed Use	MIT	Grading and Utilities_Generator Sets	PERIOD
PHS_2X	DPM	9901	3.23E-06	2023	Phase 2 Mixed Use	MIT	Grading and Utilities_Graders	PERIOD
PHS_2X	DPM	9901	4.34E-06	2023	Phase 2 Mixed Use	MIT	Grading and Utilities_Other Construction Equipment	PERIOD
PHS_2X	DPM	9901	1.53E-07	2023	Phase 2 Mixed Use	MIT	Grading and Utilities_Pavers	PERIOD
PHS_2X	DPM	9901	7.84E-07	2023	Phase 2 Mixed Use	MIT	Grading and Utilities_Scrapers	PERIOD
PHS_2X	DPM	9901	2.97E-05	2023	Phase 2 Mixed Use	MIT	Grading and Utilities_Tractors/Loaders/Backhoes	PERIOD
RS45	DPM	9901	3.75E-06	2026	Phase 2 Mixed Use	MIT	Landscaping_Excavators	PERIOD
RS45	DPM	9901	0.00E+00	2026	Phase 2 Mixed Use	MIT	Landscaping_Generator Sets	PERIOD
RS45	DPM	9901	7.21E-06	2026	Phase 2 Mixed Use	MIT	Landscaping_Other Construction Equipment	PERIOD
RS45	DPM	9901	3.90E-05	2026	Phase 2 Mixed Use	MIT	Landscaping_Tractors/Loaders/Backhoes	PERIOD
RS45	DPM	9901	9.57E-07	2025	Phase 2 Mixed Use	MIT	Tenant Improvements_Forklifts	PERIOD
RS45	DPM	9901	4.39E-06	2025	Phase 2 Mixed Use	MIT	Tenant Improvements_Generator Sets	PERIOD
RS45	DPM	9901	6.11E-06	2025	Phase 2 Mixed Use	MIT	Tenant Improvements_Other Construction Equipment	PERIOD
RS45	DPM	9901	6.66E-06	2026	Phase 2 Mixed Use	MIT	Tenant Improvements_Forklifts	PERIOD
RS45	DPM	9901	3.05E-05	2026	Phase 2 Mixed Use	MIT	Tenant Improvements_Generator Sets	PERIOD
RS45	DPM	9901	4.25E-05	2026	Phase 2 Mixed Use	MIT	Tenant Improvements_Other Construction Equipment	PERIOD
TUNNEL	DPM	9901	1.80E-05	2023	Phase 2 Mixed Use	MIT	Tunnel Construction_Air Compressors	PERIOD
TUNNEL	DPM	9901	2.57E-05	2023	Phase 2 Mixed Use	MIT	Tunnel Construction_Cranes	PERIOD
TUNNEL	DPM	9901	5.91E-05	2023	Phase 2 Mixed Use	MIT	Tunnel Construction_Excavators	PERIOD
TUNNEL	DPM	9901	9.25E-06	2023	Phase 2 Mixed Use	MIT	Tunnel Construction_Forklifts	PERIOD
TUNNEL	DPM	9901	5.53E-05	2023	Phase 2 Mixed Use	MIT	Tunnel Construction_Tractors/Loaders/Backhoes	PERIOD
TUNNEL	DPM	9901	8.94E-06	2024	Phase 2 Mixed Use	MIT	Tunnel Construction_Air Compressors	PERIOD
TUNNEL	DPM	9901	1.28E-05	2024	Phase 2 Mixed Use	MIT	Tunnel Construction_Cranes	PERIOD
TUNNEL	DPM	9901	2.94E-05	2024	Phase 2 Mixed Use	MIT	Tunnel Construction_Excavators	PERIOD
TUNNEL	DPM	9901	4.60E-06	2024	Phase 2 Mixed Use	MIT	Tunnel Construction_Forklifts	PERIOD
TUNNEL	DPM	9901	2.75E-05	2024	Phase 2 Mixed Use	MIT	Tunnel Construction_Tractors/Loaders/Backhoes	PERIOD
RETAIL	DPM	9901	4.70E-08	2025	Alternate 1	MIT	Core and Shell_Vendor	PERIOD
TRUCKS	DPM	9901	2.85E-07	2025	Alternate 1	MIT	Core and Shell_Vendor	PERIOD
RETAIL	DPM	9901	9.85E-08	2024	Alternate 1	MIT	Demolition_Hauling	PERIOD

TRUCKS	DPM	9901	6.38E-07	2024	Alternate 1	MIT	Demolition_Hauling	PERIOD
RETAIL	DPM	9901	5.25E-08	2025	Alternate 1	MIT	Foundations_Vendor	PERIOD
TRUCKS	DPM	9901	3.19E-07	2025	Alternate 1	MIT	Foundations_Vendor	PERIOD
RETAIL	DPM	9901	4.32E-09	2024	Alternate 1	MIT	Grading and Utilities_Hauling	PERIOD
TRUCKS	DPM	9901	2.80E-08	2024	Alternate 1	MIT	Grading and Utilities_Hauling	PERIOD
RETAIL	DPM	9901	8.87E-08	2025	Alternate 1	MIT	Grading and Utilities_Hauling	PERIOD
TRUCKS	DPM	9901	6.05E-07	2025	Alternate 1	MIT	Grading and Utilities_Hauling	PERIOD
RETAIL	DPM	9901	5.87E-08	2025	Alternate 1	MIT	Tenant Improvements_Vendor	PERIOD
TRUCKS	DPM	9901	3.56E-07	2025	Alternate 1	MIT	Tenant Improvements_Vendor	PERIOD
PHS_1A	DPM	9901	9.60E-07	2021	Phase 1a	MIT	Demolition_Hauling	PERIOD
TRUCKS	DPM	9901	5.16E-06	2021	Phase 1a	MIT	Demolition_Hauling	PERIOD
PHS_1A	DPM	9901	0.00E+00	2021	Phase 1a	MIT	Demolition_Vendor	PERIOD
TRUCKS	DPM	9901	0.00E+00	2021	Phase 1a	MIT	Demolition_Vendor	PERIOD
PHS_1A	DPM	9901	4.46E-06	2022	Phase 1a	MIT	Demolition_Hauling	PERIOD
TRUCKS	DPM	9901	2.61E-05	2022	Phase 1a	MIT	Demolition_Hauling	PERIOD
PHS_1A	DPM	9901	0.00E+00	2022	Phase 1a	MIT	Demolition_Vendor	PERIOD
TRUCKS	DPM	9901	0.00E+00	2022	Phase 1a	MIT	Demolition_Vendor	PERIOD
PHS_1A	DPM	9901	9.00E-06	2022	Phase 1a	MIT	Grading and Utilities_Hauling	PERIOD
TRUCKS	DPM	9901	5.26E-05	2022	Phase 1a	MIT	Grading and Utilities_Hauling	PERIOD
PHS_1A	DPM	9901	0.00E+00	2022	Phase 1a	MIT	Grading and Utilities_Vendor	PERIOD
TRUCKS	DPM	9901	0.00E+00	2022	Phase 1a	MIT	Grading and Utilities_Vendor	PERIOD
PHS_1A	DPM	9901	0.00E+00	2023	Phase 1a Mixed Use	MIT	Core and Shell_Hauling	PERIOD
TRUCKS	DPM	9901	0.00E+00	2023	Phase 1a Mixed Use	MIT	Core and Shell_Hauling	PERIOD
PHS_1A	DPM	9901	3.16E-08	2023	Phase 1a Mixed Use	MIT	Core and Shell_Vendor	PERIOD
TRUCKS	DPM	9901	1.71E-07	2023	Phase 1a Mixed Use	MIT	Core and Shell_Vendor	PERIOD
PHS_1A	DPM	9901	0.00E+00	2024	Phase 1a Mixed Use	MIT	Core and Shell_Hauling	PERIOD
TRUCKS	DPM	9901	0.00E+00	2024	Phase 1a Mixed Use	MIT	Core and Shell_Hauling	PERIOD
PHS_1A	DPM	9901	7.82E-08	2024	Phase 1a Mixed Use	MIT	Core and Shell_Vendor	PERIOD
TRUCKS	DPM	9901	4.49E-07	2024	Phase 1a Mixed Use	MIT	Core and Shell_Vendor	PERIOD
PHS_1A	DPM	9901	0.00E+00	2023	Phase 1a Mixed Use	MIT	Foundations_Hauling	PERIOD
TRUCKS	DPM	9901	0.00E+00	2023	Phase 1a Mixed Use	MIT	Foundations_Hauling	PERIOD
PHS_1A	DPM	9901	1.10E-07	2023	Phase 1a Mixed Use	MIT	Foundations_Vendor	PERIOD
TRUCKS	DPM	9901	5.98E-07	2023	Phase 1a Mixed Use	MIT	Foundations_Vendor	PERIOD
PHS_1A	DPM	9901	0.00E+00	2024	Phase 1a Mixed Use	MIT	Foundations_Hauling	PERIOD
TRUCKS	DPM	9901	0.00E+00	2024	Phase 1a Mixed Use	MIT	Foundations_Hauling	PERIOD
PHS_1A	DPM	9901	4.34E-10	2024	Phase 1a Mixed Use	MIT	Foundations_Vendor	PERIOD
TRUCKS	DPM	9901	2.49E-09	2024	Phase 1a Mixed Use	MIT	Foundations_Vendor	PERIOD
PHS_1A	DPM	9901	0.00E+00	2025	Phase 1a Mixed Use	MIT	Landscaping_Hauling	PERIOD
TRUCKS	DPM	9901	0.00E+00	2025	Phase 1a Mixed Use	MIT	Landscaping_Hauling	PERIOD
PHS_1A	DPM	9901	4.72E-08	2025	Phase 1a Mixed Use	MIT	Landscaping_Vendor	PERIOD
TRUCKS	DPM	9901	2.86E-07	2025	Phase 1a Mixed Use	MIT	Landscaping_Vendor	PERIOD
PHS_1A	DPM	9901	0.00E+00	2024	Phase 1a Mixed Use	MIT	Tenant Improvements_Hauling	PERIOD
TRUCKS	DPM	9901	0.00E+00	2024	Phase 1a Mixed Use	MIT	Tenant Improvements_Hauling	PERIOD
PHS_1A	DPM	9901	6.39E-08	2024	Phase 1a Mixed Use	MIT	Tenant Improvements_Vendor	PERIOD
TRUCKS	DPM	9901	3.66E-07	2024	Phase 1a Mixed Use	MIT	Tenant Improvements_Vendor	PERIOD
PHS_1A	DPM	9901	0.00E+00	2025	Phase 1a Mixed Use	MIT	Tenant Improvements_Hauling	PERIOD
TRUCKS	DPM	9901	0.00E+00	2025	Phase 1a Mixed Use	MIT	Tenant Improvements_Hauling	PERIOD

PHS_1A	DPM	9901	6.83E-08	2025	Phase 1a Mixed Use	MIT	Tenant Improvements_Vendor	PERIOD
TRUCKS	DPM	9901	4.14E-07	2025	Phase 1a Mixed Use	MIT	Tenant Improvements_Vendor	PERIOD
PHS_1A	DPM	9901	0.00E+00	2022	Phase 1a Office	MIT	Foundations + Core and Shell_Hauling	PERIOD
TRUCKS	DPM	9901	0.00E+00	2022	Phase 1a Office	MIT	Foundations + Core and Shell_Hauling	PERIOD
PHS_1A	DPM	9901	1.30E-07	2022	Phase 1a Office	MIT	Foundations + Core and Shell_Vendor	PERIOD
TRUCKS	DPM	9901	6.96E-07	2022	Phase 1a Office	MIT	Foundations + Core and Shell_Vendor	PERIOD
PHS_1A	DPM	9901	0.00E+00	2023	Phase 1a Office	MIT	Foundations + Core and Shell_Hauling	PERIOD
TRUCKS	DPM	9901	0.00E+00	2023	Phase 1a Office	MIT	Foundations + Core and Shell_Hauling	PERIOD
PHS_1A	DPM	9901	7.05E-07	2023	Phase 1a Office	MIT	Foundations + Core and Shell_Vendor	PERIOD
TRUCKS	DPM	9901	3.82E-06	2023	Phase 1a Office	MIT	Foundations + Core and Shell_Vendor	PERIOD
PHS_1A	DPM	9901	0.00E+00	2024	Phase 1a Office	MIT	Foundations + Core and Shell_Hauling	PERIOD
TRUCKS	DPM	9901	0.00E+00	2024	Phase 1a Office	MIT	Foundations + Core and Shell_Hauling	PERIOD
PHS_1A	DPM	9901	6.26E-07	2024	Phase 1a Office	MIT	Foundations + Core and Shell_Vendor	PERIOD
TRUCKS	DPM	9901	3.59E-06	2024	Phase 1a Office	MIT	Foundations + Core and Shell_Vendor	PERIOD
PHS_1A	DPM	9901	0.00E+00	2025	Phase 1a Office	MIT	Foundations + Core and Shell_Hauling	PERIOD
TRUCKS	DPM	9901	0.00E+00	2025	Phase 1a Office	MIT	Foundations + Core and Shell_Hauling	PERIOD
PHS_1A	DPM	9901	5.51E-07	2025	Phase 1a Office	MIT	Foundations + Core and Shell_Vendor	PERIOD
TRUCKS	DPM	9901	3.34E-06	2025	Phase 1a Office	MIT	Foundations + Core and Shell_Vendor	PERIOD
PHS_1A	DPM	9901	0.00E+00	2024	Phase 1a Office	MIT	Tenant Improvements_Hauling	PERIOD
TRUCKS	DPM	9901	0.00E+00	2024	Phase 1a Office	MIT	Tenant Improvements_Hauling	PERIOD
PHS_1A	DPM	9901	2.54E-07	2024	Phase 1a Office	MIT	Tenant Improvements_Vendor	PERIOD
TRUCKS	DPM	9901	1.46E-06	2024	Phase 1a Office	MIT	Tenant Improvements_Vendor	PERIOD
PHS_1A	DPM	9901	0.00E+00	2025	Phase 1a Office	MIT	Tenant Improvements_Hauling	PERIOD
TRUCKS	DPM	9901	0.00E+00	2025	Phase 1a Office	MIT	Tenant Improvements_Hauling	PERIOD
PHS_1A	DPM	9901	3.00E-07	2025	Phase 1a Office	MIT	Tenant Improvements_Vendor	PERIOD
TRUCKS	DPM	9901	1.82E-06	2025	Phase 1a Office	MIT	Tenant Improvements_Vendor	PERIOD
PHS_1A	DPM	9901	0.00E+00	2026	Phase 1a Office	MIT	Tenant Improvements_Hauling	PERIOD
TRUCKS	DPM	9901	0.00E+00	2026	Phase 1a Office	MIT	Tenant Improvements_Hauling	PERIOD
PHS_1A	DPM	9901	4.67E-08	2026	Phase 1a Office	MIT	Tenant Improvements_Vendor	PERIOD
TRUCKS	DPM	9901	3.03E-07	2026	Phase 1a Office	MIT	Tenant Improvements_Vendor	PERIOD
PHS_1B	DPM	9901	5.15E-06	2022	Phase 1b	MIT	Demolition_Hauling	PERIOD
TRUCKS	DPM	9901	3.01E-05	2022	Phase 1b	MIT	Demolition_Hauling	PERIOD
PHS_1B	DPM	9901	0.00E+00	2022	Phase 1b	MIT	Demolition_Vendor	PERIOD
TRUCKS	DPM	9901	0.00E+00	2022	Phase 1b	MIT	Demolition_Vendor	PERIOD
PHS_1B	DPM	9901	4.50E-06	2022	Phase 1b	MIT	Grading and Utilities_Hauling	PERIOD
TRUCKS	DPM	9901	2.63E-05	2022	Phase 1b	MIT	Grading and Utilities_Hauling	PERIOD
PHS_1B	DPM	9901	0.00E+00	2022	Phase 1b	MIT	Grading and Utilities_Vendor	PERIOD
TRUCKS	DPM	9901	0.00E+00	2022	Phase 1b	MIT	Grading and Utilities_Vendor	PERIOD
PHS_1B	DPM	9901	4.13E-06	2023	Phase 1b	MIT	Grading and Utilities_Hauling	PERIOD
TRUCKS	DPM	9901	2.51E-05	2023	Phase 1b	MIT	Grading and Utilities_Hauling	PERIOD
PHS_1B	DPM	9901	0.00E+00	2023	Phase 1b	MIT	Grading and Utilities_Vendor	PERIOD
TRUCKS	DPM	9901	0.00E+00	2023	Phase 1b	MIT	Grading and Utilities_Vendor	PERIOD
PHS_1B	DPM	9901	0.00E+00	2024	Phase 1b Mixed Use	MIT	Core and Shell_Hauling	PERIOD
TRUCKS	DPM	9901	0.00E+00	2024	Phase 1b Mixed Use	MIT	Core and Shell_Hauling	PERIOD
PHS_1B	DPM	9901	9.45E-08	2024	Phase 1b Mixed Use	MIT	Core and Shell_Vendor	PERIOD
TRUCKS	DPM	9901	5.42E-07	2024	Phase 1b Mixed Use	MIT	Core and Shell_Vendor	PERIOD
PHS_1B	DPM	9901	0.00E+00	2025	Phase 1b Mixed Use	MIT	Core and Shell_Hauling	PERIOD

TRUCKS	DPM	9901	0.00E+00	2025	Phase 1b Mixed Use	MIT	Core and Shell_Hauling	PERIOD
PHS_1B	DPM	9901	2.76E-08	2025	Phase 1b Mixed Use	MIT	Core and Shell_Vendor	PERIOD
TRUCKS	DPM	9901	1.68E-07	2025	Phase 1b Mixed Use	MIT	Core and Shell_Vendor	PERIOD
PHS_1B	DPM	9901	0.00E+00	2024	Phase 1b Mixed Use	MIT	Foundations_Hauling	PERIOD
TRUCKS	DPM	9901	0.00E+00	2024	Phase 1b Mixed Use	MIT	Foundations_Hauling	PERIOD
PHS_1B	DPM	9901	7.82E-08	2024	Phase 1b Mixed Use	MIT	Foundations_Vendor	PERIOD
TRUCKS	DPM	9901	4.49E-07	2024	Phase 1b Mixed Use	MIT	Foundations_Vendor	PERIOD
PHS_1B	DPM	9901	0.00E+00	2025	Phase 1b Mixed Use	MIT	Landscaping_Hauling	PERIOD
TRUCKS	DPM	9901	0.00E+00	2025	Phase 1b Mixed Use	MIT	Landscaping_Hauling	PERIOD
PHS_1B	DPM	9901	3.49E-08	2025	Phase 1b Mixed Use	MIT	Landscaping_Vendor	PERIOD
TRUCKS	DPM	9901	2.12E-07	2025	Phase 1b Mixed Use	MIT	Landscaping_Vendor	PERIOD
PHS_1B	DPM	9901	0.00E+00	2026	Phase 1b Mixed Use	MIT	Landscaping_Hauling	PERIOD
TRUCKS	DPM	9901	0.00E+00	2026	Phase 1b Mixed Use	MIT	Landscaping_Hauling	PERIOD
PHS_1B	DPM	9901	1.08E-08	2026	Phase 1b Mixed Use	MIT	Landscaping_Vendor	PERIOD
TRUCKS	DPM	9901	7.02E-08	2026	Phase 1b Mixed Use	MIT	Landscaping_Vendor	PERIOD
PHS_1B	DPM	9901	0.00E+00	2024	Phase 1b Mixed Use	MIT	Tenant Improvements_Hauling	PERIOD
TRUCKS	DPM	9901	0.00E+00	2024	Phase 1b Mixed Use	MIT	Tenant Improvements_Hauling	PERIOD
PHS_1B	DPM	9901	1.11E-08	2024	Phase 1b Mixed Use	MIT	Tenant Improvements_Vendor	PERIOD
TRUCKS	DPM	9901	6.36E-08	2024	Phase 1b Mixed Use	MIT	Tenant Improvements_Vendor	PERIOD
PHS_1B	DPM	9901	0.00E+00	2025	Phase 1b Mixed Use	MIT	Tenant Improvements_Hauling	PERIOD
TRUCKS	DPM	9901	0.00E+00	2025	Phase 1b Mixed Use	MIT	Tenant Improvements_Hauling	PERIOD
PHS_1B	DPM	9901	1.35E-07	2025	Phase 1b Mixed Use	MIT	Tenant Improvements_Vendor	PERIOD
TRUCKS	DPM	9901	8.21E-07	2025	Phase 1b Mixed Use	MIT	Tenant Improvements_Vendor	PERIOD
PHS_1B	DPM	9901	0.00E+00	2023	Phase 1b Office	MIT	Foundations + Core and Shell_Hauling	PERIOD
TRUCKS	DPM	9901	0.00E+00	2023	Phase 1b Office	MIT	Foundations + Core and Shell_Hauling	PERIOD
PHS_1B	DPM	9901	5.48E-07	2023	Phase 1b Office	MIT	Foundations + Core and Shell_Vendor	PERIOD
TRUCKS	DPM	9901	2.97E-06	2023	Phase 1b Office	MIT	Foundations + Core and Shell_Vendor	PERIOD
PHS_1B	DPM	9901	0.00E+00	2024	Phase 1b Office	MIT	Foundations + Core and Shell_Hauling	PERIOD
TRUCKS	DPM	9901	0.00E+00	2024	Phase 1b Office	MIT	Foundations + Core and Shell_Hauling	PERIOD
PHS_1B	DPM	9901	5.54E-07	2024	Phase 1b Office	MIT	Foundations + Core and Shell_Vendor	PERIOD
TRUCKS	DPM	9901	3.18E-06	2024	Phase 1b Office	MIT	Foundations + Core and Shell_Vendor	PERIOD
PHS_1B	DPM	9901	0.00E+00	2024	Phase 1b Office	MIT	Tenant Improvements_Hauling	PERIOD
TRUCKS	DPM	9901	0.00E+00	2024	Phase 1b Office	MIT	Tenant Improvements_Hauling	PERIOD
PHS_1B	DPM	9901	4.68E-07	2024	Phase 1b Office	MIT	Tenant Improvements_Vendor	PERIOD
TRUCKS	DPM	9901	2.69E-06	2024	Phase 1b Office	MIT	Tenant Improvements_Vendor	PERIOD
PHS_1B	DPM	9901	0.00E+00	2025	Phase 1b Office	MIT	Tenant Improvements_Hauling	PERIOD
TRUCKS	DPM	9901	0.00E+00	2025	Phase 1b Office	MIT	Tenant Improvements_Hauling	PERIOD
PHS_1B	DPM	9901	3.28E-07	2025	Phase 1b Office	MIT	Tenant Improvements_Vendor	PERIOD
TRUCKS	DPM	9901	1.99E-06	2025	Phase 1b Office	MIT	Tenant Improvements_Vendor	PERIOD
RS45	DPM	9901	0.00E+00	2025	Phase 2 Mixed Use	MIT	Core and Shell_Hauling	PERIOD
TRUCKS	DPM	9901	0.00E+00	2025	Phase 2 Mixed Use	MIT	Core and Shell_Hauling	PERIOD
RS45	DPM	9901	3.20E-07	2025	Phase 2 Mixed Use	MIT	Core and Shell_Vendor	PERIOD
TRUCKS	DPM	9901	1.94E-06	2025	Phase 2 Mixed Use	MIT	Core and Shell_Vendor	PERIOD
RS45	DPM	9901	0.00E+00	2024	Phase 2 Mixed Use	MIT	Foundations_Hauling	PERIOD
TRUCKS	DPM	9901	0.00E+00	2024	Phase 2 Mixed Use	MIT	Foundations_Hauling	PERIOD
RS45	DPM	9901	5.21E-08	2024	Phase 2 Mixed Use	MIT	Foundations_Vendor	PERIOD
TRUCKS	DPM	9901	2.99E-07	2024	Phase 2 Mixed Use	MIT	Foundations_Vendor	PERIOD

RS45	DPM	9901	0.00E+00	2025	Phase 2 Mixed Use	MIT	Foundations_Hauling	PERIOD
TRUCKS	DPM	9901	0.00E+00	2025	Phase 2 Mixed Use	MIT	Foundations_Hauling	PERIOD
RS45	DPM	9901	1.90E-07	2025	Phase 2 Mixed Use	MIT	Foundations_Vendor	PERIOD
TRUCKS	DPM	9901	1.15E-06	2025	Phase 2 Mixed Use	MIT	Foundations_Vendor	PERIOD
PHS_2X	DPM	9901	6.23E-07	2023	Phase 2 Mixed Use	MIT	Grading and Utilities_Hauling	PERIOD
TRUCKS	DPM	9901	3.78E-06	2023	Phase 2 Mixed Use	MIT	Grading and Utilities_Hauling	PERIOD
PHS_2X	DPM	9901	0.00E+00	2023	Phase 2 Mixed Use	MIT	Grading and Utilities_Vendor	PERIOD
TRUCKS	DPM	9901	0.00E+00	2023	Phase 2 Mixed Use	MIT	Grading and Utilities_Vendor	PERIOD
RS45	DPM	9901	0.00E+00	2026	Phase 2 Mixed Use	MIT	Landscaping_Hauling	PERIOD
TRUCKS	DPM	9901	0.00E+00	2026	Phase 2 Mixed Use	MIT	Landscaping_Hauling	PERIOD
RS45	DPM	9901	6.49E-08	2026	Phase 2 Mixed Use	MIT	Landscaping_Vendor	PERIOD
TRUCKS	DPM	9901	4.21E-07	2026	Phase 2 Mixed Use	MIT	Landscaping_Vendor	PERIOD
RS45	DPM	9901	0.00E+00	2025	Phase 2 Mixed Use	MIT	Tenant Improvements_Hauling	PERIOD
TRUCKS	DPM	9901	0.00E+00	2025	Phase 2 Mixed Use	MIT	Tenant Improvements_Hauling	PERIOD
RS45	DPM	9901	5.75E-08	2025	Phase 2 Mixed Use	MIT	Tenant Improvements_Vendor	PERIOD
TRUCKS	DPM	9901	3.49E-07	2025	Phase 2 Mixed Use	MIT	Tenant Improvements_Vendor	PERIOD
RS45	DPM	9901	0.00E+00	2026	Phase 2 Mixed Use	MIT	Tenant Improvements_Hauling	PERIOD
TRUCKS	DPM	9901	0.00E+00	2026	Phase 2 Mixed Use	MIT	Tenant Improvements_Hauling	PERIOD
RS45	DPM	9901	3.53E-07	2026	Phase 2 Mixed Use	MIT	Tenant Improvements_Vendor	PERIOD
TRUCKS	DPM	9901	2.29E-06	2026	Phase 2 Mixed Use	MIT	Tenant Improvements_Vendor	PERIOD
TRUCKS	DPM	9901	0.00E+00	2023	Phase 2 Mixed Use	MIT	Tunnel Construction_Hauling	PERIOD
TUNNEL	DPM	9901	0.00E+00	2023	Phase 2 Mixed Use	MIT	Tunnel Construction_Hauling	PERIOD
TRUCKS	DPM	9901	1.87E-06	2023	Phase 2 Mixed Use	MIT	Tunnel Construction_Vendor	PERIOD
TUNNEL	DPM	9901	3.45E-07	2023	Phase 2 Mixed Use	MIT	Tunnel Construction_Vendor	PERIOD
TRUCKS	DPM	9901	0.00E+00	2024	Phase 2 Mixed Use	MIT	Tunnel Construction_Hauling	PERIOD
TUNNEL	DPM	9901	0.00E+00	2024	Phase 2 Mixed Use	MIT	Tunnel Construction_Hauling	PERIOD
TRUCKS	DPM	9901	8.67E-07	2024	Phase 2 Mixed Use	MIT	Tunnel Construction_Vendor	PERIOD
TUNNEL	DPM	9901	1.51E-07	2024	Phase 2 Mixed Use	MIT	Tunnel Construction_Vendor	PERIOD
PHS_1A	DPM	9901	8.63E-06	2021	Phase 1a	MIT	Demolition_Onsite HHDT	PERIOD
PHS_1A	DPM	9901	4.70E-05	2022	Phase 1a	MIT	Demolition_Onsite HHDT	PERIOD
PHS_1A	DPM	9901	7.24E-05	2022	Phase 1a	MIT	Grading and Utilities_Onsite HHDT	PERIOD
RS2	DPM	9901	4.15E-05	2023	Phase 1a Mixed Use	MIT	Foundations_Onsite HHDT	PERIOD
RS2	DPM	9901	1.68E-06	2023	Phase 1a Mixed Use	MIT	Core and Shell_Onsite HHDT	PERIOD
RS2	DPM	9901	2.89E-06	2024	Phase 1a Mixed Use	MIT	Core and Shell_Onsite HHDT	PERIOD
RS2	DPM	9901	3.66E-06	2024	Phase 1a Mixed Use	MIT	Tenant Improvements_Onsite HHDT	PERIOD
RS2	DPM	9901	2.71E-06	2025	Phase 1a Mixed Use	MIT	Tenant Improvements_Onsite HHDT	PERIOD
RS2	DPM	9901	4.20E-06	2025	Phase 1a Mixed Use	MIT	Landscaping_Onsite HHDT	PERIOD
RS3	DPM	9901	4.54E-05	2023	Phase 1a Mixed Use	MIT	Foundations_Onsite HHDT	PERIOD
RS3	DPM	9901	2.69E-07	2024	Phase 1a Mixed Use	MIT	Foundations_Onsite HHDT	PERIOD
RS3	DPM	9901	8.96E-06	2024	Phase 1a Mixed Use	MIT	Core and Shell_Onsite HHDT	PERIOD
RS3	DPM	9901	4.08E-06	2024	Phase 1a Mixed Use	MIT	Tenant Improvements_Onsite HHDT	PERIOD
RS3	DPM	9901	8.45E-06	2025	Phase 1a Mixed Use	MIT	Tenant Improvements_Onsite HHDT	PERIOD
RS3	DPM	9901	4.13E-06	2025	Phase 1a Mixed Use	MIT	Landscaping_Onsite HHDT	PERIOD
NG	DPM	9901	9.80E-06	2022	Phase 1a Office	MIT	Vertical_Onsite HHDT	PERIOD
NG	DPM	9901	1.24E-05	2023	Phase 1a Office	MIT	Vertical_Onsite HHDT	PERIOD
O4	DPM	9901	1.28E-05	2023	Phase 1a Office	MIT	Vertical_Onsite HHDT	PERIOD
O4	DPM	9901	6.92E-06	2024	Phase 1a Office	MIT	Vertical_Onsite HHDT	PERIOD

MCP	DPM	9901	1.07E-05	2022	Phase 1a Office	MIT	Vertical_Onsite HHDT	PERIOD
MCP	DPM	9901	2.72E-05	2023	Phase 1a Office	MIT	Vertical_Onsite HHDT	PERIOD
MCP	DPM	9901	1.56E-05	2024	Phase 1a Office	MIT	Vertical_Onsite HHDT	PERIOD
MCP	DPM	9901	1.30E-05	2025	Phase 1a Office	MIT	Vertical_Onsite HHDT	PERIOD
MCP	DPM	9901	5.08E-07	2026	Phase 1a Office	MIT	Vertical_Onsite HHDT	PERIOD
EXCAVATE	DPM	9901	8.97E-06	2022	Phase 1a Office	MIT	Hotel Excavation_Onsite HHDT	PERIOD
EXCAVATE	DPM	9901	2.24E-05	2023	Phase 1a Office	MIT	Hotel Excavation_Onsite HHDT	PERIOD
HTL	DPM	9901	1.24E-05	2024	Phase 1a Office	MIT	Vertical_Onsite HHDT	PERIOD
HTL	DPM	9901	1.97E-05	2025	Phase 1a Office	MIT	Vertical_Onsite HHDT	PERIOD
TS	DPM	9901	4.45E-05	2023	Phase 1a Office	MIT	Vertical_Onsite HHDT	PERIOD
TS	DPM	9901	1.70E-05	2024	Phase 1a Office	MIT	Vertical_Onsite HHDT	PERIOD
TS	DPM	9901	2.61E-06	2025	Phase 1a Office	MIT	Vertical_Onsite HHDT	PERIOD
PHS_1B	DPM	9901	2.69E-05	2022	Phase 1b	MIT	Demolition_Onsite HHDT	PERIOD
PHS_1B	DPM	9901	3.29E-05	2022	Phase 1b	MIT	Grading and Utilities_Onsite HHDT	PERIOD
PHS_1B	DPM	9901	2.89E-05	2023	Phase 1b	MIT	Grading and Utilities_Onsite HHDT	PERIOD
SG	DPM	9901	1.74E-05	2023	Phase 1b Office	MIT	Vertical_Onsite HHDT	PERIOD
SG	DPM	9901	7.60E-06	2024	Phase 1b Office	MIT	Vertical_Onsite HHDT	PERIOD
O3	DPM	9901	1.14E-05	2023	Phase 1b Office	MIT	Vertical_Onsite HHDT	PERIOD
O3	DPM	9901	8.99E-06	2024	Phase 1b Office	MIT	Vertical_Onsite HHDT	PERIOD
O3	DPM	9901	2.21E-06	2025	Phase 1b Office	MIT	Vertical_Onsite HHDT	PERIOD
O1	DPM	9901	1.10E-05	2023	Phase 1b Office	MIT	Vertical_Onsite HHDT	PERIOD
O1	DPM	9901	8.50E-06	2024	Phase 1b Office	MIT	Vertical_Onsite HHDT	PERIOD
O2	DPM	9901	1.01E-05	2023	Phase 1b Office	MIT	Vertical_Onsite HHDT	PERIOD
O2	DPM	9901	8.99E-06	2024	Phase 1b Office	MIT	Vertical_Onsite HHDT	PERIOD
O2	DPM	9901	2.49E-07	2025	Phase 1b Office	MIT	Vertical_Onsite HHDT	PERIOD
O5	DPM	9901	1.30E-05	2023	Phase 1b Office	MIT	Vertical_Onsite HHDT	PERIOD
O5	DPM	9901	8.99E-06	2024	Phase 1b Office	MIT	Vertical_Onsite HHDT	PERIOD
O5	DPM	9901	2.03E-06	2025	Phase 1b Office	MIT	Vertical_Onsite HHDT	PERIOD
O6	DPM	9901	1.04E-05	2023	Phase 1b Office	MIT	Vertical_Onsite HHDT	PERIOD
O6	DPM	9901	9.02E-06	2024	Phase 1b Office	MIT	Vertical_Onsite HHDT	PERIOD
O6	DPM	9901	4.35E-06	2025	Phase 1b Office	MIT	Vertical_Onsite HHDT	PERIOD
RS7	DPM	9901	1.31E-05	2024	Phase 1b Mixed Use	MIT	Foundations_Onsite HHDT	PERIOD
RS7	DPM	9901	3.21E-06	2024	Phase 1b Mixed Use	MIT	Core and Shell_Onsite HHDT	PERIOD
RS7	DPM	9901	4.23E-07	2024	Phase 1b Mixed Use	MIT	Tenant Improvements_Onsite HHDT	PERIOD
RS7	DPM	9901	4.06E-06	2025	Phase 1b Mixed Use	MIT	Tenant Improvements_Onsite HHDT	PERIOD
RS7	DPM	9901	4.13E-06	2025	Phase 1b Mixed Use	MIT	Landscaping_Onsite HHDT	PERIOD
RS6	DPM	9901	1.75E-05	2024	Phase 1b Mixed Use	MIT	Foundations_Onsite HHDT	PERIOD
RS6	DPM	9901	4.03E-06	2024	Phase 1b Mixed Use	MIT	Core and Shell_Onsite HHDT	PERIOD
RS6	DPM	9901	2.28E-06	2025	Phase 1b Mixed Use	MIT	Core and Shell_Onsite HHDT	PERIOD
RS6	DPM	9901	8.88E-06	2025	Phase 1b Mixed Use	MIT	Tenant Improvements_Onsite HHDT	PERIOD
RS6	DPM	9901	1.92E-06	2025	Phase 1b Mixed Use	MIT	Landscaping_Onsite HHDT	PERIOD
RS6	DPM	9901	2.17E-06	2026	Phase 1b Mixed Use	MIT	Landscaping_Onsite HHDT	PERIOD
PHS_2X	DPM	9901	5.54E-06	2023	Phase 2 Mixed Use	MIT	Grading and Utilities_Onsite HHDT	PERIOD
TUNNEL	DPM	9901	2.50E-05	2023	Phase 2 Mixed Use	MIT	Tunnel Construction_Onsite HHDT	PERIOD
TUNNEL	DPM	9901	1.17E-05	2024	Phase 2 Mixed Use	MIT	Tunnel Construction_Onsite HHDT	PERIOD
RS45	DPM	9901	6.66E-06	2024	Phase 2 Mixed Use	MIT	Foundations_Onsite HHDT	PERIOD
RS45	DPM	9901	2.62E-05	2025	Phase 2 Mixed Use	MIT	Foundations_Onsite HHDT	PERIOD

RS45	DPM	9901	9.90E-06	2025	Phase 2 Mixed Use	MIT	Core and Shell_Onsite HHDT	PERIOD
RS45	DPM	9901	1.78E-06	2025	Phase 2 Mixed Use	MIT	Tenant Improvements_Onsite HHDT	PERIOD
RS45	DPM	9901	1.18E-05	2026	Phase 2 Mixed Use	MIT	Tenant Improvements_Onsite HHDT	PERIOD
RS45	DPM	9901	7.99E-06	2026	Phase 2 Mixed Use	MIT	Landscaping_Onsite HHDT	PERIOD
RETAIL	DPM	9901	8.95E-06	2024	Alternate 1	MIT	Demolition_Onsite HHDT	PERIOD
RETAIL	DPM	9901	4.12E-07	2024	Alternate 1	MIT	Grading and Utilities_Onsite HHDT	PERIOD
RETAIL	DPM	9901	8.65E-06	2025	Alternate 1	MIT	Grading and Utilities_Onsite HHDT	PERIOD
RETAIL	DPM	9901	3.40E-06	2025	Alternate 1	MIT	Foundations_Onsite HHDT	PERIOD
RETAIL	DPM	9901	3.98E-06	2025	Alternate 1	MIT	Core and Shell_Onsite HHDT	PERIOD
RETAIL	DPM	9901	1.88E-06	2025	Alternate 1	MIT	Tenant Improvements_Onsite HHDT	PERIOD
PHS_1A	DPM	9901	1.03E-05	2021	Phase 1a	MIT	Demolition_Onsite LHDT1	PERIOD
PHS_1A	DPM	9901	5.63E-05	2022	Phase 1a	MIT	Demolition_Onsite LHDT1	PERIOD
PHS_1A	DPM	9901	1.52E-04	2022	Phase 1a	MIT	Grading and Utilities_Onsite LHDT1	PERIOD
RS2	DPM	9901	1.57E-05	2023	Phase 1a Mixed Use	MIT	Foundations_Onsite LHDT1	PERIOD
RS2	DPM	9901	1.25E-05	2023	Phase 1a Mixed Use	MIT	Core and Shell_Onsite LHDT1	PERIOD
RS2	DPM	9901	2.04E-05	2024	Phase 1a Mixed Use	MIT	Core and Shell_Onsite LHDT1	PERIOD
RS2	DPM	9901	1.74E-05	2024	Phase 1a Mixed Use	MIT	Tenant Improvements_Onsite LHDT1	PERIOD
RS2	DPM	9901	1.24E-05	2025	Phase 1a Mixed Use	MIT	Tenant Improvements_Onsite LHDT1	PERIOD
RS2	DPM	9901	5.95E-06	2025	Phase 1a Mixed Use	MIT	Landscaping_Onsite LHDT1	PERIOD
RS3	DPM	9901	1.56E-05	2023	Phase 1a Mixed Use	MIT	Foundations_Onsite LHDT1	PERIOD
RS3	DPM	9901	8.78E-08	2024	Phase 1a Mixed Use	MIT	Foundations_Onsite LHDT1	PERIOD
RS3	DPM	9901	3.16E-05	2024	Phase 1a Mixed Use	MIT	Core and Shell_Onsite LHDT1	PERIOD
RS3	DPM	9901	1.13E-05	2024	Phase 1a Mixed Use	MIT	Tenant Improvements_Onsite LHDT1	PERIOD
RS3	DPM	9901	2.26E-05	2025	Phase 1a Mixed Use	MIT	Tenant Improvements_Onsite LHDT1	PERIOD
RS3	DPM	9901	5.85E-06	2025	Phase 1a Mixed Use	MIT	Landscaping_Onsite LHDT1	PERIOD
NG	DPM	9901	3.44E-07	2022	Phase 1a Office	MIT	Vertical_Onsite LHDT1	PERIOD
NG	DPM	9901	5.12E-06	2023	Phase 1a Office	MIT	Vertical_Onsite LHDT1	PERIOD
O4	DPM	9901	4.23E-06	2023	Phase 1a Office	MIT	Vertical_Onsite LHDT1	PERIOD
O4	DPM	9901	4.55E-06	2024	Phase 1a Office	MIT	Vertical_Onsite LHDT1	PERIOD
MCP	DPM	9901	1.72E-06	2022	Phase 1a Office	MIT	Vertical_Onsite LHDT1	PERIOD
MCP	DPM	9901	1.26E-05	2023	Phase 1a Office	MIT	Vertical_Onsite LHDT1	PERIOD
MCP	DPM	9901	2.30E-05	2024	Phase 1a Office	MIT	Vertical_Onsite LHDT1	PERIOD
MCP	DPM	9901	2.11E-05	2025	Phase 1a Office	MIT	Vertical_Onsite LHDT1	PERIOD
MCP	DPM	9901	3.39E-06	2026	Phase 1a Office	MIT	Vertical_Onsite LHDT1	PERIOD
EXCAVATE	DPM	9901	4.58E-06	2022	Phase 1a Office	MIT	Hotel Excavation_Onsite LHDT1	PERIOD
EXCAVATE	DPM	9901	3.48E-05	2023	Phase 1a Office	MIT	Hotel Excavation_Onsite LHDT1	PERIOD
HTL	DPM	9901	1.08E-05	2024	Phase 1a Office	MIT	Vertical_Onsite LHDT1	PERIOD
HTL	DPM	9901	6.25E-06	2025	Phase 1a Office	MIT	Vertical_Onsite LHDT1	PERIOD
TS	DPM	9901	2.32E-05	2023	Phase 1a Office	MIT	Vertical_Onsite LHDT1	PERIOD
TS	DPM	9901	1.70E-05	2024	Phase 1a Office	MIT	Vertical_Onsite LHDT1	PERIOD
TS	DPM	9901	8.88E-06	2025	Phase 1a Office	MIT	Vertical_Onsite LHDT1	PERIOD
PHS_1B	DPM	9901	3.22E-05	2022	Phase 1b	MIT	Demolition_Onsite LHDT1	PERIOD
PHS_1B	DPM	9901	6.90E-05	2022	Phase 1b	MIT	Grading and Utilities_Onsite LHDT1	PERIOD
PHS_1B	DPM	9901	6.02E-05	2023	Phase 1b	MIT	Grading and Utilities_Onsite LHDT1	PERIOD
SG	DPM	9901	3.17E-06	2023	Phase 1b Office	MIT	Vertical_Onsite LHDT1	PERIOD
SG	DPM	9901	4.13E-06	2024	Phase 1b Office	MIT	Vertical_Onsite LHDT1	PERIOD
O3	DPM	9901	2.34E-06	2023	Phase 1b Office	MIT	Vertical_Onsite LHDT1	PERIOD

O3	DPM	9901	5.75E-06	2024	Phase 1b Office	MIT	Vertical_Onsite LHDT1	PERIOD
O3	DPM	9901	1.25E-06	2025	Phase 1b Office	MIT	Vertical_Onsite LHDT1	PERIOD
O1	DPM	9901	2.51E-06	2023	Phase 1b Office	MIT	Vertical_Onsite LHDT1	PERIOD
O1	DPM	9901	5.47E-06	2024	Phase 1b Office	MIT	Vertical_Onsite LHDT1	PERIOD
O2	DPM	9901	1.99E-06	2023	Phase 1b Office	MIT	Vertical_Onsite LHDT1	PERIOD
O2	DPM	9901	5.75E-06	2024	Phase 1b Office	MIT	Vertical_Onsite LHDT1	PERIOD
O2	DPM	9901	1.41E-07	2025	Phase 1b Office	MIT	Vertical_Onsite LHDT1	PERIOD
O5	DPM	9901	2.79E-06	2023	Phase 1b Office	MIT	Vertical_Onsite LHDT1	PERIOD
O5	DPM	9901	5.75E-06	2024	Phase 1b Office	MIT	Vertical_Onsite LHDT1	PERIOD
O5	DPM	9901	1.15E-06	2025	Phase 1b Office	MIT	Vertical_Onsite LHDT1	PERIOD
O6	DPM	9901	1.66E-06	2023	Phase 1b Office	MIT	Vertical_Onsite LHDT1	PERIOD
O6	DPM	9901	5.32E-06	2024	Phase 1b Office	MIT	Vertical_Onsite LHDT1	PERIOD
O6	DPM	9901	2.46E-06	2025	Phase 1b Office	MIT	Vertical_Onsite LHDT1	PERIOD
RS7	DPM	9901	1.02E-05	2024	Phase 1b Mixed Use	MIT	Foundations_Onsite LHDT1	PERIOD
RS7	DPM	9901	2.27E-05	2024	Phase 1b Mixed Use	MIT	Core and Shell_Onsite LHDT1	PERIOD
RS7	DPM	9901	2.02E-06	2024	Phase 1b Mixed Use	MIT	Tenant Improvements_Onsite LHDT1	PERIOD
RS7	DPM	9901	1.86E-05	2025	Phase 1b Mixed Use	MIT	Tenant Improvements_Onsite LHDT1	PERIOD
RS7	DPM	9901	5.85E-06	2025	Phase 1b Mixed Use	MIT	Landscaping_Onsite LHDT1	PERIOD
RS6	DPM	9901	1.02E-05	2024	Phase 1b Mixed Use	MIT	Foundations_Onsite LHDT1	PERIOD
RS6	DPM	9901	1.42E-05	2024	Phase 1b Mixed Use	MIT	Core and Shell_Onsite LHDT1	PERIOD
RS6	DPM	9901	7.75E-06	2025	Phase 1b Mixed Use	MIT	Core and Shell_Onsite LHDT1	PERIOD
RS6	DPM	9901	2.38E-05	2025	Phase 1b Mixed Use	MIT	Tenant Improvements_Onsite LHDT1	PERIOD
RS6	DPM	9901	2.72E-06	2025	Phase 1b Mixed Use	MIT	Landscaping_Onsite LHDT1	PERIOD
RS6	DPM	9901	3.01E-06	2026	Phase 1b Mixed Use	MIT	Landscaping_Onsite LHDT1	PERIOD
PHS_2X	DPM	9901	1.07E-05	2023	Phase 2 Mixed Use	MIT	Grading and Utilities_Onsite LHDT1	PERIOD
TUNNEL	DPM	9901	4.76E-05	2023	Phase 2 Mixed Use	MIT	Tunnel Construction_Onsite LHDT1	PERIOD
TUNNEL	DPM	9901	2.12E-05	2024	Phase 2 Mixed Use	MIT	Tunnel Construction_Onsite LHDT1	PERIOD
RS45	DPM	9901	2.11E-06	2024	Phase 2 Mixed Use	MIT	Foundations_Onsite LHDT1	PERIOD
RS45	DPM	9901	7.99E-06	2025	Phase 2 Mixed Use	MIT	Foundations_Onsite LHDT1	PERIOD
RS45	DPM	9901	4.49E-05	2025	Phase 2 Mixed Use	MIT	Core and Shell_Onsite LHDT1	PERIOD
RS45	DPM	9901	5.90E-06	2025	Phase 2 Mixed Use	MIT	Tenant Improvements_Onsite LHDT1	PERIOD
RS45	DPM	9901	3.83E-05	2026	Phase 2 Mixed Use	MIT	Tenant Improvements_Onsite LHDT1	PERIOD
RS45	DPM	9901	1.11E-05	2026	Phase 2 Mixed Use	MIT	Landscaping_Onsite LHDT1	PERIOD
RETAIL	DPM	9901	2.90E-06	2024	Alternate 1	MIT	Demolition_Onsite LHDT1	PERIOD
RETAIL	DPM	9901	1.76E-07	2024	Alternate 1	MIT	Grading and Utilities_Onsite LHDT1	PERIOD
RETAIL	DPM	9901	3.55E-06	2025	Alternate 1	MIT	Grading and Utilities_Onsite LHDT1	PERIOD
RETAIL	DPM	9901	8.88E-07	2025	Alternate 1	MIT	Foundations_Onsite LHDT1	PERIOD
RETAIL	DPM	9901	3.47E-06	2025	Alternate 1	MIT	Core and Shell_Onsite LHDT1	PERIOD
RETAIL	DPM	9901	1.80E-06	2025	Alternate 1	MIT	Tenant Improvements_Onsite LHDT1	PERIOD

PHASE	YEAR	RECTYPE	IFINH	EXCAVATE	HTL	MCP	NG	O1	O2	O3	O4	O5	O6	PHS_1A	PHS_1B	PHS_2X	RETAIL
				1.77869	1.3115	2.15222	2.36197	10.5137	5.94605	4.01936	2.94803	4.5772	7.03205	3.02658	7.71402	3.39239	0.840095
Phase 1a	2022	Residential	0.050266155	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.70E-01	0.00E+00	0.00E+00	0.00E+00
Phase 1a Office	2022	Residential	0.050266155	2.94E-02	0.00E+00	3.47E-02	2.33E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.18E-05	0.00E+00	0.00E+00	0.00E+00
Phase 1a Office	2023	Residential	0.149315068	2.90E-01	0.00E+00	3.60E-01	1.34E-01	0.00E+00	0.00E+00	0.00E+00	1.29E-01	0.00E+00	0.00E+00	3.51E-04	0.00E+00	0.00E+00	0.00E+00
Phase 1a Office	2024	Residential	0.149061541	0.00E+00	8.77E-02	1.08E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.84E-02	0.00E+00	0.00E+00	4.37E-04	0.00E+00	0.00E+00	0.00E+00
Phase 1a Office	2025	Residential	0.025931507	0.00E+00	7.16E-03	1.39E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.35E-05	0.00E+00	0.00E+00	0.00E+00
Phase 1a Office	2026	Residential	0.025931507	0.00E+00	0.00E+00	3.54E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.03E-06	0.00E+00	0.00E+00	0.00E+00
Phase 1a Mixed Use	2023	Residential	0.149315068	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.06E-05	0.00E+00	0.00E+00	0.00E+00
Phase 1a Mixed Use	2024	Residential	0.149061541	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.07E-05	0.00E+00	0.00E+00	0.00E+00
Phase 1a Mixed Use	2025	Residential	0.025931507	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.97E-06	0.00E+00	0.00E+00	0.00E+00
Phase 1b	2022	Residential	0.050266155	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.38E-01	0.00E+00	0.00E+00
Phase 1b	2023	Residential	0.149315068	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.35E-01	0.00E+00	0.00E+00
Phase 1b Office	2023	Residential	0.149315068	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.98E-01	2.71E-01	2.15E-01	0.00E+00	2.85E-01	4.17E-01	0.00E+00	6.94E-04	0.00E+00	0.00E+00
Phase 1b Office	2024	Residential	0.149061541	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.21E-01	7.54E-02	4.97E-02	0.00E+00	5.41E-02	9.75E-02	0.00E+00	1.29E-03	0.00E+00	0.00E+00
Phase 1b Office	2025	Residential	0.025931507	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.53E-04	9.17E-04	0.00E+00	9.60E-04	3.16E-03	0.00E+00	7.21E-05	0.00E+00	0.00E+00
Phase 1b Mixed Use	2024	Residential	0.149061541	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.32E-04	0.00E+00	0.00E+00
Phase 1b Mixed Use	2025	Residential	0.025931507	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.35E-05	0.00E+00	0.00E+00
Phase 1b Mixed Use	2026	Residential	0.025931507	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.38E-06	0.00E+00	0.00E+00
Phase 2 Mixed Use	2023	Residential	0.149315068	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.83E-02	0.00E+00
Phase 2 Mixed Use	2024	Residential	0.149061541	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Phase 2 Mixed Use	2025	Residential	0.025931507	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Phase 2 Mixed Use	2026	Residential	0.025931507	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Alternate 1	2024	Residential	0.149061541	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.88E-03
Alternate 1	2025	Residential	0.025931507	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.86E-03

RS2	RS3	RS45	RS6	RS7	SG	TRUCKS	TS	TUNNEL	PHS1A_FD	PHS1B_FD	PHS2X_FD	RTAIL_FD	TRCKS_FD
1.20941	**2.31736**	**3.39239**	**1.87171**	**3.40722**	**18.1945**	**0.444516**	**2.05018**	**1.2231**	**3.16781**	**8.2004**	**3.45794**	**0.832633**	**0.444516**
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.93E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.71E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.79E-04	2.87E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.68E-04	1.36E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.55E-05	6.18E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.84E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
6.14E-02	1.13E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.61E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2.64E-02	6.52E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.96E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2.59E-03	6.70E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.89E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.39E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.83E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.21E+00	2.17E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.10E-01	4.28E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.52E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	6.37E-02	1.29E-01	0.00E+00	7.68E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	5.78E-03	8.37E-03	0.00E+00	1.52E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.06E-03	0.00E+00	0.00E+00	8.90E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.13E-04	0.00E+00	4.83E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	3.77E-02	0.00E+00	0.00E+00	0.00E+00	8.50E-05	0.00E+00	2.33E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	3.97E-02	0.00E+00	0.00E+00	0.00E+00	4.37E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	1.93E-02	0.00E+00	0.00E+00	0.00E+00	3.44E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.85E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.98E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

CPF	1.1
multiply	1.00E+06
CF	0.001

Risk	7.5

Receptor ID	R00760	CF	0.001
UTMx	574,840	IF_{inh} x ASF	0.693602
UTMy	4,147,800	CPF	1.1
Scenario	4	Multiplier	1000000

Source Group	Dispersion Factor	Emissions	Risk
	ug/m^3 / g/s	g/s	in a million
NGA	1.1E-01	3.9E-05	3.4E-03
NGB	1.1E-01	3.9E-05	3.4E-03
OSG	6.4E-01	7.7E-05	3.7E-02
PMP	2.2E+00	1.8E-04	2.9E-01
RS2	4.9E-01	4.7E-05	1.8E-02
RS3	2.8E-01	3.9E-05	8.4E-03
RS4	2.6E-01	1.8E-04	3.5E-02
RS5	1.7E-01	1.8E-04	2.4E-02
RS6	3.7E-01	1.1E-04	3.1E-02
RS7	3.6E-01	7.7E-05	2.1E-02
SGA	1.3E-01	9.2E-05	9.1E-03
SGB	1.3E-01	9.2E-05	9.2E-03
TS1	4.1E-01	2.1E-04	6.7E-02
B40EG1	-2.3E-01	7.7E-05	-1.4E-02
		Total	0.55

Risk	0.55

Receptor ID	R01084	CF	0.001
UTMx	575,500	IF_{inh} x ASF	0.382561
UTMy	4,147,960	CPF	1.1
Scenario	2	Multiplier	1000000

Source Group	Dispersion Factor	Emissions	Risk
	ug/m^3 / g/s	g/s	in a million
NGA	1.6E+00	3.9E-05	2.6E-02
NGB	1.6E+00	3.9E-05	2.6E-02
OSG	5.3E-01	7.7E-05	1.7E-02
PMP	4.3E-01	1.8E-04	3.3E-02
RS2	7.0E-01	4.7E-05	1.4E-02
RS3	1.2E+00	3.9E-05	2.0E-02
RS4	1.4E+00	1.8E-04	1.0E-01
RS5	1.1E+00	1.8E-04	8.3E-02
RS6	9.1E-01	1.1E-04	4.2E-02
RS7	1.0E+00	7.7E-05	3.3E-02
SGA	4.1E+00	9.2E-05	1.6E-01
SGB	4.0E+00	9.2E-05	1.6E-01
TS1	7.8E-01	2.1E-04	7.0E-02
B40EG1	-4.0E+00	7.7E-05	-1.3E-01
		Total	0.65

Risk	0.65

Receptor R00760
UTMx 574,840
UTMy 4,147,800
Scenario 4

Source Group	Dispersion Factor (ug/m3/g/s)	Emissions (g/s)	Concentration	Total Concentration
ADAMS_CT	0.228802	1.75972E-07	4.02627E-08	0.00412377
ADAMSD01	0.164522	3.16292E-08	5.2037E-09	
ADAMSD02	0.182569	8.84892E-08	1.61554E-08	
ADAMSD03	0.176496	1.93167E-08	3.40933E-09	
ADAMSD04	0.161537	2.09597E-08	3.38577E-09	
ADAMSD05	0.140406	3.72243E-08	5.22652E-09	
ADAMSD06	0.108975	2.06329E-08	2.24847E-09	
BAY_EAST	0.0858905	1.48985E-05	1.27964E-06	
BAY_EFB	1.78729	7.73358E-06	1.38222E-05	
BAY_M01	0.768622	1.35397E-06	1.04069E-06	
BAY_M02	0.451841	1.66337E-06	7.51577E-07	
BAY_M03	0.312218	1.4354E-06	4.48156E-07	
BAY_M04	0.238917	1.75836E-06	4.20103E-07	
BAY_M05	0.169805	4.30597E-06	7.31175E-07	
BAY_WFB1	0.410733	3.7039E-06	1.52131E-06	
BAY_WFB2	0.550204	1.8559E-06	1.02113E-06	
BAY_WFB3	0.647287	1.09555E-06	7.09138E-07	
BAY_WFB4	0.806482	2.9006E-06	2.33928E-06	
BAY_WFB5	0.994965	1.2129E-06	1.20679E-06	
BAY_WFB6	1.45295	5.841E-06	8.48668E-06	
BAY_WFB7	2.24412	1.46254E-06	3.28211E-06	
OBRIEN01	10.2777	3.62698E-06	3.7277E-05	
OBRIEN02	0.724052	1.56702E-06	1.13461E-06	
OBRIEN03	0.457231	4.00898E-07	1.83303E-07	
OBRIEN04	0.423196	3.29622E-07	1.39495E-07	
OBRIEN05	0.418998	3.2044E-07	1.34264E-07	
OBRIEN06	0.427006	5.89308E-07	2.51638E-07	
OBRIEN07	0.407719	1.2155E-06	4.95582E-07	
OBRIEN08	0.386555	5.74086E-07	2.21916E-07	
OBRIEN09	0.375985	5.60164E-07	2.10613E-07	
OBRIEN10	0.360868	5.87721E-07	2.1209E-07	
OBRIEN11	0.328439	1.24359E-06	4.08445E-07	
OBRIEN12	0.263668	2.86745E-06	7.56054E-07	
OBRIEN13	0.219022	8.94975E-07	1.96019E-07	
OBRIEN14	0.188372	3.16376E-06	5.95964E-07	
OBRIEN15	0.143168	6.71632E-06	9.61561E-07	
OBRIEN16	0.115819	1.32948E-06	1.53979E-07	
OBRIEN17	0.108128	1.49826E-06	1.62004E-07	
UNIV_01	0.132548	3.47455E-07	4.60545E-08	
UNIV_02	0.135673	2.8685E-07	3.89178E-08	
UNIV_03	0.150824	7.02329E-07	1.05928E-07	

$Risk_{inh} = C_i \times CF \times IF_{inh} \times ASF \times CPF$

C_i	0.004	ug/m^3	
CF	0.001	mg/ug	
IF_{inh} x ASF	0.6936016	m^3/kg-day	(residential receptor)
CPF	1	mg chemical/kg body weight-day	

$Risk_{inh}$ 2.9

UNIV_04	0.124093	3.83606E-07	4.76029E-08
UNIV_05	0.111142	2.53725E-07	2.81995E-08
UNIV_06	0.109829	2.18082E-07	2.39518E-08
UNIV_07	0.11052	8.14231E-07	8.99888E-08
UNIV_08	0.0962958	8.86207E-07	8.5338E-08
UNIV_09	0.102161	3.07028E-06	3.13662E-07
UNIV_10	0.0720584	6.76364E-06	4.87377E-07
UNIV_11	0.0682129	2.51102E-06	1.71284E-07
UNIV_12	0.065637	1.38409E-06	9.08476E-08
UNIV_13	0.111984	2.79184E-06	3.12642E-07
UNIV_14	0.139206	4.39061E-06	6.11199E-07
UNIV_15	0.212796	1.41352E-05	3.00792E-06
WILLOW01	1.0423	2.00451E-06	2.0893E-06
WILLOW02	1.36289	3.60626E-06	4.91494E-06
WILLOW03	1.80611	0	0
WILLOW04	2.86405	0	0
WILLOW05	8.0686	8.81292E-06	7.11079E-05
WILLOW06	31.0703	4.83043E-06	0.000150083
WILLOW07	258.338	1.38006E-05	0.003565207
WILLOW08	6.79496	4.56369E-06	3.10101E-05
WILLOW09	3.47985	1.90057E-06	6.61369E-06
WILLOW10	4.24553	1.52299E-06	6.46591E-06
WILLOW11	2.3138	8.84299E-06	2.04609E-05
WILLOW12	1.12795	1.25605E-05	1.41676E-05
WILLOW13	0.645833	1.05948E-05	6.8425E-06
ONSITE	0.823985	2.84021E-05	2.34029E-05
SHUTTLES	1.51916	8.90706E-05	0.000135312

Receptor R01084
UTMx 575,500
UTMy 4,147,960
Scenario 2

Source Group	Dispersion Factor (ug/m3/g/s)	Emissions (g/s)	Concentration	Total Concentration
ADAMS_CT	4.61758	1.75972E-07	8.12563E-07	0.002327533
ADAMSD01	2.58897	3.16292E-08	8.1887E-08	
ADAMSD02	2.34296	8.84892E-08	2.07327E-07	
ADAMSD03	1.6297	1.93167E-08	3.14805E-08	
ADAMSD04	1.26177	2.09597E-08	2.64464E-08	
ADAMSD05	0.875164	3.72243E-08	3.25774E-08	
ADAMSD06	0.508449	2.06329E-08	1.04908E-08	
BAY_EAST	0.273822	1.48985E-05	4.07955E-06	
BAY_EFB	2.08074	7.73358E-06	1.60916E-05	
BAY_M01	3.30124	1.35397E-06	4.46977E-06	
BAY_M02	2.77428	1.66337E-06	4.61464E-06	
BAY_M03	2.00457	1.4354E-06	2.87735E-06	
BAY_M04	1.58553	1.75836E-06	2.78794E-06	
BAY_M05	0.98026	4.30597E-06	4.22097E-06	
BAY_WFB1	0.24912	3.7039E-06	9.22716E-07	
BAY_WFB2	0.30966	1.8559E-06	5.74699E-07	
BAY_WFB3	0.350888	1.09555E-06	3.84417E-07	
BAY_WFB4	0.418054	2.9006E-06	1.21261E-06	
BAY_WFB5	0.502312	1.2129E-06	6.09255E-07	
BAY_WFB6	0.726719	5.841E-06	4.24476E-06	
BAY_WFB7	1.08618	1.46254E-06	1.58858E-06	
OBRIEN01	3.9779	3.62698E-06	1.44278E-05	
OBRIEN02	7.0612	1.56702E-06	1.10651E-05	
OBRIEN03	8.18863	4.00898E-07	3.28281E-06	
OBRIEN04	10.439	3.29622E-07	3.44092E-06	
OBRIEN05	16.1324	3.2044E-07	5.16947E-06	
OBRIEN06	38.0345	5.89308E-07	2.2414E-05	
OBRIEN07	77.5479	1.2155E-06	9.42593E-05	
OBRIEN08	104.437	5.74086E-07	5.99558E-05	
OBRIEN09	127.429	5.60164E-07	7.13811E-05	
OBRIEN10	154.03	5.87721E-07	9.05266E-05	
OBRIEN11	181.195	1.24359E-06	0.000225333	
OBRIEN12	69.9427	2.86745E-06	0.000200557	
OBRIEN13	13.0887	8.94975E-07	1.17141E-05	
OBRIEN14	5.2007	3.16376E-06	1.64538E-05	
OBRIEN15	1.17325	6.71632E-06	7.87992E-06	
OBRIEN16	0.522561	1.32948E-06	6.94736E-07	
OBRIEN17	0.438247	1.49826E-06	6.56607E-07	
UNIV_01	0.631395	3.47455E-07	2.19382E-07	
UNIV_02	0.575324	2.8685E-07	1.65032E-07	
UNIV_03	0.457422	7.02329E-07	3.21261E-07	

$Risk_{inh} = C_i \times CF \times IF_{inh} \times ASF \times CPF$

C_i	0.002	ug/m^3
CF	0.001	mg/ug
IF_{inh} x ASF	0.383	m^3/kg-day (residential receptor)
CPF	1	mg chemical/kg body weight-day

$Risk_{inh}$ 0.89

UNIV_04	0.402371	3.83606E-07	1.54352E-07
UNIV_05	0.413553	2.53725E-07	1.04929E-07
UNIV_06	0.46428	2.18082E-07	1.01251E-07
UNIV_07	0.481881	8.14231E-07	3.92362E-07
UNIV_08	0.422297	8.86207E-07	3.74243E-07
UNIV_09	0.368206	3.07028E-06	1.13049E-06
UNIV_10	0.340396	6.76364E-06	2.30232E-06
UNIV_11	0.459498	2.51102E-06	1.15381E-06
UNIV_12	0.576887	1.38409E-06	7.98464E-07
UNIV_13	0.78125	2.79184E-06	2.18113E-06
UNIV_14	0.998923	4.39061E-06	4.38588E-06
UNIV_15	0.406929	1.41352E-05	5.75202E-06
WILLOW01	3.63643	2.00451E-06	7.28927E-06
WILLOW02	4.26222	3.60626E-06	1.53707E-05
WILLOW03	4.76352	0	0
WILLOW04	4.85792	0	0
WILLOW05	3.79712	8.81292E-06	3.34637E-05
WILLOW06	2.82282	4.83043E-06	1.36354E-05
WILLOW07	1.68951	1.38006E-05	2.33162E-05
WILLOW08	0.938966	4.56369E-06	4.28515E-06
WILLOW09	0.665459	1.90057E-06	1.26475E-06
WILLOW10	0.765154	1.52299E-06	1.16532E-06
WILLOW11	0.468515	8.84299E-06	4.14307E-06
WILLOW12	0.296042	1.25605E-05	3.71842E-06
WILLOW13	0.213201	1.05948E-05	2.25883E-06
ONSITE	18.4213	2.84021E-05	0.000523203
SHUTTLES	8.82209	8.90706E-05	0.000785788

PHASE	YEAR	RECTYPE	IFINH	EXCAVATE	HTL	MCP	NG	O1	O2	O3	O4	O5	O6	PHS_1A	PHS_1B	PHS_2X
				8.90376	**6.87441**	**3.13909**	**0.830208**	**2.57998**	**6.53736**	**8.52868**	**5.89373**	**1.55107**	**1.51476**	**6.98184**	**4.21203**	**73.5981**
Phase 1a Office	2025	Residential	0.112121191	0.00E+00	1.62E-01	8.77E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.33E-04	0.00E+00	0.00E+00
Phase 1a Office	2026	Residential	0.149315068	0.00E+00	0.00E+00	2.97E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.35E-05	0.00E+00	0.00E+00
Phase 1a Mixed Use	2025	Residential	0.112121191	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.94E-05	0.00E+00	0.00E+00
Phase 1b Office	2025	Residential	0.112121191	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.28E-04	8.41E-03	0.00E+00	1.41E-03	2.94E-03	0.00E+00	1.70E-04	0.00E+00
Phase 1b Mixed Use	2025	Residential	0.112121191	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.03E-04	0.00E+00
Phase 1b Mixed Use	2026	Residential	0.149315068	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.49E-06	0.00E+00
Phase 2 Mixed Use	2025	Residential	0.112121191	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Phase 2 Mixed Use	2026	Residential	0.149315068	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Alternate 1	2025	Residential	0.112121191	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

RETAIL	RS2	RS3	RS45	RS6	RS7	SG	TRUCKS	TS	TUNNEL	PHS1A_FD	PHS1B_FD	PHS2X_FD	RTAIL_FD	TRCKS_FD
3.1027	**6.49526**	**27.327**	**73.5981**	**6.77239**	**10.2483**	**0.962467**	**1.29605**	**10.3699**	**4.47513**	**7.36575**	**4.43493**	**40.4279**	**3.15795**	**1.29484**
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.26E-04	1.35E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.44E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	6.02E-02	3.42E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.12E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.18E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.04E-02	1.09E-01	0.00E+00	1.92E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.22E-02	0.00E+00	0.00E+00	1.49E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	3.72E+00	0.00E+00	0.00E+00	0.00E+00	5.50E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	2.41E+00	0.00E+00	0.00E+00	0.00E+00	5.77E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4.57E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.50E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

CPF	1.1
multiply	1.00E+06
CF	0.001
Risk	7.2

Receptor ID	R07400	CF	0.001
UTMx	575,275	IF_{inh} x ASF	0.693602
UTMy	4,148,145	CPF	1.1
Scenario	3	Multiplier	1000000

Source Group	Dispersion Factor	Emissions	Risk
	ug/m^3 / g/s	g/s	in a million
NGA	6.3E-01	3.9E-05	0.0185103
NGB	6.2E-01	3.9E-05	0.0183346
OSG	1.4E+00	7.7E-05	0.0838867
PMP	9.4E-01	1.8E-04	0.1282889
RS2	3.3E+00	4.7E-05	0.1188347
RS3	1.0E+01	3.9E-05	0.3070657
RS4	4.2E-01	1.8E-04	0.0571859
RS5	3.3E+00	1.8E-04	0.4460787
RS6	3.5E-01	1.1E-04	0.0298815
RS7	3.3E-01	7.7E-05	0.0192738
SGA	8.6E-01	9.2E-05	0.0605658
SGB	9.0E-01	9.2E-05	0.0633349
TS1	2.6E+00	2.1E-04	0.4302879
B40EG1	-6.8E+00	7.7E-05	-4.0E-01
		Total	1.4

Risk	1.4

Receptor ID	R02968	CF	0.001
UTMx	575,245	IF_{inh} x ASF	0.693602
UTMy	4,148,135	CPF	1.1
Scenario	3	Multiplier	1000000

Source Group	Dispersion Factor	Emissions	Risk
	ug/m^3 / g/s	g/s	in a million
NGA	5.3E-01	3.9E-05	0.0155679
NGB	5.2E-01	3.9E-05	0.0154706
OSG	1.7E+00	7.7E-05	0.097209
PMP	1.1E+00	1.8E-04	0.1484655
RS2	4.5E+00	4.7E-05	0.1629421
RS3	6.3E+00	3.9E-05	0.1870715
RS4	2.4E-01	1.8E-04	0.0329674
RS5	1.6E+00	1.8E-04	0.2171492
RS6	5.1E-01	1.1E-04	0.0429674
RS7	5.4E-01	7.7E-05	0.0318746
SGA	6.7E-01	9.2E-05	0.0469281
SGB	7.0E-01	9.2E-05	0.0488935
TS1	3.0E+00	2.1E-04	0.4845591
B40EG1	-2.2E+00	7.7E-05	-1.3E-01
		Total	1.4

Risk	1.4

Receptor R07400
UTMx 575,275
UTMy 4,148,145
Scenario 3

Source Group	Dispersion Factor (ug/m3/g/s)	Emissions (g/s)	Concentration	Total Concentration
ADAMS_CT	1.08121	1.75972E-07	1.90262E-07	0.002824425
ADAMSD01	0.419713	3.16292E-08	1.32752E-08	
ADAMSD02	0.526925	8.84892E-08	4.66271E-08	
ADAMSD03	0.547806	1.93167E-08	1.05818E-08	
ADAMSD04	0.469138	2.09597E-08	9.83301E-09	
ADAMSD05	0.325047	3.72243E-08	1.20997E-08	
ADAMSD06	0.248534	2.06329E-08	5.12799E-09	
BAY_EAST	0.162917	1.48985E-05	2.42722E-06	
BAY_EFB	3.82639	7.73358E-06	2.95917E-05	
BAY_M01	4.81889	1.35397E-06	6.52462E-06	
BAY_M02	3.77104	1.66337E-06	6.27262E-06	
BAY_M03	2.43578	1.4354E-06	3.49631E-06	
BAY_M04	1.44654	1.75836E-06	2.54354E-06	
BAY_M05	0.611145	4.30597E-06	2.63157E-06	
BAY_WFB1	0.28519	3.7039E-06	1.05632E-06	
BAY_WFB2	0.357319	1.8559E-06	6.6315E-07	
BAY_WFB3	0.408531	1.09555E-06	4.47568E-07	
BAY_WFB4	0.49683	2.9006E-06	1.44111E-06	
BAY_WFB5	0.610821	1.2129E-06	7.40865E-07	
BAY_WFB6	0.967322	5.841E-06	5.65012E-06	
BAY_WFB7	1.60222	1.46254E-06	2.34331E-06	
OBRIEN01	2.54238	3.62698E-06	9.22116E-06	
OBRIEN02	3.69002	1.56702E-06	5.78235E-06	
OBRIEN03	3.58395	4.00898E-07	1.4368E-06	
OBRIEN04	4.05148	3.29622E-07	1.33546E-06	
OBRIEN05	4.93936	3.2044E-07	1.58277E-06	
OBRIEN06	7.37833	5.89308E-07	4.34811E-06	
OBRIEN07	10.1922	1.2155E-06	1.23886E-05	
OBRIEN08	9.63977	5.74086E-07	5.53406E-06	
OBRIEN09	7.71768	5.60164E-07	4.32317E-06	
OBRIEN10	5.55796	5.87721E-07	3.26653E-06	
OBRIEN11	3.53381	1.24359E-06	4.39463E-06	
OBRIEN12	1.67074	2.86745E-06	4.79076E-06	
OBRIEN13	0.824613	8.94975E-07	7.38008E-07	
OBRIEN14	0.556188	3.16376E-06	1.75964E-06	
OBRIEN15	0.288726	6.71632E-06	1.93917E-06	
OBRIEN16	0.172473	1.32948E-06	2.293E-07	
OBRIEN17	0.147046	1.49826E-06	2.20313E-07	
UNIV_01	0.322694	3.47455E-07	1.12122E-07	
UNIV_02	0.289505	2.8685E-07	8.30445E-08	
UNIV_03	0.317352	7.02329E-07	2.22885E-07	

$Risk_{inh} = C_i \times CF \times IF_{inh} \times ASF \times CPF$

C_i	0.003	ug/m^3	
CF	0.001	mg/ug	
IF_{inh} x ASF	0.69360	m^3/kg-day	(residential receptor)
CPF	1	mg chemical/kg body weight-day	

$Risk_{inh}$	2.0

UNIV_04	0.29144	3.83606E-07	1.11798E-07
UNIV_05	0.247427	2.53725E-07	6.27785E-08
UNIV_06	0.242951	2.18082E-07	5.29833E-08
UNIV_07	0.227944	8.14231E-07	1.85599E-07
UNIV_08	0.17795	8.86207E-07	1.57701E-07
UNIV_09	0.147931	3.07028E-06	4.54189E-07
UNIV_10	0.228205	6.76364E-06	1.5435E-06
UNIV_11	0.268001	2.51102E-06	6.72956E-07
UNIV_12	0.3339	1.38409E-06	4.62148E-07
UNIV_13	0.402128	2.79184E-06	1.12268E-06
UNIV_14	0.566183	4.39061E-06	2.48589E-06
UNIV_15	0.340582	1.41352E-05	4.8142E-06
WILLOW01	6.78733	2.00451E-06	1.36053E-05
WILLOW02	11.8162	3.60626E-06	4.26123E-05
WILLOW03	14.9714	0	0
WILLOW04	14.6461	0	0
WILLOW05	7.65566	8.81292E-06	6.74687E-05
WILLOW06	3.04797	4.83043E-06	1.4723E-05
WILLOW07	1.13789	1.38006E-05	1.57035E-05
WILLOW08	0.574249	4.56369E-06	2.6207E-06
WILLOW09	0.468484	1.90057E-06	8.90385E-07
WILLOW10	0.500158	1.52299E-06	7.61737E-07
WILLOW11	0.408828	8.84299E-06	3.61526E-06
WILLOW12	0.32938	1.25605E-05	4.13716E-06
WILLOW13	0.25041	1.05948E-05	2.65305E-06
ONSITE	72.5723	2.84021E-05	0.002061204
SHUTTLES	5.07998	8.90706E-05	0.000452477

Receptor R02968
UTMx 575,245
UTMy 4,148,135
Scenario 3

Source Group	Dispersion Factor (ug/m3/g/s)	Emissions (g/s)	Concentration	Total Concentration
ADAMS_CT	0.846247	1.75972E-07	1.48916E-07	0.00162159
ADAMSD01	0.344905	3.16292E-08	1.09091E-08	
ADAMSD02	0.436901	8.84892E-08	3.8661E-08	
ADAMSD03	0.456896	1.93167E-08	8.82574E-09	
ADAMSD04	0.397758	2.09597E-08	8.3369E-09	
ADAMSD05	0.277609	3.72243E-08	1.03338E-08	
ADAMSD06	0.219779	2.06329E-08	4.53469E-09	
BAY_EAST	0.151353	1.48985E-05	2.25494E-06	
BAY_EFB	3.81119	7.73358E-06	2.94742E-05	
BAY_M01	4.28395	1.35397E-06	5.80033E-06	
BAY_M02	3.33511	1.66337E-06	5.54751E-06	
BAY_M03	2.03631	1.4354E-06	2.92291E-06	
BAY_M04	1.18622	1.75836E-06	2.08581E-06	
BAY_M05	0.51515	4.30597E-06	2.21822E-06	
BAY_WFB1	0.290768	3.7039E-06	1.07698E-06	
BAY_WFB2	0.366456	1.8559E-06	6.80107E-07	
BAY_WFB3	0.420295	1.09555E-06	4.60456E-07	
BAY_WFB4	0.512757	2.9006E-06	1.4873E-06	
BAY_WFB5	0.632831	1.2129E-06	7.67561E-07	
BAY_WFB6	1.00668	5.841E-06	5.88001E-06	
BAY_WFB7	1.67458	1.46254E-06	2.44914E-06	
OBRIEN01	2.78583	3.62698E-06	1.01041E-05	
OBRIEN02	3.68822	1.56702E-06	5.77953E-06	
OBRIEN03	3.77846	4.00898E-07	1.51478E-06	
OBRIEN04	4.40527	3.29622E-07	1.45207E-06	
OBRIEN05	5.59601	3.2044E-07	1.79319E-06	
OBRIEN06	6.9933	5.89308E-07	4.12121E-06	
OBRIEN07	6.68983	1.2155E-06	8.13147E-06	
OBRIEN08	5.38279	5.74086E-07	3.09018E-06	
OBRIEN09	4.15482	5.60164E-07	2.32738E-06	
OBRIEN10	3.1477	5.87721E-07	1.84997E-06	
OBRIEN11	2.15942	1.24359E-06	2.68544E-06	
OBRIEN12	1.05508	2.86745E-06	3.02538E-06	
OBRIEN13	0.616911	8.94975E-07	5.5212E-07	
OBRIEN14	0.452681	3.16376E-06	1.43217E-06	
OBRIEN15	0.241894	6.71632E-06	1.62464E-06	
OBRIEN16	0.148557	1.32948E-06	1.97504E-07	
OBRIEN17	0.12965	1.49826E-06	1.94249E-07	
UNIV_01	0.287676	3.47455E-07	9.99546E-08	
UNIV_02	0.263874	2.8685E-07	7.56922E-08	
UNIV_03	0.292454	7.02329E-07	2.05399E-07	

$Risk_{inh} = C_i \times CF \times IF_{inh} \times ASF \times CPF$

C_i	0.002	ug/m^3
CF	0.001	mg/ug
IF_{inh} x ASF	0.694	m^3/kg-day (residential receptor)
CPF	1	mg chemical/kg body weight-day

$Risk_{inh}$ 1.1

UNIV_04	0.255454	3.83606E-07	9.79938E-08
UNIV_05	0.222001	2.53725E-07	5.63273E-08
UNIV_06	0.219799	2.18082E-07	4.79343E-08
UNIV_07	0.204185	8.14231E-07	1.66254E-07
UNIV_08	0.16372	8.86207E-07	1.4509E-07
UNIV_09	0.135977	3.07028E-06	4.17487E-07
UNIV_10	0.207065	6.76364E-06	1.40051E-06
UNIV_11	0.237257	2.51102E-06	5.95757E-07
UNIV_12	0.292824	1.38409E-06	4.05295E-07
UNIV_13	0.361142	2.79184E-06	1.00825E-06
UNIV_14	0.516017	4.39061E-06	2.26563E-06
UNIV_15	0.34974	1.41352E-05	4.94365E-06
WILLOW01	6.08719	2.00451E-06	1.22018E-05
WILLOW02	11.5723	3.60626E-06	4.17327E-05
WILLOW03	16.102	0	0
WILLOW04	17.0836	0	0
WILLOW05	9.30384	8.81292E-06	8.1994E-05
WILLOW06	3.48127	4.83043E-06	1.6816E-05
WILLOW07	1.16617	1.38006E-05	1.60938E-05
WILLOW08	0.599363	4.56369E-06	2.73531E-06
WILLOW09	0.489777	1.90057E-06	9.30854E-07
WILLOW10	0.524146	1.52299E-06	7.98271E-07
WILLOW11	0.431416	8.84299E-06	3.81501E-06
WILLOW12	0.347703	1.25605E-05	4.36731E-06
WILLOW13	0.260673	1.05948E-05	2.76179E-06
ONSITE	29.0597	2.84021E-05	0.000825356
SHUTTLES	5.46583	8.90706E-05	0.000486845

Traffic Data as Provided by the Transportation Engineer- Used as reference for trip rate scaling

Daily Trips Rates and VMT

Land Use	Fleet Type / Land Use	End of Phase 2 End of Area 3	TOTAL TOTAL	End of Phase 2 End of Area 3	TOTAL TOTAL
Faceook Office - Existing 2019	Cars (per 1,000 s.f.)		9.19		110,860
	Trucks (per 1,000 s.f.)		0.22		2,640
	Shuttles (per 1,000 s.f.)		0.66		21,088
	On-Demand (per 1,000 s.f.)		0.66		7,919
Mixed Use - Existing 2019	General Mixed Use				
Facebook Office	Cars (per 1,000 s.f.)	10.05		178,766	
	Trucks (per 1,000 s.f.)	0.23		4,056	
	Shuttles (per 1,000 s.f.)	0.44		21,088	
	On-Demand (per 1,000 s.f.)	0.68		12,168	
Mixed Use	Residential (per d.u.)	4.35		71,524	
	Retail[3] (per 1,000 s.f.)	25.07		33,594	
	Hamilton Parcels[3] (per 1,000 s.f.)	28.31		1,461	
	Park (per acre)	42.80		1,147	
	Hotel (per room)	6.69		14,814	

Notes:

1. Daily project trip rates provided by Hexagon in terms of trip rates per land use amount.
2. Daily Project VMT provided by Hexagon includes reductions for passby and diverted trips.
3 The trip rates and VMT for Hamilton Parcels were provided seperately and added to retail totals.

Table 17
Traffic Data Provided by the Transportation Engineer
Willow Village
Menlo Park, California

Daily Trips Rates and VMT

Land Use	Fleet Type / Land Use	Trip Rate Units[1]	Weekday Trips per Day per Unit[1]	Weekday daily VMT[2]
			TOTAL	TOTAL
Main Project Site - Existing Conditions	Cars	per 1,000 s.f.	9.19	110,860
	Trucks	per 1,000 s.f.	0.22	2,640
	Shuttles	per 1,000 s.f.	0.66	21,088
	On-Demand	per 1,000 s.f.	0.66	7,919
Campus District - Full Buildout	Cars	per 1,000 s.f.	10.05	178,766
	Trucks	per 1,000 s.f.	0.23	4,056
	Shuttles	per 1,000 s.f.	0.44	21,088
	On-Demand	per 1,000 s.f.	0.68	12,168
Town Square and the Residential/Shopping District - Full Buildout	Residential	per d.u.	4.35	71,524
	Retail[3]	per 1,000 s.f.	25.07	33,594
	Hamilton Avenue Parcels North and South[3]	per 1,000 s.f.	28.31	1,461
	Park	per acre	42.80	1,147
	Hotel	per room	6.69	14,814

Notes:

1. Daily project trip rates were provided by the Transportation Engineer in terms of trip rates per land use amount.
2. Daily Project VMT provided by the Transportation Engineer include reductions for pass-by and diverted trips. Daily VMT is given in VMT per day.
3. The trip rates and VMT for Hamilton Avenue Parcels North and South were provided separately and added to retail totals in calculations.

Abbreviations:

VMT - Vehicle miles traveled
s.f. - Square feet
d.u. - Dwelling unit

Table 21
Mobile CAP Emissions Before EV Reductions
Willow Village
Menlo Park, California

Year	Land Use[1]	Fleet Type	Annual Trips[2]	Annual VMT[2]	CAP Emissions[3,4]							
					ROG	NOX	PM_{10}	$PM_{2.5}$	ROG	NOX	PM_{10}	$PM_{2.5}$
			trips/year	VMT/year	tons/year				lb/day			
Existing Conditions	Campus District	Cars	2,557,040	30,742,244	4.9	4.1	3.1	0.59	27	22	17	3.3
		Trucks	60,882	731,958	0.18	2.0	0.17	0.068	1.0	11	0.92	0.37
		Shuttles	122,319	3,916,358	0.027	1.8	0.59	0.15	0.15	10	3.3	0.80
		On-Demand	122,319	1,470,590	0.19	0.15	0.15	0.028	1.1	0.8	0.81	0.15
			2,862,559	**36,861,150**	**5.3**	**8.0**	**4.0**	**0.84**	**29**	**44**	**22**	**4.6**
Partial Buildout - Year 4	Campus District	Cars	133,874	1,488,677	0.19	0.12	0.15	0.028	1.1	0.65	0.82	0.15
		Trucks	3,037	33,776	0.0041	0.035	0.0065	0.0020	0.023	0.19	0.036	0.011
		Shuttles	3,996	120,048	0.0011	0.071	0.018	0.0046	0.0058	0.39	0.10	0.025
		On-Demand	6,229	69,267	0.0077	0.0046	0.0069	0.0013	0.042	0.025	0.038	0.0071
	Residential	San Mateo	0	0	0	0	0	0	0	0	0	0
	Retail	San Mateo	179,684	1,256,238	0.19	0.21	0.13	0.027	1.1	1.2	0.74	0.15
	Park	San Mateo	198,943	1,332,917	0.21	0.23	0.14	0.029	1.2	1.2	0.78	0.16
	Hotel	San Mateo	0	0	0	0	0	0	0	0	0	0
			525,763	**4,300,922**	**0.61**	**0.67**	**0.46**	**0.092**	**3.4**	**3.7**	**2.5**	**0.50**
Partial Buildout - Year 5	Campus District	Cars	2,553,590	28,395,923	3.6	2.1	2.9	0.53	20	11	16	2.9
		Trucks	57,937	644,259	0.073	0.60	0.12	0.037	0.40	3.3	0.68	0.20
		Shuttles	76,227	2,289,859	0.021	1.4	0.35	0.089	0.11	7.4	1.9	0.49
		On-Demand	118,816	1,321,238	0.14	0.081	0.13	0.025	0.78	0.45	0.72	0.13
	Residential	San Mateo	420,957	3,999,096	0.49	0.57	0.43	0.085	2.7	3.1	2.3	0.47
	Retail	San Mateo	1,048,602	7,331,178	1.1	1.1	0.78	0.16	5.9	6.3	4.3	0.86
	Park	San Mateo	217,546	1,457,557	0.22	0.23	0.16	0.031	1.2	1.3	0.85	0.17
	Hotel	San Mateo	184,925	2,122,939	0.23	0.29	0.23	0.045	1.3	1.6	1.2	0.25
			4,678,601	**47,562,050**	**5.8**	**6.3**	**5.1**	**1.0**	**32**	**35**	**28**	**5.5**
Partial Buildout - Year 6	Campus District	Cars	4,146,833	46,112,784	5.6	3.1	4.6	0.86	31	17	25	4.7
		Trucks	94,085	1,046,226	0.11	0.89	0.20	0.059	0.62	4.9	1.1	0.33
		Shuttles	123,787	3,718,554	0.034	2.2	0.57	0.15	0.19	12	3.1	0.80
		On-Demand	192,949	2,145,589	0.22	0.12	0.21	0.040	1.2	0.68	1.2	0.22
	Residential	San Mateo	1,709,992	16,244,920	1.9	2.1	1.7	0.35	10	12	9.5	1.9
	Retail	San Mateo	1,730,009	12,095,154	1.7	1.8	1.3	0.26	9.3	10	7.1	1.4
	Park	San Mateo	231,140	1,548,641	0.22	0.23	0.17	0.033	1.2	1.3	0.91	0.18
	Hotel	San Mateo	452,878	5,199,035	0.55	0.65	0.55	0.11	3.0	3.6	3.0	0.60
			8,681,672	**88,110,903**	**10**	**11**	**9.4**	**1.9**	**57**	**61**	**51**	**10**
Full Buildout	Campus District	Cars	4,367,418	48,565,689	5.9	3.3	4.9	0.91	32	18	27	5.0
		Trucks	99,090	1,101,879	0.12	0.94	0.21	0.062	0.65	5.2	1.2	0.34
		Shuttles	130,371	3,916,358	0.036	2.3	0.61	0.15	0.20	13	3.3	0.84
		On-Demand	203,212	2,259,721	0.23	0.13	0.23	0.042	1.3	0.71	1.2	0.23
	Residential	San Mateo	2,686,027	25,517,254	3.0	3.4	2.7	0.54	16	18	15	3.0
	Retail	San Mateo	1,767,718	12,358,799	1.7	1.8	1.3	0.26	9.5	10	7.2	1.4
	Park	San Mateo	231,140	1,548,641	0.22	0.23	0.17	0.033	1.2	1.3	0.91	0.18
	Hotel	San Mateo	452,878	5,199,035	0.55	0.65	0.55	0.11	3.0	3.6	3.0	0.60
			9,937,855	**100,467,375**	**12**	**13**	**11**	**2.1**	**64**	**70**	**59**	**12**

Notes:

1. Hamilton Avenue Parcels North and South were provided separately and added to the retail land use totals.
2. Trip counts and VMTs by land use type were broken out by year using a scaling factor representing the percent of each fleet that is operational in a given year leading up to full buildout. This percent was determined based on the square footage of the land use associated with each fleet that is operational in a given year relative to that land use's full buildout square footage. See Table 16 for more details on scaling. See Table 18 for Project Trip Rates and VMT.
3. Criteria air pollutants are calculated by year using emission factors for the associated year and fleet from EMFAC2021. Electric vehicles are not included in the emission factors for Campus District fleets (all fleet types except San Mateo Fleet), as reductions associated with EVs are considered separately. Project emission factors are shown in Table 20.
4. Full buildout emissions are conservatively calculated using 2026 emission factors.

Abbreviations:

EV - electric vehicle
lb - pound
NO_x - nitrogen oxides
VMT- vehicle miles traveled
PM_{10} - particulate matter less than 10 microns in diameter
$PM_{2.5}$ - particulate matter less than 2.5 microns in diameter
ROG - reactive organic gases

References:

California Air Resources Board. EMFAC2021. Available at: https://arb.ca.gov/emfac/

calendar_y	sub_area	vehicle_cla	fuel	total_vmt	cvmt	evmt	trips	Passenger?
2019	San Mateo	HHDT	Dsl	116718.7	116718.7	0	13350.56	--
2019	San Mateo	HHDT	Gas	633.6181	633.6181	0	104.6005	--
2019	San Mateo	HHDT	NG	8088.083	8088.083	0	725.1411	--
2019	San Mateo	LDA	Dsl	30528.88	30528.88	0	4603.546	X
2019	San Mateo	LDA	Elec	370112.2	0	370112.2	55824	X
2019	San Mateo	LDA	Gas	9059972	9059972	0	1194168	X
2019	San Mateo	LDA	Phe	201712.8	108516.2	93196.57	22890.33	X
2019	San Mateo	LDT1	Dsl	191.3367	191.3367	0	37.29891	X
2019	San Mateo	LDT1	Elec	1489.158	0	1489.158	256.2115	X
2019	San Mateo	LDT1	Gas	746067.9	746067.9	0	106653.8	X
2019	San Mateo	LDT1	Phe	12.66139	6.860848	5.800542	1.420725	X
2019	San Mateo	LDT2	Dsl	14432.93	14432.93	0	1850.91	X
2019	San Mateo	LDT2	Elec	1031.816	0	1031.816	151.4389	X
2019	San Mateo	LDT2	Gas	3691162	3691162	0	486749.2	X
2019	San Mateo	LDT2	Phe	9001.731	4772.528	4229.203	944.5231	X
2019	San Mateo	LHDT1	Dsl	111039.4	111039.4	0	38916.64	--
2019	San Mateo	LHDT1	Gas	336731.6	336731.6	0	130248.7	--
2019	San Mateo	LHDT2	Dsl	44855.14	44855.14	0	14606.64	--
2019	San Mateo	LHDT2	Gas	37198.29	37198.29	0	15515.62	--
2019	San Mateo	MCY	Gas	56766.51	56766.51	0	20136.29	--
2019	San Mateo	MDV	Dsl	35424.74	35424.74	0	4323.946	X
2019	San Mateo	MDV	Elec	17.63672	0	17.63672	3.413282	X
2019	San Mateo	MDV	Gas	2045190	2045190	0	267290.7	X
2019	San Mateo	MDV	Phe	11022.49	5939.581	5082.909	1147.059	X
2019	San Mateo	MH	Dsl	2547.822	2547.822	0	23.33496	--
2019	San Mateo	MH	Gas	5874.386	5874.386	0	73.71764	--
2019	San Mateo	MHDT	Dsl	169569.2	169569.2	0	51316.62	--
2019	San Mateo	MHDT	Gas	41022.2	41022.2	0	14906.76	--
2019	San Mateo	MHDT	NG	1527.688	1527.688	0	299.4585	--
2019	San Mateo	OBUS	Dsl	73369.25	73369.25	0	9623.968	--
2019	San Mateo	OBUS	Gas	17849.4	17849.4	0	5184.607	--
2019	San Mateo	OBUS	NG	829.53	829.53	0	116.9914	--
2019	San Mateo	SBUS	Dsl	3812.508	3812.508	0	2392.995	--
2019	San Mateo	SBUS	Gas	3265.956	3265.956	0	216.9404	--
2019	San Mateo	SBUS	NG	134.4181	134.4181	0	73.91797	--
2019	San Mateo	UBUS	Dsl	29399.41	29399.41	0	1489.803	--
2019	San Mateo	UBUS	Elec	15.3193	0	15.3193	8.074811	--
2019	San Mateo	UBUS	Gas	4117.962	4117.962	0	242.2443	--
2020	San Mateo	HHDT	Dsl	117718.7	117718.7	0	13415.96	--
2020	San Mateo	HHDT	Gas	539.8177	539.8177	0	85.26691	--
2020	San Mateo	HHDT	NG	8593.127	8593.127	0	796.3688	--
2020	San Mateo	LDA	Dsl	24543.36	24543.36	0	4315.509	X
2020	San Mateo	LDA	Elec	387273.4	0	387273.4	57026.05	X
2020	San Mateo	LDA	Gas	7500311	7500311	0	1142657	X
2020	San Mateo	LDA	Phe	182757.2	97646.36	85110.82	23953.82	X
2020	San Mateo	LDT1	Dsl	142.8432	142.8432	0	32.10177	X

%VMT from "passenger" vehicles	
2019	93.8%
2024	92.9%
2025	92.8%
2026	92.7%
2027	92.6%

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2020	San Mateo	LDT1	Elec	1477.544	0	1477.544	249.4129	X
2020	San Mateo	LDT1	Gas	652528.7	652528.7	0	106369	X
2020	San Mateo	LDT1	Phe	102.3429	53.26908	49.0738	12.24412	X
2020	San Mateo	LDT2	Dsl	13496.58	13496.58	0	1996.948	X
2020	San Mateo	LDT2	Elec	1589.474	0	1589.474	269.9659	X
2020	San Mateo	LDT2	Gas	3480182	3480182	0	522322	X
2020	San Mateo	LDT2	Phe	13816.1	7252.614	6563.483	1687.824	X
2020	San Mateo	LHDT1	Dsl	110321	110321	0	41747.03	--
2020	San Mateo	LHDT1	Gas	308144	308144	0	134898.7	--
2020	San Mateo	LHDT2	Dsl	45726	45726	0	16286.35	--
2020	San Mateo	LHDT2	Gas	33453.7	33453.7	0	15759.79	--
2020	San Mateo	MCY	Gas	53049.19	53049.19	0	20813.86	--
2020	San Mateo	MDV	Dsl	31736.51	31736.51	0	4507.83	X
2020	San Mateo	MDV	Elec	1938.903	0	1938.903	324.2495	X
2020	San Mateo	MDV	Gas	1952190	1952190	0	289054.4	X
2020	San Mateo	MDV	Phe	11718.9	6264.697	5454.206	1430.885	X
2020	San Mateo	MH	Dsl	2398.506	2398.506	0	24.94283	--
2020	San Mateo	MH	Gas	5414.65	5414.65	0	72.61379	--
2020	San Mateo	MHDT	Dsl	171409.1	171409.1	0	50599.04	--
2020	San Mateo	MHDT	Gas	36560.18	36560.18	0	14591.52	--
2020	San Mateo	MHDT	NG	1629.658	1629.658	0	326.7787	--
2020	San Mateo	OBUS	Dsl	73662.82	73662.82	0	9862.258	--
2020	San Mateo	OBUS	Gas	15309.29	15309.29	0	5169.794	--
2020	San Mateo	OBUS	NG	723.6502	723.6502	0	110.1893	--
2020	San Mateo	SBUS	Dsl	3809.244	3809.244	0	2406.157	--
2020	San Mateo	SBUS	Gas	2658.325	2658.325	0	202.2378	--
2020	San Mateo	SBUS	NG	137.6816	137.6816	0	76.03648	--
2020	San Mateo	UBUS	Dsl	28352.37	28352.37	0	1357.799	--
2020	San Mateo	UBUS	Elec	15.3193	0	15.3193	8.074811	--
2020	San Mateo	UBUS	Gas	4128.673	4128.673	0	242.8744	--
2020	San Mateo	UBUS	NG	1123.548	1123.548	0	135.8995	--
2021	San Mateo	HHDT	Dsl	118103.1	118103.1	0	13607.24	--
2021	San Mateo	HHDT	Gas	613.6717	613.6717	0	84.19134	--
2021	San Mateo	HHDT	NG	9165.577	9165.577	0	873.9044	--
2021	San Mateo	LDA	Dsl	25369.15	25369.15	0	4047.449	X
2021	San Mateo	LDA	Elec	499254.3	0	499254.3	63693.55	X
2021	San Mateo	LDA	Gas	8252409	8252409	0	1125641	X
2021	San Mateo	LDA	Phe	227736.6	120267.2	107469.3	26923	X
2021	San Mateo	LDT1	Dsl	139.7116	139.7116	0	28.19453	X
2021	San Mateo	LDT1	Elec	1739.936	0	1739.936	254.3673	X
2021	San Mateo	LDT1	Gas	742816.9	742816.9	0	107382	X
2021	San Mateo	LDT1	Phe	391.5695	199.1601	192.4094	41.92214	X
2021	San Mateo	LDT2	Dsl	16522.16	16522.16	0	2190.085	X
2021	San Mateo	LDT2	Elec	6866.192	0	6866.192	1033.913	X
2021	San Mateo	LDT2	Gas	4244631	4244631	0	565277	X
2021	San Mateo	LDT2	Phe	27118.23	13980	13138.23	2985.81	X
2021	San Mateo	LHDT1	Dsl	145257.9	145257.9	0	46347.29	--

2021	San Mateo	LHDT1	Gas	366040.8	366040.8	0	141024.3	--
2021	San Mateo	LHDT2	Dsl	61322	61322	0	18731.79	--
2021	San Mateo	LHDT2	Gas	40124.64	40124.64	0	16452.14	--
2021	San Mateo	MCY	Gas	65449.33	65449.33	0	22030.7	--
2021	San Mateo	MDV	Dsl	37047.2	37047.2	0	4753.762	X
2021	San Mateo	MDV	Elec	6938.265	0	6938.265	1042.96	X
2021	San Mateo	MDV	Gas	2405181	2405181	0	314766.8	X
2021	San Mateo	MDV	Phe	16452.34	8679.304	7773.039	1825.202	X
2021	San Mateo	MH	Dsl	2996.165	2996.165	0	27.26828	--
2021	San Mateo	MH	Gas	6617.11	6617.11	0	73.47527	--
2021	San Mateo	MHDT	Dsl	172846.2	172846.2	0	49761.7	--
2021	San Mateo	MHDT	Gas	43052.67	43052.67	0	14729.79	--
2021	San Mateo	MHDT	NG	1750.732	1750.732	0	354.0447	--
2021	San Mateo	OBUS	Dsl	73932.61	73932.61	0	9922.773	--
2021	San Mateo	OBUS	Gas	16707.17	16707.17	0	5141.389	--
2021	San Mateo	OBUS	NG	677.5634	677.5634	0	107.3793	--
2021	San Mateo	SBUS	Dsl	3804.36	3804.36	0	2422.734	--
2021	San Mateo	SBUS	Gas	3121.684	3121.684	0	212.1101	--
2021	San Mateo	SBUS	NG	142.5665	142.5665	0	79.53119	--
2021	San Mateo	UBUS	Dsl	28415.12	28415.12	0	1360.995	--
2021	San Mateo	UBUS	Elec	15.3193	0	15.3193	8.074811	--
2021	San Mateo	UBUS	Gas	4141.008	4141.008	0	243.6	--
2021	San Mateo	UBUS	NG	1148.902	1148.902	0	137.1906	--
2022	San Mateo	HHDT	Dsl	118758.5	118758.5	0	13886.59	--
2022	San Mateo	HHDT	Gas	607.5295	607.5295	0	85.26989	--
2022	San Mateo	HHDT	NG	9768.638	9768.638	0	950.7524	--
2022	San Mateo	LDA	Dsl	22501.88	22501.88	0	3790.786	X
2022	San Mateo	LDA	Elec	568258.7	0	568258.7	72996.66	X
2022	San Mateo	LDA	Gas	7995565	7995565	0	1130997	X
2022	San Mateo	LDA	Phe	249381.9	127562.4	121819.5	30825.69	X
2022	San Mateo	LDT1	Dsl	119.4982	119.4982	0	25.11455	X
2022	San Mateo	LDT1	Elec	2054.9	0	2054.9	294.187	X
2022	San Mateo	LDT1	Gas	736196.1	736196.1	0	109571	X
2022	San Mateo	LDT1	Phe	849.1339	406.2744	442.8594	95.38501	X
2022	San Mateo	LDT2	Dsl	17455.1	17455.1	0	2406.111	X
2022	San Mateo	LDT2	Elec	16536.35	0	16536.35	2591.33	X
2022	San Mateo	LDT2	Gas	4489208	4489208	0	617258.5	X
2022	San Mateo	LDT2	Phe	39780.13	19647.25	20132.88	4612.9	X
2022	San Mateo	LHDT1	Dsl	163656.9	163656.9	0	51898.77	--
2022	San Mateo	LHDT1	Gas	379521.5	379521.5	0	149039.3	--
2022	San Mateo	LHDT2	Dsl	70077.77	70077.77	0	21614.87	--
2022	San Mateo	LHDT2	Gas	41928.69	41928.69	0	17384.3	--
2022	San Mateo	MCY	Gas	70029.62	70029.62	0	23550.22	--
2022	San Mateo	MDV	Dsl	37479.46	37479.46	0	5036.896	X
2022	San Mateo	MDV	Elec	16375.41	0	16375.41	2565.598	X
2022	San Mateo	MDV	Gas	2561532	2561532	0	344969.9	X
2022	San Mateo	MDV	Phe	21966.08	11106.12	10859.96	2545.251	X

2022	San Mateo	MH	Dsl	3250.689	3250.689	0	30.03894	--
2022	San Mateo	MH	Gas	7043.926	7043.926	0	75.19494	--
2022	San Mateo	MHDT	Dsl	174304	174304	0	49995.69	--
2022	San Mateo	MHDT	Gas	44483.7	44483.7	0	15136.85	--
2022	San Mateo	MHDT	NG	1873.257	1873.257	0	381.7521	--
2022	San Mateo	OBUS	Dsl	74221.67	74221.67	0	10035.19	--
2022	San Mateo	OBUS	Gas	15869.04	15869.04	0	5125.898	--
2022	San Mateo	OBUS	NG	654.3713	654.3713	0	106.5229	--
2022	San Mateo	SBUS	Dsl	3799.171	3799.171	0	2434.843	--
2022	San Mateo	SBUS	Gas	3267.931	3267.931	0	230.2914	--
2022	San Mateo	SBUS	NG	147.755	147.755	0	83.22328	--
2022	San Mateo	UBUS	Dsl	28477.87	28477.87	0	1364.19	--
2022	San Mateo	UBUS	Elec	15.3193	0	15.3193	8.074811	--
2022	San Mateo	UBUS	Gas	4153.342	4153.342	0	244.3256	--
2022	San Mateo	UBUS	NG	1174.257	1174.257	0	138.4817	--
2023	San Mateo	HHDT	Dsl	119079.6	119079.6	0	14027.66	--
2023	San Mateo	HHDT	Elec	40.81187	0	40.81187	9.636589	--
2023	San Mateo	HHDT	Gas	593.3265	593.3265	0	86.11225	--
2023	San Mateo	HHDT	NG	10602.72	10602.72	0	1067.368	--
2023	San Mateo	LDA	Dsl	19906.52	19906.52	0	3528.191	X
2023	San Mateo	LDA	Elec	630419.6	0	630419.6	81240.99	X
2023	San Mateo	LDA	Gas	7727537	7727537	0	1129355	X
2023	San Mateo	LDA	Phe	264587.6	131767.9	132819.8	34062.99	X
2023	San Mateo	LDT1	Dsl	101.9185	101.9185	0	22.20173	X
2023	San Mateo	LDT1	Elec	2574.77	0	2574.77	357.9526	X
2023	San Mateo	LDT1	Gas	732297.8	732297.8	0	111855.3	X
2023	San Mateo	LDT1	Phe	1451.31	668.3078	783.0024	170.4066	X
2023	San Mateo	LDT2	Dsl	18280.98	18280.98	0	2609.031	X
2023	San Mateo	LDT2	Elec	26877.43	0	26877.43	4389.934	X
2023	San Mateo	LDT2	Gas	4716888	4716888	0	668266.1	X
2023	San Mateo	LDT2	Phe	52235.96	24959.1	27276.86	6356.221	X
2023	San Mateo	LHDT1	Dsl	179686.5	179686.5	0	57574.27	--
2023	San Mateo	LHDT1	Gas	392533.1	392533.1	0	157508.2	--
2023	San Mateo	LHDT2	Dsl	77798.97	77798.97	0	24562.62	--
2023	San Mateo	LHDT2	Gas	43549.94	43549.94	0	18343.59	--
2023	San Mateo	MCY	Gas	73820.04	73820.04	0	25073.54	--
2023	San Mateo	MDV	Dsl	37908.13	37908.13	0	5305.818	X
2023	San Mateo	MDV	Elec	28548.82	0	28548.82	4657.021	X
2023	San Mateo	MDV	Gas	2704273	2704273	0	374408	X
2023	San Mateo	MDV	Phe	27547.88	13448.47	14099.41	3332.947	X
2023	San Mateo	MH	Dsl	3487.262	3487.262	0	32.85822	--
2023	San Mateo	MH	Gas	7442.976	7442.976	0	77.51215	--
2023	San Mateo	MHDT	Dsl	175901.2	175901.2	0	50462.49	--
2023	San Mateo	MHDT	Elec	44.11104	0	44.11104	25.56596	--
2023	San Mateo	MHDT	Gas	45998.29	45998.29	0	15610.09	--
2023	San Mateo	MHDT	NG	1832.77	1832.77	0	342.2075	--
2023	San Mateo	OBUS	Dsl	74746.95	74746.95	0	10288.18	--

2023	San Mateo	OBUS	Gas	15177.04	15177.04	0	5133.267	--
2023	San Mateo	OBUS	NG	415.1452	415.1452	0	59.28285	--
2023	San Mateo	SBUS	Dsl	3793.041	3793.041	0	2444.395	--
2023	San Mateo	SBUS	Elec	0.481131	0	0.481131	0.600564	--
2023	San Mateo	SBUS	Gas	3411.923	3411.923	0	248.4515	--
2023	San Mateo	SBUS	NG	153.4041	153.4041	0	87.21356	--
2023	San Mateo	UBUS	Dsl	28540.62	28540.62	0	1367.385	--
2023	San Mateo	UBUS	Elec	15.3193	0	15.3193	8.074811	--
2023	San Mateo	UBUS	Gas	4165.676	4165.676	0	245.0511	--
2023	San Mateo	UBUS	NG	1199.611	1199.611	0	139.7728	--
2024	San Mateo	HHDT	Dsl	119489.1	119489.1	0	14359.46	--
2024	San Mateo	HHDT	Elec	364.2879	0	364.2879	41.8342	--
2024	San Mateo	HHDT	Gas	570.1519	570.1519	0	87.71727	--
2024	San Mateo	HHDT	NG	11187.83	11187.83	0	1132.175	--
2024	San Mateo	LDA	Dsl	17557.03	17557.03	0	3247.138	X
2024	San Mateo	LDA	Elec	689392.1	0	689392.1	89072.05	X
2024	San Mateo	LDA	Gas	7454000	7454000	0	1124271	X
2024	San Mateo	LDA	Phe	275231.1	133857.4	141373.7	36867.1	X
2024	San Mateo	LDT1	Dsl	87.50597	87.50597	0	19.69868	X
2024	San Mateo	LDT1	Elec	3278.131	0	3278.131	443.5442	X
2024	San Mateo	LDT1	Gas	728708.6	728708.6	0	114230.1	X
2024	San Mateo	LDT1	Phe	2174.893	971.2907	1203.602	266.6421	X
2024	San Mateo	LDT2	Dsl	18954.02	18954.02	0	2798.233	X
2024	San Mateo	LDT2	Elec	37598.89	0	37598.89	6394.245	X
2024	San Mateo	LDT2	Gas	4914901	4914901	0	718035.6	X
2024	San Mateo	LDT2	Phe	62724.85	29203.5	33521.35	8018.288	X
2024	San Mateo	LHDT1	Dsl	191551.4	191551.4	0	62852.09	--
2024	San Mateo	LHDT1	Elec	3530.642	0	3530.642	794.6546	--
2024	San Mateo	LHDT1	Gas	401258.4	401258.4	0	165526.8	--
2024	San Mateo	LHDT2	Dsl	83732.44	83732.44	0	27341.93	--
2024	San Mateo	LHDT2	Elec	865.8383	0	865.8383	194.8979	--
2024	San Mateo	LHDT2	Gas	44551.76	44551.76	0	19209.92	--
2024	San Mateo	MCY	Gas	76675.37	76675.37	0	26527.78	--
2024	San Mateo	MDV	Dsl	38157.5	38157.5	0	5552.1	X
2024	San Mateo	MDV	Elec	40547.66	0	40547.66	6889.415	X
2024	San Mateo	MDV	Gas	2823183	2823183	0	402441.6	X
2024	San Mateo	MDV	Phe	35015.17	16467.11	18548.06	4395.815	X
2024	San Mateo	MH	Dsl	3693.518	3693.518	0	35.66509	--
2024	San Mateo	MH	Gas	7786.339	7786.339	0	80.21686	--
2024	San Mateo	MHDT	Dsl	177028	177028	0	51051.04	--
2024	San Mateo	MHDT	Elec	871.0875	0	871.0875	206.3119	--
2024	San Mateo	MHDT	Gas	46997.14	46997.14	0	16077.84	--
2024	San Mateo	MHDT	NG	1935.863	1935.863	0	369.2827	--
2024	San Mateo	OBUS	Dsl	75002.36	75002.36	0	10539.7	--
2024	San Mateo	OBUS	Elec	79.58076	0	79.58076	17.47512	--
2024	San Mateo	OBUS	Gas	14438.68	14438.68	0	5085.967	--
2024	San Mateo	OBUS	NG	492.5585	492.5585	0	69.398	--

2024	San Mateo	SBUS	Dsl	3777.202	3777.202	0	2446.541	--
2024	San Mateo	SBUS	Elec	36.62057	0	36.62057	8.140217	--
2024	San Mateo	SBUS	Gas	3561.549	3561.549	0	267.5256	--
2024	San Mateo	SBUS	NG	158.6097	158.6097	0	91.05913	--
2024	San Mateo	UBUS	Dsl	21477.78	21477.78	0	1110.357	--
2024	San Mateo	UBUS	Elec	3851.303	0	3851.303	148.3176	--
2024	San Mateo	UBUS	Gas	4178.01	4178.01	0	245.7767	--
2024	San Mateo	UBUS	NG	4514.573	4514.573	0	261.0446	--
2025	San Mateo	HHDT	Dsl	119560.7	119560.7	0	14621.91	--
2025	San Mateo	HHDT	Elec	901.0022	0	901.0022	96.27797	--
2025	San Mateo	HHDT	Gas	539.4434	539.4434	0	86.75436	--
2025	San Mateo	HHDT	NG	11842.66	11842.66	0	1200.105	--
2025	San Mateo	LDA	Dsl	15407.46	15407.46	0	2980.227	X
2025	San Mateo	LDA	Elec	745853.8	0	745853.8	96825.51	X
2025	San Mateo	LDA	Gas	7185689	7185689	0	1119872	X
2025	San Mateo	LDA	Phe	283509.4	134548.1	148961.4	39536.84	X
2025	San Mateo	LDT1	Dsl	75.91061	75.91061	0	17.6629	X
2025	San Mateo	LDT1	Elec	4207.979	0	4207.979	557.9394	X
2025	San Mateo	LDT1	Gas	722986.2	722986.2	0	116608.1	X
2025	San Mateo	LDT1	Phe	3019.599	1309.635	1709.964	386.7975	X
2025	San Mateo	LDT2	Dsl	19447.24	19447.24	0	2972.356	X
2025	San Mateo	LDT2	Elec	48819.4	0	48819.4	8654.222	X
2025	San Mateo	LDT2	Gas	5072144	5072144	0	766397.2	X
2025	San Mateo	LDT2	Phe	72787.26	33032.95	39754.31	9778.227	X
2025	San Mateo	LHDT1	Dsl	200335.3	200335.3	0	67883.84	--
2025	San Mateo	LHDT1	Elec	8786.546	0	8786.546	2203.775	--
2025	San Mateo	LHDT1	Gas	405927.2	405927.2	0	173028.5	--
2025	San Mateo	LHDT2	Dsl	88314.97	88314.97	0	30020.32	--
2025	San Mateo	LHDT2	Elec	2145.224	0	2145.224	536.9131	--
2025	San Mateo	LHDT2	Gas	45031.5	45031.5	0	20000.19	--
2025	San Mateo	MCY	Gas	78703.42	78703.42	0	27989.55	--
2025	San Mateo	MDV	Dsl	38222.55	38222.55	0	5783.756	X
2025	San Mateo	MDV	Elec	52408.32	0	52408.32	9288.746	X
2025	San Mateo	MDV	Gas	2915872	2915872	0	429459.7	X
2025	San Mateo	MDV	Phe	42471.44	19328.41	23143.04	5559.474	X
2025	San Mateo	MH	Dsl	3863.222	3863.222	0	38.45125	--
2025	San Mateo	MH	Gas	8053.177	8053.177	0	83.08723	--
2025	San Mateo	MHDT	Dsl	177557.8	177557.8	0	51845.95	--
2025	San Mateo	MHDT	Elec	2407.793	0	2407.793	583.4118	--
2025	San Mateo	MHDT	Gas	47612.58	47612.58	0	16519.46	--
2025	San Mateo	MHDT	NG	2054.281	2054.281	0	404.8873	--
2025	San Mateo	OBUS	Dsl	75305.13	75305.13	0	10889.45	--
2025	San Mateo	OBUS	Elec	185.5536	0	185.5536	42.89613	--
2025	San Mateo	OBUS	Gas	13715.02	13715.02	0	5056.462	--
2025	San Mateo	OBUS	NG	584.7868	584.7868	0	81.73885	--
2025	San Mateo	SBUS	Dsl	3758.24	3758.24	0	2446.247	--
2025	San Mateo	SBUS	Elec	78.89105	0	78.89105	17.7986	--

2025	San Mateo	SBUS	Gas	3679.781	3679.781	0	285.4854	--
2025	San Mateo	SBUS	NG	163.6295	163.6295	0	94.88454	--
2025	San Mateo	UBUS	Dsl	21526.83	21526.83	0	1112.874	--
2025	San Mateo	UBUS	Elec	3870.538	0	3870.538	149.2699	--
2025	San Mateo	UBUS	Gas	4190.344	4190.344	0	246.5023	--
2025	San Mateo	UBUS	NG	4534.391	4534.391	0	262.0616	--
2026	San Mateo	HHDT	Dsl	119591.7	119591.7	0	14836.49	--
2026	San Mateo	HHDT	Elec	1568.579	0	1568.579	167.6097	--
2026	San Mateo	HHDT	Gas	504.3899	504.3899	0	85.71223	--
2026	San Mateo	HHDT	NG	12388.44	12388.44	0	1253.654	--
2026	San Mateo	LDA	Dsl	13511.27	13511.27	0	2704.797	X
2026	San Mateo	LDA	Elec	751657.4	0	751657.4	101606	X
2026	San Mateo	LDA	Gas	6969047	6969047	0	1119592	X
2026	San Mateo	LDA	Phe	284060.2	132539.9	151520.3	41455.43	X
2026	San Mateo	LDT1	Dsl	66.09906	66.09906	0	15.81841	X
2026	San Mateo	LDT1	Elec	5160.147	0	5160.147	697.0716	X
2026	San Mateo	LDT1	Gas	717326.6	717326.6	0	118989.9	X
2026	San Mateo	LDT1	Phe	3837.146	1635.987	2201.159	514.818	X
2026	San Mateo	LDT2	Dsl	19853.42	19853.42	0	3139.478	X
2026	San Mateo	LDT2	Elec	58794.02	0	58794.02	10836.18	X
2026	San Mateo	LDT2	Gas	5206694	5206694	0	813724.2	X
2026	San Mateo	LDT2	Phe	81093.05	36145.09	44947.96	11455.57	X
2026	San Mateo	LHDT1	Dsl	207453.3	207453.3	0	72636.71	--
2026	San Mateo	LHDT1	Elec	15691.66	0	15691.66	4239.881	--
2026	San Mateo	LHDT1	Gas	409379.7	409379.7	0	180141.9	--
2026	San Mateo	LHDT2	Dsl	92139.39	92139.39	0	32576.42	--
2026	San Mateo	LHDT2	Elec	3810.55	0	3810.55	1024.59	--
2026	San Mateo	LHDT2	Gas	45322.23	45322.23	0	20712.2	--
2026	San Mateo	MCY	Gas	80438.96	80438.96	0	29385.71	--
2026	San Mateo	MDV	Dsl	38163.09	38163.09	0	5993.722	X
2026	San Mateo	MDV	Elec	62843.93	0	62843.93	11585.67	X
2026	San Mateo	MDV	Gas	2995462	2995462	0	456021.9	X
2026	San Mateo	MDV	Phe	48514.48	21600.3	26914.18	6646.496	X
2026	San Mateo	MH	Dsl	4016.353	4016.353	0	41.17686	--
2026	San Mateo	MH	Gas	8288.685	8288.685	0	86.0507	--
2026	San Mateo	MHDT	Dsl	177809.3	177809.3	0	52490.37	--
2026	San Mateo	MHDT	Elec	4276.512	0	4276.512	1058.544	--
2026	San Mateo	MHDT	Gas	48169.43	48169.43	0	16977.94	--
2026	San Mateo	MHDT	NG	2179.843	2179.843	0	442.254	--
2026	San Mateo	OBUS	Dsl	75611.47	75611.47	0	11233.17	--
2026	San Mateo	OBUS	Elec	297.3898	0	297.3898	71.90495	--
2026	San Mateo	OBUS	Gas	13078.36	13078.36	0	5006.245	--
2026	San Mateo	OBUS	NG	669.454	669.454	0	92.66776	--
2026	San Mateo	SBUS	Dsl	3737.054	3737.054	0	2439.538	--
2026	San Mateo	SBUS	Elec	127.7057	0	127.7057	29.50964	--
2026	San Mateo	SBUS	Gas	3792.283	3792.283	0	302.6791	--
2026	San Mateo	SBUS	NG	168.2676	168.2676	0	98.5766	--

2026	San Mateo	UBUS	Dsl	21575.87	21575.87	0	1115.391	--
2026	San Mateo	UBUS	Elec	3889.774	0	3889.774	150.2222	--
2026	San Mateo	UBUS	Gas	4202.678	4202.678	0	247.2278	--
2026	San Mateo	UBUS	NG	4554.21	4554.21	0	263.0787	--
2027	San Mateo	HHDT	Dsl	119374.9	119374.9	0	15003.58	--
2027	San Mateo	HHDT	Elec	2533.074	0	2533.074	269.7516	--
2027	San Mateo	HHDT	Gas	465.9735	465.9735	0	84.47398	--
2027	San Mateo	HHDT	NG	12874.54	12874.54	0	1300.878	--
2027	San Mateo	LDA	Dsl	11859.15	11859.15	0	2430.953	X
2027	San Mateo	LDA	Elec	763478.8	0	763478.8	106722.5	X
2027	San Mateo	LDA	Gas	6787745	6787745	0	1118595	X
2027	San Mateo	LDA	Phe	285623.3	131294.8	154328.5	43320.49	X
2027	San Mateo	LDT1	Dsl	18.5258	18.5258	0	4.138205	X
2027	San Mateo	LDT1	Elec	6297.196	0	6297.196	865.6909	X
2027	San Mateo	LDT1	Gas	713999.1	713999.1	0	121334.5	X
2027	San Mateo	LDT1	Phe	4749.74	2001.346	2748.394	662.5207	X
2027	San Mateo	LDT2	Dsl	20263.35	20263.35	0	3297.619	X
2027	San Mateo	LDT2	Elec	69186.62	0	69186.62	13210.51	X
2027	San Mateo	LDT2	Gas	5337772	5337772	0	859058.8	X
2027	San Mateo	LDT2	Phe	89530.08	39333.03	50197.05	13204.12	X
2027	San Mateo	LHDT1	Dsl	212564.8	212564.8	0	77006.08	--
2027	San Mateo	LHDT1	Elec	25488.91	0	25488.91	7271.182	--
2027	San Mateo	LHDT1	Gas	410499.8	410499.8	0	186522.8	--
2027	San Mateo	LHDT2	Dsl	94986.53	94986.53	0	34931.64	--
2027	San Mateo	LHDT2	Elec	6178.283	0	6178.283	1750.724	--
2027	San Mateo	LHDT2	Gas	45337.82	45337.82	0	21330.63	--
2027	San Mateo	MCY	Gas	81910.47	81910.47	0	30723.56	--
2027	San Mateo	MDV	Dsl	38182.61	38182.61	0	6183.555	X
2027	San Mateo	MDV	Elec	73029.24	0	73029.24	13959.05	X
2027	San Mateo	MDV	Gas	3072334	3072334	0	481493.9	X
2027	San Mateo	MDV	Phe	54464.83	23853.74	30611.09	7768.48	X
2027	San Mateo	MH	Dsl	4153.858	4153.858	0	43.89117	--
2027	San Mateo	MH	Gas	8482.343	8482.343	0	89.00834	--
2027	San Mateo	MHDT	Dsl	177451.1	177451.1	0	52965.25	--
2027	San Mateo	MHDT	Elec	7032.616	0	7032.616	1769.648	--
2027	San Mateo	MHDT	Gas	48390.56	48390.56	0	17357.42	--
2027	San Mateo	MHDT	NG	2296.644	2296.644	0	479.4474	--
2027	San Mateo	OBUS	Dsl	75909.96	75909.96	0	11575.44	--
2027	San Mateo	OBUS	Elec	456.3866	0	456.3866	114.4504	--
2027	San Mateo	OBUS	Gas	12473.77	12473.77	0	4966.188	--
2027	San Mateo	OBUS	NG	747.5342	747.5342	0	103.1386	--
2027	San Mateo	SBUS	Dsl	3706.878	3706.878	0	2426.328	--
2027	San Mateo	SBUS	Elec	202.8314	0	202.8314	47.87691	--
2027	San Mateo	SBUS	Gas	3883.503	3883.503	0	317.9877	--
2027	San Mateo	SBUS	NG	172.5017	172.5017	0	102.1373	--
2027	San Mateo	UBUS	Dsl	21607.25	21607.25	0	1116.989	--
2027	San Mateo	UBUS	Elec	3934.273	0	3934.273	152.4775	--

2027	San Mateo	UBUS	Gas	4214.564	4214.564	0	247.9413	--
2027	San Mateo	UBUS	NG	4566.887	4566.887	0	263.7242	--
2028	San Mateo	HHDT	Dsl	118863.6	118863.6	0	15118.87	--
2028	San Mateo	HHDT	Elec	3900.691	0	3900.691	410.6363	--
2028	San Mateo	HHDT	Gas	426.9851	426.9851	0	81.78009	--
2028	San Mateo	HHDT	NG	13277.54	13277.54	0	1340.296	--
2028	San Mateo	LDA	Dsl	10422.73	10422.73	0	2185.907	X
2028	San Mateo	LDA	Elec	778703.3	0	778703.3	112146.2	X
2028	San Mateo	LDA	Gas	6625096	6625096	0	1117181	X
2028	San Mateo	LDA	Phe	287067.5	130150.4	156917.1	45092.44	X
2028	San Mateo	LDT1	Dsl	17.08643	17.08643	0	3.850863	X
2028	San Mateo	LDT1	Elec	7602.43	0	7602.43	1064.315	X
2028	San Mateo	LDT1	Gas	710860.9	710860.9	0	123556	X
2028	San Mateo	LDT1	Phe	5738.6	2397.775	3340.825	829.5127	X
2028	San Mateo	LDT2	Dsl	20620.51	20620.51	0	3444.651	X
2028	San Mateo	LDT2	Elec	80104.27	0	80104.27	15796.57	X
2028	San Mateo	LDT2	Gas	5454076	5454076	0	902311	X
2028	San Mateo	LDT2	Phe	97890.29	42500.25	55390.04	15020.19	X
2028	San Mateo	LHDT1	Dsl	215842.1	215842.1	0	80937.65	--
2028	San Mateo	LHDT1	Elec	38136.82	0	38136.82	11425.03	--
2028	San Mateo	LHDT1	Gas	409468.1	409468.1	0	192109.4	--
2028	San Mateo	LHDT2	Dsl	96950.8	96950.8	0	37061.35	--
2028	San Mateo	LHDT2	Elec	9233.104	0	9233.104	2743.645	--
2028	San Mateo	LHDT2	Gas	45093.53	45093.53	0	21849.12	--
2028	San Mateo	MCY	Gas	83191.06	83191.06	0	32049.68	--
2028	San Mateo	MDV	Dsl	38138.7	38138.7	0	6350.78	X
2028	San Mateo	MDV	Elec	83057.65	0	83057.65	16411.37	X
2028	San Mateo	MDV	Gas	3139229	3139229	0	505616.6	X
2028	San Mateo	MDV	Phe	60147.57	26000.4	34147.16	8907.963	X
2028	San Mateo	MH	Dsl	4277.963	4277.963	0	46.56535	--
2028	San Mateo	MH	Gas	8640.917	8640.917	0	91.85001	--
2028	San Mateo	MHDT	Dsl	176136.6	176136.6	0	53168.12	--
2028	San Mateo	MHDT	Elec	11169.03	0	11169.03	2839.827	--
2028	San Mateo	MHDT	Gas	48208.29	48208.29	0	17652.82	--
2028	San Mateo	MHDT	NG	2394.418	2394.418	0	514.2228	--
2028	San Mateo	OBUS	Dsl	76199.48	76199.48	0	11894.78	--
2028	San Mateo	OBUS	Elec	691.3658	0	691.3658	178.7881	--
2028	San Mateo	OBUS	Gas	11852.4	11852.4	0	4889.127	--
2028	San Mateo	OBUS	NG	821.4822	821.4822	0	113.2737	--
2028	San Mateo	SBUS	Dsl	3662.699	3662.699	0	2403.923	--
2028	San Mateo	SBUS	Elec	315.9164	0	315.9164	76.16352	--
2028	San Mateo	SBUS	Gas	3950.797	3950.797	0	331.0562	--
2028	San Mateo	SBUS	NG	176.1298	176.1298	0	105.463	--
2028	San Mateo	UBUS	Dsl	19902.79	19902.79	0	1043.197	--
2028	San Mateo	UBUS	Elec	5326.696	0	5326.696	213.2752	--
2028	San Mateo	UBUS	Gas	4226.45	4226.45	0	248.6548	--
2028	San Mateo	UBUS	NG	4967.469	4967.469	0	281.217	--

Table 22
EV Assumptions for Campus District
Willow Village
Menlo Park, California

Campus District EV Parameters

Description	Units	Value
Electricity required per mile charged[1]	kWh/mi	0.30
Total Charging Energy of Meta Campuses[2]	kWh/year	3,791,856
Total Area of Meta Campuses[2]	sqf	4,753,594
Total Meta Campus Energy per Area[2]	kWh/sqf	0.80
Existing Conditions Fleet eVMT per Total VMT[3]	Percent	5.5%
Full Buildout Fleet MSS eVMT per Total VMT[4]	Percent	14%
Electricity Loss Factor[5]	Percent	10%
Existing Conditions Charging Energy Usage[6]	kWh/year	534,955
Full Buildout Charging Energy Usage[7]	kWh/year	2,925,608

eVMTs from Project Chargers at the proposed Campus District

Year	Land Use Category[8]	Project Increase in Annual eVMTs[9]
		eVMT/year
Existing Conditions	Campus District	1,783,182
Partial Buildout - Year 4		298,927
Partial Buildout - Year 5		5,701,922
Partial Buildout - Year 6		9,259,481
Full Buildout		9,752,026

Notes:

1. An average EV fuel economy of 0.30 kWh per mile was used. The fuel economy is based on electric fleet data from fueleconomy.gov. Available at: https://www.fueleconomy.gov/.
2. Meta provided energy usage and areas for EV charging at their existing campuses: Classic, Bayfront, Chilco, Willow, Gateway. The provided data was used to evaluate an average ratio of EV charging energy usage per campus area.
3. The percent eVMT for existing conditions is calculated by dividing the eVMT in existing conditions by the annual VMT from the 'Car' and 'On-Demand' vehicle types in existing conditions. For existing conditions VMT, see Table 18.
4. ARB is currently preparing its 2020 Mobile Source Strategy (MSS) update to the ARB VISION Model (version 2.1) estimating future fleet characteristics. The Mobile Source Strategy projects eVMTs reflecting the aspirational target identified in EO N-79-20, assuming 100% of passenger vehicle sales in California are ZEV or PHEV, and GHG emissions assumed to have reduced by 2.0% per year from 2026 to 2035. The increase in annual eVMTs charged by the Campus District is scaled from the increase in fleet eVMT from existing conditions to full buildout.
5. A 10% Loss Factor was applied to the annual project energy uses to account for expected losses. Source available at: https://www.fueleconomy.gov/

Table 22
EV Assumptions for Campus District
Willow Village
Menlo Park, California

6. The EV charging energy consumption for existing conditions was based on existing charger energy usage data for Willow Village for 2019 provided by the Project applicant. The total energy usage was reduced assuming a 10% loss factor.
7. The EV charging energy consumption for the Project at full buildout was determined using an average ratio of existing charging sites kWh/sqf and multiplying it by the Campus District land use area at full buildout (1.6 million sqf). This number was scaled by the increase in fleet eVMT from existing conditions to full buildout based on the MSS scenario of the VISION model. A 10% loss factor was applied to the total energy usage per year. All relevant data sources were provided by the Project applicant.
8. Meta offers an EV charging program to its workers. Charging on campus is free and valets move cars into chargers to maximize charging time. Therefore, the EV charging annual electricity for the Campus District was provided based on studies from Meta's existing campuses in the area. The electricity for EV charging at the Project would be supplied with 100% renewable energy.
9. For years where the Campus District is only operational a proportion of the year, the annual kWh is multiplied by a scaling fraction for the Campus District land use, found in Table 16.

Abbreviations:

EV - Electric vehicle (includes battery electric or plug-in hybrid technology)
eVMT- Electric vehicle miles traveled
kWh - Kilowatt hour
sqf- Square foot
MSS - Mobile Source Strategy

References:

City of Menlo Park Nonresidential EV Charging Requirements. Published July 17, 2019. Available at: https://www.menlopark.org/DocumentCenter/View/22382/Nonresidential-EV-Charging-Requirements

California Air Resources Board. Vision Scenario Planning. Available at: https://ww2.arb.ca.gov/resources/documents/vision-scenario-planning

CalEEMod Appendix D. Available at: http://www.aqmd.gov/docs/default-source/caleemod/user-guide-2021/appendix-d2020-4-0-full-merge.pdf?sfvrsn=12

Table 24
EV Emissions Reductions Summary
Willow Village
Menlo Park, California

Town Square and the Residential/Shopping District

Year	Scenario	Miles Charged by Project Chargers[1]	EV Trips Charged by Project Chargers[1]	eVMT from Additional Project Chargers[2]	Trip Counts from additional Project Chargers[2]	Electric VMT CAP Emissions Reduction (lb/year)[3,4]			
				eVMT/year	trips/year	ROG	NOx	PM_{10}	$PM_{2.5}$
Year 4	Reference	121,137	17,714	94,143	13,767	-33	-18	-0.34	-0.31
	MSS	215,280	31,482						
Year 5	Reference	776,244	97,457	801,830	100,669	-246	-133	-2.7	-2.5
	MSS	1,578,074	198,125						
Year 6	Reference	1,955,968	229,894	2,628,507	308,940	-746	-396	-8.3	-7.7
	MSS	4,584,475	538,834						
Full Buildout	Reference	2,643,906	304,407	4,404,570	507,121	-1,234	-658	-14	-13
	MSS	7,048,476	811,528						

Campus District

Year	eVMT from Additional Project Chargers[6]	Trip Counts from additional Project Chargers[6,7]	Electric VMT CAP Emissions Reduction (lb/year)[3,4]			
	eVMT/year	trips/year	ROG	NOx	PM_{10}	$PM_{2.5}$
Year 4	298,927	26,882	-78	-47	-1.0	-0.91
Year 5	5,701,922	512,763	-1,432	-833	-18	-17
Year 6	9,259,481	832,687	-2,249	-1,262	-28	-26
Full Buildout	9,752,026	876,981	-2,369	-1,329	-30	-27

Year	Electric VMT CAP Emissions Reduction (lb/year)			
	ROG	NOx	PM_{10}	$PM_{2.5}$
Existing Conditions	-564	-472	-7.6	-7.0
Partial Buildout- Year 4	-111	-65	-1.3	-1.2
Partial Buildout- Year 5	-1,677	-966	-21	-19
Partial Buildout- Year 6	-2,995	-1,658	-37	-34
Full Buildout	-3,603	-1,988	-44	-40

Notes:

1. Expected eVMT and trips charged by the Project chargers in Town Square and the Residential/Shopping District land uses are calculated based on the San Mateo Fleet, charger usage assumptions, ARB's Vision Model, and traffic data provided by the Transportation Engineer. For calculation details, see Table 23.
2. Emissions reductions from EV charging represent the decrease in emissions from increases in electric vehicle use due to the installation of EV chargers throughout the site. For Town Square and the Residential/Shopping District land uses, the eVMT and trips from additional Project chargers is calculated based on the difference between the MSS scenario and the baseline scenario, representing the additional eVMT due to the installation of additional chargers.
3. Emissions reductions use emission factors developed in EMFAC2021 that represent passenger vehicles (LDA, LDT1, LDT2, MCY). The eVMTs determined for Town Square and the Residential/Shopping District are based on ARB's VISION Model, which includes expected electric vehicle fleet % for passenger vehicles only (LDA, LDT1, LDT2, MCY).
4. EVs emit particulate matter brake wear and tire wear, therefore those emissions are not considered in the reductions.
6. Expected eVMT charged by additional Project chargers is measured based on anticipated charging energy usage provided by the Project Applicant. For calculation details see Table 22.
7. Trip counts from Project chargers were calculated by dividing the increased eVMTs from project chargers by the average VMTs per trip for the passenger vehicles (Cars) in a given year, based on traffic data provided by the Transportation Engineer.

Abbreviations:

eVMT - electric vehicle miles traveled
lb - pound
MT - metric ton
EV - electric vehicle
ROG - reactive organic gases
NOx - nitrogen oxides
PM_{10} - particulate matter less than 10 microns in diameter
$PM_{2.5}$ - particulate matter less than 2.5 microns in diameter

References:

California Air Resources Board. Vision Scenario Planning. Available at: https://ww2.arb.ca.gov/resources/documents/vision-scenario-planning

Table 23
EV Assumptions for Town Square and the Residential/Shopping District
Willow Village
Menlo Park, CA

EV Assumptions

Description	Units	Input
Miles Charged per Hour Charged[1]	(miles/hr)	21
Scenario1[2]	-	Reference
Scenario 2[2]	-	MSS
Number of Chargers[3]	Total #	249
Average Daily Hours for Charging per Charger[4]	hr	10
Annual Days of Charger Activity[4]	days/yr	365

eVMTs from Project Chargers - Reference Scenario

Year	Total Annual Project Trips[5,6]	Total Annual Project VMT[5,6]	% of total Fleet using Electric Fuel[2]	Annual Project EV Trips[6]	Annual Project Electric VMT[6]	Number of Project EV Chargers Available[7]	Total Annual EV Charge Hours Available from Project Chargers[8]	Number of EV Annual VMT Available from Project Chargers[8]	Project Chargers at Capacity Relative to Project Electric VMT[9]	Total Annual eVMTs Charged by Project[9]
	trips/year	VMT/year		trips/year	eVMT/year		hours/year	eVMT/year		
Partial Buildout - Year 4	378,626	2,589,154	**4.7%**	17,714	121,137	131	477,218	10,021,583	Under Capacity	**121,137**
Partial Buildout - Year 5	1,872,030	14,910,770	**5.2%**	97,457	776,244	187	683,944	14,362,828	Under Capacity	**776,244**
Partial Buildout - Year 6	4,124,018	35,087,750	**5.6%**	229,894	1,955,968	239	871,770	18,307,160	Under Capacity	**1,955,968**
Full Buildout	5,137,763	44,623,729	**5.9%**	304,407	2,643,906	249	908,850	19,085,850	Under Capacity	**2,643,906**

eVMTs from Project Chargers - Mobile Source Strategy (MSS) Scenario

Year	Total Annual Project Trips[5,6]	Total Annual Project VMT[5,6]	% of total Fleet using Electric Fuel[2]	Annual Project EV Trips[6]	Annual Project Electric VMT[6]	Number of Project EV Chargers Available[7]	Total Annual EV Charge Hours Available from Project Chargers[8]	Number of EV Annual VMT Available from Project Chargers[8]	Project Chargers at Capacity Relative to Project Electric VMT[9]	Total Annual eVMTs Charged by Project[9]
	trips/year	VMT/year		trips/year	eVMT/year		hours/year	eVMT/year		
Partial Buildout - Year 4	378,626	2,589,154	**8.3%**	31,482	215,280	131	477,218	10,021,583	Under Capacity	**215,280**
Partial Buildout - Year 5	1,872,030	14,910,770	**10.6%**	198,125	1,578,074	187	683,944	14,362,828	Under Capacity	**1,578,074**
Partial Buildout - Year 6	4,124,018	35,087,750	**13.1%**	538,834	4,584,475	239	871,770	18,307,160	Under Capacity	**4,584,475**
Full Buildout	5,137,763	44,623,729	**15.8%**	811,528	7,048,476	249	908850	19,085,850	Under Capacity	**7,048,476**

Notes:

1. The miles charged per hour charged is representative of a typical charge rate for an EV of 6.25 kWh per hour and a fuel economy of 0.30 kWh per mile. The charge rate is based on capability of existing battery-electric vehicles and Level 2 charging stations. Reference: Chargepoint. 2017. Level Up Your EV Charging Knowledge. Available at: https://www.chargepoint.com/blog/level-your-ev-charging-knowledge/. The fuel economy is based on electric fleet data from fueleconomy.gov. Available at: https://www.fueleconomy.gov/.
2. The two scenarios analyzed are the Reference and the Mobile Source Strategy scenarios. ARB is currently preparing its 2020 Mobile Source Strategy (MSS) update to the ARB VISION Model (version 2.1). The 2020 MSS uses "scenario planning to take an integrated approach to identifying the technology trajectories and programmatic concepts" to model projected years of electric vehicle miles for assessed scenarios. The Mobile Source Strategy projects eVMTs reflecting the aspirational target identified in EO N-79-20, assuming 100% of passenger vehicle sales in California are ZEV or PHEV, and GHG emissions assumed to have reduced by 2.0% per year from 2026 to 2035. The 2020 update only considers passenger vehicles (LDA, LDT1, LDT2, and MDV). To determine the eVMT percent of the passenger vehicle fleets, the 2020 MSS update was downloaded in July 13, 2021. The increase in annual eVMTs charged by the Project from the Reference Scenario to the MSS Scenario is used to determine the eVMTs the Project can take credit for based on providing additional charging infrastructure for the state to reach aspirational EV fleet penetration.
3. The number of chargers in the Town Square and the Residential/Shopping District was provided by the Project Applicant in the Willow Village Mixed Use Development Concept Level Energy Use Summary, dated June 14, 2021, detailing chargers available for all mixed-use traffic. 249 EV Charging Stations are available to serve the 1,694 residential spaces and 500 commercial spaces.
4. Meta offers a valet service to charge EVs from 7am to 7pm, average daily hours of availability for charging per charger is conservatively assumed to be 10 hours per day. When demand is met, the full 10 hours will be used for charging, with each vehicle cycling out of the charging spot before or as the car reaches full charge. The number of chargers are available for all Town Square and the Residential/Shopping District land uses, and it is expected that there will be 10 hours a day of active charging taking place due to the frequency of turnover associated with retail, restaurant, hotel, and park land uses. Town Square and the Residential/Shopping District land uses are assumed to operate 365 days per year. Any charging inefficiencies associated with cars remaining plugged in after reaching full charge is assumed to balance out due the likelihood of more than 10 hours of activity a day associated with Town Square and the Residential/Shopping District activity.
5. Town Square and the Residential/Shopping District Total VMT and trips includes all proposed Project residential, retail, park, and hotel land uses, consistent with Table 18. Retail land uses include Hamilton Parcels North and South and are added to total VMT and trips.
6. EV Annual Trips and EV Annual VMT are determined based on Project trips and VMTs and the VISION Reference Scenario percent of Electric Fleet. These eVMTs (electric vehicle miles traveled) represents the number of project VMTs that are driven by electric vehicles.
7. 249 EV Charging Stations are proposed for the full buildout. To reflect the EV charging stations that will come online during construction in the partial years leading up to full buildout, a scaling factor was applied based on the ratio of square feet of the parking land use that is built out in a given year to the total square feet that will be built. The scaling factor for a given year was applied to the 249 chargers at full buildout. To see scaling factors used, refer to the parking land use from Table 16.
8. Total annual charge hours available from the project are determined by multiplying the average daily hours of charging per charger (10 hours) by the annual days of charger activity (365 days). The annual charge hours available from the project are then multiplied by 25 miles charged per charge hour to determine the number of eVMT available from the project.
9. The Project EV chargers for Town Square and the Residential/Shopping District land uses are determined to be at capacity, meaning used fully for all available charge hours per day, when the electric vehicle miles associated with the Project are in excess of the maximum electric vehicle miles the Project chargers can charge. If there is a surplus of chargers relative to EVs coming to the site, then the Project chargers are under-capacity, and only a fraction of chargers will be used as the number of EVs coming to the site are fewer than the total number of charger capacity. If there is a surplus of EVs coming to the site relative to the chargers at the site, all chargers will be used and the site will be at capacity. In the scenario when the chargers are at capacity, the full capacity of VMTs the site can charge are assumed to be charged.

Abbreviations:

EV - electric vehicle (includes battery electric or plug-in hybrid technology)
Hr - hour
TDM - Transportation Demand Management
VMT - vehicle miles travelled
eVMT - electric vehicle mile traveled

References:

U.S. Census. 2019. Factfinder. Available at: https://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?src=bkmk
California Air Pollution Control Officers Association (CAPCOA). California Emissions Estimator Model (CalEEMod), Version 2016.3.2. Available online at http://www.caleemod.com/
California Air Resources Board. EMFAC2021. Available at: https://arb.ca.gov/emfac/
California Air Resources Board. Vision Scenario Planning. Available at: https://ww2.arb.ca.gov/resources/documents/vision-scenario-planning

Table 19
Summary of Fleet Mix Categories
Willow Village
Menlo Park, California

Land Use	Fleet Type	EMFAC2007 Category[1]	Fuel[1,2]
Town Square and the Residential/Shopping District[3]	San Mateo County Mix	All	Mix of Gasoline, Diesel, Electric, and Natural Gas
Campus District[4]	Cars	LDA, LDT1, LDT2, MCY Mix	Mix of Gasoline and Diesel
	On-Demand	LDA	Gasoline
	Shuttles	Motor Coach, All Other Buses Mix	Diesel
	Trams	LDT1, LDT2	Mix of Gasoline and Diesel
	Trucks	HHDT, LHDT1, LHDT2, MHDT Mix	Mix of Gasoline, Diesel, and Natural Gas

Notes:

1. EMFAC2007 categories and fuel types were chosen to match vehicle type descriptions provided by Meta Transportation Operations Team.
2. Electric vehicles were not considered in the emission factors of the Campus District fleets because Campus District-specific emissions reductions are applied later.
3. Land uses other than the Campus District were assumed to have the same distribution of vehicle types as San Mateo County, per EMFAC2021. Hamilton Avenue Parcels North and South were combined with the retail land uses having the EMFAC2021 fleet for San Mateo County.
4. Default split between EMFAC categories assumed for all fleets associated with the Office (Existing and Full Buildout).

Abbreviations:

HHDT - heavy-heavy duty trucks
LDA - light duty auto (passenger cars)
LDT- light duty trucks
LHDT - light-heavy duty trucks
LHDT - light-heavy duty trucks
MHDT - medium-heavy duty trucks
MCY - motorcycles

References:

California Air Resources Board. EMFAC2021. Available at: https://arb.ca.gov/emfac/

Table 8
Fugitive Road Dust Emission Factors
Willow Village
Menlo Park, California

Road Dust Equation[1]

E [lb/VMT] = k*(sL)^0.91 * (W)^1.02 * (1-P/4N)

Parameter	Value
k = particle size multiplier for PM_{10} [lb/VMT]	0.0022
sL = roadway silt loading [grams per square meter - g/m^2]	0.032
W = average weight of vehicles traveling the road [tons]	2.4
P = number of "wet" days in county with at least 0.01 in of precipitation during the annual averaging period	74
N = number of days in the averaging period	365
PM_{10} speciation profile fraction	0.46
$PM_{2.5}$ speciation profile fraction	0.069
E = Fugitive PM_{10} Emission Factor [g/VMT]	0.10
E = Fugitive $PM_{2.5}$ Emission Factor [g/VMT][2]	0.015
E = Fugitive PM_{10} Emission Factor with Street Sweeping Reduction [g/VMT][3]	0.075
E = Fugitive $PM_{2.5}$ Emission Factor with Street Sweeping Reduction [g/VMT][3]	0.011

Notes:

1. Road dust equation is based on the U.S. EPA AP-42 Chapter 13.2.1: Paved Roads. Parameter values were obtained from the 2021 California ARB Miscellaneous Process Methodology using major roadways silt loading, annual San Mateo county "wet" days, and statewide average vehicle fleet weight.
2. $PM_{2.5}$ emission factor was scaled from the PM_{10} value based on the ARB's guidance.
3. A 26% reduction in the PM_{10} emission factor was taken for street sweeping of arterial/collector streets, based on SCAQMD's Fugitive Dust Table XI-C. The $PM_{2.5}$ emissions factor was scaled from the PM_{10} value based on the ARB's guidance.

Abbreviations:

ARB - Air Resource Board
lb - pounds
g - grams
m^2 - square meters
PM - particulate matter
$PM_{2.5}$ - particulate matter less than 2.5 microns in diameter
PM_{10} - particulate matter less than 10 microns in diameter
SCAQMD - South Coast Air Quality Management District
USEPA - United States Environmental Protection Agency
VMT - vehicle miles traveled

References:

USEPA. 2011. AP 42. Compilation of Air Pollutant Emission Factors, Volume 1. Fifth Edition. Chapter 13.2.1, Paved Roads. Available online at: https://www3.epa.gov/ttn/chief/ap42/ch13/final/c13s0201.pdf

California ARB. 2021. Miscellaneous Processes Methodologies - Paved Entrained Road Dust. Available online at: https://ww3.arb.ca.gov/ei/areasrc/fullpdf/2021_paved_roads_7_9.pdf

SCAQMD. 2007. Table XI-C Mitigation Measure Examples: Dust From Paved Roads. Available online at: http://www.aqmd.gov/home/rules-compliance/ceqa/air-quality-analysis-handbook/mitigation-measures-and-control-efficiencies/fugitive-dust

Table 1
Land Use Summary
Willow Village
Menlo Park, California

Land Use[1]	CalEEMod® Land Use	Size	Units[2]	Square Footage
Existing Conditions (2019)				
Office	General Office Building	252	ksf	251,530
R&D	Research and Development	124	ksf	123,870
Warehouse	Unrefrigerated Warehouse-No Rail	501	ksf	500,780
Lab & Manufacture	Manufacturing	24	ksf	23,570
Health Center	Health Club	24	ksf	24,060
Former Fire Department Building	General Light Industry	80	ksf	80,100
Parking	Enclosed Parking with Elevator	2,300	Spaces	920,000
Partial Buildout by Year[3]				
Land Use Type[4]		**Percent Operational by Year**		
		Year 4	**Year 5**	**Year 6**
Office		3.1%	58%	95%
Retail		10%	59%	98%
Residential		0%	16%	64%
Hotel		0%	41%	100%
Parking		53%	75%	96%
Park		89%	95%	100%
Full Buildout				
Land Use Type[4]		**Size**	**Units[2]**	**Square Footage**
Office		1,600	ksf	1,600,000
Retail		208	ksf	207,690
Residential		1,730	DU	1,695,976
Hotel		193	Rooms	172,000
Parking		1,869	ksf	1,869,240
Park		404	ksf	403,837

Notes:

1. Land uses analyzed based on information provided by the Project Applicant, as found in the Project Description. "Office" land use mapped to General Office Building and Research and Development; "Office/Lab" mapped to General Office Building, Research and Development, Health Club, and Manufacturing; "Warehouse" mapped to Unrefrigerated Warehouse-No Rail and General Light Industry, and "Warehouse/Office" mapped to Unrefrigerated Warehouse-No Rail and Research and Development CalEEMod land use types on a building-by-building basis.

2. The Project Applicant provided Project land uses in units of square footage, hotel rooms, and dwelling units. For the existing parking land use, each parking space is assumed to be 400 sqft. This assumption is based on CalEEMod defaults.

3. Partial buildout for Year 4, Year 5, and Year 6 were calculated based on the portion of building area for each land use type that becomes operational each year, based on the construction schedule, as shown in Table 2.

4. For Hamilton Avenue Parcels North and South, only net new square footage was included in the analysis. This is under the conservative assumption that the existing retail area and the retail land use that will replace it have similar operational emissions.

Abbreviations:

DU - dwelling unit
sqft - square foot
ksf - 1,000 square feet
CalEEMod® - California Emissions Estimator Model

References:

California Air Pollution Control Officers Association (CAPCOA). California Emissions Estimator Model (CalEEMod®), Version 2020.4.0. Available online at http://www.caleemod.com/

Table 25
Summary of Mobile Emissions
Willow Village
Menlo Park, California

Total Emissions Before Reductions:[1]

Year	CAP Emissions without Reductions (ton/year)			
	ROG	NO_x	PM_{10}[2]	$PM_{2.5}$[2]
Total Emissions by Year				
Existing Conditions[3]	4.985	8.007	4.022	0.836
Year 4	0.61	0.67	0.46	0.092
Year 5	5.8	6.3	5.1	1.0
Year 6	10	11	9.4	1.9
Full Buildout	12	13	11	2.1
Net Emissions by Year				
Year 4	-4.4	-7.3	-3.6	-0.74
Year 5	0.8	-1.7	1.0	0.17
Year 6	5.3	3.1	5.4	1.0
Full Buildout	**6.8**	**4.7**	**6.7**	**1.3**

Total Emissions with Reductions:[4]

Year	CAP Emissions with Reductions (ton/year)			
	ROG	NO_x	PM_{10}[2]	$PM_{2.5}$[2]
Total Emissions by Year				
Existing Conditions[3]	5.0	8.0	4.0	0.84
Year 4	0.56	0.64	0.46	0.091
Year 5	5.0	5.9	5.1	1.0
Year 6	8.8	10	9.4	1.8
Full Buildout	**10**	**12**	**11**	**2.1**
Net Emissions by Year				
Year 4	-4.4	-7.4	-3.6	-0.74
Year 5	0.0	-2.2	1.0	0.16
Year 6	3.9	2.3	5.3	1.0
Full Buildout	**5.0**	**3.7**	**6.6**	**1.3**

Notes:

1. Calculations of emissions before reductions are shown in detail in Table 21. Net emissions subtract the emissions from the existing conditions in 2019.
2. PM10 and PM2.5 emissions include exhaust, tire wear, brake wear, and fugitive dust. Fugitive dust emissions factors are calculated in Table 8.
3. The Existing Conditions includes EV reductions associated with existing Project Site chargers.
4. Emissions after reductions account for the reductions associated with EVs as shown in Table 24. The emissions reductions are subtracted from the total Project emissions.

Abbreviations:

lb - pound
MT - metric ton
EV - electric vehicle
ROG - reactive organic gases
NOx - nitrogen oxides
PM_{10} - particulate matter less than 10 microns in diameter
$PM_{2.5}$ - particulate matter less than 2.5 microns in diameter

References:

California ARB. 2021. Miscellaneous Processes Methodologies - Paved Entrained Road Dust. Available online at: https://ww3.arb.ca.gov/ei/areasrc/fullpdf/2021_paved_roads_7_9.pdf

California Air Resources Board. EMFAC2021. Available at: https://arb.ca.gov/emfac/

Daily Trips Rates and VMT

Values used in traffic calculations

Land Use	Fleet Type / Land Use				
		Total Buildout	Total Buildout	Total Buildout	Total Buildout
		End of Area 3	TOTAL	End of Area 3	TOTAL
Faceook Campus - Existing 2019	Cars		9,221		110,860
	Trucks		220		2,640
	Shuttles		659		21,088
	On-Demand		659		7,919
Facebook Campus - Full Buildout 2026	Cars	16,076		178,766	
	Trucks	365		4,056	
	Shuttles	702		21,088	
	On-Demand	1,094		12,168	
Town Square and the Residential/Shopping District - Full Buildout	Residential	7,529		71,524	
	Retail	5,014		35,055	
	Hamilton Parcel	218		1,461	
	Park	171		1,147	
	Hotel	1,290		14,814	

Table 16
Building Operational Capacity For Emissions Scaling
Willow Village
Menlo Park, California

Building or Parcel[1]		Percent Breakdown of Land Use Type by Building						Percent of Year Building is Operational[2]		
		Office	Retail	Residential	Hotel	Parking	Park	Year 4	Year 5	Year 6
North Garage		--	--	--	--	45%	--	100%	100%	100%
Office Building 4		11%	48%	--	--	--	--	21%	100%	100%
Meeting, Collaboration, Park		28%	--	--	--	--	--	0%	0%	82%
Hotel Construction		--	--	--	100%	--	--	0%	41%	100%
Town Square		--	--	--	--	--	14%	0%	58%	100%
Parcel 2		--	19%	19%	--	12%	--	0%	34%	100%
Parcel 3		--	26%	24%	--	12%	--	0%	10%	100%
Other		0.38%	--	--	--	0.73%	86%	100%	100%	100%
South Garage		--	--	--	--	23.9%	--	29%	100%	100%
Office Building 3		13%	--	--	--	--	--	0%	76%	100%
Office Building 1		8.4%	--	--	--	--	--	5%	100%	100%
Office Building 2		10%	--	--	--	--	--	0%	98%	100%
Office Building 5		15%	--	--	--	--	--	0%	78%	100%
Office Building 6		14%	--	--	--	--	--	0%	53%	100%
Parcel 6		--	--	10%	--	1.4%	--	0%	0%	88%
Parcel 7		--	--	6.9%	--	0.5%	--	0%	99%	100%
Parcels 4 + 5		--	2.4%	40%	--	4.4%	--	0%	0%	11%
Hamilton Avenue Parcels North and South		--	3.7%	--	--	--	--	0%	54%	100%
Partial Buildout by Year and Land Use Type[3]	**Year 4**	3.1%	10%	0%	0%	53%	86%			
	Year 5	58%	59%	16%	41%	75%	94%			
	Year 6	95%	98%	64%	100%	96%	100%			

Notes:

1. Construction area/subphasing information and full buildout square footage by building provided by Project Applicant.
2. The percentage of year that each building is operational is calculated using the last day of construction for each building. For each partial year of construction, the building is assumed to be operational during the fraction of the year between the last day of construction and the end of that year. The building is assumed to be 0% operational for each full year of construction and 100% operational for each year full year after the end of construction.
3. Partial buildout for Year 4, Year 5, and Year 6 were calculated based on the portion of building area that becomes operational each year over the total building area for each land use type.

Abbreviations:

% - percent

Copied from operational workbook, used for scaling land usage by year

Building or Parcel[1]		Percent Breakdown of Land Use Type by Building						Percent of Year Building is Operational[2]		
		Office	Retail	Residential	Hotel	Parking	Park	Year 4	Year 5	Year 6
Partial Buildout by Year and Land Use Type[3]	Year 4	3.1%	10%	0%	0%	53%	86%			
	Year 5	58%	59%	16%	41%	75%	94%			
	Year 6	95%	98%	64%	100%	96%	100%			

Notes:

1. Construction area/subphasing information and full buildout square footage by building provided by Project Applicant.
2. The percentage of year that each building is operational is calculated using the last day of construction for each building. For each partial year of construction, the building is assumed to be operational during the fraction of the year between the last day of construction and the end of that year. The building is assumed to be 0% operational for each full year of construction and 100% operational for each year full year after the end of construction.
3. Partial buildout for Year 4, Year 5, and Year 6 were calculated based on the portion of building area that becomes operational each year over the total building area for each land use type.

Abbreviations:

% - percent

Not included in the report- Table 18 support

Willow Village Project	Category	Land Use	Fleet Type	CalEEMod One-Way Trip Rates[3]			Average One-Way Trips		Average Daily One-Way Trips[5]
				Weekday	Saturday	Sunday	Weekday	Weekend[4]	
Existing - 2019		Office	Cars	2,774	619	264	9,221	1467	7,006
			Trucks	2,774	619	264	220	34.9	0,167
			Shuttles	2,774	0	0	659	0	0,470
			On-Demand	2,774	0	0	659	0	0,470
Year 4	Campus District	Office	Cars	18,272	2,624	1,216	493	52	0,367
			Trucks	18,272	2,624	1,216	11	1.2	0,008
			Shuttles	18,272	0	0	22	0	0,015
			On-Demand	18,272	0	0	34	0	0,024
	Mixed Use	Residential	All	11,505	11,055	10,138	0	0	0,000
		Retail	All	8,868	10,378	5,242	510	449	0,492
		Park	All	22	264	194	147	1,539	0,545
		Hotel	All	968	970	705	0	0	0,000
Year 5	Campus District	Office	Cars	18,272	2,624	1,216	9,400	988	6,996
			Trucks	18,272	2,624	1,216	213	22	0,159
			Shuttles	18,272	0	0	410	0	0,293
			On-Demand	18,272	0	0	640	0	0,457
	Mixed Use	Residential	All	11,505	11,055	10,138	1,180	1,087	1,153
		Retail	All	8,868	10,378	5,242	2,974	2,619	2,873
		Park	All	22	264	194	161	1,683	0,596
		Hotel	All	968	970	705	527	456	0,507
Year 6	Campus District	Office	Cars	18,272	2,624	1,216	15,264	1,604	11,361
			Trucks	18,272	2,624	1,216	346	36	0,258
			Shuttles	18,272	0	0	667	0	0,476
			On-Demand	18,272	0	0	1,039	0	0,742
	Mixed Use	Residential	All	11,505	11,055	10,138	4,793	4,415	4,685
		Retail	All	8,868	10,378	5,242	4,907	4,322	4,740
		Park	All	22	264	194	171	1,788	0,633
		Hotel	All	968	970	705	1,290	1,117	1,241
Full Buildout	Campus District	Office	Cars	18,272	2,624	1,216	16,076	1,689	11,966
			Trucks	18,272	2,624	1,216	365	38	0,271
			Shuttles	18,272	0	0	702	0	0,501
			On-Demand	18,272	0	0	1,094	0	0,782
	Mixed Use	Residential	All	11,505	11,055	10,138	7,529	6,934	7,359
		Retail	All	8,868	10,378	5,242	5,014	4,416	4,843
		Park	All	22	264	194	171	1,788	0,633
		Hotel	All	968	970	705	1,290	1,117	1,241

cy	scenario	Passenger?	total_pop	sum of trip	ctrip	etrip	total_vmt	cvmt	evmt	Tech	cpop	epop	veh_class_	fuel_ID
2017	2a	1	16313.24	43543.96	43543.96	0	93132.2	93132.2	0	ICE	16313.24	0	1	1
2017	2a	1	14912.8	41514.56	41514.56	0	91024.25	91024.25	0	ICE	14912.8	0	1	1
2017	2a	1	14775.51	43671.83	43671.83	0	117502.5	117502.5	0	ICE	14775.51	0	1	1
2017	2a	1	15848.5	47751.2	47751.2	0	136186.4	136186.4	0	ICE	15848.5	0	1	1
2017	2a	1	4786.37	14695.45	14695.45	0	43382.48	43382.48	0	ICE	4786.37	0	1	1
2017	2a	1	6399.348	20380.96	20380.96	0	65574.5	65574.5	0	ICE	6399.348	0	1	1
2017	2a	1	7521.869	24386.95	24386.95	0	81515.5	81515.5	0	ICE	7521.869	0	1	1
2017	2a	1	15869.99	53271.1	53271.1	0	195024.6	195024.6	0	ICE	15869.99	0	1	1
2017	2a	1	18687.92	63800.76	63800.76	0	243227.1	243227.1	0	ICE	18687.92	0	1	1
2017	2a	1	25170.66	88816.94	88816.94	0	368133.3	368133.3	0	ICE	25170.66	0	1	1
2017	2a	1	33973.71	121825.6	121825.6	0	527628.1	527628.1	0	ICE	33973.71	0	1	1
2017	2a	1	47741.98	173932.2	173932.2	0	785157.6	785157.6	0	ICE	47741.98	0	1	1
2017	2a	1	59974.27	221932.4	221932.4	0	1041109	1041109	0	ICE	59974.27	0	1	1
2017	2a	1	59937.17	225228.9	225228.9	0	1098899	1098899	0	ICE	59937.17	0	1	1
2017	2a	1	72056.49	274898.4	274898.4	0	1395395	1395395	0	ICE	72056.49	0	1	1
2017	2a	1	91509.39	354354.6	354354.6	0	1866546	1866546	0	ICE	91509.39	0	1	1
2017	2a	1	126413	496754.9	496754.9	0	2711674	2711674	0	ICE	126413	0	1	1
2017	2a	1	134136.6	534790.5	534790.5	0	3026251	3026251	0	ICE	134136.6	0	1	1
2017	2a	1	186319.8	753514.7	753514.7	0	4409296	4409296	0	ICE	186319.8	0	1	1
2017	2a	1	229402.7	940892.8	940892.8	0	5699074	5699074	0	ICE	229402.7	0	1	1
2017	2a	1	270453.2	1124755	1124755	0	7045771	7045771	0	ICE	270453.2	0	1	1
2017	2a	1	359654.3	1516328	1516328	0	9823474	9823474	0	ICE	359654.3	0	1	1
2017	2a	1	392109.7	1675626	1675626	0	11207186	11207186	0	ICE	392109.7	0	1	1
2017	2a	1	652.7144	2789.284	2789.284	0	18814.57	18814.57	0	ICE	652.7144	0	1	2
2017	2a	1	420873.3	1822655	1822655	0	12600618	12600618	0	ICE	420873.3	0	1	1
2017	2a	1	473619.4	2078214	2078214	0	14827662	14827662	0	ICE	473619.4	0	1	1
2017	2a	1	475529.1	2113836	2113836	0	15551210	15551210	0	ICE	475529.1	0	1	1
2017	2a	1	568212.3	2558387	2558387	0	19412989	19412989	0	ICE	568212.3	0	1	1
2017	2a	1	598560.3	2729321	2729321	0	21329127	21329127	0	ICE	598560.3	0	1	1
2017	2a	1	1459.728	6656.085	6656.085	0	51821.17	51821.17	0	ICE	1459.728	0	1	2
2017	2a	1	644436.6	2975428	2975428	0	23906489	23906489	0	ICE	644436.6	0	1	1
2017	2a	1	550813.6	2574717	2574717	0	21276237	21276237	0	ICE	550813.6	0	1	1
2017	2a	1	441870.9	2090792	2090792	0	17765952	17765952	0	ICE	441870.9	0	1	1
2017	2a	1	521136.8	2495709	2495709	0	21785202	21785202	0	ICE	521136.8	0	1	1
2017	2a	1	5773.445	27648.86	27648.86	0	239464.1	239464.1	0	ICE	5773.445	0	1	2
2017	2a	1	510830	2475615	2475615	0	22221752	22221752	0	ICE	510830	0	1	1
2017	2a	1	7682.726	37232.49	37232.49	0	330143.8	330143.8	0	ICE	7682.726	0	1	2
2017	2a	1	733192.1	3595244	3595244	0	33241482	33241482	0	ICE	733192.1	0	1	1
2017	2a	1	874118.7	4336363	4336363	0	41104028	41104028	0	ICE	874118.7	0	1	1
2017	2a	1	862131.7	4326289	4326289	0	42146361	42146361	0	ICE	862131.7	0	1	1
2017	2a	1	15816.72	79370.36	79370.36	0	771132.8	771132.8	0	ICE	15816.72	0	1	2
2017	2a	1	997879.2	5064656	5064656	0	50706714	50706714	0	ICE	997879.2	0	1	1
2017	2a	1	926068.9	4753243	4753243	0	48769569	48769569	0	ICE	926068.9	0	1	1
2017	2a	1	847126.5	4396586	4396586	0	46066819	46066819	0	ICE	847126.5	0	1	1
2017	2a	1	10366.6	53802.66	53802.66	0	566205.7	566205.7	0	ICE	10366.6	0	1	2
2017	2a	1	49269.97	255711.1	0	255711.1	2398766	0	2398766	BEV	0	49269.97	1	3

2017	2a	1	1005.51	5218.595	0	5218.595	40398.76	0	40398.76	FCEV	0	1005.51	1	7
2017	2a	1	44443.18	230660.1	124556.5	106103.7	2591798	1399571	1192227	PHEV	23999.32	20443.86	1	8
2017	2a	1	4091.489	10921.17	10921.17	0	50364.44	50364.44	0	ICE	4091.489	0	2	1
2017	2a	1	2066.243	5870.424	5870.424	0	28011.72	28011.72	0	ICE	2066.243	0	2	1
2017	2a	1	2931.28	9335.687	9335.687	0	49905.65	49905.65	0	ICE	2931.28	0	2	1
2017	2a	1	3262.031	10575.96	10575.96	0	56832	56832	0	ICE	3262.031	0	2	1
2017	2a	1	6144.969	20274.9	20274.9	0	111660.9	111660.9	0	ICE	6144.969	0	2	1
2017	2a	1	9560.414	32091.63	32091.63	0	180070.8	180070.8	0	ICE	9560.414	0	2	1
2017	2a	1	15781.44	53877.99	53877.99	0	305970.7	305970.7	0	ICE	15781.44	0	2	1
2017	2a	1	15158.4	52619.35	52619.35	0	304360.5	304360.5	0	ICE	15158.4	0	2	1
2017	2a	1	15496.19	54679.69	54679.69	0	319639.3	319639.3	0	ICE	15496.19	0	2	1
2017	2a	1	20708.7	74258.91	74258.91	0	438944.8	438944.8	0	ICE	20708.7	0	2	1
2017	2a	1	17822.09	64928.92	64928.92	0	385087	385087	0	ICE	17822.09	0	2	1
2017	2a	1	22652.34	83824.07	83824.07	0	498916.7	498916.7	0	ICE	22652.34	0	2	1
2017	2a	1	19919.26	74851.59	74851.59	0	452428.9	452428.9	0	ICE	19919.26	0	2	1
2017	2a	1	25834.16	98558.34	98558.34	0	603003.2	603003.2	0	ICE	25834.16	0	2	1
2017	2a	1	31676.5	122661.9	122661.9	0	759517.9	759517.9	0	ICE	31676.5	0	2	1
2017	2a	1	30609.09	120282.1	120282.1	0	755660.2	755660.2	0	ICE	30609.09	0	2	1
2017	2a	1	34048.89	135749.9	135749.9	0	860615.6	860615.6	0	ICE	34048.89	0	2	1
2017	2a	1	44212.86	178805.7	178805.7	0	1151806	1151806	0	ICE	44212.86	0	2	1
2017	2a	1	55482.56	227561.1	227561.1	0	1493008	1493008	0	ICE	55482.56	0	2	1
2017	2a	1	49813.37	207162.8	207162.8	0	1383869	1383869	0	ICE	49813.37	0	2	1
2017	2a	1	52464.31	221193.2	221193.2	0	1507245	1507245	0	ICE	52464.31	0	2	1
2017	2a	1	57040.99	243756.7	243756.7	0	1691983	1691983	0	ICE	57040.99	0	2	1
2017	2a	1	57654.6	249681.9	249681.9	0	1766759	1766759	0	ICE	57654.6	0	2	1
2017	2a	1	38716.28	169884.7	169884.7	0	1227177	1227177	0	ICE	38716.28	0	2	1
2017	2a	1	20170.06	90816.09	90816.09	0	683242.2	683242.2	0	ICE	20170.06	0	2	1
2017	2a	1	30832.01	140588.1	140588.1	0	1085071	1085071	0	ICE	30832.01	0	2	1
2017	2a	1	42884.24	198000.8	198000.8	0	1563726	1563726	0	ICE	42884.24	0	2	1
2017	2a	1	70759.19	330756	330756	0	2675986	2675986	0	ICE	70759.19	0	2	1
2017	2a	1	50190.35	237484.7	237484.7	0	1965369	1965369	0	ICE	50190.35	0	2	1
2017	2a	1	25353.77	121418.4	121418.4	0	1028652	1028652	0	ICE	25353.77	0	2	1
2017	2a	1	21465.77	104028.7	104028.7	0	905150.9	905150.9	0	ICE	21465.77	0	2	1
2017	2a	1	133446.2	677295.5	677295.5	0	6580259	6580259	0	ICE	133446.2	0	2	1
2017	2a	1	119271.1	612184.1	612184.1	0	6104704	6104704	0	ICE	119271.1	0	2	1
2017	2a	1	92988.05	482608	482608	0	4943005	4943005	0	ICE	92988.05	0	2	1
2017	2a	1	12.59691	65.37797	65.37797	0	669.8895	669.8895	0	ICE	12.59691	0	2	2
2017	2a	1	3.133165	16.26113	0	16.26113	125.8602	0	125.8602	BEV	0	3.133165	2	3
2017	2a	1	0.063942	0.33186	0	0.33186	2.568575	0	2.568575	FCEV	0	0.063942	2	7
2017	2a	1	27.17541	141.0404	84.62422	56.41615	1445.495	867.2968	578.1979	PHEV	16.30525	10.87016	2	8
2017	2a	1	4244.25	11328.92	11328.92	0	54207.59	54207.59	0	ICE	4244.25	0	3	1
2017	2a	1	3714.657	10553.75	10553.75	0	50717.09	50717.09	0	ICE	3714.657	0	3	1
2017	2a	1	2328.251	6748.202	6748.202	0	33366.71	33366.71	0	ICE	2328.251	0	3	1
2017	2a	1	1456.395	4554.963	4554.963	0	23495.28	23495.28	0	ICE	1456.395	0	3	1
2017	2a	1	3874.709	12784.33	12784.33	0	67214.18	67214.18	0	ICE	3874.709	0	3	1
2017	2a	1	6952.656	23736.44	23736.44	0	127490.8	127490.8	0	ICE	6952.656	0	3	1
2017	2a	1	7651.172	26559.51	26559.51	0	145213.8	145213.8	0	ICE	7651.172	0	3	1

2017	2a	1	10552.42	37235.18	37235.18	0	207392.8	207392.8	0	ICE	10552.42	0	3	1
2017	2a	1	14369.91	51528.78	51528.78	0	292541.8	292541.8	0	ICE	14369.91	0	3	1
2017	2a	1	17214.36	62714.82	62714.82	0	360594.1	360594.1	0	ICE	17214.36	0	3	1
2017	2a	1	21834.56	80797.91	80797.91	0	476623.6	476623.6	0	ICE	21834.56	0	3	1
2017	2a	1	21118.27	79357.16	79357.16	0	474503.2	474503.2	0	ICE	21118.27	0	3	1
2017	2a	1	30143.38	114998.2	114998.2	0	698261	698261	0	ICE	30143.38	0	3	1
2017	2a	1	35967.43	139277.8	139277.8	0	856730.2	856730.2	0	ICE	35967.43	0	3	1
2017	2a	1	48674.88	191273.8	191273.8	0	1195226	1195226	0	ICE	48674.88	0	3	1
2017	2a	1	50994.75	203311.5	203311.5	0	1287342	1287342	0	ICE	50994.75	0	3	1
2017	2a	1	86091.57	348171.5	348171.5	0	2242323	2242323	0	ICE	86091.57	0	3	1
2017	2a	1	105806.7	433965.2	433965.2	0	2841814	2841814	0	ICE	105806.7	0	3	1
2017	2a	1	127814.4	531552	531552	0	3542170	3542170	0	ICE	127814.4	0	3	1
2017	2a	1	178962.7	754519.2	754519.2	0	5123708	5123708	0	ICE	178962.7	0	3	1
2017	2a	1	178262.6	761780.3	761780.3	0	5269588	5269588	0	ICE	178262.6	0	3	1
2017	2a	1	179755.1	778456.5	778456.5	0	5507259	5507259	0	ICE	179755.1	0	3	1
2017	2a	1	206373.7	905555.6	905555.6	0	6544200	6544200	0	ICE	206373.7	0	3	1
2017	2a	1	248454.8	1104439	1104439	0	8151103	8151103	0	ICE	248454.8	0	3	1
2017	2a	1	267133.6	1202774	1202774	0	9083415	9083415	0	ICE	267133.6	0	3	1
2017	2a	1	239864.6	1093737	1093737	0	8454000	8454000	0	ICE	239864.6	0	3	1
2017	2a	1	237445.8	1096311	1096311	0	8668531	8668531	0	ICE	237445.8	0	3	1
2017	2a	1	180772	844999	844999	0	6836278	6836278	0	ICE	180772	0	3	1
2017	2a	1	107300.9	507713.7	507713.7	0	4210380	4210380	0	ICE	107300.9	0	3	1
2017	2a	1	181706.4	870186.4	870186.4	0	7389227	7389227	0	ICE	181706.4	0	3	1
2017	2a	1	231267.4	1120782	1120782	0	9763684	9763684	0	ICE	231267.4	0	3	1
2017	2a	1	216231.1	1060300	1060300	0	9508345	9508345	0	ICE	216231.1	0	3	1
2017	2a	1	285107.8	1414374	1414374	0	13013232	13013232	0	ICE	285107.8	0	3	1
2017	2a	1	258664.2	1298011	1298011	0	12272987	12272987	0	ICE	258664.2	0	3	1
2017	2a	1	2802.35	14062.56	14062.56	0	131510.8	131510.8	0	ICE	2802.35	0	3	2
2017	2a	1	304601.7	1545981	1545981	0	15015137	15015137	0	ICE	304601.7	0	3	1
2017	2a	1	290155	1489281	1489281	0	14846847	14846847	0	ICE	290155	0	3	1
2017	2a	1	1936.329	9938.614	9938.614	0	99033.09	99033.09	0	ICE	1936.329	0	3	2
2017	2a	1	293089.7	1521135	1521135	0	15521817	15521817	0	ICE	293089.7	0	3	1
2017	2a	1	2995.704	15547.7	15547.7	0	159095.6	159095.6	0	ICE	2995.704	0	3	2
2017	2a	1	3271.722	8733.011	8733.011	0	40642.05	40642.05	0	ICE	3271.722	0	4	1
2017	2a	1	2828.415	7711.758	7711.758	0	35630.93	35630.93	0	ICE	2828.415	0	4	1
2017	2a	1	3149.415	8767.404	8767.404	0	40342.14	40342.14	0	ICE	3149.415	0	4	1
2017	2a	1	2502.095	7108.727	7108.727	0	32844.09	32844.09	0	ICE	2502.095	0	4	1
2017	2a	1	5330.63	15450.3	15450.3	0	70455.82	70455.82	0	ICE	5330.63	0	4	1
2017	2a	1	8648.144	25561.23	25561.23	0	119339.1	119339.1	0	ICE	8648.144	0	4	1
2017	2a	1	1969.13	6158.571	6158.571	0	31133.35	31133.35	0	ICE	1969.13	0	4	1
2017	2a	1	9987.724	36386.98	36386.98	0	197452.7	197452.7	0	ICE	9987.724	0	4	1
2017	2a	1	9607.21	35551.1	35551.1	0	197219.1	197219.1	0	ICE	9607.21	0	4	1
2017	2a	1	13493.01	50703.37	50703.37	0	284895.3	284895.3	0	ICE	13493.01	0	4	1
2017	2a	1	16915.12	64531.85	64531.85	0	371465.5	371465.5	0	ICE	16915.12	0	4	1
2017	2a	1	29806.34	115420	115420	0	674724.3	674724.3	0	ICE	29806.34	0	4	1
2017	2a	1	36846.46	144792.6	144792.6	0	862480.3	862480.3	0	ICE	36846.46	0	4	1
2017	2a	1	36796.8	146705.5	146705.5	0	889191.5	889191.5	0	ICE	36796.8	0	4	1

2017	2a	1	52714.68	213188.7	213188.7	0	1320714	1320714	0	ICE	52714.68	0	4	1
2017	2a	1	63606.53	260881.6	260881.6	0	1647330	1647330	0	ICE	63606.53	0	4	1
2017	2a	1	110887.4	461156.5	461156.5	0	2979786	2979786	0	ICE	110887.4	0	4	1
2017	2a	1	134545.7	567254	567254	0	3747047	3747047	0	ICE	134545.7	0	4	1
2017	2a	1	180870.6	772925	772925	0	5218062	5218062	0	ICE	180870.6	0	4	1
2017	2a	1	164.7984	704.2427	704.2427	0	4716.989	4716.989	0	ICE	164.7984	0	4	2
2017	2a	1	221346.5	958574	958574	0	6627218	6627218	0	ICE	221346.5	0	4	1
2017	2a	1	240845.2	1056814	1056814	0	7496425	7496425	0	ICE	240845.2	0	4	1
2017	2a	1	258948.1	1151084	1151084	0	8365460	8365460	0	ICE	258948.1	0	4	1
2017	2a	1	350.8904	1559.788	1559.788	0	11231.88	11231.88	0	ICE	350.8904	0	4	2
2017	2a	1	236162.5	1063326	1063326	0	7908978	7908978	0	ICE	236162.5	0	4	1
2017	2a	1	228346.5	1041217	1041217	0	7928971	7928971	0	ICE	228346.5	0	4	1
2017	2a	1	221926.2	1024656	1024656	0	8006956	8006956	0	ICE	221926.2	0	4	1
2017	2a	1	162669.5	760380.7	760380.7	0	6090678	6090678	0	ICE	162669.5	0	4	1
2017	2a	1	65299.96	308978.5	308978.5	0	2540405	2540405	0	ICE	65299.96	0	4	1
2017	2a	1	90383.96	432846.1	432846.1	0	3653641	3653641	0	ICE	90383.96	0	4	1
2017	2a	1	125814.7	609730.9	609730.9	0	5280181	5280181	0	ICE	125814.7	0	4	1
2017	2a	1	3564.418	17274.1	17274.1	0	148884.5	148884.5	0	ICE	3564.418	0	4	2
2017	2a	1	122822.3	602265.1	602265.1	0	5367451	5367451	0	ICE	122822.3	0	4	1
2017	2a	1	131186.2	650793.8	650793.8	0	5960401	5960401	0	ICE	131186.2	0	4	1
2017	2a	1	2884.115	14307.63	14307.63	0	129552	129552	0	ICE	2884.115	0	4	2
2017	2a	1	197260.9	989881	989881	0	9307614	9307614	0	ICE	197260.9	0	4	1
2017	2a	1	6057.969	30399.67	30399.67	0	285851.8	285851.8	0	ICE	6057.969	0	4	2
2017	2a	1	211274.6	1072308	1072308	0	10345400	10345400	0	ICE	211274.6	0	4	1
2017	2a	1	224415.9	1151862	1151862	0	11359632	11359632	0	ICE	224415.9	0	4	1
2017	2a	1	175971.8	913293.6	913293.6	0	9158562	9158562	0	ICE	175971.8	0	4	1
2017	2a	1	6136.165	31846.7	31846.7	0	319554.2	319554.2	0	ICE	6136.165	0	4	2
2017	2a	1	1472.23	7640.875	4584.525	3056.35	73285.55	43971.33	29314.22	PHEV	883.3381	588.8921	4	8
2017	2a	1	12492.22	34060.42	34060.42	0	73474.98	73474.98	0	ICE	12492.22	0	1	1
2017	2a	1	12066.58	34282.47	34282.47	0	85404.15	85404.15	0	ICE	12066.58	0	1	1
2017	2a	1	12920.07	37447.52	37447.52	0	95518.54	95518.54	0	ICE	12920.07	0	1	1
2017	2a	1	225.4996	653.588	653.588	0	1657.01	1657.01	0	ICE	225.4996	0	1	2
2017	2a	1	446.3906	1319.392	1319.392	0	3500.973	3500.973	0	ICE	446.3906	0	1	2
2017	2a	1	989.3531	2980.901	2980.901	0	8367.771	8367.771	0	ICE	989.3531	0	1	2
2017	2a	1	6219.381	19451.49	19451.49	0	59924.9	59924.9	0	ICE	6219.381	0	1	1
2017	2a	1	1833.337	5733.873	5733.873	0	17474.33	17474.33	0	ICE	1833.337	0	1	2
2017	2a	1	2216.697	7059.848	7059.848	0	22687.42	22687.42	0	ICE	2216.697	0	1	2
2017	2a	1	2313.304	7500.054	7500.054	0	24750.08	24750.08	0	ICE	2313.304	0	1	2
2017	2a	1	12157	40111.17	40111.17	0	140810.6	140810.6	0	ICE	12157	0	1	1
2017	2a	1	1972.218	6620.184	6620.184	0	23928.92	23928.92	0	ICE	1972.218	0	1	2
2017	2a	1	23127.77	80283.43	80283.43	0	318048.9	318048.9	0	ICE	23127.77	0	1	1
2017	2a	1	217.2967	804.0978	804.0978	0	3769.266	3769.266	0	ICE	217.2967	0	1	2
2017	2a	1	131.6785	494.8149	494.8149	0	2338.535	2338.535	0	ICE	131.6785	0	1	2
2017	2a	1	79.22367	302.2415	302.2415	0	1510.46	1510.46	0	ICE	79.22367	0	1	2
2017	2a	1	330.99	1338.59	1338.59	0	7820.258	7820.258	0	ICE	330.99	0	1	2
2017	2a	1	598.4899	2523.275	2523.275	0	16492.67	16492.67	0	ICE	598.4899	0	1	2
2017	2a	1	102.0746	436.2016	0	436.2016	2176.572	0	2176.572	BEV	0	102.0746	1	3

2017	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2017	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2017	2a	1	1556.34	6739.964	6739.964	0	46371.79	46371.79	0	ICE	1556.34	0	1	2
2017	2a	1	2098.631	9208.667	9208.667	0	65590.67	65590.67	0	ICE	2098.631	0	1	2
2017	2a	1	757.2726	3366.251	3366.251	0	24714.67	24714.67	0	ICE	757.2726	0	1	2
2017	2a	1	1432.853	6451.449	6451.449	0	48234.78	48234.78	0	ICE	1432.853	0	1	2
2017	2a	1	3437.386	16264.61	16264.61	0	137265.7	137265.7	0	ICE	3437.386	0	1	2
2017	2a	1	8306.406	40730.88	40730.88	0	373579	373579	0	ICE	8306.406	0	1	2
2017	2a	1	11296.49	56040.08	56040.08	0	529346.1	529346.1	0	ICE	11296.49	0	1	2
2017	2a	1	10757.99	53368.64	0	53368.64	370984.2	0	370984.2	BEV	0	10757.99	1	3
2017	2a	1	0.632042	3.135459	0	3.135459	21.79567	0	21.79567	FCEV	0	0.632042	1	7
2017	2a	1	11244.66	55782.95	33469.77	22313.18	520689.1	312413.4	208275.6	PHEV	6746.795	4497.863	1	8
2017	2a	1	12939.04	64929.8	0	64929.8	464044.2	0	464044.2	BEV	0	12939.04	1	3
2017	2a	1	1.812953	9.097632	0	9.097632	65.01951	0	65.01951	FCEV	0	1.812953	1	7
2017	2a	1	16336.52	81978.76	49187.26	32791.5	788118.2	472870.9	315247.3	PHEV	9801.909	6534.606	1	8
2017	2a	1	11020.95	55935.97	55935.97	0	560399.8	560399.8	0	ICE	11020.95	0	1	2
2017	2a	1	28830.92	146329	0	146329	1073802	0	1073802	BEV	0	28830.92	1	3
2017	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2017	2a	1	13709.88	69583.38	41750.03	27833.35	688667.5	413200.5	275467	PHEV	8225.926	5483.951	1	8
2017	2a	1	2586.221	7051.409	7051.409	0	32238.96	32238.96	0	ICE	2586.221	0	2	1
2017	2a	1	2727.863	7593.88	7593.88	0	32829.45	32829.45	0	ICE	2727.863	0	2	1
2017	2a	1	2200.167	6376.963	6376.963	0	32213.92	32213.92	0	ICE	2200.167	0	2	1
2017	2a	1	2845.772	8411.219	8411.219	0	43475.8	43475.8	0	ICE	2845.772	0	2	1
2017	2a	1	3259.925	9822.09	9822.09	0	50784.45	50784.45	0	ICE	3259.925	0	2	1
2017	2a	1	2899.399	8901.936	8901.936	0	46204.01	46204.01	0	ICE	2899.399	0	2	1
2017	2a	1	2286.624	7151.552	7151.552	0	37981.84	37981.84	0	ICE	2286.624	0	2	1
2017	2a	1	473.9341	1509.409	1509.409	0	7768.171	7768.171	0	ICE	473.9341	0	2	2
2017	2a	1	229.9325	745.4734	745.4734	0	3798.142	3798.142	0	ICE	229.9325	0	2	2
2017	2a	1	176.7721	593.3745	593.3745	0	3110.591	3110.591	0	ICE	176.7721	0	2	2
2017	2a	1	32529.22	144599.9	144599.9	0	1065942	1065942	0	ICE	32529.22	0	2	1
2017	2a	1	40157.68	196915.2	196915.2	0	1764044	1764044	0	ICE	40157.68	0	2	1
2017	2a	1	55392.36	274792.6	274792.6	0	2527573	2527573	0	ICE	55392.36	0	2	1
2017	2a	1	64621.79	324280.6	324280.6	0	3063286	3063286	0	ICE	64621.79	0	2	1
2017	2a	1	4277.25	11662.05	11662.05	0	56236.76	56236.76	0	ICE	4277.25	0	3	1
2017	2a	1	5345.88	14881.97	14881.97	0	71457.37	71457.37	0	ICE	5345.88	0	3	1
2017	2a	1	3340.775	9874.294	9874.294	0	48851.49	48851.49	0	ICE	3340.775	0	3	1
2017	2a	1	3264.813	9836.818	9836.818	0	50053.78	50053.78	0	ICE	3264.813	0	3	1
2017	2a	1	2008.224	6165.789	6165.789	0	31605.13	31605.13	0	ICE	2008.224	0	3	1
2017	2a	1	34.52334	107.9738	107.9738	0	570.1649	570.1649	0	ICE	34.52334	0	3	2
2017	2a	1	1533.261	4883.205	4883.205	0	25055.84	25055.84	0	ICE	1533.261	0	3	1
2017	2a	1	2049.818	6645.797	6645.797	0	34503.59	34503.59	0	ICE	2049.818	0	3	1
2017	2a	1	4435.927	14890.17	14890.17	0	78626.65	78626.65	0	ICE	4435.927	0	3	1
2017	2a	1	54.24877	253.5799	253.5799	0	2063.979	2063.979	0	ICE	54.24877	0	3	2
2017	2a	1	1477.717	7246.058	7246.058	0	64244.56	64244.56	0	ICE	1477.717	0	3	2
2017	2a	1	1041.195	5165.203	5165.203	0	47073.47	47073.47	0	ICE	1041.195	0	3	2
2017	2a	1	3948.312	20039.34	20039.34	0	193064	193064	0	ICE	3948.312	0	3	2
2017	2a	1	4185.812	21484.56	0	21484.56	153196.6	0	153196.6	BEV	0	4185.812	3	3

2017	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2017	2a	1	380.9397	1955.253	1173.152	782.1011	19239.28	11543.57	7695.713	PHEV	228.5638	152.3759	3	8
2017	2a	1	8784.924	26468.8	26468.8	0	125423.6	125423.6	0	ICE	8784.924	0	4	1
2017	2a	1	3512.884	10785.5	10785.5	0	51566.4	51566.4	0	ICE	3512.884	0	4	1
2017	2a	1	2001.535	6374.589	6374.589	0	32689.22	32689.22	0	ICE	2001.535	0	4	1
2017	2a	1	400.4777	1275.461	1275.461	0	5750.746	5750.746	0	ICE	400.4777	0	4	2
2017	2a	1	1345.539	4362.427	4362.427	0	21723.11	21723.11	0	ICE	1345.539	0	4	1
2017	2a	1	2290.917	7558.722	7558.722	0	38383.85	38383.85	0	ICE	2290.917	0	4	1
2017	2a	1	309.4094	1020.875	1020.875	0	4791.759	4791.759	0	ICE	309.4094	0	4	2
2017	2a	1	3214.434	10789.96	10789.96	0	55358.3	55358.3	0	ICE	3214.434	0	4	1
2017	2a	1	165.7846	556.4926	556.4926	0	2646.236	2646.236	0	ICE	165.7846	0	4	2
2017	2a	1	4301.445	14685.18	14685.18	0	74857.4	74857.4	0	ICE	4301.445	0	4	1
2017	2a	1	4682.388	16253.97	16253.97	0	83672.03	83672.03	0	ICE	4682.388	0	4	1
2017	2a	1	6235.364	22002.04	22002.04	0	116807.2	116807.2	0	ICE	6235.364	0	4	1
2017	2a	1	18.93511	66.81423	66.81423	0	351.1111	351.1111	0	ICE	18.93511	0	4	2
2017	2a	1	8483.027	30419.12	30419.12	0	163238.8	163238.8	0	ICE	8483.027	0	4	1
2017	2a	1	112.0331	433.8291	433.8291	0	2474.247	2474.247	0	ICE	112.0331	0	4	2
2017	2a	1	93.6329	389.3987	389.3987	0	2454.56	2454.56	0	ICE	93.6329	0	4	2
2017	2a	1	585.9779	2638.377	2638.377	0	19643.73	19643.73	0	ICE	585.9779	0	4	2
2017	2a	1	799.9936	3647.819	3647.819	0	27871.42	27871.42	0	ICE	799.9936	0	4	2
2017	2a	1	1054.921	4870.674	4870.674	0	38288.07	38288.07	0	ICE	1054.921	0	4	2
2017	2a	1	741.691	3466.953	3466.953	0	28010.66	28010.66	0	ICE	741.691	0	4	2
2017	2a	1	1019.342	4823.199	4823.199	0	39307.42	39307.42	0	ICE	1019.342	0	4	2
2017	2a	1	5661.774	27762.79	27762.79	0	249242.8	249242.8	0	ICE	5661.774	0	4	2
2017	2a	1	11041.5	56040.24	56040.24	0	546117.7	546117.7	0	ICE	11041.5	0	4	2
2017	2a	1	6909.794	35465.97	35465.97	0	355012.7	355012.7	0	ICE	6909.794	0	4	2
2017	2a	1	1968.786	6495.871	6495.871	0	22363.45	22363.45	0	ICE	1968.786	0	1	2
2017	2a	1	135.9987	495.4665	495.4665	0	2199.247	2199.247	0	ICE	135.9987	0	1	2
2017	2a	1	716.9881	2981.796	2981.796	0	18689.81	18689.81	0	ICE	716.9881	0	1	2
2017	2a	1	56.9835	256.5693	0	256.5693	1438.191	0	1438.191	BEV	0	56.9835	1	3
2017	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2017	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2017	2a	1	2340.174	11475.16	0	11475.16	77779.72	0	77779.72	BEV	0	2340.174	1	3
2017	2a	1	8.843825	43.36614	0	43.36614	293.9397	0	293.9397	FCEV	0	8.843825	1	7
2017	2a	1	4919.132	24121.21	14472.73	9648.484	219469.3	131681.6	87787.7	PHEV	2951.479	1967.653	1	8
2017	2a	1	18373.13	94303.94	0	94303.94	710385	0	710385	BEV	0	18373.13	1	3
2017	2a	1	559.3837	2871.154	0	2871.154	21628.21	0	21628.21	FCEV	0	559.3837	1	7
2017	2a	1	13212.74	67817.14	40690.28	27126.86	690400.9	414240.5	276160.4	PHEV	7927.641	5285.094	1	8
2017	2a	1	19.41862	75.19529	75.19529	0	427.8	427.8	0	ICE	19.41862	0	2	2
2017	2a	1	12.15086	47.74825	47.74825	0	279.2242	279.2242	0	ICE	12.15086	0	2	2
2017	2a	1	24.49773	100.4772	100.4772	0	637.9979	637.9979	0	ICE	24.49773	0	2	2
2017	2a	1	34.73808	118.5961	118.5961	0	661.3878	661.3878	0	ICE	34.73808	0	3	2
2017	2a	1	191.3955	861.7623	861.7623	0	6487.818	6487.818	0	ICE	191.3955	0	3	2
2017	2a	1	198.2189	903.8406	903.8406	0	7047.092	7047.092	0	ICE	198.2189	0	3	2
2017	2a	1	383.464	1243.244	1243.244	0	5617.586	5617.586	0	ICE	383.464	0	4	2
2017	2a	1	72.9409	299.1664	299.1664	0	1826.471	1826.471	0	ICE	72.9409	0	4	2
2017	2a	1	209.5758	919.6061	919.6061	0	6502.096	6502.096	0	ICE	209.5758	0	4	2

2017	2a	1	1740.075	8333.167	8333.167	0	69516.39	69516.39	0	ICE	1740.075	0	4	2
2017	2a	1	133.7712	372.3951	372.3951	0	872.699	872.699	0	ICE	133.7712	0	1	2
2017	2a	1	202.7044	575.9054	575.9054	0	1349.85	1349.85	0	ICE	202.7044	0	1	2
2017	2a	1	1023.385	3142.07	3142.07	0	9148.615	9148.615	0	ICE	1023.385	0	1	2
2017	2a	1	443.0396	1512.542	1512.542	0	5630.377	5630.377	0	ICE	443.0396	0	1	2
2017	2a	1	1109.412	3851.103	3851.103	0	15124.21	15124.21	0	ICE	1109.412	0	1	2
2017	2a	1	426.5818	1676.304	1676.304	0	9082.965	9082.965	0	ICE	426.5818	0	1	2
2017	2a	1	357.9627	1427.165	1427.165	0	7964.13	7964.13	0	ICE	357.9627	0	1	2
2017	2a	1	657.6479	2697.336	2697.336	0	16393.86	16393.86	0	ICE	657.6479	0	1	2
2017	2a	1	202.5612	877.2218	0	877.2218	4495.291	0	4495.291	BEV	0	202.5612	1	3
2017	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2017	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2017	2a	1	3021.329	14642.14	0	14642.14	96490.78	0	96490.78	BEV	0	3021.329	1	3
2017	2a	1	29.85024	144.662	0	144.662	953.3135	0	953.3135	FCEV	0	29.85024	1	7
2017	2a	1	839.8406	4070.086	2442.052	1628.034	35893.89	21536.33	14357.55	PHEV	503.9044	335.9362	1	8
2017	2a	1	1557.901	7996.252	7996.252	0	81610.01	81610.01	0	ICE	1557.901	0	1	2
2017	2a	1	150.4802	470.6357	470.6357	0	2416.501	2416.501	0	ICE	150.4802	0	2	2
2017	2a	1	190.3006	627.8835	627.8835	0	3337.172	3337.172	0	ICE	190.3006	0	2	2
2017	2a	1	71.61305	244.4877	244.4877	0	1291.099	1291.099	0	ICE	71.61305	0	2	2
2017	2a	1	686.7347	3446.124	0	3446.124	24630.08	0	24630.08	BEV	0	686.7347	2	3
2017	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2017	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2017	2a	1	91.1219	279.7688	279.7688	0	1440.515	1440.515	0	ICE	91.1219	0	3	2
2017	2a	1	65.35599	211.8933	211.8933	0	1071.678	1071.678	0	ICE	65.35599	0	3	2
2017	2a	1	53.42992	176.2883	176.2883	0	928.2982	928.2982	0	ICE	53.42992	0	3	2
2017	2a	1	3.209647	11.87717	11.87717	0	71.33069	71.33069	0	ICE	3.209647	0	3	2
2017	2a	1	85.4021	262.2075	262.2075	0	1245.187	1245.187	0	ICE	85.4021	0	4	2
2017	2a	1	116.8544	398.9419	398.9419	0	2020.369	2020.369	0	ICE	116.8544	0	4	2
2017	2a	1	71.76299	273.7787	273.7787	0	1483.725	1483.725	0	ICE	71.76299	0	4	2
2017	2a	1	144.2945	567.0227	567.0227	0	3250.547	3250.547	0	ICE	144.2945	0	4	2
2017	2a	1	144.3751	575.6105	575.6105	0	3362.647	3362.647	0	ICE	144.3751	0	4	2
2017	2a	1	67.45277	241.8775	241.8775	0	1079.751	1079.751	0	ICE	67.45277	0	1	2
2017	2a	1	300.2595	1403.53	1403.53	0	11409.69	11409.69	0	ICE	300.2595	0	1	2
2017	2a	1	29.85512	131.0025	131.0025	0	927.649	927.649	0	ICE	29.85512	0	2	2
2017	2a	1	56.27746	156.6663	156.6663	0	784.2248	784.2248	0	ICE	56.27746	0	3	2
2017	2a	1	1.371829	5.705135	5.705135	0	39.33856	39.33856	0	ICE	1.371829	0	3	2
2017	2a	1	94.88836	454.4175	454.4175	0	3851.473	3851.473	0	ICE	94.88836	0	3	2
2017	2a	1	224.1042	1124.584	0	1124.584	7619.344	0	7619.344	BEV	0	224.1042	3	3
2017	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2017	2a	1	101.4674	509.1764	305.5058	203.6705	4740.808	2844.485	1896.323	PHEV	60.88041	40.58694	3	8
2017	2a	1	46.36416	145.0067	145.0067	0	811.3462	811.3462	0	ICE	46.36416	0	4	2
2017	2a	1	33.31231	123.2709	123.2709	0	666.1832	666.1832	0	ICE	33.31231	0	4	2
2017	2a	1	180.5264	730.0848	730.0848	0	4335.014	4335.014	0	ICE	180.5264	0	4	2
2017	2a	1	80.94351	350.538	350.538	0	2426.792	2426.792	0	ICE	80.94351	0	4	2
2017	2a	1	219.0747	1061.693	1061.693	0	9185.234	9185.234	0	ICE	219.0747	0	3	2
2017	2a	1	23.5108	84.3069	84.3069	0	431.4474	431.4474	0	ICE	23.5108	0	4	2
2017	2a	1	33.75218	142.3015	142.3015	0	925.5337	925.5337	0	ICE	33.75218	0	4	2

2017	2a	1	53.59322	232.0935	0	232.0935	1135.688	0	1135.688	BEV	0	53.59322	3	3
2017	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2017	2a	1	0	0	0	0	0	0	0	PHEV	0	0	3	8
2017	2a	1	200.2117	867.047	0	867.047	4228.417	0	4228.417	BEV	0	200.2117	4	3
2017	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2017	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2017	2a	1	71.62091	252.7208	252.7208	0	1066.657	1066.657	0	ICE	71.62091	0	1	2
2017	2a	1	59.88918	231.9107	231.9107	0	1226.614	1226.614	0	ICE	59.88918	0	1	2
2017	2a	1	202.5502	935.1945	935.1945	0	7408.686	7408.686	0	ICE	202.5502	0	1	2
2017	2a	1	533.7475	2556.101	0	2556.101	16376.96	0	16376.96	BEV	0	533.7475	1	3
2017	2a	1	54.18757	259.5026	0	259.5026	1662.636	0	1662.636	FCEV	0	54.18757	1	7
2017	2a	1	56.89694	272.4778	163.4867	108.9911	2329.165	1397.499	931.6659	PHEV	34.13817	22.75878	1	8
2017	2a	1	49.61451	172.2268	172.2268	0	900.3061	900.3061	0	ICE	49.61451	0	2	2
2017	2a	1	23.97987	90.11035	90.11035	0	467.6252	467.6252	0	ICE	23.97987	0	2	2
2017	2a	1	316.4942	1551.945	0	1551.945	10537.46	0	10537.46	BEV	0	316.4942	2	3
2017	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2017	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2017	2a	1	109.2541	329.1804	329.1804	0	1730.884	1730.884	0	ICE	109.2541	0	3	2
2017	2a	1	221.1288	704.262	704.262	0	3550.542	3550.542	0	ICE	221.1288	0	3	2
2017	2a	1	12.78772	44.39003	44.39003	0	255.5946	255.5946	0	ICE	12.78772	0	3	2
2017	2a	1	92.71498	438.6976	438.6976	0	3556.629	3556.629	0	ICE	92.71498	0	3	2
2017	2a	1	59.62507	224.0561	224.0561	0	1262.501	1262.501	0	ICE	59.62507	0	4	2
2017	2a	1	70.6808	322.291	0	322.291	1863.984	0	1863.984	BEV	0	70.6808	1	3
2017	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2017	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2017	2a	1	368.3298	1721.717	0	1721.717	10491.66	0	10491.66	BEV	0	368.3298	1	3
2017	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2017	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2017	2a	1	294.7399	1394.615	0	1394.615	8749.831	0	8749.831	BEV	0	294.7399	1	3
2017	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2017	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2017	2a	1	3.684645	10.89067	10.89067	0	44.22768	44.22768	0	ICE	3.684645	0	2	2
2017	2a	1	24.96584	89.5245	89.5245	0	442.0666	442.0666	0	ICE	24.96584	0	2	2
2017	2a	1	25.16486	100.33	100.33	0	635.3409	635.3409	0	ICE	25.16486	0	2	2
2017	2a	1	35.36397	167.331	167.331	0	1366.383	1366.383	0	ICE	35.36397	0	2	2
2017	2a	1	379.0041	1880.179	0	1880.179	13105.19	0	13105.19	BEV	0	379.0041	2	3
2017	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2017	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2017	2a	1	105.9544	288.8879	288.8879	0	1418.213	1418.213	0	ICE	105.9544	0	3	2
2017	2a	1	31.93587	147.4511	147.4511	0	1168.888	1168.888	0	ICE	31.93587	0	3	2
2017	2a	1	11.59805	32.95134	32.95134	0	165.9676	165.9676	0	ICE	11.59805	0	4	2
2017	2a	1	11.11125	32.20486	32.20486	0	156.3199	156.3199	0	ICE	11.11125	0	4	2
2017	2a	1	32.94991	114.379	114.379	0	607.7069	607.7069	0	ICE	32.94991	0	4	2
2017	2a	1	26.52917	96.65028	96.65028	0	524.726	524.726	0	ICE	26.52917	0	4	2
2017	2a	1	39.4109	107.455	107.455	0	234.4913	234.4913	0	ICE	39.4109	0	1	2
2017	2a	1	54.84637	240.6626	0	240.6626	1279.648	0	1279.648	BEV	0	54.84637	1	3
2017	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7

2017	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2017	2a	1	118.5419	547.3197	0	547.3197	3253.295	0	3253.295	BEV	0	118.5419	1	3
2017	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2017	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2017	2a	1	54.97298	256.9651	0	256.9651	1570.791	0	1570.791	BEV	0	54.97298	2	3
2017	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2017	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2017	2a	1	5.582933	27.37619	27.37619	0	251.3027	251.3027	0	ICE	5.582933	0	2	2
2017	2a	1	2.608216	11.89297	0	11.89297	66.52203	0	66.52203	BEV	0	2.608216	4	3
2017	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2017	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2017	2a	1	13.6003	41.75659	41.75659	0	216.0514	216.0514	0	ICE	13.6003	0	2	2
2017	2a	1	56.4762	166.9261	166.9261	0	822.303	822.303	0	ICE	56.4762	0	3	2
2017	2a	1	20.28804	86.69808	86.69808	0	570.3651	570.3651	0	ICE	20.28804	0	2	2
2017	2a	1	10.40489	37.31069	37.31069	0	216.41	216.41	0	ICE	10.40489	0	3	2
2017	2a	1	3.263447	14.31981	14.31981	0	109.2355	109.2355	0	ICE	3.263447	0	3	2
2017	2a	1	10.59824	40.43269	0	40.43269	154.2245	0	154.2245	BEV	0	10.59824	1	3
2017	2a	1	29.29361	83.22636	83.22636	0	465.9526	465.9526	0	ICE	29.29361	0	3	2
2017	2a	1	13.109	46.25628	46.25628	0	275.2583	275.2583	0	ICE	13.109	0	3	2
2017	2a	1	3.712783	13.95171	13.95171	0	82.28372	82.28372	0	ICE	3.712783	0	3	2
2017	2a	1	47.2068	223.3675	0	223.3675	1335.004	0	1335.004	BEV	0	47.2068	3	3
2017	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2017	2a	1	0	0	0	0	0	0	0	PHEV	0	0	3	8
2017	2a	1	20.88341	101.2064	0	101.2064	636.1056	0	636.1056	BEV	0	20.88341	3	3
2017	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2017	2a	1	14.45774	70.06598	42.03959	28.02639	604.8208	362.8925	241.9283	PHEV	8.674646	5.783097	3	8
2017	2a	1	1.911222	9.700254	0	9.700254	66.34982	0	66.34982	BEV	0	1.911222	4	3
2017	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2017	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2017	2a	1	7.311099	27.47328	0	27.47328	103.0404	0	103.0404	BEV	0	7.311099	1	3
2017	2a	1	27.108	72.35777	72.35777	0	149.1012	149.1012	0	ICE	27.108	0	1	2
2017	2a	1	27.12874	95.72622	95.72622	0	472.1081	472.1081	0	ICE	27.12874	0	2	2
2017	2a	1	125.6842	529.8932	0	529.8932	2560.923	0	2560.923	BEV	0	125.6842	2	3
2017	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2017	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2017	2a	1	53.20132	227.3484	0	227.3484	1138.847	0	1138.847	BEV	0	53.20132	2	3
2017	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2017	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2017	2a	1	36.82001	159.4546	159.4546	0	1125.709	1125.709	0	ICE	36.82001	0	2	2
2017	2a	1	13.88405	63.30865	0	63.30865	367.1873	0	367.1873	BEV	0	13.88405	2	3
2017	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2017	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2017	2a	1	26.30924	121.4724	121.4724	0	940.7604	940.7604	0	ICE	26.30924	0	2	2
2017	2a	1	6.914276	31.9239	0	31.9239	190.2986	0	190.2986	BEV	0	6.914276	2	3
2017	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2017	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2017	2a	1	29.61335	138.4244	138.4244	0	1112.62	1112.62	0	ICE	29.61335	0	2	2

2017	2a	1	21.47019	101.5901	0	101.5901	634.8718	0	634.8718	BEV	0	21.47019	2	3
2017	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2017	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2017	2a	1	33.38051	112.049	112.049	0	642.6757	642.6757	0	ICE	33.38051	0	3	2
2017	2a	1	19.35755	90.48475	0	90.48475	535.1782	0	535.1782	BEV	0	19.35755	3	3
2017	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2017	2a	1	0	0	0	0	0	0	0	PHEV	0	0	3	8
2017	2a	1	16.41389	81.42669	0	81.42669	539.9222	0	539.9222	BEV	0	16.41389	3	3
2017	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2017	2a	1	12.5518	62.26747	37.36048	24.90699	559.8976	335.9386	223.9591	PHEV	7.53108	5.02072	3	8
2017	2a	1	15.05604	63.47733	0	63.47733	291.6905	0	291.6905	BEV	0	15.05604	4	3
2017	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2017	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2017	2a	1	31.94106	140.1555	0	140.1555	706.1905	0	706.1905	BEV	0	31.94106	4	3
2017	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2017	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2017	2a	1	3.580719	16.12226	0	16.12226	87.17571	0	87.17571	BEV	0	3.580719	4	3
2017	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2017	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2017	2a	1	18.15097	49.48918	49.48918	0	264.3873	264.3873	0	ICE	18.15097	0	4	2
2017	2a	1	32.774	125.0341	125.0341	0	677.5169	677.5169	0	ICE	32.774	0	2	2
2017	2a	1	1.879632	8.46308	8.46308	0	63.31378	63.31378	0	ICE	1.879632	0	2	2
2017	2a	1	163.1615	706.5951	0	706.5951	3655.461	0	3655.461	BEV	0	163.1615	2	3
2017	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2017	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2017	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2017	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2017	2a	1	8.909709	39.60571	0	39.60571	218.2356	0	218.2356	BEV	0	8.909709	2	3
2017	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2017	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2017	2a	1	4.120638	12.65147	0	12.65147	32.19996	0	32.19996	BEV	0	4.120638	1	3
2017	2a	1	86.16839	358.3554	0	358.3554	1679.362	0	1679.362	BEV	0	86.16839	2	3
2017	2a	1	19.27365	56.96694	56.96694	0	257.8639	257.8639	0	ICE	19.27365	0	4	2
2017	2a	1	2.362261	9.553457	9.553457	0	61.78688	61.78688	0	ICE	2.362261	0	3	2
2017	2a	1	24.44249	101.651	101.651	0	641.6216	641.6216	0	ICE	24.44249	0	2	2
2017	2a	1	1.703457	7.377076	7.377076	0	52.36367	52.36367	0	ICE	1.703457	0	3	2
2017	2a	1	13.64663	37.98976	37.98976	0	250.1266	250.1266	0	ICE	13.64663	0	2	2
2017	2a	1	11.81843	43.73364	43.73364	0	254.2421	254.2421	0	ICE	11.81843	0	2	2
2017	2a	1	11.17875	33.68136	33.68136	0	148.029	148.029	0	ICE	11.17875	0	4	2
2017	2a	1	13.50659	53.07576	0	53.07576	218.8011	0	218.8011	BEV	0	13.50659	1	3
2017	2a	1	18.41454	83.96681	83.96681	0	642.134	642.134	0	ICE	18.41454	0	2	2
2017	2a	1	5.199916	21.92321	0	21.92321	102.8866	0	102.8866	BEV	0	5.199916	3	3
2017	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2017	2a	1	0	0	0	0	0	0	0	PHEV	0	0	3	8
2017	2a	1	2.356033	8.178498	0	8.178498	26.16555	0	26.16555	BEV	0	2.356033	2	3
2017	2a	1	4.310981	20.1512	0	20.1512	118.7572	0	118.7572	BEV	0	4.310981	4	3
2017	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2017	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2017	2a	1	28.0495	115.0448	0	115.0448	525.0119	0	525.0119	BEV	0	28.0495	1	3

2017	2a	1	25.61582	107.9981	0	107.9981	521.647	0	521.647	BEV	0	25.61582	1	3
2017	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2017	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2017	2a	1	55.27326	245.7024	0	245.7024	1339.283	0	1339.283	BEV	0	55.27326	1	3
2017	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2017	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2017	2a	1	29.80894	120.5533	120.5533	0	731.6891	731.6891	0	ICE	29.80894	0	2	2
2017	2a	1	27.7271	113.7224	0	113.7224	517.5113	0	517.5113	BEV	0	27.7271	2	3
2017	2a	1	3.030515	13.64495	0	13.64495	76.15808	0	76.15808	BEV	0	3.030515	2	3
2017	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2017	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2017	2a	1	5.389683	20.56186	20.56186	0	115.1295	115.1295	0	ICE	5.389683	0	3	2
2017	2a	1	25.512	103.1756	0	103.1756	453.5382	0	453.5382	BEV	0	25.512	1	3
2017	2a	1	34.55283	143.6976	0	143.6976	674.0291	0	674.0291	BEV	0	34.55283	1	3
2017	2a	1	6.624716	18.06249	18.06249	0	78.37097	78.37097	0	ICE	6.624716	0	2	2
2017	2a	1	4.034769	12.61898	0	12.61898	32.61447	0	32.61447	BEV	0	4.034769	2	3
2017	2a	1	19.60965	71.44127	71.44127	0	413.7999	413.7999	0	ICE	19.60965	0	2	2
2017	2a	1	6.547891	24.60534	0	24.60534	91.98218	0	91.98218	BEV	0	6.547891	2	3
2017	2a	1	3.158472	12.0497	0	12.0497	45.66295	0	45.66295	BEV	0	3.158472	2	3
2017	2a	1	3.186568	12.522	0	12.522	51.68318	0	51.68318	BEV	0	3.186568	2	3
2017	2a	1	20.77541	87.5906	87.5906	0	564.4901	564.4901	0	ICE	20.77541	0	2	2
2017	2a	1	7.574469	36.27391	36.27391	0	305.1669	305.1669	0	ICE	7.574469	0	2	2
2017	2a	1	9.827004	48.75019	48.75019	0	449.0941	449.0941	0	ICE	9.827004	0	2	2
2017	2a	1	6.7167	24.47008	24.47008	0	129.9001	129.9001	0	ICE	6.7167	0	3	2
2017	2a	1	2.990751	11.40984	0	11.40984	42.15611	0	42.15611	BEV	0	2.990751	3	3
2017	2a	1	3.759316	14.55731	14.55731	0	90.44373	90.44373	0	ICE	3.759316	0	3	2
2017	2a	1	26.64365	110.8051	0	110.8051	497.8726	0	497.8726	BEV	0	26.64365	3	3
2017	2a	1	3.277423	14.00561	14.00561	0	92.55541	92.55541	0	ICE	3.277423	0	3	2
2017	2a	1	2.329155	9.953317	0	9.953317	47.41848	0	47.41848	BEV	0	2.329155	3	3
2017	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2017	2a	1	0	0	0	0	0	0	0	PHEV	0	0	3	8
2017	2a	1	31.03235	148.613	0	148.613	916.0386	0	916.0386	BEV	0	31.03235	3	3
2017	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2017	2a	1	0	0	0	0	0	0	0	PHEV	0	0	3	8
2017	2a	1	66.2242	324.7337	0	324.7337	2105.759	0	2105.759	BEV	0	66.2242	3	3
2017	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2017	2a	1	16.98056	83.26504	49.95902	33.30602	739.4714	443.6828	295.7886	PHEV	10.18834	6.792225	3	8
2017	2a	1	1.560634	5.059795	0	5.059795	13.25618	0	13.25618	BEV	0	1.560634	4	3
2017	2a	1	1.630697	5.75406	0	5.75406	17.65852	0	17.65852	BEV	0	1.630697	4	3
2017	2a	1	5.161168	20.28143	0	20.28143	80.29353	0	80.29353	BEV	0	5.161168	4	3
2017	2a	1	3.624519	17.56536	17.56536	0	155.6112	155.6112	0	ICE	3.624519	0	2	2
2017	2a	1	3.219847	13.75957	0	13.75957	65.32519	0	65.32519	BEV	0	3.219847	4	3
2017	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2017	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2017	2a	1	9.123612	27.48926	27.48926	0	136.0886	136.0886	0	ICE	9.123612	0	2	2
2017	2a	1	2.349305	8.020551	0	8.020551	24.50471	0	24.50471	BEV	0	2.349305	2	3
2017	2a	1	0.844368	2.544062	0	2.544062	6.348899	0	6.348899	BEV	0	0.844368	1	3

2017	2a	1	1.586097	5.05148	0	5.05148	13.69953	0	13.69953	BEV	0	1.586097	1	3
2017	2a	1	3.113909	10.27412	0	10.27412	28.91447	0	28.91447	BEV	0	3.113909	1	3
2017	2a	1	4.324678	14.76449	0	14.76449	45.39329	0	45.39329	BEV	0	4.324678	1	3
2017	2a	1	3.756124	13.03863	0	13.03863	41.42143	0	41.42143	BEV	0	3.756124	1	3
2017	2a	1	3.009635	10.61977	0	10.61977	34.96703	0	34.96703	BEV	0	3.009635	1	3
2017	2a	1	2.83391	10.16206	0	10.16206	34.22355	0	34.22355	BEV	0	2.83391	1	3
2017	2a	1	2.908573	10.59643	0	10.59643	37.20155	0	37.20155	BEV	0	2.908573	1	3
2017	2a	1	3.1757	11.75155	0	11.75155	41.64744	0	41.64744	BEV	0	3.1757	1	3
2017	2a	1	5.448785	21.09949	0	21.09949	83.77382	0	83.77382	BEV	0	5.448785	1	3
2017	2a	1	18.37546	73.26129	0	73.26129	313.7479	0	313.7479	BEV	0	18.37546	1	3
2017	2a	1	1.589479	5.062253	0	5.062253	13.69644	0	13.69644	BEV	0	1.589479	2	3
2017	2a	1	1.599297	5.276769	0	5.276769	15.17846	0	15.17846	BEV	0	1.599297	2	3
2017	2a	1	1.582529	5.312107	0	5.312107	15.77233	0	15.77233	BEV	0	1.582529	2	3
2017	2a	1	3.103935	12.01946	0	12.01946	48.30272	0	48.30272	BEV	0	3.103935	2	3
2017	2a	1	0	0	0	0	0	0	0	BEV	0	0	2	3
2017	2a	1	41.3666	209.9529	0	209.9529	1556.138	0	1556.138	FCEV	0	41.3666	2	7
2017	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2017	2a	1	0	0	0	0	0	0	0	BEV	0	0	2	3
2017	2a	1	43.58623	223.7155	0	223.7155	1697.667	0	1697.667	FCEV	0	43.58623	2	7
2017	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2017	2a	1	0.801605	3.563317	3.563317	0	25.94983	25.94983	0	ICE	0.801605	0	3	2
2017	2a	1	0	0	0	0	0	0	0	BEV	0	0	3	3
2017	2a	1	2.997752	15.21485	0	15.21485	106.2906	0	106.2906	FCEV	0	2.997752	3	7
2017	2a	1	42.96778	218.0795	130.8477	87.23181	2124.994	1274.996	849.9976	PHEV	25.78067	17.18711	3	8
2017	2a	1	1.842938	9.248101	9.248101	0	88.25956	88.25956	0	ICE	1.842938	0	2	2
2017	2a	1	1.477329	6.059249	0	6.059249	26.2509	0	26.2509	BEV	0	1.477329	3	3
2017	2a	1	0.819532	2.750938	0	2.750938	7.67738	0	7.67738	BEV	0	0.819532	4	3
2017	2a	1	2.243398	8.044554	0	8.044554	25.97061	0	25.97061	BEV	0	2.243398	4	3
2017	2a	1	9.831796	37.50869	0	37.50869	136.765	0	136.765	BEV	0	9.831796	4	3
2017	2a	1	3.745018	15.5747	0	15.5747	69.67635	0	69.67635	BEV	0	3.745018	4	3
2017	2a	1	0.688589	2.153605	0	2.153605	5.566275	0	5.566275	BEV	0	0.688589	1	3
2017	2a	1	0.544508	1.765372	0	1.765372	4.602425	0	4.602425	BEV	0	0.544508	3	3
2017	2a	1	1.468954	6.782306	0	6.782306	38.33927	0	38.33927	BEV	0	1.468954	3	3
2017	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2017	2a	1	0	0	0	0	0	0	0	PHEV	0	0	3	8
2017	2a	1	0.635679	2.060959	0	2.060959	5.53249	0	5.53249	BEV	0	0.635679	2	3
2017	2a	1	3.801784	18.20663	0	18.20663	116.1356	0	116.1356	BEV	0	3.801784	2	3
2017	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2017	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2017	2a	1	3.735569	14.89338	0	14.89338	63.65492	0	63.65492	BEV	0	3.735569	2	3
2017	2a	1	10.44693	42.24949	0	42.24949	187.3451	0	187.3451	BEV	0	10.44693	2	3
2017	2a	1	3.65471	14.98976	0	14.98976	65.25964	0	65.25964	BEV	0	3.65471	4	3
2017	2a	1	2.113876	10.84991	10.84991	0	105.6667	105.6667	0	ICE	2.113876	0	2	2
2017	2a	1	1.674727	8.116164	0	8.116164	52.99966	0	52.99966	BEV	0	1.674727	2	3
2017	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2017	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2017	2a	1	1.431525	5.051263	0	5.051263	16.40705	0	16.40705	BEV	0	1.431525	2	3

2017	2a	1	0.662972	2.453302	0	2.453302	8.284898	0	8.284898	BEV	0	0.662972	4	3
2017	2a	1	0.58795	2.108318	0	2.108318	7.062952	0	7.062952	BEV	0	0.58795	2	3
2017	2a	1	0.838845	3.296343	0	3.296343	12.55083	0	12.55083	BEV	0	0.838845	3	3
2017	2a	1	0.912817	4.109978	0	4.109978	21.30189	0	21.30189	BEV	0	0.912817	3	3
2017	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2017	2a	1	0	0	0	0	0	0	0	PHEV	0	0	3	8
2017	2a	1	1.441359	5.333692	0	5.333692	18.61368	0	18.61368	BEV	0	1.441359	3	3
2017	2a	1	0.893564	2.794676	0	2.794676	7.013756	0	7.013756	BEV	0	0.893564	4	3
2017	2a	1	5.882568	23.45327	0	23.45327	96.61203	0	96.61203	BEV	0	5.882568	4	3
2017	2a	1	0.758949	2.460617	0	2.460617	6.893233	0	6.893233	BEV	0	0.758949	1	3
2017	2a	1	0.747094	2.507785	0	2.507785	7.482002	0	7.482002	BEV	0	0.747094	1	3
2017	2a	1	1.617126	7.095852	0	7.095852	37.47387	0	37.47387	BEV	0	1.617126	2	3
2017	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2017	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2017	2a	1	0.781543	3.474137	3.474137	0	26.44634	26.44634	0	ICE	0.781543	0	2	2
2017	2a	1	1.514378	5.170102	0	5.170102	15.21155	0	15.21155	BEV	0	1.514378	3	3
2017	2a	1	9.263906	34.81144	0	34.81144	125.1943	0	125.1943	BEV	0	9.263906	4	3
2017	2a	1	5.430592	25.07358	0	25.07358	143.5334	0	143.5334	BEV	0	5.430592	4	3
2017	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2017	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2017	2a	1	0.807485	2.155373	2.155373	0	11.21158	11.21158	0	ICE	0.807485	0	2	2
2017	2a	1	0.72166	2.918536	0	2.918536	12.32349	0	12.32349	BEV	0	0.72166	3	3
2017	2a	1	0.885962	2.466358	2.466358	0	13.67435	13.67435	0	ICE	0.885962	0	4	2
2017	2a	1	0	0	0	0	0	0	0	BEV	0	0	4	3
2017	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2017	2a	1	0	0	0	0	0	0	0	BEV	0	0	4	3
2017	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2017	2a	1	4.322678	21.44412	12.86647	8.577646	207.6672	124.6003	83.06687	PHEV	2.593607	1.729071	4	8
2017	2a	1	0.759266	2.983628	2.983628	0	19.92074	19.92074	0	ICE	0.759266	0	3	2
2017	2a	1	0.996552	3.687701	0	3.687701	12.85119	0	12.85119	BEV	0	0.996552	2	3
2018	2a	1	14493.54	39517.08	39517.08	0	81388.38	81388.38	0	ICE	14493.54	0	1	1
2018	2a	1	14125.97	40942.7	40942.7	0	103905	103905	0	ICE	14125.97	0	1	1
2018	2a	1	15162.36	44815.22	44815.22	0	120773.7	120773.7	0	ICE	15162.36	0	1	1
2018	2a	1	4596.579	13849.4	13849.4	0	38511.13	38511.13	0	ICE	4596.579	0	1	1
2018	2a	1	5990.737	18736.39	18736.39	0	56824.11	56824.11	0	ICE	5990.737	0	1	1
2018	2a	1	7042.407	22429.01	22429.01	0	70725.24	70725.24	0	ICE	7042.407	0	1	1
2018	2a	1	14558.73	48035.51	48035.51	0	166222.9	166222.9	0	ICE	14558.73	0	1	1
2018	2a	1	16896.4	56716.47	56716.47	0	204162.3	204162.3	0	ICE	16896.4	0	1	1
2018	2a	1	21835.98	75799.23	75799.23	0	297152.1	297152.1	0	ICE	21835.98	0	1	1
2018	2a	1	29322.84	103468.3	103468.3	0	424114.7	424114.7	0	ICE	29322.84	0	1	1
2018	2a	1	40629.26	145691.7	145691.7	0	622541.1	622541.1	0	ICE	40629.26	0	1	1
2018	2a	1	50287.8	183207	183207	0	814482.4	814482.4	0	ICE	50287.8	0	1	1
2018	2a	1	49651.44	183733.2	183733.2	0	850287.4	850287.4	0	ICE	49651.44	0	1	1
2018	2a	1	59229.45	222569.5	222569.5	0	1071600	1071600	0	ICE	59229.45	0	1	1
2018	2a	1	74921.1	285827	285827	0	1429535	1429535	0	ICE	74921.1	0	1	1
2018	2a	1	103338.3	400160	400160	0	2075878	2075878	0	ICE	103338.3	0	1	1
2018	2a	1	110127.3	432758.6	432758.6	0	2329445	2329445	0	ICE	110127.3	0	1	1
2018	2a	1	154427.9	615690	615690	0	3429456	3429456	0	ICE	154427.9	0	1	1
2018	2a	1	192218.2	777368.8	777368.8	0	4486196	4486196	0	ICE	192218.2	0	1	1

2018	2a	1	230068.9	943625.4	943625.4	0	5636131	5636131	0	ICE	230068.9	0	1	1
2018	2a	1	309888.1	1288756	1288756	0	7967013	7967013	0	ICE	309888.1	0	1	1
2018	2a	1	344180.6	1451089	1451089	0	9267478	9267478	0	ICE	344180.6	0	1	1
2018	2a	1	574.8164	2423.466	2423.466	0	15653.66	15653.66	0	ICE	574.8164	0	1	2
2018	2a	1	373288	1595194	1595194	0	10539398	10539398	0	ICE	373288	0	1	1
2018	2a	1	426408.1	1846624	1846624	0	12597529	12597529	0	ICE	426408.1	0	1	1
2018	2a	1	430852.6	1890555	1890555	0	13305625	13305625	0	ICE	430852.6	0	1	1
2018	2a	1	524736.2	2332573	2332573	0	16942865	16942865	0	ICE	524736.2	0	1	1
2018	2a	1	553847.9	2493711	2493711	0	18663321	18663321	0	ICE	553847.9	0	1	1
2018	2a	1	1352.756	6090.812	6090.812	0	45481.85	45481.85	0	ICE	1352.756	0	1	2
2018	2a	1	606971.1	2767673	2767673	0	21304629	21304629	0	ICE	606971.1	0	1	1
2018	2a	1	518473.2	2393843	2393843	0	18960598	18960598	0	ICE	518473.2	0	1	1
2018	2a	1	422092.5	1973025	1973025	0	16073798	16073798	0	ICE	422092.5	0	1	1
2018	2a	1	496161.3	2347677	2347677	0	19653832	19653832	0	ICE	496161.3	0	1	1
2018	2a	1	5498.017	26014.85	26014.85	0	216160.8	216160.8	0	ICE	5498.017	0	1	2
2018	2a	1	493496.7	2363341	2363341	0	20354860	20354860	0	ICE	493496.7	0	1	1
2018	2a	1	7427.576	35570.44	35570.44	0	302576	302576	0	ICE	7427.576	0	1	2
2018	2a	1	704449.3	3413944	3413944	0	30307570	30307570	0	ICE	704449.3	0	1	1
2018	2a	1	849859.5	4167329	4167329	0	37945085	37945085	0	ICE	849859.5	0	1	1
2018	2a	1	841748	4175777	4175777	0	39102486	39102486	0	ICE	841748	0	1	1
2018	2a	1	15483.71	76812.19	76812.19	0	717167.3	717167.3	0	ICE	15483.71	0	1	2
2018	2a	1	966106.8	4848050	4848050	0	46695761	46695761	0	ICE	966106.8	0	1	1
2018	2a	1	908041.9	4608694	4608694	0	45560703	45560703	0	ICE	908041.9	0	1	1
2018	2a	1	936916.3	4808919	4808919	0	48612778	48612778	0	ICE	936916.3	0	1	1
2018	2a	1	11465.39	58848.53	58848.53	0	597185.8	597185.8	0	ICE	11465.39	0	1	2
2018	2a	1	54492.26	279693	0	279693	2571205	0	2571205	BEV	0	54492.26	1	3
2018	2a	1	1112.087	5708.02	0	5708.02	44437.15	0	44437.15	FCEV	0	1112.087	1	7
2018	2a	1	49153.87	252292.5	136238	116054.6	2708518	1462600	1245918	PHEV	26543.09	22610.78	1	8
2018	2a	1	865908.5	4494065	4494065	0	46441759	46441759	0	ICE	865908.5	0	1	1
2018	2a	1	10596.44	54995.54	54995.54	0	570499.3	570499.3	0	ICE	10596.44	0	1	2
2018	2a	1	61551.95	319454.6	0	319454.6	3113570	0	3113570	BEV	0	61551.95	1	3
2018	2a	1	1256.162	6519.483	0	6519.483	52001.81	0	52001.81	FCEV	0	1256.162	1	7
2018	2a	1	39780.73	206462	111489.5	94972.51	2230478	1204458	1026020	PHEV	21481.59	18299.13	1	8
2018	2a	1	1861.818	5182.968	5182.968	0	24285.05	24285.05	0	ICE	1861.818	0	2	1
2018	2a	1	2589.067	8097.463	8097.463	0	42374.35	42374.35	0	ICE	2589.067	0	2	1
2018	2a	1	2951.521	9400.15	9400.15	0	49382.97	49382.97	0	ICE	2951.521	0	2	1
2018	2a	1	5545.52	17979.35	17979.35	0	96768.64	96768.64	0	ICE	5545.52	0	2	1
2018	2a	1	8668.98	28602.69	28602.69	0	156770.6	156770.6	0	ICE	8668.98	0	2	1
2018	2a	1	14361.31	48206.88	48206.88	0	267407.6	267407.6	0	ICE	14361.31	0	2	1
2018	2a	1	13655.04	46618.43	46618.43	0	263278.8	263278.8	0	ICE	13655.04	0	2	1
2018	2a	1	13685.33	47505.89	47505.89	0	271355.2	271355.2	0	ICE	13685.33	0	2	1
2018	2a	1	18341.33	64719.02	64719.02	0	374429.6	374429.6	0	ICE	18341.33	0	2	1
2018	2a	1	15603.85	55953.52	55953.52	0	324523.9	324523.9	0	ICE	15603.85	0	2	1
2018	2a	1	19956.35	72704.36	72704.36	0	422706.9	422706.9	0	ICE	19956.35	0	2	1
2018	2a	1	17645.96	65298.18	65298.18	0	385072.2	385072.2	0	ICE	17645.96	0	2	1
2018	2a	1	22942.2	86211.05	86211.05	0	514350.4	514350.4	0	ICE	22942.2	0	2	1
2018	2a	1	28106.74	107228.3	107228.3	0	649257.7	649257.7	0	ICE	28106.74	0	2	1

2018	2a	1	27254.66	105539	105539	0	647293.1	647293.1	0	ICE	27254.66	0	2	1
2018	2a	1	30486.12	119798.9	119798.9	0	739847.8	739847.8	0	ICE	30486.12	0	2	1
2018	2a	1	39914.24	159134.5	159134.5	0	997038	997038	0	ICE	39914.24	0	2	1
2018	2a	1	50383.53	203761.1	203761.1	0	1298637	1298637	0	ICE	50383.53	0	2	1
2018	2a	1	45594.84	187006.8	187006.8	0	1211925	1211925	0	ICE	45594.84	0	2	1
2018	2a	1	48188.51	200405.4	200405.4	0	1323297	1323297	0	ICE	48188.51	0	2	1
2018	2a	1	52946.11	223224.5	223224.5	0	1499734	1499734	0	ICE	52946.11	0	2	1
2018	2a	1	53658.52	229302.2	229302.2	0	1568908	1568908	0	ICE	53658.52	0	2	1
2018	2a	1	36455.3	157875.1	157875.1	0	1101878	1101878	0	ICE	36455.3	0	2	1
2018	2a	1	19106.59	84933.17	84933.17	0	616320.9	616320.9	0	ICE	19106.59	0	2	1
2018	2a	1	29160.46	131295.6	131295.6	0	977013.9	977013.9	0	ICE	29160.46	0	2	1
2018	2a	1	41015.46	187022.7	187022.7	0	1422795	1422795	0	ICE	41015.46	0	2	1
2018	2a	1	67597.58	312104.8	312104.8	0	2431416	2431416	0	ICE	67597.58	0	2	1
2018	2a	1	48743.32	227845.3	227845.3	0	1814356	1814356	0	ICE	48743.32	0	2	1
2018	2a	1	24541.52	116122.6	116122.6	0	946395	946395	0	ICE	24541.52	0	2	1
2018	2a	1	20792.67	99575.47	99575.47	0	833396.6	833396.6	0	ICE	20792.67	0	2	1
2018	2a	1	132021	662498.5	662498.5	0	6187196	6187196	0	ICE	132021	0	2	1
2018	2a	1	117681.1	597281.1	597281.1	0	5721262	5721262	0	ICE	117681.1	0	2	1
2018	2a	1	101838.6	522707.8	522707.8	0	5143107	5143107	0	ICE	101838.6	0	2	1
2018	2a	1	13.79587	70.81022	70.81022	0	696.9675	696.9675	0	ICE	13.79587	0	2	2
2018	2a	1	3.431376	17.61226	0	17.61226	137.0222	0	137.0222	BEV	0	3.431376	2	3
2018	2a	1	0.070028	0.359434	0	0.359434	2.796372	0	2.796372	FCEV	0	0.070028	2	7
2018	2a	1	29.76194	152.7594	91.65564	61.10376	1503.874	902.3242	601.5494	PHEV	17.85716	11.90478	2	8
2018	2a	1	95644.43	496394.6	496394.6	0	5011716	5011716	0	ICE	95644.43	0	2	1
2018	2a	1	12.95677	67.24562	67.24562	0	679.1629	679.1629	0	ICE	12.95677	0	2	2
2018	2a	1	3488.009	9709.99	9709.99	0	45789.48	45789.48	0	ICE	3488.009	0	3	1
2018	2a	1	2232.855	6343.787	6343.787	0	30777.07	30777.07	0	ICE	2232.855	0	3	1
2018	2a	1	1348.336	4139.757	4139.757	0	20856.15	20856.15	0	ICE	1348.336	0	3	1
2018	2a	1	3568.585	11569.85	11569.85	0	59264.69	59264.69	0	ICE	3568.585	0	3	1
2018	2a	1	6383.535	21427.74	21427.74	0	112020	112020	0	ICE	6383.535	0	3	1
2018	2a	1	6897.991	23549.81	23549.81	0	125555.7	125555.7	0	ICE	6897.991	0	3	1
2018	2a	1	9351.307	32461.19	32461.19	0	176274.2	176274.2	0	ICE	9351.307	0	3	1
2018	2a	1	12830.43	45273.34	45273.34	0	251214.3	251214.3	0	ICE	12830.43	0	3	1
2018	2a	1	15386.52	55174.2	55174.2	0	309679.8	309679.8	0	ICE	15386.52	0	3	1
2018	2a	1	19411.44	70719.19	70719.19	0	406703.3	406703.3	0	ICE	19411.44	0	3	1
2018	2a	1	18805.86	69590.33	69590.33	0	405186.6	405186.6	0	ICE	18805.86	0	3	1
2018	2a	1	26638.25	100099.9	100099.9	0	591322.6	591322.6	0	ICE	26638.25	0	3	1
2018	2a	1	31579.86	120478.4	120478.4	0	722913.5	722913.5	0	ICE	31579.86	0	3	1
2018	2a	1	42412	164233.3	164233.3	0	999465.4	999465.4	0	ICE	42412	0	3	1
2018	2a	1	43966.6	172772	172772	0	1063747	1063747	0	ICE	43966.6	0	3	1
2018	2a	1	73047.62	291234.3	291234.3	0	1821359	1821359	0	ICE	73047.62	0	3	1
2018	2a	1	89037	360083.4	360083.4	0	2287155	2287155	0	ICE	89037	0	3	1
2018	2a	1	109358.8	448534.1	448534.1	0	2896718	2896718	0	ICE	109358.8	0	3	1
2018	2a	1	156801.1	652101.1	652101.1	0	4287337	4287337	0	ICE	156801.1	0	3	1
2018	2a	1	158164.2	666831.5	666831.5	0	4462640	4462640	0	ICE	158164.2	0	3	1
2018	2a	1	160403.9	685463.7	685463.7	0	4688580	4688580	0	ICE	160403.9	0	3	1
2018	2a	1	187569.6	812298.2	812298.2	0	5670570	5670570	0	ICE	187569.6	0	3	1

2018	2a	1	227171.9	996816.7	996816.7	0	7100131	7100131	0	ICE	227171.9	0	3	1
2018	2a	1	249528.1	1109210	1109210	0	8079237	8079237	0	ICE	249528.1	0	3	1
2018	2a	1	223725.9	1007330	1007330	0	7505392	7505392	0	ICE	223725.9	0	3	1
2018	2a	1	225525.9	1028355	1028355	0	7832972	7832972	0	ICE	225525.9	0	3	1
2018	2a	1	172019.3	794230.4	794230.4	0	6186590	6186590	0	ICE	172019.3	0	3	1
2018	2a	1	104026.5	486260.4	486260.4	0	3880951	3880951	0	ICE	104026.5	0	3	1
2018	2a	1	176947	837256.5	837256.5	0	6839872	6839872	0	ICE	176947	0	3	1
2018	2a	1	227150.5	1087817	1087817	0	9114758	9114758	0	ICE	227150.5	0	3	1
2018	2a	1	211609	1025512	1025512	0	8844545	8844545	0	ICE	211609	0	3	1
2018	2a	1	280599.4	1375933	1375933	0	12171844	12171844	0	ICE	280599.4	0	3	1
2018	2a	1	255616	1268070	1268070	0	11527155	11527155	0	ICE	255616	0	3	1
2018	2a	1	2767.404	13728.65	13728.65	0	123312.3	123312.3	0	ICE	2767.404	0	3	2
2018	2a	1	297576.3	1493276	1493276	0	13936176	13936176	0	ICE	297576.3	0	3	1
2018	2a	1	283539.7	1439083	1439083	0	13785042	13785042	0	ICE	283539.7	0	3	1
2018	2a	1	1898.823	9637.325	9637.325	0	92431.77	92431.77	0	ICE	1898.823	0	3	2
2018	2a	1	322705.6	1656354	1656354	0	16236644	16236644	0	ICE	322705.6	0	3	1
2018	2a	1	3298.411	16929.79	16929.79	0	166421.7	166421.7	0	ICE	3298.411	0	3	2
2018	2a	1	300338.2	1558755	1558755	0	15677231	15677231	0	ICE	300338.2	0	3	1
2018	2a	1	3069.792	15932.22	15932.22	0	160689.5	160689.5	0	ICE	3069.792	0	3	2
2018	2a	1	1036.209	5377.923	3226.754	2151.169	54326.87	32596.12	21730.75	PHEV	621.7252	414.4835	3	8
2018	2a	1	2818.783	7524.009	7524.009	0	34248.52	34248.52	0	ICE	2818.783	0	4	1
2018	2a	1	3141.436	8565.219	8565.219	0	38760.12	38760.12	0	ICE	3141.436	0	4	1
2018	2a	1	2497.914	6953.742	6953.742	0	31544.27	31544.27	0	ICE	2497.914	0	4	1
2018	2a	1	5329.705	15142.28	15142.28	0	67642.15	67642.15	0	ICE	5329.705	0	4	1
2018	2a	1	8582.815	24876.43	24876.43	0	113826.6	113826.6	0	ICE	8582.815	0	4	1
2018	2a	1	1865.186	5726.624	5726.624	0	28277.44	28277.44	0	ICE	1865.186	0	4	1
2018	2a	1	8810.556	31593.6	31593.6	0	166395.7	166395.7	0	ICE	8810.556	0	4	1
2018	2a	1	8409.182	30636.08	30636.08	0	165195.9	165195.9	0	ICE	8409.182	0	4	1
2018	2a	1	11561.83	42784.09	42784.09	0	233940.5	233940.5	0	ICE	11561.83	0	4	1
2018	2a	1	14501	54491.14	54491.14	0	305163.9	305163.9	0	ICE	14501	0	4	1
2018	2a	1	25723.8	98137.34	98137.34	0	558693.2	558693.2	0	ICE	25723.8	0	4	1
2018	2a	1	32029.53	124028.9	124028.9	0	718352.3	718352.3	0	ICE	32029.53	0	4	1
2018	2a	1	32179.66	126453.8	126453.8	0	744253.5	744253.5	0	ICE	32179.66	0	4	1
2018	2a	1	46723.53	186282.5	186282.5	0	1119073	1119073	0	ICE	46723.53	0	4	1
2018	2a	1	56683.76	229240.5	229240.5	0	1402033	1402033	0	ICE	56683.76	0	4	1
2018	2a	1	99747.83	409114.7	409114.7	0	2557840	2557840	0	ICE	99747.83	0	4	1
2018	2a	1	120025.9	499161.3	499161.3	0	3186352	3186352	0	ICE	120025.9	0	4	1
2018	2a	1	163967.8	691299.5	691299.5	0	4506798	4506798	0	ICE	163967.8	0	4	1
2018	2a	1	151.048	636.829	636.829	0	4110.601	4110.601	0	ICE	151.048	0	4	2
2018	2a	1	203074.7	867811.4	867811.4	0	5789143	5789143	0	ICE	203074.7	0	4	1
2018	2a	1	223375.8	967362.4	967362.4	0	6617930	6617930	0	ICE	223375.8	0	4	1
2018	2a	1	240878.3	1056959	1056959	0	7403910	7403910	0	ICE	240878.3	0	4	1
2018	2a	1	326.6315	1433.239	1433.239	0	9937.146	9937.146	0	ICE	326.6315	0	4	2
2018	2a	1	222598.7	989502.4	989502.4	0	7089343	7089343	0	ICE	222598.7	0	4	1
2018	2a	1	214543.7	965987.3	965987.3	0	7082066	7082066	0	ICE	214543.7	0	4	1
2018	2a	1	211183.1	962955	962955	0	7241530	7241530	0	ICE	211183.1	0	4	1
2018	2a	1	154203.6	711973.4	711973.4	0	5487558	5487558	0	ICE	154203.6	0	4	1

2018	2a	1	63351.59	296130.1	296130.1	0	2341641	2341641	0	ICE	63351.59	0	4	1
2018	2a	1	87200.18	412603.3	412603.3	0	3349602	3349602	0	ICE	87200.18	0	4	1
2018	2a	1	122501.6	586656.6	586656.6	0	4885474	4885474	0	ICE	122501.6	0	4	1
2018	2a	1	3466.736	16602.1	16602.1	0	137518.9	137518.9	0	ICE	3466.736	0	4	2
2018	2a	1	119139.7	577381.7	577381.7	0	4948278	4948278	0	ICE	119139.7	0	4	1
2018	2a	1	129577.2	635388.4	635388.4	0	5596174	5596174	0	ICE	129577.2	0	4	1
2018	2a	1	2840.25	13927.31	13927.31	0	121200.4	121200.4	0	ICE	2840.25	0	4	2
2018	2a	1	194645.8	965606.7	965606.7	0	8732861	8732861	0	ICE	194645.8	0	4	1
2018	2a	1	5987.76	29704.32	29704.32	0	268645.6	268645.6	0	ICE	5987.76	0	4	2
2018	2a	1	207285.2	1040184	1040184	0	9657223	9657223	0	ICE	207285.2	0	4	1
2018	2a	1	221721.5	1125330	1125330	0	10679860	10679860	0	ICE	221721.5	0	4	1
2018	2a	1	202268.2	1038184	1038184	0	10030972	10030972	0	ICE	202268.2	0	4	1
2018	2a	1	7053.124	36201.64	36201.64	0	349995.1	349995.1	0	ICE	7053.124	0	4	2
2018	2a	1	1692.233	8685.742	5211.445	3474.297	80243.62	48146.17	32097.45	PHEV	1015.34	676.8933	4	8
2018	2a	1	178702.9	927467.9	927467.9	0	9168197	9168197	0	ICE	178702.9	0	4	1
2018	2a	1	6231.398	32340.96	32340.96	0	319890.9	319890.9	0	ICE	6231.398	0	4	2
2018	2a	1	3.126045	16.22417	0	16.22417	116.7985	0	116.7985	BEV	0	3.126045	4	3
2018	2a	1	0.063797	0.331106	0	0.331106	2.383642	0	2.383642	FCEV	0	0.063797	4	7
2018	2a	1	3825.418	19853.92	11912.35	7941.567	192915.5	115749.3	77166.19	PHEV	2295.251	1530.167	4	8
2018	2a	1	12136.5	32395.24	32395.24	0	66012.67	66012.67	0	ICE	12136.5	0	1	1
2018	2a	1	11611.73	32324.96	32324.96	0	76353.94	76353.94	0	ICE	11611.73	0	1	1
2018	2a	1	12427.13	35306.86	35306.86	0	84885.67	84885.67	0	ICE	12427.13	0	1	1
2018	2a	1	216.9516	616.3834	616.3834	0	1473.891	1473.891	0	ICE	216.9516	0	1	2
2018	2a	1	427.2643	1238.383	1238.383	0	3101.537	3101.537	0	ICE	427.2643	0	1	2
2018	2a	1	944.7952	2792.522	2792.522	0	7398.031	7398.031	0	ICE	944.7952	0	1	2
2018	2a	1	5996.08	18409.59	18409.59	0	53500.92	53500.92	0	ICE	5996.08	0	1	1
2018	2a	1	1763.755	5415.204	5415.204	0	15578.78	15578.78	0	ICE	1763.755	0	1	2
2018	2a	1	2068.476	6469.282	6469.282	0	19626.69	19626.69	0	ICE	2068.476	0	1	2
2018	2a	1	2161.349	6883.574	6883.574	0	21431.92	21431.92	0	ICE	2161.349	0	1	2
2018	2a	1	11147.5	36141.77	36141.77	0	119922.3	119922.3	0	ICE	11147.5	0	1	1
2018	2a	1	1809.526	5970.404	5970.404	0	20376.27	20376.27	0	ICE	1809.526	0	1	2
2018	2a	1	20542.05	70130.76	70130.76	0	262628.3	262628.3	0	ICE	20542.05	0	1	1
2018	2a	1	181.6648	661.8358	661.8358	0	2946.734	2946.734	0	ICE	181.6648	0	1	2
2018	2a	1	108.6237	401.9578	401.9578	0	1800.752	1800.752	0	ICE	108.6237	0	1	2
2018	2a	1	65.54398	246.2979	246.2979	0	1167.629	1167.629	0	ICE	65.54398	0	1	2
2018	2a	1	274.9482	1096.194	1096.194	0	6101.672	6101.672	0	ICE	274.9482	0	1	2
2018	2a	1	518.0655	2154.52	2154.52	0	13476.58	13476.58	0	ICE	518.0655	0	1	2
2018	2a	1	89.7685	378.4703	0	378.4703	1889.347	0	1889.347	BEV	0	89.7685	1	3
2018	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2018	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2018	2a	1	1378.52	5890.911	5890.911	0	38820.14	38820.14	0	ICE	1378.52	0	1	2
2018	2a	1	1890.122	8185.458	8185.458	0	55912.16	55912.16	0	ICE	1890.122	0	1	2
2018	2a	1	689.0619	3023.562	3023.562	0	21314.07	21314.07	0	ICE	689.0619	0	1	2
2018	2a	1	1323.275	5882.262	5882.262	0	42177.21	42177.21	0	ICE	1323.275	0	1	2
2018	2a	1	3281.126	15337.26	15337.26	0	124172.8	124172.8	0	ICE	3281.126	0	1	2
2018	2a	1	7982.213	38683.88	38683.88	0	340591.6	340591.6	0	ICE	7982.213	0	1	2
2018	2a	1	10986.22	53871.47	53871.47	0	488834.4	488834.4	0	ICE	10986.22	0	1	2

2018	2a	1	10485.64	51416.88	0	51416.88	358543.5	0	358543.5	BEV	0	10485.64	1	3
2018	2a	1	0.616042	3.020791	0	3.020791	21.06477	0	21.06477	FCEV	0	0.616042	1	7
2018	2a	1	10960	53742.89	32245.73	21497.15	480560.3	288336.2	192224.1	PHEV	6575.997	4383.998	1	8
2018	2a	1	12674.38	62875.55	0	62875.55	450865.7	0	450865.7	BEV	0	12674.38	1	3
2018	2a	1	1.775869	8.809801	0	8.809801	63.173	0	63.173	FCEV	0	1.775869	1	7
2018	2a	1	16002.35	79385.11	47631.07	31754.05	731224.9	438735	292490	PHEV	9601.412	6400.941	1	8
2018	2a	1	10787.97	54135.44	54135.44	0	521793.3	521793.3	0	ICE	10787.97	0	1	2
2018	2a	1	28112.46	141072	0	141072	1039500	0	1039500	BEV	0	28112.46	1	3
2018	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2018	2a	1	13368.23	67083.52	40250.11	26833.41	636777.7	382066.6	254711.1	PHEV	8020.938	5347.292	1	8
2018	2a	1	2346.915	6264.48	6264.48	0	28127.31	28127.31	0	ICE	2346.915	0	2	1
2018	2a	1	2449.005	6677.285	6677.285	0	28267.44	28267.44	0	ICE	2449.005	0	2	1
2018	2a	1	1968.281	5592.104	5592.104	0	27688.22	27688.22	0	ICE	1968.281	0	2	1
2018	2a	1	2550.287	7391.753	7391.753	0	37427.56	37427.56	0	ICE	2550.287	0	2	1
2018	2a	1	2955.939	8736.839	8736.839	0	44330.87	44330.87	0	ICE	2955.939	0	2	1
2018	2a	1	2552.851	7691.69	7691.69	0	39128.85	39128.85	0	ICE	2552.851	0	2	1
2018	2a	1	2063.306	6334.906	6334.906	0	32991.13	32991.13	0	ICE	2063.306	0	2	1
2018	2a	1	420.6118	1315.489	1315.489	0	6607.028	6607.028	0	ICE	420.6118	0	2	2
2018	2a	1	207.997	662.4392	662.4392	0	3298.98	3298.98	0	ICE	207.997	0	2	2
2018	2a	1	161.237	531.9903	531.9903	0	2714.251	2714.251	0	ICE	161.237	0	2	2
2018	2a	1	30548.27	134044	134044	0	953779.9	953779.9	0	ICE	30548.27	0	2	1
2018	2a	1	38914.23	188588.5	188588.5	0	1624705	1624705	0	ICE	38914.23	0	2	1
2018	2a	1	54485.93	267174.5	267174.5	0	2363559	2363559	0	ICE	54485.93	0	2	1
2018	2a	1	64121.89	318098.4	318098.4	0	2889374	2889374	0	ICE	64121.89	0	2	1
2018	2a	1	4085.809	10906.01	10906.01	0	51736.45	51736.45	0	ICE	4085.809	0	3	1
2018	2a	1	5053.373	13778.17	13778.17	0	64797.01	64797.01	0	ICE	5053.373	0	3	1
2018	2a	1	3183.071	9225.813	9225.813	0	44669.55	44669.55	0	ICE	3183.071	0	3	1
2018	2a	1	3183.593	9409.715	9409.715	0	46799.49	46799.49	0	ICE	3183.593	0	3	1
2018	2a	1	1828.839	5510.255	5510.255	0	27670.29	27670.29	0	ICE	1828.839	0	3	1
2018	2a	1	32.00791	98.27292	98.27292	0	506.6819	506.6819	0	ICE	32.00791	0	3	2
2018	2a	1	1387.971	4340.961	4340.961	0	21750.54	21750.54	0	ICE	1387.971	0	3	1
2018	2a	1	1894.783	6034.6	6034.6	0	30615.32	30615.32	0	ICE	1894.783	0	3	1
2018	2a	1	4057.317	13386.83	13386.83	0	69067.52	69067.52	0	ICE	4057.317	0	3	1
2018	2a	1	51.96376	239.9219	239.9219	0	1885.388	1885.388	0	ICE	51.96376	0	3	2
2018	2a	1	1446.662	7010.899	7010.899	0	59735.35	59735.35	0	ICE	1446.662	0	3	2
2018	2a	1	1024.383	5023.112	5023.112	0	43980.23	43980.23	0	ICE	1024.383	0	3	2
2018	2a	1	3858.87	19364.31	19364.31	0	179175.6	179175.6	0	ICE	3858.87	0	3	2
2018	2a	1	4063.285	20622.88	0	20622.88	141063.1	0	141063.1	BEV	0	4063.285	3	3
2018	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2018	2a	1	369.7888	1876.833	1126.1	750.7333	17677.75	10606.65	7071.098	PHEV	221.8733	147.9155	3	8
2018	2a	1	8477.641	25057.28	25057.28	0	115928.5	115928.5	0	ICE	8477.641	0	4	1
2018	2a	1	3443.759	10375.98	10375.98	0	48262.76	48262.76	0	ICE	3443.759	0	4	1
2018	2a	1	1897.649	5935.012	5935.012	0	29679.66	29679.66	0	ICE	1897.649	0	4	1
2018	2a	1	380.5638	1190.236	1190.236	0	5220.358	5220.358	0	ICE	380.5638	0	4	2
2018	2a	1	1261.445	4017.513	4017.513	0	19422.62	19422.62	0	ICE	1261.445	0	4	1
2018	2a	1	2101.628	6813.773	6813.773	0	33638.06	33638.06	0	ICE	2101.628	0	4	1
2018	2a	1	282.5311	916.0054	916.0054	0	4184.825	4184.825	0	ICE	282.5311	0	4	2

2018	2a	1	2914.622	9616.59	9616.59	0	47858.74	47858.74	0	ICE	2914.622	0	4	1
2018	2a	1	151.5489	500.025	500.025	0	2294.884	2294.884	0	ICE	151.5489	0	4	2
2018	2a	1	3869.004	12987.16	12987.16	0	64390.83	64390.83	0	ICE	3869.004	0	4	1
2018	2a	1	4152.875	14177.96	14177.96	0	70905.31	70905.31	0	ICE	4152.875	0	4	1
2018	2a	1	5520.222	19162.35	19162.35	0	98753.79	98753.79	0	ICE	5520.222	0	4	1
2018	2a	1	16.81898	58.38374	58.38374	0	296.5052	296.5052	0	ICE	16.81898	0	4	2
2018	2a	1	7468.348	26352.74	26352.74	0	137658.7	137658.7	0	ICE	7468.348	0	4	1
2018	2a	1	95.87815	365.779	365.779	0	2037.302	2037.302	0	ICE	95.87815	0	4	2
2018	2a	1	85.19188	349.4136	349.4136	0	2120.671	2120.671	0	ICE	85.19188	0	4	2
2018	2a	1	554.3201	2464.08	2464.08	0	17665.91	17665.91	0	ICE	554.3201	0	4	2
2018	2a	1	750.5298	3379.275	3379.275	0	24864.78	24864.78	0	ICE	750.5298	0	4	2
2018	2a	1	1003.851	4577.368	4577.368	0	34632.22	34632.22	0	ICE	1003.851	0	4	2
2018	2a	1	705.7656	3258.59	3258.59	0	25335	25335	0	ICE	705.7656	0	4	2
2018	2a	1	988.2969	4619.685	4619.685	0	36192.47	36192.47	0	ICE	988.2969	0	4	2
2018	2a	1	5505.605	26681.59	26681.59	0	230421.9	230421.9	0	ICE	5505.605	0	4	2
2018	2a	1	10930.8	54852.2	54852.2	0	514586.4	514586.4	0	ICE	10930.8	0	4	2
2018	2a	1	6872.142	34879.01	34879.01	0	336273.6	336273.6	0	ICE	6872.142	0	4	2
2018	2a	1	1808.014	5861.836	5861.836	0	19038.73	19038.73	0	ICE	1808.014	0	1	2
2018	2a	1	117.0327	419.6653	419.6653	0	1764.45	1764.45	0	ICE	117.0327	0	1	2
2018	2a	1	610.9195	2505.68	2505.68	0	14996	14996	0	ICE	610.9195	0	1	2
2018	2a	1	52.43259	233.0749	0	233.0749	1308.307	0	1308.307	BEV	0	52.43259	1	3
2018	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2018	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2018	2a	1	2253.789	10922.45	0	10922.45	74252.89	0	74252.89	BEV	0	2253.789	1	3
2018	2a	1	8.517365	41.27737	0	41.27737	280.6114	0	280.6114	FCEV	0	8.517365	1	7
2018	2a	1	4737.548	22959.39	13775.63	9183.755	200115.8	120069.5	80046.32	PHEV	2842.529	1895.019	1	8
2018	2a	1	18076.96	91748.18	0	91748.18	694249.7	0	694249.7	BEV	0	18076.96	1	3
2018	2a	1	550.3668	2793.343	0	2793.343	21136.95	0	21136.95	FCEV	0	550.3668	1	7
2018	2a	1	12999.75	65979.21	39587.53	26391.69	645094.7	387056.8	258037.9	PHEV	7799.853	5199.902	1	8
2018	2a	1	17.31259	66.04821	66.04821	0	363.0419	363.0419	0	ICE	17.31259	0	2	2
2018	2a	1	10.7894	41.78011	41.78011	0	235.9865	235.9865	0	ICE	10.7894	0	2	2
2018	2a	1	21.47012	86.82945	86.82945	0	536.703	536.703	0	ICE	21.47012	0	2	2
2018	2a	1	31.94312	107.2241	107.2241	0	583.3866	583.3866	0	ICE	31.94312	0	3	2
2018	2a	1	180.7405	803.433	803.433	0	5841.305	5841.305	0	ICE	180.7405	0	3	2
2018	2a	1	185.8777	836.918	836.918	0	6306.683	6306.683	0	ICE	185.8777	0	3	2
2018	2a	1	357.9921	1140.151	1140.151	0	5011.067	5011.067	0	ICE	357.9921	0	4	2
2018	2a	1	64.64264	261.4278	261.4278	0	1543.407	1543.407	0	ICE	64.64264	0	4	2
2018	2a	1	194.7048	843.1984	843.1984	0	5745.582	5745.582	0	ICE	194.7048	0	4	2
2018	2a	1	1672.597	7914.194	7914.194	0	63457.51	63457.51	0	ICE	1672.597	0	4	2
2018	2a	1	128.8963	351.4396	351.4396	0	784.1792	784.1792	0	ICE	128.8963	0	1	2
2018	2a	1	194.2882	540.8633	540.8633	0	1197.123	1197.123	0	ICE	194.2882	0	1	2
2018	2a	1	980.782	2955.076	2955.076	0	8116.193	8116.193	0	ICE	980.782	0	1	2
2018	2a	1	399.1513	1339.839	1339.839	0	4705.345	4705.345	0	ICE	399.1513	0	1	2
2018	2a	1	984.654	3361.618	3361.618	0	12479.67	12479.67	0	ICE	984.654	0	1	2
2018	2a	1	348.0528	1347.775	1347.775	0	6941.602	6941.602	0	ICE	348.0528	0	1	2
2018	2a	1	294.5483	1157.463	1157.463	0	6151.395	6151.395	0	ICE	294.5483	0	1	2
2018	2a	1	551.5943	2230.758	2230.758	0	12948.67	12948.67	0	ICE	551.5943	0	1	2

2018	2a	1	178.8043	764.0949	0	764.0949	3921.682	0	3921.682	BEV	0	178.8043	1	3
2018	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2018	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2018	2a	1	2919.428	13981.05	0	13981.05	92412.75	0	92412.75	BEV	0	2919.428	1	3
2018	2a	1	28.84348	138.1306	0	138.1306	913.0232	0	913.0232	FCEV	0	28.84348	1	7
2018	2a	1	811.5152	3886.322	2331.793	1554.529	32821.74	19693.04	13128.7	PHEV	486.9091	324.6061	1	8
2018	2a	1	1528.079	7755.645	7755.645	0	76152.91	76152.91	0	ICE	1528.079	0	1	2
2018	2a	1	136.5919	419.374	419.374	0	2106.318	2106.318	0	ICE	136.5919	0	2	2
2018	2a	1	171.3018	555.3845	555.3845	0	2888.309	2888.309	0	ICE	171.3018	0	2	2
2018	2a	1	65.57774	220.1261	220.1261	0	1130.35	1130.35	0	ICE	65.57774	0	2	2
2018	2a	1	683.6299	3391.379	0	3391.379	24320.84	0	24320.84	BEV	0	683.6299	2	3
2018	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2018	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2018	2a	1	82.80913	249.5023	249.5023	0	1262.283	1262.283	0	ICE	82.80913	0	3	2
2018	2a	1	60.9673	194.1717	194.1717	0	957.0211	957.0211	0	ICE	60.9673	0	3	2
2018	2a	1	49.68073	161.0719	161.0719	0	824.3806	824.3806	0	ICE	49.68073	0	3	2
2018	2a	1	2.874222	10.47128	10.47128	0	61.39144	61.39144	0	ICE	2.874222	0	3	2
2018	2a	1	81.5433	245.6883	245.6883	0	1151.234	1151.234	0	ICE	81.5433	0	4	2
2018	2a	1	105.4071	353.8223	353.8223	0	1737.531	1737.531	0	ICE	105.4071	0	4	2
2018	2a	1	61.1991	229.9709	229.9709	0	1210.91	1210.91	0	ICE	61.1991	0	4	2
2018	2a	1	125.542	486.14	486.14	0	2702.371	2702.371	0	ICE	125.542	0	4	2
2018	2a	1	127.1867	499.7955	499.7955	0	2824.212	2824.212	0	ICE	127.1867	0	4	2
2018	2a	1	58.68251	207.0665	207.0665	0	881.2279	881.2279	0	ICE	58.68251	0	1	2
2018	2a	1	284.373	1312.979	1312.979	0	10235.64	10235.64	0	ICE	284.373	0	1	2
2018	2a	1	28.18685	122.0674	122.0674	0	833.7337	833.7337	0	ICE	28.18685	0	2	2
2018	2a	1	284.373	1312.979	1312.979	0	10235.64	10235.64	0	ICE	284.373	0	1	2
2018	2a	1	28.18685	122.0674	122.0674	0	833.7337	833.7337	0	ICE	28.18685	0	2	2
2018	2a	1	53.3846	145.5547	145.5547	0	711.6189	711.6189	0	ICE	53.3846	0	3	2
2018	2a	1	1.28318	5.262952	5.262952	0	35.44942	35.44942	0	ICE	1.28318	0	3	2
2018	2a	1	92.89186	439.5346	439.5346	0	3588.284	3588.284	0	ICE	92.89186	0	3	2
2018	2a	1	221.1673	1097.176	0	1097.176	7133.518	0	7133.518	BEV	0	221.1673	3	3
2018	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2018	2a	1	100.1376	496.7668	298.0601	198.7067	4431.971	2659.183	1772.788	PHEV	60.08258	40.05505	3	8
2018	2a	1	43.94905	134.9355	134.9355	0	736.3459	736.3459	0	ICE	43.94905	0	4	2
2018	2a	1	29.43565	107.2391	107.2391	0	561.1354	561.1354	0	ICE	29.43565	0	4	2
2018	2a	1	161.2638	642.9444	642.9444	0	3686.085	3686.085	0	ICE	161.2638	0	4	2
2018	2a	1	74.95216	320.2976	320.2976	0	2136.061	2136.061	0	ICE	74.95216	0	4	2
2018	2a	1	215.7995	1033.457	1033.457	0	8592.737	8592.737	0	ICE	215.7995	0	3	2
2018	2a	1	20.78653	73.34716	73.34716	0	364.6894	364.6894	0	ICE	20.78653	0	4	2
2018	2a	1	30.42039	126.5117	126.5117	0	793.8865	793.8865	0	ICE	30.42039	0	4	2
2018	2a	1	46.80319	200.0069	0	200.0069	934.7883	0	934.7883	BEV	0	46.80319	3	3
2018	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2018	2a	1	0	0	0	0	0	0	0	PHEV	0	0	3	8
2018	2a	1	183.5052	784.1837	0	784.1837	3662.043	0	3662.043	BEV	0	183.5052	4	3
2018	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2018	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2018	2a	1	62.387	216.564	216.564	0	863.3288	863.3288	0	ICE	62.387	0	1	2
2018	2a	1	49.30433	188.098	188.098	0	945.7521	945.7521	0	ICE	49.30433	0	1	2
2018	2a	1	191.1718	871.7071	871.7071	0	6613.103	6613.103	0	ICE	191.1718	0	1	2

2018	2a	1	505.8046	2393.305	0	2393.305	15386.66	0	15386.66	BEV	0	505.8046	1	3
2018	2a	1	51.35072	242.9752	0	242.9752	1562.097	0	1562.097	FCEV	0	51.35072	1	7
2018	2a	1	53.91825	255.1239	153.0743	102.0496	2089.029	1253.418	835.6118	PHEV	32.35095	21.5673	1	8
2018	2a	1	44.82651	153.0382	153.0382	0	776.0608	776.0608	0	ICE	44.82651	0	2	2
2018	2a	1	21.09821	78.07307	78.07307	0	390.9652	390.9652	0	ICE	21.09821	0	2	2
2018	2a	1	307.4292	1489.882	0	1489.882	10132.67	0	10132.67	BEV	0	307.4292	2	3
2018	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2018	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2018	2a	1	106.7608	315.552	315.552	0	1617.936	1617.936	0	ICE	106.7608	0	3	2
2018	2a	1	199.2519	623.1721	623.1721	0	3068.453	3068.453	0	ICE	199.2519	0	3	2
2018	2a	1	11.57383	39.51316	39.51316	0	222.2757	222.2757	0	ICE	11.57383	0	3	2
2018	2a	1	90.25923	421.9068	421.9068	0	3284.286	3284.286	0	ICE	90.25923	0	3	2
2018	2a	1	51.37065	190.095	190.095	0	1039.138	1039.138	0	ICE	51.37065	0	4	2
2018	2a	1	65.32398	294.1225	0	294.1225	1703.486	0	1703.486	BEV	0	65.32398	1	3
2018	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2018	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2018	2a	1	346.7331	1600.902	0	1600.902	9753.573	0	9753.573	BEV	0	346.7331	1	3
2018	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2018	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2018	2a	1	280.9712	1313.369	0	1313.369	8278.056	0	8278.056	BEV	0	280.9712	1	3
2018	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2018	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2018	2a	1	3.320827	9.625085	9.625085	0	37.9829	37.9829	0	ICE	3.320827	0	2	2
2018	2a	1	21.97854	77.55324	77.55324	0	370.6815	370.6815	0	ICE	21.97854	0	2	2
2018	2a	1	22.55971	88.65108	88.65108	0	545.6274	545.6274	0	ICE	22.55971	0	2	2
2018	2a	1	34.47306	161.1405	161.1405	0	1266.956	1266.956	0	ICE	34.47306	0	2	2
2018	2a	1	373.4204	1831.085	0	1831.085	12793.72	0	12793.72	BEV	0	373.4204	2	3
2018	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2018	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2018	2a	1	100.4926	268.2388	268.2388	0	1300.424	1300.424	0	ICE	100.4926	0	3	2
2018	2a	1	30.5032	139.0888	139.0888	0	1062.69	1062.69	0	ICE	30.5032	0	3	2
2018	2a	1	11.60883	32.31689	32.31689	0	160.027	160.027	0	ICE	11.60883	0	4	2
2018	2a	1	11.28582	32.06425	32.06425	0	151.6571	151.6571	0	ICE	11.28582	0	4	2
2018	2a	1	29.28218	99.96966	99.96966	0	515.5088	515.5088	0	ICE	29.28218	0	4	2
2018	2a	1	22.57141	80.93836	80.93836	0	432.9	432.9	0	ICE	22.57141	0	4	2
2018	2a	1	38.40965	102.5246	102.5246	0	213.0658	213.0658	0	ICE	38.40965	0	1	2
2018	2a	1	49.18046	212.9834	0	212.9834	1132.669	0	1132.669	BEV	0	49.18046	1	3
2018	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2018	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2018	2a	1	111.6458	509.0838	0	509.0838	3032.27	0	3032.27	BEV	0	111.6458	1	3
2018	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2018	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2018	2a	1	52.77968	243.689	0	243.689	1492.823	0	1492.823	BEV	0	52.77968	2	3
2018	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2018	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2018	2a	1	5.508387	26.69508	26.69508	0	237.3379	237.3379	0	ICE	5.508387	0	2	2
2018	2a	1	2.474547	11.1417	0	11.1417	60.11993	0	60.11993	BEV	0	2.474547	4	3

2018	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2018	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2018	2a	1	11.99283	36.13414	36.13414	0	182.7777	182.7777	0	ICE	11.99283	0	2	2
2018	2a	1	54.31814	157.4357	157.4357	0	756.7438	756.7438	0	ICE	54.31814	0	3	2
2018	2a	1	18.83956	79.4289	79.4289	0	503.4086	503.4086	0	ICE	18.83956	0	2	2
2018	2a	1	9.372408	33.07139	33.07139	0	187.1772	187.1772	0	ICE	9.372408	0	3	2
2018	2a	1	2.983532	12.92063	12.92063	0	95.70871	95.70871	0	ICE	2.983532	0	3	2
2018	2a	1	8.765525	32.93865	0	32.93865	125.401	0	125.401	BEV	0	8.765525	1	3
2018	2a	1	27.65133	76.97632	76.97632	0	422.4049	422.4049	0	ICE	27.65133	0	3	2
2018	2a	1	11.59165	40.23808	40.23808	0	233.697	233.697	0	ICE	11.59165	0	3	2
2018	2a	1	3.297718	12.20307	12.20307	0	69.8018	69.8018	0	ICE	3.297718	0	3	2
2018	2a	1	45.89755	214.543	0	214.543	1235.171	0	1235.171	BEV	0	45.89755	3	3
2018	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2018	2a	1	0	0	0	0	0	0	0	PHEV	0	0	3	8
2018	2a	1	20.74515	99.34791	0	99.34791	600.815	0	600.815	BEV	0	20.74515	3	3
2018	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2018	2a	1	14.36203	68.77932	41.26759	27.51173	571.9229	343.1537	228.7692	PHEV	8.617217	5.744811	3	8
2018	2a	1	1.927968	9.674792	0	9.674792	63.60644	0	63.60644	BEV	0	1.927968	4	3
2018	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2018	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2018	2a	1	6.109029	22.60622	0	22.60622	84.50341	0	84.50341	BEV	0	6.109029	1	3
2018	2a	1	23.86302	82.83572	82.83572	0	396.1339	396.1339	0	ICE	23.86302	0	2	2
2018	2a	1	115.5829	480.6839	0	480.6839	2321.097	0	2321.097	BEV	0	115.5829	2	3
2018	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2018	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2018	2a	1	43.30116	182.5607	0	182.5607	917.3263	0	917.3263	BEV	0	43.30116	2	3
2018	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2018	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2018	2a	1	34.22563	146.2584	146.2584	0	998.3485	998.3485	0	ICE	34.22563	0	2	2
2018	2a	1	13.18306	59.357	0	59.357	344.7088	0	344.7088	BEV	0	13.18306	2	3
2018	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2018	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2018	2a	1	24.32004	110.8948	110.8948	0	827.5152	827.5152	0	ICE	24.32004	0	2	2
2018	2a	1	6.661629	30.37576	0	30.37576	181.669	0	181.669	BEV	0	6.661629	2	3
2018	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2018	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2018	2a	1	28.24412	130.4059	130.4059	0	1009.95	1009.95	0	ICE	28.24412	0	2	2
2018	2a	1	21.03915	98.34521	0	98.34521	617.6649	0	617.6649	BEV	0	21.03915	2	3
2018	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2018	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2018	2a	1	30.66922	101.1909	101.1909	0	567.4896	567.4896	0	ICE	30.66922	0	3	2
2018	2a	1	18.96223	87.55051	0	87.55051	499.4044	0	499.4044	BEV	0	18.96223	3	3
2018	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2018	2a	1	0	0	0	0	0	0	0	PHEV	0	0	3	8
2018	2a	1	16.31614	80.00699	0	80.00699	509.4396	0	509.4396	BEV	0	16.31614	3	3
2018	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2018	2a	1	12.47705	61.18182	36.70909	24.47273	527.9782	316.7869	211.1913	PHEV	7.486228	4.990818	3	8

2018	2a	1	8.678095	36.09029	0	36.09029	159.9562	0	159.9562	BEV	0	8.678095	4	3
2018	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2018	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2018	2a	1	26.13264	113.1713	0	113.1713	546.6209	0	546.6209	BEV	0	26.13264	4	3
2018	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2018	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2018	2a	1	3.400331	15.11525	0	15.11525	78.70802	0	78.70802	BEV	0	3.400331	4	3
2018	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2018	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2018	2a	1	18.1687	48.49662	48.49662	0	254.6762	254.6762	0	ICE	18.1687	0	4	2
2018	2a	1	29.22737	109.8291	109.8291	0	574.1513	574.1513	0	ICE	29.22737	0	2	2
2018	2a	1	1.801096	8.006288	8.006288	0	57.97086	57.97086	0	ICE	1.801096	0	2	2
2018	2a	1	144.1037	615.807	0	615.807	3180.799	0	3180.799	BEV	0	144.1037	2	3
2018	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2018	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2018	2a	1	8.358526	36.67671	0	36.67671	201.9953	0	201.9953	BEV	0	8.358526	2	3
2018	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2018	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2018	2a	1	3.948506	11.89677	0	11.89677	30.6476	0	30.6476	BEV	0	3.948506	1	3
2018	2a	1	76.99475	315.7932	0	315.7932	1478.578	0	1478.578	BEV	0	76.99475	2	3
2018	2a	1	18.29413	53.02371	53.02371	0	242.7059	242.7059	0	ICE	18.29413	0	4	2
2018	2a	1	2.045527	8.155332	8.155332	0	50.75533	50.75533	0	ICE	2.045527	0	3	2
2018	2a	1	22.45517	92.09965	92.09965	0	559.8546	559.8546	0	ICE	22.45517	0	2	2
2018	2a	1	1.565992	6.692046	6.692046	0	45.55651	45.55651	0	ICE	1.565992	0	3	2
2018	2a	1	12.26433	33.43906	33.43906	0	216.725	216.725	0	ICE	12.26433	0	2	2
2018	2a	1	10.47881	38.17608	38.17608	0	216.5172	216.5172	0	ICE	10.47881	0	2	2
2018	2a	1	10.73049	31.716	31.716	0	135.5754	135.5754	0	ICE	10.73049	0	4	2
2018	2a	1	11.05734	42.81765	0	42.81765	175.9611	0	175.9611	BEV	0	11.05734	1	3
2018	2a	1	17.48615	78.73172	78.73172	0	579.725	579.725	0	ICE	17.48615	0	2	2
2018	2a	1	4.744435	19.73106	0	19.73106	89.50647	0	89.50647	BEV	0	4.744435	3	3
2018	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2018	2a	1	0	0	0	0	0	0	0	PHEV	0	0	3	8
2018	2a	1	2.130685	7.274179	0	7.274179	23.21817	0	23.21817	BEV	0	2.130685	2	3
2018	2a	1	4.078676	18.83165	0	18.83165	106.4778	0	106.4778	BEV	0	4.078676	4	3
2018	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2018	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2018	2a	1	23.44368	94.81092	0	94.81092	432.2205	0	432.2205	BEV	0	23.44368	1	3
2018	2a	1	21.96557	91.34996	0	91.34996	440.9356	0	440.9356	BEV	0	21.96557	1	3
2018	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2018	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2018	2a	1	50.01036	219.4425	0	219.4425	1196.234	0	1196.234	BEV	0	50.01036	1	3
2018	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2018	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2018	2a	1	26.84845	107.0423	107.0423	0	627.5908	627.5908	0	ICE	26.84845	0	2	2
2018	2a	1	24.24579	98.05481	0	98.05481	445.4355	0	445.4355	BEV	0	24.24579	2	3
2018	2a	1	2.890548	12.84915	0	12.84915	71.75884	0	71.75884	BEV	0	2.890548	2	3
2018	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7

2018	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2018	2a	1	4.769341	17.92199	17.92199	0	96.66164	96.66164	0	ICE	4.769341	0	3	2
2018	2a	1	21.15834	84.35641	0	84.35641	370.4485	0	370.4485	BEV	0	21.15834	1	3
2018	2a	1	29.4231	120.6785	0	120.6785	566.1135	0	566.1135	BEV	0	29.4231	1	3
2018	2a	1	6.026013	16.08487	16.08487	0	68.261	68.261	0	ICE	6.026013	0	2	2
2018	2a	1	3.671664	11.273	0	11.273	29.15102	0	29.15102	BEV	0	3.671664	2	3
2018	2a	1	17.14812	61.49111	61.49111	0	346.6775	346.6775	0	ICE	17.14812	0	2	2
2018	2a	1	5.785202	21.40791	0	21.40791	79.95379	0	79.95379	BEV	0	5.785202	2	3
2018	2a	1	2.821907	10.60402	0	10.60402	40.13885	0	40.13885	BEV	0	2.821907	2	3
2018	2a	1	2.836769	10.98491	0	10.98491	45.22987	0	45.22987	BEV	0	2.836769	2	3
2018	2a	1	19.05337	79.23879	79.23879	0	491.8595	491.8595	0	ICE	19.05337	0	2	2
2018	2a	1	7.416053	35.09039	35.09039	0	285.0185	285.0185	0	ICE	7.416053	0	2	2
2018	2a	1	9.720215	47.66356	47.66356	0	421.9202	421.9202	0	ICE	9.720215	0	2	2
2018	2a	1	6.04307	21.66972	21.66972	0	111.7782	111.7782	0	ICE	6.04307	0	3	2
2018	2a	1	2.614805	9.825784	0	9.825784	34.55193	0	34.55193	BEV	0	2.614805	3	3
2018	2a	1	3.263742	12.4513	12.4513	0	75.52951	75.52951	0	ICE	3.263742	0	3	2
2018	2a	1	22.42717	91.98482	0	91.98482	393.8983	0	393.8983	BEV	0	22.42717	3	3
2018	2a	1	2.926855	12.33983	12.33983	0	78.51629	78.51629	0	ICE	2.926855	0	3	2
2018	2a	1	2.064588	8.704449	0	8.704449	39.59835	0	39.59835	BEV	0	2.064588	3	3
2018	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2018	2a	1	0	0	0	0	0	0	0	PHEV	0	0	3	8
2018	2a	1	30.27993	143.275	0	143.275	846.8728	0	846.8728	BEV	0	30.27993	3	3
2018	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2018	2a	1	0	0	0	0	0	0	0	PHEV	0	0	3	8
2018	2a	1	64.46002	312.39	0	312.39	1940.124	0	1940.124	BEV	0	64.46002	3	3
2018	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2018	2a	1	16.52821	80.1	48.06	32.04	681.802	409.0812	272.7208	PHEV	9.916926	6.611284	3	8
2018	2a	1	1.44555	4.603861	0	4.603861	11.59523	0	11.59523	BEV	0	1.44555	4	3
2018	2a	1	1.4759	5.12329	0	5.12329	15.00287	0	15.00287	BEV	0	1.4759	4	3
2018	2a	1	4.457656	17.26151	0	17.26151	65.02147	0	65.02147	BEV	0	4.457656	4	3
2018	2a	1	3.528467	16.89772	16.89772	0	144.8271	144.8271	0	ICE	3.528467	0	2	2
2018	2a	1	2.103525	8.868609	0	8.868609	40.57685	0	40.57685	BEV	0	2.103525	4	3
2018	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2018	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2018	2a	1	8.375688	24.75594	24.75594	0	119.6055	119.6055	0	ICE	8.375688	0	2	2
2018	2a	1	2.145564	7.202057	0	7.202057	22.01721	0	22.01721	BEV	0	2.145564	2	3
2018	2a	1	0.807824	2.387676	0	2.387676	6.025473	0	6.025473	BEV	0	0.807824	1	3
2018	2a	1	1.483682	4.640304	0	4.640304	12.60707	0	12.60707	BEV	0	1.483682	1	3
2018	2a	1	2.869735	9.304083	0	9.304083	26.18449	0	26.18449	BEV	0	2.869735	1	3
2018	2a	1	3.909441	13.1229	0	13.1229	40.28012	0	40.28012	BEV	0	3.909441	1	3
2018	2a	1	3.34754	11.42853	0	11.42853	36.18916	0	36.18916	BEV	0	3.34754	1	3
2018	2a	1	2.645379	9.182904	0	9.182904	30.24138	0	30.24138	BEV	0	2.645379	1	3
2018	2a	1	2.462461	8.689017	0	8.689017	28.99916	0	28.99916	BEV	0	2.462461	1	3
2018	2a	1	2.521897	9.043222	0	9.043222	31.70266	0	31.70266	BEV	0	2.521897	1	3
2018	2a	1	2.69419	9.815391	0	9.815391	34.6409	0	34.6409	BEV	0	2.69419	1	3
2018	2a	1	4.474732	17.07128	0	17.07128	67.15682	0	67.15682	BEV	0	4.474732	1	3
2018	2a	1	15.0684	59.21308	0	59.21308	253.0003	0	253.0003	BEV	0	15.0684	1	3

2018	2a	1	1.419033	4.438111	0	4.438111	12.07308	0	12.07308	BEV	0	1.419033	2	3
2018	2a	1	1.459538	4.732028	0	4.732028	13.60809	0	13.60809	BEV	0	1.459538	2	3
2018	2a	1	1.44572	4.770052	0	4.770052	14.19334	0	14.19334	BEV	0	1.44572	2	3
2018	2a	1	2.775688	10.58936	0	10.58936	42.42762	0	42.42762	BEV	0	2.775688	2	3
2018	2a	1	0	0	0	0	0	0	0	BEV	0	0	2	3
2018	2a	1	40.24534	201.9563	0	201.9563	1500.537	0	1500.537	FCEV	0	40.24534	2	7
2018	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2018	2a	1	0	0	0	0	0	0	0	BEV	0	0	2	3
2018	2a	1	42.20442	214.2052	0	214.2052	1630.458	0	1630.458	FCEV	0	42.20442	2	7
2018	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2018	2a	1	0.729711	3.201928	3.201928	0	22.56798	22.56798	0	ICE	0.729711	0	3	2
2018	2a	1	0	0	0	0	0	0	0	BEV	0	0	3	3
2018	2a	1	2.84812	14.29223	0	14.29223	95.91469	0	95.91469	FCEV	0	2.84812	3	7
2018	2a	1	40.82305	204.8554	122.9132	81.94214	1913.537	1148.122	765.415	PHEV	24.49383	16.32922	3	8
2018	2a	1	1.853032	9.192595	9.192595	0	84.02108	84.02108	0	ICE	1.853032	0	2	2
2018	2a	1	1.223619	4.94856	0	4.94856	20.4553	0	20.4553	BEV	0	1.223619	3	3
2018	2a	1	0.740031	2.441682	0	2.441682	6.519636	0	6.519636	BEV	0	0.740031	4	3
2018	2a	1	1.963847	6.92961	0	6.92961	21.29028	0	21.29028	BEV	0	1.963847	4	3
2018	2a	1	8.436849	31.70357	0	31.70357	110.7967	0	110.7967	BEV	0	8.436849	4	3
2018	2a	1	3.377051	13.85094	0	13.85094	59.09274	0	59.09274	BEV	0	3.377051	4	3
2018	2a	1	0.658519	2.021831	0	2.021831	5.273519	0	5.273519	BEV	0	0.658519	1	3
2018	2a	1	0.503392	1.603227	0	1.603227	3.968693	0	3.968693	BEV	0	0.503392	3	3
2018	2a	1	1.416855	6.460592	0	6.460592	34.97735	0	34.97735	BEV	0	1.416855	3	3
2018	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2018	2a	1	0	0	0	0	0	0	0	PHEV	0	0	3	8
2018	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2018	2a	1	0	0	0	0	0	0	0	PHEV	0	0	3	8
2018	2a	1	0.566941	1.805622	0	1.805622	4.691678	0	4.691678	BEV	0	0.566941	2	3
2018	2a	1	3.675495	17.39126	0	17.39126	110.2799	0	110.2799	BEV	0	3.675495	2	3
2018	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2018	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2018	2a	1	3.332672	13.09613	0	13.09613	55.63499	0	55.63499	BEV	0	3.332672	2	3
2018	2a	1	9.408534	37.51098	0	37.51098	165.3757	0	165.3757	BEV	0	9.408534	2	3
2018	2a	1	3.241237	13.10821	0	13.10821	54.27978	0	54.27978	BEV	0	3.241237	4	3
2018	2a	1	2.163671	10.98154	10.98154	0	104.7028	104.7028	0	ICE	2.163671	0	2	2
2018	2a	1	1.813341	8.684036	0	8.684036	57.07057	0	57.07057	BEV	0	1.813341	2	3
2018	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2018	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2018	2a	1	1.27532	4.427019	0	4.427019	14.31202	0	14.31202	BEV	0	1.27532	2	3
2018	2a	1	0.593508	2.162251	0	2.162251	6.966955	0	6.966955	BEV	0	0.593508	4	3
2018	2a	1	0.515286	1.818232	0	1.818232	6.058443	0	6.058443	BEV	0	0.515286	2	3
2018	2a	1	0.737334	2.855201	0	2.855201	10.36697	0	10.36697	BEV	0	0.737334	3	3
2018	2a	1	0.871877	3.875695	0	3.875695	19.23386	0	19.23386	BEV	0	0.871877	3	3
2018	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2018	2a	1	0	0	0	0	0	0	0	PHEV	0	0	3	8
2018	2a	1	1.281593	4.669062	0	4.669062	15.63138	0	15.63138	BEV	0	1.281593	3	3
2018	2a	1	0.847025	2.600596	0	2.600596	6.280657	0	6.280657	BEV	0	0.847025	4	3
2018	2a	1	5.11243	20.08991	0	20.08991	78.92637	0	78.92637	BEV	0	5.11243	4	3
2018	2a	1	0.702345	2.236863	0	2.236863	6.245286	0	6.245286	BEV	0	0.702345	1	3

2018	2a	1	0.682556	2.252047	0	2.252047	6.683355	0	6.683355	BEV	0	0.682556	1	3
2018	2a	1	1.52349	6.5977	0	6.5977	34.75978	0	34.75978	BEV	0	1.52349	2	3
2018	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2018	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2018	2a	1	0.730225	3.204185	3.204185	0	23.57805	23.57805	0	ICE	0.730225	0	2	2
2018	2a	1	1.387553	4.657627	0	4.657627	13.02969	0	13.02969	BEV	0	1.387553	3	3
2018	2a	1	7.883224	29.17155	0	29.17155	99.65662	0	99.65662	BEV	0	7.883224	4	3
2018	2a	1	5.123595	23.36262	0	23.36262	127.7454	0	127.7454	BEV	0	5.123595	4	3
2018	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2018	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2018	2a	1	0.594698	2.371009	0	2.371009	9.531439	0	9.531439	BEV	0	0.594698	3	3
2018	2a	1	0.885962	2.415601	2.415601	0	13.29022	13.29022	0	ICE	0.885962	0	4	2
2018	2a	1	0	0	0	0	0	0	0	BEV	0	0	4	3
2018	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2018	2a	1	4.240621	20.7941	12.47646	8.317638	192.9633	115.778	77.18531	PHEV	2.544372	1.696248	4	8
2018	2a	1	0.66077	2.558719	2.558719	0	16.55939	16.55939	0	ICE	0.66077	0	3	2
2018	2a	1	0.894501	3.258819	0	3.258819	11.3348	0	11.3348	BEV	0	0.894501	2	3
2019	2a	1	14127.73	37710.31	37710.31	0	72879.84	72879.84	0	ICE	14127.73	0	1	1
2019	2a	1	13593.78	38621.43	38621.43	0	92340.06	92340.06	0	ICE	13593.78	0	1	1
2019	2a	1	14510.68	42057.74	42057.74	0	106892.5	106892.5	0	ICE	14510.68	0	1	1
2019	2a	1	4408.989	13031.6	13031.6	0	34080.29	34080.29	0	ICE	4408.989	0	1	1
2019	2a	1	5790.877	17779.56	17779.56	0	50743.42	50743.42	0	ICE	5790.877	0	1	1
2019	2a	1	6610.792	20675.65	20675.65	0	61357.08	61357.08	0	ICE	6610.792	0	1	1
2019	2a	1	13397.55	43436.73	43436.73	0	141775.1	141775.1	0	ICE	13397.55	0	1	1
2019	2a	1	15512.93	51183.82	51183.82	0	173886.1	173886.1	0	ICE	15512.93	0	1	1
2019	2a	1	19438.03	66361.63	66361.63	0	245555.9	245555.9	0	ICE	19438.03	0	1	1
2019	2a	1	25504.57	88534	88534	0	342655.7	342655.7	0	ICE	25504.57	0	1	1
2019	2a	1	35147.57	124021.4	124021.4	0	500849	500849	0	ICE	35147.57	0	1	1
2019	2a	1	42908.85	153866	153866	0	646533.4	646533.4	0	ICE	42908.85	0	1	1
2019	2a	1	41751.8	152108.9	152108.9	0	666371.8	666371.8	0	ICE	41751.8	0	1	1
2019	2a	1	49177.37	181978.9	181978.9	0	830072.4	830072.4	0	ICE	49177.37	0	1	1
2019	2a	1	61709.21	231887.8	231887.8	0	1098836	1098836	0	ICE	61709.21	0	1	1
2019	2a	1	84768.84	323396.5	323396.5	0	1591305	1591305	0	ICE	84768.84	0	1	1
2019	2a	1	90256.34	349502.3	349502.3	0	1786100	1786100	0	ICE	90256.34	0	1	1
2019	2a	1	127062.2	499306.2	499306.2	0	2642693	2642693	0	ICE	127062.2	0	1	1
2019	2a	1	159655.5	636532	636532	0	3493309	3493309	0	ICE	159655.5	0	1	1
2019	2a	1	193218.8	781415.6	781415.6	0	4442498	4442498	0	ICE	193218.8	0	1	1
2019	2a	1	264207.5	1083644	1083644	0	6381442	6381442	0	ICE	264207.5	0	1	1
2019	2a	1	297220.2	1236073	1236073	0	7525898	7525898	0	ICE	297220.2	0	1	1
2019	2a	1	499.1325	2075.782	2075.782	0	12813.91	12813.91	0	ICE	499.1325	0	1	2
2019	2a	1	328381	1384477	1384477	0	8726988	8726988	0	ICE	328381	0	1	1
2019	2a	1	379034.7	1619752	1619752	0	10549664	10549664	0	ICE	379034.7	0	1	1
2019	2a	1	388854.4	1683992	1683992	0	11321213	11321213	0	ICE	388854.4	0	1	1
2019	2a	1	476712.9	2091787	2091787	0	14522562	14522562	0	ICE	476712.9	0	1	1
2019	2a	1	512705.3	2279093	2279093	0	16311722	16311722	0	ICE	512705.3	0	1	1
2019	2a	1	1254.143	5574.956	5574.956	0	39859.64	39859.64	0	ICE	1254.143	0	1	2
2019	2a	1	562919.7	2534557	2534557	0	18664085	18664085	0	ICE	562919.7	0	1	1

2019	2a	1	489405.9	2231598	2231598	0	16916882	16916882	0	ICE	489405.9	0	1	1
2019	2a	1	398228.7	1838662	1838662	0	14342067	14342067	0	ICE	398228.7	0	1	1
2019	2a	1	475130	2220943	2220943	0	17805849	17805849	0	ICE	475130	0	1	1
2019	2a	1	5272.191	24644.28	24644.28	0	196169.1	196169.1	0	ICE	5272.191	0	1	2
2019	2a	1	470931.8	2228299	2228299	0	18388171	18388171	0	ICE	470931.8	0	1	1
2019	2a	1	7107.682	33631.28	33631.28	0	274042.1	274042.1	0	ICE	7107.682	0	1	2
2019	2a	1	682298.6	3267507	3267507	0	27806190	27806190	0	ICE	682298.6	0	1	1
2019	2a	1	818701.8	3967642	3967642	0	34652692	34652692	0	ICE	818701.8	0	1	1
2019	2a	1	820250.9	4022141	4022141	0	36142983	36142983	0	ICE	820250.9	0	1	1
2019	2a	1	15128.23	74182.04	74182.04	0	664483.9	664483.9	0	ICE	15128.23	0	1	2
2019	2a	1	944932.2	4687658	4687658	0	43345609	43345609	0	ICE	944932.2	0	1	1
2019	2a	1	882284.3	4427417	4427417	0	42065619	42065619	0	ICE	882284.3	0	1	1
2019	2a	1	928007	4710025	4710025	0	45855109	45855109	0	ICE	928007	0	1	1
2019	2a	1	11356.37	57638.32	57638.32	0	563009.6	563009.6	0	ICE	11356.37	0	1	2
2019	2a	1	53974.08	273941.2	0	273941.2	2462189	0	2462189	BEV	0	53974.08	1	3
2019	2a	1	1101.512	5590.636	0	5590.636	43648.87	0	43648.87	FCEV	0	1101.512	1	7
2019	2a	1	48686.46	247104.2	133436.3	113667.9	2530836	1366652	1164185	PHEV	26290.69	22395.77	1	8
2019	2a	1	960024.7	4927528	4927528	0	49093458	49093458	0	ICE	960024.7	0	1	1
2019	2a	1	11748.18	60299.99	60299.99	0	602758.9	602758.9	0	ICE	11748.18	0	1	2
2019	2a	1	68242.08	350266.8	0	350266.8	3321114	0	3321114	BEV	0	68242.08	1	3
2019	2a	1	1392.696	7148.302	0	7148.302	57193.18	0	57193.18	FCEV	0	1392.696	1	7
2019	2a	1	44104.52	226375.7	122242.9	104132.8	2341190	1264242	1076947	PHEV	23816.44	20288.08	1	8
2019	2a	1	875234.9	4542469	4542469	0	46274265	46274265	0	ICE	875234.9	0	1	1
2019	2a	1	10665.04	55351.55	55351.55	0	565396.6	565396.6	0	ICE	10665.04	0	1	2
2019	2a	1	76294.24	395967.1	0	395967.1	3817893	0	3817893	BEV	0	76294.24	1	3
2019	2a	1	1784.661	9262.389	0	9262.389	75900.16	0	75900.16	FCEV	0	1784.661	1	7
2019	2a	1	37417.42	194196.4	102924.1	91272.31	2091805	1108657	983148.3	PHEV	19831.23	17586.19	1	8
2019	2a	1	1673.174	4561.96	4561.96	0	20921.67	20921.67	0	ICE	1673.174	0	2	1
2019	2a	1	2343.656	7195.658	7195.658	0	36807.74	36807.74	0	ICE	2343.656	0	2	1
2019	2a	1	2610.859	8165.618	8165.618	0	41878.41	41878.41	0	ICE	2610.859	0	2	1
2019	2a	1	5023.38	15998.71	15998.71	0	84121.46	84121.46	0	ICE	5023.38	0	2	1
2019	2a	1	7846.246	25438.63	25438.63	0	136030.1	136030.1	0	ICE	7846.246	0	2	1
2019	2a	1	13038.19	43018.6	43018.6	0	232638.9	232638.9	0	ICE	13038.19	0	2	1
2019	2a	1	12459.77	41823.96	41823.96	0	230261.1	230261.1	0	ICE	12459.77	0	2	1
2019	2a	1	12348.69	42158.54	42158.54	0	234687.5	234687.5	0	ICE	12348.69	0	2	1
2019	2a	1	16218.34	56298.73	56298.73	0	317737.4	317737.4	0	ICE	16218.34	0	2	1
2019	2a	1	13836.99	48825.06	48825.06	0	276563.2	276563.2	0	ICE	13836.99	0	2	1
2019	2a	1	17496.57	62740.61	62740.61	0	355828.3	355828.3	0	ICE	17496.57	0	2	1
2019	2a	1	15584.44	56776.76	56776.76	0	326402.4	326402.4	0	ICE	15584.44	0	2	1
2019	2a	1	20358.57	75336.07	75336.07	0	437595.1	437595.1	0	ICE	20358.57	0	2	1
2019	2a	1	25010.22	93982.17	93982.17	0	553796.8	553796.8	0	ICE	25010.22	0	2	1
2019	2a	1	24237.12	92465.59	92465.59	0	553585.8	553585.8	0	ICE	24237.12	0	2	1
2019	2a	1	27168.03	105203.6	105203.6	0	632891.2	632891.2	0	ICE	27168.03	0	2	1
2019	2a	1	35806.71	140706.8	140706.8	0	857151.4	857151.4	0	ICE	35806.71	0	2	1
2019	2a	1	45541.72	181570.7	181570.7	0	1123693	1123693	0	ICE	45541.72	0	2	1
2019	2a	1	41471.3	167718.2	167718.2	0	1053976	1053976	0	ICE	41471.3	0	2	1
2019	2a	1	44190.27	181245.9	181245.9	0	1159184	1159184	0	ICE	44190.27	0	2	1

2019	2a	1	48688.13	202483.2	202483.2	0	1315943	1315943	0	ICE	48688.13	0	2	1
2019	2a	1	49911.79	210431.6	210431.6	0	1391032	1391032	0	ICE	49911.79	0	2	1
2019	2a	1	34012.8	145348.9	145348.9	0	979202.9	979202.9	0	ICE	34012.8	0	2	1
2019	2a	1	17974.57	78871.33	78871.33	0	551438.1	551438.1	0	ICE	17974.57	0	2	1
2019	2a	1	27715.24	123200.6	123200.6	0	882833.2	882833.2	0	ICE	27715.24	0	2	1
2019	2a	1	38903.16	175162.3	175162.3	0	1282399	1282399	0	ICE	38903.16	0	2	1
2019	2a	1	64786.46	295414	295414	0	2213340	2213340	0	ICE	64786.46	0	2	1
2019	2a	1	46666.76	215465.1	215465.1	0	1649325	1649325	0	ICE	46666.76	0	2	1
2019	2a	1	23901.02	111722.7	111722.7	0	874829.6	874829.6	0	ICE	23901.02	0	2	1
2019	2a	1	20181.77	95493.65	95493.65	0	767864	767864	0	ICE	20181.77	0	2	1
2019	2a	1	131212.7	650925.3	650925.3	0	5836653	5836653	0	ICE	131212.7	0	2	1
2019	2a	1	116683.4	585532.7	585532.7	0	5380961	5380961	0	ICE	116683.4	0	2	1
2019	2a	1	100790.5	511554.1	511554.1	0	4829509	4829509	0	ICE	100790.5	0	2	1
2019	2a	1	13.6539	69.29926	69.29926	0	654.4326	654.4326	0	ICE	13.6539	0	2	2
2019	2a	1	3.396063	17.23645	0	17.23645	134.355	0	134.355	BEV	0	3.396063	2	3
2019	2a	1	0.069307	0.351764	0	0.351764	2.741938	0	2.741938	FCEV	0	0.069307	2	7
2019	2a	1	29.45565	149.4998	89.69987	59.79991	1412.047	847.2284	564.8189	PHEV	17.67339	11.78226	2	8
2019	2a	1	104996.9	538918.4	538918.4	0	5221740	5221740	0	ICE	104996.9	0	2	1
2019	2a	1	14.22372	73.00624	73.00624	0	707.5835	707.5835	0	ICE	14.22372	0	2	2
2019	2a	1	95547.54	495891.7	495891.7	0	4929940	4929940	0	ICE	95547.54	0	2	1
2019	2a	1	13.03395	67.64618	67.64618	0	672.9619	672.9619	0	ICE	13.03395	0	2	2
2019	2a	1	1270.441	6593.587	0	6593.587	61021.54	0	61021.54	BEV	0	1270.441	2	3
2019	2a	1	29.71791	154.2359	0	154.2359	1263.914	0	1263.914	FCEV	0	29.71791	2	7
2019	2a	1	975.6091	5063.411	3009.113	2054.298	52053.99	30934.94	21119.05	PHEV	579.7905	395.8185	2	8
2019	2a	1	3296.119	8986.966	8986.966	0	41429	41429	0	ICE	3296.119	0	3	1
2019	2a	1	2104.247	5857.845	5857.845	0	27783.39	27783.39	0	ICE	2104.247	0	3	1
2019	2a	1	1228.812	3702.387	3702.387	0	18236.19	18236.19	0	ICE	1228.812	0	3	1
2019	2a	1	3298.749	10506.02	10506.02	0	52459.18	52459.18	0	ICE	3298.749	0	3	1
2019	2a	1	5843.783	19281.15	19281.15	0	98243.66	98243.66	0	ICE	5843.783	0	3	1
2019	2a	1	6331.946	21254.57	21254.57	0	110104.5	110104.5	0	ICE	6331.946	0	3	1
2019	2a	1	8439.778	28813.49	28813.49	0	152246	152246	0	ICE	8439.778	0	3	1
2019	2a	1	11375.23	39486.82	39486.82	0	213274.5	213274.5	0	ICE	11375.23	0	3	1
2019	2a	1	13749.2	48515.29	48515.29	0	265628.7	265628.7	0	ICE	13749.2	0	3	1
2019	2a	1	17364.6	62267.39	62267.39	0	349069.1	349069.1	0	ICE	17364.6	0	3	1
2019	2a	1	16715.3	60896.67	60896.67	0	345084.9	345084.9	0	ICE	16715.3	0	3	1
2019	2a	1	23733.58	87825.16	87825.16	0	504316.3	504316.3	0	ICE	23733.58	0	3	1
2019	2a	1	27921.73	104922.9	104922.9	0	611423.6	611423.6	0	ICE	27921.73	0	3	1
2019	2a	1	37242.25	142080.7	142080.7	0	842152.6	842152.6	0	ICE	37242.25	0	3	1
2019	2a	1	38375.71	148603.4	148603.4	0	889271.1	889271.1	0	ICE	38375.71	0	3	1
2019	2a	1	63023.91	247660	247660	0	1503355	1503355	0	ICE	63023.91	0	3	1
2019	2a	1	75592.39	301380.1	301380.1	0	1855729	1855729	0	ICE	75592.39	0	3	1
2019	2a	1	92112.97	372523.3	372523.3	0	2329360	2329360	0	ICE	92112.97	0	3	1
2019	2a	1	134286.5	550774.7	550774.7	0	3503457	3503457	0	ICE	134286.5	0	3	1
2019	2a	1	138838.9	577400.2	577400.2	0	3734705	3734705	0	ICE	138838.9	0	3	1
2019	2a	1	142585.6	601150.7	601150.7	0	3971814	3971814	0	ICE	142585.6	0	3	1
2019	2a	1	167682.2	716566.2	716566.2	0	4828137	4828137	0	ICE	167682.2	0	3	1
2019	2a	1	206874.8	895902.4	895902.4	0	6153337	6153337	0	ICE	206874.8	0	3	1

2019	2a	1	228741.2	1003703	1003703	0	7044531	7044531	0	ICE	228741.2	0	3	1
2019	2a	1	209470	931142.2	931142.2	0	6680713	6680713	0	ICE	209470	0	3	1
2019	2a	1	210775.8	949022.4	949022.4	0	6956403	6956403	0	ICE	210775.8	0	3	1
2019	2a	1	163653.4	746228.3	746228.3	0	5590217	5590217	0	ICE	163653.4	0	3	1
2019	2a	1	99218.75	458102.9	458102.9	0	3515214	3515214	0	ICE	99218.75	0	3	1
2019	2a	1	171992.8	803961.2	803961.2	0	6311195	6311195	0	ICE	171992.8	0	3	1
2019	2a	1	221785	1049416	1049416	0	8448019	8448019	0	ICE	221785	0	3	1
2019	2a	1	208344.3	997754.8	997754.8	0	8266207	8266207	0	ICE	208344.3	0	3	1
2019	2a	1	275267.7	1334019	1334019	0	11333207	11333207	0	ICE	275267.7	0	3	1
2019	2a	1	252151.6	1236438	1236438	0	10792792	10792792	0	ICE	252151.6	0	3	1
2019	2a	1	2732.888	13400.85	13400.85	0	115463.6	115463.6	0	ICE	2732.888	0	3	2
2019	2a	1	294656.7	1461745	1461745	0	13095214	13095214	0	ICE	294656.7	0	3	1
2019	2a	1	277943.1	1394754	1394754	0	12822182	12822182	0	ICE	277943.1	0	3	1
2019	2a	1	1872.216	9395.024	9395.024	0	86619.43	86619.43	0	ICE	1872.216	0	3	2
2019	2a	1	315277.6	1600166	1600166	0	15049492	15049492	0	ICE	315277.6	0	3	1
2019	2a	1	3222.489	16355.49	16355.49	0	154252.9	154252.9	0	ICE	3222.489	0	3	2
2019	2a	1	331466.2	1701320	1701320	0	16421904	16421904	0	ICE	331466.2	0	3	1
2019	2a	1	3387.954	17389.39	17389.39	0	168321.7	168321.7	0	ICE	3387.954	0	3	2
2019	2a	1	1143.604	5869.79	3521.874	2347.916	56907.06	34144.24	22762.83	PHEV	686.1627	457.4418	3	8
2019	2a	1	301575.3	1565176	1565176	0	15541491	15541491	0	ICE	301575.3	0	3	1
2019	2a	1	3074.666	15957.52	15957.52	0	158822	158822	0	ICE	3074.666	0	3	2
2019	2a	1	3556.701	18459.28	0	18459.28	144083.7	0	144083.7	BEV	0	3556.701	3	3
2019	2a	1	83.19768	431.796	0	431.796	3057.77	0	3057.77	FCEV	0	83.19768	3	7
2019	2a	1	3089.205	16032.97	9528.168	6504.807	159500.2	94788.7	64711.52	PHEV	1835.87	1253.335	3	8
2019	2a	1	3144.972	8394.685	8394.685	0	37255.46	37255.46	0	ICE	3144.972	0	4	1
2019	2a	1	2499.945	6816.174	6816.174	0	30298.05	30298.05	0	ICE	2499.945	0	4	1
2019	2a	1	5334.432	14850.1	14850.1	0	64906.51	64906.51	0	ICE	5334.432	0	4	1
2019	2a	1	8589.448	24403.57	24403.57	0	109190.7	109190.7	0	ICE	8589.448	0	4	1
2019	2a	1	1825.357	5499.764	5499.764	0	26413.85	26413.85	0	ICE	1825.357	0	4	1
2019	2a	1	7776.556	27440.28	27440.28	0	140289.2	140289.2	0	ICE	7776.556	0	4	1
2019	2a	1	7423.031	26618.1	26618.1	0	139024.7	139024.7	0	ICE	7423.031	0	4	1
2019	2a	1	10134.61	36922.1	36922.1	0	195747	195747	0	ICE	10134.61	0	4	1
2019	2a	1	12429.92	45996.41	45996.41	0	250217.7	250217.7	0	ICE	12429.92	0	4	1
2019	2a	1	22080.42	82972.7	82972.7	0	458388.4	458388.4	0	ICE	22080.42	0	4	1
2019	2a	1	27661.95	105531.4	105531.4	0	594068.5	594068.5	0	ICE	27661.95	0	4	1
2019	2a	1	27996.75	108412.7	108412.7	0	619064.9	619064.9	0	ICE	27996.75	0	4	1
2019	2a	1	40887.42	160672	160672	0	935595.8	935595.8	0	ICE	40887.42	0	4	1
2019	2a	1	50274.89	200441.5	200441.5	0	1186325	1186325	0	ICE	50274.89	0	4	1
2019	2a	1	88960.71	359774.9	359774.9	0	2174850	2174850	0	ICE	88960.71	0	4	1
2019	2a	1	108140.6	443537.6	443537.6	0	2733614	2733614	0	ICE	108140.6	0	4	1
2019	2a	1	146448.3	609046.1	609046.1	0	3829539	3829539	0	ICE	146448.3	0	4	1
2019	2a	1	136.1315	566.141	566.141	0	3518.507	3518.507	0	ICE	136.1315	0	4	2
2019	2a	1	184303.5	777036.3	777036.3	0	4996358	4996358	0	ICE	184303.5	0	4	1
2019	2a	1	205229.4	877019.1	877019.1	0	5779994	5779994	0	ICE	205229.4	0	4	1
2019	2a	1	223808.2	969235.1	969235.1	0	6535635	6535635	0	ICE	223808.2	0	4	1
2019	2a	1	304.7777	1319.885	1319.885	0	8793.064	8793.064	0	ICE	304.7777	0	4	2
2019	2a	1	207478.1	910401.6	910401.6	0	6274366	6274366	0	ICE	207478.1	0	4	1

2019	2a	1	202477.5	900059	900059	0	6344888	6344888	0	ICE	202477.5	0	4	1
2019	2a	1	198864	895388.9	895388.9	0	6471443	6471443	0	ICE	198864	0	4	1
2019	2a	1	146864.6	669674.8	669674.8	0	4959245	4959245	0	ICE	146864.6	0	4	1
2019	2a	1	60141.19	277677.9	277677.9	0	2109205	2109205	0	ICE	60141.19	0	4	1
2019	2a	1	84649.65	395685.5	395685.5	0	3084632	3084632	0	ICE	84649.65	0	4	1
2019	2a	1	118317.8	559842.2	559842.2	0	4476914	4476914	0	ICE	118317.8	0	4	1
2019	2a	1	3349.334	15847.98	15847.98	0	125976.9	125976.9	0	ICE	3349.334	0	4	2
2019	2a	1	116155.3	556264.4	556264.4	0	4577401	4577401	0	ICE	116155.3	0	4	1
2019	2a	1	125933.3	610305.6	610305.6	0	5162068	5162068	0	ICE	125933.3	0	4	1
2019	2a	1	2756.585	13359.13	13359.13	0	111587.9	111587.9	0	ICE	2756.585	0	4	2
2019	2a	1	192507.9	943972	943972	0	8198788	8198788	0	ICE	192507.9	0	4	1
2019	2a	1	5934.198	29098.64	29098.64	0	252707.4	252707.4	0	ICE	5934.198	0	4	2
2019	2a	1	204693.5	1015452	1015452	0	9056492	9056492	0	ICE	204693.5	0	4	1
2019	2a	1	217485.5	1091370	1091370	0	9954071	9954071	0	ICE	217485.5	0	4	1
2019	2a	1	199459	1012338	1012338	0	9395680	9395680	0	ICE	199459	0	4	1
2019	2a	1	6955.166	35300.39	35300.39	0	327829	327829	0	ICE	6955.166	0	4	2
2019	2a	1	1668.73	8469.508	5081.705	3387.803	75158.01	45094.8	30063.2	PHEV	1001.238	667.4922	4	8
2019	2a	1	205889.3	1056770	1056770	0	10055105	10055105	0	ICE	205889.3	0	4	1
2019	2a	1	7179.392	36849.74	36849.74	0	350837.7	350837.7	0	ICE	7179.392	0	4	2
2019	2a	1	3.601616	18.48605	0	18.48605	127.7891	0	127.7891	BEV	0	3.601616	4	3
2019	2a	1	0.073502	0.377266	0	0.377266	2.60794	0	2.60794	FCEV	0	0.073502	4	7
2019	2a	1	4407.386	22621.83	13573.1	9048.733	211554	126932.4	84621.6	PHEV	2644.431	1762.954	4	8
2019	2a	1	181062.5	939714.5	939714.5	0	9141447	9141447	0	ICE	181062.5	0	4	1
2019	2a	1	6373.284	33077.34	33077.34	0	322228.3	322228.3	0	ICE	6373.284	0	4	2
2019	2a	1	1552.152	8055.668	0	8055.668	59288.59	0	59288.59	BEV	0	1552.152	4	3
2019	2a	1	36.30764	188.4367	0	188.4367	1334.417	0	1334.417	FCEV	0	36.30764	4	7
2019	2a	1	4038.379	20959.19	12455.75	8503.442	211483.7	125681.7	85801.96	PHEV	2399.951	1638.428	4	8
2019	2a	1	11276.7	30746.27	30746.27	0	68864.76	68864.76	0	ICE	11276.7	0	1	1
2019	2a	1	12003.52	33415.63	33415.63	0	75660.54	75660.54	0	ICE	12003.52	0	1	1
2019	2a	1	209.3008	582.6559	582.6559	0	1315.968	1315.968	0	ICE	209.3008	0	1	2
2019	2a	1	410.0741	1165.066	1165.066	0	2749.99	2749.99	0	ICE	410.0741	0	1	2
2019	2a	1	903.5249	2618.777	2618.777	0	6537.814	6537.814	0	ICE	903.5249	0	1	2
2019	2a	1	5769.104	17382.19	17382.19	0	47523.26	47523.26	0	ICE	5769.104	0	1	1
2019	2a	1	1696.615	5111.866	5111.866	0	13846.17	13846.17	0	ICE	1696.615	0	1	2
2019	2a	1	1996.059	6128.441	6128.441	0	17530.85	17530.85	0	ICE	1996.059	0	1	2
2019	2a	1	2025.619	6335.246	6335.246	0	18558.09	18558.09	0	ICE	2025.619	0	1	2
2019	2a	1	10445.3	33266.72	33266.72	0	104109.1	104109.1	0	ICE	10445.3	0	1	1
2019	2a	1	1665.964	5401.289	5401.289	0	17370.12	17370.12	0	ICE	1665.964	0	1	2
2019	2a	1	18634.2	62549.8	62549.8	0	220743.8	220743.8	0	ICE	18634.2	0	1	1
2019	2a	1	155.6332	558.0818	558.0818	0	2351.01	2351.01	0	ICE	155.6332	0	1	2
2019	2a	1	91.68519	334.0247	334.0247	0	1414.786	1414.786	0	ICE	91.68519	0	1	2
2019	2a	1	54.41794	201.3714	201.3714	0	904.3332	904.3332	0	ICE	54.41794	0	1	2
2019	2a	1	226.6865	890.7917	890.7917	0	4714.756	4714.756	0	ICE	226.6865	0	1	2
2019	2a	1	444.1219	1821.561	1821.561	0	10880.74	10880.74	0	ICE	444.1219	0	1	2
2019	2a	1	77.34845	321.6752	0	321.6752	1600.95	0	1600.95	BEV	0	77.34845	1	3
2019	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2019	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8

2019	2a	1	1216.142	5127.341	5127.341	0	32300.6	32300.6	0	ICE	1216.142	0	1	2
2019	2a	1	1687.036	7209.314	7209.314	0	47138.78	47138.78	0	ICE	1687.036	0	1	2
2019	2a	1	624.0556	2702.566	2702.566	0	18263.07	18263.07	0	ICE	624.0556	0	1	2
2019	2a	1	1204.647	5285.92	5285.92	0	36287.57	36287.57	0	ICE	1204.647	0	1	2
2019	2a	1	3100.12	14313.56	14313.56	0	111018.8	111018.8	0	ICE	3100.12	0	1	2
2019	2a	1	7744.443	37087.91	37087.91	0	312954.6	312954.6	0	ICE	7744.443	0	1	2
2019	2a	1	10616.44	51450.05	51450.05	0	447830.6	447830.6	0	ICE	10616.44	0	1	2
2019	2a	1	10115.74	49023.48	0	49023.48	341742.2	0	341742.2	BEV	0	10115.74	1	3
2019	2a	1	0.594309	2.880177	0	2.880177	20.07768	0	20.07768	FCEV	0	0.594309	1	7
2019	2a	1	10573.35	51241.22	30744.73	20496.49	438269.5	262961.7	175307.8	PHEV	6344.012	4229.341	1	8
2019	2a	1	12372.8	60670.64	0	60670.64	435063.5	0	435063.5	BEV	0	12372.8	1	3
2019	2a	1	1.733613	8.50086	0	8.50086	60.95888	0	60.95888	FCEV	0	1.733613	1	7
2019	2a	1	15621.59	76601.25	45960.75	30640.5	675006.8	405004.1	270002.7	PHEV	9372.954	6248.636	1	8
2019	2a	1	10619.12	52679.74	52679.74	0	487506.8	487506.8	0	ICE	10619.12	0	1	2
2019	2a	1	27664.2	137237.7	0	137237.7	1012097	0	1012097	BEV	0	27664.2	1	3
2019	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2019	2a	1	13155.07	65260.19	39156.11	26104.08	593025.9	355815.5	237210.4	PHEV	7893.041	5262.027	1	8
2019	2a	1	2231.029	5955.151	5955.151	0	24613.38	24613.38	0	ICE	2231.029	0	2	1
2019	2a	1	1779.249	4953.108	4953.108	0	24016.81	24016.81	0	ICE	1779.249	0	2	1
2019	2a	1	2285.68	6493.867	6493.867	0	32151.69	32151.69	0	ICE	2285.68	0	2	1
2019	2a	1	2652.441	7687.834	7687.834	0	38131.69	38131.69	0	ICE	2652.441	0	2	1
2019	2a	1	2315.245	6843.148	6843.148	0	34090.19	34090.19	0	ICE	2315.245	0	2	1
2019	2a	1	1820.443	5484.959	5484.959	0	27942.59	27942.59	0	ICE	1820.443	0	2	1
2019	2a	1	380.991	1169.745	1169.745	0	5730.589	5730.589	0	ICE	380.991	0	2	2
2019	2a	1	184.3199	576.4716	576.4716	0	2799.877	2799.877	0	ICE	184.3199	0	2	2
2019	2a	1	145.8796	472.9619	472.9619	0	2346.226	2346.226	0	ICE	145.8796	0	2	2
2019	2a	1	28825.28	124832.2	124832.2	0	856505.8	856505.8	0	ICE	28825.28	0	2	1
2019	2a	1	37800.54	181025.6	181025.6	0	1497971	1497971	0	ICE	37800.54	0	2	1
2019	2a	1	52976.9	256739.8	256739.8	0	2181909	2181909	0	ICE	52976.9	0	2	1
2019	2a	1	63247.62	310137.9	310137.9	0	2705586	2705586	0	ICE	63247.62	0	2	1
2019	2a	1	4827.555	12885.9	12885.9	0	59470.47	59470.47	0	ICE	4827.555	0	3	1
2019	2a	1	3052.179	8671.575	8671.575	0	41096.25	41096.25	0	ICE	3052.179	0	3	1
2019	2a	1	3036.904	8802.162	8802.162	0	42775.88	42775.88	0	ICE	3036.904	0	3	1
2019	2a	1	1783.504	5271.486	5271.486	0	25802.91	25802.91	0	ICE	1783.504	0	3	1
2019	2a	1	29.44923	88.72995	88.72995	0	447.4887	447.4887	0	ICE	29.44923	0	3	2
2019	2a	1	1285.66	3947.322	3947.322	0	19266.81	19266.81	0	ICE	1285.66	0	3	1
2019	2a	1	1714.705	5362.842	5362.842	0	26526	26526	0	ICE	1714.705	0	3	1
2019	2a	1	3736.48	12114.19	12114.19	0	60773.25	60773.25	0	ICE	3736.48	0	3	1
2019	2a	1	49.56679	226.0151	226.0151	0	1712.205	1712.205	0	ICE	49.56679	0	3	2
2019	2a	1	1425.461	6826.49	6826.49	0	55832.27	55832.27	0	ICE	1425.461	0	3	2
2019	2a	1	1004.861	4869.818	4869.818	0	40911.13	40911.13	0	ICE	1004.861	0	3	2
2019	2a	1	3821.162	18956.18	18956.18	0	168295.4	168295.4	0	ICE	3821.162	0	3	2
2019	2a	1	3972.932	19936.69	0	19936.69	130610.5	0	130610.5	BEV	0	3972.932	3	3
2019	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2019	2a	1	361.566	1814.385	1088.631	725.754	16338.14	9802.883	6535.255	PHEV	216.9396	144.6264	3	8
2019	2a	1	8438.042	24456.82	24456.82	0	110569.6	110569.6	0	ICE	8438.042	0	4	1
2019	2a	1	3321.648	9817.762	9817.762	0	44517.74	44517.74	0	ICE	3321.648	0	4	1

2019	2a	1	1807.437	5549.319	5549.319	0	26990.44	26990.44	0	ICE	1807.437	0	4	1
2019	2a	1	362.4766	1112.901	1112.901	0	4733.885	4733.885	0	ICE	362.4766	0	4	2
2019	2a	1	1203.012	3762.491	3762.491	0	17634.59	17634.59	0	ICE	1203.012	0	4	1
2019	2a	1	1972.391	6281.769	6281.769	0	30073.57	30073.57	0	ICE	1972.391	0	4	1
2019	2a	1	264.2274	841.5248	841.5248	0	3725.382	3725.382	0	ICE	264.2274	0	4	2
2019	2a	1	2679.998	8688.929	8688.929	0	41893.38	41893.38	0	ICE	2679.998	0	4	1
2019	2a	1	139.5286	452.3712	452.3712	0	2004.607	2004.607	0	ICE	139.5286	0	4	2
2019	2a	1	3520.943	11617.1	11617.1	0	55703.03	55703.03	0	ICE	3520.943	0	4	1
2019	2a	1	3735.911	12540.41	12540.41	0	60858.21	60858.21	0	ICE	3735.911	0	4	1
2019	2a	1	4906.578	16751.11	16751.11	0	83658.6	83658.6	0	ICE	4906.578	0	4	1
2019	2a	1	14.9757	51.1272	51.1272	0	250.9488	250.9488	0	ICE	14.9757	0	4	2
2019	2a	1	6627.109	23004.68	23004.68	0	116340.6	116340.6	0	ICE	6627.109	0	4	1
2019	2a	1	82.49728	310.0041	310.0041	0	1674.723	1674.723	0	ICE	82.49728	0	4	2
2019	2a	1	76.3447	308.7532	308.7532	0	1802.749	1802.749	0	ICE	76.3447	0	4	2
2019	2a	1	518.5556	2275.391	2275.391	0	15682.06	15682.06	0	ICE	518.5556	0	4	2
2019	2a	1	711.0116	3160.61	3160.61	0	22345.66	22345.66	0	ICE	711.0116	0	4	2
2019	2a	1	949.0484	4273.109	4273.109	0	31070.05	31070.05	0	ICE	949.0484	0	4	2
2019	2a	1	674.2117	3074.277	3074.277	0	22968.71	22968.71	0	ICE	674.2117	0	4	2
2019	2a	1	937.6713	4329.322	4329.322	0	32565.26	32565.26	0	ICE	937.6713	0	4	2
2019	2a	1	5386.188	25794.29	25794.29	0	213919.3	213919.3	0	ICE	5386.188	0	4	2
2019	2a	1	10864.02	53894.65	53894.65	0	485818.5	485818.5	0	ICE	10864.02	0	4	2
2019	2a	1	6789.76	34071.9	34071.9	0	315917.3	315917.3	0	ICE	6789.76	0	4	2
2019	2a	1	1694.227	5395.86	5395.86	0	16500.26	16500.26	0	ICE	1694.227	0	1	2
2019	2a	1	101.6604	358.7179	358.7179	0	1424.794	1424.794	0	ICE	101.6604	0	1	2
2019	2a	1	514.8891	2082.314	2082.314	0	11875.63	11875.63	0	ICE	514.8891	0	1	2
2019	2a	1	47.37407	207.8746	0	207.8746	1164.348	0	1164.348	BEV	0	47.37407	1	3
2019	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2019	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2019	2a	1	2186.166	10469.49	0	10469.49	71134.14	0	71134.14	BEV	0	2186.166	1	3
2019	2a	1	8.261809	39.56555	0	39.56555	268.8252	0	268.8252	FCEV	0	8.261809	1	7
2019	2a	1	4595.402	22007.24	13204.34	8802.896	183452.6	110071.6	73381.04	PHEV	2757.241	1838.161	1	8
2019	2a	1	17669.28	88666.74	0	88666.74	671730.4	0	671730.4	BEV	0	17669.28	1	3
2019	2a	1	537.9545	2699.526	0	2699.526	20451.34	0	20451.34	FCEV	0	537.9545	1	7
2019	2a	1	12706.57	63763.24	38257.95	25505.3	597371.8	358423.1	238948.7	PHEV	7623.945	5082.63	1	8
2019	2a	1	15.47466	58.14989	58.14989	0	307.9723	307.9723	0	ICE	15.47466	0	2	2
2019	2a	1	9.56845	36.50402	36.50402	0	198.9574	198.9574	0	ICE	9.56845	0	2	2
2019	2a	1	19.36643	77.21221	77.21221	0	461.5085	461.5085	0	ICE	19.36643	0	2	2
2019	2a	1	29.36276	96.88037	96.88037	0	514.7001	514.7001	0	ICE	29.36276	0	3	2
2019	2a	1	167.1658	733.5137	733.5137	0	5143.935	5143.935	0	ICE	167.1658	0	3	2
2019	2a	1	175.3649	779.5372	779.5372	0	5667.676	5667.676	0	ICE	175.3649	0	3	2
2019	2a	1	341.6427	1068.508	1068.508	0	4546.248	4546.248	0	ICE	341.6427	0	4	2
2019	2a	1	57.87508	230.7427	230.7427	0	1311.51	1311.51	0	ICE	57.87508	0	4	2
2019	2a	1	179.7645	768.1986	768.1986	0	5035.954	5035.954	0	ICE	179.7645	0	4	2
2019	2a	1	1624.544	7593.753	7593.753	0	58434.18	58434.18	0	ICE	1624.544	0	4	2
2019	2a	1	125.0297	333.7342	333.7342	0	708.6081	708.6081	0	ICE	125.0297	0	1	2
2019	2a	1	188.9687	515.2288	515.2288	0	1076.513	1076.513	0	ICE	188.9687	0	1	2
2019	2a	1	939.6101	2777.196	2777.196	0	7186.009	7186.009	0	ICE	939.6101	0	1	2

2019	2a	1	367.2425	1211.691	1211.691	0	4006.619	4006.619	0	ICE	367.2425	0	1	2
2019	2a	1	893.6551	2999.75	2999.75	0	10494.14	10494.14	0	ICE	893.6551	0	1	2
2019	2a	1	285.5422	1089.355	1089.355	0	5322.608	5322.608	0	ICE	285.5422	0	1	2
2019	2a	1	242.1895	937.8378	937.8378	0	4736.864	4736.864	0	ICE	242.1895	0	1	2
2019	2a	1	460.8953	1837.548	1837.548	0	10164.57	10164.57	0	ICE	460.8953	0	1	2
2019	2a	1	156.7373	660.8155	0	660.8155	3384.796	0	3384.796	BEV	0	156.7373	1	3
2019	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2019	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2019	2a	1	2790.053	13201.64	0	13201.64	87213.6	0	87213.6	BEV	0	2790.053	1	3
2019	2a	1	27.56528	130.4301	0	130.4301	861.6564	0	861.6564	FCEV	0	27.56528	1	7
2019	2a	1	775.5529	3669.668	2201.801	1467.867	29634.8	17780.88	11853.92	PHEV	465.3317	310.2212	1	8
2019	2a	1	1488.063	7467.292	7467.292	0	70393.34	70393.34	0	ICE	1488.063	0	1	2
2019	2a	1	120.2307	362.2527	362.2527	0	1779.41	1779.41	0	ICE	120.2307	0	2	2
2019	2a	1	155.4901	495.2126	495.2126	0	2511.068	2511.068	0	ICE	155.4901	0	2	2
2019	2a	1	59.51181	196.355	196.355	0	979.9218	979.9218	0	ICE	59.51181	0	2	2
2019	2a	1	674.6052	3307.96	0	3307.96	23721.02	0	23721.02	BEV	0	674.6052	2	3
2019	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2019	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2019	2a	1	80.83092	238.9112	238.9112	0	1177.953	1177.953	0	ICE	80.83092	0	3	2
2019	2a	1	55.1897	172.6091	172.6091	0	828.8227	828.8227	0	ICE	55.1897	0	3	2
2019	2a	1	45.89021	146.1534	146.1534	0	728.4711	728.4711	0	ICE	45.89021	0	3	2
2019	2a	1	2.605267	9.342173	9.342173	0	53.43541	53.43541	0	ICE	2.605267	0	3	2
2019	2a	1	78.55838	232.1942	232.1942	0	1060.972	1060.972	0	ICE	78.55838	0	4	2
2019	2a	1	95.74056	315.8893	315.8893	0	1496.819	1496.819	0	ICE	95.74056	0	4	2
2019	2a	1	52.61837	194.7122	194.7122	0	991.6787	991.6787	0	ICE	52.61837	0	4	2
2019	2a	1	108.8048	415.0948	415.0948	0	2233.481	2233.481	0	ICE	108.8048	0	4	2
2019	2a	1	111.356	431.2071	431.2071	0	2355.25	2355.25	0	ICE	111.356	0	4	2
2019	2a	1	51.20141	177.7355	177.7355	0	720.1592	720.1592	0	ICE	51.20141	0	1	2
2019	2a	1	268.2327	1223.09	1223.09	0	9126.487	9126.487	0	ICE	268.2327	0	1	2
2019	2a	1	26.31824	112.4673	112.4673	0	739.6348	739.6348	0	ICE	26.31824	0	2	2
2019	2a	1	51.13132	136.4818	136.4818	0	653.3824	653.3824	0	ICE	51.13132	0	3	2
2019	2a	1	1.214297	4.910861	4.910861	0	32.09792	32.09792	0	ICE	1.214297	0	3	2
2019	2a	1	90.47372	422.9095	422.9095	0	3320.742	3320.742	0	ICE	90.47372	0	3	2
2019	2a	1	218.9095	1073.433	0	1073.433	6686.458	0	6686.458	BEV	0	218.9095	3	3
2019	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2019	2a	1	99.11535	486.0171	291.6103	194.4068	4150.04	2490.024	1660.016	PHEV	59.46921	39.64614	3	8
2019	2a	1	43.03947	129.6771	129.6771	0	689.6942	689.6942	0	ICE	43.03947	0	4	2
2019	2a	1	26.10116	93.59562	93.59562	0	473.2489	473.2489	0	ICE	26.10116	0	4	2
2019	2a	1	141.9235	557.7053	557.7053	0	3087.954	3087.954	0	ICE	141.9235	0	4	2
2019	2a	1	68.28536	287.8959	287.8959	0	1848.381	1848.381	0	ICE	68.28536	0	4	2
2019	2a	1	210.8468	997.6595	997.6595	0	7964.555	7964.555	0	ICE	210.8468	0	3	2
2019	2a	1	18.50455	64.23486	64.23486	0	308.6945	308.6945	0	ICE	18.50455	0	4	2
2019	2a	1	27.57544	113.1004	113.1004	0	684.7573	684.7573	0	ICE	27.57544	0	4	2
2019	2a	1	41.45168	174.7632	0	174.7632	778.6827	0	778.6827	BEV	0	41.45168	3	3
2019	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2019	2a	1	0	0	0	0	0	0	0	PHEV	0	0	3	8
2019	2a	1	166.6148	702.4598	0	702.4598	3135.379	0	3135.379	BEV	0	166.6148	4	3

2019	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2019	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2019	2a	1	55.56068	189.6847	189.6847	0	713.2342	713.2342	0	ICE	55.56068	0	1	2
2019	2a	1	40.70418	152.9561	152.9561	0	729.5586	729.5586	0	ICE	40.70418	0	1	2
2019	2a	1	177.0478	797.1611	797.1611	0	5781.744	5781.744	0	ICE	177.0478	0	1	2
2019	2a	1	482.1463	2253.74	0	2253.74	14488.38	0	14488.38	BEV	0	482.1463	1	3
2019	2a	1	48.94886	228.8061	0	228.8061	1470.902	0	1470.902	FCEV	0	48.94886	1	7
2019	2a	1	51.3963	240.2464	144.1478	96.09855	1881.925	1129.155	752.7699	PHEV	30.83778	20.55852	1	8
2019	2a	1	40.95424	137.4719	137.4719	0	675.702	675.702	0	ICE	40.95424	0	2	2
2019	2a	1	18.42862	67.1386	67.1386	0	323.9322	323.9322	0	ICE	18.42862	0	2	2
2019	2a	1	298.4245	1429.146	0	1429.146	9701.627	0	9701.627	BEV	0	298.4245	2	3
2019	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2019	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2019	2a	1	101.9195	295.4034	295.4034	0	1479.194	1479.194	0	ICE	101.9195	0	3	2
2019	2a	1	184.7776	567.3172	567.3172	0	2718.751	2718.751	0	ICE	184.7776	0	3	2
2019	2a	1	10.66422	35.79681	35.79681	0	196.2181	196.2181	0	ICE	10.66422	0	3	2
2019	2a	1	85.99241	397.0356	397.0356	0	2964.944	2964.944	0	ICE	85.99241	0	3	2
2019	2a	1	45.08535	164.2536	164.2536	0	868.2724	868.2724	0	ICE	45.08535	0	4	2
2019	2a	1	60.1478	267.3708	0	267.3708	1545.229	0	1545.229	BEV	0	60.1478	1	3
2019	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2019	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2019	2a	1	326.2826	1487.787	0	1487.787	9031.448	0	9031.448	BEV	0	326.2826	1	3
2019	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2019	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2019	2a	1	263.455	1216.398	0	1216.398	7673.319	0	7673.319	BEV	0	263.455	1	3
2019	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2019	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2019	2a	1	2.990326	8.495844	8.495844	0	32.59234	32.59234	0	ICE	2.990326	0	2	2
2019	2a	1	19.40007	67.34346	67.34346	0	311.1951	311.1951	0	ICE	19.40007	0	2	2
2019	2a	1	20.112	77.88029	77.88029	0	466.1583	466.1583	0	ICE	20.112	0	2	2
2019	2a	1	33.06102	152.646	152.646	0	1153.522	1153.522	0	ICE	33.06102	0	2	2
2019	2a	1	362.6291	1757.395	0	1757.395	12265.55	0	12265.55	BEV	0	362.6291	2	3
2019	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2019	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2019	2a	1	28.57914	128.6782	128.6782	0	946.5267	946.5267	0	ICE	28.57914	0	3	2
2019	2a	1	11.62304	31.69057	31.69057	0	154.3766	154.3766	0	ICE	11.62304	0	4	2
2019	2a	1	11.28302	31.4099	31.4099	0	145.2265	145.2265	0	ICE	11.28302	0	4	2
2019	2a	1	26.25016	88.11443	88.11443	0	442.147	442.147	0	ICE	26.25016	0	4	2
2019	2a	1	19.86018	70.07843	70.07843	0	364.3885	364.3885	0	ICE	19.86018	0	4	2
2019	2a	1	43.46716	185.7508	0	185.7508	984.4494	0	984.4494	BEV	0	43.46716	1	3
2019	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2019	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2019	2a	1	103.4374	465.729	0	465.729	2769.625	0	2769.625	BEV	0	103.4374	1	3
2019	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2019	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2019	2a	1	50.6762	231.0739	0	231.0739	1413.062	0	1413.062	BEV	0	50.6762	2	3
2019	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7

2019	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2019	2a	1	5.434577	26.02602	26.02602	0	223.5288	223.5288	0	ICE	5.434577	0	2	2
2019	2a	1	2.3556	10.47118	0	10.47118	54.40582	0	54.40582	BEV	0	2.3556	4	3
2019	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2019	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2019	2a	1	10.9072	32.23831	32.23831	0	159.2963	159.2963	0	ICE	10.9072	0	2	2
2019	2a	1	52.13034	148.108	148.108	0	696.6536	696.6536	0	ICE	52.13034	0	3	2
2019	2a	1	17.32845	72.06519	72.06519	0	439.3088	439.3088	0	ICE	17.32845	0	2	2
2019	2a	1	8.354914	29.00241	29.00241	0	160.0226	160.0226	0	ICE	8.354914	0	3	2
2019	2a	1	2.69604	11.52115	11.52115	0	82.87352	82.87352	0	ICE	2.69604	0	3	2
2019	2a	1	7.268066	26.89519	0	26.89519	101.8234	0	101.8234	BEV	0	7.268066	1	3
2019	2a	1	26.1566	71.31675	71.31675	0	383.0103	383.0103	0	ICE	26.1566	0	3	2
2019	2a	1	10.53251	35.9581	35.9581	0	203.3468	203.3468	0	ICE	10.53251	0	3	2
2019	2a	1	2.931552	10.68014	10.68014	0	59.22359	59.22359	0	ICE	2.931552	0	3	2
2019	2a	1	43.87703	202.5846	0	202.5846	1121.15	0	1121.15	BEV	0	43.87703	3	3
2019	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2019	2a	1	0	0	0	0	0	0	0	PHEV	0	0	3	8
2019	2a	1	20.33503	96.21886	0	96.21886	558.5706	0	558.5706	BEV	0	20.33503	3	3
2019	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2019	2a	1	14.0781	66.61306	39.96784	26.64522	532.5219	319.5131	213.0088	PHEV	8.446859	5.63124	3	8
2019	2a	1	1.93172	9.582955	0	9.582955	60.46449	0	60.46449	BEV	0	1.93172	4	3
2019	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2019	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2019	2a	1	5.139927	18.72563	0	18.72563	69.51338	0	69.51338	BEV	0	5.139927	1	3
2019	2a	1	21.52573	73.48907	73.48907	0	339.7709	339.7709	0	ICE	21.52573	0	2	2
2019	2a	1	106.0143	434.8165	0	434.8165	2089.848	0	2089.848	BEV	0	106.0143	2	3
2019	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2019	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2019	2a	1	39.77239	165.4046	0	165.4046	828.6695	0	828.6695	BEV	0	39.77239	2	3
2019	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2019	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2019	2a	1	31.74376	133.8339	133.8339	0	882.6251	882.6251	0	ICE	31.74376	0	2	2
2019	2a	1	12.56598	55.85869	0	55.85869	323.5438	0	323.5438	BEV	0	12.56598	2	3
2019	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2019	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2019	2a	1	23.0712	103.8786	103.8786	0	744.8553	744.8553	0	ICE	23.0712	0	2	2
2019	2a	1	6.364183	28.65486	0	28.65486	171.2606	0	171.2606	BEV	0	6.364183	2	3
2019	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2019	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2019	2a	1	27.03356	123.2679	123.2679	0	918.7049	918.7049	0	ICE	27.03356	0	2	2
2019	2a	1	20.30165	93.73475	0	93.73475	589.2562	0	589.2562	BEV	0	20.30165	2	3
2019	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2019	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2019	2a	1	28.20023	91.42908	91.42908	0	499.8471	499.8471	0	ICE	28.20023	0	3	2
2019	2a	1	18.3902	83.85583	0	83.85583	459.9222	0	459.9222	BEV	0	18.3902	3	3
2019	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2019	2a	1	0	0	0	0	0	0	0	PHEV	0	0	3	8

2019	2a	1	16.06249	77.84299	0	77.84299	475.1507	0	475.1507	BEV	0	16.06249	3	3
2019	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2019	2a	1	12.28308	59.52699	35.71619	23.8108	492.3178	295.3907	196.9271	PHEV	7.369847	4.913231	3	8
2019	2a	1	7.787821	31.94167	0	31.94167	135.7697	0	135.7697	BEV	0	7.787821	4	3
2019	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2019	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2019	2a	1	23.9471	102.3346	0	102.3346	472.4213	0	472.4213	BEV	0	23.9471	4	3
2019	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2019	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2019	2a	1	3.193549	14.0131	0	14.0131	70.08086	0	70.08086	BEV	0	3.193549	4	3
2019	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2019	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2019	2a	1	25.7376	95.24096	95.24096	0	479.8212	479.8212	0	ICE	25.7376	0	2	2
2019	2a	1	1.716549	7.532116	7.532116	0	52.62783	52.62783	0	ICE	1.716549	0	2	2
2019	2a	1	133.5991	563.2632	0	563.2632	2891.646	0	2891.646	BEV	0	133.5991	2	3
2019	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2019	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2019	2a	1	7.884923	34.14684	0	34.14684	187.2465	0	187.2465	BEV	0	7.884923	2	3
2019	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2019	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2019	2a	1	3.810174	11.26169	0	11.26169	29.326	0	29.326	BEV	0	3.810174	1	3
2019	2a	1	70.00564	283.1168	0	283.1168	1319.216	0	1319.216	BEV	0	70.00564	2	3
2019	2a	1	18.31575	52.03707	52.03707	0	233.2066	233.2066	0	ICE	18.31575	0	4	2
2019	2a	1	1.798486	7.067365	7.067365	0	42.28675	42.28675	0	ICE	1.798486	0	3	2
2019	2a	1	20.39647	82.48742	82.48742	0	482.4437	482.4437	0	ICE	20.39647	0	2	2
2019	2a	1	1.430039	6.029144	6.029144	0	39.31011	39.31011	0	ICE	1.430039	0	3	2
2019	2a	1	11.19636	29.88578	29.88578	0	190.5117	190.5117	0	ICE	11.19636	0	2	2
2019	2a	1	9.25234	33.17778	33.17778	0	183.5107	183.5107	0	ICE	9.25234	0	2	2
2019	2a	1	10.64323	30.84834	30.84834	0	128.3325	128.3325	0	ICE	10.64323	0	4	2
2019	2a	1	9.107314	34.74477	0	34.74477	141.8437	0	141.8437	BEV	0	9.107314	1	3
2019	2a	1	16.61433	73.85451	73.85451	0	523.168	523.168	0	ICE	16.61433	0	2	2
2019	2a	1	4.165694	17.08555	0	17.08555	74.74789	0	74.74789	BEV	0	4.165694	3	3
2019	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2019	2a	1	0	0	0	0	0	0	0	PHEV	0	0	3	8
2019	2a	1	1.953572	6.557594	0	6.557594	20.80788	0	20.80788	BEV	0	1.953572	2	3
2019	2a	1	3.884654	17.71328	0	17.71328	95.86074	0	95.86074	BEV	0	3.884654	4	3
2019	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2019	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2019	2a	1	19.43923	77.50245	0	77.50245	351.679	0	351.679	BEV	0	19.43923	1	3
2019	2a	1	18.64013	76.4523	0	76.4523	367.5234	0	367.5234	BEV	0	18.64013	1	3
2019	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2019	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2019	2a	1	44.88305	194.3728	0	194.3728	1056.003	0	1056.003	BEV	0	44.88305	1	3
2019	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2019	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2019	2a	1	24.06137	94.55206	94.55206	0	534.9424	534.9424	0	ICE	24.06137	0	2	2
2019	2a	1	21.91935	87.39049	0	87.39049	394.6987	0	394.6987	BEV	0	21.91935	2	3

2019	2a	1	2.732629	11.99061	0	11.99061	66.76723	0	66.76723	BEV	0	2.732629	2	3
2019	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2019	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2019	2a	1	4.223171	15.62768	15.62768	0	81.21736	81.21736	0	ICE	4.223171	0	3	2
2019	2a	1	17.42317	68.46643	0	68.46643	299.3136	0	299.3136	BEV	0	17.42317	1	3
2019	2a	1	24.74227	100.0627	0	100.0627	467.7944	0	467.7944	BEV	0	24.74227	1	3
2019	2a	1	3.21651	9.691281	0	9.691281	25.04661	0	25.04661	BEV	0	3.21651	2	3
2019	2a	1	15.11502	53.33471	53.33471	0	292.8144	292.8144	0	ICE	15.11502	0	2	2
2019	2a	1	5.09763	18.57153	0	18.57153	69.02165	0	69.02165	BEV	0	5.09763	2	3
2019	2a	1	2.48563	9.197975	0	9.197975	34.63665	0	34.63665	BEV	0	2.48563	2	3
2019	2a	1	2.528129	9.644913	0	9.644913	39.4712	0	39.4712	BEV	0	2.528129	2	3
2019	2a	1	17.43813	71.5223	71.5223	0	426.9868	426.9868	0	ICE	17.43813	0	2	2
2019	2a	1	7.232387	33.807	33.807	0	264.5606	264.5606	0	ICE	7.232387	0	2	2
2019	2a	1	9.453027	45.81183	45.81183	0	388.9983	388.9983	0	ICE	9.453027	0	2	2
2019	2a	1	5.37764	18.97549	18.97549	0	95.02102	95.02102	0	ICE	5.37764	0	3	2
2019	2a	1	2.320421	8.586625	0	8.586625	28.68981	0	28.68981	BEV	0	2.320421	3	3
2019	2a	1	2.855941	10.73191	10.73191	0	63.32831	63.32831	0	ICE	2.855941	0	3	2
2019	2a	1	18.49148	74.78324	0	74.78324	304.6816	0	304.6816	BEV	0	18.49148	3	3
2019	2a	1	2.594113	10.78834	10.78834	0	65.98683	65.98683	0	ICE	2.594113	0	3	2
2019	2a	1	1.809358	7.524722	0	7.524722	32.62125	0	32.62125	BEV	0	1.809358	3	3
2019	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2019	2a	1	0	0	0	0	0	0	0	PHEV	0	0	3	8
2019	2a	1	29.36471	137.2621	0	137.2621	776.6671	0	776.6671	BEV	0	29.36471	3	3
2019	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2019	2a	1	0	0	0	0	0	0	0	PHEV	0	0	3	8
2019	2a	1	63.34714	303.3676	0	303.3676	1801.706	0	1801.706	BEV	0	63.34714	3	3
2019	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2019	2a	1	16.24286	77.78656	46.67193	31.11462	634.2	380.52	253.68	PHEV	9.745715	6.497143	3	8
2019	2a	1	1.379829	4.315499	0	4.315499	10.43927	0	10.43927	BEV	0	1.379829	4	3
2019	2a	1	1.32145	4.511445	0	4.511445	12.59715	0	12.59715	BEV	0	1.32145	4	3
2019	2a	1	3.845434	14.67048	0	14.67048	52.48783	0	52.48783	BEV	0	3.845434	4	3
2019	2a	1	3.4353	16.25474	16.25474	0	134.4994	134.4994	0	ICE	3.4353	0	2	2
2019	2a	1	1.883946	7.834917	0	7.834917	34.36073	0	34.36073	BEV	0	1.883946	4	3
2019	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2019	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2019	2a	1	7.502945	21.74654	21.74654	0	102.555	102.555	0	ICE	7.502945	0	2	2
2019	2a	1	1.981714	6.538527	0	6.538527	19.94688	0	19.94688	BEV	0	1.981714	2	3
2019	2a	1	0.776871	2.251682	0	2.251682	5.740556	0	5.740556	BEV	0	0.776871	1	3
2019	2a	1	1.432662	4.398658	0	4.398658	11.95162	0	11.95162	BEV	0	1.432662	1	3
2019	2a	1	2.705608	8.616956	0	8.616956	24.20966	0	24.20966	BEV	0	2.705608	1	3
2019	2a	1	3.603833	11.89059	0	11.89059	36.34502	0	36.34502	BEV	0	3.603833	1	3
2019	2a	1	3.041936	10.21093	0	10.21093	32.14153	0	32.14153	BEV	0	3.041936	1	3
2019	2a	1	2.373173	8.102037	0	8.102037	26.60628	0	26.60628	BEV	0	2.373173	1	3
2019	2a	1	2.165258	7.516261	0	7.516261	24.78222	0	24.78222	BEV	0	2.165258	1	3
2019	2a	1	2.19046	7.729236	0	7.729236	26.96733	0	26.96733	BEV	0	2.19046	1	3
2019	2a	1	2.281019	8.179461	0	8.179461	28.68248	0	28.68248	BEV	0	2.281019	1	3
2019	2a	1	3.693278	13.87842	0	13.87842	53.94511	0	53.94511	BEV	0	3.693278	1	3

2019	2a	1	12.33965	47.78318	0	47.78318	203.0159	0	203.0159	BEV	0	12.33965	1	3
2019	2a	1	1.301879	3.997119	0	3.997119	10.91157	0	10.91157	BEV	0	1.301879	2	3
2019	2a	1	1.346597	4.28871	0	4.28871	12.30506	0	12.30506	BEV	0	1.346597	2	3
2019	2a	1	1.320287	4.280556	0	4.280556	12.73022	0	12.73022	BEV	0	1.320287	2	3
2019	2a	1	2.480338	9.320489	0	9.320489	37.0925	0	37.0925	BEV	0	2.480338	2	3
2019	2a	1	0	0	0	0	0	0	0	BEV	0	0	2	3
2019	2a	1	39.66056	196.7497	0	196.7497	1460.5	0	1460.5	FCEV	0	39.66056	2	7
2019	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2019	2a	1	0	0	0	0	0	0	0	BEV	0	0	2	3
2019	2a	1	41.31993	207.3488	0	207.3488	1577.757	0	1577.757	FCEV	0	41.31993	2	7
2019	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2019	2a	1	0.659483	2.855989	2.855989	0	19.45818	19.45818	0	ICE	0.659483	0	3	2
2019	2a	1	0	0	0	0	0	0	0	BEV	0	0	3	3
2019	2a	1	2.775311	13.76787	0	13.76787	88.64522	0	88.64522	FCEV	0	2.775311	3	7
2019	2a	1	39.77946	197.3395	118.4037	78.9358	1765.929	1059.557	706.3716	PHEV	23.86767	15.91178	3	8
2019	2a	1	1.834922	8.997633	8.997633	0	78.65407	78.65407	0	ICE	1.834922	0	2	2
2019	2a	1	1.019407	4.064284	0	4.064284	16.00479	0	16.00479	BEV	0	1.019407	3	3
2019	2a	1	0.671538	2.177221	0	2.177221	5.560182	0	5.560182	BEV	0	0.671538	4	3
2019	2a	1	1.723821	5.983901	0	5.983901	17.47763	0	17.47763	BEV	0	1.723821	4	3
2019	2a	1	7.159593	26.49379	0	26.49379	88.52425	0	88.52425	BEV	0	7.159593	4	3
2019	2a	1	3.006215	12.15773	0	12.15773	49.3985	0	49.3985	BEV	0	3.006215	4	3
2019	2a	1	0.629239	1.895883	0	1.895883	4.983321	0	4.983321	BEV	0	0.629239	1	3
2019	2a	1	0.455325	1.424056	0	1.424056	3.348481	0	3.348481	BEV	0	0.455325	3	3
2019	2a	1	1.337951	6.024149	0	6.024149	31.17254	0	31.17254	BEV	0	1.337951	3	3
2019	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2019	2a	1	0	0	0	0	0	0	0	PHEV	0	0	3	8
2019	2a	1	0.500841	1.56641	0	1.56641	3.93733	0	3.93733	BEV	0	0.500841	2	3
2019	2a	1	3.579636	16.73261	0	16.73261	105.137	0	105.137	BEV	0	3.579636	2	3
2019	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2019	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2019	2a	1	2.967953	11.49289	0	11.49289	48.36755	0	48.36755	BEV	0	2.967953	2	3
2019	2a	1	8.435365	33.14778	0	33.14778	144.7788	0	144.7788	BEV	0	8.435365	2	3
2019	2a	1	2.857848	11.39398	0	11.39398	44.80325	0	44.80325	BEV	0	2.857848	4	3
2019	2a	1	2.199701	11.03838	11.03838	0	102.7097	102.7097	0	ICE	2.199701	0	2	2
2019	2a	1	1.797611	8.505721	0	8.505721	56.01418	0	56.01418	BEV	0	1.797611	2	3
2019	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2019	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2019	2a	1	1.141895	3.898441	0	3.898441	12.51646	0	12.51646	BEV	0	1.141895	2	3
2019	2a	1	0.521035	1.868368	0	1.868368	5.741962	0	5.741962	BEV	0	0.521035	4	3
2019	2a	1	0.451727	1.56808	0	1.56808	5.1833	0	5.1833	BEV	0	0.451727	2	3
2019	2a	1	0.640642	2.444075	0	2.444075	8.447527	0	8.447527	BEV	0	0.640642	3	3
2019	2a	1	0.800401	3.51211	0	3.51211	16.656	0	16.656	BEV	0	0.800401	3	3
2019	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2019	2a	1	0	0	0	0	0	0	0	PHEV	0	0	3	8
2019	2a	1	1.126567	4.039733	0	4.039733	12.93524	0	12.93524	BEV	0	1.126567	3	3
2019	2a	1	0.847025	2.55207	0	2.55207	5.929957	0	5.929957	BEV	0	0.847025	4	3
2019	2a	1	4.426087	17.13927	0	17.13927	64.10332	0	64.10332	BEV	0	4.426087	4	3

2019	2a	1	0.653676	2.044411	0	2.044411	5.677746	0	5.677746	BEV	0	0.653676	1	3
2019	2a	1	0.627595	2.034752	0	2.034752	5.992015	0	5.992015	BEV	0	0.627595	1	3
2019	2a	1	1.417622	6.058008	0	6.058008	31.7454	0	31.7454	BEV	0	1.417622	2	3
2019	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2019	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2019	2a	1	0.687248	2.976233	2.976233	0	21.17303	21.17303	0	ICE	0.687248	0	2	2
2019	2a	1	1.289547	4.25477	0	4.25477	11.30924	0	11.30924	BEV	0	1.289547	3	3
2019	2a	1	6.868607	25.0235	0	25.0235	81.08892	0	81.08892	BEV	0	6.868607	4	3
2019	2a	1	4.791699	21.57472	0	21.57472	112.4773	0	112.4773	BEV	0	4.791699	4	3
2019	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2019	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2019	2a	1	0.502281	1.973773	0	1.973773	7.545189	0	7.545189	BEV	0	0.502281	3	3
2019	2a	1	0.889836	2.375186	2.375186	0	12.98667	12.98667	0	ICE	0.889836	0	4	2
2019	2a	1	0	0	0	0	0	0	0	BEV	0	0	4	3
2019	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2019	2a	1	4.0858	19.80085	11.88051	7.92034	176.0844	105.6506	70.43375	PHEV	2.45148	1.63432	4	8
2019	2a	1	0.577819	2.204402	2.204402	0	13.83873	13.83873	0	ICE	0.577819	0	3	2
2019	2a	1	0.764825	2.74257	0	2.74257	9.494351	0	9.494351	BEV	0	0.764825	2	3
2020	2a	1	13069.71	36383.72	36383.72	0	82212.42	82212.42	0	ICE	13069.71	0	1	1
2020	2a	1	13895.14	39477.61	39477.61	0	94930.38	94930.38	0	ICE	13895.14	0	1	1
2020	2a	1	4206.702	12192.7	12192.7	0	30032.74	30032.74	0	ICE	4206.702	0	1	1
2020	2a	1	5556.227	16740.8	16740.8	0	44994.99	44994.99	0	ICE	5556.227	0	1	1
2020	2a	1	6354.018	19508.55	19508.55	0	54612.26	54612.26	0	ICE	6354.018	0	1	1
2020	2a	1	12515.88	39861.21	39861.21	0	122892.3	122892.3	0	ICE	12515.88	0	1	1
2020	2a	1	14207.93	46064.09	46064.09	0	147896.3	147896.3	0	ICE	14207.93	0	1	1
2020	2a	1	17555.62	58929.3	58929.3	0	205947.9	205947.9	0	ICE	17555.62	0	1	1
2020	2a	1	22629.79	77258.33	77258.33	0	282717.6	282717.6	0	ICE	22629.79	0	1	1
2020	2a	1	30446.29	105688.2	105688.2	0	403706.6	403706.6	0	ICE	30446.29	0	1	1
2020	2a	1	37018.11	130621.7	130621.7	0	519635.9	519635.9	0	ICE	37018.11	0	1	1
2020	2a	1	35505.98	127320.2	127320.2	0	528335.8	528335.8	0	ICE	35505.98	0	1	1
2020	2a	1	41230.78	150210.7	150210.7	0	649957.5	649957.5	0	ICE	41230.78	0	1	1
2020	2a	1	51086.48	189043.5	189043.5	0	850554.6	850554.6	0	ICE	51086.48	0	1	1
2020	2a	1	69627.56	261643	261643	0	1222696	1222696	0	ICE	69627.56	0	1	1
2020	2a	1	73868.15	281809.9	281809.9	0	1369391	1369391	0	ICE	73868.15	0	1	1
2020	2a	1	103860.9	402183.6	402183.6	0	2025808	2025808	0	ICE	103860.9	0	1	1
2020	2a	1	131040.7	514940	514940	0	2692231	2692231	0	ICE	131040.7	0	1	1
2020	2a	1	160039	638061	638061	0	3458731	3458731	0	ICE	160039	0	1	1
2020	2a	1	221279.8	894899.6	894899.6	0	5029828	5029828	0	ICE	221279.8	0	1	1
2020	2a	1	252780.6	1036777	1036777	0	6029762	6029762	0	ICE	252780.6	0	1	1
2020	2a	1	427.7862	1754.561	1754.561	0	10366.69	10366.69	0	ICE	427.7862	0	1	2
2020	2a	1	282768.6	1175972	1175972	0	7087119	7087119	0	ICE	282768.6	0	1	1
2020	2a	1	332387.9	1401371	1401371	0	8732143	8732143	0	ICE	332387.9	0	1	1
2020	2a	1	344608.5	1472636	1472636	0	9479144	9479144	0	ICE	344608.5	0	1	1
2020	2a	1	429021.5	1857942	1857942	0	12358053	12358053	0	ICE	429021.5	0	1	1
2020	2a	1	464415.9	2037829	2037829	0	13980774	13980774	0	ICE	464415.9	0	1	1
2020	2a	1	1140.557	5004.696	5004.696	0	34338.43	34338.43	0	ICE	1140.557	0	1	2
2020	2a	1	519317.6	2308486	2308486	0	16301926	16301926	0	ICE	519317.6	0	1	1

2020	2a	1	452295.6	2036470	2036470	0	14811492	14811492	0	ICE	452295.6	0	1	1
2020	2a	1	374556.3	1707906	1707906	0	12787713	12787713	0	ICE	374556.3	0	1	1
2020	2a	1	446742	2062653	2062653	0	15879588	15879588	0	ICE	446742	0	1	1
2020	2a	1	4972.037	22956.39	22956.39	0	175524.4	175524.4	0	ICE	4972.037	0	1	2
2020	2a	1	449368.8	2100525	2100525	0	16651634	16651634	0	ICE	449368.8	0	1	1
2020	2a	1	6801.968	31795.05	31795.05	0	248819.4	248819.4	0	ICE	6801.968	0	1	2
2020	2a	1	649493.8	3073197	3073197	0	25137056	25137056	0	ICE	649493.8	0	1	1
2020	2a	1	790591.7	3786120	3786120	0	31796694	31796694	0	ICE	790591.7	0	1	1
2020	2a	1	787293.7	3815430	3815430	0	32990367	32990367	0	ICE	787293.7	0	1	1
2020	2a	1	14585.82	70686.65	70686.65	0	609105.7	609105.7	0	ICE	14585.82	0	1	2
2020	2a	1	916859.6	4495867	4495867	0	40010364	40010364	0	ICE	916859.6	0	1	1
2020	2a	1	860406.3	4268338	4268338	0	39054348	39054348	0	ICE	860406.3	0	1	1
2020	2a	1	903165	4532199	4532199	0	42565977	42565977	0	ICE	903165	0	1	1
2020	2a	1	11052.36	55462.2	55462.2	0	522341.8	522341.8	0	ICE	11052.36	0	1	2
2020	2a	1	52529.24	263598.6	0	263598.6	2319232	0	2319232	BEV	0	52529.24	1	3
2020	2a	1	1072.025	5379.562	0	5379.562	42159.38	0	42159.38	FCEV	0	1072.025	1	7
2020	2a	1	47383.16	237774.8	128398.4	109376.4	2327783	1257003	1070780	PHEV	25586.9	21796.25	1	8
2020	2a	1	947631.6	4809628	4809628	0	46306887	46306887	0	ICE	947631.6	0	1	1
2020	2a	1	11596.52	58857.2	58857.2	0	568245.6	568245.6	0	ICE	11596.52	0	1	2
2020	2a	1	67361.13	341886	0	341886	3160069	0	3160069	BEV	0	67361.13	1	3
2020	2a	1	1374.717	6977.266	0	6977.266	56070.6	0	56070.6	FCEV	0	1374.717	1	7
2020	2a	1	43535.17	220959.3	119318	101641.3	2193383	1184427	1008956	PHEV	23508.99	20026.18	1	8
2020	2a	1	966314.8	4959814	4959814	0	48884356	48884356	0	ICE	966314.8	0	1	1
2020	2a	1	11774.88	60437.04	60437.04	0	597031.6	597031.6	0	ICE	11774.88	0	1	2
2020	2a	1	84233.68	432347	0	432347	4072233	0	4072233	BEV	0	84233.68	1	3
2020	2a	1	1970.378	10113.38	0	10113.38	83272.89	0	83272.89	FCEV	0	1970.378	1	7
2020	2a	1	41311.2	212038.4	112380.4	99658.05	2187939	1159608	1028331	PHEV	21894.94	19416.26	1	8
2020	2a	1	876569	4549393	4549393	0	45768473	45768473	0	ICE	876569	0	1	1
2020	2a	1	10778.11	55938.38	55938.38	0	564289.1	564289.1	0	ICE	10778.11	0	1	2
2020	2a	1	90784.91	471173.7	0	471173.7	4604489	0	4604489	BEV	0	90784.91	1	3
2020	2a	1	2396.083	12435.67	0	12435.67	104796.5	0	104796.5	FCEV	0	2396.083	1	7
2020	2a	1	34616.79	179661.1	93423.78	86237.34	1832042	952661.7	879380	PHEV	18000.73	16616.06	1	8
2020	2a	1	1525.283	4071.347	4071.347	0	18278.69	18278.69	0	ICE	1525.283	0	2	1
2020	2a	1	2062.759	6215.05	6215.05	0	31105.89	31105.89	0	ICE	2062.759	0	2	1
2020	2a	1	2353.101	7224.656	7224.656	0	36244.46	36244.46	0	ICE	2353.101	0	2	1
2020	2a	1	4432.095	13861.64	13861.64	0	71213.71	71213.71	0	ICE	4432.095	0	2	1
2020	2a	1	7095.742	22598.87	22598.87	0	118128.6	118128.6	0	ICE	7095.742	0	2	1
2020	2a	1	11761.65	38132.91	38132.91	0	201269.3	201269.3	0	ICE	11761.65	0	2	1
2020	2a	1	11275.5	37202.72	37202.72	0	199871.6	199871.6	0	ICE	11275.5	0	2	1
2020	2a	1	11226	37682.52	37682.52	0	204690.8	204690.8	0	ICE	11226	0	2	1
2020	2a	1	14578.09	49769.75	49769.75	0	274056.2	274056.2	0	ICE	14578.09	0	2	1
2020	2a	1	12200.98	42353.26	42353.26	0	234163.6	234163.6	0	ICE	12200.98	0	2	1
2020	2a	1	15470.9	54590.45	54590.45	0	302574.3	302574.3	0	ICE	15470.9	0	2	1
2020	2a	1	13641.46	48916.65	48916.65	0	274638.8	274638.8	0	ICE	13641.46	0	2	1
2020	2a	1	17943.29	65370.47	65370.47	0	370578.5	370578.5	0	ICE	17943.29	0	2	1
2020	2a	1	22146.14	81950.89	81950.89	0	470755.1	470755.1	0	ICE	22146.14	0	2	1
2020	2a	1	21512.11	80837.14	80837.14	0	471760.6	471760.6	0	ICE	21512.11	0	2	1

2020	2a	1	24099.54	91940.7	91940.7	0	540486.5	540486.5	0	ICE	24099.54	0	2	1
2020	2a	1	31840.54	123297.1	123297.1	0	732926.8	732926.8	0	ICE	31840.54	0	2	1
2020	2a	1	40756.7	160158.3	160158.3	0	965608.5	965608.5	0	ICE	40756.7	0	2	1
2020	2a	1	37387.99	149062.5	149062.5	0	911394.6	911394.6	0	ICE	37387.99	0	2	1
2020	2a	1	40078.02	162083.5	162083.5	0	1007453	1007453	0	ICE	40078.02	0	2	1
2020	2a	1	44492.09	182483.9	182483.9	0	1151093	1151093	0	ICE	44492.09	0	2	1
2020	2a	1	45837.19	190626.8	190626.8	0	1221205	1221205	0	ICE	45837.19	0	2	1
2020	2a	1	31599.84	133227.2	133227.2	0	868933.9	868933.9	0	ICE	31599.84	0	2	1
2020	2a	1	16942.48	73371.96	73371.96	0	495693.6	495693.6	0	ICE	16942.48	0	2	1
2020	2a	1	26029.35	114215.2	114215.2	0	790529.3	790529.3	0	ICE	26029.35	0	2	1
2020	2a	1	36854.73	163827.8	163827.8	0	1157702	1157702	0	ICE	36854.73	0	2	1
2020	2a	1	61272.37	275880.1	275880.1	0	1994119	1994119	0	ICE	61272.37	0	2	1
2020	2a	1	44564.58	203206	203206	0	1499628	1499628	0	ICE	44564.58	0	2	1
2020	2a	1	22813.13	105330.5	105330.5	0	794919.7	794919.7	0	ICE	22813.13	0	2	1
2020	2a	1	19594.54	91592.51	91592.51	0	709621.6	709621.6	0	ICE	19594.54	0	2	1
2020	2a	1	129003.3	632573.9	632573.9	0	5462188	5462188	0	ICE	129003.3	0	2	1
2020	2a	1	115402.6	572493.7	572493.7	0	5062444	5062444	0	ICE	115402.6	0	2	1
2020	2a	1	99473.93	499173.1	499173.1	0	4534844	4534844	0	ICE	99473.93	0	2	1
2020	2a	1	13.47554	67.62202	67.62202	0	614.4682	614.4682	0	ICE	13.47554	0	2	2
2020	2a	1	3.351702	16.81928	0	16.81928	131.4731	0	131.4731	BEV	0	3.351702	2	3
2020	2a	1	0.068402	0.343251	0	0.343251	2.683124	0	2.683124	FCEV	0	0.068402	2	7
2020	2a	1	29.07088	145.8815	87.52888	58.35259	1325.773	795.464	530.3093	PHEV	17.44253	11.62835	2	8
2020	2a	1	103417.2	524885.5	524885.5	0	4894743	4894743	0	ICE	103417.2	0	2	1
2020	2a	1	14.00972	71.10523	71.10523	0	663.2348	663.2348	0	ICE	14.00972	0	2	2
2020	2a	1	104364.5	535672.9	535672.9	0	5126869	5126869	0	ICE	104364.5	0	2	1
2020	2a	1	14.2367	73.07286	73.07286	0	699.7501	699.7501	0	ICE	14.2367	0	2	2
2020	2a	1	1387.675	7122.535	0	7122.535	64437.55	0	64437.55	BEV	0	1387.675	2	3
2020	2a	1	32.46024	166.609	0	166.609	1370.027	0	1370.027	FCEV	0	32.46024	2	7
2020	2a	1	1065.637	5469.606	3250.509	2219.097	53735.64	31934.33	21801.32	PHEV	633.2929	432.3442	2	8
2020	2a	1	94552.5	490727.5	490727.5	0	4815833	4815833	0	ICE	94552.5	0	2	1
2020	2a	1	13.04807	67.71949	67.71949	0	665.2891	665.2891	0	ICE	13.04807	0	2	2
2020	2a	1	2568.235	13329.14	0	13329.14	122982.1	0	122982.1	BEV	0	2568.235	2	3
2020	2a	1	67.78332	351.7954	0	351.7954	2964.974	0	2964.974	FCEV	0	67.78332	2	7
2020	2a	1	1978.007	10265.86	6042.19	4223.667	103770.8	61076.51	42694.26	PHEV	1164.199	813.8087	2	8
2020	2a	1	3155.654	8423.199	8423.199	0	38065.14	38065.14	0	ICE	3155.654	0	3	1
2020	2a	1	1985.113	5412.471	5412.471	0	25096.79	25096.79	0	ICE	1985.113	0	3	1
2020	2a	1	1198.239	3541.624	3541.624	0	17013.4	17013.4	0	ICE	1198.239	0	3	1
2020	2a	1	2977.303	9311.695	9311.695	0	45384.25	45384.25	0	ICE	2977.303	0	3	1
2020	2a	1	5367.961	17403.68	17403.68	0	86346.64	86346.64	0	ICE	5367.961	0	3	1
2020	2a	1	5793.57	19115.48	19115.48	0	96583.51	96583.51	0	ICE	5793.57	0	3	1
2020	2a	1	7734.16	25961.41	25961.41	0	133408.4	133408.4	0	ICE	7734.16	0	3	1
2020	2a	1	10252.66	35002.69	35002.69	0	184194.4	184194.4	0	ICE	10252.66	0	3	1
2020	2a	1	12171.55	42251.09	42251.09	0	225450.5	225450.5	0	ICE	12171.55	0	3	1
2020	2a	1	15479.66	54621.36	54621.36	0	299232.9	299232.9	0	ICE	15479.66	0	3	1
2020	2a	1	14910.44	53467.03	53467.03	0	295701.1	295701.1	0	ICE	14910.44	0	3	1
2020	2a	1	21040.64	76654.62	76654.62	0	429011.1	429011.1	0	ICE	21040.64	0	3	1
2020	2a	1	24815.56	91828.99	91828.99	0	520879.9	520879.9	0	ICE	24815.56	0	3	1

2020	2a	1	32829.13	123363.7	123363.7	0	711285.3	711285.3	0	ICE	32829.13	0	3	1
2020	2a	1	33603.8	128199.8	128199.8	0	748323.9	748323.9	0	ICE	33603.8	0	3	1
2020	2a	1	54827.48	212310.1	212310.1	0	1254767	1254767	0	ICE	54827.48	0	3	1
2020	2a	1	65034.61	255561.3	255561.3	0	1530096	1530096	0	ICE	65034.61	0	3	1
2020	2a	1	77926.67	310686.6	310686.6	0	1886887	1886887	0	ICE	77926.67	0	3	1
2020	2a	1	112669.1	455656.6	455656.6	0	2812148	2812148	0	ICE	112669.1	0	3	1
2020	2a	1	118640.2	486601.7	486601.7	0	3051059	3051059	0	ICE	118640.2	0	3	1
2020	2a	1	124767.6	518881.1	518881.1	0	3321160	3321160	0	ICE	124767.6	0	3	1
2020	2a	1	148588.6	626460.1	626460.1	0	4086207	4086207	0	ICE	148588.6	0	3	1
2020	2a	1	184311.8	787630.5	787630.5	0	5232926	5232926	0	ICE	184311.8	0	3	1
2020	2a	1	207785.1	899844.5	899844.5	0	6104409	6104409	0	ICE	207785.1	0	3	1
2020	2a	1	191610.5	840775.4	840775.4	0	5826638	5826638	0	ICE	191610.5	0	3	1
2020	2a	1	196773.3	874702.4	874702.4	0	6188861	6188861	0	ICE	196773.3	0	3	1
2020	2a	1	152405.9	686210.5	686210.5	0	4959185	4959185	0	ICE	152405.9	0	3	1
2020	2a	1	94127.12	429201.8	429201.8	0	3175704	3175704	0	ICE	94127.12	0	3	1
2020	2a	1	163511.9	754950.8	754950.8	0	5712548	5712548	0	ICE	163511.9	0	3	1
2020	2a	1	214949.4	1004757	1004757	0	7793930	7793930	0	ICE	214949.4	0	3	1
2020	2a	1	202857.1	959855	959855	0	7662028	7662028	0	ICE	202857.1	0	3	1
2020	2a	1	270429.8	1295080	1295080	0	10597087	10597087	0	ICE	270429.8	0	3	1
2020	2a	1	246489.3	1194551	1194551	0	10042424	10042424	0	ICE	246489.3	0	3	1
2020	2a	1	2670.092	12939.96	12939.96	0	107265.3	107265.3	0	ICE	2670.092	0	3	2
2020	2a	1	289461	1419386	1419386	0	12241644	12241644	0	ICE	289461	0	3	1
2020	2a	1	274458.8	1361546	1361546	0	12049694	12049694	0	ICE	274458.8	0	3	1
2020	2a	1	1860.442	9229.355	9229.355	0	82035.31	82035.31	0	ICE	1860.442	0	3	2
2020	2a	1	307015	1540641	1540641	0	13942431	13942431	0	ICE	307015	0	3	1
2020	2a	1	3138.036	15747.07	15747.07	0	142905.3	142905.3	0	ICE	3138.036	0	3	2
2020	2a	1	322366.2	1636144	1636144	0	15198504	15198504	0	ICE	322366.2	0	3	1
2020	2a	1	3294.942	16723.22	16723.22	0	155781.3	155781.3	0	ICE	3294.942	0	3	2
2020	2a	1	1112.208	5644.924	3386.955	2257.97	52667.19	31600.31	21066.87	PHEV	667.325	444.8833	3	8
2020	2a	1	331220.3	1700058	1700058	0	16251716	16251716	0	ICE	331220.3	0	3	1
2020	2a	1	3376.908	17332.69	17332.69	0	166079.4	166079.4	0	ICE	3376.908	0	3	2
2020	2a	1	3906.327	20050.04	0	20050.04	150723.1	0	150723.1	BEV	0	3906.327	3	3
2020	2a	1	91.37607	469.0069	0	469.0069	3199.14	0	3199.14	FCEV	0	91.37607	3	7
2020	2a	1	3392.876	17414.65	10349.28	7065.372	166788.8	99120.19	67668.59	PHEV	2016.338	1376.538	3	8
2020	2a	1	300019.7	1557102	1557102	0	15258800	15258800	0	ICE	300019.7	0	3	1
2020	2a	1	3065.761	15911.3	15911.3	0	156315.6	156315.6	0	ICE	3065.761	0	3	2
2020	2a	1	7189.98	37315.99	0	37315.99	328963.1	0	328963.1	BEV	0	7189.98	3	3
2020	2a	1	189.7649	984.8796	0	984.8796	6881.116	0	6881.116	FCEV	0	189.7649	3	7
2020	2a	1	5188.873	26930.25	15850.38	11079.88	264567.9	155717.1	108850.8	PHEV	3054.023	2134.851	3	8
2020	2a	1	2499.42	6671.552	6671.552	0	29022.57	29022.57	0	ICE	2499.42	0	4	1
2020	2a	1	5330.913	14534.9	14534.9	0	62135.33	62135.33	0	ICE	5330.913	0	4	1
2020	2a	1	8592.121	23918.92	23918.92	0	104522.7	104522.7	0	ICE	8592.121	0	4	1
2020	2a	1	1764.249	5214.574	5214.574	0	24338.93	24338.93	0	ICE	1764.249	0	4	1
2020	2a	1	6898.698	23947.45	23947.45	0	118502	118502	0	ICE	6898.698	0	4	1
2020	2a	1	6548.562	23107.19	23107.19	0	117152.1	117152.1	0	ICE	6548.562	0	4	1
2020	2a	1	8946.084	32079.58	32079.58	0	164798.1	164798.1	0	ICE	8946.084	0	4	1
2020	2a	1	10889.6	39672.65	39672.65	0	209325.8	209325.8	0	ICE	10889.6	0	4	1

2020	2a	1	18903.77	69952.64	69952.64	0	375522.5	375522.5	0	ICE	18903.77	0	4	1
2020	2a	1	23718.4	89127.82	89127.82	0	487250.9	487250.9	0	ICE	23718.4	0	4	1
2020	2a	1	24152.04	92140.99	92140.99	0	511735.1	511735.1	0	ICE	24152.04	0	4	1
2020	2a	1	35514.72	137524.7	137524.7	0	777933.9	777933.9	0	ICE	35514.72	0	4	1
2020	2a	1	43928.27	172621.4	172621.4	0	991296.3	991296.3	0	ICE	43928.27	0	4	1
2020	2a	1	78805.79	314191.6	314191.6	0	1840247	1840247	0	ICE	78805.79	0	4	1
2020	2a	1	96300.43	389458.2	389458.2	0	2323566	2323566	0	ICE	96300.43	0	4	1
2020	2a	1	131816.3	540643.4	540643.4	0	3286520	3286520	0	ICE	131816.3	0	4	1
2020	2a	1	123.2451	505.4884	505.4884	0	3033.096	3033.096	0	ICE	123.2451	0	4	2
2020	2a	1	164283.2	683217.6	683217.6	0	4244102	4244102	0	ICE	164283.2	0	4	1
2020	2a	1	185939.7	783934.6	783934.6	0	4989559	4989559	0	ICE	185939.7	0	4	1
2020	2a	1	205297.1	877308.6	877308.6	0	5709088	5709088	0	ICE	205297.1	0	4	1
2020	2a	1	281.9054	1204.683	1204.683	0	7725.865	7725.865	0	ICE	281.9054	0	4	2
2020	2a	1	192691.1	834477.7	834477.7	0	5545230	5545230	0	ICE	192691.1	0	4	1
2020	2a	1	188388.1	826635.5	826635.5	0	5617244	5617244	0	ICE	188388.1	0	4	1
2020	2a	1	187524	833587.3	833587.3	0	5805680	5805680	0	ICE	187524	0	4	1
2020	2a	1	138041.5	621534.8	621534.8	0	4434397	4434397	0	ICE	138041.5	0	4	1
2020	2a	1	57212.11	260876.3	260876.3	0	1908373	1908373	0	ICE	57212.11	0	4	1
2020	2a	1	80250.66	370525.3	370525.3	0	2781862	2781862	0	ICE	80250.66	0	4	1
2020	2a	1	114749.5	536383.9	536383.9	0	4129710	4129710	0	ICE	114749.5	0	4	1
2020	2a	1	3249.481	15189.34	15189.34	0	116170.1	116170.1	0	ICE	3249.481	0	4	2
2020	2a	1	112093.9	530392.6	530392.6	0	4202455	4202455	0	ICE	112093.9	0	4	1
2020	2a	1	122732.1	587760.5	587760.5	0	4787263	4787263	0	ICE	122732.1	0	4	1
2020	2a	1	2681.953	12843.79	12843.79	0	103265.6	103265.6	0	ICE	2681.953	0	4	2
2020	2a	1	186861.2	905578.2	905578.2	0	7576202	7576202	0	ICE	186861.2	0	4	1
2020	2a	1	5770.309	27964.42	27964.42	0	233874.1	233874.1	0	ICE	5770.309	0	4	2
2020	2a	1	201952.8	990285.7	990285.7	0	8508777	8508777	0	ICE	201952.8	0	4	1
2020	2a	1	213965	1061446	1061446	0	9329770	9329770	0	ICE	213965	0	4	1
2020	2a	1	194102.7	974032.6	974032.6	0	8712478	8712478	0	ICE	194102.7	0	4	1
2020	2a	1	6768.393	33964.68	33964.68	0	303991.7	303991.7	0	ICE	6768.393	0	4	2
2020	2a	1	1623.919	8149.034	4889.421	3259.614	69683.47	41810.08	27873.39	PHEV	974.3511	649.5674	4	8
2020	2a	1	202100.9	1025747	1025747	0	9408236	9408236	0	ICE	202100.9	0	4	1
2020	2a	1	7047.293	35767.97	35767.97	0	328267.9	328267.9	0	ICE	7047.293	0	4	2
2020	2a	1	3.535347	17.94337	0	17.94337	119.4601	0	119.4601	BEV	0	3.535347	4	3
2020	2a	1	0.07215	0.366191	0	0.366191	2.437962	0	2.437962	FCEV	0	0.07215	4	7
2020	2a	1	4326.291	21957.74	13174.64	8783.097	197935.9	118761.6	79174.37	PHEV	2595.774	1730.516	4	8
2020	2a	1	207603.1	1065566	1065566	0	10014128	10014128	0	ICE	207603.1	0	4	1
2020	2a	1	7307.494	37507.25	37507.25	0	352993.6	352993.6	0	ICE	7307.494	0	4	2
2020	2a	1	1779.67	9134.529	0	9134.529	64778.25	0	64778.25	BEV	0	1779.67	4	3
2020	2a	1	41.6297	213.6732	0	213.6732	1457.462	0	1457.462	FCEV	0	41.6297	4	7
2020	2a	1	4630.334	23766.16	14123.89	9642.272	231743.1	137721.6	94021.48	PHEV	2751.742	1878.593	4	8
2020	2a	1	181775.9	943417.1	943417.1	0	9056747	9056747	0	ICE	181775.9	0	4	1
2020	2a	1	6498.743	33728.48	33728.48	0	324701.6	324701.6	0	ICE	6498.743	0	4	2
2020	2a	1	3134.5	16268.06	0	16268.06	127430.5	0	127430.5	BEV	0	3134.5	4	3
2020	2a	1	82.72874	429.3622	0	429.3622	2999.85	0	2999.85	FCEV	0	82.72874	4	7
2020	2a	1	4221.375	21908.94	12894.97	9013.962	214764.5	126404.2	88360.25	PHEV	2484.581	1736.794	4	8
2020	2a	1	10924.55	29160.25	29160.25	0	62218.43	62218.43	0	ICE	10924.55	0	1	1

2020	2a	1	11636.99	31728.62	31728.62	0	67928.42	67928.42	0	ICE	11636.99	0	1	1
2020	2a	1	202.5955	552.3826	552.3826	0	1183.27	1183.27	0	ICE	202.5955	0	1	2
2020	2a	1	392.2603	1091.982	1091.982	0	2439.789	2439.789	0	ICE	392.2603	0	1	2
2020	2a	1	864.1336	2455.099	2455.099	0	5791.681	5791.681	0	ICE	864.1336	0	1	2
2020	2a	1	5510.975	16288.73	16288.73	0	41989.55	41989.55	0	ICE	5510.975	0	1	1
2020	2a	1	1619.244	4785.982	4785.982	0	12236.01	12236.01	0	ICE	1619.244	0	1	2
2020	2a	1	1914.072	5767.061	5767.061	0	15571.71	15571.71	0	ICE	1914.072	0	1	2
2020	2a	1	1945.733	5973.927	5973.927	0	16502.11	16502.11	0	ICE	1945.733	0	1	2
2020	2a	1	9765.71	30542.84	30542.84	0	90235.72	90235.72	0	ICE	9765.71	0	1	1
2020	2a	1	1555.484	4953.985	4953.985	0	15034.39	15034.39	0	ICE	1555.484	0	1	2
2020	2a	1	17067.17	56311.92	56311.92	0	187776.9	187776.9	0	ICE	17067.17	0	1	1
2020	2a	1	135.3	477.4184	477.4184	0	1904.37	1904.37	0	ICE	135.3	0	1	2
2020	2a	1	78.6752	282.1198	282.1198	0	1129.887	1129.887	0	ICE	78.6752	0	1	2
2020	2a	1	45.60436	166.1444	166.1444	0	707.8948	707.8948	0	ICE	45.60436	0	1	2
2020	2a	1	185.8419	719.641	719.641	0	3627.918	3627.918	0	ICE	185.8419	0	1	2
2020	2a	1	374.2587	1513.577	1513.577	0	8649.797	8649.797	0	ICE	374.2587	0	1	2
2020	2a	1	65.25617	267.6475	0	267.6475	1329.076	0	1329.076	BEV	0	65.25617	1	3
2020	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2020	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2020	2a	1	1057.779	4399.069	4399.069	0	26548.78	26548.78	0	ICE	1057.779	0	1	2
2020	2a	1	1495.224	6303.967	6303.967	0	39530.76	39530.76	0	ICE	1495.224	0	1	2
2020	2a	1	555.8615	2375.396	2375.396	0	15419.93	15419.93	0	ICE	555.8615	0	1	2
2020	2a	1	1089.184	4716.874	4716.874	0	31072.27	31072.27	0	ICE	1089.184	0	1	2
2020	2a	1	2926.863	13345.94	13345.94	0	99422.43	99422.43	0	ICE	2926.863	0	1	2
2020	2a	1	7407.332	35049.13	35049.13	0	284222.3	284222.3	0	ICE	7407.332	0	1	2
2020	2a	1	10308.56	49367.38	49367.38	0	413229.1	413229.1	0	ICE	10308.56	0	1	2
2020	2a	1	9757.516	46728.45	0	46728.45	325909.7	0	325909.7	BEV	0	9757.516	1	3
2020	2a	1	0.573263	2.745341	0	2.745341	19.14751	0	19.14751	FCEV	0	0.573263	1	7
2020	2a	1	10198.93	48842.36	29305.42	19536.95	400619.3	240371.6	160247.7	PHEV	6119.357	4079.572	1	8
2020	2a	1	11865.2	57501.82	0	57501.82	412704.3	0	412704.3	BEV	0	11865.2	1	3
2020	2a	1	1.662491	8.056862	0	8.056862	57.82602	0	57.82602	FCEV	0	1.662491	1	7
2020	2a	1	14980.7	72600.38	43560.23	29040.15	613683.4	368210.1	245473.4	PHEV	8988.422	5992.281	1	8
2020	2a	1	10369.57	50847.7	50847.7	0	452905.6	452905.6	0	ICE	10369.57	0	1	2
2020	2a	1	26926.21	132034	0	132034	975452.3	0	975452.3	BEV	0	26926.21	1	3
2020	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2020	2a	1	12804.14	62785.72	37671.43	25114.29	547634	328580.4	219053.6	PHEV	7682.482	5121.654	1	8
2020	2a	1	1599.339	4360.647	4360.647	0	20686.14	20686.14	0	ICE	1599.339	0	2	1
2020	2a	1	2061.704	5739.412	5739.412	0	27828.67	27828.67	0	ICE	2061.704	0	2	1
2020	2a	1	2367.181	6725.423	6725.423	0	32642.14	32642.14	0	ICE	2367.181	0	2	1
2020	2a	1	2072.551	6007.082	6007.082	0	29249.63	29249.63	0	ICE	2072.551	0	2	1
2020	2a	1	1652.694	4884.852	4884.852	0	24357.04	24357.04	0	ICE	1652.694	0	2	1
2020	2a	1	333.9662	1006.234	1006.234	0	4822.505	4822.505	0	ICE	333.9662	0	2	2
2020	2a	1	166.9733	512.653	512.653	0	2430.092	2430.092	0	ICE	166.9733	0	2	2
2020	2a	1	131.4382	418.611	418.611	0	2026.214	2026.214	0	ICE	131.4382	0	2	2
2020	2a	1	26832.97	114666.9	114666.9	0	760975.8	760975.8	0	ICE	26832.97	0	2	1
2020	2a	1	36585.26	173109.8	173109.8	0	1379940	1379940	0	ICE	36585.26	0	2	1
2020	2a	1	51309.51	245719.7	245719.7	0	2011965	2011965	0	ICE	51309.51	0	2	1

2020	2a	1	61333.43	297237.7	297237.7	0	2497788	2497788	0	ICE	61333.43	0	2	1
2020	2a	1	2872.164	7995.587	7995.587	0	37018.58	37018.58	0	ICE	2872.164	0	3	1
2020	2a	1	2908.631	8263.742	8263.742	0	39346.11	39346.11	0	ICE	2908.631	0	3	1
2020	2a	1	1698.255	4922.222	4922.222	0	23545.83	23545.83	0	ICE	1698.255	0	3	1
2020	2a	1	28.52032	84.29722	84.29722	0	415.5294	415.5294	0	ICE	28.52032	0	3	2
2020	2a	1	1168.352	3520.22	3520.22	0	16811.92	16811.92	0	ICE	1168.352	0	3	1
2020	2a	1	1585.493	4867.893	4867.893	0	23471.56	23471.56	0	ICE	1585.493	0	3	1
2020	2a	1	3453.721	10999.58	10999.58	0	53817.39	53817.39	0	ICE	3453.721	0	3	1
2020	2a	1	46.14146	207.7528	207.7528	0	1521.519	1521.519	0	ICE	46.14146	0	3	2
2020	2a	1	1385.678	6556.584	6556.584	0	51634.14	51634.14	0	ICE	1385.678	0	3	2
2020	2a	1	986.7357	4725.447	4725.447	0	38201.94	38201.94	0	ICE	986.7357	0	3	2
2020	2a	1	3749.759	18387.13	18387.13	0	157074.3	157074.3	0	ICE	3749.759	0	3	2
2020	2a	1	3900.837	19351.43	0	19351.43	121770.7	0	121770.7	BEV	0	3900.837	3	3
2020	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2020	2a	1	355.0048	1761.122	1056.673	704.4489	15213.09	9127.857	6085.238	PHEV	213.0029	142.0019	3	8
2020	2a	1	8433.538	23960.61	23960.61	0	105750.1	105750.1	0	ICE	8433.538	0	4	1
2020	2a	1	3294.281	9548.144	9548.144	0	42308.8	42308.8	0	ICE	3294.281	0	4	1
2020	2a	1	1764.31	5315.832	5315.832	0	25104.94	25104.94	0	ICE	1764.31	0	4	1
2020	2a	1	357.5068	1077.161	1077.161	0	4425.957	4425.957	0	ICE	357.5068	0	4	2
2020	2a	1	1145.828	3518.002	3518.002	0	15988.02	15988.02	0	ICE	1145.828	0	4	1
2020	2a	1	1880.272	5880.664	5880.664	0	27278.6	27278.6	0	ICE	1880.272	0	4	1
2020	2a	1	253.4008	792.5261	792.5261	0	3387.408	3387.408	0	ICE	253.4008	0	4	2
2020	2a	1	2509.393	7992.042	7992.042	0	37339.33	37339.33	0	ICE	2509.393	0	4	1
2020	2a	1	130.351	415.1485	415.1485	0	1780.912	1780.912	0	ICE	130.351	0	4	2
2020	2a	1	3237.861	10497.6	10497.6	0	48721.2	48721.2	0	ICE	3237.861	0	4	1
2020	2a	1	3397.831	11210.9	11210.9	0	52560.88	52560.88	0	ICE	3397.831	0	4	1
2020	2a	1	4411.484	14808.12	14808.12	0	71776.98	71776.98	0	ICE	4411.484	0	4	1
2020	2a	1	13.4135	45.02535	45.02535	0	214.1699	214.1699	0	ICE	13.4135	0	4	2
2020	2a	1	5890.021	20108.59	20108.59	0	98492.75	98492.75	0	ICE	5890.021	0	4	1
2020	2a	1	71.78348	265.6319	265.6319	0	1387.743	1387.743	0	ICE	71.78348	0	4	2
2020	2a	1	67.97949	271.0281	271.0281	0	1526.39	1526.39	0	ICE	67.97949	0	4	2
2020	2a	1	483.2557	2092.811	2092.811	0	13895.6	13895.6	0	ICE	483.2557	0	4	2
2020	2a	1	669.4524	2937.517	2937.517	0	19980.76	19980.76	0	ICE	669.4524	0	4	2
2020	2a	1	901.0738	4005.48	4005.48	0	28049.77	28049.77	0	ICE	901.0738	0	4	2
2020	2a	1	635.9955	2863.582	2863.582	0	20612.48	20612.48	0	ICE	635.9955	0	4	2
2020	2a	1	890.6301	4061.104	4061.104	0	29408.08	29408.08	0	ICE	890.6301	0	4	2
2020	2a	1	5229.565	24744.63	24744.63	0	197562.3	197562.3	0	ICE	5229.565	0	4	2
2020	2a	1	10793.94	52928.62	52928.62	0	459636.5	459636.5	0	ICE	10793.94	0	4	2
2020	2a	1	6727.657	33374.83	33374.83	0	298344	298344	0	ICE	6727.657	0	4	2
2020	2a	1	1579.782	4940.862	4940.862	0	14239.3	14239.3	0	ICE	1579.782	0	1	2
2020	2a	1	88.50873	307.2404	307.2404	0	1154.721	1154.721	0	ICE	88.50873	0	1	2
2020	2a	1	429.7545	1713.393	1713.393	0	9327.249	9327.249	0	ICE	429.7545	0	1	2
2020	2a	1	42.07335	182.2049	0	182.2049	1019.026	0	1019.026	BEV	0	42.07335	1	3
2020	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2020	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2020	2a	1	2079.631	9840.15	0	9840.15	66876.58	0	66876.58	BEV	0	2079.631	1	3
2020	2a	1	7.859199	37.18721	0	37.18721	252.7353	0	252.7353	FCEV	0	7.859199	1	7

2020	2a	1	4371.461	20684.35	12410.61	8273.742	165349.6	99209.76	66139.84	PHEV	2622.877	1748.584	1	8
2020	2a	1	17285.34	85749.83	0	85749.83	651011	0	651011	BEV	0	17285.34	1	3
2020	2a	1	526.2653	2610.718	0	2610.718	19820.52	0	19820.52	FCEV	0	526.2653	1	7
2020	2a	1	12430.47	61665.59	36999.36	24666.24	554832.7	332899.6	221933.1	PHEV	7458.285	4972.19	1	8
2020	2a	1	13.60063	50.3286	50.3286	0	257.4566	257.4566	0	ICE	13.60063	0	2	2
2020	2a	1	8.486918	31.89172	31.89172	0	167.9184	167.9184	0	ICE	8.486918	0	2	2
2020	2a	1	17.85132	70.14889	70.14889	0	403.7665	403.7665	0	ICE	17.85132	0	2	2
2020	2a	1	26.89707	87.20408	87.20408	0	452.1939	452.1939	0	ICE	26.89707	0	3	2
2020	2a	1	153.0038	662.6058	662.6058	0	4494.523	4494.523	0	ICE	153.0038	0	3	2
2020	2a	1	162.6537	713.7146	713.7146	0	5018.578	5018.578	0	ICE	162.6537	0	3	2
2020	2a	1	327.681	1006.069	1006.069	0	4141.264	4141.264	0	ICE	327.681	0	4	2
2020	2a	1	51.67101	203.0474	203.0474	0	1110.191	1110.191	0	ICE	51.67101	0	4	2
2020	2a	1	164.2252	692.3849	692.3849	0	4376.117	4376.117	0	ICE	164.2252	0	4	2
2020	2a	1	1538.677	7104.225	7104.225	0	52614.66	52614.66	0	ICE	1538.677	0	4	2
2020	2a	1	183.4469	489.6639	489.6639	0	968.4724	968.4724	0	ICE	183.4469	0	1	2
2020	2a	1	896.069	2597.167	2597.167	0	6342.6	6342.6	0	ICE	896.069	0	1	2
2020	2a	1	337.7724	1095.106	1095.106	0	3412.913	3412.913	0	ICE	337.7724	0	1	2
2020	2a	1	818.6643	2701.126	2701.126	0	8921.184	8921.184	0	ICE	818.6643	0	1	2
2020	2a	1	234.7821	882.2524	882.2524	0	4095.849	4095.849	0	ICE	234.7821	0	1	2
2020	2a	1	198.7905	758.3936	758.3936	0	3645.976	3645.976	0	ICE	198.7905	0	1	2
2020	2a	1	382.5597	1503.314	1503.314	0	7936.271	7936.271	0	ICE	382.5597	0	1	2
2020	2a	1	134.8621	560.862	0	560.862	2869.077	0	2869.077	BEV	0	134.8621	1	3
2020	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2020	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2020	2a	1	2662.237	12444.34	0	12444.34	82233.52	0	82233.52	BEV	0	2662.237	1	3
2020	2a	1	26.30248	122.948	0	122.948	812.454	0	812.454	FCEV	0	26.30248	1	7
2020	2a	1	740.0238	3459.16	2075.496	1383.664	26783.97	16070.38	10713.59	PHEV	444.0143	296.0095	1	8
2020	2a	1	1455.545	7220.724	7220.724	0	65505.1	65505.1	0	ICE	1455.545	0	1	2
2020	2a	1	108.3768	320.3283	320.3283	0	1543.044	1543.044	0	ICE	108.3768	0	2	2
2020	2a	1	138.5323	433.2681	433.2681	0	2138.591	2138.591	0	ICE	138.5323	0	2	2
2020	2a	1	53.56525	173.666	173.666	0	843.3944	843.3944	0	ICE	53.56525	0	2	2
2020	2a	1	649.7039	3148.634	0	3148.634	22593.63	0	22593.63	BEV	0	649.7039	2	3
2020	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2020	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2020	2a	1	77.49868	224.6222	224.6222	0	1076.293	1076.293	0	ICE	77.49868	0	3	2
2020	2a	1	50.88022	156.216	156.216	0	731.5593	731.5593	0	ICE	50.88022	0	3	2
2020	2a	1	41.22055	128.9197	128.9197	0	627.0381	627.0381	0	ICE	41.22055	0	3	2
2020	2a	1	2.353491	8.304504	8.304504	0	46.46784	46.46784	0	ICE	2.353491	0	3	2
2020	2a	1	79.50319	230.432	230.432	0	1014.432	1014.432	0	ICE	79.50319	0	4	2
2020	2a	1	87.40886	283.3918	283.3918	0	1298.981	1298.981	0	ICE	87.40886	0	4	2
2020	2a	1	46.78127	170.4321	170.4321	0	836.0624	836.0624	0	ICE	46.78127	0	4	2
2020	2a	1	93.90166	352.859	352.859	0	1835.587	1835.587	0	ICE	93.90166	0	4	2
2020	2a	1	96.50246	368.1607	368.1607	0	1949.874	1949.874	0	ICE	96.50246	0	4	2
2020	2a	1	45.27932	154.584	154.584	0	597.3624	597.3624	0	ICE	45.27932	0	1	2
2020	2a	1	247.2257	1113.139	1113.139	0	7967.88	7967.88	0	ICE	247.2257	0	1	2
2020	2a	1	24.2863	102.3927	102.3927	0	650.0561	650.0561	0	ICE	24.2863	0	2	2
2020	2a	1	1.133243	4.518137	4.518137	0	28.61209	28.61209	0	ICE	1.133243	0	3	2

2020	2a	1	85.87747	396.5049	396.5049	0	3003.33	3003.33	0	ICE	85.87747	0	3	2
2020	2a	1	214.6197	1040.103	0	1040.103	6223.404	0	6223.404	BEV	0	214.6197	3	3
2020	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2020	2a	1	97.17308	470.926	282.5556	188.3704	3860.574	2316.345	1544.23	PHEV	58.30385	38.86923	3	8
2020	2a	1	41.02805	121.2662	121.2662	0	630.2899	630.2899	0	ICE	41.02805	0	4	2
2020	2a	1	22.99595	81.14327	81.14327	0	398.0561	398.0561	0	ICE	22.99595	0	4	2
2020	2a	1	123.7758	479.3006	479.3006	0	2571.172	2571.172	0	ICE	123.7758	0	4	2
2020	2a	1	60.9598	253.5184	253.5184	0	1571.788	1571.788	0	ICE	60.9598	0	4	2
2020	2a	1	203.2267	949.9611	949.9611	0	7303.485	7303.485	0	ICE	203.2267	0	3	2
2020	2a	1	16.39125	55.95989	55.95989	0	260.4211	260.4211	0	ICE	16.39125	0	4	2
2020	2a	1	24.59772	99.47809	99.47809	0	583.3386	583.3386	0	ICE	24.59772	0	4	2
2020	2a	1	36.55926	152.0419	0	152.0419	647.667	0	647.667	BEV	0	36.55926	3	3
2020	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2020	2a	1	0	0	0	0	0	0	0	PHEV	0	0	3	8
2020	2a	1	149.2688	620.7762	0	620.7762	2654.339	0	2654.339	BEV	0	149.2688	4	3
2020	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2020	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2020	2a	1	49.9711	167.739	167.739	0	596.1156	596.1156	0	ICE	49.9711	0	1	2
2020	2a	1	33.58325	124.2735	124.2735	0	564.0607	564.0607	0	ICE	33.58325	0	1	2
2020	2a	1	162.6686	723.0992	723.0992	0	5024.798	5024.798	0	ICE	162.6686	0	1	2
2020	2a	1	451.6016	2085.09	0	2085.09	13413.32	0	13413.32	BEV	0	451.6016	1	3
2020	2a	1	45.84788	211.6842	0	211.6842	1361.759	0	1361.759	FCEV	0	45.84788	1	7
2020	2a	1	48.14027	222.2684	133.3611	88.90738	1670.148	1002.089	668.0592	PHEV	28.88416	19.25611	1	8
2020	2a	1	36.92088	121.8178	121.8178	0	581.6183	581.6183	0	ICE	36.92088	0	2	2
2020	2a	1	16.00144	57.37926	57.37926	0	267.3156	267.3156	0	ICE	16.00144	0	2	2
2020	2a	1	286.8635	1357.346	0	1357.346	9205.038	0	9205.038	BEV	0	286.8635	2	3
2020	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2020	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2020	2a	1	97.28563	276.3992	276.3992	0	1356.96	1356.96	0	ICE	97.28563	0	3	2
2020	2a	1	168.9293	508.9806	508.9806	0	2379.502	2379.502	0	ICE	168.9293	0	3	2
2020	2a	1	9.760175	32.20301	32.20301	0	172.7276	172.7276	0	ICE	9.760175	0	3	2
2020	2a	1	81.17128	370.1256	370.1256	0	2659.725	2659.725	0	ICE	81.17128	0	3	2
2020	2a	1	39.86743	142.9598	142.9598	0	732.2447	732.2447	0	ICE	39.86743	0	4	2
2020	2a	1	53.70916	235.6726	0	235.6726	1360.147	0	1360.147	BEV	0	53.70916	1	3
2020	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2020	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2020	2a	1	298.5177	1344.082	0	1344.082	8136.348	0	8136.348	BEV	0	298.5177	1	3
2020	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2020	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2020	2a	1	245.222	1118.166	0	1118.166	7063.173	0	7063.173	BEV	0	245.222	1	3
2020	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2020	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2020	2a	1	2.681847	7.46578	7.46578	0	27.90059	27.90059	0	ICE	2.681847	0	2	2
2020	2a	1	17.42635	59.49374	59.49374	0	266.2179	266.2179	0	ICE	17.42635	0	2	2
2020	2a	1	17.7311	67.64485	67.64485	0	395.0078	395.0078	0	ICE	17.7311	0	2	2
2020	2a	1	31.51938	143.7224	143.7224	0	1046.456	1046.456	0	ICE	31.51938	0	2	2
2020	2a	1	348.2056	1667.546	0	1667.546	11634.86	0	11634.86	BEV	0	348.2056	2	3

2020	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2020	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2020	2a	1	26.59347	118.2141	118.2141	0	839.8201	839.8201	0	ICE	26.59347	0	3	2
2020	2a	1	11.50872	30.71952	30.71952	0	147.4345	147.4345	0	ICE	11.50872	0	4	2
2020	2a	1	11.18917	30.50762	30.50762	0	138.2226	138.2226	0	ICE	11.18917	0	4	2
2020	2a	1	23.58266	77.80932	77.80932	0	379.0864	379.0864	0	ICE	23.58266	0	4	2
2020	2a	1	18.14448	62.98494	62.98494	0	312.5924	312.5924	0	ICE	18.14448	0	4	2
2020	2a	1	37.5196	158.1853	0	158.1853	836.1115	0	836.1115	BEV	0	37.5196	1	3
2020	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2020	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2020	2a	1	94.55889	420.336	0	420.336	2497.292	0	2497.292	BEV	0	94.55889	1	3
2020	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2020	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2020	2a	1	47.64582	214.5263	0	214.5263	1310.39	0	1310.39	BEV	0	47.64582	2	3
2020	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2020	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2020	2a	1	5.366844	25.39419	25.39419	0	211.0272	211.0272	0	ICE	5.366844	0	2	2
2020	2a	1	2.211541	9.704108	0	9.704108	48.63238	0	48.63238	BEV	0	2.211541	4	3
2020	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2020	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2020	2a	1	9.718576	28.16832	28.16832	0	136.1272	136.1272	0	ICE	9.718576	0	2	2
2020	2a	1	48.78679	135.8137	135.8137	0	625.2161	625.2161	0	ICE	48.78679	0	3	2
2020	2a	1	15.83705	64.95549	64.95549	0	381.6848	381.6848	0	ICE	15.83705	0	2	2
2020	2a	1	7.495732	25.5905	25.5905	0	137.5119	137.5119	0	ICE	7.495732	0	3	2
2020	2a	1	2.38275	10.04584	10.04584	0	70.4487	70.4487	0	ICE	2.38275	0	3	2
2020	2a	1	6.07295	22.12479	0	22.12479	83.34442	0	83.34442	BEV	0	6.07295	1	3
2020	2a	1	24.92619	66.53397	66.53397	0	351.8747	351.8747	0	ICE	24.92619	0	3	2
2020	2a	1	9.529315	31.98724	31.98724	0	176.4743	176.4743	0	ICE	9.529315	0	3	2
2020	2a	1	2.598267	9.317073	9.317073	0	50.25062	50.25062	0	ICE	2.598267	0	3	2
2020	2a	1	41.56726	189.5388	0	189.5388	1010.393	0	1010.393	BEV	0	41.56726	3	3
2020	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2020	2a	1	0	0	0	0	0	0	0	PHEV	0	0	3	8
2020	2a	1	19.75046	92.32136	0	92.32136	515.4683	0	515.4683	BEV	0	19.75046	3	3
2020	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2020	2a	1	13.6734	63.91479	38.34887	25.56591	492.3921	295.4353	196.9569	PHEV	8.204038	5.469358	3	8
2020	2a	1	1.92724	9.450317	0	9.450317	57.35598	0	57.35598	BEV	0	1.92724	4	3
2020	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2020	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2020	2a	1	4.385614	15.72629	0	15.72629	58.03614	0	58.03614	BEV	0	4.385614	1	3
2020	2a	1	19.57355	65.70294	65.70294	0	294.1581	294.1581	0	ICE	19.57355	0	2	2
2020	2a	1	95.43808	385.9707	0	385.9707	1847.559	0	1847.559	BEV	0	95.43808	2	3
2020	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2020	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2020	2a	1	40.60538	166.5426	0	166.5426	832.905	0	832.905	BEV	0	40.60538	2	3
2020	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2020	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2020	2a	1	28.85042	119.9825	119.9825	0	766.7363	766.7363	0	ICE	28.85042	0	2	2

2020	2a	1	11.73699	51.50122	0	51.50122	297.7161	0	297.7161	BEV	0	11.73699	2	3
2020	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2020	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2020	2a	1	22.60262	100.4739	100.4739	0	692.9322	692.9322	0	ICE	22.60262	0	2	2
2020	2a	1	6.04338	26.86421	0	26.86421	160.4505	0	160.4505	BEV	0	6.04338	2	3
2020	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2020	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2020	2a	1	25.33836	114.0865	114.0865	0	820.6802	820.6802	0	ICE	25.33836	0	2	2
2020	2a	1	19.48722	88.85804	0	88.85804	559.1573	0	559.1573	BEV	0	19.48722	2	3
2020	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2020	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2020	2a	1	25.98334	82.75304	82.75304	0	442.3284	442.3284	0	ICE	25.98334	0	3	2
2020	2a	1	17.52314	78.89828	0	78.89828	416.5418	0	416.5418	BEV	0	17.52314	3	3
2020	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2020	2a	1	0	0	0	0	0	0	0	PHEV	0	0	3	8
2020	2a	1	15.71001	75.23477	0	75.23477	441.2557	0	441.2557	BEV	0	15.71001	3	3
2020	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2020	2a	1	12.01354	57.53247	34.51948	23.01299	457.2542	274.3525	182.9017	PHEV	7.208123	4.805415	3	8
2020	2a	1	10.63917	43.02692	0	43.02692	175.7901	0	175.7901	BEV	0	10.63917	4	3
2020	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2020	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2020	2a	1	24.2282	102.1478	0	102.1478	452.562	0	452.562	BEV	0	24.2282	4	3
2020	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2020	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2020	2a	1	2.993073	12.96195	0	12.96195	62.29439	0	62.29439	BEV	0	2.993073	4	3
2020	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2020	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2020	2a	1	22.42222	81.68797	81.68797	0	397.6893	397.6893	0	ICE	22.42222	0	2	2
2020	2a	1	1.634612	7.078932	7.078932	0	47.76824	47.76824	0	ICE	1.634612	0	2	2
2020	2a	1	126.1955	524.8194	0	524.8194	2682.095	0	2682.095	BEV	0	126.1955	2	3
2020	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2020	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2020	2a	1	7.24197	30.94754	0	30.94754	169.1115	0	169.1115	BEV	0	7.24197	2	3
2020	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2020	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2020	2a	1	3.604071	10.44604	0	10.44604	27.57389	0	27.57389	BEV	0	3.604071	1	3
2020	2a	1	63.87936	254.6812	0	254.6812	1182.103	0	1182.103	BEV	0	63.87936	2	3
2020	2a	1	19.13562	53.27012	53.27012	0	226.3272	226.3272	0	ICE	19.13562	0	4	2
2020	2a	1	1.580074	6.118569	6.118569	0	35.33161	35.33161	0	ICE	1.580074	0	3	2
2020	2a	1	18.3179	73.03182	73.03182	0	411.959	411.959	0	ICE	18.3179	0	2	2
2020	2a	1	1.281449	5.329265	5.329265	0	33.3314	33.3314	0	ICE	1.281449	0	3	2
2020	2a	1	8.166381	28.81581	28.81581	0	155.8752	155.8752	0	ICE	8.166381	0	2	2
2020	2a	1	10.58286	30.06707	30.06707	0	121.9575	121.9575	0	ICE	10.58286	0	4	2
2020	2a	1	7.454839	28.01342	0	28.01342	113.7367	0	113.7367	BEV	0	7.454839	1	3
2020	2a	1	15.47663	67.91051	67.91051	0	464.2599	464.2599	0	ICE	15.47663	0	2	2
2020	2a	1	3.596418	14.54463	0	14.54463	61.42993	0	61.42993	BEV	0	3.596418	3	3
2020	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7

2020	2a	1	0	0	0	0	0	0	0	PHEV	0	0	3	8
2020	2a	1	1.755754	5.792988	0	5.792988	18.30146	0	18.30146	BEV	0	1.755754	2	3
2020	2a	1	3.614595	16.27479	0	16.27479	84.48937	0	84.48937	BEV	0	3.614595	4	3
2020	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2020	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2020	2a	1	15.78168	62.01602	0	62.01602	280.3127	0	280.3127	BEV	0	15.78168	1	3
2020	2a	1	15.44829	62.47598	0	62.47598	299.358	0	299.358	BEV	0	15.44829	1	3
2020	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2020	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2020	2a	1	39.22672	167.6299	0	167.6299	908.3018	0	908.3018	BEV	0	39.22672	1	3
2020	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2020	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2020	2a	1	21.21355	82.14586	82.14586	0	449.8639	449.8639	0	ICE	21.21355	0	2	2
2020	2a	1	20.03571	78.73273	0	78.73273	353.9876	0	353.9876	BEV	0	20.03571	2	3
2020	2a	1	2.577968	11.16428	0	11.16428	62.02555	0	62.02555	BEV	0	2.577968	2	3
2020	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2020	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2020	2a	1	3.701703	13.48593	13.48593	0	67.84106	67.84106	0	ICE	3.701703	0	3	2
2020	2a	1	14.18128	54.91461	0	54.91461	239.145	0	239.145	BEV	0	14.18128	1	3
2020	2a	1	20.3691	81.20978	0	81.20978	378.6188	0	378.6188	BEV	0	20.3691	1	3
2020	2a	1	2.888326	8.536997	0	8.536997	22.12896	0	22.12896	BEV	0	2.888326	2	3
2020	2a	1	13.19787	45.81376	45.81376	0	245.1021	245.1021	0	ICE	13.19787	0	2	2
2020	2a	1	4.403391	15.79003	0	15.79003	58.42371	0	58.42371	BEV	0	4.403391	2	3
2020	2a	1	2.180828	7.945127	0	7.945127	29.78202	0	29.78202	BEV	0	2.180828	2	3
2020	2a	1	2.236536	8.404343	0	8.404343	34.21188	0	34.21188	BEV	0	2.236536	2	3
2020	2a	1	15.72231	63.58415	63.58415	0	366.0854	366.0854	0	ICE	15.72231	0	2	2
2020	2a	1	6.952824	32.10188	32.10188	0	242.6065	242.6065	0	ICE	6.952824	0	2	2
2020	2a	1	9.15631	43.84929	43.84929	0	358.1811	358.1811	0	ICE	9.15631	0	2	2
2020	2a	1	4.713837	16.36314	16.36314	0	79.79525	79.79525	0	ICE	4.713837	0	3	2
2020	2a	1	2.019324	7.356741	0	7.356741	23.41987	0	23.41987	BEV	0	2.019324	3	3
2020	2a	1	2.507899	9.280379	9.280379	0	53.42943	53.42943	0	ICE	2.507899	0	3	2
2020	2a	1	15.19358	60.57543	0	60.57543	235.3941	0	235.3941	BEV	0	15.19358	3	3
2020	2a	1	2.233999	9.162726	9.162726	0	53.99378	53.99378	0	ICE	2.233999	0	3	2
2020	2a	1	1.527787	6.266203	0	6.266203	25.94946	0	25.94946	BEV	0	1.527787	3	3
2020	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2020	2a	1	0	0	0	0	0	0	0	PHEV	0	0	3	8
2020	2a	1	27.56344	127.2631	0	127.2631	690.9452	0	690.9452	BEV	0	27.56344	3	3
2020	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2020	2a	1	0	0	0	0	0	0	0	PHEV	0	0	3	8
2020	2a	1	61.07229	288.9745	0	288.9745	1645.516	0	1645.516	BEV	0	61.07229	3	3
2020	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2020	2a	1	15.65956	74.09603	44.45762	29.63841	580.6881	348.4129	232.2752	PHEV	9.395737	6.263825	3	8
2020	2a	1	1.299459	3.989691	0	3.989691	9.303536	0	9.303536	BEV	0	1.299459	4	3
2020	2a	1	1.167971	3.920551	0	3.920551	10.47047	0	10.47047	BEV	0	1.167971	4	3
2020	2a	1	3.242077	12.18292	0	12.18292	41.51455	0	41.51455	BEV	0	3.242077	4	3
2020	2a	1	3.327525	15.55415	15.55415	0	124.5646	124.5646	0	ICE	3.327525	0	2	2
2020	2a	1	2.337754	9.588274	0	9.588274	40.40261	0	40.40261	BEV	0	2.337754	4	3

2020	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2020	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2020	2a	1	6.729425	19.11904	19.11904	0	87.89879	87.89879	0	ICE	6.729425	0	2	2
2020	2a	1	1.812076	5.875003	0	5.875003	17.91399	0	17.91399	BEV	0	1.812076	2	3
2020	2a	1	0.742031	2.108191	0	2.108191	5.450224	0	5.450224	BEV	0	0.742031	1	3
2020	2a	1	1.372323	4.134781	0	4.134781	11.27109	0	11.27109	BEV	0	1.372323	1	3
2020	2a	1	2.525941	7.900031	0	7.900031	22.2126	0	22.2126	BEV	0	2.525941	1	3
2020	2a	1	3.29282	10.67578	0	10.67578	32.55539	0	32.55539	BEV	0	3.29282	1	3
2020	2a	1	2.768121	9.13322	0	9.13322	28.63496	0	28.63496	BEV	0	2.768121	1	3
2020	2a	1	2.129707	7.148831	0	7.148831	23.44118	0	23.44118	BEV	0	2.129707	1	3
2020	2a	1	1.921975	6.561643	0	6.561643	21.42644	0	21.42644	BEV	0	1.921975	1	3
2020	2a	1	1.902438	6.603933	0	6.603933	22.95974	0	22.95974	BEV	0	1.902438	1	3
2020	2a	1	1.96742	6.942218	0	6.942218	24.21354	0	24.21354	BEV	0	1.96742	1	3
2020	2a	1	3.058249	11.31693	0	11.31693	43.54329	0	43.54329	BEV	0	3.058249	1	3
2020	2a	1	9.981341	38.07922	0	38.07922	161.0355	0	161.0355	BEV	0	9.981341	1	3
2020	2a	1	1.160235	3.495765	0	3.495765	9.602498	0	9.602498	BEV	0	1.160235	2	3
2020	2a	1	1.190314	3.722778	0	3.722778	10.68442	0	10.68442	BEV	0	1.190314	2	3
2020	2a	1	1.212616	3.862	0	3.862	11.50132	0	11.50132	BEV	0	1.212616	2	3
2020	2a	1	2.188003	8.096617	0	8.096617	32.03287	0	32.03287	BEV	0	2.188003	2	3
2020	2a	1	0	0	0	0	0	0	0	BEV	0	0	2	3
2020	2a	1	38.31184	187.864	0	187.864	1394.68	0	1394.68	FCEV	0	38.31184	2	7
2020	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2020	2a	1	0	0	0	0	0	0	0	BEV	0	0	2	3
2020	2a	1	40.11586	199.0084	0	199.0084	1515.293	0	1515.293	FCEV	0	40.11586	2	7
2020	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2020	2a	1	0.582289	2.488329	2.488329	0	16.43736	16.43736	0	ICE	0.582289	0	3	2
2020	2a	1	0	0	0	0	0	0	0	BEV	0	0	3	3
2020	2a	1	2.670859	13.09669	0	13.09669	81.11423	0	81.11423	FCEV	0	2.670859	3	7
2020	2a	1	38.28231	187.7192	112.6315	75.0877	1614.136	968.4816	645.6544	PHEV	22.96939	15.31293	3	8
2020	2a	1	1.780766	8.630054	8.630054	0	72.32978	72.32978	0	ICE	1.780766	0	2	2
2020	2a	1	0.860839	3.382772	0	3.382772	12.72237	0	12.72237	BEV	0	0.860839	3	3
2020	2a	1	0.62337	1.98534	0	1.98534	4.867078	0	4.867078	BEV	0	0.62337	4	3
2020	2a	1	1.496128	5.107796	0	5.107796	14.22982	0	14.22982	BEV	0	1.496128	4	3
2020	2a	1	6.208615	22.61904	0	22.61904	72.37814	0	72.37814	BEV	0	6.208615	4	3
2020	2a	1	2.624225	10.46255	0	10.46255	40.59447	0	40.59447	BEV	0	2.624225	4	3
2020	2a	1	0.602482	1.780749	0	1.780749	4.727902	0	4.727902	BEV	0	0.602482	1	3
2020	2a	1	0.425575	1.306632	0	1.306632	2.932768	0	2.932768	BEV	0	0.425575	3	3
2020	2a	1	1.266234	5.628703	0	5.628703	27.90051	0	27.90051	BEV	0	1.266234	3	3
2020	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2020	2a	1	0	0	0	0	0	0	0	PHEV	0	0	3	8
2020	2a	1	0.453471	1.39228	0	1.39228	3.406274	0	3.406274	BEV	0	0.453471	2	3
2020	2a	1	3.373642	15.57644	0	15.57644	97.10196	0	97.10196	BEV	0	3.373642	2	3
2020	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2020	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2020	2a	1	2.59156	9.886905	0	9.886905	41.26442	0	41.26442	BEV	0	2.59156	2	3
2020	2a	1	7.386367	28.60245	0	28.60245	123.8935	0	123.8935	BEV	0	7.386367	2	3
2020	2a	1	2.446638	9.614359	0	9.614359	35.99519	0	35.99519	BEV	0	2.446638	4	3

2020	2a	1	2.208774	10.95738	10.95738	0	99.64409	99.64409	0	ICE	2.208774	0	2	2
2020	2a	1	1.735481	8.112314	0	8.112314	53.55076	0	53.55076	BEV	0	1.735481	2	3
2020	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2020	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2020	2a	1	1.029837	3.456874	0	3.456874	11.04317	0	11.04317	BEV	0	1.029837	2	3
2020	2a	1	0.455748	1.608147	0	1.608147	4.731305	0	4.731305	BEV	0	0.455748	4	3
2020	2a	1	0.396995	1.355346	0	1.355346	4.450061	0	4.450061	BEV	0	0.396995	2	3
2020	2a	1	0.579049	2.175922	0	2.175922	7.171543	0	7.171543	BEV	0	0.579049	3	3
2020	2a	1	0.75226	3.257773	0	3.257773	14.78653	0	14.78653	BEV	0	0.75226	3	3
2020	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2020	2a	1	0	0	0	0	0	0	0	PHEV	0	0	3	8
2020	2a	1	1.002492	3.537385	0	3.537385	10.86218	0	10.86218	BEV	0	1.002492	3	3
2020	2a	1	0.847025	2.503544	0	2.503544	5.621065	0	5.621065	BEV	0	0.847025	4	3
2020	2a	1	3.732718	14.24047	0	14.24047	50.84544	0	50.84544	BEV	0	3.732718	4	3
2020	2a	1	0.610326	1.873865	0	1.873865	5.192061	0	5.192061	BEV	0	0.610326	1	3
2020	2a	1	0.570605	1.817292	0	1.817292	5.323598	0	5.323598	BEV	0	0.570605	1	3
2020	2a	1	1.299897	5.480456	0	5.480456	28.59309	0	28.59309	BEV	0	1.299897	2	3
2020	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2020	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2020	2a	1	0.625239	2.671871	2.671871	0	18.46407	18.46407	0	ICE	0.625239	0	2	2
2020	2a	1	1.155094	3.744976	0	3.744976	9.495663	0	9.495663	BEV	0	1.155094	3	3
2020	2a	1	5.805764	20.81877	0	20.81877	64.19427	0	64.19427	BEV	0	5.805764	4	3
2020	2a	1	4.40339	19.57408	0	19.57408	97.55716	0	97.55716	BEV	0	4.40339	4	3
2020	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2020	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2020	2a	1	0.422068	1.634386	0	1.634386	5.958812	0	5.958812	BEV	0	0.422068	3	3
2020	2a	1	0	0	0	0	0	0	0	BEV	0	0	4	3
2020	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2020	2a	1	3.906193	18.70664	11.22398	7.482656	159.9913	95.99478	63.99652	PHEV	2.343716	1.562477	4	8
2020	2a	1	0.504802	1.896919	1.896919	0	11.55877	11.55877	0	ICE	0.504802	0	3	2
2020	2a	1	0.671099	2.368035	0	2.368035	8.169707	0	8.169707	BEV	0	0.671099	2	3
2021	2a	1	12637.61	34456.82	34456.82	0	73509.09	73509.09	0	ICE	12637.61	0	1	1
2021	2a	1	13326.3	37098.03	37098.03	0	84252.28	84252.28	0	ICE	13326.3	0	1	1
2021	2a	1	4026.803	11440.59	11440.59	0	26477.76	26477.76	0	ICE	4026.803	0	1	1
2021	2a	1	5295.854	15652.9	15652.9	0	39527.95	39527.95	0	ICE	5295.854	0	1	1
2021	2a	1	6085.889	18336.66	18336.66	0	48202.21	48202.21	0	ICE	6085.889	0	1	1
2021	2a	1	11688.35	36556	36556	0	105996.4	105996.4	0	ICE	11688.35	0	1	1
2021	2a	1	13245.37	42184.51	42184.51	0	127528.1	127528.1	0	ICE	13245.37	0	1	1
2021	2a	1	16031.58	52895.09	52895.09	0	174216.7	174216.7	0	ICE	16031.58	0	1	1
2021	2a	1	20399.24	68474.53	68474.53	0	235884	235884	0	ICE	20399.24	0	1	1
2021	2a	1	26946.89	91996.96	91996.96	0	331229.6	331229.6	0	ICE	26946.89	0	1	1
2021	2a	1	31986.16	111033.6	111033.6	0	416418.6	416418.6	0	ICE	31986.16	0	1	1
2021	2a	1	30538.34	107757.3	107757.3	0	422010.9	422010.9	0	ICE	30538.34	0	1	1
2021	2a	1	34969.27	125395.6	125395.6	0	512057	512057	0	ICE	34969.27	0	1	1
2021	2a	1	42705.1	155581.9	155581.9	0	661493.3	661493.3	0	ICE	42705.1	0	1	1
2021	2a	1	57468.33	212659.3	212659.3	0	939984.8	939984.8	0	ICE	57468.33	0	1	1
2021	2a	1	60484.53	227285.8	227285.8	0	1044688	1044688	0	ICE	60484.53	0	1	1

2021	2a	1	84710.98	323175.8	323175.8	0	1541302	1541302	0	ICE	84710.98	0	1	1
2021	2a	1	106741.9	413340	413340	0	2047954	2047954	0	ICE	106741.9	0	1	1
2021	2a	1	130910.6	514429	514429	0	2645104	2645104	0	ICE	130910.6	0	1	1
2021	2a	1	182734.2	728545	728545	0	3887344	3887344	0	ICE	182734.2	0	1	1
2021	2a	1	211096	853714.4	853714.4	0	4717870	4717870	0	ICE	211096	0	1	1
2021	2a	1	359.8055	1455.125	1455.125	0	8183.319	8183.319	0	ICE	359.8055	0	1	2
2021	2a	1	239687.2	983074.5	983074.5	0	5634389	5634389	0	ICE	239687.2	0	1	1
2021	2a	1	285287.8	1186449	1186449	0	7035998	7035998	0	ICE	285287.8	0	1	1
2021	2a	1	301315.3	1270366	1270366	0	7787454	7787454	0	ICE	301315.3	0	1	1
2021	2a	1	379196.5	1620443	1620443	0	10273367	10273367	0	ICE	379196.5	0	1	1
2021	2a	1	416742.3	1804765	1804765	0	11807389	11807389	0	ICE	416742.3	0	1	1
2021	2a	1	1025.215	4439.847	4439.847	0	29079.16	29079.16	0	ICE	1025.215	0	1	2
2021	2a	1	469003.3	2057958	2057958	0	13864516	13864516	0	ICE	469003.3	0	1	1
2021	2a	1	416151.7	1849890	1849890	0	12842681	12842681	0	ICE	416151.7	0	1	1
2021	2a	1	345259.5	1554538	1554538	0	11115079	11115079	0	ICE	345259.5	0	1	1
2021	2a	1	419176	1911363	1911363	0	14058059	14058059	0	ICE	419176	0	1	1
2021	2a	1	4660.794	21252.34	21252.34	0	155275.8	155275.8	0	ICE	4660.794	0	1	2
2021	2a	1	421490.7	1946065	1946065	0	14746775	14746775	0	ICE	421490.7	0	1	1
2021	2a	1	6378.419	29449.8	29449.8	0	220236.4	220236.4	0	ICE	6378.419	0	1	2
2021	2a	1	618141.3	2889433	2889433	0	22600582	22600582	0	ICE	618141.3	0	1	1
2021	2a	1	750037.8	3548939	3548939	0	28515548	28515548	0	ICE	750037.8	0	1	1
2021	2a	1	757975.3	3629921	3629921	0	30042376	30042376	0	ICE	757975.3	0	1	1
2021	2a	1	14030.98	67193.95	67193.95	0	554012.8	554012.8	0	ICE	14030.98	0	1	2
2021	2a	1	877866.9	4254371	4254371	0	36258660	36258660	0	ICE	877866.9	0	1	1
2021	2a	1	833766.8	4088417	4088417	0	35837772	35837772	0	ICE	833766.8	0	1	1
2021	2a	1	880809.8	4369556	4369556	0	39361677	39361677	0	ICE	880809.8	0	1	1
2021	2a	1	10778.8	53471.88	53471.88	0	482751.8	482751.8	0	ICE	10778.8	0	1	2
2021	2a	1	51229.03	254139	0	254139	2175421	0	2175421	BEV	0	51229.03	1	3
2021	2a	1	1045.49	5186.511	0	5186.511	40541.04	0	40541.04	FCEV	0	1045.49	1	7
2021	2a	1	46210.33	229242	123790.7	105451.3	2133271	1151967	981304.9	PHEV	24953.58	21256.75	1	8
2021	2a	1	920065	4617006	4617006	0	42689425	42689425	0	ICE	920065	0	1	1
2021	2a	1	11259.18	56500.01	56500.01	0	523569.1	523569.1	0	ICE	11259.18	0	1	2
2021	2a	1	65401.6	328193.7	0	328193.7	2938445	0	2938445	BEV	0	65401.6	1	3
2021	2a	1	1334.727	6697.831	0	6697.831	53709.16	0	53709.16	FCEV	0	1334.727	1	7
2021	2a	1	42268.73	212110	114539.4	97570.6	2008722	1084710	924012.2	PHEV	22825.12	19443.62	1	8
2021	2a	1	952361.5	4833635	4833635	0	45835948	45835948	0	ICE	952361.5	0	1	1
2021	2a	1	11604.85	58899.5	58899.5	0	559555.2	559555.2	0	ICE	11604.85	0	1	2
2021	2a	1	83017.37	421348	0	421348	3854460	0	3854460	BEV	0	83017.37	1	3
2021	2a	1	1941.927	9856.094	0	9856.094	81047.76	0	81047.76	FCEV	0	1941.927	1	7
2021	2a	1	40714.68	206644.1	109521.4	97122.73	2031783	1076845	954938	PHEV	21578.78	19135.9	1	8
2021	2a	1	967351.4	4965134	4965134	0	48134864	48134864	0	ICE	967351.4	0	1	1
2021	2a	1	11894.35	61050.25	61050.25	0	593157.6	593157.6	0	ICE	11894.35	0	1	2
2021	2a	1	100187.1	514231.4	0	514231.4	4870331	0	4870331	BEV	0	100187.1	1	3
2021	2a	1	2644.235	13572.09	0	13572.09	114294	0	114294	FCEV	0	2644.235	1	7
2021	2a	1	38201.9	196079.3	101961.2	94118.04	1921303	999077.7	922225.5	PHEV	19864.99	18336.91	1	8
2021	2a	1	826809.8	4291143	4291143	0	42480016	42480016	0	ICE	826809.8	0	1	1
2021	2a	1	10215.33	53017.56	53017.56	0	526078.6	526078.6	0	ICE	10215.33	0	1	2

2021	2a	1	133583	693295.9	0	693295.9	6654670	0	6654670	BEV	0	133583	1	3
2021	2a	1	4579.087	23765.46	0	23765.46	204847.2	0	204847.2	FCEV	0	4579.087	1	7
2021	2a	1	50786.42	263581.5	131263.6	132317.9	2724423	1356762	1367660	PHEV	25291.64	25494.79	1	8
2021	2a	1	1864.306	5510.31	5510.31	0	26998.38	26998.38	0	ICE	1864.306	0	2	1
2021	2a	1	2068.377	6231.978	6231.978	0	30526.56	30526.56	0	ICE	2068.377	0	2	1
2021	2a	1	3993.681	12261.68	12261.68	0	61545.47	61545.47	0	ICE	3993.681	0	2	1
2021	2a	1	6253.356	19557.75	19557.75	0	99827.41	99827.41	0	ICE	6253.356	0	2	1
2021	2a	1	10604.23	33772.87	33772.87	0	174128	174128	0	ICE	10604.23	0	2	1
2021	2a	1	10151.42	32912.31	32912.31	0	172441.1	172441.1	0	ICE	10151.42	0	2	1
2021	2a	1	10144.14	33469.9	33469.9	0	177158.4	177158.4	0	ICE	10144.14	0	2	1
2021	2a	1	13230.76	44411.97	44411.97	0	238264	238264	0	ICE	13230.76	0	2	1
2021	2a	1	10940.47	37350.89	37350.89	0	201113.7	201113.7	0	ICE	10940.47	0	2	1
2021	2a	1	13589.31	47172.58	47172.58	0	254733.8	254733.8	0	ICE	13589.31	0	2	1
2021	2a	1	12023.8	42427.08	42427.08	0	232433.1	232433.1	0	ICE	12023.8	0	2	1
2021	2a	1	15648.77	56114.61	56114.61	0	310123.4	310123.4	0	ICE	15648.77	0	2	1
2021	2a	1	19443.58	70836.28	70836.28	0	396393.9	396393.9	0	ICE	19443.58	0	2	1
2021	2a	1	18992.76	70281.95	70281.95	0	399029.8	399029.8	0	ICE	18992.76	0	2	1
2021	2a	1	21316.45	80101.9	80101.9	0	457808.5	457808.5	0	ICE	21316.45	0	2	1
2021	2a	1	28167.49	107460.1	107460.1	0	622666.5	622666.5	0	ICE	28167.49	0	2	1
2021	2a	1	36140.4	139947.6	139947.6	0	821304.7	821304.7	0	ICE	36140.4	0	2	1
2021	2a	1	33356.86	131079.8	131079.8	0	778663.9	778663.9	0	ICE	33356.86	0	2	1
2021	2a	1	36043.98	143704.1	143704.1	0	866556.6	866556.6	0	ICE	36043.98	0	2	1
2021	2a	1	40258.8	162814.6	162814.6	0	994834.2	994834.2	0	ICE	40258.8	0	2	1
2021	2a	1	41804.98	171462.7	171462.7	0	1062175	1062175	0	ICE	41804.98	0	2	1
2021	2a	1	28921.81	120279.4	120279.4	0	757616.9	757616.9	0	ICE	28921.81	0	2	1
2021	2a	1	15690.23	67050.02	67050.02	0	436517.2	436517.2	0	ICE	15690.23	0	2	1
2021	2a	1	24395.05	105646.4	105646.4	0	704119.8	704119.8	0	ICE	24395.05	0	2	1
2021	2a	1	34462.75	151220.5	151220.5	0	1028129	1028129	0	ICE	34462.75	0	2	1
2021	2a	1	57860.27	257202.2	257202.2	0	1787267	1787267	0	ICE	57860.27	0	2	1
2021	2a	1	41999.3	189102.7	189102.7	0	1340725	1340725	0	ICE	41999.3	0	2	1
2021	2a	1	21727.58	99073.62	99073.62	0	717849.4	717849.4	0	ICE	21727.58	0	2	1
2021	2a	1	18642.38	86073.72	86073.72	0	640124.1	640124.1	0	ICE	18642.38	0	2	1
2021	2a	1	124594.3	603816.4	603816.4	0	4999511	4999511	0	ICE	124594.3	0	2	1
2021	2a	1	113129.4	554735.9	554735.9	0	4700279	4700279	0	ICE	113129.4	0	2	1
2021	2a	1	98261.21	487458.2	487458.2	0	4242763	4242763	0	ICE	98261.21	0	2	1
2021	2a	1	13.31126	66.03502	66.03502	0	574.8586	574.8586	0	ICE	13.31126	0	2	2
2021	2a	1	3.31084	16.42455	0	16.42455	127.9504	0	127.9504	BEV	0	3.31084	2	3
2021	2a	1	0.067568	0.335195	0	0.335195	2.611232	0	2.611232	FCEV	0	0.067568	2	7
2021	2a	1	28.71647	142.4578	85.4747	56.98313	1240.271	744.1626	496.1084	PHEV	17.22988	11.48659	2	8
2021	2a	1	102007.4	511886.5	511886.5	0	4573465	4573465	0	ICE	102007.4	0	2	1
2021	2a	1	13.81875	69.34428	69.34428	0	619.6663	619.6663	0	ICE	13.81875	0	2	2
2021	2a	1	102754	521519.5	521519.5	0	4783214	4783214	0	ICE	102754	0	2	1
2021	2a	1	14.017	71.14215	71.14215	0	652.7583	652.7583	0	ICE	14.017	0	2	2
2021	2a	1	1366.26	6934.344	0	6934.344	61010.6	0	61010.6	BEV	0	1366.26	2	3
2021	2a	1	31.9593	162.2069	0	162.2069	1330.247	0	1330.247	FCEV	0	31.9593	2	7
2021	2a	1	1049.192	5325.089	3164.624	2160.465	49784.94	29586.48	20198.46	PHEV	623.5197	425.6721	2	8
2021	2a	1	103253.7	529971.3	529971.3	0	4985947	4985947	0	ICE	103253.7	0	2	1

2021	2a	1	14.24882	73.13506	73.13506	0	688.6073	688.6073	0	ICE	14.24882	0	2	2
2021	2a	1	2804.576	14395.08	0	14395.08	129391.4	0	129391.4	BEV	0	2804.576	2	3
2021	2a	1	74.02107	379.9287	0	379.9287	3194.429	0	3194.429	FCEV	0	74.02107	2	7
2021	2a	1	2160.033	11086.82	6525.388	4561.436	106599.5	62741.45	43858.1	PHEV	1271.334	888.6994	2	8
2021	2a	1	89190.22	462897.2	462897.2	0	4467740	4467740	0	ICE	89190.22	0	2	1
2021	2a	1	12.46984	64.71846	64.71846	0	625.4327	625.4327	0	ICE	12.46984	0	2	2
2021	2a	1	6285.989	32624.28	0	32624.28	299999.1	0	299999.1	BEV	0	6285.989	2	3
2021	2a	1	215.4772	1118.326	0	1118.326	9642.018	0	9642.018	FCEV	0	215.4772	2	7
2021	2a	1	4533.399	23528.34	13639.72	9888.626	236443.9	137069.9	99373.98	PHEV	2628.076	1905.323	2	8
2021	2a	1	1892.228	5050.81	5050.81	0	22979.14	22979.14	0	ICE	1892.228	0	3	1
2021	2a	1	1138.737	3300.516	3300.516	0	15475.71	15475.71	0	ICE	1138.737	0	3	1
2021	2a	1	2749.077	8440.409	8440.409	0	40007.77	40007.77	0	ICE	2749.077	0	3	1
2021	2a	1	4946.877	15755.06	15755.06	0	76060.82	76060.82	0	ICE	4946.877	0	3	1
2021	2a	1	5307.353	17207.18	17207.18	0	84449.7	84449.7	0	ICE	5307.353	0	3	1
2021	2a	1	7053.168	23271.43	23271.43	0	116413.3	116413.3	0	ICE	7053.168	0	3	1
2021	2a	1	9366.24	31439.85	31439.85	0	160626	160626	0	ICE	9366.24	0	3	1
2021	2a	1	10940.65	37351.5	37351.5	0	193778.5	193778.5	0	ICE	10940.65	0	3	1
2021	2a	1	13675.54	47471.91	47471.91	0	252992.7	252992.7	0	ICE	13675.54	0	3	1
2021	2a	1	13272.92	46834.69	46834.69	0	252449.7	252449.7	0	ICE	13272.92	0	3	1
2021	2a	1	18750.45	67236.88	67236.88	0	366288.7	366288.7	0	ICE	18750.45	0	3	1
2021	2a	1	21957.99	79996.68	79996.68	0	441048.1	441048.1	0	ICE	21957.99	0	3	1
2021	2a	1	29095.77	107667.7	107667.7	0	602844.9	602844.9	0	ICE	29095.77	0	3	1
2021	2a	1	29559.04	111075.5	111075.5	0	628918.5	628918.5	0	ICE	29559.04	0	3	1
2021	2a	1	47911.32	182783.6	182783.6	0	1050571	1050571	0	ICE	47911.32	0	3	1
2021	2a	1	56454.37	218610	218610	0	1270424	1270424	0	ICE	56454.37	0	3	1
2021	2a	1	66861.49	262740.3	262740.3	0	1546765	1546765	0	ICE	66861.49	0	3	1
2021	2a	1	95072.81	379046.7	379046.7	0	2264898	2264898	0	ICE	95072.81	0	3	1
2021	2a	1	99383.49	401926.7	401926.7	0	2436799	2436799	0	ICE	99383.49	0	3	1
2021	2a	1	106286.1	435931.6	435931.6	0	2696267	2696267	0	ICE	106286.1	0	3	1
2021	2a	1	129642	539152.4	539152.4	0	3395105	3395105	0	ICE	129642	0	3	1
2021	2a	1	162825.7	686484.5	686484.5	0	4399265	4399265	0	ICE	162825.7	0	3	1
2021	2a	1	184717.4	789363.7	789363.7	0	5160880	5160880	0	ICE	184717.4	0	3	1
2021	2a	1	173571.7	751678.3	751678.3	0	5015842	5015842	0	ICE	173571.7	0	3	1
2021	2a	1	179390.8	787155.9	787155.9	0	5358154	5358154	0	ICE	179390.8	0	3	1
2021	2a	1	141816.5	630406.8	630406.8	0	4379811	4379811	0	ICE	141816.5	0	3	1
2021	2a	1	87391.65	393482.6	393482.6	0	2797328	2797328	0	ICE	87391.65	0	3	1
2021	2a	1	154573.1	704824	704824	0	5121124	5121124	0	ICE	154573.1	0	3	1
2021	2a	1	203763.4	940795.8	940795.8	0	7005399	7005399	0	ICE	203763.4	0	3	1
2021	2a	1	195974	916058.7	916058.7	0	7016902	7016902	0	ICE	195974	0	3	1
2021	2a	1	262325.5	1241240	1241240	0	9742505	9742505	0	ICE	262325.5	0	3	1
2021	2a	1	241253.3	1155355	1155355	0	9314923	9314923	0	ICE	241253.3	0	3	1
2021	2a	1	2615.659	12526.31	12526.31	0	99494.49	99494.49	0	ICE	2615.659	0	3	2
2021	2a	1	282321.3	1368203	1368203	0	11312355	11312355	0	ICE	282321.3	0	3	1
2021	2a	1	269423.6	1321132	1321132	0	11206226	11206226	0	ICE	269423.6	0	3	1
2021	2a	1	1827.698	8962.209	8962.209	0	76449.65	76449.65	0	ICE	1827.698	0	3	2
2021	2a	1	302277.7	1499551	1499551	0	13002993	13002993	0	ICE	302277.7	0	3	1
2021	2a	1	3089.615	15327.09	15327.09	0	133276.2	133276.2	0	ICE	3089.615	0	3	2

2021	2a	1	313678.1	1574078	1574078	0	14008605	14008605	0	ICE	313678.1	0	3	1
2021	2a	1	3206.141	16088.83	16088.83	0	143584.5	143584.5	0	ICE	3206.141	0	3	2
2021	2a	1	1082.233	5430.788	3258.473	2172.315	48543.54	29126.12	19417.41	PHEV	649.34	432.8933	3	8
2021	2a	1	321964.2	1634103	1634103	0	14967859	14967859	0	ICE	321964.2	0	3	1
2021	2a	1	3282.538	16660.26	16660.26	0	152958.7	152958.7	0	ICE	3282.538	0	3	2
2021	2a	1	3797.162	19272.19	0	19272.19	138895.4	0	138895.4	BEV	0	3797.162	3	3
2021	2a	1	88.8225	450.8115	0	450.8115	2948.751	0	2948.751	FCEV	0	88.8225	3	7
2021	2a	1	3298.06	16739.04	9947.772	6791.267	153612.2	91289.56	62322.68	PHEV	1959.99	1338.07	3	8
2021	2a	1	329458.8	1691017	1691017	0	15884737	15884737	0	ICE	329458.8	0	3	1
2021	2a	1	3366.585	17279.71	17279.71	0	162727.3	162727.3	0	ICE	3366.585	0	3	2
2021	2a	1	7895.489	40525.25	0	40525.25	342516.1	0	342516.1	BEV	0	7895.489	3	3
2021	2a	1	208.3853	1069.581	0	1069.581	7167.807	0	7167.807	FCEV	0	208.3853	3	7
2021	2a	1	5698.026	29246.32	17213.55	12032.77	275419.8	162104.2	113315.6	PHEV	3353.695	2344.331	3	8
2021	2a	1	282962.2	1468574	1468574	0	14136519	14136519	0	ICE	282962.2	0	3	1
2021	2a	1	2935.171	15233.54	15233.54	0	147215.4	147215.4	0	ICE	2935.171	0	3	2
2021	2a	1	19325.86	100301.2	0	100301.2	841092	0	841092	BEV	0	19325.86	3	3
2021	2a	1	662.4703	3438.221	0	3438.221	23598.94	0	23598.94	FCEV	0	662.4703	3	7
2021	2a	1	13135.6	68173.77	39521.31	28652.46	725609.3	420646.1	304963.2	PHEV	7614.895	5520.705	3	8
2021	2a	1	5309.761	14173.03	14173.03	0	59360.12	59360.12	0	ICE	5309.761	0	4	1
2021	2a	1	8547.471	23304.94	23304.94	0	99793.45	99793.45	0	ICE	8547.471	0	4	1
2021	2a	1	1742.037	5049.119	5049.119	0	23094.73	23094.73	0	ICE	1742.037	0	4	1
2021	2a	1	6103.304	20836.74	20836.74	0	99808.53	99808.53	0	ICE	6103.304	0	4	1
2021	2a	1	5773.968	20043.17	20043.17	0	98357.33	98357.33	0	ICE	5773.968	0	4	1
2021	2a	1	7852.575	27708.52	27708.52	0	138115.6	138115.6	0	ICE	7852.575	0	4	1
2021	2a	1	9547.426	34235.92	34235.92	0	175004.1	175004.1	0	ICE	9547.426	0	4	1
2021	2a	1	16467.61	59994.3	59994.3	0	312188.2	312188.2	0	ICE	16467.61	0	4	1
2021	2a	1	20203.73	74763.1	74763.1	0	396836.2	396836.2	0	ICE	20203.73	0	4	1
2021	2a	1	20612.07	77455.01	77455.01	0	417243.3	417243.3	0	ICE	20612.07	0	4	1
2021	2a	1	30495.98	116343.4	116343.4	0	639375.2	639375.2	0	ICE	30495.98	0	4	1
2021	2a	1	38001.05	147152.6	147152.6	0	819410.1	819410.1	0	ICE	38001.05	0	4	1
2021	2a	1	68523.54	269271.5	269271.5	0	1527943	1527943	0	ICE	68523.54	0	4	1
2021	2a	1	84894.5	338466.7	338466.7	0	1952796	1952796	0	ICE	84894.5	0	4	1
2021	2a	1	116854.4	472582.6	472582.6	0	2774894	2774894	0	ICE	116854.4	0	4	1
2021	2a	1	110.4449	446.6612	446.6612	0	2577.678	2577.678	0	ICE	110.4449	0	4	2
2021	2a	1	147101.2	603333.9	603333.9	0	3615460	3615460	0	ICE	147101.2	0	4	1
2021	2a	1	164983.2	686128.8	686128.8	0	4209428	4209428	0	ICE	164983.2	0	4	1
2021	2a	1	185237.9	780975.9	780975.9	0	4894174	4894174	0	ICE	185237.9	0	4	1
2021	2a	1	254.9289	1074.798	1074.798	0	6621.075	6621.075	0	ICE	254.9289	0	4	2
2021	2a	1	176055.5	752348.7	752348.7	0	4808894	4808894	0	ICE	176055.5	0	4	1
2021	2a	1	174014.2	753594.7	753594.7	0	4922106	4922106	0	ICE	174014.2	0	4	1
2021	2a	1	173795.9	762606.2	762606.2	0	5102181	5102181	0	ICE	173795.9	0	4	1
2021	2a	1	129580.6	576015.7	576015.7	0	3945989	3945989	0	ICE	129580.6	0	4	1
2021	2a	1	53588.11	241281.5	241281.5	0	1693650	1693650	0	ICE	53588.11	0	4	1
2021	2a	1	76020.7	346640	346640	0	2496334	2496334	0	ICE	76020.7	0	4	1
2021	2a	1	108274.1	499912.4	499912.4	0	3691208	3691208	0	ICE	108274.1	0	4	1
2021	2a	1	3063.472	14144.36	14144.36	0	103671	103671	0	ICE	3063.472	0	4	2
2021	2a	1	108143.9	505506.6	505506.6	0	3839369	3839369	0	ICE	108143.9	0	4	1

2021	2a	1	117813	557453.5	557453.5	0	4352331	4352331	0	ICE	117813	0	4	1
2021	2a	1	2570.674	12163.61	12163.61	0	93711.03	93711.03	0	ICE	2570.674	0	4	2
2021	2a	1	181057.6	867079.5	867079.5	0	6953390	6953390	0	ICE	181057.6	0	4	1
2021	2a	1	5598.341	26810.29	26810.29	0	214860.9	214860.9	0	ICE	5598.341	0	4	2
2021	2a	1	195056.5	945294.3	945294.3	0	7787060	7787060	0	ICE	195056.5	0	4	1
2021	2a	1	210247.4	1030958	1030958	0	8687604	8687604	0	ICE	210247.4	0	4	1
2021	2a	1	190074.2	942927.7	942927.7	0	8084911	8084911	0	ICE	190074.2	0	4	1
2021	2a	1	6627.918	32880.04	32880.04	0	282095.1	282095.1	0	ICE	6627.918	0	4	2
2021	2a	1	1590.215	7888.802	4733.281	3155.521	64661.44	38796.86	25864.58	PHEV	954.1289	636.086	4	8
2021	2a	1	196537.6	986251.1	986251.1	0	8675301	8675301	0	ICE	196537.6	0	4	1
2021	2a	1	6853.297	34390.74	34390.74	0	302695	302695	0	ICE	6853.297	0	4	2
2021	2a	1	3.438027	17.25247	0	17.25247	110.0993	0	110.0993	BEV	0	3.438027	4	3
2021	2a	1	0.070164	0.352091	0	0.352091	2.246924	0	2.246924	FCEV	0	0.070164	4	7
2021	2a	1	4207.198	21112.27	12667.36	8444.906	182511.8	109507.1	73004.74	PHEV	2524.319	1682.879	4	8
2021	2a	1	203678.9	1033756	1033756	0	9318290	9318290	0	ICE	203678.9	0	4	1
2021	2a	1	7169.364	36387.54	36387.54	0	328465.8	328465.8	0	ICE	7169.364	0	4	2
2021	2a	1	1746.03	8861.833	0	8861.833	60268.64	0	60268.64	BEV	0	1746.03	4	3
2021	2a	1	40.8428	207.2943	0	207.2943	1355.937	0	1355.937	FCEV	0	40.8428	4	7
2021	2a	1	4542.809	23056.67	13702.25	9354.419	215642.9	128153.5	87489.42	PHEV	2699.727	1843.083	4	8
2021	2a	1	208396.3	1069638	1069638	0	9870294	9870294	0	ICE	208396.3	0	4	1
2021	2a	1	7450.459	38241.04	38241.04	0	353874.5	353874.5	0	ICE	7450.459	0	4	2
2021	2a	1	3593.535	18444.58	0	18444.58	138694.2	0	138694.2	BEV	0	3593.535	4	3
2021	2a	1	94.84404	486.807	0	486.807	3262.326	0	3262.326	FCEV	0	94.84404	4	7
2021	2a	1	4839.579	24840.16	14620.21	10219.95	234087.9	137777.4	96310.43	PHEV	2848.438	1991.141	4	8
2021	2a	1	171362.8	889373	889373	0	8385177	8385177	0	ICE	171362.8	0	4	1
2021	2a	1	6234.704	32358.11	32358.11	0	306417.6	306417.6	0	ICE	6234.704	0	4	2
2021	2a	1	9068.685	47066.48	0	47066.48	362154.7	0	362154.7	BEV	0	9068.685	4	3
2021	2a	1	310.8651	1613.39	0	1613.39	11073.84	0	11073.84	FCEV	0	310.8651	4	7
2021	2a	1	10823.94	56176.25	32566.18	23610.08	573345.8	332376.7	240969	PHEV	6274.793	4549.148	4	8
2021	2a	1	11278.61	30105.31	30105.31	0	60858.74	60858.74	0	ICE	11278.61	0	1	1
2021	2a	1	196.7388	525.143	525.143	0	1065.247	1065.247	0	ICE	196.7388	0	1	2
2021	2a	1	380.2796	1036.844	1036.844	0	2188.52	2188.52	0	ICE	380.2796	0	1	2
2021	2a	1	827.6202	2303.946	2303.946	0	5126.292	5126.292	0	ICE	827.6202	0	1	2
2021	2a	1	5249.332	15214.66	15214.66	0	36855.54	36855.54	0	ICE	5249.332	0	1	1
2021	2a	1	1539.374	4461.722	4461.722	0	10733.82	10733.82	0	ICE	1539.374	0	1	2
2021	2a	1	1821.041	5382.433	5382.433	0	13684.34	13684.34	0	ICE	1821.041	0	1	2
2021	2a	1	1862.376	5611.3	5611.3	0	14557.32	14557.32	0	ICE	1862.376	0	1	2
2021	2a	1	9378.846	28795.59	28795.59	0	80114.42	80114.42	0	ICE	9378.846	0	1	1
2021	2a	1	1453.857	4547.026	4547.026	0	12956.62	12956.62	0	ICE	1453.857	0	1	2
2021	2a	1	15614.5	50624.39	50624.39	0	158941.4	158941.4	0	ICE	15614.5	0	1	1
2021	2a	1	116.8454	405.6055	405.6055	0	1528.25	1528.25	0	ICE	116.8454	0	1	2
2021	2a	1	67.44794	237.9961	237.9961	0	898.4739	898.4739	0	ICE	67.44794	0	1	2
2021	2a	1	38.86052	139.3492	139.3492	0	560.05	560.05	0	ICE	38.86052	0	1	2
2021	2a	1	152.0284	579.9946	579.9946	0	2771.115	2771.115	0	ICE	152.0284	0	1	2
2021	2a	1	311.4792	1241.84	1241.84	0	6751.417	6751.417	0	ICE	311.4792	0	1	2
2021	2a	1	54.72283	221.3101	0	221.3101	1089.674	0	1089.674	BEV	0	54.72283	1	3
2021	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7

2021	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2021	2a	1	898.1335	3683.686	3683.686	0	21174.76	21174.76	0	ICE	898.1335	0	1	2
2021	2a	1	1288.409	5358.211	5358.211	0	32043.87	32043.87	0	ICE	1288.409	0	1	2
2021	2a	1	488.6768	2060.296	2060.296	0	12778.3	12778.3	0	ICE	488.6768	0	1	2
2021	2a	1	963.7213	4118.328	4118.328	0	25895.57	25895.57	0	ICE	963.7213	0	1	2
2021	2a	1	2697.443	12145.29	12145.29	0	86444.27	86444.27	0	ICE	2697.443	0	1	2
2021	2a	1	7041.09	32912.8	32912.8	0	255149.9	255149.9	0	ICE	7041.09	0	1	2
2021	2a	1	9774.934	46251.86	46251.86	0	370342.1	370342.1	0	ICE	9774.934	0	1	2
2021	2a	1	9275.39	43888.18	0	43888.18	304362.4	0	304362.4	BEV	0	9275.39	1	3
2021	2a	1	0.544938	2.578472	0	2.578472	17.88158	0	17.88158	FCEV	0	0.544938	1	7
2021	2a	1	9694.992	45873.6	27524.16	18349.44	359138.9	215483.3	143655.5	PHEV	5816.995	3877.997	1	8
2021	2a	1	11442.95	54799.95	0	54799.95	391210	0	391210	BEV	0	11442.95	1	3
2021	2a	1	1.603328	7.678289	0	7.678289	54.81435	0	54.81435	FCEV	0	1.603328	1	7
2021	2a	1	14447.59	69189.07	41513.44	27675.63	558290.2	334974.1	223316.1	PHEV	8668.553	5779.035	1	8
2021	2a	1	9936.759	48156.12	48156.12	0	410727.6	410727.6	0	ICE	9936.759	0	1	2
2021	2a	1	25847.77	125265	0	125265	921234.8	0	921234.8	BEV	0	25847.77	1	3
2021	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2021	2a	1	12291.31	59566.88	35740.13	23826.75	496250.5	297750.3	198500.2	PHEV	7374.785	4916.524	1	8
2021	2a	1	1447.93	3864.873	3864.873	0	17971.6	17971.6	0	ICE	1447.93	0	2	1
2021	2a	1	1845.858	5032.788	5032.788	0	23891.76	23891.76	0	ICE	1845.858	0	2	1
2021	2a	1	2130.893	5932.024	5932.024	0	28189.57	28189.57	0	ICE	2130.893	0	2	1
2021	2a	1	1846.508	5246.131	5246.131	0	24968.45	24968.45	0	ICE	1846.508	0	2	1
2021	2a	1	1472.645	4268.315	4268.315	0	20814.29	20814.29	0	ICE	1472.645	0	2	1
2021	2a	1	302.453	893.9573	893.9573	0	4180.756	4180.756	0	ICE	302.453	0	2	2
2021	2a	1	146.3179	440.853	440.853	0	2040.315	2040.315	0	ICE	146.3179	0	2	2
2021	2a	1	116.2502	363.5795	363.5795	0	1711.462	1711.462	0	ICE	116.2502	0	2	2
2021	2a	1	24821.24	104648.1	104648.1	0	669819	669819	0	ICE	24821.24	0	2	1
2021	2a	1	35374.02	165352	165352	0	1264544	1264544	0	ICE	35374.02	0	2	1
2021	2a	1	49489.79	234169.8	234169.8	0	1839688	1839688	0	ICE	49489.79	0	2	1
2021	2a	1	59227.92	283640.7	283640.7	0	2286181	2286181	0	ICE	59227.92	0	2	1
2021	2a	1	2699.529	7360.347	7360.347	0	33294.84	33294.84	0	ICE	2699.529	0	3	1
2021	2a	1	2724.188	7583.648	7583.648	0	35314.77	35314.77	0	ICE	2724.188	0	3	1
2021	2a	1	1622.257	4609.01	4609.01	0	21569.86	21569.86	0	ICE	1622.257	0	3	1
2021	2a	1	27.15113	78.69484	78.69484	0	378.2912	378.2912	0	ICE	27.15113	0	3	2
2021	2a	1	1138.648	3365.491	3365.491	0	15634.71	15634.71	0	ICE	1138.648	0	3	1
2021	2a	1	1439.045	4335.814	4335.814	0	20408.36	20408.36	0	ICE	1439.045	0	3	1
2021	2a	1	3109.094	9723.878	9723.878	0	46321.83	46321.83	0	ICE	3109.094	0	3	1
2021	2a	1	43.20204	192.043	192.043	0	1353.712	1353.712	0	ICE	43.20204	0	3	2
2021	2a	1	1340.4	6265.554	6265.554	0	47317.75	47317.75	0	ICE	1340.4	0	3	2
2021	2a	1	957.287	4529.576	4529.576	0	35098.62	35098.62	0	ICE	957.287	0	3	2
2021	2a	1	3661.096	17742.62	17742.62	0	145243.5	145243.5	0	ICE	3661.096	0	3	2
2021	2a	1	3833.007	18795.34	0	18795.34	113092.7	0	113092.7	BEV	0	3833.007	3	3
2021	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2021	2a	1	348.8318	1710.514	1026.309	684.2057	14117.68	8470.606	5647.07	PHEV	209.2991	139.5327	3	8
2021	2a	1	8395.389	23371.25	23371.25	0	100927.5	100927.5	0	ICE	8395.389	0	4	1
2021	2a	1	3283.619	9329.124	9329.124	0	40392.6	40392.6	0	ICE	3283.619	0	4	1
2021	2a	1	1693.943	5006.771	5006.771	0	23064.51	23064.51	0	ICE	1693.943	0	4	1

2021	2a	1	341.7872	1010.217	1010.217	0	4042.732	4042.732	0	ICE	341.7872	0	4	2
2021	2a	1	1118.902	3371.23	3371.23	0	14853.95	14853.95	0	ICE	1118.902	0	4	1
2021	2a	1	1785.154	5480.904	5480.904	0	24687.52	24687.52	0	ICE	1785.154	0	4	1
2021	2a	1	239.224	734.4824	734.4824	0	3053.176	3053.176	0	ICE	239.224	0	4	2
2021	2a	1	2381.935	7449.644	7449.644	0	33743.94	33743.94	0	ICE	2381.935	0	4	1
2021	2a	1	124.51	389.4124	389.4124	0	1611.454	1611.454	0	ICE	124.51	0	4	2
2021	2a	1	3027.536	9642.248	9642.248	0	43328.41	43328.41	0	ICE	3027.536	0	4	1
2021	2a	1	3105.518	10068.53	10068.53	0	45718.59	45718.59	0	ICE	3105.518	0	4	1
2021	2a	1	3985.521	13149.95	13149.95	0	61658.43	61658.43	0	ICE	3985.521	0	4	1
2021	2a	1	12.22753	40.34388	40.34388	0	184.7957	184.7957	0	ICE	12.22753	0	4	2
2021	2a	1	5269.654	17688.75	17688.75	0	84073.2	84073.2	0	ICE	5269.654	0	4	1
2021	2a	1	61.96176	225.7372	225.7372	0	1145.725	1145.725	0	ICE	61.96176	0	4	2
2021	2a	1	59.98064	235.7011	235.7011	0	1276.007	1276.007	0	ICE	59.98064	0	4	2
2021	2a	1	443.4591	1895.06	1895.06	0	12085.58	12085.58	0	ICE	443.4591	0	4	2
2021	2a	1	616.7041	2670.73	2670.73	0	17452.93	17452.93	0	ICE	616.7041	0	4	2
2021	2a	1	836.2279	3669.318	3669.318	0	24680.25	24680.25	0	ICE	836.2279	0	4	2
2021	2a	1	599.3238	2664.132	2664.132	0	18406.1	18406.1	0	ICE	599.3238	0	4	2
2021	2a	1	834.2623	3756.283	3756.283	0	26085.93	26085.93	0	ICE	834.2623	0	4	2
2021	2a	1	5049.579	23603.7	23603.7	0	180595.9	180595.9	0	ICE	5049.579	0	4	2
2021	2a	1	10466.11	50721.48	50721.48	0	422235.5	422235.5	0	ICE	10466.11	0	4	2
2021	2a	1	6634.536	32532.78	32532.78	0	278890.9	278890.9	0	ICE	6634.536	0	4	2
2021	2a	1	1518.478	4662.137	4662.137	0	12619.53	12619.53	0	ICE	1518.478	0	1	2
2021	2a	1	79.80748	272.4635	272.4635	0	961.7059	961.7059	0	ICE	79.80748	0	1	2
2021	2a	1	352.3394	1384.56	1384.56	0	7155.893	7155.893	0	ICE	352.3394	0	1	2
2021	2a	1	37.11835	158.6201	0	158.6201	880.2216	0	880.2216	BEV	0	37.11835	1	3
2021	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2021	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2021	2a	1	1980.92	9259.592	0	9259.592	62554.46	0	62554.46	BEV	0	1980.92	1	3
2021	2a	1	7.486155	34.99321	0	34.99321	236.4015	0	236.4015	FCEV	0	7.486155	1	7
2021	2a	1	4163.966	19464	11678.4	7785.6	148489.4	89093.64	59395.76	PHEV	2498.379	1665.586	1	8
2021	2a	1	16811.42	82435.64	0	82435.64	623308.3	0	623308.3	BEV	0	16811.42	1	3
2021	2a	1	511.8363	2509.815	0	2509.815	18977.09	0	18977.09	FCEV	0	511.8363	1	7
2021	2a	1	12089.66	59282.25	35569.35	23712.9	509760.6	305856.4	203904.2	PHEV	7253.795	4835.864	1	8
2021	2a	1	11.95212	43.54362	43.54362	0	214.5564	214.5564	0	ICE	11.95212	0	2	2
2021	2a	1	7.502822	27.76389	27.76389	0	140.7348	140.7348	0	ICE	7.502822	0	2	2
2021	2a	1	15.27638	59.15518	59.15518	0	331.6764	331.6764	0	ICE	15.27638	0	2	2
2021	2a	1	25.01983	79.68441	79.68441	0	402.8768	402.8768	0	ICE	25.01983	0	3	2
2021	2a	1	138.3638	591.2784	591.2784	0	3864.336	3864.336	0	ICE	138.3638	0	3	2
2021	2a	1	148.6934	643.9391	643.9391	0	4364.337	4364.337	0	ICE	148.6934	0	3	2
2021	2a	1	319.5902	962.919	962.919	0	3844.304	3844.304	0	ICE	319.5902	0	4	2
2021	2a	1	44.90825	173.8996	173.8996	0	917.6526	917.6526	0	ICE	44.90825	0	4	2
2021	2a	1	146.508	609.2947	609.2947	0	3705.038	3705.038	0	ICE	146.508	0	4	2
2021	2a	1	1454.304	6631.349	6631.349	0	47082.29	47082.29	0	ICE	1454.304	0	4	2
2021	2a	1	856.0823	2432.224	2432.224	0	5596.228	5596.228	0	ICE	856.0823	0	1	2
2021	2a	1	314.3649	1001.205	1001.205	0	2930.701	2930.701	0	ICE	314.3649	0	1	2
2021	2a	1	748.2028	2425.778	2425.778	0	7539.162	7539.162	0	ICE	748.2028	0	1	2
2021	2a	1	193.5681	716.2911	716.2911	0	3145.761	3145.761	0	ICE	193.5681	0	1	2

2021	2a	1	163.1738	613.1665	613.1665	0	2791.07	2791.07	0	ICE	163.1738	0	1	2
2021	2a	1	312.4557	1209.931	1209.931	0	6063.779	6063.779	0	ICE	312.4557	0	1	2
2021	2a	1	113.9806	467.4901	0	467.4901	2372.74	0	2372.74	BEV	0	113.9806	1	3
2021	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2021	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2021	2a	1	2494.013	11515.11	0	11515.11	75623.9	0	75623.9	BEV	0	2494.013	1	3
2021	2a	1	24.64045	113.7674	0	113.7674	747.152	0	747.152	FCEV	0	24.64045	1	7
2021	2a	1	693.2624	3200.862	1920.517	1280.345	23644.35	14186.61	9457.739	PHEV	415.9575	277.305	1	8
2021	2a	1	1407.719	6902.821	6902.821	0	59940.96	59940.96	0	ICE	1407.719	0	1	2
2021	2a	1	97.20209	281.7305	281.7305	0	1324.344	1324.344	0	ICE	97.20209	0	2	2
2021	2a	1	124.1205	381.0834	381.0834	0	1839.84	1839.84	0	ICE	124.1205	0	2	2
2021	2a	1	48.54264	154.601	154.601	0	729.8389	729.8389	0	ICE	48.54264	0	2	2
2021	2a	1	628.8364	3011.479	0	3011.479	21492.14	0	21492.14	BEV	0	628.8364	2	3
2021	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2021	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2021	2a	1	73.43035	208.6237	208.6237	0	982.1081	982.1081	0	ICE	73.43035	0	3	2
2021	2a	1	46.44724	139.9446	139.9446	0	638.6747	638.6747	0	ICE	46.44724	0	3	2
2021	2a	1	38.22695	117.3671	117.3671	0	554.6186	554.6186	0	ICE	38.22695	0	3	2
2021	2a	1	2.10122	7.293965	7.293965	0	39.60812	39.60812	0	ICE	2.10122	0	3	2
2021	2a	1	77.60762	220.4918	220.4918	0	961.0684	961.0684	0	ICE	77.60762	0	4	2
2021	2a	1	81.94659	260.9876	260.9876	0	1155.17	1155.17	0	ICE	81.94659	0	4	2
2021	2a	1	41.00314	147.0323	147.0323	0	697.8615	697.8615	0	ICE	41.00314	0	4	2
2021	2a	1	80.06333	296.2711	296.2711	0	1491.791	1491.791	0	ICE	80.06333	0	4	2
2021	2a	1	83.0793	312.1912	312.1912	0	1595.784	1595.784	0	ICE	83.0793	0	4	2
2021	2a	1	41.03444	137.7411	137.7411	0	504.5	504.5	0	ICE	41.03444	0	1	2
2021	2a	1	228.2224	1014.501	1014.501	0	6931.913	6931.913	0	ICE	228.2224	0	1	2
2021	2a	1	22.28055	92.65989	92.65989	0	565.6125	565.6125	0	ICE	22.28055	0	2	2
2021	2a	1	1.031406	4.053035	4.053035	0	24.61298	24.61298	0	ICE	1.031406	0	3	2
2021	2a	1	81.6221	372.1813	372.1813	0	2707.714	2707.714	0	ICE	81.6221	0	3	2
2021	2a	1	209.9443	1005.417	0	1005.417	5751.269	0	5751.269	BEV	0	209.9443	3	3
2021	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2021	2a	1	95.0562	455.2213	273.1328	182.0885	3567.737	2140.642	1427.095	PHEV	57.03372	38.02248	3	8
2021	2a	1	40.86258	118.4361	118.4361	0	602.4977	602.4977	0	ICE	40.86258	0	4	2
2021	2a	1	20.47472	71.07389	71.07389	0	336.0459	336.0459	0	ICE	20.47472	0	4	2
2021	2a	1	107.4144	409.7901	409.7901	0	2123.636	2123.636	0	ICE	107.4144	0	4	2
2021	2a	1	55.09506	225.9718	225.9718	0	1348.216	1348.216	0	ICE	55.09506	0	4	2
2021	2a	1	192.9565	890.8996	890.8996	0	6571.533	6571.533	0	ICE	192.9565	0	3	2
2021	2a	1	14.65687	49.19902	49.19902	0	221.5324	221.5324	0	ICE	14.65687	0	4	2
2021	2a	1	21.89479	87.29254	87.29254	0	493.9354	493.9354	0	ICE	21.89479	0	4	2
2021	2a	1	30.57451	125.4011	0	125.4011	508.014	0	508.014	BEV	0	30.57451	3	3
2021	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2021	2a	1	0	0	0	0	0	0	0	PHEV	0	0	3	8
2021	2a	1	133.6561	548.1891	0	548.1891	2234.193	0	2234.193	BEV	0	133.6561	4	3
2021	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2021	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2021	2a	1	45.77896	151.0445	151.0445	0	506.0384	506.0384	0	ICE	45.77896	0	1	2
2021	2a	1	28.2537	102.933	102.933	0	442.3696	442.3696	0	ICE	28.2537	0	1	2

2021	2a	1	147.3148	646.4086	646.4086	0	4282.864	4282.864	0	ICE	147.3148	0	1	2
2021	2a	1	420.4343	1917.101	0	1917.101	12261.2	0	12261.2	BEV	0	420.4343	1	3
2021	2a	1	42.68369	194.6295	0	194.6295	1244.792	0	1244.792	FCEV	0	42.68369	1	7
2021	2a	1	44.81787	204.361	122.6166	81.74439	1464.977	878.9863	585.9909	PHEV	26.89072	17.92715	1	8
2021	2a	1	33.45566	108.4679	108.4679	0	501.1824	501.1824	0	ICE	33.45566	0	2	2
2021	2a	1	13.95401	49.23798	49.23798	0	220.8405	220.8405	0	ICE	13.95401	0	2	2
2021	2a	1	278.7176	1302.835	0	1302.835	8773.574	0	8773.574	BEV	0	278.7176	2	3
2021	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2021	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2021	2a	1	91.32966	254.2453	254.2453	0	1218.58	1218.58	0	ICE	91.32966	0	3	2
2021	2a	1	164.2497	485.4712	485.4712	0	2208.956	2208.956	0	ICE	164.2497	0	3	2
2021	2a	1	8.994292	29.16075	29.16075	0	152.2183	152.2183	0	ICE	8.994292	0	3	2
2021	2a	1	75.6025	340.4018	340.4018	0	2345.986	2345.986	0	ICE	75.6025	0	3	2
2021	2a	1	35.33949	124.6986	124.6986	0	617.4148	617.4148	0	ICE	35.33949	0	4	2
2021	2a	1	48.16391	208.581	0	208.581	1194.608	0	1194.608	BEV	0	48.16391	1	3
2021	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2021	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2021	2a	1	274.4778	1220.117	0	1220.117	7321.455	0	7321.455	BEV	0	274.4778	1	3
2021	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2021	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2021	2a	1	225.2665	1014.267	0	1014.267	6373.896	0	6373.896	BEV	0	225.2665	1	3
2021	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2021	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2021	2a	1	2.414363	6.582832	6.582832	0	23.8699	23.8699	0	ICE	2.414363	0	2	2
2021	2a	1	15.85493	53.22055	53.22055	0	229.7835	229.7835	0	ICE	15.85493	0	2	2
2021	2a	1	15.80482	59.39057	59.39057	0	335.872	335.872	0	ICE	15.80482	0	2	2
2021	2a	1	29.82149	134.2718	134.2718	0	938.0519	938.0519	0	ICE	29.82149	0	2	2
2021	2a	1	336.3203	1591.36	0	1591.36	11032.89	0	11032.89	BEV	0	336.3203	2	3
2021	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2021	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2021	2a	1	24.38857	107.0156	107.0156	0	731.4542	731.4542	0	ICE	24.38857	0	3	2
2021	2a	1	11.21608	29.9384	29.9384	0	132.5555	132.5555	0	ICE	11.21608	0	4	2
2021	2a	1	21.49156	69.67863	69.67863	0	329.3381	329.3381	0	ICE	21.49156	0	4	2
2021	2a	1	15.60184	53.26485	53.26485	0	260.2404	260.2404	0	ICE	15.60184	0	4	2
2021	2a	1	32.09233	133.4649	0	133.4649	699.1827	0	699.1827	BEV	0	32.09233	1	3
2021	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2021	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2021	2a	1	85.44742	374.9382	0	374.9382	2211.468	0	2211.468	BEV	0	85.44742	1	3
2021	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2021	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2021	2a	1	45.19187	200.8883	0	200.8883	1218.064	0	1218.064	BEV	0	45.19187	2	3
2021	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2021	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2021	2a	1	5.255757	24.56746	24.56746	0	196.491	196.491	0	ICE	5.255757	0	2	2
2021	2a	1	2.061567	8.927924	0	8.927924	42.94142	0	42.94142	BEV	0	2.061567	4	3
2021	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2021	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8

2021	2a	1	8.707442	24.7388	24.7388	0	116.5804	116.5804	0	ICE	8.707442	0	2	2
2021	2a	1	46.16638	125.874	125.874	0	564.6834	564.6834	0	ICE	46.16638	0	3	2
2021	2a	1	14.33134	57.9588	57.9588	0	327.1039	327.1039	0	ICE	14.33134	0	2	2
2021	2a	1	6.875397	23.07878	23.07878	0	120.3066	120.3066	0	ICE	6.875397	0	3	2
2021	2a	1	2.111706	8.782122	8.782122	0	59.86373	59.86373	0	ICE	2.111706	0	3	2
2021	2a	1	5.165974	18.52456	0	18.52456	69.02666	0	69.02666	BEV	0	5.165974	1	3
2021	2a	1	8.752586	28.87854	28.87854	0	155.1151	155.1151	0	ICE	8.752586	0	3	2
2021	2a	1	2.323033	8.19703	8.19703	0	42.89713	42.89713	0	ICE	2.323033	0	3	2
2021	2a	1	38.78999	174.6527	0	174.6527	892.2378	0	892.2378	BEV	0	38.78999	3	3
2021	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2021	2a	1	0	0	0	0	0	0	0	PHEV	0	0	3	8
2021	2a	1	18.88649	87.2008	0	87.2008	466.0621	0	466.0621	BEV	0	18.88649	3	3
2021	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2021	2a	1	13.07526	60.36978	36.22187	24.14791	446.3611	267.8167	178.5445	PHEV	7.845156	5.230104	3	8
2021	2a	1	1.89403	9.178962	0	9.178962	53.32182	0	53.32182	BEV	0	1.89403	4	3
2021	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2021	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2021	2a	1	3.791986	13.38036	0	13.38036	48.80737	0	48.80737	BEV	0	3.791986	1	3
2021	2a	1	17.68766	58.3592	58.3592	0	252.3748	252.3748	0	ICE	17.68766	0	2	2
2021	2a	1	85.91373	342.5303	0	342.5303	1622.808	0	1622.808	BEV	0	85.91373	2	3
2021	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2021	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2021	2a	1	32.45012	131.2348	0	131.2348	650.0716	0	650.0716	BEV	0	32.45012	2	3
2021	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2021	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2021	2a	1	26.34771	108.0649	108.0649	0	666.9794	666.9794	0	ICE	26.34771	0	2	2
2021	2a	1	11.10876	48.10814	0	48.10814	275.8166	0	275.8166	BEV	0	11.10876	2	3
2021	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2021	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2021	2a	1	20.42638	89.62973	89.62973	0	594.1827	594.1827	0	ICE	20.42638	0	2	2
2021	2a	1	5.723291	25.11346	0	25.11346	148.9203	0	148.9203	BEV	0	5.723291	2	3
2021	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2021	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2021	2a	1	23.9595	106.5055	106.5055	0	736.7014	736.7014	0	ICE	23.9595	0	2	2
2021	2a	1	18.45579	83.09755	0	83.09755	520.1352	0	520.1352	BEV	0	18.45579	2	3
2021	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2021	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2021	2a	1	23.43456	73.293	73.293	0	381.9723	381.9723	0	ICE	23.43456	0	3	2
2021	2a	1	16.73476	74.38986	0	74.38986	375.9838	0	375.9838	BEV	0	16.73476	3	3
2021	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2021	2a	1	0	0	0	0	0	0	0	PHEV	0	0	3	8
2021	2a	1	15.32405	72.50851	0	72.50851	406.8032	0	406.8032	BEV	0	15.32405	3	3
2021	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2021	2a	1	11.71839	55.44768	33.26861	22.17907	422.0132	253.2079	168.8053	PHEV	7.031036	4.687357	3	8
2021	2a	1	6.056051	24.14493	0	24.14493	94.18576	0	94.18576	BEV	0	6.056051	4	3
2021	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2021	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8

2021	2a	1	19.06384	79.28231	0	79.28231	334.195	0	334.195	BEV	0	19.06384	4	3
2021	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2021	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2021	2a	1	2.779692	11.87862	0	11.87862	54.54539	0	54.54539	BEV	0	2.779692	4	3
2021	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2021	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2021	2a	1	19.49147	69.89407	69.89407	0	327.5808	327.5808	0	ICE	19.49147	0	2	2
2021	2a	1	1.547761	6.614141	6.614141	0	42.89736	42.89736	0	ICE	1.547761	0	2	2
2021	2a	1	109.7649	450.1996	0	450.1996	2273.007	0	2273.007	BEV	0	109.7649	2	3
2021	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2021	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2021	2a	1	6.710659	28.29261	0	28.29261	153.088	0	153.088	BEV	0	6.710659	2	3
2021	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2021	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2021	2a	1	3.416571	9.706855	0	9.706855	25.85547	0	25.85547	BEV	0	3.416571	1	3
2021	2a	1	55.76006	219.1158	0	219.1158	1006.051	0	1006.051	BEV	0	55.76006	2	3
2021	2a	1	18.16877	49.5377	49.5377	0	213.2765	213.2765	0	ICE	18.16877	0	4	2
2021	2a	1	1.415652	5.400769	5.400769	0	30.03851	30.03851	0	ICE	1.415652	0	3	2
2021	2a	1	16.4046	64.46384	64.46384	0	349.6162	349.6162	0	ICE	16.4046	0	2	2
2021	2a	1	1.138996	4.671579	4.671579	0	27.91617	27.91617	0	ICE	1.138996	0	3	2
2021	2a	1	7.218028	25.05594	25.05594	0	131.6668	131.6668	0	ICE	7.218028	0	2	2
2021	2a	1	10.56879	29.4216	29.4216	0	116.0451	116.0451	0	ICE	10.56879	0	4	2
2021	2a	1	6.195835	22.92744	0	22.92744	92.00609	0	92.00609	BEV	0	6.195835	1	3
2021	2a	1	14.57068	63.10049	63.10049	0	414.9897	414.9897	0	ICE	14.57068	0	2	2
2021	2a	1	3.138492	12.51288	0	12.51288	50.72268	0	50.72268	BEV	0	3.138492	3	3
2021	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2021	2a	1	0	0	0	0	0	0	0	PHEV	0	0	3	8
2021	2a	1	1.600768	5.189915	0	5.189915	16.24015	0	16.24015	BEV	0	1.600768	2	3
2021	2a	1	3.400839	15.11751	0	15.11751	74.91135	0	74.91135	BEV	0	3.400839	4	3
2021	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2021	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2021	2a	1	12.90335	49.96601	0	49.96601	223.5897	0	223.5897	BEV	0	12.90335	1	3
2021	2a	1	12.76193	50.88067	0	50.88067	241.4835	0	241.4835	BEV	0	12.76193	1	3
2021	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2021	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2021	2a	1	34.23805	144.35	0	144.35	775.2758	0	775.2758	BEV	0	34.23805	1	3
2021	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2021	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2021	2a	1	18.74751	71.52252	71.52252	0	377.8519	377.8519	0	ICE	18.74751	0	2	2
2021	2a	1	17.19816	66.59696	0	66.59696	295.9382	0	295.9382	BEV	0	17.19816	2	3
2021	2a	1	2.409274	10.29569	0	10.29569	56.72498	0	56.72498	BEV	0	2.409274	2	3
2021	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2021	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2021	2a	1	3.277368	11.75225	11.75225	0	57.19106	57.19106	0	ICE	3.277368	0	3	2
2021	2a	1	11.60119	44.25899	0	44.25899	190.7956	0	190.7956	BEV	0	11.60119	1	3
2021	2a	1	16.7111	65.66828	0	65.66828	303.3792	0	303.3792	BEV	0	16.7111	1	3
2021	2a	1	2.593491	7.516975	0	7.516975	19.48219	0	19.48219	BEV	0	2.593491	2	3

2021	2a	1	11.86098	40.49352	40.49352	0	210.423	210.423	0	ICE	11.86098	0	2	2
2021	2a	1	3.888284	13.72016	0	13.72016	50.22569	0	50.22569	BEV	0	3.888284	2	3
2021	2a	1	1.894439	6.793232	0	6.793232	25.19309	0	25.19309	BEV	0	1.894439	2	3
2021	2a	1	1.981138	7.331121	0	7.331121	29.50671	0	29.50671	BEV	0	1.981138	2	3
2021	2a	1	14.12222	56.30404	56.30404	0	311.5101	311.5101	0	ICE	14.12222	0	2	2
2021	2a	1	6.665764	30.39462	30.39462	0	220.7887	220.7887	0	ICE	6.665764	0	2	2
2021	2a	1	8.906006	42.14037	42.14037	0	329.6683	329.6683	0	ICE	8.906006	0	2	2
2021	2a	1	4.217899	14.39995	14.39995	0	67.88314	67.88314	0	ICE	4.217899	0	3	2
2021	2a	1	1.799089	6.451316	0	6.451316	19.48545	0	19.48545	BEV	0	1.799089	3	3
2021	2a	1	2.211196	8.055762	8.055762	0	45.19764	45.19764	0	ICE	2.211196	0	3	2
2021	2a	1	12.86654	50.56063	0	50.56063	186.5883	0	186.5883	BEV	0	12.86654	3	3
2021	2a	1	1.903554	7.698352	7.698352	0	43.53161	43.53161	0	ICE	1.903554	0	3	2
2021	2a	1	1.279941	5.176339	0	5.176339	20.38444	0	20.38444	BEV	0	1.279941	3	3
2021	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2021	2a	1	0	0	0	0	0	0	0	PHEV	0	0	3	8
2021	2a	1	26.10557	119.0364	0	119.0364	617.294	0	617.294	BEV	0	26.10557	3	3
2021	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2021	2a	1	0	0	0	0	0	0	0	PHEV	0	0	3	8
2021	2a	1	59.13453	276.4179	0	276.4179	1502.39	0	1502.39	BEV	0	59.13453	3	3
2021	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2021	2a	1	15.1627	70.87637	42.52582	28.35055	531.9904	319.1942	212.7961	PHEV	9.09762	6.06508	3	8
2021	2a	1	1.280496	3.858108	0	3.858108	8.645547	0	8.645547	BEV	0	1.280496	4	3
2021	2a	1	1.058107	3.491151	0	3.491151	8.886253	0	8.886253	BEV	0	1.058107	4	3
2021	2a	1	2.758933	10.20932	0	10.20932	32.9936	0	32.9936	BEV	0	2.758933	4	3
2021	2a	1	3.187263	14.71591	14.71591	0	113.461	113.461	0	ICE	3.187263	0	2	2
2021	2a	1	1.50557	6.088828	0	6.088828	24.48389	0	24.48389	BEV	0	1.50557	4	3
2021	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2021	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2021	2a	1	6.063265	16.87904	16.87904	0	75.75127	75.75127	0	ICE	6.063265	0	2	2
2021	2a	1	1.658696	5.282697	0	5.282697	16.02086	0	16.02086	BEV	0	1.658696	2	3
2021	2a	1	0.714922	1.990213	0	1.990213	5.201873	0	5.201873	BEV	0	0.714922	1	3
2021	2a	1	1.304457	3.855571	0	3.855571	10.50396	0	10.50396	BEV	0	1.304457	1	3
2021	2a	1	2.450442	7.523517	0	7.523517	21.08062	0	21.08062	BEV	0	2.450442	1	3
2021	2a	1	3.066927	9.767702	0	9.767702	29.57951	0	29.57951	BEV	0	3.066927	1	3
2021	2a	1	2.553299	8.278153	0	8.278153	25.72123	0	25.72123	BEV	0	2.553299	1	3
2021	2a	1	1.959199	6.464239	0	6.464239	21.05299	0	21.05299	BEV	0	1.959199	1	3
2021	2a	1	1.732523	5.815593	0	5.815593	18.73561	0	18.73561	BEV	0	1.732523	1	3
2021	2a	1	1.696949	5.793401	0	5.793401	19.95429	0	19.95429	BEV	0	1.696949	1	3
2021	2a	1	1.713458	5.947927	0	5.947927	20.52351	0	20.52351	BEV	0	1.713458	1	3
2021	2a	1	2.568735	9.358337	0	9.358337	35.46048	0	35.46048	BEV	0	2.568735	1	3
2021	2a	1	8.217206	30.87821	0	30.87821	129.1908	0	129.1908	BEV	0	8.217206	1	3
2021	2a	1	1.067554	3.155359	0	3.155359	8.686021	0	8.686021	BEV	0	1.067554	2	3
2021	2a	1	1.08787	3.340054	0	3.340054	9.548069	0	9.548069	BEV	0	1.08787	2	3
2021	2a	1	1.079103	3.374959	0	3.374959	10.01486	0	10.01486	BEV	0	1.079103	2	3
2021	2a	1	1.939653	7.066485	0	7.066485	27.62252	0	27.62252	BEV	0	1.939653	2	3
2021	2a	1	0	0	0	0	0	0	0	BEV	0	0	2	3
2021	2a	1	36.9842	179.2351	0	179.2351	1322.898	0	1322.898	FCEV	0	36.9842	2	7

2021	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2021	2a	1	0	0	0	0	0	0	0	BEV	0	0	2	3
2021	2a	1	39.29491	192.6846	0	192.6846	1459.49	0	1459.49	FCEV	0	39.29491	2	7
2021	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2021	2a	1	0.508746	2.144908	2.144908	0	13.68075	13.68075	0	ICE	0.508746	0	3	2
2021	2a	1	0	0	0	0	0	0	0	BEV	0	0	3	3
2021	2a	1	2.577566	12.49155	0	12.49155	74.08348	0	74.08348	FCEV	0	2.577566	3	7
2021	2a	1	36.94511	179.0456	107.4274	71.61824	1473.695	884.2172	589.4781	PHEV	22.16707	14.77804	3	8
2021	2a	1	1.724803	8.260032	8.260032	0	66.07415	66.07415	0	ICE	1.724803	0	2	2
2021	2a	1	0.744591	2.883303	0	2.883303	10.31035	0	10.31035	BEV	0	0.744591	3	3
2021	2a	1	0.585623	1.83157	0	1.83157	4.296864	0	4.296864	BEV	0	0.585623	4	3
2021	2a	1	1.338654	4.493486	0	4.493486	11.89691	0	11.89691	BEV	0	1.338654	4	3
2021	2a	1	5.460375	19.58025	0	19.58025	59.68652	0	59.68652	BEV	0	5.460375	4	3
2021	2a	1	2.283457	8.973119	0	8.973119	33.10437	0	33.10437	BEV	0	2.283457	4	3
2021	2a	1	0.579457	1.679497	0	1.679497	4.48704	0	4.48704	BEV	0	0.579457	1	3
2021	2a	1	0.38966	1.174038	0	1.174038	2.511765	0	2.511765	BEV	0	0.38966	3	3
2021	2a	1	1.169569	5.131997	0	5.131997	24.25555	0	24.25555	BEV	0	1.169569	3	3
2021	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2021	2a	1	0	0	0	0	0	0	0	PHEV	0	0	3	8
2021	2a	1	0.392686	1.183155	0	1.183155	2.814072	0	2.814072	BEV	0	0.392686	2	3
2021	2a	1	3.216736	14.6677	0	14.6677	90.23526	0	90.23526	BEV	0	3.216736	2	3
2021	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2021	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2021	2a	1	2.297426	8.633152	0	8.633152	35.52959	0	35.52959	BEV	0	2.297426	2	3
2021	2a	1	6.559951	25.02647	0	25.02647	106.8784	0	106.8784	BEV	0	6.559951	2	3
2021	2a	1	2.110037	8.170759	0	8.170759	28.99914	0	28.99914	BEV	0	2.110037	4	3
2021	2a	1	2.185814	10.71825	10.71825	0	94.73197	94.73197	0	ICE	2.185814	0	2	2
2021	2a	1	1.713827	7.912909	0	7.912909	52.01011	0	52.01011	BEV	0	1.713827	2	3
2021	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2021	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2021	2a	1	0.935776	3.087529	0	3.087529	9.768014	0	9.768014	BEV	0	0.935776	2	3
2021	2a	1	0.396871	1.377657	0	1.377657	3.867296	0	3.867296	BEV	0	0.396871	4	3
2021	2a	1	0.360013	1.208462	0	1.208462	3.924863	0	3.924863	BEV	0	0.360013	2	3
2021	2a	1	0.514103	1.902417	0	1.902417	5.95022	0	5.95022	BEV	0	0.514103	3	3
2021	2a	1	0.684305	2.924281	0	2.924281	12.63828	0	12.63828	BEV	0	0.684305	3	3
2021	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2021	2a	1	0	0	0	0	0	0	0	PHEV	0	0	3	8
2021	2a	1	0.86415	2.999723	0	2.999723	8.790604	0	8.790604	BEV	0	0.86415	3	3
2021	2a	1	0.847025	2.455018	0	2.455018	5.313833	0	5.313833	BEV	0	0.847025	4	3
2021	2a	1	3.189216	11.98428	0	11.98428	40.66574	0	40.66574	BEV	0	3.189216	4	3
2021	2a	1	0.582423	1.75483	0	1.75483	4.832975	0	4.832975	BEV	0	0.582423	1	3
2021	2a	1	0.529001	1.654483	0	1.654483	4.800622	0	4.800622	BEV	0	0.529001	1	3
2021	2a	1	1.196171	4.974611	0	4.974611	25.6896	0	25.6896	BEV	0	1.196171	2	3
2021	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2021	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2021	2a	1	0.577797	2.436033	2.436033	0	16.31619	16.31619	0	ICE	0.577797	0	2	2
2021	2a	1	1.077127	3.430488	0	3.430488	8.273219	0	8.273219	BEV	0	1.077127	3	3

2021	2a	1	5.052172	17.82704	0	17.82704	52.10152	0	52.10152	BEV	0	5.052172	4	3
2021	2a	1	4.059315	17.81203	0	17.81203	84.49018	0	84.49018	BEV	0	4.059315	4	3
2021	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2021	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2021	2a	1	0.362893	1.384452	0	1.384452	4.794766	0	4.794766	BEV	0	0.362893	3	3
2021	2a	1	0	0	0	0	0	0	0	BEV	0	0	4	3
2021	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2021	2a	1	3.739779	17.69544	10.61726	7.078174	145.0334	87.02006	58.01337	PHEV	2.243867	1.495911	4	8
2021	2a	1	0.448611	1.660066	1.660066	0	9.784079	9.784079	0	ICE	0.448611	0	3	2
2021	2a	1	0.598612	2.077962	0	2.077962	7.103004	0	7.103004	BEV	0	0.598612	2	3
2022	2a	1	12297.12	32823.95	32823.95	0	66169.58	66169.58	0	ICE	12297.12	0	1	1
2022	2a	1	12940.74	35283.32	35283.32	0	75759.28	75759.28	0	ICE	12940.74	0	1	1
2022	2a	1	3885.529	10816.61	10816.61	0	23524.92	23524.92	0	ICE	3885.529	0	1	1
2022	2a	1	5073.754	14705.77	14705.77	0	34838.41	34838.41	0	ICE	5073.754	0	1	1
2022	2a	1	5833.714	17242.65	17242.65	0	42559.01	42559.01	0	ICE	5833.714	0	1	1
2022	2a	1	11291.56	34668.13	34668.13	0	94508.76	94508.76	0	ICE	11291.56	0	1	1
2022	2a	1	12418.64	38840.03	38840.03	0	110365.9	110365.9	0	ICE	12418.64	0	1	1
2022	2a	1	14742.54	47797.38	47797.38	0	148166.2	148166.2	0	ICE	14742.54	0	1	1
2022	2a	1	18733.38	61809.46	61809.46	0	200478.4	200478.4	0	ICE	18733.38	0	1	1
2022	2a	1	24416.28	81958.6	81958.6	0	277586.1	277586.1	0	ICE	24416.28	0	1	1
2022	2a	1	28470.83	97199.7	97199.7	0	343252.5	343252.5	0	ICE	28470.83	0	1	1
2022	2a	1	26536.55	92116.34	92116.34	0	339877.5	339877.5	0	ICE	26536.55	0	1	1
2022	2a	1	30244.07	106718.9	106718.9	0	410996.8	410996.8	0	ICE	30244.07	0	1	1
2022	2a	1	36418.51	130592.4	130592.4	0	523660.8	523660.8	0	ICE	36418.51	0	1	1
2022	2a	1	48307.36	175991.9	175991.9	0	734836.5	734836.5	0	ICE	48307.36	0	1	1
2022	2a	1	50208.27	185793.7	185793.7	0	807404.9	807404.9	0	ICE	50208.27	0	1	1
2022	2a	1	69761.96	262148	262148	0	1182119	1182119	0	ICE	69761.96	0	1	1
2022	2a	1	87550.7	334009.4	334009.4	0	1566510	1566510	0	ICE	87550.7	0	1	1
2022	2a	1	107252.5	415317.2	415317.2	0	2023341	2023341	0	ICE	107252.5	0	1	1
2022	2a	1	150316.8	590688.1	590688.1	0	2989191	2989191	0	ICE	150316.8	0	1	1
2022	2a	1	175324.2	699001.7	699001.7	0	3666679	3666679	0	ICE	175324.2	0	1	1
2022	2a	1	301.1039	1200.474	1200.474	0	6415.224	6415.224	0	ICE	301.1039	0	1	2
2022	2a	1	201277.7	814007.2	814007.2	0	4433038	4433038	0	ICE	201277.7	0	1	1
2022	2a	1	243140.2	997237.2	997237.2	0	5623751	5623751	0	ICE	243140.2	0	1	1
2022	2a	1	260094.8	1081677	1081677	0	6310432	6310432	0	ICE	260094.8	0	1	1
2022	2a	1	333521.4	1406149	1406149	0	8490438	8490438	0	ICE	333521.4	0	1	1
2022	2a	1	370444.3	1583042	1583042	0	9871258	9871258	0	ICE	370444.3	0	1	1
2022	2a	1	913.1389	3902.171	3902.171	0	24379.12	24379.12	0	ICE	913.1389	0	1	2
2022	2a	1	423216.5	1832802	1832802	0	11773629	11773629	0	ICE	423216.5	0	1	1
2022	2a	1	377883.4	1658130	1658130	0	10982257	10982257	0	ICE	377883.4	0	1	1
2022	2a	1	319429.4	1419937	1419937	0	9690951	9690951	0	ICE	319429.4	0	1	1
2022	2a	1	388597.3	1749667	1749667	0	12288801	12288801	0	ICE	388597.3	0	1	1
2022	2a	1	4322.153	19460.58	19460.58	0	135808.6	135808.6	0	ICE	4322.153	0	1	2
2022	2a	1	397751.8	1813673	1813673	0	13131897	13131897	0	ICE	397751.8	0	1	1
2022	2a	1	6016.497	27434.09	27434.09	0	195971.1	195971.1	0	ICE	6016.497	0	1	2
2022	2a	1	583314.6	2693222	2693222	0	20126784	20126784	0	ICE	583314.6	0	1	1
2022	2a	1	718195.7	3357127	3357127	0	25785877	25785877	0	ICE	718195.7	0	1	1

2022	2a	1	723304.7	3422446	3422446	0	27077987	27077987	0	ICE	723304.7	0	1	1
2022	2a	1	13405.43	63430.2	63430.2	0	499781.3	499781.3	0	ICE	13405.43	0	1	2
2022	2a	1	849888.7	4070092	4070092	0	33152893	33152893	0	ICE	849888.7	0	1	1
2022	2a	1	802947.4	3891292	3891292	0	32608052	32608052	0	ICE	802947.4	0	1	1
2022	2a	1	859300.5	4213623	4213623	0	36305826	36305826	0	ICE	859300.5	0	1	1
2022	2a	1	10515.58	51563.67	51563.67	0	445024	445024	0	ICE	10515.58	0	1	2
2022	2a	1	49978.03	245069.8	0	245069.8	2034105	0	2034105	BEV	0	49978.03	1	3
2022	2a	1	1019.96	5001.423	0	5001.423	38835.63	0	38835.63	FCEV	0	1019.96	1	7
2022	2a	1	45081.88	221061.2	119373.1	101688.2	1950742	1053400	897341.1	PHEV	24344.21	20737.66	1	8
2022	2a	1	902591.4	4477612	4477612	0	39619174	39619174	0	ICE	902591.4	0	1	1
2022	2a	1	11045.35	54794.19	54794.19	0	485643.6	485643.6	0	ICE	11045.35	0	1	2
2022	2a	1	64159.51	318285.1	0	318285.1	2750226	0	2750226	BEV	0	64159.51	1	3
2022	2a	1	1309.378	6495.614	0	6495.614	51755.42	0	51755.42	FCEV	0	1309.378	1	7
2022	2a	1	41465.98	205706.1	111081.3	94624.8	1852414	1000304	852110.5	PHEV	22391.63	19074.35	1	8
2022	2a	1	930074.7	4667236	4667236	0	42398370	42398370	0	ICE	930074.7	0	1	1
2022	2a	1	11333.28	56871.87	56871.87	0	517356.7	517356.7	0	ICE	11333.28	0	1	2
2022	2a	1	81074.63	406843	0	406843	3598604	0	3598604	BEV	0	81074.63	1	3
2022	2a	1	1896.482	9516.796	0	9516.796	77785.66	0	77785.66	FCEV	0	1896.482	1	7
2022	2a	1	39761.89	199530.3	105751.1	93779.25	1861798	986753	875045.1	PHEV	21073.8	18688.09	1	8
2022	2a	1	958837.8	4866505	4866505	0	45289577	45289577	0	ICE	958837.8	0	1	1
2022	2a	1	11789.67	59837.52	59837.52	0	557801.3	557801.3	0	ICE	11789.67	0	1	2
2022	2a	1	99305.37	504016.5	0	504016.5	4608763	0	4608763	BEV	0	99305.37	1	3
2022	2a	1	2620.963	13302.49	0	13302.49	111446.9	0	111446.9	FCEV	0	2620.963	1	7
2022	2a	1	37865.68	192184.3	99935.81	92248.44	1802793	937452.4	865340.7	PHEV	19690.16	18175.53	1	8
2022	2a	1	917411.1	4708805	4708805	0	44813826	44813826	0	ICE	917411.1	0	1	1
2022	2a	1	11334.72	58177.83	58177.83	0	554670.6	554670.6	0	ICE	11334.72	0	1	2
2022	2a	1	148221	760775.3	0	760775.3	7074898	0	7074898	BEV	0	148221	1	3
2022	2a	1	5080.861	26078.59	0	26078.59	223755	0	223755	FCEV	0	5080.861	1	7
2022	2a	1	56351.57	289236.3	144039.7	145196.6	2842995	1415811	1427183	PHEV	28063.08	28288.49	1	8
2022	2a	1	774717.1	4020782	4020782	0	39039872	39039872	0	ICE	774717.1	0	1	1
2022	2a	1	9640.691	50035.19	50035.19	0	486822.2	486822.2	0	ICE	9640.691	0	1	2
2022	2a	1	176601.8	916563.3	0	916563.3	8680205	0	8680205	BEV	0	176601.8	1	3
2022	2a	1	7467.973	38758.78	0	38758.78	340113.9	0	340113.9	FCEV	0	7467.973	1	7
2022	2a	1	66944.93	347444.2	165383.4	182060.8	3515677	1673462	1842215	PHEV	31865.79	35079.14	1	8
2022	2a	1	1672.647	4847.999	4847.999	0	23170.99	23170.99	0	ICE	1672.647	0	2	1
2022	2a	1	1877.338	5548.828	5548.828	0	26556.12	26556.12	0	ICE	1877.338	0	2	1
2022	2a	1	3523.211	10615.36	10615.36	0	52029.78	52029.78	0	ICE	3523.211	0	2	1
2022	2a	1	5668.974	17405.28	17405.28	0	86691.84	86691.84	0	ICE	5668.974	0	2	1
2022	2a	1	9395.434	29384.78	29384.78	0	147722.2	147722.2	0	ICE	9395.434	0	2	1
2022	2a	1	9210.962	29335.53	29335.53	0	149933.8	149933.8	0	ICE	9210.962	0	2	1
2022	2a	1	9173.095	29740.46	29740.46	0	153338.6	153338.6	0	ICE	9173.095	0	2	1
2022	2a	1	12011.38	39630.71	39630.71	0	206964.2	206964.2	0	ICE	12011.38	0	2	1
2022	2a	1	9976.516	33488.37	33488.37	0	175410.4	175410.4	0	ICE	9976.516	0	2	1
2022	2a	1	12247.75	41813.95	41813.95	0	219493	219493	0	ICE	12247.75	0	2	1
2022	2a	1	10625.39	36883.93	36883.93	0	196612.2	196612.2	0	ICE	10625.39	0	2	1
2022	2a	1	13870.82	48944.43	48944.43	0	263608.7	263608.7	0	ICE	13870.82	0	2	1
2022	2a	1	17052.88	61149.58	61149.58	0	333191.7	333191.7	0	ICE	17052.88	0	2	1

2022	2a	1	16775.86	61117.31	61117.31	0	337677.4	337677.4	0	ICE	16775.86	0	2	1
2022	2a	1	18908.39	69969.73	69969.73	0	388554.5	388554.5	0	ICE	18908.39	0	2	1
2022	2a	1	25065.39	94189.46	94189.46	0	530074.1	530074.1	0	ICE	25065.39	0	2	1
2022	2a	1	32140.98	122619.1	122619.1	0	701051.9	701051.9	0	ICE	32140.98	0	2	1
2022	2a	1	29742.86	115174.2	115174.2	0	665470.9	665470.9	0	ICE	29742.86	0	2	1
2022	2a	1	32337.97	127075.9	127075.9	0	744036.5	744036.5	0	ICE	32337.97	0	2	1
2022	2a	1	36380.79	145046.9	145046.9	0	859227.9	859227.9	0	ICE	36380.79	0	2	1
2022	2a	1	38052.2	153890.7	153890.7	0	922329.7	922329.7	0	ICE	38052.2	0	2	1
2022	2a	1	26538.46	108847.2	108847.2	0	662351.4	662351.4	0	ICE	26538.46	0	2	1
2022	2a	1	14589.92	61512.11	61512.11	0	385969.6	385969.6	0	ICE	14589.92	0	2	1
2022	2a	1	22743.43	97190.87	97190.87	0	623902	623902	0	ICE	22743.43	0	2	1
2022	2a	1	32494.34	140721.6	140721.6	0	920770.2	920770.2	0	ICE	32494.34	0	2	1
2022	2a	1	54397.59	238693.3	238693.3	0	1595049	1595049	0	ICE	54397.59	0	2	1
2022	2a	1	39878.15	177267.6	177267.6	0	1207609	1207609	0	ICE	39878.15	0	2	1
2022	2a	1	20589.98	92706.8	92706.8	0	645083.3	645083.3	0	ICE	20589.98	0	2	1
2022	2a	1	17858.48	81431.28	81431.28	0	581308.3	581308.3	0	ICE	17858.48	0	2	1
2022	2a	1	120979	579364.9	579364.9	0	4592936	4592936	0	ICE	120979	0	2	1
2022	2a	1	109906.9	532637.4	532637.4	0	4317083	4317083	0	ICE	109906.9	0	2	1
2022	2a	1	96821.83	474770.7	474770.7	0	3951429	3951429	0	ICE	96821.83	0	2	1
2022	2a	1	13.11627	64.31627	64.31627	0	535.3551	535.3551	0	ICE	13.11627	0	2	2
2022	2a	1	3.262341	15.99705	0	15.99705	123.7074	0	123.7074	BEV	0	3.262341	2	3
2022	2a	1	0.066578	0.32647	0	0.32647	2.524641	0	2.524641	FCEV	0	0.066578	2	7
2022	2a	1	28.29582	138.75	83.24998	55.49998	1155.004	693.0021	462.0014	PHEV	16.97749	11.31833	2	8
2022	2a	1	101277	502418.8	502418.8	0	4291148	4291148	0	ICE	101277	0	2	1
2022	2a	1	13.7198	68.06171	68.06171	0	581.3814	581.3814	0	ICE	13.7198	0	2	2
2022	2a	1	101870.7	511200.3	511200.3	0	4481536	4481536	0	ICE	101870.7	0	2	1
2022	2a	1	13.89651	69.73448	69.73448	0	611.5072	611.5072	0	ICE	13.89651	0	2	2
2022	2a	1	1354.516	6797.136	0	6797.136	57974.06	0	57974.06	BEV	0	1354.516	2	3
2022	2a	1	31.68458	158.9973	0	158.9973	1294.838	0	1294.838	FCEV	0	31.68458	2	7
2022	2a	1	1040.173	5219.723	3102.007	2117.716	46339.88	27539.13	18800.75	PHEV	618.1599	422.013	2	8
2022	2a	1	102183.2	518622.5	518622.5	0	4664623	4664623	0	ICE	102183.2	0	2	1
2022	2a	1	14.10109	71.56895	71.56895	0	644.0588	644.0588	0	ICE	14.10109	0	2	2
2022	2a	1	2775.499	14086.82	0	14086.82	122936.9	0	122936.9	BEV	0	2775.499	2	3
2022	2a	1	73.25363	371.7929	0	371.7929	3105.086	0	3105.086	FCEV	0	73.25363	2	7
2022	2a	1	2137.638	10849.41	6385.654	4463.758	98993	58264.45	40728.55	PHEV	1258.153	879.4855	2	8
2022	2a	1	97909.2	502539.5	502539.5	0	4637995	4637995	0	ICE	97909.2	0	2	1
2022	2a	1	13.68885	70.26092	70.26092	0	648.9996	648.9996	0	ICE	13.68885	0	2	2
2022	2a	1	6900.489	35418.21	0	35418.21	316582.4	0	316582.4	BEV	0	6900.489	2	3
2022	2a	1	236.5416	1214.099	0	1214.099	10398.42	0	10398.42	FCEV	0	236.5416	2	7
2022	2a	1	4976.571	25543.3	14807.81	10735.48	242169	140388.8	101780.2	PHEV	2884.989	2091.582	2	8
2022	2a	1	83578.14	433770.5	433770.5	0	4106046	4106046	0	ICE	83578.14	0	2	1
2022	2a	1	11.73309	60.89475	60.89475	0	577.0023	577.0023	0	ICE	11.73309	0	2	2
2022	2a	1	10230.68	53097.24	0	53097.24	486947.3	0	486947.3	BEV	0	10230.68	2	3
2022	2a	1	432.6256	2245.327	0	2245.327	19709.03	0	19709.03	FCEV	0	432.6256	2	7
2022	2a	1	6902.636	35824.68	20450.78	15373.91	350819	200267.5	150551.5	PHEV	3940.419	2962.217	2	8
2022	2a	1	1091.773	3101.847	3101.847	0	14214.36	14214.36	0	ICE	1091.773	0	3	1
2022	2a	1	2506.712	7552.674	7552.674	0	34890.54	34890.54	0	ICE	2506.712	0	3	1

2022	2a	1	4473.987	13992.66	13992.66	0	65678.74	65678.74	0	ICE	4473.987	0	3	1
2022	2a	1	4908.338	15632.32	15632.32	0	74603.79	74603.79	0	ICE	4908.338	0	3	1
2022	2a	1	6488.31	21036.01	21036.01	0	102089	102089	0	ICE	6488.31	0	3	1
2022	2a	1	8585.63	28327.68	28327.68	0	140770.7	140770.7	0	ICE	8585.63	0	3	1
2022	2a	1	10040.85	33704.33	33704.33	0	169599.4	169599.4	0	ICE	10040.85	0	3	1
2022	2a	1	12354.81	42179.45	42179.45	0	218468.1	218468.1	0	ICE	12354.81	0	3	1
2022	2a	1	11774.35	40872.29	40872.29	0	214119.7	214119.7	0	ICE	11774.35	0	3	1
2022	2a	1	16771.72	59180.53	59180.53	0	313940.3	313940.3	0	ICE	16771.72	0	3	1
2022	2a	1	19645.57	70446.64	70446.64	0	377727.4	377727.4	0	ICE	19645.57	0	3	1
2022	2a	1	25861.94	94219.44	94219.44	0	512413.4	512413.4	0	ICE	25861.94	0	3	1
2022	2a	1	26323.56	97409.29	97409.29	0	535028.2	535028.2	0	ICE	26323.56	0	3	1
2022	2a	1	42330.08	159065.9	159065.9	0	886050.5	886050.5	0	ICE	42330.08	0	3	1
2022	2a	1	49545.92	189019.7	189019.7	0	1067450	1067450	0	ICE	49545.92	0	3	1
2022	2a	1	58310.44	225797.3	225797.3	0	1289212	1289212	0	ICE	58310.44	0	3	1
2022	2a	1	81919.85	321913.9	321913.9	0	1863295	1863295	0	ICE	81919.85	0	3	1
2022	2a	1	84314.13	336152.9	336152.9	0	1971525	1971525	0	ICE	84314.13	0	3	1
2022	2a	1	89471.69	361841.4	361841.4	0	2162891	2162891	0	ICE	89471.69	0	3	1
2022	2a	1	110994.7	455243.9	455243.9	0	2768380	2768380	0	ICE	110994.7	0	3	1
2022	2a	1	142796.5	593859.3	593859.3	0	3671563	3671563	0	ICE	142796.5	0	3	1
2022	2a	1	164211.6	692327.4	692327.4	0	4363249	4363249	0	ICE	164211.6	0	3	1
2022	2a	1	155242.4	663406.5	663406.5	0	4263801	4263801	0	ICE	155242.4	0	3	1
2022	2a	1	163430.5	707760.1	707760.1	0	4636086	4636086	0	ICE	163430.5	0	3	1
2022	2a	1	129954.8	570233.9	570233.9	0	3809743	3809743	0	ICE	129954.8	0	3	1
2022	2a	1	81767.81	363476.7	363476.7	0	2483171	2483171	0	ICE	81767.81	0	3	1
2022	2a	1	144363.6	650000	650000	0	4535847	4535847	0	ICE	144363.6	0	3	1
2022	2a	1	193823.9	883800	883800	0	6317515	6317515	0	ICE	193823.9	0	3	1
2022	2a	1	186942.3	863131.3	863131.3	0	6341585	6341585	0	ICE	186942.3	0	3	1
2022	2a	1	254935.4	1191668	1191668	0	8965342	8965342	0	ICE	254935.4	0	3	1
2022	2a	1	235504	1114329	1114329	0	8606929	8606929	0	ICE	235504	0	3	1
2022	2a	1	2552.699	12078.55	12078.55	0	91842.11	91842.11	0	ICE	2552.699	0	3	2
2022	2a	1	277889.8	1330806	1330806	0	10532357	10532357	0	ICE	277889.8	0	3	1
2022	2a	1	264316.5	1280947	1280947	0	10395649	10395649	0	ICE	264316.5	0	3	1
2022	2a	1	1797.838	8712.791	8712.791	0	71189.83	71189.83	0	ICE	1797.838	0	3	2
2022	2a	1	297961.7	1461070	1461070	0	12114189	12114189	0	ICE	297961.7	0	3	1
2022	2a	1	3045.501	14933.77	14933.77	0	124164.6	124164.6	0	ICE	3045.501	0	3	2
2022	2a	1	310428.1	1539984	1539984	0	13103212	13103212	0	ICE	310428.1	0	3	1
2022	2a	1	3172.921	15740.35	15740.35	0	134302.1	134302.1	0	ICE	3172.921	0	3	2
2022	2a	1	1071.02	5313.159	3187.896	2125.264	45404.9	27242.94	18161.96	PHEV	642.612	428.408	3	8
2022	2a	1	314899.3	1580206	1580206	0	13834090	13834090	0	ICE	314899.3	0	3	1
2022	2a	1	3210.509	16110.75	16110.75	0	141370.1	141370.1	0	ICE	3210.509	0	3	2
2022	2a	1	3713.841	18636.54	0	18636.54	128649.4	0	128649.4	BEV	0	3713.841	3	3
2022	2a	1	86.87347	435.9424	0	435.9424	2733.602	0	2733.602	FCEV	0	86.87347	3	7
2022	2a	1	3225.691	16186.93	9619.664	6567.271	141974.7	84373.55	57601.18	PHEV	1916.982	1308.709	3	8
2022	2a	1	321903.6	1633796	1633796	0	14668910	14668910	0	ICE	321903.6	0	3	1
2022	2a	1	3289.382	16695	16695	0	150268.9	150268.9	0	ICE	3289.382	0	3	2
2022	2a	1	7714.427	39153.96	0	39153.96	316593.8	0	316593.8	BEV	0	7714.427	3	3
2022	2a	1	203.6066	1033.389	0	1033.389	6641.365	0	6641.365	FCEV	0	203.6066	3	7

2022	2a	1	5567.358	28256.68	16631.07	11625.6	254333.7	149693.5	104640.1	PHEV	3276.788	2290.57	3	8
2022	2a	1	312381.4	1603363	1603363	0	14755708	14755708	0	ICE	312381.4	0	3	1
2022	2a	1	3240.337	16631.71	16631.71	0	153658.4	153658.4	0	ICE	3240.337	0	3	2
2022	2a	1	21335.14	109507.1	0	109507.1	879194.3	0	879194.3	BEV	0	21335.14	3	3
2022	2a	1	731.3465	3753.79	0	3753.79	24716.22	0	24716.22	FCEV	0	731.3465	3	7
2022	2a	1	14501.29	74430.93	43148.67	31282.25	756614.1	438620	317994.1	PHEV	8406.606	6094.686	3	8
2022	2a	1	265144.8	1376101	1376101	0	12980251	12980251	0	ICE	265144.8	0	3	1
2022	2a	1	2763.292	14341.49	14341.49	0	135891.4	135891.4	0	ICE	2763.292	0	3	2
2022	2a	1	32128.65	166747.7	0	166747.7	1366572	0	1366572	BEV	0	32128.65	3	3
2022	2a	1	1358.626	7051.272	0	7051.272	47548.33	0	47548.33	FCEV	0	1358.626	3	7
2022	2a	1	20548.41	106646.3	60879.78	45766.48	1153712	658604.7	495107.2	PHEV	11730.21	8818.205	3	8
2022	2a	1	8553.848	22832.27	22832.27	0	95624.13	95624.13	0	ICE	8553.848	0	4	1
2022	2a	1	1742.639	4951.029	4951.029	0	22118.62	22118.62	0	ICE	1742.639	0	4	1
2022	2a	1	5491.788	18434.39	18434.39	0	85471.68	85471.68	0	ICE	5491.788	0	4	1
2022	2a	1	5134.305	17528.57	17528.57	0	83134.54	83134.54	0	ICE	5134.305	0	4	1
2022	2a	1	6968.787	24190.75	24190.75	0	116459.4	116459.4	0	ICE	6968.787	0	4	1
2022	2a	1	8420.519	29712.56	29712.56	0	147180.2	147180.2	0	ICE	8420.519	0	4	1
2022	2a	1	14524.47	52082.99	52082.99	0	262045.2	262045.2	0	ICE	14524.47	0	4	1
2022	2a	1	17697.58	64475.3	64475.3	0	331253.2	331253.2	0	ICE	17697.58	0	4	1
2022	2a	1	17657.65	65341.44	65341.44	0	341191.2	341191.2	0	ICE	17657.65	0	4	1
2022	2a	1	26167.11	98329.46	98329.46	0	523510.4	523510.4	0	ICE	26167.11	0	4	1
2022	2a	1	32807.11	125160.4	125160.4	0	676134.7	676134.7	0	ICE	32807.11	0	4	1
2022	2a	1	59582.3	230722.3	230722.3	0	1268192	1268192	0	ICE	59582.3	0	4	1
2022	2a	1	74267.41	291842.7	291842.7	0	1628821	1628821	0	ICE	74267.41	0	4	1
2022	2a	1	103629.6	413162	413162	0	2343036	2343036	0	ICE	103629.6	0	4	1
2022	2a	1	98.80942	393.9443	393.9443	0	2186.7	2186.7	0	ICE	98.80942	0	4	2
2022	2a	1	131168.9	530473.2	530473.2	0	3067318	3067318	0	ICE	131168.9	0	4	1
2022	2a	1	148600.8	609484.9	609484.9	0	3604339	3604339	0	ICE	148600.8	0	4	1
2022	2a	1	165403.3	687875.7	687875.7	0	4150533	4150533	0	ICE	165403.3	0	4	1
2022	2a	1	228.7211	951.2008	951.2008	0	5623.048	5623.048	0	ICE	228.7211	0	4	2
2022	2a	1	159886.8	674093.9	674093.9	0	4143967	4143967	0	ICE	159886.8	0	4	1
2022	2a	1	159941.7	683488.7	683488.7	0	4290455	4290455	0	ICE	159941.7	0	4	1
2022	2a	1	161637.5	699995.4	699995.4	0	4497780	4497780	0	ICE	161637.5	0	4	1
2022	2a	1	120800.7	530066	530066	0	3486097	3486097	0	ICE	120800.7	0	4	1
2022	2a	1	50616.98	225004.1	225004.1	0	1515360	1515360	0	ICE	50616.98	0	4	1
2022	2a	1	71631.59	322522.7	322522.7	0	2227613	2227613	0	ICE	71631.59	0	4	1
2022	2a	1	103198.6	470565.9	470565.9	0	3331134	3331134	0	ICE	103198.6	0	4	1
2022	2a	1	2918.688	13308.66	13308.66	0	93449.94	93449.94	0	ICE	2918.688	0	4	2
2022	2a	1	102705.4	474201.3	474201.3	0	3450404	3450404	0	ICE	102705.4	0	4	1
2022	2a	1	114438.3	534929.1	534929.1	0	3999196	3999196	0	ICE	114438.3	0	4	1
2022	2a	1	2495.015	11662.67	11662.67	0	86013.6	86013.6	0	ICE	2495.015	0	4	2
2022	2a	1	174940	827760.2	827760.2	0	6354714	6354714	0	ICE	174940	0	4	1
2022	2a	1	5414.356	25619	25619	0	196468.8	196468.8	0	ICE	5414.356	0	4	2
2022	2a	1	190171.9	910727.3	910727.3	0	7180048	7180048	0	ICE	190171.9	0	4	1
2022	2a	1	204123.5	989235.5	989235.5	0	7977456	7977456	0	ICE	204123.5	0	4	1
2022	2a	1	187464.7	919242.4	919242.4	0	7539039	7539039	0	ICE	187464.7	0	4	1
2022	2a	1	6536.923	32054.13	32054.13	0	263048.1	263048.1	0	ICE	6536.923	0	4	2

2022	2a	1	1568.383	7690.644	4614.386	3076.257	60306.85	36184.11	24122.74	PHEV	941.0297	627.3531	4	8
2022	2a	1	193447.5	959662	959662	0	8074853	8074853	0	ICE	193447.5	0	4	1
2022	2a	1	6745.545	33463.57	33463.57	0	281743.5	281743.5	0	ICE	6745.545	0	4	2
2022	2a	1	3.383972	16.78734	0	16.78734	102.6635	0	102.6635	BEV	0	3.383972	4	3
2022	2a	1	0.069061	0.342599	0	0.342599	2.095173	0	2.095173	FCEV	0	0.069061	4	7
2022	2a	1	4141.05	20543.08	12325.85	8217.234	169893.7	101936.2	67957.48	PHEV	2484.63	1656.42	4	8
2022	2a	1	199088.9	999053.9	999053.9	0	8617159	8617159	0	ICE	199088.9	0	4	1
2022	2a	1	7007.8	35166.05	35166.05	0	303749.2	303749.2	0	ICE	7007.8	0	4	2
2022	2a	1	1706.682	8564.353	0	8564.353	55824.47	0	55824.47	BEV	0	1706.682	4	3
2022	2a	1	39.92239	200.3357	0	200.3357	1256.172	0	1256.172	FCEV	0	39.92239	4	7
2022	2a	1	4440.435	22282.68	13242.28	9040.402	199378.8	118488	80890.84	PHEV	2638.887	1801.548	4	8
2022	2a	1	205502.4	1043011	1043011	0	9209908	9209908	0	ICE	205502.4	0	4	1
2022	2a	1	7346.996	37289.09	37289.09	0	330192.6	330192.6	0	ICE	7346.996	0	4	2
2022	2a	1	3543.633	17985.42	0	17985.42	129596.8	0	129596.8	BEV	0	3543.633	4	3
2022	2a	1	93.52696	474.6886	0	474.6886	3050.783	0	3050.783	FCEV	0	93.52696	4	7
2022	2a	1	4772.373	24221.8	14256.26	9965.539	218389.5	128537.8	89851.7	PHEV	2808.882	1963.49	4	8
2022	2a	1	197508.7	1013755	1013755	0	9164794	9164794	0	ICE	197508.7	0	4	1
2022	2a	1	7185.972	36883.51	36883.51	0	334905.2	334905.2	0	ICE	7185.972	0	4	2
2022	2a	1	10452.35	53648.9	0	53648.9	395960.8	0	395960.8	BEV	0	10452.35	4	3
2022	2a	1	358.2958	1839.028	0	1839.028	12108.85	0	12108.85	FCEV	0	358.2958	4	7
2022	2a	1	12475.42	64032.7	37120.67	26912.03	626568	363230.4	263337.6	PHEV	7232.178	5243.24	4	8
2022	2a	1	160549.4	833251.4	833251.4	0	7699067	7699067	0	ICE	160549.4	0	4	1
2022	2a	1	5873.32	30482.53	30482.53	0	283077.2	283077.2	0	ICE	5873.32	0	4	2
2022	2a	1	15794.61	81974.01	0	81974.01	627522.3	0	627522.3	BEV	0	15794.61	4	3
2022	2a	1	667.9078	3466.441	0	3466.441	23375	0	23375	FCEV	0	667.9078	4	7
2022	2a	1	16727.8	86817.31	49560.28	37257.03	890369.7	508273.9	382095.8	PHEV	9549.187	7178.618	4	8
2022	2a	1	368.9929	984.9307	984.9307	0	1964.636	1964.636	0	ICE	368.9929	0	1	2
2022	2a	1	802.8333	2188.949	2188.949	0	4599.852	4599.852	0	ICE	802.8333	0	1	2
2022	2a	1	5049.332	14345.71	14345.71	0	32647.73	32647.73	0	ICE	5049.332	0	1	1
2022	2a	1	1477.81	4198.62	4198.62	0	9508.313	9508.313	0	ICE	1477.81	0	1	2
2022	2a	1	1741.422	5047.337	5047.337	0	12070.84	12070.84	0	ICE	1741.422	0	1	2
2022	2a	1	1782.645	5268.947	5268.947	0	12829.11	12829.11	0	ICE	1782.645	0	1	2
2022	2a	1	9011.674	27151.99	27151.99	0	71000.8	71000.8	0	ICE	9011.674	0	1	1
2022	2a	1	1404.622	4312.57	4312.57	0	11536.84	11536.84	0	ICE	1404.622	0	1	2
2022	2a	1	14636.61	46615.41	46615.41	0	137609.9	137609.9	0	ICE	14636.61	0	1	1
2022	2a	1	104.4461	356.5801	356.5801	0	1267.398	1267.398	0	ICE	104.4461	0	1	2
2022	2a	1	58.6361	203.5435	203.5435	0	722.6679	722.6679	0	ICE	58.6361	0	1	2
2022	2a	1	33.69234	118.8865	118.8865	0	450.4496	450.4496	0	ICE	33.69234	0	1	2
2022	2a	1	125.5165	471.6598	471.6598	0	2132.527	2132.527	0	ICE	125.5165	0	1	2
2022	2a	1	257.6855	1012.606	1012.606	0	5229.625	5229.625	0	ICE	257.6855	0	1	2
2022	2a	1	45.49233	181.3738	0	181.3738	883.8082	0	883.8082	BEV	0	45.49233	1	3
2022	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2022	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2022	2a	1	758.5692	3067.805	3067.805	0	16780.18	16780.18	0	ICE	758.5692	0	1	2
2022	2a	1	1105.485	4534.136	4534.136	0	25826	25826	0	ICE	1105.485	0	1	2
2022	2a	1	423.9988	1763.318	1763.318	0	10438.5	10438.5	0	ICE	423.9988	0	1	2
2022	2a	1	849.2793	3580.621	3580.621	0	21471.96	21471.96	0	ICE	849.2793	0	1	2

2022	2a	1	2496.027	11095.41	11095.41	0	75412.48	75412.48	0	ICE	2496.027	0	1	2
2022	2a	1	6642.074	30667.12	30667.12	0	227075.8	227075.8	0	ICE	6642.074	0	1	2
2022	2a	1	9367.528	43787.48	43787.48	0	335120.5	335120.5	0	ICE	9367.528	0	1	2
2022	2a	1	8869.943	41461.57	0	41461.57	285225	0	285225	BEV	0	8869.943	1	3
2022	2a	1	0.521118	2.435907	0	2.435907	16.75724	0	16.75724	FCEV	0	0.521118	1	7
2022	2a	1	9271.204	43337.22	26002.33	17334.89	323586.1	194151.6	129434.4	PHEV	5562.722	3708.482	1	8
2022	2a	1	10917.16	51656.51	0	51656.51	365775	0	365775	BEV	0	10917.16	1	3
2022	2a	1	1.529657	7.237847	0	7.237847	51.25053	0	51.25053	FCEV	0	1.529657	1	7
2022	2a	1	13783.74	65220.24	39132.14	26088.09	501771.4	301062.8	200708.6	PHEV	8270.243	5513.495	1	8
2022	2a	1	9630.153	46118.51	46118.51	0	375893.7	375893.7	0	ICE	9630.153	0	1	2
2022	2a	1	25054.65	119985.9	0	119985.9	875443.9	0	875443.9	BEV	0	25054.65	1	3
2022	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2022	2a	1	11914.16	57056.54	34233.92	22822.62	453179.6	271907.7	181271.8	PHEV	7148.494	4765.663	1	8
2022	2a	1	1680.677	4486.129	4486.129	0	20833.51	20833.51	0	ICE	1680.677	0	2	1
2022	2a	1	1917.546	5228.246	5228.246	0	24281.63	24281.63	0	ICE	1917.546	0	2	1
2022	2a	1	1668.907	4645.937	4645.937	0	21617.72	21617.72	0	ICE	1668.907	0	2	1
2022	2a	1	1319.806	3749.713	3749.713	0	17846.17	17846.17	0	ICE	1319.806	0	2	1
2022	2a	1	271.6299	787.2921	787.2921	0	3586.411	3586.411	0	ICE	271.6299	0	2	2
2022	2a	1	132.6534	392.0823	392.0823	0	1770.24	1770.24	0	ICE	132.6534	0	2	2
2022	2a	1	105.1724	322.9076	322.9076	0	1478.951	1478.951	0	ICE	105.1724	0	2	2
2022	2a	1	22846.54	95013.75	95013.75	0	586742.9	586742.9	0	ICE	22846.54	0	2	1
2022	2a	1	33853.29	156304	156304	0	1146329	1146329	0	ICE	33853.29	0	2	1
2022	2a	1	48156.26	225101.1	225101.1	0	1695399	1695399	0	ICE	48156.26	0	2	1
2022	2a	1	57478.08	271967.9	271967.9	0	2100142	2100142	0	ICE	57478.08	0	2	1
2022	2a	1	2584.761	6899.349	6899.349	0	30553.82	30553.82	0	ICE	2584.761	0	3	1
2022	2a	1	2574.147	7018.49	7018.49	0	31897.28	31897.28	0	ICE	2574.147	0	3	1
2022	2a	1	1526.088	4248.355	4248.355	0	19410.13	19410.13	0	ICE	1526.088	0	3	1
2022	2a	1	26.16933	74.34993	74.34993	0	349.1476	349.1476	0	ICE	26.16933	0	3	2
2022	2a	1	1087.004	3150.572	3150.572	0	14254.92	14254.92	0	ICE	1087.004	0	3	1
2022	2a	1	1405.871	4155.32	4155.32	0	19016.91	19016.91	0	ICE	1405.871	0	3	1
2022	2a	1	2879.225	8839.998	8839.998	0	40913.59	40913.59	0	ICE	2879.225	0	3	1
2022	2a	1	39.69833	174.1939	174.1939	0	1181.526	1181.526	0	ICE	39.69833	0	3	2
2022	2a	1	1275.856	5890.756	5890.756	0	42642.66	42642.66	0	ICE	1275.856	0	3	2
2022	2a	1	930.524	4349.632	4349.632	0	32281.94	32281.94	0	ICE	930.524	0	3	2
2022	2a	1	3604.558	17262.12	17262.12	0	135209.9	135209.9	0	ICE	3604.558	0	3	2
2022	2a	1	3753.495	18190.41	0	18190.41	104629.6	0	104629.6	BEV	0	3753.495	3	3
2022	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2022	2a	1	341.5956	1655.461	993.2766	662.1844	13033.95	7820.367	5213.578	PHEV	204.9574	136.6382	3	8
2022	2a	1	8401.608	22907.24	22907.24	0	96647.09	96647.09	0	ICE	8401.608	0	4	1
2022	2a	1	3286.118	9147.96	9147.96	0	38688.75	38688.75	0	ICE	3286.118	0	4	1
2022	2a	1	1685.606	4885.562	4885.562	0	21963.34	21963.34	0	ICE	1685.606	0	4	1
2022	2a	1	339.5766	984.2289	984.2289	0	3826.886	3826.886	0	ICE	339.5766	0	4	2
2022	2a	1	1082.789	3200.389	3200.389	0	13687.86	13687.86	0	ICE	1082.789	0	4	1
2022	2a	1	1750.358	5273.793	5273.793	0	23013.76	23013.76	0	ICE	1750.358	0	4	1
2022	2a	1	234.9469	707.8903	707.8903	0	2844.797	2844.797	0	ICE	234.9469	0	4	2
2022	2a	1	2274.654	6983.803	6983.803	0	30632.79	30632.79	0	ICE	2274.654	0	4	1
2022	2a	1	118.9949	365.3466	365.3466	0	1460.099	1460.099	0	ICE	118.9949	0	4	2

2022	2a	1	2892.39	9046.124	9046.124	0	39307.12	39307.12	0	ICE	2892.39	0	4	1
2022	2a	1	2913.428	9278.83	9278.83	0	40731.61	40731.61	0	ICE	2913.428	0	4	1
2022	2a	1	3664.906	11882.14	11882.14	0	53850.17	53850.17	0	ICE	3664.906	0	4	1
2022	2a	1	11.25397	36.48695	36.48695	0	161.1506	161.1506	0	ICE	11.25397	0	4	2
2022	2a	1	4790.352	15805.43	15805.43	0	72503.49	72503.49	0	ICE	4790.352	0	4	1
2022	2a	1	54.9818	197.1581	197.1581	0	964.9346	964.9346	0	ICE	54.9818	0	4	2
2022	2a	1	52.84257	204.6239	204.6239	0	1065.002	1065.002	0	ICE	52.84257	0	4	2
2022	2a	1	404.202	1704.144	1704.144	0	10435.14	10435.14	0	ICE	404.202	0	4	2
2022	2a	1	568.9613	2431.377	2431.377	0	15243.56	15243.56	0	ICE	568.9613	0	4	2
2022	2a	1	780.1912	3378.735	3378.735	0	21810.98	21810.98	0	ICE	780.1912	0	4	2
2022	2a	1	560.5172	2459.516	2459.516	0	16304.25	16304.25	0	ICE	560.5172	0	4	2
2022	2a	1	787.0699	3498.707	3498.707	0	23300.28	23300.28	0	ICE	787.0699	0	4	2
2022	2a	1	4809.749	22207.09	22207.09	0	162682.7	162682.7	0	ICE	4809.749	0	4	2
2022	2a	1	10239.92	49038.68	49038.68	0	390535.9	390535.9	0	ICE	10239.92	0	4	2
2022	2a	1	6467.441	31342.9	31342.9	0	257136.5	257136.5	0	ICE	6467.441	0	4	2
2022	2a	1	1460.531	4400.552	4400.552	0	11169.91	11169.91	0	ICE	1460.531	0	1	2
2022	2a	1	73.84779	247.8864	247.8864	0	817.7022	817.7022	0	ICE	73.84779	0	1	2
2022	2a	1	289.9303	1122.706	1122.706	0	5502.209	5502.209	0	ICE	289.9303	0	1	2
2022	2a	1	32.49659	137.0079	0	137.0079	752.8391	0	752.8391	BEV	0	32.49659	1	3
2022	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2022	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2022	2a	1	1867.746	8623.568	0	8623.568	57757.44	0	57757.44	BEV	0	1867.746	1	3
2022	2a	1	7.058455	32.58959	0	32.58959	218.2729	0	218.2729	FCEV	0	7.058455	1	7
2022	2a	1	3926.069	18127.06	10876.23	7250.822	131851.9	79111.12	52740.75	PHEV	2355.642	1570.428	1	8
2022	2a	1	16215.15	78582.82	0	78582.82	589543	0	589543	BEV	0	16215.15	1	3
2022	2a	1	493.6823	2392.513	0	2392.513	17949.08	0	17949.08	FCEV	0	493.6823	1	7
2022	2a	1	11660.86	56511.55	33906.93	22604.62	463389.6	278033.8	185355.8	PHEV	6996.515	4664.343	1	8
2022	2a	1	10.46446	37.52428	37.52428	0	177.9932	177.9932	0	ICE	10.46446	0	2	2
2022	2a	1	6.586479	23.99566	23.99566	0	117.0867	117.0867	0	ICE	6.586479	0	2	2
2022	2a	1	13.55065	51.69629	51.69629	0	280.669	280.669	0	ICE	13.55065	0	2	2
2022	2a	1	22.57782	70.61349	70.61349	0	348.3811	348.3811	0	ICE	22.57782	0	3	2
2022	2a	1	124.6332	525.4622	525.4622	0	3308.156	3308.156	0	ICE	124.6332	0	3	2
2022	2a	1	134.9952	576.8833	576.8833	0	3767.068	3767.068	0	ICE	134.9952	0	3	2
2022	2a	1	308.9995	913.3067	913.3067	0	3534.824	3534.824	0	ICE	308.9995	0	4	2
2022	2a	1	39.23283	149.6748	149.6748	0	759.7562	759.7562	0	ICE	39.23283	0	4	2
2022	2a	1	132.6681	544.1367	544.1367	0	3181.897	3181.897	0	ICE	132.6681	0	4	2
2022	2a	1	1368.081	6159.814	6159.814	0	41924.06	41924.06	0	ICE	1368.081	0	4	2
2022	2a	1	824.0362	2293.969	2293.969	0	4973.813	4973.813	0	ICE	824.0362	0	1	2
2022	2a	1	295.0494	922.7848	922.7848	0	2531.615	2531.615	0	ICE	295.0494	0	1	2
2022	2a	1	701.5327	2234.276	2234.276	0	6523.794	6523.794	0	ICE	701.5327	0	1	2
2022	2a	1	162.7877	593.0632	593.0632	0	2461.131	2461.131	0	ICE	162.7877	0	1	2
2022	2a	1	135.4262	501.1393	501.1393	0	2159.064	2159.064	0	ICE	135.4262	0	1	2
2022	2a	1	257.5878	982.7078	982.7078	0	4667.004	4667.004	0	ICE	257.5878	0	1	2
2022	2a	1	95.88092	387.7616	0	387.7616	1949.054	0	1949.054	BEV	0	95.88092	1	3
2022	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2022	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2022	2a	1	2348.814	10710.15	0	10710.15	69770.64	0	69770.64	BEV	0	2348.814	1	3

2022	2a	1	23.20591	105.8145	0	105.8145	689.3227	0	689.3227	FCEV	0	23.20591	1	7
2022	2a	1	652.9014	2977.106	1786.264	1190.842	20973.82	12584.29	8389.529	PHEV	391.7408	261.1605	1	8
2022	2a	1	1355.012	6566.743	6566.743	0	54466.16	54466.16	0	ICE	1355.012	0	1	2
2022	2a	1	87.18452	247.7008	247.7008	0	1136.328	1136.328	0	ICE	87.18452	0	2	2
2022	2a	1	109.417	329.6713	329.6713	0	1552.358	1552.358	0	ICE	109.417	0	2	2
2022	2a	1	42.9147	134.2183	134.2183	0	615.9492	615.9492	0	ICE	42.9147	0	2	2
2022	2a	1	608.8988	2881.114	0	2881.114	20386.34	0	20386.34	BEV	0	608.8988	2	3
2022	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2022	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2022	2a	1	69.11788	192.4117	192.4117	0	883.4605	883.4605	0	ICE	69.11788	0	3	2
2022	2a	1	45.40934	134.2159	134.2159	0	595.2532	595.2532	0	ICE	45.40934	0	3	2
2022	2a	1	34.78801	104.8156	104.8156	0	482.5339	482.5339	0	ICE	34.78801	0	3	2
2022	2a	1	1.911957	6.52744	6.52744	0	34.43234	34.43234	0	ICE	1.911957	0	3	2
2022	2a	1	77.6938	216.2855	216.2855	0	920.1399	920.1399	0	ICE	77.6938	0	4	2
2022	2a	1	78.22275	244.6463	244.6463	0	1045.851	1045.851	0	ICE	78.22275	0	4	2
2022	2a	1	36.33236	128.202	128.202	0	587.0688	587.0688	0	ICE	36.33236	0	4	2
2022	2a	1	70.37115	256.3741	256.3741	0	1245.051	1245.051	0	ICE	70.37115	0	4	2
2022	2a	1	71.54526	264.7504	264.7504	0	1306.639	1306.639	0	ICE	71.54526	0	4	2
2022	2a	1	37.54967	123.8925	123.8925	0	430.285	430.285	0	ICE	37.54967	0	1	2
2022	2a	1	207.0865	908.6832	908.6832	0	5921.812	5921.812	0	ICE	207.0865	0	1	2
2022	2a	1	20.43015	83.79405	83.79405	0	491.6151	491.6151	0	ICE	20.43015	0	2	2
2022	2a	1	0.934165	3.617396	3.617396	0	20.94852	20.94852	0	ICE	0.934165	0	3	2
2022	2a	1	76.35799	343.8034	343.8034	0	2402.368	2402.368	0	ICE	76.35799	0	3	2
2022	2a	1	204.5392	967.8139	0	967.8139	5291.427	0	5291.427	BEV	0	204.5392	3	3
2022	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2022	2a	1	92.60894	438.1959	262.9175	175.2783	3280.99	1968.594	1312.396	PHEV	55.56536	37.04358	3	8
2022	2a	1	40.82733	115.9949	115.9949	0	577.5138	577.5138	0	ICE	40.82733	0	4	2
2022	2a	1	18.24779	62.29814	62.29814	0	284.083	284.083	0	ICE	18.24779	0	4	2
2022	2a	1	92.54813	347.7727	347.7727	0	1740.398	1740.398	0	ICE	92.54813	0	4	2
2022	2a	1	49.28399	199.3143	199.3143	0	1145.355	1145.355	0	ICE	49.28399	0	4	2
2022	2a	1	183.1695	835.2183	835.2183	0	5911.75	5911.75	0	ICE	183.1695	0	3	2
2022	2a	1	13.26802	43.77691	43.77691	0	189.9608	189.9608	0	ICE	13.26802	0	4	2
2022	2a	1	19.24299	75.61763	75.61763	0	413.3248	413.3248	0	ICE	19.24299	0	4	2
2022	2a	1	25.63145	103.6587	0	103.6587	399.3743	0	399.3743	BEV	0	25.63145	3	3
2022	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2022	2a	1	0	0	0	0	0	0	0	PHEV	0	0	3	8
2022	2a	1	119.1981	482.0609	0	482.0609	1871.561	0	1871.561	BEV	0	119.1981	4	3
2022	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2022	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2022	2a	1	42.19009	136.7862	136.7862	0	431.7111	431.7111	0	ICE	42.19009	0	1	2
2022	2a	1	24.16323	86.64643	86.64643	0	351.91	351.91	0	ICE	24.16323	0	1	2
2022	2a	1	132.8857	575.4814	575.4814	0	3632.603	3632.603	0	ICE	132.8857	0	1	2
2022	2a	1	387.6833	1745.552	0	1745.552	11078.38	0	11078.38	BEV	0	387.6833	1	3
2022	2a	1	39.35871	177.2134	0	177.2134	1124.709	0	1124.709	FCEV	0	39.35871	1	7
2022	2a	1	41.32665	186.0741	111.6444	74.42963	1272.219	763.3311	508.8874	PHEV	24.79599	16.53066	1	8
2022	2a	1	30.36706	96.71454	96.71454	0	433.0811	433.0811	0	ICE	30.36706	0	2	2
2022	2a	1	12.25225	42.53122	42.53122	0	183.7482	183.7482	0	ICE	12.25225	0	2	2

2022	2a	1	266.0054	1228.173	0	1228.173	8192.71	0	8192.71	BEV	0	266.0054	2	3
2022	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2022	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2022	2a	1	86.321	235.3568	235.3568	0	1100.313	1100.313	0	ICE	86.321	0	3	2
2022	2a	1	156.6875	454.1432	454.1432	0	2010.37	2010.37	0	ICE	156.6875	0	3	2
2022	2a	1	8.340174	26.5622	26.5622	0	135.084	135.084	0	ICE	8.340174	0	3	2
2022	2a	1	70.6591	314.0959	314.0959	0	2076.813	2076.813	0	ICE	70.6591	0	3	2
2022	2a	1	31.60753	109.7192	109.7192	0	523.4757	523.4757	0	ICE	31.60753	0	4	2
2022	2a	1	42.60114	182.05	0	182.05	1032.646	0	1032.646	BEV	0	42.60114	1	3
2022	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2022	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2022	2a	1	248.0036	1088.225	0	1088.225	6461.065	0	6461.065	BEV	0	248.0036	1	3
2022	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2022	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2022	2a	1	206.9215	919.8139	0	919.8139	5737.789	0	5737.789	BEV	0	206.9215	1	3
2022	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2022	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2022	2a	1	2.203755	5.882352	5.882352	0	20.68961	20.68961	0	ICE	2.203755	0	2	2
2022	2a	1	14.36044	47.38128	47.38128	0	197.4701	197.4701	0	ICE	14.36044	0	2	2
2022	2a	1	13.9948	51.78721	51.78721	0	283.8838	283.8838	0	ICE	13.9948	0	2	2
2022	2a	1	28.3181	125.8805	125.8805	0	843.4784	843.4784	0	ICE	28.3181	0	2	2
2022	2a	1	327.0159	1528.6	0	1528.6	10502.29	0	10502.29	BEV	0	327.0159	2	3
2022	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2022	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2022	2a	1	22.26035	96.40178	96.40178	0	634.1227	634.1227	0	ICE	22.26035	0	3	2
2022	2a	1	20.02204	63.7672	63.7672	0	292.5863	292.5863	0	ICE	20.02204	0	4	2
2022	2a	1	13.99008	46.96077	46.96077	0	222.9413	222.9413	0	ICE	13.99008	0	4	2
2022	2a	1	27.1303	111.2747	0	111.2747	576.6392	0	576.6392	BEV	0	27.1303	1	3
2022	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2022	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2022	2a	1	76.86599	332.8797	0	332.8797	1945.131	0	1945.131	BEV	0	76.86599	1	3
2022	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2022	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2022	2a	1	42.49149	186.4501	0	186.4501	1120.044	0	1120.044	BEV	0	42.49149	2	3
2022	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2022	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2022	2a	1	5.118695	23.63352	23.63352	0	181.5929	181.5929	0	ICE	5.118695	0	2	2
2022	2a	1	1.91239	8.172332	0	8.172332	37.68458	0	37.68458	BEV	0	1.91239	4	3
2022	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2022	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2022	2a	1	7.880655	21.93832	21.93832	0	100.9285	100.9285	0	ICE	7.880655	0	2	2
2022	2a	1	44.27647	118.1845	118.1845	0	519.2125	519.2125	0	ICE	44.27647	0	3	2
2022	2a	1	12.91229	51.48013	51.48013	0	278.9789	278.9789	0	ICE	12.91229	0	2	2
2022	2a	1	6.35999	20.98434	20.98434	0	106.2459	106.2459	0	ICE	6.35999	0	3	2
2022	2a	1	1.832963	7.517881	7.517881	0	49.84702	49.84702	0	ICE	1.832963	0	3	2
2022	2a	1	4.459614	15.73615	0	15.73615	57.89793	0	57.89793	BEV	0	4.459614	1	3
2022	2a	1	7.994351	25.91881	25.91881	0	135.408	135.408	0	ICE	7.994351	0	3	2

2022	2a	1	2.050323	7.117285	7.117285	0	36.15811	36.15811	0	ICE	2.050323	0	3	2
2022	2a	1	36.35757	161.6177	0	161.6177	790.4543	0	790.4543	BEV	0	36.35757	3	3
2022	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2022	2a	1	0	0	0	0	0	0	0	PHEV	0	0	3	8
2022	2a	1	18.01336	82.13749	0	82.13749	419.868	0	419.868	BEV	0	18.01336	3	3
2022	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2022	2a	1	12.47079	56.86442	34.11865	22.74577	403.3612	242.0167	161.3445	PHEV	7.482472	4.988315	3	8
2022	2a	1	1.862582	8.91985	0	8.91985	49.56582	0	49.56582	BEV	0	1.862582	4	3
2022	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2022	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2022	2a	1	3.291429	11.42554	0	11.42554	41.14123	0	41.14123	BEV	0	3.291429	1	3
2022	2a	1	16.11494	52.24689	52.24689	0	217.9991	217.9991	0	ICE	16.11494	0	2	2
2022	2a	1	76.93307	302.3177	0	302.3177	1414.735	0	1414.735	BEV	0	76.93307	2	3
2022	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2022	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2022	2a	1	29.18963	116.3764	0	116.3764	570.1447	0	570.1447	BEV	0	29.18963	2	3
2022	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2022	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2022	2a	1	23.85779	96.48565	96.48565	0	575.6888	575.6888	0	ICE	23.85779	0	2	2
2022	2a	1	10.3974	44.43185	0	44.43185	252.1109	0	252.1109	BEV	0	10.3974	2	3
2022	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2022	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2022	2a	1	19.23511	83.30055	83.30055	0	529.9528	529.9528	0	ICE	19.23511	0	2	2
2022	2a	1	5.453555	23.61744	0	23.61744	138.6982	0	138.6982	BEV	0	5.453555	2	3
2022	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2022	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2022	2a	1	22.42653	98.40626	98.40626	0	654.7377	654.7377	0	ICE	22.42653	0	2	2
2022	2a	1	17.56352	78.07388	0	78.07388	484.9659	0	484.9659	BEV	0	17.56352	2	3
2022	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2022	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2022	2a	1	21.65894	66.49879	66.49879	0	337.5022	337.5022	0	ICE	21.65894	0	3	2
2022	2a	1	15.74273	69.07815	0	69.07815	333.9231	0	333.9231	BEV	0	15.74273	3	3
2022	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2022	2a	1	0	0	0	0	0	0	0	PHEV	0	0	3	8
2022	2a	1	14.8976	69.63718	0	69.63718	373.498	0	373.498	BEV	0	14.8976	3	3
2022	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2022	2a	1	11.39228	53.25196	31.95118	21.30078	387.7758	232.6655	155.1103	PHEV	6.835368	4.556912	3	8
2022	2a	1	5.286082	20.77229	0	20.77229	77.32481	0	77.32481	BEV	0	5.286082	4	3
2022	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2022	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2022	2a	1	17.09657	70.12141	0	70.12141	281.5665	0	281.5665	BEV	0	17.09657	4	3
2022	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2022	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2022	2a	1	2.545981	10.73403	0	10.73403	47.00735	0	47.00735	BEV	0	2.545981	4	3
2022	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2022	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2022	2a	1	17.04512	60.14525	60.14525	0	271.5763	271.5763	0	ICE	17.04512	0	2	2

2022	2a	1	1.44988	6.112797	6.112797	0	38.05687	38.05687	0	ICE	1.44988	0	2	2
2022	2a	1	99.31369	401.6444	0	401.6444	2001.326	0	2001.326	BEV	0	99.31369	2	3
2022	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2022	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2022	2a	1	6.168205	25.65221	0	25.65221	137.1771	0	137.1771	BEV	0	6.168205	2	3
2022	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2022	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2022	2a	1	3.252061	9.053153	0	9.053153	24.3623	0	24.3623	BEV	0	3.252061	1	3
2022	2a	1	49.48117	191.6074	0	191.6074	868.8542	0	868.8542	BEV	0	49.48117	2	3
2022	2a	1	18.17807	48.52164	48.52164	0	204.8089	204.8089	0	ICE	18.17807	0	4	2
2022	2a	1	1.270827	4.775451	4.775451	0	25.5428	25.5428	0	ICE	1.270827	0	3	2
2022	2a	1	14.56197	56.38874	56.38874	0	294.2843	294.2843	0	ICE	14.56197	0	2	2
2022	2a	1	1.008936	4.08034	4.08034	0	23.27566	23.27566	0	ICE	1.008936	0	3	2
2022	2a	1	6.4998	22.19038	22.19038	0	113.1978	113.1978	0	ICE	6.4998	0	2	2
2022	2a	1	10.58298	28.8548	28.8548	0	110.7083	110.7083	0	ICE	10.58298	0	4	2
2022	2a	1	5.222817	19.02761	0	19.02761	75.34068	0	75.34068	BEV	0	5.222817	1	3
2022	2a	1	13.58027	58.03339	58.03339	0	367.4092	367.4092	0	ICE	13.58027	0	2	2
2022	2a	1	2.754676	10.82483	0	10.82483	42.02913	0	42.02913	BEV	0	2.754676	3	3
2022	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2022	2a	1	0	0	0	0	0	0	0	PHEV	0	0	3	8
2022	2a	1	1.464714	4.664894	0	4.664894	14.44521	0	14.44521	BEV	0	1.464714	2	3
2022	2a	1	3.159044	13.8617	0	13.8617	65.51405	0	65.51405	BEV	0	3.159044	4	3
2022	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2022	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2022	2a	1	10.57482	40.34335	0	40.34335	178.3988	0	178.3988	BEV	0	10.57482	1	3
2022	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2022	2a	1	10.57482	40.34335	0	40.34335	178.3988	0	178.3988	BEV	0	10.57482	1	3
2022	2a	1	10.48286	41.19364	0	41.19364	193.2666	0	193.2666	BEV	0	10.48286	1	3
2022	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2022	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2022	2a	1	29.36656	122.1291	0	122.1291	648.9206	0	648.9206	BEV	0	29.36656	1	3
2022	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2022	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2022	2a	1	16.69518	62.73632	62.73632	0	318.7776	318.7776	0	ICE	16.69518	0	2	2
2022	2a	1	15.25966	58.21621	0	58.21621	255.3221	0	255.3221	BEV	0	15.25966	2	3
2022	2a	1	2.2456	9.467609	0	9.467609	51.62622	0	51.62622	BEV	0	2.2456	2	3
2022	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2022	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2022	2a	1	2.877906	10.15495	10.15495	0	47.91439	47.91439	0	ICE	2.877906	0	3	2
2022	2a	1	9.57198	35.96911	0	35.96911	153.1898	0	153.1898	BEV	0	9.57198	1	3
2022	2a	1	13.68046	52.97526	0	52.97526	242.0361	0	242.0361	BEV	0	13.68046	1	3
2022	2a	1	2.341138	6.651431	0	6.651431	17.26489	0	17.26489	BEV	0	2.341138	2	3
2022	2a	1	10.81288	36.29581	36.29581	0	183.1561	183.1561	0	ICE	10.81288	0	2	2
2022	2a	1	3.443912	11.95485	0	11.95485	43.21652	0	43.21652	BEV	0	3.443912	2	3
2022	2a	1	1.660739	5.860065	0	5.860065	21.46446	0	21.46446	BEV	0	1.660739	2	3
2022	2a	1	1.751316	6.380341	0	6.380341	25.34439	0	25.34439	BEV	0	1.751316	2	3
2022	2a	1	12.62221	49.60049	49.60049	0	263.7251	263.7251	0	ICE	12.62221	0	2	2
2022	2a	1	6.340821	28.54967	28.54967	0	199.2559	199.2559	0	ICE	6.340821	0	2	2
2022	2a	1	8.663031	40.49438	40.49438	0	303.1073	303.1073	0	ICE	8.663031	0	2	2

2022	2a	1	3.85139	12.92804	12.92804	0	58.89953	58.89953	0	ICE	3.85139	0	3	2
2022	2a	1	1.60262	5.654989	0	5.654989	16.20462	0	16.20462	BEV	0	1.60262	3	3
2022	2a	1	1.974709	7.081069	7.081069	0	38.74893	38.74893	0	ICE	1.974709	0	3	2
2022	2a	1	11.04944	42.78707	0	42.78707	149.9249	0	149.9249	BEV	0	11.04944	3	3
2022	2a	1	1.634768	6.517671	6.517671	0	35.36502	35.36502	0	ICE	1.634768	0	3	2
2022	2a	1	1.084441	4.323567	0	4.323567	16.18285	0	16.18285	BEV	0	1.084441	3	3
2022	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2022	2a	1	0	0	0	0	0	0	0	PHEV	0	0	3	8
2022	2a	1	24.31814	109.4929	0	109.4929	542.0573	0	542.0573	BEV	0	24.31814	3	3
2022	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2022	2a	1	0	0	0	0	0	0	0	PHEV	0	0	3	8
2022	2a	1	55.98598	258.4929	0	258.4929	1340.523	0	1340.523	BEV	0	55.98598	3	3
2022	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2022	2a	1	14.35538	66.28022	39.76813	26.51209	476.4366	285.8619	190.5746	PHEV	8.613228	5.742152	3	8
2022	2a	1	1.214279	3.589033	0	3.589033	7.739209	0	7.739209	BEV	0	1.214279	4	3
2022	2a	1	0.963257	3.123013	0	3.123013	7.579579	0	7.579579	BEV	0	0.963257	4	3
2022	2a	1	2.39717	8.733298	0	8.733298	26.7652	0	26.7652	BEV	0	2.39717	4	3
2022	2a	1	3.056689	13.93792	13.93792	0	103.3908	103.3908	0	ICE	3.056689	0	2	2
2022	2a	1	1.328991	5.298567	0	5.298567	20.32325	0	20.32325	BEV	0	1.328991	4	3
2022	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2022	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2022	2a	1	5.477831	14.93547	14.93547	0	65.30198	65.30198	0	ICE	5.477831	0	2	2
2022	2a	1	1.47122	4.601329	0	4.601329	13.87063	0	13.87063	BEV	0	1.47122	2	3
2022	2a	1	0.692076	1.886966	0	1.886966	4.995061	0	4.995061	BEV	0	0.692076	1	3
2022	2a	1	1.245862	3.611006	0	3.611006	9.842074	0	9.842074	BEV	0	1.245862	1	3
2022	2a	1	2.327216	7.011855	0	7.011855	19.57218	0	19.57218	BEV	0	2.327216	1	3
2022	2a	1	2.880037	9.007487	0	9.007487	27.07517	0	27.07517	BEV	0	2.880037	1	3
2022	2a	1	2.379482	7.578292	0	7.578292	23.3261	0	23.3261	BEV	0	2.379482	1	3
2022	2a	1	1.814039	5.881368	0	5.881368	19.00461	0	19.00461	BEV	0	1.814039	1	3
2022	2a	1	1.604774	5.294838	0	5.294838	16.80473	0	16.80473	BEV	0	1.604774	1	3
2022	2a	1	1.546167	5.19005	0	5.19005	17.68779	0	17.68779	BEV	0	1.546167	1	3
2022	2a	1	1.536479	5.245554	0	5.245554	17.88173	0	17.88173	BEV	0	1.536479	1	3
2022	2a	1	2.212562	7.933981	0	7.933981	29.5843	0	29.5843	BEV	0	2.212562	1	3
2022	2a	1	6.833168	25.28586	0	25.28586	104.4874	0	104.4874	BEV	0	6.833168	1	3
2022	2a	1	0.958033	2.776763	0	2.776763	7.665143	0	7.665143	BEV	0	0.958033	2	3
2022	2a	1	0.972449	2.92997	0	2.92997	8.345036	0	8.345036	BEV	0	0.972449	2	3
2022	2a	1	0.989214	3.037154	0	3.037154	8.977208	0	8.977208	BEV	0	0.989214	2	3
2022	2a	1	1.704405	6.111793	0	6.111793	23.56414	0	23.56414	BEV	0	1.704405	2	3
2022	2a	1	0	0	0	0	0	0	0	BEV	0	0	2	3
2022	2a	1	35.75097	171.2103	0	171.2103	1252.232	0	1252.232	FCEV	0	35.75097	2	7
2022	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2022	2a	1	0	0	0	0	0	0	0	BEV	0	0	2	3
2022	2a	1	38.04903	184.3955	0	184.3955	1384.446	0	1384.446	FCEV	0	38.04903	2	7
2022	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2022	2a	1	0.436418	1.814965	1.814965	0	11.17971	11.17971	0	ICE	0.436418	0	3	2
2022	2a	1	0	0	0	0	0	0	0	BEV	0	0	3	3
2022	2a	1	2.521143	12.07368	0	12.07368	68.54427	0	68.54427	FCEV	0	2.521143	3	7

2022	2a	1	36.13639	173.0561	103.8336	69.22243	1361.83	817.0981	544.7321	PHEV	21.68183	14.45456	3	8
2022	2a	1	1.671019	7.906727	7.906727	0	60.26221	60.26221	0	ICE	1.671019	0	2	2
2022	2a	1	0.645072	2.460977	0	2.460977	8.363557	0	8.363557	BEV	0	0.645072	3	3
2022	2a	1	0.558276	1.714059	0	1.714059	3.852216	0	3.852216	BEV	0	0.558276	4	3
2022	2a	1	1.19847	3.954267	0	3.954267	9.955665	0	9.955665	BEV	0	1.19847	4	3
2022	2a	1	4.805505	16.95666	0	16.95666	49.20736	0	49.20736	BEV	0	4.805505	4	3
2022	2a	1	1.9717	7.635073	0	7.635073	26.77798	0	26.77798	BEV	0	1.9717	4	3
2022	2a	1	0.55609	1.579914	0	1.579914	4.250244	0	4.250244	BEV	0	0.55609	1	3
2022	2a	1	0.381051	1.126268	0	1.126268	2.303318	0	2.303318	BEV	0	0.381051	3	3
2022	2a	1	1.076719	4.662894	0	4.662894	21.00156	0	21.00156	BEV	0	1.076719	3	3
2022	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2022	2a	1	0	0	0	0	0	0	0	PHEV	0	0	3	8
2022	2a	1	0.350119	1.034844	0	1.034844	2.401129	0	2.401129	BEV	0	0.350119	2	3
2022	2a	1	3.028837	13.6374	0	13.6374	82.69003	0	82.69003	BEV	0	3.028837	2	3
2022	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2022	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2022	2a	1	2.038589	7.543719	0	7.543719	30.56917	0	30.56917	BEV	0	2.038589	2	3
2022	2a	1	5.838623	21.94009	0	21.94009	92.24238	0	92.24238	BEV	0	5.838623	2	3
2022	2a	1	1.807193	6.894513	0	6.894513	23.19593	0	23.19593	BEV	0	1.807193	4	3
2022	2a	1	2.13552	10.34929	10.34929	0	88.57601	88.57601	0	ICE	2.13552	0	2	2
2022	2a	1	1.664452	7.589584	0	7.589584	49.55788	0	49.55788	BEV	0	1.664452	2	3
2022	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2022	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2022	2a	1	0.847908	2.749037	0	2.749037	8.609921	0	8.609921	BEV	0	0.847908	2	3
2022	2a	1	0.353714	1.207582	0	1.207582	3.236476	0	3.236476	BEV	0	0.353714	4	3
2022	2a	1	0.325043	1.072456	0	1.072456	3.439557	0	3.439557	BEV	0	0.325043	2	3
2022	2a	1	0.457114	1.665344	0	1.665344	4.942288	0	4.942288	BEV	0	0.457114	3	3
2022	2a	1	0.61784	2.604856	0	2.604856	10.71432	0	10.71432	BEV	0	0.61784	3	3
2022	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2022	2a	1	0	0	0	0	0	0	0	PHEV	0	0	3	8
2022	2a	1	0.77317	2.639609	0	2.639609	7.377884	0	7.377884	BEV	0	0.77317	3	3
2022	2a	1	0.847025	2.406492	0	2.406492	5.032606	0	5.032606	BEV	0	0.847025	4	3
2022	2a	1	2.710921	10.03165	0	10.03165	32.34684	0	32.34684	BEV	0	2.710921	4	3
2022	2a	1	0.551414	1.629809	0	1.629809	4.465938	0	4.465938	BEV	0	0.551414	1	3
2022	2a	1	0.502292	1.542173	0	1.542173	4.433752	0	4.433752	BEV	0	0.502292	1	3
2022	2a	1	1.102185	4.5206	0	4.5206	23.06881	0	23.06881	BEV	0	1.102185	2	3
2022	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2022	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2022	2a	1	0.529174	2.200719	2.200719	0	14.31713	14.31713	0	ICE	0.529174	0	2	2
2022	2a	1	0.978019	3.058812	0	3.058812	7.027299	0	7.027299	BEV	0	0.978019	3	3
2022	2a	1	4.386186	15.22577	0	15.22577	42.19532	0	42.19532	BEV	0	4.386186	4	3
2022	2a	1	3.731562	16.16009	0	16.16009	72.93784	0	72.93784	BEV	0	3.731562	4	3
2022	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2022	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2022	2a	1	0.316342	1.188733	0	1.188733	3.910644	0	3.910644	BEV	0	0.316342	3	3
2022	2a	1	0	0	0	0	0	0	0	BEV	0	0	4	3
2022	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7

2022	2a	1	3.581215	16.74	10.044	6.695999	131.4503	78.87021	52.58014	PHEV	2.148729	1.432486	4	8
2022	2a	1	0.39771	1.448927	1.448927	0	8.264014	8.264014	0	ICE	0.39771	0	3	2
2022	2a	1	0.5437	1.856198	0	1.856198	6.277822	0	6.277822	BEV	0	0.5437	2	3
2023	2a	1	12620.38	33686.82	33686.82	0	68550.21	68550.21	0	ICE	12620.38	0	1	1
2023	2a	1	3786.363	10323.63	10323.63	0	21139.95	21139.95	0	ICE	3786.363	0	1	1
2023	2a	1	4903.327	13930.89	13930.89	0	30983.08	30983.08	0	ICE	4903.327	0	1	1
2023	2a	1	5595.53	16218.09	16218.09	0	37576.67	37576.67	0	ICE	5595.53	0	1	1
2023	2a	1	10888.36	32806.4	32806.4	0	84006.41	84006.41	0	ICE	10888.36	0	1	1
2023	2a	1	12019.36	36902.67	36902.67	0	98622.69	98622.69	0	ICE	12019.36	0	1	1
2023	2a	1	13853.95	44122.74	44122.74	0	128687.2	128687.2	0	ICE	13853.95	0	1	1
2023	2a	1	17275.98	56011.14	56011.14	0	170983.5	170983.5	0	ICE	17275.98	0	1	1
2023	2a	1	22485.77	74190.23	74190.23	0	236648.9	236648.9	0	ICE	22485.77	0	1	1
2023	2a	1	25907.21	86963.26	86963.26	0	288814.9	288814.9	0	ICE	25907.21	0	1	1
2023	2a	1	23702.06	80919.08	80919.08	0	281173.7	281173.7	0	ICE	23702.06	0	1	1
2023	2a	1	26372.76	91547.76	91547.76	0	332134.9	332134.9	0	ICE	26372.76	0	1	1
2023	2a	1	31606.99	111528.1	111528.1	0	421782.8	421782.8	0	ICE	31606.99	0	1	1
2023	2a	1	41354.41	148292	148292	0	584138.6	584138.6	0	ICE	41354.41	0	1	1
2023	2a	1	42381.77	154404	154404	0	634000.7	634000.7	0	ICE	42381.77	0	1	1
2023	2a	1	58126.48	215094.7	215094.7	0	917311.9	917311.9	0	ICE	58126.48	0	1	1
2023	2a	1	72370.18	271949.1	271949.1	0	1206514	1206514	0	ICE	72370.18	0	1	1
2023	2a	1	88271.64	336759.8	336759.8	0	1553893	1553893	0	ICE	88271.64	0	1	1
2023	2a	1	123579.6	478541.2	478541.2	0	2295917	2295917	0	ICE	123579.6	0	1	1
2023	2a	1	144752.4	568822.1	568822.1	0	2831725	2831725	0	ICE	144752.4	0	1	1
2023	2a	1	250.3013	983.5889	983.5889	0	4989.883	4989.883	0	ICE	250.3013	0	1	2
2023	2a	1	167753.1	668816.7	668816.7	0	3460014	3460014	0	ICE	167753.1	0	1	1
2023	2a	1	204851.2	828459.1	828459.1	0	4442458	4442458	0	ICE	204851.2	0	1	1
2023	2a	1	222444.1	912352.2	912352.2	0	5065363	5065363	0	ICE	222444.1	0	1	1
2023	2a	1	288932.7	1201607	1201607	0	6910819	6910819	0	ICE	288932.7	0	1	1
2023	2a	1	326953	1378457	1378457	0	8192745	8192745	0	ICE	326953	0	1	1
2023	2a	1	808.0073	3406.615	3406.615	0	20299.98	20299.98	0	ICE	808.0073	0	1	2
2023	2a	1	377347.5	1612542	1612542	0	9880115	9880115	0	ICE	377347.5	0	1	1
2023	2a	1	342032.4	1481222	1481222	0	9362266	9362266	0	ICE	342032.4	0	1	1
2023	2a	1	290983.7	1276819	1276819	0	8320405	8320405	0	ICE	290983.7	0	1	1
2023	2a	1	360714.9	1603461	1603461	0	10758378	10758378	0	ICE	360714.9	0	1	1
2023	2a	1	4013.898	17842.7	17842.7	0	118980	118980	0	ICE	4013.898	0	1	2
2023	2a	1	369949.6	1665705	1665705	0	11527918	11527918	0	ICE	369949.6	0	1	1
2023	2a	1	5595.095	25192.03	25192.03	0	171965.2	171965.2	0	ICE	5595.095	0	1	2
2023	2a	1	552681.7	2520124	2520124	0	18012988	18012988	0	ICE	552681.7	0	1	1
2023	2a	1	680121.6	3140189	3140189	0	23081493	23081493	0	ICE	680121.6	0	1	1
2023	2a	1	694897.7	3248223	3248223	0	24603508	24603508	0	ICE	694897.7	0	1	1
2023	2a	1	12898.49	60292.56	60292.56	0	454675	454675	0	ICE	12898.49	0	1	2
2023	2a	1	813237.8	3847981	3847981	0	30016317	30016317	0	ICE	813237.8	0	1	1
2023	2a	1	779979.5	3735299	3735299	0	29984561	29984561	0	ICE	779979.5	0	1	1
2023	2a	1	831438.4	4029367	4029367	0	33295835	33295835	0	ICE	831438.4	0	1	1
2023	2a	1	10174.62	49308.85	49308.85	0	407900.7	407900.7	0	ICE	10174.62	0	1	2
2023	2a	1	48357.53	234353.2	0	234353.2	1889856	0	1889856	BEV	0	48357.53	1	3
2023	2a	1	986.8884	4782.718	0	4782.718	36934.04	0	36934.04	FCEV	0	986.8884	1	7

2023	2a	1	43620.13	211394.5	114153	97241.47	1774365	958156.9	816207.7	PHEV	23554.87	20065.26	1	8
2023	2a	1	883706.8	4333300	4333300	0	36785058	36785058	0	ICE	883706.8	0	1	1
2023	2a	1	10814.25	53028.2	53028.2	0	450651.7	450651.7	0	ICE	10814.25	0	1	2
2023	2a	1	62817.12	308026.9	0	308026.9	2574405	0	2574405	BEV	0	62817.12	1	3
2023	2a	1	1281.982	6286.263	0	6286.263	49834.13	0	49834.13	FCEV	0	1281.982	1	7
2023	2a	1	40598.4	199076.3	107501.2	91575.09	1709509	923134.6	786373.9	PHEV	21923.14	18675.26	1	8
2023	2a	1	915719.2	4542736	4542736	0	39613435	39613435	0	ICE	915719.2	0	1	1
2023	2a	1	11158.35	55354.8	55354.8	0	483152	483152	0	ICE	11158.35	0	1	2
2023	2a	1	79823.25	395990.4	0	395990.4	3392892	0	3392892	BEV	0	79823.25	1	3
2023	2a	1	1867.211	9262.933	0	9262.933	75358.5	0	75358.5	FCEV	0	1867.211	1	7
2023	2a	1	39148.17	194207.8	102930.1	91277.67	1723713	913568.1	810145.3	PHEV	20748.53	18399.64	1	8
2023	2a	1	939812	4716099	4716099	0	42192870	42192870	0	ICE	939812	0	1	1
2023	2a	1	11555.73	57988.17	57988.17	0	519379.8	519379.8	0	ICE	11555.73	0	1	2
2023	2a	1	97334.9	488439.2	0	488439.2	4318541	0	4318541	BEV	0	97334.9	1	3
2023	2a	1	2568.956	12891.36	0	12891.36	107563.5	0	107563.5	FCEV	0	2568.956	1	7
2023	2a	1	37114.33	186244.5	96847.16	89397.38	1675060	871031.3	804028.9	PHEV	19299.45	17814.88	1	8
2023	2a	1	912636.3	4632012	4632012	0	42475142	42475142	0	ICE	912636.3	0	1	1
2023	2a	1	11275.73	57229.04	57229.04	0	525424.6	525424.6	0	ICE	11275.73	0	1	2
2023	2a	1	147449.5	748368.3	0	748368.3	6756747	0	6756747	BEV	0	147449.5	1	3
2023	2a	1	5054.417	25653.29	0	25653.29	219468.1	0	219468.1	FCEV	0	5054.417	1	7
2023	2a	1	56058.28	284519.3	141690.6	142828.7	2666275	1327805	1338470	PHEV	27917.02	28141.26	1	8
2023	2a	1	862579.9	4427372	4427372	0	41497580	41497580	0	ICE	862579.9	0	1	1
2023	2a	1	10734.07	55094.86	55094.86	0	517129.8	517129.8	0	ICE	10734.07	0	1	2
2023	2a	1	196630.7	1009248	0	1009248	9302477	0	9302477	BEV	0	196630.7	1	3
2023	2a	1	8314.936	42678.16	0	42678.16	373772.2	0	373772.2	FCEV	0	8314.936	1	7
2023	2a	1	74537.34	382578.5	182107.4	200471.1	3687230	1755122	1932109	PHEV	35479.77	39057.56	1	8
2023	2a	1	721995	3747154	3747154	0	35822911	35822911	0	ICE	721995	0	1	1
2023	2a	1	9060.007	47021.44	47021.44	0	450228.4	450228.4	0	ICE	9060.007	0	1	2
2023	2a	1	220090.5	1142270	0	1142270	10739085	0	10739085	BEV	0	220090.5	1	3
2023	2a	1	11097	57593.43	0	57593.43	519293.9	0	519293.9	FCEV	0	11097	1	7
2023	2a	1	83186.55	431738.2	196009.1	235729.1	4252748	1930748	2322000	PHEV	37766.69	45419.86	1	8
2023	2a	1	1503.959	4272.914	4272.914	0	19913.51	19913.51	0	ICE	1503.959	0	2	1
2023	2a	1	1686.567	4888.346	4888.346	0	22815.05	22815.05	0	ICE	1686.567	0	2	1
2023	2a	1	3210.957	9490.594	9490.594	0	45440.7	45440.7	0	ICE	3210.957	0	2	1
2023	2a	1	5022.745	15133.43	15133.43	0	73558.19	73558.19	0	ICE	5022.745	0	2	1
2023	2a	1	8545.805	26237.93	26237.93	0	128597.9	128597.9	0	ICE	8545.805	0	2	1
2023	2a	1	8187.553	25607.06	25607.06	0	127570.6	127570.6	0	ICE	8187.553	0	2	1
2023	2a	1	8342.473	26569.53	26569.53	0	133575.2	133575.2	0	ICE	8342.473	0	2	1
2023	2a	1	10895.21	35323.8	35323.8	0	179616.3	179616.3	0	ICE	10895.21	0	2	1
2023	2a	1	9086.622	29980.67	29980.67	0	152702	152702	0	ICE	9086.622	0	2	1
2023	2a	1	11203.53	37607.12	37607.12	0	191827.4	191827.4	0	ICE	11203.53	0	2	1
2023	2a	1	9611.821	32814.85	32814.85	0	169967.8	169967.8	0	ICE	9611.821	0	2	1
2023	2a	1	12298.42	42691.51	42691.51	0	223602.6	223602.6	0	ICE	12298.42	0	2	1
2023	2a	1	15163.9	53507.19	53507.19	0	284001	284001	0	ICE	15163.9	0	2	1
2023	2a	1	14759.08	52924.31	52924.31	0	284694.3	284694.3	0	ICE	14759.08	0	2	1
2023	2a	1	16743.51	60999.44	60999.44	0	329438.2	329438.2	0	ICE	16743.51	0	2	1
2023	2a	1	22302.62	82529.97	82529.97	0	451226.8	451226.8	0	ICE	22302.62	0	2	1

2023	2a	1	28695.49	107830.5	107830.5	0	598789	598789	0	ICE	28695.49	0	2	1
2023	2a	1	26535.25	101233	101233	0	569845	569845	0	ICE	26535.25	0	2	1
2023	2a	1	28917.81	111979.3	111979.3	0	637847.4	637847.4	0	ICE	28917.81	0	2	1
2023	2a	1	32719.84	128576.5	128576.5	0	739616.9	739616.9	0	ICE	32719.84	0	2	1
2023	2a	1	34507.72	137579.2	137579.2	0	798869.7	798869.7	0	ICE	34507.72	0	2	1
2023	2a	1	24255.76	98095.16	98095.16	0	577328.4	577328.4	0	ICE	24255.76	0	2	1
2023	2a	1	13483.93	56076.68	56076.68	0	339460.2	339460.2	0	ICE	13483.93	0	2	1
2023	2a	1	21229.43	89504.77	89504.77	0	553938.7	553938.7	0	ICE	21229.43	0	2	1
2023	2a	1	30377.64	129814.6	129814.6	0	818410.3	818410.3	0	ICE	30377.64	0	2	1
2023	2a	1	51462.21	222864.8	222864.8	0	1433680	1433680	0	ICE	51462.21	0	2	1
2023	2a	1	37586.47	164927.2	164927.2	0	1080814	1080814	0	ICE	37586.47	0	2	1
2023	2a	1	19615.26	87194.32	87194.32	0	583184.3	583184.3	0	ICE	19615.26	0	2	1
2023	2a	1	16986.54	76482.23	76482.23	0	524628.8	524628.8	0	ICE	16986.54	0	2	1
2023	2a	1	117806.6	557423.2	557423.2	0	4241214	4241214	0	ICE	117806.6	0	2	1
2023	2a	1	106974.4	512297	512297	0	3982979	3982979	0	ICE	106974.4	0	2	1
2023	2a	1	94339.19	457192.2	457192.2	0	3649945	3649945	0	ICE	94339.19	0	2	1
2023	2a	1	12.77995	61.93495	61.93495	0	494.4815	494.4815	0	ICE	12.77995	0	2	2
2023	2a	1	3.17869	15.40476	0	15.40476	118.3965	0	118.3965	BEV	0	3.17869	2	3
2023	2a	1	0.064871	0.314383	0	0.314383	2.416256	0	2.416256	FCEV	0	0.064871	2	7
2023	2a	1	27.57027	133.6127	80.16763	53.44509	1066.787	640.0719	426.7146	PHEV	16.54216	11.02811	2	8
2023	2a	1	100072.5	490710.5	490710.5	0	4019580	4019580	0	ICE	100072.5	0	2	1
2023	2a	1	13.55663	66.4756	66.4756	0	544.5578	544.5578	0	ICE	13.55663	0	2	2
2023	2a	1	101424.9	503152.5	503152.5	0	4230154	4230154	0	ICE	101424.9	0	2	1
2023	2a	1	13.83569	68.63665	68.63665	0	577.1296	577.1296	0	ICE	13.83569	0	2	2
2023	2a	1	1348.588	6690.129	0	6690.129	55465.55	0	55465.55	BEV	0	1348.588	2	3
2023	2a	1	31.54592	156.4942	0	156.4942	1267.637	0	1267.637	FCEV	0	31.54592	2	7
2023	2a	1	1035.621	5137.549	3053.172	2084.377	43471.49	25834.49	17637	PHEV	615.4546	420.1661	2	8
2023	2a	1	101589.8	509790.7	509790.7	0	4398100	4398100	0	ICE	101589.8	0	2	1
2023	2a	1	14.0192	70.35018	70.35018	0	607.0994	607.0994	0	ICE	14.0192	0	2	2
2023	2a	1	2759.381	13846.93	0	13846.93	117640.4	0	117640.4	BEV	0	2759.381	2	3
2023	2a	1	72.82823	365.4615	0	365.4615	3036.928	0	3036.928	FCEV	0	72.82823	2	7
2023	2a	1	2125.225	10664.65	6276.91	4387.743	92685.1	54551.8	38133.3	PHEV	1250.846	874.3781	2	8
2023	2a	1	97166.51	493160.8	493160.8	0	4367432	4367432	0	ICE	97166.51	0	2	1
2023	2a	1	13.58502	68.94967	68.94967	0	610.8883	610.8883	0	ICE	13.58502	0	2	2
2023	2a	1	6848.145	34757.21	0	34757.21	302810.4	0	302810.4	BEV	0	6848.145	2	3
2023	2a	1	234.7473	1191.441	0	1191.441	10157.73	0	10157.73	FCEV	0	234.7473	2	7
2023	2a	1	4938.821	25066.59	14531.46	10535.13	225100.8	130494.2	94606.66	PHEV	2863.105	2075.716	2	8
2023	2a	1	92010.73	472264.4	472264.4	0	4291474	4291474	0	ICE	92010.73	0	2	1
2023	2a	1	12.9169	66.2987	66.2987	0	602.773	602.773	0	ICE	12.9169	0	2	2
2023	2a	1	11262.9	57809.22	0	57809.22	516777.7	0	516777.7	BEV	0	11262.9	2	3
2023	2a	1	476.2753	2444.583	0	2444.583	21367.6	0	21367.6	FCEV	0	476.2753	2	7
2023	2a	1	7599.076	39003.85	22265.63	16738.22	360793.3	205961.4	154831.9	PHEV	4337.987	3261.089	2	8
2023	2a	1	77898.35	404292.4	404292.4	0	3768118	3768118	0	ICE	77898.35	0	2	1
2023	2a	1	10.98724	57.02377	57.02377	0	531.7967	531.7967	0	ICE	10.98724	0	2	2
2023	2a	1	14414.27	74810.07	0	74810.07	686189	0	686189	BEV	0	14414.27	2	3
2023	2a	1	726.77	3771.936	0	3771.936	33917.28	0	33917.28	FCEV	0	726.77	2	7
2023	2a	1	9087.965	47166.54	26507.6	20658.94	448512.4	252064	196448.4	PHEV	5107.436	3980.529	2	8

2023	2a	1	1030.421	2868.507	2868.507	0	12820.13	12820.13	0	ICE	1030.421	0	3	1
2023	2a	1	2453.096	7250.591	7250.591	0	32563.82	32563.82	0	ICE	2453.096	0	3	1
2023	2a	1	4149.331	12739.57	12739.57	0	58096.25	58096.25	0	ICE	4149.331	0	3	1
2023	2a	1	4452.582	13925.72	13925.72	0	64581.66	64581.66	0	ICE	4452.582	0	3	1
2023	2a	1	6015.759	19159.29	19159.29	0	90365.21	90365.21	0	ICE	6015.759	0	3	1
2023	2a	1	7920.525	25679.45	25679.45	0	123783.8	123783.8	0	ICE	7920.525	0	3	1
2023	2a	1	9231.379	30458.29	30458.29	0	149028.2	149028.2	0	ICE	9231.379	0	3	1
2023	2a	1	11362.7	38141.4	38141.4	0	191705.3	191705.3	0	ICE	11362.7	0	3	1
2023	2a	1	10661.65	36398.98	36398.98	0	185279.6	185279.6	0	ICE	10661.65	0	3	1
2023	2a	1	14917.75	51784	51784	0	266961.4	266961.4	0	ICE	14917.75	0	3	1
2023	2a	1	17616.28	62160.63	62160.63	0	324458	324458	0	ICE	17616.28	0	3	1
2023	2a	1	23220.19	83264.81	83264.81	0	440365.4	440365.4	0	ICE	23220.19	0	3	1
2023	2a	1	23454.25	85447.82	85447.82	0	455767.4	455767.4	0	ICE	23454.25	0	3	1
2023	2a	1	37781.26	139808	139808	0	755356.9	755356.9	0	ICE	37781.26	0	3	1
2023	2a	1	43896.9	164953.6	164953.6	0	902681.2	902681.2	0	ICE	43896.9	0	3	1
2023	2a	1	51300.35	195712.9	195712.9	0	1085899	1085899	0	ICE	51300.35	0	3	1
2023	2a	1	71608.48	277291.7	277291.7	0	1556797	1556797	0	ICE	71608.48	0	3	1
2023	2a	1	72914.35	286525.7	286525.7	0	1627475	1627475	0	ICE	72914.35	0	3	1
2023	2a	1	76118.68	303478.3	303478.3	0	1755191	1755191	0	ICE	76118.68	0	3	1
2023	2a	1	93707.63	378972.4	378972.4	0	2227381	2227381	0	ICE	93707.63	0	3	1
2023	2a	1	122614.5	502902	502902	0	3002802	3002802	0	ICE	122614.5	0	3	1
2023	2a	1	144641.8	601533.4	601533.4	0	3657765	3657765	0	ICE	144641.8	0	3	1
2023	2a	1	138577.6	584253.1	584253.1	0	3620021	3620021	0	ICE	138577.6	0	3	1
2023	2a	1	146625.1	626581.9	626581.9	0	3954012	3954012	0	ICE	146625.1	0	3	1
2023	2a	1	118704.8	514069.1	514069.1	0	3306287	3306287	0	ICE	118704.8	0	3	1
2023	2a	1	75201.6	329980.1	329980.1	0	2168579	2168579	0	ICE	75201.6	0	3	1
2023	2a	1	135534.9	602483.8	602483.8	0	4041818	4041818	0	ICE	135534.9	0	3	1
2023	2a	1	181688.2	818054.7	818054.7	0	5618916	5618916	0	ICE	181688.2	0	3	1
2023	2a	1	178487.2	813867.8	813867.8	0	5743796	5743796	0	ICE	178487.2	0	3	1
2023	2a	1	244127.6	1127162	1127162	0	8142504	8142504	0	ICE	244127.6	0	3	1
2023	2a	1	229619.1	1073329	1073329	0	7957972	7957972	0	ICE	229619.1	0	3	1
2023	2a	1	2487.257	11626.41	11626.41	0	84805.14	84805.14	0	ICE	2487.257	0	3	2
2023	2a	1	271993.5	1286986	1286986	0	9774287	9774287	0	ICE	271993.5	0	3	1
2023	2a	1	261020.5	1250019	1250019	0	9732221	9732221	0	ICE	261020.5	0	3	1
2023	2a	1	1782.349	8535.618	8535.618	0	66968.86	66968.86	0	ICE	1782.349	0	3	2
2023	2a	1	292855.9	1419256	1419256	0	11286149	11286149	0	ICE	292855.9	0	3	1
2023	2a	1	2993.315	14506.38	14506.38	0	115678.2	115678.2	0	ICE	2993.315	0	3	2
2023	2a	1	306875.1	1504777	1504777	0	12278661	12278661	0	ICE	306875.1	0	3	1
2023	2a	1	3136.606	15380.5	15380.5	0	125851	125851	0	ICE	3136.606	0	3	2
2023	2a	1	1058.762	5191.692	3115.015	2076.677	42547.78	25528.67	17019.11	PHEV	635.2571	423.5047	3	8
2023	2a	1	312529.1	1550407	1550407	0	13017630	13017630	0	ICE	312529.1	0	3	1
2023	2a	1	3186.345	15806.95	15806.95	0	133026.6	133026.6	0	ICE	3186.345	0	3	2
2023	2a	1	3685.888	18285.1	0	18285.1	121071.2	0	121071.2	BEV	0	3685.888	3	3
2023	2a	1	86.2196	427.7216	0	427.7216	2572.673	0	2572.673	FCEV	0	86.2196	3	7
2023	2a	1	3201.412	15881.69	9438.262	6443.429	133595.6	79393.94	54201.64	PHEV	1902.553	1298.858	3	8
2023	2a	1	315749.5	1584472	1584472	0	13642804	13642804	0	ICE	315749.5	0	3	1
2023	2a	1	3226.496	16190.98	16190.98	0	139757	139757	0	ICE	3226.496	0	3	2

2023	2a	1	7566.944	37971.91	0	37971.91	294489.6	0	294489.6	BEV	0	7566.944	3	3
2023	2a	1	199.7141	1002.191	0	1002.191	6179.953	0	6179.953	FCEV	0	199.7141	3	7
2023	2a	1	5460.921	27403.61	16128.98	11274.63	236542	139221.9	97320.14	PHEV	3214.142	2246.779	3	8
2023	2a	1	306090.6	1553539	1553539	0	13713717	13713717	0	ICE	306090.6	0	3	1
2023	2a	1	3175.083	16114.88	16114.88	0	142806.7	142806.7	0	ICE	3175.083	0	3	2
2023	2a	1	20905.5	106104.2	0	106104.2	817361.3	0	817361.3	BEV	0	20905.5	3	3
2023	2a	1	716.6187	3637.141	0	3637.141	22986.74	0	22986.74	FCEV	0	716.6187	3	7
2023	2a	1	14209.26	72117.99	41807.83	30310.16	703024.8	407553.5	295471.3	PHEV	8237.314	5971.951	3	8
2023	2a	1	293573.4	1506827	1506827	0	13641029	13641029	0	ICE	293573.4	0	3	1
2023	2a	1	3059.57	15703.89	15703.89	0	142808.3	142808.3	0	ICE	3059.57	0	3	2
2023	2a	1	35573.45	182588.2	0	182588.2	1436458	0	1436458	BEV	0	35573.45	3	3
2023	2a	1	1504.297	7721.121	0	7721.121	49992.82	0	49992.82	FCEV	0	1504.297	3	7
2023	2a	1	22751.6	116777.3	66663.18	50114.16	1212199	691992.2	520206.4	PHEV	12987.91	9763.685	3	8
2023	2a	1	247112.5	1282514	1282514	0	11899885	11899885	0	ICE	247112.5	0	3	1
2023	2a	1	2589.28	13438.36	13438.36	0	125324.5	125324.5	0	ICE	2589.28	0	3	2
2023	2a	1	45634.51	236843.1	0	236843.1	1918813	0	1918813	BEV	0	45634.51	3	3
2023	2a	1	2300.9	11941.67	0	11941.67	79676.97	0	79676.97	FCEV	0	2300.9	3	7
2023	2a	1	27433.61	142380.4	80017.8	62362.63	1541891	866542.6	675348.2	PHEV	15417.69	12015.92	3	8
2023	2a	1	1754.227	4883.452	4883.452	0	21251.92	21251.92	0	ICE	1754.227	0	4	1
2023	2a	1	5011.36	16534.63	16534.63	0	73873.67	73873.67	0	ICE	5011.36	0	4	1
2023	2a	1	4636.305	15562.78	15562.78	0	71349.82	71349.82	0	ICE	4636.305	0	4	1
2023	2a	1	6220.804	21237.89	21237.89	0	98697.83	98697.83	0	ICE	6220.804	0	4	1
2023	2a	1	7499.803	26034.07	26034.07	0	124415.7	124415.7	0	ICE	7499.803	0	4	1
2023	2a	1	12858	45370.62	45370.62	0	220945	220945	0	ICE	12858	0	4	1
2023	2a	1	15662.83	56165.02	56165.02	0	278776.4	278776.4	0	ICE	15662.83	0	4	1
2023	2a	1	15525.87	56563.39	56563.39	0	285582.2	285582.2	0	ICE	15525.87	0	4	1
2023	2a	1	22488.38	83217.35	83217.35	0	429255.8	429255.8	0	ICE	22488.38	0	4	1
2023	2a	1	28248.28	106150	106150	0	555116.5	555116.5	0	ICE	28248.28	0	4	1
2023	2a	1	51641.16	197013.1	197013.1	0	1049893	1049893	0	ICE	51641.16	0	4	1
2023	2a	1	64814.37	250982.6	250982.6	0	1355859	1355859	0	ICE	64814.37	0	4	1
2023	2a	1	91026.96	357701.4	357701.4	0	1960835	1960835	0	ICE	91026.96	0	4	1
2023	2a	1	87.14039	342.4286	342.4286	0	1830.483	1830.483	0	ICE	87.14039	0	4	2
2023	2a	1	116720.8	465355.5	465355.5	0	2597925	2597925	0	ICE	116720.8	0	4	1
2023	2a	1	133041.1	538044.7	538044.7	0	3069615	3069615	0	ICE	133041.1	0	4	1
2023	2a	1	149589	613537.7	613537.7	0	3566701	3566701	0	ICE	149589	0	4	1
2023	2a	1	208.0928	853.4906	853.4906	0	4840.921	4840.921	0	ICE	208.0928	0	4	2
2023	2a	1	143457.5	596608.3	596608.3	0	3528574	3528574	0	ICE	143457.5	0	4	1
2023	2a	1	145783.7	614634.4	614634.4	0	3710166	3710166	0	ICE	145783.7	0	4	1
2023	2a	1	149234.2	637731.3	637731.3	0	3937451	3937451	0	ICE	149234.2	0	4	1
2023	2a	1	112737.9	488228.3	488228.3	0	3083980	3083980	0	ICE	112737.9	0	4	1
2023	2a	1	47383.27	207914.9	207914.9	0	1344141	1344141	0	ICE	47383.27	0	4	1
2023	2a	1	67931.86	301972.7	301972.7	0	2001388	2001388	0	ICE	67931.86	0	4	1
2023	2a	1	97653.64	439687.5	439687.5	0	2985672	2985672	0	ICE	97653.64	0	4	1
2023	2a	1	2758.689	12421.05	12421.05	0	83605.57	83605.57	0	ICE	2758.689	0	4	2
2023	2a	1	98332.48	448377.4	448377.4	0	3128627	3128627	0	ICE	98332.48	0	4	1
2023	2a	1	109215.9	504260.9	504260.9	0	3615170	3615170	0	ICE	109215.9	0	4	1
2023	2a	1	2373.953	10960.78	10960.78	0	77507.69	77507.69	0	ICE	2373.953	0	4	2

2023	2a	1	170641	797642.6	797642.6	0	5871307	5871307	0	ICE	170641	0	4	1
2023	2a	1	5284.115	24700.01	24700.01	0	181525.9	181525.9	0	ICE	5284.115	0	4	2
2023	2a	1	184365.5	872358.6	872358.6	0	6596385	6596385	0	ICE	184365.5	0	4	1
2023	2a	1	199588.8	955824.7	955824.7	0	7394163	7394163	0	ICE	199588.8	0	4	1
2023	2a	1	182131.3	882655.6	882655.6	0	6945046	6945046	0	ICE	182131.3	0	4	1
2023	2a	1	6350.948	30778.35	30778.35	0	242323.2	242323.2	0	ICE	6350.948	0	4	2
2023	2a	1	1523.762	7384.549	4430.729	2953.819	55548.4	33329.04	22219.36	PHEV	914.2574	609.5049	4	8
2023	2a	1	191340.6	938248.3	938248.3	0	7574230	7574230	0	ICE	191340.6	0	4	1
2023	2a	1	6672.078	32716.87	32716.87	0	264276.3	264276.3	0	ICE	6672.078	0	4	2
2023	2a	1	3.347117	16.41275	0	16.41275	96.23533	0	96.23533	BEV	0	3.347117	4	3
2023	2a	1	0.068309	0.334954	0	0.334954	1.963986	0	1.963986	FCEV	0	0.068309	4	7
2023	2a	1	4095.949	20084.69	12050.81	8033.876	159355.8	95613.5	63742.33	PHEV	2457.569	1638.379	4	8
2023	2a	1	196523.2	974919.9	974919.9	0	8069891	8069891	0	ICE	196523.2	0	4	1
2023	2a	1	6917.488	34316.55	34316.55	0	284459	284459	0	ICE	6917.488	0	4	2
2023	2a	1	1684.687	8357.465	0	8357.465	52253.51	0	52253.51	BEV	0	1684.687	4	3
2023	2a	1	39.40789	195.4963	0	195.4963	1175.716	0	1175.716	FCEV	0	39.40789	4	7
2023	2a	1	4383.21	21744.4	12922.39	8822.015	186726.5	110968.9	75757.6	PHEV	2604.879	1778.331	4	8
2023	2a	1	201449.3	1010899	1010899	0	8571173	8571173	0	ICE	201449.3	0	4	1
2023	2a	1	7202.092	36141.03	36141.03	0	307294.6	307294.6	0	ICE	7202.092	0	4	2
2023	2a	1	3473.742	17431.69	0	17431.69	120550.7	0	120550.7	BEV	0	3473.742	4	3
2023	2a	1	91.68234	460.0739	0	460.0739	2836.911	0	2836.911	FCEV	0	91.68234	4	7
2023	2a	1	4678.248	23476.05	13817.33	9658.72	203252.1	119628.4	83623.71	PHEV	2753.483	1924.765	4	8
2023	2a	1	195314.1	991300.9	991300.9	0	8607084	8607084	0	ICE	195314.1	0	4	1
2023	2a	1	7106.123	36066.56	36066.56	0	314527.1	314527.1	0	ICE	7106.123	0	4	2
2023	2a	1	10336.21	52460.6	0	52460.6	371744.2	0	371744.2	BEV	0	10336.21	4	3
2023	2a	1	354.3145	1798.295	0	1798.295	11365.45	0	11365.45	FCEV	0	354.3145	4	7
2023	2a	1	12336.79	62614.41	36298.47	26315.94	588500.2	341162	247338.2	PHEV	7151.815	5184.978	4	8
2023	2a	1	185592.3	952591.5	952591.5	0	8473586	8473586	0	ICE	185592.3	0	4	1
2023	2a	1	6789.455	34848.31	34848.31	0	311565.5	311565.5	0	ICE	6789.455	0	4	2
2023	2a	1	18258.29	93714.52	0	93714.52	689568.5	0	689568.5	BEV	0	18258.29	4	3
2023	2a	1	772.0898	3962.913	0	3962.913	25659.46	0	25659.46	FCEV	0	772.0898	4	7
2023	2a	1	19337.05	99251.48	56658.41	42593.06	980698.9	559838.9	420859.9	PHEV	11038.69	8298.357	4	8
2023	2a	1	149605.7	776453.5	776453.5	0	7059353	7059353	0	ICE	149605.7	0	4	1
2023	2a	1	5507.42	28583.51	28583.51	0	261355.7	261355.7	0	ICE	5507.42	0	4	2
2023	2a	1	23331.82	121092.1	0	121092.1	924630.6	0	924630.6	BEV	0	23331.82	4	3
2023	2a	1	1176.394	6105.486	0	6105.486	40483.64	0	40483.64	FCEV	0	1176.394	4	7
2023	2a	1	21930.58	113819.7	63966.67	49853.02	1168361	656618.9	511742.2	PHEV	12324.98	9605.592	4	8
2023	2a	1	781.6534	2086.421	2086.421	0	4148.104	4148.104	0	ICE	781.6534	0	1	2
2023	2a	1	4886.502	13603.14	13603.14	0	29123.25	29123.25	0	ICE	4886.502	0	1	1
2023	2a	1	1427.773	3974.663	3974.663	0	8486.477	8486.477	0	ICE	1427.773	0	1	2
2023	2a	1	1677.835	4766.913	4766.913	0	10727.33	10727.33	0	ICE	1677.835	0	1	2
2023	2a	1	1709.629	4955.188	4955.188	0	11325.05	11325.05	0	ICE	1709.629	0	1	2
2023	2a	1	8664.786	25610.42	25610.42	0	62996.27	62996.27	0	ICE	8664.786	0	1	1
2023	2a	1	1354.099	4079.874	4079.874	0	10238.31	10238.31	0	ICE	1354.099	0	1	2
2023	2a	1	13777.89	43091.17	43091.17	0	119475.5	119475.5	0	ICE	13777.89	0	1	1
2023	2a	1	96.00556	322.2638	322.2638	0	1076.838	1076.838	0	ICE	96.00556	0	1	2
2023	2a	1	52.79176	180.2316	180.2316	0	601.0449	601.0449	0	ICE	52.79176	0	1	2

2023	2a	1	29.31767	101.7704	101.7704	0	363.381	363.381	0	ICE	29.31767	0	1	2
2023	2a	1	104.7416	387.5921	387.5921	0	1658.733	1658.733	0	ICE	104.7416	0	1	2
2023	2a	1	212.9994	824.8039	824.8039	0	4044.237	4044.237	0	ICE	212.9994	0	1	2
2023	2a	1	37.45193	147.1719	0	147.1719	708.9558	0	708.9558	BEV	0	37.45193	1	3
2023	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2023	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2023	2a	1	638.1393	2544.204	2544.204	0	13233.84	13233.84	0	ICE	638.1393	0	1	2
2023	2a	1	940.5128	3803.622	3803.622	0	20627.39	20627.39	0	ICE	940.5128	0	1	2
2023	2a	1	363.9361	1492.68	1492.68	0	8429.395	8429.395	0	ICE	363.9361	0	1	2
2023	2a	1	738.5053	3071.281	3071.281	0	17567.7	17567.7	0	ICE	738.5053	0	1	2
2023	2a	1	2277.244	9992.411	9992.411	0	64875.68	64875.68	0	ICE	2277.244	0	1	2
2023	2a	1	6298.281	28718.97	28718.97	0	203358.6	203358.6	0	ICE	6298.281	0	1	2
2023	2a	1	8895.303	41070.5	41070.5	0	300794.6	300794.6	0	ICE	8895.303	0	1	2
2023	2a	1	8368.373	38637.62	0	38637.62	263526	0	263526	BEV	0	8368.373	1	3
2023	2a	1	0.49165	2.269997	0	2.269997	15.4824	0	15.4824	FCEV	0	0.49165	1	7
2023	2a	1	8746.943	40385.51	24231.31	16154.21	287904	172742.4	115161.6	PHEV	5248.166	3498.777	1	8
2023	2a	1	10451.65	48855.1	0	48855.1	343160.1	0	343160.1	BEV	0	10451.65	1	3
2023	2a	1	1.464432	6.845327	0	6.845327	48.08185	0	48.08185	FCEV	0	1.464432	1	7
2023	2a	1	13196	61683.24	37009.94	24673.3	453209.3	271925.6	181283.7	PHEV	7917.598	5278.399	1	8
2023	2a	1	9246.088	43749.53	43749.53	0	341454.2	341454.2	0	ICE	9246.088	0	1	2
2023	2a	1	23981.86	113474.5	0	113474.5	821871.8	0	821871.8	BEV	0	23981.86	1	3
2023	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2023	2a	1	11404.02	53960.16	32376.1	21584.07	409472.9	245683.7	163789.2	PHEV	6842.411	4561.607	1	8
2023	2a	1	1749.993	4671.153	4671.153	0	21220.67	21220.67	0	ICE	1749.993	0	2	1
2023	2a	1	1505.779	4105.552	4105.552	0	18651.19	18651.19	0	ICE	1505.779	0	2	1
2023	2a	1	1199.248	3338.489	3338.489	0	15509.09	15509.09	0	ICE	1199.248	0	2	1
2023	2a	1	243.6668	692.2841	692.2841	0	3073.607	3073.607	0	ICE	243.6668	0	2	2
2023	2a	1	119.5871	346.6113	346.6113	0	1522.127	1522.127	0	ICE	119.5871	0	2	2
2023	2a	1	92.61362	279.043	279.043	0	1245.82	1245.82	0	ICE	92.61362	0	2	2
2023	2a	1	21018.08	86205.45	86205.45	0	514213.5	514213.5	0	ICE	21018.08	0	2	1
2023	2a	1	32552.96	148435.3	148435.3	0	1045454	1045454	0	ICE	32552.96	0	2	1
2023	2a	1	46266.72	213618.1	213618.1	0	1545225	1545225	0	ICE	46266.72	0	2	1
2023	2a	1	56134.93	262396.5	262396.5	0	1944904	1944904	0	ICE	56134.93	0	2	1
2023	2a	1	2472.177	6598.833	6598.833	0	29362.6	29362.6	0	ICE	2472.177	0	3	1
2023	2a	1	1445.979	3942.504	3942.504	0	17566.77	17566.77	0	ICE	1445.979	0	3	1
2023	2a	1	24.65709	68.6409	68.6409	0	314.5996	314.5996	0	ICE	24.65709	0	3	2
2023	2a	1	1044.196	2966.676	2966.676	0	13105.42	13105.42	0	ICE	1044.196	0	3	1
2023	2a	1	1345.398	3899.503	3899.503	0	17371.55	17371.55	0	ICE	1345.398	0	3	1
2023	2a	1	2628.361	7919.2	7919.2	0	35689.21	35689.21	0	ICE	2628.361	0	3	1
2023	2a	1	36.23946	156.9404	156.9404	0	1024.906	1024.906	0	ICE	36.23946	0	3	2
2023	2a	1	1214.478	5537.787	5537.787	0	38485.4	38485.4	0	ICE	1214.478	0	3	2
2023	2a	1	888.9358	4104.306	4104.306	0	29227.54	29227.54	0	ICE	888.9358	0	3	2
2023	2a	1	3521.905	16664.53	16664.53	0	125218.5	125218.5	0	ICE	3521.905	0	3	2
2023	2a	1	3696.052	17700.28	0	17700.28	97385.84	0	97385.84	BEV	0	3696.052	3	3
2023	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2023	2a	1	336.3679	1610.856	966.5135	644.3424	12136.23	7281.739	4854.493	PHEV	201.8208	134.5472	3	8
2023	2a	1	8437.861	22522.68	22522.68	0	92750.95	92750.95	0	ICE	8437.861	0	4	1

2023	2a	1	3295.459	8985.168	8985.168	0	37128.45	37128.45	0	ICE	3295.459	0	4	1
2023	2a	1	1693.194	4810.55	4810.55	0	21075.08	21075.08	0	ICE	1693.194	0	4	1
2023	2a	1	342.335	972.6114	972.6114	0	3662.527	3662.527	0	ICE	342.335	0	4	2
2023	2a	1	1080.629	3132.097	3132.097	0	13036.05	13036.05	0	ICE	1080.629	0	4	1
2023	2a	1	1702.137	5030.99	5030.99	0	21276.24	21276.24	0	ICE	1702.137	0	4	1
2023	2a	1	228.768	676.1672	676.1672	0	2623.697	2623.697	0	ICE	228.768	0	4	2
2023	2a	1	2238.12	6743.409	6743.409	0	28610.21	28610.21	0	ICE	2238.12	0	4	1
2023	2a	1	116.8936	352.1982	352.1982	0	1359.244	1359.244	0	ICE	116.8936	0	4	2
2023	2a	1	2774.264	8517.738	8517.738	0	35770.77	35770.77	0	ICE	2774.264	0	4	1
2023	2a	1	2794.356	8739.515	8739.515	0	37022.03	37022.03	0	ICE	2794.356	0	4	1
2023	2a	1	3449.481	10986.08	10986.08	0	48095.07	48095.07	0	ICE	3449.481	0	4	1
2023	2a	1	10.60752	33.78336	33.78336	0	144.0344	144.0344	0	ICE	10.60752	0	4	2
2023	2a	1	4424.446	14344.67	14344.67	0	63491.14	63491.14	0	ICE	4424.446	0	4	1
2023	2a	1	49.42431	174.3981	174.3981	0	819.3165	819.3165	0	ICE	49.42431	0	4	2
2023	2a	1	46.10719	175.9008	175.9008	0	881.3489	881.3489	0	ICE	46.10719	0	4	2
2023	2a	1	363.7386	1512.709	1512.709	0	8895.485	8895.485	0	ICE	363.7386	0	4	2
2023	2a	1	523.9307	2208.929	2208.929	0	13272.23	13272.23	0	ICE	523.9307	0	4	2
2023	2a	1	724.4071	3095.652	3095.652	0	19177.7	19177.7	0	ICE	724.4071	0	4	2
2023	2a	1	524.0481	2269.469	2269.469	0	14439.29	14439.29	0	ICE	524.0481	0	4	2
2023	2a	1	734.97	3225.004	3225.004	0	20610.57	20610.57	0	ICE	734.97	0	4	2
2023	2a	1	4622.292	21076.77	21076.77	0	147925.6	147925.6	0	ICE	4622.292	0	4	2
2023	2a	1	9966.168	47156.72	47156.72	0	359960.2	359960.2	0	ICE	9966.168	0	4	2
2023	2a	1	6344.506	30383.65	30383.65	0	239046.3	239046.3	0	ICE	6344.506	0	4	2
2023	2a	1	1400.653	4139.896	4139.896	0	9860.314	9860.314	0	ICE	1400.653	0	1	2
2023	2a	1	68.90446	227.3454	227.3454	0	701.7179	701.7179	0	ICE	68.90446	0	1	2
2023	2a	1	240.0304	915.7257	915.7257	0	4252.424	4252.424	0	ICE	240.0304	0	1	2
2023	2a	1	27.87109	115.9098	0	115.9098	629.9599	0	629.9599	BEV	0	27.87109	1	3
2023	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2023	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2023	2a	1	1763.445	8040.973	0	8040.973	53378.6	0	53378.6	BEV	0	1763.445	1	3
2023	2a	1	6.664289	30.38789	0	30.38789	201.7247	0	201.7247	FCEV	0	6.664289	1	7
2023	2a	1	3706.825	16902.42	10141.45	6760.968	117358.2	70414.91	46943.27	PHEV	2224.095	1482.73	1	8
2023	2a	1	15734.48	75351.94	0	75351.94	561374.6	0	561374.6	BEV	0	15734.48	1	3
2023	2a	1	479.048	2294.146	0	2294.146	17091.47	0	17091.47	FCEV	0	479.048	1	7
2023	2a	1	11315.19	54188.12	32512.87	21675.25	424678.7	254807.2	169871.5	PHEV	6789.116	4526.077	1	8
2023	2a	1	9.202694	32.47253	32.47253	0	148.5318	148.5318	0	ICE	9.202694	0	2	2
2023	2a	1	5.751175	20.62302	20.62302	0	96.94227	96.94227	0	ICE	5.751175	0	2	2
2023	2a	1	12.44848	46.77828	46.77828	0	243.5431	243.5431	0	ICE	12.44848	0	2	2
2023	2a	1	20.80903	63.88935	63.88935	0	307.5476	307.5476	0	ICE	20.80903	0	3	2
2023	2a	1	111.1203	462.1251	462.1251	0	2804.889	2804.889	0	ICE	111.1203	0	3	2
2023	2a	1	122.5003	516.4699	516.4699	0	3249.408	3249.408	0	ICE	122.5003	0	3	2
2023	2a	1	309.3254	896.5486	896.5486	0	3355.403	3355.403	0	ICE	309.3254	0	4	2
2023	2a	1	34.35611	129.1017	129.1017	0	627.6551	627.6551	0	ICE	34.35611	0	4	2
2023	2a	1	119.3645	482.734	482.734	0	2715.139	2715.139	0	ICE	119.3645	0	4	2
2023	2a	1	1296.477	5763.138	5763.138	0	37620.22	37620.22	0	ICE	1296.477	0	4	2
2023	2a	1	802.5584	2188.199	2188.199	0	4481.958	4481.958	0	ICE	802.5584	0	1	2
2023	2a	1	286.8629	880.7465	880.7465	0	2263.588	2263.588	0	ICE	286.8629	0	1	2

2023	2a	1	660.1633	2064.7	2064.7	0	5657.108	5657.108	0	ICE	660.1633	0	1	2
2023	2a	1	139.7387	501.086	501.086	0	1962.589	1962.589	0	ICE	139.7387	0	1	2
2023	2a	1	114.313	416.4617	416.4617	0	1697.489	1697.489	0	ICE	114.313	0	1	2
2023	2a	1	214.9504	807.7298	807.7298	0	3630.509	3630.509	0	ICE	214.9504	0	1	2
2023	2a	1	80.17523	319.6514	0	319.6514	1589.48	0	1589.48	BEV	0	80.17523	1	3
2023	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2023	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2023	2a	1	2178.342	9808.028	0	9808.028	63320.27	0	63320.27	BEV	0	2178.342	1	3
2023	2a	1	21.52167	96.90175	0	96.90175	625.5941	0	625.5941	FCEV	0	21.52167	1	7
2023	2a	1	605.5151	2726.344	1635.806	1090.538	18329.05	10997.43	7331.62	PHEV	363.3091	242.206	1	8
2023	2a	1	1318.28	6313.203	6313.203	0	50133.06	50133.06	0	ICE	1318.28	0	1	2
2023	2a	1	78.76602	219.2704	219.2704	0	983.9179	983.9179	0	ICE	78.76602	0	2	2
2023	2a	1	100.3196	296.5136	296.5136	0	1357.759	1357.759	0	ICE	100.3196	0	2	2
2023	2a	1	38.76687	119.0247	119.0247	0	531.6541	531.6541	0	ICE	38.76687	0	2	2
2023	2a	1	591.6099	2765.415	0	2765.415	19402.89	0	19402.89	BEV	0	591.6099	2	3
2023	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2023	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2023	2a	1	66.02022	180.0061	180.0061	0	801.5761	801.5761	0	ICE	66.02022	0	3	2
2023	2a	1	43.27042	125.415	125.415	0	541.791	541.791	0	ICE	43.27042	0	3	2
2023	2a	1	34.01493	100.5376	100.5376	0	450.0376	450.0376	0	ICE	34.01493	0	3	2
2023	2a	1	1.760501	5.909509	5.909509	0	30.26002	30.26002	0	ICE	1.760501	0	3	2
2023	2a	1	79.55671	216.9137	216.9137	0	888.0362	888.0362	0	ICE	79.55671	0	4	2
2023	2a	1	74.66422	229.2393	229.2393	0	948.1064	948.1064	0	ICE	74.66422	0	4	2
2023	2a	1	32.81657	113.9161	113.9161	0	499.4299	499.4299	0	ICE	32.81657	0	4	2
2023	2a	1	62.88665	225.504	225.504	0	1053.505	1053.505	0	ICE	62.88665	0	4	2
2023	2a	1	62.88218	229.0905	229.0905	0	1089.12	1089.12	0	ICE	62.88218	0	4	2
2023	2a	1	34.62336	112.2538	112.2538	0	370.1159	370.1159	0	ICE	34.62336	0	1	2
2023	2a	1	186.466	807.5191	807.5191	0	5018.538	5018.538	0	ICE	186.466	0	1	2
2023	2a	1	18.50569	74.84071	74.84071	0	422.4386	422.4386	0	ICE	18.50569	0	2	2
2023	2a	1	0.864177	3.29687	3.29687	0	18.10055	18.10055	0	ICE	0.864177	0	3	2
2023	2a	1	71.47486	317.7222	317.7222	0	2133.992	2133.992	0	ICE	71.47486	0	3	2
2023	2a	1	199.4695	932.3984	0	932.3984	4875.301	0	4875.301	BEV	0	199.4695	3	3
2023	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2023	2a	1	90.31356	422.1608	253.2965	168.8643	3026.835	1816.101	1210.734	PHEV	54.18814	36.12543	3	8
2023	2a	1	40.74883	113.4374	113.4374	0	553.4029	553.4029	0	ICE	40.74883	0	4	2
2023	2a	1	16.47592	55.30505	55.30505	0	243.5481	243.5481	0	ICE	16.47592	0	4	2
2023	2a	1	79.63513	294.6866	294.6866	0	1426.362	1426.362	0	ICE	79.63513	0	4	2
2023	2a	1	43.87204	174.9139	174.9139	0	969.1212	969.1212	0	ICE	43.87204	0	4	2
2023	2a	1	170.5673	767.9825	767.9825	0	5222.118	5222.118	0	ICE	170.5673	0	3	2
2023	2a	1	12.12479	39.31027	39.31027	0	164.5914	164.5914	0	ICE	12.12479	0	4	2
2023	2a	1	16.81029	65.09498	65.09498	0	344.2159	344.2159	0	ICE	16.81029	0	4	2
2023	2a	1	21.95258	87.52295	0	87.52295	321.1037	0	321.1037	BEV	0	21.95258	3	3
2023	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2023	2a	1	0	0	0	0	0	0	0	PHEV	0	0	3	8
2023	2a	1	106.1624	423.2599	0	423.2599	1566.046	0	1566.046	BEV	0	106.1624	4	3
2023	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2023	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8

2023	2a	1	39.44499	125.6264	125.6264	0	373.6145	373.6145	0	ICE	39.44499	0	1	2
2023	2a	1	20.8863	73.6992	73.6992	0	283.1241	283.1241	0	ICE	20.8863	0	1	2
2023	2a	1	117.8766	503.7292	503.7292	0	3029.472	3029.472	0	ICE	117.8766	0	1	2
2023	2a	1	358.4974	1593.604	0	1593.604	10026.91	0	10026.91	BEV	0	358.4974	1	3
2023	2a	1	36.39568	161.7872	0	161.7872	1017.96	0	1017.96	FCEV	0	36.39568	1	7
2023	2a	1	38.21546	169.8765	101.9259	67.95061	1108.488	665.0928	443.3952	PHEV	22.92928	15.28619	1	8
2023	2a	1	26.81859	83.87675	83.87675	0	364.3988	364.3988	0	ICE	26.81859	0	2	2
2023	2a	1	11.00951	37.58658	37.58658	0	156.2955	156.2955	0	ICE	11.00951	0	2	2
2023	2a	1	254.1998	1159.103	0	1159.103	7656.375	0	7656.375	BEV	0	254.1998	2	3
2023	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2023	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2023	2a	1	82.56846	220.395	220.395	0	1009.647	1009.647	0	ICE	82.56846	0	3	2
2023	2a	1	150.9375	428.8299	428.8299	0	1848.035	1848.035	0	ICE	150.9375	0	3	2
2023	2a	1	7.548734	23.60912	23.60912	0	117.1272	117.1272	0	ICE	7.548734	0	3	2
2023	2a	1	64.56594	283.3115	283.3115	0	1799.773	1799.773	0	ICE	64.56594	0	3	2
2023	2a	1	28.20878	96.30506	96.30506	0	442.935	442.935	0	ICE	28.20878	0	4	2
2023	2a	1	37.22053	156.9243	0	156.9243	880.6363	0	880.6363	BEV	0	37.22053	1	3
2023	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2023	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2023	2a	1	222.3867	963.079	0	963.079	5652.344	0	5652.344	BEV	0	222.3867	1	3
2023	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2023	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2023	2a	1	186.4328	818.0557	0	818.0557	5058.795	0	5058.795	BEV	0	186.4328	1	3
2023	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2023	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2023	2a	1	12.98092	42.08596	42.08596	0	169.1698	169.1698	0	ICE	12.98092	0	2	2
2023	2a	1	12.34326	44.9686	44.9686	0	239.2836	239.2836	0	ICE	12.34326	0	2	2
2023	2a	1	26.54255	116.4671	116.4671	0	749.0627	749.0627	0	ICE	26.54255	0	2	2
2023	2a	1	311.1898	1436.794	0	1436.794	9780.606	0	9780.606	BEV	0	311.1898	2	3
2023	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2023	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2023	2a	1	19.94815	85.24564	85.24564	0	540.2672	540.2672	0	ICE	19.94815	0	3	2
2023	2a	1	19.02891	59.51407	59.51407	0	265.0351	265.0351	0	ICE	19.02891	0	4	2
2023	2a	1	13.10441	43.2371	43.2371	0	195.1103	195.1103	0	ICE	13.10441	0	4	2
2023	2a	1	22.62014	91.48037	0	91.48037	468.4742	0	468.4742	BEV	0	22.62014	1	3
2023	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2023	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2023	2a	1	68.02886	290.7118	0	290.7118	1681.034	0	1681.034	BEV	0	68.02886	1	3
2023	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2023	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2023	2a	1	40.02863	173.35	0	173.35	1030.375	0	1030.375	BEV	0	40.02863	2	3
2023	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2023	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2023	2a	1	4.95662	22.60125	22.60125	0	166.8905	166.8905	0	ICE	4.95662	0	2	2
2023	2a	1	1.751635	7.385016	0	7.385016	32.64236	0	32.64236	BEV	0	1.751635	4	3
2023	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2023	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8

2023	2a	1	7.098042	19.35302	19.35302	0	86.95812	86.95812	0	ICE	7.098042	0	2	2
2023	2a	1	11.54801	45.37931	45.37931	0	236.3155	236.3155	0	ICE	11.54801	0	2	2
2023	2a	1	5.871326	19.03566	19.03566	0	93.47952	93.47952	0	ICE	5.871326	0	3	2
2023	2a	1	1.576033	6.373793	6.373793	0	41.16929	41.16929	0	ICE	1.576033	0	3	2
2023	2a	1	3.84611	13.351	0	13.351	48.47406	0	48.47406	BEV	0	3.84611	1	3
2023	2a	1	7.394911	23.55168	23.55168	0	119.941	119.941	0	ICE	7.394911	0	3	2
2023	2a	1	1.845844	6.301728	6.301728	0	31.01859	31.01859	0	ICE	1.845844	0	3	2
2023	2a	1	33.31619	146.1894	0	146.1894	684.4156	0	684.4156	BEV	0	33.31619	3	3
2023	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2023	2a	1	0	0	0	0	0	0	0	PHEV	0	0	3	8
2023	2a	1	16.86572	75.93825	0	75.93825	371.2812	0	371.2812	BEV	0	16.86572	3	3
2023	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2023	2a	1	11.67627	52.57263	31.54358	21.02905	358.0101	214.8061	143.204	PHEV	7.005761	4.670508	3	8
2023	2a	1	1.811665	8.572219	0	8.572219	45.57125	0	45.57125	BEV	0	1.811665	4	3
2023	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2023	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2023	2a	1	2.943684	10.04977	0	10.04977	35.68954	0	35.68954	BEV	0	2.943684	1	3
2023	2a	1	14.64658	46.64716	46.64716	0	188.1703	188.1703	0	ICE	14.64658	0	2	2
2023	2a	1	68.34429	264.6516	0	264.6516	1221.95	0	1221.95	BEV	0	68.34429	2	3
2023	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2023	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2023	2a	1	29.33964	115.2936	0	115.2936	559.3715	0	559.3715	BEV	0	29.33964	2	3
2023	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2023	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2023	2a	1	21.45761	85.54956	85.54956	0	494.2871	494.2871	0	ICE	21.45761	0	2	2
2023	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2023	2a	1	21.45761	85.54956	85.54956	0	494.2871	494.2871	0	ICE	21.45761	0	2	2
2023	2a	1	9.688273	40.84644	0	40.84644	229.1194	0	229.1194	BEV	0	9.688273	2	3
2023	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2023	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2023	2a	1	18.53751	79.21745	79.21745	0	483.0149	483.0149	0	ICE	18.53751	0	2	2
2023	2a	1	5.128114	21.91428	0	21.91428	127.2904	0	127.2904	BEV	0	5.128114	2	3
2023	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2023	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2023	2a	1	21.03993	91.11657	91.11657	0	583.8348	583.8348	0	ICE	21.03993	0	2	2
2023	2a	1	16.51157	72.4518	0	72.4518	445.9736	0	445.9736	BEV	0	16.51157	2	3
2023	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2023	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2023	2a	1	19.75563	59.52331	59.52331	0	295.0152	295.0152	0	ICE	19.75563	0	3	2
2023	2a	1	14.70571	63.6853	0	63.6853	294.0896	0	294.0896	BEV	0	14.70571	3	3
2023	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2023	2a	1	0	0	0	0	0	0	0	PHEV	0	0	3	8
2023	2a	1	14.17964	65.4688	0	65.4688	335.7569	0	335.7569	BEV	0	14.17964	3	3
2023	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2023	2a	1	10.84325	50.06438	30.03863	20.02575	349.3898	209.6339	139.7559	PHEV	6.505951	4.337301	3	8
2023	2a	1	7.077201	27.40526	0	27.40526	97.71206	0	97.71206	BEV	0	7.077201	4	3
2023	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2023	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2023	2a	1	17.14614	69.3424	0	69.3424	266.3494	0	266.3494	BEV	0	17.14614	4	3

2023	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2023	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2023	2a	1	2.293899	9.53982	0	9.53982	39.83026	0	39.83026	BEV	0	2.293899	4	3
2023	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2023	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2023	2a	1	14.94538	51.87989	51.87989	0	225.8942	225.8942	0	ICE	14.94538	0	2	2
2023	2a	1	1.347973	5.605922	5.605922	0	33.47296	33.47296	0	ICE	1.347973	0	2	2
2023	2a	1	93.40101	372.3814	0	372.3814	1832.719	0	1832.719	BEV	0	93.40101	2	3
2023	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2023	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2023	2a	1	5.634651	23.11046	0	23.11046	122.0083	0	122.0083	BEV	0	5.634651	2	3
2023	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2023	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2023	2a	1	3.158231	8.611013	0	8.611013	23.4833	0	23.4833	BEV	0	3.158231	1	3
2023	2a	1	44.77611	170.8227	0	170.8227	764.7928	0	764.7928	BEV	0	44.77611	2	3
2023	2a	1	1.150377	4.256924	4.256924	0	21.92367	21.92367	0	ICE	1.150377	0	3	2
2023	2a	1	12.91843	49.28433	49.28433	0	247.8536	247.8536	0	ICE	12.91843	0	2	2
2023	2a	1	0.89098	3.552256	3.552256	0	19.371	19.371	0	ICE	0.89098	0	3	2
2023	2a	1	5.899865	19.8042	19.8042	0	98.20883	98.20883	0	ICE	5.899865	0	2	2
2023	2a	1	10.58543	28.25506	28.25506	0	105.5824	105.5824	0	ICE	10.58543	0	4	2
2023	2a	1	4.469172	16.02591	0	16.02591	62.56007	0	62.56007	BEV	0	4.469172	1	3
2023	2a	1	12.60579	53.14691	53.14691	0	324.4018	324.4018	0	ICE	12.60579	0	2	2
2023	2a	1	2.446756	9.474648	0	9.474648	35.20636	0	35.20636	BEV	0	2.446756	3	3
2023	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2023	2a	1	0	0	0	0	0	0	0	PHEV	0	0	3	8
2023	2a	1	1.296949	4.056286	0	4.056286	12.43303	0	12.43303	BEV	0	1.296949	2	3
2023	2a	1	2.927411	12.67759	0	12.67759	57.14554	0	57.14554	BEV	0	2.927411	4	3
2023	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2023	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2023	2a	1	8.710211	32.73079	0	32.73079	142.8856	0	142.8856	BEV	0	8.710211	1	3
2023	2a	1	8.570196	33.18663	0	33.18663	153.7825	0	153.7825	BEV	0	8.570196	1	3
2023	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2023	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2023	2a	1	24.82099	101.803	0	101.803	534.586	0	534.586	BEV	0	24.82099	1	3
2023	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2023	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2023	2a	1	14.6826	54.33236	54.33236	0	266.0332	266.0332	0	ICE	14.6826	0	2	2
2023	2a	1	13.97315	52.5076	0	52.5076	227.3099	0	227.3099	BEV	0	13.97315	2	3
2023	2a	1	2.072593	8.619459	0	8.619459	46.46314	0	46.46314	BEV	0	2.072593	2	3
2023	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2023	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2023	2a	1	2.534903	8.799408	8.799408	0	40.23202	40.23202	0	ICE	2.534903	0	3	2
2023	2a	1	7.955258	29.43812	0	29.43812	123.7464	0	123.7464	BEV	0	7.955258	1	3
2023	2a	1	11.20794	42.75875	0	42.75875	192.9859	0	192.9859	BEV	0	11.20794	1	3
2023	2a	1	2.105638	5.861718	0	5.861718	15.28132	0	15.28132	BEV	0	2.105638	2	3
2023	2a	1	9.773728	32.24773	32.24773	0	158.3353	158.3353	0	ICE	9.773728	0	2	2
2023	2a	1	3.157887	10.78106	0	10.78106	38.45699	0	38.45699	BEV	0	3.157887	2	3

2023	2a	1	1.462353	5.076266	0	5.076266	18.35327	0	18.35327	BEV	0	1.462353	2	3
2023	2a	1	1.54184	5.528853	0	5.528853	21.65952	0	21.65952	BEV	0	1.54184	2	3
2023	2a	1	11.15558	43.19808	43.19808	0	221.0749	221.0749	0	ICE	11.15558	0	2	2
2023	2a	1	6.035504	26.8292	26.8292	0	179.9726	179.9726	0	ICE	6.035504	0	2	2
2023	2a	1	8.288685	38.26969	38.26969	0	274.4752	274.4752	0	ICE	8.288685	0	2	2
2023	2a	1	3.507553	11.57292	11.57292	0	51.09607	51.09607	0	ICE	3.507553	0	3	2
2023	2a	1	1.415558	4.913827	0	4.913827	13.37062	0	13.37062	BEV	0	1.415558	3	3
2023	2a	1	1.762117	6.217788	6.217788	0	33.28199	33.28199	0	ICE	1.762117	0	3	2
2023	2a	1	9.555154	36.4533	0	36.4533	121.3395	0	121.3395	BEV	0	9.555154	3	3
2023	2a	1	1.414428	5.558166	5.558166	0	28.98376	28.98376	0	ICE	1.414428	0	3	2
2023	2a	1	0.927397	3.644318	0	3.644318	12.96883	0	12.96883	BEV	0	0.927397	3	3
2023	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2023	2a	1	0	0	0	0	0	0	0	PHEV	0	0	3	8
2023	2a	1	22.65888	100.7239	0	100.7239	476.1747	0	476.1747	BEV	0	22.65888	3	3
2023	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2023	2a	1	0	0	0	0	0	0	0	PHEV	0	0	3	8
2023	2a	1	52.88909	241.1642	0	241.1642	1193.779	0	1193.779	BEV	0	52.88909	3	3
2023	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2023	2a	1	13.56131	61.83698	37.10219	24.73479	426.5869	255.9521	170.6348	PHEV	8.136783	5.424522	3	8
2023	2a	1	1.196194	3.467049	0	3.467049	7.212781	0	7.212781	BEV	0	1.196194	4	3
2023	2a	1	0.894436	2.848644	0	2.848644	6.602515	0	6.602515	BEV	0	0.894436	4	3
2023	2a	1	2.072319	7.431088	0	7.431088	21.61451	0	21.61451	BEV	0	2.072319	4	3
2023	2a	1	2.894135	13.0309	13.0309	0	93.0032	93.0032	0	ICE	2.894135	0	2	2
2023	2a	1	1.590271	6.24916	0	6.24916	22.9517	0	22.9517	BEV	0	1.590271	4	3
2023	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2023	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2023	2a	1	4.95784	13.23367	13.23367	0	56.54744	56.54744	0	ICE	4.95784	0	2	2
2023	2a	1	1.337932	4.107813	0	4.107813	12.31595	0	12.31595	BEV	0	1.337932	2	3
2023	2a	1	0.672214	1.7943	0	1.7943	4.82519	0	4.82519	BEV	0	0.672214	1	3
2023	2a	1	1.188266	3.375995	0	3.375995	9.225407	0	9.225407	BEV	0	1.188266	1	3
2023	2a	1	2.228439	6.586576	0	6.586576	18.35346	0	18.35346	BEV	0	2.228439	1	3
2023	2a	1	2.758117	8.468165	0	8.468165	25.29702	0	25.29702	BEV	0	2.758117	1	3
2023	2a	1	2.22508	6.95907	0	6.95907	21.23486	0	21.23486	BEV	0	2.22508	1	3
2023	2a	1	1.697933	5.407663	0	5.407663	17.34482	0	17.34482	BEV	0	1.697933	1	3
2023	2a	1	1.475513	4.78382	0	4.78382	14.97971	0	14.97971	BEV	0	1.475513	1	3
2023	2a	1	1.429494	4.716516	0	4.716516	15.90202	0	15.90202	BEV	0	1.429494	1	3
2023	2a	1	1.401342	4.703912	0	4.703912	15.84053	0	15.84053	BEV	0	1.401342	1	3
2023	2a	1	1.918913	6.771056	0	6.771056	24.83136	0	24.83136	BEV	0	1.918913	1	3
2023	2a	1	5.736811	20.90018	0	20.90018	85.22952	0	85.22952	BEV	0	5.736811	1	3
2023	2a	1	0.857326	2.435757	0	2.435757	6.755637	0	6.755637	BEV	0	0.857326	2	3
2023	2a	1	0.896381	2.649425	0	2.649425	7.530754	0	7.530754	BEV	0	0.896381	2	3
2023	2a	1	0.882578	2.659189	0	2.659189	7.836446	0	7.836446	BEV	0	0.882578	2	3
2023	2a	1	1.518887	5.359528	0	5.359528	20.36663	0	20.36663	BEV	0	1.518887	2	3
2023	2a	1	0	0	0	0	0	0	0	BEV	0	0	2	3
2023	2a	1	34.45101	163.0112	0	163.0112	1182.407	0	1182.407	FCEV	0	34.45101	2	7
2023	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2023	2a	1	0	0	0	0	0	0	0	BEV	0	0	2	3

2023	2a	1	36.75265	176.0074	0	176.0074	1311.257	0	1311.257	FCEV	0	36.75265	2	7
2023	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2023	2a	1	0.364281	1.494096	1.494096	0	8.897898	8.897898	0	ICE	0.364281	0	3	2
2023	2a	1	0	0	0	0	0	0	0	BEV	0	0	3	3
2023	2a	1	2.455481	11.61855	0	11.61855	63.17669	0	63.17669	FCEV	0	2.455481	3	7
2023	2a	1	35.19523	166.5326	99.91954	66.61303	1256.493	753.8957	502.5972	PHEV	21.11714	14.07809	3	8
2023	2a	1	1.62679	7.604253	7.604253	0	55.31498	55.31498	0	ICE	1.62679	0	2	2
2023	2a	1	0.565797	2.126123	0	2.126123	6.870355	0	6.870355	BEV	0	0.565797	3	3
2023	2a	1	0.552904	1.665889	0	1.665889	3.595221	0	3.595221	BEV	0	0.552904	4	3
2023	2a	1	1.083744	3.513651	0	3.513651	8.425759	0	8.425759	BEV	0	1.083744	4	3
2023	2a	1	4.19402	14.5587	0	14.5587	40.2345	0	40.2345	BEV	0	4.19402	4	3
2023	2a	1	1.686114	6.432591	0	6.432591	21.45996	0	21.45996	BEV	0	1.686114	4	3
2023	2a	1	0.538356	1.498685	0	1.498685	4.06709	0	4.06709	BEV	0	0.538356	1	3
2023	2a	1	0.36102	1.046381	0	1.046381	2.053051	0	2.053051	BEV	0	0.36102	3	3
2023	2a	1	0.973426	4.159799	0	4.159799	17.8562	0	17.8562	BEV	0	0.973426	3	3
2023	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2023	2a	1	0	0	0	0	0	0	0	PHEV	0	0	3	8
2023	2a	1	0.316136	0.916288	0	0.916288	2.083365	0	2.083365	BEV	0	0.316136	2	3
2023	2a	1	2.85816	12.70518	0	12.70518	75.88931	0	75.88931	BEV	0	2.85816	2	3
2023	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2023	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2023	2a	1	1.798436	6.552008	0	6.552008	26.1309	0	26.1309	BEV	0	1.798436	2	3
2023	2a	1	5.185423	19.18845	0	19.18845	79.36917	0	79.36917	BEV	0	5.185423	2	3
2023	2a	1	1.543522	5.800168	0	5.800168	18.5107	0	18.5107	BEV	0	1.543522	4	3
2023	2a	1	2.081799	9.969673	9.969673	0	82.7623	82.7623	0	ICE	2.081799	0	2	2
2023	2a	1	1.604439	7.224017	0	7.224017	46.77343	0	46.77343	BEV	0	1.604439	2	3
2023	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2023	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2023	2a	1	0.771425	2.456874	0	2.456874	7.622959	0	7.622959	BEV	0	0.771425	2	3
2023	2a	1	0.313305	1.051676	0	1.051676	2.695537	0	2.695537	BEV	0	0.313305	4	3
2023	2a	1	0.292033	0.946811	0	0.946811	3.000786	0	3.000786	BEV	0	0.292033	2	3
2023	2a	1	0.399236	1.431614	0	1.431614	4.031008	0	4.031008	BEV	0	0.399236	3	3
2023	2a	1	0.556394	2.313919	0	2.313919	9.053663	0	9.053663	BEV	0	0.556394	3	3
2023	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2023	2a	1	0	0	0	0	0	0	0	PHEV	0	0	3	8
2023	2a	1	0.689067	2.313005	0	2.313005	6.170668	0	6.170668	BEV	0	0.689067	3	3
2023	2a	1	0.847025	2.357966	0	2.357966	4.780324	0	4.780324	BEV	0	0.847025	4	3
2023	2a	1	2.348427	8.555718	0	8.555718	26.23148	0	26.23148	BEV	0	2.348427	4	3
2023	2a	1	0.522256	1.513706	0	1.513706	4.135411	0	4.135411	BEV	0	0.522256	1	3
2023	2a	1	0.478596	1.441999	0	1.441999	4.113591	0	4.113591	BEV	0	0.478596	1	3
2023	2a	1	1.005274	4.065527	0	4.065527	20.48288	0	20.48288	BEV	0	1.005274	2	3
2023	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2023	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2023	2a	1	0.481558	1.975106	1.975106	0	12.51757	12.51757	0	ICE	0.481558	0	2	2
2023	2a	1	0.900864	2.765896	0	2.765896	6.068304	0	6.068304	BEV	0	0.900864	3	3
2023	2a	1	3.836451	13.09768	0	13.09768	34.46176	0	34.46176	BEV	0	3.836451	4	3
2023	2a	1	3.391226	14.49193	0	14.49193	62.26465	0	62.26465	BEV	0	3.391226	4	3

2023	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2023	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2023	2a	1	0.279919	1.035829	0	1.035829	3.240334	0	3.240334	BEV	0	0.279919	3	3
2023	2a	1	0	0	0	0	0	0	0	BEV	0	0	4	3
2023	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2023	2a	1	3.418081	15.78162	9.468972	6.312648	118.9476	71.36854	47.57903	PHEV	2.050848	1.367232	4	8
2023	2a	1	0.36394	1.305044	1.305044	0	7.21065	7.21065	0	ICE	0.36394	0	3	2
2023	2a	1	0.497759	1.670836	0	1.670836	5.588277	0	5.588277	BEV	0	0.497759	2	3
2024	2a	1	3664.507	9781.448	9781.448	0	18898.37	18898.37	0	ICE	3664.507	0	1	1
2024	2a	1	4703.631	13094.06	13094.06	0	27382.41	27382.41	0	ICE	4703.631	0	1	1
2024	2a	1	5352.225	15206.26	15206.26	0	33110.47	33110.47	0	ICE	5352.225	0	1	1
2024	2a	1	10381.15	30683.45	30683.45	0	73885.97	73885.97	0	ICE	10381.15	0	1	1
2024	2a	1	11489.69	34618.19	34618.19	0	86969.65	86969.65	0	ICE	11489.69	0	1	1
2024	2a	1	12921.48	40412.7	40412.7	0	110841.8	110841.8	0	ICE	12921.48	0	1	1
2024	2a	1	16098.44	51271.13	51271.13	0	147319	147319	0	ICE	16098.44	0	1	1
2024	2a	1	20553.93	66638.73	66638.73	0	200211.6	200211.6	0	ICE	20553.93	0	1	1
2024	2a	1	23671.23	78101.58	78101.58	0	244384.6	244384.6	0	ICE	23671.23	0	1	1
2024	2a	1	21372.74	71742.29	71742.29	0	234651.2	234651.2	0	ICE	21372.74	0	1	1
2024	2a	1	23347.07	79707.14	79707.14	0	272539.5	272539.5	0	ICE	23347.07	0	1	1
2024	2a	1	27318.99	94832.42	94832.42	0	338028.3	338028.3	0	ICE	27318.99	0	1	1
2024	2a	1	35574.23	125526.9	125526.9	0	466678.3	466678.3	0	ICE	35574.23	0	1	1
2024	2a	1	35950.61	128914.6	128914.6	0	499632	499632	0	ICE	35950.61	0	1	1
2024	2a	1	48613.23	177106.3	177106.3	0	713962.3	713962.3	0	ICE	48613.23	0	1	1
2024	2a	1	59769	221172.8	221172.8	0	928400.1	928400.1	0	ICE	59769	0	1	1
2024	2a	1	72309.8	271722.2	271722.2	0	1186547	1186547	0	ICE	72309.8	0	1	1
2024	2a	1	100807.7	384585.5	384585.5	0	1748263	1748263	0	ICE	100807.7	0	1	1
2024	2a	1	117975.9	456841.5	456841.5	0	2156890	2156890	0	ICE	117975.9	0	1	1
2024	2a	1	205.8696	797.1951	797.1951	0	3835.658	3835.658	0	ICE	205.8696	0	1	2
2024	2a	1	137264.8	539398.6	539398.6	0	2649311	2649311	0	ICE	137264.8	0	1	1
2024	2a	1	169135.4	674327.5	674327.5	0	3436062	3436062	0	ICE	169135.4	0	1	1
2024	2a	1	185684	750943.4	750943.4	0	3965689	3965689	0	ICE	185684	0	1	1
2024	2a	1	244869.4	1004330	1004330	0	5499136	5499136	0	ICE	244869.4	0	1	1
2024	2a	1	280628.2	1167071	1167071	0	6608747	6608747	0	ICE	280628.2	0	1	1
2024	2a	1	696.9989	2898.665	2898.665	0	16468.6	16468.6	0	ICE	696.9989	0	1	2
2024	2a	1	329887.8	1390830	1390830	0	8123897	8123897	0	ICE	329887.8	0	1	1
2024	2a	1	302153.6	1291211	1291211	0	7786491	7786491	0	ICE	302153.6	0	1	1
2024	2a	1	260948.3	1130076	1130076	0	7029436	7029436	0	ICE	260948.3	0	1	1
2024	2a	1	325604.6	1428733	1428733	0	9154908	9154908	0	ICE	325604.6	0	1	1
2024	2a	1	3627.642	15917.88	15917.88	0	101385.9	101385.9	0	ICE	3627.642	0	1	2
2024	2a	1	340262.8	1512546	1512546	0	10003481	10003481	0	ICE	340262.8	0	1	1
2024	2a	1	5150.118	22893.46	22893.46	0	149290.8	149290.8	0	ICE	5150.118	0	1	2
2024	2a	1	509537.7	2294204	2294204	0	15680051	15680051	0	ICE	509537.7	0	1	1
2024	2a	1	638242.7	2910265	2910265	0	20466927	20466927	0	ICE	638242.7	0	1	1
2024	2a	1	651708.3	3009002	3009002	0	21819463	21819463	0	ICE	651708.3	0	1	1
2024	2a	1	12108.3	55905.24	55905.24	0	403439.2	403439.2	0	ICE	12108.3	0	1	2
2024	2a	1	773743.2	3616777	3616777	0	27016539	27016539	0	ICE	773743.2	0	1	1
2024	2a	1	739763.6	3500325	3500325	0	26917565	26917565	0	ICE	739763.6	0	1	1

2024	2a	1	800934.1	3835649	3835649	0	30387344	30387344	0	ICE	800934.1	0	1	1
2024	2a	1	9801.328	46938.26	46938.26	0	372059.3	372059.3	0	ICE	9801.328	0	1	2
2024	2a	1	46583.36	223086.3	0	223086.3	1746557	0	1746557	BEV	0	46583.36	1	3
2024	2a	1	950.6809	4552.782	0	4552.782	34922.52	0	34922.52	FCEV	0	950.6809	1	7
2024	2a	1	42019.77	201231.4	108665	92566.46	1606562	867543.5	739018.5	PHEV	22690.68	19329.1	1	8
2024	2a	1	847106.3	4105297	4105297	0	33433173	33433173	0	ICE	847106.3	0	1	1
2024	2a	1	10366.35	50238.05	50238.05	0	409358.2	409358.2	0	ICE	10366.35	0	1	2
2024	2a	1	60215.43	291819.6	0	291819.6	2358346	0	2358346	BEV	0	60215.43	1	3
2024	2a	1	1228.886	5955.503	0	5955.503	46917.25	0	46917.25	FCEV	0	1228.886	1	7
2024	2a	1	38916.94	188601.6	101844.9	86756.73	1544806	834195.3	710610.8	PHEV	21015.15	17901.79	1	8
2024	2a	1	888178.9	4355230	4355230	0	36445503	36445503	0	ICE	888178.9	0	1	1
2024	2a	1	10822.77	53069.97	53069.97	0	444307	444307	0	ICE	10822.77	0	1	2
2024	2a	1	77422.57	379645.4	0	379645.4	3149228	0	3149228	BEV	0	77422.57	1	3
2024	2a	1	1811.054	8880.595	0	8880.595	71827.43	0	71827.43	FCEV	0	1811.054	1	7
2024	2a	1	37970.79	186191.7	98681.58	87510.08	1572030	833176	738854.2	PHEV	20124.52	17846.27	1	8
2024	2a	1	916702	4547612	4547612	0	39073966	39073966	0	ICE	916702	0	1	1
2024	2a	1	11271.58	55916.48	55916.48	0	480720	480720	0	ICE	11271.58	0	1	2
2024	2a	1	94941.43	470989.2	0	470989.2	4022735	0	4022735	BEV	0	94941.43	1	3
2024	2a	1	2505.785	12430.8	0	12430.8	103160.7	0	103160.7	FCEV	0	2505.785	1	7
2024	2a	1	36201.69	179590.8	93387.21	86203.58	1547226	804557.8	742668.7	PHEV	18824.88	17376.81	1	8
2024	2a	1	886325.7	4447698	4447698	0	39228373	39228373	0	ICE	886325.7	0	1	1
2024	2a	1	10950.66	54951.81	54951.81	0	484976	484976	0	ICE	10950.66	0	1	2
2024	2a	1	143198.7	718589.6	0	718589.6	6287413	0	6287413	BEV	0	143198.7	1	3
2024	2a	1	4908.702	24632.51	0	24632.51	209733.6	0	209733.6	FCEV	0	4908.702	1	7
2024	2a	1	54442.16	273197.9	136052.5	137145.3	2436960	1213606	1223354	PHEV	27112.2	27329.97	1	8
2024	2a	1	850396.6	4316120	4316120	0	39007384	39007384	0	ICE	850396.6	0	1	1
2024	2a	1	10582.46	53710.42	53710.42	0	485771.1	485771.1	0	ICE	10582.46	0	1	2
2024	2a	1	193853.4	983887.6	0	983887.6	8814669	0	8814669	BEV	0	193853.4	1	3
2024	2a	1	8197.495	41605.73	0	41605.73	363122	0	363122	FCEV	0	8197.495	1	7
2024	2a	1	73484.56	372965	177531.3	195433.7	3420602	1628207	1792396	PHEV	34978.65	38505.91	1	8
2024	2a	1	796888.2	4090196	4090196	0	37778961	37778961	0	ICE	796888.2	0	1	1
2024	2a	1	9999.81	51326.12	51326.12	0	474456.6	474456.6	0	ICE	9999.81	0	1	2
2024	2a	1	242920.7	1246841	0	1246841	11416991	0	11416991	BEV	0	242920.7	1	3
2024	2a	1	12248.1	62865.95	0	62865.95	563510.5	0	563510.5	FCEV	0	12248.1	1	7
2024	2a	1	91815.56	471262.7	213953.3	257309.4	4421692	2007448	2414244	PHEV	41684.27	50131.3	1	8
2024	2a	1	661476.5	3433063	3433063	0	32338793	32338793	0	ICE	661476.5	0	1	1
2024	2a	1	8367.042	43424.95	43424.95	0	409405	409405	0	ICE	8367.042	0	1	2
2024	2a	1	261317.4	1356237	0	1356237	12669976	0	12669976	BEV	0	261317.4	1	3
2024	2a	1	15334.41	79585.61	0	79585.61	731319.7	0	731319.7	FCEV	0	15334.41	1	7
2024	2a	1	98480.96	511116.2	220802.2	290314	4891035	2112927	2778108	PHEV	42543.77	55937.18	1	8
2024	2a	1	1352.85	3766.091	3766.091	0	17162.44	17162.44	0	ICE	1352.85	0	2	1
2024	2a	1	1504.132	4273.404	4273.404	0	19457.88	19457.88	0	ICE	1504.132	0	2	1
2024	2a	1	2865.044	8304.045	8304.045	0	38797.94	38797.94	0	ICE	2865.044	0	2	1
2024	2a	1	4543.326	13428.66	13428.66	0	63832.93	63832.93	0	ICE	4543.326	0	2	1
2024	2a	1	7501.708	22602.5	22602.5	0	108223.4	108223.4	0	ICE	7501.708	0	2	1
2024	2a	1	7379.761	22657.86	22657.86	0	110212.1	110212.1	0	ICE	7379.761	0	2	1
2024	2a	1	7348.351	22982.41	22982.41	0	112733.9	112733.9	0	ICE	7348.351	0	2	1

2024	2a	1	9825.408	31292.45	31292.45	0	155298	155298	0	ICE	9825.408	0	2	1
2024	2a	1	8170.281	26489.19	26489.19	0	131426.1	131426.1	0	ICE	8170.281	0	2	1
2024	2a	1	10109.51	33355.63	33355.63	0	165552.7	165552.7	0	ICE	10109.51	0	2	1
2024	2a	1	8715.216	29254.54	29254.54	0	147423.2	147423.2	0	ICE	8715.216	0	2	1
2024	2a	1	11025.4	37640.84	37640.84	0	191764.5	191764.5	0	ICE	11025.4	0	2	1
2024	2a	1	13321.41	46242.63	46242.63	0	238954	238954	0	ICE	13321.41	0	2	1
2024	2a	1	13007.46	45897.99	45897.99	0	240790.7	240790.7	0	ICE	13007.46	0	2	1
2024	2a	1	14594.94	52335.71	52335.71	0	275348.5	275348.5	0	ICE	14594.94	0	2	1
2024	2a	1	19584.54	71349.81	71349.81	0	379769.8	379769.8	0	ICE	19584.54	0	2	1
2024	2a	1	25316.53	93682.79	93682.79	0	505929.2	505929.2	0	ICE	25316.53	0	2	1
2024	2a	1	23479.87	88231.48	88231.48	0	482872.8	482872.8	0	ICE	23479.87	0	2	1
2024	2a	1	25567.84	97542.34	97542.34	0	541875.1	541875.1	0	ICE	25567.84	0	2	1
2024	2a	1	28993.39	112272	112272	0	628813.3	628813.3	0	ICE	28993.39	0	2	1
2024	2a	1	30780.84	120957	120957	0	681967.2	681967.2	0	ICE	30780.84	0	2	1
2024	2a	1	21811.54	86960.67	86960.67	0	496044.7	496044.7	0	ICE	21811.54	0	2	1
2024	2a	1	12297.72	50438.99	50438.99	0	295113.9	295113.9	0	ICE	12297.72	0	2	1
2024	2a	1	19430.59	80807.56	80807.56	0	482967.8	482967.8	0	ICE	19430.59	0	2	1
2024	2a	1	28081.3	118392.7	118392.7	0	720249	720249	0	ICE	28081.3	0	2	1
2024	2a	1	47685.95	203779.2	203779.2	0	1263817	1263817	0	ICE	47685.95	0	2	1
2024	2a	1	35223.26	152539.6	152539.6	0	962866.5	962866.5	0	ICE	35223.26	0	2	1
2024	2a	1	18333.87	80447.92	80447.92	0	517840	517840	0	ICE	18333.87	0	2	1
2024	2a	1	16045.43	71325.61	71325.61	0	470574.9	470574.9	0	ICE	16045.43	0	2	1
2024	2a	1	113960.3	532694.8	532694.8	0	3892418	3892418	0	ICE	113960.3	0	2	1
2024	2a	1	103106	487864.7	487864.7	0	3640995	3640995	0	ICE	103106	0	2	1
2024	2a	1	91009.68	435842.6	435842.6	0	3339800	3339800	0	ICE	91009.68	0	2	1
2024	2a	1	12.32891	59.04276	59.04276	0	452.4394	452.4394	0	ICE	12.32891	0	2	2
2024	2a	1	3.066505	14.6854	0	14.6854	112.0486	0	112.0486	BEV	0	3.066505	2	3
2024	2a	1	0.062582	0.299702	0	0.299702	2.286707	0	2.286707	FCEV	0	0.062582	2	7
2024	2a	1	26.59724	127.3734	76.42402	50.94935	976.0549	585.6329	390.4219	PHEV	15.95834	10.6389	2	8
2024	2a	1	96629.59	468292.1	468292.1	0	3681399	3681399	0	ICE	96629.59	0	2	1
2024	2a	1	13.09022	63.43863	63.43863	0	498.7146	498.7146	0	ICE	13.09022	0	2	2
2024	2a	1	99316.07	487001.3	487001.3	0	3928884	3928884	0	ICE	99316.07	0	2	1
2024	2a	1	13.54802	66.43341	66.43341	0	535.9566	535.9566	0	ICE	13.54802	0	2	2
2024	2a	1	1320.549	6475.376	0	6475.376	52183.51	0	52183.51	BEV	0	1320.549	2	3
2024	2a	1	30.89002	151.4708	0	151.4708	1219.051	0	1219.051	FCEV	0	30.89002	2	7
2024	2a	1	1014.088	4972.633	2955.165	2017.468	40142.64	23856.2	16286.44	PHEV	602.6583	411.4302	2	8
2024	2a	1	100235.5	497252.4	497252.4	0	4116616	4116616	0	ICE	100235.5	0	2	1
2024	2a	1	13.83232	68.61992	68.61992	0	568.0954	568.0954	0	ICE	13.83232	0	2	2
2024	2a	1	2722.597	13506.37	0	13506.37	111686.9	0	111686.9	BEV	0	2722.597	2	3
2024	2a	1	71.85739	356.473	0	356.473	2944.303	0	2944.303	FCEV	0	71.85739	2	7
2024	2a	1	2096.894	10402.36	6122.53	4279.827	86179.52	50722.81	35456.72	PHEV	1234.172	862.7222	2	8
2024	2a	1	95734.89	480410.1	480410.1	0	4083517	4083517	0	ICE	95734.89	0	2	1
2024	2a	1	13.38486	67.16697	67.16697	0	570.942	570.942	0	ICE	13.38486	0	2	2
2024	2a	1	6747.247	33858.56	0	33858.56	287373.8	0	287373.8	BEV	0	6747.247	2	3
2024	2a	1	231.2886	1160.636	0	1160.636	9838.678	0	9838.678	FCEV	0	231.2886	2	7
2024	2a	1	4866.055	24418.49	14155.75	10262.74	207856.3	120497.3	87359.05	PHEV	2820.921	2045.133	2	8
2024	2a	1	90490.38	459276.7	459276.7	0	4006980	4006980	0	ICE	90490.38	0	2	1

2024	2a	1	12.70347	64.47542	64.47542	0	562.545	562.545	0	ICE	12.70347	0	2	2
2024	2a	1	11076.8	56219.41	0	56219.41	489611.8	0	489611.8	BEV	0	11076.8	2	3
2024	2a	1	468.4054	2377.354	0	2377.354	20670.89	0	20670.89	FCEV	0	468.4054	2	7
2024	2a	1	7473.511	37931.21	21653.3	16277.91	331628.8	189312.7	142316.1	PHEV	4266.307	3207.204	2	8
2024	2a	1	84981.79	436186.9	436186.9	0	3904849	3904849	0	ICE	84981.79	0	2	1
2024	2a	1	11.98633	61.52235	61.52235	0	550.799	550.799	0	ICE	11.98633	0	2	2
2024	2a	1	15724.99	80711.8	0	80711.8	721039.2	0	721039.2	BEV	0	15724.99	2	3
2024	2a	1	792.8566	4069.503	0	4069.503	36288.31	0	36288.31	FCEV	0	792.8566	2	7
2024	2a	1	9914.351	50887.49	28598.77	22288.72	456825.9	256736.2	200089.8	PHEV	5571.865	4342.486	2	8
2024	2a	1	71375.85	370440.7	370440.7	0	3401434	3401434	0	ICE	71375.85	0	2	1
2024	2a	1	10.11134	52.47787	52.47787	0	481.901	481.901	0	ICE	10.11134	0	2	2
2024	2a	1	18644.6	96765.46	0	96765.46	886419.8	0	886419.8	BEV	0	18644.6	2	3
2024	2a	1	1094.087	5678.312	0	5678.312	51924.34	0	51924.34	FCEV	0	1094.087	2	7
2024	2a	1	10969.46	56931.51	31491.26	25440.25	524562.8	290158.2	234404.6	PHEV	6067.68	4901.783	2	8
2024	2a	1	969.3211	2642.883	2642.883	0	11524.86	11524.86	0	ICE	969.3211	0	3	1
2024	2a	1	2331.627	6757.988	6757.988	0	29564.68	29564.68	0	ICE	2331.627	0	3	1
2024	2a	1	3763.461	11339.23	11339.23	0	50393.32	50393.32	0	ICE	3763.461	0	3	1
2024	2a	1	4105.808	12605.94	12605.94	0	56804.53	56804.53	0	ICE	4105.808	0	3	1
2024	2a	1	5419.14	16948.69	16948.69	0	77729.69	77729.69	0	ICE	5419.14	0	3	1
2024	2a	1	7291.805	23223.3	23223.3	0	108912.6	108912.6	0	ICE	7291.805	0	3	1
2024	2a	1	8452.677	27404.76	27404.76	0	130174.5	130174.5	0	ICE	8452.677	0	3	1
2024	2a	1	10372.48	34223.28	34223.28	0	167479.7	167479.7	0	ICE	10372.48	0	3	1
2024	2a	1	9736.029	32681.12	32681.12	0	161507.2	161507.2	0	ICE	9736.029	0	3	1
2024	2a	1	13410.48	45783.5	45783.5	0	229460.9	229460.9	0	ICE	13410.48	0	3	1
2024	2a	1	15554.4	53993.98	53993.98	0	274033.3	274033.3	0	ICE	15554.4	0	3	1
2024	2a	1	20676.48	72958.82	72958.82	0	375967.5	375967.5	0	ICE	20676.48	0	3	1
2024	2a	1	20886.77	74897.46	74897.46	0	388752.7	388752.7	0	ICE	20886.77	0	3	1
2024	2a	1	33405.06	121700.3	121700.3	0	638886.5	638886.5	0	ICE	33405.06	0	3	1
2024	2a	1	38888.1	143903.8	143903.8	0	764274.6	764274.6	0	ICE	38888.1	0	3	1
2024	2a	1	45083.76	169413.5	169413.5	0	911511.5	911511.5	0	ICE	45083.76	0	3	1
2024	2a	1	62476.41	238350	238350	0	1301434	1301434	0	ICE	62476.41	0	3	1
2024	2a	1	63274.36	245019.2	245019.2	0	1350428	1350428	0	ICE	63274.36	0	3	1
2024	2a	1	65255.07	256427.6	256427.6	0	1437606	1437606	0	ICE	65255.07	0	3	1
2024	2a	1	79021.8	315052.8	315052.8	0	1792983	1792983	0	ICE	79021.8	0	3	1
2024	2a	1	102578.8	414849.2	414849.2	0	2395770	2395770	0	ICE	102578.8	0	3	1
2024	2a	1	123242.5	505477.7	505477.7	0	2970227	2970227	0	ICE	123242.5	0	3	1
2024	2a	1	121110.3	503671	503671	0	3012714	3012714	0	ICE	121110.3	0	3	1
2024	2a	1	129704.5	546843.4	546843.4	0	3328766	3328766	0	ICE	129704.5	0	3	1
2024	2a	1	105516	450907.7	450907.7	0	2795819	2795819	0	ICE	105516	0	3	1
2024	2a	1	68100.21	294918.2	294918.2	0	1866833	1866833	0	ICE	68100.21	0	3	1
2024	2a	1	123498.3	541903	541903	0	3499198	3499198	0	ICE	123498.3	0	3	1
2024	2a	1	169095.8	751669.9	751669.9	0	4966276	4966276	0	ICE	169095.8	0	3	1
2024	2a	1	165864.2	746806.9	746806.9	0	5067674	5067674	0	ICE	165864.2	0	3	1
2024	2a	1	231022.6	1053419	1053419	0	7312447	7312447	0	ICE	231022.6	0	3	1
2024	2a	1	217781.4	1005519	1005519	0	7163035	7163035	0	ICE	217781.4	0	3	1
2024	2a	1	2355.527	10875.71	10875.71	0	76162.05	76162.05	0	ICE	2355.527	0	3	2
2024	2a	1	262777.4	1228324	1228324	0	8958247	8958247	0	ICE	262777.4	0	3	1

2024	2a	1	253359.3	1198815	1198815	0	8960712	8960712	0	ICE	253359.3	0	3	1
2024	2a	1	1733.926	8204.382	8204.382	0	61843.8	61843.8	0	ICE	1733.926	0	3	2
2024	2a	1	286414.9	1371632	1371632	0	10467579	10467579	0	ICE	286414.9	0	3	1
2024	2a	1	2927.48	14019.61	14019.61	0	107289.1	107289.1	0	ICE	2927.48	0	3	2
2024	2a	1	298951.9	1448799	1448799	0	11344052	11344052	0	ICE	298951.9	0	3	1
2024	2a	1	3055.623	14808.34	14808.34	0	116272.3	116272.3	0	ICE	3055.623	0	3	2
2024	2a	1	1031.426	4998.558	2999.135	1999.423	39309.49	23585.7	15723.8	PHEV	618.8555	412.5704	3	8
2024	2a	1	306212.2	1501527	1501527	0	12096289	12096289	0	ICE	306212.2	0	3	1
2024	2a	1	3121.941	15308.6	15308.6	0	123611.6	123611.6	0	ICE	3121.941	0	3	2
2024	2a	1	3611.387	17708.62	0	17708.62	112491.2	0	112491.2	BEV	0	3611.387	3	3
2024	2a	1	84.4769	414.2367	0	414.2367	2390.239	0	2390.239	FCEV	0	84.4769	3	7
2024	2a	1	3136.704	15380.98	9140.699	6240.285	124140.3	73774.78	50365.48	PHEV	1864.098	1272.605	3	8
2024	2a	1	310584.8	1540761	1540761	0	12729684	12729684	0	ICE	310584.8	0	3	1
2024	2a	1	3173.72	15744.32	15744.32	0	130402.8	130402.8	0	ICE	3173.72	0	3	2
2024	2a	1	7443.172	36924.38	0	36924.38	274797	0	274797	BEV	0	7443.172	3	3
2024	2a	1	196.4473	974.5439	0	974.5439	5767.666	0	5767.666	FCEV	0	196.4473	3	7
2024	2a	1	5371.597	26647.64	15684.04	10963.6	220709.8	129903.5	90806.32	PHEV	3161.569	2210.029	3	8
2024	2a	1	297576.6	1493278	1493278	0	12647571	12647571	0	ICE	297576.6	0	3	1
2024	2a	1	3086.766	15489.79	15489.79	0	131703.7	131703.7	0	ICE	3086.766	0	3	2
2024	2a	1	20324	101988.5	0	101988.5	754016.9	0	754016.9	BEV	0	20324	3	3
2024	2a	1	696.6855	3496.059	0	3496.059	21212.3	0	21212.3	FCEV	0	696.6855	3	7
2024	2a	1	13814.03	69320.58	40186.13	29134.45	648242.8	375795.6	272447.2	PHEV	8008.188	5805.838	3	8
2024	2a	1	285093.7	1446970	1446970	0	12570824	12570824	0	ICE	285093.7	0	3	1
2024	2a	1	2971.197	15080.07	15080.07	0	131603.1	131603.1	0	ICE	2971.197	0	3	2
2024	2a	1	34545.93	175335.1	0	175335.1	1324246	0	1324246	BEV	0	34545.93	3	3
2024	2a	1	1460.847	7414.41	0	7414.41	46106.84	0	46106.84	FCEV	0	1460.847	3	7
2024	2a	1	22094.43	112138.5	64015.08	48123.45	1116722	637488.7	479233.2	PHEV	12612.76	9481.668	3	8
2024	2a	1	271166.1	1391817	1391817	0	12400576	12400576	0	ICE	271166.1	0	3	1
2024	2a	1	2841.317	14583.66	14583.66	0	130596.6	130596.6	0	ICE	2841.317	0	3	2
2024	2a	1	50076.51	257028.2	0	257028.2	2000069	0	2000069	BEV	0	50076.51	3	3
2024	2a	1	2524.866	12959.41	0	12959.41	83077.1	0	83077.1	FCEV	0	2524.866	3	7
2024	2a	1	30103.96	154514.9	86837.37	67677.52	1606334	902759.4	703574.1	PHEV	16918.43	13185.53	3	8
2024	2a	1	226409.9	1175067	1175067	0	10729893	10729893	0	ICE	226409.9	0	3	1
2024	2a	1	2384.265	12374.33	12374.33	0	113632.7	113632.7	0	ICE	2384.265	0	3	2
2024	2a	1	59232.96	307419.1	0	307419.1	2462589	0	2462589	BEV	0	59232.96	3	3
2024	2a	1	3475.861	18039.72	0	18039.72	125037.6	0	125037.6	FCEV	0	3475.861	3	7
2024	2a	1	33427.03	173486.3	95962.69	77523.58	1869759	1034244	835515.1	PHEV	18489.92	14937.11	3	8
2024	2a	1	1745.687	4759.668	4759.668	0	20253.76	20253.76	0	ICE	1745.687	0	4	1
2024	2a	1	4593.23	14891.89	14891.89	0	64262.24	64262.24	0	ICE	4593.23	0	4	1
2024	2a	1	4192.173	13831.78	13831.78	0	61201.31	61201.31	0	ICE	4192.173	0	4	1
2024	2a	1	5567.786	18689.5	18689.5	0	84092.72	84092.72	0	ICE	5567.786	0	4	1
2024	2a	1	6634.669	22650.82	22650.82	0	104672.4	104672.4	0	ICE	6634.669	0	4	1
2024	2a	1	11344.06	39378.63	39378.63	0	185317.7	185317.7	0	ICE	11344.06	0	4	1
2024	2a	1	13741.58	48488.41	48488.41	0	233336.1	233336.1	0	ICE	13741.58	0	4	1
2024	2a	1	13620.42	48841.2	48841.2	0	238551.6	238551.6	0	ICE	13620.42	0	4	1
2024	2a	1	19592.19	71377.68	71377.68	0	356586.7	356586.7	0	ICE	19592.19	0	4	1
2024	2a	1	24063.77	89047.02	89047.02	0	451716.9	451716.9	0	ICE	24063.77	0	4	1

2024	2a	1	44061.57	165572.4	165572.4	0	855318.3	855318.3	0	ICE	44061.57	0	4	1
2024	2a	1	55635.03	212249.9	212249.9	0	1113099	1113099	0	ICE	55635.03	0	4	1
2024	2a	1	78709.79	304790.3	304790.3	0	1619054	1619054	0	ICE	78709.79	0	4	1
2024	2a	1	76.46951	296.1152	296.1152	0	1525.371	1525.371	0	ICE	76.46951	0	4	2
2024	2a	1	101511.3	398900.9	398900.9	0	2155718	2155718	0	ICE	101511.3	0	4	1
2024	2a	1	117250.6	467467.6	467467.6	0	2578608	2578608	0	ICE	117250.6	0	4	1
2024	2a	1	132638.7	536417.5	536417.5	0	3011330	3011330	0	ICE	132638.7	0	4	1
2024	2a	1	185.4066	749.8214	749.8214	0	4088.938	4088.938	0	ICE	185.4066	0	4	2
2024	2a	1	128594	527426.9	527426.9	0	3007082	3007082	0	ICE	128594	0	4	1
2024	2a	1	129492.3	538530.2	538530.2	0	3130913	3130913	0	ICE	129492.3	0	4	1
2024	2a	1	134796	568309.4	568309.4	0	3376984	3376984	0	ICE	134796	0	4	1
2024	2a	1	103085.7	440522.4	440522.4	0	2676268	2676268	0	ICE	103085.7	0	4	1
2024	2a	1	43836.59	189840.9	189840.9	0	1179393	1179393	0	ICE	43836.59	0	4	1
2024	2a	1	63021.35	276533.9	276533.9	0	1760523	1760523	0	ICE	63021.35	0	4	1
2024	2a	1	91758.37	407887.1	407887.1	0	2659436	2659436	0	ICE	91758.37	0	4	1
2024	2a	1	2592.035	11522.19	11522.19	0	74406.77	74406.77	0	ICE	2592.035	0	4	2
2024	2a	1	92171.4	415003.6	415003.6	0	2779368	2779368	0	ICE	92171.4	0	4	1
2024	2a	1	103584.6	472326.2	472326.2	0	3248985	3248985	0	ICE	103584.6	0	4	1
2024	2a	1	2248.772	10253.97	10253.97	0	69559.56	69559.56	0	ICE	2248.772	0	4	2
2024	2a	1	161216.3	744352	744352	0	5257609	5257609	0	ICE	161216.3	0	4	1
2024	2a	1	4997.672	23074.75	23074.75	0	162628.7	162628.7	0	ICE	4997.672	0	4	2
2024	2a	1	177996.2	832023.7	832023.7	0	6036335	6036335	0	ICE	177996.2	0	4	1
2024	2a	1	191560.3	906402.2	906402.2	0	6729354	6729354	0	ICE	191560.3	0	4	1
2024	2a	1	176103.1	843352.6	843352.6	0	6368393	6368393	0	ICE	176103.1	0	4	1
2024	2a	1	6140.745	29407.84	29407.84	0	222203.3	222203.3	0	ICE	6140.745	0	4	2
2024	2a	1	1473.329	7055.729	4233.437	2822.291	50928.64	30557.18	20371.46	PHEV	883.9974	589.3316	4	8
2024	2a	1	184247	892909	892909	0	6918851	6918851	0	ICE	184247	0	4	1
2024	2a	1	6424.724	31135.88	31135.88	0	241409.6	241409.6	0	ICE	6424.724	0	4	2
2024	2a	1	3.223029	15.61964	0	15.61964	87.82577	0	87.82577	BEV	0	3.223029	4	3
2024	2a	1	0.065776	0.318768	0	0.318768	1.792363	0	1.792363	FCEV	0	0.065776	4	7
2024	2a	1	3944.099	19114.13	11468.48	7645.652	145560.8	87336.5	58224.33	PHEV	2366.46	1577.64	4	8
2024	2a	1	192653.3	944685	944685	0	7505631	7505631	0	ICE	192653.3	0	4	1
2024	2a	1	6781.271	33252.3	33252.3	0	264569.7	264569.7	0	ICE	6781.271	0	4	2
2024	2a	1	1651.513	8098.278	0	8098.278	48577.07	0	48577.07	BEV	0	1651.513	4	3
2024	2a	1	38.63189	189.4334	0	189.4334	1092.908	0	1092.908	FCEV	0	38.63189	4	7
2024	2a	1	4296.897	21070.05	12521.63	8548.421	173679.2	103215.1	70464.14	PHEV	2553.585	1743.313	4	8
2024	2a	1	197085.2	977707.9	977707.9	0	7958926	7958926	0	ICE	197085.2	0	4	1
2024	2a	1	7046.069	34954.42	34954.42	0	285345.2	285345.2	0	ICE	7046.069	0	4	2
2024	2a	1	3398.489	16859.36	0	16859.36	111910.8	0	111910.8	BEV	0	3398.489	4	3
2024	2a	1	89.69618	444.9684	0	444.9684	2633.094	0	2633.094	FCEV	0	89.69618	4	7
2024	2a	1	4576.9	22705.27	13363.67	9341.597	188737	111085.2	77651.8	PHEV	2693.833	1883.068	4	8
2024	2a	1	189762.7	952253.9	952253.9	0	7942447	7942447	0	ICE	189762.7	0	4	1
2024	2a	1	6904.148	34645.91	34645.91	0	290241.7	290241.7	0	ICE	6904.148	0	4	2
2024	2a	1	10042.43	50394.2	0	50394.2	342907.5	0	342907.5	BEV	0	10042.43	4	3
2024	2a	1	344.2439	1727.461	0	1727.461	10480.94	0	10480.94	FCEV	0	344.2439	4	7
2024	2a	1	11986.15	60148.05	34868.69	25279.37	543124.1	314856.8	228267.3	PHEV	6948.542	5037.607	4	8
2024	2a	1	181885.3	923144.5	923144.5	0	7889912	7889912	0	ICE	181885.3	0	4	1

2024	2a	1	6653.844	33771.05	33771.05	0	290106	290106	0	ICE	6653.844	0	4	2
2024	2a	1	17893.6	90817.56	0	90817.56	641945.8	0	641945.8	BEV	0	17893.6	4	3
2024	2a	1	756.6682	3840.409	0	3840.409	23882.24	0	23882.24	FCEV	0	756.6682	4	7
2024	2a	1	18950.82	96183.36	54906.96	41276.4	913224	521320.4	391903.5	PHEV	10818.21	8132.608	4	8
2024	2a	1	171403.1	879762.5	879762.5	0	7703800	7703800	0	ICE	171403.1	0	4	1
2024	2a	1	6309.848	32386.62	32386.62	0	285225.3	285225.3	0	ICE	6309.848	0	4	2
2024	2a	1	26731.25	137203.8	0	137203.8	1007688	0	1007688	BEV	0	26731.25	4	3
2024	2a	1	1347.794	6917.837	0	6917.837	44072.91	0	44072.91	FCEV	0	1347.794	4	7
2024	2a	1	25125.85	128963.7	72477.59	56486.09	1276069	717151.1	558918.4	PHEV	14120.73	11005.12	4	8
2024	2a	1	137050.7	711293.2	711293.2	0	6366022	6366022	0	ICE	137050.7	0	4	1
2024	2a	1	5074.712	26337.75	26337.75	0	237211.8	237211.8	0	ICE	5074.712	0	4	2
2024	2a	1	31360.17	162759.3	0	162759.3	1239652	0	1239652	BEV	0	31360.17	4	3
2024	2a	1	1840.252	9550.908	0	9550.908	62364.74	0	62364.74	FCEV	0	1840.252	4	7
2024	2a	1	26138.75	135660.1	75039.42	60620.69	1390376	769076.4	621299.3	PHEV	14458.46	11680.29	4	8
2024	2a	1	4720.166	12869.67	12869.67	0	25982.65	25982.65	0	ICE	4720.166	0	1	1
2024	2a	1	1378.509	3758.547	3758.547	0	7588.749	7588.749	0	ICE	1378.509	0	1	2
2024	2a	1	1606.454	4472.078	4472.078	0	9488.678	9488.678	0	ICE	1606.454	0	1	2
2024	2a	1	1633.13	4639.901	4639.901	0	9963.41	9963.41	0	ICE	1633.13	0	1	2
2024	2a	1	8247.062	23903.28	23903.28	0	55334.29	55334.29	0	ICE	8247.062	0	1	1
2024	2a	1	1291.911	3818.49	3818.49	0	8993.404	8993.404	0	ICE	1291.911	0	1	2
2024	2a	1	13239.47	40648.76	40648.76	0	105961.9	105961.9	0	ICE	13239.47	0	1	1
2024	2a	1	88.30715	291.3633	291.3633	0	916.6883	916.6883	0	ICE	88.30715	0	1	2
2024	2a	1	47.88111	160.7235	160.7235	0	503.372	503.372	0	ICE	47.88111	0	1	2
2024	2a	1	26.14712	89.26652	89.26652	0	299.8608	299.8608	0	ICE	26.14712	0	1	2
2024	2a	1	87.81227	319.915	319.915	0	1295.621	1295.621	0	ICE	87.81227	0	1	2
2024	2a	1	175.1513	668.2092	668.2092	0	3108.449	3108.449	0	ICE	175.1513	0	1	2
2024	2a	1	30.59145	118.4602	0	118.4602	563.7173	0	563.7173	BEV	0	30.59145	1	3
2024	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2024	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2024	2a	1	526.4064	2068.577	2068.577	0	10224.73	10224.73	0	ICE	526.4064	0	1	2
2024	2a	1	785.2571	3130.749	3130.749	0	16149.49	16149.49	0	ICE	785.2571	0	1	2
2024	2a	1	306.6767	1240.262	1240.262	0	6679.348	6679.348	0	ICE	306.6767	0	1	2
2024	2a	1	629.8611	2583.369	2583.369	0	14085.85	14085.85	0	ICE	629.8611	0	1	2
2024	2a	1	2046	8860.511	8860.511	0	54930.68	54930.68	0	ICE	2046	0	1	2
2024	2a	1	5813.073	26173.48	26173.48	0	177168.2	177168.2	0	ICE	5813.073	0	1	2
2024	2a	1	8361.651	38127.54	38127.54	0	267118.7	267118.7	0	ICE	8361.651	0	1	2
2024	2a	1	7846.615	35779.07	0	35779.07	241687.3	0	241687.3	BEV	0	7846.615	1	3
2024	2a	1	0.460996	2.102055	0	2.102055	14.19936	0	14.19936	FCEV	0	0.460996	1	7
2024	2a	1	8201.582	37397.66	22438.59	14959.06	254532.8	152719.7	101813.1	PHEV	4920.949	3280.633	1	8
2024	2a	1	9796.316	45230.57	0	45230.57	314775.8	0	314775.8	BEV	0	9796.316	1	3
2024	2a	1	1.37261	6.337477	0	6.337477	44.10477	0	44.10477	FCEV	0	1.37261	1	7
2024	2a	1	12368.59	57107	34264.2	22842.8	400700.2	240420.1	160280.1	PHEV	7421.152	4947.435	1	8
2024	2a	1	8815.131	41205.36	41205.36	0	307886.3	307886.3	0	ICE	8815.131	0	1	2
2024	2a	1	22834.42	106737	0	106737	766529.2	0	766529.2	BEV	0	22834.42	1	3
2024	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2024	2a	1	10858.38	50756.3	30453.78	20302.52	367960.7	220776.4	147184.3	PHEV	6515.028	4343.352	1	8
2024	2a	1	1364.634	3642.536	3642.536	0	16185.23	16185.23	0	ICE	1364.634	0	2	1

2024	2a	1	1074.099	2928.562	2928.562	0	13293.13	13293.13	0	ICE	1074.099	0	2	1
2024	2a	1	219.464	610.9484	610.9484	0	2648.341	2648.341	0	ICE	219.464	0	2	2
2024	2a	1	106.8922	303.6925	303.6925	0	1299.305	1299.305	0	ICE	106.8922	0	2	2
2024	2a	1	83.70467	247.4051	247.4051	0	1077.003	1077.003	0	ICE	83.70467	0	2	2
2024	2a	1	19031.2	76965.97	76965.97	0	444270.4	444270.4	0	ICE	19031.2	0	2	1
2024	2a	1	30681.15	138142.5	138142.5	0	935394.1	935394.1	0	ICE	30681.15	0	2	1
2024	2a	1	44079.49	200994.1	200994.1	0	1397386	1397386	0	ICE	44079.49	0	2	1
2024	2a	1	53468.5	246869.4	246869.4	0	1758030	1758030	0	ICE	53468.5	0	2	1
2024	2a	1	1377.711	3677.442	3677.442	0	16053.53	16053.53	0	ICE	1377.711	0	3	1
2024	2a	1	23.11173	63.01482	63.01482	0	281.7937	281.7937	0	ICE	23.11173	0	3	2
2024	2a	1	979.3353	2726.293	2726.293	0	11745.13	11745.13	0	ICE	979.3353	0	3	1
2024	2a	1	1285.087	3651.074	3651.074	0	15881.64	15881.64	0	ICE	1285.087	0	3	1
2024	2a	1	2557.002	7557.706	7557.706	0	33102.65	33102.65	0	ICE	2557.002	0	3	1
2024	2a	1	32.4434	138.6423	138.6423	0	872.4737	872.4737	0	ICE	32.4434	0	3	2
2024	2a	1	1127.518	5076.67	5076.67	0	33902.43	33902.43	0	ICE	1127.518	0	3	2
2024	2a	1	840.7005	3833.435	3833.435	0	26211.62	26211.62	0	ICE	840.7005	0	3	2
2024	2a	1	3404.164	15912.39	15912.39	0	114778.8	114778.8	0	ICE	3404.164	0	3	2
2024	2a	1	3583.253	16954.81	0	16954.81	89267.95	0	89267.95	BEV	0	3583.253	3	3
2024	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2024	2a	1	326.1024	1543.012	925.8073	617.2049	11136	6681.6	4454.4	PHEV	195.6614	130.441	3	8
2024	2a	1	3282.409	8761.536	8761.536	0	35416.95	35416.95	0	ICE	3282.409	0	4	1
2024	2a	1	1685.173	4691.219	4691.219	0	20076.6	20076.6	0	ICE	1685.173	0	4	1
2024	2a	1	341.3587	950.2811	950.2811	0	3480.969	3480.969	0	ICE	341.3587	0	4	2
2024	2a	1	1075.926	3056.824	3056.824	0	12395.21	12395.21	0	ICE	1075.926	0	4	1
2024	2a	1	1686.774	4888.947	4888.947	0	20135.19	20135.19	0	ICE	1686.774	0	4	1
2024	2a	1	226.3298	655.9942	655.9942	0	2472.516	2472.516	0	ICE	226.3298	0	4	2
2024	2a	1	2157.389	6376.574	6376.574	0	26252.68	26252.68	0	ICE	2157.389	0	4	1
2024	2a	1	112.6926	333.0845	333.0845	0	1243.938	1243.938	0	ICE	112.6926	0	4	2
2024	2a	1	2714.03	8177.317	8177.317	0	33221.93	33221.93	0	ICE	2714.03	0	4	1
2024	2a	1	2657.731	8159.952	8159.952	0	33443.58	33443.58	0	ICE	2657.731	0	4	1
2024	2a	1	3276.366	10247.03	10247.03	0	43395.48	43395.48	0	ICE	3276.366	0	4	1
2024	2a	1	10.12173	31.65631	31.65631	0	130.2621	130.2621	0	ICE	10.12173	0	4	2
2024	2a	1	4133.946	13166	13166	0	56339.72	56339.72	0	ICE	4133.946	0	4	1
2024	2a	1	43.78058	151.9755	151.9755	0	687.7941	687.7941	0	ICE	43.78058	0	4	2
2024	2a	1	39.79409	149.5363	149.5363	0	721.091	721.091	0	ICE	39.79409	0	4	2
2024	2a	1	327.5547	1343.462	1343.462	0	7598.111	7598.111	0	ICE	327.5547	0	4	2
2024	2a	1	467.6594	1944.893	1944.893	0	11226.15	11226.15	0	ICE	467.6594	0	4	2
2024	2a	1	657.1078	2770.412	2770.412	0	16500.14	16500.14	0	ICE	657.1078	0	4	2
2024	2a	1	481.0879	2055.862	2055.862	0	12567.7	12567.7	0	ICE	481.0879	0	4	2
2024	2a	1	679.8749	2944.3	2944.3	0	18072.78	18072.78	0	ICE	679.8749	0	4	2
2024	2a	1	4350.55	19588.44	19588.44	0	131823	131823	0	ICE	4350.55	0	4	2
2024	2a	1	9654.569	45129.22	45129.22	0	330245.8	330245.8	0	ICE	9654.569	0	4	2
2024	2a	1	6113.962	28929.31	28929.31	0	218341.1	218341.1	0	ICE	6113.962	0	4	2
2024	2a	1	1333.724	3865.665	3865.665	0	8637.862	8637.862	0	ICE	1333.724	0	1	2
2024	2a	1	63.63677	206.3193	206.3193	0	595.9152	595.9152	0	ICE	63.63677	0	1	2
2024	2a	1	197.8201	743.3584	743.3584	0	3267.922	3267.922	0	ICE	197.8201	0	1	2
2024	2a	1	23.45557	96.20278	0	96.20278	516.6331	0	516.6331	BEV	0	23.45557	1	3

2024	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2024	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2024	2a	1	1624.802	7315.705	0	7315.705	48079.99	0	48079.99	BEV	0	1624.802	1	3
2024	2a	1	6.14034	27.64701	0	27.64701	181.7006	0	181.7006	FCEV	0	6.14034	1	7
2024	2a	1	3415.394	15377.88	9226.727	6151.152	101906.8	61144.05	40762.7	PHEV	2049.236	1366.158	1	8
2024	2a	1	14953.23	70753.91	0	70753.91	522897.7	0	522897.7	BEV	0	14953.23	1	3
2024	2a	1	455.2624	2154.156	0	2154.156	15920.01	0	15920.01	FCEV	0	455.2624	1	7
2024	2a	1	10753.37	50881.52	30528.91	20352.61	381144.3	228686.6	152457.7	PHEV	6452.024	4301.349	1	8
2024	2a	1	8.098293	28.11161	28.11161	0	123.9495	123.9495	0	ICE	8.098293	0	2	2
2024	2a	1	5.057846	17.84706	17.84706	0	80.91193	80.91193	0	ICE	5.057846	0	2	2
2024	2a	1	10.96326	40.5691	40.5691	0	204.2486	204.2486	0	ICE	10.96326	0	2	2
2024	2a	1	18.86427	56.83767	56.83767	0	267.6131	267.6131	0	ICE	18.86427	0	3	2
2024	2a	1	96.90636	397.4605	397.4605	0	2327.569	2327.569	0	ICE	96.90636	0	3	2
2024	2a	1	109.2514	454.3525	454.3525	0	2757.557	2757.557	0	ICE	109.2514	0	3	2
2024	2a	1	308.4809	876.4282	876.4282	0	3185.694	3185.694	0	ICE	308.4809	0	4	2
2024	2a	1	29.70177	109.9102	109.9102	0	514.0952	514.0952	0	ICE	29.70177	0	4	2
2024	2a	1	106.0167	422.679	422.679	0	2290.889	2290.889	0	ICE	106.0167	0	4	2
2024	2a	1	1201.748	5273.198	5273.198	0	33047.94	33047.94	0	ICE	1201.748	0	4	2
2024	2a	1	775.5976	2070.256	2070.256	0	4015.317	4015.317	0	ICE	775.5976	0	1	2
2024	2a	1	275.5138	830.1177	830.1177	0	1998.639	1998.639	0	ICE	275.5138	0	1	2
2024	2a	1	634.198	1947.159	1947.159	0	5009.702	5009.702	0	ICE	634.198	0	1	2
2024	2a	1	120.2342	424.2571	424.2571	0	1569.364	1569.364	0	ICE	120.2342	0	1	2
2024	2a	1	97.12907	348.2932	348.2932	0	1342.045	1342.045	0	ICE	97.12907	0	1	2
2024	2a	1	178.562	660.7614	660.7614	0	2815.249	2815.249	0	ICE	178.562	0	1	2
2024	2a	1	65.75599	258.396	0	258.396	1269.525	0	1269.525	BEV	0	65.75599	1	3
2024	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2024	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2024	2a	1	2001.152	8895.58	0	8895.58	56844.5	0	56844.5	BEV	0	2001.152	1	3
2024	2a	1	19.77106	87.88691	0	87.88691	561.6146	0	561.6146	FCEV	0	19.77106	1	7
2024	2a	1	556.2614	2472.71	1483.626	989.084	15859.25	9515.551	6343.7	PHEV	333.7569	222.5046	1	8
2024	2a	1	1250.598	5917.432	5917.432	0	44980.21	44980.21	0	ICE	1250.598	0	1	2
2024	2a	1	70.67105	192.6867	192.6867	0	845.0505	845.0505	0	ICE	70.67105	0	2	2
2024	2a	1	89.56668	259.6001	259.6001	0	1158.253	1158.253	0	ICE	89.56668	0	2	2
2024	2a	1	33.843	101.9683	101.9683	0	444.1363	444.1363	0	ICE	33.843	0	2	2
2024	2a	1	561.2624	2591.405	0	2591.405	18011.27	0	18011.27	BEV	0	561.2624	2	3
2024	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2024	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2024	2a	1	62.76135	167.5251	167.5251	0	730.3285	730.3285	0	ICE	62.76135	0	3	2
2024	2a	1	41.30027	117.3386	117.3386	0	494.6848	494.6848	0	ICE	41.30027	0	3	2
2024	2a	1	32.34332	93.74388	93.74388	0	408.829	408.829	0	ICE	32.34332	0	3	2
2024	2a	1	1.615052	5.328749	5.328749	0	26.53314	26.53314	0	ICE	1.615052	0	3	2
2024	2a	1	79.25439	211.549	211.549	0	846.2808	846.2808	0	ICE	79.25439	0	4	2
2024	2a	1	72.85021	219.4962	219.4962	0	877.2803	877.2803	0	ICE	72.85021	0	4	2
2024	2a	1	29.19125	99.65921	99.65921	0	420.616	420.616	0	ICE	29.19125	0	4	2
2024	2a	1	55.46467	195.7121	195.7121	0	883.3291	883.3291	0	ICE	55.46467	0	4	2
2024	2a	1	55.76117	199.9529	199.9529	0	914.8064	914.8064	0	ICE	55.76117	0	4	2
2024	2a	1	32.14891	102.3895	102.3895	0	319.6821	319.6821	0	ICE	32.14891	0	1	2

2024	2a	1	164.7518	704.0438	704.0438	0	4171.83	4171.83	0	ICE	164.7518	0	1	2
2024	2a	1	16.61919	66.25922	66.25922	0	360.0064	360.0064	0	ICE	16.61919	0	2	2
2024	2a	1	0.773381	2.906173	2.906173	0	15.22381	15.22381	0	ICE	0.773381	0	3	2
2024	2a	1	65.36508	286.818	286.818	0	1853.422	1853.422	0	ICE	65.36508	0	3	2
2024	2a	1	188.8168	871.7862	0	871.7862	4359.578	0	4359.578	BEV	0	188.8168	3	3
2024	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2024	2a	1	85.49035	394.7175	236.8305	157.887	2711.933	1627.16	1084.773	PHEV	51.29421	34.19614	3	8
2024	2a	1	40.47248	110.3494	110.3494	0	527.3485	527.3485	0	ICE	40.47248	0	4	2
2024	2a	1	15.00867	49.52004	49.52004	0	209.6377	209.6377	0	ICE	15.00867	0	4	2
2024	2a	1	69.80579	254.3144	254.3144	0	1187.857	1187.857	0	ICE	69.80579	0	4	2
2024	2a	1	38.39346	150.8717	150.8717	0	807.1269	807.1269	0	ICE	38.39346	0	4	2
2024	2a	1	158.3832	704.0495	704.0495	0	4603.944	4603.944	0	ICE	158.3832	0	3	2
2024	2a	1	11.25412	35.8427	35.8427	0	144.873	144.873	0	ICE	11.25412	0	4	2
2024	2a	1	14.5558	55.53096	55.53096	0	284.4592	284.4592	0	ICE	14.5558	0	4	2
2024	2a	1	18.77425	73.77568	0	73.77568	257.6488	0	257.6488	BEV	0	18.77425	3	3
2024	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2024	2a	1	0	0	0	0	0	0	0	PHEV	0	0	3	8
2024	2a	1	92.59905	363.8791	0	363.8791	1283.035	0	1283.035	BEV	0	92.59905	4	3
2024	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2024	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2024	2a	1	36.77837	115.0266	115.0266	0	322.3135	322.3135	0	ICE	36.77837	0	1	2
2024	2a	1	18.10589	62.85097	62.85097	0	228.2551	228.2551	0	ICE	18.10589	0	1	2
2024	2a	1	103.1542	434.9055	434.9055	0	2491.339	2491.339	0	ICE	103.1542	0	1	2
2024	2a	1	322.2414	1413.976	0	1413.976	8808.741	0	8808.741	BEV	0	322.2414	1	3
2024	2a	1	32.71486	143.5509	0	143.5509	894.2884	0	894.2884	FCEV	0	32.71486	1	7
2024	2a	1	34.35061	150.7284	90.43704	60.29136	938.161	562.8966	375.2644	PHEV	20.61036	13.74024	1	8
2024	2a	1	24.13104	74.08882	74.08882	0	312.4817	312.4817	0	ICE	24.13104	0	2	2
2024	2a	1	10.01524	33.61835	33.61835	0	134.5373	134.5373	0	ICE	10.01524	0	2	2
2024	2a	1	239.0192	1076.189	0	1076.189	7033.059	0	7033.059	BEV	0	239.0192	2	3
2024	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2024	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2024	2a	1	141.8902	394.9968	394.9968	0	1658.427	1658.427	0	ICE	141.8902	0	3	2
2024	2a	1	6.961237	21.37288	21.37288	0	103.3125	103.3125	0	ICE	6.961237	0	3	2
2024	2a	1	58.41174	252.9608	252.9608	0	1545.78	1545.78	0	ICE	58.41174	0	3	2
2024	2a	1	25.42487	85.34418	85.34418	0	378.5347	378.5347	0	ICE	25.42487	0	4	2
2024	2a	1	31.69958	131.8316	0	131.8316	731.2639	0	731.2639	BEV	0	31.69958	1	3
2024	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2024	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2024	2a	1	195.4737	835.3294	0	835.3294	4841.817	0	4841.817	BEV	0	195.4737	1	3
2024	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2024	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2024	2a	1	166.2015	719.7604	0	719.7604	4407.394	0	4407.394	BEV	0	166.2015	1	3
2024	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2024	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2024	2a	1	11.68768	37.22352	37.22352	0	144.497	144.497	0	ICE	11.68768	0	2	2
2024	2a	1	10.7727	38.6296	38.6296	0	199.5632	199.5632	0	ICE	10.7727	0	2	2
2024	2a	1	24.90602	107.8593	107.8593	0	666.2297	666.2297	0	ICE	24.90602	0	2	2

2024	2a	1	295.7767	1348.686	0	1348.686	9087.563	0	9087.563	BEV	0	295.7767	2	3
2024	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2024	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2024	2a	1	17.70419	74.64211	74.64211	0	456.25	456.25	0	ICE	17.70419	0	3	2
2024	2a	1	17.95502	55.12676	55.12676	0	238.7194	238.7194	0	ICE	17.95502	0	4	2
2024	2a	1	11.93761	38.70341	38.70341	0	169.2228	169.2228	0	ICE	11.93761	0	4	2
2024	2a	1	18.54739	73.94678	0	73.94678	373.9216	0	373.9216	BEV	0	18.54739	1	3
2024	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2024	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2024	2a	1	59.24151	249.7664	0	249.7664	1427.703	0	1427.703	BEV	0	59.24151	1	3
2024	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2024	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2024	2a	1	37.12299	158.6399	0	158.6399	932.1358	0	932.1358	BEV	0	37.12299	2	3
2024	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2024	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2024	2a	1	4.769958	21.47683	21.47683	0	152.4204	152.4204	0	ICE	4.769958	0	2	2
2024	2a	1	1.574993	6.550047	0	6.550047	27.75988	0	27.75988	BEV	0	1.574993	4	3
2024	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2024	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2024	2a	1	6.43273	17.1705	17.1705	0	75.41165	75.41165	0	ICE	6.43273	0	2	2
2024	2a	1	10.21371	39.55086	39.55086	0	198.1865	198.1865	0	ICE	10.21371	0	2	2
2024	2a	1	5.405021	17.21418	17.21418	0	82.16895	82.16895	0	ICE	5.405021	0	3	2
2024	2a	1	1.35299	5.394249	5.394249	0	33.97164	33.97164	0	ICE	1.35299	0	3	2
2024	2a	1	3.373484	11.51711	0	11.51711	41.25044	0	41.25044	BEV	0	3.373484	1	3
2024	2a	1	6.65547	20.81538	20.81538	0	103.3719	103.3719	0	ICE	6.65547	0	3	2
2024	2a	1	1.674417	5.620549	5.620549	0	26.80831	26.80831	0	ICE	1.674417	0	3	2
2024	2a	1	30.24191	130.9671	0	130.9671	586.9247	0	586.9247	BEV	0	30.24191	3	3
2024	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2024	2a	1	0	0	0	0	0	0	0	PHEV	0	0	3	8
2024	2a	1	15.76313	70.07073	0	70.07073	327.7147	0	327.7147	BEV	0	15.76313	3	3
2024	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2024	2a	1	10.91294	48.51051	29.1063	19.4042	317.3484	190.409	126.9394	PHEV	6.547761	4.365174	3	8
2024	2a	1	1.753793	8.197912	0	8.197912	41.71402	0	41.71402	BEV	0	1.753793	4	3
2024	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2024	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2024	2a	1	2.669219	8.95982	0	8.95982	31.37986	0	31.37986	BEV	0	2.669219	1	3
2024	2a	1	12.89152	40.31899	40.31899	0	157.3933	157.3933	0	ICE	12.89152	0	2	2
2024	2a	1	60.36818	230.307	0	230.307	1048.316	0	1048.316	BEV	0	60.36818	2	3
2024	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2024	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2024	2a	1	25.81808	99.97614	0	99.97614	478.8514	0	478.8514	BEV	0	25.81808	2	3
2024	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2024	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2024	2a	1	19.07099	74.94174	74.94174	0	419.8688	419.8688	0	ICE	19.07099	0	2	2
2024	2a	1	8.899503	37.01107	0	37.01107	205.0183	0	205.0183	BEV	0	8.899503	2	3
2024	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2024	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8

2024	2a	1	17.10239	72.10489	72.10489	0	422.5847	422.5847	0	ICE	17.10239	0	2	2
2024	2a	1	4.783422	20.16724	0	20.16724	115.7313	0	115.7313	BEV	0	4.783422	2	3
2024	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2024	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2024	2a	1	19.41169	82.95314	82.95314	0	512.5029	512.5029	0	ICE	19.41169	0	2	2
2024	2a	1	15.56791	67.41919	0	67.41919	410.7607	0	410.7607	BEV	0	15.56791	2	3
2024	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2024	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2024	2a	1	19.10775	56.4766	56.4766	0	272.575	272.575	0	ICE	19.10775	0	3	2
2024	2a	1	13.57153	57.99604	0	57.99604	255.7727	0	255.7727	BEV	0	13.57153	3	3
2024	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2024	2a	1	0	0	0	0	0	0	0	PHEV	0	0	3	8
2024	2a	1	13.41856	61.1861	0	61.1861	300.077	0	300.077	BEV	0	13.41856	3	3
2024	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2024	2a	1	10.26125	46.78937	28.07362	18.71575	313.1591	187.8955	125.2637	PHEV	6.156752	4.104502	3	8
2024	2a	1	6.069847	23.15671	0	23.15671	78.8571	0	78.8571	BEV	0	6.069847	4	3
2024	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2024	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2024	2a	1	15.01682	59.87073	0	59.87073	219.2782	0	219.2782	BEV	0	15.01682	4	3
2024	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2024	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2024	2a	1	2.082559	8.541593	0	8.541593	33.99421	0	33.99421	BEV	0	2.082559	4	3
2024	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2024	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2024	2a	1	13.40182	45.75396	45.75396	0	191.8075	191.8075	0	ICE	13.40182	0	2	2
2024	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2024	2a	1	13.40182	45.75396	45.75396	0	191.8075	191.8075	0	ICE	13.40182	0	2	2
2024	2a	1	1.249813	5.126096	5.126096	0	29.34476	29.34476	0	ICE	1.249813	0	2	2
2024	2a	1	82.63367	324.7189	0	324.7189	1574.909	0	1574.909	BEV	0	82.63367	2	3
2024	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2024	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2024	2a	1	5.086717	20.5717	0	20.5717	107.1284	0	107.1284	BEV	0	5.086717	2	3
2024	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2024	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2024	2a	1	3.054897	8.154252	0	8.154252	22.60239	0	22.60239	BEV	0	3.054897	1	3
2024	2a	1	39.4865	148.3804	0	148.3804	654.8806	0	654.8806	BEV	0	39.4865	2	3
2024	2a	1	1.02761	3.743759	3.743759	0	18.59807	18.59807	0	ICE	1.02761	0	3	2
2024	2a	1	11.48893	43.17254	43.17254	0	208.6808	208.6808	0	ICE	11.48893	0	2	2
2024	2a	1	0.798686	3.138534	3.138534	0	16.36859	16.36859	0	ICE	0.798686	0	3	2
2024	2a	1	5.329294	17.58363	17.58363	0	84.67068	84.67068	0	ICE	5.329294	0	2	2
2024	2a	1	3.852576	13.59416	0	13.59416	52.29819	0	52.29819	BEV	0	3.852576	1	3
2024	2a	1	11.52704	47.93841	47.93841	0	282.4743	282.4743	0	ICE	11.52704	0	2	2
2024	2a	1	2.164543	8.25782	0	8.25782	29.34937	0	29.34937	BEV	0	2.164543	3	3
2024	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2024	2a	1	0	0	0	0	0	0	0	PHEV	0	0	3	8
2024	2a	1	1.170877	3.594908	0	3.594908	10.91924	0	10.91924	BEV	0	1.170877	2	3
2024	2a	1	2.67253	11.42068	0	11.42068	49.11028	0	49.11028	BEV	0	2.67253	4	3
2024	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2024	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8

2024	2a	1	7.192042	26.61386	0	26.61386	114.6086	0	114.6086	BEV	0	7.192042	1	3
2024	2a	1	6.988942	26.66309	0	26.66309	121.9189	0	121.9189	BEV	0	6.988942	1	3
2024	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2024	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2024	2a	1	20.55963	83.14728	0	83.14728	431.123	0	431.123	BEV	0	20.55963	1	3
2024	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2024	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2024	2a	1	12.78296	46.57049	46.57049	0	219.7613	219.7613	0	ICE	12.78296	0	2	2
2024	2a	1	12.2837	45.45533	0	45.45533	193.9117	0	193.9117	BEV	0	12.2837	2	3
2024	2a	1	1.891724	7.758889	0	7.758889	41.29462	0	41.29462	BEV	0	1.891724	2	3
2024	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2024	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2024	2a	1	2.256478	7.703638	7.703638	0	34.05524	34.05524	0	ICE	2.256478	0	3	2
2024	2a	1	6.646851	24.21561	0	24.21561	100.3875	0	100.3875	BEV	0	6.646851	1	3
2024	2a	1	9.181908	34.50332	0	34.50332	153.6865	0	153.6865	BEV	0	9.181908	1	3
2024	2a	1	1.902929	5.188392	0	5.188392	13.62836	0	13.62836	BEV	0	1.902929	2	3
2024	2a	1	8.817771	28.58845	28.58845	0	136.4562	136.4562	0	ICE	8.817771	0	2	2
2024	2a	1	2.920798	9.804301	0	9.804301	34.48908	0	34.48908	BEV	0	2.920798	2	3
2024	2a	1	1.323007	4.516758	0	4.516758	16.11882	0	16.11882	BEV	0	1.323007	2	3
2024	2a	1	1.361451	4.804002	0	4.804002	18.55188	0	18.55188	BEV	0	1.361451	2	3
2024	2a	1	9.845686	37.56169	37.56169	0	185.2341	185.2341	0	ICE	9.845686	0	2	2
2024	2a	1	5.6702	24.8805	24.8805	0	160.5013	160.5013	0	ICE	5.6702	0	2	2
2024	2a	1	7.898283	36.01467	36.01467	0	247.7188	247.7188	0	ICE	7.898283	0	2	2
2024	2a	1	3.213861	10.41979	10.41979	0	44.52654	44.52654	0	ICE	3.213861	0	3	2
2024	2a	1	1.271572	4.34116	0	4.34116	11.22855	0	11.22855	BEV	0	1.271572	3	3
2024	2a	1	1.553148	5.391444	5.391444	0	28.10486	28.10486	0	ICE	1.553148	0	3	2
2024	2a	1	8.265625	31.06015	0	31.06015	98.27044	0	98.27044	BEV	0	8.265625	3	3
2024	2a	1	1.240636	4.804152	4.804152	0	24.09458	24.09458	0	ICE	1.240636	0	3	2
2024	2a	1	0.800514	3.099854	0	3.099854	10.49236	0	10.49236	BEV	0	0.800514	3	3
2024	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2024	2a	1	0	0	0	0	0	0	0	PHEV	0	0	3	8
2024	2a	1	20.52399	90.05802	0	90.05802	406.6716	0	406.6716	BEV	0	20.52399	3	3
2024	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2024	2a	1	0	0	0	0	0	0	0	PHEV	0	0	3	8
2024	2a	1	48.77081	219.5915	0	219.5915	1037.94	0	1037.94	BEV	0	48.77081	3	3
2024	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2024	2a	1	12.50534	56.30552	33.78331	22.52221	373.3318	223.9991	149.3327	PHEV	7.503201	5.002134	3	8
2024	2a	1	1.195435	3.396363	0	3.396363	6.839631	0	6.839631	BEV	0	1.195435	4	3
2024	2a	1	0.848427	2.653505	0	2.653505	5.884838	0	5.884838	BEV	0	0.848427	4	3
2024	2a	1	1.790444	6.317743	0	6.317743	17.45592	0	17.45592	BEV	0	1.790444	4	3
2024	2a	1	2.740671	12.18291	12.18291	0	83.65628	83.65628	0	ICE	2.740671	0	2	2
2024	2a	1	1.379793	5.343015	0	5.343015	18.73307	0	18.73307	BEV	0	1.379793	4	3
2024	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2024	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2024	2a	1	1.173996	3.537225	0	3.537225	10.55991	0	10.55991	BEV	0	1.173996	2	3
2024	2a	1	1.136359	3.163419	0	3.163419	8.691059	0	8.691059	BEV	0	1.136359	1	3
2024	2a	1	2.124598	6.157935	0	6.157935	17.16191	0	17.16191	BEV	0	2.124598	1	3

2024	2a	1	2.633467	7.934585	0	7.934585	23.58031	0	23.58031	BEV	0	2.633467	1	3
2024	2a	1	2.135653	6.557031	0	6.557031	19.85861	0	19.85861	BEV	0	2.135653	1	3
2024	2a	1	1.588227	4.967274	0	4.967274	15.82126	0	15.82126	BEV	0	1.588227	1	3
2024	2a	1	1.364805	4.346701	0	4.346701	13.44817	0	13.44817	BEV	0	1.364805	1	3
2024	2a	1	1.318549	4.274921	0	4.274921	14.26098	0	14.26098	BEV	0	1.318549	1	3
2024	2a	1	1.293188	4.266784	0	4.266784	14.19195	0	14.19195	BEV	0	1.293188	1	3
2024	2a	1	1.677863	5.824366	0	5.824366	20.99472	0	20.99472	BEV	0	1.677863	1	3
2024	2a	1	4.873314	17.47512	0	17.47512	70.29424	0	70.29424	BEV	0	4.873314	1	3
2024	2a	1	0.78029	2.172186	0	2.172186	6.067782	0	6.067782	BEV	0	0.78029	2	3
2024	2a	1	0.799579	2.317501	0	2.317501	6.587387	0	6.587387	BEV	0	0.799579	2	3
2024	2a	1	0.813223	2.403634	0	2.403634	7.071527	0	7.071527	BEV	0	0.813223	2	3
2024	2a	1	1.342276	4.659443	0	4.659443	17.44328	0	17.44328	BEV	0	1.342276	2	3
2024	2a	1	0	0	0	0	0	0	0	BEV	0	0	2	3
2024	2a	1	33.071	154.5868	0	154.5868	1111.089	0	1111.089	FCEV	0	33.071	2	7
2024	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2024	2a	1	0	0	0	0	0	0	0	BEV	0	0	2	3
2024	2a	1	35.13746	166.2592	0	166.2592	1227.999	0	1227.999	FCEV	0	35.13746	2	7
2024	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2024	2a	1	0.296652	1.199721	1.199721	0	6.916234	6.916234	0	ICE	0.296652	0	3	2
2024	2a	1	0	0	0	0	0	0	0	BEV	0	0	3	3
2024	2a	1	2.356986	11.01747	0	11.01747	57.39901	0	57.39901	FCEV	0	2.356986	3	7
2024	2a	1	33.78346	157.9171	94.75025	63.16683	1143.694	686.2163	457.4775	PHEV	20.27008	13.51339	3	8
2024	2a	1	1.549188	7.152757	7.152757	0	49.68133	49.68133	0	ICE	1.549188	0	2	2
2024	2a	1	0.498568	1.844932	0	1.844932	5.671037	0	5.671037	BEV	0	0.498568	3	3
2024	2a	1	0.53032	1.567461	0	1.567461	3.256695	0	3.256695	BEV	0	0.53032	4	3
2024	2a	1	0.995648	3.170991	0	3.170991	7.255569	0	7.255569	BEV	0	0.995648	4	3
2024	2a	1	3.690876	12.60069	0	12.60069	33.17705	0	33.17705	BEV	0	3.690876	4	3
2024	2a	1	1.43207	5.381363	0	5.381363	17.08489	0	17.08489	BEV	0	1.43207	4	3
2024	2a	1	0.52289	1.425675	0	1.425675	3.914212	0	3.914212	BEV	0	0.52289	1	3
2024	2a	1	0.342987	0.974463	0	0.974463	1.842477	0	1.842477	BEV	0	0.342987	3	3
2024	2a	1	0.880726	3.713204	0	3.713204	15.19328	0	15.19328	BEV	0	0.880726	3	3
2024	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2024	2a	1	0	0	0	0	0	0	0	PHEV	0	0	3	8
2024	2a	1	0.284511	0.808328	0	0.808328	1.809688	0	1.809688	BEV	0	0.284511	2	3
2024	2a	1	2.651804	11.63596	0	11.63596	68.43014	0	68.43014	BEV	0	2.651804	2	3
2024	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2024	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2024	2a	1	1.566357	5.61677	0	5.61677	22.03799	0	22.03799	BEV	0	1.566357	2	3
2024	2a	1	4.544392	16.55599	0	16.55599	67.33931	0	67.33931	BEV	0	4.544392	2	3
2024	2a	1	1.301189	4.814997	0	4.814997	14.58606	0	14.58606	BEV	0	1.301189	4	3
2024	2a	1	2.028452	9.597983	9.597983	0	77.20168	77.20168	0	ICE	2.028452	0	2	2
2024	2a	1	1.544308	6.864804	0	6.864804	44.02757	0	44.02757	BEV	0	1.544308	2	3
2024	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2024	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2024	2a	1	0.684877	2.141993	0	2.141993	6.588794	0	6.588794	BEV	0	0.684877	2	3
2024	2a	1	0.280155	0.924352	0	0.924352	2.268019	0	2.268019	BEV	0	0.280155	4	3
2024	2a	1	0.26161	0.83319	0	0.83319	2.611231	0	2.611231	BEV	0	0.26161	2	3

2024	2a	1	0.344592	1.215922	0	1.215922	3.251672	0	3.251672	BEV	0	0.344592	3	3
2024	2a	1	0.47902	1.964696	0	1.964696	7.316377	0	7.316377	BEV	0	0.47902	3	3
2024	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2024	2a	1	0	0	0	0	0	0	0	PHEV	0	0	3	8
2024	2a	1	0.621311	2.049973	0	2.049973	5.22302	0	5.22302	BEV	0	0.621311	3	3
2024	2a	1	0.847025	2.309439	0	2.309439	4.555099	0	4.555099	BEV	0	0.847025	4	3
2024	2a	1	1.995495	7.155607	0	7.155607	20.87453	0	20.87453	BEV	0	1.995495	4	3
2024	2a	1	0.491752	1.397122	0	1.397122	3.815123	0	3.815123	BEV	0	0.491752	1	3
2024	2a	1	0.4481	1.324445	0	1.324445	3.755757	0	3.755757	BEV	0	0.4481	1	3
2024	2a	1	0.902298	3.597382	0	3.597382	17.87873	0	17.87873	BEV	0	0.902298	2	3
2024	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2024	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2024	2a	1	0.43097	1.74293	1.74293	0	10.79402	10.79402	0	ICE	0.43097	0	2	2
2024	2a	1	0.828067	2.49495	0	2.49495	5.241976	0	5.241976	BEV	0	0.828067	3	3
2024	2a	1	3.399093	11.4098	0	11.4098	28.54119	0	28.54119	BEV	0	3.399093	4	3
2024	2a	1	3.018173	12.72483	0	12.72483	52.06688	0	52.06688	BEV	0	3.018173	4	3
2024	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2024	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2024	2a	1	0.245937	0.895989	0	0.895989	2.667527	0	2.667527	BEV	0	0.245937	3	3
2024	2a	1	0	0	0	0	0	0	0	BEV	0	0	4	3
2024	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2024	2a	1	3.209996	14.63697	8.782184	5.854789	106.0008	63.60046	42.40031	PHEV	1.925998	1.283999	4	8
2024	2a	1	0.324029	1.143365	1.143365	0	6.125559	6.125559	0	ICE	0.324029	0	3	2
2024	2a	1	0.444419	1.466329	0	1.466329	4.848434	0	4.848434	BEV	0	0.444419	2	3
2025	2a	1	4521.871	12329.02	12329.02	0	24300.66	24300.66	0	ICE	4521.871	0	1	1
2025	2a	1	5118.676	14249.47	14249.47	0	29196.04	29196.04	0	ICE	5118.676	0	1	1
2025	2a	1	9853.443	28559.22	28559.22	0	64668.31	64668.31	0	ICE	9853.443	0	1	1
2025	2a	1	10911.43	32250.8	32250.8	0	76236.13	76236.13	0	ICE	10911.43	0	1	1
2025	2a	1	12362.6	37956.51	37956.51	0	97996.3	97996.3	0	ICE	12362.6	0	1	1
2025	2a	1	14958.51	46783.63	46783.63	0	126456.1	126456.1	0	ICE	14958.51	0	1	1
2025	2a	1	19074.13	60748.25	60748.25	0	171932	171932	0	ICE	19074.13	0	1	1
2025	2a	1	21546.98	69858.34	69858.34	0	205974.1	205974.1	0	ICE	21546.98	0	1	1
2025	2a	1	19444.98	64157.36	64157.36	0	197875.5	197875.5	0	ICE	19444.98	0	1	1
2025	2a	1	20962.27	70364.46	70364.46	0	226604.4	226604.4	0	ICE	20962.27	0	1	1
2025	2a	1	24080.8	82212.11	82212.11	0	276330.2	276330.2	0	ICE	24080.8	0	1	1
2025	2a	1	30600.97	106225.2	106225.2	0	372575.3	372575.3	0	ICE	30600.97	0	1	1
2025	2a	1	30784.98	108627.6	108627.6	0	397603.4	397603.4	0	ICE	30784.98	0	1	1
2025	2a	1	41054.15	147215.2	147215.2	0	560435.4	560435.4	0	ICE	41054.15	0	1	1
2025	2a	1	49740.22	181212.1	181212.1	0	719376	719376	0	ICE	49740.22	0	1	1
2025	2a	1	59439.09	219952	219952	0	909145	909145	0	ICE	59439.09	0	1	1
2025	2a	1	82203.24	308899.2	308899.2	0	1329353	1329353	0	ICE	82203.24	0	1	1
2025	2a	1	95833.89	365610.1	365610.1	0	1635967	1635967	0	ICE	95833.89	0	1	1
2025	2a	1	168.8238	644.0695	644.0695	0	2935.278	2935.278	0	ICE	168.8238	0	1	2
2025	2a	1	111354.2	431200.1	431200.1	0	2009244	2009244	0	ICE	111354.2	0	1	1
2025	2a	1	137728.5	541220.6	541220.6	0	2618877	2618877	0	ICE	137728.5	0	1	1
2025	2a	1	152614.5	608460.1	608460.1	0	3054002	3054002	0	ICE	152614.5	0	1	1
2025	2a	1	203533.2	823128.8	823128.8	0	4288064	4288064	0	ICE	203533.2	0	1	1

2025	2a	1	236781.8	971158	971158	0	5236215	5236215	0	ICE	236781.8	0	1	1
2025	2a	1	591.5968	2426.429	2426.429	0	13133.54	13133.54	0	ICE	591.5968	0	1	2
2025	2a	1	281903.6	1172375	1172375	0	6524760	6524760	0	ICE	281903.6	0	1	1
2025	2a	1	263016.5	1108896	1108896	0	6375756	6375756	0	ICE	263016.5	0	1	1
2025	2a	1	229527.8	980855.1	980855.1	0	5821515	5821515	0	ICE	229527.8	0	1	1
2025	2a	1	290805.1	1259375	1259375	0	7703183	7703183	0	ICE	290805.1	0	1	1
2025	2a	1	3241.259	14036.76	14036.76	0	85353.24	85353.24	0	ICE	3241.259	0	1	2
2025	2a	1	305862.6	1342107	1342107	0	8478432	8478432	0	ICE	305862.6	0	1	1
2025	2a	1	4634.804	20337.24	20337.24	0	126634.4	126634.4	0	ICE	4634.804	0	1	2
2025	2a	1	466701.7	2074597	2074597	0	13551940	13551940	0	ICE	466701.7	0	1	1
2025	2a	1	585767.3	2637429	2637429	0	17738230	17738230	0	ICE	585767.3	0	1	1
2025	2a	1	608872.2	2776341	2776341	0	19265966	19265966	0	ICE	608872.2	0	1	1
2025	2a	1	11306.51	51555.55	51555.55	0	355850.8	355850.8	0	ICE	11306.51	0	1	2
2025	2a	1	722574.1	3336197	3336197	0	23858978	23858978	0	ICE	722574.1	0	1	1
2025	2a	1	701173.5	3277558	3277558	0	24137421	24137421	0	ICE	701173.5	0	1	1
2025	2a	1	757201.5	3582835	3582835	0	27206167	27206167	0	ICE	757201.5	0	1	1
2025	2a	1	9266.155	43844.48	43844.48	0	332920.8	332920.8	0	ICE	9266.155	0	1	2
2025	2a	1	44039.82	208382.3	0	208382.3	1582690	0	1582690	BEV	0	44039.82	1	3
2025	2a	1	898.7718	4252.7	0	4252.7	32357.06	0	32357.06	FCEV	0	898.7718	1	7
2025	2a	1	39725.41	187967.9	101502.7	86465.24	1427460	770828.5	656631.7	PHEV	21451.72	18273.69	1	8
2025	2a	1	812357.2	3890354	3890354	0	30377199	30377199	0	ICE	812357.2	0	1	1
2025	2a	1	9941.116	47607.7	47607.7	0	371730	371730	0	ICE	9941.116	0	1	2
2025	2a	1	57745.33	276540.7	0	276540.7	2159299	0	2159299	BEV	0	57745.33	1	3
2025	2a	1	1178.476	5643.687	0	5643.687	44117.24	0	44117.24	FCEV	0	1178.476	1	7
2025	2a	1	37320.53	178726.9	96512.51	82214.36	1395875	753772.7	642102.7	PHEV	20153.08	17167.44	1	8
2025	2a	1	847572.6	4107557	4107557	0	32975094	32975094	0	ICE	847572.6	0	1	1
2025	2a	1	10327.96	50052	50052	0	401811.8	401811.8	0	ICE	10327.96	0	1	2
2025	2a	1	73882.92	358055.8	0	358055.8	2873730	0	2873730	BEV	0	73882.92	1	3
2025	2a	1	1728.255	8375.575	0	8375.575	67251.39	0	67251.39	FCEV	0	1728.255	1	7
2025	2a	1	36234.82	175603.4	93069.78	82533.58	1410510	747570.1	662939.5	PHEV	19204.45	17030.37	1	8
2025	2a	1	885137.5	4340316	4340316	0	35793971	35793971	0	ICE	885137.5	0	1	1
2025	2a	1	10883.47	53367.62	53367.62	0	440119.4	440119.4	0	ICE	10883.47	0	1	2
2025	2a	1	91672.35	449519.9	0	449519.9	3706539	0	3706539	BEV	0	91672.35	1	3
2025	2a	1	2419.505	11864.16	0	11864.16	97785.86	0	97785.86	FCEV	0	2419.505	1	7
2025	2a	1	34955.17	171404.4	89130.3	82274.12	1413829	735190.9	678637.7	PHEV	18176.69	16778.48	1	8
2025	2a	1	860712.2	4269856	4269856	0	36173517	36173517	0	ICE	860712.2	0	1	1
2025	2a	1	10634.2	52754.56	52754.56	0	446939.2	446939.2	0	ICE	10634.2	0	1	2
2025	2a	1	139060.5	689856.7	0	689856.7	5841031	0	5841031	BEV	0	139060.5	1	3
2025	2a	1	4766.848	23647.57	0	23647.57	200059.7	0	200059.7	FCEV	0	4766.848	1	7
2025	2a	1	52868.87	262274	130612.4	131661.5	2224408	1107755	1116653	PHEV	26328.7	26540.17	1	8
2025	2a	1	822424.8	4127035	4127035	0	35884494	35884494	0	ICE	822424.8	0	1	1
2025	2a	1	10234.37	51357.41	51357.41	0	446570.6	446570.6	0	ICE	10234.37	0	1	2
2025	2a	1	187477.1	940784.3	0	940784.3	8173586	0	8173586	BEV	0	187477.1	1	3
2025	2a	1	7927.857	39783.02	0	39783.02	345235.7	0	345235.7	FCEV	0	7927.857	1	7
2025	2a	1	71067.46	356625.7	169753.8	186871.9	3105932	1478424	1627509	PHEV	33828.11	37239.35	1	8
2025	2a	1	782553.1	3971786	3971786	0	35386103	35386103	0	ICE	782553.1	0	1	1
2025	2a	1	9819.925	49840.24	49840.24	0	444064.1	444064.1	0	ICE	9819.925	0	1	2

2025	2a	1	238550.8	1210746	0	1210746	10778610	0	10778610	BEV	0	238550.8	1	3
2025	2a	1	12027.77	61046	0	61046	543008.1	0	543008.1	FCEV	0	12027.77	1	7
2025	2a	1	90163.91	457619.7	207759.3	249860.4	4083986	1854130	2229856	PHEV	40934.42	49229.49	1	8
2025	2a	1	727502.5	3734060	3734060	0	34000243	34000243	0	ICE	727502.5	0	1	1
2025	2a	1	9202.208	47232.27	47232.27	0	430076.3	430076.3	0	ICE	9202.208	0	1	2
2025	2a	1	287401.1	1475146	0	1475146	13425452	0	13425452	BEV	0	287401.1	1	3
2025	2a	1	16865.04	86563.34	0	86563.34	787810.9	0	787810.9	FCEV	0	16865.04	1	7
2025	2a	1	108311	555928.7	240161.2	315767.5	5067959	2189358	2878601	PHEV	46790.33	61520.62	1	8
2025	2a	1	600590.6	3117065	3117065	0	28958045	28958045	0	ICE	600590.6	0	1	1
2025	2a	1	7654.316	39725.9	39725.9	0	369042.3	369042.3	0	ICE	7654.316	0	1	2
2025	2a	1	301851.6	1566610	0	1566610	14554682	0	14554682	BEV	0	301851.6	1	3
2025	2a	1	20246.14	105077.5	0	105077.5	977136.8	0	977136.8	FCEV	0	20246.14	1	7
2025	2a	1	113426	588680.7	241359.1	347321.6	5469993	2242697	3227296	PHEV	46504.64	66921.32	1	8
2025	2a	1	1207.029	3291.002	3291.002	0	14677.02	14677.02	0	ICE	1207.029	0	2	1
2025	2a	1	1349.528	3756.842	3756.842	0	16731.45	16731.45	0	ICE	1349.528	0	2	1
2025	2a	1	2544.432	7229.011	7229.011	0	33019.72	33019.72	0	ICE	2544.432	0	2	1
2025	2a	1	4035.842	11697.48	11697.48	0	54363.06	54363.06	0	ICE	4035.842	0	2	1
2025	2a	1	6754.354	19963.78	19963.78	0	93643.38	93643.38	0	ICE	6754.354	0	2	1
2025	2a	1	6456.03	19451.89	19451.89	0	92587.65	92587.65	0	ICE	6456.03	0	2	1
2025	2a	1	6597.233	20255.29	20255.29	0	97140.4	97140.4	0	ICE	6597.233	0	2	1
2025	2a	1	8624.258	26972.88	26972.88	0	130784.9	130784.9	0	ICE	8624.258	0	2	1
2025	2a	1	7333.564	23356.3	23356.3	0	113226.6	113226.6	0	ICE	7333.564	0	2	1
2025	2a	1	9051.847	29347.36	29347.36	0	142012	142012	0	ICE	9051.847	0	2	1
2025	2a	1	7831.647	25839.97	25839.97	0	126897.9	126897.9	0	ICE	7831.647	0	2	1
2025	2a	1	9954.982	33416.09	33416.09	0	165849.3	165849.3	0	ICE	9954.982	0	2	1
2025	2a	1	11891.34	40597.16	40597.16	0	204331.2	204331.2	0	ICE	11891.34	0	2	1
2025	2a	1	11385.24	39521.57	39521.57	0	202115.9	202115.9	0	ICE	11385.24	0	2	1
2025	2a	1	12804.11	45180.44	45180.44	0	232032.7	232032.7	0	ICE	12804.11	0	2	1
2025	2a	1	17017.13	61021.38	61021.38	0	316730.5	316730.5	0	ICE	17017.13	0	2	1
2025	2a	1	22144.9	80677.62	80677.62	0	424703.7	424703.7	0	ICE	22144.9	0	2	1
2025	2a	1	20630.89	76343.77	76343.77	0	406792.4	406792.4	0	ICE	20630.89	0	2	1
2025	2a	1	22540.09	84700.02	84700.02	0	457954.4	457954.4	0	ICE	22540.09	0	2	1
2025	2a	1	25534.06	97413.45	97413.45	0	532587.7	532587.7	0	ICE	25534.06	0	2	1
2025	2a	1	27170.66	105213.8	105213.8	0	577559.1	577559.1	0	ICE	27170.66	0	2	1
2025	2a	1	19378.78	76151.25	76151.25	0	421956.1	421956.1	0	ICE	19378.78	0	2	1
2025	2a	1	11073.49	44783.4	44783.4	0	253763.6	253763.6	0	ICE	11073.49	0	2	1
2025	2a	1	17633.22	72322.48	72322.48	0	418183	418183	0	ICE	17633.22	0	2	1
2025	2a	1	25584.78	106401.5	106401.5	0	625610.2	625610.2	0	ICE	25584.78	0	2	1
2025	2a	1	43881.94	185009.3	185009.3	0	1107801	1107801	0	ICE	43881.94	0	2	1
2025	2a	1	32489.68	138840.1	138840.1	0	845289.2	845289.2	0	ICE	32489.68	0	2	1
2025	2a	1	17111.16	74102.46	74102.46	0	459599.1	459599.1	0	ICE	17111.16	0	2	1
2025	2a	1	14932.3	65522.04	65522.04	0	416244	416244	0	ICE	14932.3	0	2	1
2025	2a	1	107926.6	498308	498308	0	3499613	3499613	0	ICE	107926.6	0	2	1
2025	2a	1	99324.65	464282.1	464282.1	0	3327616	3327616	0	ICE	99324.65	0	2	1
2025	2a	1	87371.71	413415	413415	0	3042257	3042257	0	ICE	87371.71	0	2	1
2025	2a	1	11.83608	56.00453	56.00453	0	412.1096	412.1096	0	ICE	11.83608	0	2	2
2025	2a	1	2.943927	13.92972	0	13.92972	105.3682	0	105.3682	BEV	0	2.943927	2	3

2025	2a	1	0.06008	0.28428	0	0.28428	2.150371	0	2.150371	FCEV	0	0.06008	2	7
2025	2a	1	25.53406	120.819	72.49139	48.32759	889.0234	533.414	355.6094	PHEV	15.32043	10.21362	2	8
2025	2a	1	92868.9	444746.4	444746.4	0	3356847	3356847	0	ICE	92868.9	0	2	1
2025	2a	1	12.58077	60.24893	60.24893	0	454.7232	454.7232	0	ICE	12.58077	0	2	2
2025	2a	1	95538.21	463003	463003	0	3585853	3585853	0	ICE	95538.21	0	2	1
2025	2a	1	13.03267	63.15972	63.15972	0	489.0994	489.0994	0	ICE	13.03267	0	2	2
2025	2a	1	1270.317	6156.284	0	6156.284	48214.21	0	48214.21	BEV	0	1270.317	2	3
2025	2a	1	29.71501	144.0066	0	144.0066	1149.949	0	1149.949	FCEV	0	29.71501	2	7
2025	2a	1	975.5138	4727.593	2809.541	1918.052	36440.75	21656.22	14784.53	PHEV	579.7339	395.7799	2	8
2025	2a	1	97782.1	479479.4	479479.4	0	3810435	3810435	0	ICE	97782.1	0	2	1
2025	2a	1	13.49375	66.16727	66.16727	0	525.7065	525.7065	0	ICE	13.49375	0	2	2
2025	2a	1	2655.957	13023.62	0	13023.62	104788.9	0	104788.9	BEV	0	2655.957	2	3
2025	2a	1	70.09856	343.7318	0	343.7318	2818.087	0	2818.087	FCEV	0	70.09856	2	7
2025	2a	1	2045.569	10030.55	5903.696	4126.855	79274.45	46658.68	32615.77	PHEV	1203.964	841.6056	2	8
2025	2a	1	94107.64	466852.9	466852.9	0	3809364	3809364	0	ICE	94107.64	0	2	1
2025	2a	1	13.15735	65.27151	65.27151	0	532.3941	532.3941	0	ICE	13.15735	0	2	2
2025	2a	1	6632.561	32903.07	0	32903.07	271900	0	271900	BEV	0	6632.561	2	3
2025	2a	1	227.3573	1127.883	0	1127.883	9494.018	0	9494.018	FCEV	0	227.3573	2	7
2025	2a	1	4783.344	23729.4	13756.27	9973.129	191597.3	111071.7	80525.59	PHEV	2772.973	2010.371	2	8
2025	2a	1	88832.53	445773.2	445773.2	0	3733909	3733909	0	ICE	88832.53	0	2	1
2025	2a	1	12.47073	62.57974	62.57974	0	523.9593	523.9593	0	ICE	12.47073	0	2	2
2025	2a	1	10873.87	54566.47	0	54566.47	462604	0	462604	BEV	0	10873.87	2	3
2025	2a	1	459.824	2307.456	0	2307.456	19929.68	0	19929.68	FCEV	0	459.824	2	7
2025	2a	1	7336.592	36815.97	21016.66	15799.31	304382.2	173758.7	130623.4	PHEV	4188.146	3148.446	2	8
2025	2a	1	83279.08	422676.3	422676.3	0	3633973	3633973	0	ICE	83279.08	0	2	1
2025	2a	1	11.74617	59.61674	59.61674	0	512.3162	512.3162	0	ICE	11.74617	0	2	2
2025	2a	1	15409.92	78211.81	0	78211.81	679962.7	0	679962.7	BEV	0	15409.92	2	3
2025	2a	1	776.9707	3943.453	0	3943.453	34830.61	0	34830.61	FCEV	0	776.9707	2	7
2025	2a	1	9715.704	49311.28	27712.94	21598.34	418051.2	234944.8	183106.4	PHEV	5460.226	4255.479	2	8
2025	2a	1	77592.65	398260.6	398260.6	0	3513479	3513479	0	ICE	77592.65	0	2	1
2025	2a	1	10.99204	56.41893	56.41893	0	497.4804	497.4804	0	ICE	10.99204	0	2	2
2025	2a	1	20268.53	104032.5	0	104032.5	927241.1	0	927241.1	BEV	0	20268.53	2	3
2025	2a	1	1189.381	6104.75	0	6104.75	55063.4	0	55063.4	FCEV	0	1189.381	2	7
2025	2a	1	11924.9	61207.04	33856.24	27350.8	532249.9	294410.2	237839.6	PHEV	6596.172	5328.726	2	8
2025	2a	1	64812.11	336374.8	336374.8	0	3045545	3045545	0	ICE	64812.11	0	2	1
2025	2a	1	9.2187	47.84505	47.84505	0	432.958	432.958	0	ICE	9.2187	0	2	2
2025	2a	1	23003.5	119388.1	0	119388.1	1091138	0	1091138	BEV	0	23003.5	2	3
2025	2a	1	1542.917	8007.741	0	8007.741	73875.96	0	73875.96	FCEV	0	1542.917	2	7
2025	2a	1	12608.38	65437.47	35616.68	29820.79	583902.6	317809.9	266092.8	PHEV	6862.559	5745.817	2	8
2025	2a	1	921.1532	2458.779	2458.779	0	10515.55	10515.55	0	ICE	921.1532	0	3	1
2025	2a	1	2222.017	6312.994	6312.994	0	26978.82	26978.82	0	ICE	2222.017	0	3	1
2025	2a	1	3654.498	10801.56	10801.56	0	46683.38	46683.38	0	ICE	3654.498	0	3	1
2025	2a	1	3713.744	11189.44	11189.44	0	49195.79	49195.79	0	ICE	3713.744	0	3	1
2025	2a	1	4979.899	15289.63	15289.63	0	68208.26	68208.26	0	ICE	4979.899	0	3	1
2025	2a	1	6544.949	20469.72	20469.72	0	93490.05	93490.05	0	ICE	6544.949	0	3	1
2025	2a	1	7753.722	24694.44	24694.44	0	114263.9	114263.9	0	ICE	7753.722	0	3	1
2025	2a	1	9461.911	30676.84	30676.84	0	145969	145969	0	ICE	9461.911	0	3	1

2025	2a	1	8859.276	29230.56	29230.56	0	140770.4	140770.4	0	ICE	8859.276	0	3	1
2025	2a	1	12209.85	40985.05	40985.05	0	199595.9	199595.9	0	ICE	12209.85	0	3	1
2025	2a	1	13933.12	47567.83	47567.83	0	234923.7	234923.7	0	ICE	13933.12	0	3	1
2025	2a	1	18192.47	63151.51	63151.51	0	316864.7	316864.7	0	ICE	18192.47	0	3	1
2025	2a	1	18531.26	65389.22	65389.22	0	330968.5	330968.5	0	ICE	18531.26	0	3	1
2025	2a	1	29649.05	106317.9	106317.9	0	543549.8	543549.8	0	ICE	29649.05	0	3	1
2025	2a	1	34254.14	124793.7	124793.7	0	644590.1	644590.1	0	ICE	34254.14	0	3	1
2025	2a	1	39789.82	147240.6	147240.6	0	769533.5	769533.5	0	ICE	39789.82	0	3	1
2025	2a	1	54696.29	205535	205535	0	1089274	1089274	0	ICE	54696.29	0	3	1
2025	2a	1	55007.61	209856.2	209856.2	0	1125546	1125546	0	ICE	55007.61	0	3	1
2025	2a	1	56377.37	218311.8	218311.8	0	1188776	1188776	0	ICE	56377.37	0	3	1
2025	2a	1	67446.08	265037.5	265037.5	0	1463311	1463311	0	ICE	67446.08	0	3	1
2025	2a	1	86107.76	343303.9	343303.9	0	1921126	1921126	0	ICE	86107.76	0	3	1
2025	2a	1	102814.2	415801	415801	0	2364434	2364434	0	ICE	102814.2	0	3	1
2025	2a	1	102851.1	421842.7	421842.7	0	2439583	2439583	0	ICE	102851.1	0	3	1
2025	2a	1	112882.2	469452	469452	0	2760194	2760194	0	ICE	112882.2	0	3	1
2025	2a	1	92894.65	391650.4	391650.4	0	2343981	2343981	0	ICE	92894.65	0	3	1
2025	2a	1	60262.13	257521.8	257521.8	0	1572269	1572269	0	ICE	60262.13	0	3	1
2025	2a	1	111331.3	482136.7	482136.7	0	3000127	3000127	0	ICE	111331.3	0	3	1
2025	2a	1	153454.9	673350.9	673350.9	0	4283918	4283918	0	ICE	153454.9	0	3	1
2025	2a	1	153727.6	683354.4	683354.4	0	4462633	4462633	0	ICE	153727.6	0	3	1
2025	2a	1	213669.7	962052.2	962052.2	0	6422643	6422643	0	ICE	213669.7	0	3	1
2025	2a	1	205153.5	935461.1	935461.1	0	6406611	6406611	0	ICE	205153.5	0	3	1
2025	2a	1	2219.396	10120.02	10120.02	0	68081.36	68081.36	0	ICE	2219.396	0	3	2
2025	2a	1	248245.1	1146173	1146173	0	8033187	8033187	0	ICE	248245.1	0	3	1
2025	2a	1	243896	1140065	1140065	0	8184982	8184982	0	ICE	243896	0	3	1
2025	2a	1	1671.844	7814.853	7814.853	0	56617.85	56617.85	0	ICE	1671.844	0	3	2
2025	2a	1	276739.6	1309443	1309443	0	9595443	9595443	0	ICE	276739.6	0	3	1
2025	2a	1	2828.588	13383.97	13383.97	0	98351.31	98351.31	0	ICE	2828.588	0	3	2
2025	2a	1	291255.8	1394815	1394815	0	10483743	10483743	0	ICE	291255.8	0	3	1
2025	2a	1	2976.959	14256.57	14256.57	0	107455.4	107455.4	0	ICE	2976.959	0	3	2
2025	2a	1	1004.873	4812.307	2887.384	1924.923	36328.84	21797.3	14531.53	PHEV	602.9239	401.9492	3	8
2025	2a	1	297177.1	1440198	1440198	0	11136134	11136134	0	ICE	297177.1	0	3	1
2025	2a	1	3029.826	14683.32	14683.32	0	113800.3	113800.3	0	ICE	3029.826	0	3	2
2025	2a	1	3504.83	16985.32	0	16985.32	103508.7	0	103508.7	BEV	0	3504.83	3	3
2025	2a	1	81.98434	397.3174	0	397.3174	2198.909	0	2198.909	FCEV	0	81.98434	3	7
2025	2a	1	3044.153	14752.75	8767.351	5985.403	114286.9	67919.05	46367.81	PHEV	1809.096	1235.056	3	8
2025	2a	1	303159.6	1486558	1486558	0	11786896	11786896	0	ICE	303159.6	0	3	1
2025	2a	1	3097.846	15190.44	15190.44	0	120745	120745	0	ICE	3097.846	0	3	2
2025	2a	1	7265.227	35625.4	0	35625.4	254433.8	0	254433.8	BEV	0	7265.227	3	3
2025	2a	1	191.7509	940.26	0	940.26	5339.66	0	5339.66	FCEV	0	191.7509	3	7
2025	2a	1	5243.178	25710.19	15132.28	10577.91	204363.8	120282.7	84081.09	PHEV	3085.985	2157.193	3	8
2025	2a	1	291619.3	1446677	1446677	0	11759818	11759818	0	ICE	291619.3	0	3	1
2025	2a	1	3024.972	15006.4	15006.4	0	122458.9	122458.9	0	ICE	3024.972	0	3	2
2025	2a	1	19917.13	98805.7	0	98805.7	701169.3	0	701169.3	BEV	0	19917.13	3	3
2025	2a	1	682.7385	3386.957	0	3386.957	19728.02	0	19728.02	FCEV	0	682.7385	3	7
2025	2a	1	13537.48	67157.28	38932.03	28225.25	602690.6	349388.3	253302.2	PHEV	7847.872	5689.61	3	8

2025	2a	1	276160.4	1385809	1385809	0	11554102	11554102	0	ICE	276160.4	0	3	1
2025	2a	1	2878.096	14442.66	14442.66	0	120958.3	120958.3	0	ICE	2878.096	0	3	2
2025	2a	1	33463.46	167924	0	167924	1217490	0	1217490	BEV	0	33463.46	3	3
2025	2a	1	1415.072	7101.014	0	7101.014	42403.65	0	42403.65	FCEV	0	1415.072	3	7
2025	2a	1	21402.11	107398.6	61309.25	46089.34	1026134	585775.9	440358	PHEV	12217.55	9184.565	3	8
2025	2a	1	262396.7	1331774	1331774	0	11389527	11389527	0	ICE	262396.7	0	3	1
2025	2a	1	2749.43	13954.51	13954.51	0	119947.5	119947.5	0	ICE	2749.43	0	3	2
2025	2a	1	48457.06	245939.9	0	245939.9	1837677	0	1837677	BEV	0	48457.06	3	3
2025	2a	1	2443.213	12400.33	0	12400.33	76364.57	0	76364.57	FCEV	0	2443.213	3	7
2025	2a	1	29130.41	147849.1	83091.17	64757.89	1474800	828837.8	645962.5	PHEV	16371.29	12759.12	3	8
2025	2a	1	247605.3	1270886	1270886	0	11146152	11146152	0	ICE	247605.3	0	3	1
2025	2a	1	2607.468	13383.38	13383.38	0	118040	118040	0	ICE	2607.468	0	3	2
2025	2a	1	64778.06	332487	0	332487	2558807	0	2558807	BEV	0	64778.06	3	3
2025	2a	1	3801.253	19510.73	0	19510.73	129954.6	0	129954.6	FCEV	0	3801.253	3	7
2025	2a	1	36556.3	187632.9	103787.8	83845.09	1941705	1074040	867664.8	PHEV	20220.86	16335.44	3	8
2025	2a	1	205579.4	1066957	1066957	0	9595393	9595393	0	ICE	205579.4	0	3	1
2025	2a	1	2174.954	11288.01	11288.01	0	102147.2	102147.2	0	ICE	2174.954	0	3	2
2025	2a	1	73181.54	379812.2	0	379812.2	3011997	0	3011997	BEV	0	73181.54	3	3
2025	2a	1	4908.518	25475.21	0	25475.21	180076.6	0	180076.6	FCEV	0	4908.518	3	7
2025	2a	1	38710.13	200905.5	109350	91555.53	2152432	1171538	980894	PHEV	21069.37	17640.76	3	8
2025	2a	1	1725.032	4604.524	4604.524	0	19256.54	19256.54	0	ICE	1725.032	0	4	1
2025	2a	1	4275.346	13616.34	13616.34	0	56893.2	56893.2	0	ICE	4275.346	0	4	1
2025	2a	1	3820.984	12388.16	12388.16	0	53073.5	53073.5	0	ICE	3820.984	0	4	1
2025	2a	1	5015.263	16547.51	16547.51	0	71985.8	71985.8	0	ICE	5015.263	0	4	1
2025	2a	1	5903.499	19816.39	19816.39	0	88907.96	88907.96	0	ICE	5903.499	0	4	1
2025	2a	1	9986.531	34094.12	34094.12	0	155438	155438	0	ICE	9986.531	0	4	1
2025	2a	1	12058.79	41859.68	41859.68	0	195094.6	195094.6	0	ICE	12058.79	0	4	1
2025	2a	1	11893.6	41967.64	41967.64	0	199070.1	199070.1	0	ICE	11893.6	0	4	1
2025	2a	1	17098.6	61313.53	61313.53	0	296922.3	296922.3	0	ICE	17098.6	0	4	1
2025	2a	1	20871.11	76036.99	76036.99	0	374156.4	374156.4	0	ICE	20871.11	0	4	1
2025	2a	1	37326.41	138124.9	138124.9	0	693507.6	693507.6	0	ICE	37326.41	0	4	1
2025	2a	1	47242.94	177527.2	177527.2	0	903829	903829	0	ICE	47242.94	0	4	1
2025	2a	1	67222.61	256456.9	256456.9	0	1324490	1324490	0	ICE	67222.61	0	4	1
2025	2a	1	66.54684	253.8788	253.8788	0	1261.818	1261.818	0	ICE	66.54684	0	4	2
2025	2a	1	87311.89	338100.5	338100.5	0	1773474	1773474	0	ICE	87311.89	0	4	1
2025	2a	1	101445.4	398641.8	398641.8	0	2132308	2132308	0	ICE	101445.4	0	4	1
2025	2a	1	116358.8	463912	463912	0	2520799	2520799	0	ICE	116358.8	0	4	1
2025	2a	1	163.5287	651.9743	651.9743	0	3426.166	3426.166	0	ICE	163.5287	0	4	2
2025	2a	1	113490.5	458978.2	458978.2	0	2528930	2528930	0	ICE	113490.5	0	4	1
2025	2a	1	115455.3	473538.7	473538.7	0	2657081	2657081	0	ICE	115455.3	0	4	1
2025	2a	1	119189.2	495681.6	495681.6	0	2839516	2839516	0	ICE	119189.2	0	4	1
2025	2a	1	92667.25	390691.6	390691.6	0	2286451	2286451	0	ICE	92667.25	0	4	1
2025	2a	1	39909.3	170546.8	170546.8	0	1019585	1019585	0	ICE	39909.3	0	4	1
2025	2a	1	58030.2	251308.5	251308.5	0	1538519	1538519	0	ICE	58030.2	0	4	1
2025	2a	1	84689.28	371611.5	371611.5	0	2328840	2328840	0	ICE	84689.28	0	4	1
2025	2a	1	2393.735	10503.56	10503.56	0	65134.49	65134.49	0	ICE	2393.735	0	4	2
2025	2a	1	86148.42	382949.6	382949.6	0	2463963	2463963	0	ICE	86148.42	0	4	1

2025	2a	1	96598.64	434937.3	434937.3	0	2872892	2872892	0	ICE	96598.64	0	4	1
2025	2a	1	2093.856	9427.627	9427.627	0	61403.14	61403.14	0	ICE	2093.856	0	4	2
2025	2a	1	152046.8	693304.5	693304.5	0	4701289	4701289	0	ICE	152046.8	0	4	1
2025	2a	1	4721.92	21531.06	21531.06	0	145579.3	145579.3	0	ICE	4721.92	0	4	2
2025	2a	1	167288	772385.3	772385.3	0	5380247	5380247	0	ICE	167288	0	4	1
2025	2a	1	183997.6	860076.7	860076.7	0	6129432	6129432	0	ICE	183997.6	0	4	1
2025	2a	1	168080.1	795301	795301	0	5765353	5765353	0	ICE	168080.1	0	4	1
2025	2a	1	5860.979	27732.28	27732.28	0	201162.9	201162.9	0	ICE	5860.979	0	4	2
2025	2a	1	1406.206	6653.715	3992.229	2661.486	46096.57	27657.94	18438.63	PHEV	843.7234	562.4823	4	8
2025	2a	1	177471.7	849906.7	849906.7	0	6321597	6321597	0	ICE	177471.7	0	4	1
2025	2a	1	6188.467	29636.38	29636.38	0	220570.8	220570.8	0	ICE	6188.467	0	4	2
2025	2a	1	3.104508	14.8674	0	14.8674	80.14811	0	80.14811	BEV	0	3.104508	4	3
2025	2a	1	0.063357	0.303416	0	0.303416	1.635676	0	1.635676	FCEV	0	0.063357	4	7
2025	2a	1	3799.063	18193.6	10916.16	7277.439	132988.2	79792.94	53195.29	PHEV	2279.438	1519.625	4	8
2025	2a	1	184809.5	895634.7	895634.7	0	6831401	6831401	0	ICE	184809.5	0	4	1
2025	2a	1	6505.173	31525.76	31525.76	0	240804.2	240804.2	0	ICE	6505.173	0	4	2
2025	2a	1	1584.272	7677.795	0	7677.795	44179.48	0	44179.48	BEV	0	1584.272	4	3
2025	2a	1	37.059	179.5975	0	179.5975	993.8579	0	993.8579	FCEV	0	37.059	4	7
2025	2a	1	4121.95	19976.04	11871.48	8104.566	158091.4	93951.47	64139.94	PHEV	2449.616	1672.334	4	8
2025	2a	1	192475.7	943814.2	943814.2	0	7375396	7375396	0	ICE	192475.7	0	4	1
2025	2a	1	6881.274	33742.67	33742.67	0	264425.2	264425.2	0	ICE	6881.274	0	4	2
2025	2a	1	3319.004	16274.9	0	16274.9	103678.8	0	103678.8	BEV	0	3319.004	4	3
2025	2a	1	87.59835	429.5429	0	429.5429	2438.959	0	2438.959	FCEV	0	87.59835	4	7
2025	2a	1	4469.855	21918.16	12900.4	9017.756	174902.8	102942.8	71960	PHEV	2630.829	1839.026	4	8
2025	2a	1	184963.3	917573.4	917573.4	0	7348343	7348343	0	ICE	184963.3	0	4	1
2025	2a	1	6729.531	33384.13	33384.13	0	268532.2	268532.2	0	ICE	6729.531	0	4	2
2025	2a	1	9788.437	48558.87	0	48558.87	317209.8	0	317209.8	BEV	0	9788.437	4	3
2025	2a	1	335.5374	1664.547	0	1664.547	9694.069	0	9694.069	FCEV	0	335.5374	4	7
2025	2a	1	11683	57957.5	33598.79	24358.71	502519.3	291317.6	211201.7	PHEV	6772.802	4910.198	4	8
2025	2a	1	176078.4	883584.5	883584.5	0	7254739	7254739	0	ICE	176078.4	0	4	1
2025	2a	1	6441.413	32323.85	32323.85	0	266752.8	266752.8	0	ICE	6441.413	0	4	2
2025	2a	1	17322.33	86925.71	0	86925.71	590127.8	0	590127.8	BEV	0	17322.33	4	3
2025	2a	1	732.5107	3675.834	0	3675.834	21949.34	0	21949.34	FCEV	0	732.5107	4	7
2025	2a	1	18345.79	92061.56	52554	39507.56	839794.2	479402.5	360391.7	PHEV	10472.83	7872.965	4	8
2025	2a	1	167376	849503.5	849503.5	0	7147504	7147504	0	ICE	167376	0	4	1
2025	2a	1	6161.597	31272.69	31272.69	0	264629.8	264629.8	0	ICE	6161.597	0	4	2
2025	2a	1	26103.2	132484.7	0	132484.7	934881.4	0	934881.4	BEV	0	26103.2	4	3
2025	2a	1	1316.128	6679.9	0	6679.9	40882.8	0	40882.8	FCEV	0	1316.128	4	7
2025	2a	1	24535.51	124528	69984.75	54543.28	1183943	665376	518567	PHEV	13788.96	10746.55	4	8
2025	2a	1	156492.9	803232.8	803232.8	0	6924086	6924086	0	ICE	156492.9	0	4	1
2025	2a	1	5794.618	29742.09	29742.09	0	258015.8	258015.8	0	ICE	5794.618	0	4	2
2025	2a	1	35808.97	183797.1	0	183797.1	1346844	0	1346844	BEV	0	35808.97	4	3
2025	2a	1	2101.313	10785.43	0	10785.43	67686.7	0	67686.7	FCEV	0	2101.313	4	7
2025	2a	1	29846.83	153195.1	84738.79	68456.34	1513483	837172.3	676310.7	PHEV	16509.56	13337.27	4	8
2025	2a	1	124423.6	645758.4	645758.4	0	5692391	5692391	0	ICE	124423.6	0	4	1
2025	2a	1	4632.028	24040.22	24040.22	0	213390.7	213390.7	0	ICE	4632.028	0	4	2
2025	2a	1	39991.92	207558.1	0	207558.1	1575309	0	1575309	BEV	0	39991.92	4	3

2025	2a	1	2682.385	13921.58	0	13921.58	93431.13	0	93431.13	FCEV	0	2682.385	4	7
2025	2a	1	29501.84	153114.6	83338.07	69776.5	1564049	851289.3	712759.3	PHEV	16057.43	13444.41	4	8
2025	2a	1	4549.585	12143.93	12143.93	0	23176.51	23176.51	0	ICE	4549.585	0	1	1
2025	2a	1	1326.088	3539.648	3539.648	0	6773.622	6773.622	0	ICE	1326.088	0	1	2
2025	2a	1	1545.277	4213.245	4213.245	0	8456.312	8456.312	0	ICE	1545.277	0	1	2
2025	2a	1	1559.06	4340.143	4340.143	0	8769.478	8769.478	0	ICE	1559.06	0	1	2
2025	2a	1	7849.68	22301.81	22301.81	0	48662.38	48662.38	0	ICE	7849.68	0	1	1
2025	2a	1	1228.422	3560.458	3560.458	0	7867.272	7867.272	0	ICE	1228.422	0	1	2
2025	2a	1	12618.2	38018.38	38018.38	0	93114.84	93114.84	0	ICE	12618.2	0	1	1
2025	2a	1	80.23733	260.1406	260.1406	0	771.9831	771.9831	0	ICE	80.23733	0	1	2
2025	2a	1	43.55333	143.7012	143.7012	0	423.0065	423.0065	0	ICE	43.55333	0	1	2
2025	2a	1	23.94676	80.38256	80.38256	0	253.5483	253.5483	0	ICE	23.94676	0	1	2
2025	2a	1	74.45053	266.9706	266.9706	0	1021.881	1021.881	0	ICE	74.45053	0	1	2
2025	2a	1	144.1486	541.6744	541.6744	0	2387.357	2387.357	0	ICE	144.1486	0	1	2
2025	2a	1	25.05962	95.60347	0	95.60347	449.0056	0	449.0056	BEV	0	25.05962	1	3
2025	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2025	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2025	2a	1	429.5366	1663.308	1663.308	0	7806.672	7806.672	0	ICE	429.5366	0	1	2
2025	2a	1	644.6758	2533.331	2533.331	0	12418.13	12418.13	0	ICE	644.6758	0	1	2
2025	2a	1	255.0926	1017.031	1017.031	0	5217.987	5217.987	0	ICE	255.0926	0	1	2
2025	2a	1	527.0068	2131.321	2131.321	0	11072.03	11072.03	0	ICE	527.0068	0	1	2
2025	2a	1	1801.903	7700.18	7700.18	0	45561.45	45561.45	0	ICE	1801.903	0	1	2
2025	2a	1	5320.556	23651.09	23651.09	0	152949.1	152949.1	0	ICE	5320.556	0	1	2
2025	2a	1	7672.696	34546.47	34546.47	0	231377.1	231377.1	0	ICE	7672.696	0	1	2
2025	2a	1	7208.453	32456.2	0	32456.2	216864.9	0	216864.9	BEV	0	7208.453	1	3
2025	2a	1	0.423503	1.906833	0	1.906833	12.74102	0	12.74102	FCEV	0	0.423503	1	7
2025	2a	1	7534.55	33924.46	20354.68	13569.79	220386.3	132231.8	88154.52	PHEV	4520.73	3013.82	1	8
2025	2a	1	9157.349	41755.77	0	41755.77	287565.5	0	287565.5	BEV	0	9157.349	1	3
2025	2a	1	1.283081	5.850605	0	5.850605	40.2922	0	40.2922	FCEV	0	1.283081	1	7
2025	2a	1	11561.84	52719.8	31631.88	21087.92	353190.6	211914.4	141276.3	PHEV	6937.105	4624.737	1	8
2025	2a	1	8235.319	38023.29	38023.29	0	271904.6	271904.6	0	ICE	8235.319	0	1	2
2025	2a	1	21369.81	98666.53	0	98666.53	701581.9	0	701581.9	BEV	0	21369.81	1	3
2025	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2025	2a	1	10161.92	46918.59	28151.15	18767.43	324859.7	194915.8	129943.9	PHEV	6097.15	4064.767	1	8
2025	2a	1	967.2216	2581.747	2581.747	0	11496.16	11496.16	0	ICE	967.2216	0	2	1
2025	2a	1	197.236	537.7698	537.7698	0	2274.727	2274.727	0	ICE	197.236	0	2	2
2025	2a	1	95.84891	266.8261	266.8261	0	1116.622	1116.622	0	ICE	95.84891	0	2	2
2025	2a	1	74.77174	216.7184	216.7184	0	919.0642	919.0642	0	ICE	74.77174	0	2	2
2025	2a	1	17039.66	67935.59	67935.59	0	380243.6	380243.6	0	ICE	17039.66	0	2	1
2025	2a	1	28836.77	128186.1	128186.1	0	835161.6	835161.6	0	ICE	28836.77	0	2	1
2025	2a	1	41376.59	186298.9	186298.9	0	1245996	1245996	0	ICE	41376.59	0	2	1
2025	2a	1	50740.01	231364.8	231364.8	0	1583818	1583818	0	ICE	50740.01	0	2	1
2025	2a	1	22.07438	58.92182	58.92182	0	257.974	257.974	0	ICE	22.07438	0	3	2
2025	2a	1	919.9979	2508.402	2508.402	0	10538.83	10538.83	0	ICE	919.9979	0	3	1
2025	2a	1	1201.054	3343.517	3343.517	0	14204.34	14204.34	0	ICE	1201.054	0	3	1
2025	2a	1	2420.595	7015.851	7015.851	0	29962.38	29962.38	0	ICE	2420.595	0	3	1
2025	2a	1	28.91906	121.9248	121.9248	0	739.6171	739.6171	0	ICE	28.91906	0	3	2

2025	2a	1	1045.818	4648.9	4648.9	0	29857.59	29857.59	0	ICE	1045.818	0	3	2
2025	2a	1	777.464	3500.547	3500.547	0	23001.03	23001.03	0	ICE	777.464	0	3	2
2025	2a	1	3217.112	14853.73	14853.73	0	102924.7	102924.7	0	ICE	3217.112	0	3	2
2025	2a	1	3454.307	16146.78	0	16146.78	81351.4	0	81351.4	BEV	0	3454.307	3	3
2025	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2025	2a	1	314.3673	1469.476	881.6853	587.7902	10165.37	6099.224	4066.15	PHEV	188.6204	125.7469	3	8
2025	2a	1	1668.814	4550.072	4550.072	0	19088.51	19088.51	0	ICE	1668.814	0	4	1
2025	2a	1	337.6609	920.6426	920.6426	0	3298.385	3298.385	0	ICE	337.6609	0	4	2
2025	2a	1	1067.877	2972.777	2972.777	0	11770.72	11770.72	0	ICE	1067.877	0	4	1
2025	2a	1	1671.254	4748.216	4748.216	0	19109.86	19109.86	0	ICE	1671.254	0	4	1
2025	2a	1	223.4643	634.8866	634.8866	0	2339.027	2339.027	0	ICE	223.4643	0	4	2
2025	2a	1	2129.782	6172.961	6172.961	0	24784.33	24784.33	0	ICE	2129.782	0	4	1
2025	2a	1	111.6763	323.6827	323.6827	0	1172.72	1172.72	0	ICE	111.6763	0	4	2
2025	2a	1	2609.533	7712.971	7712.971	0	30432.16	30432.16	0	ICE	2609.533	0	4	1
2025	2a	1	2585.749	7790.811	7790.811	0	30968.5	30968.5	0	ICE	2585.749	0	4	1
2025	2a	1	3102.674	9526.046	9526.046	0	39128.57	39128.57	0	ICE	3102.674	0	4	1
2025	2a	1	9.665391	29.67536	29.67536	0	117.894	117.894	0	ICE	9.665391	0	4	2
2025	2a	1	3911.739	12234.2	12234.2	0	50728.78	50728.78	0	ICE	3911.739	0	4	1
2025	2a	1	38.25389	130.5992	130.5992	0	573.5865	573.5865	0	ICE	38.25389	0	4	2
2025	2a	1	34.37564	127.2057	127.2057	0	590.7642	590.7642	0	ICE	34.37564	0	4	2
2025	2a	1	290.3386	1174.187	1174.187	0	6399.014	6399.014	0	ICE	290.3386	0	4	2
2025	2a	1	416.3201	1707.533	1707.533	0	9498.934	9498.934	0	ICE	416.3201	0	4	2
2025	2a	1	582.2005	2421.244	2421.244	0	13892.15	13892.15	0	ICE	582.2005	0	4	2
2025	2a	1	434.5367	1832.037	1832.037	0	10774.29	10774.29	0	ICE	434.5367	0	4	2
2025	2a	1	620.2458	2650.534	2650.534	0	15643.12	15643.12	0	ICE	620.2458	0	4	2
2025	2a	1	4076.504	18121	18121	0	117037.4	117037.4	0	ICE	4076.504	0	4	2
2025	2a	1	9106.463	42045.45	42045.45	0	295142.5	295142.5	0	ICE	9106.463	0	4	2
2025	2a	1	5889.394	27529.32	27529.32	0	199334.2	199334.2	0	ICE	5889.394	0	4	2
2025	2a	1	1272.013	3613.929	3613.929	0	7582.339	7582.339	0	ICE	1272.013	0	1	2
2025	2a	1	60.60685	193.0237	193.0237	0	519.5842	519.5842	0	ICE	60.60685	0	1	2
2025	2a	1	162.9707	603.0667	603.0667	0	2512.586	2512.586	0	ICE	162.9707	0	1	2
2025	2a	1	19.48944	78.81919	0	78.81919	417.7686	0	417.7686	BEV	0	19.48944	1	3
2025	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2025	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2025	2a	1	1489.72	6622.146	0	6622.146	43031.5	0	43031.5	BEV	0	1489.72	1	3
2025	2a	1	5.629845	25.02596	0	25.02596	162.6217	0	162.6217	FCEV	0	5.629845	1	7
2025	2a	1	3131.445	13919.99	8351.996	5567.997	88013.33	52808	35205.33	PHEV	1878.867	1252.578	1	8
2025	2a	1	14199.02	66371.76	0	66371.76	485974.6	0	485974.6	BEV	0	14199.02	1	3
2025	2a	1	432.2998	2020.738	0	2020.738	14795.86	0	14795.86	FCEV	0	432.2998	1	7
2025	2a	1	10210.99	47730.17	28638.1	19092.07	341684.1	205010.5	136673.6	PHEV	6126.596	4084.398	1	8
2025	2a	1	7.303554	24.93441	24.93441	0	106.0012	106.0012	0	ICE	7.303554	0	2	2
2025	2a	1	4.452324	15.45535	15.45535	0	67.55883	67.55883	0	ICE	4.452324	0	2	2
2025	2a	1	9.281808	33.81521	33.81521	0	166.1406	166.1406	0	ICE	9.281808	0	2	2
2025	2a	1	18.2109	53.82578	53.82578	0	247.5309	247.5309	0	ICE	18.2109	0	3	2
2025	2a	1	83.72792	338.6125	338.6125	0	1914.517	1914.517	0	ICE	83.72792	0	3	2
2025	2a	1	95.09659	390.0377	390.0377	0	2286.107	2286.107	0	ICE	95.09659	0	3	2
2025	2a	1	305.2154	849.6647	849.6647	0	3015.248	3015.248	0	ICE	305.2154	0	4	2

2025	2a	1	25.87491	94.26669	94.26669	0	425.1458	425.1458	0	ICE	25.87491	0	4	2
2025	2a	1	92.46186	363.34	363.34	0	1902.668	1902.668	0	ICE	92.46186	0	4	2
2025	2a	1	1104.725	4784.179	4784.179	0	28819.44	28819.44	0	ICE	1104.725	0	4	2
2025	2a	1	261.0446	771.5669	771.5669	0	1741.106	1741.106	0	ICE	261.0446	0	1	2
2025	2a	1	604.3346	1820.848	1820.848	0	4396.716	4396.716	0	ICE	604.3346	0	1	2
2025	2a	1	103.4851	359.2277	359.2277	0	1254.985	1254.985	0	ICE	103.4851	0	1	2
2025	2a	1	83.29578	293.9167	293.9167	0	1070.886	1070.886	0	ICE	83.29578	0	1	2
2025	2a	1	148.862	542.3294	542.3294	0	2191.894	2191.894	0	ICE	148.862	0	1	2
2025	2a	1	53.43898	206.9334	0	206.9334	1003.251	0	1003.251	BEV	0	53.43898	1	3
2025	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2025	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2025	2a	1	1797.605	7887.785	0	7887.785	49823.56	0	49823.56	BEV	0	1797.605	1	3
2025	2a	1	17.76005	77.93005	0	77.93005	492.2488	0	492.2488	FCEV	0	17.76005	1	7
2025	2a	1	499.6815	2192.572	1315.543	877.029	13409.21	8045.527	5363.685	PHEV	299.8089	199.8726	1	8
2025	2a	1	1182.108	5525.633	5525.633	0	40183.22	40183.22	0	ICE	1182.108	0	1	2
2025	2a	1	64.10921	171.1229	171.1229	0	734.6928	734.6928	0	ICE	64.10921	0	2	2
2025	2a	1	79.30987	225.3281	225.3281	0	984.0848	984.0848	0	ICE	79.30987	0	2	2
2025	2a	1	30.63482	90.54702	90.54702	0	384.3019	384.3019	0	ICE	30.63482	0	2	2
2025	2a	1	534.1596	2435.666	0	2435.666	16751.06	0	16751.06	BEV	0	534.1596	2	3
2025	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2025	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2025	2a	1	38.74422	107.8569	107.8569	0	443.731	443.731	0	ICE	38.74422	0	3	2
2025	2a	1	30.78495	87.46344	87.46344	0	372.5161	372.5161	0	ICE	30.78495	0	3	2
2025	2a	1	1.481227	4.802345	4.802345	0	23.20938	23.20938	0	ICE	1.481227	0	3	2
2025	2a	1	70.2501	207.6375	207.6375	0	804.3336	804.3336	0	ICE	70.2501	0	4	2
2025	2a	1	25.99171	87.24689	87.24689	0	356.8277	356.8277	0	ICE	25.99171	0	4	2
2025	2a	1	48.91337	169.793	169.793	0	739.5591	739.5591	0	ICE	48.91337	0	4	2
2025	2a	1	49.25412	173.7976	173.7976	0	766.4805	766.4805	0	ICE	49.25412	0	4	2
2025	2a	1	30.07131	94.04984	94.04984	0	279.021	279.021	0	ICE	30.07131	0	1	2
2025	2a	1	144.1318	607.6696	607.6696	0	3431.567	3431.567	0	ICE	144.1318	0	1	2
2025	2a	1	14.8298	58.27548	58.27548	0	304.9648	304.9648	0	ICE	14.8298	0	2	2
2025	2a	1	0.71142	2.632581	2.632581	0	13.14065	13.14065	0	ICE	0.71142	0	3	2
2025	2a	1	59.4172	257.3151	257.3151	0	1600.799	1600.799	0	ICE	59.4172	0	3	2
2025	2a	1	177.5789	809.726	0	809.726	3871.662	0	3871.662	BEV	0	177.5789	3	3
2025	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2025	2a	1	80.40217	366.6186	219.9712	146.6474	2415.089	1449.053	966.0355	PHEV	48.2413	32.16087	3	8
2025	2a	1	40.20415	107.3145	107.3145	0	502.841	502.841	0	ICE	40.20415	0	4	2
2025	2a	1	13.82426	44.82019	44.82019	0	182.6271	182.6271	0	ICE	13.82426	0	4	2
2025	2a	1	61.77361	221.5127	221.5127	0	997.6577	997.6577	0	ICE	61.77361	0	4	2
2025	2a	1	33.44522	129.5109	129.5109	0	669.8577	669.8577	0	ICE	33.44522	0	4	2
2025	2a	1	144.0503	632.0839	632.0839	0	3978.968	3978.968	0	ICE	144.0503	0	3	2
2025	2a	1	10.65629	33.32818	33.32818	0	130.0071	130.0071	0	ICE	10.65629	0	4	2
2025	2a	1	12.46486	46.83983	46.83983	0	232.3444	232.3444	0	ICE	12.46486	0	4	2
2025	2a	1	16.00589	61.98009	0	61.98009	205.8514	0	205.8514	BEV	0	16.00589	3	3
2025	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2025	2a	1	0	0	0	0	0	0	0	PHEV	0	0	3	8
2025	2a	1	79.91324	309.4504	0	309.4504	1039.646	0	1039.646	BEV	0	79.91324	4	3

2025	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2025	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2025	2a	1	35.34567	108.5207	108.5207	0	286.4463	286.4463	0	ICE	35.34567	0	1	2
2025	2a	1	16.1218	55.03999	55.03999	0	188.7854	188.7854	0	ICE	16.1218	0	1	2
2025	2a	1	88.69309	368.8551	368.8551	0	2012.146	2012.146	0	ICE	88.69309	0	1	2
2025	2a	1	285.9088	1238.171	0	1238.171	7625.924	0	7625.924	BEV	0	285.9088	1	3
2025	2a	1	29.02627	125.7026	0	125.7026	774.2055	0	774.2055	FCEV	0	29.02627	1	7
2025	2a	1	30.47758	131.9878	79.19265	52.7951	783.0547	469.8328	313.2219	PHEV	18.28655	12.19103	1	8
2025	2a	1	21.05191	63.429	63.429	0	260.3241	260.3241	0	ICE	21.05191	0	2	2
2025	2a	1	9.031217	29.79787	29.79787	0	114.924	114.924	0	ICE	9.031217	0	2	2
2025	2a	1	225.4071	1001.987	0	1001.987	6471.251	0	6471.251	BEV	0	225.4071	2	3
2025	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2025	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2025	2a	1	133.1248	362.9688	362.9688	0	1487.414	1487.414	0	ICE	133.1248	0	3	2
2025	2a	1	6.345435	19.11867	19.11867	0	90.19375	90.19375	0	ICE	6.345435	0	3	2
2025	2a	1	51.85097	221.5779	221.5779	0	1304.324	1304.324	0	ICE	51.85097	0	3	2
2025	2a	1	23.19787	76.53974	76.53974	0	326.2833	326.2833	0	ICE	23.19787	0	4	2
2025	2a	1	26.65209	109.3133	0	109.3133	598.624	0	598.624	BEV	0	26.65209	1	3
2025	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2025	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2025	2a	1	170.0253	716.8386	0	716.8386	4098.932	0	4098.932	BEV	0	170.0253	1	3
2025	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2025	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2025	2a	1	146.056	624.1499	0	624.1499	3779.552	0	3779.552	BEV	0	146.056	1	3
2025	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2025	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2025	2a	1	10.22977	31.99421	31.99421	0	120.0467	120.0467	0	ICE	10.22977	0	2	2
2025	2a	1	9.479046	33.44767	33.44767	0	168.0053	168.0053	0	ICE	9.479046	0	2	2
2025	2a	1	23.11962	98.79847	98.79847	0	586.4264	586.4264	0	ICE	23.11962	0	2	2
2025	2a	1	277.6766	1250.244	0	1250.244	8329.925	0	8329.925	BEV	0	277.6766	2	3
2025	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2025	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2025	2a	1	15.53029	64.58705	64.58705	0	381.1023	381.1023	0	ICE	15.53029	0	3	2
2025	2a	1	17.52638	52.80664	52.80664	0	221.8423	221.8423	0	ICE	17.52638	0	4	2
2025	2a	1	10.716	34.12885	34.12885	0	147.233	147.233	0	ICE	10.716	0	4	2
2025	2a	1	15.09447	59.31552	0	59.31552	295.8271	0	295.8271	BEV	0	15.09447	1	3
2025	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2025	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2025	2a	1	50.67054	210.7276	0	210.7276	1189.337	0	1189.337	BEV	0	50.67054	1	3
2025	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2025	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2025	2a	1	34.2894	144.5665	0	144.5665	838.6221	0	838.6221	BEV	0	34.2894	2	3
2025	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2025	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2025	2a	1	4.572537	20.32598	20.32598	0	138.6099	138.6099	0	ICE	4.572537	0	2	2
2025	2a	1	1.43141	5.870915	0	5.870915	23.85068	0	23.85068	BEV	0	1.43141	4	3
2025	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7

2025	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2025	2a	1	9.046713	34.51357	34.51357	0	166.5541	166.5541	0	ICE	9.046713	0	2	2
2025	2a	1	4.877181	15.25368	15.25368	0	70.75513	70.75513	0	ICE	4.877181	0	3	2
2025	2a	1	1.179187	4.633758	4.633758	0	28.44985	28.44985	0	ICE	1.179187	0	3	2
2025	2a	1	3.07	10.30513	0	10.30513	36.39995	0	36.39995	BEV	0	3.07	1	3
2025	2a	1	6.110397	18.76057	18.76057	0	90.84378	90.84378	0	ICE	6.110397	0	3	2
2025	2a	1	1.523114	5.025408	5.025408	0	23.26968	23.26968	0	ICE	1.523114	0	3	2
2025	2a	1	26.95731	115.1983	0	115.1983	494.1025	0	494.1025	BEV	0	26.95731	3	3
2025	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2025	2a	1	0	0	0	0	0	0	0	PHEV	0	0	3	8
2025	2a	1	14.44173	63.36945	0	63.36945	283.5149	0	283.5149	BEV	0	14.44173	3	3
2025	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2025	2a	1	9.998122	43.87116	26.3227	17.54846	275.9105	165.5463	110.3642	PHEV	5.998873	3.999249	3	8
2025	2a	1	1.672395	7.721616	0	7.721616	37.58627	0	37.58627	BEV	0	1.672395	4	3
2025	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2025	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2025	2a	1	2.465893	8.136043	0	8.136043	28.0925	0	28.0925	BEV	0	2.465893	1	3
2025	2a	1	11.60443	35.62872	35.62872	0	134.7341	134.7341	0	ICE	11.60443	0	2	2
2025	2a	1	53.43729	200.804	0	200.804	900.1645	0	900.1645	BEV	0	53.43729	2	3
2025	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2025	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2025	2a	1	20.18278	76.99811	0	76.99811	362.4217	0	362.4217	BEV	0	20.18278	2	3
2025	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2025	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2025	2a	1	16.81907	65.12899	65.12899	0	354.5872	354.5872	0	ICE	16.81907	0	2	2
2025	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2025	2a	1	8.095114	33.20203	0	33.20203	181.3975	0	181.3975	BEV	0	8.095114	2	3
2025	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2025	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2025	2a	1	15.08052	62.71655	62.71655	0	354.667	354.667	0	ICE	15.08052	0	2	2
2025	2a	1	4.424518	18.4006	0	18.4006	104.1767	0	104.1767	BEV	0	4.424518	2	3
2025	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2025	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2025	2a	1	17.86874	75.33586	75.33586	0	449.3021	449.3021	0	ICE	17.86874	0	2	2
2025	2a	1	14.49829	61.95639	0	61.95639	373.1966	0	373.1966	BEV	0	14.49829	2	3
2025	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2025	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2025	2a	1	18.09141	52.43613	52.43613	0	246.7957	246.7957	0	ICE	18.09141	0	3	2
2025	2a	1	12.46707	52.56204	0	52.56204	221.2914	0	221.2914	BEV	0	12.46707	3	3
2025	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2025	2a	1	0	0	0	0	0	0	0	PHEV	0	0	3	8
2025	2a	1	12.46335	56.11649	0	56.11649	263.1955	0	263.1955	BEV	0	12.46335	3	3
2025	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2025	2a	1	9.530799	42.91261	25.74757	17.16505	275.6899	165.4139	110.2759	PHEV	5.718479	3.81232	3	8
2025	2a	1	3.384333	12.71748	0	12.71748	41.14739	0	41.14739	BEV	0	3.384333	4	3
2025	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2025	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2025	2a	1	11.5199	45.26883	0	45.26883	157.2955	0	157.2955	BEV	0	11.5199	4	3

2025	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2025	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2025	2a	1	1.875654	7.585519	0	7.585519	28.76169	0	28.76169	BEV	0	1.875654	4	3
2025	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2025	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2025	2a	1	12.1879	40.91137	40.91137	0	165.1824	165.1824	0	ICE	12.1879	0	2	2
2025	2a	1	1.155365	4.672527	4.672527	0	25.6653	25.6653	0	ICE	1.155365	0	2	2
2025	2a	1	69.64637	269.6937	0	269.6937	1284.595	0	1284.595	BEV	0	69.64637	2	3
2025	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2025	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2025	2a	1	4.569592	18.21855	0	18.21855	93.46821	0	93.46821	BEV	0	4.569592	2	3
2025	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2025	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2025	2a	1	34.04442	125.98	0	125.98	547.1157	0	547.1157	BEV	0	34.04442	2	3
2025	2a	1	0.933797	3.348485	3.348485	0	16.07857	16.07857	0	ICE	0.933797	0	3	2
2025	2a	1	10.10564	37.39552	37.39552	0	174.0068	174.0068	0	ICE	10.10564	0	2	2
2025	2a	1	0.715812	2.771859	2.771859	0	13.85055	13.85055	0	ICE	0.715812	0	3	2
2025	2a	1	4.755328	15.41744	15.41744	0	72.36456	72.36456	0	ICE	4.755328	0	2	2
2025	2a	1	3.349475	11.62703	0	11.62703	44.04441	0	44.04441	BEV	0	3.349475	1	3
2025	2a	1	10.50492	43.08581	43.08581	0	245.4499	245.4499	0	ICE	10.50492	0	2	2
2025	2a	1	1.925606	7.235946	0	7.235946	24.57191	0	24.57191	BEV	0	1.925606	3	3
2025	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2025	2a	1	0	0	0	0	0	0	0	PHEV	0	0	3	8
2025	2a	1	1.022956	3.082147	0	3.082147	9.284124	0	9.284124	BEV	0	1.022956	2	3
2025	2a	1	2.407539	10.15035	0	10.15035	41.63302	0	41.63302	BEV	0	2.407539	4	3
2025	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2025	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2025	2a	1	6.010278	21.89646	0	21.89646	92.92418	0	92.92418	BEV	0	6.010278	1	3
2025	2a	1	5.722855	21.50506	0	21.50506	96.92948	0	96.92948	BEV	0	5.722855	1	3
2025	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2025	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2025	2a	1	16.84798	67.17137	0	67.17137	343.5314	0	343.5314	BEV	0	16.84798	1	3
2025	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2025	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2025	2a	1	11.10739	39.82977	39.82977	0	181.1881	181.1881	0	ICE	11.10739	0	2	2
2025	2a	1	10.43555	38.0185	0	38.0185	159.4677	0	159.4677	BEV	0	10.43555	2	3
2025	2a	1	1.720573	6.95834	0	6.95834	36.53353	0	36.53353	BEV	0	1.720573	2	3
2025	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2025	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2025	2a	1	2.069097	6.945378	6.945378	0	29.59846	29.59846	0	ICE	2.069097	0	3	2
2025	2a	1	5.658317	20.29004	0	20.29004	82.8712	0	82.8712	BEV	0	5.658317	1	3
2025	2a	1	7.601385	28.12862	0	28.12862	123.5379	0	123.5379	BEV	0	7.601385	1	3
2025	2a	1	1.722243	4.597081	0	4.597081	12.21031	0	12.21031	BEV	0	1.722243	2	3
2025	2a	1	7.967986	25.37684	25.37684	0	118.0838	118.0838	0	ICE	7.967986	0	2	2
2025	2a	1	2.707881	8.934463	0	8.934463	30.98771	0	30.98771	BEV	0	2.707881	2	3
2025	2a	1	1.211183	4.065601	0	4.065601	14.31785	0	14.31785	BEV	0	1.211183	2	3
2025	2a	1	1.198031	4.158726	0	4.158726	15.82135	0	15.82135	BEV	0	1.198031	2	3

2025	2a	1	8.734368	32.82157	32.82157	0	155.8147	155.8147	0	ICE	8.734368	0	2	2
2025	2a	1	5.334101	23.10013	23.10013	0	143.3551	143.3551	0	ICE	5.334101	0	2	2
2025	2a	1	7.447432	33.53221	33.53221	0	221.3271	221.3271	0	ICE	7.447432	0	2	2
2025	2a	1	2.944208	9.376859	9.376859	0	38.82916	38.82916	0	ICE	2.944208	0	3	2
2025	2a	1	1.159122	3.890849	0	3.890849	9.575089	0	9.575089	BEV	0	1.159122	3	3
2025	2a	1	1.403757	4.792442	4.792442	0	24.36778	24.36778	0	ICE	1.403757	0	3	2
2025	2a	1	7.24222	26.79954	0	26.79954	80.61713	0	80.61713	BEV	0	7.24222	3	3
2025	2a	1	1.085554	4.141431	4.141431	0	20.01136	20.01136	0	ICE	1.085554	0	3	2
2025	2a	1	0.693918	2.647324	0	2.647324	8.523452	0	8.523452	BEV	0	0.693918	3	3
2025	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2025	2a	1	0	0	0	0	0	0	0	PHEV	0	0	3	8
2025	2a	1	18.47346	80.00211	0	80.00211	345.0555	0	345.0555	BEV	0	18.47346	3	3
2025	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2025	2a	1	0	0	0	0	0	0	0	PHEV	0	0	3	8
2025	2a	1	45.03777	200.2033	0	200.2033	903.6675	0	903.6675	BEV	0	45.03777	3	3
2025	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2025	2a	1	11.54815	51.33417	30.8005	20.53367	327.5845	196.5507	131.0338	PHEV	6.928888	4.619259	3	8
2025	2a	1	1.194813	3.326143	0	3.326143	6.507733	0	6.507733	BEV	0	1.194813	4	3
2025	2a	1	0.804416	2.469775	0	2.469775	5.250522	0	5.250522	BEV	0	0.804416	4	3
2025	2a	1	1.555753	5.400487	0	5.400487	14.18354	0	14.18354	BEV	0	1.555753	4	3
2025	2a	1	2.565832	11.25872	11.25872	0	74.38117	74.38117	0	ICE	2.565832	0	2	2
2025	2a	1	0.857474	3.271296	0	3.271296	10.89116	0	10.89116	BEV	0	0.857474	4	3
2025	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2025	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2025	2a	1	1.072599	3.170271	0	3.170271	9.434727	0	9.434727	BEV	0	1.072599	2	3
2025	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2025	2a	1	1.072599	3.170271	0	3.170271	9.434727	0	9.434727	BEV	0	1.072599	2	3
2025	2a	1	1.09319	2.980616	0	2.980616	8.255748	0	8.255748	BEV	0	1.09319	1	3
2025	2a	1	2.018783	5.735583	0	5.735583	16.00771	0	16.00771	BEV	0	2.018783	1	3
2025	2a	1	2.503151	7.398539	0	7.398539	21.90396	0	21.90396	BEV	0	2.503151	1	3
2025	2a	1	2.052838	6.18516	0	6.18516	18.61394	0	18.61394	BEV	0	2.052838	1	3
2025	2a	1	1.534601	4.71164	0	4.71164	14.90913	0	14.90913	BEV	0	1.534601	1	3
2025	2a	1	1.272224	3.978958	0	3.978958	12.16591	0	12.16591	BEV	0	1.272224	1	3
2025	2a	1	1.230257	3.918184	0	3.918184	12.93538	0	12.93538	BEV	0	1.230257	1	3
2025	2a	1	1.183954	3.838546	0	3.838546	12.61425	0	12.61425	BEV	0	1.183954	1	3
2025	2a	1	1.496548	5.109228	0	5.109228	18.11581	0	18.11581	BEV	0	1.496548	1	3
2025	2a	1	4.17821	14.74319	0	14.74319	58.45577	0	58.45577	BEV	0	4.17821	1	3
2025	2a	1	0.70175	1.913343	0	1.913343	5.397531	0	5.397531	BEV	0	0.70175	2	3
2025	2a	1	0.712208	2.023461	0	2.023461	5.764242	0	5.764242	BEV	0	0.712208	2	3
2025	2a	1	0.729384	2.114046	0	2.114046	6.219013	0	6.219013	BEV	0	0.729384	2	3
2025	2a	1	1.219766	4.164295	0	4.164295	15.3517	0	15.3517	BEV	0	1.219766	2	3
2025	2a	1	0	0	0	0	0	0	0	BEV	0	0	2	3
2025	2a	1	31.05146	143.3677	0	143.3677	1019.984	0	1019.984	FCEV	0	31.05146	2	7
2025	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2025	2a	1	0	0	0	0	0	0	0	BEV	0	0	2	3
2025	2a	1	33.78808	157.9386	0	157.9386	1155.314	0	1155.314	FCEV	0	33.78808	2	7
2025	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2025	2a	1	0.244484	0.974738	0.974738	0	5.445723	5.445723	0	ICE	0.244484	0	3	2
2025	2a	1	0	0	0	0	0	0	0	BEV	0	0	3	3

2025	2a	1	2.211328	10.20992	0	10.20992	50.962	0	50.962	FCEV	0	2.211328	3	7
2025	2a	1	31.69571	146.3423	87.80535	58.5369	1018.441	611.0645	407.3763	PHEV	19.01742	12.67828	3	8
2025	2a	1	1.480962	6.752907	6.752907	0	44.81167	44.81167	0	ICE	1.480962	0	2	2
2025	2a	1	0.43983	1.602376	0	1.602376	4.686695	0	4.686695	BEV	0	0.43983	3	3
2025	2a	1	0.529502	1.534709	0	1.534709	3.078773	0	3.078773	BEV	0	0.529502	4	3
2025	2a	1	0.929226	2.90621	0	2.90621	6.356054	0	6.356054	BEV	0	0.929226	4	3
2025	2a	1	3.257036	10.93296	0	10.93296	27.44439	0	27.44439	BEV	0	3.257036	4	3
2025	2a	1	1.209784	4.476759	0	4.476759	13.5301	0	13.5301	BEV	0	1.209784	4	3
2025	2a	1	0.504664	1.347068	0	1.347068	3.752948	0	3.752948	BEV	0	0.504664	1	3
2025	2a	1	0.328038	0.913199	0	0.913199	1.671324	0	1.671324	BEV	0	0.328038	3	3
2025	2a	1	0.788205	3.27797	0	3.27797	12.78812	0	12.78812	BEV	0	0.788205	3	3
2025	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2025	2a	1	0	0	0	0	0	0	0	PHEV	0	0	3	8
2025	2a	1	0.255054	0.710025	0	0.710025	1.571885	0	1.571885	BEV	0	0.255054	2	3
2025	2a	1	2.466291	10.68064	0	10.68064	61.80082	0	61.80082	BEV	0	2.466291	2	3
2025	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2025	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2025	2a	1	1.380701	4.871929	0	4.871929	18.79533	0	18.79533	BEV	0	1.380701	2	3
2025	2a	1	3.96727	14.22615	0	14.22615	56.85709	0	56.85709	BEV	0	3.96727	2	3
2025	2a	1	1.122601	4.089827	0	4.089827	11.76382	0	11.76382	BEV	0	1.122601	4	3
2025	2a	1	1.971629	9.216163	9.216163	0	71.79279	71.79279	0	ICE	1.971629	0	2	2
2025	2a	1	1.477661	6.483886	0	6.483886	41.12907	0	41.12907	BEV	0	1.477661	2	3
2025	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2025	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2025	2a	1	0.617983	1.897373	0	1.897373	5.791315	0	5.791315	BEV	0	0.617983	2	3
2025	2a	1	0.258766	0.838954	0	0.838954	1.973569	0	1.973569	BEV	0	0.258766	4	3
2025	2a	1	0.233334	0.729767	0	0.729767	2.26213	0	2.26213	BEV	0	0.233334	2	3
2025	2a	1	0.300052	1.04157	0	1.04157	2.646662	0	2.646662	BEV	0	0.300052	3	3
2025	2a	1	0.406389	1.643518	0	1.643518	5.824158	0	5.824158	BEV	0	0.406389	3	3
2025	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2025	2a	1	0	0	0	0	0	0	0	PHEV	0	0	3	8
2025	2a	1	0.56437	1.829767	0	1.829767	4.456395	0	4.456395	BEV	0	0.56437	3	3
2025	2a	1	0.847025	2.260913	0	2.260913	4.358109	0	4.358109	BEV	0	0.847025	4	3
2025	2a	1	1.717047	6.058756	0	6.058756	16.82364	0	16.82364	BEV	0	1.717047	4	3
2025	2a	1	0.465416	1.295633	0	1.295633	3.54534	0	3.54534	BEV	0	0.465416	1	3
2025	2a	1	0.4203	1.218197	0	1.218197	3.440127	0	3.440127	BEV	0	0.4203	1	3
2025	2a	1	0.804151	3.160007	0	3.160007	15.47581	0	15.47581	BEV	0	0.804151	2	3
2025	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2025	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2025	2a	1	0.383967	1.530843	1.530843	0	9.289813	9.289813	0	ICE	0.383967	0	2	2
2025	2a	1	0.792015	2.34095	0	2.34095	4.722565	0	4.722565	BEV	0	0.792015	3	3
2025	2a	1	2.996873	9.887973	0	9.887973	23.54159	0	23.54159	BEV	0	2.996873	4	3
2025	2a	1	2.633587	10.95251	0	10.95251	42.67922	0	42.67922	BEV	0	2.633587	4	3
2025	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2025	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2025	2a	1	0.218681	0.784162	0	0.784162	2.223335	0	2.223335	BEV	0	0.218681	3	3
2025	2a	1	0	0	0	0	0	0	0	BEV	0	0	4	3

2025	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2025	2a	1	2.984368	13.43718	8.062305	5.37487	93.58678	56.15207	37.43471	PHEV	1.790621	1.193747	4	8
2025	2a	1	0.28828	1.000708	1.000708	0	5.202344	5.202344	0	ICE	0.28828	0	3	2
2025	2a	1	0.39533	1.281714	0	1.281714	4.188587	0	4.188587	BEV	0	0.39533	2	3
2026	2a	1	4387.902	11712.36	11712.36	0	21801.22	21801.22	0	ICE	4387.902	0	1	1
2026	2a	1	4957.532	13516.86	13516.86	0	26122.76	26122.76	0	ICE	4957.532	0	1	1
2026	2a	1	9451.8	26853.6	26853.6	0	57239.87	57239.87	0	ICE	9451.8	0	1	1
2026	2a	1	10412.38	30179.24	30179.24	0	67136	67136	0	ICE	10412.38	0	1	1
2026	2a	1	11852.28	35710.68	35710.68	0	86724.52	86724.52	0	ICE	11852.28	0	1	1
2026	2a	1	14406.25	44231.08	44231.08	0	112550.4	112550.4	0	ICE	14406.25	0	1	1
2026	2a	1	17836.07	55783.39	55783.39	0	148620.6	148620.6	0	ICE	17836.07	0	1	1
2026	2a	1	20142.87	64152.02	64152.02	0	178192.1	178192.1	0	ICE	20142.87	0	1	1
2026	2a	1	17830.06	57807.55	57807.55	0	168063.8	168063.8	0	ICE	17830.06	0	1	1
2026	2a	1	19203.83	63361.71	63361.71	0	192479.7	192479.7	0	ICE	19203.83	0	1	1
2026	2a	1	21778.6	73104.65	73104.65	0	231455.2	231455.2	0	ICE	21778.6	0	1	1
2026	2a	1	27161.72	92730.4	92730.4	0	306838.6	306838.6	0	ICE	27161.72	0	1	1
2026	2a	1	26676.36	92601.64	92601.64	0	319856.3	319856.3	0	ICE	26676.36	0	1	1
2026	2a	1	35416.24	124969.4	124969.4	0	449463	449463	0	ICE	35416.24	0	1	1
2026	2a	1	42318.63	151749.5	151749.5	0	569209.7	569209.7	0	ICE	42318.63	0	1	1
2026	2a	1	49836.33	181562.2	181562.2	0	710243.2	710243.2	0	ICE	49836.33	0	1	1
2026	2a	1	68054.41	251832.6	251832.6	0	1026697	1026697	0	ICE	68054.41	0	1	1
2026	2a	1	78719.11	295806.7	295806.7	0	1254115	1254115	0	ICE	78719.11	0	1	1
2026	2a	1	139.7778	525.2499	525.2499	0	2264.728	2264.728	0	ICE	139.7778	0	1	2
2026	2a	1	91093.91	347526.9	347526.9	0	1536281	1536281	0	ICE	91093.91	0	1	1
2026	2a	1	112501.2	435641.9	435641.9	0	2001852	2001852	0	ICE	112501.2	0	1	1
2026	2a	1	125164	491847.2	491847.2	0	2346748	2346748	0	ICE	125164	0	1	1
2026	2a	1	168491.5	671760.3	671760.3	0	3329871	3329871	0	ICE	168491.5	0	1	1
2026	2a	1	198193.8	801535.5	801535.5	0	4116086	4116086	0	ICE	198193.8	0	1	1
2026	2a	1	498.2509	2015.026	2015.026	0	10392.68	10392.68	0	ICE	498.2509	0	1	2
2026	2a	1	239490.6	982268.5	982268.5	0	5210524	5210524	0	ICE	239490.6	0	1	1
2026	2a	1	226263.9	940981.9	940981.9	0	5160875	5160875	0	ICE	226263.9	0	1	1
2026	2a	1	201133.9	847994.6	847994.6	0	4804042	4804042	0	ICE	201133.9	0	1	1
2026	2a	1	257568.7	1100684	1100684	0	6430950	6430950	0	ICE	257568.7	0	1	1
2026	2a	1	2874.166	12282.35	12282.35	0	71350.69	71350.69	0	ICE	2874.166	0	1	2
2026	2a	1	275059.8	1191188	1191188	0	7192078	7192078	0	ICE	275059.8	0	1	1
2026	2a	1	4170.542	18061.16	18061.16	0	107455.7	107455.7	0	ICE	4170.542	0	1	2
2026	2a	1	422583	1854269	1854269	0	11575913	11575913	0	ICE	422583	0	1	1
2026	2a	1	540429.7	2402334	2402334	0	15452079	15452079	0	ICE	540429.7	0	1	1
2026	2a	1	562754.6	2533814	2533814	0	16816916	16816916	0	ICE	562754.6	0	1	1
2026	2a	1	10457.05	47083.08	47083.08	0	310770.9	310770.9	0	ICE	10457.05	0	1	2
2026	2a	1	679611.5	3098899	3098899	0	21198289	21198289	0	ICE	679611.5	0	1	1
2026	2a	1	659487.2	3044918	3044918	0	21450179	21450179	0	ICE	659487.2	0	1	1
2026	2a	1	723210.4	3380567	3380567	0	24556567	24556567	0	ICE	723210.4	0	1	1
2026	2a	1	8850.193	41369.26	41369.26	0	300493.7	300493.7	0	ICE	8850.193	0	1	2
2026	2a	1	42062.85	196618.2	0	196618.2	1428908	0	1428908	BEV	0	42062.85	1	3
2026	2a	1	858.4255	4012.616	0	4012.616	29229.38	0	29229.38	FCEV	0	858.4255	1	7
2026	2a	1	37942.12	177356.3	95772.38	81583.88	1288259	695660	592599.3	PHEV	20488.74	17453.37	1	8

2026	2a	1	773544.2	3660164	3660164	0	27347778	27347778	0	ICE	773544.2	0	1	1
2026	2a	1	9466.147	44790.78	44790.78	0	334653.9	334653.9	0	ICE	9466.147	0	1	2
2026	2a	1	54986.36	260177.9	0	260177.9	1944288	0	1944288	BEV	0	54986.36	1	3
2026	2a	1	1122.171	5309.753	0	5309.753	39750.53	0	39750.53	FCEV	0	1122.171	1	7
2026	2a	1	35537.42	168151.7	90801.91	77349.78	1256535	678528.8	578006	PHEV	19190.21	16347.21	1	8
2026	2a	1	818681.4	3920641	3920641	0	30121848	30121848	0	ICE	818681.4	0	1	1
2026	2a	1	9975.915	47774.36	47774.36	0	367039.6	367039.6	0	ICE	9975.915	0	1	2
2026	2a	1	71364.48	341762.3	0	341762.3	2625605	0	2625605	BEV	0	71364.48	1	3
2026	2a	1	1669.344	7994.441	0	7994.441	61486.14	0	61486.14	FCEV	0	1669.344	1	7
2026	2a	1	34999.68	167612.4	88834.59	78777.85	1288229	682761.5	605467.7	PHEV	18549.83	16449.85	1	8
2026	2a	1	850820.5	4123297	4123297	0	32560242	32560242	0	ICE	850820.5	0	1	1
2026	2a	1	10461.51	50699.2	50699.2	0	400353.1	400353.1	0	ICE	10461.51	0	1	2
2026	2a	1	88118.18	427043.6	0	427043.6	3372076	0	3372076	BEV	0	88118.18	1	3
2026	2a	1	2325.7	11270.95	0	11270.95	89013.84	0	89013.84	FCEV	0	2325.7	1	7
2026	2a	1	33599.95	162834.1	84673.72	78160.36	1286044	668742.7	617300.9	PHEV	17471.97	16127.97	1	8
2026	2a	1	837137.4	4104945	4104945	0	33305346	33305346	0	ICE	837137.4	0	1	1
2026	2a	1	10342.93	50717.06	50717.06	0	411496.3	411496.3	0	ICE	10342.93	0	1	2
2026	2a	1	135251.6	663213	0	663213	5378722	0	5378722	BEV	0	135251.6	1	3
2026	2a	1	4636.284	22734.25	0	22734.25	184332.5	0	184332.5	FCEV	0	4636.284	1	7
2026	2a	1	51420.79	252144.4	125567.9	126576.5	2047630	1019720	1027910	PHEV	25607.55	25813.24	1	8
2026	2a	1	804500.8	3991000	3991000	0	33251696	33251696	0	ICE	804500.8	0	1	1
2026	2a	1	10011.32	49664.57	49664.57	0	413802.1	413802.1	0	ICE	10011.32	0	1	2
2026	2a	1	183391.2	909774.3	0	909774.3	7574707	0	7574707	BEV	0	183391.2	1	3
2026	2a	1	7755.076	38471.69	0	38471.69	320057.4	0	320057.4	FCEV	0	7755.076	1	7
2026	2a	1	69518.6	344870.7	164158.4	180712.2	2877569	1369723	1507846	PHEV	33090.85	36427.75	1	8
2026	2a	1	762379.9	3825721	3825721	0	32706163	32706163	0	ICE	762379.9	0	1	1
2026	2a	1	9566.779	48007.34	48007.34	0	410436.5	410436.5	0	ICE	9566.779	0	1	2
2026	2a	1	232401.3	1166220	0	1166220	9961424	0	9961424	BEV	0	232401.3	1	3
2026	2a	1	11717.71	58801	0	58801	501738.4	0	501738.4	FCEV	0	11717.71	1	7
2026	2a	1	87839.6	440790.5	200118.9	240671.6	3775306	1713989	2061317	PHEV	39879.18	47960.42	1	8
2026	2a	1	719583.7	3652190	3652190	0	31987280	31987280	0	ICE	719583.7	0	1	1
2026	2a	1	9102.042	46196.69	46196.69	0	404629.3	404629.3	0	ICE	9102.042	0	1	2
2026	2a	1	284272.7	1442804	0	1442804	12626139	0	12626139	BEV	0	284272.7	1	3
2026	2a	1	16681.46	84665.42	0	84665.42	740366.4	0	740366.4	FCEV	0	16681.46	1	7
2026	2a	1	107132	543739.8	234895.6	308844.2	4771103	2061116	2709986	PHEV	46281.02	60850.97	1	8
2026	2a	1	665167.2	3414110	3414110	0	30563951	30563951	0	ICE	665167.2	0	1	1
2026	2a	1	8477.322	43511.64	43511.64	0	389534.5	389534.5	0	ICE	8477.322	0	1	2
2026	2a	1	334307.2	1715902	0	1715902	15353116	0	15353116	BEV	0	334307.2	1	3
2026	2a	1	22423.05	115091	0	115091	1029708	0	1029708	FCEV	0	22423.05	1	7
2026	2a	1	125621.7	644779.9	264359.8	380420.1	5779759	2369701	3410058	PHEV	51504.91	74116.82	1	8
2026	2a	1	544129.5	2824032	2824032	0	25760588	25760588	0	ICE	544129.5	0	1	1
2026	2a	1	6934.737	35991.29	35991.29	0	328295.5	328295.5	0	ICE	6934.737	0	1	2
2026	2a	1	344522	1788069	0	1788069	16310365	0	16310365	BEV	0	344522	1	3
2026	2a	1	26045.61	135176.7	0	135176.7	1233861	0	1233861	FCEV	0	26045.61	1	7
2026	2a	1	129084.4	669948.1	259939.9	410008.3	6112988	2371840	3741149	PHEV	50084.75	78999.66	1	8
2026	2a	1	1095.95	2925.355	2925.355	0	12777.34	12777.34	0	ICE	1095.95	0	2	1
2026	2a	1	1211.905	3304.297	3304.297	0	14389.14	14389.14	0	ICE	1211.905	0	2	1

2026	2a	1	2293.734	6385.343	6385.343	0	28562.65	28562.65	0	ICE	2293.734	0	2	1
2026	2a	1	3607.363	10248.91	10248.91	0	46557.6	46557.6	0	ICE	3607.363	0	2	1
2026	2a	1	6038.083	17500.78	17500.78	0	80222.81	80222.81	0	ICE	6038.083	0	2	1
2026	2a	1	5855.147	17306	17306	0	80675.56	80675.56	0	ICE	5855.147	0	2	1
2026	2a	1	5806.962	17496.26	17496.26	0	82088.72	82088.72	0	ICE	5806.962	0	2	1
2026	2a	1	7791.784	23922.88	23922.88	0	113399.8	113399.8	0	ICE	7791.784	0	2	1
2026	2a	1	6476.158	20254.57	20254.57	0	95883.77	95883.77	0	ICE	6476.158	0	2	1
2026	2a	1	8178.184	26046.29	26046.29	0	123033.4	123033.4	0	ICE	8178.184	0	2	1
2026	2a	1	7059.638	22888.34	22888.34	0	109572.4	109572.4	0	ICE	7059.638	0	2	1
2026	2a	1	9005.885	29714.29	29714.29	0	143680.6	143680.6	0	ICE	9005.885	0	2	1
2026	2a	1	10809.54	36284.6	36284.6	0	177888.4	177888.4	0	ICE	10809.54	0	2	1
2026	2a	1	10231.66	34931	34931	0	174012.1	174012.1	0	ICE	10231.66	0	2	1
2026	2a	1	11274.22	39136.2	39136.2	0	195896.7	195896.7	0	ICE	11274.22	0	2	1
2026	2a	1	15034.57	53050.82	53050.82	0	268788.1	268788.1	0	ICE	15034.57	0	2	1
2026	2a	1	19364.43	69438.53	69438.53	0	356608.6	356608.6	0	ICE	19364.43	0	2	1
2026	2a	1	18166.82	66184.81	66184.81	0	343847.1	343847.1	0	ICE	18166.82	0	2	1
2026	2a	1	19935.71	73771.3	73771.3	0	388459.8	388459.8	0	ICE	19935.71	0	2	1
2026	2a	1	22643.98	85090.41	85090.41	0	452924.6	452924.6	0	ICE	22643.98	0	2	1
2026	2a	1	24099.38	91940.09	91940.09	0	492304	492304	0	ICE	24099.38	0	2	1
2026	2a	1	17228.5	66714.43	66714.43	0	359815.6	359815.6	0	ICE	17228.5	0	2	1
2026	2a	1	9975.734	39772.35	39772.35	0	218617	218617	0	ICE	9975.734	0	2	1
2026	2a	1	15998.24	64700.08	64700.08	0	362501.1	362501.1	0	ICE	15998.24	0	2	1
2026	2a	1	23374.1	95868.63	95868.63	0	545726.3	545726.3	0	ICE	23374.1	0	2	1
2026	2a	1	40236.5	167334.8	167334.8	0	968945.5	968945.5	0	ICE	40236.5	0	2	1
2026	2a	1	30087.18	126849.6	126849.6	0	746063.7	746063.7	0	ICE	30087.18	0	2	1
2026	2a	1	15887.66	67893.67	67893.67	0	406367.8	406367.8	0	ICE	15887.66	0	2	1
2026	2a	1	14033.42	60773.83	60773.83	0	372289.5	372289.5	0	ICE	14033.42	0	2	1
2026	2a	1	103058.4	469926.9	469926.9	0	3170803	3170803	0	ICE	103058.4	0	2	1
2026	2a	1	94700.35	437241	437241	0	3008638	3008638	0	ICE	94700.35	0	2	1
2026	2a	1	84673.23	395795.7	395795.7	0	2794245	2794245	0	ICE	84673.23	0	2	1
2026	2a	1	11.47052	53.61768	53.61768	0	378.5151	378.5151	0	ICE	11.47052	0	2	2
2026	2a	1	2.853003	13.33605	0	13.33605	96.53364	0	96.53364	BEV	0	2.853003	2	3
2026	2a	1	0.058225	0.272164	0	0.272164	1.970074	0	1.970074	FCEV	0	0.058225	2	7
2026	2a	1	24.74543	115.6698	69.40188	46.26792	816.5537	489.9322	326.6215	PHEV	14.84726	9.898173	2	8
2026	2a	1	89734.7	424595.9	424595.9	0	3073615	3073615	0	ICE	89734.7	0	2	1
2026	2a	1	12.15619	57.51919	57.51919	0	416.3576	416.3576	0	ICE	12.15619	0	2	2
2026	2a	1	92415.53	442575.2	442575.2	0	3286078	3286078	0	ICE	92415.53	0	2	1
2026	2a	1	12.6067	60.3731	60.3731	0	448.2134	448.2134	0	ICE	12.6067	0	2	2
2026	2a	1	1228.796	5884.667	0	5884.667	44161.8	0	44161.8	BEV	0	1228.796	2	3
2026	2a	1	28.74377	137.653	0	137.653	1052.424	0	1052.424	FCEV	0	28.74377	2	7
2026	2a	1	943.6289	4519.011	2685.584	1833.427	33401.54	19850.06	13551.48	PHEV	560.7852	382.8437	2	8
2026	2a	1	94673.1	458810.5	458810.5	0	3494581	3494581	0	ICE	94673.1	0	2	1
2026	2a	1	13.06471	63.315	63.315	0	482.1326	482.1326	0	ICE	13.06471	0	2	2
2026	2a	1	2571.51	12462.21	0	12462.21	96073.56	0	96073.56	BEV	0	2571.51	2	3
2026	2a	1	67.86977	328.9146	0	328.9146	2582.536	0	2582.536	FCEV	0	67.86977	2	7
2026	2a	1	1980.53	9598.164	5649.205	3948.959	72713.2	42796.91	29916.29	PHEV	1165.683	814.8467	2	8
2026	2a	1	92400.31	453089.5	453089.5	0	3541844	3541844	0	ICE	92400.31	0	2	1

2026	2a	1	12.91865	63.34723	63.34723	0	495.0068	495.0068	0	ICE	12.91865	0	2	2
2026	2a	1	6512.231	31933.05	0	31933.05	252788.3	0	252788.3	BEV	0	6512.231	2	3
2026	2a	1	223.2325	1094.632	0	1094.632	8825.674	0	8825.674	FCEV	0	223.2325	2	7
2026	2a	1	4696.563	23029.83	13350.72	9679.108	178151.2	103276.8	74874.42	PHEV	2722.664	1973.898	2	8
2026	2a	1	87891.42	436015.2	436015.2	0	3497812	3497812	0	ICE	87891.42	0	2	1
2026	2a	1	12.33861	61.20987	61.20987	0	490.827	490.827	0	ICE	12.33861	0	2	2
2026	2a	1	10758.66	53372.01	0	53372.01	433412.3	0	433412.3	BEV	0	10758.66	2	3
2026	2a	1	454.9524	2256.946	0	2256.946	18675.17	0	18675.17	FCEV	0	454.9524	2	7
2026	2a	1	7258.865	36010.07	20556.61	15453.46	285091.4	162746.4	122344.9	PHEV	4143.775	3115.09	2	8
2026	2a	1	82287.89	412931.3	412931.3	0	3399817	3399817	0	ICE	82287.89	0	2	1
2026	2a	1	11.60637	58.24225	58.24225	0	479.3006	479.3006	0	ICE	11.60637	0	2	2
2026	2a	1	15226.51	76408.6	0	76408.6	636300.5	0	636300.5	BEV	0	15226.51	2	3
2026	2a	1	767.7232	3852.535	0	3852.535	32603.33	0	32603.33	FCEV	0	767.7232	2	7
2026	2a	1	9600.068	48174.39	27074.01	21100.38	390992.3	219737.7	171254.6	PHEV	5395.238	4204.83	2	8
2026	2a	1	76537.47	388459.8	388459.8	0	3282189	3282189	0	ICE	76537.47	0	2	1
2026	2a	1	10.84256	55.03052	55.03052	0	464.7251	464.7251	0	ICE	10.84256	0	2	2
2026	2a	1	19992.9	101472.4	0	101472.4	866462.2	0	866462.2	BEV	0	19992.9	2	3
2026	2a	1	1173.207	5954.519	0	5954.519	51469.53	0	51469.53	FCEV	0	1173.207	2	7
2026	2a	1	11762.73	59700.8	33023.07	26677.73	496994.3	274908.9	222085.5	PHEV	6506.471	5256.261	2	8
2026	2a	1	70925.73	364041.2	364041.2	0	3156980	3156980	0	ICE	70925.73	0	2	1
2026	2a	1	10.08828	51.78024	51.78024	0	448.7931	448.7931	0	ICE	10.08828	0	2	2
2026	2a	1	25173.38	129207.6	0	129207.6	1131385	0	1131385	BEV	0	25173.38	2	3
2026	2a	1	1688.458	8666.366	0	8666.366	76620	0	76620	FCEV	0	1688.458	2	7
2026	2a	1	13797.7	70819.61	38546.1	32273.51	604991.4	329288.2	275703.2	PHEV	7509.892	6287.81	2	8
2026	2a	1	58719.17	304752.5	304752.5	0	2708443	2708443	0	ICE	58719.17	0	2	1
2026	2a	1	8.352056	43.34717	43.34717	0	385.0358	385.0358	0	ICE	8.352056	0	2	2
2026	2a	1	27710.79	143819	0	143819	1289449	0	1289449	BEV	0	27710.79	2	3
2026	2a	1	2094.915	10872.61	0	10872.61	98162.27	0	98162.27	FCEV	0	2094.915	2	7
2026	2a	1	14121.68	73291.51	39242.37	34049.14	641511.7	343483.7	298028	PHEV	7561.15	6560.528	2	8
2026	2a	1	2089.072	5815.599	5815.599	0	24263.44	24263.44	0	ICE	2089.072	0	3	1
2026	2a	1	3480.039	10086.55	10086.55	0	42494.33	42494.33	0	ICE	3480.039	0	3	1
2026	2a	1	3619.062	10696.83	10696.83	0	45761.97	45761.97	0	ICE	3619.062	0	3	1
2026	2a	1	4530.789	13651.18	13651.18	0	59408.59	59408.59	0	ICE	4530.789	0	3	1
2026	2a	1	6048.069	18569.2	18569.2	0	82521.21	82521.21	0	ICE	6048.069	0	3	1
2026	2a	1	7000.384	21894.12	21894.12	0	98667.25	98667.25	0	ICE	7000.384	0	3	1
2026	2a	1	8732.233	27810.85	27810.85	0	128999.1	128999.1	0	ICE	8732.233	0	3	1
2026	2a	1	8125.651	26344.5	26344.5	0	123381.2	123381.2	0	ICE	8125.651	0	3	1
2026	2a	1	11175.44	36872.58	36872.58	0	175010.3	175010.3	0	ICE	11175.44	0	3	1
2026	2a	1	12753.25	42809.07	42809.07	0	205479.9	205479.9	0	ICE	12753.25	0	3	1
2026	2a	1	16393.04	55966.02	55966.02	0	273364.1	273364.1	0	ICE	16393.04	0	3	1
2026	2a	1	16401.12	56933.22	56933.22	0	280596.9	280596.9	0	ICE	16401.12	0	3	1
2026	2a	1	26447.98	93324.09	93324.09	0	465352.8	465352.8	0	ICE	26447.98	0	3	1
2026	2a	1	30578.73	109651.7	109651.7	0	551747.9	551747.9	0	ICE	30578.73	0	3	1
2026	2a	1	35258.25	128451.8	128451.8	0	653077	653077	0	ICE	35258.25	0	3	1
2026	2a	1	48548.09	179650.2	179650.2	0	925212.4	925212.4	0	ICE	48548.09	0	3	1
2026	2a	1	48466.78	182126.1	182126.1	0	948222.5	948222.5	0	ICE	48466.78	0	3	1
2026	2a	1	49330.26	188196.9	188196.9	0	997639.6	997639.6	0	ICE	49330.26	0	3	1

2026	2a	1	58638.76	227068.6	227068.6	0	1218112	1218112	0	ICE	58638.76	0	3	1
2026	2a	1	73967.79	290665.3	290665.3	0	1578492	1578492	0	ICE	73967.79	0	3	1
2026	2a	1	87006.76	346888.1	346888.1	0	1911789	1911789	0	ICE	87006.76	0	3	1
2026	2a	1	86504.42	349841.2	349841.2	0	1958392	1958392	0	ICE	86504.42	0	3	1
2026	2a	1	96536.59	395943.9	395943.9	0	2251703	2251703	0	ICE	96536.59	0	3	1
2026	2a	1	81298.87	338104.1	338104.1	0	1955890	1955890	0	ICE	81298.87	0	3	1
2026	2a	1	53406.3	225164.7	225164.7	0	1327680	1327680	0	ICE	53406.3	0	3	1
2026	2a	1	99202.83	423929.4	423929.4	0	2545999	2545999	0	ICE	99202.83	0	3	1
2026	2a	1	139355.6	603500.2	603500.2	0	3702465	3702465	0	ICE	139355.6	0	3	1
2026	2a	1	140515.1	616571.9	616571.9	0	3878048	3878048	0	ICE	140515.1	0	3	1
2026	2a	1	199433.5	886527.8	886527.8	0	5695168	5695168	0	ICE	199433.5	0	3	1
2026	2a	1	191108.5	860470.1	860470.1	0	5666557	5666557	0	ICE	191108.5	0	3	1
2026	2a	1	2065.594	9300.38	9300.38	0	60123.63	60123.63	0	ICE	2065.594	0	3	2
2026	2a	1	235417.5	1073459	1073459	0	7227776	7227776	0	ICE	235417.5	0	3	1
2026	2a	1	232017.4	1071248	1071248	0	7384202	7384202	0	ICE	232017.4	0	3	1
2026	2a	1	1594.779	7363.254	7363.254	0	51242.7	51242.7	0	ICE	1594.779	0	3	2
2026	2a	1	267898.5	1252262	1252262	0	8803830	8803830	0	ICE	267898.5	0	3	1
2026	2a	1	2738.221	12799.51	12799.51	0	90237.65	90237.65	0	ICE	2738.221	0	3	2
2026	2a	1	283255.1	1340272	1340272	0	9661546	9661546	0	ICE	283255.1	0	3	1
2026	2a	1	2895.183	13699.08	13699.08	0	99027.75	99027.75	0	ICE	2895.183	0	3	2
2026	2a	1	977.2695	4624.127	2774.476	1849.651	33479.54	20087.73	13391.82	PHEV	586.3617	390.9078	3	8
2026	2a	1	291426.2	1395632	1395632	0	10344943	10344943	0	ICE	291426.2	0	3	1
2026	2a	1	2971.193	14228.96	14228.96	0	105714.3	105714.3	0	ICE	2971.193	0	3	2
2026	2a	1	3437.006	16459.72	0	16459.72	96241.8	0	96241.8	BEV	0	3437.006	3	3
2026	2a	1	80.3978	385.0226	0	385.0226	2045.297	0	2045.297	FCEV	0	80.3978	3	7
2026	2a	1	2985.243	14296.24	8496.05	5800.188	106166.5	63093.24	43073.27	PHEV	1774.087	1211.156	3	8
2026	2a	1	296154.5	1435242	1435242	0	10906559	10906559	0	ICE	296154.5	0	3	1
2026	2a	1	3026.264	14666.06	14666.06	0	111725.5	111725.5	0	ICE	3026.264	0	3	2
2026	2a	1	7097.35	34395.6	0	34395.6	235555.1	0	235555.1	BEV	0	7097.35	3	3
2026	2a	1	187.3201	907.8018	0	907.8018	4950.236	0	4950.236	FCEV	0	187.3201	3	7
2026	2a	1	5122.024	24822.66	14609.91	10212.75	189098	111297.7	77800.34	PHEV	3014.677	2107.347	3	8
2026	2a	1	286518.3	1404957	1404957	0	10941680	10941680	0	ICE	286518.3	0	3	1
2026	2a	1	2972.058	14573.64	14573.64	0	113936.4	113936.4	0	ICE	2972.058	0	3	2
2026	2a	1	19568.73	95956.27	0	95956.27	653133.8	0	653133.8	BEV	0	19568.73	3	3
2026	2a	1	670.7959	3289.281	0	3289.281	18404.91	0	18404.91	FCEV	0	670.7959	3	7
2026	2a	1	13300.68	65220.55	37809.29	27411.27	560301.9	324815	235486.9	PHEV	7710.594	5590.086	3	8
2026	2a	1	272414.9	1351407	1351407	0	10793671	10793671	0	ICE	272414.9	0	3	1
2026	2a	1	2839.061	14084.13	14084.13	0	112993.3	112993.3	0	ICE	2839.061	0	3	2
2026	2a	1	33009.6	163755.3	0	163755.3	1139015	0	1139015	BEV	0	33009.6	3	3
2026	2a	1	1395.879	6924.734	0	6924.734	39741.57	0	39741.57	FCEV	0	1395.879	3	7
2026	2a	1	21111.84	104732.5	59787.28	44945.19	957342.4	546505.7	410836.6	PHEV	12051.85	9059.996	3	8
2026	2a	1	255860.3	1283940	1283940	0	10516414	10516414	0	ICE	255860.3	0	3	1
2026	2a	1	2680.94	13453.31	13453.31	0	110747.1	110747.1	0	ICE	2680.94	0	3	2
2026	2a	1	47249.97	237106.5	0	237106.5	1699601	0	1699601	BEV	0	47249.97	3	3
2026	2a	1	2382.351	11954.95	0	11954.95	70772.31	0	70772.31	FCEV	0	2382.351	3	7
2026	2a	1	28404.75	142538.7	80106.78	62431.97	1359429	763999.1	595429.9	PHEV	15963.47	12441.28	3	8
2026	2a	1	241182.9	1224105	1224105	0	10282640	10282640	0	ICE	241182.9	0	3	1

2026	2a	1	2539.835	12890.73	12890.73	0	108888.9	108888.9	0	ICE	2539.835	0	3	2
2026	2a	1	63097.85	320248.1	0	320248.1	2364711	0	2364711	BEV	0	63097.85	3	3
2026	2a	1	3702.657	18792.54	0	18792.54	120293.4	0	120293.4	FCEV	0	3702.657	3	7
2026	2a	1	35608.11	180726.1	99967.35	80758.74	1787714	988861.1	798852.6	PHEV	19696.37	15911.74	3	8
2026	2a	1	226349	1161784	1161784	0	10010649	10010649	0	ICE	226349	0	3	1
2026	2a	1	2394.689	12291.24	12291.24	0	106560.7	106560.7	0	ICE	2394.689	0	3	2
2026	2a	1	80575.03	413568.3	0	413568.3	3147758	0	3147758	BEV	0	80575.03	3	3
2026	2a	1	5404.423	27739.34	0	27739.34	188440.7	0	188440.7	FCEV	0	5404.423	3	7
2026	2a	1	42620.99	218761.2	119068.6	99692.6	2240788	1219629	1021159	PHEV	23198	19422.99	3	8
2026	2a	1	186253	966653.1	966653.1	0	8533804	8533804	0	ICE	186253	0	3	1
2026	2a	1	1970.488	10226.84	10226.84	0	90840.94	90840.94	0	ICE	1970.488	0	3	2
2026	2a	1	88181.12	457660	0	457660	3590103	0	3590103	BEV	0	88181.12	3	3
2026	2a	1	6666.427	34598.76	0	34598.76	249850.8	0	249850.8	FCEV	0	6666.427	3	7
2026	2a	1	43643.81	226511.4	121280.7	105230.7	2400657	1285380	1115277	PHEV	23368.14	20275.67	3	8
2026	2a	1	4075.287	12745.71	12745.71	0	51539.01	51539.01	0	ICE	4075.287	0	4	1
2026	2a	1	3575.51	11387.46	11387.46	0	47220.89	47220.89	0	ICE	3575.51	0	4	1
2026	2a	1	4606.08	14933.56	14933.56	0	62833.84	62833.84	0	ICE	4606.08	0	4	1
2026	2a	1	5346.132	17639.19	17639.19	0	76516.06	76516.06	0	ICE	5346.132	0	4	1
2026	2a	1	8951.263	30046.88	30046.88	0	132839.1	132839.1	0	ICE	8951.263	0	4	1
2026	2a	1	10686.11	36482.48	36482.48	0	164649.4	164649.4	0	ICE	10686.11	0	4	1
2026	2a	1	10513.1	36494.14	36494.14	0	167521.7	167521.7	0	ICE	10513.1	0	4	1
2026	2a	1	15031.5	53040	53040	0	249386.3	249386.3	0	ICE	15031.5	0	4	1
2026	2a	1	18341.09	65768.93	65768.93	0	313580.9	313580.9	0	ICE	18341.09	0	4	1
2026	2a	1	32583.79	118708.3	118708.3	0	578064.5	578064.5	0	ICE	32583.79	0	4	1
2026	2a	1	40324.26	149218.3	149218.3	0	737877.4	737877.4	0	ICE	40324.26	0	4	1
2026	2a	1	57493.48	216046.1	216046.1	0	1082748	1082748	0	ICE	57493.48	0	4	1
2026	2a	1	57.53936	216.2185	216.2185	0	1037.506	1037.506	0	ICE	57.53936	0	4	2
2026	2a	1	75108.22	286540.9	286540.9	0	1460999	1460999	0	ICE	75108.22	0	4	1
2026	2a	1	87869.5	340259.7	340259.7	0	1766692	1766692	0	ICE	87869.5	0	4	1
2026	2a	1	101464.2	398715.7	398715.7	0	2099942	2099942	0	ICE	101464.2	0	4	1
2026	2a	1	143.5566	564.1229	564.1229	0	2858.153	2858.153	0	ICE	143.5566	0	4	2
2026	2a	1	100379.8	400205.1	400205.1	0	2132968	2132968	0	ICE	100379.8	0	4	1
2026	2a	1	102666.9	415205.5	415205.5	0	2251396	2251396	0	ICE	102666.9	0	4	1
2026	2a	1	107132.4	439402.4	439402.4	0	2429260	2429260	0	ICE	107132.4	0	4	1
2026	2a	1	82546.56	343293	343293	0	1937145	1937145	0	ICE	82546.56	0	4	1
2026	2a	1	36151.4	152416.8	152416.8	0	877782.4	877782.4	0	ICE	36151.4	0	4	1
2026	2a	1	53230.68	227473.9	227473.9	0	1340479	1340479	0	ICE	53230.68	0	4	1
2026	2a	1	78569.4	340256.6	340256.6	0	2051241	2051241	0	ICE	78569.4	0	4	1
2026	2a	1	2220.731	9617.209	9617.209	0	57315.64	57315.64	0	ICE	2220.731	0	4	2
2026	2a	1	80137.66	351639.2	351639.2	0	2174193	2174193	0	ICE	80137.66	0	4	1
2026	2a	1	91038.42	404686.7	404686.7	0	2567297	2567297	0	ICE	91038.42	0	4	1
2026	2a	1	1969.878	8756.563	8756.563	0	54771.88	54771.88	0	ICE	1969.878	0	4	2
2026	2a	1	142898.9	643405.2	643405.2	0	4187887	4187887	0	ICE	142898.9	0	4	1
2026	2a	1	4443.41	20006.54	20006.54	0	129747.9	129747.9	0	ICE	4443.41	0	4	2
2026	2a	1	158952.6	724793.8	724793.8	0	4844027	4844027	0	ICE	158952.6	0	4	1
2026	2a	1	174066.8	803684	803684	0	5494995	5494995	0	ICE	174066.8	0	4	1
2026	2a	1	162385	759051	759051	0	5276559	5276559	0	ICE	162385	0	4	1

2026	2a	1	5662.393	26468.23	26468.23	0	184108	184108	0	ICE	5662.393	0	4	2
2026	2a	1	1358.56	6350.437	3810.262	2540.175	42189.01	25313.41	16875.6	PHEV	815.1357	543.4238	4	8
2026	2a	1	170496.4	806734.3	806734.3	0	5753516	5753516	0	ICE	170496.4	0	4	1
2026	2a	1	5945.237	28130.96	28130.96	0	200749.4	200749.4	0	ICE	5945.237	0	4	2
2026	2a	1	2.982489	14.11218	0	14.11218	72.99346	0	72.99346	BEV	0	2.982489	4	3
2026	2a	1	0.060867	0.288004	0	0.288004	1.489662	0	1.489662	FCEV	0	0.060867	4	7
2026	2a	1	3649.745	17269.43	10361.66	6907.77	121041.1	72624.67	48416.44	PHEV	2189.847	1459.898	4	8
2026	2a	1	179182.4	858099.2	858099.2	0	6274149	6274149	0	ICE	179182.4	0	4	1
2026	2a	1	6307.105	30204.54	30204.54	0	221160.2	221160.2	0	ICE	6307.105	0	4	2
2026	2a	1	1536.035	7356.024	0	7356.024	40622.74	0	40622.74	BEV	0	1536.035	4	3
2026	2a	1	35.93063	172.0707	0	172.0707	913.9663	0	913.9663	FCEV	0	35.93063	4	7
2026	2a	1	3996.446	19138.86	11373.95	7764.908	145175.7	86275.82	58899.84	PHEV	2375.031	1621.415	4	8
2026	2a	1	185854.5	900699.2	900699.2	0	6747299	6747299	0	ICE	185854.5	0	4	1
2026	2a	1	6644.557	32201.25	32201.25	0	241903.4	241903.4	0	ICE	6644.557	0	4	2
2026	2a	1	3204.83	15531.44	0	15531.44	94951.81	0	94951.81	BEV	0	3204.83	4	3
2026	2a	1	84.58495	409.9207	0	409.9207	2235.056	0	2235.056	FCEV	0	84.58495	4	7
2026	2a	1	4316.091	20916.9	12311.09	8605.81	159987.8	94164.23	65823.54	PHEV	2540.328	1775.763	4	8
2026	2a	1	181826.2	891593.6	891593.6	0	6843168	6843168	0	ICE	181826.2	0	4	1
2026	2a	1	6615.392	32438.91	32438.91	0	250064.6	250064.6	0	ICE	6615.392	0	4	2
2026	2a	1	9622.415	47183.99	0	47183.99	295866.9	0	295866.9	BEV	0	9622.415	4	3
2026	2a	1	329.8464	1617.418	0	1617.418	9048.699	0	9048.699	FCEV	0	329.8464	4	7
2026	2a	1	11484.85	56316.51	32647.49	23669.03	467701.3	271133.1	196568.2	PHEV	6657.929	4826.916	4	8
2026	2a	1	172757	857019.8	857019.8	0	6744317	6744317	0	ICE	172757	0	4	1
2026	2a	1	6319.906	31352.04	31352.04	0	247976.1	247976.1	0	ICE	6319.906	0	4	2
2026	2a	1	16995.57	84312.32	0	84312.32	549529.6	0	549529.6	BEV	0	16995.57	4	3
2026	2a	1	718.6931	3565.321	0	3565.321	20458.56	0	20458.56	FCEV	0	718.6931	4	7
2026	2a	1	17999.73	89293.76	50973.98	38319.78	780045.2	445294.4	334750.8	PHEV	10275.27	7724.454	4	8
2026	2a	1	163103.5	818474.7	818474.7	0	6602863	6602863	0	ICE	163103.5	0	4	1
2026	2a	1	6004.315	30130.43	30130.43	0	244455.3	244455.3	0	ICE	6004.315	0	4	2
2026	2a	1	25436.88	127645.6	0	127645.6	864993	0	864993	BEV	0	25436.88	4	3
2026	2a	1	1282.532	6435.912	0	6435.912	37865.4	0	37865.4	FCEV	0	1282.532	4	7
2026	2a	1	23909.21	119979.5	67428.5	52551.04	1092655	614072.3	478583	PHEV	13436.98	10472.24	4	8
2026	2a	1	153816.4	780682.9	780682.9	0	6452876	6452876	0	ICE	153816.4	0	4	1
2026	2a	1	5695.512	28907.12	28907.12	0	240444.6	240444.6	0	ICE	5695.512	0	4	2
2026	2a	1	35196.53	178637.2	0	178637.2	1257307	0	1257307	BEV	0	35196.53	4	3
2026	2a	1	2065.374	10482.64	0	10482.64	63269.8	0	63269.8	FCEV	0	2065.374	4	7
2026	2a	1	29336.36	148894.3	82359.84	66534.5	1408698	779211.1	629486.7	PHEV	16227.2	13109.16	4	8
2026	2a	1	143041.8	734191.9	734191.9	0	6219332	6219332	0	ICE	143041.8	0	4	1
2026	2a	1	5325.143	27332.42	27332.42	0	233138.4	233138.4	0	ICE	5325.143	0	4	2
2026	2a	1	45976.13	235982.2	0	235982.2	1722381	0	1722381	BEV	0	45976.13	4	3
2026	2a	1	3083.765	15828.07	0	15828.07	102197.8	0	102197.8	FCEV	0	3083.765	4	7
2026	2a	1	33916.37	174082.9	94750.82	79332.05	1707736	929496	778239.5	PHEV	18460.19	15456.17	4	8
2026	2a	1	112726.6	585051.1	585051.1	0	5064236	5064236	0	ICE	112726.6	0	4	1
2026	2a	1	4196.574	21780.22	21780.22	0	189831.3	189831.3	0	ICE	4196.574	0	4	2
2026	2a	1	49608.51	257468.2	0	257468.2	1946647	0	1946647	BEV	0	49608.51	4	3
2026	2a	1	3750.367	19464.4	0	19464.4	134633.1	0	134633.1	FCEV	0	3750.367	4	7
2026	2a	1	32289.16	167580.7	89727.52	77853.23	1698730	909548.4	789181.2	PHEV	17288.54	15000.62	4	8

2026	2a	1	1497.06	3996.013	3996.013	0	7599.864	7599.864	0	ICE	1497.06	0	1	2
2026	2a	1	1508.93	4114.144	4114.144	0	7843.835	7843.835	0	ICE	1508.93	0	1	2
2026	2a	1	7543.241	20999.03	20999.03	0	43254.63	43254.63	0	ICE	7543.241	0	1	1
2026	2a	1	1178.667	3348.721	3348.721	0	6947.649	6947.649	0	ICE	1178.667	0	1	2
2026	2a	1	12065.12	35660.76	35660.76	0	82124.96	82124.96	0	ICE	12065.12	0	1	1
2026	2a	1	75.60242	240.7824	240.7824	0	672.4744	672.4744	0	ICE	75.60242	0	1	2
2026	2a	1	40.05738	129.8716	129.8716	0	359.2017	359.2017	0	ICE	40.05738	0	1	2
2026	2a	1	22.15985	73.11487	73.11487	0	216.9169	216.9169	0	ICE	22.15985	0	1	2
2026	2a	1	64.33837	227.0237	227.0237	0	821.7025	821.7025	0	ICE	64.33837	0	1	2
2026	2a	1	119.9157	443.7434	443.7434	0	1856.476	1856.476	0	ICE	119.9157	0	1	2
2026	2a	1	20.66104	77.63903	0	77.63903	348.0268	0	348.0268	BEV	0	20.66104	1	3
2026	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2026	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2026	2a	1	354.0564	1350.739	1350.739	0	6017.834	6017.834	0	ICE	354.0564	0	1	2
2026	2a	1	531.9912	2060.046	2060.046	0	9593.267	9593.267	0	ICE	531.9912	0	1	2
2026	2a	1	211.0335	829.2814	829.2814	0	4052.134	4052.134	0	ICE	211.0335	0	1	2
2026	2a	1	439.5061	1752.271	1752.271	0	8673.31	8673.31	0	ICE	439.5061	0	1	2
2026	2a	1	1582.317	6671.161	6671.161	0	37688.15	37688.15	0	ICE	1582.317	0	1	2
2026	2a	1	4820.305	21151.21	21151.21	0	130692.2	130692.2	0	ICE	4820.305	0	1	2
2026	2a	1	7085.759	31497.83	31497.83	0	201735.4	201735.4	0	ICE	7085.759	0	1	2
2026	2a	1	6639.472	29513.98	0	29513.98	188607.6	0	188607.6	BEV	0	6639.472	1	3
2026	2a	1	0.390075	1.733975	0	1.733975	11.08087	0	11.08087	FCEV	0	0.390075	1	7
2026	2a	1	6939.83	30849.14	18509.48	12339.66	191346	114807.6	76538.4	PHEV	4163.898	2775.932	1	8
2026	2a	1	8448.454	38039.33	0	38039.33	250541.4	0	250541.4	BEV	0	8448.454	1	3
2026	2a	1	1.183754	5.329877	0	5.329877	35.10458	0	35.10458	FCEV	0	1.183754	1	7
2026	2a	1	10666.81	48027.53	28816.52	19211.01	307161.4	184296.8	122864.5	PHEV	6400.086	4266.724	1	8
2026	2a	1	7756.747	35369.29	35369.29	0	241901.9	241901.9	0	ICE	7756.747	0	1	2
2026	2a	1	20105.51	91677.3	0	91677.3	623537	0	623537	BEV	0	20105.51	1	3
2026	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2026	2a	1	9560.709	43595.02	26157.01	17438.01	288132.4	172879.4	115253	PHEV	5736.425	3824.284	1	8
2026	2a	1	179.3117	478.626	478.626	0	1980.617	1980.617	0	ICE	179.3117	0	2	2
2026	2a	1	86.28043	235.2462	235.2462	0	961.4652	961.4652	0	ICE	86.28043	0	2	2
2026	2a	1	66.96465	190.2539	190.2539	0	786.5078	786.5078	0	ICE	66.96465	0	2	2
2026	2a	1	15241.49	59893.25	59893.25	0	325625	325625	0	ICE	15241.49	0	2	1
2026	2a	1	27019.33	118559.2	118559.2	0	743868.4	743868.4	0	ICE	27019.33	0	2	1
2026	2a	1	39186.04	174190.9	174190.9	0	1121286	1121286	0	ICE	39186.04	0	2	1
2026	2a	1	47975.84	216012.2	216012.2	0	1421826	1421826	0	ICE	47975.84	0	2	1
2026	2a	1	880.266	2349.641	2349.641	0	9668.959	9668.959	0	ICE	880.266	0	3	1
2026	2a	1	1132.66	3088.231	3088.231	0	12807.8	12807.8	0	ICE	1132.66	0	3	1
2026	2a	1	2315.036	6577.271	6577.271	0	27441.59	27441.59	0	ICE	2315.036	0	3	1
2026	2a	1	25.5676	106.33	106.33	0	622.5381	622.5381	0	ICE	25.5676	0	3	2
2026	2a	1	954.6683	4189.027	4189.027	0	25897.75	25897.75	0	ICE	954.6683	0	3	2
2026	2a	1	725.0686	3223.097	3223.097	0	20364.3	20364.3	0	ICE	725.0686	0	3	2
2026	2a	1	3049.29	13904.18	13904.18	0	92522.83	92522.83	0	ICE	3049.29	0	3	2
2026	2a	1	3273.404	15113.63	0	15113.63	72920.18	0	72920.18	BEV	0	3273.404	3	3
2026	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2026	2a	1	297.9038	1375.452	825.2709	550.1806	9117.596	5470.557	3647.038	PHEV	178.7423	119.1615	3	8

2026	2a	1	1664.585	4443.177	4443.177	0	18260	18260	0	ICE	1664.585	0	4	1
2026	2a	1	337.4855	900.8297	900.8297	0	3148.72	3148.72	0	ICE	337.4855	0	4	2
2026	2a	1	1065.601	2905.393	2905.393	0	11240.24	11240.24	0	ICE	1065.601	0	4	1
2026	2a	1	1667.892	4643.11	4643.11	0	18250.55	18250.55	0	ICE	1667.892	0	4	1
2026	2a	1	223.3216	621.6872	621.6872	0	2231.101	2231.101	0	ICE	223.3216	0	4	2
2026	2a	1	2125.539	6038.89	6038.89	0	23648.85	23648.85	0	ICE	2125.539	0	4	1
2026	2a	1	111.5957	317.0558	317.0558	0	1116.455	1116.455	0	ICE	111.5957	0	4	2
2026	2a	1	2593.015	7515.593	7515.593	0	28875.52	28875.52	0	ICE	2593.015	0	4	1
2026	2a	1	2497.846	7382.86	7382.86	0	28490.31	28490.31	0	ICE	2497.846	0	4	1
2026	2a	1	3038.857	9156.014	9156.014	0	36437.51	36437.51	0	ICE	3038.857	0	4	1
2026	2a	1	9.482675	28.57111	28.57111	0	109.7873	109.7873	0	ICE	9.482675	0	4	2
2026	2a	1	3730.965	11455.07	11455.07	0	46020.87	46020.87	0	ICE	3730.965	0	4	1
2026	2a	1	34.45725	115.6634	115.6634	0	490.3456	490.3456	0	ICE	34.45725	0	4	2
2026	2a	1	30.3567	110.5946	110.5946	0	493.8792	493.8792	0	ICE	30.3567	0	4	2
2026	2a	1	258.1309	1029.145	1029.145	0	5408.397	5408.397	0	ICE	258.1309	0	4	2
2026	2a	1	371.5301	1502.542	1502.542	0	8051.675	8051.675	0	ICE	371.5301	0	4	2
2026	2a	1	525.3095	2154.552	2154.552	0	11914.22	11914.22	0	ICE	525.3095	0	4	2
2026	2a	1	388.6014	1616.108	1616.108	0	9151.224	9151.224	0	ICE	388.6014	0	4	2
2026	2a	1	561.9641	2369.28	2369.28	0	13461.73	13461.73	0	ICE	561.9641	0	4	2
2026	2a	1	3807.227	16705.88	16705.88	0	103545.4	103545.4	0	ICE	3807.227	0	4	2
2026	2a	1	8682.59	39590.96	39590.96	0	266340	266340	0	ICE	8682.59	0	4	2
2026	2a	1	5593.573	25826.09	25826.09	0	179259.2	179259.2	0	ICE	5593.573	0	4	2
2026	2a	1	1221.794	3401.254	3401.254	0	6707.624	6707.624	0	ICE	1221.794	0	1	2
2026	2a	1	57.87751	181.0154	181.0154	0	453.1633	453.1633	0	ICE	57.87751	0	1	2
2026	2a	1	137.1724	499.7422	499.7422	0	1973.768	1973.768	0	ICE	137.1724	0	1	2
2026	2a	1	16.08461	64.12787	0	64.12787	324.4655	0	324.4655	BEV	0	16.08461	1	3
2026	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2026	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2026	2a	1	1347.334	5912.02	0	5912.02	36721.81	0	36721.81	BEV	0	1347.334	1	3
2026	2a	1	5.091751	22.3423	0	22.3423	138.7765	0	138.7765	FCEV	0	5.091751	1	7
2026	2a	1	2832.145	12427.28	7456.369	4970.913	74976.82	44986.09	29990.73	PHEV	1699.287	1132.858	1	8
2026	2a	1	13364.94	61707.28	0	61707.28	432192.5	0	432192.5	BEV	0	13364.94	1	3
2026	2a	1	406.9058	1878.725	0	1878.725	13158.42	0	13158.42	FCEV	0	406.9058	1	7
2026	2a	1	9611.182	44375.79	26625.47	17750.31	303281.2	181968.7	121312.5	PHEV	5766.709	3844.473	1	8
2026	2a	1	6.671468	22.39425	22.39425	0	91.92009	91.92009	0	ICE	6.671468	0	2	2
2026	2a	1	4.00888	13.68636	13.68636	0	57.55295	57.55295	0	ICE	4.00888	0	2	2
2026	2a	1	8.107017	29.07079	29.07079	0	138.501	138.501	0	ICE	8.107017	0	2	2
2026	2a	1	17.27172	50.06034	50.06034	0	225.2886	225.2886	0	ICE	17.27172	0	3	2
2026	2a	1	72.65084	289.6524	289.6524	0	1582.804	1582.804	0	ICE	72.65084	0	3	2
2026	2a	1	82.67165	334.3407	334.3407	0	1893.439	1893.439	0	ICE	82.67165	0	3	2
2026	2a	1	305.0923	831.8434	831.8434	0	2874.832	2874.832	0	ICE	305.0923	0	4	2
2026	2a	1	23.17568	83.1052	83.1052	0	359.894	359.894	0	ICE	23.17568	0	4	2
2026	2a	1	80.9905	313.6219	313.6219	0	1587.366	1587.366	0	ICE	80.9905	0	4	2
2026	2a	1	1012.853	4328.284	4328.284	0	25085.23	25085.23	0	ICE	1012.853	0	4	2
2026	2a	1	249.5368	723.2574	723.2574	0	1528.775	1528.775	0	ICE	249.5368	0	1	2
2026	2a	1	577.6092	1707.234	1707.234	0	3870.577	3870.577	0	ICE	577.6092	0	1	2
2026	2a	1	91.86541	313.6294	313.6294	0	1034.476	1034.476	0	ICE	91.86541	0	1	2

2026	2a	1	72.29433	250.9553	250.9553	0	864.7449	864.7449	0	ICE	72.29433	0	1	2
2026	2a	1	127.1255	455.8569	455.8569	0	1745.543	1745.543	0	ICE	127.1255	0	1	2
2026	2a	1	43.76412	166.9619	0	166.9619	772.6427	0	772.6427	BEV	0	43.76412	1	3
2026	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2026	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2026	2a	1	1614.055	6989.906	0	6989.906	42219.07	0	42219.07	BEV	0	1614.055	1	3
2026	2a	1	15.9466	69.05915	0	69.05915	417.1176	0	417.1176	FCEV	0	15.9466	1	7
2026	2a	1	448.6598	1942.988	1165.793	777.1954	11340.32	6804.195	4536.13	PHEV	269.1959	179.4639	1	8
2026	2a	1	1109.678	5123.493	5123.493	0	35616.03	35616.03	0	ICE	1109.678	0	1	2
2026	2a	1	71.58735	199.2863	199.2863	0	850.6467	850.6467	0	ICE	71.58735	0	2	2
2026	2a	1	27.35363	79.28176	79.28176	0	327.9161	327.9161	0	ICE	27.35363	0	2	2
2026	2a	1	503.1996	2265.666	0	2265.666	14896.68	0	14896.68	BEV	0	503.1996	2	3
2026	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2026	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2026	2a	1	36.57937	99.73474	99.73474	0	400.4413	400.4413	0	ICE	36.57937	0	3	2
2026	2a	1	28.82736	80.25018	80.25018	0	333.936	333.936	0	ICE	28.82736	0	3	2
2026	2a	1	1.383316	4.405653	4.405653	0	20.70533	20.70533	0	ICE	1.383316	0	3	2
2026	2a	1	69.78917	202.2769	202.2769	0	762.3375	762.3375	0	ICE	69.78917	0	4	2
2026	2a	1	23.78329	78.47131	78.47131	0	307.9458	307.9458	0	ICE	23.78329	0	4	2
2026	2a	1	43.59915	148.8479	148.8479	0	625.078	625.078	0	ICE	43.59915	0	4	2
2026	2a	1	44.02482	152.8233	152.8233	0	648.2085	648.2085	0	ICE	44.02482	0	4	2
2026	2a	1	28.87932	88.66732	88.66732	0	249.9872	249.9872	0	ICE	28.87932	0	1	2
2026	2a	1	124.1397	516.2698	516.2698	0	2779.175	2779.175	0	ICE	124.1397	0	1	2
2026	2a	1	13.15426	50.93762	50.93762	0	257.2215	257.2215	0	ICE	13.15426	0	2	2
2026	2a	1	0.660973	2.408038	2.408038	0	11.43697	11.43697	0	ICE	0.660973	0	3	2
2026	2a	1	53.26766	227.6319	227.6319	0	1365.36	1365.36	0	ICE	53.26766	0	3	2
2026	2a	1	165.1702	743.6821	0	743.6821	3403.204	0	3403.204	BEV	0	165.1702	3	3
2026	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2026	2a	1	74.7839	336.716	202.0296	134.6864	2127.977	1276.786	851.1907	PHEV	44.87034	29.91356	3	8
2026	2a	1	13.02714	41.48948	41.48948	0	163.0252	163.0252	0	ICE	13.02714	0	4	2
2026	2a	1	54.6094	192.6942	192.6942	0	839.4364	839.4364	0	ICE	54.6094	0	4	2
2026	2a	1	29.00288	110.6471	110.6471	0	554.4549	554.4549	0	ICE	29.00288	0	4	2
2026	2a	1	130.5	565.1497	565.1497	0	3430.143	3430.143	0	ICE	130.5	0	3	2
2026	2a	1	10.12855	31.09738	31.09738	0	117.4238	117.4238	0	ICE	10.12855	0	4	2
2026	2a	1	10.68362	39.5343	39.5343	0	190.2759	190.2759	0	ICE	10.68362	0	4	2
2026	2a	1	13.94171	53.18819	0	53.18819	168.31	0	168.31	BEV	0	13.94171	3	3
2026	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2026	2a	1	0	0	0	0	0	0	0	PHEV	0	0	3	8
2026	2a	1	68.97033	263.1246	0	263.1246	843.0569	0	843.0569	BEV	0	68.97033	4	3
2026	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2026	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2026	2a	1	33.89331	102.1199	102.1199	0	253.8786	253.8786	0	ICE	33.89331	0	1	2
2026	2a	1	14.67378	49.25578	49.25578	0	159.4945	159.4945	0	ICE	14.67378	0	1	2
2026	2a	1	75.51571	309.7269	309.7269	0	1609.185	1609.185	0	ICE	75.51571	0	1	2
2026	2a	1	252.07	1077.186	0	1077.186	6345.122	0	6345.122	BEV	0	252.07	1	3
2026	2a	1	25.59087	109.359	0	109.359	644.1748	0	644.1748	FCEV	0	25.59087	1	7
2026	2a	1	26.87041	114.8269	68.89616	45.93077	649.8792	389.9275	259.9517	PHEV	16.12224	10.74816	1	8

2026	2a	1	19.11101	56.48622	56.48622	0	225.5441	225.5441	0	ICE	19.11101	0	2	2
2026	2a	1	8.209611	26.61671	26.61671	0	98.86913	98.86913	0	ICE	8.209611	0	2	2
2026	2a	1	210.6432	924.2896	0	924.2896	5703.362	0	5703.362	BEV	0	210.6432	2	3
2026	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2026	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2026	2a	1	127.3415	339.9049	339.9049	0	1363.433	1363.433	0	ICE	127.3415	0	3	2
2026	2a	1	6.160993	18.20999	18.20999	0	83.77397	83.77397	0	ICE	6.160993	0	3	2
2026	2a	1	45.88295	193.4457	193.4457	0	1098.73	1098.73	0	ICE	45.88295	0	3	2
2026	2a	1	21.4088	69.41034	69.41034	0	284.8834	284.8834	0	ICE	21.4088	0	4	2
2026	2a	1	22.17079	89.6631	0	89.6631	468.8635	0	468.8635	BEV	0	22.17079	1	3
2026	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2026	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2026	2a	1	145.4767	605.0058	0	605.0058	3301.487	0	3301.487	BEV	0	145.4767	1	3
2026	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2026	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2026	2a	1	127.3108	536.751	0	536.751	3108.293	0	3108.293	BEV	0	127.3108	1	3
2026	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2026	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2026	2a	1	9.196919	28.23702	28.23702	0	102.6406	102.6406	0	ICE	9.196919	0	2	2
2026	2a	1	8.353786	28.9985	28.9985	0	141.6396	141.6396	0	ICE	8.353786	0	2	2
2026	2a	1	21.40152	90.23029	90.23029	0	515.3611	515.3611	0	ICE	21.40152	0	2	2
2026	2a	1	262.058	1164.908	0	1164.908	7417.459	0	7417.459	BEV	0	262.058	2	3
2026	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2026	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2026	2a	1	13.34133	54.71932	54.71932	0	312.127	312.127	0	ICE	13.34133	0	3	2
2026	2a	1	16.84164	49.77866	49.77866	0	204.0384	204.0384	0	ICE	16.84164	0	4	2
2026	2a	1	10.18181	31.84421	31.84421	0	133.1354	133.1354	0	ICE	10.18181	0	4	2
2026	2a	1	12.25944	47.47258	0	47.47258	225.8943	0	225.8943	BEV	0	12.25944	1	3
2026	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2026	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2026	2a	1	42.89045	175.9148	0	175.9148	948.1474	0	948.1474	BEV	0	42.89045	1	3
2026	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2026	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2026	2a	1	31.44616	130.7777	0	130.7777	724.402	0	724.402	BEV	0	31.44616	2	3
2026	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2026	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2026	2a	1	4.367888	19.16603	19.16603	0	125.5794	125.5794	0	ICE	4.367888	0	2	2
2026	2a	1	1.283593	5.191105	0	5.191105	20.21812	0	20.21812	BEV	0	1.283593	4	3
2026	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2026	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2026	2a	1	8.068576	30.31969	30.31969	0	140.8903	140.8903	0	ICE	8.068576	0	2	2
2026	2a	1	4.500993	13.81927	13.81927	0	62.30881	62.30881	0	ICE	4.500993	0	3	2
2026	2a	1	1.037775	4.018607	4.018607	0	24.06548	24.06548	0	ICE	1.037775	0	3	2
2026	2a	1	2.799963	9.238282	0	9.238282	31.15254	0	31.15254	BEV	0	2.799963	1	3
2026	2a	1	5.610067	16.90302	16.90302	0	80.00119	80.00119	0	ICE	5.610067	0	3	2
2026	2a	1	1.391385	4.511066	4.511066	0	20.28593	20.28593	0	ICE	1.391385	0	3	2
2026	2a	1	24.0076	101.2177	0	101.2177	415.7145	0	415.7145	BEV	0	24.0076	3	3

2026	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2026	2a	1	0	0	0	0	0	0	0	PHEV	0	0	3	8
2026	2a	1	13.19305	57.13449	0	57.13449	244.6202	0	244.6202	BEV	0	13.19305	3	3
2026	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2026	2a	1	9.133651	39.55464	23.73279	15.82186	239.4087	143.6452	95.76347	PHEV	5.48019	3.65346	3	8
2026	2a	1	1.594759	7.271798	0	7.271798	33.87967	0	33.87967	BEV	0	1.594759	4	3
2026	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2026	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2026	2a	1	2.270884	7.362522	0	7.362522	24.27844	0	24.27844	BEV	0	2.270884	1	3
2026	2a	1	10.08877	30.39727	30.39727	0	111.7906	111.7906	0	ICE	10.08877	0	2	2
2026	2a	1	47.13426	174.4184	0	174.4184	744.9322	0	744.9322	BEV	0	47.13426	2	3
2026	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2026	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2026	2a	1	17.81302	66.93689	0	66.93689	300.3317	0	300.3317	BEV	0	17.81302	2	3
2026	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2026	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2026	2a	1	14.86869	56.72463	56.72463	0	300.7881	300.7881	0	ICE	14.86869	0	2	2
2026	2a	1	7.362722	29.77632	0	29.77632	155.2109	0	155.2109	BEV	0	7.362722	2	3
2026	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2026	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2026	2a	1	13.78375	56.53392	56.53392	0	308.1649	308.1649	0	ICE	13.78375	0	2	2
2026	2a	1	4.049575	16.60929	0	16.60929	89.71012	0	89.71012	BEV	0	4.049575	2	3
2026	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2026	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2026	2a	1	16.33069	67.91573	67.91573	0	391.7091	391.7091	0	ICE	16.33069	0	2	2
2026	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2026	2a	1	16.33069	67.91573	67.91573	0	391.7091	391.7091	0	ICE	16.33069	0	2	2
2026	2a	1	13.47023	56.79145	0	56.79145	327.0432	0	327.0432	BEV	0	13.47023	2	3
2026	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2026	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2026	2a	1	17.26926	49.06387	49.06387	0	226.1036	226.1036	0	ICE	17.26926	0	3	2
2026	2a	1	11.3792	47.32361	0	47.32361	190.24	0	190.24	BEV	0	11.3792	3	3
2026	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2026	2a	1	0	0	0	0	0	0	0	PHEV	0	0	3	8
2026	2a	1	11.62636	51.68184	0	51.68184	231.9485	0	231.9485	BEV	0	11.62636	3	3
2026	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2026	2a	1	8.890746	39.52141	23.71285	15.80856	243.8855	146.3313	97.5542	PHEV	5.334447	3.556298	3	8
2026	2a	1	2.895955	10.71637	0	10.71637	33.10621	0	33.10621	BEV	0	2.895955	4	3
2026	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2026	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2026	2a	1	9.971017	38.61107	0	38.61107	127.9339	0	127.9339	BEV	0	9.971017	4	3
2026	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2026	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2026	2a	1	1.676314	6.683312	0	6.683312	24.15169	0	24.15169	BEV	0	1.676314	4	3
2026	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2026	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2026	2a	1	11.01541	36.34457	36.34457	0	141.5988	141.5988	0	ICE	11.01541	0	2	2
2026	2a	1	1.061322	4.231395	4.231395	0	22.31722	22.31722	0	ICE	1.061322	0	2	2
2026	2a	1	61.41426	234.2978	0	234.2978	1062.318	0	1062.318	BEV	0	61.41426	2	3

2026	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2026	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2026	2a	1	4.083106	16.04506	0	16.04506	78.43419	0	78.43419	BEV	0	4.083106	2	3
2026	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2026	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2026	2a	1	29.88717	108.8841	0	108.8841	450.5207	0	450.5207	BEV	0	29.88717	2	3
2026	2a	1	0.846565	2.987182	2.987182	0	13.89673	13.89673	0	ICE	0.846565	0	3	2
2026	2a	1	8.849602	32.24061	32.24061	0	144.6561	144.6561	0	ICE	8.849602	0	2	2
2026	2a	1	0.647991	2.472111	2.472111	0	11.86831	11.86831	0	ICE	0.647991	0	3	2
2026	2a	1	4.260369	13.56864	13.56864	0	62.23776	62.23776	0	ICE	4.260369	0	2	2
2026	2a	1	2.981491	10.17884	0	10.17884	36.74731	0	36.74731	BEV	0	2.981491	1	3
2026	2a	1	9.517442	38.49044	38.49044	0	212.4587	212.4587	0	ICE	9.517442	0	2	2
2026	2a	1	1.718084	6.357701	0	6.357701	20.64274	0	20.64274	BEV	0	1.718084	3	3
2026	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2026	2a	1	0	0	0	0	0	0	0	PHEV	0	0	3	8
2026	2a	1	0.933265	2.758442	0	2.758442	7.992442	0	7.992442	BEV	0	0.933265	2	3
2026	2a	1	2.135016	8.879061	0	8.879061	34.75546	0	34.75546	BEV	0	2.135016	4	3
2026	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2026	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2026	2a	1	5.124348	18.3753	0	18.3753	74.35829	0	74.35829	BEV	0	5.124348	1	3
2026	2a	1	4.763162	17.62589	0	17.62589	75.75754	0	75.75754	BEV	0	4.763162	1	3
2026	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2026	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2026	2a	1	13.74767	54.02312	0	54.02312	263.5829	0	263.5829	BEV	0	13.74767	1	3
2026	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2026	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2026	2a	1	9.712506	34.27145	34.27145	0	150.6755	150.6755	0	ICE	9.712506	0	2	2
2026	2a	1	9.118399	32.69749	0	32.69749	130.6282	0	130.6282	BEV	0	9.118399	2	3
2026	2a	1	1.545028	6.159886	0	6.159886	30.85309	0	30.85309	BEV	0	1.545028	2	3
2026	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2026	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2026	2a	1	1.882597	6.211497	6.211497	0	25.7106	25.7106	0	ICE	1.882597	0	3	2
2026	2a	1	4.896902	17.27916	0	17.27916	67.28394	0	67.28394	BEV	0	4.896902	1	3
2026	2a	1	6.369754	23.2061	0	23.2061	97.1955	0	97.1955	BEV	0	6.369754	1	3
2026	2a	1	7.037818	22.0112	22.0112	0	99.92056	99.92056	0	ICE	7.037818	0	2	2
2026	2a	1	2.51626	8.158068	0	8.158068	27.01422	0	27.01422	BEV	0	2.51626	2	3
2026	2a	1	1.104467	3.64411	0	3.64411	12.26509	0	12.26509	BEV	0	1.104467	2	3
2026	2a	1	1.080148	3.687637	0	3.687637	13.37738	0	13.37738	BEV	0	1.080148	2	3
2026	2a	1	7.69011	28.45695	28.45695	0	130.3567	130.3567	0	ICE	7.69011	0	2	2
2026	2a	1	4.978782	21.27613	21.27613	0	127.1404	127.1404	0	ICE	4.978782	0	2	2
2026	2a	1	7.06434	31.40262	31.40262	0	199.0017	199.0017	0	ICE	7.06434	0	2	2
2026	2a	1	2.6562	8.307425	8.307425	0	33.35831	33.35831	0	ICE	2.6562	0	3	2
2026	2a	1	1.057196	3.488143	0	3.488143	8.180152	0	8.180152	BEV	0	1.057196	3	3
2026	2a	1	1.286632	4.318864	4.318864	0	21.38508	21.38508	0	ICE	1.286632	0	3	2
2026	2a	1	6.377328	23.23369	0	23.23369	66.50638	0	66.50638	BEV	0	6.377328	3	3
2026	2a	1	0.957525	3.598141	3.598141	0	16.73362	16.73362	0	ICE	0.957525	0	3	2
2026	2a	1	0.605916	2.276881	0	2.276881	6.978535	0	6.978535	BEV	0	0.605916	3	3

2026	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2026	2a	1	0	0	0	0	0	0	0	PHEV	0	0	3	8
2026	2a	1	16.35003	69.86958	0	69.86958	287.9948	0	287.9948	BEV	0	16.35003	3	3
2026	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2026	2a	1	0	0	0	0	0	0	0	PHEV	0	0	3	8
2026	2a	1	40.82382	179.1325	0	179.1325	772.636	0	772.636	BEV	0	40.82382	3	3
2026	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2026	2a	1	10.46765	45.93141	27.55884	18.37256	282.5048	169.5029	113.0019	PHEV	6.280588	4.187059	3	8
2026	2a	1	1.197671	3.265485	0	3.265485	6.235049	0	6.235049	BEV	0	1.197671	4	3
2026	2a	1	0.787991	2.3742	0	2.3742	4.852717	0	4.852717	BEV	0	0.787991	4	3
2026	2a	1	1.363879	4.656296	0	4.656296	11.63988	0	11.63988	BEV	0	1.363879	4	3
2026	2a	1	2.409719	10.43565	10.43565	0	66.35604	66.35604	0	ICE	2.409719	0	2	2
2026	2a	1	0.735224	2.762789	0	2.762789	8.779479	0	8.779479	BEV	0	0.735224	4	3
2026	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2026	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2026	2a	1	0.95724	2.774465	0	2.774465	7.980956	0	7.980956	BEV	0	0.95724	2	3
2026	2a	1	1.057501	2.822723	0	2.822723	7.657175	0	7.657175	BEV	0	1.057501	1	3
2026	2a	1	1.937639	5.394039	0	5.394039	14.64194	0	14.64194	BEV	0	1.937639	1	3
2026	2a	1	2.388729	6.923492	0	6.923492	19.80811	0	19.80811	BEV	0	2.388729	1	3
2026	2a	1	1.950493	5.765053	0	5.765053	16.71579	0	16.71579	BEV	0	1.950493	1	3
2026	2a	1	1.479262	4.456987	0	4.456987	13.57881	0	13.57881	BEV	0	1.479262	1	3
2026	2a	1	1.227662	3.769255	0	3.769255	11.0413	0	11.0413	BEV	0	1.227662	1	3
2026	2a	1	1.153225	3.60678	0	3.60678	11.41559	0	11.41559	BEV	0	1.153225	1	3
2026	2a	1	1.111606	3.540297	0	3.540297	11.13043	0	11.13043	BEV	0	1.111606	1	3
2026	2a	1	1.343886	4.511049	0	4.511049	15.2509	0	15.2509	BEV	0	1.343886	1	3
2026	2a	1	3.636269	12.62258	0	12.62258	47.73648	0	47.73648	BEV	0	3.636269	1	3
2026	2a	1	0.640328	1.709189	0	1.709189	4.729506	0	4.729506	BEV	0	0.640328	2	3
2026	2a	1	0.646233	1.798995	0	1.798995	4.986012	0	4.986012	BEV	0	0.646233	2	3
2026	2a	1	0.653778	1.857456	0	1.857456	5.300995	0	5.300995	BEV	0	0.653778	2	3
2026	2a	1	1.121631	3.765001	0	3.765001	13.23059	0	13.23059	BEV	0	1.121631	2	3
2026	2a	1	0	0	0	0	0	0	0	BEV	0	0	2	3
2026	2a	1	29.39088	134.0168	0	134.0168	911.4985	0	911.4985	FCEV	0	29.39088	2	7
2026	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2026	2a	1	0	0	0	0	0	0	0	BEV	0	0	2	3
2026	2a	1	31.85719	147.0878	0	147.0878	1028.851	0	1028.851	FCEV	0	31.85719	2	7
2026	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2026	2a	1	0.205829	0.808829	0.808829	0	4.387187	4.387187	0	ICE	0.205829	0	3	2
2026	2a	1	0	0	0	0	0	0	0	BEV	0	0	3	3
2026	2a	1	2.07649	9.468401	0	9.468401	45.30561	0	45.30561	FCEV	0	2.07649	3	7
2026	2a	1	29.76303	135.7137	81.42825	54.2855	907.6	544.56	363.04	PHEV	17.85782	11.90521	3	8
2026	2a	1	1.397817	6.293698	6.293698	0	39.90023	39.90023	0	ICE	1.397817	0	2	2
2026	2a	1	0.39364	1.411545	0	1.411545	3.931967	0	3.931967	BEV	0	0.39364	3	3
2026	2a	1	0.530064	1.505971	0	1.505971	2.927987	0	2.927987	BEV	0	0.530064	4	3
2026	2a	1	0.870999	2.674201	0	2.674201	5.605023	0	5.605023	BEV	0	0.870999	4	3
2026	2a	1	2.919764	9.633558	0	9.633558	23.09098	0	23.09098	BEV	0	2.919764	4	3
2026	2a	1	1.050536	3.827283	0	3.827283	11.02231	0	11.02231	BEV	0	1.050536	4	3
2026	2a	1	0.313738	0.855417	0	0.855417	1.522964	0	1.522964	BEV	0	0.313738	3	3

2026	2a	1	0.694987	2.850482	0	2.850482	10.61065	0	10.61065	BEV	0	0.694987	3	3
2026	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2026	2a	1	0	0	0	0	0	0	0	PHEV	0	0	3	8
2026	2a	1	0.231504	0.631201	0	0.631201	1.34455	0	1.34455	BEV	0	0.231504	2	3
2026	2a	1	2.268486	9.694057	0	9.694057	53.4091	0	53.4091	BEV	0	2.268486	2	3
2026	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2026	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2026	2a	1	1.211929	4.206969	0	4.206969	15.44625	0	15.44625	BEV	0	1.211929	2	3
2026	2a	1	3.512297	12.39345	0	12.39345	47.10099	0	47.10099	BEV	0	3.512297	2	3
2026	2a	1	0.965113	3.460778	0	3.460778	9.461131	0	9.461131	BEV	0	0.965113	4	3
2026	2a	1	1.899736	8.771271	8.771271	0	66.05367	66.05367	0	ICE	1.899736	0	2	2
2026	2a	1	1.410512	6.108434	0	6.108434	37.07823	0	37.07823	BEV	0	1.410512	2	3
2026	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2026	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2026	2a	1	0.547649	1.650055	0	1.650055	4.845798	0	4.845798	BEV	0	0.547649	2	3
2026	2a	1	0.239798	0.763722	0	0.763722	1.72643	0	1.72643	BEV	0	0.239798	4	3
2026	2a	1	0.209875	0.644373	0	0.644373	1.916502	0	1.916502	BEV	0	0.209875	2	3
2026	2a	1	0.270294	0.922785	0	0.922785	2.230875	0	2.230875	BEV	0	0.270294	3	3
2026	2a	1	0.354168	1.412036	0	1.412036	4.764395	0	4.764395	BEV	0	0.354168	3	3
2026	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2026	2a	1	0	0	0	0	0	0	0	PHEV	0	0	3	8
2026	2a	1	0.513962	1.636892	0	1.636892	3.817924	0	3.817924	BEV	0	0.513962	3	3
2026	2a	1	1.477559	5.129052	0	5.129052	13.57054	0	13.57054	BEV	0	1.477559	4	3
2026	2a	1	0.445869	1.215674	0	1.215674	3.237433	0	3.237433	BEV	0	0.445869	1	3
2026	2a	1	0.396848	1.127488	0	1.127488	3.0771	0	3.0771	BEV	0	0.396848	1	3
2026	2a	1	0.715833	2.77194	0	2.77194	12.93954	0	12.93954	BEV	0	0.715833	2	3
2026	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2026	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2026	2a	1	0.340397	1.337632	1.337632	0	7.981501	7.981501	0	ICE	0.340397	0	2	2
2026	2a	1	0.744113	2.156736	0	2.156736	4.192599	0	4.192599	BEV	0	0.744113	3	3
2026	2a	1	2.689704	8.720397	0	8.720397	19.79748	0	19.79748	BEV	0	2.689704	4	3
2026	2a	1	2.328331	9.549628	0	9.549628	35.45952	0	35.45952	BEV	0	2.328331	4	3
2026	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2026	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2026	2a	1	0.195856	0.691097	0	0.691097	1.868427	0	1.868427	BEV	0	0.195856	3	3
2026	2a	1	0	0	0	0	0	0	0	BEV	0	0	4	3
2026	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2026	2a	1	2.801959	12.45535	7.473211	4.982141	83.47606	50.08564	33.39043	PHEV	1.681175	1.120784	4	8
2026	2a	1	0.258706	0.883225	0.883225	0	4.460604	4.460604	0	ICE	0.258706	0	3	2
2026	2a	1	0.355299	1.131573	0	1.131573	3.538806	0	3.538806	BEV	0	0.355299	2	3
2027	2a	1	4812.314	12845.22	12845.22	0	23475.19	23475.19	0	ICE	4812.314	0	1	1
2027	2a	1	9098.842	25329.54	25329.54	0	50920.42	50920.42	0	ICE	9098.842	0	1	1
2027	2a	1	9990.535	28384.21	28384.21	0	59510.43	59510.43	0	ICE	9990.535	0	1	1
2027	2a	1	11335.94	33505.53	33505.53	0	76636.43	76636.43	0	ICE	11335.94	0	1	1
2027	2a	1	13825.05	41654.59	41654.59	0	99742.1	99742.1	0	ICE	13825.05	0	1	1
2027	2a	1	17196.95	52799.29	52799.29	0	132563.4	132563.4	0	ICE	17196.95	0	1	1
2027	2a	1	18868.48	59012.32	59012.32	0	154347	154347	0	ICE	18868.48	0	1	1

2027	2a	1	16690.74	53157.51	53157.51	0	145725	145725	0	ICE	16690.74	0	1	1
2027	2a	1	17625.48	57144.26	57144.26	0	163755.3	163755.3	0	ICE	17625.48	0	1	1
2027	2a	1	19974.48	65904.4	65904.4	0	196920.6	196920.6	0	ICE	19974.48	0	1	1
2027	2a	1	24586.45	82529.81	82529.81	0	257468.7	257468.7	0	ICE	24586.45	0	1	1
2027	2a	1	23707.27	80936.85	80936.85	0	263888.1	263888.1	0	ICE	23707.27	0	1	1
2027	2a	1	30714.42	106619	106619	0	362092.2	362092.2	0	ICE	30714.42	0	1	1
2027	2a	1	36535.77	128919.7	128919.7	0	457179.6	457179.6	0	ICE	36535.77	0	1	1
2027	2a	1	42430.72	152151.5	152151.5	0	562785	562785	0	ICE	42430.72	0	1	1
2027	2a	1	57099.83	208024.4	208024.4	0	803195.9	803195.9	0	ICE	57099.83	0	1	1
2027	2a	1	65229.09	241377.6	241377.6	0	970115.7	970115.7	0	ICE	65229.09	0	1	1
2027	2a	1	116.3924	430.7054	430.7054	0	1760.769	1760.769	0	ICE	116.3924	0	1	2
2027	2a	1	74877	281369	281369	0	1179384	1179384	0	ICE	74877	0	1	1
2027	2a	1	92089.59	351325.5	351325.5	0	1532671	1532671	0	ICE	92089.59	0	1	1
2027	2a	1	102323.9	396232.1	396232.1	0	1796587	1796587	0	ICE	102323.9	0	1	1
2027	2a	1	138328	543576.6	543576.6	0	2563294	2563294	0	ICE	138328	0	1	1
2027	2a	1	164209.6	654688.9	654688.9	0	3201084	3201084	0	ICE	164209.6	0	1	1
2027	2a	1	415.3982	1656.155	1656.155	0	8135.325	8135.325	0	ICE	415.3982	0	1	2
2027	2a	1	200598.9	811262	811262	0	4101171	4101171	0	ICE	200598.9	0	1	1
2027	2a	1	192375.2	789025.1	789025.1	0	4127452	4127452	0	ICE	192375.2	0	1	1
2027	2a	1	173177.1	720205.5	720205.5	0	3894507	3894507	0	ICE	173177.1	0	1	1
2027	2a	1	225948.7	952615.7	952615.7	0	5315912	5315912	0	ICE	225948.7	0	1	1
2027	2a	1	2523.532	10639.39	10639.39	0	59042.07	59042.07	0	ICE	2523.532	0	1	2
2027	2a	1	243867.5	1042134	1042134	0	6014498	6014498	0	ICE	243867.5	0	1	1
2027	2a	1	3697.492	15800.71	15800.71	0	89835.7	89835.7	0	ICE	3697.492	0	1	2
2027	2a	1	380528.4	1647935	1647935	0	9839125	9839125	0	ICE	380528.4	0	1	1
2027	2a	1	489789.4	2149166	2149166	0	13228034	13228034	0	ICE	489789.4	0	1	1
2027	2a	1	519648.9	2309959	2309959	0	14679460	14679460	0	ICE	519648.9	0	1	1
2027	2a	1	9652.219	42906.33	42906.33	0	271114.4	271114.4	0	ICE	9652.219	0	1	2
2027	2a	1	628618	2830365	2830365	0	18548457	18548457	0	ICE	628618	0	1	1
2027	2a	1	621125.4	2832214	2832214	0	19123469	19123469	0	ICE	621125.4	0	1	1
2027	2a	1	681476.9	3146447	3146447	0	21917961	21917961	0	ICE	681476.9	0	1	1
2027	2a	1	8339.485	38504.24	38504.24	0	268203	268203	0	ICE	8339.485	0	1	2
2027	2a	1	39635.58	183001.4	0	183001.4	1275584	0	1275584	BEV	0	39635.58	1	3
2027	2a	1	808.8893	3734.723	0	3734.723	26104.09	0	26104.09	FCEV	0	808.8893	1	7
2027	2a	1	35752.63	165073.5	89139.68	75933.8	1149737	620857.9	528879	PHEV	19306.42	16446.21	1	8
2027	2a	1	739420.8	3456341	3456341	0	24773131	24773131	0	ICE	739420.8	0	1	1
2027	2a	1	9048.567	42296.53	42296.53	0	303144.1	303144.1	0	ICE	9048.567	0	1	2
2027	2a	1	52560.75	245689.4	0	245689.4	1761516	0	1761516	BEV	0	52560.75	1	3
2027	2a	1	1072.668	5014.07	0	5014.07	36036.32	0	36036.32	FCEV	0	1072.668	1	7
2027	2a	1	33969.75	158787.9	85745.46	73042.43	1138132	614591.5	523540.9	PHEV	18343.67	15626.09	1	8
2027	2a	1	780221	3691756	3691756	0	27219889	27219889	0	ICE	780221	0	1	1
2027	2a	1	9507.262	44985.32	44985.32	0	331675.1	331675.1	0	ICE	9507.262	0	1	2
2027	2a	1	68011.88	321810.5	0	321810.5	2373083	0	2373083	BEV	0	68011.88	1	3
2027	2a	1	1590.921	7527.73	0	7527.73	55607.51	0	55607.51	FCEV	0	1590.921	1	7
2027	2a	1	33355.45	157827.3	83648.48	74178.84	1163939	616887.5	547051.2	PHEV	17678.39	15677.06	1	8
2027	2a	1	822507.2	3938962	3938962	0	29859822	29859822	0	ICE	822507.2	0	1	1
2027	2a	1	10113.38	48432.66	48432.66	0	367144.1	367144.1	0	ICE	10113.38	0	1	2

2027	2a	1	85185.82	407952.3	0	407952.3	3092853	0	3092853	BEV	0	85185.82	1	3
2027	2a	1	2248.306	10767.07	0	10767.07	81701.16	0	81701.16	FCEV	0	2248.306	1	7
2027	2a	1	32481.82	155554.5	80888.33	74666.15	1179322	613247.3	566074.4	PHEV	16890.55	15591.27	1	8
2027	2a	1	805396.6	3903161	3903161	0	30421057	30421057	0	ICE	805396.6	0	1	1
2027	2a	1	9950.767	48224.01	48224.01	0	375855.5	375855.5	0	ICE	9950.767	0	1	2
2027	2a	1	130123.4	630612	0	630612	4913592	0	4913592	BEV	0	130123.4	1	3
2027	2a	1	4460.496	21616.72	0	21616.72	168484.2	0	168484.2	FCEV	0	4460.496	1	7
2027	2a	1	49471.13	239750	119395.5	120354.5	1869982	931251	938730.9	PHEV	24636.62	24834.51	1	8
2027	2a	1	783181.6	3840370	3840370	0	30748803	30748803	0	ICE	783181.6	0	1	1
2027	2a	1	9746.025	47790.12	47790.12	0	382648.8	382648.8	0	ICE	9746.025	0	1	2
2027	2a	1	178531.3	875437.3	0	875437.3	7005690	0	7005690	BEV	0	178531.3	1	3
2027	2a	1	7549.568	37019.68	0	37019.68	296180.1	0	296180.1	FCEV	0	7549.568	1	7
2027	2a	1	67676.37	331854.4	157962.7	173891.7	2660286	1266296	1393990	PHEV	32213.95	35462.42	1	8
2027	2a	1	746529.3	3703412	3703412	0	30447523	30447523	0	ICE	746529.3	0	1	1
2027	2a	1	9367.877	46472.54	46472.54	0	382088	382088	0	ICE	9367.877	0	1	2
2027	2a	1	227569.4	1128936	0	1128936	9274498	0	9274498	BEV	0	227569.4	1	3
2027	2a	1	11474.09	56921.12	0	56921.12	467282.8	0	467282.8	FCEV	0	11474.09	1	7
2027	2a	1	86013.33	426698.4	193721.1	232977.3	3513941	1595329	1918612	PHEV	39050.05	46963.28	1	8
2027	2a	1	701910.9	3522280	3522280	0	29714188	29714188	0	ICE	701910.9	0	1	1
2027	2a	1	8878.499	44553.46	44553.46	0	375878.7	375878.7	0	ICE	8878.499	0	1	2
2027	2a	1	277291.1	1391483	0	1391483	11727842	0	11727842	BEV	0	277291.1	1	3
2027	2a	1	16271.77	81653.86	0	81653.86	687577.7	0	687577.7	FCEV	0	16271.77	1	7
2027	2a	1	104500.9	524398.9	226540.3	297858.6	4432833	1914984	2517849	PHEV	45144.37	59356.49	1	8
2027	2a	1	658904.8	3344219	3344219	0	28913319	28913319	0	ICE	658904.8	0	1	1
2027	2a	1	8397.51	42620.89	42620.89	0	368512.9	368512.9	0	ICE	8397.51	0	1	2
2027	2a	1	331159.8	1680775	0	1680775	14518813	0	14518813	BEV	0	331159.8	1	3
2027	2a	1	22211.94	112734.9	0	112734.9	973153.8	0	973153.8	FCEV	0	22211.94	1	7
2027	2a	1	124439	631580.3	258947.9	372632.4	5471427	2243285	3228142	PHEV	51020	73419.03	1	8
2027	2a	1	603679.2	3098510	3098510	0	27356185	27356185	0	ICE	603679.2	0	1	1
2027	2a	1	7693.677	39489.41	39489.41	0	348653.4	348653.4	0	ICE	7693.677	0	1	2
2027	2a	1	382226.6	1961858	0	1961858	17310845	0	17310845	BEV	0	382226.6	1	3
2027	2a	1	28896.05	148315	0	148315	1308558	0	1308558	FCEV	0	28896.05	1	7
2027	2a	1	143211.5	735062.9	285204.4	449858.5	6499272	2521718	3977555	PHEV	55566.05	87645.41	1	8
2027	2a	1	486277.5	2523780	2523780	0	22700688	22700688	0	ICE	486277.5	0	1	1
2027	2a	1	6197.433	32164.68	32164.68	0	289301.2	289301.2	0	ICE	6197.433	0	1	2
2027	2a	1	386804.2	2007514	0	2007514	18055762	0	18055762	BEV	0	386804.2	1	3
2027	2a	1	32593.17	169158.6	0	169158.6	1522147	0	1522147	FCEV	0	32593.17	1	7
2027	2a	1	144507	749991.2	274496.8	475494.4	6748619	2469995	4278625	PHEV	52889.55	91617.42	1	8
2027	2a	1	1101.007	2938.853	2938.853	0	12543.52	12543.52	0	ICE	1101.007	0	2	1
2027	2a	1	2061.419	5620.52	5620.52	0	24625.22	24625.22	0	ICE	2061.419	0	2	1
2027	2a	1	3256.366	9065.136	9065.136	0	40377.59	40377.59	0	ICE	3256.366	0	2	1
2027	2a	1	5403.688	15352.47	15352.47	0	68858.58	68858.58	0	ICE	5403.688	0	2	1
2027	2a	1	5238.849	15184.28	15184.28	0	69270.5	69270.5	0	ICE	5238.849	0	2	1
2027	2a	1	5271.843	15581.93	15581.93	0	71671.54	71671.54	0	ICE	5271.843	0	2	1
2027	2a	1	6866.244	20687.86	20687.86	0	96046.18	96046.18	0	ICE	6866.244	0	2	1
2027	2a	1	5856.196	17980.1	17980.1	0	83254.82	83254.82	0	ICE	5856.196	0	2	1
2027	2a	1	7229.057	22609.31	22609.31	0	104332.8	104332.8	0	ICE	7229.057	0	2	1

2027	2a	1	6386.589	20340.33	20340.33	0	95147.33	95147.33	0	ICE	6386.589	0	2	1
2027	2a	1	8127.014	26348.92	26348.92	0	124301.7	124301.7	0	ICE	8127.014	0	2	1
2027	2a	1	9787.23	32292.28	32292.28	0	154384.4	154384.4	0	ICE	9787.23	0	2	1
2027	2a	1	9310.464	31252.62	31252.62	0	151810.6	151810.6	0	ICE	9310.464	0	2	1
2027	2a	1	10139.76	34617.25	34617.25	0	168873.1	168873.1	0	ICE	10139.76	0	2	1
2027	2a	1	13255.01	46012.12	46012.12	0	227392.9	227392.9	0	ICE	13255.01	0	2	1
2027	2a	1	17127.54	60436.07	60436.07	0	303288.3	303288.3	0	ICE	17127.54	0	2	1
2027	2a	1	15902.06	57022.87	57022.87	0	289279.7	289279.7	0	ICE	15902.06	0	2	1
2027	2a	1	17571.75	64016.87	64016.87	0	328971.2	328971.2	0	ICE	17571.75	0	2	1
2027	2a	1	20040.18	74157.9	74157.9	0	384754.6	384754.6	0	ICE	20040.18	0	2	1
2027	2a	1	21401.95	80423.17	80423.17	0	419228.6	419228.6	0	ICE	21401.95	0	2	1
2027	2a	1	15300.17	58370.75	58370.75	0	307112.1	307112.1	0	ICE	15300.17	0	2	1
2027	2a	1	8925.454	35073.64	35073.64	0	187396.3	187396.3	0	ICE	8925.454	0	2	1
2027	2a	1	14421.98	57499.14	57499.14	0	312781.9	312781.9	0	ICE	14421.98	0	2	1
2027	2a	1	21210.55	85779.7	85779.7	0	473635.6	473635.6	0	ICE	21210.55	0	2	1
2027	2a	1	36781.18	150857.6	150857.6	0	846259.3	846259.3	0	ICE	36781.18	0	2	1
2027	2a	1	27594.58	114759.8	114759.8	0	653143.3	653143.3	0	ICE	27594.58	0	2	1
2027	2a	1	14723.29	62074.44	62074.44	0	359082.7	359082.7	0	ICE	14723.29	0	2	1
2027	2a	1	13041.92	55732.82	55732.82	0	329691.2	329691.2	0	ICE	13041.92	0	2	1
2027	2a	1	97462.96	438828.9	438828.9	0	2852616	2852616	0	ICE	97462.96	0	2	1
2027	2a	1	90470.57	412528.6	412528.6	0	2732784	2732784	0	ICE	90470.57	0	2	1
2027	2a	1	80837.71	373235.8	373235.8	0	2536392	2536392	0	ICE	80837.71	0	2	1
2027	2a	1	10.95093	50.56153	50.56153	0	343.5879	343.5879	0	ICE	10.95093	0	2	2
2027	2a	1	2.723768	12.57591	0	12.57591	87.31779	0	87.31779	BEV	0	2.723768	2	3
2027	2a	1	0.055587	0.256651	0	0.256651	1.781996	0	1.781996	FCEV	0	0.055587	2	7
2027	2a	1	23.62452	109.0768	65.44606	43.63071	741.2092	444.7255	296.4837	PHEV	14.17471	9.449808	2	8
2027	2a	1	87060.15	406953.1	406953.1	0	2834110	2834110	0	ICE	87060.15	0	2	1
2027	2a	1	11.79387	55.12915	55.12915	0	383.9155	383.9155	0	ICE	11.79387	0	2	2
2027	2a	1	89398.43	423004.8	423004.8	0	3021163	3021163	0	ICE	89398.43	0	2	1
2027	2a	1	12.19513	57.70344	57.70344	0	412.0827	412.0827	0	ICE	12.19513	0	2	2
2027	2a	1	1188.679	5624.451	0	5624.451	40572.26	0	40572.26	BEV	0	1188.679	2	3
2027	2a	1	27.80537	131.5661	0	131.5661	965.7105	0	965.7105	FCEV	0	27.80537	2	7
2027	2a	1	912.8223	4319.183	2566.829	1752.354	30718.6	18255.63	12462.98	PHEV	542.4772	370.345	2	8
2027	2a	1	91683.68	439070.4	439070.4	0	3216226	3216226	0	ICE	91683.68	0	2	1
2027	2a	1	12.65218	60.59091	60.59091	0	443.7337	443.7337	0	ICE	12.65218	0	2	2
2027	2a	1	2490.312	11926.03	0	11926.03	88373.25	0	88373.25	BEV	0	2490.312	2	3
2027	2a	1	65.7267	314.7632	0	314.7632	2373.665	0	2373.665	FCEV	0	65.7267	2	7
2027	2a	1	1917.992	9185.208	5406.151	3779.057	66937.92	39397.75	27540.17	PHEV	1128.876	789.1169	2	8
2027	2a	1	89565.57	434058	434058	0	3262745	3262745	0	ICE	89565.57	0	2	1
2027	2a	1	12.52232	60.6864	60.6864	0	456.0043	456.0043	0	ICE	12.52232	0	2	2
2027	2a	1	6312.443	30591.74	0	30591.74	232795	0	232795	BEV	0	6312.443	2	3
2027	2a	1	216.384	1048.653	0	1048.653	8123.965	0	8123.965	FCEV	0	216.384	2	7
2027	2a	1	4552.478	22062.49	12789.94	9272.549	164156.4	95163.83	68992.61	PHEV	2639.136	1913.341	2	8
2027	2a	1	86397.38	423653.9	423653.9	0	3267547	3267547	0	ICE	86397.38	0	2	1
2027	2a	1	12.12887	59.47453	59.47453	0	458.5165	458.5165	0	ICE	12.12887	0	2	2
2027	2a	1	10575.78	51858.87	0	51858.87	404852.5	0	404852.5	BEV	0	10575.78	2	3
2027	2a	1	447.2189	2192.96	0	2192.96	17442.35	0	17442.35	FCEV	0	447.2189	2	7

2027	2a	1	7135.475	34989.16	19973.81	15015.35	266342.5	152043.5	114299	PHEV	4073.337	3062.138	2	8
2027	2a	1	81515.31	404384.4	404384.4	0	3200691	3200691	0	ICE	81515.31	0	2	1
2027	2a	1	11.4974	57.03674	57.03674	0	451.2261	451.2261	0	ICE	11.4974	0	2	2
2027	2a	1	15083.55	74827.09	0	74827.09	599108	0	599108	BEV	0	15083.55	2	3
2027	2a	1	760.5152	3772.794	0	3772.794	30701.83	0	30701.83	FCEV	0	760.5152	2	7
2027	2a	1	9509.935	47177.27	26513.62	20663.64	368030.7	206833.2	161197.4	PHEV	5344.584	4165.352	2	8
2027	2a	1	75725.01	379997.9	379997.9	0	3086825	3086825	0	ICE	75725.01	0	2	1
2027	2a	1	10.72746	53.83178	53.83178	0	437.0593	437.0593	0	ICE	10.72746	0	2	2
2027	2a	1	19780.67	99261.98	0	99261.98	815069.6	0	815069.6	BEV	0	19780.67	2	3
2027	2a	1	1160.753	5824.811	0	5824.811	48427.11	0	48427.11	FCEV	0	1160.753	2	7
2027	2a	1	11637.87	58400.33	32303.73	26096.61	467260.4	258461.8	208798.6	PHEV	6437.403	5200.464	2	8
2027	2a	1	70057.98	355573.7	355573.7	0	2965469	2965469	0	ICE	70057.98	0	2	1
2027	2a	1	9.964858	50.57584	50.57584	0	421.5619	421.5619	0	ICE	9.964858	0	2	2
2027	2a	1	24865.39	126202.3	0	126202.3	1063051	0	1063051	BEV	0	24865.39	2	3
2027	2a	1	1667.801	8464.789	0	8464.789	72009.42	0	72009.42	FCEV	0	1667.801	2	7
2027	2a	1	13628.89	69172.36	37649.53	31522.83	568034.2	309172.9	258861.3	PHEV	7418.012	6210.882	2	8
2027	2a	1	64353.25	330306.6	330306.6	0	2824340	2824340	0	ICE	64353.25	0	2	1
2027	2a	1	9.153433	46.98192	46.98192	0	401.506	401.506	0	ICE	9.153433	0	2	2
2027	2a	1	30369.63	155878.5	0	155878.5	1344981	0	1344981	BEV	0	30369.63	2	3
2027	2a	1	2295.922	11784.3	0	11784.3	102408.3	0	102408.3	FCEV	0	2295.922	2	7
2027	2a	1	15476.65	79437.15	42532.92	36904.23	668647.7	358013.1	310634.6	PHEV	8286.64	7190.009	2	8
2027	2a	1	52476.13	272351.1	272351.1	0	2386524	2386524	0	ICE	52476.13	0	2	1
2027	2a	1	7.464063	38.73849	38.73849	0	339.2718	339.2718	0	ICE	7.464063	0	2	2
2027	2a	1	32578.99	169084.9	0	169084.9	1493844	0	1493844	BEV	0	32578.99	2	3
2027	2a	1	2745.193	14247.55	0	14247.55	126549.5	0	126549.5	FCEV	0	2745.193	2	7
2027	2a	1	15400.41	79928.12	42087.86	37840.26	689395.9	363016.2	326379.7	PHEV	8109.415	7290.993	2	8
2027	2a	1	1971.738	5376.002	5376.002	0	21918.78	21918.78	0	ICE	1971.738	0	3	1
2027	2a	1	3330.681	9462.832	9462.832	0	38984.52	38984.52	0	ICE	3330.681	0	3	1
2027	2a	1	3447.047	9990.92	9990.92	0	41702.6	41702.6	0	ICE	3447.047	0	3	1
2027	2a	1	4419.743	13063.39	13063.39	0	55361.1	55361.1	0	ICE	4419.743	0	3	1
2027	2a	1	5507.803	16594.9	16594.9	0	72037.32	72037.32	0	ICE	5507.803	0	3	1
2027	2a	1	6473.597	19875.69	19875.69	0	87243.41	87243.41	0	ICE	6473.597	0	3	1
2027	2a	1	7888.755	24672.55	24672.55	0	111645.3	111645.3	0	ICE	7888.755	0	3	1
2027	2a	1	7505.256	23903.12	23903.12	0	109212	109212	0	ICE	7505.256	0	3	1
2027	2a	1	10261.58	33269.49	33269.49	0	153693.5	153693.5	0	ICE	10261.58	0	3	1
2027	2a	1	11681.27	38541.53	38541.53	0	180454	180454	0	ICE	11681.27	0	3	1
2027	2a	1	15018.51	50412.94	50412.94	0	239580.7	239580.7	0	ICE	15018.51	0	3	1
2027	2a	1	14786.44	50481.04	50481.04	0	242360.5	242360.5	0	ICE	14786.44	0	3	1
2027	2a	1	23426.54	81320.54	81320.54	0	395147.5	395147.5	0	ICE	23426.54	0	3	1
2027	2a	1	27298.61	96325.62	96325.62	0	473122.2	473122.2	0	ICE	27298.61	0	3	1
2027	2a	1	31499.31	112952.8	112952.8	0	559899.4	559899.4	0	ICE	31499.31	0	3	1
2027	2a	1	43036.08	156787.8	156787.8	0	786219.7	786219.7	0	ICE	43036.08	0	3	1
2027	2a	1	43057.29	159331.8	159331.8	0	806561.7	806561.7	0	ICE	43057.29	0	3	1
2027	2a	1	43483.77	163401.1	163401.1	0	841496	841496	0	ICE	43483.77	0	3	1
2027	2a	1	51332.99	195837.4	195837.4	0	1023530	1023530	0	ICE	51332.99	0	3	1
2027	2a	1	64348.03	249176.8	249176.8	0	1315675	1315675	0	ICE	64348.03	0	3	1
2027	2a	1	74869.73	294209.6	294209.6	0	1574248	1574248	0	ICE	74869.73	0	3	1

2027	2a	1	73339.2	292396.8	292396.8	0	1587072	1587072	0	ICE	73339.2	0	3	1
2027	2a	1	81251.92	328599	328599	0	1809920	1809920	0	ICE	81251.92	0	3	1
2027	2a	1	69508.33	285087.7	285087.7	0	1596451	1596451	0	ICE	69508.33	0	3	1
2027	2a	1	46779.76	194546.7	194546.7	0	1109411	1109411	0	ICE	46779.76	0	3	1
2027	2a	1	87965.27	370867.7	370867.7	0	2152535	2152535	0	ICE	87965.27	0	3	1
2027	2a	1	124309.9	531221.1	531221.1	0	3147232	3147232	0	ICE	124309.9	0	3	1
2027	2a	1	127726.8	553139.9	553139.9	0	3357162	3357162	0	ICE	127726.8	0	3	1
2027	2a	1	182420.7	800451.3	800451.3	0	4957995	4957995	0	ICE	182420.7	0	3	1
2027	2a	1	178472.5	793351.4	793351.4	0	5035166	5035166	0	ICE	178472.5	0	3	1
2027	2a	1	1926.737	8564.791	8564.791	0	53330.24	53330.24	0	ICE	1926.737	0	3	2
2027	2a	1	219431.9	987996.6	987996.6	0	6407918	6407918	0	ICE	219431.9	0	3	1
2027	2a	1	220327.9	1004653	1004653	0	6667167	6667167	0	ICE	220327.9	0	3	1
2027	2a	1	1518.272	6923.032	6923.032	0	46396.8	46396.8	0	ICE	1518.272	0	3	2
2027	2a	1	254896	1176880	1176880	0	7963700	7963700	0	ICE	254896	0	3	1
2027	2a	1	2605.322	12029.03	12029.03	0	81628.42	81628.42	0	ICE	2605.322	0	3	2
2027	2a	1	274482.4	1283038	1283038	0	8898044	8898044	0	ICE	274482.4	0	3	1
2027	2a	1	2805.517	13114.08	13114.08	0	91203.68	91203.68	0	ICE	2805.517	0	3	2
2027	2a	1	947.0026	4426.659	2655.996	1770.664	30834.67	18500.8	12333.87	PHEV	568.2015	378.801	3	8
2027	2a	1	283706.4	1342408	1342408	0	9571328	9571328	0	ICE	283706.4	0	3	1
2027	2a	1	2892.486	13686.32	13686.32	0	97809.81	97809.81	0	ICE	2892.486	0	3	2
2027	2a	1	3345.96	15832.01	0	15832.01	88929.08	0	88929.08	BEV	0	3345.96	3	3
2027	2a	1	78.26806	370.3394	0	370.3394	1888.888	0	1888.888	FCEV	0	78.26806	3	7
2027	2a	1	2906.164	13751.04	8172.045	5578.992	98227.96	58375.47	39852.48	PHEV	1727.092	1179.072	3	8
2027	2a	1	290726.3	1392280	1392280	0	10174105	10174105	0	ICE	290726.3	0	3	1
2027	2a	1	2970.796	14227.05	14227.05	0	104223.1	104223.1	0	ICE	2970.796	0	3	2
2027	2a	1	6967.263	33366.01	0	33366.01	219661.7	0	219661.7	BEV	0	6967.263	3	3
2027	2a	1	183.8867	880.6279	0	880.6279	4612.2	0	4612.2	FCEV	0	183.8867	3	7
2027	2a	1	5028.143	24079.62	14172.58	9907.045	176400.1	103824.1	72576.04	PHEV	2959.421	2068.722	3	8
2027	2a	1	280206.8	1357955	1357955	0	10168954	10168954	0	ICE	280206.8	0	3	1
2027	2a	1	2906.59	14086.09	14086.09	0	105890.7	105890.7	0	ICE	2906.59	0	3	2
2027	2a	1	19137.67	92746.15	0	92746.15	606822.7	0	606822.7	BEV	0	19137.67	3	3
2027	2a	1	656.0196	3179.241	0	3179.241	17092.58	0	17092.58	FCEV	0	656.0196	3	7
2027	2a	1	13007.69	63038.66	36544.41	26494.25	520844.8	301941.2	218903.6	PHEV	7540.746	5466.948	3	8
2027	2a	1	267951.7	1313915	1313915	0	10089556	10089556	0	ICE	267951.7	0	3	1
2027	2a	1	2792.546	13693.39	13693.39	0	105622.5	105622.5	0	ICE	2792.546	0	3	2
2027	2a	1	32468.77	159212.2	0	159212.2	1064637	0	1064637	BEV	0	32468.77	3	3
2027	2a	1	1373.009	6732.62	0	6732.62	37142.15	0	37142.15	FCEV	0	1373.009	3	7
2027	2a	1	20765.95	101826.9	58128.59	43698.27	894945.5	510886.1	384059.5	PHEV	11854.39	8911.558	3	8
2027	2a	1	252688.5	1253547	1253547	0	9872484	9872484	0	ICE	252688.5	0	3	1
2027	2a	1	2647.706	13134.85	13134.85	0	103965.7	103965.7	0	ICE	2647.706	0	3	2
2027	2a	1	46664.23	231493.8	0	231493.8	1595687	0	1595687	BEV	0	46664.23	3	3
2027	2a	1	2352.818	11671.96	0	11671.96	66450.91	0	66450.91	FCEV	0	2352.818	3	7
2027	2a	1	28052.64	139164.6	78210.52	60954.11	1276058	717144.7	558913.5	PHEV	15765.58	12287.05	3	8
2027	2a	1	235483	1181684	1181684	0	9543932	9543932	0	ICE	235483	0	3	1
2027	2a	1	2479.81	12444.01	12444.01	0	101065.5	101065.5	0	ICE	2479.81	0	3	2
2027	2a	1	61606.63	309150.1	0	309150.1	2195364	0	2195364	BEV	0	61606.63	3	3
2027	2a	1	3615.15	18141.29	0	18141.29	111701.3	0	111701.3	FCEV	0	3615.15	3	7

2027	2a	1	34766.56	174463.1	96503.04	77960.1	1658818	917563.6	741254.9	PHEV	19230.88	15535.69	3	8
2027	2a	1	220783.5	1120569	1120569	0	9285742	9285742	0	ICE	220783.5	0	3	1
2027	2a	1	2335.808	11855.21	11855.21	0	98843.17	98843.17	0	ICE	2335.808	0	3	2
2027	2a	1	78593.85	398896.8	0	398896.8	2920725	0	2920725	BEV	0	78593.85	3	3
2027	2a	1	5271.539	26755.27	0	26755.27	174886.8	0	174886.8	FCEV	0	5271.539	3	7
2027	2a	1	41573.02	211000.6	114844.6	96155.97	2077714	1130870	946843.8	PHEV	22627.6	18945.42	3	8
2027	2a	1	205395.5	1054235	1054235	0	8956919	8956919	0	ICE	205395.5	0	3	1
2027	2a	1	2173.009	11153.42	11153.42	0	95344.18	95344.18	0	ICE	2173.009	0	3	2
2027	2a	1	97244.09	499125.7	0	499125.7	3768875	0	3768875	BEV	0	97244.09	3	3
2027	2a	1	7351.581	37733.54	0	37733.54	262321.2	0	262321.2	FCEV	0	7351.581	3	7
2027	2a	1	48129.38	247034.2	132269.1	114765	2518973	1348730	1170243	PHEV	25769.85	22359.54	3	8
2027	2a	1	166450.5	863878.2	863878.2	0	7519498	7519498	0	ICE	166450.5	0	3	1
2027	2a	1	1760.986	9139.515	9139.515	0	80043.92	80043.92	0	ICE	1760.986	0	3	2
2027	2a	1	103636.1	537871.4	0	537871.4	4185759	0	4185759	BEV	0	103636.1	3	3
2027	2a	1	8732.658	45322.5	0	45322.5	331245.7	0	331245.7	FCEV	0	8732.658	3	7
2027	2a	1	47895.46	248577.4	130893.8	117683.7	2619143	1379166	1239977	PHEV	25220.38	22675.08	3	8
2027	2a	1	3890.111	11943.69	11943.69	0	46824.54	46824.54	0	ICE	3890.111	0	4	1
2027	2a	1	3406.396	10653.71	10653.71	0	42810.6	42810.6	0	ICE	3406.396	0	4	1
2027	2a	1	4313.458	13737.72	13737.72	0	55996.78	55996.78	0	ICE	4313.458	0	4	1
2027	2a	1	4908.438	15913.84	15913.84	0	66871.71	66871.71	0	ICE	4908.438	0	4	1
2027	2a	1	8106.198	26745.83	26745.83	0	114436.8	114436.8	0	ICE	8106.198	0	4	1
2027	2a	1	9581.32	32161.81	32161.81	0	140928	140928	0	ICE	9581.32	0	4	1
2027	2a	1	9321.532	31823.8	31823.8	0	141571.9	141571.9	0	ICE	9321.532	0	4	1
2027	2a	1	13287.7	46125.6	46125.6	0	210148.9	210148.9	0	ICE	13287.7	0	4	1
2027	2a	1	16133.49	56928.46	56928.46	0	263784.1	263784.1	0	ICE	16133.49	0	4	1
2027	2a	1	28635.86	102684.8	102684.8	0	485073.2	485073.2	0	ICE	28635.86	0	4	1
2027	2a	1	35223.46	128325	128325	0	615937.7	615937.7	0	ICE	35223.46	0	4	1
2027	2a	1	49106.7	181717.4	181717.4	0	885243.9	885243.9	0	ICE	49106.7	0	4	1
2027	2a	1	49.76495	184.1532	184.1532	0	854.1607	854.1607	0	ICE	49.76495	0	4	2
2027	2a	1	64268.47	241504.8	241504.8	0	1196124	1196124	0	ICE	64268.47	0	4	1
2027	2a	1	75632.17	288539.8	288539.8	0	1457906	1457906	0	ICE	75632.17	0	4	1
2027	2a	1	87983.49	340701.1	340701.1	0	1742746	1742746	0	ICE	87983.49	0	4	1
2027	2a	1	125.5922	486.3344	486.3344	0	2378.711	2378.711	0	ICE	125.5922	0	4	2
2027	2a	1	87642.8	344402.9	344402.9	0	1779419	1779419	0	ICE	87642.8	0	4	1
2027	2a	1	90827.96	362122.9	362122.9	0	1900861	1900861	0	ICE	90827.96	0	4	1
2027	2a	1	95358.66	385649.5	385649.5	0	2061605	2061605	0	ICE	95358.66	0	4	1
2027	2a	1	74233	304465.9	304465.9	0	1659210	1659210	0	ICE	74233	0	4	1
2027	2a	1	32234.12	134054.6	134054.6	0	744665.5	744665.5	0	ICE	32234.12	0	4	1
2027	2a	1	48257.07	203455.2	203455.2	0	1155564	1155564	0	ICE	48257.07	0	4	1
2027	2a	1	72114.8	308172.5	308172.5	0	1789236	1789236	0	ICE	72114.8	0	4	1
2027	2a	1	2038.204	8709.98	8709.98	0	49943.31	49943.31	0	ICE	2038.204	0	4	2
2027	2a	1	74394.78	322177.8	322177.8	0	1917263	1917263	0	ICE	74394.78	0	4	1
2027	2a	1	84761.21	371927.1	371927.1	0	2269817	2269817	0	ICE	84761.21	0	4	1
2027	2a	1	1830.717	8033.077	8033.077	0	48337.28	48337.28	0	ICE	1830.717	0	4	2
2027	2a	1	134716.2	598844.3	598844.3	0	3749119	3749119	0	ICE	134716.2	0	4	1
2027	2a	1	4192.05	18634.63	18634.63	0	116139	116139	0	ICE	4192.05	0	4	2
2027	2a	1	149418.5	672759.8	672759.8	0	4324354	4324354	0	ICE	149418.5	0	4	1

2027	2a	1	165431.9	754338.1	754338.1	0	4960288	4960288	0	ICE	165431.9	0	4	1
2027	2a	1	153473.1	708600.5	708600.5	0	4738603	4738603	0	ICE	153473.1	0	4	1
2027	2a	1	5351.631	24709.02	24709.02	0	165338.6	165338.6	0	ICE	5351.631	0	4	2
2027	2a	1	1283.999	5928.354	3557.012	2371.342	37874.51	22724.71	15149.8	PHEV	770.3997	513.5998	4	8
2027	2a	1	164889.7	770758.9	770758.9	0	5285652	5285652	0	ICE	164889.7	0	4	1
2027	2a	1	5749.732	26876.49	26876.49	0	184425.4	184425.4	0	ICE	5749.732	0	4	2
2027	2a	1	2.884412	13.48287	0	13.48287	66.92439	0	66.92439	BEV	0	2.884412	4	3
2027	2a	1	0.058866	0.275161	0	0.275161	1.365804	0	1.365804	FCEV	0	0.058866	4	7
2027	2a	1	3529.726	16499.32	9899.589	6599.726	111188.1	66712.83	44475.22	PHEV	2117.836	1411.89	4	8
2027	2a	1	172321.2	815368.9	815368.9	0	5732894	5732894	0	ICE	172321.2	0	4	1
2027	2a	1	6065.596	28700.46	28700.46	0	202082.5	202082.5	0	ICE	6065.596	0	4	2
2027	2a	1	1477.217	6989.72	0	6989.72	37066.12	0	37066.12	BEV	0	1477.217	4	3
2027	2a	1	34.55479	163.5022	0	163.5022	833.7945	0	833.7945	FCEV	0	34.55479	4	7
2027	2a	1	3843.415	18185.81	10807.57	7378.244	132673.4	78845.89	53827.48	PHEV	2284.087	1559.329	4	8
2027	2a	1	180390.4	863884.2	863884.2	0	6222697	6222697	0	ICE	180390.4	0	4	1
2027	2a	1	6449.208	30885.06	30885.06	0	223097.3	223097.3	0	ICE	6449.208	0	4	2
2027	2a	1	3110.608	14896.61	0	14896.61	87508.02	0	87508.02	BEV	0	3110.608	4	3
2027	2a	1	82.09816	393.1656	0	393.1656	2058.943	0	2058.943	FCEV	0	82.09816	4	7
2027	2a	1	4189.199	20061.95	11807.89	8254.058	147559.4	86849.23	60710.14	PHEV	2465.643	1723.556	4	8
2027	2a	1	175766.8	851811.7	851811.7	0	6287478	6287478	0	ICE	175766.8	0	4	1
2027	2a	1	6394.935	30991.52	30991.52	0	229760.8	229760.8	0	ICE	6394.935	0	4	2
2027	2a	1	9301.749	45078.69	0	45078.69	271697.8	0	271697.8	BEV	0	9301.749	4	3
2027	2a	1	318.8543	1545.251	0	1545.251	8306.84	0	8306.84	FCEV	0	318.8543	4	7
2027	2a	1	11102.11	53803.73	31190.79	22612.94	429801.3	249161.9	180639.3	PHEV	6436.054	4666.06	4	8
2027	2a	1	170020.9	833706.2	833706.2	0	6309484	6309484	0	ICE	170020.9	0	4	1
2027	2a	1	6219.814	30499.17	30499.17	0	231989.5	231989.5	0	ICE	6219.814	0	4	2
2027	2a	1	16726.4	82018.76	0	82018.76	513976.4	0	513976.4	BEV	0	16726.4	4	3
2027	2a	1	707.3107	3468.333	0	3468.333	19130.81	0	19130.81	FCEV	0	707.3107	4	7
2027	2a	1	17714.65	86864.69	49587.33	37277.36	729833.5	416630.7	313202.8	PHEV	10112.54	7602.117	4	8
2027	2a	1	160221.6	794833.5	794833.5	0	6168018	6168018	0	ICE	160221.6	0	4	1
2027	2a	1	5898.222	29260.13	29260.13	0	228357.4	228357.4	0	ICE	5898.222	0	4	2
2027	2a	1	24987.42	123958.6	0	123958.6	807910.9	0	807910.9	BEV	0	24987.42	4	3
2027	2a	1	1259.87	6250.014	0	6250.014	35359.59	0	35359.59	FCEV	0	1259.87	4	7
2027	2a	1	23486.75	116514	65480.87	51033.13	1020778	573677.2	447100.7	PHEV	13199.55	10287.2	4	8
2027	2a	1	150088.8	753165	753165	0	5991701	5991701	0	ICE	150088.8	0	4	1
2027	2a	1	5557.485	27888.18	27888.18	0	223262.6	223262.6	0	ICE	5557.485	0	4	2
2027	2a	1	34343.56	172340.5	0	172340.5	1167183	0	1167183	BEV	0	34343.56	4	3
2027	2a	1	2015.321	10113.14	0	10113.14	58716.37	0	58716.37	FCEV	0	2015.321	4	7
2027	2a	1	28625.41	143646	79456.78	64189.25	1308232	723639.3	584592.9	PHEV	15833.94	12791.47	4	8
2027	2a	1	140784.4	714539.8	714539.8	0	5826891	5826891	0	ICE	140784.4	0	4	1
2027	2a	1	5241.105	26600.81	26600.81	0	218428.5	218428.5	0	ICE	5241.105	0	4	2
2027	2a	1	45250.57	229665.6	0	229665.6	1613569	0	1613569	BEV	0	45250.57	4	3
2027	2a	1	3035.099	15404.4	0	15404.4	95726.82	0	95726.82	FCEV	0	3035.099	4	7
2027	2a	1	33381.12	169423.2	92214.63	77208.58	1600072	870896.5	729175.8	PHEV	18168.87	15212.25	4	8
2027	2a	1	129803.9	666245.8	666245.8	0	5565913	5565913	0	ICE	129803.9	0	4	1
2027	2a	1	4832.326	24802.93	24802.93	0	208645.4	208645.4	0	ICE	4832.326	0	4	2
2027	2a	1	57123.86	293200.2	0	293200.2	2137362	0	2137362	BEV	0	57123.86	4	3

2027	2a	1	4318.522	22165.72	0	22165.72	147732	0	147732	FCEV	0	4318.522	4	7
2027	2a	1	37180.75	190838	102180.1	88657.88	1868911	1000668	868242.7	PHEV	19907.63	17273.11	4	8
2027	2a	1	100741.5	522848.3	522848.3	0	4463271	4463271	0	ICE	100741.5	0	4	1
2027	2a	1	3750.393	19464.54	19464.54	0	167305.2	167305.2	0	ICE	3750.393	0	4	2
2027	2a	1	59886.26	310809.7	0	310809.7	2345779	0	2345779	BEV	0	59886.26	4	3
2027	2a	1	5046.178	26189.66	0	26189.66	184708.8	0	184708.8	FCEV	0	5046.178	4	7
2027	2a	1	34238.71	177698.9	93571.16	84127.73	1796152	945802.4	850349.8	PHEV	18029.12	16209.58	4	8
2027	2a	1	1463.046	3905.222	3905.222	0	7039.997	7039.997	0	ICE	1463.046	0	1	2
2027	2a	1	7310.317	19931.8	19931.8	0	38871.89	38871.89	0	ICE	7310.317	0	1	1
2027	2a	1	1134.063	3157.027	3157.027	0	6159.211	6159.211	0	ICE	1134.063	0	1	2
2027	2a	1	11533.95	33429.99	33429.99	0	72402.24	72402.24	0	ICE	11533.95	0	1	1
2027	2a	1	71.03728	222.1733	222.1733	0	583.3586	583.3586	0	ICE	71.03728	0	1	2
2027	2a	1	37.69304	120.0467	120.0467	0	311.7976	311.7976	0	ICE	37.69304	0	1	2
2027	2a	1	20.38734	66.0986	66.0986	0	184.5821	184.5821	0	ICE	20.38734	0	1	2
2027	2a	1	55.85336	193.8838	193.8838	0	663.0675	663.0675	0	ICE	55.85336	0	1	2
2027	2a	1	101.0571	368.1682	368.1682	0	1462.797	1462.797	0	ICE	101.0571	0	1	2
2027	2a	1	17.16491	63.51806	0	63.51806	271.7597	0	271.7597	BEV	0	17.16491	1	3
2027	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2027	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2027	2a	1	293.116	1101.457	1101.457	0	4653.503	4653.503	0	ICE	293.116	0	1	2
2027	2a	1	439.2737	1675.847	1675.847	0	7408.295	7408.295	0	ICE	439.2737	0	1	2
2027	2a	1	174.1035	674.1861	674.1861	0	3136.174	3136.174	0	ICE	174.1035	0	1	2
2027	2a	1	362.8442	1425.84	1425.84	0	6723.52	6723.52	0	ICE	362.8442	0	1	2
2027	2a	1	1365.526	5678.921	5678.921	0	30633.68	30633.68	0	ICE	1365.526	0	1	2
2027	2a	1	4338.942	18790.44	18790.44	0	111019.1	111019.1	0	ICE	4338.942	0	1	2
2027	2a	1	6425.912	28196.51	28196.51	0	172792.1	172792.1	0	ICE	6425.912	0	1	2
2027	2a	1	6002.839	26340.1	0	26340.1	161124.1	0	161124.1	BEV	0	6002.839	1	3
2027	2a	1	0.352673	1.547506	0	1.547506	9.466196	0	9.466196	FCEV	0	0.352673	1	7
2027	2a	1	6274.397	27531.68	16519.01	11012.67	163179.8	97907.86	65271.9	PHEV	3764.638	2509.759	1	8
2027	2a	1	7780.18	34584.69	0	34584.69	218137.6	0	218137.6	BEV	0	7780.18	1	3
2027	2a	1	1.090119	4.84583	0	4.84583	30.56433	0	30.56433	FCEV	0	1.090119	1	7
2027	2a	1	9823.064	43665.78	26199.47	17466.31	266963	160177.8	106785.2	PHEV	5893.838	3929.226	1	8
2027	2a	1	7182.475	32339.24	32339.24	0	211873.3	211873.3	0	ICE	7182.475	0	1	2
2027	2a	1	18569.71	83610.5	0	83610.5	544913.1	0	544913.1	BEV	0	18569.71	1	3
2027	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2027	2a	1	8830.396	39759.04	23855.42	15903.61	251293.4	150776	100517.3	PHEV	5298.238	3532.159	1	8
2027	2a	1	78.49632	209.5255	209.5255	0	838.2574	838.2574	0	ICE	78.49632	0	2	2
2027	2a	1	60.46357	168.3197	168.3197	0	680.4752	680.4752	0	ICE	60.46357	0	2	2
2027	2a	1	13553.55	52483.81	52483.81	0	277851.9	277851.9	0	ICE	13553.55	0	2	1
2027	2a	1	25404.5	110018	110018	0	666048.2	666048.2	0	ICE	25404.5	0	2	1
2027	2a	1	36757.86	161291.3	161291.3	0	1001318	1001318	0	ICE	36757.86	0	2	1
2027	2a	1	45479.4	202166.4	202166.4	0	1282254	1282254	0	ICE	45479.4	0	2	1
2027	2a	1	1084.121	2893.78	2893.78	0	11771.41	11771.41	0	ICE	1084.121	0	3	1
2027	2a	1	2176.146	6057.998	6057.998	0	24693.04	24693.04	0	ICE	2176.146	0	3	1
2027	2a	1	22.13839	90.80038	90.80038	0	513.4889	513.4889	0	ICE	22.13839	0	3	2
2027	2a	1	866.2285	3751.332	3751.332	0	22368.6	22368.6	0	ICE	866.2285	0	3	2
2027	2a	1	662.3998	2906.57	2906.57	0	17694.85	17694.85	0	ICE	662.3998	0	3	2

2027	2a	1	2839.584	12785.29	12785.29	0	81925.35	81925.35	0	ICE	2839.584	0	3	2
2027	2a	1	3099.732	14134.19	0	14134.19	65331.72	0	65331.72	BEV	0	3099.732	3	3
2027	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2027	2a	1	282.0984	1286.315	771.7892	514.5261	8196.17	4917.702	3278.468	PHEV	169.2591	112.8394	3	8
2027	2a	1	1064.199	2840.602	2840.602	0	10761.32	10761.32	0	ICE	1064.199	0	4	1
2027	2a	1	1665.917	4542.173	4542.173	0	17472.65	17472.65	0	ICE	1665.917	0	4	1
2027	2a	1	223.2362	608.6601	608.6601	0	2131.741	2131.741	0	ICE	223.2362	0	4	2
2027	2a	1	2123.178	5910.545	5910.545	0	22621.31	22621.31	0	ICE	2123.178	0	4	1
2027	2a	1	111.5492	310.5328	310.5328	0	1064.702	1064.702	0	ICE	111.5492	0	4	2
2027	2a	1	2590.18	7358.987	7358.987	0	27585.1	27585.1	0	ICE	2590.18	0	4	1
2027	2a	1	2482.03	7193.916	7193.916	0	27054.57	27054.57	0	ICE	2482.03	0	4	1
2027	2a	1	2937.606	8682.653	8682.653	0	33597.07	33597.07	0	ICE	2937.606	0	4	1
2027	2a	1	9.182076	27.13937	27.13937	0	101.2079	101.2079	0	ICE	9.182076	0	4	2
2027	2a	1	3658.57	11023.2	11023.2	0	42937.98	42937.98	0	ICE	3658.57	0	4	1
2027	2a	1	31.4244	103.6826	103.6826	0	423.1006	423.1006	0	ICE	31.4244	0	4	2
2027	2a	1	27.13771	97.31257	97.31257	0	417.6516	417.6516	0	ICE	27.13771	0	4	2
2027	2a	1	226.3902	889.6274	889.6274	0	4516.315	4516.315	0	ICE	226.3902	0	4	2
2027	2a	1	330.366	1317.14	1317.14	0	6807.731	6807.731	0	ICE	330.366	0	4	2
2027	2a	1	468.7488	1895.714	1895.714	0	10119.85	10119.85	0	ICE	468.7488	0	4	2
2027	2a	1	350.6536	1438.202	1438.202	0	7851.736	7851.736	0	ICE	350.6536	0	4	2
2027	2a	1	501.4277	2085.328	2085.328	0	11419.65	11419.65	0	ICE	501.4277	0	4	2
2027	2a	1	3545.395	15353.87	15353.87	0	91447	91447	0	ICE	3545.395	0	4	2
2027	2a	1	8190.95	36879.92	36879.92	0	238309.6	238309.6	0	ICE	8190.95	0	4	2
2027	2a	1	5330.493	24306.04	24306.04	0	162085	162085	0	ICE	5330.493	0	4	2
2027	2a	1	1183.974	3228.139	3228.139	0	6002.925	6002.925	0	ICE	1183.974	0	1	2
2027	2a	1	56.44862	173.3125	173.3125	0	403.7951	403.7951	0	ICE	56.44862	0	1	2
2027	2a	1	117.1015	419.9121	419.9121	0	1571.08	1571.08	0	ICE	117.1015	0	1	2
2027	2a	1	13.1858	51.81518	0	51.81518	250.2951	0	250.2951	BEV	0	13.1858	1	3
2027	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2027	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2027	2a	1	1210.976	5244.313	0	5244.313	31167	0	31167	BEV	0	1210.976	1	3
2027	2a	1	4.576437	19.81895	0	19.81895	117.7842	0	117.7842	FCEV	0	4.576437	1	7
2027	2a	1	2545.516	11023.74	6614.243	4409.495	63523.93	38114.36	25409.57	PHEV	1527.309	1018.206	1	8
2027	2a	1	12572.81	57329.62	0	57329.62	384933	0	384933	BEV	0	12572.81	1	3
2027	2a	1	382.7886	1745.443	0	1745.443	11719.57	0	11719.57	FCEV	0	382.7886	1	7
2027	2a	1	9041.53	41227.66	24736.6	16491.06	269591.3	161754.8	107836.5	PHEV	5424.918	3616.612	1	8
2027	2a	1	6.051724	19.96724	19.96724	0	79.25981	79.25981	0	ICE	6.051724	0	2	2
2027	2a	1	3.643829	12.23131	12.23131	0	49.58772	49.58772	0	ICE	3.643829	0	2	2
2027	2a	1	7.150495	25.23116	25.23116	0	116.8398	116.8398	0	ICE	7.150495	0	2	2
2027	2a	1	16.51486	46.92053	46.92053	0	207.4948	207.4948	0	ICE	16.51486	0	3	2
2027	2a	1	64.00861	251.5295	251.5295	0	1329.386	1329.386	0	ICE	64.00861	0	3	2
2027	2a	1	71.98291	286.9894	286.9894	0	1571.681	1571.681	0	ICE	71.98291	0	3	2
2027	2a	1	305.0067	814.136	814.136	0	2745.218	2745.218	0	ICE	305.0067	0	4	2
2027	2a	1	20.63231	72.80298	72.80298	0	303.2928	303.2928	0	ICE	20.63231	0	4	2
2027	2a	1	70.44496	268.7503	268.7503	0	1317.306	1317.306	0	ICE	70.44496	0	4	2
2027	2a	1	917.3876	3867.77	3867.77	0	21595.46	21595.46	0	ICE	917.3876	0	4	2
2027	2a	1	239.577	680.6646	680.6646	0	1349.422	1349.422	0	ICE	239.577	0	1	2

2027	2a	1	552.0941	1600.19	1600.19	0	3406.366	3406.366	0	ICE	552.0941	0	1	2
2027	2a	1	83.06446	278.8241	278.8241	0	867.6792	867.6792	0	ICE	83.06446	0	1	2
2027	2a	1	64.15958	219.0414	219.0414	0	713.5054	713.5054	0	ICE	64.15958	0	1	2
2027	2a	1	110.0877	388.4542	388.4542	0	1410.174	1410.174	0	ICE	110.0877	0	1	2
2027	2a	1	36.158	135.8727	0	135.8727	600.2976	0	600.2976	BEV	0	36.158	1	3
2027	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2027	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2027	2a	1	1427.136	6098.665	0	6098.665	35234.83	0	35234.83	BEV	0	1427.136	1	3
2027	2a	1	14.09987	60.25384	0	60.25384	348.1145	0	348.1145	FCEV	0	14.09987	1	7
2027	2a	1	396.7018	1695.25	1017.15	678.0999	9445.466	5667.28	3778.187	PHEV	238.0211	158.6807	1	8
2027	2a	1	1042.769	4754.828	4754.828	0	31661.01	31661.01	0	ICE	1042.769	0	1	2
2027	2a	1	64.47882	175.8034	175.8034	0	733.6731	733.6731	0	ICE	64.47882	0	2	2
2027	2a	1	24.52984	69.69198	69.69198	0	280.9281	280.9281	0	ICE	24.52984	0	2	2
2027	2a	1	475.5454	2113.909	0	2113.909	13307.45	0	13307.45	BEV	0	475.5454	2	3
2027	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2027	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2027	2a	1	34.85472	93.0356	93.0356	0	366.5769	366.5769	0	ICE	34.85472	0	3	2
2027	2a	1	27.30263	74.44143	74.44143	0	302.7685	302.7685	0	ICE	27.30263	0	3	2
2027	2a	1	1.244516	3.892298	3.892298	0	17.83976	17.83976	0	ICE	1.244516	0	3	2
2027	2a	1	69.70505	198.0397	198.0397	0	727.9867	727.9867	0	ICE	69.70505	0	4	2
2027	2a	1	21.9827	71.271	71.271	0	268.7614	268.7614	0	ICE	21.9827	0	4	2
2027	2a	1	39.28293	131.8618	131.8618	0	534.9589	534.9589	0	ICE	39.28293	0	4	2
2027	2a	1	39.33509	134.2904	134.2904	0	548.3187	548.3187	0	ICE	39.33509	0	4	2
2027	2a	1	27.56651	83.05734	83.05734	0	221.8303	221.8303	0	ICE	27.56651	0	1	2
2027	2a	1	105.6244	433.2176	433.2176	0	2222.465	2222.465	0	ICE	105.6244	0	1	2
2027	2a	1	11.66971	44.5204	44.5204	0	217.2113	217.2113	0	ICE	11.66971	0	2	2
2027	2a	1	0.591798	2.122116	2.122116	0	9.580073	9.580073	0	ICE	0.591798	0	3	2
2027	2a	1	47.48558	200.2025	200.2025	0	1158.7	1158.7	0	ICE	47.48558	0	3	2
2027	2a	1	153.9276	684.2437	0	684.2437	2997.91	0	2997.91	BEV	0	153.9276	3	3
2027	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2027	2a	1	69.69361	309.8041	185.8825	123.9217	1883.158	1129.895	753.2633	PHEV	41.81617	27.87744	3	8
2027	2a	1	12.48044	39.03332	39.03332	0	148.0809	148.0809	0	ICE	12.48044	0	4	2
2027	2a	1	48.73909	169.188	169.188	0	711.2867	711.2867	0	ICE	48.73909	0	4	2
2027	2a	1	24.92715	93.66998	93.66998	0	454.5382	454.5382	0	ICE	24.92715	0	4	2
2027	2a	1	116.0835	496.0664	496.0664	0	2907.346	2907.346	0	ICE	116.0835	0	3	2
2027	2a	1	9.894119	29.81078	29.81078	0	108.7998	108.7998	0	ICE	9.894119	0	4	2
2027	2a	1	9.360374	34.10143	34.10143	0	158.7543	158.7543	0	ICE	9.360374	0	4	2
2027	2a	1	12.27105	46.11153	0	46.11153	139.0682	0	139.0682	BEV	0	12.27105	3	3
2027	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2027	2a	1	0	0	0	0	0	0	0	PHEV	0	0	3	8
2027	2a	1	59.09119	222.0499	0	222.0499	678.7343	0	678.7343	BEV	0	59.09119	4	3
2027	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2027	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2027	2a	1	32.41014	95.79432	95.79432	0	224.5299	224.5299	0	ICE	32.41014	0	1	2
2027	2a	1	13.50891	44.57171	44.57171	0	136.3221	136.3221	0	ICE	13.50891	0	1	2
2027	2a	1	63.34128	256.1648	256.1648	0	1267.313	1267.313	0	ICE	63.34128	0	1	2
2027	2a	1	220.1073	927.9879	0	927.9879	5228.798	0	5228.798	BEV	0	220.1073	1	3

2027	2a	1	22.34592	94.21197	0	94.21197	530.8424	0	530.8424	FCEV	0	22.34592	1	7
2027	2a	1	23.46322	98.92257	59.35354	39.56903	534.0652	320.4391	213.6261	PHEV	14.07793	9.385287	1	8
2027	2a	1	17.07451	49.48876	49.48876	0	192.3063	192.3063	0	ICE	17.07451	0	2	2
2027	2a	1	7.42621	23.65136	23.65136	0	84.75573	84.75573	0	ICE	7.42621	0	2	2
2027	2a	1	197.5202	855.3907	0	855.3907	5048.523	0	5048.523	BEV	0	197.5202	2	3
2027	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2027	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2027	2a	1	5.85784	16.97836	16.97836	0	76.37427	76.37427	0	ICE	5.85784	0	3	2
2027	2a	1	40.13324	166.9053	166.9053	0	916.3159	916.3159	0	ICE	40.13324	0	3	2
2027	2a	1	20.23064	64.43156	64.43156	0	255.2093	255.2093	0	ICE	20.23064	0	4	2
2027	2a	1	18.27323	72.85371	0	72.85371	363.847	0	363.847	BEV	0	18.27323	1	3
2027	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2027	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2027	2a	1	123.0166	504.5512	0	504.5512	2628.415	0	2628.415	BEV	0	123.0166	1	3
2027	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2027	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2027	2a	1	109.0259	453.4149	0	453.4149	2511.201	0	2511.201	BEV	0	109.0259	1	3
2027	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2027	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2027	2a	1	7.974031	24.0256	24.0256	0	84.92427	84.92427	0	ICE	7.974031	0	2	2
2027	2a	1	7.548328	25.77007	25.77007	0	122.5261	122.5261	0	ICE	7.548328	0	2	2
2027	2a	1	19.62951	81.6348	81.6348	0	449.2103	449.2103	0	ICE	19.62951	0	2	2
2027	2a	1	244.5787	1073.197	0	1073.197	6538.567	0	6538.567	BEV	0	244.5787	2	3
2027	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2027	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2027	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2027	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2027	2a	1	11.30167	45.7062	45.7062	0	252.3363	252.3363	0	ICE	11.30167	0	3	2
2027	2a	1	16.75699	48.56847	48.56847	0	194.8082	194.8082	0	ICE	16.75699	0	4	2
2027	2a	1	9.657658	29.65162	29.65162	0	120.5089	120.5089	0	ICE	9.657658	0	4	2
2027	2a	1	10.01002	38.18863	0	38.18863	173.4348	0	173.4348	BEV	0	10.01002	1	3
2027	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2027	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2027	2a	1	35.84537	144.9659	0	144.9659	746.3492	0	746.3492	BEV	0	35.84537	1	3
2027	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2027	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2027	2a	1	28.72596	117.8192	0	117.8192	623.2705	0	623.2705	BEV	0	28.72596	2	3
2027	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2027	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2027	2a	1	4.166145	18.04211	18.04211	0	113.6552	113.6552	0	ICE	4.166145	0	2	2
2027	2a	1	1.150555	4.587161	0	4.587161	17.13074	0	17.13074	BEV	0	1.150555	4	3
2027	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2027	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2027	2a	1	7.104131	26.28855	26.28855	0	117.825	117.825	0	ICE	7.104131	0	2	2
2027	2a	1	4.114284	12.39626	12.39626	0	54.47913	54.47913	0	ICE	4.114284	0	3	2
2027	2a	1	0.932124	3.556091	3.556091	0	20.77603	20.77603	0	ICE	0.932124	0	3	2
2027	2a	1	2.556823	8.289579	0	8.289579	26.72411	0	26.72411	BEV	0	2.556823	1	3
2027	2a	1	5.455362	16.12436	16.12436	0	74.57329	74.57329	0	ICE	5.455362	0	3	2
2027	2a	1	1.280049	4.076763	4.076763	0	17.84477	17.84477	0	ICE	1.280049	0	3	2

2027	2a	1	21.15817	87.99217	0	87.99217	346.0803	0	346.0803	BEV	0	21.15817	3	3
2027	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2027	2a	1	0	0	0	0	0	0	0	PHEV	0	0	3	8
2027	2a	1	11.87162	50.73169	0	50.73169	207.9185	0	207.9185	BEV	0	11.87162	3	3
2027	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2027	2a	1	8.218811	35.12194	21.07316	14.04878	204.8054	122.8833	81.92217	PHEV	4.931287	3.287524	3	8
2027	2a	1	1.504932	6.775985	0	6.775985	30.21036	0	30.21036	BEV	0	1.504932	4	3
2027	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2027	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2027	2a	1	2.129823	6.783166	0	6.783166	21.39117	0	21.39117	BEV	0	2.129823	1	3
2027	2a	1	9.178794	27.12967	27.12967	0	96.88729	96.88729	0	ICE	9.178794	0	2	2
2027	2a	1	41.44909	151.0061	0	151.0061	614.7579	0	614.7579	BEV	0	41.44909	2	3
2027	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2027	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2027	2a	1	15.73313	58.21983	0	58.21983	249.102	0	249.102	BEV	0	15.73313	2	3
2027	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2027	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2027	2a	1	13.20947	49.6379	49.6379	0	255.5912	255.5912	0	ICE	13.20947	0	2	2
2027	2a	1	6.610852	26.35687	0	26.35687	131.0809	0	131.0809	BEV	0	6.610852	2	3
2027	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2027	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2027	2a	1	12.47656	50.45772	50.45772	0	265.5869	265.5869	0	ICE	12.47656	0	2	2
2027	2a	1	3.708037	14.99604	0	14.99604	77.29916	0	77.29916	BEV	0	3.708037	2	3
2027	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2027	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2027	2a	1	14.87566	61.01236	61.01236	0	340.8952	340.8952	0	ICE	14.87566	0	2	2
2027	2a	1	12.37748	51.47522	0	51.47522	283.4262	0	283.4262	BEV	0	12.37748	2	3
2027	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2027	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2027	2a	1	16.20694	45.11721	45.11721	0	203.4641	203.4641	0	ICE	16.20694	0	3	2
2027	2a	1	10.22098	41.92126	0	41.92126	160.8967	0	160.8967	BEV	0	10.22098	3	3
2027	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2027	2a	1	0	0	0	0	0	0	0	PHEV	0	0	3	8
2027	2a	1	10.62116	46.60502	0	46.60502	200.2285	0	200.2285	BEV	0	10.62116	3	3
2027	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2027	2a	1	8.122064	35.63913	21.38348	14.25565	211.7195	127.0317	84.68779	PHEV	4.873239	3.248826	3	8
2027	2a	1	2.551078	9.294012	0	9.294012	27.43114	0	27.43114	BEV	0	2.551078	4	3
2027	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2027	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2027	2a	1	8.559221	32.65377	0	32.65377	103.2132	0	103.2132	BEV	0	8.559221	4	3
2027	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2027	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2027	2a	1	1.484033	5.831686	0	5.831686	20.08778	0	20.08778	BEV	0	1.484033	4	3
2027	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2027	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2027	2a	1	9.989256	32.38657	32.38657	0	121.7811	121.7811	0	ICE	9.989256	0	2	2
2027	2a	1	0.968037	3.804019	3.804019	0	19.27461	19.27461	0	ICE	0.968037	0	2	2

2027	2a	1	54.48065	204.7247	0	204.7247	883.9654	0	883.9654	BEV	0	54.48065	2	3
2027	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2027	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2027	2a	1	3.640307	14.09647	0	14.09647	65.67088	0	65.67088	BEV	0	3.640307	2	3
2027	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2027	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2027	2a	1	26.06112	93.45204	0	93.45204	368.6346	0	368.6346	BEV	0	26.06112	2	3
2027	2a	1	0.760207	2.638908	2.638908	0	11.85788	11.85788	0	ICE	0.760207	0	3	2
2027	2a	1	7.731601	27.72459	27.72459	0	120.1204	120.1204	0	ICE	7.731601	0	2	2
2027	2a	1	0.58601	2.202079	2.202079	0	10.15743	10.15743	0	ICE	0.58601	0	3	2
2027	2a	1	3.731468	11.67039	11.67039	0	52.36043	52.36043	0	ICE	3.731468	0	2	2
2027	2a	1	2.707721	9.089062	0	9.089062	31.32076	0	31.32076	BEV	0	2.707721	1	3
2027	2a	1	8.572135	34.17633	34.17633	0	183.2014	183.2014	0	ICE	8.572135	0	2	2
2027	2a	1	1.509202	5.498279	0	5.498279	17.05063	0	17.05063	BEV	0	1.509202	3	3
2027	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2027	2a	1	0	0	0	0	0	0	0	PHEV	0	0	3	8
2027	2a	1	0.832167	2.411952	0	2.411952	6.743578	0	6.743578	BEV	0	0.832167	2	3
2027	2a	1	1.915734	7.857364	0	7.857364	29.35419	0	29.35419	BEV	0	1.915734	4	3
2027	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2027	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2027	2a	1	4.422375	15.60475	0	15.60475	60.25088	0	60.25088	BEV	0	4.422375	1	3
2027	2a	1	4.007183	14.59885	0	14.59885	59.85514	0	59.85514	BEV	0	4.007183	1	3
2027	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2027	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2027	2a	1	11.1855	43.31396	0	43.31396	201.6827	0	201.6827	BEV	0	11.1855	1	3
2027	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2027	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2027	2a	1	8.514612	29.55677	29.55677	0	125.7735	125.7735	0	ICE	8.514612	0	2	2
2027	2a	1	8.063469	28.45267	0	28.45267	108.3416	0	108.3416	BEV	0	8.063469	2	3
2027	2a	1	1.377829	5.414346	0	5.414346	25.87763	0	25.87763	BEV	0	1.377829	2	3
2027	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2027	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2027	2a	1	1.730352	5.610044	5.610044	0	22.49179	22.49179	0	ICE	1.730352	0	3	2
2027	2a	1	4.264288	14.80262	0	14.80262	54.98591	0	54.98591	BEV	0	4.264288	1	3
2027	2a	1	5.431542	19.47686	0	19.47686	77.83118	0	77.83118	BEV	0	5.431542	1	3
2027	2a	1	6.36846	19.55289	19.55289	0	86.85631	86.85631	0	ICE	6.36846	0	2	2
2027	2a	1	2.328691	7.416533	0	7.416533	23.47966	0	23.47966	BEV	0	2.328691	2	3
2027	2a	1	1.010355	3.275712	0	3.275712	10.55191	0	10.55191	BEV	0	1.010355	2	3
2027	2a	1	0.985547	3.308204	0	3.308204	11.45613	0	11.45613	BEV	0	0.985547	2	3
2027	2a	1	6.715709	24.46647	24.46647	0	108.3493	108.3493	0	ICE	6.715709	0	2	2
2027	2a	1	4.618022	19.4699	19.4699	0	112.1229	112.1229	0	ICE	4.618022	0	2	2
2027	2a	1	6.635432	29.11588	29.11588	0	177.4893	177.4893	0	ICE	6.635432	0	2	2
2027	2a	1	2.460224	7.553553	7.553553	0	29.42569	29.42569	0	ICE	2.460224	0	3	2
2027	2a	1	0.962613	3.120925	0	3.120925	6.986206	0	6.986206	BEV	0	0.962613	3	3
2027	2a	1	1.180561	3.895177	3.895177	0	18.86963	18.86963	0	ICE	1.180561	0	3	2
2027	2a	1	5.683842	20.38158	0	20.38158	55.56123	0	55.56123	BEV	0	5.683842	3	3
2027	2a	1	0.848258	3.138944	3.138944	0	14.07437	14.07437	0	ICE	0.848258	0	3	2

2027	2a	1	0.535173	1.980387	0	1.980387	5.781242	0	5.781242	BEV	0	0.535173	3	3
2027	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2027	2a	1	0	0	0	0	0	0	0	PHEV	0	0	3	8
2027	2a	1	14.40262	60.72246	0	60.72246	239.2517	0	239.2517	BEV	0	14.40262	3	3
2027	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2027	2a	1	0	0	0	0	0	0	0	PHEV	0	0	3	8
2027	2a	1	36.80264	159.3794	0	159.3794	657.1452	0	657.1452	BEV	0	36.80264	3	3
2027	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2027	2a	1	9.436575	40.8665	24.5199	16.3466	242.8981	145.7389	97.15926	PHEV	5.661945	3.77463	3	8
2027	2a	1	1.198179	3.198228	0	3.198228	5.986893	0	5.986893	BEV	0	1.198179	4	3
2027	2a	1	0.761897	2.251932	0	2.251932	4.437439	0	4.437439	BEV	0	0.761897	4	3
2027	2a	1	1.214992	4.078388	0	4.078388	9.715275	0	9.715275	BEV	0	1.214992	4	3
2027	2a	1	2.236773	9.558537	9.558537	0	58.50285	58.50285	0	ICE	2.236773	0	2	2
2027	2a	1	0.62612	2.316931	0	2.316931	7.031352	0	7.031352	BEV	0	0.62612	4	3
2027	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2027	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2027	2a	1	0.857796	2.437092	0	2.437092	6.79685	0	6.79685	BEV	0	0.857796	2	3
2027	2a	1	1.872306	5.104899	0	5.104899	13.53408	0	13.53408	BEV	0	1.872306	1	3
2027	2a	1	2.280918	6.480338	0	6.480338	17.97742	0	17.97742	BEV	0	2.280918	1	3
2027	2a	1	1.860233	5.391698	0	5.391698	15.11061	0	15.11061	BEV	0	1.860233	1	3
2027	2a	1	1.416349	4.186289	0	4.186289	12.31765	0	12.31765	BEV	0	1.416349	1	3
2027	2a	1	1.186836	3.575912	0	3.575912	10.06628	0	10.06628	BEV	0	1.186836	1	3
2027	2a	1	1.11712	3.42986	0	3.42986	10.43077	0	10.43077	BEV	0	1.11712	1	3
2027	2a	1	1.038285	3.247298	0	3.247298	9.785144	0	9.785144	BEV	0	1.038285	1	3
2027	2a	1	1.240541	4.09308	0	4.09308	13.19517	0	13.19517	BEV	0	1.240541	1	3
2027	2a	1	3.231957	11.03393	0	11.03393	39.83693	0	39.83693	BEV	0	3.231957	1	3
2027	2a	1	0.579234	1.579298	0	1.579298	4.27667	0	4.27667	BEV	0	0.579234	2	3
2027	2a	1	0.594716	1.655582	0	1.655582	4.601392	0	4.601392	BEV	0	0.594716	2	3
2027	2a	1	1.032914	3.408027	0	3.408027	11.42999	0	11.42999	BEV	0	1.032914	2	3
2027	2a	1	0	0	0	0	0	0	0	BEV	0	0	2	3
2027	2a	1	27.55961	124.0877	0	124.0877	808.3324	0	808.3324	FCEV	0	27.55961	2	7
2027	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2027	2a	1	0	0	0	0	0	0	0	BEV	0	0	2	3
2027	2a	1	30.25795	137.9705	0	137.9705	924.8454	0	924.8454	FCEV	0	30.25795	2	7
2027	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2027	2a	1	0.175441	0.679367	0.679367	0	3.583793	3.583793	0	ICE	0.175441	0	3	2
2027	2a	1	0	0	0	0	0	0	0	BEV	0	0	3	3
2027	2a	1	1.918806	8.63946	0	8.63946	39.63535	0	39.63535	FCEV	0	1.918806	3	7
2027	2a	1	27.50288	123.8323	74.29936	49.53291	798.1355	478.8813	319.2542	PHEV	16.50173	11.00115	3	8
2027	2a	1	1.32285	5.880374	5.880374	0	35.70019	35.70019	0	ICE	1.32285	0	2	2
2027	2a	1	0.352475	1.243738	0	1.243738	3.302196	0	3.302196	BEV	0	0.352475	3	3
2027	2a	1	0.529554	1.474182	0	1.474182	2.789169	0	2.789169	BEV	0	0.529554	4	3
2027	2a	1	0.846544	2.550619	0	2.550619	5.137285	0	5.137285	BEV	0	0.846544	4	3
2027	2a	1	2.683406	8.699977	0	8.699977	19.93841	0	19.93841	BEV	0	2.683406	4	3
2027	2a	1	0.912188	3.270996	0	3.270996	8.983442	0	8.983442	BEV	0	0.912188	4	3
2027	2a	1	0.298286	0.796196	0	0.796196	1.385944	0	1.385944	BEV	0	0.298286	3	3
2027	2a	1	0.604897	2.446324	0	2.446324	8.690771	0	8.690771	BEV	0	0.604897	3	3

2027	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2027	2a	1	0	0	0	0	0	0	0	PHEV	0	0	3	8
2027	2a	1	0.209254	0.55855	0	0.55855	1.152475	0	1.152475	BEV	0	0.209254	2	3
2027	2a	1	2.085167	8.79121	0	8.79121	46.16164	0	46.16164	BEV	0	2.085167	2	3
2027	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2027	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2027	2a	1	1.08965	3.720077	0	3.720077	13.01397	0	13.01397	BEV	0	1.08965	2	3
2027	2a	1	3.09948	10.75922	0	10.75922	38.92123	0	38.92123	BEV	0	3.09948	2	3
2027	2a	1	0.83961	2.962638	0	2.962638	7.706379	0	7.706379	BEV	0	0.83961	4	3
2027	2a	1	1.824116	8.31762	8.31762	0	60.6076	60.6076	0	ICE	1.824116	0	2	2
2027	2a	1	1.329773	5.682599	0	5.682599	33.01305	0	33.01305	BEV	0	1.329773	2	3
2027	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2027	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2027	2a	1	0.495655	1.465003	0	1.465003	4.149915	0	4.149915	BEV	0	0.495655	2	3
2027	2a	1	0.226324	0.707843	0	0.707843	1.540122	0	1.540122	BEV	0	0.226324	4	3
2027	2a	1	0.185861	0.559996	0	0.559996	1.602023	0	1.602023	BEV	0	0.185861	2	3
2027	2a	1	0.246748	0.828264	0	0.828264	1.907055	0	1.907055	BEV	0	0.246748	3	3
2027	2a	1	0.310807	1.221355	0	1.221355	3.924638	0	3.924638	BEV	0	0.310807	3	3
2027	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2027	2a	1	0	0	0	0	0	0	0	PHEV	0	0	3	8
2027	2a	1	0.461341	1.442871	0	1.442871	3.229465	0	3.229465	BEV	0	0.461341	3	3
2027	2a	1	1.289057	4.400855	0	4.400855	11.10552	0	11.10552	BEV	0	1.289057	4	3
2027	2a	1	0.430259	1.148465	0	1.148465	2.990845	0	2.990845	BEV	0	0.430259	1	3
2027	2a	1	0.378288	1.053087	0	1.053087	2.788886	0	2.788886	BEV	0	0.378288	1	3
2027	2a	1	0.637509	2.432122	0	2.432122	10.82587	0	10.82587	BEV	0	0.637509	2	3
2027	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2027	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2027	2a	1	0.302127	1.169934	1.169934	0	6.886895	6.886895	0	ICE	0.302127	0	2	2
2027	2a	1	0.72153	2.049947	0	2.049947	3.85416	0	3.85416	BEV	0	0.72153	3	3
2027	2a	1	2.47269	7.875147	0	7.875147	17.07936	0	17.07936	BEV	0	2.47269	4	3
2027	2a	1	2.055116	8.311298	0	8.311298	29.41802	0	29.41802	BEV	0	2.055116	4	3
2027	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2027	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2027	2a	1	0.173135	0.601005	0	0.601005	1.550678	0	1.550678	BEV	0	0.173135	3	3
2027	2a	1	0	0	0	0	0	0	0	BEV	0	0	4	3
2027	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2027	2a	1	2.607212	11.44029	6.864173	4.576115	73.91475	44.34885	29.5659	PHEV	1.564327	1.042885	4	8
2027	2a	1	0.235925	0.791935	0.791935	0	3.888765	3.888765	0	ICE	0.235925	0	3	2
2027	2a	1	0.315407	0.986456	0	0.986456	2.956668	0	2.956668	BEV	0	0.315407	2	3
2028	2a	1	8829.752	24074.58	24074.58	0	45741.33	45741.33	0	ICE	8829.752	0	1	1
2028	2a	1	9613.279	26761.64	26761.64	0	52948.67	52948.67	0	ICE	9613.279	0	1	1
2028	2a	1	10837.06	31410.13	31410.13	0	67646.34	67646.34	0	ICE	10837.06	0	1	1
2028	2a	1	13231.95	39109.54	39109.54	0	88178.7	88178.7	0	ICE	13231.95	0	1	1
2028	2a	1	16510.22	49744.97	49744.97	0	117587.5	117587.5	0	ICE	16510.22	0	1	1
2028	2a	1	18214.42	55923.2	55923.2	0	137812.1	137812.1	0	ICE	18214.42	0	1	1
2028	2a	1	15649.18	48943.76	48943.76	0	126380.5	126380.5	0	ICE	15649.18	0	1	1
2028	2a	1	16508.83	52578.14	52578.14	0	142102.2	142102.2	0	ICE	16508.83	0	1	1

2028	2a	1	18345.59	59478.96	59478.96	0	167640.4	167640.4	0	ICE	18345.59	0	1	1
2028	2a	1	22561.78	74441.01	74441.01	0	219251.8	219251.8	0	ICE	22561.78	0	1	1
2028	2a	1	21483.68	72114.69	72114.69	0	221670	221670	0	ICE	21483.68	0	1	1
2028	2a	1	27309.48	93234.84	93234.84	0	298930.6	298930.6	0	ICE	27309.48	0	1	1
2028	2a	1	31703.44	110052.2	110052.2	0	368592.4	368592.4	0	ICE	31703.44	0	1	1
2028	2a	1	36654.28	129337.9	129337.9	0	452398.4	452398.4	0	ICE	36654.28	0	1	1
2028	2a	1	48644.85	174434.6	174434.6	0	636972	636972	0	ICE	48644.85	0	1	1
2028	2a	1	54771.54	199542	199542	0	759691.3	759691.3	0	ICE	54771.54	0	1	1
2028	2a	1	98.30258	358.133	358.133	0	1388.704	1388.704	0	ICE	98.30258	0	1	2
2028	2a	1	62087.93	229753.9	229753.9	0	913220.6	913220.6	0	ICE	62087.93	0	1	1
2028	2a	1	75728.26	284567.9	284567.9	0	1177478	1177478	0	ICE	75728.26	0	1	1
2028	2a	1	83810.2	319739.3	319739.3	0	1376749	1376749	0	ICE	83810.2	0	1	1
2028	2a	1	113165.3	438213.5	438213.5	0	1964454	1964454	0	ICE	113165.3	0	1	1
2028	2a	1	134889.7	530065.1	530065.1	0	2466177	2466177	0	ICE	134889.7	0	1	1
2028	2a	1	343.2465	1348.828	1348.828	0	6305.965	6305.965	0	ICE	343.2465	0	1	2
2028	2a	1	166264.1	662880.1	662880.1	0	3191395	3191395	0	ICE	166264.1	0	1	1
2028	2a	1	161212.4	651975.3	651975.3	0	3251231	3251231	0	ICE	161212.4	0	1	1
2028	2a	1	147313.4	604204.4	604204.4	0	3117064	3117064	0	ICE	147313.4	0	1	1
2028	2a	1	194678.2	809623.6	809623.6	0	4313489	4313489	0	ICE	194678.2	0	1	1
2028	2a	1	2177.455	9055.555	9055.555	0	47990.36	47990.36	0	ICE	2177.455	0	1	2
2028	2a	1	214070.9	902538.1	902538.1	0	4976523	4976523	0	ICE	214070.9	0	1	1
2028	2a	1	3246.623	13687.99	13687.99	0	74336.25	74336.25	0	ICE	3246.623	0	1	2
2028	2a	1	337710.7	1443159	1443159	0	8238775	8238775	0	ICE	337710.7	0	1	1
2028	2a	1	441325.7	1911227	1911227	0	11253456	11253456	0	ICE	441325.7	0	1	1
2028	2a	1	471219.3	2067682	2067682	0	12577812	12577812	0	ICE	471219.3	0	1	1
2028	2a	1	8751.174	38399.63	38399.63	0	232213.8	232213.8	0	ICE	8751.174	0	1	2
2028	2a	1	580704.8	2581366	2581366	0	16202929	16202929	0	ICE	580704.8	0	1	1
2028	2a	1	575043.8	2589146	2589146	0	16752366	16752366	0	ICE	575043.8	0	1	1
2028	2a	1	642633.4	2930286	2930286	0	19570555	19570555	0	ICE	642633.4	0	1	1
2028	2a	1	7864.143	35859	35859	0	239475.9	239475.9	0	ICE	7864.143	0	1	2
2028	2a	1	37376.39	170429.2	0	170429.2	1139176	0	1139176	BEV	0	37376.39	1	3
2028	2a	1	762.7834	3478.148	0	3478.148	23323.47	0	23323.47	FCEV	0	762.7834	1	7
2028	2a	1	33714.77	153732.9	83015.79	70717.16	1026506	554313.3	472192.8	PHEV	18205.98	15508.79	1	8
2028	2a	1	697210.2	3219089	3219089	0	22131800	22131800	0	ICE	697210.2	0	1	1
2028	2a	1	8532.02	39393.19	39393.19	0	270819.9	270819.9	0	ICE	8532.02	0	1	2
2028	2a	1	49560.26	228824.7	0	228824.7	1573873	0	1573873	BEV	0	49560.26	1	3
2028	2a	1	1011.434	4669.892	0	4669.892	32213.14	0	32213.14	FCEV	0	1011.434	1	7
2028	2a	1	32030.56	147888.3	79859.67	68028.61	1016725	549031.5	467693.5	PHEV	17296.5	14734.06	1	8
2028	2a	1	746276.3	3488386	3488386	0	24679608	24679608	0	ICE	746276.3	0	1	1
2028	2a	1	9093.633	42507.19	42507.19	0	300718.4	300718.4	0	ICE	9093.633	0	1	2
2028	2a	1	65052.92	304082.7	0	304082.7	2151984	0	2151984	BEV	0	65052.92	1	3
2028	2a	1	1521.706	7113.046	0	7113.046	50457.46	0	50457.46	FCEV	0	1521.706	1	7
2028	2a	1	31904.27	149133	79040.49	70092.51	1055166	559238	495928.1	PHEV	16909.26	14995.01	1	8
2028	2a	1	784371.4	3711395	3711395	0	27007963	27007963	0	ICE	784371.4	0	1	1
2028	2a	1	9644.467	45634.53	45634.53	0	332074.3	332074.3	0	ICE	9644.467	0	1	2
2028	2a	1	81236.16	384383.5	0	384383.5	2797837	0	2797837	BEV	0	81236.16	1	3
2028	2a	1	2144.063	10145.02	0	10145.02	73957.77	0	73957.77	FCEV	0	2144.063	1	7

2028	2a	1	30975.79	146567.5	76215.12	70352.42	1066636	554650.9	511985.5	PHEV	16107.41	14868.38	1	8
2028	2a	1	779085.4	3731017	3731017	0	27923258	27923258	0	ICE	779085.4	0	1	1
2028	2a	1	9625.69	46097.14	46097.14	0	344989.5	344989.5	0	ICE	9625.69	0	1	2
2028	2a	1	125872.5	602799.5	0	602799.5	4510924	0	4510924	BEV	0	125872.5	1	3
2028	2a	1	4314.777	20663.34	0	20663.34	154782.6	0	154782.6	FCEV	0	4314.777	1	7
2028	2a	1	47854.98	229176	114129.7	115046.4	1716073	854604.4	861468.7	PHEV	23831.78	24023.2	1	8
2028	2a	1	753982.4	3653995	3653995	0	28112290	28112290	0	ICE	753982.4	0	1	1
2028	2a	1	9382.665	45470.84	45470.84	0	349834	349834	0	ICE	9382.665	0	1	2
2028	2a	1	171875.2	832951.8	0	832951.8	6405942	0	6405942	BEV	0	171875.2	1	3
2028	2a	1	7268.098	35223.09	0	35223.09	270969.3	0	270969.3	FCEV	0	7268.098	1	7
2028	2a	1	65153.2	315749.3	150296.7	165452.7	2431631	1157456	1274175	PHEV	31012.92	34140.28	1	8
2028	2a	1	727222.3	3565971	3565971	0	28182123	28182123	0	ICE	727222.3	0	1	1
2028	2a	1	9125.602	44747.84	44747.84	0	353653.1	353653.1	0	ICE	9125.602	0	1	2
2028	2a	1	221684	1087038	0	1087038	8585873	0	8585873	BEV	0	221684	1	3
2028	2a	1	11177.34	54808.66	0	54808.66	432793.3	0	432793.3	FCEV	0	11177.34	1	7
2028	2a	1	83788.82	410862.7	186531.7	224331	3251560	1476208	1775352	PHEV	38040.12	45748.7	1	8
2028	2a	1	687805.2	3412092	3412092	0	27689895	27689895	0	ICE	687805.2	0	1	1
2028	2a	1	8700.075	43159.68	43159.68	0	350267.3	350267.3	0	ICE	8700.075	0	1	2
2028	2a	1	271718.6	1347952	0	1347952	10930067	0	10930067	BEV	0	271718.6	1	3
2028	2a	1	15944.77	79099.45	0	79099.45	640969.4	0	640969.4	FCEV	0	15944.77	1	7
2028	2a	1	102400.8	507993.9	219453.4	288540.6	4130031	1784173	2345858	PHEV	44237.14	58163.65	1	8
2028	2a	1	643254.8	3227936	3227936	0	26889653	26889653	0	ICE	643254.8	0	1	1
2028	2a	1	8198.056	41138.91	41138.91	0	342723.7	342723.7	0	ICE	8198.056	0	1	2
2028	2a	1	323294.3	1622333	0	1622333	13501404	0	13501404	BEV	0	323294.3	1	3
2028	2a	1	21684.37	108815	0	108815	904832.1	0	904832.1	FCEV	0	21684.37	1	7
2028	2a	1	121483.4	609619.5	249944	359675.5	5089413	2086659	3002753	PHEV	49808.2	71675.21	1	8
2028	2a	1	598552.7	3037906	3037906	0	25913295	25913295	0	ICE	598552.7	0	1	1
2028	2a	1	7628.342	38717.04	38717.04	0	330277.7	330277.7	0	ICE	7628.342	0	1	2
2028	2a	1	378980.7	1923486	0	1923486	16391977	0	16391977	BEV	0	378980.7	1	3
2028	2a	1	28650.66	145414.1	0	145414.1	1238521	0	1238521	FCEV	0	28650.66	1	7
2028	2a	1	141995.3	720685.8	279626.1	441059.7	6161042	2390484	3770558	PHEV	55094.18	86901.13	1	8
2028	2a	1	540034.6	2771841	2771841	0	24142169	24142169	0	ICE	540034.6	0	1	1
2028	2a	1	6882.548	35326.12	35326.12	0	307692.4	307692.4	0	ICE	6882.548	0	1	2
2028	2a	1	429564.8	2204831	0	2204831	19191491	0	19191491	BEV	0	429564.8	1	3
2028	2a	1	36196.29	185785	0	185785	1616940	0	1616940	FCEV	0	36196.29	1	7
2028	2a	1	160482	823707.3	301476.9	522230.4	7186008	2630079	4555929	PHEV	58736.4	101745.6	1	8
2028	2a	1	429626.5	2229762	2229762	0	19782988	19782988	0	ICE	429626.5	0	1	1
2028	2a	1	5475.436	28417.51	28417.51	0	252118.9	252118.9	0	ICE	5475.436	0	1	2
2028	2a	1	430915	2236449	0	2236449	19839883	0	19839883	BEV	0	430915	1	3
2028	2a	1	40103.9	208139.2	0	208139.2	1847071	0	1847071	FCEV	0	40103.9	1	7
2028	2a	1	160521.3	833105.6	286588.3	546517.3	7395270	2543973	4851297	PHEV	55219.33	105302	1	8
2028	2a	1	1873.656	5001.239	5001.239	0	21496.33	21496.33	0	ICE	1873.656	0	2	1
2028	2a	1	2927.932	7983.095	7983.095	0	34840.72	34840.72	0	ICE	2927.932	0	2	1
2028	2a	1	4878.822	13581.76	13581.76	0	59740.35	59740.35	0	ICE	4878.822	0	2	1
2028	2a	1	4689.9	13324.52	13324.52	0	59510.26	59510.26	0	ICE	4689.9	0	2	1
2028	2a	1	4719.477	13678.93	13678.93	0	61585.39	61585.39	0	ICE	4719.477	0	2	1
2028	2a	1	6238.714	18439.7	18439.7	0	83951.14	83951.14	0	ICE	6238.714	0	2	1

2028	2a	1	5161.653	15551.96	15551.96	0	70514.54	70514.54	0	ICE	5161.653	0	2	1
2028	2a	1	6539.233	20077.21	20077.21	0	90592.32	90592.32	0	ICE	6539.233	0	2	1
2028	2a	1	5649.95	17670.56	17670.56	0	80777.32	80777.32	0	ICE	5649.95	0	2	1
2028	2a	1	7357.428	23432.3	23432.3	0	108033.9	108033.9	0	ICE	7357.428	0	2	1
2028	2a	1	8838.969	28657.18	28657.18	0	133702.1	133702.1	0	ICE	8838.969	0	2	1
2028	2a	1	8435.175	27831.27	27831.27	0	131892.2	131892.2	0	ICE	8435.175	0	2	1
2028	2a	1	9231.622	30987.97	30987.97	0	147386.5	147386.5	0	ICE	9231.622	0	2	1
2028	2a	1	11931.9	40735.61	40735.61	0	196240.4	196240.4	0	ICE	11931.9	0	2	1
2028	2a	1	15109.83	52450.74	52450.74	0	256851.6	256851.6	0	ICE	15109.83	0	2	1
2028	2a	1	14074.23	49662.19	49662.19	0	246272.7	246272.7	0	ICE	14074.23	0	2	1
2028	2a	1	15389.53	55185.01	55185.01	0	277016.8	277016.8	0	ICE	15389.53	0	2	1
2028	2a	1	17668.47	64369.26	64369.26	0	326019.6	326019.6	0	ICE	17668.47	0	2	1
2028	2a	1	18954.93	70141.95	70141.95	0	356195.5	356195.5	0	ICE	18954.93	0	2	1
2028	2a	1	13600.04	51105.54	51105.54	0	261705.9	261705.9	0	ICE	13600.04	0	2	1
2028	2a	1	7938.259	30739.56	30739.56	0	159972.9	159972.9	0	ICE	7938.259	0	2	1
2028	2a	1	12911.75	50738.26	50738.26	0	268403.1	268403.1	0	ICE	12911.75	0	2	1
2028	2a	1	19121.5	76235.68	76235.68	0	408971.9	408971.9	0	ICE	19121.5	0	2	1
2028	2a	1	33387.47	135025.6	135025.6	0	734885.2	734885.2	0	ICE	33387.47	0	2	1
2028	2a	1	25219.96	103439.4	103439.4	0	570488.3	570488.3	0	ICE	25219.96	0	2	1
2028	2a	1	13510.31	56186.4	56186.4	0	314526	314526	0	ICE	13510.31	0	2	1
2028	2a	1	12096.14	50998.19	50998.19	0	291646.7	291646.7	0	ICE	12096.14	0	2	1
2028	2a	1	92402.74	410751.4	410751.4	0	2574161	2574161	0	ICE	92402.74	0	2	1
2028	2a	1	85560.92	385239.7	385239.7	0	2459102	2459102	0	ICE	85560.92	0	2	1
2028	2a	1	77275.87	352363.3	352363.3	0	2306247	2306247	0	ICE	77275.87	0	2	1
2028	2a	1	10.46841	47.73397	47.73397	0	312.4138	312.4138	0	ICE	10.46841	0	2	2
2028	2a	1	2.603754	11.87262	0	11.87262	79.06131	0	79.06131	BEV	0	2.603754	2	3
2028	2a	1	0.053138	0.242298	0	0.242298	1.613496	0	1.613496	FCEV	0	0.053138	2	7
2028	2a	1	22.58358	102.9768	61.78611	41.19074	673.9613	404.3768	269.5845	PHEV	13.55015	9.033433	2	8
2028	2a	1	83167.25	383991.5	383991.5	0	2574934	2574934	0	ICE	83167.25	0	2	1
2028	2a	1	11.26651	52.01859	52.01859	0	348.8088	348.8088	0	ICE	11.26651	0	2	2
2028	2a	1	86784.07	405662.6	405662.6	0	2788190	2788190	0	ICE	86784.07	0	2	1
2028	2a	1	11.83849	55.33773	55.33773	0	380.3093	380.3093	0	ICE	11.83849	0	2	2
2028	2a	1	1153.918	5393.862	0	5393.862	37408.05	0	37408.05	BEV	0	1153.918	2	3
2028	2a	1	26.99223	126.1722	0	126.1722	888.9844	0	888.9844	FCEV	0	26.99223	2	7
2028	2a	1	886.1277	4142.106	2461.595	1680.512	28361.75	16854.98	11506.77	PHEV	526.613	359.5147	2	8
2028	2a	1	88743.17	419904.3	419904.3	0	2959585	2959585	0	ICE	88743.17	0	2	1
2028	2a	1	12.24639	57.94602	57.94602	0	408.3319	408.3319	0	ICE	12.24639	0	2	2
2028	2a	1	2410.441	11405.44	0	11405.44	81258.12	0	81258.12	BEV	0	2410.441	2	3
2028	2a	1	63.61869	301.0233	0	301.0233	2180.078	0	2180.078	FCEV	0	63.61869	2	7
2028	2a	1	1856.478	8784.259	5170.164	3614.095	61618.77	36267.05	25351.72	PHEV	1092.67	763.808	2	8
2028	2a	1	86788.72	415628.6	415628.6	0	3005544	3005544	0	ICE	86788.72	0	2	1
2028	2a	1	12.13408	58.10975	58.10975	0	420.0644	420.0644	0	ICE	12.13408	0	2	2
2028	2a	1	6116.734	29292.86	0	29292.86	214326	0	214326	BEV	0	6116.734	2	3
2028	2a	1	209.6753	1004.129	0	1004.129	7473.712	0	7473.712	FCEV	0	209.6753	2	7
2028	2a	1	4411.334	21125.75	12246.9	8878.85	151286.6	87703.02	63583.61	PHEV	2557.314	1854.021	2	8
2028	2a	1	83796.14	406097.9	406097.9	0	3012768	3012768	0	ICE	83796.14	0	2	1
2028	2a	1	11.7637	57.00993	57.00993	0	422.7693	422.7693	0	ICE	11.7637	0	2	2

2028	2a	1	10257.37	49709.87	0	49709.87	373172.6	0	373172.6	BEV	0	10257.37	2	3
2028	2a	1	433.7541	2102.085	0	2102.085	16070.14	0	16070.14	FCEV	0	433.7541	2	7
2028	2a	1	6920.641	33539.22	19146.11	14393.12	245656.4	140234.7	105421.7	PHEV	3950.697	2969.944	2	8
2028	2a	1	80176.72	393150.6	393150.6	0	2992672	2992672	0	ICE	80176.72	0	2	1
2028	2a	1	11.30859	55.45226	55.45226	0	421.9013	421.9013	0	ICE	11.30859	0	2	2
2028	2a	1	14835.86	72748.38	0	72748.38	560136.4	0	560136.4	BEV	0	14835.86	2	3
2028	2a	1	748.0266	3667.986	0	3667.986	28701.63	0	28701.63	FCEV	0	748.0266	2	7
2028	2a	1	9353.77	45866.68	25777.07	20089.61	344137.4	193405.2	150732.2	PHEV	5256.819	4096.951	2	8
2028	2a	1	75059.93	372360.3	372360.3	0	2908719	2908719	0	ICE	75059.93	0	2	1
2028	2a	1	10.63324	52.74981	52.74981	0	411.8393	411.8393	0	ICE	10.63324	0	2	2
2028	2a	1	19606.94	97266.9	0	97266.9	768135.2	0	768135.2	BEV	0	19606.94	2	3
2028	2a	1	1150.559	5707.737	0	5707.737	45643.48	0	45643.48	FCEV	0	1150.559	2	7
2028	2a	1	11535.65	57226.53	31654.45	25572.08	440220.3	243504.7	196715.6	PHEV	6380.865	5154.789	2	8
2028	2a	1	69359.61	348055.5	348055.5	0	2791673	2791673	0	ICE	69359.61	0	2	1
2028	2a	1	9.865523	49.50648	49.50648	0	396.8513	396.8513	0	ICE	9.865523	0	2	2
2028	2a	1	24617.52	123533.9	0	123533.9	1000963	0	1000963	BEV	0	24617.52	2	3
2028	2a	1	1651.175	8285.812	0	8285.812	67815.57	0	67815.57	FCEV	0	1651.175	2	7
2028	2a	1	13493.03	67709.8	36853.48	30856.32	534560.2	290953.5	243606.7	PHEV	7344.066	6148.968	2	8
2028	2a	1	63609.36	322844.2	322844.2	0	2655696	2655696	0	ICE	63609.36	0	2	1
2028	2a	1	9.047624	45.92049	45.92049	0	377.5261	377.5261	0	ICE	9.047624	0	2	2
2028	2a	1	30018.57	152356.9	0	152356.9	1265007	0	1265007	BEV	0	30018.57	2	3
2028	2a	1	2269.382	11518.07	0	11518.07	96336.15	0	96336.15	FCEV	0	2269.382	2	7
2028	2a	1	15297.75	77642.49	41572.01	36070.48	628422.1	336475.2	291947	PHEV	8190.851	7106.896	2	8
2028	2a	1	57553.08	295403.3	295403.3	0	2491316	2491316	0	ICE	57553.08	0	2	1
2028	2a	1	8.186195	42.01736	42.01736	0	354.164	354.164	0	ICE	8.186195	0	2	2
2028	2a	1	35730.93	183396.5	0	183396.5	1559825	0	1559825	BEV	0	35730.93	2	3
2028	2a	1	3010.785	15453.49	0	15453.49	132157.5	0	132157.5	FCEV	0	3010.785	2	7
2028	2a	1	16890.36	86693.34	45650.24	41043.11	719313.6	378770	340543.6	PHEV	8893.983	7996.381	2	8
2028	2a	1	46362.7	240622.4	240622.4	0	2079581	2079581	0	ICE	46362.7	0	2	1
2028	2a	1	6.594506	34.22548	34.22548	0	295.6368	295.6368	0	ICE	6.594506	0	2	2
2028	2a	1	37796.39	196163.3	0	196163.3	1708355	0	1708355	BEV	0	37796.39	2	3
2028	2a	1	3517.591	18256.3	0	18256.3	159661.9	0	159661.9	FCEV	0	3517.591	2	7
2028	2a	1	16527.59	85778.18	44408.59	41369.59	729347.2	377593.4	351753.7	PHEV	8556.568	7971.019	2	8
2028	2a	1	1888.19	5040.033	5040.033	0	20158.01	20158.01	0	ICE	1888.19	0	3	1
2028	2a	1	3134.255	8725.201	8725.201	0	35127.87	35127.87	0	ICE	3134.255	0	3	1
2028	2a	1	3301.889	9381.03	9381.03	0	38302.65	38302.65	0	ICE	3301.889	0	3	1
2028	2a	1	4213.705	12213	12213	0	50502.58	50502.58	0	ICE	4213.705	0	3	1
2028	2a	1	5373.577	15882.63	15882.63	0	67179.88	67179.88	0	ICE	5373.577	0	3	1
2028	2a	1	5902.685	17784.67	17784.67	0	76276.6	76276.6	0	ICE	5902.685	0	3	1
2028	2a	1	7295.97	22400.6	22400.6	0	98827.61	98827.61	0	ICE	7295.97	0	3	1
2028	2a	1	6784.351	21218.46	21218.46	0	94587.53	94587.53	0	ICE	6784.351	0	3	1
2028	2a	1	9485.19	30208.91	30208.91	0	136170.4	136170.4	0	ICE	9485.19	0	3	1
2028	2a	1	10731.57	34793.25	34793.25	0	158588.6	158588.6	0	ICE	10731.57	0	3	1
2028	2a	1	13768.56	45428.39	45428.39	0	210687.7	210687.7	0	ICE	13768.56	0	3	1
2028	2a	1	13553.33	45494.74	45494.74	0	212534.8	212534.8	0	ICE	13553.33	0	3	1
2028	2a	1	21130.9	72141.1	72141.1	0	341557.9	341557.9	0	ICE	21130.9	0	3	1
2028	2a	1	24193.86	83984.14	83984.14	0	402078	402078	0	ICE	24193.86	0	3	1

2028	2a	1	28137.5	99285.69	99285.69	0	480548.8	480548.8	0	ICE	28137.5	0	3	1
2028	2a	1	38467.71	137940.6	137940.6	0	674657.6	674657.6	0	ICE	38467.71	0	3	1
2028	2a	1	38195.12	139151.3	139151.3	0	685883.2	685883.2	0	ICE	38195.12	0	3	1
2028	2a	1	38653.95	143037.4	143037.4	0	716373.1	716373.1	0	ICE	38653.95	0	3	1
2028	2a	1	45270.79	170116.3	170116.3	0	863964.5	863964.5	0	ICE	45270.79	0	3	1
2028	2a	1	56348.46	214971.6	214971.6	0	1106111	1106111	0	ICE	56348.46	0	3	1
2028	2a	1	65221.65	252559.7	252559.7	0	1313876	1313876	0	ICE	65221.65	0	3	1
2028	2a	1	63208.3	248384.6	248384.6	0	1308869	1308869	0	ICE	63208.3	0	3	1
2028	2a	1	68921.82	274785.1	274785.1	0	1467765	1467765	0	ICE	68921.82	0	3	1
2028	2a	1	58474.63	236483.1	236483.1	0	1283181	1283181	0	ICE	58474.63	0	3	1
2028	2a	1	40020.97	164145.6	164145.6	0	906224	906224	0	ICE	40020.97	0	3	1
2028	2a	1	77068.18	320509.6	320509.6	0	1799581	1799581	0	ICE	77068.18	0	3	1
2028	2a	1	110347.2	465231.4	465231.4	0	2664126	2664126	0	ICE	110347.2	0	3	1
2028	2a	1	114033.6	487306.6	487306.6	0	2856971	2856971	0	ICE	114033.6	0	3	1
2028	2a	1	165921.3	718546.9	718546.9	0	4295047	4295047	0	ICE	165921.3	0	3	1
2028	2a	1	163330.3	716683.4	716683.4	0	4387514	4387514	0	ICE	163330.3	0	3	1
2028	2a	1	1760.7	7725.845	7725.845	0	46378.86	46378.86	0	ICE	1760.7	0	3	2
2028	2a	1	205007.5	911305.5	911305.5	0	5697747	5697747	0	ICE	205007.5	0	3	1
2028	2a	1	205591.9	925681.5	925681.5	0	5918677	5918677	0	ICE	205591.9	0	3	1
2028	2a	1	1420.447	6395.593	6395.593	0	41301.37	41301.37	0	ICE	1420.447	0	3	2
2028	2a	1	242048.3	1103694	1103694	0	7192506	7192506	0	ICE	242048.3	0	3	1
2028	2a	1	2474.004	11280.99	11280.99	0	73725.76	73725.76	0	ICE	2474.004	0	3	2
2028	2a	1	261325.6	1206567	1206567	0	8056449	8056449	0	ICE	261325.6	0	3	1
2028	2a	1	2671.04	12332.46	12332.46	0	82579.42	82579.42	0	ICE	2671.04	0	3	2
2028	2a	1	901.6099	4162.823	2497.694	1665.129	27919.3	16751.58	11167.72	PHEV	540.966	360.644	3	8
2028	2a	1	275083.1	1285846	1285846	0	8822980	8822980	0	ICE	275083.1	0	3	1
2028	2a	1	2804.57	13109.65	13109.65	0	90163.7	90163.7	0	ICE	2804.57	0	3	2
2028	2a	1	3244.259	15164.93	0	15164.93	81832.3	0	81832.3	BEV	0	3244.259	3	3
2028	2a	1	75.88911	354.7353	0	354.7353	1736.912	0	1736.912	FCEV	0	75.88911	3	7
2028	2a	1	2817.831	13171.64	7827.719	5343.923	90548.84	53811.88	36736.96	PHEV	1674.597	1143.234	3	8
2028	2a	1	283191.4	1339971	1339971	0	9421612	9421612	0	ICE	283191.4	0	3	1
2028	2a	1	2893.8	13692.53	13692.53	0	96515.69	96515.69	0	ICE	2893.8	0	3	2
2028	2a	1	6786.688	32112.44	0	32112.44	203312.7	0	203312.7	BEV	0	6786.688	3	3
2028	2a	1	179.1208	847.5423	0	847.5423	4263.338	0	4263.338	FCEV	0	179.1208	3	7
2028	2a	1	4897.825	23174.94	13640.11	9534.833	163355.1	96146.16	67208.96	PHEV	2882.72	2015.105	3	8
2028	2a	1	275238.8	1318110	1318110	0	9494662	9494662	0	ICE	275238.8	0	3	1
2028	2a	1	2855.057	13672.78	13672.78	0	98870.37	98870.37	0	ICE	2855.057	0	3	2
2028	2a	1	18798.37	90024.81	0	90024.81	566298.7	0	566298.7	BEV	0	18798.37	3	3
2028	2a	1	644.3885	3085.957	0	3085.957	15940.1	0	15940.1	FCEV	0	644.3885	3	7
2028	2a	1	12777.07	61189	35472.14	25716.86	486483.7	282021.6	204462.2	PHEV	7407.049	5370.019	3	8
2028	2a	1	262218.5	1270779	1270779	0	9385943	9385943	0	ICE	262218.5	0	3	1
2028	2a	1	2732.795	13243.83	13243.83	0	98257.56	98257.56	0	ICE	2732.795	0	3	2
2028	2a	1	31774.05	153985.3	0	153985.3	990079.7	0	990079.7	BEV	0	31774.05	3	3
2028	2a	1	1343.632	6511.589	0	6511.589	34526.98	0	34526.98	FCEV	0	1343.632	3	7
2028	2a	1	20321.63	98483.89	56220.23	42263.66	832770.8	475393.1	357377.6	PHEV	11600.75	8720.881	3	8
2028	2a	1	248706.4	1219544	1219544	0	9237184	9237184	0	ICE	248706.4	0	3	1
2028	2a	1	2605.981	12778.56	12778.56	0	97275.67	97275.67	0	ICE	2605.981	0	3	2

2028	2a	1	45928.86	225214.5	0	225214.5	1492907	0	1492907	BEV	0	45928.86	3	3
2028	2a	1	2315.741	11355.35	0	11355.35	62163.88	0	62163.88	FCEV	0	2315.741	3	7
2028	2a	1	27610.56	135389.8	76089.04	59300.71	1194020	671039.2	522980.7	PHEV	15517.13	12093.42	3	8
2028	2a	1	232715.1	1154462	1154462	0	8968198	8968198	0	ICE	232715.1	0	3	1
2028	2a	1	2450.663	12157.35	12157.35	0	94968.51	94968.51	0	ICE	2450.663	0	3	2
2028	2a	1	60882.51	302028.4	0	302028.4	2063129	0	2063129	BEV	0	60882.51	3	3
2028	2a	1	3572.658	17723.38	0	17723.38	104979.8	0	104979.8	FCEV	0	3572.658	3	7
2028	2a	1	34357.92	170444.1	94279.96	76164.18	1558574	862113.9	696459.8	PHEV	19004.84	15353.08	3	8
2028	2a	1	215718.7	1082504	1082504	0	8627539	8627539	0	ICE	215718.7	0	3	1
2028	2a	1	2282.225	11452.5	11452.5	0	91836.08	91836.08	0	ICE	2282.225	0	3	2
2028	2a	1	76790.89	385346.7	0	385346.7	2714336	0	2714336	BEV	0	76790.89	3	3
2028	2a	1	5150.609	25846.42	0	25846.42	162554.4	0	162554.4	FCEV	0	5150.609	3	7
2028	2a	1	40619.33	203833.1	110943.4	92889.65	1929864	1050398	879466.8	PHEV	22108.52	18510.81	3	8
2028	2a	1	200489.3	1017567	1017567	0	8317019	8317019	0	ICE	200489.3	0	3	1
2028	2a	1	2121.103	10765.49	10765.49	0	88531.61	88531.61	0	ICE	2121.103	0	3	2
2028	2a	1	94921.26	481765.3	0	481765.3	3500663	0	3500663	BEV	0	94921.26	3	3
2028	2a	1	7175.978	36421.1	0	36421.1	243690.5	0	243690.5	FCEV	0	7175.978	3	7
2028	2a	1	46979.74	238441.9	127668.6	110773.3	2338045	1251856	1086189	PHEV	25154.29	21825.44	3	8
2028	2a	1	183712.2	942941.6	942941.6	0	7901769	7901769	0	ICE	183712.2	0	3	1
2028	2a	1	1943.608	9975.976	9975.976	0	84112.48	84112.48	0	ICE	1943.608	0	3	2
2028	2a	1	114383.7	587098.1	0	587098.1	4399407	0	4399407	BEV	0	114383.7	3	3
2028	2a	1	9638.276	49470.47	0	49470.47	348181.6	0	348181.6	FCEV	0	9638.276	3	7
2028	2a	1	52862.44	271327.6	142873.3	128454.2	2751482	1448852	1302630	PHEV	27835.85	25026.59	3	8
2028	2a	1	147059.2	763237.1	763237.1	0	6552379	6552379	0	ICE	147059.2	0	3	1
2028	2a	1	1555.832	8074.769	8074.769	0	69749.16	69749.16	0	ICE	1555.832	0	3	2
2028	2a	1	120145.6	623555.7	0	623555.7	4815504	0	4815504	BEV	0	120145.6	3	3
2028	2a	1	11181.57	58032.36	0	58032.36	426690.3	0	426690.3	FCEV	0	11181.57	3	7
2028	2a	1	51724.75	268451.5	138981.2	129470.3	2810472	1455021	1355450	PHEV	26778.64	24946.11	3	8
2028	2a	1	3818.666	11505.57	11505.57	0	43729.55	43729.55	0	ICE	3818.666	0	4	1
2028	2a	1	3251.664	9983.487	9983.487	0	38918.48	38918.48	0	ICE	3251.664	0	4	1
2028	2a	1	4113.445	12865.04	12865.04	0	50820.93	50820.93	0	ICE	4113.445	0	4	1
2028	2a	1	4594.551	14632.95	14632.95	0	59622.46	59622.46	0	ICE	4594.551	0	4	1
2028	2a	1	7444.015	24134.54	24134.54	0	100062.8	100062.8	0	ICE	7444.015	0	4	1
2028	2a	1	8677.113	28629.53	28629.53	0	121492.1	121492.1	0	ICE	8677.113	0	4	1
2028	2a	1	8362.889	28071.88	28071.88	0	121261.6	121261.6	0	ICE	8362.889	0	4	1
2028	2a	1	11784.76	40233.3	40233.3	0	177760.3	177760.3	0	ICE	11784.76	0	4	1
2028	2a	1	14270.53	49537.3	49537.3	0	222481.7	222481.7	0	ICE	14270.53	0	4	1
2028	2a	1	25198.45	88914.99	88914.99	0	408405.9	408405.9	0	ICE	25198.45	0	4	1
2028	2a	1	30968.33	111048.7	111048.7	0	517183.1	517183.1	0	ICE	30968.33	0	4	1
2028	2a	1	42924.92	156382.8	156382.8	0	739624.3	739624.3	0	ICE	42924.92	0	4	1
2028	2a	1	43.92746	160.0352	160.0352	0	715.2328	715.2328	0	ICE	43.92746	0	4	2
2028	2a	1	54908.43	203186.4	203186.4	0	978642.1	978642.1	0	ICE	54908.43	0	4	1
2028	2a	1	64747.33	243304.3	243304.3	0	1194738	1194738	0	ICE	64747.33	0	4	1
2028	2a	1	75802.83	289190.8	289190.8	0	1439488	1439488	0	ICE	75802.83	0	4	1
2028	2a	1	109.0504	416.0317	416.0317	0	1967.187	1967.187	0	ICE	109.0504	0	4	2
2028	2a	1	76096.45	294670.6	294670.6	0	1478089	1478089	0	ICE	76096.45	0	4	1
2028	2a	1	79336.22	311761.2	311761.2	0	1586893	1586893	0	ICE	79336.22	0	4	1

2028	2a	1	84468.54	336768.5	336768.5	0	1743014	1743014	0	ICE	84468.54	0	4	1
2028	2a	1	66115.61	267384.8	267384.8	0	1409268	1409268	0	ICE	66115.61	0	4	1
2028	2a	1	29019.4	119022.8	119022.8	0	638463.1	638463.1	0	ICE	29019.4	0	4	1
2028	2a	1	43071.21	179123.7	179123.7	0	981387	981387	0	ICE	43071.21	0	4	1
2028	2a	1	65428.35	275850.5	275850.5	0	1543846	1543846	0	ICE	65428.35	0	4	1
2028	2a	1	1848.609	7793.864	7793.864	0	43034.49	43034.49	0	ICE	1848.609	0	4	2
2028	2a	1	68342.67	292052.8	292052.8	0	1674055	1674055	0	ICE	68342.67	0	4	1
2028	2a	1	78776.78	341154.7	341154.7	0	2003975	2003975	0	ICE	78776.78	0	4	1
2028	2a	1	1697.681	7352.062	7352.062	0	42582.43	42582.43	0	ICE	1697.681	0	4	2
2028	2a	1	125500.6	550689.3	550689.3	0	3317900	3317900	0	ICE	125500.6	0	4	1
2028	2a	1	3908.41	17149.87	17149.87	0	102765.9	102765.9	0	ICE	3908.41	0	4	2
2028	2a	1	140926.6	626451.4	626451.4	0	3874887	3874887	0	ICE	140926.6	0	4	1
2028	2a	1	155534.2	700296	700296	0	4431287	4431287	0	ICE	155534.2	0	4	1
2028	2a	1	145747.7	664582	664582	0	4276764	4276764	0	ICE	145747.7	0	4	1
2028	2a	1	5082.247	23174.08	23174.08	0	149225	149225	0	ICE	5082.247	0	4	2
2028	2a	1	1219.367	5560.082	3336.049	2224.033	34169.24	20501.54	13667.7	PHEV	731.6203	487.7469	4	8
2028	2a	1	155939	719986	719986	0	4751142	4751142	0	ICE	155939	0	4	1
2028	2a	1	5437.619	25106.03	25106.03	0	165776.2	165776.2	0	ICE	5437.619	0	4	2
2028	2a	1	2.727837	12.5947	0	12.5947	59.98565	0	59.98565	BEV	0	2.727837	4	3
2028	2a	1	0.05567	0.257035	0	0.257035	1.224197	0	1.224197	FCEV	0	0.05567	4	7
2028	2a	1	3338.121	15412.44	9247.464	6164.976	99931.07	59958.64	39972.43	PHEV	2002.873	1335.249	4	8
2028	2a	1	166756.6	779485.3	779485.3	0	5271425	5271425	0	ICE	166756.6	0	4	1
2028	2a	1	5869.724	27437.38	27437.38	0	185817.3	185817.3	0	ICE	5869.724	0	4	2
2028	2a	1	1429.515	6682.109	0	6682.109	34023.11	0	34023.11	BEV	0	1429.515	4	3
2028	2a	1	33.43894	156.3066	0	156.3066	765.1761	0	765.1761	FCEV	0	33.43894	4	7
2028	2a	1	3719.303	17385.47	10331.94	7053.534	122018.6	72513.93	49504.7	PHEV	2210.329	1508.974	4	8
2028	2a	1	173590.1	821372.9	821372.9	0	5691025	5691025	0	ICE	173590.1	0	4	1
2028	2a	1	6206.089	29365.23	29365.23	0	204038.1	204038.1	0	ICE	6206.089	0	4	2
2028	2a	1	2993.346	14163.56	0	14163.56	79953.56	0	79953.56	BEV	0	2993.346	4	3
2028	2a	1	79.00327	373.8182	0	373.8182	1880.088	0	1880.088	FCEV	0	79.00327	4	7
2028	2a	1	4031.276	19074.71	11226.83	7847.88	134965.9	79437.07	55528.83	PHEV	2372.694	1658.582	4	8
2028	2a	1	170706.2	817506.9	817506.9	0	5803950	5803950	0	ICE	170706.2	0	4	1
2028	2a	1	6210.814	29743.4	29743.4	0	212094.2	212094.2	0	ICE	6210.814	0	4	2
2028	2a	1	9033.936	43263.25	0	43263.25	250625.9	0	250625.9	BEV	0	9033.936	4	3
2028	2a	1	309.6739	1483.019	0	1483.019	7659.505	0	7659.505	FCEV	0	309.6739	4	7
2028	2a	1	10782.47	51636.9	29934.65	21702.25	396847.6	230058.2	166789.4	PHEV	6250.749	4531.716	4	8
2028	2a	1	164459.8	797015	797015	0	5802567	5802567	0	ICE	164459.8	0	4	1
2028	2a	1	6016.373	29156.91	29156.91	0	213353.4	213353.4	0	ICE	6016.373	0	4	2
2028	2a	1	16179.31	78409.13	0	78409.13	472454.3	0	472454.3	BEV	0	16179.31	4	3
2028	2a	1	684.1756	3315.693	0	3315.693	17579.15	0	17579.15	FCEV	0	684.1756	4	7
2028	2a	1	17135.23	83041.8	47405	35636.8	671354.7	383247.6	288107.1	PHEV	9781.771	7353.463	4	8
2028	2a	1	157784.5	773704.4	773704.4	0	5775768	5775768	0	ICE	157784.5	0	4	1
2028	2a	1	5808.508	28482.31	28482.31	0	213836.6	213836.6	0	ICE	5808.508	0	4	2
2028	2a	1	24607.36	120663.4	0	120663.4	756374.4	0	756374.4	BEV	0	24607.36	4	3
2028	2a	1	1240.707	6083.869	0	6083.869	33096.34	0	33096.34	FCEV	0	1240.707	4	7
2028	2a	1	23129.51	113416.7	63740.19	49676.52	955978.9	537260.1	418718.8	PHEV	12998.78	10130.72	4	8
2028	2a	1	147534.9	731897	731897	0	5602550	5602550	0	ICE	147534.9	0	4	1

2028	2a	1	5462.92	27100.67	27100.67	0	208763.2	208763.2	0	ICE	5462.92	0	4	2
2028	2a	1	33759.18	167473.9	0	167473.9	1091243	0	1091243	BEV	0	33759.18	4	3
2028	2a	1	1981.029	9827.566	0	9827.566	54884.76	0	54884.76	FCEV	0	1981.029	4	7
2028	2a	1	28138.33	139589.7	77213.06	62376.67	1223365	676695.9	546669.6	PHEV	15564.51	12573.81	4	8
2028	2a	1	137470.2	689843.2	689843.2	0	5415996	5415996	0	ICE	137470.2	0	4	1
2028	2a	1	5117.725	25681.41	25681.41	0	203027.6	203027.6	0	ICE	5117.725	0	4	2
2028	2a	1	44185.33	221727.7	0	221727.7	1499480	0	1499480	BEV	0	44185.33	4	3
2028	2a	1	2963.65	14871.98	0	14871.98	88937.39	0	88937.39	FCEV	0	2963.65	4	7
2028	2a	1	32595.3	163567.4	89027.42	74540.02	1487490	809619.5	677870.4	PHEV	17741.16	14854.14	4	8
2028	2a	1	127841.7	648850.4	648850.4	0	5219891	5219891	0	ICE	127841.7	0	4	1
2028	2a	1	4759.278	24155.33	24155.33	0	195675.3	195675.3	0	ICE	4759.278	0	4	2
2028	2a	1	56260.35	285544.9	0	285544.9	2004355	0	2004355	BEV	0	56260.35	4	3
2028	2a	1	4253.241	21586.98	0	21586.98	138524	0	138524	FCEV	0	4253.241	4	7
2028	2a	1	36618.7	185855.3	99512.23	86343.06	1752825	938512.8	814312.6	PHEV	19606.7	17012	4	8
2028	2a	1	116104.3	595929.7	595929.7	0	4911433	4911433	0	ICE	116104.3	0	4	1
2028	2a	1	4322.318	22185.21	22185.21	0	184112.4	184112.4	0	ICE	4322.318	0	4	2
2028	2a	1	69018.76	354253.3	0	354253.3	2578991	0	2578991	BEV	0	69018.76	4	3
2028	2a	1	5815.707	29850.34	0	29850.34	202978.3	0	202978.3	FCEV	0	5815.707	4	7
2028	2a	1	39460.02	202536.9	106650.1	95886.74	1978657	1041904	936752.5	PHEV	20778.52	18681.5	4	8
2028	2a	1	89005.18	461936.9	461936.9	0	3890132	3890132	0	ICE	89005.18	0	4	1
2028	2a	1	3313.475	17196.94	17196.94	0	145822	145822	0	ICE	3313.475	0	4	2
2028	2a	1	71172.53	369385.4	0	369385.4	2783245	0	2783245	BEV	0	71172.53	4	3
2028	2a	1	6623.802	34377.53	0	34377.53	245611.3	0	245611.3	FCEV	0	6623.802	4	7
2028	2a	1	35526.66	184383.4	95457.9	88925.46	1857422	961613.7	895807.9	PHEV	18392.66	17134	4	8
2028	2a	1	7098.957	18948.82	18948.82	0	35065.92	35065.92	0	ICE	7098.957	0	1	1
2028	2a	1	1100.922	3001.698	3001.698	0	5519.788	5519.788	0	ICE	1100.922	0	1	2
2028	2a	1	11081.63	31484.13	31484.13	0	64174.34	64174.34	0	ICE	11081.63	0	1	1
2028	2a	1	68.80261	211.2426	211.2426	0	521.7619	521.7619	0	ICE	68.80261	0	1	2
2028	2a	1	35.42727	110.8009	110.8009	0	269.9597	269.9597	0	ICE	35.42727	0	1	2
2028	2a	1	19.32951	61.56159	61.56159	0	161.3451	161.3451	0	ICE	19.32951	0	1	2
2028	2a	1	49.63883	169.4675	169.4675	0	547.5942	547.5942	0	ICE	49.63883	0	1	2
2028	2a	1	86.2219	309.1814	309.1814	0	1164.917	1164.917	0	ICE	86.2219	0	1	2
2028	2a	1	14.48177	52.75954	0	52.75954	215.5338	0	215.5338	BEV	0	14.48177	1	3
2028	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2028	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2028	2a	1	244.0231	902.9979	902.9979	0	3623.24	3623.24	0	ICE	244.0231	0	1	2
2028	2a	1	364.176	1368.482	1368.482	0	5733.563	5733.563	0	ICE	364.176	0	1	2
2028	2a	1	143.7027	548.2314	548.2314	0	2424.948	2424.948	0	ICE	143.7027	0	1	2
2028	2a	1	298.9328	1157.566	1157.566	0	5197.24	5197.24	0	ICE	298.9328	0	1	2
2028	2a	1	1164.902	4777.833	4777.833	0	24594.6	24594.6	0	ICE	1164.902	0	1	2
2028	2a	1	3849.653	16450.95	16450.95	0	92915.54	92915.54	0	ICE	3849.653	0	1	2
2028	2a	1	5792.479	25085.2	25085.2	0	147042.4	147042.4	0	ICE	5792.479	0	1	2
2028	2a	1	5394.208	23360.43	0	23360.43	136773.3	0	136773.3	BEV	0	5394.208	1	3
2028	2a	1	0.316915	1.372447	0	1.372447	8.035561	0	8.035561	FCEV	0	0.316915	1	7
2028	2a	1	5638.232	24417.21	14650.33	9766.884	138272.6	82963.56	55309.04	PHEV	3382.939	2255.293	1	8
2028	2a	1	7034.385	30866.46	0	30866.46	186429	0	186429	BEV	0	7034.385	1	3
2028	2a	1	0.985622	4.324851	0	4.324851	26.12148	0	26.12148	FCEV	0	0.985622	1	7

2028	2a	1	8881.441	38971.23	23382.74	15588.49	227730.9	136638.5	91092.36	PHEV	5328.865	3552.577	1	8
2028	2a	1	6638.47	29509.52	29509.52	0	185152.8	185152.8	0	ICE	6638.47	0	1	2
2028	2a	1	17123.77	76119.09	0	76119.09	475317.7	0	475317.7	BEV	0	17123.77	1	3
2028	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2028	2a	1	8142.812	36196.67	21718	14478.67	218754	131252.4	87501.59	PHEV	4885.687	3257.125	1	8
2028	2a	1	54.43607	148.4216	148.4216	0	586.4598	586.4598	0	ICE	54.43607	0	2	2
2028	2a	1	12038.29	45926.54	45926.54	0	237176.6	237176.6	0	ICE	12038.29	0	2	1
2028	2a	1	23618.02	100928.3	100928.3	0	590205.9	590205.9	0	ICE	23618.02	0	2	1
2028	2a	1	34594.06	149814.8	149814.8	0	897802.7	897802.7	0	ICE	34594.06	0	2	1
2028	2a	1	42692.56	187332.4	187332.4	0	1145966	1145966	0	ICE	42692.56	0	2	1
2028	2a	1	2054.515	5601.697	5601.697	0	22307.48	22307.48	0	ICE	2054.515	0	3	1
2028	2a	1	18.92978	76.55583	76.55583	0	418.3968	418.3968	0	ICE	18.92978	0	3	2
2028	2a	1	771.4056	3296.494	3296.494	0	18979.5	18979.5	0	ICE	771.4056	0	3	2
2028	2a	1	601.6779	2605.656	2605.656	0	15298.2	15298.2	0	ICE	601.6779	0	3	2
2028	2a	1	2650.135	11780.46	11780.46	0	72746.63	72746.63	0	ICE	2650.135	0	3	2
2028	2a	1	2881.655	12974.71	0	12974.71	57456.89	0	57456.89	BEV	0	2881.655	3	3
2028	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2028	2a	1	262.2518	1180.794	708.4764	472.3176	7239.491	4343.695	2895.797	PHEV	157.3511	104.9007	3	8
2028	2a	1	1664.826	4443.82	4443.82	0	16748.27	16748.27	0	ICE	1664.826	0	4	1
2028	2a	1	223.3101	596.0681	596.0681	0	2039.574	2039.574	0	ICE	223.3101	0	4	2
2028	2a	1	2121.91	5785.451	5785.451	0	21663.43	21663.43	0	ICE	2121.91	0	4	1
2028	2a	1	111.5671	304.1911	304.1911	0	1016.552	1016.552	0	ICE	111.5671	0	4	2
2028	2a	1	2588.99	7207.282	7207.282	0	26386.48	26386.48	0	ICE	2588.99	0	4	1
2028	2a	1	2480.812	7048.26	7048.26	0	25860.33	25860.33	0	ICE	2480.812	0	4	1
2028	2a	1	2920.558	8464.944	8464.944	0	31941.51	31941.51	0	ICE	2920.558	0	4	1
2028	2a	1	9.141078	26.4945	26.4945	0	96.30385	96.30385	0	ICE	9.141078	0	4	2
2028	2a	1	3540.124	10463.51	10463.51	0	39627.18	39627.18	0	ICE	3540.124	0	4	1
2028	2a	1	29.00222	94.02927	94.02927	0	369.6741	369.6741	0	ICE	29.00222	0	4	2
2028	2a	1	24.16911	85.28289	85.28289	0	352.4739	352.4739	0	ICE	24.16911	0	4	2
2028	2a	1	197.7721	765.839	765.839	0	3759.776	3759.776	0	ICE	197.7721	0	4	2
2028	2a	1	289.785	1138.745	1138.745	0	5684.598	5684.598	0	ICE	289.785	0	4	2
2028	2a	1	417.0633	1662.794	1662.794	0	8577.964	8577.964	0	ICE	417.0633	0	4	2
2028	2a	1	313.0562	1266.062	1266.062	0	6672.186	6672.186	0	ICE	313.0562	0	4	2
2028	2a	1	451.2912	1850.966	1850.966	0	9780.722	9780.722	0	ICE	451.2912	0	4	2
2028	2a	1	3268.06	13965.6	13965.6	0	79976.54	79976.54	0	ICE	3268.06	0	4	2
2028	2a	1	7749.773	34449.52	34449.52	0	213898.8	213898.8	0	ICE	7749.773	0	4	2
2028	2a	1	5028.293	22639.99	22639.99	0	145105.3	145105.3	0	ICE	5028.293	0	4	2
2028	2a	1	1148.985	3066.917	3066.917	0	5384.106	5384.106	0	ICE	1148.985	0	1	2
2028	2a	1	54.80101	165.1143	165.1143	0	356.4995	356.4995	0	ICE	54.80101	0	1	2
2028	2a	1	101.3982	357.7927	357.7927	0	1268.381	1268.381	0	ICE	101.3982	0	1	2
2028	2a	1	10.78618	41.76765	0	41.76765	192.6602	0	192.6602	BEV	0	10.78618	1	3
2028	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2028	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2028	2a	1	1071.955	4580.85	0	4580.85	26046.25	0	26046.25	BEV	0	1071.955	1	3
2028	2a	1	4.051058	17.31163	0	17.31163	98.43218	0	98.43218	FCEV	0	4.051058	1	7
2028	2a	1	2253.289	9629.113	5777.468	3851.645	52987.42	31792.45	21194.97	PHEV	1351.973	901.3154	1	8
2028	2a	1	11615.71	52299.96	0	52299.96	336623.5	0	336623.5	BEV	0	11615.71	1	3

2028	2a	1	353.649	1592.312	0	1592.312	10248.76	0	10248.76	FCEV	0	353.649	1	7
2028	2a	1	8353.248	37610.67	22566.4	15044.27	235289.4	141173.6	94115.75	PHEV	5011.949	3341.299	1	8
2028	2a	1	5.506551	17.85301	17.85301	0	68.55604	68.55604	0	ICE	5.506551	0	2	2
2028	2a	1	3.301596	10.89338	10.89338	0	42.5939	42.5939	0	ICE	3.301596	0	2	2
2028	2a	1	6.302653	21.8784	21.8784	0	98.36847	98.36847	0	ICE	6.302653	0	2	2
2028	2a	1	15.5247	43.21796	43.21796	0	187.5509	187.5509	0	ICE	15.5247	0	3	2
2028	2a	1	56.75906	219.7898	219.7898	0	1124.117	1124.117	0	ICE	56.75906	0	3	2
2028	2a	1	63.66921	250.1958	250.1958	0	1325.643	1325.643	0	ICE	63.66921	0	3	2
2028	2a	1	18.55611	64.41382	64.41382	0	257.5427	257.5427	0	ICE	18.55611	0	4	2
2028	2a	1	60.7562	228.3066	228.3066	0	1083.282	1083.282	0	ICE	60.7562	0	4	2
2028	2a	1	818.4247	3403.648	3403.648	0	18321.06	18321.06	0	ICE	818.4247	0	4	2
2028	2a	1	230.9058	642.8002	642.8002	0	1196.391	1196.391	0	ICE	230.9058	0	1	2
2028	2a	1	530.3605	1506.813	1506.813	0	3014.378	3014.378	0	ICE	530.3605	0	1	2
2028	2a	1	76.08448	251.0354	251.0354	0	737.2698	737.2698	0	ICE	76.08448	0	1	2
2028	2a	1	58.02942	194.7885	194.7885	0	599.3606	599.3606	0	ICE	58.02942	0	1	2
2028	2a	1	95.90255	332.9065	332.9065	0	1145.203	1145.203	0	ICE	95.90255	0	1	2
2028	2a	1	30.19598	111.739	0	111.739	471.4112	0	471.4112	BEV	0	30.19598	1	3
2028	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2028	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2028	2a	1	1249.438	5267.718	0	5267.718	29108.14	0	29108.14	BEV	0	1249.438	1	3
2028	2a	1	12.34425	52.04421	0	52.04421	287.5838	0	287.5838	FCEV	0	12.34425	1	7
2028	2a	1	347.307	1464.271	878.5624	585.7083	7785.564	4671.338	3114.225	PHEV	208.3842	138.9228	1	8
2028	2a	1	963.1786	4336.731	4336.731	0	27655.37	27655.37	0	ICE	963.1786	0	1	2
2028	2a	1	58.66535	156.5919	156.5919	0	639.9232	639.9232	0	ICE	58.66535	0	2	2
2028	2a	1	22.14696	61.65316	61.65316	0	243.0292	243.0292	0	ICE	22.14696	0	2	2
2028	2a	1	444.2135	1949.182	0	1949.182	11748.38	0	11748.38	BEV	0	444.2135	2	3
2028	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2028	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2028	2a	1	25.9766	69.33779	69.33779	0	276.9867	276.9867	0	ICE	25.9766	0	3	2
2028	2a	1	1.14382	3.511838	3.511838	0	15.69269	15.69269	0	ICE	1.14382	0	3	2
2028	2a	1	69.66218	193.927	193.927	0	696.1651	696.1651	0	ICE	69.66218	0	4	2
2028	2a	1	20.78451	66.19555	66.19555	0	240.2997	240.2997	0	ICE	20.78451	0	4	2
2028	2a	1	35.88765	118.4088	118.4088	0	462.454	462.454	0	ICE	35.88765	0	4	2
2028	2a	1	35.52011	119.2311	119.2311	0	469.1431	469.1431	0	ICE	35.52011	0	4	2
2028	2a	1	26.4018	78.03554	78.03554	0	198.3936	198.3936	0	ICE	26.4018	0	1	2
2028	2a	1	88.70148	358.7265	358.7265	0	1753.089	1753.089	0	ICE	88.70148	0	1	2
2028	2a	1	10.41392	39.1329	39.1329	0	184.2112	184.2112	0	ICE	10.41392	0	2	2
2028	2a	1	0.541315	1.910078	1.910078	0	8.19565	8.19565	0	ICE	0.541315	0	3	2
2028	2a	1	41.92696	174.365	174.365	0	974.5183	974.5183	0	ICE	41.92696	0	3	2
2028	2a	1	140.4536	616.302	0	616.302	2585.326	0	2585.326	BEV	0	140.4536	3	3
2028	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2028	2a	1	63.593	279.0423	167.4254	111.6169	1633.163	979.8976	653.2651	PHEV	38.1558	25.4372	3	8
2028	2a	1	11.9654	36.737	36.737	0	134.7405	134.7405	0	ICE	11.9654	0	4	2
2028	2a	1	43.51603	148.5641	148.5641	0	603.3003	603.3003	0	ICE	43.51603	0	4	2
2028	2a	1	21.43226	79.30923	79.30923	0	373.0158	373.0158	0	ICE	21.43226	0	4	2
2028	2a	1	102.6766	432.8918	432.8918	0	2452.351	2452.351	0	ICE	102.6766	0	3	2
2028	2a	1	9.54756	28.21963	28.21963	0	99.99611	99.99611	0	ICE	9.54756	0	4	2

2028	2a	1	8.330488	29.87213	29.87213	0	134.3708	134.3708	0	ICE	8.330488	0	4	2
2028	2a	1	10.89001	40.29806	0	40.29806	115.8758	0	115.8758	BEV	0	10.89001	3	3
2028	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2028	2a	1	0	0	0	0	0	0	0	PHEV	0	0	3	8
2028	2a	1	50.58513	187.1882	0	187.1882	545.952	0	545.952	BEV	0	50.58513	4	3
2028	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2028	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2028	2a	1	30.89731	89.55276	89.55276	0	197.8158	197.8158	0	ICE	30.89731	0	1	2
2028	2a	1	12.43724	40.32328	40.32328	0	116.4083	116.4083	0	ICE	12.43724	0	1	2
2028	2a	1	52.61135	209.7567	209.7567	0	987.5635	987.5635	0	ICE	52.61135	0	1	2
2028	2a	1	188.619	784.4249	0	784.4249	4227.392	0	4227.392	BEV	0	188.619	1	3
2028	2a	1	19.14914	79.63704	0	79.63704	429.1769	0	429.1769	FCEV	0	19.14914	1	7
2028	2a	1	20.10659	83.6189	50.17134	33.44756	430.5009	258.3006	172.2004	PHEV	12.06396	8.042637	1	8
2028	2a	1	15.35703	43.63101	43.63101	0	164.7867	164.7867	0	ICE	15.35703	0	2	2
2028	2a	1	6.532963	20.43223	20.43223	0	70.72312	70.72312	0	ICE	6.532963	0	2	2
2028	2a	1	182.9182	781.6752	0	781.6752	4412.748	0	4412.748	BEV	0	182.9182	2	3
2028	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2028	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2028	2a	1	5.619429	15.96542	15.96542	0	70.34863	70.34863	0	ICE	5.619429	0	3	2
2028	2a	1	34.27337	140.5719	140.5719	0	746.8379	746.8379	0	ICE	34.27337	0	3	2
2028	2a	1	19.44404	60.81239	60.81239	0	232.5783	232.5783	0	ICE	19.44404	0	4	2
2028	2a	1	14.95676	58.77439	0	58.77439	280.3314	0	280.3314	BEV	0	14.95676	1	3
2028	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2028	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2028	2a	1	102.4969	414.518	0	414.518	2061.77	0	2061.77	BEV	0	102.4969	1	3
2028	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2028	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2028	2a	1	92.26787	378.4358	0	378.4358	2004.237	0	2004.237	BEV	0	92.26787	1	3
2028	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2028	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2028	2a	1	7.238425	21.39454	21.39454	0	73.4276	73.4276	0	ICE	7.238425	0	2	2
2028	2a	1	6.89631	23.14898	23.14898	0	107.2135	107.2135	0	ICE	6.89631	0	2	2
2028	2a	1	17.99213	73.79454	73.79454	0	391.4828	391.4828	0	ICE	17.99213	0	2	2
2028	2a	1	229.0181	991.7971	0	991.7971	5781.929	0	5781.929	BEV	0	229.0181	2	3
2028	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2028	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2028	2a	1	9.6461	38.45813	38.45813	0	205.7113	205.7113	0	ICE	9.6461	0	3	2
2028	2a	1	16.74007	47.56039	47.56039	0	187.0568	187.0568	0	ICE	16.74007	0	4	2
2028	2a	1	9.458656	28.49874	28.49874	0	112.361	112.361	0	ICE	9.458656	0	4	2
2028	2a	1	8.207303	30.84099	0	30.84099	133.687	0	133.687	BEV	0	8.207303	1	3
2028	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2028	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2028	2a	1	29.62143	118.098	0	118.098	580.7583	0	580.7583	BEV	0	29.62143	1	3
2028	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2028	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2028	2a	1	26.1164	105.62	0	105.62	533.6448	0	533.6448	BEV	0	26.1164	2	3
2028	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7

2028	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2028	2a	1	3.957134	16.91026	16.91026	0	102.4229	102.4229	0	ICE	3.957134	0	2	2
2028	2a	1	1.017837	3.999711	0	3.999711	14.31897	0	14.31897	BEV	0	1.017837	4	3
2028	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2028	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2028	2a	1	6.227054	22.68622	22.68622	0	98.14544	98.14544	0	ICE	6.227054	0	2	2
2028	2a	1	3.990435	11.79449	11.79449	0	50.47894	50.47894	0	ICE	3.990435	0	3	2
2028	2a	1	0.828622	3.113754	3.113754	0	17.6561	17.6561	0	ICE	0.828622	0	3	2
2028	2a	1	2.394558	7.626308	0	7.626308	23.53244	0	23.53244	BEV	0	2.394558	1	3
2028	2a	1	5.186904	15.03372	15.03372	0	68.04447	68.04447	0	ICE	5.186904	0	3	2
2028	2a	1	1.152588	3.604789	3.604789	0	15.37291	15.37291	0	ICE	1.152588	0	3	2
2028	2a	1	18.22561	74.75218	0	74.75218	281.4729	0	281.4729	BEV	0	18.22561	3	3
2028	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2028	2a	1	0	0	0	0	0	0	0	PHEV	0	0	3	8
2028	2a	1	10.68434	45.04593	0	45.04593	176.6911	0	176.6911	BEV	0	10.68434	3	3
2028	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2028	2a	1	7.396851	31.18564	18.71139	12.47426	175.2634	105.158	70.10535	PHEV	4.438111	2.958741	3	8
2028	2a	1	1.425678	6.337465	0	6.337465	27.03623	0	27.03623	BEV	0	1.425678	4	3
2028	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2028	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2028	2a	1	2.012018	6.292708	0	6.292708	19.01009	0	19.01009	BEV	0	2.012018	1	3
2028	2a	1	8.189351	23.73602	23.73602	0	82.39319	82.39319	0	ICE	8.189351	0	2	2
2028	2a	1	36.26481	130.0412	0	130.0412	504.7869	0	504.7869	BEV	0	36.26481	2	3
2028	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2028	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2028	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2028	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2028	2a	1	13.82725	50.37501	0	50.37501	205.5477	0	205.5477	BEV	0	13.82725	2	3
2028	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2028	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2028	2a	1	11.66333	43.1597	43.1597	0	216.167	216.167	0	ICE	11.66333	0	2	2
2028	2a	1	5.893535	23.15935	0	23.15935	109.8904	0	109.8904	BEV	0	5.893535	2	3
2028	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2028	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2028	2a	1	11.23039	44.77456	44.77456	0	227.8502	227.8502	0	ICE	11.23039	0	2	2
2028	2a	1	3.33405	13.29256	0	13.29256	65.37647	0	65.37647	BEV	0	3.33405	2	3
2028	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2028	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2028	2a	1	13.45115	54.39914	54.39914	0	294.8965	294.8965	0	ICE	13.45115	0	2	2
2028	2a	1	11.30023	46.34778	0	46.34778	243.9584	0	243.9584	BEV	0	11.30023	2	3
2028	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2028	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2028	2a	1	15.29479	41.70172	41.70172	0	183.7923	183.7923	0	ICE	15.29479	0	3	2
2028	2a	1	9.152719	37.01543	0	37.01543	135.6279	0	135.6279	BEV	0	9.152719	3	3
2028	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2028	2a	1	0	0	0	0	0	0	0	PHEV	0	0	3	8
2028	2a	1	9.640915	41.75143	0	41.75143	171.6986	0	171.6986	BEV	0	9.640915	3	3
2028	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2028	2a	1	7.372465	31.92756	19.15654	12.77103	182.7664	109.6599	73.10657	PHEV	4.423479	2.948986	3	8

2028	2a	1	2.260292	8.105136	0	8.105136	22.8555	0	22.8555	BEV	0	2.260292	4	3
2028	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2028	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2028	2a	1	7.323432	27.51963	0	27.51963	82.98334	0	82.98334	BEV	0	7.323432	4	3
2028	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2028	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2028	2a	1	1.30655	5.059392	0	5.059392	16.61368	0	16.61368	BEV	0	1.30655	4	3
2028	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2028	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2028	2a	1	9.047936	28.81632	28.81632	0	104.7284	104.7284	0	ICE	9.047936	0	2	2
2028	2a	1	0.871239	3.373724	3.373724	0	16.42988	16.42988	0	ICE	0.871239	0	2	2
2028	2a	1	48.27999	178.6582	0	178.6582	734.7845	0	734.7845	BEV	0	48.27999	2	3
2028	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2028	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2028	2a	1	3.239675	12.35949	0	12.35949	54.87816	0	54.87816	BEV	0	3.239675	2	3
2028	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2028	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2028	2a	1	23.02422	81.24303	0	81.24303	305.6519	0	305.6519	BEV	0	23.02422	2	3
2028	2a	1	0.686319	2.343099	2.343099	0	10.20189	10.20189	0	ICE	0.686319	0	3	2
2028	2a	1	6.786314	23.94612	23.94612	0	100.379	100.379	0	ICE	6.786314	0	2	2
2028	2a	1	0.535793	1.982682	1.982682	0	8.802933	8.802933	0	ICE	0.535793	0	3	2
2028	2a	1	3.372032	10.35305	10.35305	0	45.41599	45.41599	0	ICE	3.372032	0	2	2
2028	2a	1	2.506566	8.270239	0	8.270239	27.2139	0	27.2139	BEV	0	2.506566	1	3
2028	2a	1	7.667488	30.13031	30.13031	0	157.1329	157.1329	0	ICE	7.667488	0	2	2
2028	2a	1	1.334592	4.785687	0	4.785687	14.17438	0	14.17438	BEV	0	1.334592	3	3
2028	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2028	2a	1	0	0	0	0	0	0	0	PHEV	0	0	3	8
2028	2a	1	0.746348	2.120458	0	2.120458	5.74036	0	5.74036	BEV	0	0.746348	2	3
2028	2a	1	1.70373	6.890226	0	6.890226	24.55997	0	24.55997	BEV	0	1.70373	4	3
2028	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2028	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2028	2a	1	3.854238	13.37922	0	13.37922	49.31147	0	49.31147	BEV	0	3.854238	1	3
2028	2a	1	3.425662	12.28401	0	12.28401	48.05681	0	48.05681	BEV	0	3.425662	1	3
2028	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2028	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2028	2a	1	9.121888	34.80037	0	34.80037	154.6521	0	154.6521	BEV	0	9.121888	1	3
2028	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2028	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2028	2a	1	7.659133	26.14836	26.14836	0	107.6452	107.6452	0	ICE	7.659133	0	2	2
2028	2a	1	7.104923	24.66332	0	24.66332	89.55601	0	89.55601	BEV	0	7.104923	2	3
2028	2a	1	1.218663	4.719065	0	4.719065	21.52184	0	21.52184	BEV	0	1.218663	2	3
2028	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2028	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2028	2a	1	1.590325	5.064947	5.064947	0	19.73375	19.73375	0	ICE	1.590325	0	3	2
2028	2a	1	3.845099	13.1272	0	13.1272	46.54024	0	46.54024	BEV	0	3.845099	1	3
2028	2a	1	4.707774	16.6118	0	16.6118	63.36958	0	63.36958	BEV	0	4.707774	1	3
2028	2a	1	5.586867	16.83312	16.83312	0	73.39799	73.39799	0	ICE	5.586867	0	2	2

2028	2a	1	2.09117	6.54026	0	6.54026	19.82646	0	19.82646	BEV	0	2.09117	2	3
2028	2a	1	0.924571	2.944619	0	2.944619	9.087737	0	9.087737	BEV	0	0.924571	2	3
2028	2a	1	0.89443	2.951111	0	2.951111	9.7653	0	9.7653	BEV	0	0.89443	2	3
2028	2a	1	5.857094	21.00284	21.00284	0	89.99966	89.99966	0	ICE	5.857094	0	2	2
2028	2a	1	4.260843	17.71991	17.71991	0	98.39166	98.39166	0	ICE	4.260843	0	2	2
2028	2a	1	6.253497	27.08171	27.08171	0	158.948	158.948	0	ICE	6.253497	0	2	2
2028	2a	1	2.242247	6.755846	6.755846	0	25.55951	25.55951	0	ICE	2.242247	0	3	2
2028	2a	1	0.890264	2.835357	0	2.835357	6.066889	0	6.066889	BEV	0	0.890264	3	3
2028	2a	1	1.076567	3.490381	3.490381	0	16.50509	16.50509	0	ICE	1.076567	0	3	2
2028	2a	1	5.075569	17.9096	0	17.9096	46.51859	0	46.51859	BEV	0	5.075569	3	3
2028	2a	1	0.742063	2.703462	2.703462	0	11.70983	11.70983	0	ICE	0.742063	0	3	2
2028	2a	1	0.468878	1.708201	0	1.708201	4.750415	0	4.750415	BEV	0	0.468878	3	3
2028	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2028	2a	1	0	0	0	0	0	0	0	PHEV	0	0	3	8
2028	2a	1	12.4988	51.97978	0	51.97978	195.7562	0	195.7562	BEV	0	12.4988	3	3
2028	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2028	2a	1	0	0	0	0	0	0	0	PHEV	0	0	3	8
2028	2a	1	32.51206	138.9357	0	138.9357	547.6223	0	547.6223	BEV	0	32.51206	3	3
2028	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2028	2a	1	8.336425	35.62455	21.37473	14.24982	204.9669	122.9801	81.98676	PHEV	5.001855	3.33457	3	8
2028	2a	1	0.755338	2.189271	0	2.189271	4.170865	0	4.170865	BEV	0	0.755338	4	3
2028	2a	1	1.085545	3.581679	0	3.581679	8.139665	0	8.139665	BEV	0	1.085545	4	3
2028	2a	1	2.064769	8.705212	8.705212	0	51.28134	51.28134	0	ICE	2.064769	0	2	2
2028	2a	1	0.551042	2.007541	0	2.007541	5.817744	0	5.817744	BEV	0	0.551042	4	3
2028	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2028	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2028	2a	1	0.778746	2.167888	0	2.167888	5.882614	0	5.882614	BEV	0	0.778746	2	3
2028	2a	1	1.815179	4.845148	0	4.845148	12.59835	0	12.59835	BEV	0	1.815179	1	3
2028	2a	1	2.188193	6.091536	0	6.091536	16.44598	0	16.44598	BEV	0	2.188193	1	3
2028	2a	1	1.77526	5.043708	0	5.043708	13.70636	0	13.70636	BEV	0	1.77526	1	3
2028	2a	1	1.359577	3.940598	0	3.940598	11.22891	0	11.22891	BEV	0	1.359577	1	3
2028	2a	1	1.12862	3.335851	0	3.335851	9.044725	0	9.044725	BEV	0	1.12862	1	3
2028	2a	1	1.085332	3.270083	0	3.270083	9.576174	0	9.576174	BEV	0	1.085332	1	3
2028	2a	1	1.002369	3.077543	0	3.077543	8.905747	0	8.905747	BEV	0	1.002369	1	3
2028	2a	1	1.14034	3.697141	0	3.697141	11.39425	0	11.39425	BEV	0	1.14034	1	3
2028	2a	1	2.904945	9.751088	0	9.751088	33.63409	0	33.63409	BEV	0	2.904945	1	3
2028	2a	1	0.526318	1.404868	0	1.404868	3.733178	0	3.733178	BEV	0	0.526318	2	3
2028	2a	1	0.53457	1.45752	0	1.45752	3.960321	0	3.960321	BEV	0	0.53457	2	3
2028	2a	1	0.950795	3.08261	0	3.08261	9.87824	0	9.87824	BEV	0	0.950795	2	3
2028	2a	1	0	0	0	0	0	0	0	BEV	0	0	2	3
2028	2a	1	25.89675	115.117	0	115.117	718.2073	0	718.2073	FCEV	0	25.89675	2	7
2028	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2028	2a	1	0	0	0	0	0	0	0	BEV	0	0	2	3
2028	2a	1	28.38957	127.8246	0	127.8246	821.1133	0	821.1133	FCEV	0	28.38957	2	7
2028	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2028	2a	1	0.151242	0.576993	0.576993	0	2.964606	2.964606	0	ICE	0.151242	0	3	2
2028	2a	1	0	0	0	0	0	0	0	BEV	0	0	3	3

2028	2a	1	1.776338	7.896231	0	7.896231	34.7274	0	34.7274	FCEV	0	1.776338	3	7
2028	2a	1	25.46084	113.1793	67.90759	45.27172	703.8724	422.3234	281.549	PHEV	15.27651	10.18434	3	8
2028	2a	1	1.233865	5.414126	5.414126	0	31.50323	31.50323	0	ICE	1.233865	0	2	2
2028	2a	1	0.31239	1.0844	0	1.0844	2.745865	0	2.745865	BEV	0	0.31239	3	3
2028	2a	1	0.529293	1.443134	0	1.443134	2.667618	0	2.667618	BEV	0	0.529293	4	3
2028	2a	1	0.807825	2.387681	0	2.387681	4.633017	0	4.633017	BEV	0	0.807825	4	3
2028	2a	1	2.489883	7.929905	0	7.929905	17.39433	0	17.39433	BEV	0	2.489883	4	3
2028	2a	1	0.797017	2.812346	0	2.812346	7.368619	0	7.368619	BEV	0	0.797017	4	3
2028	2a	1	0.528175	2.105786	0	2.105786	7.139396	0	7.139396	BEV	0	0.528175	3	3
2028	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2028	2a	1	0	0	0	0	0	0	0	PHEV	0	0	3	8
2028	2a	1	1.89544	7.882716	0	7.882716	39.46368	0	39.46368	BEV	0	1.89544	2	3
2028	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2028	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2028	2a	1	0.991138	3.326972	0	3.326972	11.0996	0	11.0996	BEV	0	0.991138	2	3
2028	2a	1	2.793144	9.53582	0	9.53582	32.86018	0	32.86018	BEV	0	2.793144	2	3
2028	2a	1	0.730036	2.534175	0	2.534175	6.275947	0	6.275947	BEV	0	0.730036	4	3
2028	2a	1	1.726689	7.77445	7.77445	0	54.77854	54.77854	0	ICE	1.726689	0	2	2
2028	2a	1	1.249068	5.266157	0	5.266157	29.27457	0	29.27457	BEV	0	1.249068	2	3
2028	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2028	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2028	2a	1	0.444279	1.287697	0	1.287697	3.529518	0	3.529518	BEV	0	0.444279	2	3
2028	2a	1	0.216322	0.664168	0	0.664168	1.393318	0	1.393318	BEV	0	0.216322	4	3
2028	2a	1	0.165601	0.489464	0	0.489464	1.350362	0	1.350362	BEV	0	0.165601	2	3
2028	2a	1	0.223795	0.738397	0	0.738397	1.621164	0	1.621164	BEV	0	0.223795	3	3
2028	2a	1	0.272964	1.057007	0	1.057007	3.235391	0	3.235391	BEV	0	0.272964	3	3
2028	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2028	2a	1	0	0	0	0	0	0	0	PHEV	0	0	3	8
2028	2a	1	0.424662	1.303825	0	1.303825	2.805181	0	2.805181	BEV	0	0.424662	3	3
2028	2a	1	1.15067	3.862477	0	3.862477	9.303737	0	9.303737	BEV	0	1.15067	4	3
2028	2a	1	0.364075	0.992661	0	0.992661	2.561484	0	2.561484	BEV	0	0.364075	1	3
2028	2a	1	0.568894	2.137761	0	2.137761	9.074501	0	9.074501	BEV	0	0.568894	2	3
2028	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2028	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2028	2a	1	0.267702	1.021295	1.021295	0	5.949409	5.949409	0	ICE	0.267702	0	2	2
2028	2a	1	0.676507	1.883274	0	1.883274	3.437367	0	3.437367	BEV	0	0.676507	3	3
2028	2a	1	2.312284	7.231806	0	7.231806	15.00947	0	15.00947	BEV	0	2.312284	4	3
2028	2a	1	1.801181	7.181148	0	7.181148	24.23051	0	24.23051	BEV	0	1.801181	4	3
2028	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2028	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2028	2a	1	0.157404	0.537379	0	0.537379	1.324194	0	1.324194	BEV	0	0.157404	3	3
2028	2a	1	0	0	0	0	0	0	0	BEV	0	0	4	3
2028	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2028	2a	1	2.413531	10.45216	6.271294	4.180863	65.15311	39.09187	26.06125	PHEV	1.448118	0.965412	4	8
2028	2a	1	0.222827	0.735201	0.735201	0	3.511939	3.511939	0	ICE	0.222827	0	3	2
2028	2a	1	0.282763	0.868159	0	0.868159	2.497619	0	2.497619	BEV	0	0.282763	2	3
2029	2a	1	8578.02	22896.79	22896.79	0	41192.98	41192.98	0	ICE	8578.02	0	1	1

2029	2a	1	9321.524	25415.41	25415.41	0	47559.04	47559.04	0	ICE	9321.524	0	1	1
2029	2a	1	10405.88	29564.25	29564.25	0	59998.01	59998.01	0	ICE	10405.88	0	1	1
2029	2a	1	12648.55	36660.56	36660.56	0	77801.1	77801.1	0	ICE	12648.55	0	1	1
2029	2a	1	15798.3	46694.86	46694.86	0	103991.5	103991.5	0	ICE	15798.3	0	1	1
2029	2a	1	17493	52706.05	52706.05	0	122244.9	122244.9	0	ICE	17493	0	1	1
2029	2a	1	15106.43	46380.8	46380.8	0	112881	112881	0	ICE	15106.43	0	1	1
2029	2a	1	15471.06	48386.68	48386.68	0	123205.2	123205.2	0	ICE	15471.06	0	1	1
2029	2a	1	17185.04	54731.77	54731.77	0	145478.3	145478.3	0	ICE	17185.04	0	1	1
2029	2a	1	20714.07	67157.93	67157.93	0	186657.1	186657.1	0	ICE	20714.07	0	1	1
2029	2a	1	19717.69	65057.14	65057.14	0	188808.6	188808.6	0	ICE	19717.69	0	1	1
2029	2a	1	24742.45	83053.48	83053.48	0	251093.1	251093.1	0	ICE	24742.45	0	1	1
2029	2a	1	28183.81	96219.79	96219.79	0	304317.3	304317.3	0	ICE	28183.81	0	1	1
2029	2a	1	31797.9	110380	110380	0	364745.2	364745.2	0	ICE	31797.9	0	1	1
2029	2a	1	42015.33	148254.9	148254.9	0	512094.2	512094.2	0	ICE	42015.33	0	1	1
2029	2a	1	46653.22	167292.8	167292.8	0	602515.5	602515.5	0	ICE	46653.22	0	1	1
2029	2a	1	83.83888	300.6362	300.6362	0	1104.697	1104.697	0	ICE	83.83888	0	1	2
2029	2a	1	52122.36	189890.6	189890.6	0	715221.2	715221.2	0	ICE	52122.36	0	1	1
2029	2a	1	62772.03	232285.4	232285.4	0	911730.3	911730.3	0	ICE	62772.03	0	1	1
2029	2a	1	68902.07	258916.8	258916.8	0	1057770	1057770	0	ICE	68902.07	0	1	1
2029	2a	1	92673.47	353553	353553	0	1505750	1505750	0	ICE	92673.47	0	1	1
2029	2a	1	110312.2	427165.4	427165.4	0	1889932	1889932	0	ICE	110312.2	0	1	1
2029	2a	1	282.5291	1094.046	1094.046	0	4864.488	4864.488	0	ICE	282.5291	0	1	2
2029	2a	1	136501.8	536400.3	536400.3	0	2458106	2458106	0	ICE	136501.8	0	1	1
2029	2a	1	133560.2	532492.6	532492.6	0	2529804	2529804	0	ICE	133560.2	0	1	1
2029	2a	1	123399.2	499051	499051	0	2455150	2455150	0	ICE	123399.2	0	1	1
2029	2a	1	165572.4	679093.5	679093.5	0	3452802	3452802	0	ICE	165572.4	0	1	1
2029	2a	1	1856.015	7612.427	7612.427	0	38508.4	38508.4	0	ICE	1856.015	0	1	2
2029	2a	1	184393.4	766851.5	766851.5	0	4038501	4038501	0	ICE	184393.4	0	1	1
2029	2a	1	2800.271	11645.71	11645.71	0	60397.56	60397.56	0	ICE	2800.271	0	1	2
2029	2a	1	296470.9	1249942	1249942	0	6819914	6819914	0	ICE	296470.9	0	1	1
2029	2a	1	391542.3	1673201	1673201	0	9423164	9423164	0	ICE	391542.3	0	1	1
2029	2a	1	424439.9	1838101	1838101	0	10700704	10700704	0	ICE	424439.9	0	1	1
2029	2a	1	7880.694	34128.53	34128.53	0	197474.2	197474.2	0	ICE	7880.694	0	1	2
2029	2a	1	526329	2309500	2309500	0	13882008	13882008	0	ICE	526329	0	1	1
2029	2a	1	531229.4	2361437	2361437	0	14638923	14638923	0	ICE	531229.4	0	1	1
2029	2a	1	595214.9	2679967	2679967	0	17157812	17157812	0	ICE	595214.9	0	1	1
2029	2a	1	7283.865	32795.75	32795.75	0	209949.6	209949.6	0	ICE	7283.865	0	1	2
2029	2a	1	34618.47	155870.3	0	155870.3	998950.3	0	998950.3	BEV	0	34618.47	1	3
2029	2a	1	706.4993	3181.027	0	3181.027	20463.6	0	20463.6	FCEV	0	706.4993	1	7
2029	2a	1	31227.03	140600.3	75924.18	64676.15	899851.9	485920	413931.9	PHEV	16862.6	14364.43	1	8
2029	2a	1	657286.8	2997103	2997103	0	19762705	19762705	0	ICE	657286.8	0	1	1
2029	2a	1	8043.462	36676.66	36676.66	0	241827.3	241827.3	0	ICE	8043.462	0	1	2
2029	2a	1	46722.36	213045.1	0	213045.1	1405570	0	1405570	BEV	0	46722.36	1	3
2029	2a	1	953.5176	4347.859	0	4347.859	28784.07	0	28784.07	FCEV	0	953.5176	1	7
2029	2a	1	30196.43	137690	74352.6	63337.4	907831.4	490228.9	417602.4	PHEV	16306.07	13890.36	1	8
2029	2a	1	703486.9	3248069	3248069	0	22049831	22049831	0	ICE	703486.9	0	1	1
2029	2a	1	8572.23	39578.84	39578.84	0	268672.6	268672.6	0	ICE	8572.23	0	1	2

2029	2a	1	61322.97	283134.3	0	283134.3	1922915	0	1922915	BEV	0	61322.97	1	3
2029	2a	1	1434.455	6623.024	0	6623.024	45108.44	0	45108.44	FCEV	0	1434.455	1	7
2029	2a	1	30074.97	138859.1	73595.35	65263.8	942645.4	499602.1	443043.3	PHEV	15939.73	14135.24	1	8
2029	2a	1	750033.5	3505949	3505949	0	24488940	24488940	0	ICE	750033.5	0	1	1
2029	2a	1	9222.255	43108.41	43108.41	0	301097.8	301097.8	0	ICE	9222.255	0	1	2
2029	2a	1	77679.82	363105.8	0	363105.8	2537220	0	2537220	BEV	0	77679.82	1	3
2029	2a	1	2050.201	9583.437	0	9583.437	67113.34	0	67113.34	FCEV	0	2050.201	1	7
2029	2a	1	29619.74	138454.2	71996.2	66458.03	967108.9	502896.6	464212.3	PHEV	15402.27	14217.48	1	8
2029	2a	1	742761.4	3514509	3514509	0	25258221	25258221	0	ICE	742761.4	0	1	1
2029	2a	1	9176.902	43422.17	43422.17	0	312058.5	312058.5	0	ICE	9176.902	0	1	2
2029	2a	1	120003.8	567819.6	0	567819.6	4081054	0	4081054	BEV	0	120003.8	1	3
2029	2a	1	4113.606	19464.27	0	19464.27	140125.4	0	140125.4	FCEV	0	4113.606	1	7
2029	2a	1	45623.79	215877.2	107506.8	108370.3	1551984	772888.1	779096	PHEV	22720.65	22903.14	1	8
2029	2a	1	729142.9	3491844	3491844	0	25805591	25805591	0	ICE	729142.9	0	1	1
2029	2a	1	9073.56	43453	43453	0	321123.1	321123.1	0	ICE	9073.56	0	1	2
2029	2a	1	166212.9	795988.4	0	795988.4	5881426	0	5881426	BEV	0	166212.9	1	3
2029	2a	1	7028.656	33660.02	0	33660.02	248951.4	0	248951.4	FCEV	0	7028.656	1	7
2029	2a	1	63006.77	301737.5	143627.1	158110.5	2231457	1062174	1169284	PHEV	29991.22	33015.55	1	8
2029	2a	1	699929.2	3392039	3392039	0	25768070	25768070	0	ICE	699929.2	0	1	1
2029	2a	1	8783.112	42565.24	42565.24	0	323354	323354	0	ICE	8783.112	0	1	2
2029	2a	1	213364	1034018	0	1034018	7851630	0	7851630	BEV	0	213364	1	3
2029	2a	1	10757.85	52135.34	0	52135.34	395965.9	0	395965.9	FCEV	0	10757.85	1	7
2029	2a	1	80644.18	390822.6	177433.5	213389.2	2972262	1349407	1622855	PHEV	36612.46	44031.72	1	8
2029	2a	1	669843.7	3284612	3284612	0	25632076	25632076	0	ICE	669843.7	0	1	1
2029	2a	1	8472.88	41547.19	41547.19	0	324230	324230	0	ICE	8472.88	0	1	2
2029	2a	1	264622.9	1297592	0	1297592	10119532	0	10119532	BEV	0	264622.9	1	3
2029	2a	1	15528.38	76144.21	0	76144.21	593676.5	0	593676.5	FCEV	0	15528.38	1	7
2029	2a	1	99726.68	489014.7	211254.4	277760.4	3821902	1651062	2170840	PHEV	43081.92	56644.75	1	8
2029	2a	1	630203	3126336	3126336	0	25061859	25061859	0	ICE	630203	0	1	1
2029	2a	1	8031.716	39844.06	39844.06	0	319422.8	319422.8	0	ICE	8031.716	0	1	2
2029	2a	1	316734.5	1571269	0	1571269	12585087	0	12585087	BEV	0	316734.5	1	3
2029	2a	1	21244.39	105390	0	105390	843611.4	0	843611.4	FCEV	0	21244.39	1	7
2029	2a	1	119018.5	590431.7	242077	348354.7	4742451	1944405	2798046	PHEV	48797.58	70220.9	1	8
2029	2a	1	584303.2	2932109	2932109	0	24107660	24107660	0	ICE	584303.2	0	1	1
2029	2a	1	7446.737	37368.69	37368.69	0	307266.9	307266.9	0	ICE	7446.737	0	1	2
2029	2a	1	369958.5	1856500	0	1856500	15248447	0	15248447	BEV	0	369958.5	1	3
2029	2a	1	27968.59	140350	0	140350	1152002	0	1152002	FCEV	0	27968.59	1	7
2029	2a	1	138614.9	695587.4	269887.9	425699.5	5732822	2224335	3508487	PHEV	53782.57	84832.3	1	8
2029	2a	1	535500.3	2717889	2717889	0	22881471	22881471	0	ICE	535500.3	0	1	1
2029	2a	1	6824.761	34638.53	34638.53	0	291636.8	291636.8	0	ICE	6824.761	0	1	2
2029	2a	1	425958	2161916	0	2161916	18182944	0	18182944	BEV	0	425958	1	3
2029	2a	1	35892.38	182168.9	0	182168.9	1531414	0	1531414	FCEV	0	35892.38	1	7
2029	2a	1	159134.5	807674.5	295608.9	512065.6	6816000	2494656	4321344	PHEV	58243.23	100891.3	1	8
2029	2a	1	477236	2449514	2449514	0	21055136	21055136	0	ICE	477236	0	1	1
2029	2a	1	6082.201	31218.18	31218.18	0	268349.3	268349.3	0	ICE	6082.201	0	1	2
2029	2a	1	478667.3	2456860	0	2456860	21103938	0	21103938	BEV	0	478667.3	1	3
2029	2a	1	44548.05	228652.2	0	228652.2	1963834	0	1963834	FCEV	0	44548.05	1	7

2029	2a	1	178309.6	915211.6	314832.8	600378.8	7880825	2711004	5169821	PHEV	61338.51	116971.1	1	8
2029	2a	1	371667.5	1928954	1928954	0	16887840	16887840	0	ICE	371667.5	0	1	1
2029	2a	1	4736.768	24583.83	24583.83	0	215223.5	215223.5	0	ICE	4736.768	0	1	2
2029	2a	1	475164.5	2466104	0	2466104	21586795	0	21586795	BEV	0	475164.5	1	3
2029	2a	1	48473.96	251579.8	0	251579.8	2202735	0	2202735	FCEV	0	48473.96	1	7
2029	2a	1	176494.5	916006.6	294954.1	621052.5	8024575	2583913	5440662	PHEV	56831.24	119663.3	1	8
2029	2a	1	2660.196	7100.702	7100.702	0	30419.22	30419.22	0	ICE	2660.196	0	2	1
2029	2a	1	4385.987	11958.52	11958.52	0	51555.87	51555.87	0	ICE	4385.987	0	2	1
2029	2a	1	4233.992	11786.67	11786.67	0	51661.79	51661.79	0	ICE	4233.992	0	2	1
2029	2a	1	4222.682	11997.1	11997.1	0	52905.65	52905.65	0	ICE	4222.682	0	2	1
2029	2a	1	5583.396	16182.92	16182.92	0	72155.15	72155.15	0	ICE	5583.396	0	2	1
2029	2a	1	4686.281	13851.19	13851.19	0	61587.78	61587.78	0	ICE	4686.281	0	2	1
2029	2a	1	5759.485	17353.21	17353.21	0	76667.46	76667.46	0	ICE	5759.485	0	2	1
2029	2a	1	5109.414	15687.28	15687.28	0	70153.14	70153.14	0	ICE	5109.414	0	2	1
2029	2a	1	6507.496	20352.58	20352.58	0	91729.12	91729.12	0	ICE	6507.496	0	2	1
2029	2a	1	8001.294	25482.92	25482.92	0	116243.3	116243.3	0	ICE	8001.294	0	2	1
2029	2a	1	7615.589	24690.81	24690.81	0	114254.7	114254.7	0	ICE	7615.589	0	2	1
2029	2a	1	8360.643	27585.36	27585.36	0	128006.5	128006.5	0	ICE	8360.643	0	2	1
2029	2a	1	10860.77	36456.55	36456.55	0	171293.1	171293.1	0	ICE	10860.77	0	2	1
2029	2a	1	13598.05	46423.88	46423.88	0	221745.1	221745.1	0	ICE	13598.05	0	2	1
2029	2a	1	12413.62	43091.38	43091.38	0	208616.4	208616.4	0	ICE	12413.62	0	2	1
2029	2a	1	13616.15	48045.79	48045.79	0	235865.9	235865.9	0	ICE	13616.15	0	2	1
2029	2a	1	15463.27	55449.42	55449.42	0	274455.9	274455.9	0	ICE	15463.27	0	2	1
2029	2a	1	16708.83	60873.1	60873.1	0	301623.9	301623.9	0	ICE	16708.83	0	2	1
2029	2a	1	12044.88	44571.59	44571.59	0	222329.2	222329.2	0	ICE	12044.88	0	2	1
2029	2a	1	7046.482	26882.61	26882.61	0	136526	136526	0	ICE	7046.482	0	2	1
2029	2a	1	11482.06	44462.34	44462.34	0	229218.7	229218.7	0	ICE	11482.06	0	2	1
2029	2a	1	17104.82	67215.46	67215.46	0	350957.8	350957.8	0	ICE	17104.82	0	2	1
2029	2a	1	30083.58	119940.5	119940.5	0	634448.9	634448.9	0	ICE	30083.58	0	2	1
2029	2a	1	22873.57	92505.28	92505.28	0	495180.9	495180.9	0	ICE	22873.57	0	2	1
2029	2a	1	12343.66	50627.4	50627.4	0	274652.9	274652.9	0	ICE	12343.66	0	2	1
2029	2a	1	11100.05	46162.65	46162.65	0	255550.8	255550.8	0	ICE	11100.05	0	2	1
2029	2a	1	86682.31	380356.8	380356.8	0	2300451	2300451	0	ICE	86682.31	0	2	1
2029	2a	1	81061.8	360338.3	360338.3	0	2218248	2218248	0	ICE	81061.8	0	2	1
2029	2a	1	73084.63	329065	329065	0	2076429	2076429	0	ICE	73084.63	0	2	1
2029	2a	1	9.900634	44.5778	44.5778	0	281.2842	281.2842	0	ICE	9.900634	0	2	2
2029	2a	1	2.462534	11.08761	0	11.08761	70.81094	0	70.81094	BEV	0	2.462534	2	3
2029	2a	1	0.050256	0.226278	0	0.226278	1.445121	0	1.445121	FCEV	0	0.050256	2	7
2029	2a	1	21.35871	96.16802	57.70081	38.46721	606.8094	364.0857	242.7238	PHEV	12.81523	8.543484	2	8
2029	2a	1	79481.61	362421.1	362421.1	0	2341552	2341552	0	ICE	79481.61	0	2	1
2029	2a	1	10.76722	49.09648	49.09648	0	317.1965	317.1965	0	ICE	10.76722	0	2	2
2029	2a	1	82883.72	382682.4	382682.4	0	2533566	2533566	0	ICE	82883.72	0	2	1
2029	2a	1	11.30643	52.20293	52.20293	0	345.5833	345.5833	0	ICE	11.30643	0	2	2
2029	2a	1	1102.057	5088.308	0	5088.308	33947.43	0	33947.43	BEV	0	1102.057	2	3
2029	2a	1	25.77911	119.0247	0	119.0247	804.9873	0	804.9873	FCEV	0	25.77911	2	7
2029	2a	1	846.3023	3907.462	2322.149	1585.313	25786.74	15324.69	10462.05	PHEV	502.9454	343.3569	2	8
2029	2a	1	86125.01	402581.9	402581.9	0	2731645	2731645	0	ICE	86125.01	0	2	1

2029	2a	1	11.88509	55.55556	55.55556	0	376.8906	376.8906	0	ICE	11.88509	0	2	2
2029	2a	1	2339.327	10934.93	0	10934.93	74922.91	0	74922.91	BEV	0	2339.327	2	3
2029	2a	1	61.74177	288.6051	0	288.6051	2007.12	0	2007.12	FCEV	0	61.74177	2	7
2029	2a	1	1801.707	8421.881	4956.878	3465.002	56900.18	33489.82	23410.36	PHEV	1060.433	741.2737	2	8
2029	2a	1	83984.43	397387.4	397387.4	0	2766074	2766074	0	ICE	83984.43	0	2	1
2029	2a	1	11.74201	55.55942	55.55942	0	386.6044	386.6044	0	ICE	11.74201	0	2	2
2029	2a	1	5919.092	28007.25	0	28007.25	197092.1	0	197092.1	BEV	0	5919.092	2	3
2029	2a	1	202.9003	960.0594	0	960.0594	6865.194	0	6865.194	FCEV	0	202.9003	2	7
2029	2a	1	4268.797	20198.58	11709.41	8489.175	139327.4	80770.1	58557.33	PHEV	2474.682	1794.114	2	8
2029	2a	1	81178.36	388760.7	388760.7	0	2775664	2775664	0	ICE	81178.36	0	2	1
2029	2a	1	11.3962	54.57606	54.57606	0	389.5048	389.5048	0	ICE	11.3962	0	2	2
2029	2a	1	9936.928	47587.65	0	47587.65	343622.1	0	343622.1	BEV	0	9936.928	2	3
2029	2a	1	420.2036	2012.343	0	2012.343	14786.09	0	14786.09	FCEV	0	420.2036	2	7
2029	2a	1	6704.44	32107.36	18328.72	13778.65	226455.7	129273.8	97181.84	PHEV	3827.278	2877.163	2	8
2029	2a	1	77744.01	376767.7	376767.7	0	2759731	2759731	0	ICE	77744.01	0	2	1
2029	2a	1	10.96547	53.14152	53.14152	0	389.0664	389.0664	0	ICE	10.96547	0	2	2
2029	2a	1	14385.71	69716.9	0	69716.9	516390.4	0	516390.4	BEV	0	14385.71	2	3
2029	2a	1	725.33	3515.138	0	3515.138	26449.64	0	26449.64	FCEV	0	725.33	2	7
2029	2a	1	9069.959	43955.38	24702.92	19252.46	317465.8	178415.8	139050	PHEV	5097.317	3972.642	2	8
2029	2a	1	73809.77	361929.9	361929.9	0	2720088	2720088	0	ICE	73809.77	0	2	1
2029	2a	1	10.45614	51.2722	51.2722	0	385.1328	385.1328	0	ICE	10.45614	0	2	2
2029	2a	1	19280.38	94542.29	0	94542.29	718280.9	0	718280.9	BEV	0	19280.38	2	3
2029	2a	1	1131.395	5547.854	0	5547.854	42677.62	0	42677.62	FCEV	0	1131.395	2	7
2029	2a	1	11343.52	55623.52	30767.76	24855.77	411703.9	227731.1	183972.8	PHEV	6274.588	5068.934	2	8
2029	2a	1	68736.26	340989.6	340989.6	0	2631089	2631089	0	ICE	68736.26	0	2	1
2029	2a	1	9.77686	48.50144	48.50144	0	374.0211	374.0211	0	ICE	9.77686	0	2	2
2029	2a	1	24396.28	121026	0	121026	943495.2	0	943495.2	BEV	0	24396.28	2	3
2029	2a	1	1636.336	8117.6	0	8117.6	63927.84	0	63927.84	FCEV	0	1636.336	2	7
2029	2a	1	13371.77	66335.21	36105.31	30229.9	503714.5	274164.6	229549.9	PHEV	7278.063	6093.706	2	8
2029	2a	1	62965.83	315970.7	315970.7	0	2500677	2500677	0	ICE	62965.83	0	2	1
2029	2a	1	8.956089	44.94282	44.94282	0	355.4852	355.4852	0	ICE	8.956089	0	2	2
2029	2a	1	29714.88	149113.1	0	149113.1	1191405	0	1191405	BEV	0	29714.88	2	3
2029	2a	1	2246.423	11272.84	0	11272.84	90742.91	0	90742.91	FCEV	0	2246.423	2	7
2029	2a	1	15142.98	75989.44	40686.92	35302.52	591525.9	316719.9	274806	PHEV	8107.984	7034.996	2	8
2029	2a	1	56882.43	288702.2	288702.2	0	2343292	2343292	0	ICE	56882.43	0	2	1
2029	2a	1	8.090803	41.06422	41.06422	0	333.1162	333.1162	0	ICE	8.090803	0	2	2
2029	2a	1	35314.57	179236.3	0	179236.3	1467513	0	1467513	BEV	0	35314.57	2	3
2029	2a	1	2975.701	15102.93	0	15102.93	124353.3	0	124353.3	FCEV	0	2975.701	2	7
2029	2a	1	16693.55	84726.75	44614.69	40112.07	676239	356088.1	320150.9	PHEV	8790.344	7903.201	2	8
2029	2a	1	50847.53	260985.6	260985.6	0	2171781	2171781	0	ICE	50847.53	0	2	1
2029	2a	1	7.232416	37.12189	37.12189	0	308.7396	308.7396	0	ICE	7.232416	0	2	2
2029	2a	1	41452.58	212764	0	212764	1784508	0	1784508	BEV	0	41452.58	2	3
2029	2a	1	3857.86	19801.28	0	19801.28	166797.5	0	166797.5	FCEV	0	3857.86	2	7
2029	2a	1	18126.36	93037.35	48166.77	44870.59	761297.5	394134.6	367162.9	PHEV	9384.276	8742.085	2	8
2029	2a	1	40108.11	208161.1	208161.1	0	1775067	1775067	0	ICE	40108.11	0	2	1
2029	2a	1	5.70487	29.60827	29.60827	0	252.3469	252.3469	0	ICE	5.70487	0	2	2
2029	2a	1	43225.53	224340.5	0	224340.5	1926668	0	1926668	BEV	0	43225.53	2	3

2029	2a	1	4409.658	22886.12	0	22886.12	197216.2	0	197216.2	FCEV	0	4409.658	2	7
2029	2a	1	17428.6	90454.44	46028.39	44426.05	758531	385983.9	372547.1	PHEV	8868.669	8559.933	2	8
2029	2a	1	2958.151	8065.487	8065.487	0	31738.12	31738.12	0	ICE	2958.151	0	3	1
2029	2a	1	3106.629	8648.295	8648.295	0	34517.97	34517.97	0	ICE	3106.629	0	3	1
2029	2a	1	4034.738	11463.14	11463.14	0	46382.54	46382.54	0	ICE	4034.738	0	3	1
2029	2a	1	5119.818	14839.28	14839.28	0	61292.85	61292.85	0	ICE	5119.818	0	3	1
2029	2a	1	5754.246	17007.77	17007.77	0	71116.42	71116.42	0	ICE	5754.246	0	3	1
2029	2a	1	6653.813	20047.8	20047.8	0	86532.56	86532.56	0	ICE	6653.813	0	3	1
2029	2a	1	6272.687	19258.84	19258.84	0	83724.23	83724.23	0	ICE	6272.687	0	3	1
2029	2a	1	8571.476	26807.8	26807.8	0	117940.5	117940.5	0	ICE	8571.476	0	3	1
2029	2a	1	9914.92	31577.53	31577.53	0	140488.4	140488.4	0	ICE	9914.92	0	3	1
2029	2a	1	12644.9	40996.52	40996.52	0	185206.7	185206.7	0	ICE	12644.9	0	3	1
2029	2a	1	12416.68	40967.97	40967.97	0	186813.4	186813.4	0	ICE	12416.68	0	3	1
2029	2a	1	19362.93	64995.94	64995.94	0	299533.6	299533.6	0	ICE	19362.93	0	3	1
2029	2a	1	21815.49	74478.31	74478.31	0	347537.6	347537.6	0	ICE	21815.49	0	3	1
2029	2a	1	24932.15	86546.97	86546.97	0	408471.8	408471.8	0	ICE	24932.15	0	3	1
2029	2a	1	34343.37	121183.7	121183.7	0	579020.9	579020.9	0	ICE	34343.37	0	3	1
2029	2a	1	34127.91	122378.6	122378.6	0	588412.4	588412.4	0	ICE	34127.91	0	3	1
2029	2a	1	34283.26	124899.7	124899.7	0	609255.1	609255.1	0	ICE	34283.26	0	3	1
2029	2a	1	40223.3	148844.7	148844.7	0	735407.6	735407.6	0	ICE	40223.3	0	3	1
2029	2a	1	49672.28	186656	186656	0	933584.1	933584.1	0	ICE	49672.28	0	3	1
2029	2a	1	57136.7	217978.8	217978.8	0	1105070	1105070	0	ICE	57136.7	0	3	1
2029	2a	1	55085.24	213308.2	213308.2	0	1092845	1092845	0	ICE	55085.24	0	3	1
2029	2a	1	59384.8	233359.7	233359.7	0	1210444	1210444	0	ICE	59384.8	0	3	1
2029	2a	1	49528.49	197465.6	197465.6	0	1039683	1039683	0	ICE	49528.49	0	3	1
2029	2a	1	33662.18	136136.6	136136.6	0	728407.6	728407.6	0	ICE	33662.18	0	3	1
2029	2a	1	65899.65	270286.7	270286.7	0	1469800	1469800	0	ICE	65899.65	0	3	1
2029	2a	1	96725.74	402261.1	402261.1	0	2228888	2228888	0	ICE	96725.74	0	3	1
2029	2a	1	101227.7	426783.1	426783.1	0	2419370	2419370	0	ICE	101227.7	0	3	1
2029	2a	1	148099.8	632883.9	632883.9	0	3654857	3654857	0	ICE	148099.8	0	3	1
2029	2a	1	148496.6	643086.8	643086.8	0	3801308	3801308	0	ICE	148496.6	0	3	1
2029	2a	1	1598.591	6922.937	6922.937	0	40107.64	40107.64	0	ICE	1598.591	0	3	2
2029	2a	1	187521.2	822831.6	822831.6	0	4964287	4964287	0	ICE	187521.2	0	3	1
2029	2a	1	192118	854008.7	854008.7	0	5265386	5265386	0	ICE	192118	0	3	1
2029	2a	1	1331.018	5916.681	5916.681	0	36841.03	36841.03	0	ICE	1331.018	0	3	2
2029	2a	1	225644.2	1015967	1015967	0	6381713	6381713	0	ICE	225644.2	0	3	1
2029	2a	1	2306.335	10384.32	10384.32	0	65417.12	65417.12	0	ICE	2306.335	0	3	2
2029	2a	1	248084.2	1131217	1131217	0	7276970	7276970	0	ICE	248084.2	0	3	1
2029	2a	1	2535.698	11562.3	11562.3	0	74591.83	74591.83	0	ICE	2535.698	0	3	2
2029	2a	1	855.9251	3902.856	2341.714	1561.142	25219.19	15131.51	10087.67	PHEV	513.5551	342.3701	3	8
2029	2a	1	261829	1208891	1208891	0	7989617	7989617	0	ICE	261829	0	3	1
2029	2a	1	2669.439	12325.07	12325.07	0	81649.01	81649.01	0	ICE	2669.439	0	3	2
2029	2a	1	3087.944	14257.35	0	14257.35	73924.14	0	73924.14	BEV	0	3087.944	3	3
2029	2a	1	72.2326	333.5052	0	333.5052	1567.527	0	1567.527	FCEV	0	72.2326	3	7
2029	2a	1	2682.062	12383.35	7359.247	5024.101	81997.37	48729.87	33267.51	PHEV	1593.911	1088.151	3	8
2029	2a	1	274503.3	1283135	1283135	0	8685673	8685673	0	ICE	274503.3	0	3	1
2029	2a	1	2805.02	13111.76	13111.76	0	88978.04	88978.04	0	ICE	2805.02	0	3	2

2029	2a	1	6578.478	30750.37	0	30750.37	187304	0	187304	BEV	0	6578.478	3	3
2029	2a	1	173.6255	811.5933	0	811.5933	3920.698	0	3920.698	FCEV	0	173.6255	3	7
2029	2a	1	4747.564	22191.96	13061.56	9130.408	150597.5	88637.36	61960.1	PHEV	2794.28	1953.283	3	8
2029	2a	1	268025.6	1268211	1268211	0	8793112	8793112	0	ICE	268025.6	0	3	1
2029	2a	1	2780.233	13155.18	13155.18	0	91566.56	91566.56	0	ICE	2780.233	0	3	2
2029	2a	1	18305.71	86616.78	0	86616.78	524055.4	0	524055.4	BEV	0	18305.71	3	3
2029	2a	1	627.5008	2969.133	0	2969.133	14735.79	0	14735.79	FCEV	0	627.5008	3	7
2029	2a	1	12442.22	58872.59	34129.28	24743.31	450784.5	261326.2	189458.3	PHEV	7212.931	5229.286	3	8
2029	2a	1	257499.5	1233157	1233157	0	8764541	8764541	0	ICE	257499.5	0	3	1
2029	2a	1	2683.614	12851.75	12851.75	0	91753.59	91753.59	0	ICE	2683.614	0	3	2
2029	2a	1	31202.23	149426.6	0	149426.6	924043.3	0	924043.3	BEV	0	31202.23	3	3
2029	2a	1	1319.451	6318.812	0	6318.812	32202.83	0	32202.83	FCEV	0	1319.451	3	7
2029	2a	1	19955.91	95568.26	54555.82	41012.44	778006	444130.3	333875.7	PHEV	11391.97	8563.937	3	8
2029	2a	1	243329.1	1179236	1179236	0	8594373	8594373	0	ICE	243329.1	0	3	1
2029	2a	1	2549.636	12356.2	12356.2	0	90507.14	90507.14	0	ICE	2549.636	0	3	2
2029	2a	1	44935.81	217770.6	0	217770.6	1388592	0	1388592	BEV	0	44935.81	3	3
2029	2a	1	2265.671	10980.03	0	10980.03	57797.26	0	57797.26	FCEV	0	2265.671	3	7
2029	2a	1	27013.58	130914.8	73574.14	57340.7	1111277	624537.5	486739.2	PHEV	15181.63	11831.95	3	8
2029	2a	1	228995.4	1122890	1122890	0	8392445	8392445	0	ICE	228995.4	0	3	1
2029	2a	1	2411.491	11824.87	11824.87	0	88871.8	88871.8	0	ICE	2411.491	0	3	2
2029	2a	1	59909.36	293768.6	0	293768.6	1930560	0	1930560	BEV	0	59909.36	3	3
2029	2a	1	3515.553	17238.69	0	17238.69	98226.5	0	98226.5	FCEV	0	3515.553	3	7
2029	2a	1	33808.74	165782.9	91701.6	74081.25	1458612	806820.7	651791.1	PHEV	18701.06	15107.68	3	8
2029	2a	1	213140.9	1057358	1057358	0	8108689	8108689	0	ICE	213140.9	0	3	1
2029	2a	1	2254.953	11186.46	11186.46	0	86312.91	86312.91	0	ICE	2254.953	0	3	2
2029	2a	1	75873.26	376395.1	0	376395.1	2551339	0	2551339	BEV	0	75873.26	3	3
2029	2a	1	5089.06	25246.01	0	25246.01	152800.7	0	152800.7	FCEV	0	5089.06	3	7
2029	2a	1	40133.94	199098.1	108366.2	90731.83	1813586	987108.7	826476.9	PHEV	21844.33	18289.61	3	8
2029	2a	1	195867.2	982887	982887	0	7729683	7729683	0	ICE	195867.2	0	3	1
2029	2a	1	2072.203	10398.58	10398.58	0	82278.94	82278.94	0	ICE	2072.203	0	3	2
2029	2a	1	92732.94	465345.9	0	465345.9	3254186	0	3254186	BEV	0	92732.94	3	3
2029	2a	1	7010.542	35179.81	0	35179.81	226558.2	0	226558.2	FCEV	0	7010.542	3	7
2029	2a	1	45896.66	230315.4	123317.5	106998	2172254	1163087	1009167	PHEV	24574.38	21322.28	3	8
2029	2a	1	179310	910073.6	910073.6	0	7339671	7339671	0	ICE	179310	0	3	1
2029	2a	1	1897.034	9628.245	9628.245	0	78128.2	78128.2	0	ICE	1897.034	0	3	2
2029	2a	1	111642.7	566633.7	0	566633.7	4087611	0	4087611	BEV	0	111642.7	3	3
2029	2a	1	9407.318	47746.09	0	47746.09	323542.2	0	323542.2	FCEV	0	9407.318	3	7
2029	2a	1	51595.72	261869.9	137893.2	123976.7	2554650	1345206	1209444	PHEV	27168.83	24426.89	3	8
2029	2a	1	162324	833162	833162	0	6889049	6889049	0	ICE	162324	0	3	1
2029	2a	1	1717.328	8814.548	8814.548	0	73332.4	73332.4	0	ICE	1717.328	0	3	2
2029	2a	1	132616.8	680683.5	0	680683.5	5063854	0	5063854	BEV	0	132616.8	3	3
2029	2a	1	12342.22	63349.06	0	63349.06	448724.2	0	448724.2	FCEV	0	12342.22	3	7
2029	2a	1	57093.81	293045.9	151714.1	141331.9	2953983	1529319	1424664	PHEV	29558.28	27535.53	3	8
2029	2a	1	127220.1	660272.1	660272.1	0	5592913	5592913	0	ICE	127220.1	0	3	1
2029	2a	1	1345.942	6985.437	6985.437	0	59535.85	59535.85	0	ICE	1345.942	0	3	2
2029	2a	1	137272	712441.7	0	712441.7	5462115	0	5462115	BEV	0	137272	3	3
2029	2a	1	14003.82	72679.82	0	72679.82	535727.3	0	535727.3	FCEV	0	14003.82	3	7

2029	2a	1	54901.91	284940.9	144994.2	139946.7	2963313	1507903	1455410	PHEV	27937.23	26964.68	3	8
2029	2a	1	3693.266	10916.15	10916.15	0	40333.43	40333.43	0	ICE	3693.266	0	4	1
2029	2a	1	3187.832	9604.874	9604.874	0	36320.12	36320.12	0	ICE	3187.832	0	4	1
2029	2a	1	3926.146	12054.33	12054.33	0	46204.72	46204.72	0	ICE	3926.146	0	4	1
2029	2a	1	4374.832	13682.55	13682.55	0	54079.73	54079.73	0	ICE	4374.832	0	4	1
2029	2a	1	6960.492	22168.12	22168.12	0	89154.34	89154.34	0	ICE	6960.492	0	4	1
2029	2a	1	7961.395	25811.96	25811.96	0	106212	106212	0	ICE	7961.395	0	4	1
2029	2a	1	7569.311	24974.41	24974.41	0	104504.8	104504.8	0	ICE	7569.311	0	4	1
2029	2a	1	10563.06	35457.22	35457.22	0	152235.5	152235.5	0	ICE	10563.06	0	4	1
2029	2a	1	12647.98	43180.33	43180.33	0	188136.6	188136.6	0	ICE	12647.98	0	4	1
2029	2a	1	22267.89	77298.52	77298.52	0	344343.7	344343.7	0	ICE	22267.89	0	4	1
2029	2a	1	27234.81	96100.49	96100.49	0	435300.5	435300.5	0	ICE	27234.81	0	4	1
2029	2a	1	37725.62	135279.5	135279.5	0	621014.4	621014.4	0	ICE	37725.62	0	4	1
2029	2a	1	39.29257	140.8984	140.8984	0	606.0189	606.0189	0	ICE	39.29257	0	4	2
2029	2a	1	47953.63	174703.2	174703.2	0	817387.5	817387.5	0	ICE	47953.63	0	4	1
2029	2a	1	55278.91	204557.4	204557.4	0	977370.9	977370.9	0	ICE	55278.91	0	4	1
2029	2a	1	64867.47	243755.7	243755.7	0	1179297	1179297	0	ICE	64867.47	0	4	1
2029	2a	1	93.95253	353.0501	353.0501	0	1613.646	1613.646	0	ICE	93.95253	0	4	2
2029	2a	1	65561.69	250120.5	250120.5	0	1220498	1220498	0	ICE	65561.69	0	4	1
2029	2a	1	68837.53	266561.6	266561.6	0	1317743	1317743	0	ICE	68837.53	0	4	1
2029	2a	1	73744.28	289787	289787	0	1454774	1454774	0	ICE	73744.28	0	4	1
2029	2a	1	58518.74	233309	233309	0	1190930	1190930	0	ICE	58518.74	0	4	1
2029	2a	1	25833.12	104474.3	104474.3	0	542025.3	542025.3	0	ICE	25833.12	0	4	1
2029	2a	1	38755.81	158956.6	158956.6	0	841146.9	841146.9	0	ICE	38755.81	0	4	1
2029	2a	1	58357.7	242696.8	242696.8	0	1310576	1310576	0	ICE	58357.7	0	4	1
2029	2a	1	1650.162	6862.659	6862.659	0	36516.73	36516.73	0	ICE	1650.162	0	4	2
2029	2a	1	61962.66	261238.9	261238.9	0	1443806	1443806	0	ICE	61962.66	0	4	1
2029	2a	1	72336.05	309118	309118	0	1749237	1749237	0	ICE	72336.05	0	4	1
2029	2a	1	1556.997	6653.607	6653.607	0	37126.29	37126.29	0	ICE	1556.997	0	4	2
2029	2a	1	116530.5	504652.8	504652.8	0	2928049	2928049	0	ICE	116530.5	0	4	1
2029	2a	1	3632.335	15730.37	15730.37	0	90675.37	90675.37	0	ICE	3632.335	0	4	2
2029	2a	1	131151.8	575486.3	575486.3	0	3427756	3427756	0	ICE	131151.8	0	4	1
2029	2a	1	146539.2	651400.4	651400.4	0	3969213	3969213	0	ICE	146539.2	0	4	1
2029	2a	1	136730.3	615630.7	615630.7	0	3815346	3815346	0	ICE	136730.3	0	4	1
2029	2a	1	4767.807	21467.14	21467.14	0	133126	133126	0	ICE	4767.807	0	4	2
2029	2a	1	1143.924	5150.542	3090.325	2060.217	30467.63	18280.58	12187.05	PHEV	686.3546	457.5697	4	8
2029	2a	1	148046.4	675063.2	675063.2	0	4288391	4288391	0	ICE	148046.4	0	4	1
2029	2a	1	5162.4	23539.56	23539.56	0	149630.8	149630.8	0	ICE	5162.4	0	4	2
2029	2a	1	2.589771	11.80886	0	11.80886	53.96328	0	53.96328	BEV	0	2.589771	4	3
2029	2a	1	0.052852	0.240997	0	0.240997	1.101292	0	1.101292	FCEV	0	0.052852	4	7
2029	2a	1	3169.166	14450.8	8670.478	5780.319	90184.2	54110.52	36073.68	PHEV	1901.5	1267.667	4	8
2029	2a	1	157661.3	727938.1	727938.1	0	4738754	4738754	0	ICE	157661.3	0	4	1
2029	2a	1	5549.577	25622.95	25622.95	0	167042.4	167042.4	0	ICE	5549.577	0	4	2
2029	2a	1	1351.546	6240.222	0	6240.222	30508.44	0	30508.44	BEV	0	1351.546	4	3
2029	2a	1	31.61511	145.9701	0	145.9701	685.9234	0	685.9234	FCEV	0	31.61511	4	7
2029	2a	1	3516.444	16235.77	9648.688	6587.085	109721	65205.62	44515.37	PHEV	2089.772	1426.672	4	8
2029	2a	1	167935.9	784997.9	784997.9	0	5233261	5233261	0	ICE	167935.9	0	4	1

2029	2a	1	6003.943	28064.77	28064.77	0	187628.7	187628.7	0	ICE	6003.943	0	4	2
2029	2a	1	2895.846	13536.31	0	13536.31	73433.97	0	73433.97	BEV	0	2895.846	4	3
2029	2a	1	76.42995	357.2634	0	357.2634	1725.538	0	1725.538	FCEV	0	76.42995	4	7
2029	2a	1	3899.969	18229.97	10729.64	7500.332	124126.2	73057.14	51069.07	PHEV	2295.41	1604.559	4	8
2029	2a	1	164225.7	777063.6	777063.6	0	5308472	5308472	0	ICE	164225.7	0	4	1
2029	2a	1	5975.034	28271.95	28271.95	0	193991.3	193991.3	0	ICE	5975.034	0	4	2
2029	2a	1	8690.983	41122.95	0	41122.95	229003.4	0	229003.4	BEV	0	8690.983	4	3
2029	2a	1	297.9179	1409.652	0	1409.652	6994.959	0	6994.959	FCEV	0	297.9179	4	7
2029	2a	1	10373.13	49082.35	28453.74	20628.61	363098.2	210493.2	152605	PHEV	6013.454	4359.68	4	8
2029	2a	1	159683.3	764718.4	764718.4	0	5356849	5356849	0	ICE	159683.3	0	4	1
2029	2a	1	5841.635	27975.41	27975.41	0	196967.8	196967.8	0	ICE	5841.635	0	4	2
2029	2a	1	15709.4	75231.84	0	75231.84	435883	0	435883	BEV	0	15709.4	4	3
2029	2a	1	664.3046	3181.335	0	3181.335	16211.39	0	16211.39	FCEV	0	664.3046	4	7
2029	2a	1	16637.56	79676.79	45484.06	34192.72	619981.7	353921	266060.7	PHEV	9497.671	7139.891	4	8
2029	2a	1	152587.2	739477.4	739477.4	0	5312362	5312362	0	ICE	152587.2	0	4	1
2029	2a	1	5617.18	27222.31	27222.31	0	196682.3	196682.3	0	ICE	5617.18	0	4	2
2029	2a	1	23796.81	115325.5	0	115325.5	695392.8	0	695392.8	BEV	0	23796.81	4	3
2029	2a	1	1199.839	5814.732	0	5814.732	30416.71	0	30416.71	FCEV	0	1199.839	4	7
2029	2a	1	22367.64	108399.4	60920.46	47478.93	879504.8	494281.7	385223.1	PHEV	12570.61	9797.026	4	8
2029	2a	1	145257.8	712279.1	712279.1	0	5246935	5246935	0	ICE	145257.8	0	4	1
2029	2a	1	5378.605	26374.26	26374.26	0	195513.5	195513.5	0	ICE	5378.605	0	4	2
2029	2a	1	33238.14	162984.9	0	162984.9	1021805	0	1021805	BEV	0	33238.14	4	3
2029	2a	1	1950.453	9564.145	0	9564.145	51380.41	0	51380.41	FCEV	0	1950.453	4	7
2029	2a	1	27704.04	135848.1	75143.42	60704.71	1145850	633818.7	512031.2	PHEV	15324.29	12379.75	4	8
2029	2a	1	135106.3	670240.7	670240.7	0	5065110	5065110	0	ICE	135106.3	0	4	1
2029	2a	1	5029.722	24951.65	24951.65	0	189875.1	189875.1	0	ICE	5029.722	0	4	2
2029	2a	1	43425.53	215427.1	0	215427.1	1402209	0	1402209	BEV	0	43425.53	4	3
2029	2a	1	2912.688	14449.38	0	14449.38	83155.98	0	83155.98	FCEV	0	2912.688	4	7
2029	2a	1	32034.8	158919.5	86497.63	72421.9	1391216	757218.8	633996.9	PHEV	17436.08	14598.72	4	8
2029	2a	1	124818	626352.7	626352.7	0	4852981	4852981	0	ICE	124818	0	4	1
2029	2a	1	4646.709	23317.79	23317.79	0	181922.8	181922.8	0	ICE	4646.709	0	4	2
2029	2a	1	54929.65	275644.1	0	275644.1	1863165	0	1863165	BEV	0	54929.65	4	3
2029	2a	1	4152.641	20838.49	0	20838.49	128746.1	0	128746.1	FCEV	0	4152.641	4	7
2029	2a	1	35752.58	179411.1	96061.83	83349.27	1629876	872682.2	757193.8	PHEV	19142.95	16609.63	4	8
2029	2a	1	114335.1	580298.6	580298.6	0	4607176	4607176	0	ICE	114335.1	0	4	1
2029	2a	1	4256.454	21603.29	21603.29	0	172707.6	172707.6	0	ICE	4256.454	0	4	2
2029	2a	1	67967.05	344961.3	0	344961.3	2419136	0	2419136	BEV	0	67967.05	4	3
2029	2a	1	5727.087	29067.37	0	29067.37	190383.8	0	190383.8	FCEV	0	5727.087	4	7
2029	2a	1	38858.73	197224.4	103852.7	93371.65	1856146	977393.4	878752.5	PHEV	20461.9	18396.83	4	8
2029	2a	1	102590	526564.5	526564.5	0	4282880	4282880	0	ICE	102590	0	4	1
2029	2a	1	3819.208	19602.89	19602.89	0	160550.9	160550.9	0	ICE	3819.208	0	4	2
2029	2a	1	82035.52	421064.6	0	421064.6	3061794	0	3061794	BEV	0	82035.52	4	3
2029	2a	1	7634.786	39187.14	0	39187.14	270097.4	0	270097.4	FCEV	0	7634.786	4	7
2029	2a	1	40949.06	210179.6	108813	101366.6	2047258	1059895	987363.4	PHEV	21199.91	19749.15	4	8
2029	2a	1	76997.88	399619	399619	0	3321189	3321189	0	ICE	76997.88	0	4	1
2029	2a	1	2866.469	14876.97	14876.97	0	124495.8	124495.8	0	ICE	2866.469	0	4	2
2029	2a	1	83220.09	431912.3	0	431912.3	3249889	0	3249889	BEV	0	83220.09	4	3

2029	2a	1	8489.707	44061.58	0	44061.58	317677	0	317677	FCEV	0	8489.707	4	7
2029	2a	1	35975.19	186711.2	95009.34	91701.89	1873584	953386.8	920197.6	PHEV	18306.23	17668.96	4	8
2029	2a	1	1069.282	2854.169	2854.169	0	4951.064	4951.064	0	ICE	1069.282	0	1	2
2029	2a	1	10672.03	29709.02	29709.02	0	57051.77	57051.77	0	ICE	10672.03	0	1	1
2029	2a	1	66.32925	199.8487	199.8487	0	463.4303	463.4303	0	ICE	66.32925	0	1	2
2029	2a	1	34.31815	105.366	105.366	0	240.8071	240.8071	0	ICE	34.31815	0	1	2
2029	2a	1	18.2407	57.04888	57.04888	0	140.0203	140.0203	0	ICE	18.2407	0	1	2
2029	2a	1	45.05548	151.2386	151.2386	0	461.0625	461.0625	0	ICE	45.05548	0	1	2
2029	2a	1	74.58098	263.1657	263.1657	0	940.691	940.691	0	ICE	74.58098	0	1	2
2029	2a	1	12.37909	44.38994	0	44.38994	173.1962	0	173.1962	BEV	0	12.37909	1	3
2029	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2029	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2029	2a	1	205.8427	749.9198	749.9198	0	2857.455	2857.455	0	ICE	205.8427	0	1	2
2029	2a	1	303.3335	1122.474	1122.474	0	4464.857	4464.857	0	ICE	303.3335	0	1	2
2029	2a	1	119.0411	447.3268	447.3268	0	1878.644	1878.644	0	ICE	119.0411	0	1	2
2029	2a	1	246.1834	939.1997	939.1997	0	4012.304	4012.304	0	ICE	246.1834	0	1	2
2029	2a	1	978.7632	3958.314	3958.314	0	19435.82	19435.82	0	ICE	978.7632	0	1	2
2029	2a	1	3380.47	14252.3	14252.3	0	76918.75	76918.75	0	ICE	3380.47	0	1	2
2029	2a	1	5143.097	21978.31	21978.31	0	123204.7	123204.7	0	ICE	5143.097	0	1	2
2029	2a	1	4771.759	20391.44	0	20391.44	114277	0	114277	BEV	0	4771.759	1	3
2029	2a	1	0.280345	1.198017	0	1.198017	6.713881	0	6.713881	FCEV	0	0.280345	1	7
2029	2a	1	4987.625	21313.92	12788.35	8525.566	115313.5	69188.1	46125.4	PHEV	2992.575	1995.05	1	8
2029	2a	1	6318.203	27361.92	0	27361.92	158252.9	0	158252.9	BEV	0	6318.203	1	3
2029	2a	1	0.885274	3.833813	0	3.833813	22.17359	0	22.17359	FCEV	0	0.885274	1	7
2029	2a	1	7977.207	34546.49	20727.89	13818.6	192944.5	115766.7	77177.79	PHEV	4786.324	3190.883	1	8
2029	2a	1	6021.748	26423.07	26423.07	0	158736.9	158736.9	0	ICE	6021.748	0	1	2
2029	2a	1	15494.52	67989.04	0	67989.04	406787.5	0	406787.5	BEV	0	15494.52	1	3
2029	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2029	2a	1	7368.062	32330.61	19398.37	12932.25	186814.8	112088.9	74725.92	PHEV	4420.837	2947.225	1	8
2029	2a	1	49.50992	132.1539	132.1539	0	511.4538	511.4538	0	ICE	49.50992	0	2	2
2029	2a	1	10693.06	40181.83	40181.83	0	202001.5	202001.5	0	ICE	10693.06	0	2	1
2029	2a	1	21897.62	92321.88	92321.88	0	522116.5	522116.5	0	ICE	21897.62	0	2	1
2029	2a	1	32171.88	137482	137482	0	796218	796218	0	ICE	32171.88	0	2	1
2029	2a	1	40177.95	173996.7	173996.7	0	1027598	1027598	0	ICE	40177.95	0	2	1
2029	2a	1	1965.362	5246.022	5246.022	0	20494.79	20494.79	0	ICE	1965.362	0	3	1
2029	2a	1	16.27724	64.89588	64.89588	0	342.8835	342.8835	0	ICE	16.27724	0	3	2
2029	2a	1	683.0141	2879.635	2879.635	0	16024.48	16024.48	0	ICE	683.0141	0	3	2
2029	2a	1	536.4534	2292.458	2292.458	0	12994.98	12994.98	0	ICE	536.4534	0	3	2
2029	2a	1	2421.594	10625.81	10625.81	0	63299.13	63299.13	0	ICE	2421.594	0	3	2
2029	2a	1	2683.546	11928.98	0	11928.98	50613.05	0	50613.05	BEV	0	2683.546	3	3
2029	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2029	2a	1	244.2224	1085.625	651.375	434.25	6411.432	3846.859	2564.573	PHEV	146.5335	97.68898	3	8
2029	2a	1	2120.083	5659.012	5659.012	0	20755.79	20755.79	0	ICE	2120.083	0	4	1
2029	2a	1	111.5593	297.7787	297.7787	0	971.0187	971.0187	0	ICE	111.5593	0	4	2
2029	2a	1	2587.074	7053.734	7053.734	0	25250.29	25250.29	0	ICE	2587.074	0	4	1
2029	2a	1	2479.097	6901.36	6901.36	0	24731.19	24731.19	0	ICE	2479.097	0	4	1
2029	2a	1	2917.855	8289.947	8289.947	0	30539.98	30539.98	0	ICE	2917.855	0	4	1

2029	2a	1	9.12567	25.92703	25.92703	0	91.99231	91.99231	0	ICE	9.12567	0	4	2
2029	2a	1	3518.902	10199.19	10199.19	0	37666.19	37666.19	0	ICE	3518.902	0	4	1
2029	2a	1	27.35589	87.12441	87.12441	0	330.6593	330.6593	0	ICE	27.35589	0	4	2
2029	2a	1	21.67829	75.25186	75.25186	0	299.0741	299.0741	0	ICE	21.67829	0	4	2
2029	2a	1	171.3548	653.7255	653.7255	0	3108.379	3108.379	0	ICE	171.3548	0	4	2
2029	2a	1	252.7867	978.8734	978.8734	0	4724.964	4724.964	0	ICE	252.7867	0	4	2
2029	2a	1	365.2766	1435.398	1435.398	0	7167.194	7167.194	0	ICE	365.2766	0	4	2
2029	2a	1	278.0868	1108.707	1108.707	0	5646.824	5646.824	0	ICE	278.0868	0	4	2
2029	2a	1	401.9909	1625.731	1625.731	0	8301.025	8301.025	0	ICE	401.9909	0	4	2
2029	2a	1	2972.64	12532.86	12532.86	0	69064.91	69064.91	0	ICE	2972.64	0	4	2
2029	2a	1	7237.148	31756.17	31756.17	0	189560.7	189560.7	0	ICE	7237.148	0	4	2
2029	2a	1	4752.284	21125	21125	0	130196.2	130196.2	0	ICE	4752.284	0	4	2
2029	2a	1	53.21164	157.2771	157.2771	0	313.8591	313.8591	0	ICE	53.21164	0	1	2
2029	2a	1	88.25402	306.3562	306.3562	0	1028.396	1028.396	0	ICE	88.25402	0	1	2
2029	2a	1	8.828924	33.6827	0	33.6827	148.3523	0	148.3523	BEV	0	8.828924	1	3
2029	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2029	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2029	2a	1	939.0454	3959.081	0	3959.081	21536.5	0	21536.5	BEV	0	939.0454	1	3
2029	2a	1	3.548775	14.96189	0	14.96189	81.38926	0	81.38926	FCEV	0	3.548775	1	7
2029	2a	1	1973.908	8322.133	4993.28	3328.853	43717.92	26230.75	17487.17	PHEV	1184.345	789.5631	1	8
2029	2a	1	10710.77	47611.85	0	47611.85	293757.8	0	293757.8	BEV	0	10710.77	1	3
2029	2a	1	326.0975	1449.578	0	1449.578	8943.677	0	8943.677	FCEV	0	326.0975	1	7
2029	2a	1	7702.477	34239.28	20543.57	13695.71	204913	122947.8	81965.22	PHEV	4621.486	3080.991	1	8
2029	2a	1	5.002993	15.93378	15.93378	0	59.31174	59.31174	0	ICE	5.002993	0	2	2
2029	2a	1	2.976622	9.650626	9.650626	0	36.46702	36.46702	0	ICE	2.976622	0	2	2
2029	2a	1	5.678542	19.3866	19.3866	0	84.72553	84.72553	0	ICE	5.678542	0	2	2
2029	2a	1	14.57169	39.73015	39.73015	0	169.399	169.399	0	ICE	14.57169	0	3	2
2029	2a	1	50.61785	193.1091	193.1091	0	957.108	957.108	0	ICE	50.61785	0	3	2
2029	2a	1	56.62157	219.2574	219.2574	0	1124.837	1124.837	0	ICE	56.62157	0	3	2
2029	2a	1	16.65583	56.86317	56.86317	0	218.2303	218.2303	0	ICE	16.65583	0	4	2
2029	2a	1	52.36829	193.7868	193.7868	0	891.1174	891.1174	0	ICE	52.36829	0	4	2
2029	2a	1	736.0042	3018.714	3018.714	0	15684.52	15684.52	0	ICE	736.0042	0	4	2
2029	2a	1	224.2427	611.4044	611.4044	0	1070.259	1070.259	0	ICE	224.2427	0	1	2
2029	2a	1	510.4498	1421	1421	0	2674.16	2674.16	0	ICE	510.4498	0	1	2
2029	2a	1	69.84687	226.4533	226.4533	0	627.7799	627.7799	0	ICE	69.84687	0	1	2
2029	2a	1	53.08855	175.1619	175.1619	0	509.7348	509.7348	0	ICE	53.08855	0	1	2
2029	2a	1	85.16335	290.7485	290.7485	0	948.5607	948.5607	0	ICE	85.16335	0	1	2
2029	2a	1	25.45465	92.73561	0	92.73561	373.6261	0	373.6261	BEV	0	25.45465	1	3
2029	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2029	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2029	2a	1	1074.231	4467.492	0	4467.492	23613.01	0	23613.01	BEV	0	1074.231	1	3
2029	2a	1	10.61323	44.1381	0	44.1381	233.2927	0	233.2927	FCEV	0	10.61323	1	7
2029	2a	1	298.6047	1241.831	745.0989	496.7326	6300.072	3780.043	2520.029	PHEV	179.1628	119.4419	1	8
2029	2a	1	887.5283	3945.267	3945.267	0	24090.48	24090.48	0	ICE	887.5283	0	1	2
2029	2a	1	19.96358	54.4313	54.4313	0	209.4704	209.4704	0	ICE	19.96358	0	2	2
2029	2a	1	416.1746	1802.307	0	1802.307	10401.61	0	10401.61	BEV	0	416.1746	2	3
2029	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7

2029	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2029	2a	1	1.041563	3.138208	3.138208	0	13.72801	13.72801	0	ICE	1.041563	0	3	2
2029	2a	1	69.60814	189.7887	189.7887	0	666.2014	666.2014	0	ICE	69.60814	0	4	2
2029	2a	1	19.96215	62.43284	62.43284	0	218.3232	218.3232	0	ICE	19.96215	0	4	2
2029	2a	1	33.1198	107.379	107.379	0	404.3209	404.3209	0	ICE	33.1198	0	4	2
2029	2a	1	32.55879	107.4255	107.4255	0	405.8861	405.8861	0	ICE	32.55879	0	4	2
2029	2a	1	25.17079	72.95502	72.95502	0	176.533	176.533	0	ICE	25.17079	0	1	2
2029	2a	1	73.69425	293.8123	293.8123	0	1367.126	1367.126	0	ICE	73.69425	0	1	2
2029	2a	1	9.203616	34.05761	34.05761	0	154.9449	154.9449	0	ICE	9.203616	0	2	2
2029	2a	1	0.492981	1.711287	1.711287	0	6.977047	6.977047	0	ICE	0.492981	0	3	2
2029	2a	1	36.22419	148.5731	148.5731	0	802.5425	802.5425	0	ICE	36.22419	0	3	2
2029	2a	1	127.354	551.5258	0	551.5258	2215.283	0	2215.283	BEV	0	127.354	3	3
2029	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2029	2a	1	57.66193	249.7136	149.8282	99.88545	1408.895	845.3371	563.5581	PHEV	34.59716	23.06477	3	8
2029	2a	1	11.76425	35.44546	35.44546	0	125.7258	125.7258	0	ICE	11.76425	0	4	2
2029	2a	1	39.26323	131.7957	131.7957	0	517.9936	517.9936	0	ICE	39.26323	0	4	2
2029	2a	1	18.78477	68.43609	68.43609	0	311.3918	311.3918	0	ICE	18.78477	0	4	2
2029	2a	1	89.5562	372.4445	372.4445	0	2041.457	2041.457	0	ICE	89.5562	0	3	2
2029	2a	1	9.466817	27.43862	27.43862	0	94.47277	94.47277	0	ICE	9.466817	0	4	2
2029	2a	1	7.371223	26.01002	26.01002	0	113.335	113.335	0	ICE	7.371223	0	4	2
2029	2a	1	9.640946	35.1236	0	35.1236	96.33975	0	96.33975	BEV	0	9.640946	3	3
2029	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2029	2a	1	0	0	0	0	0	0	0	PHEV	0	0	3	8
2029	2a	1	44.35212	161.5823	0	161.5823	449.7692	0	449.7692	BEV	0	44.35212	4	3
2029	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2029	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2029	2a	1	29.61347	84.13513	84.13513	0	175.3021	175.3021	0	ICE	29.61347	0	1	2
2029	2a	1	11.67223	37.1743	37.1743	0	101.1731	101.1731	0	ICE	11.67223	0	1	2
2029	2a	1	43.29324	170.126	170.126	0	761.9346	761.9346	0	ICE	43.29324	0	1	2
2029	2a	1	159.8593	655.6614	0	655.6614	3379.52	0	3379.52	BEV	0	159.8593	1	3
2029	2a	1	16.22937	66.56461	0	66.56461	343.0985	0	343.0985	FCEV	0	16.22937	1	7
2029	2a	1	17.04084	69.89284	41.9357	27.95714	342.9812	205.7887	137.1925	PHEV	10.2245	6.816336	1	8
2029	2a	1	13.87078	38.61375	38.61375	0	142.191	142.191	0	ICE	13.87078	0	2	2
2029	2a	1	5.878372	18.04819	18.04819	0	60.39327	60.39327	0	ICE	5.878372	0	2	2
2029	2a	1	169.0504	712.7284	0	712.7284	3848.607	0	3848.607	BEV	0	169.0504	2	3
2029	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2029	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2029	2a	1	5.308261	14.77724	14.77724	0	63.65848	63.65848	0	ICE	5.308261	0	3	2
2029	2a	1	28.79192	116.4403	116.4403	0	599.5185	599.5185	0	ICE	28.79192	0	3	2
2029	2a	1	18.72073	57.47769	57.47769	0	212.7545	212.7545	0	ICE	18.72073	0	4	2
2029	2a	1	12.2027	47.25289	0	47.25289	215.2866	0	215.2866	BEV	0	12.2027	1	3
2029	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2029	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2029	2a	1	84.41566	336.5576	0	336.5576	1598.594	0	1598.594	BEV	0	84.41566	1	3
2029	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2029	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2029	2a	1	77.12785	311.9204	0	311.9204	1579.576	0	1579.576	BEV	0	77.12785	1	3

2029	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2029	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2029	2a	1	6.468872	18.74938	18.74938	0	62.54382	62.54382	0	ICE	6.468872	0	2	2
2029	2a	1	6.264859	20.67047	20.67047	0	93.34341	93.34341	0	ICE	6.264859	0	2	2
2029	2a	1	16.3151	65.98153	65.98153	0	337.86	337.86	0	ICE	16.3151	0	2	2
2029	2a	1	211.7245	904.775	0	904.775	5047.413	0	5047.413	BEV	0	211.7245	2	3
2029	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2029	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2029	2a	1	8.356694	32.83863	32.83863	0	170.3525	170.3525	0	ICE	8.356694	0	3	2
2029	2a	1	16.72174	46.55032	46.55032	0	179.7963	179.7963	0	ICE	16.72174	0	4	2
2029	2a	1	9.124638	26.9696	26.9696	0	103.6308	103.6308	0	ICE	9.124638	0	4	2
2029	2a	1	6.797987	25.15568	0	25.15568	104.0997	0	104.0997	BEV	0	6.797987	1	3
2029	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2029	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2029	2a	1	24.28205	95.41922	0	95.41922	448.2074	0	448.2074	BEV	0	24.28205	1	3
2029	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2029	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2029	2a	1	23.5481	93.88414	0	93.88414	453.0131	0	453.0131	BEV	0	23.5481	2	3
2029	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2029	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2029	2a	1	3.711398	15.64751	15.64751	0	91.116	91.116	0	ICE	3.711398	0	2	2
2029	2a	1	0.898144	3.477909	0	3.477909	11.9389	0	11.9389	BEV	0	0.898144	4	3
2029	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2029	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2029	2a	1	5.438363	19.50132	19.50132	0	81.4816	81.4816	0	ICE	5.438363	0	2	2
2029	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2029	2a	1	5.438363	19.50132	19.50132	0	81.4816	81.4816	0	ICE	5.438363	0	2	2
2029	2a	1	3.80226	11.02047	11.02047	0	45.96932	45.96932	0	ICE	3.80226	0	3	2
2029	2a	1	0.751119	2.779487	2.779487	0	15.28512	15.28512	0	ICE	0.751119	0	3	2
2029	2a	1	2.246342	7.025569	0	7.025569	20.78682	0	20.78682	BEV	0	2.246342	1	3
2029	2a	1	4.993562	14.18726	14.18726	0	63.00519	63.00519	0	ICE	4.993562	0	3	2
2029	2a	1	1.063976	3.266693	3.266693	0	13.57139	13.57139	0	ICE	1.063976	0	3	2
2029	2a	1	15.44101	62.44653	0	62.44653	225.1255	0	225.1255	BEV	0	15.44101	3	3
2029	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2029	2a	1	0	0	0	0	0	0	0	PHEV	0	0	3	8
2029	2a	1	9.541777	39.68215	0	39.68215	148.9813	0	148.9813	BEV	0	9.541777	3	3
2029	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2029	2a	1	6.605845	27.47226	16.48335	10.9889	148.8751	89.32505	59.55003	PHEV	3.963507	2.642338	3	8
2029	2a	1	1.33467	5.856451	0	5.856451	23.89944	0	23.89944	BEV	0	1.33467	4	3
2029	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2029	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2029	2a	1	1.935115	5.941324	0	5.941324	17.23562	0	17.23562	BEV	0	1.935115	1	3
2029	2a	1	7.392558	21.00307	21.00307	0	70.75355	70.75355	0	ICE	7.392558	0	2	2
2029	2a	1	32.03118	113.0249	0	113.0249	418.5324	0	418.5324	BEV	0	32.03118	2	3
2029	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2029	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2029	2a	1	12.09068	43.35574	0	43.35574	168.7614	0	168.7614	BEV	0	12.09068	2	3
2029	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2029	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8

2029	2a	1	10.23136	37.27458	37.27458	0	181.7828	181.7828	0	ICE	10.23136	0	2	2
2029	2a	1	5.229034	20.24855	0	20.24855	91.67964	0	91.67964	BEV	0	5.229034	2	3
2029	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2029	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2029	2a	1	10.03047	39.41595	39.41595	0	194.206	194.206	0	ICE	10.03047	0	2	2
2029	2a	1	2.974972	11.69051	0	11.69051	54.86222	0	54.86222	BEV	0	2.974972	2	3
2029	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2029	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2029	2a	1	12.09191	48.20934	48.20934	0	254.0148	254.0148	0	ICE	12.09191	0	2	2
2029	2a	1	10.26058	41.49584	0	41.49584	208.8239	0	208.8239	BEV	0	10.26058	2	3
2029	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2029	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2029	2a	1	14.6259	39.04003	39.04003	0	168.9037	168.9037	0	ICE	14.6259	0	3	2
2029	2a	1	8.170907	32.57667	0	32.57667	113.8425	0	113.8425	BEV	0	8.170907	3	3
2029	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2029	2a	1	0	0	0	0	0	0	0	PHEV	0	0	3	8
2029	2a	1	8.575366	36.64562	0	36.64562	144.2677	0	144.2677	BEV	0	8.575366	3	3
2029	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2029	2a	1	6.557633	28.02312	16.81387	11.20925	154.7757	92.86539	61.91026	PHEV	3.93458	2.623053	3	8
2029	2a	1	1.996722	7.045612	0	7.045612	18.9896	0	18.9896	BEV	0	1.996722	4	3
2029	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2029	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2029	2a	1	6.24567	23.11185	0	23.11185	66.50696	0	66.50696	BEV	0	6.24567	4	3
2029	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2029	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2029	2a	1	1.13787	4.341018	0	4.341018	13.5888	0	13.5888	BEV	0	1.13787	4	3
2029	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2029	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2029	2a	1	7.971485	24.9313	24.9313	0	87.70145	87.70145	0	ICE	7.971485	0	2	2
2029	2a	1	0.783475	2.988989	2.988989	0	13.99116	13.99116	0	ICE	0.783475	0	2	2
2029	2a	1	42.60813	155.2287	0	155.2287	608.3105	0	608.3105	BEV	0	42.60813	2	3
2029	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2029	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2029	2a	1	2.889371	10.85753	0	10.85753	45.95548	0	45.95548	BEV	0	2.889371	2	3
2029	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2029	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2029	2a	1	20.29452	70.44835	0	70.44835	252.9342	0	252.9342	BEV	0	20.29452	2	3
2029	2a	1	0.63349	2.12645	2.12645	0	8.949325	8.949325	0	ICE	0.63349	0	3	2
2029	2a	1	5.972013	20.73065	20.73065	0	84.10787	84.10787	0	ICE	5.972013	0	2	2
2029	2a	1	0.485046	1.767106	1.767106	0	7.576417	7.576417	0	ICE	0.485046	0	3	2
2029	2a	1	2.963823	8.929938	8.929938	0	38.34434	38.34434	0	ICE	2.963823	0	2	2
2029	2a	1	2.314071	7.502542	0	7.502542	23.61527	0	23.61527	BEV	0	2.314071	1	3
2029	2a	1	6.808178	26.36351	26.36351	0	134.1025	134.1025	0	ICE	6.808178	0	2	2
2029	2a	1	1.167101	4.118222	0	4.118222	11.64834	0	11.64834	BEV	0	1.167101	3	3
2029	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2029	2a	1	0	0	0	0	0	0	0	PHEV	0	0	3	8
2029	2a	1	0.675305	1.879927	0	1.879927	4.945026	0	4.945026	BEV	0	0.675305	2	3

2029	2a	1	1.508048	6.012453	0	6.012453	20.45409	0	20.45409	BEV	0	1.508048	4	3
2029	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2029	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2029	2a	1	3.440635	11.74636	0	11.74636	41.34897	0	41.34897	BEV	0	3.440635	1	3
2029	2a	1	2.964983	10.46221	0	10.46221	39.07421	0	39.07421	BEV	0	2.964983	1	3
2029	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2029	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2029	2a	1	7.487524	28.13624	0	28.13624	119.3583	0	119.3583	BEV	0	7.487524	1	3
2029	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2029	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2029	2a	1	6.980114	23.43029	23.43029	0	93.34947	93.34947	0	ICE	6.980114	0	2	2
2029	2a	1	6.406148	21.87065	0	21.87065	75.79006	0	75.79006	BEV	0	6.406148	2	3
2029	2a	1	1.083754	4.134567	0	4.134567	18.00091	0	18.00091	BEV	0	1.083754	2	3
2029	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2029	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2029	2a	1	1.442232	4.510666	4.510666	0	17.06287	17.06287	0	ICE	1.442232	0	3	2
2029	2a	1	3.529264	11.84675	0	11.84675	40.12086	0	40.12086	BEV	0	3.529264	1	3
2029	2a	1	4.095721	14.21748	0	14.21748	51.78664	0	51.78664	BEV	0	4.095721	1	3
2029	2a	1	5.08485	15.02924	15.02924	0	64.28179	64.28179	0	ICE	5.08485	0	2	2
2029	2a	1	1.904874	5.848477	0	5.848477	17.01348	0	17.01348	BEV	0	1.904874	2	3
2029	2a	1	0.822358	2.571973	0	2.571973	7.616017	0	7.616017	BEV	0	0.822358	2	3
2029	2a	1	0.813882	2.63872	0	2.63872	8.353415	0	8.353415	BEV	0	0.813882	2	3
2029	2a	1	5.136071	18.12309	18.12309	0	75.31696	75.31696	0	ICE	5.136071	0	2	2
2029	2a	1	3.914081	16.05357	16.05357	0	85.96633	85.96633	0	ICE	3.914081	0	2	2
2029	2a	1	5.827882	24.90464	24.90464	0	140.8739	140.8739	0	ICE	5.827882	0	2	2
2029	2a	1	2.202483	6.509858	6.509858	0	23.8876	23.8876	0	ICE	2.202483	0	3	2
2029	2a	1	0.806919	2.523686	0	2.523686	5.171506	0	5.171506	BEV	0	0.806919	3	3
2029	2a	1	0.998488	3.180034	3.180034	0	14.72075	14.72075	0	ICE	0.998488	0	3	2
2029	2a	1	4.486897	15.57537	0	15.57537	38.57046	0	38.57046	BEV	0	4.486897	3	3
2029	2a	1	0.656185	2.353001	2.353001	0	9.85653	9.85653	0	ICE	0.656185	0	3	2
2029	2a	1	0.415378	1.489494	0	1.489494	3.947843	0	3.947843	BEV	0	0.415378	3	3
2029	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2029	2a	1	0	0	0	0	0	0	0	PHEV	0	0	3	8
2029	2a	1	10.56508	43.33257	0	43.33257	155.9874	0	155.9874	BEV	0	10.56508	3	3
2029	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2029	2a	1	0	0	0	0	0	0	0	PHEV	0	0	3	8
2029	2a	1	28.49253	120.1265	0	120.1265	452.6387	0	452.6387	BEV	0	28.49253	3	3
2029	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2029	2a	1	7.305776	30.80166	18.481	12.32067	171.8314	103.0988	68.73255	PHEV	4.383466	2.922311	3	8
2029	2a	1	0.754053	2.142346	0	2.142346	3.959424	0	3.959424	BEV	0	0.754053	4	3
2029	2a	1	0.980327	3.178358	0	3.178358	6.900067	0	6.900067	BEV	0	0.980327	4	3
2029	2a	1	1.88474	7.83822	7.83822	0	44.45168	44.45168	0	ICE	1.88474	0	2	2
2029	2a	1	0.488516	1.751758	0	1.751758	4.849887	0	4.849887	BEV	0	0.488516	4	3
2029	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2029	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2029	2a	1	0.702893	1.916458	0	1.916458	5.079424	0	5.079424	BEV	0	0.702893	2	3
2029	2a	1	2.107851	5.747118	0	5.747118	15.15946	0	15.15946	BEV	0	2.107851	1	3

2029	2a	1	1.704345	4.74459	0	4.74459	12.54802	0	12.54802	BEV	0	1.704345	1	3
2029	2a	1	1.301755	3.69843	0	3.69843	10.23658	0	10.23658	BEV	0	1.301755	1	3
2029	2a	1	1.080888	3.132846	0	3.132846	8.202626	0	8.202626	BEV	0	1.080888	1	3
2029	2a	1	1.034102	3.056486	0	3.056486	8.638848	0	8.638848	BEV	0	1.034102	1	3
2029	2a	1	0.960145	2.892899	0	2.892899	8.057846	0	8.057846	BEV	0	0.960145	1	3
2029	2a	1	1.057579	3.368231	0	3.368231	9.945577	0	9.945577	BEV	0	1.057579	1	3
2029	2a	1	2.657679	8.768824	0	8.768824	28.92389	0	28.92389	BEV	0	2.657679	1	3
2029	2a	1	0.487181	1.300404	0	1.300404	3.468804	0	3.468804	BEV	0	0.487181	2	3
2029	2a	1	0.878567	2.798105	0	2.798105	8.58036	0	8.58036	BEV	0	0.878567	2	3
2029	2a	1	0	0	0	0	0	0	0	BEV	0	0	2	3
2029	2a	1	24.08648	105.69	0	105.69	631.5269	0	631.5269	FCEV	0	24.08648	2	7
2029	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2029	2a	1	0	0	0	0	0	0	0	BEV	0	0	2	3
2029	2a	1	26.70308	118.7013	0	118.7013	730.6919	0	730.6919	FCEV	0	26.70308	2	7
2029	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2029	2a	1	0.131542	0.494303	0.494303	0	2.477573	2.477573	0	ICE	0.131542	0	3	2
2029	2a	1	0	0	0	0	0	0	0	BEV	0	0	3	3
2029	2a	1	1.611107	7.06944	0	7.06944	29.80096	0	29.80096	FCEV	0	1.611107	3	7
2029	2a	1	23.09253	101.3286	60.79718	40.53146	608.8292	365.2975	243.5317	PHEV	13.85552	9.237012	3	8
2029	2a	1	1.152007	4.988939	4.988939	0	27.8547	27.8547	0	ICE	1.152007	0	2	2
2029	2a	1	0.280555	0.957817	0	0.957817	2.314607	0	2.314607	BEV	0	0.280555	3	3
2029	2a	1	0.529052	1.412166	0	1.412166	2.561853	0	2.561853	BEV	0	0.529052	4	3
2029	2a	1	0.80519	2.333763	0	2.333763	4.375877	0	4.375877	BEV	0	0.80519	4	3
2029	2a	1	2.352527	7.357669	0	7.357669	15.47774	0	15.47774	BEV	0	2.352527	4	3
2029	2a	1	0.692343	2.40333	0	2.40333	6.010477	0	6.010477	BEV	0	0.692343	4	3
2029	2a	1	0.465603	1.829645	0	1.829645	5.920288	0	5.920288	BEV	0	0.465603	3	3
2029	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2029	2a	1	0	0	0	0	0	0	0	PHEV	0	0	3	8
2029	2a	1	1.714294	7.031158	0	7.031158	33.57431	0	33.57431	BEV	0	1.714294	2	3
2029	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2029	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2029	2a	1	0.89755	2.961404	0	2.961404	9.433526	0	9.433526	BEV	0	0.89755	2	3
2029	2a	1	2.545098	8.54318	0	8.54318	28.07198	0	28.07198	BEV	0	2.545098	2	3
2029	2a	1	0.638275	2.179078	0	2.179078	5.143188	0	5.143188	BEV	0	0.638275	4	3
2029	2a	1	1.635983	7.27232	7.27232	0	49.51665	49.51665	0	ICE	1.635983	0	2	2
2029	2a	1	1.157745	4.814806	0	4.814806	25.61325	0	25.61325	BEV	0	1.157745	2	3
2029	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2029	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2029	2a	1	0.397264	1.12867	0	1.12867	3.003209	0	3.003209	BEV	0	0.397264	2	3
2029	2a	1	0.2081	0.627002	0	0.627002	1.27078	0	1.27078	BEV	0	0.2081	4	3
2029	2a	1	0.148067	0.429159	0	0.429159	1.145222	0	1.145222	BEV	0	0.148067	2	3
2029	2a	1	0.205104	0.664977	0	0.664977	1.393864	0	1.393864	BEV	0	0.205104	3	3
2029	2a	1	0.241453	0.921151	0	0.921151	2.686054	0	2.686054	BEV	0	0.241453	3	3
2029	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2029	2a	1	0	0	0	0	0	0	0	PHEV	0	0	3	8
2029	2a	1	0.386913	1.16576	0	1.16576	2.415662	0	2.415662	BEV	0	0.386913	3	3
2029	2a	1	1.02219	3.372643	0	3.372643	7.762584	0	7.762584	BEV	0	1.02219	4	3

2029	2a	1	0.351438	0.938071	0	0.938071	2.369352	0	2.369352	BEV	0	0.351438	1	3
2029	2a	1	0.503313	1.862488	0	1.862488	7.541625	0	7.541625	BEV	0	0.503313	2	3
2029	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2029	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2029	2a	1	0.237843	0.893755	0.893755	0	5.119157	5.119157	0	ICE	0.237843	0	2	2
2029	2a	1	0.629392	1.716056	0	1.716056	3.053445	0	3.053445	BEV	0	0.629392	3	3
2029	2a	1	2.151472	6.6056	0	6.6056	13.14759	0	13.14759	BEV	0	2.151472	4	3
2029	2a	1	1.55845	6.124114	0	6.124114	19.70185	0	19.70185	BEV	0	1.55845	4	3
2029	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2029	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2029	2a	1	0.143441	0.481493	0	0.481493	1.134033	0	1.134033	BEV	0	0.143441	3	3
2029	2a	1	0	0	0	0	0	0	0	BEV	0	0	4	3
2029	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2029	2a	1	2.210244	9.44517	5.667102	3.778068	56.86827	34.12096	22.74731	PHEV	1.326147	0.884098	4	8
2029	2a	1	0.206253	0.6687	0.6687	0	3.109646	3.109646	0	ICE	0.206253	0	3	2
2029	2a	1	0.247273	0.745027	0	0.745027	2.061658	0	2.061658	BEV	0	0.247273	2	3
2030	2a	1	9051.949	24161.82	24161.82	0	42852.35	42852.35	0	ICE	9051.949	0	1	1
2030	2a	1	10017.89	27888.01	27888.01	0	53396.18	53396.18	0	ICE	10017.89	0	1	1
2030	2a	1	12148.42	34515	34515	0	69011.06	69011.06	0	ICE	12148.42	0	1	1
2030	2a	1	15102.62	43773.45	43773.45	0	91824.81	91824.81	0	ICE	15102.62	0	1	1
2030	2a	1	16751.59	49512.5	49512.5	0	108158.4	108158.4	0	ICE	16751.59	0	1	1
2030	2a	1	14512.68	43726.41	43726.41	0	100201.2	100201.2	0	ICE	14512.68	0	1	1
2030	2a	1	14940.02	45869.9	45869.9	0	110117.7	110117.7	0	ICE	14940.02	0	1	1
2030	2a	1	16114.79	50399.99	50399.99	0	126205.5	126205.5	0	ICE	16114.79	0	1	1
2030	2a	1	19405.5	61803.61	61803.61	0	162078.1	162078.1	0	ICE	19405.5	0	1	1
2030	2a	1	18112.2	58722.28	58722.28	0	160846.3	160846.3	0	ICE	18112.2	0	1	1
2030	2a	1	22714.54	74945.04	74945.04	0	213959.4	213959.4	0	ICE	22714.54	0	1	1
2030	2a	1	25543.9	85743.7	85743.7	0	255786.5	255786.5	0	ICE	25543.9	0	1	1
2030	2a	1	28274.78	96530.37	96530.37	0	301311.6	301311.6	0	ICE	28274.78	0	1	1
2030	2a	1	36452.43	126537.3	126537.3	0	413034.6	413034.6	0	ICE	36452.43	0	1	1
2030	2a	1	40311.3	142242	142242	0	484725.6	484725.6	0	ICE	40311.3	0	1	1
2030	2a	1	72.65555	256.3716	256.3716	0	892.6432	892.6432	0	ICE	72.65555	0	1	2
2030	2a	1	44400.75	159215.7	159215.7	0	567495.8	567495.8	0	ICE	44400.75	0	1	1
2030	2a	1	52702.88	192005.5	192005.5	0	714380.4	714380.4	0	ICE	52702.88	0	1	1
2030	2a	1	57129.91	211406.9	211406.9	0	819563.4	819563.4	0	ICE	57129.91	0	1	1
2030	2a	1	76206.43	286364.7	286364.7	0	1157651	1157651	0	ICE	76206.43	0	1	1
2030	2a	1	90351.98	344696.4	344696.4	0	1449331	1449331	0	ICE	90351.98	0	1	1
2030	2a	1	232.8734	888.4214	888.4214	0	3753.821	3753.821	0	ICE	232.8734	0	1	2
2030	2a	1	111624.2	432245.7	432245.7	0	1884218	1884218	0	ICE	111624.2	0	1	1
2030	2a	1	109661.1	430926.3	430926.3	0	1949403	1949403	0	ICE	109661.1	0	1	1
2030	2a	1	102241.5	407627.7	407627.7	0	1911178	1911178	0	ICE	102241.5	0	1	1
2030	2a	1	138733.1	561064.6	561064.6	0	2721182	2721182	0	ICE	138733.1	0	1	1
2030	2a	1	1559.127	6305.422	6305.422	0	30434.52	30434.52	0	ICE	1559.127	0	1	2
2030	2a	1	156861.2	643364.8	643364.8	0	3234616	3234616	0	ICE	156861.2	0	1	1
2030	2a	1	2386.854	9789.656	9789.656	0	48462.18	48462.18	0	ICE	2386.854	0	1	2
2030	2a	1	255534.6	1062712	1062712	0	5539953	5539953	0	ICE	255534.6	0	1	1
2030	2a	1	343800.4	1449487	1449487	0	7804464	7804464	0	ICE	343800.4	0	1	1

2030	2a	1	376631.6	1609483	1609483	0	8965537	8965537	0	ICE	376631.6	0	1	1
2030	2a	1	6993.406	29885.34	29885.34	0	165424.4	165424.4	0	ICE	6993.406	0	1	2
2030	2a	1	474117.7	2053238	2053238	0	11816024	11816024	0	ICE	474117.7	0	1	1
2030	2a	1	481731.4	2113808	2113808	0	12552129	12552129	0	ICE	481731.4	0	1	1
2030	2a	1	550283.6	2446137	2446137	0	15009577	15009577	0	ICE	550283.6	0	1	1
2030	2a	1	6734.025	29934.29	29934.29	0	183660.4	183660.4	0	ICE	6734.025	0	1	2
2030	2a	1	32005.21	142270.5	0	142270.5	874077.9	0	874077.9	BEV	0	32005.21	1	3
2030	2a	1	653.1675	2903.48	0	2903.48	17915.95	0	17915.95	FCEV	0	653.1675	1	7
2030	2a	1	28869.78	128332.8	69299.72	59033.1	787092.8	425030.1	362062.7	PHEV	15589.68	13280.1	1	8
2030	2a	1	608934.7	2741741	2741741	0	17336283	17336283	0	ICE	608934.7	0	1	1
2030	2a	1	7451.759	33551.7	33551.7	0	212133.5	212133.5	0	ICE	7451.759	0	1	2
2030	2a	1	43285.31	194893	0	194893	1233174	0	1233174	BEV	0	43285.31	1	3
2030	2a	1	883.3737	3977.408	0	3977.408	25269.46	0	25269.46	FCEV	0	883.3737	1	7
2030	2a	1	27975.09	125958.4	68017.53	57940.86	796307.6	430006.1	366301.5	PHEV	15106.55	12868.54	1	8
2030	2a	1	663370.1	3024842	3024842	0	19701006	19701006	0	ICE	663370.1	0	1	1
2030	2a	1	8083.393	36858.74	36858.74	0	240050.4	240050.4	0	ICE	8083.393	0	1	2
2030	2a	1	57825.99	263675.5	0	263675.5	1718314	0	1718314	BEV	0	57825.99	1	3
2030	2a	1	1352.655	6167.848	0	6167.848	40330.66	0	40330.66	FCEV	0	1352.655	1	7
2030	2a	1	28359.93	129315.9	68537.42	60778.46	842148.4	446338.7	395809.8	PHEV	15030.76	13329.17	1	8
2030	2a	1	707210.8	3265263	3265263	0	21892463	21892463	0	ICE	707210.8	0	1	1
2030	2a	1	8695.715	40148.99	40148.99	0	269170.7	269170.7	0	ICE	8695.715	0	1	2
2030	2a	1	73244.74	338178.3	0	338178.3	2268435	0	2268435	BEV	0	73244.74	1	3
2030	2a	1	1933.146	8925.527	0	8925.527	60034.67	0	60034.67	FCEV	0	1933.146	1	7
2030	2a	1	27928.62	128949.2	67053.61	61895.64	864544.6	449563.2	414981.4	PHEV	14522.88	13405.74	1	8
2030	2a	1	710415.1	3320757	3320757	0	22915567	22915567	0	ICE	710415.1	0	1	1
2030	2a	1	8777.26	41028.34	41028.34	0	283111.5	283111.5	0	ICE	8777.26	0	1	2
2030	2a	1	114777.8	536516.2	0	536516.2	3703114	0	3703114	BEV	0	114777.8	1	3
2030	2a	1	3934.463	18391.22	0	18391.22	127231.7	0	127231.7	FCEV	0	3934.463	1	7
2030	2a	1	43636.93	203976	101580.1	102396	1407786	701077.6	706708.7	PHEV	21731.19	21905.74	1	8
2030	2a	1	695323.1	3290046	3290046	0	23356455	23356455	0	ICE	695323.1	0	1	1
2030	2a	1	8652.7	40941.81	40941.81	0	290641	290641	0	ICE	8652.7	0	1	2
2030	2a	1	158503.4	749987.4	0	749987.4	5324170	0	5324170	BEV	0	158503.4	1	3
2030	2a	1	6702.645	31714.77	0	31714.77	225511.8	0	225511.8	FCEV	0	6702.645	1	7
2030	2a	1	60084.33	284299.8	135326.7	148973.1	2019141	961111.3	1058030	PHEV	28600.14	31484.19	1	8
2030	2a	1	677032.8	3242290	3242290	0	23667309	23667309	0	ICE	677032.8	0	1	1
2030	2a	1	8495.795	40686.11	40686.11	0	296985.9	296985.9	0	ICE	8495.795	0	1	2
2030	2a	1	206384.4	988368.6	0	988368.6	7212930	0	7212930	BEV	0	206384.4	1	3
2030	2a	1	10405.93	49833.71	0	49833.71	363968.4	0	363968.4	FCEV	0	10405.93	1	7
2030	2a	1	78006.11	373568.9	169600.3	203968.6	2729046	1238987	1490059	PHEV	35414.77	42591.34	1	8
2030	2a	1	644877.3	3125243	3125243	0	23450687	23450687	0	ICE	644877.3	0	1	1
2030	2a	1	8157.079	39531.32	39531.32	0	296631	296631	0	ICE	8157.079	0	1	2
2030	2a	1	254759.9	1234633	0	1234633	9259797	0	9259797	BEV	0	254759.9	1	3
2030	2a	1	14949.61	72449.7	0	72449.7	543451.7	0	543451.7	FCEV	0	14949.61	1	7
2030	2a	1	96009.67	465287.8	201004.3	264283.5	3495653	1510122	1985531	PHEV	41476.18	54533.49	1	8
2030	2a	1	613910.2	3010340	3010340	0	23213436	23213436	0	ICE	613910.2	0	1	1
2030	2a	1	7824.07	38365.72	38365.72	0	295857.1	295857.1	0	ICE	7824.07	0	1	2
2030	2a	1	308545.9	1512970	0	1512970	11658944	0	11658944	BEV	0	308545.9	1	3

2030	2a	1	20695.15	101479.7	0	101479.7	781801.5	0	781801.5	FCEV	0	20695.15	1	7
2030	2a	1	115941.5	568524.8	233095.2	335429.6	4391204	1800394	2590810	PHEV	47536	68405.47	1	8
2030	2a	1	572633.7	2840744	2840744	0	22484012	22484012	0	ICE	572633.7	0	1	1
2030	2a	1	7298.014	36204.28	36204.28	0	286568.2	286568.2	0	ICE	7298.014	0	1	2
2030	2a	1	362569.8	1798651	0	1798651	14223116	0	14223116	BEV	0	362569.8	1	3
2030	2a	1	27410.01	135976.7	0	135976.7	1074727	0	1074727	FCEV	0	27410.01	1	7
2030	2a	1	135846.5	673912.9	261478.2	412434.7	5345465	2074040	3271424	PHEV	52708.45	83138.07	1	8
2030	2a	1	522987.6	2624420	2624420	0	21304581	21304581	0	ICE	522987.6	0	1	1
2030	2a	1	6665.29	33447.29	33447.29	0	271540.9	271540.9	0	ICE	6665.29	0	1	2
2030	2a	1	416004.9	2087567	0	2087567	16928413	0	16928413	BEV	0	416004.9	1	3
2030	2a	1	35053.7	175904	0	175904	1425645	0	1425645	FCEV	0	35053.7	1	7
2030	2a	1	155416.1	779898.2	285442.7	494455.4	6347488	2323181	4024308	PHEV	56882.29	98533.81	1	8
2030	2a	1	473495	2403186	2403186	0	19975414	19975414	0	ICE	473495	0	1	1
2030	2a	1	6034.524	30627.74	30627.74	0	254598.5	254598.5	0	ICE	6034.524	0	1	2
2030	2a	1	474915.1	2410393	0	2410393	20014785	0	20014785	BEV	0	474915.1	1	3
2030	2a	1	44198.84	224327.7	0	224327.7	1861950	0	1861950	FCEV	0	44198.84	1	7
2030	2a	1	176911.9	897902.1	308878.3	589023.8	7482607	2574017	4908590	PHEV	60857.69	116054.2	1	8
2030	2a	1	413131.8	2120486	2120486	0	17994536	17994536	0	ICE	413131.8	0	1	1
2030	2a	1	5265.215	27024.82	27024.82	0	229342.8	229342.8	0	ICE	5265.215	0	1	2
2030	2a	1	528175.2	2710970	0	2710970	22988765	0	22988765	BEV	0	528175.2	1	3
2030	2a	1	53881.85	276559.9	0	276559.9	2344905	0	2344905	FCEV	0	53881.85	1	7
2030	2a	1	196184.8	1006959	324240.9	682718.5	8561561	2756823	5804738	PHEV	63171.49	133013.3	1	8
2030	2a	1	312583	1622306	1622306	0	14020567	14020567	0	ICE	312583	0	1	1
2030	2a	1	3983.763	20675.73	20675.73	0	178683.3	178683.3	0	ICE	3983.763	0	1	2
2030	2a	1	519690.3	2697193	0	2697193	23304986	0	23304986	BEV	0	519690.3	1	3
2030	2a	1	57743.37	299688.1	0	299688.1	2589924	0	2589924	FCEV	0	57743.37	1	7
2030	2a	1	192477.9	998960.3	299688.1	699272.2	8639797	2591939	6047858	PHEV	57743.37	134734.5	1	8
2030	2a	1	3984.833	10636.48	10636.48	0	45026.59	45026.59	0	ICE	3984.833	0	2	1
2030	2a	1	3806.152	10377.59	10377.59	0	44614.65	44614.65	0	ICE	3806.152	0	2	1
2030	2a	1	3812.573	10613.52	10613.52	0	45949.41	45949.41	0	ICE	3812.573	0	2	1
2030	2a	1	4997.381	14198.11	14198.11	0	62033.54	62033.54	0	ICE	4997.381	0	2	1
2030	2a	1	4195.459	12160.12	12160.12	0	52947.35	52947.35	0	ICE	4195.459	0	2	1
2030	2a	1	5227.457	15450.74	15450.74	0	66928.56	66928.56	0	ICE	5227.457	0	2	1
2030	2a	1	4502.169	13564.94	13564.94	0	59421.75	59421.75	0	ICE	4502.169	0	2	1
2030	2a	1	5887.281	18075.54	18075.54	0	79721.71	79721.71	0	ICE	5887.281	0	2	1
2030	2a	1	7079.876	22142.74	22142.74	0	98780.96	98780.96	0	ICE	7079.876	0	2	1
2030	2a	1	6897.168	21966.45	21966.45	0	99436.92	99436.92	0	ICE	6897.168	0	2	1
2030	2a	1	7551.596	24483.33	24483.33	0	110933.6	110933.6	0	ICE	7551.596	0	2	1
2030	2a	1	9839.733	32465.51	32465.51	0	148870.8	148870.8	0	ICE	9839.733	0	2	1
2030	2a	1	12381.28	41560.48	41560.48	0	193737.6	193737.6	0	ICE	12381.28	0	2	1
2030	2a	1	11176.6	38157.02	38157.02	0	180261.2	180261.2	0	ICE	11176.6	0	2	1
2030	2a	1	12010.87	41693.34	41693.34	0	199921.2	199921.2	0	ICE	12010.87	0	2	1
2030	2a	1	13680.53	48272.98	48272.98	0	233770.1	233770.1	0	ICE	13680.53	0	2	1
2030	2a	1	14623.87	52439.45	52439.45	0	253810.3	253810.3	0	ICE	14623.87	0	2	1
2030	2a	1	10621.78	38696.96	38696.96	0	188323.8	188323.8	0	ICE	10621.78	0	2	1
2030	2a	1	6258.35	23517.31	23517.31	0	116319.4	116319.4	0	ICE	6258.35	0	2	1
2030	2a	1	10194.33	38891.79	38891.79	0	195773.6	195773.6	0	ICE	10194.33	0	2	1

2030	2a	1	15207.49	58888.4	58888.4	0	299941.4	299941.4	0	ICE	15207.49	0	2	1
2030	2a	1	26909.03	105742.3	105742.3	0	544613.5	544613.5	0	ICE	26909.03	0	2	1
2030	2a	1	20603.73	82145.23	82145.23	0	427546.4	427546.4	0	ICE	20603.73	0	2	1
2030	2a	1	11197.33	45284.25	45284.25	0	238447.4	238447.4	0	ICE	11197.33	0	2	1
2030	2a	1	10147.48	41619.78	41619.78	0	223355.8	223355.8	0	ICE	10147.48	0	2	1
2030	2a	1	81556.27	353191.7	353191.7	0	2063706	2063706	0	ICE	81556.27	0	2	1
2030	2a	1	76022.39	333581.7	333581.7	0	1982615	1982615	0	ICE	76022.39	0	2	1
2030	2a	1	69273.66	307937.4	307937.4	0	1874916	1874916	0	ICE	69273.66	0	2	1
2030	2a	1	9.38437	41.71568	41.71568	0	253.9888	253.9888	0	ICE	9.38437	0	2	2
2030	2a	1	2.334126	10.37573	0	10.37573	63.54404	0	63.54404	BEV	0	2.334126	2	3
2030	2a	1	0.047635	0.21175	0	0.21175	1.296817	0	1.296817	FCEV	0	0.047635	2	7
2030	2a	1	20.24497	89.99354	53.99613	35.99742	547.9287	328.7572	219.1715	PHEV	12.14698	8.097988	2	8
2030	2a	1	75189.24	338541	338541	0	2109498	2109498	0	ICE	75189.24	0	2	1
2030	2a	1	10.18574	45.8615	45.8615	0	285.7639	285.7639	0	ICE	10.18574	0	2	2
2030	2a	1	79229.78	361272.7	361272.7	0	2305314	2305314	0	ICE	79229.78	0	2	1
2030	2a	1	10.80799	49.28237	49.28237	0	314.4544	314.4544	0	ICE	10.80799	0	2	2
2030	2a	1	1053.473	4803.635	0	4803.635	30840.69	0	30840.69	BEV	0	1053.473	2	3
2030	2a	1	24.64264	112.3657	0	112.3657	729.4111	0	729.4111	FCEV	0	24.64264	2	7
2030	2a	1	808.993	3688.854	2192.233	1496.621	23480.08	13953.87	9526.203	PHEV	480.773	328.22	2	8
2030	2a	1	82275.88	379876	379876	0	2483713	2483713	0	ICE	82275.88	0	2	1
2030	2a	1	11.35392	52.42218	52.42218	0	342.6921	342.6921	0	ICE	11.35392	0	2	2
2030	2a	1	2234.777	10318.19	0	10318.19	68026.37	0	68026.37	BEV	0	2234.777	2	3
2030	2a	1	58.98238	272.3276	0	272.3276	1818.635	0	1818.635	FCEV	0	58.98238	2	7
2030	2a	1	1721.184	7946.88	4677.307	3269.574	51769.9	30470.28	21299.62	PHEV	1013.04	708.1444	2	8
2030	2a	1	81525.81	381083.4	381083.4	0	2554541	2554541	0	ICE	81525.81	0	2	1
2030	2a	1	11.39826	53.27993	53.27993	0	357.05	357.05	0	ICE	11.39826	0	2	2
2030	2a	1	5745.813	26858.17	0	26858.17	181828.1	0	181828.1	BEV	0	5745.813	2	3
2030	2a	1	196.9605	920.6701	0	920.6701	6324.384	0	6324.384	FCEV	0	196.9605	2	7
2030	2a	1	4143.829	19369.87	11228.99	8140.881	128788.3	74660.4	54127.87	PHEV	2402.237	1741.592	2	8
2030	2a	1	78574.97	371791.6	371791.6	0	2556083	2556083	0	ICE	78574.97	0	2	1
2030	2a	1	11.03072	52.19386	52.19386	0	358.7008	358.7008	0	ICE	11.03072	0	2	2
2030	2a	1	9618.252	45510.49	0	45510.49	316194.7	0	316194.7	BEV	0	9618.252	2	3
2030	2a	1	406.7277	1924.505	0	1924.505	13590.69	0	13590.69	FCEV	0	406.7277	2	7
2030	2a	1	6489.43	30705.9	17528.68	13177.22	208718.6	119148.5	89570.11	PHEV	3704.537	2784.892	2	8
2030	2a	1	75334.07	360772.6	360772.6	0	2544113	2544113	0	ICE	75334.07	0	2	1
2030	2a	1	10.62556	50.88548	50.88548	0	358.676	358.676	0	ICE	10.62556	0	2	2
2030	2a	1	13939.78	66757.18	0	66757.18	475806.6	0	475806.6	BEV	0	13939.78	2	3
2030	2a	1	702.846	3365.908	0	3365.908	24354.52	0	24354.52	FCEV	0	702.846	2	7
2030	2a	1	8788.805	42089.32	23654.2	18435.12	292850.1	164581.8	128268.4	PHEV	4939.308	3849.497	2	8
2030	2a	1	71588.05	346934.3	346934.3	0	2509919	2509919	0	ICE	71588.05	0	2	1
2030	2a	1	10.1414	49.14788	49.14788	0	355.38	355.38	0	ICE	10.1414	0	2	2
2030	2a	1	18700.03	90625.19	0	90625.19	662604.6	0	662604.6	BEV	0	18700.03	2	3
2030	2a	1	1097.34	5317.993	0	5317.993	39357.56	0	39357.56	FCEV	0	1097.34	2	7
2030	2a	1	11002.07	53318.91	29492.98	23825.94	380038.9	210215.8	169823.1	PHEV	6085.719	4916.356	2	8
2030	2a	1	67608.29	331520.6	331520.6	0	2461992	2461992	0	ICE	67608.29	0	2	1
2030	2a	1	9.61642	47.1546	47.1546	0	349.9846	349.9846	0	ICE	9.61642	0	2	2
2030	2a	1	23995.93	117665.2	0	117665.2	882811.8	0	882811.8	BEV	0	23995.93	2	3

2030	2a	1	1609.483	7892.181	0	7892.181	59812.26	0	59812.26	FCEV	0	1609.483	2	7
2030	2a	1	13152.34	64493.14	35102.69	29390.44	471378.9	256564.8	214814.1	PHEV	7158.629	5993.708	2	8
2030	2a	1	62417.21	309641.8	309641.8	0	2358366	2358366	0	ICE	62417.21	0	2	1
2030	2a	1	8.878055	44.04261	44.04261	0	335.2529	335.2529	0	ICE	8.878055	0	2	2
2030	2a	1	29455.97	146126.4	0	146126.4	1123728	0	1123728	BEV	0	29455.97	2	3
2030	2a	1	2226.85	11047.04	0	11047.04	85594.07	0	85594.07	FCEV	0	2226.85	2	7
2030	2a	1	15011.04	74467.37	39871.96	34595.41	557750	298635.3	259114.7	PHEV	8037.34	6973.7	2	8
2030	2a	1	56325.07	282646.5	282646.5	0	2208056	2208056	0	ICE	56325.07	0	2	1
2030	2a	1	8.011526	40.20288	40.20288	0	313.888	313.888	0	ICE	8.011526	0	2	2
2030	2a	1	34968.54	175476.7	0	175476.7	1383081	0	1383081	BEV	0	34968.54	2	3
2030	2a	1	2946.544	14786.14	0	14786.14	117210.6	0	117210.6	FCEV	0	2946.544	2	7
2030	2a	1	16529.97	82949.56	43678.87	39270.69	636972.1	335411.3	301560.8	PHEV	8704.212	7825.762	2	8
2030	2a	1	50272.91	255156.1	255156.1	0	2044262	2044262	0	ICE	50272.91	0	2	1
2030	2a	1	7.150684	36.29272	36.29272	0	290.6073	290.6073	0	ICE	7.150684	0	2	2
2030	2a	1	40984.13	208011.7	0	208011.7	1680121	0	1680121	BEV	0	40984.13	2	3
2030	2a	1	3814.263	19358.99	0	19358.99	157057.4	0	157057.4	FCEV	0	3814.263	2	7
2030	2a	1	17921.52	90959.23	47090.89	43868.34	716229.3	370802.2	345427.2	PHEV	9278.225	8643.292	2	8
2030	2a	1	44006.25	225871.3	225871.3	0	1855278	1855278	0	ICE	44006.25	0	2	1
2030	2a	1	6.259331	32.12733	32.12733	0	263.7461	263.7461	0	ICE	6.259331	0	2	2
2030	2a	1	47426.66	243427.3	0	243427.3	2014161	0	2014161	BEV	0	47426.66	2	3
2030	2a	1	4838.236	24833.26	0	24833.26	206190.3	0	206190.3	FCEV	0	4838.236	2	7
2030	2a	1	19122.5	98150.26	49944.46	48205.8	792395.5	403216.1	389179.4	PHEV	9730.622	9391.88	2	8
2030	2a	1	33732.07	175069.5	175069.5	0	1473546	1473546	0	ICE	33732.07	0	2	1
2030	2a	1	4.797959	24.90141	24.90141	0	209.4824	209.4824	0	ICE	4.797959	0	2	2
2030	2a	1	48878.09	253677.3	0	253677.3	2149254	0	2149254	BEV	0	48878.09	2	3
2030	2a	1	5430.899	28186.37	0	28186.37	239468.9	0	239468.9	FCEV	0	5430.899	2	7
2030	2a	1	18103	93954.56	46977.28	46977.28	777375.7	388687.8	388687.8	PHEV	9051.499	9051.499	2	8
2030	2a	1	2832.09	7559.529	7559.529	0	29196.83	29196.83	0	ICE	2832.09	0	3	1
2030	2a	1	2931.504	7992.833	7992.833	0	31190.18	31190.18	0	ICE	2931.504	0	3	1
2030	2a	1	3792.963	10558.93	10558.93	0	41777.94	41777.94	0	ICE	3792.963	0	3	1
2030	2a	1	4905.456	13936.94	13936.94	0	56372.68	56372.68	0	ICE	4905.456	0	3	1
2030	2a	1	5481.909	15888.77	15888.77	0	64909.03	64909.03	0	ICE	5481.909	0	3	1
2030	2a	1	6483.721	19163.87	19163.87	0	80730.31	80730.31	0	ICE	6483.721	0	3	1
2030	2a	1	5721.033	17237.36	17237.36	0	73328.81	73328.81	0	ICE	5721.033	0	3	1
2030	2a	1	7925.977	24334.89	24334.89	0	104445.5	104445.5	0	ICE	7925.977	0	3	1
2030	2a	1	8961.408	28027.34	28027.34	0	121743.6	121743.6	0	ICE	8961.408	0	3	1
2030	2a	1	11688.98	37227.63	37227.63	0	164257.7	164257.7	0	ICE	11688.98	0	3	1
2030	2a	1	11406.06	36980.03	36980.03	0	164296.8	164296.8	0	ICE	11406.06	0	3	1
2030	2a	1	17746.87	58554.56	58554.56	0	263504	263504	0	ICE	17746.87	0	3	1
2030	2a	1	19993.81	67113.63	67113.63	0	304934.1	304934.1	0	ICE	19993.81	0	3	1
2030	2a	1	22486.22	76768.18	76768.18	0	353277.9	353277.9	0	ICE	22486.22	0	3	1
2030	2a	1	30433.44	105643.6	105643.6	0	492497.3	492497.3	0	ICE	30433.44	0	3	1
2030	2a	1	30472.43	107524.7	107524.7	0	505129.6	505129.6	0	ICE	30472.43	0	3	1
2030	2a	1	30646.53	109894.8	109894.8	0	523052.7	523052.7	0	ICE	30646.53	0	3	1
2030	2a	1	35679.33	129985.8	129985.8	0	625741.7	625741.7	0	ICE	35679.33	0	3	1
2030	2a	1	44138.86	163334.1	163334.1	0	795048.7	795048.7	0	ICE	44138.86	0	3	1
2030	2a	1	50404.29	189406.7	189406.7	0	933460.6	933460.6	0	ICE	50404.29	0	3	1

2030	2a	1	48296.9	184254.6	184254.6	0	919919.6	919919.6	0	ICE	48296.9	0	3	1
2030	2a	1	51770.45	200472.3	200472.3	0	1011249	1011249	0	ICE	51770.45	0	3	1
2030	2a	1	42653.39	167611.6	167611.6	0	857462.2	857462.2	0	ICE	42653.39	0	3	1
2030	2a	1	28523.24	113719.6	113719.6	0	590515.4	590515.4	0	ICE	28523.24	0	3	1
2030	2a	1	55424.46	224147.6	224147.6	0	1181764	1181764	0	ICE	55424.46	0	3	1
2030	2a	1	82786.81	339549.3	339549.3	0	1822505	1822505	0	ICE	82786.81	0	3	1
2030	2a	1	88792.33	369267.8	369267.8	0	2026225	2026225	0	ICE	88792.33	0	3	1
2030	2a	1	131523.4	554511.9	554511.9	0	3096753	3096753	0	ICE	131523.4	0	3	1
2030	2a	1	132564.3	566494.9	566494.9	0	3236889	3236889	0	ICE	132564.3	0	3	1
2030	2a	1	1424.601	6087.833	6087.833	0	34079.19	34079.19	0	ICE	1424.601	0	3	2
2030	2a	1	170493.6	738348	738348	0	4302809	4302809	0	ICE	170493.6	0	3	1
2030	2a	1	175859.9	771662.7	771662.7	0	4592228	4592228	0	ICE	175859.9	0	3	1
2030	2a	1	1222.412	5363.872	5363.872	0	32230.27	32230.27	0	ICE	1222.412	0	3	2
2030	2a	1	210769.8	936920.4	936920.4	0	5677645	5677645	0	ICE	210769.8	0	3	1
2030	2a	1	2154.303	9576.373	9576.373	0	58202.32	58202.32	0	ICE	2154.303	0	3	2
2030	2a	1	231327.9	1041558	1041558	0	6460574	6460574	0	ICE	231327.9	0	3	1
2030	2a	1	2364.429	10645.89	10645.89	0	66225.74	66225.74	0	ICE	2364.429	0	3	2
2030	2a	1	798.1134	3593.522	2156.113	1437.409	22391.09	13434.65	8956.434	PHEV	478.8681	319.2454	3	8
2030	2a	1	248624.8	1133682	1133682	0	7221240	7221240	0	ICE	248624.8	0	3	1
2030	2a	1	2534.818	11558.29	11558.29	0	73798.42	73798.42	0	ICE	2534.818	0	3	2
2030	2a	1	2932.217	13370.35	0	13370.35	66619.51	0	66619.51	BEV	0	2932.217	3	3
2030	2a	1	68.58987	312.7568	0	312.7568	1410.968	0	1410.968	FCEV	0	68.58987	3	7
2030	2a	1	2546.804	11612.94	6901.405	4711.536	74112.84	44044.2	30068.64	PHEV	1513.529	1033.275	3	8
2030	2a	1	261345.6	1206659	1206659	0	7870174	7870174	0	ICE	261345.6	0	3	1
2030	2a	1	2670.568	12330.28	12330.28	0	80625.59	80625.59	0	ICE	2670.568	0	3	2
2030	2a	1	6263.154	28917.61	0	28917.61	169559.3	0	169559.3	BEV	0	6263.154	3	3
2030	2a	1	165.3032	763.2213	0	763.2213	3540.607	0	3540.607	FCEV	0	165.3032	3	7
2030	2a	1	4520.001	20869.29	12283.07	8586.224	136460.7	80316.89	56143.84	PHEV	2660.343	1859.657	3	8
2030	2a	1	259862.5	1214699	1214699	0	8111013	8111013	0	ICE	259862.5	0	3	1
2030	2a	1	2695.558	12600.09	12600.09	0	84465.57	84465.57	0	ICE	2695.558	0	3	2
2030	2a	1	17748.19	82961.95	0	82961.95	482901.1	0	482901.1	BEV	0	17748.19	3	3
2030	2a	1	608.3894	2843.85	0	2843.85	13559.67	0	13559.67	FCEV	0	608.3894	3	7
2030	2a	1	12063.27	56388.44	32689.19	23699.26	416127	241234.8	174892.3	PHEV	6993.252	5070.021	3	8
2030	2a	1	250807	1186739	1186739	0	8121700	8121700	0	ICE	250807	0	3	1
2030	2a	1	2613.867	12367.98	12367.98	0	85025.58	85025.58	0	ICE	2613.867	0	3	2
2030	2a	1	30391.28	143801.8	0	143801.8	855585	0	855585	BEV	0	30391.28	3	3
2030	2a	1	1285.158	6080.958	0	6080.958	29787.61	0	29787.61	FCEV	0	1285.158	3	7
2030	2a	1	19437.25	91970.86	52502.22	39468.64	721461.9	411851.7	309610.2	PHEV	11095.89	8341.358	3	8
2030	2a	1	239009.2	1144608	1144608	0	8030303	8030303	0	ICE	239009.2	0	3	1
2030	2a	1	2504.372	11993.36	11993.36	0	84568.2	84568.2	0	ICE	2504.372	0	3	2
2030	2a	1	44138.06	211375.9	0	211375.9	1296793	0	1296793	BEV	0	44138.06	3	3
2030	2a	1	2225.449	10657.61	0	10657.61	53941.4	0	53941.4	FCEV	0	2225.449	3	7
2030	2a	1	26534.01	127070.6	71413.65	55656.9	1038887	583854.6	455032.6	PHEV	14912.11	11621.89	3	8
2030	2a	1	224107.6	1086084	1086084	0	7813527	7813527	0	ICE	224107.6	0	3	1
2030	2a	1	2360.019	11437.27	11437.27	0	82742.19	82742.19	0	ICE	2360.019	0	3	2
2030	2a	1	58630.63	284139.3	0	284139.3	1796861	0	1796861	BEV	0	58630.63	3	3
2030	2a	1	3440.515	16673.63	0	16673.63	91397.68	0	91397.68	FCEV	0	3440.515	3	7

2030	2a	1	33087.11	160348.7	88695.77	71652.98	1358447	751415.2	607031.7	PHEV	18301.9	14785.21	3	8
2030	2a	1	209792.2	1028727	1028727	0	7593052	7593052	0	ICE	209792.2	0	3	1
2030	2a	1	2219.525	10883.55	10883.55	0	80824.44	80824.44	0	ICE	2219.525	0	3	2
2030	2a	1	74681.21	366203.1	0	366203.1	2388961	0	2388961	BEV	0	74681.21	3	3
2030	2a	1	5009.106	24562.4	0	24562.4	143067.2	0	143067.2	FCEV	0	5009.106	3	7
2030	2a	1	39503.39	193706.9	105431.9	88274.99	1698375	924401.5	773973.9	PHEV	21501.13	18002.26	3	8
2030	2a	1	193584.5	960341.9	960341.9	0	7269744	7269744	0	ICE	193584.5	0	3	1
2030	2a	1	2048.054	10160.07	10160.07	0	77382.87	77382.87	0	ICE	2048.054	0	3	2
2030	2a	1	91652.22	454672	0	454672	3060831	0	3060831	BEV	0	91652.22	3	3
2030	2a	1	6928.84	34372.87	0	34372.87	213104.4	0	213104.4	FCEV	0	6928.84	3	7
2030	2a	1	45361.78	225032.5	120488.8	104543.7	2042736	1093739	948996.9	PHEV	24287.99	21073.79	3	8
2030	2a	1	175240.4	879378.9	879378.9	0	6826459	6826459	0	ICE	175240.4	0	3	1
2030	2a	1	1853.979	9303.506	9303.506	0	72664.63	72664.63	0	ICE	1853.979	0	3	2
2030	2a	1	109108.9	547522.5	0	547522.5	3802611	0	3802611	BEV	0	109108.9	3	3
2030	2a	1	9193.808	46135.72	0	46135.72	301009.3	0	301009.3	FCEV	0	9193.808	3	7
2030	2a	1	50424.69	253037.7	133242.4	119795.3	2375242	1250735	1124507	PHEV	26552.2	23872.49	3	8
2030	2a	1	158495.2	804429.7	804429.7	0	6403931	6403931	0	ICE	158495.2	0	3	1
2030	2a	1	1676.821	8510.572	8510.572	0	68167.66	68167.66	0	ICE	1676.821	0	3	2
2030	2a	1	129488.7	657209.6	0	657209.6	4708527	0	4708527	BEV	0	129488.7	3	3
2030	2a	1	12051.1	61164.41	0	61164.41	417274.4	0	417274.4	FCEV	0	12051.1	3	7
2030	2a	1	55747.11	282940	146482.1	136457.9	2744737	1420990	1323748	PHEV	28861.08	26886.04	3	8
2030	2a	1	140498.2	721136.5	721136.5	0	5885726	5885726	0	ICE	140498.2	0	3	1
2030	2a	1	1486.419	7629.36	7629.36	0	62652.32	62652.32	0	ICE	1486.419	0	3	2
2030	2a	1	151599.3	778115.1	0	778115.1	5749056	0	5749056	BEV	0	151599.3	3	3
2030	2a	1	15465.42	79379.5	0	79379.5	563898.3	0	563898.3	FCEV	0	15465.42	3	7
2030	2a	1	60632.09	311207	158359.9	152847.1	3117490	1586357	1531133	PHEV	30853.07	29779.02	3	8
2030	2a	1	106995.7	555307.8	555307.8	0	4642876	4642876	0	ICE	106995.7	0	3	1
2030	2a	1	1131.976	5874.953	5874.953	0	49422.88	49422.88	0	ICE	1131.976	0	3	2
2030	2a	1	155052.4	804721.8	0	804721.8	6127313	0	6127313	BEV	0	155052.4	3	3
2030	2a	1	17228.04	89413.53	0	89413.53	659303.1	0	659303.1	FCEV	0	17228.04	3	7
2030	2a	1	57426.8	298045.1	149022.6	149022.6	3078597	1539298	1539298	PHEV	28713.4	28713.4	3	8
2030	2a	1	3670.899	10639.73	10639.73	0	38329.92	38329.92	0	ICE	3670.899	0	4	1
2030	2a	1	3081.36	9107.545	9107.545	0	33504.88	33504.88	0	ICE	3081.36	0	4	1
2030	2a	1	3851.666	11604.99	11604.99	0	43154.26	43154.26	0	ICE	3851.666	0	4	1
2030	2a	1	4172.073	12809.39	12809.39	0	49170.66	49170.66	0	ICE	4172.073	0	4	1
2030	2a	1	6625.631	20722.06	20722.06	0	80878.98	80878.98	0	ICE	6625.631	0	4	1
2030	2a	1	7441.587	23700.34	23700.34	0	94666.38	94666.38	0	ICE	7441.587	0	4	1
2030	2a	1	6945.819	22519.32	22519.32	0	91401.26	91401.26	0	ICE	6945.819	0	4	1
2030	2a	1	9555.05	31526.22	31526.22	0	131243.1	131243.1	0	ICE	9555.05	0	4	1
2030	2a	1	11338.33	38059.58	38059.58	0	161213.1	161213.1	0	ICE	11338.33	0	4	1
2030	2a	1	19732.77	67367.89	67367.89	0	291322.7	291322.7	0	ICE	19732.77	0	4	1
2030	2a	1	24066.6	83542.38	83542.38	0	367130	367130	0	ICE	24066.6	0	4	1
2030	2a	1	33184.39	117094.1	117094.1	0	522990.7	522990.7	0	ICE	33184.39	0	4	1
2030	2a	1	34.95031	123.3253	123.3253	0	511.5255	511.5255	0	ICE	34.95031	0	4	2
2030	2a	1	42121.05	151041	151041	0	686336.8	686336.8	0	ICE	42121.05	0	4	1
2030	2a	1	48268.47	175850.2	175850.2	0	816682.7	816682.7	0	ICE	48268.47	0	4	1
2030	2a	1	55400.04	205005.6	205005.6	0	965184	965184	0	ICE	55400.04	0	4	1

2030	2a	1	80.9225	299.4505	299.4505	0	1324.464	1324.464	0	ICE	80.9225	0	4	2
2030	2a	1	56131.47	210928	210928	0	1000186	1000186	0	ICE	56131.47	0	4	1
2030	2a	1	59305.2	226251.7	226251.7	0	1088465	1088465	0	ICE	59305.2	0	4	1
2030	2a	1	63980.27	247752.7	247752.7	0	1208326	1208326	0	ICE	63980.27	0	4	1
2030	2a	1	51096.98	200791.7	200791.7	0	994429.1	994429.1	0	ICE	51096.98	0	4	1
2030	2a	1	22876.89	91208.11	91208.11	0	458293.8	458293.8	0	ICE	22876.89	0	4	1
2030	2a	1	34513.37	139579	139579	0	714469.8	714469.8	0	ICE	34513.37	0	4	1
2030	2a	1	52519.73	215409.1	215409.1	0	1123763	1123763	0	ICE	52519.73	0	4	1
2030	2a	1	1485.428	6092.467	6092.467	0	31277.96	31277.96	0	ICE	1485.428	0	4	2
2030	2a	1	55282.84	229909.2	229909.2	0	1226290	1226290	0	ICE	55282.84	0	4	1
2030	2a	1	65613.3	276630.3	276630.3	0	1509523	1509523	0	ICE	65613.3	0	4	1
2030	2a	1	1410.728	5947.726	5947.726	0	32003.45	32003.45	0	ICE	1410.728	0	4	2
2030	2a	1	107004.5	457268.9	457268.9	0	2557199	2557199	0	ICE	107004.5	0	4	1
2030	2a	1	3339.586	14271.25	14271.25	0	79197.67	79197.67	0	ICE	3339.586	0	4	2
2030	2a	1	121764.7	527320.2	527320.2	0	3026542	3026542	0	ICE	121764.7	0	4	1
2030	2a	1	136343.2	598265.8	598265.8	0	3512882	3512882	0	ICE	136343.2	0	4	1
2030	2a	1	128666.1	571950.6	571950.6	0	3416215	3416215	0	ICE	128666.1	0	4	1
2030	2a	1	4486.609	19944.01	19944.01	0	119200.4	119200.4	0	ICE	4486.609	0	4	2
2030	2a	1	1076.458	4785.102	2871.061	1914.041	27264.08	16358.45	10905.63	PHEV	645.8746	430.5831	4	8
2030	2a	1	138921.2	625495.3	625495.3	0	3828002	3828002	0	ICE	138921.2	0	4	1
2030	2a	1	4844.204	21811.12	21811.12	0	133567.7	133567.7	0	ICE	4844.204	0	4	2
2030	2a	1	2.430145	10.94177	0	10.94177	47.97416	0	47.97416	BEV	0	2.430145	4	3
2030	2a	1	0.049595	0.223302	0	0.223302	0.979065	0	0.979065	FCEV	0	0.049595	4	7
2030	2a	1	2973.828	13389.72	8033.831	5355.887	80487.27	48292.36	32194.91	PHEV	1784.297	1189.531	4	8
2030	2a	1	149719	682690.1	682690.1	0	4279739	4279739	0	ICE	149719	0	4	1
2030	2a	1	5270.011	24030.25	24030.25	0	150863.9	150863.9	0	ICE	5270.011	0	4	2
2030	2a	1	1283.46	5852.335	0	5852.335	27472.21	0	27472.21	BEV	0	1283.46	4	3
2030	2a	1	30.02246	136.8967	0	136.8967	617.4444	0	617.4444	FCEV	0	30.02246	4	7
2030	2a	1	3339.299	15226.57	9048.934	6177.637	99127.11	58909.83	40217.28	PHEV	1984.498	1354.802	4	8
2030	2a	1	158818.1	733278.8	733278.8	0	4707282	4707282	0	ICE	158818.1	0	4	1
2030	2a	1	5677.967	26215.74	26215.74	0	168774.2	168774.2	0	ICE	5677.967	0	4	2
2030	2a	1	2738.62	12644.48	0	12644.48	65938.17	0	65938.17	BEV	0	2738.62	4	3
2030	2a	1	72.28029	333.7253	0	333.7253	1547.803	0	1547.803	FCEV	0	72.28029	4	7
2030	2a	1	3688.225	17028.9	10022.73	7006.177	111672.6	65727.29	45945.29	PHEV	2170.784	1517.441	4	8
2030	2a	1	158915.1	742831.2	742831.2	0	4884328	4884328	0	ICE	158915.1	0	4	1
2030	2a	1	5781.818	27026.47	27026.47	0	178495.4	178495.4	0	ICE	5781.818	0	4	2
2030	2a	1	8409.941	39311.34	0	39311.34	210444.5	0	210444.5	BEV	0	8409.941	4	3
2030	2a	1	288.284	1347.552	0	1347.552	6423.908	0	6423.908	FCEV	0	288.284	4	7
2030	2a	1	10037.7	46920.1	27200.25	19719.85	334237.1	193762	140475.1	PHEV	5818.995	4218.7	4	8
2030	2a	1	153660	727070.1	727070.1	0	4902480	4902480	0	ICE	153660	0	4	1
2030	2a	1	5621.289	26598.14	26598.14	0	180264.6	180264.6	0	ICE	5621.289	0	4	2
2030	2a	1	15116.84	71528.06	0	71528.06	398545.7	0	398545.7	BEV	0	15116.84	4	3
2030	2a	1	639.2471	3024.712	0	3024.712	14814.16	0	14814.16	FCEV	0	639.2471	4	7
2030	2a	1	16009.99	75754.17	43244.81	32509.36	567653.2	324048.9	243604.3	PHEV	9139.42	6870.575	4	8
2030	2a	1	148194.4	709698.5	709698.5	0	4907298	4907298	0	ICE	148194.4	0	4	1
2030	2a	1	5455.467	26126.07	26126.07	0	181688.3	181688.3	0	ICE	5455.467	0	4	2
2030	2a	1	23111.72	110681.4	0	110681.4	641995.5	0	641995.5	BEV	0	23111.72	4	3

2030	2a	1	1165.297	5580.572	0	5580.572	28067.98	0	28067.98	FCEV	0	1165.297	4	7
2030	2a	1	21723.7	104034.1	58467.19	45566.95	812733.4	456756.2	355977.2	PHEV	12208.72	9514.98	4	8
2030	2a	1	140511.9	680957.4	680957.4	0	4828989	4828989	0	ICE	140511.9	0	4	1
2030	2a	1	5202.874	25214.48	25214.48	0	179942.2	179942.2	0	ICE	5202.874	0	4	2
2030	2a	1	32152.17	155817.8	0	155817.8	940057.4	0	940057.4	BEV	0	32152.17	4	3
2030	2a	1	1886.728	9143.573	0	9143.573	47251.32	0	47251.32	FCEV	0	1886.728	4	7
2030	2a	1	26798.89	129874.4	71839.08	58035.29	1054869	583493.1	471375.7	PHEV	14823.61	11975.27	4	8
2030	2a	1	133058.5	652458.9	652458.9	0	4746616	4746616	0	ICE	133058.5	0	4	1
2030	2a	1	4953.487	24289.67	24289.67	0	177937	177937	0	ICE	4953.487	0	4	2
2030	2a	1	42767.33	209711.8	0	209711.8	1313851	0	1313851	BEV	0	42767.33	4	3
2030	2a	1	2868.541	14066.03	0	14066.03	77902.75	0	77902.75	FCEV	0	2868.541	4	7
2030	2a	1	31549.25	154703.3	84202.81	70500.52	1303888	709687.8	594200.5	PHEV	17171.81	14377.44	4	8
2030	2a	1	122710.3	608746	608746	0	4541611	4541611	0	ICE	122710.3	0	4	1
2030	2a	1	4568.244	22662.33	22662.33	0	170251.4	170251.4	0	ICE	4568.244	0	4	2
2030	2a	1	54002.1	267895.8	0	267895.8	1743506	0	1743506	BEV	0	54002.1	4	3
2030	2a	1	4082.519	20252.72	0	20252.72	120466	0	120466	FCEV	0	4082.519	4	7
2030	2a	1	35148.86	174367.9	93361.54	81006.33	1525395	816739.8	708654.7	PHEV	18819.7	16329.16	4	8
2030	2a	1	111671.9	560384.2	560384.2	0	4286445	4286445	0	ICE	111671.9	0	4	1
2030	2a	1	4157.31	20861.92	20861.92	0	160685.9	160685.9	0	ICE	4157.31	0	4	2
2030	2a	1	66383.91	333123.1	0	333123.1	2250422	0	2250422	BEV	0	66383.91	4	3
2030	2a	1	5593.687	28069.85	0	28069.85	177086.5	0	177086.5	FCEV	0	5593.687	4	7
2030	2a	1	37953.6	190456.1	100288.7	90167.36	1727195	909491.7	817703.6	PHEV	19985.28	17968.32	4	8
2030	2a	1	101061.3	512928.4	512928.4	0	4020381	4020381	0	ICE	101061.3	0	4	1
2030	2a	1	3762.298	19095.24	19095.24	0	150711.3	150711.3	0	ICE	3762.298	0	4	2
2030	2a	1	80813.13	410160.6	0	410160.6	2874072	0	2874072	BEV	0	80813.13	4	3
2030	2a	1	7521.022	38172.35	0	38172.35	253524.9	0	253524.9	FCEV	0	7521.022	4	7
2030	2a	1	40338.88	204736.8	105995.2	98741.62	1921821	994954.2	926866.8	PHEV	20884.02	19454.87	4	8
2030	2a	1	88798.33	455776.1	455776.1	0	3659891	3659891	0	ICE	88798.33	0	4	1
2030	2a	1	3305.775	16967.58	16967.58	0	137197.8	137197.8	0	ICE	3305.775	0	4	2
2030	2a	1	95974.14	492607.4	0	492607.4	3578790	0	3578790	BEV	0	95974.14	4	3
2030	2a	1	9790.813	50253.4	0	50253.4	349730.3	0	349730.3	FCEV	0	9790.813	4	7
2030	2a	1	41488.63	212949.1	108360.7	104588.4	2067090	1051853	1015236	PHEV	21111.79	20376.85	4	8
2030	2a	1	64757.43	336091	336091	0	2757604	2757604	0	ICE	64757.43	0	4	1
2030	2a	1	2410.782	12511.96	12511.96	0	103370.1	103370.1	0	ICE	2410.782	0	4	2
2030	2a	1	96050.96	498504.5	0	498504.5	3747089	0	3747089	BEV	0	96050.96	4	3
2030	2a	1	10672.33	55389.39	0	55389.39	402052.6	0	402052.6	FCEV	0	10672.33	4	7
2030	2a	1	35574.43	184631.3	92315.65	92315.65	1844389	922194.4	922194.4	PHEV	17787.22	17787.22	4	8
2030	2a	1	10357	28238.67	28238.67	0	51200.06	51200.06	0	ICE	10357	0	1	1
2030	2a	1	63.7195	188.3351	188.3351	0	410.5359	410.5359	0	ICE	63.7195	0	1	2
2030	2a	1	33.14391	99.86193	99.86193	0	213.8133	213.8133	0	ICE	33.14391	0	1	2
2030	2a	1	17.6888	54.30939	54.30939	0	124.9995	124.9995	0	ICE	17.6888	0	1	2
2030	2a	1	41.39988	136.596	136.596	0	393.4525	393.4525	0	ICE	41.39988	0	1	2
2030	2a	1	64.91275	225.3316	225.3316	0	763.789	763.789	0	ICE	64.91275	0	1	2
2030	2a	1	10.69397	37.73465	0	37.73465	140.6339	0	140.6339	BEV	0	10.69397	1	3
2030	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2030	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2030	2a	1	175.664	629.9099	629.9099	0	2275.916	2275.916	0	ICE	175.664	0	1	2

2030	2a	1	255.9303	932.3977	932.3977	0	3521.932	3521.932	0	ICE	255.9303	0	1	2
2030	2a	1	99.20523	367.105	367.105	0	1468.178	1468.178	0	ICE	99.20523	0	1	2
2030	2a	1	203.8041	765.8447	765.8447	0	3109.923	3109.923	0	ICE	203.8041	0	1	2
2030	2a	1	814.1359	3245.886	3245.886	0	15193.01	15193.01	0	ICE	814.1359	0	1	2
2030	2a	1	2916.656	12129.73	12129.73	0	62536.7	62536.7	0	ICE	2916.656	0	1	2
2030	2a	1	4521.603	19063.4	19063.4	0	102153	102153	0	ICE	4521.603	0	1	2
2030	2a	1	4178.217	17615.66	0	17615.66	94486.16	0	94486.16	BEV	0	4178.217	1	3
2030	2a	1	0.245474	1.034937	0	1.034937	5.551152	0	5.551152	FCEV	0	0.245474	1	7
2030	2a	1	4367.232	18412.56	11047.53	7365.023	95140.86	57084.52	38056.35	PHEV	2620.339	1746.893	1	8
2030	2a	1	5588.378	23881.15	0	23881.15	132259	0	132259	BEV	0	5588.378	1	3
2030	2a	1	0.783015	3.346105	0	3.346105	18.53145	0	18.53145	FCEV	0	0.783015	1	7
2030	2a	1	7055.749	30151.75	18091.05	12060.7	160931.2	96558.73	64372.48	PHEV	4233.449	2822.299	1	8
2030	2a	1	5428.127	23507.32	23507.32	0	135185.5	135185.5	0	ICE	5428.127	0	1	2
2030	2a	1	13929.78	60325.01	0	60325.01	345803.2	0	345803.2	BEV	0	13929.78	1	3
2030	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2030	2a	1	6623.985	28686.16	17211.7	11474.46	158465.2	95079.09	63386.06	PHEV	3974.391	2649.594	1	8
2030	2a	1	9469.302	35040.77	35040.77	0	171628.8	171628.8	0	ICE	9469.302	0	2	1
2030	2a	1	20094.62	83569.1	83569.1	0	457677.6	457677.6	0	ICE	20094.62	0	2	1
2030	2a	1	29847.62	125839.7	125839.7	0	705130.7	705130.7	0	ICE	29847.62	0	2	1
2030	2a	1	37378.32	159731	159731	0	911762.1	911762.1	0	ICE	37378.32	0	2	1
2030	2a	1	14.1789	55.71768	55.71768	0	284.7714	284.7714	0	ICE	14.1789	0	3	2
2030	2a	1	596.9322	2482.51	2482.51	0	13365.85	13365.85	0	ICE	596.9322	0	3	2
2030	2a	1	475.8684	2006.294	2006.294	0	10990.63	10990.63	0	ICE	475.8684	0	3	2
2030	2a	1	2199.243	9524.153	9524.153	0	54788.22	54788.22	0	ICE	2199.243	0	3	2
2030	2a	1	2446.578	10735.44	0	10735.44	43642.39	0	43642.39	BEV	0	2446.578	3	3
2030	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2030	2a	1	222.6566	977.0036	586.2022	390.8014	5564.573	3338.744	2225.829	PHEV	133.5939	89.06262	3	8
2030	2a	1	2585.557	6901.473	6901.473	0	24186.09	24186.09	0	ICE	2585.557	0	4	1
2030	2a	1	2477.787	6755.759	6755.759	0	23673.54	23673.54	0	ICE	2477.787	0	4	1
2030	2a	1	2916.078	8117.836	8117.836	0	29231.7	29231.7	0	ICE	2916.078	0	4	1
2030	2a	1	9.112984	25.36891	25.36891	0	87.98527	87.98527	0	ICE	9.112984	0	4	2
2030	2a	1	3516.685	9991.288	9991.288	0	36028.33	36028.33	0	ICE	3516.685	0	4	1
2030	2a	1	26.22539	82.02148	82.02148	0	300.7267	300.7267	0	ICE	26.22539	0	4	2
2030	2a	1	19.41731	66.29087	66.29087	0	253.6177	253.6177	0	ICE	19.41731	0	4	2
2030	2a	1	147.4003	553.8933	553.8933	0	2549.213	2549.213	0	ICE	147.4003	0	4	2
2030	2a	1	218.9253	835.2089	835.2089	0	3904.415	3904.415	0	ICE	218.9253	0	4	2
2030	2a	1	318.2302	1232.292	1232.292	0	5963.342	5963.342	0	ICE	318.2302	0	4	2
2030	2a	1	243.7339	957.7815	957.7815	0	4721.629	4721.629	0	ICE	243.7339	0	4	2
2030	2a	1	355.8619	1418.789	1418.789	0	7010.321	7010.321	0	ICE	355.8619	0	4	2
2030	2a	1	2661.963	11070.52	11070.52	0	58749.27	58749.27	0	ICE	2661.963	0	4	2
2030	2a	1	6740.572	29191.06	29191.06	0	167603.9	167603.9	0	ICE	6740.572	0	4	2
2030	2a	1	4436.757	19468.22	19468.22	0	115439.7	115439.7	0	ICE	4436.757	0	4	2
2030	2a	1	51.6101	149.5867	149.5867	0	275.0041	275.0041	0	ICE	51.6101	0	1	2
2030	2a	1	78.53581	268.122	268.122	0	852.3362	852.3362	0	ICE	78.53581	0	1	2
2030	2a	1	7.27187	27.32587	0	27.32587	114.9317	0	114.9317	BEV	0	7.27187	1	3
2030	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2030	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8

2030	2a	1	807.914	3359.937	0	3359.937	17487.26	0	17487.26	BEV	0	807.914	1	3
2030	2a	1	3.053213	12.69764	0	12.69764	66.08662	0	66.08662	FCEV	0	3.053213	1	7
2030	2a	1	1698.265	7062.709	4237.626	2825.084	35412.92	21247.75	14165.17	PHEV	1018.959	679.3059	1	8
2030	2a	1	9693.832	42535.95	0	42535.95	251562.1	0	251562.1	BEV	0	9693.832	1	3
2030	2a	1	295.136	1295.039	0	1295.039	7658.998	0	7658.998	FCEV	0	295.136	1	7
2030	2a	1	6971.161	30589.04	18353.42	12235.61	175106.1	105063.6	70042.43	PHEV	4182.697	2788.464	1	8
2030	2a	1	4.418691	13.81972	13.81972	0	49.95847	49.95847	0	ICE	4.418691	0	2	2
2030	2a	1	2.677074	8.52608	8.52608	0	31.1941	31.1941	0	ICE	2.677074	0	2	2
2030	2a	1	5.173354	17.3655	17.3655	0	73.83776	73.83776	0	ICE	5.173354	0	2	2
2030	2a	1	13.97855	37.3121	37.3121	0	156.6507	156.6507	0	ICE	13.97855	0	3	2
2030	2a	1	45.23438	169.9795	169.9795	0	815.8696	815.8696	0	ICE	45.23438	0	3	2
2030	2a	1	50.68854	193.3788	193.3788	0	962.0947	962.0947	0	ICE	50.68854	0	3	2
2030	2a	1	15.1637	50.90029	50.90029	0	187.6298	187.6298	0	ICE	15.1637	0	4	2
2030	2a	1	46.0239	167.6729	167.6729	0	745.3949	745.3949	0	ICE	46.0239	0	4	2
2030	2a	1	655.2361	2649.906	2649.906	0	13308.86	13308.86	0	ICE	655.2361	0	4	2
2030	2a	1	218.0181	581.9427	581.9427	0	959.4986	959.4986	0	ICE	218.0181	0	1	2
2030	2a	1	495.0766	1349.841	1349.841	0	2394.144	2394.144	0	ICE	495.0766	0	1	2
2030	2a	1	65.32607	208.0537	208.0537	0	543.9502	543.9502	0	ICE	65.32607	0	1	2
2030	2a	1	48.70538	157.9097	157.9097	0	434.6313	434.6313	0	ICE	48.70538	0	1	2
2030	2a	1	76.86562	258.0164	258.0164	0	797.2923	797.2923	0	ICE	76.86562	0	1	2
2030	2a	1	21.7266	77.90896	0	77.90896	299.8511	0	299.8511	BEV	0	21.7266	1	3
2030	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2030	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2030	2a	1	912.3636	3742.05	0	3742.05	18916.95	0	18916.95	BEV	0	912.3636	1	3
2030	2a	1	9.014006	36.97086	0	36.97086	186.8965	0	186.8965	FCEV	0	9.014006	1	7
2030	2a	1	253.6103	1040.18	624.108	416.072	5032.797	3019.678	2013.119	PHEV	152.1662	101.4441	1	8
2030	2a	1	803.202	3524.402	3524.402	0	20602.9	20602.9	0	ICE	803.202	0	1	2
2030	2a	1	18.17721	48.51934	48.51934	0	182.7325	182.7325	0	ICE	18.17721	0	2	2
2030	2a	1	385.0815	1645.592	0	1645.592	9093.639	0	9093.639	BEV	0	385.0815	2	3
2030	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2030	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2030	2a	1	1.004318	2.968453	2.968453	0	12.68192	12.68192	0	ICE	1.004318	0	3	2
2030	2a	1	69.56622	185.6889	185.6889	0	638.2213	638.2213	0	ICE	69.56622	0	4	2
2030	2a	1	19.19912	58.94648	58.94648	0	198.8598	198.8598	0	ICE	19.19912	0	4	2
2030	2a	1	31.23305	99.47259	99.47259	0	361.6814	361.6814	0	ICE	31.23305	0	4	2
2030	2a	1	30.10962	97.61961	97.61961	0	354.553	354.553	0	ICE	30.10962	0	4	2
2030	2a	1	24.24513	68.88309	68.88309	0	159.4058	159.4058	0	ICE	24.24513	0	1	2
2030	2a	1	60.67886	238.4448	238.4448	0	1055.915	1055.915	0	ICE	60.67886	0	1	2
2030	2a	1	8.088647	29.46832	29.46832	0	129.7189	129.7189	0	ICE	8.088647	0	2	2
2030	2a	1	0.454591	1.551977	1.551977	0	6.014665	6.014665	0	ICE	0.454591	0	3	2
2030	2a	1	30.92123	125.0516	125.0516	0	653.3992	653.3992	0	ICE	30.92123	0	3	2
2030	2a	1	113.3008	484.1752	0	484.1752	1862.278	0	1862.278	BEV	0	113.3008	3	3
2030	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2030	2a	1	51.29907	219.2194	131.5316	87.68775	1193.911	716.3468	477.5645	PHEV	30.77944	20.51963	3	8
2030	2a	1	11.43784	33.8067	33.8067	0	116.2522	116.2522	0	ICE	11.43784	0	4	2
2030	2a	1	35.94286	118.591	118.591	0	449.4378	449.4378	0	ICE	35.94286	0	4	2
2030	2a	1	16.67164	59.7825	59.7825	0	263.1558	263.1558	0	ICE	16.67164	0	4	2

2030	2a	1	76.30152	312.9499	312.9499	0	1661.633	1661.633	0	ICE	76.30152	0	3	2
2030	2a	1	9.44822	26.84343	26.84343	0	89.9371	89.9371	0	ICE	9.44822	0	4	2
2030	2a	1	6.602057	22.91772	22.91772	0	96.43522	96.43522	0	ICE	6.602057	0	4	2
2030	2a	1	8.613505	30.88699	0	30.88699	80.81574	0	80.81574	BEV	0	8.613505	3	3
2030	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2030	2a	1	0	0	0	0	0	0	0	PHEV	0	0	3	8
2030	2a	1	39.18579	140.5156	0	140.5156	373.4313	0	373.4313	BEV	0	39.18579	4	3
2030	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2030	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2030	2a	1	28.56713	79.52576	79.52576	0	156.7088	156.7088	0	ICE	28.56713	0	1	2
2030	2a	1	10.95637	34.26671	34.26671	0	87.75571	87.75571	0	ICE	10.95637	0	1	2
2030	2a	1	35.4952	137.4491	137.4491	0	585.1749	585.1749	0	ICE	35.4952	0	1	2
2030	2a	1	133.5604	540.1452	0	540.1452	2662.782	0	2662.782	BEV	0	133.5604	1	3
2030	2a	1	13.55944	54.83707	0	54.83707	270.3332	0	270.3332	FCEV	0	13.55944	1	7
2030	2a	1	14.23741	57.57893	34.54736	23.03157	269.1749	161.5049	107.6699	PHEV	8.542445	5.694963	1	8
2030	2a	1	12.52233	34.14252	34.14252	0	122.4133	122.4133	0	ICE	12.52233	0	2	2
2030	2a	1	5.088479	15.33149	15.33149	0	49.77131	49.77131	0	ICE	5.088479	0	2	2
2030	2a	1	154.6307	643.0753	0	643.0753	3321.89	0	3321.89	BEV	0	154.6307	2	3
2030	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2030	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2030	2a	1	5.006095	13.64927	13.64927	0	57.4976	57.4976	0	ICE	5.006095	0	3	2
2030	2a	1	24.33	97.00151	97.00151	0	484.8827	484.8827	0	ICE	24.33	0	3	2
2030	2a	1	18.40403	55.45097	55.45097	0	198.494	198.494	0	ICE	18.40403	0	4	2
2030	2a	1	9.975369	38.05643	0	38.05643	165.6536	0	165.6536	BEV	0	9.975369	1	3
2030	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2030	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2030	2a	1	68.87729	270.6616	0	270.6616	1228.002	0	1228.002	BEV	0	68.87729	1	3
2030	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2030	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2030	2a	1	63.84045	254.5261	0	254.5261	1232.418	0	1232.418	BEV	0	63.84045	1	3
2030	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2030	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2030	2a	1	5.822669	16.54284	16.54284	0	53.52901	53.52901	0	ICE	5.822669	0	2	2
2030	2a	1	5.698603	18.47567	18.47567	0	81.39442	81.39442	0	ICE	5.698603	0	2	2
2030	2a	1	14.72078	58.69044	58.69044	0	290.4106	290.4106	0	ICE	14.72078	0	2	2
2030	2a	1	195.4211	823.9089	0	823.9089	4398.199	0	4398.199	BEV	0	195.4211	2	3
2030	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2030	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2030	2a	1	7.311831	28.31382	28.31382	0	142.6077	142.6077	0	ICE	7.311831	0	3	2
2030	2a	1	16.7067	45.55131	45.55131	0	173.0473	173.0473	0	ICE	16.7067	0	4	2
2030	2a	1	9.078486	26.31309	26.31309	0	98.70945	98.70945	0	ICE	9.078486	0	4	2
2030	2a	1	5.705575	20.78638	0	20.78638	82.13492	0	82.13492	BEV	0	5.705575	1	3
2030	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2030	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2030	2a	1	19.8209	76.75305	0	76.75305	344.4032	0	344.4032	BEV	0	19.8209	1	3
2030	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2030	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8

2030	2a	1	21.08412	82.85257	0	82.85257	381.8389	0	381.8389	BEV	0	21.08412	2	3
2030	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2030	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2030	2a	1	3.45048	14.34979	14.34979	0	80.33651	80.33651	0	ICE	3.45048	0	2	2
2030	2a	1	0.784399	2.992515	0	2.992515	9.846451	0	9.846451	BEV	0	0.784399	4	3
2030	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2030	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2030	2a	1	4.77257	16.84044	16.84044	0	68.08881	68.08881	0	ICE	4.77257	0	2	2
2030	2a	1	3.643731	10.35224	10.35224	0	42.21783	42.21783	0	ICE	3.643731	0	3	2
2030	2a	1	0.684123	2.492378	2.492378	0	13.27967	13.27967	0	ICE	0.684123	0	3	2
2030	2a	1	2.177714	6.68617	0	6.68617	19.00123	0	19.00123	BEV	0	2.177714	1	3
2030	2a	1	4.697097	13.07587	13.07587	0	56.93187	56.93187	0	ICE	4.697097	0	3	2
2030	2a	1	0.978784	2.949055	2.949055	0	11.9556	11.9556	0	ICE	0.978784	0	3	2
2030	2a	1	13.17013	52.50811	0	52.50811	181.2328	0	181.2328	BEV	0	13.17013	3	3
2030	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2030	2a	1	0	0	0	0	0	0	0	PHEV	0	0	3	8
2030	2a	1	8.340215	34.20731	0	34.20731	122.9453	0	122.9453	BEV	0	8.340215	3	3
2030	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2030	2a	1	5.773995	23.68198	14.20919	9.472793	123.8424	74.30544	49.53696	PHEV	3.464397	2.309598	3	8
2030	2a	1	1.24546	5.393651	0	5.393651	21.05996	0	21.05996	BEV	0	1.24546	4	3
2030	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2030	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2030	2a	1	1.874411	5.647562	0	5.647562	15.76779	0	15.76779	BEV	0	1.874411	1	3
2030	2a	1	6.67836	18.59135	18.59135	0	60.9862	60.9862	0	ICE	6.67836	0	2	2
2030	2a	1	28.25082	98.06708	0	98.06708	346.6351	0	346.6351	BEV	0	28.25082	2	3
2030	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2030	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2030	2a	1	10.69675	37.74444	0	37.74444	140.2092	0	140.2092	BEV	0	10.69675	2	3
2030	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2030	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2030	2a	1	8.947189	32.08354	32.08354	0	152.4717	152.4717	0	ICE	8.947189	0	2	2
2030	2a	1	4.663512	17.79149	0	17.79149	76.88434	0	76.88434	BEV	0	4.663512	2	3
2030	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2030	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2030	2a	1	8.885022	34.40574	34.40574	0	164.4811	164.4811	0	ICE	8.885022	0	2	2
2030	2a	1	2.63883	10.21842	0	10.21842	45.76043	0	45.76043	BEV	0	2.63883	2	3
2030	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2030	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2030	2a	1	10.7931	42.4128	42.4128	0	217.6086	217.6086	0	ICE	10.7931	0	2	2
2030	2a	1	9.200005	36.67959	0	36.67959	176.4723	0	176.4723	BEV	0	9.200005	2	3
2030	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2030	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2030	2a	1	7.389833	29.03924	0	29.03924	96.80742	0	96.80742	BEV	0	7.389833	3	3
2030	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2030	2a	1	0	0	0	0	0	0	0	PHEV	0	0	3	8
2030	2a	1	7.590759	32.00317	0	32.00317	120.594	0	120.594	BEV	0	7.590759	3	3
2030	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7

2030	2a	1	5.804698	24.47301	14.68381	9.789205	130.5447	78.3268	52.21786	PHEV	3.482819	2.321879	3	8
2030	2a	1	1.776638	6.167242	0	6.167242	15.89162	0	15.89162	BEV	0	1.776638	4	3
2030	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2030	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2030	2a	1	5.468146	19.92138	0	19.92138	54.71923	0	54.71923	BEV	0	5.468146	4	3
2030	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2030	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2030	2a	1	0.979608	3.681121	0	3.681121	10.98614	0	10.98614	BEV	0	0.979608	4	3
2030	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2030	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2030	2a	1	7.173734	22.0253	22.0253	0	75.08549	75.08549	0	ICE	7.173734	0	2	2
2030	2a	1	0.706278	2.654017	2.654017	0	11.95188	11.95188	0	ICE	0.706278	0	2	2
2030	2a	1	37.45995	134.3269	0	134.3269	501.777	0	501.777	BEV	0	37.45995	2	3
2030	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2030	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2030	2a	1	2.576435	9.533996	0	9.533996	38.47855	0	38.47855	BEV	0	2.576435	2	3
2030	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2030	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2030	2a	1	18.34877	62.64287	0	62.64287	214.802	0	214.802	BEV	0	18.34877	2	3
2030	2a	1	0.582616	1.922299	1.922299	0	7.868009	7.868009	0	ICE	0.582616	0	3	2
2030	2a	1	5.38018	18.36799	18.36799	0	72.162	72.162	0	ICE	5.38018	0	2	2
2030	2a	1	0.443799	1.591411	1.591411	0	6.604164	6.604164	0	ICE	0.443799	0	3	2
2030	2a	1	2.683113	7.930451	7.930451	0	33.36973	33.36973	0	ICE	2.683113	0	2	2
2030	2a	1	2.168989	6.907904	0	6.907904	20.83606	0	20.83606	BEV	0	2.168989	1	3
2030	2a	1	6.040872	23.04617	23.04617	0	114.5803	114.5803	0	ICE	6.040872	0	2	2
2030	2a	1	1.028487	3.570187	0	3.570187	9.65376	0	9.65376	BEV	0	1.028487	3	3
2030	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2030	2a	1	0	0	0	0	0	0	0	PHEV	0	0	3	8
2030	2a	1	0.60838	1.658767	0	1.658767	4.258463	0	4.258463	BEV	0	0.60838	2	3
2030	2a	1	1.318078	5.179547	0	5.179547	16.81804	0	16.81804	BEV	0	1.318078	4	3
2030	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2030	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2030	2a	1	3.135684	10.52561	0	10.52561	35.40734	0	35.40734	BEV	0	3.135684	1	3
2030	2a	1	2.574119	8.935538	0	8.935538	31.87279	0	31.87279	BEV	0	2.574119	1	3
2030	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2030	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2030	2a	1	6.202259	22.95121	0	22.95121	92.94968	0	92.94968	BEV	0	6.202259	1	3
2030	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2030	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2030	2a	1	6.305142	20.80338	20.80338	0	80.33715	80.33715	0	ICE	6.305142	0	2	2
2030	2a	1	5.845383	19.62131	0	19.62131	64.94575	0	64.94575	BEV	0	5.845383	2	3
2030	2a	1	0.961067	3.61145	0	3.61145	15.01117	0	15.01117	BEV	0	0.961067	2	3
2030	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2030	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2030	2a	1	1.341503	4.118778	4.118778	0	15.10642	15.10642	0	ICE	1.341503	0	3	2
2030	2a	1	3.280664	10.82432	0	10.82432	35.05329	0	35.05329	BEV	0	3.280664	1	3
2030	2a	1	3.657968	12.48834	0	12.48834	43.45815	0	43.45815	BEV	0	3.657968	1	3

2030	2a	1	4.546335	13.1771	13.1771	0	55.22001	55.22001	0	ICE	4.546335	0	2	2
2030	2a	1	1.689745	5.091167	0	5.091167	14.24361	0	14.24361	BEV	0	1.689745	2	3
2030	2a	1	0.74236	2.279246	0	2.279246	6.487802	0	6.487802	BEV	0	0.74236	2	3
2030	2a	1	0.744717	2.37181	0	2.37181	7.193962	0	7.193962	BEV	0	0.744717	2	3
2030	2a	1	4.513189	15.66663	15.66663	0	63.11622	63.11622	0	ICE	4.513189	0	2	2
2030	2a	1	3.551648	14.36358	14.36358	0	74.23944	74.23944	0	ICE	3.551648	0	2	2
2030	2a	1	5.411219	22.81408	22.81408	0	124.5335	124.5335	0	ICE	5.411219	0	2	2
2030	2a	1	2.105849	6.103593	6.103593	0	21.78171	21.78171	0	ICE	2.105849	0	3	2
2030	2a	1	0.745526	2.288967	0	2.288967	4.501661	0	4.501661	BEV	0	0.745526	3	3
2030	2a	1	0.906458	2.835	2.835	0	12.83701	12.83701	0	ICE	0.906458	0	3	2
2030	2a	1	4.065986	13.88132	0	13.88132	32.79746	0	32.79746	BEV	0	4.065986	3	3
2030	2a	1	0.575191	2.029614	2.029614	0	8.24113	8.24113	0	ICE	0.575191	0	3	2
2030	2a	1	0.366416	1.29293	0	1.29293	3.267639	0	3.267639	BEV	0	0.366416	3	3
2030	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2030	2a	1	0	0	0	0	0	0	0	PHEV	0	0	3	8
2030	2a	1	8.746275	35.37168	0	35.37168	121.7182	0	121.7182	BEV	0	8.746275	3	3
2030	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2030	2a	1	0	0	0	0	0	0	0	PHEV	0	0	3	8
2030	2a	1	24.56388	102.1558	0	102.1558	367.9778	0	367.9778	BEV	0	24.56388	3	3
2030	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2030	2a	1	6.298431	26.19379	15.71627	10.47752	141.9108	85.1465	56.76433	PHEV	3.779059	2.519372	3	8
2030	2a	1	0.753435	2.097428	0	2.097428	3.774016	0	3.774016	BEV	0	0.753435	4	3
2030	2a	1	0.903214	2.876602	0	2.876602	5.97515	0	5.97515	BEV	0	0.903214	4	3
2030	2a	1	1.717852	7.045755	7.045755	0	38.46497	38.46497	0	ICE	1.717852	0	2	2
2030	2a	1	0.430608	1.519438	0	1.519438	4.020035	0	4.020035	BEV	0	0.430608	4	3
2030	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2030	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2030	2a	1	0.64142	1.712103	0	1.712103	4.451819	0	4.451819	BEV	0	0.64142	2	3
2030	2a	1	2.039311	5.443411	0	5.443411	14.09257	0	14.09257	BEV	0	2.039311	1	3
2030	2a	1	1.644197	4.482951	0	4.482951	11.58445	0	11.58445	BEV	0	1.644197	1	3
2030	2a	1	1.252849	3.487707	0	3.487707	9.409605	0	9.409605	BEV	0	1.252849	1	3
2030	2a	1	1.032794	2.93428	0	2.93428	7.44565	0	7.44565	BEV	0	1.032794	1	3
2030	2a	1	0.989982	2.869365	0	2.869365	7.850796	0	7.850796	BEV	0	0.989982	1	3
2030	2a	1	0.920397	2.720408	0	2.720408	7.309592	0	7.309592	BEV	0	0.920397	1	3
2030	2a	1	0.990234	3.097016	0	3.097016	8.771374	0	8.771374	BEV	0	0.990234	1	3
2030	2a	1	2.448443	7.938196	0	7.938196	25.06768	0	25.06768	BEV	0	2.448443	1	3
2030	2a	1	0.786348	2.459352	0	2.459352	7.229428	0	7.229428	BEV	0	0.786348	2	3
2030	2a	1	0	0	0	0	0	0	0	BEV	0	0	2	3
2030	2a	1	22.49256	97.40742	0	97.40742	557.4043	0	557.4043	FCEV	0	22.49256	2	7
2030	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2030	2a	1	0	0	0	0	0	0	0	BEV	0	0	2	3
2030	2a	1	24.84962	109.0386	0	109.0386	643.1659	0	643.1659	FCEV	0	24.84962	2	7
2030	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2030	2a	1	0.116315	0.430419	0.430419	0	2.108592	2.108592	0	ICE	0.116315	0	3	2
2030	2a	1	0	0	0	0	0	0	0	BEV	0	0	3	3
2030	2a	1	1.451813	6.287293	0	6.287293	25.39963	0	25.39963	FCEV	0	1.451813	3	7
2030	2a	1	20.80932	90.11787	54.07072	36.04715	523.8735	314.3241	209.5494	PHEV	12.48559	8.323727	3	8

2030	2a	1	1.060922	4.533701	4.533701	0	24.31023	24.31023	0	ICE	1.060922	0	2	2
2030	2a	1	0.257372	0.863925	0	0.863925	1.994233	0	1.994233	BEV	0	0.257372	3	3
2030	2a	1	0.80316	2.281865	0	2.281865	4.147889	0	4.147889	BEV	0	0.80316	4	3
2030	2a	1	2.238253	6.872041	0	6.872041	13.88701	0	13.88701	BEV	0	2.238253	4	3
2030	2a	1	0.606604	2.070951	0	2.070951	4.947342	0	4.947342	BEV	0	0.606604	4	3
2030	2a	1	0.411433	1.593205	0	1.593205	4.918944	0	4.918944	BEV	0	0.411433	3	3
2030	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2030	2a	1	0	0	0	0	0	0	0	PHEV	0	0	3	8
2030	2a	1	1.538808	6.223248	0	6.223248	28.35407	0	28.35407	BEV	0	1.538808	2	3
2030	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2030	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2030	2a	1	0.813935	2.63889	0	2.63889	8.036417	0	8.036417	BEV	0	0.813935	2	3
2030	2a	1	2.30955	7.620198	0	7.620198	23.9042	0	23.9042	BEV	0	2.30955	2	3
2030	2a	1	0.570173	1.913911	0	1.913911	4.309875	0	4.309875	BEV	0	0.570173	4	3
2030	2a	1	1.534511	6.733342	6.733342	0	44.26273	44.26273	0	ICE	1.534511	0	2	2
2030	2a	1	1.074697	4.407859	0	4.407859	22.44401	0	22.44401	BEV	0	1.074697	2	3
2030	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2030	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2030	2a	1	0.356016	0.991086	0	0.991086	2.56862	0	2.56862	BEV	0	0.356016	2	3
2030	2a	1	0.193545	0.57206	0	0.57206	1.122971	0	1.122971	BEV	0	0.193545	4	3
2030	2a	1	0.134001	0.380712	0	0.380712	0.986836	0	0.986836	BEV	0	0.134001	2	3
2030	2a	1	0.188427	0.600112	0	0.600112	1.202895	0	1.202895	BEV	0	0.188427	3	3
2030	2a	1	0.215356	0.809253	0	0.809253	2.248741	0	2.248741	BEV	0	0.215356	3	3
2030	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2030	2a	1	0	0	0	0	0	0	0	PHEV	0	0	3	8
2030	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2030	2a	1	0	0	0	0	0	0	0	PHEV	0	0	3	8
2030	2a	1	0.386679	1.142902	0	1.142902	2.286374	0	2.286374	BEV	0	0.386679	3	3
2030	2a	1	0.922067	2.98947	0	2.98947	6.582867	0	6.582867	BEV	0	0.922067	4	3
2030	2a	1	0.448118	1.63257	0	1.63257	6.307387	0	6.307387	BEV	0	0.448118	2	3
2030	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2030	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2030	2a	1	0.211121	0.781246	0.781246	0	4.40296	4.40296	0	ICE	0.211121	0	2	2
2030	2a	1	0.605556	1.616375	0	1.616375	2.816576	0	2.816576	BEV	0	0.605556	3	3
2030	2a	1	2.06445	6.220148	0	6.220148	11.90103	0	11.90103	BEV	0	2.06445	4	3
2030	2a	1	1.336837	5.176675	0	5.176675	15.88146	0	15.88146	BEV	0	1.336837	4	3
2030	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2030	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2030	2a	1	0.132205	0.4362	0	0.4362	0.982794	0	0.982794	BEV	0	0.132205	3	3
2030	2a	1	0	0	0	0	0	0	0	BEV	0	0	4	3
2030	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2030	2a	1	1.999144	8.428529	5.057117	3.371412	49.06751	29.44051	19.62701	PHEV	1.199486	0.799657	4	8
2030	2a	1	0.191256	0.609122	0.609122	0	2.758593	2.758593	0	ICE	0.191256	0	3	2
2030	2a	1	0.225623	0.666873	0	0.666873	1.779249	0	1.779249	BEV	0	0.225623	2	3
2031	2a	1	9700.474	26448.63	26448.63	0	47893.38	47893.38	0	ICE	9700.474	0	1	1
2031	2a	1	11674.53	32499.8	32499.8	0	61302.11	61302.11	0	ICE	11674.53	0	1	1
2031	2a	1	14476.57	41129.53	41129.53	0	81367.19	81367.19	0	ICE	14476.57	0	1	1
2031	2a	1	15991.49	46349.73	46349.73	0	95331.96	95331.96	0	ICE	15991.49	0	1	1
2031	2a	1	13873.86	41006.84	41006.84	0	88548.91	88548.91	0	ICE	13873.86	0	1	1

2031	2a	1	14324.16	43158.4	43158.4	0	97590.2	97590.2	0	ICE	14324.16	0	1	1
2031	2a	1	15535.52	47698.25	47698.25	0	112610.3	112610.3	0	ICE	15535.52	0	1	1
2031	2a	1	18154.74	56780.03	56780.03	0	140357	140357	0	ICE	18154.74	0	1	1
2031	2a	1	16945.51	53968.91	53968.91	0	139493.3	139493.3	0	ICE	16945.51	0	1	1
2031	2a	1	20824.74	67516.71	67516.71	0	181956.3	181956.3	0	ICE	20824.74	0	1	1
2031	2a	1	23406.6	77228.45	77228.45	0	217637.2	217637.2	0	ICE	23406.6	0	1	1
2031	2a	1	25574.77	85847.33	85847.33	0	252847.8	252847.8	0	ICE	25574.77	0	1	1
2031	2a	1	32347.07	110433.2	110433.2	0	340620	340620	0	ICE	32347.07	0	1	1
2031	2a	1	34906.29	121170.2	121170.2	0	390322.9	390322.9	0	ICE	34906.29	0	1	1
2031	2a	1	63.14434	219.193	219.193	0	722.999	722.999	0	ICE	63.14434	0	1	2
2031	2a	1	38286	135095.6	135095.6	0	455805	455805	0	ICE	38286	0	1	1
2031	2a	1	44794.71	160628.5	160628.5	0	565782.6	565782.6	0	ICE	44794.71	0	1	1
2031	2a	1	47862.54	174371.4	174371.4	0	641031.8	641031.8	0	ICE	47862.54	0	1	1
2031	2a	1	63046.57	233301.3	233301.3	0	895415.6	895415.6	0	ICE	63046.57	0	1	1
2031	2a	1	74130.02	278562.1	278562.1	0	1112191	1112191	0	ICE	74130.02	0	1	1
2031	2a	1	192.4396	723.1397	723.1397	0	2899.978	2899.978	0	ICE	192.4396	0	1	2
2031	2a	1	91205.18	347951.4	347951.4	0	1442009	1442009	0	ICE	91205.18	0	1	1
2031	2a	1	89471.08	346461.6	346461.6	0	1491522	1491522	0	ICE	89471.08	0	1	1
2031	2a	1	83754.53	329123.5	329123.5	0	1469938	1469938	0	ICE	83754.53	0	1	1
2031	2a	1	114703.6	457312.8	457312.8	0	2114565	2114565	0	ICE	114703.6	0	1	1
2031	2a	1	1293.595	5157.447	5157.447	0	23740.64	23740.64	0	ICE	1293.595	0	1	2
2031	2a	1	131144.6	530375	530375	0	2544675	2544675	0	ICE	131144.6	0	1	1
2031	2a	1	2000.864	8091.895	8091.895	0	38222.33	38222.33	0	ICE	2000.864	0	1	2
2031	2a	1	217008.9	890059.9	890059.9	0	4431469	4431469	0	ICE	217008.9	0	1	1
2031	2a	1	295675.3	1229649	1229649	0	6328141	6328141	0	ICE	295675.3	0	1	1
2031	2a	1	329945.3	1391073	1391073	0	7411701	7411701	0	ICE	329945.3	0	1	1
2031	2a	1	6130.013	25844.56	25844.56	0	136804.1	136804.1	0	ICE	6130.013	0	1	2
2031	2a	1	419715.1	1793594	1793594	0	9881179	9881179	0	ICE	419715.1	0	1	1
2031	2a	1	433108.1	1875640	1875640	0	10667056	10667056	0	ICE	433108.1	0	1	1
2031	2a	1	498256.2	2186318	2186318	0	12855402	12855402	0	ICE	498256.2	0	1	1
2031	2a	1	6097.345	26754.78	26754.78	0	157298.9	157298.9	0	ICE	6097.345	0	1	2
2031	2a	1	28979.22	127159.1	0	127159.1	748843.9	0	748843.9	BEV	0	28979.22	1	3
2031	2a	1	591.4127	2595.083	0	2595.083	15359.65	0	15359.65	FCEV	0	591.4127	1	7
2031	2a	1	26140.24	114701.8	61938.97	52762.83	674026.4	363974.2	310052.1	PHEV	14115.73	12024.51	1	8
2031	2a	1	561778.2	2497233	2497233	0	15139583	15139583	0	ICE	561778.2	0	1	1
2031	2a	1	6874.688	30559.57	30559.57	0	185251.2	185251.2	0	ICE	6874.688	0	1	2
2031	2a	1	39933.26	177512.5	0	177512.5	1077090	0	1077090	BEV	0	39933.26	1	3
2031	2a	1	814.9645	3622.705	0	3622.705	22086.44	0	22086.44	FCEV	0	814.9645	1	7
2031	2a	1	25808.67	114725.5	61951.76	52773.72	695345.3	375486.5	319858.9	PHEV	13936.68	11871.99	1	8
2031	2a	1	613266.8	2761246	2761246	0	17252201	17252201	0	ICE	613266.8	0	1	1
2031	2a	1	7472.867	33646.73	33646.73	0	210210.1	210210.1	0	ICE	7472.867	0	1	2
2031	2a	1	53458.47	240697.9	0	240697.9	1504986	0	1504986	BEV	0	53458.47	1	3
2031	2a	1	1250.491	5630.359	0	5630.359	35346.58	0	35346.58	FCEV	0	1250.491	1	7
2031	2a	1	26217.94	118046.8	62564.81	55482	737375.3	390808.9	346566.4	PHEV	13895.51	12322.43	1	8
2031	2a	1	665466.1	3034399	3034399	0	19526541	19526541	0	ICE	665466.1	0	1	1
2031	2a	1	8182.432	37310.34	37310.34	0	240078.4	240078.4	0	ICE	8182.432	0	1	2
2031	2a	1	68921.31	314268.1	0	314268.1	2023524	0	2023524	BEV	0	68921.31	1	3

2031	2a	1	1819.038	8294.466	0	8294.466	53585.52	0	53585.52	FCEV	0	1819.038	1	7
2031	2a	1	26280.08	119832.2	62312.72	57519.43	771086.6	400965	370121.6	PHEV	13665.64	12614.44	1	8
2031	2a	1	668432.6	3086220	3086220	0	20450392	20450392	0	ICE	668432.6	0	1	1
2031	2a	1	8258.561	38130.6	38130.6	0	252652.3	252652.3	0	ICE	8258.561	0	1	2
2031	2a	1	107994.9	498623.3	0	498623.3	3305140	0	3305140	BEV	0	107994.9	1	3
2031	2a	1	3701.953	17092.29	0	17092.29	113620.3	0	113620.3	FCEV	0	3701.953	1	7
2031	2a	1	41058.18	189569.7	94405.71	95163.99	1256180	625577.6	630602.3	PHEV	20446.97	20611.2	1	8
2031	2a	1	663611.8	3101980	3101980	0	21152871	21152871	0	ICE	663611.8	0	1	1
2031	2a	1	8258.08	38601.49	38601.49	0	263215.4	263215.4	0	ICE	8258.08	0	1	2
2031	2a	1	151274.6	707116.5	0	707116.5	4822705	0	4822705	BEV	0	151274.6	1	3
2031	2a	1	6396.961	29901.89	0	29901.89	204410.3	0	204410.3	FCEV	0	6396.961	1	7
2031	2a	1	57344.09	268048.6	127591.1	140457.5	1828166	870207.3	957959.2	PHEV	27295.78	30048.3	1	8
2031	2a	1	644242.1	3048347	3048347	0	21383439	21383439	0	ICE	644242.1	0	1	1
2031	2a	1	8084.319	38252.41	38252.41	0	268321.3	268321.3	0	ICE	8084.319	0	1	2
2031	2a	1	196388.6	929247.8	0	929247.8	6518139	0	6518139	BEV	0	196388.6	1	3
2031	2a	1	9901.944	46852.83	0	46852.83	329103.5	0	329103.5	FCEV	0	9901.944	1	7
2031	2a	1	74228.04	351223.3	159455.4	191767.9	2464911	1119069	1345841	PHEV	33699.53	40528.51	1	8
2031	2a	1	622425.5	2980777	2980777	0	21500379	21500379	0	ICE	622425.5	0	1	1
2031	2a	1	7873.084	37703.97	37703.97	0	271954.3	271954.3	0	ICE	7873.084	0	1	2
2031	2a	1	245890.2	1177561	0	1177561	8491489	0	8491489	BEV	0	245890.2	1	3
2031	2a	1	14429.13	69100.67	0	69100.67	498615.5	0	498615.5	FCEV	0	14429.13	1	7
2031	2a	1	92667.02	443779.6	191712.8	252066.8	3203721	1384008	1819714	PHEV	40032.15	52634.87	1	8
2031	2a	1	589752.9	2858096	2858096	0	21200362	21200362	0	ICE	589752.9	0	1	1
2031	2a	1	7516.193	36425.43	36425.43	0	270194	270194	0	ICE	7516.193	0	1	2
2031	2a	1	296404.7	1436454	0	1436454	10649729	0	10649729	BEV	0	296404.7	1	3
2031	2a	1	19880.8	96347.53	0	96347.53	714382.3	0	714382.3	FCEV	0	19880.8	1	7
2031	2a	1	111379.2	539772.5	221306.7	318465.8	4009099	1643730	2365368	PHEV	45665.47	65713.72	1	8
2031	2a	1	556616.5	2729397	2729397	0	20788580	20788580	0	ICE	556616.5	0	1	1
2031	2a	1	7093.881	34785.2	34785.2	0	264952.7	264952.7	0	ICE	7093.881	0	1	2
2031	2a	1	352428.4	1728150	0	1728150	13153109	0	13153109	BEV	0	352428.4	1	3
2031	2a	1	26643.32	130646.9	0	130646.9	994155.7	0	994155.7	FCEV	0	26643.32	1	7
2031	2a	1	132046.7	647497.8	251229.1	396268.7	4940477	1916905	3023572	PHEV	51234.14	80812.61	1	8
2031	2a	1	511449.6	2537220	2537220	0	19835241	19835241	0	ICE	511449.6	0	1	1
2031	2a	1	6518.243	32335.96	32335.96	0	252809	252809	0	ICE	6518.243	0	1	2
2031	2a	1	406827.1	2018204	0	2018204	15762928	0	15762928	BEV	0	406827.1	1	3
2031	2a	1	34280.35	170059.4	0	170059.4	1327692	0	1327692	FCEV	0	34280.35	1	7
2031	2a	1	151987.4	753985	275958.5	478026.5	5908082	2162358	3745724	PHEV	55627.38	96359.99	1	8
2031	2a	1	461490.4	2315819	2315819	0	18568822	18568822	0	ICE	461490.4	0	1	1
2031	2a	1	5881.529	29514.28	29514.28	0	236672.5	236672.5	0	ICE	5881.529	0	1	2
2031	2a	1	462874.4	2322764	0	2322764	18604090	0	18604090	BEV	0	462874.4	1	3
2031	2a	1	43078.26	216172.3	0	216172.3	1730628	0	1730628	FCEV	0	43078.26	1	7
2031	2a	1	172426.6	865259.1	297649.1	567609.9	6956879	2393166	4563712	PHEV	59314.75	113111.8	1	8
2031	2a	1	409093.1	2076319	2076319	0	17046522	17046522	0	ICE	409093.1	0	1	1
2031	2a	1	5213.743	26461.94	26461.94	0	217268.7	217268.7	0	ICE	5213.743	0	1	2
2031	2a	1	523011.8	2654505	0	2654505	21770435	0	21770435	BEV	0	523011.8	1	3
2031	2a	1	53355.11	270799.6	0	270799.6	2220136	0	2220136	FCEV	0	53355.11	1	7
2031	2a	1	194266.9	985986.1	317487.5	668498.6	8116855	2613627	5503228	PHEV	62553.94	131713	1	8

2031	2a	1	346812.8	1780089	1780089	0	14919376	14919376	0	ICE	346812.8	0	1	1
2031	2a	1	4420.009	22686.62	22686.62	0	190150.3	190150.3	0	ICE	4420.009	0	1	2
2031	2a	1	576599.6	2959518	0	2959518	24785754	0	24785754	BEV	0	576599.6	1	3
2031	2a	1	64066.62	328835.4	0	328835.4	2753642	0	2753642	FCEV	0	64066.62	1	7
2031	2a	1	213555.4	1096118	328835.4	767282.5	9205604	2761681	6443923	PHEV	64066.62	149488.8	1	8
2031	2a	1	251743.9	1306551	1306551	0	11151055	11151055	0	ICE	251743.9	0	1	1
2031	2a	1	3208.385	16651.52	16651.52	0	142113.5	142113.5	0	ICE	3208.385	0	1	2
2031	2a	1	567374	2944671	0	2944671	25125706	0	25125706	BEV	0	567374	1	3
2031	2a	1	70124.87	363948.1	0	363948.1	3105842	0	3105842	FCEV	0	70124.87	1	7
2031	2a	1	201315.4	1044827	313448.1	731378.9	8924900	2677470	6247430	PHEV	60394.63	140920.8	1	8
2031	2a	1	3450.555	9210.361	9210.361	0	38902.69	38902.69	0	ICE	3450.555	0	2	1
2031	2a	1	3419.205	9322.565	9322.565	0	39601.36	39601.36	0	ICE	3419.205	0	2	1
2031	2a	1	4502.37	12533.79	12533.79	0	53783.13	53783.13	0	ICE	4502.37	0	2	1
2031	2a	1	3747.647	10647.48	10647.48	0	45421.81	45421.81	0	ICE	3747.647	0	2	1
2031	2a	1	4670.227	13536.19	13536.19	0	57405.46	57405.46	0	ICE	4670.227	0	2	1
2031	2a	1	4079.064	12056.45	12056.45	0	51797.86	51797.86	0	ICE	4079.064	0	2	1
2031	2a	1	5176.49	15596.66	15596.66	0	67398.72	67398.72	0	ICE	5176.49	0	2	1
2031	2a	1	6391.443	19623.46	19623.46	0	85697.05	85697.05	0	ICE	6391.443	0	2	1
2031	2a	1	6090.23	19047.56	19047.56	0	84362.51	84362.51	0	ICE	6090.23	0	2	1
2031	2a	1	6823.14	21730.68	21730.68	0	96314.26	96314.26	0	ICE	6823.14	0	2	1
2031	2a	1	8866.111	28745.17	28745.17	0	128741.1	128741.1	0	ICE	8866.111	0	2	1
2031	2a	1	11191.62	36925.96	36925.96	0	168086.4	168086.4	0	ICE	11191.62	0	2	1
2031	2a	1	10154.95	34087.33	34087.33	0	157216.7	157216.7	0	ICE	10154.95	0	2	1
2031	2a	1	10786.87	36826.48	36826.48	0	172398.4	172398.4	0	ICE	10786.87	0	2	1
2031	2a	1	12037.21	41784.76	41784.76	0	197736.3	197736.3	0	ICE	12037.21	0	2	1
2031	2a	1	12909.19	45551.25	45551.25	0	215601.2	215601.2	0	ICE	12909.19	0	2	1
2031	2a	1	9277.983	33269.74	33269.74	0	158135.5	158135.5	0	ICE	9277.983	0	2	1
2031	2a	1	5528.569	20458.25	20458.25	0	98633.83	98633.83	0	ICE	5528.569	0	2	1
2031	2a	1	9035.947	33954.83	33954.83	0	166535.8	166535.8	0	ICE	9035.947	0	2	1
2031	2a	1	13468.09	51381.31	51381.31	0	255800.6	255800.6	0	ICE	13468.09	0	2	1
2031	2a	1	23867.69	92423.57	92423.57	0	464523.1	464523.1	0	ICE	23867.69	0	2	1
2031	2a	1	18383.11	72238.63	72238.63	0	366240.9	366240.9	0	ICE	18383.11	0	2	1
2031	2a	1	10065.54	40130.4	40130.4	0	205456.6	205456.6	0	ICE	10065.54	0	2	1
2031	2a	1	9188.595	37160.52	37160.52	0	193626.1	193626.1	0	ICE	9188.595	0	2	1
2031	2a	1	75679.43	323405.4	323405.4	0	1827818	1827818	0	ICE	75679.43	0	2	1
2031	2a	1	71351.78	308999.6	308999.6	0	1775114	1775114	0	ICE	71351.78	0	2	1
2031	2a	1	64852.06	284566.9	284566.9	0	1673750	1673750	0	ICE	64852.06	0	2	1
2031	2a	1	8.785384	38.54974	38.54974	0	226.7402	226.7402	0	ICE	8.785384	0	2	2
2031	2a	1	2.185143	9.588277	0	9.588277	56.31409	0	56.31409	BEV	0	2.185143	2	3
2031	2a	1	0.044595	0.195679	0	0.195679	1.149267	0	1.149267	FCEV	0	0.044595	2	7
2031	2a	1	18.95277	83.16363	49.89818	33.26545	489.149	293.4894	195.6596	PHEV	11.37166	7.581109	2	8
2031	2a	1	71122.32	316155.1	316155.1	0	1901607	1901607	0	ICE	71122.32	0	2	1
2031	2a	1	9.634804	42.82892	42.82892	0	257.6045	257.6045	0	ICE	9.634804	0	2	2
2031	2a	1	74796.74	336773.8	336773.8	0	2073381	2073381	0	ICE	74796.74	0	2	1
2031	2a	1	10.20326	45.9404	45.9404	0	282.8235	282.8235	0	ICE	10.20326	0	2	2
2031	2a	1	994.5292	4477.887	0	4477.887	27684.2	0	27684.2	BEV	0	994.5292	2	3
2031	2a	1	23.26384	104.7459	0	104.7459	652.6493	0	652.6493	FCEV	0	23.26384	2	7

2031	2a	1	763.7285	3438.703	2043.572	1395.131	21136.2	12560.94	8575.258	PHEV	453.8729	309.8556	2	8
2031	2a	1	78485.87	357880.6	357880.6	0	2256134	2256134	0	ICE	78485.87	0	2	1
2031	2a	1	10.83091	49.38687	49.38687	0	311.3016	311.3016	0	ICE	10.83091	0	2	2
2031	2a	1	2131.833	9720.752	0	9720.752	61689.5	0	61689.5	BEV	0	2131.833	2	3
2031	2a	1	56.26538	256.5594	0	256.5594	1645.221	0	1645.221	FCEV	0	56.26538	2	7
2031	2a	1	1641.898	7486.745	4406.484	3080.261	47063.28	27700.1	19363.18	PHEV	966.3745	675.5239	2	8
2031	2a	1	77721.9	358849.8	358849.8	0	2318804	2318804	0	ICE	77721.9	0	2	1
2031	2a	1	10.86643	50.17141	50.17141	0	324.1142	324.1142	0	ICE	10.86643	0	2	2
2031	2a	1	5477.72	25291.18	0	25291.18	164811.4	0	164811.4	BEV	0	5477.72	2	3
2031	2a	1	187.7705	866.9553	0	866.9553	5721.264	0	5721.264	FCEV	0	187.7705	2	7
2031	2a	1	3950.483	18239.77	10573.86	7665.916	117047.3	67853.98	49193.3	PHEV	2290.151	1660.331	2	8
2031	2a	1	76114.73	355789.9	355789.9	0	2356597	2356597	0	ICE	76114.73	0	2	1
2031	2a	1	10.68534	49.94747	49.94747	0	330.718	330.718	0	ICE	10.68534	0	2	2
2031	2a	1	9317.097	43551.75	0	43551.75	291225.5	0	291225.5	BEV	0	9317.097	2	3
2031	2a	1	393.9928	1841.676	0	1841.676	12499.43	0	12499.43	FCEV	0	393.9928	2	7
2031	2a	1	6286.241	29384.34	16774.26	12610.08	192643.3	109971.8	82671.51	PHEV	3588.545	2697.695	2	8
2031	2a	1	72765.61	344303.6	344303.6	0	2338900	2338900	0	ICE	72765.61	0	2	1
2031	2a	1	10.26329	48.56259	48.56259	0	329.7542	329.7542	0	ICE	10.26329	0	2	2
2031	2a	1	13464.51	63709.76	0	63709.76	437114.4	0	437114.4	BEV	0	13464.51	2	3
2031	2a	1	678.8829	3212.257	0	3212.257	22352.79	0	22352.79	FCEV	0	678.8829	2	7
2031	2a	1	8489.157	40167.97	22574.4	17593.57	269475.8	151445.4	118030.4	PHEV	4770.906	3718.251	2	8
2031	2a	1	69222.89	331506.3	331506.3	0	2309896	2309896	0	ICE	69222.89	0	2	1
2031	2a	1	9.806347	46.9623	46.9623	0	327.0659	327.0659	0	ICE	9.806347	0	2	2
2031	2a	1	18082.21	86595.14	0	86595.14	609517.9	0	609517.9	BEV	0	18082.21	2	3
2031	2a	1	1061.085	5081.505	0	5081.505	36185.96	0	36185.96	FCEV	0	1061.085	2	7
2031	2a	1	10638.58	50947.85	28181.44	22766.41	349983.9	193591.1	156392.8	PHEV	5884.656	4753.927	2	8
2031	2a	1	65434.51	317112.7	317112.7	0	2267898	2267898	0	ICE	65434.51	0	2	1
2031	2a	1	9.307228	45.10525	45.10525	0	322.3976	322.3976	0	ICE	9.307228	0	2	2
2031	2a	1	23224.4	112551.5	0	112551.5	813018.1	0	813018.1	BEV	0	23224.4	2	3
2031	2a	1	1557.734	7549.185	0	7549.185	55070.63	0	55070.63	FCEV	0	1557.734	2	7
2031	2a	1	12729.46	61690.25	33577.12	28113.13	434382.5	236428.2	197954.3	PHEV	6928.461	5800.995	2	8
2031	2a	1	61262.53	300403.9	300403.9	0	2203028	2203028	0	ICE	61262.53	0	2	1
2031	2a	1	8.713817	42.72864	42.72864	0	313.1719	313.1719	0	ICE	8.713817	0	2	2
2031	2a	1	28911.06	141766.8	0	141766.8	1049673	0	1049673	BEV	0	28911.06	2	3
2031	2a	1	2185.654	10717.47	0	10717.47	79950.09	0	79950.09	FCEV	0	2185.654	2	7
2031	2a	1	14733.35	72245.7	38682.41	33563.29	521045.5	278982.7	242062.9	PHEV	7888.654	6844.691	2	8
2031	2a	1	55716.51	276400.7	276400.7	0	2078877	2078877	0	ICE	55716.51	0	2	1
2031	2a	1	7.924966	39.31449	39.31449	0	295.5226	295.5226	0	ICE	7.924966	0	2	2
2031	2a	1	34590.72	171599.1	0	171599.1	1302315	0	1302315	BEV	0	34590.72	2	3
2031	2a	1	2914.708	14459.4	0	14459.4	110372.4	0	110372.4	FCEV	0	2914.708	2	7
2031	2a	1	16351.38	81116.57	42713.67	38402.9	599568.2	315715.5	283852.7	PHEV	8610.168	7741.209	2	8
2031	2a	1	49676.24	249281.8	249281.8	0	1923076	1923076	0	ICE	49676.24	0	2	1
2031	2a	1	7.065815	35.45718	35.45718	0	273.3766	273.3766	0	ICE	7.065815	0	2	2
2031	2a	1	40497.7	203222.7	0	203222.7	1580815	0	1580815	BEV	0	40497.7	2	3
2031	2a	1	3768.993	18913.3	0	18913.3	147786.8	0	147786.8	FCEV	0	3768.993	2	7
2031	2a	1	17708.81	88865.13	46006.75	42858.38	673494.1	348677.5	324816.6	PHEV	9168.106	8540.708	2	8
2031	2a	1	43418.21	220365.7	220365.7	0	1743458	1743458	0	ICE	43418.21	0	2	1

2031	2a	1	6.175689	31.34422	31.34422	0	247.846	247.846	0	ICE	6.175689	0	2	2
2031	2a	1	46792.91	237493.7	0	237493.7	1893193	0	1893193	BEV	0	46792.91	2	3
2031	2a	1	4773.584	24227.94	0	24227.94	193824.3	0	193824.3	FCEV	0	4773.584	2	7
2031	2a	1	18866.97	95757.82	48727.05	47030.77	744228.4	378706	365522.5	PHEV	9600.595	9266.38	2	8
2031	2a	1	36934.22	189572.6	189572.6	0	1537638	1537638	0	ICE	36934.22	0	2	1
2031	2a	1	5.253423	26.9643	26.9643	0	218.5906	218.5906	0	ICE	5.253423	0	2	2
2031	2a	1	53518.03	274692.5	0	274692.5	2243198	0	2243198	BEV	0	53518.03	2	3
2031	2a	1	5946.448	30521.39	0	30521.39	249954.8	0	249954.8	FCEV	0	5946.448	2	7
2031	2a	1	19821.49	101738	50868.99	50868.99	810740.4	405370.2	405370.2	PHEV	9910.747	9910.747	2	8
2031	2a	1	27166.68	140995.1	140995.1	0	1171863	1171863	0	ICE	27166.68	0	2	1
2031	2a	1	3.864115	20.05476	20.05476	0	166.5946	166.5946	0	ICE	3.864115	0	2	2
2031	2a	1	53902.56	279754.3	0	279754.3	2339795	0	2339795	BEV	0	53902.56	2	3
2031	2a	1	6662.115	34576.37	0	34576.37	289834.2	0	289834.2	FCEV	0	6662.115	2	7
2031	2a	1	19125.69	99262.32	49631.16	49631.16	810743.9	405371.9	405371.9	PHEV	9562.844	9562.844	2	8
2031	2a	1	2803.011	7481.91	7481.91	0	28656.99	28656.99	0	ICE	2803.011	0	3	1
2031	2a	1	3575.985	9750.031	9750.031	0	37714.77	37714.77	0	ICE	3575.985	0	3	1
2031	2a	1	4604.774	12818.86	12818.86	0	50732.03	50732.03	0	ICE	4604.774	0	3	1
2031	2a	1	5244.106	14899.08	14899.08	0	59625.24	59625.24	0	ICE	5244.106	0	3	1
2031	2a	1	6163.387	17863.96	17863.96	0	73590.44	73590.44	0	ICE	6163.387	0	3	1
2031	2a	1	5564.605	16447.25	16447.25	0	68294.8	68294.8	0	ICE	5564.605	0	3	1
2031	2a	1	7216.286	21742.53	21742.53	0	91331.98	91331.98	0	ICE	7216.286	0	3	1
2031	2a	1	8271.66	25396.23	25396.23	0	107643.1	107643.1	0	ICE	8271.66	0	3	1
2031	2a	1	10545.45	32981.54	32981.54	0	142156.8	142156.8	0	ICE	10545.45	0	3	1
2031	2a	1	10521.54	33509.53	33509.53	0	145427	145427	0	ICE	10521.54	0	3	1
2031	2a	1	16272.45	52757.57	52757.57	0	231387.4	231387.4	0	ICE	16272.45	0	3	1
2031	2a	1	18292.52	60354.88	60354.88	0	267847.3	267847.3	0	ICE	18292.52	0	3	1
2031	2a	1	20573.61	69059.86	69059.86	0	309528.2	309528.2	0	ICE	20573.61	0	3	1
2031	2a	1	27391.7	93515.55	93515.55	0	425259.2	425259.2	0	ICE	27391.7	0	3	1
2031	2a	1	26954.45	93567	93567	0	428901.5	428901.5	0	ICE	26954.45	0	3	1
2031	2a	1	27317.02	96390.57	96390.57	0	448335.8	448335.8	0	ICE	27317.02	0	3	1
2031	2a	1	31834.6	114155	114155	0	536367.6	536367.6	0	ICE	31834.6	0	3	1
2031	2a	1	39073.23	142350.4	142350.4	0	675356.3	675356.3	0	ICE	39073.23	0	3	1
2031	2a	1	44717.15	165474	165474	0	793674.4	793674.4	0	ICE	44717.15	0	3	1
2031	2a	1	42550.97	159895.9	159895.9	0	776105.8	776105.8	0	ICE	42550.97	0	3	1
2031	2a	1	45306.72	172846.9	172846.9	0	849862.9	849862.9	0	ICE	45306.72	0	3	1
2031	2a	1	37095.35	143645.4	143645.4	0	715049	715049	0	ICE	37095.35	0	3	1
2031	2a	1	24521.57	96360.46	96360.46	0	486267.5	486267.5	0	ICE	24521.57	0	3	1
2031	2a	1	46855.19	186807.4	186807.4	0	956265.8	956265.8	0	ICE	46855.19	0	3	1
2031	2a	1	69555.29	281295.5	281295.5	0	1464127	1464127	0	ICE	69555.29	0	3	1
2031	2a	1	75870.4	311181.7	311181.7	0	1654677	1654677	0	ICE	75870.4	0	3	1
2031	2a	1	115183.2	479021.7	479021.7	0	2589819	2589819	0	ICE	115183.2	0	3	1
2031	2a	1	117467	495249.2	495249.2	0	2738210	2738210	0	ICE	117467	0	3	1
2031	2a	1	1260.084	5312.602	5312.602	0	28765.02	28765.02	0	ICE	1260.084	0	3	2
2031	2a	1	151855.3	648932.4	648932.4	0	3657335	3657335	0	ICE	151855.3	0	3	1
2031	2a	1	159678.8	691513	691513	0	3976253	3976253	0	ICE	159678.8	0	3	1
2031	2a	1	1113.91	4823.952	4823.952	0	27996.45	27996.45	0	ICE	1113.91	0	3	2
2031	2a	1	192414.6	844303.6	844303.6	0	4941089	4941089	0	ICE	192414.6	0	3	1

2031	2a	1	1966.692	8629.725	8629.725	0	50654.21	50654.21	0	ICE	1966.692	0	3	2
2031	2a	1	215655.3	958637.3	958637.3	0	5738766	5738766	0	ICE	215655.3	0	3	1
2031	2a	1	2204.238	9798.344	9798.344	0	58829.06	58829.06	0	ICE	2204.238	0	3	2
2031	2a	1	744.0408	3307.433	1984.46	1322.973	19890.71	11934.43	7956.284	PHEV	446.4245	297.6163	3	8
2031	2a	1	231375.2	1041771	1041771	0	6401190	6401190	0	ICE	231375.2	0	3	1
2031	2a	1	2358.951	10621.23	10621.23	0	65419.67	65419.67	0	ICE	2358.951	0	3	2
2031	2a	1	2728.779	12286.38	0	12286.38	58846.42	0	58846.42	BEV	0	2728.779	3	3
2031	2a	1	63.83109	287.4008	0	287.4008	1244.569	0	1244.569	FCEV	0	63.83109	3	7
2031	2a	1	2370.106	10671.45	6341.89	4329.56	65697.92	39043.33	26654.58	PHEV	1408.52	961.5859	3	8
2031	2a	1	247675.3	1129352	1129352	0	7101992	7101992	0	ICE	247675.3	0	3	1
2031	2a	1	2530.878	11540.32	11540.32	0	72757.81	72757.81	0	ICE	2530.878	0	3	2
2031	2a	1	5935.545	27064.96	0	27064.96	152838.2	0	152838.2	BEV	0	5935.545	3	3
2031	2a	1	156.6566	714.3244	0	714.3244	3182.124	0	3182.124	FCEV	0	156.6566	3	7
2031	2a	1	4283.572	19532.27	11496.14	8036.135	123144.3	72479.24	50665.1	PHEV	2521.188	1762.384	3	8
2031	2a	1	246917.3	1140042	1140042	0	7337811	7337811	0	ICE	246917.3	0	3	1
2031	2a	1	2561.277	11825.67	11825.67	0	76416.15	76416.15	0	ICE	2561.277	0	3	2
2031	2a	1	16864.05	77863.03	0	77863.03	436247.3	0	436247.3	BEV	0	16864.05	3	3
2031	2a	1	578.0823	2669.064	0	2669.064	12226.46	0	12226.46	FCEV	0	578.0823	3	7
2031	2a	1	11462.34	52922.75	30680.07	22242.68	376843.6	218461.6	158382	PHEV	6644.88	4817.456	3	8
2031	2a	1	242676.2	1134363	1134363	0	7479510	7479510	0	ICE	242676.2	0	3	1
2031	2a	1	2529.129	11822.13	11822.13	0	78304.65	78304.65	0	ICE	2529.129	0	3	2
2031	2a	1	29406.04	137455.3	0	137455.3	787088.7	0	787088.7	BEV	0	29406.04	3	3
2031	2a	1	1243.495	5812.582	0	5812.582	27366.99	0	27366.99	FCEV	0	1243.495	3	7
2031	2a	1	18807.12	87911.84	50185.1	37726.74	665058.1	379653.2	285404.9	PHEV	10736.18	8070.943	3	8
2031	2a	1	232321.5	1099271	1099271	0	7429113	7429113	0	ICE	232321.5	0	3	1
2031	2a	1	2434.297	11518.32	11518.32	0	78238.72	78238.72	0	ICE	2434.297	0	3	2
2031	2a	1	42903.03	203003.4	0	203003.4	1198799	0	1198799	BEV	0	42903.03	3	3
2031	2a	1	2163.178	10235.47	0	10235.47	49817.95	0	49817.95	FCEV	0	2163.178	3	7
2031	2a	1	25791.55	122037.4	68585.01	53452.37	961862.2	540566.5	421295.6	PHEV	14494.85	11296.7	3	8
2031	2a	1	219681.7	1052049	1052049	0	7288847	7288847	0	ICE	219681.7	0	3	1
2031	2a	1	2313.412	11078.86	11078.86	0	77187.28	77187.28	0	ICE	2313.412	0	3	2
2031	2a	1	57472.74	275235.2	0	275235.2	1675403	0	1675403	BEV	0	57472.74	3	3
2031	2a	1	3372.569	16151.13	0	16151.13	85181.17	0	85181.17	FCEV	0	3372.569	3	7
2031	2a	1	32433.68	155323.9	85916.32	69407.6	1267913	701337.3	566576.2	PHEV	17940.46	14493.22	3	8
2031	2a	1	204901.6	993006.4	993006.4	0	7057994	7057994	0	ICE	204901.6	0	3	1
2031	2a	1	2167.784	10505.64	10505.64	0	75129.78	75129.78	0	ICE	2167.784	0	3	2
2031	2a	1	72940.26	353487.4	0	353487.4	2220028	0	2220028	BEV	0	72940.26	3	3
2031	2a	1	4892.334	23709.52	0	23709.52	132922.2	0	132922.2	FCEV	0	4892.334	3	7
2031	2a	1	38582.5	186980.8	101771	85209.83	1579217	859545.4	719671.9	PHEV	20999.9	17582.6	3	8
2031	2a	1	190154.8	932433.4	932433.4	0	6796427	6796427	0	ICE	190154.8	0	3	1
2031	2a	1	2011.768	9864.804	9864.804	0	72344.8	72344.8	0	ICE	2011.768	0	3	2
2031	2a	1	90028.4	441458.8	0	441458.8	2861432	0	2861432	BEV	0	90028.4	3	3
2031	2a	1	6806.081	33373.96	0	33373.96	199214.7	0	199214.7	FCEV	0	6806.081	3	7
2031	2a	1	44558.1	218492.8	116987.3	101505.5	1909840	1022583	887256.9	PHEV	23857.68	20700.42	3	8
2031	2a	1	172844.3	857453.1	857453.1	0	6409865	6409865	0	ICE	172844.3	0	3	1
2031	2a	1	1828.63	9071.54	9071.54	0	68229.94	68229.94	0	ICE	1828.63	0	3	2
2031	2a	1	107617.1	533871	0	533871	3570907	0	3570907	BEV	0	107617.1	3	3

2031	2a	1	9068.103	44985.41	0	44985.41	282677.2	0	282677.2	FCEV	0	9068.103	3	7
2031	2a	1	49735.25	246728.6	129920.2	116808.4	2229947	1174226	1055721	PHEV	26189.16	23546.09	3	8
2031	2a	1	154586.7	775736.2	775736.2	0	5946731	5946731	0	ICE	154586.7	0	3	1
2031	2a	1	1635.471	8207.005	8207.005	0	63300.38	63300.38	0	ICE	1635.471	0	3	2
2031	2a	1	126295.5	633767.4	0	633767.4	4373311	0	4373311	BEV	0	126295.5	3	3
2031	2a	1	11753.92	58982.72	0	58982.72	387594.2	0	387594.2	FCEV	0	11753.92	3	7
2031	2a	1	54372.39	272847.7	141257.2	131590.6	2547863	1319065	1228798	PHEV	28149.36	26223.03	3	8
2031	2a	1	136904.8	694849.5	694849.5	0	5462489	5462489	0	ICE	136904.8	0	3	1
2031	2a	1	1448.403	7351.254	7351.254	0	58146.38	58146.38	0	ICE	1448.403	0	3	2
2031	2a	1	147722	749751.2	0	749751.2	5337056	0	5337056	BEV	0	147722	3	3
2031	2a	1	15069.88	76485.95	0	76485.95	523525.5	0	523525.5	FCEV	0	15069.88	3	7
2031	2a	1	59081.38	299862.8	152587.3	147275.5	2891919	1471574	1420345	PHEV	30063.98	29017.4	3	8
2031	2a	1	117933.1	605316.5	605316.5	0	4878652	4878652	0	ICE	117933.1	0	3	1
2031	2a	1	1247.689	6404.027	6404.027	0	51932.27	51932.27	0	ICE	1247.689	0	3	2
2031	2a	1	170902.2	877191.7	0	877191.7	6439552	0	6439552	BEV	0	170902.2	3	3
2031	2a	1	18989.14	97465.74	0	97465.74	692929.2	0	692929.2	FCEV	0	18989.14	3	7
2031	2a	1	63297.13	324885.8	162442.9	162442.9	3233849	1616925	1616925	PHEV	31648.56	31648.56	3	8
2031	2a	1	86170.76	447226.3	447226.3	0	3692329	3692329	0	ICE	86170.76	0	3	1
2031	2a	1	911.6551	4731.49	4731.49	0	39304.43	39304.43	0	ICE	911.6551	0	3	2
2031	2a	1	171141.8	888226.1	0	888226.1	6702497	0	6702497	BEV	0	171141.8	3	3
2031	2a	1	21152.36	109780.8	0	109780.8	807331.9	0	807331.9	FCEV	0	21152.36	3	7
2031	2a	1	60724.48	315160.1	157580	157580	3229924	1614962	1614962	PHEV	30362.24	30362.24	3	8
2031	2a	1	3663.469	10408.32	10408.32	0	36599.45	36599.45	0	ICE	3663.469	0	4	1
2031	2a	1	3055.754	8856.797	8856.797	0	31781.8	31781.8	0	ICE	3055.754	0	4	1
2031	2a	1	3718.452	10990.59	10990.59	0	39759.54	39759.54	0	ICE	3718.452	0	4	1
2031	2a	1	4082.666	12300.99	12300.99	0	45843.59	45843.59	0	ICE	4082.666	0	4	1
2031	2a	1	6305.884	19360.77	19360.77	0	73416.35	73416.35	0	ICE	6305.884	0	4	1
2031	2a	1	7067.305	22103.42	22103.42	0	85731.51	85731.51	0	ICE	7067.305	0	4	1
2031	2a	1	6480.619	20639.8	20639.8	0	81337	81337	0	ICE	6480.619	0	4	1
2031	2a	1	8747.515	28360.67	28360.67	0	114610.6	114610.6	0	ICE	8747.515	0	4	1
2031	2a	1	10236.54	33774.73	33774.73	0	138767.2	138767.2	0	ICE	10236.54	0	4	1
2031	2a	1	17650.32	59247.19	59247.19	0	249225.2	249225.2	0	ICE	17650.32	0	4	1
2031	2a	1	21281.89	72656.57	72656.57	0	310022.8	310022.8	0	ICE	21281.89	0	4	1
2031	2a	1	29271.59	101610.5	101610.5	0	440404.9	440404.9	0	ICE	29271.59	0	4	1
2031	2a	1	31.28076	108.5849	108.5849	0	433.4038	433.4038	0	ICE	31.28076	0	4	2
2031	2a	1	36963.44	130428.8	130428.8	0	576951.6	576951.6	0	ICE	36963.44	0	4	1
2031	2a	1	42289.4	151644.7	151644.7	0	684399.4	684399.4	0	ICE	42289.4	0	4	1
2031	2a	1	48281.56	175897.9	175897.9	0	805003.9	805003.9	0	ICE	48281.56	0	4	1
2031	2a	1	71.10348	259.0421	259.0421	0	1106.357	1106.357	0	ICE	71.10348	0	4	2
2031	2a	1	47863.97	177118.7	177118.7	0	817123.2	817123.2	0	ICE	47863.97	0	4	1
2031	2a	1	50678.82	190438.3	190438.3	0	890603.7	890603.7	0	ICE	50678.82	0	4	1
2031	2a	1	54999.18	209824.1	209824.1	0	996190.8	996190.8	0	ICE	54999.18	0	4	1
2031	2a	1	44250.25	171351.6	171351.6	0	824628.5	824628.5	0	ICE	44250.25	0	4	1
2031	2a	1	19939.96	78356.48	78356.48	0	381989.3	381989.3	0	ICE	19939.96	0	4	1
2031	2a	1	30513.35	121654	121654	0	603169.8	603169.8	0	ICE	30513.35	0	4	1
2031	2a	1	46685.48	188805.4	188805.4	0	952987.2	952987.2	0	ICE	46685.48	0	4	1
2031	2a	1	1320.958	5342.218	5342.218	0	26496.69	26496.69	0	ICE	1320.958	0	4	2

2031	2a	1	49668.31	203714.1	203714.1	0	1049921	1049921	0	ICE	49668.31	0	4	1
2031	2a	1	58456.87	243109.3	243109.3	0	1280400	1280400	0	ICE	58456.87	0	4	1
2031	2a	1	1255.943	5223.189	5223.189	0	27122.99	27122.99	0	ICE	1255.943	0	4	2
2031	2a	1	96868.04	408402.4	408402.4	0	2203534	2203534	0	ICE	96868.04	0	4	1
2031	2a	1	3027.186	12762.83	12762.83	0	68247.48	68247.48	0	ICE	3027.186	0	4	2
2031	2a	1	111569.5	476776.5	476776.5	0	2639179	2639179	0	ICE	111569.5	0	4	1
2031	2a	1	126284.1	546892.3	546892.3	0	3096655	3096655	0	ICE	126284.1	0	4	1
2031	2a	1	119292.2	523447.2	523447.2	0	3015506	3015506	0	ICE	119292.2	0	4	1
2031	2a	1	4159.74	18252.69	18252.69	0	105219.6	105219.6	0	ICE	4159.74	0	4	2
2031	2a	1	998.0329	4379.309	2627.585	1751.723	24049.69	14429.81	9619.874	PHEV	598.8197	399.2132	4	8
2031	2a	1	130468.8	579964	579964	0	3421927	3421927	0	ICE	130468.8	0	4	1
2031	2a	1	4549.47	20223.44	20223.44	0	119399.8	119399.8	0	ICE	4549.47	0	4	2
2031	2a	1	2.282288	10.1453	0	10.1453	42.67777	0	42.67777	BEV	0	2.282288	4	3
2031	2a	1	0.046577	0.207047	0	0.207047	0.870975	0	0.870975	FCEV	0	0.046577	4	7
2031	2a	1	2792.892	12415.05	7449.029	4966.019	71933.26	43159.96	28773.31	PHEV	1675.735	1117.157	4	8
2031	2a	1	140211.8	631306.6	631306.6	0	3814004	3814004	0	ICE	140211.8	0	4	1
2031	2a	1	4935.366	22221.58	22221.58	0	134448.4	134448.4	0	ICE	4935.366	0	4	2
2031	2a	1	1201.961	5411.852	0	5411.852	24395.86	0	24395.86	BEV	0	1201.961	4	3
2031	2a	1	28.11604	126.593	0	126.593	548.0766	0	548.0766	FCEV	0	28.11604	4	7
2031	2a	1	3127.254	14080.53	8367.855	5712.67	88376.43	52520.85	35855.58	PHEV	1858.483	1268.772	4	8
2031	2a	1	150516.5	686326.6	686326.6	0	4244305	4244305	0	ICE	150516.5	0	4	1
2031	2a	1	5381.174	24537.13	24537.13	0	152178.3	152178.3	0	ICE	5381.174	0	4	2
2031	2a	1	2595.47	11834.85	0	11834.85	59333.67	0	59333.67	BEV	0	2595.47	4	3
2031	2a	1	68.50213	312.3567	0	312.3567	1391.129	0	1391.129	FCEV	0	68.50213	4	7
2031	2a	1	3495.438	15938.53	9380.965	6557.568	100712.2	59276.34	41435.89	PHEV	2057.315	1438.123	4	8
2031	2a	1	149987.5	692507.2	692507.2	0	4386231	4386231	0	ICE	149987.5	0	4	1
2031	2a	1	5457.004	25195.53	25195.53	0	160297.7	160297.7	0	ICE	5457.004	0	4	2
2031	2a	1	7937.482	36648.15	0	36648.15	188647.6	0	188647.6	BEV	0	7937.482	4	3
2031	2a	1	272.0886	1256.26	0	1256.26	5753.358	0	5753.358	FCEV	0	272.0886	4	7
2031	2a	1	9473.791	43741.44	25357.54	18383.9	300346.6	174115.2	126231.4	PHEV	5492.092	3981.699	4	8
2031	2a	1	148390.2	693633.9	693633.9	0	4503323	4503323	0	ICE	148390.2	0	4	1
2031	2a	1	5428.505	25374.95	25374.95	0	165591.6	165591.6	0	ICE	5428.505	0	4	2
2031	2a	1	14598.41	68238.65	0	68238.65	365685.1	0	365685.1	BEV	0	14598.41	4	3
2031	2a	1	617.324	2885.613	0	2885.613	13583.39	0	13583.39	FCEV	0	617.324	4	7
2031	2a	1	15460.93	72270.41	41256.08	31014.33	521728	297832.2	223895.9	PHEV	8825.982	6634.947	4	8
2031	2a	1	142314.9	673388.8	673388.8	0	4483655	4483655	0	ICE	142314.9	0	4	1
2031	2a	1	5239.027	24789.4	24789.4	0	166006.9	166006.9	0	ICE	5239.027	0	4	2
2031	2a	1	22194.79	105018.6	0	105018.6	586096	0	586096	BEV	0	22194.79	4	3
2031	2a	1	1119.065	5295.058	0	5295.058	25608.38	0	25608.38	FCEV	0	1119.065	4	7
2031	2a	1	20861.83	98711.52	55475.87	43235.64	742943.1	417534	325409.1	PHEV	11724.35	9137.483	4	8
2031	2a	1	136189	652205.1	652205.1	0	4453445	4453445	0	ICE	136189	0	4	1
2031	2a	1	5042.805	24149.84	24149.84	0	165951.1	165951.1	0	ICE	5042.805	0	4	2
2031	2a	1	31162.99	149238.6	0	149238.6	866512.8	0	866512.8	BEV	0	31162.99	4	3
2031	2a	1	1828.681	8757.501	0	8757.501	43533.77	0	43533.77	FCEV	0	1828.681	4	7
2031	2a	1	25974.4	124390.6	68805.79	55584.84	973195	538315.9	434879.2	PHEV	14367.55	11606.85	4	8
2031	2a	1	128448.8	622496.3	622496.3	0	4361368	4361368	0	ICE	128448.8	0	4	1
2031	2a	1	4781.878	23174.23	23174.23	0	163497.3	163497.3	0	ICE	4781.878	0	4	2

2031	2a	1	41285.7	200081.2	0	200081.2	1206827	0	1206827	BEV	0	41285.7	4	3
2031	2a	1	2769.163	13420.08	0	13420.08	71536.54	0	71536.54	FCEV	0	2769.163	4	7
2031	2a	1	30456.26	147598.9	80336	67262.95	1198391	652267	546123.8	PHEV	16576.91	13879.35	4	8
2031	2a	1	120602.4	591379.8	591379.8	0	4249042	4249042	0	ICE	120602.4	0	4	1
2031	2a	1	4489.773	22015.82	22015.82	0	159284.9	159284.9	0	ICE	4489.773	0	4	2
2031	2a	1	53074.48	260253.3	0	260253.3	1631018	0	1631018	BEV	0	53074.48	4	3
2031	2a	1	4012.391	19674.96	0	19674.96	112681.4	0	112681.4	FCEV	0	4012.391	4	7
2031	2a	1	34545.08	169393.5	90698.15	78695.4	1427274	764203.3	663070.7	PHEV	18496.43	16048.66	4	8
2031	2a	1	109562.2	543520.5	543520.5	0	4004913	4004913	0	ICE	109562.2	0	4	1
2031	2a	1	4078.769	20234.12	20234.12	0	150132.7	150132.7	0	ICE	4078.769	0	4	2
2031	2a	1	65129.77	323098.4	0	323098.4	2102530	0	2102530	BEV	0	65129.77	4	3
2031	2a	1	5488.011	27225.14	0	27225.14	165438.3	0	165438.3	FCEV	0	5488.011	4	7
2031	2a	1	37236.58	184724.7	97270.74	87453.95	1613819	849791	764028	PHEV	19607.72	17628.86	4	8
2031	2a	1	98507.68	494324.3	494324.3	0	3734534	3734534	0	ICE	98507.68	0	4	1
2031	2a	1	3667.233	18402.65	18402.65	0	139997	139997	0	ICE	3667.233	0	4	2
2031	2a	1	78771.16	395283.9	0	395283.9	2669444	0	2669444	BEV	0	78771.16	4	3
2031	2a	1	7330.982	36787.82	0	36787.82	235455.6	0	235455.6	FCEV	0	7330.982	4	7
2031	2a	1	39319.61	197310.9	102150.7	95160.23	1785432	924343.6	861088.3	PHEV	20356.32	18963.28	4	8
2031	2a	1	87292.52	443046.2	443046.2	0	3429895	3429895	0	ICE	87292.52	0	4	1
2031	2a	1	3249.717	16493.68	16493.68	0	128576.4	128576.4	0	ICE	3249.717	0	4	2
2031	2a	1	94346.64	478848.8	0	478848.8	3353865	0	3353865	BEV	0	94346.64	4	3
2031	2a	1	9624.784	48849.82	0	48849.82	327738.3	0	327738.3	FCEV	0	9624.784	4	7
2031	2a	1	40785.08	207001.4	105334.2	101667.3	1937192	985753.9	951437.9	PHEV	20753.78	20031.3	4	8
2031	2a	1	74538.65	382585.3	382585.3	0	3034402	3034402	0	ICE	74538.65	0	4	1
2031	2a	1	2774.917	14242.84	14242.84	0	113750.7	113750.7	0	ICE	2774.917	0	4	2
2031	2a	1	110558.9	567466.8	0	567466.8	4120669	0	4120669	BEV	0	110558.9	4	3
2031	2a	1	12284.32	63051.86	0	63051.86	442038.3	0	442038.3	FCEV	0	12284.32	4	7
2031	2a	1	40947.74	210172.9	105086.4	105086.4	2031999	1015999	1015999	PHEV	20473.87	20473.87	4	8
2031	2a	1	52153.45	270676.4	270676.4	0	2193557	2193557	0	ICE	52153.45	0	4	1
2031	2a	1	1941.563	10076.71	10076.71	0	82226.97	82226.97	0	ICE	1941.563	0	4	2
2031	2a	1	106043.3	550364.7	0	550364.7	4099602	0	4099602	BEV	0	106043.3	4	3
2031	2a	1	13106.47	68022.6	0	68022.6	492694.2	0	492694.2	FCEV	0	13106.47	4	7
2031	2a	1	37626.24	195280.2	97640.1	97640.1	1936102	968051.1	968051.1	PHEV	18813.12	18813.12	4	8
2031	2a	1	10043.17	26807.64	26807.64	0	45981.11	45981.11	0	ICE	10043.17	0	1	1
2031	2a	1	61.12008	177.1504	177.1504	0	362.8314	362.8314	0	ICE	61.12008	0	1	2
2031	2a	1	31.78453	93.94521	93.94521	0	188.5964	188.5964	0	ICE	31.78453	0	1	2
2031	2a	1	17.08689	51.48247	51.48247	0	110.9321	110.9321	0	ICE	17.08689	0	1	2
2031	2a	1	38.01202	123.2403	123.2403	0	335.5345	335.5345	0	ICE	38.01202	0	1	2
2031	2a	1	57.51603	196.3603	196.3603	0	631.546	631.546	0	ICE	57.51603	0	1	2
2031	2a	1	9.313028	32.32832	0	32.32832	115.2214	0	115.2214	BEV	0	9.313028	1	3
2031	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2031	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2031	2a	1	151.8812	535.9265	535.9265	0	1837.032	1837.032	0	ICE	151.8812	0	1	2
2031	2a	1	218.1813	782.3719	782.3719	0	2803.935	2803.935	0	ICE	218.1813	0	1	2
2031	2a	1	83.62879	304.6739	304.6739	0	1160.315	1160.315	0	ICE	83.62879	0	1	2
2031	2a	1	169.1237	625.8354	625.8354	0	2418.424	2418.424	0	ICE	169.1237	0	1	2
2031	2a	1	669.2095	2629.739	2629.739	0	11727.76	11727.76	0	ICE	669.2095	0	1	2

2031	2a	1	2481.354	10177.25	10177.25	0	50103.19	50103.19	0	ICE	2481.354	0	1	2
2031	2a	1	3897.278	16207.92	16207.92	0	83003.89	83003.89	0	ICE	3897.278	0	1	2
2031	2a	1	3585.26	14910.31	0	14910.31	76552.6	0	76552.6	BEV	0	3585.26	1	3
2031	2a	1	0.210637	0.875995	0	0.875995	4.497539	0	4.497539	FCEV	0	0.210637	1	7
2031	2a	1	3747.451	15584.83	9350.895	6233.93	76901.38	46140.83	30760.55	PHEV	2248.471	1498.981	1	8
2031	2a	1	4881.937	20582.59	0	20582.59	109150.1	0	109150.1	BEV	0	4881.937	1	3
2031	2a	1	0.684032	2.883927	0	2.883927	15.29355	0	15.29355	FCEV	0	0.684032	1	7
2031	2a	1	6163.814	25987.07	15592.24	10394.83	132512.7	79507.62	53005.08	PHEV	3698.288	2465.525	1	8
2031	2a	1	4810.469	20556.86	20556.86	0	113152.6	113152.6	0	ICE	4810.469	0	1	2
2031	2a	1	12303.72	52578.24	0	52578.24	288766.1	0	288766.1	BEV	0	12303.72	1	3
2031	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2031	2a	1	5850.751	25002.37	15001.42	10000.95	132028.8	79217.26	52811.51	PHEV	3510.451	2340.3	1	8
2031	2a	1	8330.875	30350.79	30350.79	0	145063.9	145063.9	0	ICE	8330.875	0	2	1
2031	2a	1	18330.24	75181.31	75181.31	0	399323.6	399323.6	0	ICE	18330.24	0	2	1
2031	2a	1	27344.2	113718.5	113718.5	0	617346	617346	0	ICE	27344.2	0	2	1
2031	2a	1	34611.34	145923.8	145923.8	0	806017.4	806017.4	0	ICE	34611.34	0	2	1
2031	2a	1	12.44228	48.1806	48.1806	0	238.3584	238.3584	0	ICE	12.44228	0	3	2
2031	2a	1	508.5995	2086.016	2086.016	0	10879.05	10879.05	0	ICE	508.5995	0	3	2
2031	2a	1	416.1234	1730.566	1730.566	0	9170.318	9170.318	0	ICE	416.1234	0	3	2
2031	2a	1	1955.967	8358.552	8358.552	0	46490.58	46490.58	0	ICE	1955.967	0	3	2
2031	2a	1	2211.443	9576.987	0	9576.987	37304.45	0	37304.45	BEV	0	2211.443	3	3
2031	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2031	2a	1	201.2576	871.5762	522.9457	348.6305	4793.294	2875.976	1917.317	PHEV	120.7546	80.50303	3	8
2031	2a	1	2472.915	6600.803	6600.803	0	22640.8	22640.8	0	ICE	2472.915	0	4	1
2031	2a	1	2909.762	7933.554	7933.554	0	27949.82	27949.82	0	ICE	2909.762	0	4	1
2031	2a	1	9.088149	24.77911	24.77911	0	84.08758	84.08758	0	ICE	9.088149	0	4	2
2031	2a	1	3509.586	9770.056	9770.056	0	34432.44	34432.44	0	ICE	3509.586	0	4	1
2031	2a	1	25.16939	77.27681	77.27681	0	274.1108	274.1108	0	ICE	25.16939	0	4	2
2031	2a	1	17.69785	59.40674	59.40674	0	218.8263	218.8263	0	ICE	17.69785	0	4	2
2031	2a	1	126.5001	468.1084	468.1084	0	2087.259	2087.259	0	ICE	126.5001	0	4	2
2031	2a	1	187.8329	705.8291	705.8291	0	3193.22	3193.22	0	ICE	187.8329	0	4	2
2031	2a	1	274.8533	1048.576	1048.576	0	4926.046	4926.046	0	ICE	274.8533	0	4	2
2031	2a	1	212.2119	821.7544	821.7544	0	3925.897	3925.897	0	ICE	212.2119	0	4	2
2031	2a	1	310.6545	1220.754	1220.754	0	5845.485	5845.485	0	ICE	310.6545	0	4	2
2031	2a	1	2400.424	9845.313	9845.313	0	50366.46	50366.46	0	ICE	2400.424	0	4	2
2031	2a	1	6198.575	26488.74	26488.74	0	146396.7	146396.7	0	ICE	6198.575	0	4	2
2031	2a	1	4122.321	17852.33	17852.33	0	101900.6	101900.6	0	ICE	4122.321	0	4	2
2031	2a	1	50.25163	142.7704	142.7704	0	241.5093	241.5093	0	ICE	50.25163	0	1	2
2031	2a	1	71.04611	238.4819	238.4819	0	717.174	717.174	0	ICE	71.04611	0	1	2
2031	2a	1	6.027752	22.30545	0	22.30545	89.60486	0	89.60486	BEV	0	6.027752	1	3
2031	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2031	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2031	2a	1	685.1963	2810.326	0	2810.326	13994.01	0	13994.01	BEV	0	685.1963	1	3
2031	2a	1	2.589447	10.62059	0	10.62059	52.88521	0	52.88521	FCEV	0	2.589447	1	7
2031	2a	1	1440.308	5907.408	3544.445	2362.963	28259.31	16955.59	11303.72	PHEV	864.1846	576.1231	1	8
2031	2a	1	8697.092	37664.06	0	37664.06	213514.4	0	213514.4	BEV	0	8697.092	1	3
2031	2a	1	264.7895	1146.711	0	1146.711	6500.606	0	6500.606	FCEV	0	264.7895	1	7

2031	2a	1	6254.372	27085.5	16251.3	10834.2	148297.3	88978.38	59318.92	PHEV	3752.623	2501.749	1	8
2031	2a	1	3.976302	12.20832	12.20832	0	42.8833	42.8833	0	ICE	3.976302	0	2	2
2031	2a	1	2.351886	7.355664	7.355664	0	26.07828	26.07828	0	ICE	2.351886	0	2	2
2031	2a	1	4.688645	15.46985	15.46985	0	64.06778	64.06778	0	ICE	4.688645	0	2	2
2031	2a	1	40.71402	150.6606	150.6606	0	701.0932	701.0932	0	ICE	40.71402	0	3	2
2031	2a	1	45.36903	170.4855	170.4855	0	821.679	821.679	0	ICE	45.36903	0	3	2
2031	2a	1	14.04462	46.33923	46.33923	0	163.5969	163.5969	0	ICE	14.04462	0	4	2
2031	2a	1	40.9301	146.7704	146.7704	0	630.345	630.345	0	ICE	40.9301	0	4	2
2031	2a	1	578.4541	2306.244	2306.244	0	11212.34	11212.34	0	ICE	578.4541	0	4	2
2031	2a	1	480.0137	1281.272	1281.272	0	2144.971	2144.971	0	ICE	480.0137	0	1	2
2031	2a	1	61.0198	190.8431	190.8431	0	470.4149	470.4149	0	ICE	61.0198	0	1	2
2031	2a	1	45.59039	145.1986	145.1986	0	377.8816	377.8816	0	ICE	45.59039	0	1	2
2031	2a	1	70.39812	232.2737	232.2737	0	680.4186	680.4186	0	ICE	70.39812	0	1	2
2031	2a	1	18.78293	66.27726	0	66.27726	243.7445	0	243.7445	BEV	0	18.78293	1	3
2031	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2031	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2031	2a	1	761.595	3080.042	0	3080.042	14894.72	0	14894.72	BEV	0	761.595	1	3
2031	2a	1	7.524436	30.43033	0	30.43033	147.1574	0	147.1574	FCEV	0	7.524436	1	7
2031	2a	1	211.701	856.1613	513.6968	342.4645	3949.985	2369.991	1579.994	PHEV	127.0206	84.68041	1	8
2031	2a	1	720.4855	3120.171	3120.171	0	17459.29	17459.29	0	ICE	720.4855	0	1	2
2031	2a	1	354.768	1495.727	0	1495.727	7914.116	0	7914.116	BEV	0	354.768	2	3
2031	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2031	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2031	2a	1	0.947539	2.746346	2.746346	0	11.4657	11.4657	0	ICE	0.947539	0	3	2
2031	2a	1	18.89929	56.94319	56.94319	0	185.3257	185.3257	0	ICE	18.89929	0	4	2
2031	2a	1	29.91459	93.55968	93.55968	0	328.6216	328.6216	0	ICE	29.91459	0	4	2
2031	2a	1	28.43636	90.56555	90.56555	0	316.9906	316.9906	0	ICE	28.43636	0	4	2
2031	2a	1	23.3437	64.98467	64.98467	0	144.0781	144.0781	0	ICE	23.3437	0	1	2
2031	2a	1	49.66292	192.3112	192.3112	0	810.0265	810.0265	0	ICE	49.66292	0	1	2
2031	2a	1	7.07708	25.37756	25.37756	0	108.1377	108.1377	0	ICE	7.07708	0	2	2
2031	2a	1	0.42396	1.423114	1.423114	0	5.242599	5.242599	0	ICE	0.42396	0	3	2
2031	2a	1	26.47699	105.5614	105.5614	0	533.8855	533.8855	0	ICE	26.47699	0	3	2
2031	2a	1	100.0979	422.0196	0	422.0196	1554.33	0	1554.33	BEV	0	100.0979	3	3
2031	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2031	2a	1	45.32119	191.0773	114.6464	76.43092	1005.614	603.3681	402.2454	PHEV	27.19271	18.12847	3	8
2031	2a	1	11.35979	32.92521	32.92521	0	110.0346	110.0346	0	ICE	11.35979	0	4	2
2031	2a	1	33.17911	107.5713	107.5713	0	393.8175	393.8175	0	ICE	33.17911	0	4	2
2031	2a	1	14.72686	51.96506	51.96506	0	221.698	221.698	0	ICE	14.72686	0	4	2
2031	2a	1	63.74348	257.7914	257.7914	0	1327.167	1327.167	0	ICE	63.74348	0	3	2
2031	2a	1	9.407502	26.18879	26.18879	0	85.43957	85.43957	0	ICE	9.407502	0	4	2
2031	2a	1	5.898975	20.13916	20.13916	0	81.89191	81.89191	0	ICE	5.898975	0	4	2
2031	2a	1	7.680201	27.10028	0	27.10028	67.69507	0	67.69507	BEV	0	7.680201	3	3
2031	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2031	2a	1	0	0	0	0	0	0	0	PHEV	0	0	3	8
2031	2a	1	34.47593	121.6514	0	121.6514	308.8235	0	308.8235	BEV	0	34.47593	4	3
2031	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2031	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8

2031	2a	1	27.682	75.47579	75.47579	0	140.9105	140.9105	0	ICE	27.682	0	1	2
2031	2a	1	10.56601	32.4405	32.4405	0	78.33359	78.33359	0	ICE	10.56601	0	1	2
2031	2a	1	29.09204	110.9873	110.9873	0	449.0051	449.0051	0	ICE	29.09204	0	1	2
2031	2a	1	110.4027	440.1656	0	440.1656	2075.634	0	2075.634	BEV	0	110.4027	1	3
2031	2a	1	11.2084	44.68686	0	44.68686	210.7242	0	210.7242	FCEV	0	11.2084	1	7
2031	2a	1	11.76881	46.92121	28.15272	18.76848	208.8472	125.3083	83.53887	PHEV	7.061289	4.707526	1	8
2031	2a	1	11.3848	30.38877	30.38877	0	106.2377	106.2377	0	ICE	11.3848	0	2	2
2031	2a	1	4.620113	13.65562	13.65562	0	42.88813	42.88813	0	ICE	4.620113	0	2	2
2031	2a	1	140.3763	575.7518	0	575.7518	2845.204	0	2845.204	BEV	0	140.3763	2	3
2031	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2031	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2031	2a	1	4.789235	12.78362	12.78362	0	52.85168	52.85168	0	ICE	4.789235	0	3	2
2031	2a	1	20.89461	82.10789	82.10789	0	398.9404	398.9404	0	ICE	20.89461	0	3	2
2031	2a	1	17.90036	52.90792	52.90792	0	183.7113	183.7113	0	ICE	17.90036	0	4	2
2031	2a	1	8.179286	30.73571	0	30.73571	127.8306	0	127.8306	BEV	0	8.179286	1	3
2031	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2031	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2031	2a	1	55.91466	216.52	0	216.52	938.4205	0	938.4205	BEV	0	55.91466	1	3
2031	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2031	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2031	2a	1	52.34056	205.6785	0	205.6785	952.2638	0	952.2638	BEV	0	52.34056	1	3
2031	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2031	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2031	2a	1	5.251979	14.62057	14.62057	0	46.07363	46.07363	0	ICE	5.251979	0	2	2
2031	2a	1	5.185365	16.51461	16.51461	0	71.13918	71.13918	0	ICE	5.185365	0	2	2
2031	2a	1	13.18251	51.80224	51.80224	0	247.9372	247.9372	0	ICE	13.18251	0	2	2
2031	2a	1	178.0927	740.6483	0	740.6483	3783.753	0	3783.753	BEV	0	178.0927	2	3
2031	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2031	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2031	2a	1	6.43093	24.53425	24.53425	0	120.1845	120.1845	0	ICE	6.43093	0	3	2
2031	2a	1	16.65809	44.46443	44.46443	0	166.3508	166.3508	0	ICE	16.65809	0	4	2
2031	2a	1	9.055856	25.72868	25.72868	0	94.34711	94.34711	0	ICE	9.055856	0	4	2
2031	2a	1	4.860366	17.42869	0	17.42869	65.79324	0	65.79324	BEV	0	4.860366	1	3
2031	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2031	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2031	2a	1	16.14343	61.58784	0	61.58784	264.0264	0	264.0264	BEV	0	16.14343	1	3
2031	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2031	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2031	2a	1	18.71323	72.46379	0	72.46379	319.0189	0	319.0189	BEV	0	18.71323	2	3
2031	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2031	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2031	2a	1	3.203964	13.14103	13.14103	0	70.77628	70.77628	0	ICE	3.203964	0	2	2
2031	2a	1	0.680914	2.558704	0	2.558704	8.072473	0	8.072473	BEV	0	0.680914	4	3
2031	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2031	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2031	2a	1	4.206366	14.60156	14.60156	0	57.0821	57.0821	0	ICE	4.206366	0	2	2
2031	2a	1	3.432412	9.555218	9.555218	0	38.00833	38.00833	0	ICE	3.432412	0	3	2

2031	2a	1	0.617362	2.213784	2.213784	0	11.43383	11.43383	0	ICE	0.617362	0	3	2
2031	2a	1	2.091541	6.301773	0	6.301773	17.24775	0	17.24775	BEV	0	2.091541	1	3
2031	2a	1	4.397928	11.99108	11.99108	0	51.20021	51.20021	0	ICE	4.397928	0	3	2
2031	2a	1	0.953418	2.818009	2.818009	0	11.14907	11.14907	0	ICE	0.953418	0	3	2
2031	2a	1	11.35266	44.61162	0	44.61162	147.3851	0	147.3851	BEV	0	11.35266	3	3
2031	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2031	2a	1	0	0	0	0	0	0	0	PHEV	0	0	3	8
2031	2a	1	7.202006	29.12635	0	29.12635	100.2603	0	100.2603	BEV	0	7.202006	3	3
2031	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2031	2a	1	4.986004	20.1644	12.09864	8.065759	101.8338	61.10026	40.7335	PHEV	2.991602	1.994402	3	8
2031	2a	1	1.147837	4.905122	0	4.905122	18.3308	0	18.3308	BEV	0	1.147837	4	3
2031	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2031	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2031	2a	1	1.79893	5.317079	0	5.317079	14.31944	0	14.31944	BEV	0	1.79893	1	3
2031	2a	1	6.045444	16.48308	16.48308	0	52.54473	52.54473	0	ICE	6.045444	0	2	2
2031	2a	1	25.46362	86.93305	0	86.93305	293.5685	0	293.5685	BEV	0	25.46362	2	3
2031	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2031	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2031	2a	1	9.395862	32.61585	0	32.61585	115.6856	0	115.6856	BEV	0	9.395862	2	3
2031	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2031	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2031	2a	1	7.872697	27.77952	27.77952	0	128.8831	128.8831	0	ICE	7.872697	0	2	2
2031	2a	1	4.135569	15.54043	0	15.54043	64.10984	0	64.10984	BEV	0	4.135569	2	3
2031	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2031	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2031	2a	1	7.859807	29.98548	29.98548	0	139.3183	139.3183	0	ICE	7.859807	0	2	2
2031	2a	1	2.356883	8.991602	0	8.991602	38.44377	0	38.44377	BEV	0	2.356883	2	3
2031	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2031	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2031	2a	1	9.553783	36.9954	36.9954	0	185.2602	185.2602	0	ICE	9.553783	0	2	2
2031	2a	1	8.18987	32.18308	0	32.18308	148.047	0	148.047	BEV	0	8.18987	2	3
2031	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2031	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2031	2a	1	6.656205	25.77502	0	25.77502	81.97314	0	81.97314	BEV	0	6.656205	3	3
2031	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2031	2a	1	0	0	0	0	0	0	0	PHEV	0	0	3	8
2031	2a	1	6.619519	27.52912	0	27.52912	99.27697	0	99.27697	BEV	0	6.619519	3	3
2031	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2031	2a	1	5.061985	21.05168	12.63101	8.420673	108.56	65.13599	43.42399	PHEV	3.037191	2.024794	3	8
2031	2a	1	1.563744	5.338637	0	5.338637	13.15818	0	13.15818	BEV	0	1.563744	4	3
2031	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2031	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2031	2a	1	4.784788	17.15767	0	17.15767	45.00733	0	45.00733	BEV	0	4.784788	4	3
2031	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2031	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2031	2a	1	0.85756	3.173365	0	3.173365	9.033929	0	9.033929	BEV	0	0.85756	4	3
2031	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7

2031	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2031	2a	1	6.221533	18.74536	18.74536	0	62.08972	62.08972	0	ICE	6.221533	0	2	2
2031	2a	1	0.633557	2.344452	2.344452	0	10.17946	10.17946	0	ICE	0.633557	0	2	2
2031	2a	1	33.22693	117.2442	0	117.2442	417.7302	0	417.7302	BEV	0	33.22693	2	3
2031	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2031	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2031	2a	1	2.285366	8.325977	0	8.325977	32.05464	0	32.05464	BEV	0	2.285366	2	3
2031	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2031	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2031	2a	1	16.75371	56.23751	0	56.23751	184.3204	0	184.3204	BEV	0	16.75371	2	3
2031	2a	1	0.539438	1.748934	1.748934	0	6.9237	6.9237	0	ICE	0.539438	0	3	2
2031	2a	1	4.905351	16.46589	16.46589	0	62.67062	62.67062	0	ICE	4.905351	0	2	2
2031	2a	1	0.405768	1.431789	1.431789	0	5.767392	5.767392	0	ICE	0.405768	0	3	2
2031	2a	1	2.401257	6.959805	6.959805	0	28.61516	28.61516	0	ICE	2.401257	0	2	2
2031	2a	1	2.037829	6.373433	0	6.373433	18.44732	0	18.44732	BEV	0	2.037829	1	3
2031	2a	1	5.359543	20.13982	20.13982	0	97.68806	97.68806	0	ICE	5.359543	0	2	2
2031	2a	1	0.91778	3.13331	0	3.13331	8.105441	0	8.105441	BEV	0	0.91778	3	3
2031	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2031	2a	1	0	0	0	0	0	0	0	PHEV	0	0	3	8
2031	2a	1	0.552829	1.475634	0	1.475634	3.71351	0	3.71351	BEV	0	0.552829	2	3
2031	2a	1	1.142785	4.425239	0	4.425239	13.71693	0	13.71693	BEV	0	1.142785	4	3
2031	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2031	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2031	2a	1	2.887654	9.527613	0	9.527613	30.66608	0	30.66608	BEV	0	2.887654	1	3
2031	2a	1	2.282296	7.79178	0	7.79178	26.56202	0	26.56202	BEV	0	2.282296	1	3
2031	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2031	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2031	2a	1	5.188133	18.90125	0	18.90125	73.10141	0	73.10141	BEV	0	5.188133	1	3
2031	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2031	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2031	2a	1	5.731233	18.58146	18.58146	0	69.51157	69.51157	0	ICE	5.731233	0	2	2
2031	2a	1	5.294663	17.46937	0	17.46937	55.29222	0	55.29222	BEV	0	5.294663	2	3
2031	2a	1	0.846538	3.13258	0	3.13258	12.43187	0	12.43187	BEV	0	0.846538	2	3
2031	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2031	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2031	2a	1	1.214881	3.660412	3.660412	0	13.069	13.069	0	ICE	1.214881	0	3	2
2031	2a	1	3.030093	9.823986	0	9.823986	30.4601	0	30.4601	BEV	0	3.030093	1	3
2031	2a	1	3.341851	11.21766	0	11.21766	37.32551	0	37.32551	BEV	0	3.341851	1	3
2031	2a	1	4.082808	11.59971	11.59971	0	47.55267	47.55267	0	ICE	4.082808	0	2	2
2031	2a	1	1.530298	4.523087	0	4.523087	12.20087	0	12.20087	BEV	0	1.530298	2	3
2031	2a	1	0.647293	1.950282	0	1.950282	5.350056	0	5.350056	BEV	0	0.647293	2	3
2031	2a	1	0.65838	2.059124	0	2.059124	5.994424	0	5.994424	BEV	0	0.65838	2	3
2031	2a	1	4.059232	13.85826	13.85826	0	54.05496	54.05496	0	ICE	4.059232	0	2	2
2031	2a	1	3.205063	12.7783	12.7783	0	63.80811	63.80811	0	ICE	3.205063	0	2	2
2031	2a	1	4.970978	20.6732	20.6732	0	109.0378	109.0378	0	ICE	4.970978	0	2	2
2031	2a	1	2.009722	5.709842	5.709842	0	19.83337	19.83337	0	ICE	2.009722	0	3	2
2031	2a	1	0.684454	2.062247	0	2.062247	3.9014	0	3.9014	BEV	0	0.684454	3	3

2031	2a	1	0.8365	2.56828	2.56828	0	11.3712	11.3712	0	ICE	0.8365	0	3	2
2031	2a	1	3.709774	12.45267	0	12.45267	28.10025	0	28.10025	BEV	0	3.709774	3	3
2031	2a	1	0.505619	1.755154	1.755154	0	6.910738	6.910738	0	ICE	0.505619	0	3	2
2031	2a	1	0.322258	1.118655	0	1.118655	2.698	0	2.698	BEV	0	0.322258	3	3
2031	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2031	2a	1	0	0	0	0	0	0	0	PHEV	0	0	3	8
2031	2a	1	7.296713	29.09134	0	29.09134	95.70298	0	95.70298	BEV	0	7.296713	3	3
2031	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2031	2a	1	0	0	0	0	0	0	0	PHEV	0	0	3	8
2031	2a	1	20.60493	84.51092	0	84.51092	291.041	0	291.041	BEV	0	20.60493	3	3
2031	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2031	2a	1	5.283316	21.66947	13.00168	8.667787	114.2351	68.54108	45.69406	PHEV	3.16999	2.113326	3	8
2031	2a	1	0.750802	2.047083	0	2.047083	3.600927	0	3.600927	BEV	0	0.750802	4	3
2031	2a	1	0.848636	2.654159	0	2.654159	5.28516	0	5.28516	BEV	0	0.848636	4	3
2031	2a	1	1.546813	6.25562	6.25562	0	32.89433	32.89433	0	ICE	1.546813	0	2	2
2031	2a	1	0.378095	1.312481	0	1.312481	3.319833	0	3.319833	BEV	0	0.378095	4	3
2031	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2031	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2031	2a	1	1.588896	4.241145	0	4.241145	10.75633	0	10.75633	BEV	0	1.588896	1	3
2031	2a	1	1.202689	3.279168	0	3.279168	8.657035	0	8.657035	BEV	0	1.202689	1	3
2031	2a	1	0.991947	2.761402	0	2.761402	6.81704	0	6.81704	BEV	0	0.991947	1	3
2031	2a	1	0.943177	2.679671	0	2.679671	7.119859	0	7.119859	BEV	0	0.943177	1	3
2031	2a	1	0.878693	2.546803	0	2.546803	6.622301	0	6.622301	BEV	0	0.878693	1	3
2031	2a	1	0.958795	2.94376	0	2.94376	8.013379	0	8.013379	BEV	0	0.958795	1	3
2031	2a	1	2.271768	7.235241	0	7.235241	21.90978	0	21.90978	BEV	0	2.271768	1	3
2031	2a	1	0.717241	2.202124	0	2.202124	6.217846	0	6.217846	BEV	0	0.717241	2	3
2031	2a	1	0	0	0	0	0	0	0	BEV	0	0	2	3
2031	2a	1	20.65691	88.27442	0	88.27442	483.7996	0	483.7996	FCEV	0	20.65691	2	7
2031	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2031	2a	1	0	0	0	0	0	0	0	BEV	0	0	2	3
2031	2a	1	23.12337	100.1392	0	100.1392	566.0337	0	566.0337	FCEV	0	23.12337	2	7
2031	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2031	2a	1	0.103002	0.375255	0.375255	0	1.800256	1.800256	0	ICE	0.103002	0	3	2
2031	2a	1	0	0	0	0	0	0	0	BEV	0	0	3	3
2031	2a	1	1.27687	5.456526	0	5.456526	21.12498	0	21.12498	FCEV	0	1.27687	3	7
2031	2a	1	18.30181	78.2102	46.92612	31.28408	440.627	264.3762	176.2508	PHEV	10.98108	7.320722	3	8
2031	2a	1	0.974003	4.106464	4.106464	0	21.17772	21.17772	0	ICE	0.974003	0	2	2
2031	2a	1	0.234906	0.775055	0	0.775055	1.710675	0	1.710675	BEV	0	0.234906	3	3
2031	2a	1	0.799427	2.225461	0	2.225461	3.936842	0	3.936842	BEV	0	0.799427	4	3
2031	2a	1	2.182487	6.575789	0	6.575789	12.79704	0	12.79704	BEV	0	2.182487	4	3
2031	2a	1	0.539842	1.812099	0	1.812099	4.138649	0	4.138649	BEV	0	0.539842	4	3
2031	2a	1	0.364219	1.389511	0	1.389511	4.095034	0	4.095034	BEV	0	0.364219	3	3
2031	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2031	2a	1	0	0	0	0	0	0	0	PHEV	0	0	3	8
2031	2a	1	1.371618	5.468516	0	5.468516	23.78086	0	23.78086	BEV	0	1.371618	2	3
2031	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2031	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8

2031	2a	1	0.740089	2.357071	0	2.357071	6.874547	0	6.874547	BEV	0	0.740089	2	3
2031	2a	1	2.091658	6.781448	0	6.781448	20.33756	0	20.33756	BEV	0	2.091658	2	3
2031	2a	1	0.507183	1.673414	0	1.673414	3.599447	0	3.599447	BEV	0	0.507183	4	3
2031	2a	1	1.435444	6.216407	6.216407	0	39.43323	39.43323	0	ICE	1.435444	0	2	2
2031	2a	1	0.984635	3.982062	0	3.982062	19.40856	0	19.40856	BEV	0	0.984635	2	3
2031	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2031	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2031	2a	1	0.320263	0.873208	0	0.873208	2.214526	0	2.214526	BEV	0	0.320263	2	3
2031	2a	1	0.187813	0.544357	0	0.544357	1.037977	0	1.037977	BEV	0	0.187813	4	3
2031	2a	1	0.119575	0.332876	0	0.332876	0.840733	0	0.840733	BEV	0	0.119575	2	3
2031	2a	1	0.170045	0.531825	0	0.531825	1.021205	0	1.021205	BEV	0	0.170045	3	3
2031	2a	1	0.191062	0.707018	0	0.707018	1.872733	0	1.872733	BEV	0	0.191062	3	3
2031	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2031	2a	1	0	0	0	0	0	0	0	PHEV	0	0	3	8
2031	2a	1	0.374272	1.084789	0	1.084789	2.101256	0	2.101256	BEV	0	0.374272	3	3
2031	2a	1	0.845682	2.693371	0	2.693371	5.682284	0	5.682284	BEV	0	0.845682	4	3
2031	2a	1	0.39303	1.409358	0	1.409358	5.197602	0	5.197602	BEV	0	0.39303	2	3
2031	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2031	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2031	2a	1	0.186259	0.678574	0.678574	0	3.766018	3.766018	0	ICE	0.186259	0	2	2
2031	2a	1	1.95703	5.784374	0	5.784374	10.66837	0	10.66837	BEV	0	1.95703	4	3
2031	2a	1	1.138133	4.342024	0	4.342024	12.70682	0	12.70682	BEV	0	1.138133	4	3
2031	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2031	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2031	2a	1	0.119278	0.386716	0	0.386716	0.834646	0	0.834646	BEV	0	0.119278	3	3
2031	2a	1	0	0	0	0	0	0	0	BEV	0	0	4	3
2031	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2031	2a	1	1.771434	7.367005	4.420203	2.946802	41.52616	24.9157	16.61046	PHEV	1.06286	0.708574	4	8
2031	2a	1	0.172979	0.541001	0.541001	0	2.387965	2.387965	0	ICE	0.172979	0	3	2
2031	2a	1	0.199628	0.578602	0	0.578602	1.492781	0	1.492781	BEV	0	0.199628	2	3
2032	2a	1	9403.74	25100.84	25100.84	0	43070.53	43070.53	0	ICE	9403.74	0	1	1
2032	2a	1	11305.27	30824.15	30824.15	0	54972.73	54972.73	0	ICE	11305.27	0	1	1
2032	2a	1	13910.45	38724.18	38724.18	0	72332.4	72332.4	0	ICE	13910.45	0	1	1
2032	2a	1	15340.26	43583.36	43583.36	0	84489.25	84489.25	0	ICE	15340.26	0	1	1
2032	2a	1	13248.41	38399.2	38399.2	0	78108.97	78108.97	0	ICE	13248.41	0	1	1
2032	2a	1	13694.01	40475.25	40475.25	0	86278.25	86278.25	0	ICE	13694.01	0	1	1
2032	2a	1	14900.69	44895.49	44895.49	0	99828.97	99828.97	0	ICE	14900.69	0	1	1
2032	2a	1	17500.27	53730.56	53730.56	0	125295.9	125295.9	0	ICE	17500.27	0	1	1
2032	2a	1	15865.65	49620.77	49620.77	0	120907.3	120907.3	0	ICE	15865.65	0	1	1
2032	2a	1	19488.58	62068.19	62068.19	0	157883.9	157883.9	0	ICE	19488.58	0	1	1
2032	2a	1	21461.45	69581.04	69581.04	0	185175.3	185175.3	0	ICE	21461.45	0	1	1
2032	2a	1	23439.27	77336.24	77336.24	0	215259.9	215259.9	0	ICE	23439.27	0	1	1
2032	2a	1	29264.75	98233.58	98233.58	0	286005.1	286005.1	0	ICE	29264.75	0	1	1
2032	2a	1	30982.75	105775.4	105775.4	0	322078.1	322078.1	0	ICE	30982.75	0	1	1
2032	2a	1	56.07067	191.4258	191.4258	0	598.2265	598.2265	0	ICE	56.07067	0	1	2
2032	2a	1	33158.16	115101.9	115101.9	0	367248.8	367248.8	0	ICE	33158.16	0	1	1
2032	2a	1	38625.43	136293.3	136293.3	0	454611.7	454611.7	0	ICE	38625.43	0	1	1

2032	2a	1	40685.24	145892.4	145892.4	0	507944.1	507944.1	0	ICE	40685.24	0	1	1
2032	2a	1	52829.81	192468	192468	0	700866.3	700866.3	0	ICE	52829.81	0	1	1
2032	2a	1	61336.52	226973.3	226973.3	0	860679.7	860679.7	0	ICE	61336.52	0	1	1
2032	2a	1	159.9593	591.9229	591.9229	0	2255.323	2255.323	0	ICE	159.9593	0	1	2
2032	2a	1	74822.95	281166	281166	0	1106919	1106919	0	ICE	74822.95	0	1	1
2032	2a	1	73106.71	278905	278905	0	1142005	1142005	0	ICE	73106.71	0	1	1
2032	2a	1	68332.57	264606.3	264606.3	0	1125126	1125126	0	ICE	68332.57	0	1	1
2032	2a	1	93976.77	369293	369293	0	1627237	1627237	0	ICE	93976.77	0	1	1
2032	2a	1	1063	4177.184	4177.184	0	18329.32	18329.32	0	ICE	1063	0	1	2
2032	2a	1	108437.8	432331.8	432331.8	0	1978409	1978409	0	ICE	108437.8	0	1	1
2032	2a	1	1660.361	6619.709	6619.709	0	29819.94	29819.94	0	ICE	1660.361	0	1	2
2032	2a	1	181534.4	734161.5	734161.5	0	3489733	3489733	0	ICE	181534.4	0	1	1
2032	2a	1	251124.3	1029984	1029984	0	5064474	5064474	0	ICE	251124.3	0	1	1
2032	2a	1	283746.9	1180041	1180041	0	6012256	6012256	0	ICE	283746.9	0	1	1
2032	2a	1	5278.007	21950.07	21950.07	0	111086.8	111086.8	0	ICE	5278.007	0	1	2
2032	2a	1	367661.9	1550088	1550088	0	8172002	8172002	0	ICE	367661.9	0	1	1
2032	2a	1	383567.4	1639121	1639121	0	8927103	8927103	0	ICE	383567.4	0	1	1
2032	2a	1	448296.1	1941413	1941413	0	10936926	10936926	0	ICE	448296.1	0	1	1
2032	2a	1	5485.965	23757.8	23757.8	0	133822	133822	0	ICE	5485.965	0	1	2
2032	2a	1	26073.48	112915.1	0	112915.1	637287.4	0	637287.4	BEV	0	26073.48	1	3
2032	2a	1	532.1118	2304.39	0	2304.39	13081.28	0	13081.28	FCEV	0	532.1118	1	7
2032	2a	1	23519.16	101853.3	55000.76	46852.5	573343.1	309605.3	263737.8	PHEV	12700.35	10818.81	1	8
2032	2a	1	508742	2232329	2232329	0	12973867	12973867	0	ICE	508742	0	1	1
2032	2a	1	6225.664	27317.84	27317.84	0	158748.5	158748.5	0	ICE	6225.664	0	1	2
2032	2a	1	36163.25	158682.2	0	158682.2	923177.5	0	923177.5	BEV	0	36163.25	1	3
2032	2a	1	738.0255	3238.412	0	3238.412	18944.95	0	18944.95	FCEV	0	738.0255	1	7
2032	2a	1	23372.13	102555.5	55379.98	47175.54	595817.4	321741.4	274076	PHEV	12620.95	10751.18	1	8
2032	2a	1	565864.7	2515399	2515399	0	15074445	15074445	0	ICE	565864.7	0	1	1
2032	2a	1	6895.257	30651	30651	0	183673	183673	0	ICE	6895.257	0	1	2
2032	2a	1	49326.44	219267.4	0	219267.4	1315234	0	1315234	BEV	0	49326.44	1	3
2032	2a	1	1153.835	5129.061	0	5129.061	30910.51	0	30910.51	FCEV	0	1153.835	1	7
2032	2a	1	24191.45	107536.5	56994.37	50542.17	644215.6	341434.3	302781.3	PHEV	12821.47	11369.98	1	8
2032	2a	1	615301.5	2770407	2770407	0	17108868	17108868	0	ICE	615301.5	0	1	1
2032	2a	1	7565.618	34064.35	34064.35	0	210350.4	210350.4	0	ICE	7565.618	0	1	2
2032	2a	1	63725.84	286926.9	0	286926.9	1773212	0	1773212	BEV	0	63725.84	1	3
2032	2a	1	1681.914	7572.85	0	7572.85	46988.15	0	46988.15	FCEV	0	1681.914	1	7
2032	2a	1	24299.01	109406.8	56891.53	52515.26	675589.1	351306.3	324282.8	PHEV	12635.49	11663.53	1	8
2032	2a	1	629079.5	2868483	2868483	0	18250429	18250429	0	ICE	629079.5	0	1	1
2032	2a	1	7772.349	35440.44	35440.44	0	225470.2	225470.2	0	ICE	7772.349	0	1	2
2032	2a	1	101636.9	463444.7	0	463444.7	2949950	0	2949950	BEV	0	101636.9	1	3
2032	2a	1	3484.006	15886.4	0	15886.4	101468.8	0	101468.8	FCEV	0	3484.006	1	7
2032	2a	1	38640.93	176195.3	87745.26	88450.04	1120902	558209.4	562693	PHEV	19243.18	19397.75	1	8
2032	2a	1	624504.9	2883402	2883402	0	18887997	18887997	0	ICE	624504.9	0	1	1
2032	2a	1	7771.429	35881.46	35881.46	0	235029.2	235029.2	0	ICE	7771.429	0	1	2
2032	2a	1	142359.9	657290.1	0	657290.1	4306848	0	4306848	BEV	0	142359.9	1	3
2032	2a	1	6019.986	27794.88	0	27794.88	182641.6	0	182641.6	FCEV	0	6019.986	1	7
2032	2a	1	53964.78	249160.8	118600.5	130560.2	1632154	776905.2	855248.6	PHEV	25687.23	28277.54	1	8

2032	2a	1	614957.7	2874552	2874552	0	19376602	19376602	0	ICE	614957.7	0	1	1
2032	2a	1	7716.842	36071.53	36071.53	0	243134.3	243134.3	0	ICE	7716.842	0	1	2
2032	2a	1	187461.6	876268.8	0	876268.8	5907442	0	5907442	BEV	0	187461.6	1	3
2032	2a	1	9451.847	44181.62	0	44181.62	298438.5	0	298438.5	FCEV	0	9451.847	1	7
2032	2a	1	70853.97	331199.1	150364.4	180834.7	2232948	1013758	1219189	PHEV	32167.7	38686.27	1	8
2032	2a	1	592383.7	2802970	2802970	0	19436571	19436571	0	ICE	592383.7	0	1	1
2032	2a	1	7493.085	35454.88	35454.88	0	245843.7	245843.7	0	ICE	7493.085	0	1	2
2032	2a	1	234022.2	1107318	0	1107318	7677853	0	7677853	BEV	0	234022.2	1	3
2032	2a	1	13732.7	64978.74	0	64978.74	451057.2	0	451057.2	FCEV	0	13732.7	1	7
2032	2a	1	88194.39	417307.6	180276.9	237030.7	2895235	1250742	1644494	PHEV	38099.98	50094.41	1	8
2032	2a	1	569315.5	2726435	2726435	0	19447929	19447929	0	ICE	569315.5	0	1	1
2032	2a	1	7255.726	34747.45	34747.45	0	247852.7	247852.7	0	ICE	7255.726	0	1	2
2032	2a	1	286133	1370282	0	1370282	9771454	0	9771454	BEV	0	286133	1	3
2032	2a	1	19191.85	91909.18	0	91909.18	655749.5	0	655749.5	FCEV	0	19191.85	1	7
2032	2a	1	107519.4	514907.3	211112	303795.3	3676276	1507273	2169003	PHEV	44082.96	63436.46	1	8
2032	2a	1	534824	2591896	2591896	0	18996999	18996999	0	ICE	534824	0	1	1
2032	2a	1	6816.142	33032.8	33032.8	0	242113.2	242113.2	0	ICE	6816.142	0	1	2
2032	2a	1	338630.1	1641090	0	1641090	12021598	0	12021598	BEV	0	338630.1	1	3
2032	2a	1	25600.19	124065.2	0	124065.2	908875	0	908875	FCEV	0	25600.19	1	7
2032	2a	1	126876.9	614878.3	238572.8	376305.5	4513176	1751112	2762064	PHEV	49228.22	77648.64	1	8
2032	2a	1	497249.2	2438286	2438286	0	18350468	18350468	0	ICE	497249.2	0	1	1
2032	2a	1	6337.264	31075.09	31075.09	0	233879.3	233879.3	0	ICE	6337.264	0	1	2
2032	2a	1	395531.6	1939509	0	1939509	14585703	0	14585703	BEV	0	395531.6	1	3
2032	2a	1	33328.56	163428.3	0	163428.3	1228804	0	1228804	FCEV	0	33328.56	1	7
2032	2a	1	147767.4	724585	265198.1	459386.9	5463660	1999700	3463961	PHEV	54082.88	93684.55	1	8
2032	2a	1	451435.8	2239501	2239501	0	17299727	17299727	0	ICE	451435.8	0	1	1
2032	2a	1	5753.387	28541.63	28541.63	0	220493.4	220493.4	0	ICE	5753.387	0	1	2
2032	2a	1	452789.7	2246217	0	2246217	17334759	0	17334759	BEV	0	452789.7	1	3
2032	2a	1	42139.7	209048.3	0	209048.3	1612741	0	1612741	FCEV	0	42139.7	1	7
2032	2a	1	168669.9	836744.4	287840.1	548904.3	6479599	2228982	4250617	PHEV	58022.45	110647.5	1	8
2032	2a	1	398886.1	2001662	2001662	0	15859220	15859220	0	ICE	398886.1	0	1	1
2032	2a	1	5083.659	25510.46	25510.46	0	202137.4	202137.4	0	ICE	5083.659	0	1	2
2032	2a	1	509962.5	2559058	0	2559058	20252606	0	20252606	BEV	0	509962.5	1	3
2032	2a	1	52023.88	261062.6	0	261062.6	2065261	0	2065261	FCEV	0	52023.88	1	7
2032	2a	1	189419.9	950533.5	306071.8	644461.7	7552867	2432023	5120844	PHEV	60993.2	128426.7	1	8
2032	2a	1	343590.4	1743866	1743866	0	14146826	14146826	0	ICE	343590.4	0	1	1
2032	2a	1	4378.941	22224.97	22224.97	0	180311.1	180311.1	0	ICE	4378.941	0	1	2
2032	2a	1	571242.2	2899294	0	2899294	23494517	0	23494517	BEV	0	571242.2	1	3
2032	2a	1	63471.36	322143.8	0	322143.8	2609703	0	2609703	FCEV	0	63471.36	1	7
2032	2a	1	211571.2	1073813	322143.8	751668.9	8735974	2620792	6115182	PHEV	63471.36	148099.8	1	8
2032	2a	1	279462.2	1434398	1434398	0	11878372	11878372	0	ICE	279462.2	0	1	1
2032	2a	1	3561.644	18280.89	18280.89	0	151392.5	151392.5	0	ICE	3561.644	0	1	2
2032	2a	1	629844.8	3232811	0	3232811	26750751	0	26750751	BEV	0	629844.8	1	3
2032	2a	1	77845.99	399560.9	0	399560.9	3305891	0	3305891	FCEV	0	77845.99	1	7
2032	2a	1	223481.3	1147065	344119.4	802945.3	9519697	2855909	6663788	PHEV	67044.39	156436.9	1	8
2032	2a	1	190035.5	986284.1	986284.1	0	8316282	8316282	0	ICE	190035.5	0	1	1
2032	2a	1	2421.937	12569.85	12569.85	0	105986.6	105986.6	0	ICE	2421.937	0	1	2

2032	2a	1	615545.7	3194682	0	3194682	26929859	0	26929859	BEV	0	615545.7	1	3
2032	2a	1	83938.05	435638.5	0	435638.5	3672604	0	3672604	FCEV	0	83938.05	1	7
2032	2a	1	208936.7	1084382	325314.5	759067.1	9152333	2745700	6406633	PHEV	62681.01	146255.7	1	8
2032	2a	1	3100.32	8275.498	8275.498	0	34549.82	34549.82	0	ICE	3100.32	0	2	1
2032	2a	1	4038.469	11011.01	11011.01	0	46379.03	46379.03	0	ICE	4038.469	0	2	1
2032	2a	1	3376.52	9399.624	9399.624	0	39378.34	39378.34	0	ICE	3376.52	0	2	1
2032	2a	1	4174.267	11859.55	11859.55	0	49264.14	49264.14	0	ICE	4174.267	0	2	1
2032	2a	1	3643.791	10561.16	10561.16	0	44444.04	44444.04	0	ICE	3643.791	0	2	1
2032	2a	1	4691.525	13866.69	13866.69	0	58791.72	58791.72	0	ICE	4691.525	0	2	1
2032	2a	1	5620.808	16935.38	16935.38	0	72495.39	72495.39	0	ICE	5620.808	0	2	1
2032	2a	1	5499.289	16884.3	16884.3	0	73245.56	73245.56	0	ICE	5499.289	0	2	1
2032	2a	1	6025.853	18846.22	18846.22	0	81730.02	81730.02	0	ICE	6025.853	0	2	1
2032	2a	1	8011.394	25515.09	25515.09	0	111824.1	111824.1	0	ICE	8011.394	0	2	1
2032	2a	1	10088.18	32707.3	32707.3	0	145510	145510	0	ICE	10088.18	0	2	1
2032	2a	1	9181.723	30294.45	30294.45	0	136498.2	136498.2	0	ICE	9181.723	0	2	1
2032	2a	1	9802.104	32902.92	32902.92	0	150460.9	150460.9	0	ICE	9802.104	0	2	1
2032	2a	1	10813.49	36917.38	36917.38	0	170639.3	170639.3	0	ICE	10813.49	0	2	1
2032	2a	1	11367.2	39458.97	39458.97	0	182392.5	182392.5	0	ICE	11367.2	0	2	1
2032	2a	1	8192.876	28909.3	28909.3	0	134368	134368	0	ICE	8192.876	0	2	1
2032	2a	1	4862.536	17715.05	17715.05	0	83389.26	83389.26	0	ICE	4862.536	0	2	1
2032	2a	1	7985.894	29551.48	29551.48	0	141342.7	141342.7	0	ICE	7985.894	0	2	1
2032	2a	1	11933.03	44841.36	44841.36	0	217713.2	217713.2	0	ICE	11933.03	0	2	1
2032	2a	1	21134.41	80628.63	80628.63	0	396262.4	396262.4	0	ICE	21134.41	0	2	1
2032	2a	1	16297.65	63109.86	63109.86	0	312377.8	312377.8	0	ICE	16297.65	0	2	1
2032	2a	1	8981.667	35294.54	35294.54	0	176002.5	176002.5	0	ICE	8981.667	0	2	1
2032	2a	1	8261.586	32938.2	32938.2	0	166924.2	166924.2	0	ICE	8261.586	0	2	1
2032	2a	1	70054.05	295352.8	295352.8	0	1616649	1616649	0	ICE	70054.05	0	2	1
2032	2a	1	66181.81	282818.7	282818.7	0	1572391	1572391	0	ICE	66181.81	0	2	1
2032	2a	1	60878.4	263643	263643	0	1499708	1499708	0	ICE	60878.4	0	2	1
2032	2a	1	8.24708	35.71522	35.71522	0	203.1658	203.1658	0	ICE	8.24708	0	2	2
2032	2a	1	2.051254	8.883261	0	8.883261	50.03246	0	50.03246	BEV	0	2.051254	2	3
2032	2a	1	0.041862	0.181291	0	0.181291	1.021071	0	1.021071	FCEV	0	0.041862	2	7
2032	2a	1	17.79148	77.04869	46.22922	30.81948	438.2952	262.9771	175.3181	PHEV	10.67489	7.116594	2	8
2032	2a	1	66587.65	292182.6	292182.6	0	1698343	1698343	0	ICE	66587.65	0	2	1
2032	2a	1	9.020501	39.58142	39.58142	0	230.0718	230.0718	0	ICE	9.020501	0	2	2
2032	2a	1	70756.54	314529.1	314529.1	0	1869890	1869890	0	ICE	70756.54	0	2	1
2032	2a	1	9.652127	42.90592	42.90592	0	255.0719	255.0719	0	ICE	9.652127	0	2	2
2032	2a	1	940.809	4182.112	0	4182.112	24909.88	0	24909.88	BEV	0	940.809	2	3
2032	2a	1	22.00723	97.82719	0	97.82719	585.0068	0	585.0068	FCEV	0	22.00723	2	7
2032	2a	1	722.4752	3211.568	1908.589	1302.979	19081.59	11339.92	7741.674	PHEV	429.3567	293.1185	2	8
2032	2a	1	74100.25	333637.9	333637.9	0	2030046	2030046	0	ICE	74100.25	0	2	1
2032	2a	1	10.2257	46.04141	46.04141	0	280.117	280.117	0	ICE	10.2257	0	2	2
2032	2a	1	2012.711	9062.27	0	9062.27	55391.14	0	55391.14	BEV	0	2012.711	2	3
2032	2a	1	53.12139	239.1801	0	239.1801	1472.771	0	1472.771	FCEV	0	53.12139	2	7
2032	2a	1	1550.153	6979.594	4107.99	2871.604	42388.79	24948.83	17439.96	PHEV	912.3757	637.7772	2	8
2032	2a	1	74147.38	338098	338098	0	2107271	2107271	0	ICE	74147.38	0	2	1
2032	2a	1	10.36667	47.27006	47.27006	0	294.5614	294.5614	0	ICE	10.36667	0	2	2

2032	2a	1	5225.793	23828.62	0	23828.62	149517.1	0	149517.1	BEV	0	5225.793	2	3
2032	2a	1	179.1347	816.8204	0	816.8204	5178.137	0	5178.137	FCEV	0	179.1347	2	7
2032	2a	1	3768.795	17184.99	9962.384	7222.606	106527.3	61755.41	44771.91	PHEV	2184.824	1583.971	2	8
2032	2a	1	72570.8	335066.6	335066.6	0	2140166	2140166	0	ICE	72570.8	0	2	1
2032	2a	1	10.18783	47.03823	47.03823	0	300.359	300.359	0	ICE	10.18783	0	2	2
2032	2a	1	8883.289	41015.03	0	41015.03	264110.2	0	264110.2	BEV	0	8883.289	2	3
2032	2a	1	375.6483	1734.406	0	1734.406	11313.03	0	11313.03	FCEV	0	375.6483	2	7
2032	2a	1	5993.55	27672.82	15797.23	11875.59	175221.2	100026.3	75194.94	PHEV	3421.461	2572.089	2	8
2032	2a	1	70492.37	329508.8	329508.8	0	2157350	2157350	0	ICE	70492.37	0	2	1
2032	2a	1	9.942657	46.47586	46.47586	0	304.1697	304.1697	0	ICE	9.942657	0	2	2
2032	2a	1	13043.87	60972.15	0	60972.15	402800.4	0	402800.4	BEV	0	13043.87	2	3
2032	2a	1	657.6743	3074.226	0	3074.226	20572.3	0	20572.3	FCEV	0	657.6743	2	7
2032	2a	1	8223.951	38441.96	21604.38	16837.58	248863.1	139861.1	109002	PHEV	4621.861	3602.091	2	8
2032	2a	1	66869.18	316403.6	316403.6	0	2124607	2124607	0	ICE	66869.18	0	2	1
2032	2a	1	9.472913	44.82279	44.82279	0	300.84	300.84	0	ICE	9.472913	0	2	2
2032	2a	1	17467.38	82650.04	0	82650.04	560243.2	0	560243.2	BEV	0	17467.38	2	3
2032	2a	1	1025.006	4850.002	0	4850.002	33236.1	0	33236.1	FCEV	0	1025.006	2	7
2032	2a	1	10276.85	48626.77	26897.55	21729.22	322224.9	178236.4	143988.5	PHEV	5684.567	4592.285	2	8
2032	2a	1	63278.72	303039.9	303039.9	0	2088183	2088183	0	ICE	63278.72	0	2	1
2032	2a	1	9.000595	43.10358	43.10358	0	296.857	296.857	0	ICE	9.000595	0	2	2
2032	2a	1	22459.26	107556.7	0	107556.7	748263.4	0	748263.4	BEV	0	22459.26	2	3
2032	2a	1	1506.414	7214.17	0	7214.17	50663.48	0	50663.48	FCEV	0	1506.414	2	7
2032	2a	1	12310.07	58952.58	32087.05	26865.53	400238.8	217844.3	182394.5	PHEV	6700.198	5609.877	2	8
2032	2a	1	59298.62	287376.5	287376.5	0	2030355	2030355	0	ICE	59298.62	0	2	1
2032	2a	1	8.434475	40.87566	40.87566	0	288.6295	288.6295	0	ICE	8.434475	0	2	2
2032	2a	1	27984.24	135618.9	0	135618.9	967178.3	0	967178.3	BEV	0	27984.24	2	3
2032	2a	1	2115.588	10252.69	0	10252.69	73653.76	0	73653.76	FCEV	0	2115.588	2	7
2032	2a	1	14261.03	69112.68	37004.9	32107.78	480399.5	257219.6	223179.9	PHEV	7635.765	6625.269	2	8
2032	2a	1	54691.59	268182.9	268182.9	0	1942926	1942926	0	ICE	54691.59	0	2	1
2032	2a	1	7.779184	38.14562	38.14562	0	276.1973	276.1973	0	ICE	7.779184	0	2	2
2032	2a	1	33954.42	166497.2	0	166497.2	1217104	0	1217104	BEV	0	33954.42	2	3
2032	2a	1	2861.091	14029.5	0	14029.5	103147.4	0	103147.4	FCEV	0	2861.091	2	7
2032	2a	1	16050.59	78704.87	41443.74	37261.13	560397.3	295089.2	265308.1	PHEV	8451.782	7598.808	2	8
2032	2a	1	49146.79	243809.3	243809.3	0	1811560	1811560	0	ICE	49146.79	0	2	1
2032	2a	1	6.990506	34.67878	34.67878	0	257.5224	257.5224	0	ICE	6.990506	0	2	2
2032	2a	1	40066.07	198761.4	0	198761.4	1489304	0	1489304	BEV	0	40066.07	2	3
2032	2a	1	3728.822	18498.09	0	18498.09	139237.9	0	139237.9	FCEV	0	3728.822	2	7
2032	2a	1	17520.07	86914.26	44996.76	41917.51	634290.2	328381.1	305909.1	PHEV	9070.391	8449.679	2	8
2032	2a	1	42911.57	215335.9	215335.9	0	1641100	1641100	0	ICE	42911.57	0	2	1
2032	2a	1	6.103626	30.62879	30.62879	0	233.2924	233.2924	0	ICE	6.103626	0	2	2
2032	2a	1	46246.89	232072.9	0	232072.9	1782349	0	1782349	BEV	0	46246.89	2	3
2032	2a	1	4717.882	23674.94	0	23674.94	182488.4	0	182488.4	FCEV	0	4717.882	2	7
2032	2a	1	18646.82	93572.16	47614.86	45957.3	700242.7	356323.5	343919.2	PHEV	9488.567	9158.252	2	8
2032	2a	1	36449.58	184996.9	184996.9	0	1445915	1445915	0	ICE	36449.58	0	2	1
2032	2a	1	5.18449	26.31347	26.31347	0	205.5481	205.5481	0	ICE	5.18449	0	2	2
2032	2a	1	52815.79	268062.3	0	268062.3	2109823	0	2109823	BEV	0	52815.79	2	3
2032	2a	1	5868.421	29784.7	0	29784.7	235110.3	0	235110.3	FCEV	0	5868.421	2	7

2032	2a	1	19561.4	99282.34	49641.17	49641.17	761953.9	380976.9	380976.9	PHEV	9780.702	9780.702	2	8
2032	2a	1	29754.4	152720.7	152720.7	0	1223717	1223717	0	ICE	29754.4	0	2	1
2032	2a	1	4.232185	21.72258	21.72258	0	173.9637	173.9637	0	ICE	4.232185	0	2	2
2032	2a	1	59036.97	303019.7	0	303019.7	2443801	0	2443801	BEV	0	59036.97	2	3
2032	2a	1	7296.704	37451.87	0	37451.87	302735.7	0	302735.7	FCEV	0	7296.704	2	7
2032	2a	1	20947.48	107517.3	53758.66	53758.66	846149.9	423075	423075	PHEV	10473.74	10473.74	2	8
2032	2a	1	20507.48	106433.8	106433.8	0	873870.7	873870.7	0	ICE	20507.48	0	2	1
2032	2a	1	2.916929	15.13886	15.13886	0	124.2314	124.2314	0	ICE	2.916929	0	2	2
2032	2a	1	58981.89	306116	0	306116	2528466	0	2528466	BEV	0	58981.89	2	3
2032	2a	1	8042.985	41743.09	0	41743.09	345419.8	0	345419.8	FCEV	0	8042.985	2	7
2032	2a	1	20020.42	103906	51952.98	51952.98	838137.5	419068.8	419068.8	PHEV	10010.21	10010.21	2	8
2032	2a	1	3415.017	9115.501	9115.501	0	34619.8	34619.8	0	ICE	3415.017	0	3	1
2032	2a	1	4340.833	11835.41	11835.41	0	45826.19	45826.19	0	ICE	4340.833	0	3	1
2032	2a	1	4924.456	13708.8	13708.8	0	53700.25	53700.25	0	ICE	4924.456	0	3	1
2032	2a	1	5899.57	16761.33	16761.33	0	67721.88	67721.88	0	ICE	5899.57	0	3	1
2032	2a	1	5290.125	15332.9	15332.9	0	62272.6	62272.6	0	ICE	5290.125	0	3	1
2032	2a	1	7017.953	20742.89	20742.89	0	85084.35	85084.35	0	ICE	7017.953	0	3	1
2032	2a	1	7531.338	22691.77	22691.77	0	94160.71	94160.71	0	ICE	7531.338	0	3	1
2032	2a	1	9733.627	29884.86	29884.86	0	125768.2	125768.2	0	ICE	9733.627	0	3	1
2032	2a	1	9493.586	29691.76	29691.76	0	125902.3	125902.3	0	ICE	9493.586	0	3	1
2032	2a	1	15012.78	47813.46	47813.46	0	204912.7	204912.7	0	ICE	15012.78	0	3	1
2032	2a	1	16775.66	54389.04	54389.04	0	235321.9	235321.9	0	ICE	16775.66	0	3	1
2032	2a	1	18826.57	62116.96	62116.96	0	272032.2	272032.2	0	ICE	18826.57	0	3	1
2032	2a	1	25060.95	84122.58	84122.58	0	372761.9	372761.9	0	ICE	25060.95	0	3	1
2032	2a	1	24260.99	82827.25	82827.25	0	370388.8	370388.8	0	ICE	24260.99	0	3	1
2032	2a	1	24174.58	83917.21	83917.21	0	380926.1	380926.1	0	ICE	24174.58	0	3	1
2032	2a	1	28378.32	100135.4	100135.4	0	459957.5	459957.5	0	ICE	28378.32	0	3	1
2032	2a	1	34871.12	125043.7	125043.7	0	579267.3	579267.3	0	ICE	34871.12	0	3	1
2032	2a	1	39599.12	144266.3	144266.3	0	674464.8	674464.8	0	ICE	39599.12	0	3	1
2032	2a	1	37767.28	139756.3	139756.3	0	660237.3	660237.3	0	ICE	37767.28	0	3	1
2032	2a	1	39924.63	150026.8	150026.8	0	717364.6	717364.6	0	ICE	39924.63	0	3	1
2032	2a	1	32451.67	123804.4	123804.4	0	601078.8	601078.8	0	ICE	32451.67	0	3	1
2032	2a	1	21331.42	82602.31	82602.31	0	405672	405672	0	ICE	21331.42	0	3	1
2032	2a	1	40277.96	158277.1	158277.1	0	787713.6	787713.6	0	ICE	40277.96	0	3	1
2032	2a	1	58862.52	234679.6	234679.6	0	1186170	1186170	0	ICE	58862.52	0	3	1
2032	2a	1	63775.74	257921.9	257921.9	0	1330449	1330449	0	ICE	63775.74	0	3	1
2032	2a	1	98482.2	403923.8	403923.8	0	2116476	2116476	0	ICE	98482.2	0	3	1
2032	2a	1	102847	427717.9	427717.9	0	2290749	2290749	0	ICE	102847	0	3	1
2032	2a	1	1100.398	4576.313	4576.313	0	23991.3	23991.3	0	ICE	1100.398	0	3	2
2032	2a	1	134539.8	567229.2	567229.2	0	3094862	3094862	0	ICE	134539.8	0	3	1
2032	2a	1	142348.7	608307.1	608307.1	0	3383686	3383686	0	ICE	142348.7	0	3	1
2032	2a	1	997.9535	4264.615	4264.615	0	23930.46	23930.46	0	ICE	997.9535	0	3	2
2032	2a	1	174578.7	756039.2	756039.2	0	4277514	4277514	0	ICE	174578.7	0	3	1
2032	2a	1	1784.389	7727.565	7727.565	0	43853.91	43853.91	0	ICE	1784.389	0	3	2
2032	2a	1	196893	863954.6	863954.6	0	4996612	4996612	0	ICE	196893	0	3	1
2032	2a	1	2012.466	8830.581	8830.581	0	51223.56	51223.56	0	ICE	2012.466	0	3	2
2032	2a	1	679.3083	2980.764	1788.458	1192.306	17319.68	10391.81	6927.873	PHEV	407.585	271.7233	3	8

2032	2a	1	215720.8	958928.5	958928.5	0	5688940	5688940	0	ICE	215720.8	0	3	1
2032	2a	1	2199.35	9776.615	9776.615	0	58142.5	58142.5	0	ICE	2199.35	0	3	2
2032	2a	1	2544.155	11309.36	0	11309.36	52078.72	0	52078.72	BEV	0	2544.155	3	3
2032	2a	1	59.5124	264.5463	0	264.5463	1099.569	0	1099.569	FCEV	0	59.5124	3	7
2032	2a	1	2209.749	9822.844	5837.576	3985.268	58389.28	34699.92	23689.37	PHEV	1313.222	896.5269	3	8
2032	2a	1	230514.9	1037898	1037898	0	6298449	6298449	0	ICE	230514.9	0	3	1
2032	2a	1	2355.524	10605.79	10605.79	0	64527.72	64527.72	0	ICE	2355.524	0	3	2
2032	2a	1	5524.295	24873.25	0	24873.25	135361.8	0	135361.8	BEV	0	5524.295	3	3
2032	2a	1	145.8025	656.4787	0	656.4787	2808.217	0	2808.217	FCEV	0	145.8025	3	7
2032	2a	1	3986.78	17950.56	10565.18	7385.372	109214.7	64280.66	44934.05	PHEV	2346.505	1640.275	3	8
2032	2a	1	234027.7	1067122	1067122	0	6624758	6624758	0	ICE	234027.7	0	3	1
2032	2a	1	2427.573	11069.27	11069.27	0	68993.1	68993.1	0	ICE	2427.573	0	3	2
2032	2a	1	15983.71	72882.69	0	72882.69	393174.1	0	393174.1	BEV	0	15983.71	3	3
2032	2a	1	547.905	2498.343	0	2498.343	10994.01	0	10994.01	FCEV	0	547.905	3	7
2032	2a	1	10863.98	49537.66	28717.69	20819.97	340647.6	197478.3	143169.3	PHEV	6298.002	4565.974	3	8
2032	2a	1	230615.8	1064776	1064776	0	6769926	6769926	0	ICE	230615.8	0	3	1
2032	2a	1	2403.438	11096.91	11096.91	0	70878.5	70878.5	0	ICE	2403.438	0	3	2
2032	2a	1	27944.63	129023.2	0	129023.2	711353.9	0	711353.9	BEV	0	27944.63	3	3
2032	2a	1	1181.697	5456.013	0	5456.013	24688.9	0	24688.9	FCEV	0	1181.697	3	7
2032	2a	1	17872.46	82518.93	47106.52	35412.41	602774.8	344098.3	258676.5	PHEV	10202.62	7669.838	3	8
2032	2a	1	224810.3	1050851	1050851	0	6844916	6844916	0	ICE	224810.3	0	3	1
2032	2a	1	2355.594	11010.97	11010.97	0	72088.51	72088.51	0	ICE	2355.594	0	3	2
2032	2a	1	41515.94	194061.7	0	194061.7	1103378	0	1103378	BEV	0	41515.94	3	3
2032	2a	1	2093.241	9784.623	0	9784.623	45793.53	0	45793.53	FCEV	0	2093.241	3	7
2032	2a	1	24957.69	116662	65564.03	51097.95	887178.9	498594.5	388584.4	PHEV	14026.22	10931.47	3	8
2032	2a	1	213553.7	1010468	1010468	0	6746362	6746362	0	ICE	213553.7	0	3	1
2032	2a	1	2248.879	10640.97	10640.97	0	71444.23	71444.23	0	ICE	2248.879	0	3	2
2032	2a	1	55869.53	264356.7	0	264356.7	1549569	0	1549569	BEV	0	55869.53	3	3
2032	2a	1	3278.49	15512.77	0	15512.77	78729.43	0	78729.43	FCEV	0	3278.49	3	7
2032	2a	1	31528.94	149184.8	82520.53	66664.31	1174527	649681	524845.6	PHEV	17440.01	14088.93	3	8
2032	2a	1	200879.7	962006.9	962006.9	0	6587408	6587408	0	ICE	200879.7	0	3	1
2032	2a	1	2125.234	10177.68	10177.68	0	70121.8	70121.8	0	ICE	2125.234	0	3	2
2032	2a	1	71508.56	342452.3	0	342452.3	2071059	0	2071059	BEV	0	71508.56	3	3
2032	2a	1	4796.306	22969.36	0	22969.36	123959	0	123959	FCEV	0	4796.306	3	7
2032	2a	1	37825.19	181143.7	98593.92	82549.77	1474766	802694	672071.9	PHEV	20587.71	17237.48	3	8
2032	2a	1	185753.4	900209.3	900209.3	0	6321064	6321064	0	ICE	185753.4	0	3	1
2032	2a	1	1965.203	9523.885	9523.885	0	67285.49	67285.49	0	ICE	1965.203	0	3	2
2032	2a	1	87944.59	426202.3	0	426202.3	2660614	0	2660614	BEV	0	87944.59	3	3
2032	2a	1	6648.546	32220.58	0	32220.58	185205.4	0	185205.4	FCEV	0	6648.546	3	7
2032	2a	1	43526.75	210941.9	112944.3	97997.59	1776882	951393.3	825488.5	PHEV	23305.46	20221.28	3	8
2032	2a	1	169810.7	832675.1	832675.1	0	5995915	5995915	0	ICE	169810.7	0	3	1
2032	2a	1	1796.535	8809.397	8809.397	0	63823.78	63823.78	0	ICE	1796.535	0	3	2
2032	2a	1	105728.2	518443.6	0	518443.6	3340163	0	3340163	BEV	0	105728.2	3	3
2032	2a	1	8908.945	43685.46	0	43685.46	264404.1	0	264404.1	FCEV	0	8908.945	3	7
2032	2a	1	48862.32	239598.8	126165.9	113432.9	2086059	1098459	987599.8	PHEV	25729.5	23132.82	3	8
2032	2a	1	152503.4	756545.2	756545.2	0	5587170	5587170	0	ICE	152503.4	0	3	1
2032	2a	1	1613.431	8003.971	8003.971	0	59472.8	59472.8	0	ICE	1613.431	0	3	2

2032	2a	1	124593.5	618088.5	0	618088.5	4109263	0	4109263	BEV	0	124593.5	3	3
2032	2a	1	11595.52	57523.54	0	57523.54	364201.3	0	364201.3	FCEV	0	11595.52	3	7
2032	2a	1	53639.65	266097.7	137762.6	128335.1	2393437	1239117	1154321	PHEV	27770.01	25869.64	3	8
2032	2a	1	133566.7	670255	670255	0	5076002	5076002	0	ICE	133566.7	0	3	1
2032	2a	1	1413.087	7091.053	7091.053	0	54031.89	54031.89	0	ICE	1413.087	0	3	2
2032	2a	1	144120.1	723213.4	0	723213.4	4960439	0	4960439	BEV	0	144120.1	3	3
2032	2a	1	14702.43	73778.7	0	73778.7	486608.8	0	486608.8	FCEV	0	14702.43	3	7
2032	2a	1	57640.8	289249	147186.4	142062.6	2686319	1366953	1319366	PHEV	29330.93	28309.87	3	8
2032	2a	1	114950.7	583423.3	583423.3	0	4531034	4531034	0	ICE	114950.7	0	3	1
2032	2a	1	1216.137	6172.405	6172.405	0	48231.4	48231.4	0	ICE	1216.137	0	3	2
2032	2a	1	166580.3	845465.2	0	845465.2	5982181	0	5982181	BEV	0	166580.3	3	3
2032	2a	1	18508.93	93940.58	0	93940.58	643751.5	0	643751.5	FCEV	0	18508.93	3	7
2032	2a	1	61696.42	313135.3	156567.6	156567.6	3001953	1500976	1500976	PHEV	30848.21	30848.21	3	8
2032	2a	1	95019.74	487708.8	487708.8	0	3883164	3883164	0	ICE	95019.74	0	3	1
2032	2a	1	1005.274	5159.78	5159.78	0	41335.52	41335.52	0	ICE	1005.274	0	3	2
2032	2a	1	188716.6	968627.6	0	968627.6	7050017	0	7050017	BEV	0	188716.6	3	3
2032	2a	1	23324.52	119718	0	119718	849219.1	0	849219.1	FCEV	0	23324.52	3	7
2032	2a	1	66960.36	343688.1	171844	171844	3395727	1697863	1697863	PHEV	33480.18	33480.18	3	8
2032	2a	1	65048.26	337600.5	337600.5	0	2753409	2753409	0	ICE	65048.26	0	3	1
2032	2a	1	688.1868	3571.69	3571.69	0	29309.75	29309.75	0	ICE	688.1868	0	3	2
2032	2a	1	187407.8	972646.6	0	972646.6	7276877	0	7276877	BEV	0	187407.8	3	3
2032	2a	1	25555.61	132633.6	0	132633.6	971686.1	0	971686.1	FCEV	0	25555.61	3	7
2032	2a	1	63612.46	330148.6	165074.3	165074.3	3357330	1678665	1678665	PHEV	31806.23	31806.23	3	8
2032	2a	1	3657.28	10181.21	10181.21	0	34986.26	34986.26	0	ICE	3657.28	0	4	1
2032	2a	1	3049.932	8665.193	8665.193	0	30369.86	30369.86	0	ICE	3049.932	0	4	1
2032	2a	1	3688.795	10691.6	10691.6	0	37730.21	37730.21	0	ICE	3688.795	0	4	1
2032	2a	1	3939.76	11644.71	11644.71	0	42260.73	42260.73	0	ICE	3939.76	0	4	1
2032	2a	1	6170.422	18591.36	18591.36	0	68477.96	68477.96	0	ICE	6170.422	0	4	1
2032	2a	1	6724.975	20647.49	20647.49	0	77860.03	77860.03	0	ICE	6724.975	0	4	1
2032	2a	1	6155.079	19250.38	19250.38	0	73694.37	73694.37	0	ICE	6155.079	0	4	1
2032	2a	1	8156.672	25977.78	25977.78	0	102023.8	102023.8	0	ICE	8156.672	0	4	1
2032	2a	1	9370.036	30378.97	30378.97	0	121227.9	121227.9	0	ICE	9370.036	0	4	1
2032	2a	1	15925.23	52544.18	52544.18	0	214572.3	214572.3	0	ICE	15925.23	0	4	1
2032	2a	1	19037.76	63904.43	63904.43	0	265332.8	265332.8	0	ICE	19037.76	0	4	1
2032	2a	1	25893.51	88400.71	88400.71	0	372157.2	372157.2	0	ICE	25893.51	0	4	1
2032	2a	1	28.00082	95.59507	95.59507	0	367.4182	367.4182	0	ICE	28.00082	0	4	2
2032	2a	1	32592.1	113137	113137	0	485959.6	485959.6	0	ICE	32592.1	0	4	1
2032	2a	1	37107.86	130938.4	130938.4	0	575655.2	575655.2	0	ICE	37107.86	0	4	1
2032	2a	1	42329.96	151790.2	151790.2	0	675197.8	675197.8	0	ICE	42329.96	0	4	1
2032	2a	1	63.10746	226.2958	226.2958	0	932.4476	932.4476	0	ICE	63.10746	0	4	2
2032	2a	1	41746.16	152088.4	152088.4	0	681918.4	681918.4	0	ICE	41746.16	0	4	1
2032	2a	1	43220.8	159936.9	159936.9	0	728027.4	728027.4	0	ICE	43220.8	0	4	1
2032	2a	1	46993.41	176589.5	176589.5	0	815305.3	815305.3	0	ICE	46993.41	0	4	1
2032	2a	1	38048.21	145155.4	145155.4	0	680227.1	680227.1	0	ICE	38048.21	0	4	1
2032	2a	1	17269.33	66872.53	66872.53	0	316820.2	316820.2	0	ICE	17269.33	0	4	1
2032	2a	1	26609.18	104564	104564	0	503078.8	503078.8	0	ICE	26609.18	0	4	1
2032	2a	1	41279.08	164576	164576	0	804871.4	804871.4	0	ICE	41279.08	0	4	1

2032	2a	1	1167.612	4655.165	4655.165	0	22337.66	22337.66	0	ICE	1167.612	0	4	2
2032	2a	1	44160.4	178593.5	178593.5	0	890802.7	890802.7	0	ICE	44160.4	0	4	1
2032	2a	1	52547.97	215525	215525	0	1096988	1096988	0	ICE	52547.97	0	4	1
2032	2a	1	1127.489	4624.384	4624.384	0	23203.91	23203.91	0	ICE	1127.489	0	4	2
2032	2a	1	86301.92	358910.7	358910.7	0	1870166	1870166	0	ICE	86301.92	0	4	1
2032	2a	1	2701.641	11235.53	11235.53	0	57938.9	57938.9	0	ICE	2701.641	0	4	2
2032	2a	1	100986.7	425767.1	425767.1	0	2275482	2275482	0	ICE	100986.7	0	4	1
2032	2a	1	115677.8	494332.7	494332.7	0	2701796	2701796	0	ICE	115677.8	0	4	1
2032	2a	1	110325.9	477782.7	477782.7	0	2656896	2656896	0	ICE	110325.9	0	4	1
2032	2a	1	3847.081	16660.36	16660.36	0	92707.63	92707.63	0	ICE	3847.081	0	4	2
2032	2a	1	923.0176	3997.266	2398.36	1598.907	21173.03	12703.82	8469.212	PHEV	553.8106	369.2071	4	8
2032	2a	1	120977.1	530840.1	530840.1	0	3022058	3022058	0	ICE	120977.1	0	4	1
2032	2a	1	4218.49	18510.48	18510.48	0	105448.3	105448.3	0	ICE	4218.49	0	4	2
2032	2a	1	2.116249	9.285972	0	9.285972	37.47651	0	37.47651	BEV	0	2.116249	4	3
2032	2a	1	0.043189	0.18951	0	0.18951	0.764827	0	0.764827	FCEV	0	0.043189	4	7
2032	2a	1	2589.705	11363.47	6818.083	4545.389	63511.07	38106.64	25404.43	PHEV	1553.823	1035.882	4	8
2032	2a	1	131695.3	585416	585416	0	3411079	3411079	0	ICE	131695.3	0	4	1
2032	2a	1	4635.59	20606.26	20606.26	0	120246.9	120246.9	0	ICE	4635.59	0	4	2
2032	2a	1	1128.953	5018.457	0	5018.457	21724.05	0	21724.05	BEV	0	1128.953	4	3
2032	2a	1	26.40826	117.3908	0	117.3908	487.8095	0	487.8095	FCEV	0	26.40826	4	7
2032	2a	1	2937.304	13056.99	7759.584	5297.408	79080.09	46996.17	32083.92	PHEV	1745.598	1191.706	4	8
2032	2a	1	140975.1	634743.1	634743.1	0	3784290	3784290	0	ICE	140975.1	0	4	1
2032	2a	1	5040.055	22692.95	22692.95	0	135688.6	135688.6	0	ICE	5040.055	0	4	2
2032	2a	1	2430.94	10945.36	0	10945.36	52771.16	0	52771.16	BEV	0	2430.94	4	3
2032	2a	1	64.15971	288.8804	0	288.8804	1235.462	0	1235.462	FCEV	0	64.15971	4	7
2032	2a	1	3273.858	14740.61	8675.903	6064.709	89822.4	52866.9	36955.5	PHEV	1926.899	1346.959	4	8
2032	2a	1	142164.4	648242.8	648242.8	0	3956795	3956795	0	ICE	142164.4	0	4	1
2032	2a	1	5172.377	23585.06	23585.06	0	144609	144609	0	ICE	5172.377	0	4	2
2032	2a	1	7523.479	34305.63	0	34305.63	169816.9	0	169816.9	BEV	0	7523.479	4	3
2032	2a	1	257.897	1175.961	0	1175.961	5173.596	0	5173.596	FCEV	0	257.897	4	7
2032	2a	1	8979.657	40945.53	23736.71	17208.82	271151.2	157190.2	113961	PHEV	5205.636	3774.022	4	8
2032	2a	1	140072.4	646728.3	646728.3	0	4046183	4046183	0	ICE	140072.4	0	4	1
2032	2a	1	5124.217	23659.02	23659.02	0	148787.5	148787.5	0	ICE	5124.217	0	4	2
2032	2a	1	13780.11	63624.16	0	63624.16	328010.2	0	328010.2	BEV	0	13780.11	4	3
2032	2a	1	582.7206	2690.479	0	2690.479	12171.84	0	12171.84	FCEV	0	582.7206	4	7
2032	2a	1	14594.29	67383.28	38466.23	28917.05	469162.6	267824.8	201337.8	PHEV	8331.252	6263.034	4	8
2032	2a	1	137450.2	642496.1	642496.1	0	4120679	4120679	0	ICE	137450.2	0	4	1
2032	2a	1	5059.943	23652.15	23652.15	0	152571.9	152571.9	0	ICE	5059.943	0	4	2
2032	2a	1	21436.11	100200.8	0	100200.8	538082.4	0	538082.4	BEV	0	21436.11	4	3
2032	2a	1	1080.812	5052.139	0	5052.139	23492.64	0	23492.64	FCEV	0	1080.812	4	7
2032	2a	1	20148.72	94182.98	52930.83	41252.14	683242.6	383982.3	299260.2	PHEV	11323.58	8825.14	4	8
2032	2a	1	130802.9	618917.2	618917.2	0	4071100	4071100	0	ICE	130802.9	0	4	1
2032	2a	1	4843.366	22917.26	22917.26	0	151707.2	151707.2	0	ICE	4843.366	0	4	2
2032	2a	1	29930.52	141621.7	0	141621.7	791520.6	0	791520.6	BEV	0	29930.52	4	3
2032	2a	1	1756.359	8310.527	0	8310.527	39739.63	0	39739.63	FCEV	0	1756.359	4	7
2032	2a	1	24947.14	118041.9	65294.02	52747.85	890141.6	492375.5	397766.1	PHEV	13799.33	11147.81	4	8
2032	2a	1	124515.2	596299.6	596299.6	0	4024353	4024353	0	ICE	124515.2	0	4	1

2032	2a	1	4635.439	22198.98	22198.98	0	150866.2	150866.2	0	ICE	4635.439	0	4	2
2032	2a	1	40021.37	191661.2	0	191661.2	1113050	0	1113050	BEV	0	40021.37	4	3
2032	2a	1	2684.36	12855.32	0	12855.32	65953.01	0	65953.01	FCEV	0	2684.36	4	7
2032	2a	1	29523.57	141387.5	76955.19	64432.3	1106237	602108.9	504127.9	PHEV	16069.26	13454.31	4	8
2032	2a	1	116443.4	564315.2	564315.2	0	3906365	3906365	0	ICE	116443.4	0	4	1
2032	2a	1	4334.944	21008.26	21008.26	0	146440.8	146440.8	0	ICE	4334.944	0	4	2
2032	2a	1	51244.21	248342.8	0	248342.8	1499036	0	1499036	BEV	0	51244.21	4	3
2032	2a	1	3874.025	18774.53	0	18774.53	103542.2	0	103542.2	FCEV	0	3874.025	4	7
2032	2a	1	33353.8	161641.2	86547.32	75093.89	1312560	702782.1	609777.8	PHEV	17858.58	15495.22	4	8
2032	2a	1	107699	528107.5	528107.5	0	3749053	3749053	0	ICE	107699	0	4	1
2032	2a	1	4009.407	19660.33	19660.33	0	140542.2	140542.2	0	ICE	4009.407	0	4	2
2032	2a	1	64022.19	313936	0	313936	1968018	0	1968018	BEV	0	64022.19	4	3
2032	2a	1	5394.683	26453.1	0	26453.1	154841.6	0	154841.6	FCEV	0	5394.683	4	7
2032	2a	1	36603.34	179486.3	94512.36	84973.95	1510881	795586.9	715294.4	PHEV	19274.27	17329.07	4	8
2032	2a	1	96667.89	479554	479554	0	3491403	3491403	0	ICE	96667.89	0	4	1
2032	2a	1	3598.742	17852.78	17852.78	0	130883.3	130883.3	0	ICE	3598.742	0	4	2
2032	2a	1	77299.98	383472.8	0	383472.8	2495566	0	2495566	BEV	0	77299.98	4	3
2032	2a	1	7194.064	35688.6	0	35688.6	220108.1	0	220108.1	FCEV	0	7194.064	4	7
2032	2a	1	38585.25	191415.3	99098.41	92316.84	1669263	864201.3	805061.7	PHEV	19976.14	18609.12	4	8
2032	2a	1	85110.9	427097.6	427097.6	0	3188209	3188209	0	ICE	85110.9	0	4	1
2032	2a	1	3168.499	15899.94	15899.94	0	119517.3	119517.3	0	ICE	3168.499	0	4	2
2032	2a	1	91988.72	461611.4	0	461611.4	3117245	0	3117245	BEV	0	91988.72	4	3
2032	2a	1	9384.24	47091.34	0	47091.34	304596.6	0	304596.6	FCEV	0	9384.24	4	7
2032	2a	1	39765.78	199549.8	101542.4	98007.48	1800951	916426.7	884524.2	PHEV	20235.1	19530.68	4	8
2032	2a	1	73292.58	371990.6	371990.6	0	2845555	2845555	0	ICE	73292.58	0	4	1
2032	2a	1	2728.528	13848.43	13848.43	0	106671.8	106671.8	0	ICE	2728.528	0	4	2
2032	2a	1	108710.7	551752.3	0	551752.3	3864196	0	3864196	BEV	0	108710.7	4	3
2032	2a	1	12078.96	61305.81	0	61305.81	414513.9	0	414513.9	FCEV	0	12078.96	4	7
2032	2a	1	40263.21	204352.7	102176.4	102176.4	1905534	952767	952767	PHEV	20131.61	20131.61	4	8
2032	2a	1	60058.39	308262.3	308262.3	0	2415875	2415875	0	ICE	60058.39	0	4	1
2032	2a	1	2235.847	11475.95	11475.95	0	90564.43	90564.43	0	ICE	2235.847	0	4	2
2032	2a	1	122116.3	626787.8	0	626787.8	4512414	0	4512414	BEV	0	122116.3	4	3
2032	2a	1	15093.03	77468.15	0	77468.15	542209.9	0	542209.9	FCEV	0	15093.03	4	7
2032	2a	1	43329.28	222396.6	111198.3	111198.3	2134997	1067498	1067498	PHEV	21664.64	21664.64	4	8
2032	2a	1	39369.41	204327.2	204327.2	0	1636184	1636184	0	ICE	39369.41	0	4	1
2032	2a	1	1465.64	7606.671	7606.671	0	61333.81	61333.81	0	ICE	1465.64	0	4	2
2032	2a	1	116145.4	602794.6	0	602794.6	4451693	0	4451693	BEV	0	116145.4	4	3
2032	2a	1	15838.01	82199.26	0	82199.26	593346.4	0	593346.4	FCEV	0	15838.01	4	7
2032	2a	1	39423.61	204608.5	102304.3	102304.3	2013496	1006748	1006748	PHEV	19711.81	19711.81	4	8
2032	2a	1	58.78829	167.024	167.024	0	321.1279	321.1279	0	ICE	58.78829	0	1	2
2032	2a	1	30.49351	88.3824	88.3824	0	166.3826	166.3826	0	ICE	30.49351	0	1	2
2032	2a	1	16.49285	48.74774	48.74774	0	98.22007	98.22007	0	ICE	16.49285	0	1	2
2032	2a	1	35.67751	113.6275	113.6275	0	292.2114	292.2114	0	ICE	35.67751	0	1	2
2032	2a	1	51.86193	174.086	174.086	0	530.793	530.793	0	ICE	51.86193	0	1	2
2032	2a	1	8.24983	28.165	0	28.165	95.98559	0	95.98559	BEV	0	8.24983	1	3
2032	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2032	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8

2032	2a	1	131.9172	457.924	457.924	0	1488.651	1488.651	0	ICE	131.9172	0	1	2
2032	2a	1	188.6795	665.7725	665.7725	0	2263.978	2263.978	0	ICE	188.6795	0	1	2
2032	2a	1	71.28035	255.6028	255.6028	0	925.5661	925.5661	0	ICE	71.28035	0	1	2
2032	2a	1	142.3116	518.4654	518.4654	0	1906.669	1906.669	0	ICE	142.3116	0	1	2
2032	2a	1	548.381	2123.512	2123.512	0	9017.539	9017.539	0	ICE	548.381	0	1	2
2032	2a	1	2080.18	8412.663	8412.663	0	39531.25	39531.25	0	ICE	2080.18	0	1	2
2032	2a	1	3319.986	13616.89	13616.89	0	66615.65	66615.65	0	ICE	3319.986	0	1	2
2032	2a	1	3037.615	12458.75	0	12458.75	61225.41	0	61225.41	BEV	0	3037.615	1	3
2032	2a	1	0.178463	0.731963	0	0.731963	3.597051	0	3.597051	FCEV	0	0.178463	1	7
2032	2a	1	3175.032	13022.36	7813.416	5208.944	61340.49	36804.3	24536.2	PHEV	1905.019	1270.013	1	8
2032	2a	1	4186.8	17411.98	0	17411.98	88422.14	0	88422.14	BEV	0	4186.8	1	3
2032	2a	1	0.586633	2.439678	0	2.439678	12.38926	0	12.38926	FCEV	0	0.586633	1	7
2032	2a	1	5286.151	21983.94	13190.36	8793.575	107084	64250.38	42833.59	PHEV	3171.69	2114.46	1	8
2032	2a	1	4220.598	17794.34	17794.34	0	93714.72	93714.72	0	ICE	4220.598	0	1	2
2032	2a	1	10753.31	45336.69	0	45336.69	238555.8	0	238555.8	BEV	0	10753.31	1	3
2032	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2032	2a	1	5113.486	21558.81	12935.29	8623.525	108801.8	65281.08	43520.72	PHEV	3068.091	2045.394	1	8
2032	2a	1	7277.06	26094.66	26094.66	0	121847.9	121847.9	0	ICE	7277.06	0	2	1
2032	2a	1	16595.56	67115.77	67115.77	0	346279.6	346279.6	0	ICE	16595.56	0	2	1
2032	2a	1	24960.1	102373.6	102373.6	0	539219.7	539219.7	0	ICE	24960.1	0	2	1
2032	2a	1	31718.73	131911.2	131911.2	0	705983.7	705983.7	0	ICE	31718.73	0	2	1
2032	2a	1	10.98842	41.92125	41.92125	0	201.0522	201.0522	0	ICE	10.98842	0	3	2
2032	2a	1	426.1052	1723.254	1723.254	0	8714.556	8714.556	0	ICE	426.1052	0	3	2
2032	2a	1	355.6198	1458.571	1458.571	0	7484.387	7484.387	0	ICE	355.6198	0	3	2
2032	2a	1	1730.051	7294.016	7294.016	0	39265.37	39265.37	0	ICE	1730.051	0	3	2
2032	2a	1	1959.289	8372.746	0	8372.746	31252.92	0	31252.92	BEV	0	1959.289	3	3
2032	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2032	2a	1	178.3097	761.9814	457.1888	304.7926	4052.301	2431.381	1620.921	PHEV	106.9858	71.32387	3	8
2032	2a	1	2904.076	7751.676	7751.676	0	26750.17	26750.17	0	ICE	2904.076	0	4	1
2032	2a	1	9.063849	24.19359	24.19359	0	80.43877	80.43877	0	ICE	9.063849	0	4	2
2032	2a	1	3503.219	9551.631	9551.631	0	32939.06	32939.06	0	ICE	3503.219	0	4	1
2032	2a	1	24.67757	74.35302	74.35302	0	255.1876	255.1876	0	ICE	24.67757	0	4	2
2032	2a	1	16.39194	54.08406	54.08406	0	190.6891	190.6891	0	ICE	16.39194	0	4	2
2032	2a	1	110.9072	404.0539	404.0539	0	1743.239	1743.239	0	ICE	110.9072	0	4	2
2032	2a	1	161.1072	596.1706	596.1706	0	2612.862	2612.862	0	ICE	161.1072	0	4	2
2032	2a	1	235.7314	885.8196	885.8196	0	4036.339	4036.339	0	ICE	235.7314	0	4	2
2032	2a	1	183.3865	699.6268	699.6268	0	3245.074	3245.074	0	ICE	183.3865	0	4	2
2032	2a	1	270.0323	1045.654	1045.654	0	4858.727	4858.727	0	ICE	270.0323	0	4	2
2032	2a	1	2139.906	8654.21	8654.21	0	42736.83	42736.83	0	ICE	2139.906	0	4	2
2032	2a	1	5630.506	23738.61	23738.61	0	126402.9	126402.9	0	ICE	5630.506	0	4	2
2032	2a	1	3790.543	16198.36	16198.36	0	89073.15	89073.15	0	ICE	3790.543	0	4	2
2032	2a	1	48.90666	136.1473	136.1473	0	210.9717	210.9717	0	ICE	48.90666	0	1	2
2032	2a	1	65.22742	215.2133	215.2133	0	612.6932	612.6932	0	ICE	65.22742	0	1	2
2032	2a	1	5.065664	18.45508	0	18.45508	70.82433	0	70.82433	BEV	0	5.065664	1	3
2032	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2032	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2032	2a	1	572.0124	2313.332	0	2313.332	11022.66	0	11022.66	BEV	0	572.0124	1	3

2032	2a	1	2.16171	8.742386	0	8.742386	41.65607	0	41.65607	FCEV	0	2.16171	1	7
2032	2a	1	1202.391	4862.709	2917.626	1945.084	22188.78	13313.27	8875.51	PHEV	721.4345	480.9564	1	8
2032	2a	1	7680.311	32820.73	0	32820.73	178342.1	0	178342.1	BEV	0	7680.311	1	3
2032	2a	1	233.8329	999.252	0	999.252	5429.761	0	5429.761	FCEV	0	233.8329	1	7
2032	2a	1	5523.171	23602.5	14161.5	9440.999	123586.3	74151.75	49434.5	PHEV	3313.902	2209.268	1	8
2032	2a	1	3.462338	10.43195	10.43195	0	35.7009	35.7009	0	ICE	3.462338	0	2	2
2032	2a	1	2.111346	6.482403	6.482403	0	22.30069	22.30069	0	ICE	2.111346	0	2	2
2032	2a	1	4.237057	13.73713	13.73713	0	55.45923	55.45923	0	ICE	4.237057	0	2	2
2032	2a	1	36.42729	132.7108	132.7108	0	599.4743	599.4743	0	ICE	36.42729	0	3	2
2032	2a	1	40.96582	151.5924	151.5924	0	708.6054	708.6054	0	ICE	40.96582	0	3	2
2032	2a	1	13.11875	42.53282	42.53282	0	143.9657	143.9657	0	ICE	13.11875	0	4	2
2032	2a	1	36.25316	127.9225	127.9225	0	532.0105	532.0105	0	ICE	36.25316	0	4	2
2032	2a	1	504.5063	1982.518	1982.518	0	9343.986	9343.986	0	ICE	504.5063	0	4	2
2032	2a	1	58.70849	180.2509	180.2509	0	418.8226	418.8226	0	ICE	58.70849	0	1	2
2032	2a	1	42.54382	133.0583	133.0583	0	327.0611	327.0611	0	ICE	42.54382	0	1	2
2032	2a	1	64.5485	209.2753	209.2753	0	581.6459	581.6459	0	ICE	64.5485	0	1	2
2032	2a	1	16.31698	56.64113	0	56.64113	199.145	0	199.145	BEV	0	16.31698	1	3
2032	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2032	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2032	2a	1	628.7771	2506.878	0	2506.878	11598.62	0	11598.62	BEV	0	628.7771	1	3
2032	2a	1	6.212217	24.76755	0	24.76755	114.5925	0	114.5925	FCEV	0	6.212217	1	7
2032	2a	1	174.7816	696.8384	418.103	278.7353	3064.406	1838.644	1225.762	PHEV	104.8689	69.91263	1	8
2032	2a	1	636.719	2720.93	2720.93	0	14570.82	14570.82	0	ICE	636.719	0	1	2
2032	2a	1	323.3544	1344.76	0	1344.76	6813.395	0	6813.395	BEV	0	323.3544	2	3
2032	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2032	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2032	2a	1	0.907049	2.577025	2.577025	0	10.55137	10.55137	0	ICE	0.907049	0	3	2
2032	2a	1	18.35195	54.24267	54.24267	0	170.8125	170.8125	0	ICE	18.35195	0	4	2
2032	2a	1	28.69449	88.09984	88.09984	0	299.4486	299.4486	0	ICE	28.69449	0	4	2
2032	2a	1	27.33489	85.4915	85.4915	0	288.5326	288.5326	0	ICE	27.33489	0	4	2
2032	2a	1	22.61161	61.65124	61.65124	0	130.9911	130.9911	0	ICE	22.61161	0	1	2
2032	2a	1	40.68869	155.229	155.229	0	621.4624	621.4624	0	ICE	40.68869	0	1	2
2032	2a	1	6.227716	21.97506	21.97506	0	90.7992	90.7992	0	ICE	6.227716	0	2	2
2032	2a	1	0.390165	1.287321	1.287321	0	4.507054	4.507054	0	ICE	0.390165	0	3	2
2032	2a	1	23.03244	90.50872	90.50872	0	443.4584	443.4584	0	ICE	23.03244	0	3	2
2032	2a	1	87.38535	363.4164	0	363.4164	1281.751	0	1281.751	BEV	0	87.38535	3	3
2032	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2032	2a	1	39.56535	164.5436	98.72616	65.81744	837.7816	502.669	335.1126	PHEV	23.73921	15.82614	3	8
2032	2a	1	11.33199	32.19542	32.19542	0	104.7711	104.7711	0	ICE	11.33199	0	4	2
2032	2a	1	31.29447	99.66818	99.66818	0	352.5528	352.5528	0	ICE	31.29447	0	4	2
2032	2a	1	13.12841	45.57265	45.57265	0	188.0029	188.0029	0	ICE	13.12841	0	4	2
2032	2a	1	53.63705	213.8461	213.8461	0	1069.094	1069.094	0	ICE	53.63705	0	3	2
2032	2a	1	9.372863	25.55539	25.55539	0	81.27946	81.27946	0	ICE	9.372863	0	4	2
2032	2a	1	5.297525	17.78231	17.78231	0	70.09869	70.09869	0	ICE	5.297525	0	4	2
2032	2a	1	6.784077	23.54957	0	23.54957	56.19606	0	56.19606	BEV	0	6.784077	3	3
2032	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2032	2a	1	0	0	0	0	0	0	0	PHEV	0	0	3	8

2032	2a	1	30.66906	106.4615	0	106.4615	258.3147	0	258.3147	BEV	0	30.66906	4	3
2032	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2032	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2032	2a	1	26.89698	71.79449	71.79449	0	127.3518	127.3518	0	ICE	26.89698	0	1	2
2032	2a	1	10.15792	30.6056	30.6056	0	69.57681	69.57681	0	ICE	10.15792	0	1	2
2032	2a	1	23.95281	90.00869	90.00869	0	345.6572	345.6572	0	ICE	23.95281	0	1	2
2032	2a	1	90.51701	355.6974	0	355.6974	1604.482	0	1604.482	BEV	0	90.51701	1	3
2032	2a	1	9.189544	36.11142	0	36.11142	162.8916	0	162.8916	FCEV	0	9.189544	1	7
2032	2a	1	9.649021	37.91699	22.75019	15.16679	160.6149	96.36891	64.24594	PHEV	5.789413	3.859608	1	8
2032	2a	1	4.122743	11.94936	11.94936	0	36.38784	36.38784	0	ICE	4.122743	0	2	2
2032	2a	1	126.5782	511.9077	0	511.9077	2420.3	0	2420.3	BEV	0	126.5782	2	3
2032	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2032	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2032	2a	1	18.19617	70.46158	70.46158	0	333.2121	333.2121	0	ICE	18.19617	0	3	2
2032	2a	1	17.77981	51.53299	51.53299	0	173.8579	173.8579	0	ICE	17.77981	0	4	2
2032	2a	1	6.772865	25.06272	0	25.06272	99.61433	0	99.61433	BEV	0	6.772865	1	3
2032	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2032	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2032	2a	1	45.46293	173.4429	0	173.4429	718.1718	0	718.1718	BEV	0	45.46293	1	3
2032	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2032	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2032	2a	1	42.76414	165.5969	0	165.5969	733.2133	0	733.2133	BEV	0	42.76414	1	3
2032	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2032	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2032	2a	1	4.746021	12.94017	12.94017	0	39.65963	39.65963	0	ICE	4.746021	0	2	2
2032	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2032	2a	1	4.746021	12.94017	12.94017	0	39.65963	39.65963	0	ICE	4.746021	0	2	2
2032	2a	1	4.581098	14.32766	14.32766	0	60.4029	60.4029	0	ICE	4.581098	0	2	2
2032	2a	1	11.69428	45.28413	45.28413	0	210.0321	210.0321	0	ICE	11.69428	0	2	2
2032	2a	1	161.4469	662.1728	0	662.1728	3237.461	0	3237.461	BEV	0	161.4469	2	3
2032	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2032	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2032	2a	1	5.682636	21.35392	21.35392	0	101.6221	101.6221	0	ICE	5.682636	0	3	2
2032	2a	1	9.042328	25.17221	25.17221	0	90.31293	90.31293	0	ICE	9.042328	0	4	2
2032	2a	1	4.172379	14.72262	0	14.72262	53.11093	0	53.11093	BEV	0	4.172379	1	3
2032	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2032	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2032	2a	1	13.24226	49.7611	0	49.7611	203.8595	0	203.8595	BEV	0	13.24226	1	3
2032	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2032	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2032	2a	1	16.59558	63.31279	0	63.31279	266.3184	0	266.3184	BEV	0	16.59558	2	3
2032	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2032	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2032	2a	1	2.958022	11.96283	11.96283	0	61.98671	61.98671	0	ICE	2.958022	0	2	2
2032	2a	1	0.592418	2.192219	0	2.192219	6.632552	0	6.632552	BEV	0	0.592418	4	3
2032	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2032	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2032	2a	1	3.800175	12.97383	12.97383	0	49.02483	49.02483	0	ICE	3.800175	0	2	2
2032	2a	1	3.228162	8.801681	8.801681	0	34.20393	34.20393	0	ICE	3.228162	0	3	2

2032	2a	1	0.562467	1.984715	1.984715	0	9.926871	9.926871	0	ICE	0.562467	0	3	2
2032	2a	1	1.994733	5.895812	0	5.895812	15.5772	0	15.5772	BEV	0	1.994733	1	3
2032	2a	1	4.232702	11.2981	11.2981	0	47.42192	47.42192	0	ICE	4.232702	0	3	2
2032	2a	1	0.904785	2.622429	2.622429	0	10.13716	10.13716	0	ICE	0.904785	0	3	2
2032	2a	1	9.91961	38.412	0	38.412	121.4658	0	121.4658	BEV	0	9.91961	3	3
2032	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2032	2a	1	0	0	0	0	0	0	0	PHEV	0	0	3	8
2032	2a	1	6.254268	24.9352	0	24.9352	82.17815	0	82.17815	BEV	0	6.254268	3	3
2032	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2032	2a	1	4.329878	17.26283	10.3577	6.905133	84.23112	50.53867	33.69245	PHEV	2.597927	1.731951	3	8
2032	2a	1	1.044556	4.403922	0	4.403922	15.7487	0	15.7487	BEV	0	1.044556	4	3
2032	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2032	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2032	2a	1	1.726614	5.004418	0	5.004418	13.04011	0	13.04011	BEV	0	1.726614	1	3
2032	2a	1	5.507363	14.70047	14.70047	0	45.63007	45.63007	0	ICE	5.507363	0	2	2
2032	2a	1	23.22109	77.94671	0	77.94671	251.6992	0	251.6992	BEV	0	23.22109	2	3
2032	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2032	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2032	2a	1	8.432819	28.78973	0	28.78973	97.56538	0	97.56538	BEV	0	8.432819	2	3
2032	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2032	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2032	2a	1	6.918034	24.01457	24.01457	0	108.7519	108.7519	0	ICE	6.918034	0	2	2
2032	2a	1	3.654572	13.5236	0	13.5236	53.26417	0	53.26417	BEV	0	3.654572	2	3
2032	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2032	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2032	2a	1	8.442247	32.20751	32.20751	0	157.7421	157.7421	0	ICE	8.442247	0	2	2
2032	2a	1	7.220748	27.96112	0	27.96112	122.9837	0	122.9837	BEV	0	7.220748	2	3
2032	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2032	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2032	2a	1	6.037225	23.03225	0	23.03225	69.924	0	69.924	BEV	0	6.037225	3	3
2032	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2032	2a	1	0	0	0	0	0	0	0	PHEV	0	0	3	8
2032	2a	1	5.625951	23.07478	0	23.07478	79.62166	0	79.62166	BEV	0	5.625951	3	3
2032	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2032	2a	1	4.302198	17.64542	10.58725	7.058169	88.05547	52.83328	35.22219	PHEV	2.581319	1.720879	3	8
2032	2a	1	1.398655	4.694893	0	4.694893	11.07747	0	11.07747	BEV	0	1.398655	4	3
2032	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2032	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2032	2a	1	4.187418	14.77568	0	14.77568	37.02875	0	37.02875	BEV	0	4.187418	4	3
2032	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2032	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2032	2a	1	0.75949	2.76695	0	2.76695	7.512521	0	7.512521	BEV	0	0.75949	4	3
2032	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7

2032	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2032	2a	1	5.647052	16.69093	16.69093	0	53.6286	53.6286	0	ICE	5.647052	0	2	2
2032	2a	1	0.566877	2.065228	2.065228	0	8.666326	8.666326	0	ICE	0.566877	0	2	2
2032	2a	1	29.23246	101.4746	0	101.4746	345.0807	0	345.0807	BEV	0	29.23246	2	3
2032	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2032	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2032	2a	1	2.01731	7.233832	0	7.233832	26.57848	0	26.57848	BEV	0	2.01731	2	3
2032	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2032	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2032	2a	1	15.2377	50.27571	0	50.27571	157.6712	0	157.6712	BEV	0	15.2377	2	3
2032	2a	1	0.503119	1.602357	1.602357	0	6.148365	6.148365	0	ICE	0.503119	0	3	2
2032	2a	1	4.436447	14.63775	14.63775	0	54.04622	54.04622	0	ICE	4.436447	0	2	2
2032	2a	1	0.364785	1.266278	1.266278	0	4.912159	4.912159	0	ICE	0.364785	0	3	2
2032	2a	1	2.133715	6.062118	6.062118	0	24.40924	24.40924	0	ICE	2.133715	0	2	2
2032	2a	1	1.966432	6.037478	0	6.037478	16.80402	0	16.80402	BEV	0	1.966432	1	3
2032	2a	1	4.730884	17.50645	17.50645	0	82.93019	82.93019	0	ICE	4.730884	0	2	2
2032	2a	1	0.852037	2.860049	0	2.860049	7.090848	0	7.090848	BEV	0	0.852037	3	3
2032	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2032	2a	1	0	0	0	0	0	0	0	PHEV	0	0	3	8
2032	2a	1	0.985658	3.760326	0	3.760326	11.13154	0	11.13154	BEV	0	0.985658	4	3
2032	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2032	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2032	2a	1	2.652147	8.598633	0	8.598633	26.51083	0	26.51083	BEV	0	2.652147	1	3
2032	2a	1	2.062608	6.923596	0	6.923596	22.57342	0	22.57342	BEV	0	2.062608	1	3
2032	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2032	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2032	2a	1	4.409558	15.81214	0	15.81214	58.42932	0	58.42932	BEV	0	4.409558	1	3
2032	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2032	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2032	2a	1	5.203545	16.57251	16.57251	0	60.18044	60.18044	0	ICE	5.203545	0	2	2
2032	2a	1	4.80612	15.58211	0	15.58211	47.22177	0	47.22177	BEV	0	4.80612	2	3
2032	2a	1	0.742387	2.704641	0	2.704641	10.24983	0	10.24983	BEV	0	0.742387	2	3
2032	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2032	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2032	2a	1	1.192517	3.524711	3.524711	0	12.19661	12.19661	0	ICE	1.192517	0	3	2
2032	2a	1	2.863618	9.120195	0	9.120195	27.11177	0	27.11177	BEV	0	2.863618	1	3
2032	2a	1	3.077254	10.15318	0	10.15318	32.33465	0	32.33465	BEV	0	3.077254	1	3
2032	2a	1	3.677976	10.23882	10.23882	0	41.25335	41.25335	0	ICE	3.677976	0	2	2
2032	2a	1	1.374868	3.984916	0	3.984916	10.39697	0	10.39697	BEV	0	1.374868	2	3
2032	2a	1	0.587884	1.737603	0	1.737603	4.60245	0	4.60245	BEV	0	0.587884	2	3
2032	2a	1	0.597441	1.834307	0	1.834307	5.135761	0	5.135761	BEV	0	0.597441	2	3
2032	2a	1	3.69984	12.41933	12.41933	0	46.92571	46.92571	0	ICE	3.69984	0	2	2
2032	2a	1	2.869369	11.27553	11.27553	0	54.4277	54.4277	0	ICE	2.869369	0	2	2
2032	2a	1	4.553412	18.67578	18.67578	0	95.29175	95.29175	0	ICE	4.553412	0	2	2
2032	2a	1	1.893881	5.272225	5.272225	0	17.83488	17.83488	0	ICE	1.893881	0	3	2
2032	2a	1	0.663394	1.960788	0	1.960788	3.578769	0	3.578769	BEV	0	0.663394	3	3
2032	2a	1	0.769904	2.319704	2.319704	0	10.08603	10.08603	0	ICE	0.769904	0	3	2

2032	2a	1	3.394644	11.20039	0	11.20039	24.16543	0	24.16543	BEV	0	3.394644	3	3
2032	2a	1	0.450212	1.53703	1.53703	0	5.879681	5.879681	0	ICE	0.450212	0	3	2
2032	2a	1	0.289282	0.987612	0	0.987612	2.274881	0	2.274881	BEV	0	0.289282	3	3
2032	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2032	2a	1	0	0	0	0	0	0	0	PHEV	0	0	3	8
2032	2a	1	6.18815	24.31708	0	24.31708	76.48772	0	76.48772	BEV	0	6.18815	3	3
2032	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2032	2a	1	0	0	0	0	0	0	0	PHEV	0	0	3	8
2032	2a	1	16.9163	68.41291	0	68.41291	225.2594	0	225.2594	BEV	0	16.9163	3	3
2032	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2032	2a	1	4.337513	17.54177	10.52506	7.016708	90.13702	54.08221	36.05481	PHEV	2.602508	1.735005	3	8
2032	2a	1	0.749048	1.999389	0	1.999389	3.453738	0	3.453738	BEV	0	0.749048	4	3
2032	2a	1	0.789236	2.423169	0	2.423169	4.635267	0	4.635267	BEV	0	0.789236	4	3
2032	2a	1	1.389152	5.538425	5.538425	0	28.06329	28.06329	0	ICE	1.389152	0	2	2
2032	2a	1	0.333193	1.137524	0	1.137524	2.753016	0	2.753016	BEV	0	0.333193	4	3
2032	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2032	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2032	2a	1	1.162839	3.103896	0	3.103896	8.052367	0	8.052367	BEV	0	1.162839	1	3
2032	2a	1	0.957346	2.610233	0	2.610233	6.294045	0	6.294045	BEV	0	0.957346	1	3
2032	2a	1	0.905635	2.521124	0	2.521124	6.529341	0	6.529341	BEV	0	0.905635	1	3
2032	2a	1	0.839897	2.386239	0	2.386239	6.021994	0	6.021994	BEV	0	0.839897	1	3
2032	2a	1	0.925556	2.788682	0	2.788682	7.313427	0	7.313427	BEV	0	0.925556	1	3
2032	2a	1	2.115417	6.616092	0	6.616092	19.24191	0	19.24191	BEV	0	2.115417	1	3
2032	2a	1	0.637948	1.922123	0	1.922123	5.225161	0	5.225161	BEV	0	0.637948	2	3
2032	2a	1	0	0	0	0	0	0	0	BEV	0	0	2	3
2032	2a	1	18.94052	79.85457	0	79.85457	419.1699	0	419.1699	FCEV	0	18.94052	2	7
2032	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2032	2a	1	0	0	0	0	0	0	0	BEV	0	0	2	3
2032	2a	1	21.23279	90.73534	0	90.73534	491.4929	0	491.4929	FCEV	0	21.23279	2	7
2032	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2032	2a	1	0.092309	0.33101	0.33101	0	1.55852	1.55852	0	ICE	0.092309	0	3	2
2032	2a	1	0	0	0	0	0	0	0	BEV	0	0	3	3
2032	2a	1	1.113008	4.692519	0	4.692519	17.40792	0	17.40792	FCEV	0	1.113008	3	7
2032	2a	1	15.95311	67.25944	40.35566	26.90377	367.8986	220.7391	147.1594	PHEV	9.571867	6.381245	3	8
2032	2a	1	0.882482	3.670049	3.670049	0	18.23318	18.23318	0	ICE	0.882482	0	2	2
2032	2a	1	0.215431	0.698457	0	0.698457	1.476409	0	1.476409	BEV	0	0.215431	3	3
2032	2a	1	0.795055	2.167742	0	2.167742	3.747451	0	3.747451	BEV	0	0.795055	4	3
2032	2a	1	2.060794	6.091067	0	6.091067	11.4435	0	11.4435	BEV	0	2.060794	4	3
2032	2a	1	0.480638	1.585831	0	1.585831	3.466879	0	3.466879	BEV	0	0.480638	4	3
2032	2a	1	0.324232	1.218382	0	1.218382	3.427158	0	3.427158	BEV	0	0.324232	3	3
2032	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2032	2a	1	0	0	0	0	0	0	0	PHEV	0	0	3	8
2032	2a	1	1.213229	4.76753	0	4.76753	19.79364	0	19.79364	BEV	0	1.213229	2	3
2032	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2032	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2032	2a	1	0.653674	2.044405	0	2.044405	5.720146	0	5.720146	BEV	0	0.653674	2	3
2032	2a	1	1.906213	6.071003	0	6.071003	17.43469	0	17.43469	BEV	0	1.906213	2	3

2032	2a	1	0.456504	1.48005	0	1.48005	3.045323	0	3.045323	BEV	0	0.456504	4	3
2032	2a	1	1.33795	5.717544	5.717544	0	34.96473	34.96473	0	ICE	1.33795	0	2	2
2032	2a	1	0.888019	3.54045	0	3.54045	16.51382	0	16.51382	BEV	0	0.888019	2	3
2032	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2032	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2032	2a	1	0.289442	0.772591	0	0.772591	1.925267	0	1.925267	BEV	0	0.289442	2	3
2032	2a	1	0.188524	0.535616	0	0.535616	0.995044	0	0.995044	BEV	0	0.188524	4	3
2032	2a	1	0.108358	0.29544	0	0.29544	0.730584	0	0.730584	BEV	0	0.108358	2	3
2032	2a	1	0.158396	0.486318	0	0.486318	0.896266	0	0.896266	BEV	0	0.158396	3	3
2032	2a	1	0.170266	0.620309	0	0.620309	1.5665	0	1.5665	BEV	0	0.170266	3	3
2032	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2032	2a	1	0	0	0	0	0	0	0	PHEV	0	0	3	8
2032	2a	1	0.356719	1.013478	0	1.013478	1.906632	0	1.906632	BEV	0	0.356719	3	3
2032	2a	1	0.787943	2.46434	0	2.46434	4.989156	0	4.989156	BEV	0	0.787943	4	3
2032	2a	1	0.347554	1.226375	0	1.226375	4.319439	0	4.319439	BEV	0	0.347554	2	3
2032	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2032	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2032	2a	1	0.163471	0.586188	0.586188	0	3.206081	3.206081	0	ICE	0.163471	0	2	2
2032	2a	1	1.939792	5.622293	0	5.622293	10.02637	0	10.02637	BEV	0	1.939792	4	3
2032	2a	1	0.965845	3.629403	0	3.629403	10.13456	0	10.13456	BEV	0	0.965845	4	3
2032	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2032	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2032	2a	1	0.110236	0.351085	0	0.351085	0.726908	0	0.726908	BEV	0	0.110236	3	3
2032	2a	1	0	0	0	0	0	0	0	BEV	0	0	4	3
2032	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2032	2a	1	0	0	0	0	0	0	0	BEV	0	0	4	3
2032	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2032	2a	1	1.586714	6.50789	3.904734	2.603156	35.56709	21.34025	14.22683	PHEV	0.952028	0.634685	4	8
2032	2a	1	0.158101	0.485411	0.485411	0	2.089732	2.089732	0	ICE	0.158101	0	3	2
2032	2a	1	0.178053	0.505869	0	0.505869	1.265914	0	1.265914	BEV	0	0.178053	2	3
2033	2a	1	10965.7	29270.09	29270.09	0	49448.92	49448.92	0	ICE	10965.7	0	1	1
2033	2a	1	13471.91	36731.57	36731.57	0	64925.12	64925.12	0	ICE	13471.91	0	1	1
2033	2a	1	14753.41	41070.82	41070.82	0	75114.21	75114.21	0	ICE	14753.41	0	1	1
2033	2a	1	12714.56	36123.47	36123.47	0	69283	69283	0	ICE	12714.56	0	1	1
2033	2a	1	13078.91	37907.91	37907.91	0	76144.62	76144.62	0	ICE	13078.91	0	1	1
2033	2a	1	14253.08	42127.68	42127.68	0	88290.1	88290.1	0	ICE	14253.08	0	1	1
2033	2a	1	16786.68	50577.94	50577.94	0	111139	111139	0	ICE	16786.68	0	1	1
2033	2a	1	15305.75	46992.77	46992.77	0	108013.4	108013.4	0	ICE	15305.75	0	1	1
2033	2a	1	18251.35	57082.2	57082.2	0	136895.1	136895.1	0	ICE	18251.35	0	1	1
2033	2a	1	20090.68	63985.81	63985.81	0	160772.9	160772.9	0	ICE	20090.68	0	1	1
2033	2a	1	21496.55	69694.82	69694.82	0	183241.8	183241.8	0	ICE	21496.55	0	1	1
2033	2a	1	26827.79	88516.41	88516.41	0	243637.1	243637.1	0	ICE	26827.79	0	1	1
2033	2a	1	28042.65	94131.32	94131.32	0	270618.5	270618.5	0	ICE	28042.65	0	1	1
2033	2a	1	50.62927	169.9483	169.9483	0	502.5113	502.5113	0	ICE	50.62927	0	1	2
2033	2a	1	29441.67	100514.2	100514.2	0	303245.3	303245.3	0	ICE	29441.67	0	1	1
2033	2a	1	33458.6	116144.9	116144.9	0	366465.5	366465.5	0	ICE	33458.6	0	1	1
2033	2a	1	35092.39	123826.6	123826.6	0	408393	408393	0	ICE	35092.39	0	1	1
2033	2a	1	44911.83	161048.4	161048.4	0	555636.4	555636.4	0	ICE	44911.83	0	1	1
2033	2a	1	51403.89	187273.1	187273.1	0	673922.1	673922.1	0	ICE	51403.89	0	1	1

2033	2a	1	134.6597	490.588	490.588	0	1776.276	1776.276	0	ICE	134.6597	0	1	2
2033	2a	1	61910.38	229096.9	229096.9	0	856854.4	856854.4	0	ICE	61910.38	0	1	1
2033	2a	1	59986.64	225414.8	225414.8	0	877101.1	877101.1	0	ICE	59986.64	0	1	1
2033	2a	1	55838.62	213026.6	213026.6	0	861825.1	861825.1	0	ICE	55838.62	0	1	1
2033	2a	1	76694.17	296985.1	296985.1	0	1246247	1246247	0	ICE	76694.17	0	1	1
2033	2a	1	870.7801	3371.948	3371.948	0	14094.67	14094.67	0	ICE	870.7801	0	1	2
2033	2a	1	88870.56	349227.5	349227.5	0	1523424	1523424	0	ICE	88870.56	0	1	1
2033	2a	1	1364.559	5362.198	5362.198	0	23024.26	23024.26	0	ICE	1364.559	0	1	2
2033	2a	1	150208.3	598867.1	598867.1	0	2715972	2715972	0	ICE	150208.3	0	1	1
2033	2a	1	210114.8	849746.2	849746.2	0	3990203	3990203	0	ICE	210114.8	0	1	1
2033	2a	1	240990.9	988421.6	988421.6	0	4813514	4813514	0	ICE	240990.9	0	1	1
2033	2a	1	4490.845	18419.16	18419.16	0	89077.51	89077.51	0	ICE	4490.845	0	1	2
2033	2a	1	316188.2	1314957	1314957	0	6631791	6631791	0	ICE	316188.2	0	1	1
2033	2a	1	336193.2	1417414	1417414	0	7389105	7389105	0	ICE	336193.2	0	1	1
2033	2a	1	397369.9	1698105	1698105	0	9163498	9163498	0	ICE	397369.9	0	1	1
2033	2a	1	4862.763	20780.33	20780.33	0	112120.5	112120.5	0	ICE	4862.763	0	1	2
2033	2a	1	23111.55	98763.96	0	98763.96	534131.4	0	534131.4	BEV	0	23111.55	1	3
2033	2a	1	471.6642	2015.591	0	2015.591	10972.84	0	10972.84	FCEV	0	471.6642	1	7
2033	2a	1	20847.4	89088.44	48107.76	40980.68	480288.5	259355.8	220932.7	PHEV	11257.6	9589.803	1	8
2033	2a	1	457850	1982788	1982788	0	11044055	11044055	0	ICE	457850	0	1	1
2033	2a	1	5602.88	24264.11	24264.11	0	135132.8	135132.8	0	ICE	5602.88	0	1	2
2033	2a	1	32545.66	140943.9	0	140943.9	786017.2	0	786017.2	BEV	0	32545.66	1	3
2033	2a	1	664.1972	2876.406	0	2876.406	16144.1	0	16144.1	FCEV	0	664.1972	1	7
2033	2a	1	21034.1	91091.33	49189.32	41902.01	507134.4	273852.6	233281.8	PHEV	11358.42	9675.687	1	8
2033	2a	1	512576.5	2249155	2249155	0	12925440	12925440	0	ICE	512576.5	0	1	1
2033	2a	1	6245.921	27406.73	27406.73	0	157486.6	157486.6	0	ICE	6245.921	0	1	2
2033	2a	1	44681.3	196058.9	0	196058.9	1127958	0	1127958	BEV	0	44681.3	1	3
2033	2a	1	1045.177	4586.172	0	4586.172	26529.29	0	26529.29	FCEV	0	1045.177	1	7
2033	2a	1	21913.3	96154.26	50961.76	45192.5	552294.2	292715.9	259578.3	PHEV	11614.05	10299.25	1	8
2033	2a	1	567893.7	2524418	2524418	0	14957927	14957927	0	ICE	567893.7	0	1	1
2033	2a	1	6982.702	31039.72	31039.72	0	183902.4	183902.4	0	ICE	6982.702	0	1	2
2033	2a	1	58815.89	261450.1	0	261450.1	1550493	0	1550493	BEV	0	58815.89	1	3
2033	2a	1	1552.325	6900.444	0	6900.444	41115.11	0	41115.11	FCEV	0	1552.325	1	7
2033	2a	1	22426.82	99692.38	51840.04	47852.34	590630.4	307127.8	283502.6	PHEV	11661.95	10764.87	1	8
2033	2a	1	581813.7	2619628	2619628	0	16000092	16000092	0	ICE	581813.7	0	1	1
2033	2a	1	7188.375	32365.8	32365.8	0	197666.1	197666.1	0	ICE	7188.375	0	1	2
2033	2a	1	94000.38	423238.6	0	423238.6	2586578	0	2586578	BEV	0	94000.38	1	3
2033	2a	1	3222.235	14508.18	0	14508.18	89028.39	0	89028.39	FCEV	0	3222.235	1	7
2033	2a	1	35737.65	160909.5	80132.92	80776.56	982543.3	489306.5	493236.7	PHEV	17797.35	17940.3	1	8
2033	2a	1	587898.2	2680704	2680704	0	16866043	16866043	0	ICE	587898.2	0	1	1
2033	2a	1	7315.889	33359.06	33359.06	0	209866.2	209866.2	0	ICE	7315.889	0	1	2
2033	2a	1	134015.2	611083.8	0	611083.8	3846300	0	3846300	BEV	0	134015.2	1	3
2033	2a	1	5667.111	25840.95	0	25840.95	163204.9	0	163204.9	FCEV	0	5667.111	1	7
2033	2a	1	50801.51	231645.2	110263.1	121382.1	1457179	693617	763561.5	PHEV	24181.52	26619.99	1	8
2033	2a	1	578881.4	2672753	2672753	0	17312253	17312253	0	ICE	578881.4	0	1	1
2033	2a	1	7264.135	33539.24	33539.24	0	217227.7	217227.7	0	ICE	7264.135	0	1	2
2033	2a	1	176464.2	814753	0	814753	5278723	0	5278723	BEV	0	176464.2	1	3

2033	2a	1	8897.356	41079.98	0	41079.98	266796.8	0	266796.8	FCEV	0	8897.356	1	7
2033	2a	1	66697.34	307948.3	139808.5	168139.8	1994681	905585.4	1089096	PHEV	30280.59	36416.75	1	8
2033	2a	1	565605.3	2643860	2643860	0	17622645	17622645	0	ICE	565605.3	0	1	1
2033	2a	1	7154.363	33442.28	33442.28	0	222895	222895	0	ICE	7154.363	0	1	2
2033	2a	1	223443.3	1044461	0	1044461	6962555	0	6962555	BEV	0	223443.3	1	3
2033	2a	1	13111.92	61290.22	0	61290.22	409229.3	0	409229.3	FCEV	0	13111.92	1	7
2033	2a	1	84207.6	393619.2	170043.5	223575.7	2624234	1133669	1490565	PHEV	36377.68	47829.92	1	8
2033	2a	1	541986.7	2564507	2564507	0	17591551	17591551	0	ICE	541986.7	0	1	1
2033	2a	1	6907.43	32683.75	32683.75	0	224188.2	224188.2	0	ICE	6907.43	0	1	2
2033	2a	1	272397.8	1288899	0	1288899	8840433	0	8840433	BEV	0	272397.8	1	3
2033	2a	1	18270.58	86450.55	0	86450.55	593515.9	0	593515.9	FCEV	0	18270.58	1	7
2033	2a	1	102358.2	484326.1	198573.7	285752.4	3324189	1362918	1961272	PHEV	41966.85	60391.33	1	8
2033	2a	1	516424.2	2473140	2473140	0	17436654	17436654	0	ICE	516424.2	0	1	1
2033	2a	1	6581.643	31519.29	31519.29	0	222220.6	222220.6	0	ICE	6581.643	0	1	2
2033	2a	1	326980.1	1565898	0	1565898	11036501	0	11036501	BEV	0	326980.1	1	3
2033	2a	1	24719.45	118380.7	0	118380.7	834673.3	0	834673.3	FCEV	0	24719.45	1	7
2033	2a	1	122511.9	586705.6	227641.8	359063.8	4140747	1606610	2534137	PHEV	47534.6	74977.26	1	8
2033	2a	1	477921.7	2316133	2316133	0	16779221	16779221	0	ICE	477921.7	0	1	1
2033	2a	1	6090.941	29518.28	29518.28	0	213848.6	213848.6	0	ICE	6090.941	0	1	2
2033	2a	1	380157.7	1842343	0	1842343	13339085	0	13339085	BEV	0	380157.7	1	3
2033	2a	1	32033.12	155240.8	0	155240.8	1124017	0	1124017	FCEV	0	32033.12	1	7
2033	2a	1	142023.9	688284.6	251912.2	436372.5	4994047	1827821	3166226	PHEV	51980.74	90043.14	1	8
2033	2a	1	439030.6	2152808	2152808	0	16014498	16014498	0	ICE	439030.6	0	1	1
2033	2a	1	5595.287	27436.77	27436.77	0	204107.5	204107.5	0	ICE	5595.287	0	1	2
2033	2a	1	440347.3	2159265	0	2159265	16049930	0	16049930	BEV	0	440347.3	1	3
2033	2a	1	40981.73	200955.9	0	200955.9	1493470	0	1493470	FCEV	0	40981.73	1	7
2033	2a	1	164034.9	804353.5	276697.6	527655.9	5995720	2062528	3933193	PHEV	56428.02	107606.9	1	8
2033	2a	1	390337.2	1936400	1936400	0	14785408	14785408	0	ICE	390337.2	0	1	1
2033	2a	1	4974.706	24678.72	24678.72	0	188447.7	188447.7	0	ICE	4974.706	0	1	2
2033	2a	1	499033	2475623	0	2475623	18883716	0	18883716	BEV	0	499033	1	3
2033	2a	1	50908.91	252551	0	252551	1925857	0	1925857	FCEV	0	50908.91	1	7
2033	2a	1	185360.2	919542.5	296092.7	623449.8	7039410	2266690	4772720	PHEV	59686	125674.2	1	8
2033	2a	1	335188.9	1682021	1682021	0	13172694	13172694	0	ICE	335188.9	0	1	1
2033	2a	1	4271.866	21436.78	21436.78	0	167896.4	167896.4	0	ICE	4271.866	0	1	2
2033	2a	1	557274.1	2796474	0	2796474	21875146	0	21875146	BEV	0	557274.1	1	3
2033	2a	1	61919.34	310719.3	0	310719.3	2429745	0	2429745	FCEV	0	61919.34	1	7
2033	2a	1	206397.8	1035731	310719.3	725011.7	8135878	2440763	5695115	PHEV	61919.34	144478.5	1	8
2033	2a	1	277036.9	1406078	1406078	0	11274628	11274628	0	ICE	277036.9	0	1	1
2033	2a	1	3530.735	17919.96	17919.96	0	143703.3	143703.3	0	ICE	3530.735	0	1	2
2033	2a	1	624378.7	3168984	0	3168984	25383081	0	25383081	BEV	0	624378.7	1	3
2033	2a	1	77170.4	391672.2	0	391672.2	3136402	0	3136402	FCEV	0	77170.4	1	7
2033	2a	1	221541.8	1124418	337325.3	787092.4	9043242	2712973	6330269	PHEV	66462.54	155079.3	1	8
2033	2a	1	211110.9	1083571	1083571	0	8868888	8868888	0	ICE	211110.9	0	1	1
2033	2a	1	2690.536	13809.74	13809.74	0	113036.6	113036.6	0	ICE	2690.536	0	1	2
2033	2a	1	683811.4	3509806	0	3509806	28705265	0	28705265	BEV	0	683811.4	1	3
2033	2a	1	93247.01	478609.9	0	478609.9	3913925	0	3913925	FCEV	0	93247.01	1	7
2033	2a	1	232108.4	1191345	357403.5	833941.5	9773699	2932110	6841589	PHEV	69632.51	162475.9	1	8

2033	2a	1	127504.8	661749.7	661749.7	0	5514557	5514557	0	ICE	127504.8	0	1	1
2033	2a	1	1625.004	8433.77	8433.77	0	70280.41	70280.41	0	ICE	1625.004	0	1	2
2033	2a	1	664230.8	3447358	0	3447358	28719155	0	28719155	BEV	0	664230.8	1	3
2033	2a	1	99252.88	515122.4	0	515122.4	4291653	0	4291653	FCEV	0	99252.88	1	7
2033	2a	1	215341.5	1117623	335286.8	782335.8	9323713	2797114	6526599	PHEV	64602.46	150739.1	1	8
2033	2a	1	3662.227	9775.362	9775.362	0	40486.66	40486.66	0	ICE	3662.227	0	2	1
2033	2a	1	3030.015	8261.427	8261.427	0	33969.4	33969.4	0	ICE	3030.015	0	2	1
2033	2a	1	3761.066	10470.13	10470.13	0	42703.62	42703.62	0	ICE	3761.066	0	2	1
2033	2a	1	3256.791	9252.901	9252.901	0	38159.47	38159.47	0	ICE	3256.791	0	2	1
2033	2a	1	4191.994	12150.08	12150.08	0	50475.28	50475.28	0	ICE	4191.994	0	2	1
2033	2a	1	5095.927	15061.98	15061.98	0	63283.68	63283.68	0	ICE	5095.927	0	2	1
2033	2a	1	4838.219	14577.46	14577.46	0	62017.45	62017.45	0	ICE	4838.219	0	2	1
2033	2a	1	5442.421	16709.7	16709.7	0	70978.16	70978.16	0	ICE	5442.421	0	2	1
2033	2a	1	7075.814	22130.03	22130.03	0	94934.82	94934.82	0	ICE	7075.814	0	2	1
2033	2a	1	9122.451	29053.64	29053.64	0	126555.2	126555.2	0	ICE	9122.451	0	2	1
2033	2a	1	8280.804	26847.52	26847.52	0	118266.1	118266.1	0	ICE	8280.804	0	2	1
2033	2a	1	8863.69	29245.12	29245.12	0	130712.6	130712.6	0	ICE	8863.69	0	2	1
2033	2a	1	9830.116	32996.95	32996.95	0	149041.7	149041.7	0	ICE	9830.116	0	2	1
2033	2a	1	10226.66	34913.91	34913.91	0	157519.7	157519.7	0	ICE	10226.66	0	2	1
2033	2a	1	7218.294	25056.86	25056.86	0	113707.5	113707.5	0	ICE	7218.294	0	2	1
2033	2a	1	4246.614	15227.85	15227.85	0	70065.66	70065.66	0	ICE	4246.614	0	2	1
2033	2a	1	7027.41	25602.05	25602.05	0	119597.4	119597.4	0	ICE	7027.41	0	2	1
2033	2a	1	10544.28	39018.68	39018.68	0	184901.7	184901.7	0	ICE	10544.28	0	2	1
2033	2a	1	18724.33	70361.35	70361.35	0	337365.6	337365.6	0	ICE	18724.33	0	2	1
2033	2a	1	14426.97	55039.47	55039.47	0	266514.1	266514.1	0	ICE	14426.97	0	2	1
2033	2a	1	7963.832	30838.59	30838.59	0	150114.2	150114.2	0	ICE	7963.832	0	2	1
2033	2a	1	7374.573	28979.27	28979.27	0	143084.3	143084.3	0	ICE	7374.573	0	2	1
2033	2a	1	64182.03	266918.9	266918.9	0	1416835	1416835	0	ICE	64182.03	0	2	1
2033	2a	1	61249.87	258233.7	258233.7	0	1391205	1391205	0	ICE	61249.87	0	2	1
2033	2a	1	56495.28	241424.7	241424.7	0	1329844	1329844	0	ICE	56495.28	0	2	1
2033	2a	1	7.653307	32.70534	32.70534	0	180.1572	180.1572	0	ICE	7.653307	0	2	2
2033	2a	1	1.903568	8.134629	0	8.134629	43.93221	0	43.93221	BEV	0	1.903568	2	3
2033	2a	1	0.038848	0.166013	0	0.166013	0.896576	0	0.896576	FCEV	0	0.038848	2	7
2033	2a	1	16.51053	70.55546	42.33328	28.22218	388.6617	233.197	155.4647	PHEV	9.906321	6.604214	2	8
2033	2a	1	62523.55	270767.6	270767.6	0	1522620	1522620	0	ICE	62523.55	0	2	1
2033	2a	1	8.469944	36.68037	36.68037	0	206.2697	206.2697	0	ICE	8.469944	0	2	2
2033	2a	1	66262.63	290756.4	290756.4	0	1670984	1670984	0	ICE	66262.63	0	2	1
2033	2a	1	9.039098	39.66302	39.66302	0	227.9455	227.9455	0	ICE	9.039098	0	2	2
2033	2a	1	881.056	3866.021	0	3866.021	22199.61	0	22199.61	BEV	0	881.056	2	3
2033	2a	1	20.6095	90.43324	0	90.43324	519.0003	0	519.0003	FCEV	0	20.6095	2	7
2033	2a	1	676.5891	2968.832	1764.335	1204.498	17072.92	10146.19	6926.727	PHEV	402.0872	274.5019	2	8
2033	2a	1	70116.31	311683.1	311683.1	0	1831851	1831851	0	ICE	70116.31	0	2	1
2033	2a	1	9.675922	43.0117	43.0117	0	252.7808	252.7808	0	ICE	9.675922	0	2	2
2033	2a	1	1904.499	8465.935	0	8465.935	49859.16	0	49859.16	BEV	0	1904.499	2	3
2033	2a	1	50.26537	223.4411	0	223.4411	1320.934	0	1320.934	FCEV	0	50.26537	2	7
2033	2a	1	1466.81	6520.309	3837.667	2682.641	38295.19	22539.45	15755.73	PHEV	863.3226	603.4876	2	8
2033	2a	1	70022.83	315279.2	315279.2	0	1897190	1897190	0	ICE	70022.83	0	2	1

2033	2a	1	9.790012	44.07973	44.07973	0	265.2118	265.2118	0	ICE	9.790012	0	2	2
2033	2a	1	4935.101	22220.39	0	22220.39	134319.9	0	134319.9	BEV	0	4935.101	2	3
2033	2a	1	169.1701	761.6918	0	761.6918	4638.202	0	4638.202	FCEV	0	169.1701	2	7
2033	2a	1	3559.151	16025.15	9290.006	6735.14	96084.85	55701.76	40383.09	PHEV	2063.29	1495.86	2	8
2033	2a	1	69251.26	315772.6	315772.6	0	1946068	1946068	0	ICE	69251.26	0	2	1
2033	2a	1	9.721818	44.32964	44.32964	0	273.1341	273.1341	0	ICE	9.721818	0	2	2
2033	2a	1	8476.949	38653.27	0	38653.27	239754.4	0	239754.4	BEV	0	8476.949	2	3
2033	2a	1	358.4654	1634.534	0	1634.534	10245.26	0	10245.26	FCEV	0	358.4654	2	7
2033	2a	1	5719.393	26079.35	14887.58	11191.76	159625.6	91123.44	68502.2	PHEV	3264.956	2454.437	2	8
2033	2a	1	67229.54	310405.5	310405.5	0	1960427	1960427	0	ICE	67229.54	0	2	1
2033	2a	1	9.482448	43.78141	43.78141	0	276.4199	276.4199	0	ICE	9.482448	0	2	2
2033	2a	1	12440.12	57437.28	0	57437.28	365548.8	0	365548.8	BEV	0	12440.12	2	3
2033	2a	1	627.233	2895.997	0	2895.997	18637.48	0	18637.48	FCEV	0	627.233	2	7
2033	2a	1	7843.295	36213.28	20351.86	15861.41	226531.3	127310.6	99220.69	PHEV	4407.932	3435.363	2	8
2033	2a	1	64796.53	302884.2	302884.2	0	1960834	1960834	0	ICE	64796.53	0	2	1
2033	2a	1	9.179293	42.9076	42.9076	0	277.6619	277.6619	0	ICE	9.179293	0	2	2
2033	2a	1	16925.96	79118.56	0	79118.56	516589.9	0	516589.9	BEV	0	16925.96	2	3
2033	2a	1	993.2356	4642.771	0	4642.771	30616.75	0	30616.75	FCEV	0	993.2356	2	7
2033	2a	1	9958.313	46549.04	25748.27	20800.77	297772.6	164710.8	133061.8	PHEV	5508.37	4449.943	2	8
2033	2a	1	61143.75	289312.7	289312.7	0	1921848	1921848	0	ICE	61143.75	0	2	1
2033	2a	1	8.696923	41.15106	41.15106	0	273.2204	273.2204	0	ICE	8.696923	0	2	2
2033	2a	1	21701.5	102684.6	0	102684.6	688216.7	0	688216.7	BEV	0	21701.5	2	3
2033	2a	1	1455.589	6887.379	0	6887.379	46570.03	0	46570.03	FCEV	0	1455.589	2	7
2033	2a	1	11894.74	56282.12	30633.55	25648.57	368734	200696.6	168037.3	PHEV	6474.139	5420.605	2	8
2033	2a	1	57360.4	274697.2	274697.2	0	1870605	1870605	0	ICE	57360.4	0	2	1
2033	2a	1	8.158789	39.07219	39.07219	0	265.9264	265.9264	0	ICE	8.158789	0	2	2
2033	2a	1	27069.56	129635.3	0	129635.3	890713.6	0	890713.6	BEV	0	27069.56	2	3
2033	2a	1	2046.439	9800.334	0	9800.334	67809.93	0	67809.93	FCEV	0	2046.439	2	7
2033	2a	1	13794.9	66063.37	35372.22	30691.15	442923.8	237154.1	205769.8	PHEV	7386.185	6408.717	2	8
2033	2a	1	52952.5	256621.6	256621.6	0	1791735	1791735	0	ICE	52952.5	0	2	1
2033	2a	1	7.531821	36.50116	36.50116	0	254.7082	254.7082	0	ICE	7.531821	0	2	2
2033	2a	1	32874.73	159319.5	0	159319.5	1122154	0	1122154	BEV	0	32874.73	2	3
2033	2a	1	2770.114	13424.69	0	13424.69	95087.68	0	95087.68	FCEV	0	2770.114	2	7
2033	2a	1	15540.21	75311.9	39657.1	35654.81	517005.2	272240.1	244765	PHEV	8183.031	7357.18	2	8
2033	2a	1	48255.77	236624.6	236624.6	0	1694132	1694132	0	ICE	48255.77	0	2	1
2033	2a	1	6.86377	33.65684	33.65684	0	240.8302	240.8302	0	ICE	6.86377	0	2	2
2033	2a	1	39339.68	192904.1	0	192904.1	1392719	0	1392719	BEV	0	39339.68	2	3
2033	2a	1	3661.22	17952.97	0	17952.97	130204.7	0	130204.7	FCEV	0	3661.22	2	7
2033	2a	1	17202.44	84353	43670.75	40682.25	593216.1	307116.5	286099.7	PHEV	8905.946	8296.489	2	8
2033	2a	1	42467.34	210673.7	210673.7	0	1546950	1546950	0	ICE	42467.34	0	2	1
2033	2a	1	6.04044	29.96565	29.96565	0	219.907	219.907	0	ICE	6.04044	0	2	2
2033	2a	1	45768.13	227048.4	0	227048.4	1680262	0	1680262	BEV	0	45768.13	2	3
2033	2a	1	4669.041	23162.36	0	23162.36	172042.3	0	172042.3	FCEV	0	4669.041	2	7
2033	2a	1	18453.78	91546.26	46583.97	44962.29	659909.1	335799.5	324109.6	PHEV	9390.338	9063.443	2	8
2033	2a	1	36037.35	180840.1	180840.1	0	1362000	1362000	0	ICE	36037.35	0	2	1
2033	2a	1	5.125855	25.72221	25.72221	0	193.6169	193.6169	0	ICE	5.125855	0	2	2
2033	2a	1	52218.46	262039	0	262039	1987694	0	1987694	BEV	0	52218.46	2	3

2033	2a	1	5802.051	29115.45	0	29115.45	221513	0	221513	FCEV	0	5802.051	2	7
2033	2a	1	19340.17	97051.48	48525.74	48525.74	717426.1	358713	358713	PHEV	9670.085	9670.085	2	8
2033	2a	1	29375.92	149095.1	149095.1	0	1151603	1151603	0	ICE	29375.92	0	2	1
2033	2a	1	4.178351	21.20689	21.20689	0	163.7096	163.7096	0	ICE	4.178351	0	2	2
2033	2a	1	58286.01	295826	0	295826	2300243	0	2300243	BEV	0	58286.01	2	3
2033	2a	1	7203.888	36562.76	0	36562.76	284968.5	0	284968.5	FCEV	0	7203.888	2	7
2033	2a	1	20681.02	104964.9	52482.43	52482.43	795836.2	397918.1	397918.1	PHEV	10340.51	10340.51	2	8
2033	2a	1	22471.48	115339.6	115339.6	0	913307.3	913307.3	0	ICE	22471.48	0	2	1
2033	2a	1	3.196283	16.40559	16.40559	0	129.836	129.836	0	ICE	3.196283	0	2	2
2033	2a	1	64630.59	331730.1	0	331730.1	2643060	0	2643060	BEV	0	64630.59	2	3
2033	2a	1	8813.262	45235.92	0	45235.92	361092.1	0	361092.1	FCEV	0	8813.262	2	7
2033	2a	1	21937.77	112600.2	56300.11	56300.11	875471.6	437735.8	437735.8	PHEV	10968.89	10968.89	2	8
2033	2a	1	13759.54	71412.03	71412.03	0	579409.7	579409.7	0	ICE	13759.54	0	2	1
2033	2a	1	1.95712	10.15745	10.15745	0	82.37027	82.37027	0	ICE	1.95712	0	2	2
2033	2a	1	64117.94	332772.1	0	332772.1	2715449	0	2715449	BEV	0	64117.94	2	3
2033	2a	1	9580.842	49724.57	0	49724.57	406368.3	0	406368.3	FCEV	0	9580.842	2	7
2033	2a	1	20786.84	107883.7	53941.84	53941.84	859744.9	429872.5	429872.5	PHEV	10393.42	10393.42	2	8
2033	2a	1	4147.367	11070.32	11070.32	0	42116.92	42116.92	0	ICE	4147.367	0	3	1
2033	2a	1	4641.705	12655.75	12655.75	0	48523.23	48523.23	0	ICE	4641.705	0	3	1
2033	2a	1	5539.679	15421.47	15421.47	0	61057.89	61057.89	0	ICE	5539.679	0	3	1
2033	2a	1	5064.591	14389.06	14389.06	0	57323.02	57323.02	0	ICE	5064.591	0	3	1
2033	2a	1	6673.037	19341.13	19341.13	0	77624.77	77624.77	0	ICE	6673.037	0	3	1
2033	2a	1	7326.647	21655.3	21655.3	0	87770.28	87770.28	0	ICE	7326.647	0	3	1
2033	2a	1	8869.119	26722.48	26722.48	0	110158.9	110158.9	0	ICE	8869.119	0	3	1
2033	2a	1	8766.601	26915.83	26915.83	0	111456.5	111456.5	0	ICE	8766.601	0	3	1
2033	2a	1	13549.53	42376.98	42376.98	0	177502.1	177502.1	0	ICE	13549.53	0	3	1
2033	2a	1	15480.34	49302.57	49302.57	0	208499.3	208499.3	0	ICE	15480.34	0	3	1
2033	2a	1	17269.34	55989.61	55989.61	0	239120.8	239120.8	0	ICE	17269.34	0	3	1
2033	2a	1	22939.63	75687.69	75687.69	0	327851.1	327851.1	0	ICE	22939.63	0	3	1
2033	2a	1	22206.77	74541.93	74541.93	0	324820.1	324820.1	0	ICE	22206.77	0	3	1
2033	2a	1	21772.27	74330.75	74330.75	0	329275.6	329275.6	0	ICE	21772.27	0	3	1
2033	2a	1	25117.52	87190.44	87190.44	0	390979.9	390979.9	0	ICE	25117.52	0	3	1
2033	2a	1	31093.5	109716.2	109716.2	0	497062.4	497062.4	0	ICE	31093.5	0	3	1
2033	2a	1	35340.68	126727.4	126727.4	0	578506.7	578506.7	0	ICE	35340.68	0	3	1
2033	2a	1	33458.04	121893.3	121893.3	0	561301.5	561301.5	0	ICE	33458.04	0	3	1
2033	2a	1	35448.91	131177.3	131177.3	0	610638.8	610638.8	0	ICE	35448.91	0	3	1
2033	2a	1	28591.48	107439.6	107439.6	0	507543.8	507543.8	0	ICE	28591.48	0	3	1
2033	2a	1	18665.99	71211.49	71211.49	0	341133.6	341133.6	0	ICE	18665.99	0	3	1
2033	2a	1	35042.4	135695.7	135695.7	0	657487.9	657487.9	0	ICE	35042.4	0	3	1
2033	2a	1	50643.69	199010.4	199010.4	0	978020.4	978020.4	0	ICE	50643.69	0	3	1
2033	2a	1	54006.97	215320.9	215320.9	0	1078901	1078901	0	ICE	54006.97	0	3	1
2033	2a	1	82859.27	335099.4	335099.4	0	1703369	1703369	0	ICE	82859.27	0	3	1
2033	2a	1	87927.83	360635.1	360635.1	0	1872969	1872969	0	ICE	87927.83	0	3	1
2033	2a	1	939.3095	3852.568	3852.568	0	19577.19	19577.19	0	ICE	939.3095	0	3	2
2033	2a	1	117778.5	489814.9	489814.9	0	2589915	2589915	0	ICE	117778.5	0	3	1
2033	2a	1	126278.2	532397.9	532397.9	0	2867527	2867527	0	ICE	126278.2	0	3	1
2033	2a	1	890.1462	3752.919	3752.919	0	20375.13	20375.13	0	ICE	890.1462	0	3	2

2033	2a	1	155486.3	664448.7	664448.7	0	3638642	3638642	0	ICE	155486.3	0	3	1
2033	2a	1	1589.243	6791.408	6791.408	0	37306.4	37306.4	0	ICE	1589.243	0	3	2
2033	2a	1	178689.7	773842.7	773842.7	0	4328107	4328107	0	ICE	178689.7	0	3	1
2033	2a	1	1826.409	7909.537	7909.537	0	44372.72	44372.72	0	ICE	1826.409	0	3	2
2033	2a	1	616.5045	2669.865	1601.919	1067.946	15003.75	9002.248	6001.499	PHEV	369.9027	246.6018	3	8
2033	2a	1	197005.2	864446.9	864446.9	0	4956356	4956356	0	ICE	197005.2	0	3	1
2033	2a	1	2008.537	8813.341	8813.341	0	50657.3	50657.3	0	ICE	2008.537	0	3	2
2033	2a	1	2323.428	10195.06	0	10195.06	45147.99	0	45147.99	BEV	0	2323.428	3	3
2033	2a	1	54.3492	238.481	0	238.481	951.3383	0	951.3383	FCEV	0	54.3492	3	7
2033	2a	1	2018.035	8855.016	5262.41	3592.606	50871.79	30232.38	20639.41	PHEV	1199.289	818.7456	3	8
2033	2a	1	214976.9	955621.6	955621.6	0	5600888	5600888	0	ICE	214976.9	0	3	1
2033	2a	1	2196.748	9765.049	9765.049	0	57383.28	57383.28	0	ICE	2196.748	0	3	2
2033	2a	1	5151.926	22901.5	0	22901.5	120176.2	0	120176.2	BEV	0	5151.926	3	3
2033	2a	1	135.9746	604.4383	0	604.4383	2482.555	0	2482.555	FCEV	0	135.9746	3	7
2033	2a	1	3718.048	16527.58	9727.661	6799.918	97122.56	57163.57	39959	PHEV	2188.337	1529.711	3	8
2033	2a	1	217871.9	980972.8	980972.8	0	5878618	5878618	0	ICE	217871.9	0	3	1
2033	2a	1	2259.989	10175.65	10175.65	0	61225.37	61225.37	0	ICE	2259.989	0	3	2
2033	2a	1	14880.3	66998.86	0	66998.86	348156.3	0	348156.3	BEV	0	14880.3	3	3
2033	2a	1	510.0813	2296.651	0	2296.651	9708.121	0	9708.121	FCEV	0	510.0813	3	7
2033	2a	1	10114	45538.48	26399.31	19139.17	302739.7	175502.5	127237.2	PHEV	5863.229	4250.769	3	8
2033	2a	1	218638.1	996948.1	996948.1	0	6115726	6115726	0	ICE	218638.1	0	3	1
2033	2a	1	2278.608	10390.02	10390.02	0	64032.17	64032.17	0	ICE	2278.608	0	3	2
2033	2a	1	26493.24	120804.2	0	120804.2	641447.3	0	641447.3	BEV	0	26493.24	3	3
2033	2a	1	1120.322	5108.454	0	5108.454	22213.95	0	22213.95	FCEV	0	1120.322	3	7
2033	2a	1	16944.2	77262.32	44105.75	33156.57	545417.6	311355.5	234062.1	PHEV	9672.716	7271.481	3	8
2033	2a	1	213700	986674.2	986674.2	0	6199368	6199368	0	ICE	213700	0	3	1
2033	2a	1	2239.179	10338.51	10338.51	0	65292.53	65292.53	0	ICE	2239.179	0	3	2
2033	2a	1	39464.19	182210.1	0	182210.1	997869.5	0	997869.5	BEV	0	39464.19	3	3
2033	2a	1	1989.791	9187.063	0	9187.063	41341.02	0	41341.02	FCEV	0	1989.791	3	7
2033	2a	1	23724.26	109537.3	61559.95	47977.33	804709.4	452246.7	352462.7	PHEV	13333.03	10391.23	3	8
2033	2a	1	206701.4	966202.8	966202.8	0	6219457	6219457	0	ICE	206701.4	0	3	1
2033	2a	1	2176.719	10174.83	10174.83	0	65866.48	65866.48	0	ICE	2176.719	0	3	2
2033	2a	1	54076.85	252776.3	0	252776.3	1427107	0	1427107	BEV	0	54076.85	3	3
2033	2a	1	3173.293	14833.21	0	14833.21	72440.14	0	72440.14	FCEV	0	3173.293	3	7
2033	2a	1	30517.27	142649.6	78905.61	63744	1084033	599625	484407.8	PHEV	16880.41	13636.86	3	8
2033	2a	1	195323.3	924207.5	924207.5	0	6100625	6100625	0	ICE	195323.3	0	3	1
2033	2a	1	2066.449	9777.776	9777.776	0	64941.82	64941.82	0	ICE	2066.449	0	3	2
2033	2a	1	69530.62	328996.6	0	328996.6	1916668	0	1916668	BEV	0	69530.62	3	3
2033	2a	1	4663.639	22066.85	0	22066.85	114657.2	0	114657.2	FCEV	0	4663.639	3	7
2033	2a	1	36778.93	174026.1	94719.94	79306.2	1366981	744028.4	622952.9	PHEV	20018.25	16760.69	3	8
2033	2a	1	182157.2	872345.2	872345.2	0	5903205	5903205	0	ICE	182157.2	0	3	1
2033	2a	1	1927.156	9229.093	9229.093	0	62838.63	62838.63	0	ICE	1927.156	0	3	2
2033	2a	1	86241.95	413010.1	0	413010.1	2483648	0	2483648	BEV	0	86241.95	3	3
2033	2a	1	6519.828	31223.26	0	31223.26	172843.5	0	172843.5	FCEV	0	6519.828	3	7
2033	2a	1	42684.05	204412.6	109448.4	94964.28	1660414	889033.1	771380.9	PHEV	22854.26	19829.79	3	8
2033	2a	1	165933.1	804155	804155	0	5580218	5580218	0	ICE	165933.1	0	3	1
2033	2a	1	1755.512	8507.665	8507.665	0	59399.5	59399.5	0	ICE	1755.512	0	3	2

2033	2a	1	103314	500686.3	0	500686.3	3107838	0	3107838	BEV	0	103314	3	3
2033	2a	1	8705.513	42189.18	0	42189.18	245985.5	0	245985.5	FCEV	0	8705.513	3	7
2033	2a	1	47746.57	231392.3	121844.6	109547.7	1942140	1022675	919464.4	PHEV	25141.98	22604.59	3	8
2033	2a	1	149873.6	734912.7	734912.7	0	5229775	5229775	0	ICE	149873.6	0	3	1
2033	2a	1	1585.608	7775.108	7775.108	0	55668.63	55668.63	0	ICE	1585.608	0	3	2
2033	2a	1	122445	600415	0	600415	3846263	0	3846263	BEV	0	122445	3	3
2033	2a	1	11395.57	55878.73	0	55878.73	340884.6	0	340884.6	FCEV	0	11395.57	3	7
2033	2a	1	52714.66	258489	133823.4	124665.5	2240469	1159923	1080546	PHEV	27291.14	25423.53	3	8
2033	2a	1	131811.6	653896.2	653896.2	0	4772369	4772369	0	ICE	131811.6	0	3	1
2033	2a	1	1394.518	6917.982	6917.982	0	50799.68	50799.68	0	ICE	1394.518	0	3	2
2033	2a	1	142226.3	705562	0	705562	4664127	0	4664127	BEV	0	142226.3	3	3
2033	2a	1	14509.23	71977.99	0	71977.99	457550.1	0	457550.1	FCEV	0	14509.23	3	7
2033	2a	1	56883.38	282189.4	143594.1	138595.3	2525221	1284977	1240244	PHEV	28945.51	27937.87	3	8
2033	2a	1	112195.9	563013.9	563013.9	0	4213740	4213740	0	ICE	112195.9	0	3	1
2033	2a	1	1186.992	5956.48	5956.48	0	44853.52	44853.52	0	ICE	1186.992	0	3	2
2033	2a	1	162588.2	815889	0	815889	5564318	0	5564318	BEV	0	162588.2	3	3
2033	2a	1	18065.36	90654.33	0	90654.33	598811.1	0	598811.1	FCEV	0	18065.36	3	7
2033	2a	1	60217.87	302181.1	151090.5	151090.5	2790676	1395338	1395338	PHEV	30108.93	30108.93	3	8
2033	2a	1	92658.07	470278.6	470278.6	0	3609380	3609380	0	ICE	92658.07	0	3	1
2033	2a	1	980.2884	4975.376	4975.376	0	38420.72	38420.72	0	ICE	980.2884	0	3	2
2033	2a	1	184026.1	934010	0	934010	6554495	0	6554495	BEV	0	184026.1	3	3
2033	2a	1	22744.8	115439.4	0	115439.4	789567.1	0	789567.1	FCEV	0	22744.8	3	7
2033	2a	1	65296.09	331405.1	165702.5	165702.5	3154729	1577365	1577365	PHEV	32648.04	32648.04	3	8
2033	2a	1	71771.12	368380.4	368380.4	0	2898545	2898545	0	ICE	71771.12	0	3	1
2033	2a	1	759.3122	3897.329	3897.329	0	30854.47	30854.47	0	ICE	759.3122	0	3	2
2033	2a	1	206776.8	1061325	0	1061325	7661593	0	7661593	BEV	0	206776.8	3	3
2033	2a	1	28196.83	144726.2	0	144726.2	1023084	0	1023084	FCEV	0	28196.83	3	7
2033	2a	1	70186.92	360249.1	180124.5	180124.5	3533111	1766555	1766555	PHEV	35093.46	35093.46	3	8
2033	2a	1	43644.29	226513.9	226513.9	0	1825616	1825616	0	ICE	43644.29	0	3	1
2033	2a	1	461.7406	2396.434	2396.434	0	19433.5	19433.5	0	ICE	461.7406	0	3	2
2033	2a	1	203856.1	1058013	0	1058013	7850951	0	7850951	BEV	0	203856.1	3	3
2033	2a	1	30461.26	158093.9	0	158093.9	1152978	0	1152978	FCEV	0	30461.26	3	7
2033	2a	1	66089.52	343004.6	171502.3	171502.3	3461314	1730657	1730657	PHEV	33044.76	33044.76	3	8
2033	2a	1	3651.797	9956.735	9956.735	0	33475.18	33475.18	0	ICE	3651.797	0	4	1
2033	2a	1	3045.167	8477.197	8477.197	0	29052.1	29052.1	0	ICE	3045.167	0	4	1
2033	2a	1	3682.766	10463.14	10463.14	0	36064.6	36064.6	0	ICE	3682.766	0	4	1
2033	2a	1	3908.005	11326.96	11326.96	0	40139.7	40139.7	0	ICE	3908.005	0	4	1
2033	2a	1	5953.186	17595.77	17595.77	0	63143.28	63143.28	0	ICE	5953.186	0	4	1
2033	2a	1	6579.243	19823.13	19823.13	0	72651.73	72651.73	0	ICE	6579.243	0	4	1
2033	2a	1	5857.866	17985.23	17985.23	0	66962.87	66962.87	0	ICE	5857.866	0	4	1
2033	2a	1	7743.067	24216.91	24216.91	0	92469.81	92469.81	0	ICE	7743.067	0	4	1
2033	2a	1	8736.966	27825.93	27825.93	0	107958.4	107958.4	0	ICE	8736.966	0	4	1
2033	2a	1	14570.34	47239.08	47239.08	0	187508.7	187508.7	0	ICE	14570.34	0	4	1
2033	2a	1	17176.2	56671.68	56671.68	0	228506.3	228506.3	0	ICE	17176.2	0	4	1
2033	2a	1	23162.22	77749.08	77749.08	0	318599.4	318599.4	0	ICE	23162.22	0	4	1
2033	2a	1	25.45645	85.45017	85.45017	0	316.3184	316.3184	0	ICE	25.45645	0	4	2
2033	2a	1	28820.8	98394.5	98394.5	0	410747.9	410747.9	0	ICE	28820.8	0	4	1

2033	2a	1	32709.23	113543.5	113543.5	0	485036.9	485036.9	0	ICE	32709.23	0	4	1
2033	2a	1	37164.26	131137.5	131137.5	0	568294.9	568294.9	0	ICE	37164.26	0	4	1
2033	2a	1	55.84837	197.066	197.066	0	785.1082	785.1082	0	ICE	55.84837	0	4	2
2033	2a	1	36659.44	131456.3	131456.3	0	572741.3	572741.3	0	ICE	36659.44	0	4	1
2033	2a	1	37708.28	137377.7	137377.7	0	607972.5	607972.5	0	ICE	37708.28	0	4	1
2033	2a	1	40079.66	148313.2	148313.2	0	666706.2	666706.2	0	ICE	40079.66	0	4	1
2033	2a	1	32522.54	122211.6	122211.6	0	557060	557060	0	ICE	32522.54	0	4	1
2033	2a	1	14850.6	56655.63	56655.63	0	261374.6	261374.6	0	ICE	14850.6	0	4	1
2033	2a	1	23063.47	89309.36	89309.36	0	417596.1	417596.1	0	ICE	23063.47	0	4	1
2033	2a	1	36000.98	141470.2	141470.2	0	671521.1	671521.1	0	ICE	36000.98	0	4	1
2033	2a	1	1019.333	4005.593	4005.593	0	18621.62	18621.62	0	ICE	1019.333	0	4	2
2033	2a	1	39057.33	155718.1	155718.1	0	752698	752698	0	ICE	39057.33	0	4	1
2033	2a	1	46742.26	189035	189035	0	931200.3	931200.3	0	ICE	46742.26	0	4	1
2033	2a	1	1002.212	4053.148	4053.148	0	19678.53	19678.53	0	ICE	1002.212	0	4	2
2033	2a	1	77579.91	318193.2	318193.2	0	1603140	1603140	0	ICE	77579.91	0	4	1
2033	2a	1	2431.985	9974.763	9974.763	0	49656.55	49656.55	0	ICE	2431.985	0	4	2
2033	2a	1	89955.67	374105.8	374105.8	0	1932139	1932139	0	ICE	89955.67	0	4	1
2033	2a	1	104682.8	441349.8	441349.8	0	2330774	2330774	0	ICE	104682.8	0	4	1
2033	2a	1	100934.4	431328.9	431328.9	0	2317523	2317523	0	ICE	100934.4	0	4	1
2033	2a	1	3519.598	15040.51	15040.51	0	80866.8	80866.8	0	ICE	3519.598	0	4	2
2033	2a	1	844.4458	3608.621	2165.172	1443.448	18451.85	11071.11	7380.741	PHEV	506.6675	337.7783	4	8
2033	2a	1	111914.4	484662	484662	0	2664199	2664199	0	ICE	111914.4	0	4	1
2033	2a	1	3902.472	16900.24	16900.24	0	92962.5	92962.5	0	ICE	3902.472	0	4	2
2033	2a	1	1.957715	8.47818	0	8.47818	32.82308	0	32.82308	BEV	0	1.957715	4	3
2033	2a	1	0.039953	0.173024	0	0.173024	0.669859	0	0.669859	FCEV	0	0.039953	4	7
2033	2a	1	2395.704	10374.96	6224.974	4149.983	55973.81	33584.29	22389.52	PHEV	1437.423	958.2817	4	8
2033	2a	1	122147.3	535974.9	535974.9	0	3014173	3014173	0	ICE	122147.3	0	4	1
2033	2a	1	4299.505	18865.97	18865.97	0	106257.4	106257.4	0	ICE	4299.505	0	4	2
2033	2a	1	1047.103	4594.625	0	4594.625	19099.02	0	19099.02	BEV	0	1047.103	4	3
2033	2a	1	24.49364	107.4766	0	107.4766	428.6197	0	428.6197	FCEV	0	24.49364	4	7
2033	2a	1	2724.346	11954.27	7104.251	4850.017	69919.81	41552.35	28367.47	PHEV	1619.04	1105.306	4	8
2033	2a	1	132447.6	588760.1	588760.1	0	3386386	3386386	0	ICE	132447.6	0	4	1
2033	2a	1	4735.187	21049	21049	0	121425.7	121425.7	0	ICE	4735.187	0	4	2
2033	2a	1	2283.895	10152.44	0	10152.44	47079.84	0	47079.84	BEV	0	2283.895	4	3
2033	2a	1	60.27874	267.9529	0	267.9529	1100.277	0	1100.277	FCEV	0	60.27874	4	7
2033	2a	1	3075.825	13672.75	8047.391	5625.361	80406.15	47324.76	33081.39	PHEV	1810.343	1265.482	4	8
2033	2a	1	133189	599686.1	599686.1	0	3529939	3529939	0	ICE	133189	0	4	1
2033	2a	1	4845.823	21818.42	21818.42	0	129014.5	129014.5	0	ICE	4845.823	0	4	2
2033	2a	1	7048.49	31735.97	0	31735.97	151100.9	0	151100.9	BEV	0	7048.49	4	3
2033	2a	1	241.6149	1087.876	0	1087.876	4597.501	0	4597.501	FCEV	0	241.6149	4	7
2033	2a	1	8412.734	37878.5	21958.71	15919.79	242131.4	140367	101764.4	PHEV	4876.982	3535.752	4	8
2033	2a	1	132803	605556.5	605556.5	0	3652148	3652148	0	ICE	132803	0	4	1
2033	2a	1	4858.284	22152.85	22152.85	0	134303.6	134303.6	0	ICE	4858.284	0	4	2
2033	2a	1	13064.96	59573.74	0	59573.74	295478.2	0	295478.2	BEV	0	13064.96	4	3
2033	2a	1	552.479	2519.199	0	2519.199	10952.03	0	10952.03	FCEV	0	552.479	4	7
2033	2a	1	13836.88	63093.55	36017.4	27076.15	423896.4	241984.3	181912.1	PHEV	7898.882	5937.999	4	8
2033	2a	1	129783.2	599221.9	599221.9	0	3704588	3704588	0	ICE	129783.2	0	4	1

2033	2a	1	4777.696	22059.1	22059.1	0	137171.3	137171.3	0	ICE	4777.696	0	4	2
2033	2a	1	20240.39	93451.92	0	93451.92	482996.1	0	482996.1	BEV	0	20240.39	4	3
2033	2a	1	1020.524	4711.862	0	4711.862	21064.64	0	21064.64	FCEV	0	1020.524	4	7
2033	2a	1	19024.81	87839.46	49365.78	38473.68	614845.1	345542.9	269302.1	PHEV	10691.94	8332.868	4	8
2033	2a	1	126365.4	590681.2	590681.2	0	3743675	3743675	0	ICE	126365.4	0	4	1
2033	2a	1	4679.056	21871.73	21871.73	0	139510.1	139510.1	0	ICE	4679.056	0	4	2
2033	2a	1	28915.14	135160.6	0	135160.6	727162.4	0	727162.4	BEV	0	28915.14	4	3
2033	2a	1	1696.775	7931.387	0	7931.387	36478.75	0	36478.75	FCEV	0	1696.775	4	7
2033	2a	1	24100.81	112656.6	62315.19	50341.41	819134.7	453098.5	366036.2	PHEV	13331.19	10769.62	4	8
2033	2a	1	119623.9	566022.1	566022.1	0	3681012	3681012	0	ICE	119623.9	0	4	1
2033	2a	1	4453.346	21071.81	21071.81	0	137998.5	137998.5	0	ICE	4453.346	0	4	2
2033	2a	1	38449.23	181929.4	0	181929.4	1017390	0	1017390	BEV	0	38449.23	4	3
2033	2a	1	2578.911	12202.58	0	12202.58	60254.05	0	60254.05	FCEV	0	2578.911	4	7
2033	2a	1	28363.8	134208.4	73047.74	61160.7	1012461	551068.1	461393	PHEV	15438.01	12925.79	4	8
2033	2a	1	112910.3	540723.9	540723.9	0	3606691	3606691	0	ICE	112910.3	0	4	1
2033	2a	1	4203.411	20130.01	20130.01	0	135209.1	135209.1	0	ICE	4203.411	0	4	2
2033	2a	1	49689.34	237960.8	0	237960.8	1383461	0	1383461	BEV	0	49689.34	4	3
2033	2a	1	3756.477	17989.66	0	17989.66	95534.29	0	95534.29	FCEV	0	3756.477	4	7
2033	2a	1	32341.77	154883.8	82929.19	71954.57	1212384	649145.2	563239.1	PHEV	17316.71	15025.06	4	8
2033	2a	1	104017	504093.3	504093.3	0	3448851	3448851	0	ICE	104017	0	4	1
2033	2a	1	3872.333	18766.33	18766.33	0	129290.1	129290.1	0	ICE	3872.333	0	4	2
2033	2a	1	61833.39	299660.7	0	299660.7	1809967	0	1809967	BEV	0	61833.39	4	3
2033	2a	1	5210.249	25250.22	0	25250.22	142385.5	0	142385.5	FCEV	0	5210.249	4	7
2033	2a	1	35351.94	171324.7	90214.69	81110	1390323	732104.3	658218.6	PHEV	18615.32	16736.62	4	8
2033	2a	1	95053.84	466101.3	466101.3	0	3270417	3270417	0	ICE	95053.84	0	4	1
2033	2a	1	3538.654	17351.97	17351.97	0	122599.8	122599.8	0	ICE	3538.654	0	4	2
2033	2a	1	76009.31	372715.5	0	372715.5	2337438	0	2337438	BEV	0	76009.31	4	3
2033	2a	1	7073.946	34687.45	0	34687.45	206149.3	0	206149.3	FCEV	0	7073.946	4	7
2033	2a	1	37941	186045.6	96318.46	89727.13	1563760	809581.1	754179.3	PHEV	19642.6	18298.4	4	8
2033	2a	1	83551.29	414484.6	414484.6	0	2982671	2982671	0	ICE	83551.29	0	4	1
2033	2a	1	3110.438	15430.39	15430.39	0	111812.7	111812.7	0	ICE	3110.438	0	4	2
2033	2a	1	90303.08	447979.1	0	447979.1	2916224	0	2916224	BEV	0	90303.08	4	3
2033	2a	1	9212.279	45700.64	0	45700.64	284944.4	0	284944.4	FCEV	0	9212.279	4	7
2033	2a	1	39037.09	193656.8	98543.63	95113.14	1684887	857366.9	827520.3	PHEV	19864.3	19172.79	4	8
2033	2a	1	71491.27	358752.5	358752.5	0	2647029	2647029	0	ICE	71491.27	0	4	1
2033	2a	1	2661.469	13355.6	13355.6	0	99230.4	99230.4	0	ICE	2661.469	0	4	2
2033	2a	1	106038.9	532117	0	532117	3594345	0	3594345	BEV	0	106038.9	4	3
2033	2a	1	11782.1	59124.11	0	59124.11	385548.3	0	385548.3	FCEV	0	11782.1	4	7
2033	2a	1	39273.66	197080.4	98540.18	98540.18	1772823	886411.7	886411.7	PHEV	19636.83	19636.83	4	8
2033	2a	1	59077.41	299842.7	299842.7	0	2267149	2267149	0	ICE	59077.41	0	4	1
2033	2a	1	2199.327	11162.51	11162.51	0	84989.41	84989.41	0	ICE	2199.327	0	4	2
2033	2a	1	120121.7	609668.2	0	609668.2	4234633	0	4234633	BEV	0	120121.7	4	3
2033	2a	1	14846.51	75352.26	0	75352.26	508821.3	0	508821.3	FCEV	0	14846.51	4	7
2033	2a	1	42621.55	216322.3	108161.1	108161.1	2003527	1001763	1001763	PHEV	21310.77	21310.77	4	8
2033	2a	1	45365.27	232846.8	232846.8	0	1803777	1803777	0	ICE	45365.27	0	4	1
2033	2a	1	1688.853	8668.394	8668.394	0	67618.95	67618.95	0	ICE	1688.853	0	4	2
2033	2a	1	133834	686931.3	0	686931.3	4904910	0	4904910	BEV	0	133834	4	3

2033	2a	1	18250.1	93672.45	0	93672.45	653660.5	0	653660.5	FCEV	0	18250.1	4	7
2033	2a	1	45427.73	233167.3	116583.7	116583.7	2222540	1111270	1111270	PHEV	22713.86	22713.86	4	8
2033	2a	1	26415	137093.8	137093.8	0	1085131	1085131	0	ICE	26415	0	4	1
2033	2a	1	983.3747	5103.715	5103.715	0	40677.33	40677.33	0	ICE	983.3747	0	4	2
2033	2a	1	126360.8	655812.6	0	655812.6	4803603	0	4803603	BEV	0	126360.8	4	3
2033	2a	1	18881.5	97994.99	0	97994.99	704379.8	0	704379.8	FCEV	0	18881.5	4	7
2033	2a	1	40965.78	212612.4	106306.2	106306.2	2076791	1038396	1038396	PHEV	20482.89	20482.89	4	8
2033	2a	1	56.70081	157.8448	157.8448	0	285.0454	285.0454	0	ICE	56.70081	0	1	2
2033	2a	1	29.34507	83.37258	83.37258	0	147.2352	147.2352	0	ICE	29.34507	0	1	2
2033	2a	1	15.93975	46.19977	46.19977	0	86.91583	86.91583	0	ICE	15.93975	0	1	2
2033	2a	1	33.46171	104.6535	104.6535	0	254.0872	254.0872	0	ICE	33.46171	0	1	2
2033	2a	1	47.47763	156.6491	156.6491	0	453.2273	453.2273	0	ICE	47.47763	0	1	2
2033	2a	1	7.437562	24.96581	0	24.96581	81.44906	0	81.44906	BEV	0	7.437562	1	3
2033	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2033	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2033	2a	1	117.2404	400.2599	400.2599	0	1234.406	1234.406	0	ICE	117.2404	0	1	2
2033	2a	1	163.9903	569.2596	569.2596	0	1836.214	1836.214	0	ICE	163.9903	0	1	2
2033	2a	1	61.68296	217.6539	217.6539	0	750.0933	750.0933	0	ICE	61.68296	0	1	2
2033	2a	1	121.3128	435.0133	435.0133	0	1520.545	1520.545	0	ICE	121.3128	0	1	2
2033	2a	1	450.0261	1716.868	1716.868	0	6937.003	6937.003	0	ICE	450.0261	0	1	2
2033	2a	1	1726.591	6883.764	6883.764	0	30855.39	30855.39	0	ICE	1726.591	0	1	2
2033	2a	1	2787.083	11271.52	11271.52	0	52648.02	52648.02	0	ICE	2787.083	0	1	2
2033	2a	1	2533.846	10247.38	0	10247.38	48203.93	0	48203.93	BEV	0	2533.846	1	3
2033	2a	1	0.148866	0.602043	0	0.602043	2.832027	0	2.832027	FCEV	0	0.148866	1	7
2033	2a	1	2648.473	10710.96	6426.573	4284.382	48150.53	28890.32	19260.21	PHEV	1589.084	1059.389	1	8
2033	2a	1	3546.363	14545.37	0	14545.37	70723.61	0	70723.61	BEV	0	3546.363	1	3
2033	2a	1	0.496898	2.038023	0	2.038023	9.909431	0	9.909431	FCEV	0	0.496898	1	7
2033	2a	1	4477.551	18364.63	11018.78	7345.852	85413.62	51248.17	34165.45	PHEV	2686.53	1791.02	1	8
2033	2a	1	3637.523	15127.66	15127.66	0	76203	76203	0	ICE	3637.523	0	1	2
2033	2a	1	9230.94	38389.45	0	38389.45	193526.7	0	193526.7	BEV	0	9230.94	1	3
2033	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2033	2a	1	4389.56	18255.21	10953.13	7302.085	88028.93	52817.36	35211.57	PHEV	2633.736	1755.824	1	8
2033	2a	1	6426.863	22677.76	22677.76	0	103576.1	103576.1	0	ICE	6426.863	0	2	1
2033	2a	1	14923.31	59497.88	59497.88	0	298699.6	298699.6	0	ICE	14923.31	0	2	1
2033	2a	1	22615.66	91462.25	91462.25	0	468106.4	468106.4	0	ICE	22615.66	0	2	1
2033	2a	1	28961.85	118786.7	118786.7	0	616845	616845	0	ICE	28961.85	0	2	1
2033	2a	1	9.729537	36.56117	36.56117	0	169.6503	169.6503	0	ICE	9.729537	0	3	2
2033	2a	1	359.3409	1432.66	1432.66	0	7035.812	7035.812	0	ICE	359.3409	0	3	2
2033	2a	1	299.1305	1209.743	1209.743	0	6016.172	6016.172	0	ICE	299.1305	0	3	2
2033	2a	1	1511.007	6283.947	6283.947	0	32774.33	32774.33	0	ICE	1511.007	0	3	2
2033	2a	1	1726.09	7277.318	0	7277.318	26027.37	0	26027.37	BEV	0	1726.09	3	3
2033	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2033	2a	1	157.0869	662.2894	397.3737	264.9158	3409.889	2045.934	1363.956	PHEV	94.25215	62.83477	3	8
2033	2a	1	3497.529	9335.745	9335.745	0	31540.47	31540.47	0	ICE	3497.529	0	4	1
2033	2a	1	23.92325	70.7097	70.7097	0	235.5195	235.5195	0	ICE	23.92325	0	4	2
2033	2a	1	15.28911	49.56945	49.56945	0	167.4373	167.4373	0	ICE	15.28911	0	4	2
2033	2a	1	98.25812	352.3418	352.3418	0	1469.783	1469.783	0	ICE	98.25812	0	4	2

2033	2a	1	141.0882	514.0082	514.0082	0	2179.473	2179.473	0	ICE	141.0882	0	4	2
2033	2a	1	202.0117	747.5361	747.5361	0	3306.924	3306.924	0	ICE	202.0117	0	4	2
2033	2a	1	157.3815	591.4002	591.4002	0	2661.508	2661.508	0	ICE	157.3815	0	4	2
2033	2a	1	232.8313	888.2605	888.2605	0	4012.804	4012.804	0	ICE	232.8313	0	4	2
2033	2a	1	1899.875	7574.63	7574.63	0	36148.15	36148.15	0	ICE	1899.875	0	4	2
2033	2a	1	5034.492	20937.34	20937.34	0	107491.1	107491.1	0	ICE	5034.492	0	4	2
2033	2a	1	3442.636	14514.4	14514.4	0	76950.96	76950.96	0	ICE	3442.636	0	4	2
2033	2a	1	47.9258	130.6711	130.6711	0	185.4234	185.4234	0	ICE	47.9258	0	1	2
2033	2a	1	59.92579	194.2878	194.2878	0	523.7799	523.7799	0	ICE	59.92579	0	1	2
2033	2a	1	4.323184	15.50242	0	15.50242	56.86102	0	56.86102	BEV	0	4.323184	1	3
2033	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2033	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2033	2a	1	472.337	1883.165	0	1883.165	8586.513	0	8586.513	BEV	0	472.337	1	3
2033	2a	1	1.785023	7.116727	0	7.116727	32.44955	0	32.44955	FCEV	0	1.785023	1	7
2033	2a	1	992.8696	3958.482	2375.089	1583.393	17220.82	10332.49	6888.328	PHEV	595.7217	397.1478	1	8
2033	2a	1	6712.898	28302.05	0	28302.05	147395.8	0	147395.8	BEV	0	6712.898	1	3
2033	2a	1	204.3792	861.6771	0	861.6771	4487.576	0	4487.576	FCEV	0	204.3792	1	7
2033	2a	1	4827.471	20352.96	12211.77	8141.183	101884.8	61130.9	40753.93	PHEV	2896.483	1930.988	1	8
2033	2a	1	3.145842	9.298134	9.298134	0	30.96404	30.96404	0	ICE	3.145842	0	2	2
2033	2a	1	1.844654	5.557907	5.557907	0	18.55511	18.55511	0	ICE	1.844654	0	2	2
2033	2a	1	3.82964	12.19683	12.19683	0	48.1311	48.1311	0	ICE	3.82964	0	2	2
2033	2a	1	32.77553	117.5291	117.5291	0	516.0523	516.0523	0	ICE	32.77553	0	3	2
2033	2a	1	36.72886	133.8095	133.8095	0	607.5156	607.5156	0	ICE	36.72886	0	3	2
2033	2a	1	12.55055	39.97161	39.97161	0	130.1054	130.1054	0	ICE	12.55055	0	4	2
2033	2a	1	32.35229	112.3045	112.3045	0	451.2045	451.2045	0	ICE	32.35229	0	4	2
2033	2a	1	438.0351	1696.217	1696.217	0	7760.011	7760.011	0	ICE	438.0351	0	4	2
2033	2a	1	56.2606	169.5121	169.5121	0	370.7911	370.7911	0	ICE	56.2606	0	1	2
2033	2a	1	40.94075	125.6992	125.6992	0	292.1761	292.1761	0	ICE	40.94075	0	1	2
2033	2a	1	60.54068	192.813	192.813	0	508.3091	508.3091	0	ICE	60.54068	0	1	2
2033	2a	1	14.50286	49.51291	0	49.51291	166.5046	0	166.5046	BEV	0	14.50286	1	3
2033	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2033	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2033	2a	1	514.2454	2020.789	0	2020.789	8946.125	0	8946.125	BEV	0	514.2454	1	3
2033	2a	1	5.080662	19.96507	0	19.96507	88.38628	0	88.38628	FCEV	0	5.080662	1	7
2033	2a	1	142.9451	561.7199	337.032	224.688	2353.957	1412.374	941.5829	PHEV	85.76706	57.17804	1	8
2033	2a	1	557.1127	2348.826	2348.826	0	12032.67	12032.67	0	ICE	557.1127	0	1	2
2033	2a	1	293.5177	1203.86	0	1203.86	5840.238	0	5840.238	BEV	0	293.5177	2	3
2033	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2033	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2033	2a	1	0.850866	2.368659	2.368659	0	9.490324	9.490324	0	ICE	0.850866	0	3	2
2033	2a	1	18.24604	52.88432	52.88432	0	161.5206	161.5206	0	ICE	18.24604	0	4	2
2033	2a	1	28.22314	85.03577	85.03577	0	279.584	279.584	0	ICE	28.22314	0	4	2
2033	2a	1	26.26312	80.63486	80.63486	0	262.9046	262.9046	0	ICE	26.26312	0	4	2
2033	2a	1	21.9433	58.57193	58.57193	0	119.9381	119.9381	0	ICE	21.9433	0	1	2
2033	2a	1	33.53167	126.0036	126.0036	0	479.1569	479.1569	0	ICE	33.53167	0	1	2
2033	2a	1	5.494613	19.07345	19.07345	0	76.38107	76.38107	0	ICE	5.494613	0	2	2
2033	2a	1	0.364278	1.181039	1.181039	0	3.932177	3.932177	0	ICE	0.364278	0	3	2

2033	2a	1	20.2455	78.39725	78.39725	0	372.3838	372.3838	0	ICE	20.2455	0	3	2
2033	2a	1	74.59203	305.9385	0	305.9385	1033.268	0	1033.268	BEV	0	74.59203	3	3
2033	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2033	2a	1	33.77294	138.5194	83.11162	55.40775	683.1715	409.9029	273.2686	PHEV	20.26376	13.50917	3	8
2033	2a	1	11.30737	31.47769	31.47769	0	99.87041	99.87041	0	ICE	11.30737	0	4	2
2033	2a	1	30.03452	93.93477	93.93477	0	321.1582	321.1582	0	ICE	30.03452	0	4	2
2033	2a	1	11.70322	39.9549	39.9549	0	159.5266	159.5266	0	ICE	11.70322	0	4	2
2033	2a	1	45.94831	180.5594	180.5594	0	877.5497	877.5497	0	ICE	45.94831	0	3	2
2033	2a	1	9.340447	24.93189	24.93189	0	77.38673	77.38673	0	ICE	9.340447	0	4	2
2033	2a	1	4.834273	15.95034	15.95034	0	60.74634	60.74634	0	ICE	4.834273	0	4	2
2033	2a	1	6.079709	20.75619	0	20.75619	47.35519	0	47.35519	BEV	0	6.079709	3	3
2033	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2033	2a	1	0	0	0	0	0	0	0	PHEV	0	0	3	8
2033	2a	1	27.25128	93.03615	0	93.03615	215.9102	0	215.9102	BEV	0	27.25128	4	3
2033	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2033	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2033	2a	1	9.736946	28.77939	28.77939	0	61.63185	61.63185	0	ICE	9.736946	0	1	2
2033	2a	1	19.84827	73.44772	73.44772	0	267.5838	267.5838	0	ICE	19.84827	0	1	2
2033	2a	1	74.00944	286.589	0	286.589	1236.684	0	1236.684	BEV	0	74.00944	1	3
2033	2a	1	7.513649	29.09533	0	29.09533	125.5517	0	125.5517	FCEV	0	7.513649	1	7
2033	2a	1	7.889331	30.55009	18.33006	12.22004	123.061	73.83661	49.2244	PHEV	4.733599	3.155732	1	8
2033	2a	1	3.728878	10.59415	10.59415	0	31.219	31.219	0	ICE	3.728878	0	2	2
2033	2a	1	113.2756	451.6195	0	451.6195	2042.819	0	2042.819	BEV	0	113.2756	2	3
2033	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2033	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2033	2a	1	15.89967	60.65788	60.65788	0	280.0182	280.0182	0	ICE	15.89967	0	3	2
2033	2a	1	17.75499	50.44388	50.44388	0	165.6806	165.6806	0	ICE	17.75499	0	4	2
2033	2a	1	5.668978	20.65305	0	20.65305	78.46061	0	78.46061	BEV	0	5.668978	1	3
2033	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2033	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2033	2a	1	37.16754	139.6663	0	139.6663	552.6852	0	552.6852	BEV	0	37.16754	1	3
2033	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2033	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2033	2a	1	35.072	133.8011	0	133.8011	566.5664	0	566.5664	BEV	0	35.072	1	3
2033	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2033	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2033	2a	1	4.33038	11.55882	11.55882	0	34.55599	34.55599	0	ICE	4.33038	0	2	2
2033	2a	1	4.140061	12.71111	12.71111	0	52.53082	52.53082	0	ICE	4.140061	0	2	2
2033	2a	1	10.37447	39.57901	39.57901	0	178.0943	178.0943	0	ICE	10.37447	0	2	2
2033	2a	1	145.314	587.6787	0	587.6787	2749.794	0	2749.794	BEV	0	145.314	2	3
2033	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2033	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2033	2a	1	5.066224	18.74736	18.74736	0	86.72448	86.72448	0	ICE	5.066224	0	3	2
2033	2a	1	9.030495	24.62192	24.62192	0	86.51739	86.51739	0	ICE	9.030495	0	4	2
2033	2a	1	3.628293	12.59489	0	12.59489	43.44731	0	43.44731	BEV	0	3.628293	1	3
2033	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2033	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8

2033	2a	1	10.95251	40.52933	0	40.52933	158.6891	0	158.6891	BEV	0	10.95251	1	3
2033	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2033	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2033	2a	1	14.72557	55.335	0	55.335	222.3934	0	222.3934	BEV	0	14.72557	2	3
2033	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2033	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2033	2a	1	2.70975	10.80353	10.80353	0	53.87027	53.87027	0	ICE	2.70975	0	2	2
2033	2a	1	0.525779	1.915504	0	1.915504	5.558789	0	5.558789	BEV	0	0.525779	4	3
2033	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2033	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2033	2a	1	3.473523	11.65965	11.65965	0	42.58482	42.58482	0	ICE	3.473523	0	2	2
2033	2a	1	3.093887	8.258326	8.258326	0	31.38738	31.38738	0	ICE	3.093887	0	3	2
2033	2a	1	0.509228	1.767682	1.767682	0	8.554605	8.554605	0	ICE	0.509228	0	3	2
2033	2a	1	1.917355	5.557261	0	5.557261	14.21368	0	14.21368	BEV	0	1.917355	1	3
2033	2a	1	0.866543	2.461943	2.461943	0	9.313555	9.313555	0	ICE	0.866543	0	3	2
2033	2a	1	8.695767	33.1747	0	33.1747	100.3808	0	100.3808	BEV	0	8.695767	3	3
2033	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2033	2a	1	0	0	0	0	0	0	0	PHEV	0	0	3	8
2033	2a	1	5.479646	21.53293	0	21.53293	67.94422	0	67.94422	BEV	0	5.479646	3	3
2033	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2033	2a	1	3.793601	14.90741	8.944446	5.962964	70.36734	42.2204	28.14693	PHEV	2.276161	1.51744	3	8
2033	2a	1	0.936093	3.893003	0	3.893003	13.32079	0	13.32079	BEV	0	0.936093	4	3
2033	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2033	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2033	2a	1	1.648719	4.684191	0	4.684191	11.85429	0	11.85429	BEV	0	1.648719	1	3
2033	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2033	2a	1	1.648719	4.684191	0	4.684191	11.85429	0	11.85429	BEV	0	1.648719	1	3
2033	2a	1	21.07187	69.52515	0	69.52515	214.8835	0	214.8835	BEV	0	21.07187	2	3
2033	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2033	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2033	2a	1	7.655523	25.69745	0	25.69745	83.27937	0	83.27937	BEV	0	7.655523	2	3
2033	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2033	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2033	2a	1	6.225185	21.25284	21.25284	0	93.98867	93.98867	0	ICE	6.225185	0	2	2
2033	2a	1	3.219696	11.7299	0	11.7299	44.11852	0	44.11852	BEV	0	3.219696	2	3
2033	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2033	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2033	2a	1	6.143695	22.7345	22.7345	0	99.48665	99.48665	0	ICE	6.143695	0	2	2
2033	2a	1	1.848016	6.838509	0	6.838509	26.65115	0	26.65115	BEV	0	1.848016	2	3
2033	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2033	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2033	2a	1	7.475596	28.09142	28.09142	0	134.1999	134.1999	0	ICE	7.475596	0	2	2
2033	2a	1	6.388529	24.37249	0	24.37249	102.5122	0	102.5122	BEV	0	6.388529	2	3
2033	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2033	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2033	2a	1	5.465377	20.53752	0	20.53752	59.47874	0	59.47874	BEV	0	5.465377	3	3
2033	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2033	2a	1	0	0	0	0	0	0	0	PHEV	0	0	3	8
2033	2a	1	4.699497	19.00571	0	19.00571	62.74202	0	62.74202	BEV	0	4.699497	3	3

2033	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2033	2a	1	3.593733	14.53378	8.720265	5.81351	70.26112	42.15667	28.10445	PHEV	2.15624	1.437493	3	8
2033	2a	1	1.260283	4.158215	0	4.158215	9.401722	0	9.401722	BEV	0	1.260283	4	3
2033	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2033	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2033	2a	1	3.699096	12.84067	0	12.84067	30.76209	0	30.76209	BEV	0	3.699096	4	3
2033	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2033	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2033	2a	1	0.66629	2.389234	0	2.389234	6.191081	0	6.191081	BEV	0	0.66629	4	3
2033	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2033	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2033	2a	1	5.039798	14.60735	14.60735	0	45.58149	45.58149	0	ICE	5.039798	0	2	2
2033	2a	1	0.505613	1.813068	1.813068	0	7.355768	7.355768	0	ICE	0.505613	0	2	2
2033	2a	1	26.26319	89.66279	0	89.66279	291.2639	0	291.2639	BEV	0	26.26319	2	3
2033	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2033	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2033	2a	1	1.798449	6.345991	0	6.345991	22.26228	0	22.26228	BEV	0	1.798449	2	3
2033	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2033	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2033	2a	1	13.88864	45.02891	0	45.02891	135.274	0	135.274	BEV	0	13.88864	2	3
2033	2a	1	0.449649	1.406305	1.406305	0	5.260482	5.260482	0	ICE	0.449649	0	3	2
2033	2a	1	4.026348	13.05398	13.05398	0	46.76176	46.76176	0	ICE	4.026348	0	2	2
2033	2a	1	0.328786	1.122479	1.122479	0	4.21046	4.21046	0	ICE	0.328786	0	3	2
2033	2a	1	1.921838	5.350051	5.350051	0	21.11306	21.11306	0	ICE	1.921838	0	2	2
2033	2a	1	1.89365	5.70553	0	5.70553	15.30081	0	15.30081	BEV	0	1.89365	1	3
2033	2a	1	4.155258	15.13831	15.13831	0	70.15611	70.15611	0	ICE	4.155258	0	2	2
2033	2a	1	0.769614	2.539289	0	2.539289	6.033723	0	6.033723	BEV	0	0.769614	3	3
2033	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2033	2a	1	0	0	0	0	0	0	0	PHEV	0	0	3	8
2033	2a	1	0.842295	3.165136	0	3.165136	8.945174	0	8.945174	BEV	0	0.842295	4	3
2033	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2033	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2033	2a	1	2.490506	7.931888	0	7.931888	23.45997	0	23.45997	BEV	0	2.490506	1	3
2033	2a	1	1.893204	6.246493	0	6.246493	19.49714	0	19.49714	BEV	0	1.893204	1	3
2033	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2033	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2033	2a	1	3.790379	13.37469	0	13.37469	47.23355	0	47.23355	BEV	0	3.790379	1	3
2033	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2033	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2033	2a	1	4.588184	14.34982	14.34982	0	50.63435	50.63435	0	ICE	4.588184	0	2	2
2033	2a	1	4.379464	13.94794	0	13.94794	40.52768	0	40.52768	BEV	0	4.379464	2	3
2033	2a	1	0.644048	2.30948	0	2.30948	8.359774	0	8.359774	BEV	0	0.644048	2	3
2033	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2033	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2033	2a	1	1.137364	3.296535	3.296535	0	11.10749	11.10749	0	ICE	1.137364	0	3	2
2033	2a	1	2.717207	8.498229	0	8.498229	24.26119	0	24.26119	BEV	0	2.717207	1	3
2033	2a	1	2.834343	9.189336	0	9.189336	28.04352	0	28.04352	BEV	0	2.834343	1	3

2033	2a	1	3.314236	9.036364	9.036364	0	35.68669	35.68669	0	ICE	3.314236	0	2	2
2033	2a	1	1.237348	3.515441	0	3.515441	8.899484	0	8.899484	BEV	0	1.237348	2	3
2033	2a	1	0.525046	1.521792	0	1.521792	3.903911	0	3.903911	BEV	0	0.525046	2	3
2033	2a	1	0.525953	1.584687	0	1.584687	4.2767	0	4.2767	BEV	0	0.525953	2	3
2033	2a	1	3.344378	11.03454	11.03454	0	40.43874	40.43874	0	ICE	3.344378	0	2	2
2033	2a	1	2.544101	9.851597	9.851597	0	46.02398	46.02398	0	ICE	2.544101	0	2	2
2033	2a	1	4.128022	16.69455	16.69455	0	82.54721	82.54721	0	ICE	4.128022	0	2	2
2033	2a	1	1.796824	4.899096	4.899096	0	16.15225	16.15225	0	ICE	1.796824	0	3	2
2033	2a	1	0.626568	1.816046	0	1.816046	3.207152	0	3.207152	BEV	0	0.626568	3	3
2033	2a	1	0.746618	2.206771	2.206771	0	9.386146	9.386146	0	ICE	0.746618	0	3	2
2033	2a	1	3.082574	9.994137	0	9.994137	20.64364	0	20.64364	BEV	0	3.082574	3	3
2033	2a	1	0.416286	1.397357	1.397357	0	5.177901	5.177901	0	ICE	0.416286	0	3	2
2033	2a	1	0.265912	0.892593	0	0.892593	1.96565	0	1.96565	BEV	0	0.265912	3	3
2033	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2033	2a	1	0	0	0	0	0	0	0	PHEV	0	0	3	8
2033	2a	1	5.319211	20.59774	0	20.59774	61.94952	0	61.94952	BEV	0	5.319211	3	3
2033	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2033	2a	1	0	0	0	0	0	0	0	PHEV	0	0	3	8
2033	2a	1	13.99626	55.80182	0	55.80182	175.6959	0	175.6959	BEV	0	13.99626	3	3
2033	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2033	2a	1	3.588784	14.30816	8.584895	5.723263	71.85105	43.11063	28.74042	PHEV	2.15327	1.435514	3	8
2033	2a	1	0.762856	2.29847	0	2.29847	4.234081	0	4.234081	BEV	0	0.762856	4	3
2033	2a	1	1.237864	4.864337	4.864337	0	23.76401	23.76401	0	ICE	1.237864	0	2	2
2033	2a	1	0.296576	0.995522	0	0.995522	2.307154	0	2.307154	BEV	0	0.296576	4	3
2033	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2033	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2033	2a	1	0.926472	2.472976	0	2.472976	5.852909	0	5.852909	BEV	0	0.926472	1	3
2033	2a	1	0.872987	2.380224	0	2.380224	6.032581	0	6.032581	BEV	0	0.872987	1	3
2033	2a	1	0.809151	2.25253	0	2.25253	5.537056	0	5.537056	BEV	0	0.809151	1	3
2033	2a	1	0.881626	2.605813	0	2.605813	6.598842	0	6.598842	BEV	0	0.881626	1	3
2033	2a	1	2.035895	6.250749	0	6.250749	17.49168	0	17.49168	BEV	0	2.035895	1	3
2033	2a	1	0.581912	1.719951	0	1.719951	4.513046	0	4.513046	BEV	0	0.581912	2	3
2033	2a	1	0	0	0	0	0	0	0	BEV	0	0	2	3
2033	2a	1	17.21322	71.58601	0	71.58601	359.8661	0	359.8661	FCEV	0	17.21322	2	7
2033	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2033	2a	1	0	0	0	0	0	0	0	BEV	0	0	2	3
2033	2a	1	19.47559	82.11045	0	82.11045	426.1715	0	426.1715	FCEV	0	19.47559	2	7
2033	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2033	2a	1	0.083122	0.293302	0.293302	0	1.358481	1.358481	0	ICE	0.083122	0	3	2
2033	2a	1	0	0	0	0	0	0	0	BEV	0	0	3	3
2033	2a	1	0.951937	3.958897	0	3.958897	14.06925	0	14.06925	FCEV	0	0.951937	3	7
2033	2a	1	13.64443	56.74418	34.04651	22.69767	301.9011	181.1407	120.7604	PHEV	8.186658	5.457772	3	8
2033	2a	1	0.795543	3.262913	3.262913	0	15.64073	15.64073	0	ICE	0.795543	0	2	2
2033	2a	1	0.198567	0.632407	0	0.632407	1.281737	0	1.281737	BEV	0	0.198567	3	3
2033	2a	1	0.790884	2.111059	0	2.111059	3.582188	0	3.582188	BEV	0	0.790884	4	3
2033	2a	1	2.017779	5.848331	0	5.848331	10.63897	0	10.63897	BEV	0	2.017779	4	3
2033	2a	1	0.435311	1.411339	0	1.411339	2.957272	0	2.957272	BEV	0	0.435311	4	3

2033	2a	1	0.289344	1.070706	0	1.070706	2.874717	0	2.874717	BEV	0	0.289344	3	3
2033	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2033	2a	1	0	0	0	0	0	0	0	PHEV	0	0	3	8
2033	2a	1	1.064846	4.123437	0	4.123437	16.35186	0	16.35186	BEV	0	1.064846	2	3
2033	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2033	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2033	2a	1	0.593532	1.822305	0	1.822305	4.901202	0	4.901202	BEV	0	0.593532	2	3
2033	2a	1	1.685432	5.271289	0	5.271289	14.52204	0	14.52204	BEV	0	1.685432	2	3
2033	2a	1	0.419668	1.336581	0	1.336581	2.634791	0	2.634791	BEV	0	0.419668	4	3
2033	2a	1	1.24336	5.242094	5.242094	0	30.89631	30.89631	0	ICE	1.24336	0	2	2
2033	2a	1	0.791928	3.111974	0	3.111974	13.89472	0	13.89472	BEV	0	0.791928	2	3
2033	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2033	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2033	2a	1	0.189313	0.527014	0	0.527014	0.956937	0	0.956937	BEV	0	0.189313	4	3
2033	2a	1	0.097825	0.261118	0	0.261118	0.634844	0	0.634844	BEV	0	0.097825	2	3
2033	2a	1	0.143718	0.43302	0	0.43302	0.767975	0	0.767975	BEV	0	0.143718	3	3
2033	2a	1	0.149156	0.534856	0	0.534856	1.288713	0	1.288713	BEV	0	0.149156	3	3
2033	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2033	2a	1	0	0	0	0	0	0	0	PHEV	0	0	3	8
2033	2a	1	0.338819	0.943211	0	0.943211	1.728184	0	1.728184	BEV	0	0.338819	3	3
2033	2a	1	0.730424	2.242598	0	2.242598	4.365713	0	4.365713	BEV	0	0.730424	4	3
2033	2a	1	0.306313	1.063306	0	1.063306	3.578781	0	3.578781	BEV	0	0.306313	2	3
2033	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2033	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2033	2a	1	0.145092	0.511969	0.511969	0	2.761634	2.761634	0	ICE	0.145092	0	2	2
2033	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2033	2a	1	0.145092	0.511969	0.511969	0	2.761634	2.761634	0	ICE	0.145092	0	2	2
2033	2a	1	1.924463	5.46761	0	5.46761	9.460105	0	9.460105	BEV	0	1.924463	4	3
2033	2a	1	0.815494	3.017703	0	3.017703	8.043081	0	8.043081	BEV	0	0.815494	4	3
2033	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2033	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2033	2a	1	0.099263	0.31045	0	0.31045	0.61752	0	0.61752	BEV	0	0.099263	3	3
2033	2a	1	0	0	0	0	0	0	0	BEV	0	0	4	3
2033	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2033	2a	1	1.407891	5.693794	3.416276	2.277518	30.21645	18.12987	12.08658	PHEV	0.844735	0.563157	4	8
2033	2a	1	0.140528	0.423408	0.423408	0	1.77881	1.77881	0	ICE	0.140528	0	3	2
2033	2a	1	0.159425	0.443811	0	0.443811	1.08119	0	1.08119	BEV	0	0.159425	2	3
2034	2a	1	13067.6	34880.56	34880.56	0	58455.65	58455.65	0	ICE	13067.6	0	1	1
2034	2a	1	14299.85	38988.97	38988.97	0	67422.98	67422.98	0	ICE	14299.85	0	1	1
2034	2a	1	12233.98	34057.2	34057.2	0	61650.86	61650.86	0	ICE	12233.98	0	1	1
2034	2a	1	12553.51	35665.9	35665.9	0	67574.21	67574.21	0	ICE	12553.51	0	1	1
2034	2a	1	13619.8	39475.63	39475.63	0	77941.74	77941.74	0	ICE	13619.8	0	1	1
2034	2a	1	16058.14	47462.89	47462.89	0	98353.55	98353.55	0	ICE	16058.14	0	1	1
2034	2a	1	14690.78	44263.03	44263.03	0	95859.84	95859.84	0	ICE	14690.78	0	1	1
2034	2a	1	17613.63	54078.6	54078.6	0	122356.7	122356.7	0	ICE	17613.63	0	1	1
2034	2a	1	18820.56	58862.43	58862.43	0	139487.4	139487.4	0	ICE	18820.56	0	1	1
2034	2a	1	20129.92	64110.78	64110.78	0	159195.5	159195.5	0	ICE	20129.92	0	1	1
2034	2a	1	24608.55	79784.35	79784.35	0	207516.6	207516.6	0	ICE	24608.55	0	1	1
2034	2a	1	25718.78	84857.3	84857.3	0	230695.9	230695.9	0	ICE	25718.78	0	1	1

2034	2a	1	46.51216	153.4636	153.4636	0	429.9206	429.9206	0	ICE	46.51216	0	1	2
2034	2a	1	26649.92	89456.31	89456.31	0	254896.2	254896.2	0	ICE	26649.92	0	1	1
2034	2a	1	29714.9	101447	101447	0	302772.3	302772.3	0	ICE	29714.9	0	1	1
2034	2a	1	30401.82	105533.8	105533.8	0	329355.8	329355.8	0	ICE	30401.82	0	1	1
2034	2a	1	38745.09	136715.5	136715.5	0	447030.2	447030.2	0	ICE	38745.09	0	1	1
2034	2a	1	43707.55	156730	156730	0	534492.1	534492.1	0	ICE	43707.55	0	1	1
2034	2a	1	114.7253	411.3913	411.3913	0	1413.963	1413.963	0	ICE	114.7253	0	1	2
2034	2a	1	51885.03	189026	189026	0	671147.9	671147.9	0	ICE	51885.03	0	1	1
2034	2a	1	49644.53	183707.6	183707.6	0	679348.5	679348.5	0	ICE	49644.53	0	1	1
2034	2a	1	45819.07	172176.6	172176.6	0	662182.7	662182.7	0	ICE	45819.07	0	1	1
2034	2a	1	62687.81	239156.5	239156.5	0	955169.5	955169.5	0	ICE	62687.81	0	1	1
2034	2a	1	714.2417	2724.861	2724.861	0	10843.75	10843.75	0	ICE	714.2417	0	1	2
2034	2a	1	72539.28	280896	280896	0	1167354	1167354	0	ICE	72539.28	0	1	1
2034	2a	1	1117.981	4329.193	4329.193	0	17706.82	17706.82	0	ICE	1117.981	0	1	2
2034	2a	1	123175	484030.9	484030.9	0	2093307	2093307	0	ICE	123175	0	1	1
2034	2a	1	173892.2	693292.5	693292.5	0	3107128	3107128	0	ICE	173892.2	0	1	1
2034	2a	1	201630.6	815434.6	815434.6	0	3793982	3793982	0	ICE	201630.6	0	1	1
2034	2a	1	3765.755	15229.47	15229.47	0	70351.69	70351.69	0	ICE	3765.755	0	1	2
2034	2a	1	268534.2	1101391	1101391	0	5311621	5311621	0	ICE	268534.2	0	1	1
2034	2a	1	289284.6	1203071	1203071	0	6001397	6001397	0	ICE	289284.6	0	1	1
2034	2a	1	348615.5	1469788	1469788	0	7594172	7594172	0	ICE	348615.5	0	1	1
2034	2a	1	4266.137	17986.33	17986.33	0	92916.55	92916.55	0	ICE	4266.137	0	1	2
2034	2a	1	20275.93	85484.74	0	85484.74	442860.2	0	442860.2	BEV	0	20275.93	1	3
2034	2a	1	413.7945	1744.587	0	1744.587	9107.377	0	9107.377	FCEV	0	413.7945	1	7
2034	2a	1	18289.58	77110.13	41639.47	35470.66	397933.2	214883.9	183049.3	PHEV	9876.371	8413.205	1	8
2034	2a	1	405929.4	1734683	1734683	0	9258543	9258543	0	ICE	405929.4	0	1	1
2034	2a	1	4967.509	21227.95	21227.95	0	113283.4	113283.4	0	ICE	4967.509	0	1	2
2034	2a	1	28854.95	123307.6	0	123307.6	659085.6	0	659085.6	BEV	0	28854.95	1	3
2034	2a	1	588.8766	2516.482	0	2516.482	13549.78	0	13549.78	FCEV	0	588.8766	1	7
2034	2a	1	18648.82	79693.1	43034.28	36658.83	425092.7	229550	195542.6	PHEV	10070.36	8578.455	1	8
2034	2a	1	461405.5	1998186	1998186	0	11009102	11009102	0	ICE	461405.5	0	1	1
2034	2a	1	5622.385	24348.58	24348.58	0	134135.5	134135.5	0	ICE	5622.385	0	1	2
2034	2a	1	40220.73	174181.9	0	174181.9	960940	0	960940	BEV	0	40220.73	1	3
2034	2a	1	940.8357	4074.43	0	4074.43	22620.19	0	22620.19	FCEV	0	940.8357	1	7
2034	2a	1	19725.68	85425.01	45275.26	40149.76	470329.9	249274.9	221055.1	PHEV	10454.61	9271.069	1	8
2034	2a	1	514530.7	2257730	2257730	0	12832901	12832901	0	ICE	514530.7	0	1	1
2034	2a	1	6326.561	27760.57	27760.57	0	157773.4	157773.4	0	ICE	6326.561	0	1	2
2034	2a	1	53289.16	233829.6	0	233829.6	1330428	0	1330428	BEV	0	53289.16	1	3
2034	2a	1	1406.459	6171.456	0	6171.456	35307.83	0	35307.83	FCEV	0	1406.459	1	7
2034	2a	1	20319.45	89160.52	46363.47	42797.05	506697.9	263482.9	243215	PHEV	10566.11	9753.335	1	8
2034	2a	1	537110.8	2387581	2387581	0	13996646	13996646	0	ICE	537110.8	0	1	1
2034	2a	1	6636.066	29498.84	29498.84	0	172912.8	172912.8	0	ICE	6636.066	0	1	2
2034	2a	1	86777.99	385748.1	0	385748.1	2263034	0	2263034	BEV	0	86777.99	1	3
2034	2a	1	2974.659	13223.04	0	13223.04	77946.12	0	77946.12	FCEV	0	2974.659	1	7
2034	2a	1	32991.79	146656.1	73034.74	73621.37	859381.7	427972.1	431409.6	PHEV	16429.91	16561.88	1	8
2034	2a	1	543853.5	2448711	2448711	0	14795000	14795000	0	ICE	543853.5	0	1	1
2034	2a	1	6767.791	30472.11	30472.11	0	184092.8	184092.8	0	ICE	6767.791	0	1	2

2034	2a	1	123974.9	558199.6	0	558199.6	3374505	0	3374505	BEV	0	123974.9	1	3
2034	2a	1	5242.537	23604.63	0	23604.63	143279.1	0	143279.1	FCEV	0	5242.537	1	7
2034	2a	1	46995.52	211598.3	100720.8	110877.5	1277984	608320.6	669663.8	PHEV	22369.87	24625.65	1	8
2034	2a	1	545078.3	2485453	2485453	0	15468009	15468009	0	ICE	545078.3	0	1	1
2034	2a	1	6839.954	31188.89	31188.89	0	194083.4	194083.4	0	ICE	6839.954	0	1	2
2034	2a	1	166159.8	757657.1	0	757657.1	4717014	0	4717014	BEV	0	166159.8	1	3
2034	2a	1	8377.805	38201.2	0	38201.2	238525	0	238525	FCEV	0	8377.805	1	7
2034	2a	1	62802.62	286368	130011.1	156356.9	1781839	808954.9	972884.1	PHEV	28512.39	34290.23	1	8
2034	2a	1	532555.6	2458863	2458863	0	15754478	15754478	0	ICE	532555.6	0	1	1
2034	2a	1	6736.317	31102.25	31102.25	0	199262.4	199262.4	0	ICE	6736.317	0	1	2
2034	2a	1	210387	971377.8	0	971377.8	6225240	0	6225240	BEV	0	210387	1	3
2034	2a	1	12345.76	57001.6	0	57001.6	366031.8	0	366031.8	FCEV	0	12345.76	1	7
2034	2a	1	79287.16	366076.7	158145.1	207931.6	2345563	1013283	1332280	PHEV	34252.05	45035.1	1	8
2034	2a	1	517604.3	2419484	2419484	0	15958945	15958945	0	ICE	517604.3	0	1	1
2034	2a	1	6596.684	30835.48	30835.48	0	203376.8	203376.8	0	ICE	6596.684	0	1	2
2034	2a	1	260143.4	1216012	0	1216012	8021433	0	8021433	BEV	0	260143.4	1	3
2034	2a	1	17448.64	81561.76	0	81561.76	538750.8	0	538750.8	FCEV	0	17448.64	1	7
2034	2a	1	97753.38	456937.4	187344.3	269593.1	3014705	1236029	1778676	PHEV	40078.89	57674.49	1	8
2034	2a	1	491752.4	2326815	2326815	0	15781441	15781441	0	ICE	491752.4	0	1	1
2034	2a	1	6267.211	29654.44	29654.44	0	201120.4	201120.4	0	ICE	6267.211	0	1	2
2034	2a	1	311358.9	1473251	0	1473251	9990768	0	9990768	BEV	0	311358.9	1	3
2034	2a	1	23538.5	111376.7	0	111376.7	755826.8	0	755826.8	FCEV	0	23538.5	1	7
2034	2a	1	116659	551992.9	214173.2	337819.6	3746252	1453546	2292706	PHEV	45263.68	71395.28	1	8
2034	2a	1	461583.1	2210507	2210507	0	15409712	15409712	0	ICE	461583.1	0	1	1
2034	2a	1	5882.711	28172.13	28172.13	0	196388.8	196388.8	0	ICE	5882.711	0	1	2
2034	2a	1	367161.3	1758325	0	1758325	12252937	0	12252937	BEV	0	367161.3	1	3
2034	2a	1	30938.01	148161.2	0	148161.2	1032762	0	1032762	FCEV	0	30938.01	1	7
2034	2a	1	137168.5	656896	240423.9	416472.1	4584403	1677891	2906511	PHEV	50203.68	86964.85	1	8
2034	2a	1	422074.7	2045484	2045484	0	14652041	14652041	0	ICE	422074.7	0	1	1
2034	2a	1	5379.19	26068.95	26068.95	0	186738.4	186738.4	0	ICE	5379.19	0	1	2
2034	2a	1	423340.5	2051618	0	2051618	14686974	0	14686974	BEV	0	423340.5	1	3
2034	2a	1	39398.96	190937.6	0	190937.6	1366879	0	1366879	FCEV	0	39398.96	1	7
2034	2a	1	157699.7	764253.8	262903.3	501350.5	5483560	1886345	3597215	PHEV	54248.7	103451	1	8
2034	2a	1	379708.6	1861920	1861920	0	13695167	13695167	0	ICE	379708.6	0	1	1
2034	2a	1	4839.249	23729.5	23729.5	0	174547.7	174547.7	0	ICE	4839.249	0	1	2
2034	2a	1	485444.8	2380403	0	2380403	17494566	0	17494566	BEV	0	485444.8	1	3
2034	2a	1	49522.7	242837.1	0	242837.1	1784444	0	1784444	FCEV	0	49522.7	1	7
2034	2a	1	180313	884174	284704	599470	6517511	2098639	4418872	PHEV	58060.8	122252.2	1	8
2034	2a	1	328112.4	1627713	1627713	0	12289036	12289036	0	ICE	328112.4	0	1	1
2034	2a	1	4181.679	20744.64	20744.64	0	156630.8	156630.8	0	ICE	4181.679	0	1	2
2034	2a	1	545508.9	2706183	0	2706183	20410326	0	20410326	BEV	0	545508.9	1	3
2034	2a	1	60612.1	300687	0	300687	2267230	0	2267230	FCEV	0	60612.1	1	7
2034	2a	1	202040.3	1002290	300687	701602.9	7587785	2276335	5311449	PHEV	60612.1	141428.2	1	8
2034	2a	1	270390.6	1356855	1356855	0	10507044	10507044	0	ICE	270390.6	0	1	1
2034	2a	1	3446.031	17292.63	17292.63	0	133920.9	133920.9	0	ICE	3446.031	0	1	2
2034	2a	1	609399.6	3058046	0	3058046	23653415	0	23653415	BEV	0	609399.6	1	3
2034	2a	1	75319.05	377960.8	0	377960.8	2922602	0	2922602	FCEV	0	75319.05	1	7

2034	2a	1	216226.9	1085055	325516.4	759538.4	8429060	2528718	5900342	PHEV	64868.08	151358.8	1	8
2034	2a	1	209400.9	1062798	1062798	0	8426406	8426406	0	ICE	209400.9	0	1	1
2034	2a	1	2668.742	13544.99	13544.99	0	107401.2	107401.2	0	ICE	2668.742	0	1	2
2034	2a	1	678272.4	3442518	0	3442518	27264958	0	27264958	BEV	0	678272.4	1	3
2034	2a	1	92491.7	469434.2	0	469434.2	3717085	0	3717085	FCEV	0	92491.7	1	7
2034	2a	1	230228.3	1168505	350551.5	817953.5	9293764	2788129	6505635	PHEV	69068.48	161159.8	1	8
2034	2a	1	141742.2	727521.5	727521.5	0	5887584	5887584	0	ICE	141742.2	0	1	1
2034	2a	1	1806.455	9272.009	9272.009	0	75039.27	75039.27	0	ICE	1806.455	0	1	2
2034	2a	1	738400.1	3789993	0	3789993	30647592	0	30647592	BEV	0	738400.1	1	3
2034	2a	1	110335.6	566320.9	0	566320.9	4579051	0	4579051	FCEV	0	110335.6	1	7
2034	2a	1	239387	1228704	368611.2	860092.8	9968037	2990411	6977626	PHEV	71816.1	167570.9	1	8
2034	2a	1	64160.13	332991.1	332991.1	0	2743451	2743451	0	ICE	64160.13	0	1	1
2034	2a	1	817.6985	4243.855	4243.855	0	34964.13	34964.13	0	ICE	817.6985	0	1	2
2034	2a	1	713413.1	3702614	0	3702614	30495276	0	30495276	BEV	0	713413.1	1	3
2034	2a	1	116137	602751.1	0	602751.1	4964570	0	4964570	FCEV	0	116137	1	7
2034	2a	1	220513.3	1144464	343339.2	801124.9	9440573	2832172	6608401	PHEV	66153.99	154359.3	1	8
2034	2a	1	2748.538	7336.508	7336.508	0	29660.42	29660.42	0	ICE	2748.538	0	2	1
2034	2a	1	3377.405	9208.597	9208.597	0	36854.34	36854.34	0	ICE	3377.405	0	2	1
2034	2a	1	2935.012	8170.544	8170.544	0	33098.36	33098.36	0	ICE	2935.012	0	2	1
2034	2a	1	3747.613	10647.38	10647.38	0	43362.56	43362.56	0	ICE	3747.613	0	2	1
2034	2a	1	4553.897	13199.02	13199.02	0	54360.23	54360.23	0	ICE	4553.897	0	2	1
2034	2a	1	4387.969	12969.48	12969.48	0	54185.45	54185.45	0	ICE	4387.969	0	2	1
2034	2a	1	4787.752	14425.4	14425.4	0	60099.96	60099.96	0	ICE	4787.752	0	2	1
2034	2a	1	6390.957	19621.96	19621.96	0	82478.27	82478.27	0	ICE	6390.957	0	2	1
2034	2a	1	8061.193	25211.87	25211.87	0	107555.9	107555.9	0	ICE	8061.193	0	2	1
2034	2a	1	7492.271	23861.76	23861.76	0	102953.2	102953.2	0	ICE	7492.271	0	2	1
2034	2a	1	7994.665	25919.82	25919.82	0	113322.3	113322.3	0	ICE	7994.665	0	2	1
2034	2a	1	8891.734	29337.65	29337.65	0	129572.8	129572.8	0	ICE	8891.734	0	2	1
2034	2a	1	9308.65	31246.53	31246.53	0	137670.4	137670.4	0	ICE	9308.65	0	2	1
2034	2a	1	6497.074	22181.08	22181.08	0	98224.09	98224.09	0	ICE	6497.074	0	2	1
2034	2a	1	3749.749	13231.33	13231.33	0	59581.88	59581.88	0	ICE	3749.749	0	2	1
2034	2a	1	6141.04	22021.03	22021.03	0	100585.3	100585.3	0	ICE	6141.04	0	2	1
2034	2a	1	9274.773	33789.58	33789.58	0	156531.9	156531.9	0	ICE	9274.773	0	2	1
2034	2a	1	16543.65	61219.13	61219.13	0	286616.4	286616.4	0	ICE	16543.65	0	2	1
2034	2a	1	12778.29	48017.64	48017.64	0	226945.5	226945.5	0	ICE	12778.29	0	2	1
2034	2a	1	7050.227	26896.9	26896.9	0	128061.6	128061.6	0	ICE	7050.227	0	2	1
2034	2a	1	6541.642	25331.4	25331.4	0	122128.2	122128.2	0	ICE	6541.642	0	2	1
2034	2a	1	58595.06	240327	240327	0	1238969	1238969	0	ICE	58595.06	0	2	1
2034	2a	1	56106.2	233333.3	233333.3	0	1219849	1219849	0	ICE	56106.2	0	2	1
2034	2a	1	52312.61	220553.6	220553.6	0	1177955	1177955	0	ICE	52312.61	0	2	1
2034	2a	1	7.086688	29.87797	29.87797	0	159.5833	159.5833	0	ICE	7.086688	0	2	2
2034	2a	1	1.762635	7.431394	0	7.431394	38.48018	0	38.48018	BEV	0	1.762635	2	3
2034	2a	1	0.035972	0.151661	0	0.151661	0.78531	0	0.78531	FCEV	0	0.035972	2	7
2034	2a	1	15.28816	64.45597	38.67358	25.78239	344.2802	206.5681	137.7121	PHEV	9.172899	6.115266	2	8
2034	2a	1	58035.16	248005.1	248005.1	0	1350933	1350933	0	ICE	58035.16	0	2	1
2034	2a	1	7.861911	33.59677	33.59677	0	183.0141	183.0141	0	ICE	7.861911	0	2	2
2034	2a	1	62232.25	269506.1	269506.1	0	1498930	1498930	0	ICE	62232.25	0	2	1

2034	2a	1	8.4893	36.76419	36.76419	0	204.4815	204.4815	0	ICE	8.4893	0	2	2
2034	2a	1	827.4663	3583.467	0	3583.467	19850.89	0	19850.89	BEV	0	827.4663	2	3
2034	2a	1	19.35594	83.82379	0	83.82379	461.655	0	461.655	FCEV	0	19.35594	2	7
2034	2a	1	635.436	2751.851	1635.386	1116.465	15337.12	9114.631	6222.488	PHEV	377.6305	257.8055	2	8
2034	2a	1	65678.27	288192.3	288192.3	0	1637898	1637898	0	ICE	65678.27	0	2	1
2034	2a	1	9.063481	39.77001	39.77001	0	226.0292	226.0292	0	ICE	9.063481	0	2	2
2034	2a	1	1783.953	7827.878	0	7827.878	44448.85	0	44448.85	BEV	0	1783.953	2	3
2034	2a	1	47.0838	206.6009	0	206.6009	1172.594	0	1172.594	FCEV	0	47.0838	2	7
2034	2a	1	1373.968	6028.888	3548.431	2480.457	34288.34	20181.13	14107.2	PHEV	808.6782	565.2896	2	8
2034	2a	1	66273.68	294601.8	294601.8	0	1712925	1712925	0	ICE	66273.68	0	2	1
2034	2a	1	9.265838	41.18878	41.18878	0	239.4703	239.4703	0	ICE	9.265838	0	2	2
2034	2a	1	4670.866	20763.08	0	20763.08	120962.6	0	120962.6	BEV	0	4670.866	2	3
2034	2a	1	160.1124	711.7366	0	711.7366	4162.525	0	4162.525	FCEV	0	160.1124	2	7
2034	2a	1	3368.587	14974.15	8680.726	6293.419	86943.11	50402.16	36540.95	PHEV	1952.818	1415.769	2	8
2034	2a	1	65414.44	294529.8	294529.8	0	1753072	1753072	0	ICE	65414.44	0	2	1
2034	2a	1	9.183187	41.34748	41.34748	0	246.0642	246.0642	0	ICE	9.183187	0	2	2
2034	2a	1	8007.289	36052.98	0	36052.98	215524.2	0	215524.2	BEV	0	8007.289	2	3
2034	2a	1	338.6048	1524.575	0	1524.575	9182.502	0	9182.502	FCEV	0	338.6048	2	7
2034	2a	1	5402.514	24324.93	13886.06	10438.87	144128.5	82276.77	61851.71	PHEV	3084.064	2318.45	2	8
2034	2a	1	64169.06	292598.7	292598.7	0	1783659	1783659	0	ICE	64169.06	0	2	1
2034	2a	1	9.05078	41.26984	41.26984	0	251.5116	251.5116	0	ICE	9.05078	0	2	2
2034	2a	1	11873.81	54142.32	0	54142.32	332059	0	332059	BEV	0	11873.81	2	3
2034	2a	1	598.6796	2729.865	0	2729.865	16895.05	0	16895.05	FCEV	0	598.6796	2	7
2034	2a	1	7486.246	34135.86	19184.35	14951.51	206526	116067.6	90458.37	PHEV	4207.27	3278.976	2	8
2034	2a	1	61813.14	285397.5	285397.5	0	1782932	1782932	0	ICE	61813.14	0	2	1
2034	2a	1	8.756657	40.43036	40.43036	0	252.4851	252.4851	0	ICE	8.756657	0	2	2
2034	2a	1	16146.65	74550.71	0	74550.71	469131	0	469131	BEV	0	16146.65	2	3
2034	2a	1	947.5048	4374.724	0	4374.724	27766.87	0	27766.87	FCEV	0	947.5048	2	7
2034	2a	1	9499.81	43861.57	24261.71	19599.86	271244.2	150036.8	121207.4	PHEV	5254.752	4245.058	2	8
2034	2a	1	59261.68	277012.2	277012.2	0	1774722	1774722	0	ICE	59261.68	0	2	1
2034	2a	1	8.429222	39.40147	39.40147	0	252.3159	252.3159	0	ICE	8.429222	0	2	2
2034	2a	1	21033.51	98318.81	0	98318.81	634987.8	0	634987.8	BEV	0	21033.51	2	3
2034	2a	1	1410.784	6594.554	0	6594.554	42934.48	0	42934.48	FCEV	0	1410.784	2	7
2034	2a	1	11528.61	53889.22	29331.13	24558.09	340967.3	185583.6	155383.7	PHEV	6274.858	5253.753	2	8
2034	2a	1	55438.49	262317.2	262317.2	0	1722638	1722638	0	ICE	55438.49	0	2	1
2034	2a	1	7.885421	37.31129	37.31129	0	244.8998	244.8998	0	ICE	7.885421	0	2	2
2034	2a	1	26162.57	123792.9	0	123792.9	819761.7	0	819761.7	BEV	0	26162.57	2	3
2034	2a	1	1977.871	9358.652	0	9358.652	62380.69	0	62380.69	FCEV	0	1977.871	2	7
2034	2a	1	13332.69	63086.03	33778.06	29307.97	408324.4	218628.5	189695.8	PHEV	7138.704	6193.987	2	8
2034	2a	1	51233.9	245357.6	245357.6	0	1651751	1651751	0	ICE	51233.9	0	2	1
2034	2a	1	7.287372	34.899	34.899	0	234.8141	234.8141	0	ICE	7.287372	0	2	2
2034	2a	1	31807.77	152326.4	0	152326.4	1034085	0	1034085	BEV	0	31807.77	2	3
2034	2a	1	2680.208	12835.44	0	12835.44	87604.33	0	87604.33	FCEV	0	2680.208	2	7
2034	2a	1	15035.85	72006.21	37916.41	34089.8	476973	251160.4	225812.7	PHEV	7917.447	7118.399	2	8
2034	2a	1	46732.37	226477.2	226477.2	0	1563239	1563239	0	ICE	46732.37	0	2	1
2034	2a	1	6.647086	32.21351	32.21351	0	222.226	222.226	0	ICE	6.647086	0	2	2
2034	2a	1	38097.76	184631.6	0	184631.6	1284858	0	1284858	BEV	0	38097.76	2	3

2034	2a	1	3545.637	17183.08	0	17183.08	120108	0	120108	FCEV	0	3545.637	2	7
2034	2a	1	16659.37	80735.62	41797.99	38937.64	547618	283509.7	264108.4	PHEV	8624.792	8034.575	2	8
2034	2a	1	41707.4	204514.3	204514.3	0	1447548	1447548	0	ICE	41707.4	0	2	1
2034	2a	1	5.932348	29.08956	29.08956	0	205.7772	205.7772	0	ICE	5.932348	0	2	2
2034	2a	1	44949.12	220410.3	0	220410.3	1572246	0	1572246	BEV	0	44949.12	2	3
2034	2a	1	4585.49	22485.18	0	22485.18	160979.3	0	160979.3	FCEV	0	4585.49	2	7
2034	2a	1	18123.56	88869.76	45222.01	43647.75	617548.7	314244.1	303304.6	PHEV	9222.301	8901.255	2	8
2034	2a	1	35674.21	176974	176974	0	1284689	1284689	0	ICE	35674.21	0	2	1
2034	2a	1	5.074203	25.17231	25.17231	0	182.6255	182.6255	0	ICE	5.074203	0	2	2
2034	2a	1	51692.27	256437.1	0	256437.1	1875040	0	1875040	BEV	0	51692.27	2	3
2034	2a	1	5743.585	28493.01	0	28493.01	208964.9	0	208964.9	FCEV	0	5743.585	2	7
2034	2a	1	19145.28	94976.7	47488.35	47488.35	676533.1	338266.5	338266.5	PHEV	9572.642	9572.642	2	8
2034	2a	1	29053.36	145793.5	145793.5	0	1085532	1085532	0	ICE	29053.36	0	2	1
2034	2a	1	4.132471	20.73728	20.73728	0	154.3153	154.3153	0	ICE	4.132471	0	2	2
2034	2a	1	57646	289275.1	0	289275.1	2168600	0	2168600	BEV	0	57646	2	3
2034	2a	1	7124.787	35753.11	0	35753.11	268671.8	0	268671.8	FCEV	0	7124.787	2	7
2034	2a	1	20453.93	102640.5	51320.25	51320.25	749849.2	374924.6	374924.6	PHEV	10226.97	10226.97	2	8
2034	2a	1	22193.98	112643.8	112643.8	0	860133	860133	0	ICE	22193.98	0	2	1
2034	2a	1	3.156812	16.02215	16.02215	0	122.2749	122.2749	0	ICE	3.156812	0	2	2
2034	2a	1	63832.46	323976.5	0	323976.5	2489646	0	2489646	BEV	0	63832.46	2	3
2034	2a	1	8704.426	44178.62	0	44178.62	340149.2	0	340149.2	FCEV	0	8704.426	2	7
2034	2a	1	21666.86	109968.4	54984.21	54984.21	824027.3	412013.7	412013.7	PHEV	10833.43	10833.43	2	8
2034	2a	1	15083.95	77421.55	77421.55	0	606057.9	606057.9	0	ICE	15083.95	0	2	1
2034	2a	1	2.145501	11.01223	11.01223	0	86.1574	86.1574	0	ICE	2.145501	0	2	2
2034	2a	1	70289.53	360775.8	0	360775.8	2840835	0	2840835	BEV	0	70289.53	2	3
2034	2a	1	10503.03	53909.03	0	53909.03	425149.2	0	425149.2	FCEV	0	10503.03	2	7
2034	2a	1	22787.65	116962.4	58481.19	58481.19	898778.2	449389.1	449389.1	PHEV	11393.82	11393.82	2	8
2034	2a	1	6923.774	35934.38	35934.38	0	288223.7	288223.7	0	ICE	6923.774	0	2	1
2034	2a	1	0.984819	5.11121	5.11121	0	40.9746	40.9746	0	ICE	0.984819	0	2	2
2034	2a	1	69308.78	359712.6	0	359712.6	2900904	0	2900904	BEV	0	69308.78	2	3
2034	2a	1	11282.82	58557.86	0	58557.86	472834	0	472834	FCEV	0	11282.82	2	7
2034	2a	1	21423.08	111185.8	55592.91	55592.91	875728.7	437864.4	437864.4	PHEV	10711.54	10711.54	2	8
2034	2a	1	4434.676	11837.22	11837.22	0	44613.07	44613.07	0	ICE	4434.676	0	3	1
2034	2a	1	5219.034	14229.85	14229.85	0	55197.62	55197.62	0	ICE	5219.034	0	3	1
2034	2a	1	4756.592	13241.5	13241.5	0	51701.64	51701.64	0	ICE	4756.592	0	3	1
2034	2a	1	6389.274	18152.63	18152.63	0	71489.9	71489.9	0	ICE	6389.274	0	3	1
2034	2a	1	6968.419	20197.27	20197.27	0	80124.71	80124.71	0	ICE	6968.419	0	3	1
2034	2a	1	8624.526	25491.43	25491.43	0	102712.9	102712.9	0	ICE	8624.526	0	3	1
2034	2a	1	7990.496	24075.21	24075.21	0	97672.78	97672.78	0	ICE	7990.496	0	3	1
2034	2a	1	12514	38421.35	38421.35	0	157213.9	157213.9	0	ICE	12514	0	3	1
2034	2a	1	13974.63	43706.49	43706.49	0	180705.7	180705.7	0	ICE	13974.63	0	3	1
2034	2a	1	15939.09	50763.62	50763.62	0	211981	211981	0	ICE	15939.09	0	3	1
2034	2a	1	21043.95	68227.43	68227.43	0	288356.3	288356.3	0	ICE	21043.95	0	3	1
2034	2a	1	20327.03	67067.61	67067.61	0	285719.3	285719.3	0	ICE	20327.03	0	3	1
2034	2a	1	19935.05	66916.38	66916.38	0	288965.9	288965.9	0	ICE	19935.05	0	3	1
2034	2a	1	22624.17	77239.14	77239.14	0	338133.8	338133.8	0	ICE	22624.17	0	3	1
2034	2a	1	27526.65	95553.26	95553.26	0	422810.6	422810.6	0	ICE	27526.65	0	3	1

2034	2a	1	31506.94	111175.1	111175.1	0	496345.3	496345.3	0	ICE	31506.94	0	3	1
2034	2a	1	29863.01	107085.2	107085.2	0	481521.6	481521.6	0	ICE	29863.01	0	3	1
2034	2a	1	31411.54	114437.6	114437.6	0	519422.8	519422.8	0	ICE	31411.54	0	3	1
2034	2a	1	25389.84	93954.1	93954.1	0	432355.3	432355.3	0	ICE	25389.84	0	3	1
2034	2a	1	16449.05	61811.42	61811.42	0	288161.3	288161.3	0	ICE	16449.05	0	3	1
2034	2a	1	30662.35	116978.1	116978.1	0	553120.9	553120.9	0	ICE	30662.35	0	3	1
2034	2a	1	44092.91	170742.3	170742.3	0	817016.7	817016.7	0	ICE	44092.91	0	3	1
2034	2a	1	46488.59	182682.5	182682.5	0	890301.3	890301.3	0	ICE	46488.59	0	3	1
2034	2a	1	70222.93	279972.5	279972.5	0	1382485	1382485	0	ICE	70222.93	0	3	1
2034	2a	1	73967.6	299139.8	299139.8	0	1508078	1508078	0	ICE	73967.6	0	3	1
2034	2a	1	789.055	3191.096	3191.096	0	15734.92	15734.92	0	ICE	789.055	0	3	2
2034	2a	1	100675.3	412918.9	412918.9	0	2118293	2118293	0	ICE	100675.3	0	3	1
2034	2a	1	110726.8	460488.6	460488.6	0	2404132	2404132	0	ICE	110726.8	0	3	1
2034	2a	1	785.1907	3265.436	3265.436	0	17169.48	17169.48	0	ICE	785.1907	0	3	2
2034	2a	1	137775.5	580871	580871	0	3082087	3082087	0	ICE	137775.5	0	3	1
2034	2a	1	1408.219	5937.151	5937.151	0	31602.34	31602.34	0	ICE	1408.219	0	3	2
2034	2a	1	159185.1	680255.1	680255.1	0	3683814	3683814	0	ICE	159185.1	0	3	1
2034	2a	1	1627.049	6952.966	6952.966	0	37769.64	37769.64	0	ICE	1627.049	0	3	2
2034	2a	1	549.2106	2346.975	1408.185	938.7899	12771.5	7662.901	5108.601	PHEV	329.5264	219.6843	3	8
2034	2a	1	178833.5	774465.1	774465.1	0	4295959	4295959	0	ICE	178833.5	0	3	1
2034	2a	1	1823.27	7895.945	7895.945	0	43909.6	43909.6	0	ICE	1823.27	0	3	2
2034	2a	1	2109.116	9133.841	0	9133.841	38907.59	0	38907.59	BEV	0	2109.116	3	3
2034	2a	1	49.33604	213.6571	0	213.6571	817.9502	0	817.9502	FCEV	0	49.33604	3	7
2034	2a	1	1831.892	7933.281	4714.636	3218.646	44094.99	26205.02	17889.97	PHEV	1088.667	743.2246	3	8
2034	2a	1	196371.4	861666	861666	0	4882417	4882417	0	ICE	196371.4	0	3	1
2034	2a	1	2006.627	8804.961	8804.961	0	50024.38	50024.38	0	ICE	2006.627	0	3	2
2034	2a	1	4706.046	20649.85	0	20649.85	104562.4	0	104562.4	BEV	0	4706.046	3	3
2034	2a	1	124.2065	545.0106	0	545.0106	2149.176	0	2149.176	FCEV	0	124.2065	3	7
2034	2a	1	3396.265	14902.61	8771.248	6131.358	84667.46	49832.85	34834.61	PHEV	1998.944	1397.32	3	8
2034	2a	1	203234.5	903423.9	903423.9	0	5230529	5230529	0	ICE	203234.5	0	3	1
2034	2a	1	2108.154	9371.23	9371.23	0	54478.63	54478.63	0	ICE	2108.154	0	3	2
2034	2a	1	13880.58	61702.39	0	61702.39	308992.6	0	308992.6	BEV	0	13880.58	3	3
2034	2a	1	475.812	2115.094	0	2115.094	8587.496	0	8587.496	FCEV	0	475.812	3	7
2034	2a	1	9434.5	41938.52	24312.36	17626.16	269853.5	156437.9	113415.6	PHEV	5469.314	3965.186	3	8
2034	2a	1	203593.2	916682.7	916682.7	0	5430089	5430089	0	ICE	203593.2	0	3	1
2034	2a	1	2121.813	9553.506	9553.506	0	56856.6	56856.6	0	ICE	2121.813	0	3	2
2034	2a	1	24670.2	111078.1	0	111078.1	568273.9	0	568273.9	BEV	0	24670.2	3	3
2034	2a	1	1043.231	4697.167	0	4697.167	19627.64	0	19627.64	FCEV	0	1043.231	3	7
2034	2a	1	15778.24	71041.84	40554.74	30487.1	485235.1	276999.9	208235.2	PHEV	9007.121	6771.119	3	8
2034	2a	1	202650.5	924047.8	924047.8	0	5603637	5603637	0	ICE	202650.5	0	3	1
2034	2a	1	2123.401	9682.305	9682.305	0	59021.18	59021.18	0	ICE	2123.401	0	3	2
2034	2a	1	37423.67	170644.8	0	170644.8	900388.7	0	900388.7	BEV	0	37423.67	3	3
2034	2a	1	1886.908	8603.941	0	8603.941	37222.44	0	37222.44	FCEV	0	1886.908	3	7
2034	2a	1	22497.58	102584.7	57652.61	44932.1	728699.9	409529.4	319170.6	PHEV	12643.64	9853.942	3	8
2034	2a	1	196536.6	907429.1	907429.1	0	5636342	5636342	0	ICE	196536.6	0	3	1
2034	2a	1	2069.676	9555.902	9555.902	0	59693.81	59693.81	0	ICE	2069.676	0	3	2
2034	2a	1	51417.55	237400	0	237400	1291497	0	1291497	BEV	0	51417.55	3	3

2034	2a	1	3017.243	13930.91	0	13930.91	65472.57	0	65472.57	FCEV	0	3017.243	3	7
2034	2a	1	29016.55	133972.3	74105.82	59866.47	983959.6	544270.2	439689.4	PHEV	16050.29	12966.25	3	8
2034	2a	1	189097.3	883914.7	883914.7	0	5627373	5627373	0	ICE	189097.3	0	3	1
2034	2a	1	2000.58	9351.493	9351.493	0	59906.18	59906.18	0	ICE	2000.58	0	3	2
2034	2a	1	67314.3	314653.3	0	314653.3	1766280	0	1766280	BEV	0	67314.3	3	3
2034	2a	1	4514.984	21104.8	0	21104.8	105584.8	0	105584.8	FCEV	0	4514.984	3	7
2034	2a	1	35606.59	166439.1	90590.42	75848.68	1262451	687133.9	575316.8	PHEV	19380.16	16226.43	3	8
2034	2a	1	177155.6	838243.8	838243.8	0	5470090	5470090	0	ICE	177155.6	0	3	1
2034	2a	1	1874.242	8868.312	8868.312	0	58229.75	58229.75	0	ICE	1874.242	0	3	2
2034	2a	1	83873.99	396864.9	0	396864.9	2299886	0	2299886	BEV	0	83873.99	3	3
2034	2a	1	6340.812	30002.69	0	30002.69	159994.4	0	159994.4	FCEV	0	6340.812	3	7
2034	2a	1	41512.07	196421.8	105169.9	91251.96	1540004	824562.2	715441.9	PHEV	22226.75	19285.32	3	8
2034	2a	1	162759.7	779451.2	779451.2	0	5214462	5214462	0	ICE	162759.7	0	3	1
2034	2a	1	1721.938	8246.308	8246.308	0	55507.12	55507.12	0	ICE	1721.938	0	3	2
2034	2a	1	101338.1	485305.1	0	485305.1	2902935	0	2902935	BEV	0	101338.1	3	3
2034	2a	1	8539.022	40893.12	0	40893.12	229724.5	0	229724.5	FCEV	0	8539.022	3	7
2034	2a	1	46833.43	224283.9	118101.5	106182.4	1815974	956239.8	859733.8	PHEV	24661.15	22172.28	3	8
2034	2a	1	146493.1	709943.6	709943.6	0	4870356	4870356	0	ICE	146493.1	0	3	1
2034	2a	1	1549.843	7510.944	7510.944	0	51843.31	51843.31	0	ICE	1549.843	0	3	2
2034	2a	1	119683.1	580015.6	0	580015.6	3581110	0	3581110	BEV	0	119683.1	3	3
2034	2a	1	11138.53	53980.21	0	53980.21	317357.1	0	317357.1	FCEV	0	11138.53	3	7
2034	2a	1	51525.65	249706.7	129276.7	120430	2087277	1080613	1006664	PHEV	26675.56	24850.08	3	8
2034	2a	1	129574.9	635376.9	635376.9	0	4469979	4469979	0	ICE	129574.9	0	3	1
2034	2a	1	1370.855	6722.054	6722.054	0	47580.98	47580.98	0	ICE	1370.855	0	3	2
2034	2a	1	139812.9	685579.4	0	685579.4	4368447	0	4368447	BEV	0	139812.9	3	3
2034	2a	1	14263.03	69939.46	0	69939.46	428537	0	428537	FCEV	0	14263.03	3	7
2034	2a	1	55918.12	274197.3	139527.3	134670.1	2365357	1203629	1161728	PHEV	28454.34	27463.79	3	8
2034	2a	1	110755.9	549442.3	549442.3	0	3964371	3964371	0	ICE	110755.9	0	3	1
2034	2a	1	1171.757	5812.898	5812.898	0	42198.94	42198.94	0	ICE	1171.757	0	3	2
2034	2a	1	160501.4	796221.8	0	796221.8	5235455	0	5235455	BEV	0	160501.4	3	3
2034	2a	1	17833.49	88469.09	0	88469.09	563429.1	0	563429.1	FCEV	0	17833.49	3	7
2034	2a	1	59444.96	294897	147448.5	147448.5	2625082	1312541	1312541	PHEV	29722.48	29722.48	3	8
2034	2a	1	90473.44	454007.5	454007.5	0	3359208	3359208	0	ICE	90473.44	0	3	1
2034	2a	1	957.1759	4803.233	4803.233	0	35757.41	35757.41	0	ICE	957.1759	0	3	2
2034	2a	1	179687.3	901694.2	0	901694.2	6101301	0	6101301	BEV	0	179687.3	3	3
2034	2a	1	22208.54	111445.4	0	111445.4	735000.4	0	735000.4	FCEV	0	22208.54	3	7
2034	2a	1	63756.58	319938.8	159969.4	159969.4	2934931	1467466	1467466	PHEV	31878.29	31878.29	3	8
2034	2a	1	70016.26	355361.9	355361.9	0	2696311	2696311	0	ICE	70016.26	0	3	1
2034	2a	1	740.7464	3759.599	3759.599	0	28701.4	28701.4	0	ICE	740.7464	0	3	2
2034	2a	1	201720.9	1023818	0	1023818	7128644	0	7128644	BEV	0	201720.9	3	3
2034	2a	1	27507.4	139611.6	0	139611.6	951953.1	0	951953.1	FCEV	0	27507.4	3	7
2034	2a	1	68470.8	347518	173759	173759	3284926	1642463	1642463	PHEV	34235.4	34235.4	3	8
2034	2a	1	48182.34	247306	247306	0	1923689	1923689	0	ICE	48182.34	0	3	1
2034	2a	1	509.7515	2616.407	2616.407	0	20477.33	20477.33	0	ICE	509.7515	0	3	2
2034	2a	1	225052.7	1155130	0	1155130	8273878	0	8273878	BEV	0	225052.7	3	3
2034	2a	1	33628.57	172605.7	0	172605.7	1215114	0	1215114	FCEV	0	33628.57	3	7
2034	2a	1	72961.39	374489.6	187244.8	187244.8	3646022	1823011	1823011	PHEV	36480.69	36480.69	3	8

2034	2a	1	21961.71	113981.3	113981.3	0	908141.1	908141.1	0	ICE	21961.71	0	3	1
2034	2a	1	232.3469	1205.88	1205.88	0	9667.078	9667.078	0	ICE	232.3469	0	3	2
2034	2a	1	220480.5	1144294	0	1144294	8425172	0	8425172	BEV	0	220480.5	3	3
2034	2a	1	35892.17	186280.3	0	186280.3	1351865	0	1351865	FCEV	0	35892.17	3	7
2034	2a	1	68149.68	353696.9	176848.4	176848.4	3542277	1771138	1771138	PHEV	34074.84	34074.84	3	8
2034	2a	1	3646.918	9734.499	9734.499	0	32060.01	32060.01	0	ICE	3646.918	0	4	1
2034	2a	1	3040.911	8291.135	8291.135	0	27817.44	27817.44	0	ICE	3040.911	0	4	1
2034	2a	1	3677.931	10238.7	10238.7	0	34510.12	34510.12	0	ICE	3677.931	0	4	1
2034	2a	1	3901.346	11084.15	11084.15	0	38400.52	38400.52	0	ICE	3901.346	0	4	1
2034	2a	1	5905.673	17117	17117	0	60005.41	60005.41	0	ICE	5905.673	0	4	1
2034	2a	1	6346.651	18758.73	18758.73	0	67025.32	67025.32	0	ICE	6346.651	0	4	1
2034	2a	1	5732.009	17270.43	17270.43	0	62520.4	62520.4	0	ICE	5732.009	0	4	1
2034	2a	1	7365.576	22614.31	22614.31	0	84055.5	84055.5	0	ICE	7365.576	0	4	1
2034	2a	1	8293.328	25937.88	25937.88	0	97886.5	97886.5	0	ICE	8293.328	0	4	1
2034	2a	1	13577.68	43242.89	43242.89	0	167020.9	167020.9	0	ICE	13577.68	0	4	1
2034	2a	1	15714.67	50949.15	50949.15	0	199754.6	199754.6	0	ICE	15714.67	0	4	1
2034	2a	1	20898.19	68952.11	68952.11	0	274497.6	274497.6	0	ICE	20898.19	0	4	1
2034	2a	1	23.54217	77.67573	77.67573	0	275.7683	275.7683	0	ICE	23.54217	0	4	2
2034	2a	1	25777.45	86527.69	86527.69	0	351821.3	351821.3	0	ICE	25777.45	0	4	1
2034	2a	1	28920.33	98734.28	98734.28	0	410184.6	410184.6	0	ICE	28920.33	0	4	1
2034	2a	1	32782.42	113797.6	113797.6	0	479231.9	479231.9	0	ICE	32782.42	0	4	1
2034	2a	1	49.85671	173.0676	173.0676	0	665.0083	665.0083	0	ICE	49.85671	0	4	2
2034	2a	1	32213.22	113667.3	113667.3	0	482374.7	482374.7	0	ICE	32213.22	0	4	1
2034	2a	1	33103.11	118703.8	118703.8	0	510661.3	510661.3	0	ICE	33103.11	0	4	1
2034	2a	1	34970.7	127404.2	127404.2	0	557031	557031	0	ICE	34970.7	0	4	1
2034	2a	1	27746.45	102674.6	102674.6	0	455787.5	455787.5	0	ICE	27746.45	0	4	1
2034	2a	1	12694.84	47704.04	47704.04	0	214089	214089	0	ICE	12694.84	0	4	1
2034	2a	1	19846.2	75714.04	75714.04	0	344762.4	344762.4	0	ICE	19846.2	0	4	1
2034	2a	1	31205.43	120837.7	120837.7	0	557592	557592	0	ICE	31205.43	0	4	1
2034	2a	1	885.8664	3430.367	3430.367	0	15471	15471	0	ICE	885.8664	0	4	2
2034	2a	1	34072.96	133893.8	133893.8	0	628297.5	628297.5	0	ICE	34072.96	0	4	1
2034	2a	1	41364.7	164917.3	164917.3	0	787327.7	787327.7	0	ICE	41364.7	0	4	1
2034	2a	1	884.9145	3528.074	3528.074	0	16598.75	16598.75	0	ICE	884.9145	0	4	2
2034	2a	1	69008.48	279084.1	279084.1	0	1361643	1361643	0	ICE	69008.48	0	4	1
2034	2a	1	2165.812	8758.976	8758.976	0	42151.8	42151.8	0	ICE	2165.812	0	4	2
2034	2a	1	80849.57	331603.7	331603.7	0	1657143	1657143	0	ICE	80849.57	0	4	1
2034	2a	1	93225.54	387704.5	387704.5	0	1980259	1980259	0	ICE	93225.54	0	4	1
2034	2a	1	91227.22	384620.4	384620.4	0	1998966	1998966	0	ICE	91227.22	0	4	1
2034	2a	1	3181.108	13411.77	13411.77	0	69752.13	69752.13	0	ICE	3181.108	0	4	2
2034	2a	1	763.2329	3217.844	1930.706	1287.137	15899.06	9539.438	6359.625	PHEV	457.9398	305.2932	4	8
2034	2a	1	102411.2	437640	437640	0	2325199	2325199	0	ICE	102411.2	0	4	1
2034	2a	1	3571.096	15260.58	15260.58	0	81134.67	81134.67	0	ICE	3571.096	0	4	2
2034	2a	1	1.791477	7.655626	0	7.655626	28.42979	0	28.42979	BEV	0	1.791477	4	3
2034	2a	1	0.036561	0.156237	0	0.156237	0.5802	0	0.5802	FCEV	0	0.036561	4	7
2034	2a	1	2192.274	9368.377	5621.026	3747.351	48834.92	29300.95	19533.97	PHEV	1315.364	876.9096	4	8
2034	2a	1	113023.9	489466.8	489466.8	0	2658729	2658729	0	ICE	113023.9	0	4	1
2034	2a	1	3978.367	17228.91	17228.91	0	93729.38	93729.38	0	ICE	3978.367	0	4	2

2034	2a	1	968.8928	4195.936	0	4195.936	16748.52	0	16748.52	BEV	0	968.8928	4	3
2034	2a	1	22.66416	98.15054	0	98.15054	375.626	0	375.626	FCEV	0	22.66416	4	7
2034	2a	1	2520.86	10916.96	6487.794	4429.167	61716.47	36677.21	25039.25	PHEV	1498.111	1022.749	4	8
2034	2a	1	122874.1	539164.2	539164.2	0	2993999	2993999	0	ICE	122874.1	0	4	1
2034	2a	1	4392.921	19275.87	19275.87	0	107360.3	107360.3	0	ICE	4392.921	0	4	2
2034	2a	1	2118.811	9297.217	0	9297.217	41477.52	0	41477.52	BEV	0	2118.811	4	3
2034	2a	1	55.9217	245.3811	0	245.3811	967.3555	0	967.3555	FCEV	0	55.9217	4	7
2034	2a	1	2853.5	12520.99	7369.496	5151.492	71118.82	41858.51	29260.32	PHEV	1679.489	1174.012	4	8
2034	2a	1	125161.9	556373.5	556373.5	0	3160516	3160516	0	ICE	125161.9	0	4	1
2034	2a	1	4553.774	20242.57	20242.57	0	115518.9	115518.9	0	ICE	4553.774	0	4	2
2034	2a	1	6623.689	29443.82	0	29443.82	134856.2	0	134856.2	BEV	0	6623.689	4	3
2034	2a	1	227.0532	1009.304	0	1009.304	4096.908	0	4096.908	FCEV	0	227.0532	4	7
2034	2a	1	7905.712	35142.71	20372.73	14769.98	217044.6	125823.9	91220.74	PHEV	4583.054	3322.658	4	8
2034	2a	1	124448.7	560332.6	560332.6	0	3260016	3260016	0	ICE	124448.7	0	4	1
2034	2a	1	4552.66	20498.44	20498.44	0	119889.6	119889.6	0	ICE	4552.66	0	4	2
2034	2a	1	12243.07	55124.68	0	55124.68	263103.8	0	263103.8	BEV	0	12243.07	4	3
2034	2a	1	517.7237	2331.061	0	2331.061	9738.434	0	9738.434	FCEV	0	517.7237	4	7
2034	2a	1	12966.43	58381.62	33327.57	25054.06	378849.8	216269.1	162580.7	PHEV	7401.981	5564.452	4	8
2034	2a	1	123077.5	561210.1	561210.1	0	3345734	3345734	0	ICE	123077.5	0	4	1
2034	2a	1	4530.842	20659.78	20659.78	0	123889.7	123889.7	0	ICE	4530.842	0	4	2
2034	2a	1	19194.61	87523.78	0	87523.78	435406.1	0	435406.1	BEV	0	19194.61	4	3
2034	2a	1	967.7955	4412.964	0	4412.964	18965.2	0	18965.2	FCEV	0	967.7955	4	7
2034	2a	1	18041.84	82267.34	46234.25	36033.1	555922.3	312428.4	243494	PHEV	10139.51	7902.324	4	8
2034	2a	1	119347.2	551037.9	551037.9	0	3367637	3367637	0	ICE	119347.2	0	4	1
2034	2a	1	4419.186	20403.82	20403.82	0	125502.3	125502.3	0	ICE	4419.186	0	4	2
2034	2a	1	27309.22	126089.4	0	126089.4	653185.5	0	653185.5	BEV	0	27309.22	4	3
2034	2a	1	1602.538	7399.076	0	7399.076	32729.3	0	32729.3	FCEV	0	1602.538	4	7
2034	2a	1	22762.28	105095.7	58132.94	46962.77	737641.5	408021.1	329620.4	PHEV	12590.79	10171.49	4	8
2034	2a	1	115592.8	540325.6	540325.6	0	3386885	3386885	0	ICE	115592.8	0	4	1
2034	2a	1	4303.274	20115.18	20115.18	0	126976	126976	0	ICE	4303.274	0	4	2
2034	2a	1	37153.54	173670.1	0	173670.1	935276	0	935276	BEV	0	37153.54	4	3
2034	2a	1	2492.006	11648.61	0	11648.61	55356.39	0	55356.39	FCEV	0	2492.006	4	7
2034	2a	1	27407.98	128115.6	69731.49	58384.11	932273.3	507423	424850.3	PHEV	14917.77	12490.21	4	8
2034	2a	1	108501.4	513393.9	513393.9	0	3300908	3300908	0	ICE	108501.4	0	4	1
2034	2a	1	4039.278	19112.57	19112.57	0	123748.9	123748.9	0	ICE	4039.278	0	4	2
2034	2a	1	47749.09	225933.4	0	225933.4	1265387	0	1265387	BEV	0	47749.09	4	3
2034	2a	1	3609.796	17080.4	0	17080.4	87349.57	0	87349.57	FCEV	0	3609.796	4	7
2034	2a	1	31078.9	147055.4	78737.67	68317.74	1110300	594486.4	515813.7	PHEV	16640.53	14438.37	4	8
2034	2a	1	100886.8	483144	483144	0	3186176	3186176	0	ICE	100886.8	0	4	1
2034	2a	1	3755.804	17986.43	17986.43	0	119445	119445	0	ICE	3755.804	0	4	2
2034	2a	1	59972.66	287207.3	0	287207.3	1671499	0	1671499	BEV	0	59972.66	4	3
2034	2a	1	5053.458	24200.86	0	24200.86	131467.7	0	131467.7	FCEV	0	5053.458	4	7
2034	2a	1	34288.1	164204.7	86465.51	77739.2	1284999	676643.9	608355.4	PHEV	18055.14	16232.97	4	8
2034	2a	1	91829.28	445028.6	445028.6	0	3010393	3010393	0	ICE	91829.28	0	4	1
2034	2a	1	3418.61	16567.47	16567.47	0	112853.5	112853.5	0	ICE	3418.61	0	4	2
2034	2a	1	73430.81	355864.8	0	355864.8	2151119	0	2151119	BEV	0	73430.81	4	3
2034	2a	1	6833.973	33119.21	0	33119.21	189696.4	0	189696.4	FCEV	0	6833.973	4	7

2034	2a	1	36653.9	177634.4	91963.84	85670.51	1439871	745442	694429.4	PHEV	18976.25	17677.65	4	8
2034	2a	1	82179.41	402970.8	402970.8	0	2795627	2795627	0	ICE	82179.41	0	4	1
2034	2a	1	3059.366	15001.75	15001.75	0	104801.5	104801.5	0	ICE	3059.366	0	4	2
2034	2a	1	88820.34	435535	0	435535	2733197	0	2733197	BEV	0	88820.34	4	3
2034	2a	1	9061.017	44431.15	0	44431.15	267049.5	0	267049.5	FCEV	0	9061.017	4	7
2034	2a	1	38396.12	188277.3	95806.24	92471.04	1579360	803668.4	775691.2	PHEV	19538.14	18857.98	4	8
2034	2a	1	70204.2	348271.8	348271.8	0	2478039	2478039	0	ICE	70204.2	0	4	1
2034	2a	1	2613.554	12965.43	12965.43	0	92895.72	92895.72	0	ICE	2613.554	0	4	2
2034	2a	1	104129.9	516571.6	0	516571.6	3364853	0	3364853	BEV	0	104129.9	4	3
2034	2a	1	11569.98	57396.84	0	57396.84	360922.9	0	360922.9	FCEV	0	11569.98	4	7
2034	2a	1	38566.61	191322.8	95661.4	95661.4	1659651	829825.3	829825.3	PHEV	19283.31	19283.31	4	8
2034	2a	1	57648.22	289286.3	289286.3	0	2110536	2110536	0	ICE	57648.22	0	4	1
2034	2a	1	2146.122	10769.52	10769.52	0	79118.99	79118.99	0	ICE	2146.122	0	4	2
2034	2a	1	117215.8	588204	0	588204	3941869	0	3941869	BEV	0	117215.8	4	3
2034	2a	1	14487.34	72699.37	0	72699.37	473626.5	0	473626.5	FCEV	0	14487.34	4	7
2034	2a	1	41590.46	208706.3	104353.2	104353.2	1865343	932671.6	932671.6	PHEV	20795.23	20795.23	4	8
2034	2a	1	44640.29	226568.2	226568.2	0	1693927	1693927	0	ICE	44640.29	0	4	1
2034	2a	1	1661.864	8434.657	8434.657	0	63501.12	63501.12	0	ICE	1661.864	0	4	2
2034	2a	1	131695.2	668408.7	0	668408.7	4606246	0	4606246	BEV	0	131695.2	4	3
2034	2a	1	17958.44	91146.64	0	91146.64	613849.2	0	613849.2	FCEV	0	17958.44	4	7
2034	2a	1	44701.75	226880.2	113440.1	113440.1	2087114	1043557	1043557	PHEV	22350.88	22350.88	4	8
2034	2a	1	30456.18	156322.7	156322.7	0	1197431	1197431	0	ICE	30456.18	0	4	1
2034	2a	1	1133.819	5819.566	5819.566	0	44888.81	44888.81	0	ICE	1133.819	0	4	2
2034	2a	1	145692.5	747797.4	0	747797.4	5297899	0	5297899	BEV	0	145692.5	4	3
2034	2a	1	21770.15	111739.8	0	111739.8	776771.1	0	776771.1	FCEV	0	21770.15	4	7
2034	2a	1	47233.06	242433.6	121216.8	121216.8	2294629	1147315	1147315	PHEV	23616.53	23616.53	4	8
2034	2a	1	13291.97	68985.33	68985.33	0	539928.4	539928.4	0	ICE	13291.97	0	4	1
2034	2a	1	494.8321	2568.178	2568.178	0	20239.91	20239.91	0	ICE	494.8321	0	4	2
2034	2a	1	136685.7	709398.6	0	709398.6	5155610	0	5155610	BEV	0	136685.7	4	3
2034	2a	1	22251.16	115483.5	0	115483.5	826197.4	0	826197.4	FCEV	0	22251.16	4	7
2034	2a	1	42249.03	219272.5	109636.2	109636.2	2126217	1063109	1063109	PHEV	21124.51	21124.51	4	8
2034	2a	1	55.12698	150.3054	150.3054	0	255.7182	255.7182	0	ICE	55.12698	0	1	2
2034	2a	1	28.28256	78.73356	78.73356	0	130.5222	130.5222	0	ICE	28.28256	0	1	2
2034	2a	1	15.40137	43.75699	43.75699	0	76.6971	76.6971	0	ICE	15.40137	0	1	2
2034	2a	1	32.35128	99.32717	99.32717	0	227.7262	227.7262	0	ICE	32.35128	0	1	2
2034	2a	1	43.55139	141.1997	141.1997	0	387.7712	387.7712	0	ICE	43.55139	0	1	2
2034	2a	1	6.831135	22.53885	0	22.53885	70.44343	0	70.44343	BEV	0	6.831135	1	3
2034	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2034	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2034	2a	1	106.0813	356.0853	356.0853	0	1040.439	1040.439	0	ICE	106.0813	0	1	2
2034	2a	1	145.5663	496.9649	496.9649	0	1520.863	1520.863	0	ICE	145.5663	0	1	2
2034	2a	1	53.62043	186.1326	186.1326	0	610.4766	610.4766	0	ICE	53.62043	0	1	2
2034	2a	1	104.8724	370.0518	370.0518	0	1230.288	1230.288	0	ICE	104.8724	0	1	2
2034	2a	1	370.7867	1393.324	1393.324	0	5350.774	5350.774	0	ICE	370.7867	0	1	2
2034	2a	1	1419.374	5577.6	5577.6	0	23836.05	23836.05	0	ICE	1419.374	0	1	2
2034	2a	1	2316.001	9233.687	9233.687	0	41153.29	41153.29	0	ICE	2316.001	0	1	2
2034	2a	1	2090.214	8333.495	0	8333.495	37527.83	0	37527.83	BEV	0	2090.214	1	3

2034	2a	1	0.122802	0.489601	0	0.489601	2.204796	0	2.204796	FCEV	0	0.122802	1	7
2034	2a	1	2184.772	8710.488	5226.293	3484.195	37356.22	22413.73	14942.49	PHEV	1310.863	873.9086	1	8
2034	2a	1	2957.275	11959.81	0	11959.81	55685.95	0	55685.95	BEV	0	2957.275	1	3
2034	2a	1	0.414358	1.675748	0	1.675748	7.802431	0	7.802431	FCEV	0	0.414358	1	7
2034	2a	1	3733.783	15100.17	9060.099	6040.066	67045.9	40227.54	26818.36	PHEV	2240.27	1493.513	1	8
2034	2a	1	3098.261	12707.49	12707.49	0	61200.94	61200.94	0	ICE	3098.261	0	1	2
2034	2a	1	7825.625	32096.72	0	32096.72	155007.1	0	155007.1	BEV	0	7825.625	1	3
2034	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2034	2a	1	3721.295	15262.85	9157.712	6105.141	70300.03	42180.02	28120.01	PHEV	2232.777	1488.518	1	8
2034	2a	1	5662.854	19657.47	19657.47	0	87683.82	87683.82	0	ICE	5662.854	0	2	1
2034	2a	1	13322.48	52352.29	52352.29	0	256198.6	256198.6	0	ICE	13322.48	0	2	1
2034	2a	1	20351.02	81137.69	81137.69	0	404198.6	404198.6	0	ICE	20351.02	0	2	1
2034	2a	1	26251.36	106165.7	106165.7	0	535728.2	535728.2	0	ICE	26251.36	0	2	1
2034	2a	1	8.69032	32.15818	32.15818	0	144.5322	144.5322	0	ICE	8.69032	0	3	2
2034	2a	1	308.6445	1212.856	1212.856	0	5791.447	5791.447	0	ICE	308.6445	0	3	2
2034	2a	1	253.3384	1010.037	1010.037	0	4874.868	4874.868	0	ICE	253.3384	0	3	2
2034	2a	1	1289.642	5289.452	5289.452	0	26760.61	26760.61	0	ICE	1289.642	0	3	2
2034	2a	1	1500.226	6239.109	0	6239.109	21380.16	0	21380.16	BEV	0	1500.226	3	3
2034	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2034	2a	1	136.5316	567.8048	340.6829	227.1219	2833.849	1700.309	1133.539	PHEV	81.91894	54.61263	3	8
2034	2a	1	23.73345	68.78902	68.78902	0	222.9552	222.9552	0	ICE	23.73345	0	4	2
2034	2a	1	14.65642	46.6785	46.6785	0	151.4031	151.4031	0	ICE	14.65642	0	4	2
2034	2a	1	86.83105	306.3912	306.3912	0	1238.613	1238.613	0	ICE	86.83105	0	4	2
2034	2a	1	124.8904	447.8421	447.8421	0	1836.084	1836.084	0	ICE	124.8904	0	4	2
2034	2a	1	176.8836	644.4171	644.4171	0	2763.55	2763.55	0	ICE	176.8836	0	4	2
2034	2a	1	134.9935	499.538	499.538	0	2183.637	2183.637	0	ICE	134.9935	0	4	2
2034	2a	1	199.6187	750.1171	750.1171	0	3293.228	3293.228	0	ICE	199.6187	0	4	2
2034	2a	1	1663.524	6537.017	6537.017	0	30192.83	30192.83	0	ICE	1663.524	0	4	2
2034	2a	1	4540.929	18624.58	18624.58	0	92291.12	92291.12	0	ICE	4540.929	0	4	2
2034	2a	1	3077.2	12797.4	12797.4	0	65468.14	65468.14	0	ICE	3077.2	0	4	2
2034	2a	1	47.07195	125.6463	125.6463	0	162.7415	162.7415	0	ICE	47.07195	0	1	2
2034	2a	1	56.28385	179.2556	179.2556	0	457.2893	457.2893	0	ICE	56.28385	0	1	2
2034	2a	1	3.730366	13.16293	0	13.16293	46.14927	0	46.14927	BEV	0	3.730366	1	3
2034	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2034	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2034	2a	1	386.1854	1517.562	0	1517.562	6622.269	0	6622.269	BEV	0	386.1854	1	3
2034	2a	1	1.459445	5.735065	0	5.735065	25.02642	0	25.02642	FCEV	0	1.459445	1	7
2034	2a	1	811.7759	3189.971	1913.983	1275.988	13227.44	7936.465	5290.977	PHEV	487.0655	324.7104	1	8
2034	2a	1	5762.214	23963.78	0	23963.78	119617.9	0	119617.9	BEV	0	5762.214	1	3
2034	2a	1	175.4349	729.5953	0	729.5953	3641.858	0	3641.858	FCEV	0	175.4349	1	7
2034	2a	1	4143.802	17233.16	10339.9	6893.265	82458.26	49474.96	32983.3	PHEV	2486.281	1657.521	1	8
2034	2a	1	2.806776	8.135161	8.135161	0	26.36983	26.36983	0	ICE	2.806776	0	2	2
2034	2a	1	1.663617	4.917136	4.917136	0	15.93772	15.93772	0	ICE	1.663617	0	2	2
2034	2a	1	3.373297	10.55019	10.55019	0	40.70405	40.70405	0	ICE	3.373297	0	2	2
2034	2a	1	29.50932	104.1263	104.1263	0	445.0597	445.0597	0	ICE	29.50932	0	3	2
2034	2a	1	33.19014	119.0159	119.0159	0	525.4582	525.4582	0	ICE	33.19014	0	3	2
2034	2a	1	12.17792	38.08717	38.08717	0	119.3286	119.3286	0	ICE	12.17792	0	4	2

2034	2a	1	28.87804	98.58992	98.58992	0	382.914	382.914	0	ICE	28.87804	0	4	2
2034	2a	1	377.2111	1439.075	1439.075	0	6403.092	6403.092	0	ICE	377.2111	0	4	2
2034	2a	1	53.72728	158.8012	158.8012	0	327.5927	327.5927	0	ICE	53.72728	0	1	2
2034	2a	1	39.26776	118.313	118.313	0	259.7187	259.7187	0	ICE	39.26776	0	1	2
2034	2a	1	56.65249	177.1841	177.1841	0	443.1282	443.1282	0	ICE	56.65249	0	1	2
2034	2a	1	13.13621	44.09457	0	44.09457	141.873	0	141.873	BEV	0	13.13621	1	3
2034	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2034	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2034	2a	1	419.1892	1623.239	0	1623.239	6876.318	0	6876.318	BEV	0	419.1892	1	3
2034	2a	1	4.141522	16.03734	0	16.03734	67.93692	0	67.93692	FCEV	0	4.141522	1	7
2034	2a	1	116.5223	451.2127	270.7276	180.4851	1800.765	1080.459	720.3058	PHEV	69.91337	46.60891	1	8
2034	2a	1	478.7591	1991.054	1991.054	0	9755.204	9755.204	0	ICE	478.7591	0	1	2
2034	2a	1	264.3482	1069.077	0	1069.077	4965.989	0	4965.989	BEV	0	264.3482	2	3
2034	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2034	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2034	2a	1	0.793729	2.164126	2.164126	0	8.486525	8.486525	0	ICE	0.793729	0	3	2
2034	2a	1	18.23112	51.79662	51.79662	0	153.6639	153.6639	0	ICE	18.23112	0	4	2
2034	2a	1	27.36467	80.88149	80.88149	0	258.0002	258.0002	0	ICE	27.36467	0	4	2
2034	2a	1	25.91328	78.07619	78.07619	0	245.9151	245.9151	0	ICE	25.91328	0	4	2
2034	2a	1	27.78501	102.8173	102.8173	0	371.1285	371.1285	0	ICE	27.78501	0	1	2
2034	2a	1	4.961653	16.93913	16.93913	0	65.76417	65.76417	0	ICE	4.961653	0	2	2
2034	2a	1	0.333789	1.063067	1.063067	0	3.365316	3.365316	0	ICE	0.333789	0	3	2
2034	2a	1	17.8973	68.27892	68.27892	0	314.9627	314.9627	0	ICE	17.8973	0	3	2
2034	2a	1	62.70071	253.5742	0	253.5742	820.1472	0	820.1472	BEV	0	62.70071	3	3
2034	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2034	2a	1	28.38892	114.8105	68.88628	45.92419	549.1098	329.4659	219.6439	PHEV	17.03335	11.35557	3	8
2034	2a	1	11.28485	30.76847	30.76847	0	95.2951	95.2951	0	ICE	11.28485	0	4	2
2034	2a	1	28.79464	88.40731	88.40731	0	292.5847	292.5847	0	ICE	28.79464	0	4	2
2034	2a	1	10.53545	35.36457	35.36457	0	136.899	136.899	0	ICE	10.53545	0	4	2
2034	2a	1	39.87083	154.393	154.393	0	730.5037	730.5037	0	ICE	39.87083	0	3	2
2034	2a	1	4.445308	14.41231	14.41231	0	53.15217	53.15217	0	ICE	4.445308	0	4	2
2034	2a	1	5.569092	18.69388	0	18.69388	40.80809	0	40.80809	BEV	0	5.569092	3	3
2034	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2034	2a	1	0	0	0	0	0	0	0	PHEV	0	0	3	8
2034	2a	1	24.3761	81.82373	0	81.82373	181.7736	0	181.7736	BEV	0	24.3761	4	3
2034	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2034	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2034	2a	1	9.317688	27.00639	27.00639	0	54.41874	54.41874	0	ICE	9.317688	0	1	2
2034	2a	1	16.6601	60.69558	60.69558	0	209.6085	209.6085	0	ICE	16.6601	0	1	2
2034	2a	1	60.52624	230.91	0	230.91	953.1772	0	953.1772	BEV	0	60.52624	1	3
2034	2a	1	6.144796	23.44264	0	23.44264	96.76926	0	96.76926	FCEV	0	6.144796	1	7
2034	2a	1	6.452036	24.61478	14.76887	9.84591	94.25	56.55	37.7	PHEV	3.871222	2.580814	1	8
2034	2a	1	3.365827	9.369857	9.369857	0	26.79181	26.79181	0	ICE	3.365827	0	2	2
2034	2a	1	100.6524	395.5257	0	395.5257	1711.756	0	1711.756	BEV	0	100.6524	2	3
2034	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2034	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2034	2a	1	14.0089	52.64193	52.64193	0	236.6094	236.6094	0	ICE	14.0089	0	3	2

2034	2a	1	17.73744	49.37784	49.37784	0	158.0584	158.0584	0	ICE	17.73744	0	4	2
2034	2a	1	4.813476	17.26055	0	17.26055	62.69334	0	62.69334	BEV	0	4.813476	1	3
2034	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2034	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2034	2a	1	30.65182	113.4258	0	113.4258	428.9669	0	428.9669	BEV	0	30.65182	1	3
2034	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2034	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2034	2a	1	28.8677	108.4776	0	108.4776	439.3044	0	439.3044	BEV	0	28.8677	1	3
2034	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2034	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2034	2a	1	3.629871	10.93673	10.93673	0	44.41265	44.41265	0	ICE	3.629871	0	2	2
2034	2a	1	9.248657	34.75414	34.75414	0	151.4318	151.4318	0	ICE	9.248657	0	2	2
2034	2a	1	129.952	518.1069	0	518.1069	2320.148	0	2320.148	BEV	0	129.952	2	3
2034	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2034	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2034	2a	1	4.503638	16.40752	16.40752	0	73.88298	73.88298	0	ICE	4.503638	0	3	2
2034	2a	1	9.021082	24.07943	24.07943	0	82.94406	82.94406	0	ICE	9.021082	0	4	2
2034	2a	1	3.221545	10.99839	0	10.99839	36.30352	0	36.30352	BEV	0	3.221545	1	3
2034	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2034	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2034	2a	1	9.152304	33.3434	0	33.3434	124.7865	0	124.7865	BEV	0	9.152304	1	3
2034	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2034	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2034	2a	1	13.03299	48.22805	0	48.22805	185.2596	0	185.2596	BEV	0	13.03299	2	3
2034	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2034	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2034	2a	1	2.463519	9.680694	9.680694	0	46.45451	46.45451	0	ICE	2.463519	0	2	2
2034	2a	1	0.468494	1.679964	0	1.679964	4.67906	0	4.67906	BEV	0	0.468494	4	3
2034	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2034	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2034	2a	1	3.153499	10.40475	10.40475	0	36.78287	36.78287	0	ICE	3.153499	0	2	2
2034	2a	1	0.468516	1.599519	1.599519	0	7.48986	7.48986	0	ICE	0.468516	0	3	2
2034	2a	1	1.83899	5.224772	0	5.224772	12.98085	0	12.98085	BEV	0	1.83899	1	3
2034	2a	1	0.819377	2.280998	2.280998	0	8.435977	8.435977	0	ICE	0.819377	0	3	2
2034	2a	1	7.67818	28.85268	0	28.85268	83.52761	0	83.52761	BEV	0	7.67818	3	3
2034	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2034	2a	1	0	0	0	0	0	0	0	PHEV	0	0	3	8
2034	2a	1	4.842662	18.75238	0	18.75238	56.63887	0	56.63887	BEV	0	4.842662	3	3
2034	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2034	2a	1	3.352612	12.98242	7.789452	5.192968	59.31684	35.59011	23.72674	PHEV	2.011567	1.341045	3	8
2034	2a	1	0.845782	3.468967	0	3.468967	11.35707	0	11.35707	BEV	0	0.845782	4	3
2034	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2034	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2034	2a	1	1.590388	4.427354	0	4.427354	10.91565	0	10.91565	BEV	0	1.590388	1	3
2034	2a	1	19.16324	62.12989	0	62.12989	184.0284	0	184.0284	BEV	0	19.16324	2	3
2034	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2034	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8

2034	2a	1	6.926988	22.85511	0	22.85511	70.89596	0	70.89596	BEV	0	6.926988	2	3
2034	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2034	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2034	2a	1	5.67444	19.04751	19.04751	0	82.29409	82.29409	0	ICE	5.67444	0	2	2
2034	2a	1	2.80496	10.05825	0	10.05825	36.13924	0	36.13924	BEV	0	2.80496	2	3
2034	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2034	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2034	2a	1	5.37426	19.57934	19.57934	0	83.30702	83.30702	0	ICE	5.37426	0	2	2
2034	2a	1	1.627412	5.92894	0	5.92894	22.06608	0	22.06608	BEV	0	1.627412	2	3
2034	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2034	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2034	2a	1	6.596247	24.40915	24.40915	0	113.8967	113.8967	0	ICE	6.596247	0	2	2
2034	2a	1	5.640037	21.19385	0	21.19385	85.28266	0	85.28266	BEV	0	5.640037	2	3
2034	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2034	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2034	2a	1	4.982079	18.43598	0	18.43598	50.98063	0	50.98063	BEV	0	4.982079	3	3
2034	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2034	2a	1	0	0	0	0	0	0	0	PHEV	0	0	3	8
2034	2a	1	3.953024	15.76035	0	15.76035	49.78677	0	49.78677	BEV	0	3.953024	3	3
2034	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2034	2a	1	3.022901	12.05203	7.231219	4.820813	56.55261	33.93156	22.62104	PHEV	1.81374	1.20916	3	8
2034	2a	1	1.145708	3.714545	0	3.714545	8.055314	0	8.055314	BEV	0	1.145708	4	3
2034	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2034	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2034	2a	1	3.261042	11.13323	0	11.13323	25.51268	0	25.51268	BEV	0	3.261042	4	3
2034	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2034	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2034	2a	1	0.589213	2.079092	0	2.079092	5.141995	0	5.141995	BEV	0	0.589213	4	3
2034	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2034	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2034	2a	1	4.55342	12.93677	12.93677	0	39.13933	39.13933	0	ICE	4.55342	0	2	2
2034	2a	1	0.451824	1.594303	1.594303	0	6.269725	6.269725	0	ICE	0.451824	0	2	2
2034	2a	1	23.85862	80.08671	0	80.08671	248.7393	0	248.7393	BEV	0	23.85862	2	3
2034	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2034	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2034	2a	1	1.590826	5.522234	0	5.522234	18.5073	0	18.5073	BEV	0	1.590826	2	3
2034	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2034	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2034	2a	1	12.67346	40.36308	0	40.36308	116.3366	0	116.3366	BEV	0	12.67346	2	3
2034	2a	1	0.411152	1.262348	1.262348	0	4.59568	4.59568	0	ICE	0.411152	0	3	2
2034	2a	1	3.653449	11.63569	11.63569	0	40.534	40.534	0	ICE	3.653449	0	2	2
2034	2a	1	0.305114	1.024181	1.024181	0	3.706456	3.706456	0	ICE	0.305114	0	3	2
2034	2a	1	1.721577	4.693932	4.693932	0	18.1493	18.1493	0	ICE	1.721577	0	2	2
2034	2a	1	1.812051	5.355862	0	5.355862	13.87536	0	13.87536	BEV	0	1.812051	1	3
2034	2a	1	3.62708	13.00627	13.00627	0	59.04873	59.04873	0	ICE	3.62708	0	2	2
2034	2a	1	0.711734	2.30754	0	2.30754	5.262565	0	5.262565	BEV	0	0.711734	3	3
2034	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7

2034	2a	1	0	0	0	0	0	0	0	PHEV	0	0	3	8
2034	2a	1	0.720767	2.667169	0	2.667169	7.199598	0	7.199598	BEV	0	0.720767	4	3
2034	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2034	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2034	2a	1	2.337408	7.310382	0	7.310382	20.77192	0	20.77192	BEV	0	2.337408	1	3
2034	2a	1	1.735329	5.626181	0	5.626181	16.8304	0	16.8304	BEV	0	1.735329	1	3
2034	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2034	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2034	2a	1	3.284577	11.40175	0	11.40175	38.5012	0	38.5012	BEV	0	3.284577	1	3
2034	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2034	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2034	2a	1	4.139737	12.71011	12.71011	0	43.63552	43.63552	0	ICE	4.139737	0	2	2
2034	2a	1	3.87597	12.12233	0	12.12233	33.83084	0	33.83084	BEV	0	3.87597	2	3
2034	2a	1	0.566771	1.999904	0	1.999904	6.917877	0	6.917877	BEV	0	0.566771	2	3
2034	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2034	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2034	2a	1	1.094813	3.110484	3.110484	0	10.20825	10.20825	0	ICE	1.094813	0	3	2
2034	2a	1	2.649181	8.133702	0	8.133702	22.34246	0	22.34246	BEV	0	2.649181	1	3
2034	2a	1	2.663512	8.482888	0	8.482888	24.84057	0	24.84057	BEV	0	2.663512	1	3
2034	2a	1	3.008039	8.029179	8.029179	0	31.17548	31.17548	0	ICE	3.008039	0	2	2
2034	2a	1	1.129317	3.143817	0	3.143817	7.751962	0	7.751962	BEV	0	1.129317	2	3
2034	2a	1	0.473745	1.345962	0	1.345962	3.355346	0	3.355346	BEV	0	0.473745	2	3
2034	2a	1	0.481294	1.422556	0	1.422556	3.70962	0	3.70962	BEV	0	0.481294	2	3
2034	2a	1	3.043389	9.867094	9.867094	0	35.06566	35.06566	0	ICE	3.043389	0	2	2
2034	2a	1	2.253683	8.597891	8.597891	0	38.90991	38.90991	0	ICE	2.253683	0	2	2
2034	2a	1	3.721444	14.83706	14.83706	0	71.21441	71.21441	0	ICE	3.721444	0	2	2
2034	2a	1	1.719248	4.589084	4.589084	0	14.75823	14.75823	0	ICE	1.719248	0	3	2
2034	2a	1	0.607202	1.725126	0	1.725126	2.957604	0	2.957604	BEV	0	0.607202	3	3
2034	2a	1	0.706363	2.047323	2.047323	0	8.538192	8.538192	0	ICE	0.706363	0	3	2
2034	2a	1	2.847324	9.068299	0	9.068299	17.95914	0	17.95914	BEV	0	2.847324	3	3
2034	2a	1	0.376135	1.24103	1.24103	0	4.475593	4.475593	0	ICE	0.376135	0	3	2
2034	2a	1	0.241765	0.797687	0	0.797687	1.680775	0	1.680775	BEV	0	0.241765	3	3
2034	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2034	2a	1	0	0	0	0	0	0	0	PHEV	0	0	3	8
2034	2a	1	4.611395	17.59266	0	17.59266	50.60309	0	50.60309	BEV	0	4.611395	3	3
2034	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2034	2a	1	0	0	0	0	0	0	0	PHEV	0	0	3	8
2034	2a	1	11.83996	46.52653	0	46.52653	140.0907	0	140.0907	BEV	0	11.83996	3	3
2034	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2034	2a	1	3.035886	11.92988	7.157927	4.771952	58.67498	35.20499	23.46999	PHEV	1.821532	1.214354	3	8
2034	2a	1	0.724631	2.141784	0	2.141784	3.809062	0	3.809062	BEV	0	0.724631	4	3
2034	2a	1	1.093409	4.234042	4.234042	0	19.95738	19.95738	0	ICE	1.093409	0	2	2
2034	2a	1	0.266246	0.878461	0	0.878461	1.951224	0	1.951224	BEV	0	0.266246	4	3
2034	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2034	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2034	2a	1	0.845243	2.256156	0	2.256156	5.619656	0	5.619656	BEV	0	0.845243	1	3
2034	2a	1	0.780497	2.128047	0	2.128047	5.115668	0	5.115668	BEV	0	0.780497	1	3

2034	2a	1	0.842774	2.442695	0	2.442695	5.986759	0	5.986759	BEV	0	0.842774	1	3
2034	2a	1	1.956862	5.895988	0	5.895988	15.90975	0	15.90975	BEV	0	1.956862	1	3
2034	2a	1	0.520825	1.50956	0	1.50956	3.835199	0	3.835199	BEV	0	0.520825	2	3
2034	2a	1	0	0	0	0	0	0	0	BEV	0	0	2	3
2034	2a	1	15.56612	63.84429	0	63.84429	307.3626	0	307.3626	FCEV	0	15.56612	2	7
2034	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2034	2a	1	0	0	0	0	0	0	0	BEV	0	0	2	3
2034	2a	1	17.69576	73.59278	0	73.59278	365.9872	0	365.9872	FCEV	0	17.69576	2	7
2034	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2034	2a	1	0.073748	0.256002	0.256002	0	1.155995	1.155995	0	ICE	0.073748	0	3	2
2034	2a	1	0	0	0	0	0	0	0	BEV	0	0	3	3
2034	2a	1	0.793758	3.255591	0	3.255591	11.0818	0	11.0818	FCEV	0	0.793758	3	7
2034	2a	1	11.3772	46.66347	27.99808	18.66539	241.9734	145.184	96.78935	PHEV	6.82632	4.55088	3	8
2034	2a	1	0.711332	2.87677	2.87677	0	13.33007	13.33007	0	ICE	0.711332	0	2	2
2034	2a	1	0.178764	0.559095	0	0.559095	1.088341	0	1.088341	BEV	0	0.178764	3	3
2034	2a	1	2.02157	5.743502	0	5.743502	10.14926	0	10.14926	BEV	0	2.02157	4	3
2034	2a	1	0.401227	1.277848	0	1.277848	2.569767	0	2.569767	BEV	0	0.401227	4	3
2034	2a	1	0.256439	0.934251	0	0.934251	2.395722	0	2.395722	BEV	0	0.256439	3	3
2034	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2034	2a	1	0	0	0	0	0	0	0	PHEV	0	0	3	8
2034	2a	1	0.931413	3.55338	0	3.55338	13.4652	0	13.4652	BEV	0	0.931413	2	3
2034	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2034	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2034	2a	1	0.52419	1.579373	0	1.579373	4.093213	0	4.093213	BEV	0	0.52419	2	3
2034	2a	1	1.531875	4.70327	0	4.70327	12.45557	0	12.45557	BEV	0	1.531875	2	3
2034	2a	1	0.392124	1.22639	0	1.22639	2.320518	0	2.320518	BEV	0	0.392124	4	3
2034	2a	1	1.141098	4.745577	4.745577	0	26.9221	26.9221	0	ICE	1.141098	0	2	2
2034	2a	1	0.701201	2.715283	0	2.715283	11.6038	0	11.6038	BEV	0	0.701201	2	3
2034	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2034	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2034	2a	1	0.190118	0.518361	0	0.518361	0.923592	0	0.923592	BEV	0	0.190118	4	3
2034	2a	1	0.142066	0.419902	0	0.419902	0.718678	0	0.718678	BEV	0	0.142066	3	3
2034	2a	1	0.12987	0.458259	0	0.458259	1.054212	0	1.054212	BEV	0	0.12987	3	3
2034	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2034	2a	1	0	0	0	0	0	0	0	PHEV	0	0	3	8
2034	2a	1	0.321304	0.876046	0	0.876046	1.570314	0	1.570314	BEV	0	0.321304	3	3
2034	2a	1	0.698289	2.10393	0	2.10393	3.94712	0	3.94712	BEV	0	0.698289	4	3
2034	2a	1	0.275328	0.939972	0	0.939972	3.025457	0	3.025457	BEV	0	0.275328	2	3
2034	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2034	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2034	2a	1	0.127821	0.443705	0.443705	0	2.362159	2.362159	0	ICE	0.127821	0	2	2
2034	2a	1	1.909624	5.31605	0	5.31605	8.957381	0	8.957381	BEV	0	1.909624	4	3
2034	2a	1	0.702784	2.56036	0	2.56036	6.515948	0	6.515948	BEV	0	0.702784	4	3
2034	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2034	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2034	2a	1	0.090806	0.278798	0	0.278798	0.533789	0	0.533789	BEV	0	0.090806	3	3
2034	2a	1	0	0	0	0	0	0	0	BEV	0	0	4	3

2034	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2034	2a	1	1.238031	4.935917	2.96155	1.974367	25.47684	15.28611	10.19074	PHEV	0.742818	0.495212	4	8
2034	2a	1	0.135004	0.399031	0.399031	0	1.637189	1.637189	0	ICE	0.135004	0	3	2
2034	2a	1	0.14227	0.387903	0	0.387903	0.923511	0	0.923511	BEV	0	0.14227	2	3
2035	2a	1	13881.03	37051.79	37051.79	0	60694.91	60694.91	0	ICE	13881.03	0	1	1
2035	2a	1	11862.95	32344.69	32344.69	0	55383.98	55383.98	0	ICE	11862.95	0	1	1
2035	2a	1	12080.37	33629.57	33629.57	0	60158.08	60158.08	0	ICE	12080.37	0	1	1
2035	2a	1	13080.57	37163.34	37163.34	0	69194.1	69194.1	0	ICE	13080.57	0	1	1
2035	2a	1	15346.11	44479.16	44479.16	0	86878.83	86878.83	0	ICE	15346.11	0	1	1
2035	2a	1	14062.79	41565.23	41565.23	0	84880.38	84880.38	0	ICE	14062.79	0	1	1
2035	2a	1	16911.74	50954.73	50954.73	0	108632.8	108632.8	0	ICE	16911.74	0	1	1
2035	2a	1	18169.32	55784.73	55784.73	0	124755.4	124755.4	0	ICE	18169.32	0	1	1
2035	2a	1	18861.94	58991.84	58991.84	0	138183.7	138183.7	0	ICE	18861.94	0	1	1
2035	2a	1	23049.49	73409.17	73409.17	0	180394	180394	0	ICE	23049.49	0	1	1
2035	2a	1	23598.29	76508.97	76508.97	0	196601.8	196601.8	0	ICE	23598.29	0	1	1
2035	2a	1	42.81846	138.8234	138.8234	0	368.7189	368.7189	0	ICE	42.81846	0	1	2
2035	2a	1	24449.8	80670.39	80670.39	0	217439.9	217439.9	0	ICE	24449.8	0	1	1
2035	2a	1	26896.64	90284.48	90284.48	0	254573.6	254573.6	0	ICE	26896.64	0	1	1
2035	2a	1	27006.28	92199.72	92199.72	0	272255.3	272255.3	0	ICE	27006.28	0	1	1
2035	2a	1	33572.46	116540.1	116540.1	0	360736.2	360736.2	0	ICE	33572.46	0	1	1
2035	2a	1	37713.17	133074.3	133074.3	0	430174.1	430174.1	0	ICE	37713.17	0	1	1
2035	2a	1	99.26486	350.265	350.265	0	1143.164	1143.164	0	ICE	99.26486	0	1	2
2035	2a	1	44122.64	158218.5	158218.5	0	532524.9	532524.9	0	ICE	44122.64	0	1	1
2035	2a	1	41611.15	151596.5	151596.5	0	532348.1	532348.1	0	ICE	41611.15	0	1	1
2035	2a	1	37920.91	140324.8	140324.8	0	513057	513057	0	ICE	37920.91	0	1	1
2035	2a	1	51450.53	193338.2	193338.2	0	734265.5	734265.5	0	ICE	51450.53	0	1	1
2035	2a	1	588.6681	2212.068	2212.068	0	8372.075	8372.075	0	ICE	588.6681	0	1	2
2035	2a	1	59306.96	226258.4	226258.4	0	895199.9	895199.9	0	ICE	59306.96	0	1	1
2035	2a	1	917.4538	3500.123	3500.123	0	13627.7	13627.7	0	ICE	917.4538	0	1	2
2035	2a	1	100599	389552.5	389552.5	0	1605460	1605460	0	ICE	100599	0	1	1
2035	2a	1	142631.3	560486.6	560486.6	0	2396003	2396003	0	ICE	142631.3	0	1	1
2035	2a	1	166854.7	665234.8	665234.8	0	2955113	2955113	0	ICE	166854.7	0	1	1
2035	2a	1	3124.97	12458.97	12458.97	0	54938.29	54938.29	0	ICE	3124.97	0	1	2
2035	2a	1	224672.4	908620	908620	0	4188084	4188084	0	ICE	224672.4	0	1	1
2035	2a	1	245840.5	1008312	1008312	0	4810671	4810671	0	ICE	245840.5	0	1	1
2035	2a	1	300301.4	1248887	1248887	0	6176164	6176164	0	ICE	300301.4	0	1	1
2035	2a	1	3674.899	15283.1	15283.1	0	75564.58	75564.58	0	ICE	3674.899	0	1	2
2035	2a	1	17465.91	72636.9	0	72636.9	360368.7	0	360368.7	BEV	0	17465.91	1	3
2035	2a	1	356.4472	1482.386	0	1482.386	7420.128	0	7420.128	FCEV	0	356.4472	1	7
2035	2a	1	15754.85	65520.94	35381.31	30139.63	323527.5	174704.9	148822.7	PHEV	8507.617	7247.23	1	8
2035	2a	1	356207.1	1501794	1501794	0	7676843	7676843	0	ICE	356207.1	0	1	1
2035	2a	1	4359.038	18378.01	18378.01	0	93928.06	93928.06	0	ICE	4359.038	0	1	2
2035	2a	1	25320.51	106753	0	106753	546652.5	0	546652.5	BEV	0	25320.51	1	3
2035	2a	1	516.7451	2178.633	0	2178.633	11251.98	0	11251.98	FCEV	0	516.7451	1	7
2035	2a	1	16364.52	68993.96	37256.74	31737.22	352408.7	190300.7	162108	PHEV	8836.841	7527.679	1	8
2035	2a	1	409175.9	1748556	1748556	0	9233910	9233910	0	ICE	409175.9	0	1	1
2035	2a	1	4985.949	21306.75	21306.75	0	112504.6	112504.6	0	ICE	4985.949	0	1	2

2035	2a	1	35667.87	152421.6	0	152421.6	806186.9	0	806186.9	BEV	0	35667.87	1	3
2035	2a	1	834.3361	3565.419	0	3565.419	18994.91	0	18994.91	FCEV	0	834.3361	1	7
2035	2a	1	17492.8	74753.01	39619.1	35133.92	394417	209041	185376	PHEV	9271.182	8221.614	1	8
2035	2a	1	463271.7	2006268	2006268	0	10935888	10935888	0	ICE	463271.7	0	1	1
2035	2a	1	5696.292	24668.65	24668.65	0	134448.2	134448.2	0	ICE	5696.292	0	1	2
2035	2a	1	47980.35	207786.1	0	207786.1	1133957	0	1133957	BEV	0	47980.35	1	3
2035	2a	1	1266.343	5484.09	0	5484.09	30120.68	0	30120.68	FCEV	0	1266.343	1	7
2035	2a	1	18295.17	79229.98	41199.59	38030.39	431772.7	224521.8	207250.9	PHEV	9513.489	8781.682	1	8
2035	2a	1	486752.7	2135842	2135842	0	12014317	12014317	0	ICE	486752.7	0	1	1
2035	2a	1	6013.885	26388.57	26388.57	0	148420.7	148420.7	0	ICE	6013.885	0	1	2
2035	2a	1	78641.9	345076	0	345076	1942857	0	1942857	BEV	0	78641.9	1	3
2035	2a	1	2695.763	11828.84	0	11828.84	66971.05	0	66971.05	FCEV	0	2695.763	1	7
2035	2a	1	29898.57	131193.1	65334.17	65858.94	737532.5	367291.2	370241.3	PHEV	14889.49	15009.08	1	8
2035	2a	1	502186	2232332	2232332	0	12949153	12949153	0	ICE	502186	0	1	1
2035	2a	1	6249.275	27779.47	27779.47	0	161122.2	161122.2	0	ICE	6249.275	0	1	2
2035	2a	1	114476.6	508874.7	0	508874.7	2953956	0	2953956	BEV	0	114476.6	1	3
2035	2a	1	4840.879	21518.82	0	21518.82	125508.9	0	125508.9	FCEV	0	4840.879	1	7
2035	2a	1	43394.95	192900.5	91820.65	101079.9	1118306	532313.8	585992.5	PHEV	20656	22738.95	1	8
2035	2a	1	504361	2270896	2270896	0	13575666	13575666	0	ICE	504361	0	1	1
2035	2a	1	6329.011	28496.5	28496.5	0	170336	170336	0	ICE	6329.011	0	1	2
2035	2a	1	153747.7	692252.1	0	692252.1	4140571	0	4140571	BEV	0	153747.7	1	3
2035	2a	1	7751.985	34903.47	0	34903.47	209493.2	0	209493.2	FCEV	0	7751.985	1	7
2035	2a	1	58111.28	261647.2	118787.8	142859.4	1563488	709823.4	853664.2	PHEV	26382.52	31728.76	1	8
2035	2a	1	501578.1	2287101	2287101	0	14083515	14083515	0	ICE	501578.1	0	1	1
2035	2a	1	6344.481	28929.63	28929.63	0	178124.6	178124.6	0	ICE	6344.481	0	1	2
2035	2a	1	198149.2	903522.9	0	903522.9	5565724	0	5565724	BEV	0	198149.2	1	3
2035	2a	1	11627.63	53019.8	0	53019.8	327389.4	0	327389.4	FCEV	0	11627.63	1	7
2035	2a	1	74675.2	340504.7	147098	193406.7	2096335	905616.8	1190718	PHEV	32259.69	42415.51	1	8
2035	2a	1	487480.8	2250748	2250748	0	14274694	14274694	0	ICE	487480.8	0	1	1
2035	2a	1	6212.771	28684.99	28684.99	0	181909.4	181909.4	0	ICE	6212.771	0	1	2
2035	2a	1	245003.6	1131206	0	1131206	7175794	0	7175794	BEV	0	245003.6	1	3
2035	2a	1	16433.17	75873.58	0	75873.58	482111.4	0	482111.4	FCEV	0	16433.17	1	7
2035	2a	1	92064.34	425070.3	174278.8	250791.5	2695959	1105343	1590616	PHEV	37746.38	54317.96	1	8
2035	2a	1	469737.7	2195737	2195737	0	14324092	14324092	0	ICE	469737.7	0	1	1
2035	2a	1	5986.641	27983.89	27983.89	0	182543	182543	0	ICE	5986.641	0	1	2
2035	2a	1	297420	1390257	0	1390257	9069803	0	9069803	BEV	0	297420	1	3
2035	2a	1	22484.73	105102.4	0	105102.4	686368.3	0	686368.3	FCEV	0	22484.73	1	7
2035	2a	1	111436.4	520897.1	202108.1	318789	3399110	1318855	2080255	PHEV	43237.31	68199.06	1	8
2035	2a	1	439637.5	2080224	2080224	0	13954154	13954154	0	ICE	439637.5	0	1	1
2035	2a	1	5603.023	26511.71	26511.71	0	177833.6	177833.6	0	ICE	5603.023	0	1	2
2035	2a	1	349705	1654692	0	1654692	11097710	0	11097710	BEV	0	349705	1	3
2035	2a	1	29467.08	139428.8	0	139428.8	935626.6	0	935626.6	FCEV	0	29467.08	1	7
2035	2a	1	130647	618179.7	226253.8	391925.9	4149700	1518790	2630910	PHEV	47816.79	82830.18	1	8
2035	2a	1	407736.9	1952640	1952640	0	13462885	13462885	0	ICE	407736.9	0	1	1
2035	2a	1	5196.46	24885.69	24885.69	0	171577.9	171577.9	0	ICE	5196.46	0	1	2
2035	2a	1	408959.7	1958496	0	1958496	13497829	0	13497829	BEV	0	408959.7	1	3
2035	2a	1	38060.59	182271	0	182271	1256472	0	1256472	FCEV	0	38060.59	1	7

2035	2a	1	152342.7	729564.5	250970.2	478594.3	5036177	1732445	3303732	PHEV	52405.88	99936.8	1	8
2035	2a	1	365138.1	1769554	1769554	0	12536751	12536751	0	ICE	365138.1	0	1	1
2035	2a	1	4653.554	22552.33	22552.33	0	159779.7	159779.7	0	ICE	4653.554	0	1	2
2035	2a	1	466816.9	2262316	0	2262316	16017528	0	16017528	BEV	0	466816.9	1	3
2035	2a	1	47622.38	230790.4	0	230790.4	1634017	0	1634017	FCEV	0	47622.38	1	7
2035	2a	1	173393.9	840312	270580.5	569731.5	5963883	1920370	4043513	PHEV	55832.84	117561.1	1	8
2035	2a	1	319260.6	1565510	1565510	0	11388979	11388979	0	ICE	319260.6	0	1	1
2035	2a	1	4068.866	19951.89	19951.89	0	145155.5	145155.5	0	ICE	4068.866	0	1	2
2035	2a	1	530792.2	2602766	0	2602766	18919030	0	18919030	BEV	0	530792.2	1	3
2035	2a	1	58976.91	289196.2	0	289196.2	2101829	0	2101829	FCEV	0	58976.91	1	7
2035	2a	1	196589.7	963987.4	289196.2	674791.2	7028891	2108667	4920224	PHEV	58976.91	137612.8	1	8
2035	2a	1	264768.5	1313474	1313474	0	9808164	9808164	0	ICE	264768.5	0	1	1
2035	2a	1	3374.379	16739.76	16739.76	0	125010.9	125010.9	0	ICE	3374.379	0	1	2
2035	2a	1	596728.6	2960275	0	2960275	22082854	0	22082854	BEV	0	596728.6	1	3
2035	2a	1	73752.98	365876.7	0	365876.7	2728731	0	2728731	FCEV	0	73752.98	1	7
2035	2a	1	211731	1050364	315109.1	735254.6	7865904	2359771	5506133	PHEV	63519.31	148211.7	1	8
2035	2a	1	204473.8	1026076	1026076	0	7858771	7858771	0	ICE	204473.8	0	1	1
2035	2a	1	2605.948	13076.99	13076.99	0	100166.9	100166.9	0	ICE	2605.948	0	1	2
2035	2a	1	662313.1	3323573	0	3323573	25426722	0	25426722	BEV	0	662313.1	1	3
2035	2a	1	90315.42	453214.5	0	453214.5	3466402	0	3466402	FCEV	0	90315.42	1	7
2035	2a	1	224811.1	1128131	338439.4	789691.9	8669214	2600764	6068449	PHEV	67443.33	157367.8	1	8
2035	2a	1	140675.3	713986.4	713986.4	0	5598947	5598947	0	ICE	140675.3	0	1	1
2035	2a	1	1792.858	9099.509	9099.509	0	71363.23	71363.23	0	ICE	1792.858	0	1	2
2035	2a	1	732842.4	3719483	0	3719483	29136841	0	29136841	BEV	0	732842.4	1	3
2035	2a	1	109505.2	555784.8	0	555784.8	4352889	0	4352889	FCEV	0	109505.2	1	7
2035	2a	1	237585.2	1205845	361753.4	844091.3	9487284	2846185	6641099	PHEV	71275.56	166309.6	1	8
2035	2a	1	71372.75	366335.6	366335.6	0	2932099	2932099	0	ICE	71372.75	0	1	1
2035	2a	1	909.6209	4668.82	4668.82	0	37370.74	37370.74	0	ICE	909.6209	0	1	2
2035	2a	1	793612.1	4073381	0	4073381	32577855	0	32577855	BEV	0	793612.1	1	3
2035	2a	1	129192.7	663108.5	0	663108.5	5302856	0	5302856	FCEV	0	129192.7	1	7
2035	2a	1	245302.5	1259067	377720.1	881346.8	10103698	3031110	7072589	PHEV	73590.76	171711.8	1	8
2035	2a	1	763046.2	3960210	0	3960210	32256288	0	32256288	BEV	0	763046.2	1	3
2035	2a	1	134655.2	698860.6	0	698860.6	5692451	0	5692451	FCEV	0	134655.2	1	7
2035	2a	1	224425.4	1164768	349430.3	815337.3	9503182	2850955	6652227	PHEV	67327.61	157097.8	1	8
2035	2a	1	3064.528	8179.959	8179.959	0	32181.03	32181.03	0	ICE	3064.528	0	2	1
2035	2a	1	2635.293	7185.207	7185.207	0	28573.66	28573.66	0	ICE	2635.293	0	2	1
2035	2a	1	3378.234	9404.395	9404.395	0	37632.9	37632.9	0	ICE	3378.234	0	2	1
2035	2a	1	4072.422	11570.2	11570.2	0	46728.96	46728.96	0	ICE	4072.422	0	2	1
2035	2a	1	3921.152	11365.07	11365.07	0	46567.76	46567.76	0	ICE	3921.152	0	2	1
2035	2a	1	4341.528	12832.21	12832.21	0	52502.98	52502.98	0	ICE	4341.528	0	2	1
2035	2a	1	5623.121	16942.35	16942.35	0	69867.58	69867.58	0	ICE	5623.121	0	2	1
2035	2a	1	7284.314	22364.81	22364.81	0	93533.97	93533.97	0	ICE	7284.314	0	2	1
2035	2a	1	6623.461	20715.27	20715.27	0	87561.78	87561.78	0	ICE	6623.461	0	2	1
2035	2a	1	7234.937	23042.19	23042.19	0	98712.87	98712.87	0	ICE	7234.937	0	2	1
2035	2a	1	8026.16	26021.93	26021.93	0	112453.8	112453.8	0	ICE	8026.16	0	2	1
2035	2a	1	8435.392	27831.98	27831.98	0	119811.7	119811.7	0	ICE	8435.392	0	2	1
2035	2a	1	5915.453	19856.52	19856.52	0	85844.89	85844.89	0	ICE	5915.453	0	2	1

2035	2a	1	3303.597	11467.78	11467.78	0	50457.51	50457.51	0	ICE	3303.597	0	2	1
2035	2a	1	5425.81	19145.46	19145.46	0	85607.3	85607.3	0	ICE	5425.81	0	2	1
2035	2a	1	8101.502	29051.01	29051.01	0	131708.8	131708.8	0	ICE	8101.502	0	2	1
2035	2a	1	14548.15	53001.4	53001.4	0	242667.9	242667.9	0	ICE	14548.15	0	2	1
2035	2a	1	11289.28	41775.54	41775.54	0	192879.2	192879.2	0	ICE	11289.28	0	2	1
2035	2a	1	6244.618	23465.71	23465.71	0	109045.6	109045.6	0	ICE	6244.618	0	2	1
2035	2a	1	5793.984	22104.28	22104.28	0	104262.1	104262.1	0	ICE	5793.984	0	2	1
2035	2a	1	53095.47	214728.7	214728.7	0	1076786	1076786	0	ICE	53095.47	0	2	1
2035	2a	1	51203.72	210011.5	210011.5	0	1067049	1067049	0	ICE	51203.72	0	2	1
2035	2a	1	47933.6	199345.3	199345.3	0	1033763	1033763	0	ICE	47933.6	0	2	1
2035	2a	1	6.493472	27.00492	27.00492	0	140.0518	140.0518	0	ICE	6.493472	0	2	2
2035	2a	1	1.615088	6.716795	0	6.716795	33.3442	0	33.3442	BEV	0	1.615088	2	3
2035	2a	1	0.032961	0.137077	0	0.137077	0.680494	0	0.680494	FCEV	0	0.032961	2	7
2035	2a	1	14.00841	58.25791	34.95475	23.30317	302.1471	181.2883	120.8588	PHEV	8.405049	5.603366	2	8
2035	2a	1	53749.94	226613.5	226613.5	0	1197226	1197226	0	ICE	53749.94	0	2	1
2035	2a	1	7.281401	30.6989	30.6989	0	162.194	162.194	0	ICE	7.281401	0	2	2
2035	2a	1	57777.46	246903.9	246903.9	0	1330568	1330568	0	ICE	57777.46	0	2	1
2035	2a	1	7.881608	33.68095	33.68095	0	181.5205	181.5205	0	ICE	7.881608	0	2	2
2035	2a	1	768.2336	3282.939	0	3282.939	17556.72	0	17556.72	BEV	0	768.2336	2	3
2035	2a	1	17.97038	76.79389	0	76.79389	405.8213	0	405.8213	FCEV	0	17.97038	2	7
2035	2a	1	589.9494	2521.066	1498.234	1022.833	13637.37	8104.494	5532.876	PHEV	350.5985	239.3509	2	8
2035	2a	1	61696.67	267186.7	267186.7	0	1469940	1469940	0	ICE	61696.67	0	2	1
2035	2a	1	8.514027	36.87127	36.87127	0	202.8639	202.8639	0	ICE	8.514027	0	2	2
2035	2a	1	1675.805	7257.323	0	7257.323	39754.29	0	39754.29	BEV	0	1675.805	2	3
2035	2a	1	44.22945	191.5423	0	191.5423	1043.575	0	1043.575	FCEV	0	44.22945	2	7
2035	2a	1	1290.674	5589.457	3289.795	2299.662	30822.37	18141.16	12681.2	PHEV	759.6539	531.0202	2	8
2035	2a	1	62092.75	272459.2	272459.2	0	1532301	1532301	0	ICE	62092.75	0	2	1
2035	2a	1	8.681294	38.093	38.093	0	214.2371	214.2371	0	ICE	8.681294	0	2	2
2035	2a	1	4376.201	19202.51	0	19202.51	107877.1	0	107877.1	BEV	0	4376.201	2	3
2035	2a	1	150.0116	658.2419	0	658.2419	3697.037	0	3697.037	FCEV	0	150.0116	2	7
2035	2a	1	3156.077	13848.68	8028.275	5820.401	77978.1	45205.02	32773.08	PHEV	1829.623	1326.454	2	8
2035	2a	1	61926.04	275275.5	275275.5	0	1583604	1583604	0	ICE	61926.04	0	2	1
2035	2a	1	8.69347	38.64447	38.64447	0	222.2959	222.2959	0	ICE	8.69347	0	2	2
2035	2a	1	7580.279	33696.09	0	33696.09	194204.6	0	194204.6	BEV	0	7580.279	2	3
2035	2a	1	320.5479	1424.909	0	1424.909	8245.169	0	8245.169	FCEV	0	320.5479	2	7
2035	2a	1	5114.411	22734.73	12978.28	9756.448	130553.4	74527.37	56026.08	PHEV	2919.598	2194.813	2	8
2035	2a	1	60627.52	272976.6	272976.6	0	1607590	1607590	0	ICE	60627.52	0	2	1
2035	2a	1	8.551261	38.50222	38.50222	0	226.7023	226.7023	0	ICE	8.551261	0	2	2
2035	2a	1	11218.49	50511.46	0	50511.46	298685	0	298685	BEV	0	11218.49	2	3
2035	2a	1	565.638	2546.796	0	2546.796	15157.92	0	15157.92	FCEV	0	565.638	2	7
2035	2a	1	7073.074	31846.66	17897.82	13948.84	186613.8	104877	81736.86	PHEV	3975.068	3098.007	2	8
2035	2a	1	59012.22	269084.5	269084.5	0	1622993	1622993	0	ICE	59012.22	0	2	1
2035	2a	1	8.359869	38.11941	38.11941	0	229.8519	229.8519	0	ICE	8.359869	0	2	2
2035	2a	1	15415	70289.49	0	70289.49	426402	0	426402	BEV	0	15415	2	3
2035	2a	1	904.5707	4124.67	0	4124.67	25197.56	0	25197.56	FCEV	0	904.5707	2	7
2035	2a	1	9069.347	41354.5	22874.94	18479.55	247446.2	136873.1	110573.1	PHEV	5016.644	4052.702	2	8
2035	2a	1	56547.06	261083.4	261083.4	0	1614575	1614575	0	ICE	56547.06	0	2	1

2035	2a	1	8.043102	37.13581	37.13581	0	229.5623	229.5623	0	ICE	8.043102	0	2	2
2035	2a	1	20070.02	92665.28	0	92665.28	577002	0	577002	BEV	0	20070.02	2	3
2035	2a	1	1346.16	6215.354	0	6215.354	38971.57	0	38971.57	FCEV	0	1346.16	2	7
2035	2a	1	11000.52	50790.48	27644.53	23145.95	310783.3	169154.9	141628.4	PHEV	5987.424	5013.092	2	8
2035	2a	1	53743.37	251217.5	251217.5	0	1591571	1591571	0	ICE	53743.37	0	2	1
2035	2a	1	7.644312	35.7325	35.7325	0	226.2772	226.2772	0	ICE	7.644312	0	2	2
2035	2a	1	25362.61	118554.7	0	118554.7	756783.5	0	756783.5	BEV	0	25362.61	2	3
2035	2a	1	1917.395	8962.65	0	8962.65	57554.77	0	57554.77	FCEV	0	1917.395	2	7
2035	2a	1	12925.02	60416.6	32348.78	28067.83	377793.2	202281.3	175511.9	PHEV	6920.427	6004.597	2	8
2035	2a	1	49528.7	234354	234354	0	1521905	1521905	0	ICE	49528.7	0	2	1
2035	2a	1	7.044829	33.33387	33.33387	0	216.3627	216.3627	0	ICE	7.044829	0	2	2
2035	2a	1	30749.12	145495	0	145495	952256.1	0	952256.1	BEV	0	30749.12	2	3
2035	2a	1	2591.004	12259.8	0	12259.8	80644.56	0	80644.56	FCEV	0	2591.004	2	7
2035	2a	1	14535.41	68776.92	36215.96	32560.96	439966.2	231673.6	208292.6	PHEV	7653.933	6881.48	2	8
2035	2a	1	45225.92	216585.6	216585.6	0	1441871	1441871	0	ICE	45225.92	0	2	1
2035	2a	1	6.432812	30.80655	30.80655	0	204.9776	204.9776	0	ICE	6.432812	0	2	2
2035	2a	1	36869.65	176567.6	0	176567.6	1184678	0	1184678	BEV	0	36869.65	2	3
2035	2a	1	3431.342	16432.59	0	16432.59	110722.7	0	110722.7	FCEV	0	3431.342	2	7
2035	2a	1	16122.34	77209.41	39972.41	37236.99	505495.9	261702.4	243793.4	PHEV	8346.766	7775.575	2	8
2035	2a	1	40399.85	195788.2	195788.2	0	1336415	1336415	0	ICE	40399.85	0	2	1
2035	2a	1	5.746365	27.84838	27.84838	0	189.9816	189.9816	0	ICE	5.746365	0	2	2
2035	2a	1	43539.94	211005.9	0	211005.9	1451272	0	1451272	BEV	0	43539.94	2	3
2035	2a	1	4441.732	21525.79	0	21525.79	148580.3	0	148580.3	FCEV	0	4441.732	2	7
2035	2a	1	17555.37	85077.9	43292.5	41785.4	570389.3	290246.7	280142.6	PHEV	8933.177	8622.196	2	8
2035	2a	1	35043.85	171839.3	171839.3	0	1202783	1202783	0	ICE	35043.85	0	2	1
2035	2a	1	4.984542	24.44195	24.44195	0	170.9825	170.9825	0	ICE	4.984542	0	2	2
2035	2a	1	50778.87	248996.7	0	248996.7	1755447	0	1755447	BEV	0	50778.87	2	3
2035	2a	1	5642.097	27666.3	0	27666.3	195633.5	0	195633.5	FCEV	0	5642.097	2	7
2035	2a	1	18806.99	92221.01	46110.5	46110.5	633444.5	316722.2	316722.2	PHEV	9403.494	9403.494	2	8
2035	2a	1	28768.28	142714.8	142714.8	0	1024503	1024503	0	ICE	28768.28	0	2	1
2035	2a	1	4.091923	20.29937	20.29937	0	145.6388	145.6388	0	ICE	4.091923	0	2	2
2035	2a	1	57080.38	283166.6	0	283166.6	2046863	0	2046863	BEV	0	57080.38	2	3
2035	2a	1	7054.878	34998.12	0	34998.12	253595.7	0	253595.7	FCEV	0	7054.878	2	7
2035	2a	1	20253.24	100473.1	50236.54	50236.54	707510.7	353755.4	353755.4	PHEV	10126.62	10126.62	2	8
2035	2a	1	21957.32	110184.7	110184.7	0	811298	811298	0	ICE	21957.32	0	2	1
2035	2a	1	3.123151	15.67238	15.67238	0	115.3313	115.3313	0	ICE	3.123151	0	2	2
2035	2a	1	63151.81	316904	0	316904	2348635	0	2348635	BEV	0	63151.81	2	3
2035	2a	1	8611.61	43214.18	0	43214.18	320895.1	0	320895.1	FCEV	0	8611.61	2	7
2035	2a	1	21435.83	107567.8	53783.88	53783.88	776897.3	388448.6	388448.6	PHEV	10717.91	10717.91	2	8
2035	2a	1	14903.08	75639.4	75639.4	0	571161.5	571161.5	0	ICE	14903.08	0	2	1
2035	2a	1	2.119774	10.75874	10.75874	0	81.19533	81.19533	0	ICE	2.119774	0	2	2
2035	2a	1	69446.7	352471.2	0	352471.2	2677742	0	2677742	BEV	0	69446.7	2	3
2035	2a	1	10377.09	52668.11	0	52668.11	400757.1	0	400757.1	FCEV	0	10377.09	2	7
2035	2a	1	22514.4	114270.1	57135.03	57135.03	846535	423267.5	423267.5	PHEV	11257.2	11257.2	2	8
2035	2a	1	7593.472	38975.09	38975.09	0	301707.7	301707.7	0	ICE	7593.472	0	2	1
2035	2a	1	1.080075	5.543712	5.543712	0	42.8909	42.8909	0	ICE	1.080075	0	2	2
2035	2a	1	76012.64	390150.8	0	390150.8	3037121	0	3037121	BEV	0	76012.64	2	3

2035	2a	1	12374.15	63512.92	0	63512.92	495052.8	0	495052.8	FCEV	0	12374.15	2	7
2035	2a	1	23495.22	120594.2	60297.08	60297.08	916175.6	458087.8	458087.8	PHEV	11747.61	11747.61	2	8
2035	2a	1	74549.56	386912.2	0	386912.2	3084650	0	3084650	BEV	0	74549.56	2	3
2035	2a	1	13155.8	68278.63	0	68278.63	544925.5	0	544925.5	FCEV	0	13155.8	2	7
2035	2a	1	21926.34	113797.7	56898.86	56898.86	886134.4	443067.2	443067.2	PHEV	10963.17	10963.17	2	8
2035	2a	1	4988.035	13314.26	13314.26	0	50820.82	50820.82	0	ICE	4988.035	0	3	1
2035	2a	1	4482.604	12221.95	12221.95	0	46757.58	46757.58	0	ICE	4482.604	0	3	1
2035	2a	1	6003.556	16712.82	16712.82	0	64527.25	64527.25	0	ICE	6003.556	0	3	1
2035	2a	1	6673.073	18958.93	18958.93	0	73821.66	73821.66	0	ICE	6673.073	0	3	1
2035	2a	1	8200.472	23768.25	23768.25	0	93792.25	93792.25	0	ICE	8200.472	0	3	1
2035	2a	1	7774.66	22979.48	22979.48	0	91137.49	91137.49	0	ICE	7774.66	0	3	1
2035	2a	1	11405.14	34363.45	34363.45	0	137792.3	137792.3	0	ICE	11405.14	0	3	1
2035	2a	1	12909.22	39634.79	39634.79	0	160120.6	160120.6	0	ICE	12909.22	0	3	1
2035	2a	1	14392.36	45012.98	45012.98	0	183814.3	183814.3	0	ICE	14392.36	0	3	1
2035	2a	1	19424.16	61863.03	61863.03	0	255751	255751	0	ICE	19424.16	0	3	1
2035	2a	1	18655.85	60484.88	60484.88	0	251421.8	251421.8	0	ICE	18655.85	0	3	1
2035	2a	1	18258.44	60242.44	60242.44	0	254419.2	254419.2	0	ICE	18258.44	0	3	1
2035	2a	1	20716.74	69540.3	69540.3	0	296856	296856	0	ICE	20716.74	0	3	1
2035	2a	1	24794.25	84647.81	84647.81	0	365760.9	365760.9	0	ICE	24794.25	0	3	1
2035	2a	1	27897.83	96841.72	96841.72	0	422278	422278	0	ICE	27897.83	0	3	1
2035	2a	1	26623.03	93941.77	93941.77	0	413120.8	413120.8	0	ICE	26623.03	0	3	1
2035	2a	1	28044.73	100565	100565	0	445834.7	445834.7	0	ICE	28044.73	0	3	1
2035	2a	1	22504.95	81989.36	81989.36	0	368076.9	368076.9	0	ICE	22504.95	0	3	1
2035	2a	1	14609.76	54062.82	54062.82	0	245542.8	245542.8	0	ICE	14609.76	0	3	1
2035	2a	1	27024.11	101549.9	101549.9	0	467482.9	467482.9	0	ICE	27024.11	0	3	1
2035	2a	1	38607.48	147289.1	147289.1	0	687801.8	687801.8	0	ICE	38607.48	0	3	1
2035	2a	1	40488.42	156784.5	156784.5	0	744170.5	744170.5	0	ICE	40488.42	0	3	1
2035	2a	1	60487.59	237693.3	237693.3	0	1141564	1141564	0	ICE	60487.59	0	3	1
2035	2a	1	62676.29	249884.7	249884.7	0	1224442	1224442	0	ICE	62676.29	0	3	1
2035	2a	1	666.9633	2659.123	2659.123	0	12741.31	12741.31	0	ICE	666.9633	0	3	2
2035	2a	1	84664.11	342398.6	342398.6	0	1705882	1705882	0	ICE	84664.11	0	3	1
2035	2a	1	94804.74	388840.7	388840.7	0	1969866	1969866	0	ICE	94804.74	0	3	1
2035	2a	1	677.8239	2780.088	2780.088	0	14168.08	14168.08	0	ICE	677.8239	0	3	2
2035	2a	1	120612.6	501601.2	501601.2	0	2581439	2581439	0	ICE	120612.6	0	3	1
2035	2a	1	1232.795	5126.924	5126.924	0	26470.93	26470.93	0	ICE	1232.795	0	3	2
2035	2a	1	141088.3	594838.1	594838.1	0	3122004	3122004	0	ICE	141088.3	0	3	1
2035	2a	1	1442.08	6079.91	6079.91	0	32011.71	32011.71	0	ICE	1442.08	0	3	2
2035	2a	1	486.7743	2052.274	1231.365	820.9098	10824.93	6494.956	4329.971	PHEV	292.0646	194.7097	3	8
2035	2a	1	159349.5	680957.9	680957.9	0	3658539	3658539	0	ICE	159349.5	0	3	1
2035	2a	1	1624.625	6942.606	6942.606	0	37396.37	37396.37	0	ICE	1624.625	0	3	2
2035	2a	1	1879.327	8031.041	0	8031.041	32916.47	0	32916.47	BEV	0	1879.327	3	3
2035	2a	1	43.96087	187.8606	0	187.8606	690.1706	0	690.1706	FCEV	0	43.96087	3	7
2035	2a	1	1632.307	6975.434	4145.401	2830.033	37553.75	22317.65	15236.09	PHEV	970.0566	662.2502	3	8
2035	2a	1	178298.7	772149.2	772149.2	0	4233975	4233975	0	ICE	178298.7	0	3	1
2035	2a	1	1821.951	7890.231	7890.231	0	43382.67	43382.67	0	ICE	1821.951	0	3	2
2035	2a	1	4272.932	18504.57	0	18504.57	90477.58	0	90477.58	BEV	0	4272.932	3	3
2035	2a	1	112.7753	488.3905	0	488.3905	1848.821	0	1848.821	FCEV	0	112.7753	3	7

2035	2a	1	3083.695	13354.4	7860.02	5494.383	73426.2	43216.56	30209.64	PHEV	1814.975	1268.72	3	8
2035	2a	1	185687.3	814784.6	814784.6	0	4561802	4561802	0	ICE	185687.3	0	3	1
2035	2a	1	1926.137	8451.773	8451.773	0	47516.61	47516.61	0	ICE	1926.137	0	3	2
2035	2a	1	12682.14	55648.47	0	55648.47	268686.2	0	268686.2	BEV	0	12682.14	3	3
2035	2a	1	434.7306	1907.572	0	1907.572	7438.246	0	7438.246	FCEV	0	434.7306	3	7
2035	2a	1	8619.928	37823.73	21926.96	15896.77	235856.4	136729.3	99127.06	PHEV	4997.096	3622.833	3	8
2035	2a	1	189958.9	844411.2	844411.2	0	4833923	4833923	0	ICE	189958.9	0	3	1
2035	2a	1	1979.719	8800.305	8800.305	0	50617.62	50617.62	0	ICE	1979.719	0	3	2
2035	2a	1	23018.08	102320.7	0	102320.7	504541.9	0	504541.9	BEV	0	23018.08	3	3
2035	2a	1	973.3672	4326.841	0	4326.841	17371.31	0	17371.31	FCEV	0	973.3672	3	7
2035	2a	1	14721.6	65440.89	37357.4	28083.49	432989.9	247175.4	185814.5	PHEV	8403.929	6317.668	3	8
2035	2a	1	188749.4	849847.9	849847.9	0	4977982	4977982	0	ICE	188749.4	0	3	1
2035	2a	1	1977.743	8904.827	8904.827	0	52434.57	52434.57	0	ICE	1977.743	0	3	2
2035	2a	1	34856.54	156942.2	0	156942.2	798138.1	0	798138.1	BEV	0	34856.54	3	3
2035	2a	1	1757.472	7913.054	0	7913.054	32909.47	0	32909.47	FCEV	0	1757.472	3	7
2035	2a	1	20954.33	94347.28	53023.17	41324.11	648769.1	364608.2	284160.9	PHEV	11776.33	9177.996	3	8
2035	2a	1	186418.8	850034.2	850034.2	0	5097398	5097398	0	ICE	186418.8	0	3	1
2035	2a	1	1963.128	8951.492	8951.492	0	53988.92	53988.92	0	ICE	1963.128	0	3	2
2035	2a	1	48770.55	222384.4	0	222384.4	1166016	0	1166016	BEV	0	48770.55	3	3
2035	2a	1	2861.914	13049.78	0	13049.78	59019.91	0	59019.91	FCEV	0	2861.914	3	7
2035	2a	1	27522.76	125498.5	69418.62	56079.92	891591.6	493177.5	398414.1	PHEV	15224.02	12298.74	3	8
2035	2a	1	179843.1	830353.7	830353.7	0	5102543	5102543	0	ICE	179843.1	0	3	1
2035	2a	1	1902.674	8784.838	8784.838	0	54321.83	54321.83	0	ICE	1902.674	0	3	2
2035	2a	1	64020.02	295586.8	0	295586.8	1599402	0	1599402	BEV	0	64020.02	3	3
2035	2a	1	4294.026	19825.95	0	19825.95	95514.06	0	95514.06	FCEV	0	4294.026	3	7
2035	2a	1	33864.05	156353.7	85101.09	71252.61	1146619	624088.1	522530.5	PHEV	18431.72	15432.33	3	8
2035	2a	1	171544.8	801867.2	801867.2	0	5048312	5048312	0	ICE	171544.8	0	3	1
2035	2a	1	1814.881	8483.462	8483.462	0	53741.82	53741.82	0	ICE	1814.881	0	3	2
2035	2a	1	81217.54	379642.5	0	379642.5	2120603	0	2120603	BEV	0	81217.54	3	3
2035	2a	1	6139.986	28700.69	0	28700.69	147446.8	0	147446.8	FCEV	0	6139.986	3	7
2035	2a	1	40197.3	187897.9	100605.9	87291.98	1423052	761942.7	661109.3	PHEV	21522.78	18674.52	3	8
2035	2a	1	158322.4	749131	749131	0	4834296	4834296	0	ICE	158322.4	0	3	1
2035	2a	1	1674.993	7925.531	7925.531	0	51461.68	51461.68	0	ICE	1674.993	0	3	2
2035	2a	1	98575.34	466427	0	466427	2689587	0	2689587	BEV	0	98575.34	3	3
2035	2a	1	8306.225	39302.4	0	39302.4	212781	0	212781	FCEV	0	8306.225	3	7
2035	2a	1	45556.62	215559.4	113507.4	102052	1685190	887373	797817.2	PHEV	23988.82	21567.81	3	8
2035	2a	1	143724.6	688292.9	688292.9	0	4553548	4553548	0	ICE	143724.6	0	3	1
2035	2a	1	1520.554	7281.887	7281.887	0	48471.83	48471.83	0	ICE	1520.554	0	3	2
2035	2a	1	117421.3	562327.2	0	562327.2	3346860	0	3346860	BEV	0	117421.3	3	3
2035	2a	1	10928.03	52334.01	0	52334.01	296555	0	296555	FCEV	0	10928.03	3	7
2035	2a	1	50551.9	242091.5	125334.2	116757.3	1952763	1010973	941789.9	PHEV	26171.44	24380.46	3	8
2035	2a	1	126687.2	613959.2	613959.2	0	4165197	4165197	0	ICE	126687.2	0	3	1
2035	2a	1	1340.304	6495.463	6495.463	0	44337.16	44337.16	0	ICE	1340.304	0	3	2
2035	2a	1	136697.1	662469.5	0	662469.5	4069717	0	4069717	BEV	0	136697.1	3	3
2035	2a	1	13945.17	67581.9	0	67581.9	399204.4	0	399204.4	FCEV	0	13945.17	3	7
2035	2a	1	54671.95	264954.5	134824	130130.5	2204932	1121995	1082936	PHEV	27820.21	26851.74	3	8
2035	2a	1	108906	534025.9	534025.9	0	3715323	3715323	0	ICE	108906	0	3	1

2035	2a	1	1152.185	5649.798	5649.798	0	39548.02	39548.02	0	ICE	1152.185	0	3	2
2035	2a	1	157820.6	773881.1	0	773881.1	4906403	0	4906403	BEV	0	157820.6	3	3
2035	2a	1	17535.62	85986.79	0	85986.79	528010.3	0	528010.3	FCEV	0	17535.62	3	7
2035	2a	1	58452.07	286622.6	143311.3	143311.3	2460317	1230159	1230159	PHEV	29226.03	29226.03	3	8
2035	2a	1	89338.92	443196.1	443196.1	0	3162335	3162335	0	ICE	89338.92	0	3	1
2035	2a	1	945.173	4688.852	4688.852	0	33661.66	33661.66	0	ICE	945.173	0	3	2
2035	2a	1	177434	880221.9	0	880221.9	5744182	0	5744182	BEV	0	177434	3	3
2035	2a	1	21930.05	108791.5	0	108791.5	691988.5	0	691988.5	FCEV	0	21930.05	3	7
2035	2a	1	62957.08	312320	156160	156160	2762446	1381223	1381223	PHEV	31478.54	31478.54	3	8
2035	2a	1	68391.8	343199	343199	0	2511179	2511179	0	ICE	68391.8	0	3	1
2035	2a	1	723.5602	3630.919	3630.919	0	26730.51	26730.51	0	ICE	723.5602	0	3	2
2035	2a	1	197040.8	988776.1	0	988776.1	6640343	0	6640343	BEV	0	197040.8	3	3
2035	2a	1	26869.19	134833.1	0	134833.1	886771	0	886771	FCEV	0	26869.19	3	7
2035	2a	1	66882.19	335623.5	167811.8	167811.8	3058169	1529085	1529085	PHEV	33441.1	33441.1	3	8
2035	2a	1	47023.09	238661.9	238661.9	0	1790758	1790758	0	ICE	47023.09	0	3	1
2035	2a	1	497.487	2524.956	2524.956	0	19062.08	19062.08	0	ICE	497.487	0	3	2
2035	2a	1	219638	1114755	0	1114755	7703795	0	7703795	BEV	0	219638	3	3
2035	2a	1	32819.47	166572.6	0	166572.6	1131426	0	1131426	FCEV	0	32819.47	3	7
2035	2a	1	71205.95	361400.1	180700.1	180700.1	3392314	1696157	1696157	PHEV	35602.98	35602.98	3	8
2035	2a	1	24258.74	124513.1	124513.1	0	957777.8	957777.8	0	ICE	24258.74	0	3	1
2035	2a	1	256.6486	1317.303	1317.303	0	10195.38	10195.38	0	ICE	256.6486	0	3	2
2035	2a	1	243541	1250025	0	1250025	8886856	0	8886856	BEV	0	243541	3	3
2035	2a	1	39646.21	203492.5	0	203492.5	1425969	0	1425969	FCEV	0	39646.21	3	7
2035	2a	1	75277.62	386378.2	193189.1	193189.1	3734615	1867307	1867307	PHEV	37638.81	37638.81	3	8
2035	2a	1	237265.3	1231407	0	1231407	8999004	0	8999004	BEV	0	237265.3	3	3
2035	2a	1	41870.35	217307.1	0	217307.1	1568882	0	1568882	FCEV	0	41870.35	3	7
2035	2a	1	69783.92	362178.5	181089.3	181089.3	3600147	1800074	1800074	PHEV	34891.96	34891.96	3	8
2035	2a	1	3037.171	8106.939	8106.939	0	26658.95	26658.95	0	ICE	3037.171	0	4	1
2035	2a	1	3673.722	10016.51	10016.51	0	33051.02	33051.02	0	ICE	3673.722	0	4	1
2035	2a	1	3895.988	10845.73	10845.73	0	36774.49	36774.49	0	ICE	3895.988	0	4	1
2035	2a	1	5896.977	16753.96	16753.96	0	57444.01	57444.01	0	ICE	5896.977	0	4	1
2035	2a	1	6296.181	18248.85	18248.85	0	63729.25	63729.25	0	ICE	6296.181	0	4	1
2035	2a	1	5530.272	16345.77	16345.77	0	57708.04	57708.04	0	ICE	5530.272	0	4	1
2035	2a	1	7204.794	21707.9	21707.9	0	78509.61	78509.61	0	ICE	7204.794	0	4	1
2035	2a	1	7889.189	24221.94	24221.94	0	89016.44	89016.44	0	ICE	7889.189	0	4	1
2035	2a	1	12881.89	40288.89	40288.89	0	151475.6	151475.6	0	ICE	12881.89	0	4	1
2035	2a	1	14643.54	46637.47	46637.47	0	177975.1	177975.1	0	ICE	14643.54	0	4	1
2035	2a	1	19124.33	62003.74	62003.74	0	240095.1	240095.1	0	ICE	19124.33	0	4	1
2035	2a	1	21.94452	71.1472	71.1472	0	242.4768	242.4768	0	ICE	21.94452	0	4	2
2035	2a	1	23244.59	76693.91	76693.91	0	303155	303155	0	ICE	23244.59	0	4	1
2035	2a	1	25865.35	86822.75	86822.75	0	351538.1	351538.1	0	ICE	25865.35	0	4	1
2035	2a	1	29000.84	99009.14	99009.14	0	405510.3	405510.3	0	ICE	29000.84	0	4	1
2035	2a	1	44.48152	151.8604	151.8604	0	563.2469	563.2469	0	ICE	44.48152	0	4	2
2035	2a	1	28450.12	98758.9	98758.9	0	407133.3	407133.3	0	ICE	28450.12	0	4	1
2035	2a	1	29085.23	102629.9	102629.9	0	430178.8	430178.8	0	ICE	29085.23	0	4	1
2035	2a	1	30711.46	110127.6	110127.6	0	468251.5	468251.5	0	ICE	30711.46	0	4	1
2035	2a	1	24216.83	88226.02	88226.02	0	380986.9	380986.9	0	ICE	24216.83	0	4	1

2035	2a	1	10832.33	40084.62	40084.62	0	175208	175208	0	ICE	10832.33	0	4	1
2035	2a	1	16975.62	63790.15	63790.15	0	282581.2	282581.2	0	ICE	16975.62	0	4	1
2035	2a	1	26851.68	102440.2	102440.2	0	460422.7	460422.7	0	ICE	26851.68	0	4	1
2035	2a	1	763.7601	2913.775	2913.775	0	12771.63	12771.63	0	ICE	763.7601	0	4	2
2035	2a	1	29545.63	114410.4	114410.4	0	521958.3	521958.3	0	ICE	29545.63	0	4	1
2035	2a	1	36103.34	141872.4	141872.4	0	657502.4	657502.4	0	ICE	36103.34	0	4	1
2035	2a	1	772.0582	3033.895	3033.895	0	13850.87	13850.87	0	ICE	772.0582	0	4	2
2035	2a	1	61062.41	243450.3	243450.3	0	1151741	1151741	0	ICE	61062.41	0	4	1
2035	2a	1	1918.746	7649.869	7649.869	0	35631.97	35631.97	0	ICE	1918.746	0	4	2
2035	2a	1	71916.58	290845	290845	0	1408438	1408438	0	ICE	71916.58	0	4	1
2035	2a	1	83767.96	343573.5	343573.5	0	1699341	1699341	0	ICE	83767.96	0	4	1
2035	2a	1	81152.75	337496.4	337496.4	0	1698215	1698215	0	ICE	81152.75	0	4	1
2035	2a	1	2829.81	11768.56	11768.56	0	59258.62	59258.62	0	ICE	2829.81	0	4	2
2035	2a	1	678.9471	2823.591	1694.155	1129.437	13491.41	8094.849	5396.566	PHEV	407.3682	271.5788	4	8
2035	2a	1	92582	390332.2	390332.2	0	2006553	2006553	0	ICE	92582	0	4	1
2035	2a	1	3228.349	13610.95	13610.95	0	70016.93	70016.93	0	ICE	3228.349	0	4	2
2035	2a	1	1.619535	6.828071	0	6.828071	24.31957	0	24.31957	BEV	0	1.619535	4	3
2035	2a	1	0.033052	0.139348	0	0.139348	0.496318	0	0.496318	FCEV	0	0.033052	4	7
2035	2a	1	1981.864	8355.678	5013.407	3342.271	42126.14	25275.68	16850.46	PHEV	1189.119	792.7457	4	8
2035	2a	1	103449.6	442077.6	442077.6	0	2321529	2321529	0	ICE	103449.6	0	4	1
2035	2a	1	3641.361	15560.85	15560.85	0	81844.14	81844.14	0	ICE	3641.361	0	4	2
2035	2a	1	886.8183	3789.694	0	3789.694	14525.24	0	14525.24	BEV	0	886.8183	4	3
2035	2a	1	20.74429	88.64781	0	88.64781	325.5207	0	325.5207	FCEV	0	20.74429	4	7
2035	2a	1	2307.319	9860.003	5859.659	4000.344	53931.45	32050.69	21880.76	PHEV	1371.206	936.1121	4	8
2035	2a	1	113722.8	492493.5	492493.5	0	2642196	2642196	0	ICE	113722.8	0	4	1
2035	2a	1	4065.747	17607.33	17607.33	0	94749.64	94749.64	0	ICE	4065.747	0	4	2
2035	2a	1	1961.008	8492.438	0	8492.438	36454.87	0	36454.87	BEV	0	1961.008	4	3
2035	2a	1	51.7568	224.1406	0	224.1406	848.2082	0	848.2082	FCEV	0	51.7568	4	7
2035	2a	1	2640.979	11437.16	6731.583	4705.573	62792.4	36957.81	25834.59	PHEV	1554.405	1086.574	4	8
2035	2a	1	116141.8	509623.5	509623.5	0	2795638	2795638	0	ICE	116141.8	0	4	1
2035	2a	1	4225.596	18541.66	18541.66	0	102188.9	102188.9	0	ICE	4225.596	0	4	2
2035	2a	1	6146.338	26969.76	0	26969.76	118840.5	0	118840.5	BEV	0	6146.338	4	3
2035	2a	1	210.6901	924.4955	0	924.4955	3603.903	0	3603.903	FCEV	0	210.6901	4	7
2035	2a	1	7335.97	32189.79	18660.88	13528.91	192250.4	111450.3	80800.08	PHEV	4252.766	3083.203	4	8
2035	2a	1	116975.1	519981.2	519981.2	0	2920277	2920277	0	ICE	116975.1	0	4	1
2035	2a	1	4279.257	19022.28	19022.28	0	107402.1	107402.1	0	ICE	4279.257	0	4	2
2035	2a	1	11507.83	51154.96	0	51154.96	234976.5	0	234976.5	BEV	0	11507.83	4	3
2035	2a	1	486.6326	2163.194	0	2163.194	8682.709	0	8682.709	FCEV	0	486.6326	4	7
2035	2a	1	12187.75	54177.37	30927.54	23249.83	339879.8	194022.8	145857	PHEV	6957.466	5230.287	4	8
2035	2a	1	115362.1	519420	519420	0	2988001	2988001	0	ICE	115362.1	0	4	1
2035	2a	1	4246.813	19121.36	19121.36	0	110649.5	110649.5	0	ICE	4246.813	0	4	2
2035	2a	1	17991.34	81006.38	0	81006.38	387963.5	0	387963.5	BEV	0	17991.34	4	3
2035	2a	1	907.1265	4084.355	0	4084.355	16872.79	0	16872.79	FCEV	0	907.1265	4	7
2035	2a	1	16910.83	76141.36	42791.45	33349.92	497185.9	279418.5	217767.4	PHEV	9503.888	7406.945	4	8
2035	2a	1	113207.3	516203.7	516203.7	0	3042954	3042954	0	ICE	113207.3	0	4	1
2035	2a	1	4191.838	19113.98	19113.98	0	113408.1	113408.1	0	ICE	4191.838	0	4	2
2035	2a	1	25904.28	118118.6	0	118118.6	589207.7	0	589207.7	BEV	0	25904.28	4	3

2035	2a	1	1520.094	6931.339	0	6931.339	29483.47	0	29483.47	FCEV	0	1520.094	4	7
2035	2a	1	21591.26	98452.02	54458.03	43993.99	667366.8	369149.2	298217.6	PHEV	11943.05	9648.207	4	8
2035	2a	1	109200	504187.4	504187.4	0	3048273	3048273	0	ICE	109200	0	4	1
2035	2a	1	4065.287	18769.83	18769.83	0	114286.7	114286.7	0	ICE	4065.287	0	4	2
2035	2a	1	35098.8	162054.7	0	162054.7	840661.8	0	840661.8	BEV	0	35098.8	4	3
2035	2a	1	2354.188	10869.52	0	10869.52	49711.49	0	49711.49	FCEV	0	2354.188	4	7
2035	2a	1	25892.21	119546.9	65067.69	54479.25	840030.4	457216.6	382813.9	PHEV	14092.76	11799.45	4	8
2035	2a	1	104868.8	490197.7	490197.7	0	3038682	3038682	0	ICE	104868.8	0	4	1
2035	2a	1	3904.045	18249.03	18249.03	0	113921.9	113921.9	0	ICE	3904.045	0	4	2
2035	2a	1	46150.47	215725.3	0	215725.3	1163940	0	1163940	BEV	0	46150.47	4	3
2035	2a	1	3488.942	16308.67	0	16308.67	80311.46	0	80311.46	FCEV	0	3488.942	4	7
2035	2a	1	30038.39	140411.2	75180.15	65231.02	1022932	547706.9	475224.9	PHEV	16083.41	13954.98	4	8
2035	2a	1	96970.4	458832.9	458832.9	0	2917547	2917547	0	ICE	96970.4	0	4	1
2035	2a	1	3610.004	17081.38	17081.38	0	109377.2	109377.2	0	ICE	3610.004	0	4	2
2035	2a	1	57644.52	272755.4	0	272755.4	1529729	0	1529729	BEV	0	57644.52	4	3
2035	2a	1	4857.283	22983.11	0	22983.11	120285.6	0	120285.6	FCEV	0	4857.283	4	7
2035	2a	1	32957.04	155942.2	82114.7	73827.48	1177444	620008.6	557435.8	PHEV	17354.24	15602.81	4	8
2035	2a	1	89088.05	426640	426640	0	2782581	2782581	0	ICE	89088.05	0	4	1
2035	2a	1	3316.56	15882.91	15882.91	0	104315.1	104315.1	0	ICE	3316.56	0	4	2
2035	2a	1	71238.8	341160.5	0	341160.5	1987693	0	1987693	BEV	0	71238.8	4	3
2035	2a	1	6629.969	31750.72	0	31750.72	175259.8	0	175259.8	FCEV	0	6629.969	4	7
2035	2a	1	35559.74	170294.5	88163.9	82130.61	1331514	689343.6	642170	PHEV	18409.78	17149.95	4	8
2035	2a	1	79412.66	384854.4	384854.4	0	2574760	2574760	0	ICE	79412.66	0	4	1
2035	2a	1	2956.366	14327.32	14327.32	0	96522.81	96522.81	0	ICE	2956.366	0	4	2
2035	2a	1	85830.01	415954.5	0	415954.5	2516792	0	2516792	BEV	0	85830.01	4	3
2035	2a	1	8755.958	42433.65	0	42433.65	245885.1	0	245885.1	FCEV	0	8755.958	4	7
2035	2a	1	37103.43	179812.9	91499.06	88313.81	1455030	740402.2	714627.4	PHEV	18880.35	18223.08	4	8
2035	2a	1	69070.34	338689.8	338689.8	0	2323931	2323931	0	ICE	69070.34	0	4	1
2035	2a	1	2571.343	12608.71	12608.71	0	87118.98	87118.98	0	ICE	2571.343	0	4	2
2035	2a	1	102448.1	502359.2	0	502359.2	3155471	0	3155471	BEV	0	102448.1	4	3
2035	2a	1	11383.12	55817.69	0	55817.69	338453.6	0	338453.6	FCEV	0	11383.12	4	7
2035	2a	1	37943.73	186059	93029.48	93029.48	1556544	778271.8	778271.8	PHEV	18971.86	18971.86	4	8
2035	2a	1	56628.34	280924.1	280924.1	0	1976986	1976986	0	ICE	56628.34	0	4	1
2035	2a	1	2108.154	10458.21	10458.21	0	74112.72	74112.72	0	ICE	2108.154	0	4	2
2035	2a	1	115142.1	571201.3	0	571201.3	3692439	0	3692439	BEV	0	115142.1	4	3
2035	2a	1	14231.04	70597.92	0	70597.92	443649.1	0	443649.1	FCEV	0	14231.04	4	7
2035	2a	1	40854.66	202673.4	101336.7	101336.7	1747286	873643.1	873643.1	PHEV	20427.33	20427.33	4	8
2035	2a	1	43577.05	218675.3	218675.3	0	1577969	1577969	0	ICE	43577.05	0	4	1
2035	2a	1	1622.282	8140.821	8140.821	0	59154.54	59154.54	0	ICE	1622.282	0	4	2
2035	2a	1	128558.6	645123.5	0	645123.5	4290708	0	4290708	BEV	0	128558.6	4	3
2035	2a	1	17530.71	87971.39	0	87971.39	571783.4	0	571783.4	FCEV	0	17530.71	4	7
2035	2a	1	43637.05	218976.4	109488.2	109488.2	1944439	972219.7	972219.7	PHEV	21818.53	21818.53	4	8
2035	2a	1	29979.83	152160.2	152160.2	0	1125221	1125221	0	ICE	29979.83	0	4	1
2035	2a	1	1116.086	5664.605	5664.605	0	42181.94	42181.94	0	ICE	1116.086	0	4	2
2035	2a	1	143413.8	727885.4	0	727885.4	4978496	0	4978496	BEV	0	143413.8	4	3
2035	2a	1	21429.65	108764.5	0	108764.5	729932.6	0	729932.6	FCEV	0	21429.65	4	7
2035	2a	1	46494.32	235978.2	117989.1	117989.1	2156142	1078071	1078071	PHEV	23247.16	23247.16	4	8

2035	2a	1	15334.5	78707.54	78707.54	0	596337.4	596337.4	0	ICE	15334.5	0	4	1
2035	2a	1	570.8711	2930.116	2930.116	0	22355.37	22355.37	0	ICE	570.8711	0	4	2
2035	2a	1	157689.7	809375.3	0	809375.3	5691376	0	5691376	BEV	0	157689.7	4	3
2035	2a	1	25670.41	131758.8	0	131758.8	911967.9	0	911967.9	FCEV	0	25670.41	4	7
2035	2a	1	48741.28	250174.9	125087.4	125087.4	2351355	1175677	1175677	PHEV	24370.64	24370.64	4	8
2035	2a	1	147110.3	763502.6	0	763502.6	5507405	0	5507405	BEV	0	147110.3	4	3
2035	2a	1	25960.65	134735.7	0	134735.7	959131.2	0	959131.2	FCEV	0	25960.65	4	7
2035	2a	1	43267.74	224559.6	112279.8	112279.8	2161735	1080868	1080868	PHEV	21633.87	21633.87	4	8
2035	2a	1	53.72462	143.4039	143.4039	0	230.1119	230.1119	0	ICE	53.72462	0	1	2
2035	2a	1	27.4418	74.8209	74.8209	0	116.5509	116.5509	0	ICE	27.4418	0	1	2
2035	2a	1	14.91979	41.534	41.534	0	67.77681	67.77681	0	ICE	14.91979	0	1	2
2035	2a	1	31.14229	93.8311	93.8311	0	202.8468	202.8468	0	ICE	31.14229	0	1	2
2035	2a	1	40.8757	130.183	130.183	0	339.2377	339.2377	0	ICE	40.8757	0	1	2
2035	2a	1	6.273111	20.3383	0	20.3383	60.96194	0	60.96194	BEV	0	6.273111	1	3
2035	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2035	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2035	2a	1	97.3715	321.2704	321.2704	0	890.0295	890.0295	0	ICE	97.3715	0	1	2
2035	2a	1	131.6737	441.9916	441.9916	0	1281.745	1281.745	0	ICE	131.6737	0	1	2
2035	2a	1	47.6762	162.767	162.767	0	508.0568	508.0568	0	ICE	47.6762	0	1	2
2035	2a	1	91.14346	316.3863	316.3863	0	1000.578	1000.578	0	ICE	91.14346	0	1	2
2035	2a	1	307.8405	1139.152	1139.152	0	4160.606	4160.606	0	ICE	307.8405	0	1	2
2035	2a	1	1162.929	4503.243	4503.243	0	18334.41	18334.41	0	ICE	1162.929	0	1	2
2035	2a	1	1907.103	7494.19	7494.19	0	31851.42	31851.42	0	ICE	1907.103	0	1	2
2035	2a	1	1707.174	6708.544	0	6708.544	28921.49	0	28921.49	BEV	0	1707.174	1	3
2035	2a	1	0.100298	0.394133	0	0.394133	1.699165	0	1.699165	FCEV	0	0.100298	1	7
2035	2a	1	1784.403	7012.027	4207.216	2804.811	28680.89	17208.54	11472.36	PHEV	1070.642	713.7613	1	8
2035	2a	1	2438.813	9723.329	0	9723.329	43353.25	0	43353.25	BEV	0	2438.813	1	3
2035	2a	1	0.341714	1.362383	0	1.362383	6.074436	0	6.074436	FCEV	0	0.341714	1	7
2035	2a	1	3079.185	12276.43	7365.861	4910.574	52012.02	31207.21	20804.81	PHEV	1847.511	1231.674	1	8
2035	2a	1	2600.342	10516.3	10516.3	0	48397.13	48397.13	0	ICE	2600.342	0	1	2
2035	2a	1	6529.734	26407.55	0	26407.55	122175.1	0	122175.1	BEV	0	6529.734	1	3
2035	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2035	2a	1	3105.064	12557.5	7534.5	5023	55230.01	33138	22092	PHEV	1863.038	1242.026	1	8
2035	2a	1	5098.507	17406.36	17406.36	0	75768.94	75768.94	0	ICE	5098.507	0	2	1
2035	2a	1	11818.46	45764.99	45764.99	0	218794.2	218794.2	0	ICE	11818.46	0	2	1
2035	2a	1	18179.98	71440.41	71440.41	0	346991	346991	0	ICE	18179.98	0	2	1
2035	2a	1	23627.36	94200.15	94200.15	0	462670.3	462670.3	0	ICE	23627.36	0	2	1
2035	2a	1	7.724836	28.14289	28.14289	0	122.688	122.688	0	ICE	7.724836	0	3	2
2035	2a	1	268.4807	1039.646	1039.646	0	4833.391	4833.391	0	ICE	268.4807	0	3	2
2035	2a	1	218.1398	857.2064	857.2064	0	4020.067	4020.067	0	ICE	218.1398	0	3	2
2035	2a	1	1082.953	4379.678	4379.678	0	21515.89	21515.89	0	ICE	1082.953	0	3	2
2035	2a	1	1273.775	5224.376	0	5224.376	17152.64	0	17152.64	BEV	0	1273.775	3	3
2035	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2035	2a	1	115.9229	475.4567	285.274	190.1827	2303.454	1382.072	921.3814	PHEV	69.55375	46.36916	3	8
2035	2a	1	23.70491	67.34825	67.34825	0	212.7554	212.7554	0	ICE	23.70491	0	4	2
2035	2a	1	14.22828	44.49979	44.49979	0	138.765	138.765	0	ICE	14.22828	0	4	2
2035	2a	1	77.22241	268.0621	268.0621	0	1047.53	1047.53	0	ICE	77.22241	0	4	2

2035	2a	1	110.2653	389.0811	389.0811	0	1545.841	1545.841	0	ICE	110.2653	0	4	2
2035	2a	1	156.467	561.0718	561.0718	0	2330.853	2330.853	0	ICE	156.467	0	4	2
2035	2a	1	118.3406	431.1348	431.1348	0	1827.118	1827.118	0	ICE	118.3406	0	4	2
2035	2a	1	170.9408	632.5595	632.5595	0	2702.332	2702.332	0	ICE	170.9408	0	4	2
2035	2a	1	1449.638	5613.478	5613.478	0	25123.08	25123.08	0	ICE	1449.638	0	4	2
2035	2a	1	4050.018	16379.08	16379.08	0	78438.08	78438.08	0	ICE	4050.018	0	4	2
2035	2a	1	2775.195	11382.43	11382.43	0	56242.94	56242.94	0	ICE	2775.195	0	4	2
2035	2a	1	52.85563	165.3091	165.3091	0	398.837	398.837	0	ICE	52.85563	0	1	2
2035	2a	1	3.24704	11.27145	0	11.27145	37.79617	0	37.79617	BEV	0	3.24704	1	3
2035	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2035	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2035	2a	1	314.6892	1218.58	0	1218.58	5089.042	0	5089.042	BEV	0	314.6892	1	3
2035	2a	1	1.189252	4.605175	0	4.605175	19.23216	0	19.23216	FCEV	0	1.189252	1	7
2035	2a	1	661.4882	2561.5	1536.9	1024.6	10116.87	6070.121	4046.748	PHEV	396.8929	264.5953	1	8
2035	2a	1	4884.251	20032.71	0	20032.71	95826.22	0	95826.22	BEV	0	4884.251	1	3
2035	2a	1	148.7047	609.9109	0	609.9109	2917.501	0	2917.501	FCEV	0	148.7047	1	7
2035	2a	1	3512.43	14406.2	8643.717	5762.478	65858.02	39514.81	26343.21	PHEV	2107.458	1404.972	1	8
2035	2a	1	2.527829	7.181841	7.181841	0	22.64984	22.64984	0	ICE	2.527829	0	2	2
2035	2a	1	1.490403	4.319784	4.319784	0	13.5759	13.5759	0	ICE	1.490403	0	2	2
2035	2a	1	3.04439	9.347099	9.347099	0	35.32465	35.32465	0	ICE	3.04439	0	2	2
2035	2a	1	26.28701	91.25009	91.25009	0	379.2692	379.2692	0	ICE	26.28701	0	3	2
2035	2a	1	29.96951	105.7501	105.7501	0	454.7151	454.7151	0	ICE	29.96951	0	3	2
2035	2a	1	11.81695	36.28124	36.28124	0	109.5675	109.5675	0	ICE	11.81695	0	4	2
2035	2a	1	26.11658	87.66605	87.66605	0	329.474	329.474	0	ICE	26.11658	0	4	2
2035	2a	1	323.1597	1214.353	1214.353	0	5252.695	5252.695	0	ICE	323.1597	0	4	2
2035	2a	1	51.20266	148.4058	148.4058	0	288.4323	288.4323	0	ICE	51.20266	0	1	2
2035	2a	1	37.54884	110.9827	110.9827	0	230.2841	230.2841	0	ICE	37.54884	0	1	2
2035	2a	1	54.65001	167.7903	167.7903	0	398.1472	398.1472	0	ICE	54.65001	0	1	2
2035	2a	1	12.0921	39.89704	0	39.89704	122.9632	0	122.9632	BEV	0	12.0921	1	3
2035	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2035	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2035	2a	1	342.1274	1305.23	0	1305.23	5290.677	0	5290.677	BEV	0	342.1274	1	3
2035	2a	1	3.380164	12.89546	0	12.89546	52.27104	0	52.27104	FCEV	0	3.380164	1	7
2035	2a	1	95.10138	362.8156	217.6893	145.1262	1378.118	826.871	551.2473	PHEV	57.06083	38.04055	1	8
2035	2a	1	406.5058	1667.28	1667.28	0	7808.909	7808.909	0	ICE	406.5058	0	1	2
2035	2a	1	236.6453	943.4836	0	943.4836	4196.184	0	4196.184	BEV	0	236.6453	2	3
2035	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2035	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2035	2a	1	0.759631	2.027637	2.027637	0	7.805935	7.805935	0	ICE	0.759631	0	3	2
2035	2a	1	18.22058	50.72281	50.72281	0	146.319	146.319	0	ICE	18.22058	0	4	2
2035	2a	1	27.18466	78.79202	78.79202	0	244.3726	244.3726	0	ICE	27.18466	0	4	2
2035	2a	1	25.20581	74.50056	74.50056	0	227.2254	227.2254	0	ICE	25.20581	0	4	2
2035	2a	1	23.37169	85.14706	85.14706	0	292.0357	292.0357	0	ICE	23.37169	0	1	2
2035	2a	1	4.526339	15.19365	15.19365	0	57.24187	57.24187	0	ICE	4.526339	0	2	2
2035	2a	1	0.303865	0.950356	0.950356	0	2.864485	2.864485	0	ICE	0.303865	0	3	2
2035	2a	1	15.87231	59.64418	59.64418	0	266.656	266.656	0	ICE	15.87231	0	3	2
2035	2a	1	52.94026	211.0681	0	211.0681	653.8272	0	653.8272	BEV	0	52.94026	3	3

2035	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2035	2a	1	23.9697	95.56502	57.33901	38.22601	444.0011	266.4007	177.6004	PHEV	14.38182	9.587878	3	8
2035	2a	1	11.26378	30.06573	30.06573	0	91.00979	91.00979	0	ICE	11.26378	0	4	2
2035	2a	1	28.38597	85.52635	85.52635	0	274.0345	274.0345	0	ICE	28.38597	0	4	2
2035	2a	1	9.621156	31.74433	31.74433	0	118.7338	118.7338	0	ICE	9.621156	0	4	2
2035	2a	1	34.78825	132.7186	132.7186	0	612.7261	612.7261	0	ICE	34.78825	0	3	2
2035	2a	1	4.179176	13.31005	13.31005	0	47.57898	47.57898	0	ICE	4.179176	0	4	2
2035	2a	1	5.077582	16.75313	0	16.75313	35.02422	0	35.02422	BEV	0	5.077582	3	3
2035	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2035	2a	1	0	0	0	0	0	0	0	PHEV	0	0	3	8
2035	2a	1	22.07801	72.84486	0	72.84486	155.0719	0	155.0719	BEV	0	22.07801	4	3
2035	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2035	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2035	2a	1	8.933022	25.3797	25.3797	0	48.07721	48.07721	0	ICE	8.933022	0	1	2
2035	2a	1	14.23167	51.03307	51.03307	0	166.8122	166.8122	0	ICE	14.23167	0	1	2
2035	2a	1	49.8409	187.2896	0	187.2896	739.6233	0	739.6233	BEV	0	49.8409	1	3
2035	2a	1	5.05999	19.01418	0	19.01418	75.08866	0	75.08866	FCEV	0	5.05999	1	7
2035	2a	1	5.312989	19.96489	11.97893	7.985954	72.6005	43.5603	29.0402	PHEV	3.187794	2.125196	1	8
2035	2a	1	3.056963	8.334902	8.334902	0	23.09289	23.09289	0	ICE	3.056963	0	2	2
2035	2a	1	88.82931	343.9764	0	343.9764	1424.523	0	1424.523	BEV	0	88.82931	2	3
2035	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2035	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2035	2a	1	12.4377	46.0252	46.0252	0	201.7475	201.7475	0	ICE	12.4377	0	3	2
2035	2a	1	17.72285	48.32187	48.32187	0	150.8846	150.8846	0	ICE	17.72285	0	4	2
2035	2a	1	4.147252	14.63395	0	14.63395	50.84288	0	50.84288	BEV	0	4.147252	1	3
2035	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2035	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2035	2a	1	25.60151	93.27065	0	93.27065	337.2498	0	337.2498	BEV	0	25.60151	1	3
2035	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2035	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2035	2a	1	24.01512	88.867	0	88.867	344.2359	0	344.2359	BEV	0	24.01512	1	3
2035	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2035	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2035	2a	1	3.306525	9.773062	9.773062	0	38.97097	38.97097	0	ICE	3.306525	0	2	2
2035	2a	1	8.168674	30.22785	30.22785	0	127.7655	127.7655	0	ICE	8.168674	0	2	2
2035	2a	1	115.4031	453.4904	0	453.4904	1943.519	0	1943.519	BEV	0	115.4031	2	3
2035	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2035	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2035	2a	1	4.029605	14.44968	14.44968	0	63.4603	63.4603	0	ICE	4.029605	0	3	2
2035	2a	1	2.912699	9.777114	0	9.777114	30.89962	0	30.89962	BEV	0	2.912699	1	3
2035	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2035	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2035	2a	1	7.785567	27.91811	0	27.91811	99.89457	0	99.89457	BEV	0	7.785567	1	3
2035	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2035	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2035	2a	1	11.48342	41.83605	0	41.83605	153.6291	0	153.6291	BEV	0	11.48342	2	3
2035	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7

2035	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2035	2a	1	2.21275	8.568499	8.568499	0	39.57726	39.57726	0	ICE	2.21275	0	2	2
2035	2a	1	0.418256	1.475853	0	1.475853	3.941566	0	3.941566	BEV	0	0.418256	4	3
2035	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2035	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2035	2a	1	2.872606	9.313389	9.313389	0	31.84891	31.84891	0	ICE	2.872606	0	2	2
2035	2a	1	0.43497	1.460072	1.460072	0	6.609209	6.609209	0	ICE	0.43497	0	3	2
2035	2a	1	1.766045	4.91635	0	4.91635	11.9075	0	11.9075	BEV	0	1.766045	1	3
2035	2a	1	0.771346	2.103098	2.103098	0	7.609314	7.609314	0	ICE	0.771346	0	3	2
2035	2a	1	6.812569	25.20964	0	25.20964	69.82554	0	69.82554	BEV	0	6.812569	3	3
2035	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2035	2a	1	0	0	0	0	0	0	0	PHEV	0	0	3	8
2035	2a	1	4.289017	16.36277	0	16.36277	47.31611	0	47.31611	BEV	0	4.289017	3	3
2035	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2035	2a	1	2.96932	11.32807	6.796844	4.531229	50.19243	30.11546	20.07697	PHEV	1.781592	1.187728	3	8
2035	2a	1	0.757749	3.06449	0	3.06449	9.603694	0	9.603694	BEV	0	0.757749	4	3
2035	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2035	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2035	2a	1	1.545842	4.214786	0	4.214786	10.16511	0	10.16511	BEV	0	1.545842	1	3
2035	2a	1	17.47064	55.64137	0	55.64137	158.155	0	158.155	BEV	0	17.47064	2	3
2035	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2035	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2035	2a	1	6.261628	20.30107	0	20.30107	60.3486	0	60.3486	BEV	0	6.261628	2	3
2035	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2035	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2035	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2035	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2035	2a	1	5.137919	16.95221	16.95221	0	71.66151	71.66151	0	ICE	5.137919	0	2	2
2035	2a	1	2.48327	8.762443	0	8.762443	30.09024	0	30.09024	BEV	0	2.48327	2	3
2035	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2035	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2035	2a	1	4.68007	16.78217	16.78217	0	69.49513	69.49513	0	ICE	4.68007	0	2	2
2035	2a	1	1.4131	5.067207	0	5.067207	18.01782	0	18.01782	BEV	0	1.4131	2	3
2035	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2035	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2035	2a	1	5.791074	21.09787	21.09787	0	96.30502	96.30502	0	ICE	5.791074	0	2	2
2035	2a	1	4.95078	18.32016	0	18.32016	70.50943	0	70.50943	BEV	0	4.95078	2	3
2035	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2035	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2035	2a	1	4.497795	16.38623	0	16.38623	43.25134	0	43.25134	BEV	0	4.497795	3	3
2035	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2035	2a	1	0	0	0	0	0	0	0	PHEV	0	0	3	8
2035	2a	1	3.391387	13.32686	0	13.32686	40.27561	0	40.27561	BEV	0	3.391387	3	3
2035	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2035	2a	1	2.593413	10.19113	6.114677	4.076452	46.46775	27.88065	18.5871	PHEV	1.556048	1.037365	3	8
2035	2a	1	1.064109	3.389027	0	3.389027	7.059563	0	7.059563	BEV	0	1.064109	4	3
2035	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2035	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2035	2a	1	2.910151	9.768563	0	9.768563	21.42784	0	21.42784	BEV	0	2.910151	4	3

2035	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2035	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2035	2a	1	0.53712	1.864505	0	1.864505	4.405624	0	4.405624	BEV	0	0.53712	4	3
2035	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2035	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2035	2a	1	4.108038	11.43604	11.43604	0	33.65688	33.65688	0	ICE	4.108038	0	2	2
2035	2a	1	0.402388	1.396809	1.396809	0	5.331524	5.331524	0	ICE	0.402388	0	2	2
2035	2a	1	21.58393	71.21467	0	71.21467	211.6881	0	211.6881	BEV	0	21.58393	2	3
2035	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2035	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2035	2a	1	1.433919	4.895413	0	4.895413	15.6847	0	15.6847	BEV	0	1.433919	2	3
2035	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2035	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2035	2a	1	11.26029	35.21724	0	35.21724	97.52585	0	97.52585	BEV	0	11.26029	2	3
2035	2a	1	0.364263	1.097518	1.097518	0	3.918535	3.918535	0	ICE	0.364263	0	3	2
2035	2a	1	3.216272	10.05909	10.05909	0	34.11849	34.11849	0	ICE	3.216272	0	2	2
2035	2a	1	0.277249	0.914762	0.914762	0	3.20637	3.20637	0	ICE	0.277249	0	3	2
2035	2a	1	1.563669	4.173808	4.173808	0	15.80577	15.80577	0	ICE	1.563669	0	2	2
2035	2a	1	1.735328	5.029675	0	5.029675	12.62432	0	12.62432	BEV	0	1.735328	1	3
2035	2a	1	3.198232	11.28525	11.28525	0	50.27637	50.27637	0	ICE	3.198232	0	2	2
2035	2a	1	0.654125	2.083291	0	2.083291	4.565006	0	4.565006	BEV	0	0.654125	3	3
2035	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2035	2a	1	0	0	0	0	0	0	0	PHEV	0	0	3	8
2035	2a	1	0.628451	2.289555	0	2.289555	5.904218	0	5.904218	BEV	0	0.628451	4	3
2035	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2035	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2035	2a	1	2.25467	6.922444	0	6.922444	18.93469	0	18.93469	BEV	0	2.25467	1	3
2035	2a	1	1.616875	5.149503	0	5.149503	14.78517	0	14.78517	BEV	0	1.616875	1	3
2035	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2035	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2035	2a	1	2.911526	9.939979	0	9.939979	32.11139	0	32.11139	BEV	0	2.911526	1	3
2035	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2035	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2035	2a	1	3.597359	10.83877	10.83877	0	36.33085	36.33085	0	ICE	3.597359	0	2	2
2035	2a	1	3.52049	10.80886	0	10.80886	29.02818	0	29.02818	BEV	0	3.52049	2	3
2035	2a	1	0.50002	1.735718	0	1.735718	5.740783	0	5.740783	BEV	0	0.50002	2	3
2035	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2035	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2035	2a	1	1.026309	2.85706	2.85706	0	9.144036	9.144036	0	ICE	1.026309	0	3	2
2035	2a	1	2.574623	7.757289	0	7.757289	20.54906	0	20.54906	BEV	0	2.574623	1	3
2035	2a	1	2.515424	7.867141	0	7.867141	22.14144	0	22.14144	BEV	0	2.515424	1	3
2035	2a	1	1.020774	2.783172	0	2.783172	6.712115	0	6.712115	BEV	0	1.020774	2	3
2035	2a	1	0.429485	1.19561	0	1.19561	2.907187	0	2.907187	BEV	0	0.429485	2	3
2035	2a	1	0.429045	1.243545	0	1.243545	3.142544	0	3.142544	BEV	0	0.429045	2	3
2035	2a	1	2.7659	8.808976	8.808976	0	30.41815	30.41815	0	ICE	2.7659	0	2	2
2035	2a	1	2.000795	7.518489	7.518489	0	32.93714	32.93714	0	ICE	2.000795	0	2	2
2035	2a	1	3.329105	13.08212	13.08212	0	61.05985	61.05985	0	ICE	3.329105	0	2	2

2035	2a	1	0.568373	1.582248	0	1.582248	2.64316	0	2.64316	BEV	0	0.568373	3	3
2035	2a	1	0.685796	1.948423	1.948423	0	7.977639	7.977639	0	ICE	0.685796	0	3	2
2035	2a	1	2.569159	8.035199	0	8.035199	15.28259	0	15.28259	BEV	0	2.569159	3	3
2035	2a	1	0.346164	1.122313	1.122313	0	3.928302	3.928302	0	ICE	0.346164	0	3	2
2035	2a	1	0.220661	0.715414	0	0.715414	1.444474	0	1.444474	BEV	0	0.220661	3	3
2035	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2035	2a	1	0	0	0	0	0	0	0	PHEV	0	0	3	8
2035	2a	1	4.030762	15.1466	0	15.1466	41.66911	0	41.66911	BEV	0	4.030762	3	3
2035	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2035	2a	1	0	0	0	0	0	0	0	PHEV	0	0	3	8
2035	2a	1	10.1734	39.39476	0	39.39476	113.4318	0	113.4318	BEV	0	10.1734	3	3
2035	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2035	2a	1	2.608564	10.10122	6.060732	4.040488	48.76711	29.26026	19.50684	PHEV	1.565138	1.043425	3	8
2035	2a	1	0.720305	2.087731	0	2.087731	3.595216	0	3.595216	BEV	0	0.720305	4	3
2035	2a	1	0.964045	3.677872	3.677872	0	16.73756	16.73756	0	ICE	0.964045	0	2	2
2035	2a	1	0.242375	0.785814	0	0.785814	1.674574	0	1.674574	BEV	0	0.242375	4	3
2035	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2035	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2035	2a	1	0.761401	2.032362	0	2.032362	4.798173	0	4.798173	BEV	0	0.761401	1	3
2035	2a	1	0.805441	2.288347	0	2.288347	5.447632	0	5.447632	BEV	0	0.805441	1	3
2035	2a	1	1.862813	5.505899	0	5.505899	14.36266	0	14.36266	BEV	0	1.862813	1	3
2035	2a	1	0.46572	1.323163	0	1.323163	3.265531	0	3.265531	BEV	0	0.46572	2	3
2035	2a	1	0	0	0	0	0	0	0	BEV	0	0	2	3
2035	2a	1	13.98115	56.54257	0	56.54257	260.6592	0	260.6592	FCEV	0	13.98115	2	7
2035	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2035	2a	1	0	0	0	0	0	0	0	BEV	0	0	2	3
2035	2a	1	15.99933	65.6211	0	65.6211	312.6481	0	312.6481	FCEV	0	15.99933	2	7
2035	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2035	2a	1	0.067285	0.22971	0.22971	0	1.011901	1.011901	0	ICE	0.067285	0	3	2
2035	2a	1	0	0	0	0	0	0	0	BEV	0	0	3	3
2035	2a	1	0.646393	2.614141	0	2.614141	8.52132	0	8.52132	FCEV	0	0.646393	3	7
2035	2a	1	9.264961	37.46936	22.48161	14.98774	189.7765	113.8659	75.91062	PHEV	5.558977	3.705984	3	8
2035	2a	1	0.631631	2.518258	2.518258	0	11.30259	11.30259	0	ICE	0.631631	0	2	2
2035	2a	1	0.165376	0.507749	0	0.507749	0.951241	0	0.951241	BEV	0	0.165376	3	3
2035	2a	1	2.025735	5.639282	0	5.639282	9.715547	0	9.715547	BEV	0	2.025735	4	3
2035	2a	1	0.376108	1.176302	0	1.176302	2.274059	0	2.274059	BEV	0	0.376108	4	3
2035	2a	1	0.226032	0.810523	0	0.810523	1.985128	0	1.985128	BEV	0	0.226032	3	3
2035	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2035	2a	1	0	0	0	0	0	0	0	PHEV	0	0	3	8
2035	2a	1	0.814666	3.061311	0	3.061311	11.08936	0	11.08936	BEV	0	0.814666	2	3
2035	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2035	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2035	2a	1	0.477739	1.412048	0	1.412048	3.535411	0	3.535411	BEV	0	0.477739	2	3
2035	2a	1	1.355974	4.085522	0	4.085522	10.4246	0	10.4246	BEV	0	1.355974	2	3
2035	2a	1	0.366015	1.123766	0	1.123766	2.044717	0	2.044717	BEV	0	0.366015	4	3
2035	2a	1	1.04598	4.290075	4.290075	0	23.41126	23.41126	0	ICE	1.04598	0	2	2
2035	2a	1	0.618526	2.3597	0	2.3597	9.652274	0	9.652274	BEV	0	0.618526	2	3

2035	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2035	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2035	2a	1	0.190949	0.509689	0	0.509689	0.894879	0	0.894879	BEV	0	0.190949	4	3
2035	2a	1	0.136586	0.395879	0	0.395879	0.655752	0	0.655752	BEV	0	0.136586	3	3
2035	2a	1	0.114049	0.395898	0	0.395898	0.869981	0	0.869981	BEV	0	0.114049	3	3
2035	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2035	2a	1	0	0	0	0	0	0	0	PHEV	0	0	3	8
2035	2a	1	0.318967	0.851399	0	0.851399	1.49866	0	1.49866	BEV	0	0.318967	3	3
2035	2a	1	0.661341	1.95472	0	1.95472	3.54279	0	3.54279	BEV	0	0.661341	4	3
2035	2a	1	0.249946	0.838998	0	0.838998	2.584356	0	2.584356	BEV	0	0.249946	2	3
2035	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2035	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2035	2a	1	0.11498	0.392543	0.392543	0	2.063838	2.063838	0	ICE	0.11498	0	2	2
2035	2a	1	1.895219	5.167373	0	5.167373	8.513524	0	8.513524	BEV	0	1.895219	4	3
2035	2a	1	0.600013	2.151576	0	2.151576	5.230249	0	5.230249	BEV	0	0.600013	4	3
2035	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2035	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2035	2a	1	0.083731	0.252281	0	0.252281	0.465912	0	0.465912	BEV	0	0.083731	3	3
2035	2a	1	0	0	0	0	0	0	0	BEV	0	0	4	3
2035	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2035	2a	1	1.080684	4.246676	2.548005	1.69867	21.35444	12.81266	8.541775	PHEV	0.64841	0.432273	4	8
2035	2a	1	0.129464	0.375237	0.375237	0	1.504345	1.504345	0	ICE	0.129464	0	3	2
2035	2a	1	0.128716	0.343573	0	0.343573	0.802795	0	0.802795	BEV	0	0.128716	2	3
2036	2a	1	11521.52	30753.7	30753.7	0	49894.09	49894.09	0	ICE	11521.52	0	1	1
2036	2a	1	11716.69	31945.91	31945.91	0	54067.9	54067.9	0	ICE	11716.69	0	1	1
2036	2a	1	12595.27	35062.95	35062.95	0	61604.96	61604.96	0	ICE	12595.27	0	1	1
2036	2a	1	14740.87	41880.43	41880.43	0	77169.37	77169.37	0	ICE	14740.87	0	1	1
2036	2a	1	13449.52	38982.1	38982.1	0	75009.43	75009.43	0	ICE	13449.52	0	1	1
2036	2a	1	16194.39	47865.6	47865.6	0	96214.84	96214.84	0	ICE	16194.39	0	1	1
2036	2a	1	17451.85	52582.06	52582.06	0	110822.5	110822.5	0	ICE	17451.85	0	1	1
2036	2a	1	18213.43	55920.16	55920.16	0	123637.4	123637.4	0	ICE	18213.43	0	1	1
2036	2a	1	21603.25	67565.46	67565.46	0	156674.6	156674.6	0	ICE	21603.25	0	1	1
2036	2a	1	22116.28	70437.03	70437.03	0	171030.8	171030.8	0	ICE	22116.28	0	1	1
2036	2a	1	40.35417	128.522	128.522	0	323.3893	323.3893	0	ICE	40.35417	0	1	2
2036	2a	1	22437.78	72746.42	72746.42	0	185376.8	185376.8	0	ICE	22437.78	0	1	1
2036	2a	1	24680.07	81430.17	81430.17	0	217246.8	217246.8	0	ICE	24680.07	0	1	1
2036	2a	1	24452.23	82079.31	82079.31	0	229046.3	229046.3	0	ICE	24452.23	0	1	1
2036	2a	1	29833.86	101853.1	101853.1	0	298408.1	298408.1	0	ICE	29833.86	0	1	1
2036	2a	1	32682.06	113449.2	113449.2	0	347195.2	347195.2	0	ICE	32682.06	0	1	1
2036	2a	1	86.2041	299.2403	299.2403	0	927.0247	927.0247	0	ICE	86.2041	0	1	2
2036	2a	1	38073.91	134347.2	134347.2	0	428717.2	428717.2	0	ICE	38073.91	0	1	1
2036	2a	1	35396.51	126927.6	126927.6	0	422619.6	422619.6	0	ICE	35396.51	0	1	1
2036	2a	1	31790.02	115816.4	115816.4	0	402204.1	402204.1	0	ICE	31790.02	0	1	1
2036	2a	1	42595.2	157621.8	157621.8	0	569209.6	569209.6	0	ICE	42595.2	0	1	1
2036	2a	1	488.8761	1809.066	1809.066	0	6514.206	6514.206	0	ICE	488.8761	0	1	2
2036	2a	1	48690.22	182965.7	182965.7	0	688534.8	688534.8	0	ICE	48690.22	0	1	1
2036	2a	1	756.2259	2841.708	2841.708	0	10520.43	10520.43	0	ICE	756.2259	0	1	2

2036	2a	1	82293	313951.1	313951.1	0	1232140	1232140	0	ICE	82293	0	1	1
2036	2a	1	116516.7	451191.1	451191.1	0	1838428	1838428	0	ICE	116516.7	0	1	1
2036	2a	1	136852.5	537778.2	537778.2	0	2279364	2279364	0	ICE	136852.5	0	1	1
2036	2a	1	2569.569	10097.43	10097.43	0	42476.4	42476.4	0	ICE	2569.569	0	1	2
2036	2a	1	185930.2	741287.1	741287.1	0	3263269	3263269	0	ICE	185930.2	0	1	1
2036	2a	1	205816.7	832363.7	832363.7	0	3796018	3796018	0	ICE	205816.7	0	1	1
2036	2a	1	255521.8	1048020	1048020	0	4957793	4957793	0	ICE	255521.8	0	1	1
2036	2a	1	3126.914	12825.01	12825.01	0	60655.72	60655.72	0	ICE	3126.914	0	1	2
2036	2a	1	14861.48	60954.19	0	60954.19	289477.3	0	289477.3	BEV	0	14861.48	1	3
2036	2a	1	303.2954	1243.963	0	1243.963	5969.347	0	5969.347	FCEV	0	303.2954	1	7
2036	2a	1	13405.55	54982.75	29690.68	25292.06	259602.8	140185.5	119417.3	PHEV	7239	6166.555	1	8
2036	2a	1	306907.2	1276360	1276360	0	6246108	6246108	0	ICE	306907.2	0	1	1
2036	2a	1	3755.738	15619.29	15619.29	0	76420.33	76420.33	0	ICE	3755.738	0	1	2
2036	2a	1	21816.09	90728.33	0	90728.33	444933.7	0	444933.7	BEV	0	21816.09	1	3
2036	2a	1	445.2264	1851.599	0	1851.599	9171.474	0	9171.474	FCEV	0	445.2264	1	7
2036	2a	1	14099.63	58637.28	31664.13	26973.15	286666.8	154800.1	131866.7	PHEV	7613.803	6485.832	1	8
2036	2a	1	359134.7	1514137	1514137	0	7659711	7659711	0	ICE	359134.7	0	1	1
2036	2a	1	4376.18	18450.28	18450.28	0	93322.79	93322.79	0	ICE	4376.18	0	1	2
2036	2a	1	31305.78	131987.3	0	131987.3	668969.7	0	668969.7	BEV	0	31305.78	1	3
2036	2a	1	732.2989	3087.423	0	3087.423	15780.74	0	15780.74	FCEV	0	732.2989	1	7
2036	2a	1	15353.47	64731.3	34307.59	30423.71	327088.6	173356.9	153731.6	PHEV	8137.339	7216.131	1	8
2036	2a	1	410922.3	1756019	1756019	0	9176544	9176544	0	ICE	410922.3	0	1	1
2036	2a	1	5052.614	21591.64	21591.64	0	112816.2	112816.2	0	ICE	5052.614	0	1	2
2036	2a	1	42558.59	181868.2	0	181868.2	951712.4	0	951712.4	BEV	0	42558.59	1	3
2036	2a	1	1123.247	4800.04	0	4800.04	25304.68	0	25304.68	FCEV	0	1123.247	1	7
2036	2a	1	16227.83	69347.34	36060.62	33286.72	362289	188390.3	173898.7	PHEV	8438.469	7789.356	1	8
2036	2a	1	438360.6	1898387	1898387	0	10242826	10242826	0	ICE	438360.6	0	1	1
2036	2a	1	5415.996	23454.78	23454.78	0	126533.8	126533.8	0	ICE	5415.996	0	1	2
2036	2a	1	70823.48	306711.7	0	306711.7	1656711	0	1656711	BEV	0	70823.48	1	3
2036	2a	1	2427.755	10513.76	0	10513.76	57158.12	0	57158.12	FCEV	0	2427.755	1	7
2036	2a	1	26926.11	116607.5	58070.56	58536.99	628649.9	313067.7	315582.3	PHEV	13409.2	13516.91	1	8
2036	2a	1	455206.6	1997419	1997419	0	11120103	11120103	0	ICE	455206.6	0	1	1
2036	2a	1	5664.657	24856.17	24856.17	0	138361	138361	0	ICE	5664.657	0	1	2
2036	2a	1	103767.3	455324.7	0	455324.7	2537181	0	2537181	BEV	0	103767.3	1	3
2036	2a	1	4388.016	19254.35	0	19254.35	107886	0	107886	FCEV	0	4388.016	1	7
2036	2a	1	39335.36	172601.2	82158.17	90443.03	960102.7	457008.9	503093.8	PHEV	18723.63	20611.73	1	8
2036	2a	1	465829.4	2070719	2070719	0	11887271	11887271	0	ICE	465829.4	0	1	1
2036	2a	1	5845.494	25984.57	25984.57	0	149148.3	149148.3	0	ICE	5845.494	0	1	2
2036	2a	1	142001.9	631230.9	0	631230.9	3626199	0	3626199	BEV	0	142001.9	1	3
2036	2a	1	7159.757	31826.77	0	31826.77	183578	0	183578	FCEV	0	7159.757	1	7
2036	2a	1	53671.76	238583.3	108316.8	130266.5	1368704	621391.4	747312.1	PHEV	24366.98	29304.78	1	8
2036	2a	1	464221.3	2090166	2090166	0	12366100	12366100	0	ICE	464221.3	0	1	1
2036	2a	1	5871.953	26438.59	26438.59	0	156399.6	156399.6	0	ICE	5871.953	0	1	2
2036	2a	1	183391.4	825723.4	0	825723.4	4887792	0	4887792	BEV	0	183391.4	1	3
2036	2a	1	10761.62	48454.43	0	48454.43	287648.6	0	287648.6	FCEV	0	10761.62	1	7
2036	2a	1	69113.5	311184.9	134431.9	176753	1840220	794974.9	1045245	PHEV	29857.03	39256.47	1	8
2036	2a	1	459237.3	2094035	2094035	0	12766447	12766447	0	ICE	459237.3	0	1	1

2036	2a	1	5852.818	26687.74	26687.74	0	162685.4	162685.4	0	ICE	5852.818	0	1	2
2036	2a	1	230808.7	1052444	0	1052444	6418512	0	6418512	BEV	0	230808.7	1	3
2036	2a	1	15481.07	70590.74	0	70590.74	431389.8	0	431389.8	FCEV	0	15481.07	1	7
2036	2a	1	86730.35	395473.9	162144.3	233329.6	2410531	988317.7	1422213	PHEV	35559.44	51170.91	1	8
2036	2a	1	442512.2	2043123	2043123	0	12818220	12818220	0	ICE	442512.2	0	1	1
2036	2a	1	5639.662	26038.88	26038.88	0	163349	163349	0	ICE	5639.662	0	1	2
2036	2a	1	280181.9	1293628	0	1293628	8117384	0	8117384	BEV	0	280181.9	1	3
2036	2a	1	21181.54	97797.3	0	97797.3	614450.9	0	614450.9	FCEV	0	21181.54	1	7
2036	2a	1	104977.7	484692.3	188060.6	296631.7	3041017	1179915	1861102	PHEV	40731.33	64246.33	1	8
2036	2a	1	420055.7	1963504	1963504	0	12671089	12671089	0	ICE	420055.7	0	1	1
2036	2a	1	5353.459	25024.16	25024.16	0	161477.7	161477.7	0	ICE	5353.459	0	1	2
2036	2a	1	334128.8	1561848	0	1561848	10079174	0	10079174	BEV	0	334128.8	1	3
2036	2a	1	28154.6	131605.6	0	131605.6	849970.7	0	849970.7	FCEV	0	28154.6	1	7
2036	2a	1	124827.8	583494	213558.8	369935.2	3766692	1378609	2388083	PHEV	45686.99	79140.85	1	8
2036	2a	1	388446.6	1838005	1838005	0	12196612	12196612	0	ICE	388446.6	0	1	1
2036	2a	1	4950.612	23424.71	23424.71	0	155435.4	155435.4	0	ICE	4950.612	0	1	2
2036	2a	1	389611.6	1843517	0	1843517	12230721	0	12230721	BEV	0	389611.6	1	3
2036	2a	1	36259.92	171570.3	0	171570.3	1138758	0	1138758	FCEV	0	36259.92	1	7
2036	2a	1	145135.3	686733.6	236236.3	450497.2	4560496	1568810	2991685	PHEV	49926.53	95208.73	1	8
2036	2a	1	352814.5	1689618	1689618	0	11524101	11524101	0	ICE	352814.5	0	1	1
2036	2a	1	4496.493	21533.57	21533.57	0	146869.2	146869.2	0	ICE	4496.493	0	1	2
2036	2a	1	451061.5	2160120	0	2160120	14726936	0	14726936	BEV	0	451061.5	1	3
2036	2a	1	46015.09	220364.9	0	220364.9	1502624	0	1502624	FCEV	0	46015.09	1	7
2036	2a	1	167541.7	802352.4	258357.5	543994.9	5479415	1764372	3715043	PHEV	53948.44	113593.3	1	8
2036	2a	1	307087	1488224	1488224	0	10430270	10430270	0	ICE	307087	0	1	1
2036	2a	1	3913.718	18966.9	18966.9	0	132933.2	132933.2	0	ICE	3913.718	0	1	2
2036	2a	1	510552.9	2474272	0	2474272	17329573	0	17329573	BEV	0	510552.9	1	3
2036	2a	1	56728.1	274919.1	0	274919.1	1925481	0	1925481	FCEV	0	56728.1	1	7
2036	2a	1	189093.7	916397.1	274919.1	641477.9	6434470	1930341	4504129	PHEV	56728.1	132365.6	1	8
2036	2a	1	257690.8	1263600	1263600	0	9093839	9093839	0	ICE	257690.8	0	1	1
2036	2a	1	3284.176	16104.12	16104.12	0	115903.4	115903.4	0	ICE	3284.176	0	1	2
2036	2a	1	580777	2847869	0	2847869	20478468	0	20478468	BEV	0	580777	1	3
2036	2a	1	71781.43	351983.8	0	351983.8	2530742	0	2530742	FCEV	0	71781.43	1	7
2036	2a	1	206071.1	1010480	303144	707335.9	7289500	2186850	5102650	PHEV	61821.33	144249.8	1	8
2036	2a	1	200286.6	993589.9	993589.9	0	7339801	7339801	0	ICE	200286.6	0	1	1
2036	2a	1	2552.584	12662.96	12662.96	0	93550.45	93550.45	0	ICE	2552.584	0	1	2
2036	2a	1	648750.3	3218346	0	3218346	23750692	0	23750692	BEV	0	648750.3	1	3
2036	2a	1	88465.95	438865.4	0	438865.4	3238105	0	3238105	FCEV	0	88465.95	1	7
2036	2a	1	220207.4	1092414	327724.2	764689.7	8093879	2428164	5665715	PHEV	66062.23	154145.2	1	8
2036	2a	1	137432	689651.6	689651.6	0	5225374	5225374	0	ICE	137432	0	1	1
2036	2a	1	1751.523	8789.37	8789.37	0	66602.09	66602.09	0	ICE	1751.523	0	1	2
2036	2a	1	715946.3	3592712	0	3592712	27191456	0	27191456	BEV	0	715946.3	1	3
2036	2a	1	106980.5	536842	0	536842	4062202	0	4062202	FCEV	0	106980.5	1	7
2036	2a	1	232107.6	1164746	349423.8	815322.1	8855568	2656670	6198898	PHEV	69632.27	162475.3	1	8
2036	2a	1	70882.59	359758.9	359758.9	0	2790847	2790847	0	ICE	70882.59	0	1	1
2036	2a	1	903.3739	4585.002	4585.002	0	35571.74	35571.74	0	ICE	903.3739	0	1	2
2036	2a	1	788161.9	4000253	0	4000253	31000409	0	31000409	BEV	0	788161.9	1	3

2036	2a	1	128305.4	651203.9	0	651203.9	5045674	0	5045674	FCEV	0	128305.4	1	7
2036	2a	1	243617.9	1236463	370938.9	865524.2	9624798	2887439	6737358	PHEV	73085.37	170532.5	1	8
2036	2a	1	849573.4	4360614	0	4360614	34499429	0	34499429	BEV	0	849573.4	1	3
2036	2a	1	149924.7	769520.1	0	769520.1	6087596	0	6087596	FCEV	0	149924.7	1	7
2036	2a	1	249874.5	1282534	384760.1	897773.5	10182081	3054624	7127457	PHEV	74962.36	174912.2	1	8
2036	2a	1	768622.8	3989152	0	3989152	32139725	0	32139725	BEV	0	768622.8	1	3
2036	2a	1	146404.3	759838.5	0	759838.5	6121976	0	6121976	FCEV	0	146404.3	1	7
2036	2a	1	214636	1113961	334188.3	779772.6	8990773	2697232	6293541	PHEV	64390.8	150245.2	1	8
2036	2a	1	2391.637	6383.853	6383.853	0	24969.71	24969.71	0	ICE	2391.637	0	2	1
2036	2a	1	3034.201	8272.841	8272.841	0	32514.71	32514.71	0	ICE	3034.201	0	2	1
2036	2a	1	3671.98	10222.13	10222.13	0	40586.03	40586.03	0	ICE	3671.98	0	2	1
2036	2a	1	3506.745	9963.049	9963.049	0	40060.82	40060.82	0	ICE	3506.745	0	2	1
2036	2a	1	3881.807	11251.03	11251.03	0	45154.8	45154.8	0	ICE	3881.807	0	2	1
2036	2a	1	5100.582	15075.74	15075.74	0	61080.86	61080.86	0	ICE	5100.582	0	2	1
2036	2a	1	6413.029	19322.33	19322.33	0	79328.66	79328.66	0	ICE	6413.029	0	2	1
2036	2a	1	5987.24	18382.44	18382.44	0	76205.61	76205.61	0	ICE	5987.24	0	2	1
2036	2a	1	6397.969	20010.03	20010.03	0	84025.5	84025.5	0	ICE	6397.969	0	2	1
2036	2a	1	7268.219	23148.19	23148.19	0	98063.17	98063.17	0	ICE	7268.219	0	2	1
2036	2a	1	7625.898	24724.23	24724.23	0	104070.8	104070.8	0	ICE	7625.898	0	2	1
2036	2a	1	5362.553	17693.37	17693.37	0	74719.46	74719.46	0	ICE	5362.553	0	2	1
2036	2a	1	2974.38	10154.56	10154.56	0	43617.46	43617.46	0	ICE	2974.38	0	2	1
2036	2a	1	4782.049	16599.93	16599.93	0	72552.06	72552.06	0	ICE	4782.049	0	2	1
2036	2a	1	7157.068	25254.36	25254.36	0	112187.1	112187.1	0	ICE	7157.068	0	2	1
2036	2a	1	12706	45562.2	45562.2	0	204245.5	204245.5	0	ICE	12706	0	2	1
2036	2a	1	9929.246	36173.93	36173.93	0	163408.1	163408.1	0	ICE	9929.246	0	2	1
2036	2a	1	5519.302	20423.95	20423.95	0	92715.42	92715.42	0	ICE	5519.302	0	2	1
2036	2a	1	5135.06	19296.27	19296.27	0	88856.9	88856.9	0	ICE	5135.06	0	2	1
2036	2a	1	47791.76	190541.4	190541.4	0	930995.7	930995.7	0	ICE	47791.76	0	2	1
2036	2a	1	46398.96	187646.7	187646.7	0	928073.3	928073.3	0	ICE	46398.96	0	2	1
2036	2a	1	43784.24	179580.6	179580.6	0	905600.4	905600.4	0	ICE	43784.24	0	2	1
2036	2a	1	5.931367	24.32744	24.32744	0	122.6914	122.6914	0	ICE	5.931367	0	2	2
2036	2a	1	1.475278	6.050839	0	6.050839	28.7932	0	28.7932	BEV	0	1.475278	2	3
2036	2a	1	0.030108	0.123487	0	0.123487	0.587616	0	0.587616	FCEV	0	0.030108	2	7
2036	2a	1	12.79578	52.48177	31.48906	20.99271	264.6972	158.8183	105.8789	PHEV	7.677468	5.118312	2	8
2036	2a	1	49271.41	204909	204909	0	1051363	1051363	0	ICE	49271.41	0	2	1
2036	2a	1	6.674703	27.75862	27.75862	0	142.4362	142.4362	0	ICE	6.674703	0	2	2
2036	2a	1	53534.5	225705.2	225705.2	0	1179944	1179944	0	ICE	53534.5	0	2	1
2036	2a	1	7.302813	30.78917	30.78917	0	160.9786	160.9786	0	ICE	7.302813	0	2	2
2036	2a	1	711.8175	3001.072	0	3001.072	15503.99	0	15503.99	BEV	0	711.8175	2	3
2036	2a	1	16.6507	70.20052	0	70.20052	355.8818	0	355.8818	FCEV	0	16.6507	2	7
2036	2a	1	546.6258	2304.612	1369.598	935.0142	12117.08	7201.009	4916.074	PHEV	324.8519	221.7739	2	8
2036	2a	1	57305.71	244887.9	244887.9	0	1305662	1305662	0	ICE	57305.71	0	2	1
2036	2a	1	7.908083	33.79408	33.79408	0	180.2053	180.2053	0	ICE	7.908083	0	2	2
2036	2a	1	1556.537	6651.645	0	6651.645	35171.21	0	35171.21	BEV	0	1556.537	2	3
2036	2a	1	41.08163	175.5566	0	175.5566	917.9892	0	917.9892	FCEV	0	41.08163	2	7
2036	2a	1	1198.817	5122.975	3015.237	2107.738	27429.7	16144.34	11285.36	PHEV	705.5892	493.2274	2	8
2036	2a	1	58354.55	252713.1	252713.1	0	1376043	1376043	0	ICE	58354.55	0	2	1

2036	2a	1	8.15865	35.33226	35.33226	0	192.4088	192.4088	0	ICE	8.15865	0	2	2
2036	2a	1	4112.738	17810.83	0	17810.83	96531.5	0	96531.5	BEV	0	4112.738	2	3
2036	2a	1	140.9804	610.5367	0	610.5367	3292.508	0	3292.508	FCEV	0	140.9804	2	7
2036	2a	1	2966.07	12845.01	7446.437	5398.575	70238.87	40718.48	29520.39	PHEV	1719.473	1246.597	2	8
2036	2a	1	58045.91	254702	254702	0	1417559	1417559	0	ICE	58045.91	0	2	1
2036	2a	1	8.148758	35.75626	35.75626	0	199.0071	199.0071	0	ICE	8.148758	0	2	2
2036	2a	1	7105.318	31177.71	0	31177.71	173326.3	0	173326.3	BEV	0	7105.318	2	3
2036	2a	1	300.4631	1318.414	0	1318.414	7328.22	0	7328.22	FCEV	0	300.4631	2	7
2036	2a	1	4793.955	21035.59	12008.31	9027.271	117245.5	66930.46	50315.09	PHEV	2736.663	2057.291	2	8
2036	2a	1	57421.01	255249.6	255249.6	0	1453163	1453163	0	ICE	57421.01	0	2	1
2036	2a	1	8.098995	36.00189	36.00189	0	204.9441	204.9441	0	ICE	8.098995	0	2	2
2036	2a	1	10625.15	47231.25	0	47231.25	269354.7	0	269354.7	BEV	0	10625.15	2	3
2036	2a	1	535.7221	2381.408	0	2381.408	13628	0	13628	FCEV	0	535.7221	2	7
2036	2a	1	6698.988	29778.54	16735.54	13043	169196.7	95088.57	74108.17	PHEV	3764.831	2934.157	2	8
2036	2a	1	55781.29	251156.4	251156.4	0	1463775	1463775	0	ICE	55781.29	0	2	1
2036	2a	1	7.902165	35.57966	35.57966	0	207.3212	207.3212	0	ICE	7.902165	0	2	2
2036	2a	1	14571.03	65606.35	0	65606.35	383844.6	0	383844.6	BEV	0	14571.03	2	3
2036	2a	1	855.0453	3849.859	0	3849.859	22637.69	0	22637.69	FCEV	0	855.0453	2	7
2036	2a	1	8572.799	38599.2	21350.87	17248.33	223773.8	123778.9	99994.92	PHEV	4741.982	3830.816	2	8
2036	2a	1	54009.8	246274.4	246274.4	0	1470732	1470732	0	ICE	54009.8	0	2	1
2036	2a	1	7.682209	35.02941	35.02941	0	209.1265	209.1265	0	ICE	7.682209	0	2	2
2036	2a	1	19169.48	87409.18	0	87409.18	524847	0	524847	BEV	0	19169.48	2	3
2036	2a	1	1285.758	5862.811	0	5862.811	35403.21	0	35403.21	FCEV	0	1285.758	2	7
2036	2a	1	10506.92	47909.58	26076.5	21833.08	283734.3	154432.5	129301.8	PHEV	5718.769	4788.155	2	8
2036	2a	1	51306.58	236887.6	236887.6	0	1448978	1448978	0	ICE	51306.58	0	2	1
2036	2a	1	7.297709	33.69425	33.69425	0	206.0175	206.0175	0	ICE	7.297709	0	2	2
2036	2a	1	24212.64	111792.2	0	111792.2	688215.2	0	688215.2	BEV	0	24212.64	2	3
2036	2a	1	1830.457	8451.405	0	8451.405	52298.04	0	52298.04	FCEV	0	1830.457	2	7
2036	2a	1	12338.99	56970.33	30503.54	26466.79	344622.7	184520.8	160101.8	PHEV	6606.646	5732.341	2	8
2036	2a	1	48036.45	224541.1	224541.1	0	1407067	1407067	0	ICE	48036.45	0	2	1
2036	2a	1	6.832576	31.93812	31.93812	0	200.0459	200.0459	0	ICE	6.832576	0	2	2
2036	2a	1	29822.68	139402.8	0	139402.8	879744.8	0	879744.8	BEV	0	29822.68	2	3
2036	2a	1	2512.94	11746.46	0	11746.46	74470.54	0	74470.54	FCEV	0	2512.94	2	7
2036	2a	1	14097.48	65897.1	34699.53	31197.57	407365.7	214507.1	192858.6	PHEV	7423.328	6674.148	2	8
2036	2a	1	43741.42	206970.4	206970.4	0	1329449	1329449	0	ICE	43741.42	0	2	1
2036	2a	1	6.221661	29.43891	29.43891	0	189.0021	189.0021	0	ICE	6.221661	0	2	2
2036	2a	1	35659.44	168729.1	0	168729.1	1091737	0	1091737	BEV	0	35659.44	2	3
2036	2a	1	3318.711	15703.08	0	15703.08	102008.9	0	102008.9	FCEV	0	3318.711	2	7
2036	2a	1	15593.14	73781.75	38197.87	35583.88	466614.1	241572.8	225041.3	PHEV	8072.792	7520.349	2	8
2036	2a	1	39115.9	187324.9	187324.9	0	1233512	1233512	0	ICE	39115.9	0	2	1
2036	2a	1	5.56374	26.64458	26.64458	0	175.3573	175.3573	0	ICE	5.56374	0	2	2
2036	2a	1	42156.2	201884.8	0	201884.8	1339083	0	1339083	BEV	0	42156.2	2	3
2036	2a	1	4300.569	20595.3	0	20595.3	137074.1	0	137074.1	FCEV	0	4300.569	2	7
2036	2a	1	16997.44	81400.25	41421.1	39979.15	526887.5	268110.5	258777	PHEV	8649.271	8348.173	2	8
2036	2a	1	33961.09	164584.3	164584.3	0	1111211	1111211	0	ICE	33961.09	0	2	1
2036	2a	1	4.830534	23.41002	23.41002	0	157.9672	157.9672	0	ICE	4.830534	0	2	2
2036	2a	1	49209.94	238484.2	0	238484.2	1621528	0	1621528	BEV	0	49209.94	2	3

2036	2a	1	5467.771	26498.24	0	26498.24	180696.6	0	180696.6	FCEV	0	5467.771	2	7
2036	2a	1	18225.9	88327.47	44163.74	44163.74	585477.8	292738.9	292738.9	PHEV	9112.952	9112.952	2	8
2036	2a	1	28273.22	138639.2	138639.2	0	959853	959853	0	ICE	28273.22	0	2	1
2036	2a	1	4.021507	19.71966	19.71966	0	136.4488	136.4488	0	ICE	4.021507	0	2	2
2036	2a	1	56098.1	275079.9	0	275079.9	1917654	0	1917654	BEV	0	56098.1	2	3
2036	2a	1	6933.473	33998.63	0	33998.63	237584.5	0	237584.5	FCEV	0	6933.473	2	7
2036	2a	1	19904.71	97603.73	48801.87	48801.87	662905.3	331452.6	331452.6	PHEV	9952.354	9952.354	2	8
2036	2a	1	21752.84	107912.4	107912.4	0	766248.9	766248.9	0	ICE	21752.84	0	2	1
2036	2a	1	3.094066	15.34916	15.34916	0	108.9266	108.9266	0	ICE	3.094066	0	2	2
2036	2a	1	62563.69	310368.5	0	310368.5	2218417	0	2218417	BEV	0	62563.69	2	3
2036	2a	1	8531.412	42322.97	0	42322.97	303109.6	0	303109.6	FCEV	0	8531.412	2	7
2036	2a	1	21236.2	105349.4	52674.69	52674.69	733560.1	366780.1	366780.1	PHEV	10618.1	10618.1	2	8
2036	2a	1	14752.45	74029.7	74029.7	0	539162.9	539162.9	0	ICE	14752.45	0	2	1
2036	2a	1	2.098348	10.52979	10.52979	0	76.64561	76.64561	0	ICE	2.098348	0	2	2
2036	2a	1	68744.77	344970.2	0	344970.2	2528082	0	2528082	BEV	0	68744.77	2	3
2036	2a	1	10272.21	51547.27	0	51547.27	378370.2	0	378370.2	FCEV	0	10272.21	2	7
2036	2a	1	22286.84	111838.3	55919.13	55919.13	798742.8	399371.4	399371.4	PHEV	11143.42	11143.42	2	8
2036	2a	1	7507.131	38101.84	38101.84	0	284583.7	284583.7	0	ICE	7507.131	0	2	1
2036	2a	1	1.067794	5.419504	5.419504	0	40.45596	40.45596	0	ICE	1.067794	0	2	2
2036	2a	1	75148.34	381409.4	0	381409.4	2865237	0	2865237	BEV	0	75148.34	2	3
2036	2a	1	12233.45	62089.9	0	62089.9	467051.3	0	467051.3	FCEV	0	12233.45	2	7
2036	2a	1	23228.07	117892.2	58946.11	58946.11	863662.5	431831.2	431831.2	PHEV	11614.04	11614.04	2	8
2036	2a	1	81820.13	419959	0	419959	3232652	0	3232652	BEV	0	81820.13	2	3
2036	2a	1	14438.85	74110.41	0	74110.41	571086.8	0	571086.8	FCEV	0	14438.85	2	7
2036	2a	1	24064.74	123517.4	61758.68	61758.68	927965.7	463982.9	463982.9	PHEV	12032.37	12032.37	2	8
2036	2a	1	75094.39	389739.9	0	389739.9	3072476	0	3072476	BEV	0	75094.39	2	3
2036	2a	1	14303.69	74236.17	0	74236.17	585791.4	0	585791.4	FCEV	0	14303.69	2	7
2036	2a	1	20969.92	108833.9	54416.95	54416.95	838227.4	419113.7	419113.7	PHEV	10484.96	10484.96	2	8
2036	2a	1	4284.45	11436.22	11436.22	0	43067.51	43067.51	0	ICE	4284.45	0	3	1
2036	2a	1	5658.282	15427.47	15427.47	0	58399.33	58399.33	0	ICE	5658.282	0	3	1
2036	2a	1	6270.901	17457.06	17457.06	0	66668.5	66668.5	0	ICE	6270.901	0	3	1
2036	2a	1	7856.558	22321.35	22321.35	0	86520.77	86520.77	0	ICE	7856.558	0	3	1
2036	2a	1	7394.899	21433.37	21433.37	0	83278.48	83278.48	0	ICE	7394.899	0	3	1
2036	2a	1	11098.86	32804.79	32804.79	0	128643.9	128643.9	0	ICE	11098.86	0	3	1
2036	2a	1	11768.58	35458.5	35458.5	0	140420.3	140420.3	0	ICE	11768.58	0	3	1
2036	2a	1	13297.86	40828.04	40828.04	0	162966.7	162966.7	0	ICE	13297.86	0	3	1
2036	2a	1	17543.22	54867.48	54867.48	0	221930.9	221930.9	0	ICE	17543.22	0	3	1
2036	2a	1	17221.14	54846.73	54846.73	0	223032.8	223032.8	0	ICE	17221.14	0	3	1
2036	2a	1	16758.18	54332.35	54332.35	0	223978.2	223978.2	0	ICE	16758.18	0	3	1
2036	2a	1	18977.4	62614.59	62614.59	0	261504.8	261504.8	0	ICE	18977.4	0	3	1
2036	2a	1	22709.09	76228.07	76228.07	0	321281.2	321281.2	0	ICE	22709.09	0	3	1
2036	2a	1	25127.81	85786.59	85786.59	0	365291	365291	0	ICE	25127.81	0	3	1
2036	2a	1	23574.83	81835.3	81835.3	0	351507.6	351507.6	0	ICE	23574.83	0	3	1
2036	2a	1	25008.71	88245.48	88245.48	0	382710.2	382710.2	0	ICE	25008.71	0	3	1
2036	2a	1	20101.13	72080.24	72080.24	0	316231.1	316231.1	0	ICE	20101.13	0	3	1
2036	2a	1	12951.4	47184.15	47184.15	0	209092.6	209092.6	0	ICE	12951.4	0	3	1
2036	2a	1	24004.23	88826.7	88826.7	0	398549.3	398549.3	0	ICE	24004.23	0	3	1

2036	2a	1	34041.42	127919.1	127919.1	0	581606.8	581606.8	0	ICE	34041.42	0	3	1
2036	2a	1	35461.4	135286.7	135286.7	0	626796	626796	0	ICE	35461.4	0	3	1
2036	2a	1	52712.47	204120.1	204120.1	0	954711.1	954711.1	0	ICE	52712.47	0	3	1
2036	2a	1	53983.7	212135.4	212135.4	0	1011524	1011524	0	ICE	53983.7	0	3	1
2036	2a	1	574.2891	2256.738	2256.738	0	10518.5	10518.5	0	ICE	574.2891	0	3	2
2036	2a	1	71719.04	285937.4	285937.4	0	1385355	1385355	0	ICE	71719.04	0	3	1
2036	2a	1	79883.18	323063.6	323063.6	0	1589556	1589556	0	ICE	79883.18	0	3	1
2036	2a	1	576.9683	2333.375	2333.375	0	11535.03	11535.03	0	ICE	576.9683	0	3	2
2036	2a	1	103061.4	422705.4	422705.4	0	2112237	2112237	0	ICE	103061.4	0	3	1
2036	2a	1	1053.403	4320.521	4320.521	0	21661.39	21661.39	0	ICE	1053.403	0	3	2
2036	2a	1	123558	513850.7	513850.7	0	2616421	2616421	0	ICE	123558	0	3	1
2036	2a	1	1262.901	5252.128	5252.128	0	26829.72	26829.72	0	ICE	1262.901	0	3	2
2036	2a	1	426.2924	1772.856	1063.714	709.1426	9073.001	5443.801	3629.2	PHEV	255.7755	170.517	3	8
2036	2a	1	141284.7	595666.4	595666.4	0	3102591	3102591	0	ICE	141284.7	0	3	1
2036	2a	1	1440.448	6073.029	6073.029	0	31715.48	31715.48	0	ICE	1440.448	0	3	2
2036	2a	1	1666.276	7025.135	0	7025.135	27707.89	0	27707.89	BEV	0	1666.276	3	3
2036	2a	1	38.97721	164.3307	0	164.3307	579.2382	0	579.2382	FCEV	0	38.97721	3	7
2036	2a	1	1447.259	6101.746	3626.18	2475.565	31848.45	18927.08	12921.37	PHEV	860.0854	587.1737	3	8
2036	2a	1	158928.6	679159.3	679159.3	0	3607740	3607740	0	ICE	158928.6	0	3	1
2036	2a	1	1624.017	6940.01	6940.01	0	36968.11	36968.11	0	ICE	1624.017	0	3	2
2036	2a	1	3808.728	16276.07	0	16276.07	76903.73	0	76903.73	BEV	0	3808.728	3	3
2036	2a	1	100.5236	429.5736	0	429.5736	1560.912	0	1560.912	FCEV	0	100.5236	3	7
2036	2a	1	2748.688	11746.13	6913.438	4832.695	62569.42	36826.57	25742.85	PHEV	1617.799	1130.889	3	8
2036	2a	1	168658.1	730399	730399	0	3958105	3958105	0	ICE	168658.1	0	3	1
2036	2a	1	1749.493	7576.441	7576.441	0	41231.51	41231.51	0	ICE	1749.493	0	3	2
2036	2a	1	11519.07	49885.07	0	49885.07	232321.1	0	232321.1	BEV	0	11519.07	3	3
2036	2a	1	394.8618	1710.008	0	1710.008	6402.514	0	6402.514	FCEV	0	394.8618	3	7
2036	2a	1	7829.403	33906.4	19656.03	14250.38	205153.9	118930.7	86223.27	PHEV	4538.817	3290.586	3	8
2036	2a	1	173620.8	761837.5	761837.5	0	4218293	4218293	0	ICE	173620.8	0	3	1
2036	2a	1	1809.445	7939.736	7939.736	0	44174.51	44174.51	0	ICE	1809.445	0	3	2
2036	2a	1	21038.32	92314.87	0	92314.87	438907.8	0	438907.8	BEV	0	21038.32	3	3
2036	2a	1	889.6488	3903.726	0	3903.726	15055.53	0	15055.53	FCEV	0	889.6488	3	7
2036	2a	1	13455.41	59041.52	33704.27	25337.25	378904.2	216300.2	162604	PHEV	7681.115	5774.292	3	8
2036	2a	1	176174.4	783135.9	783135.9	0	4434014	4434014	0	ICE	176174.4	0	3	1
2036	2a	1	1845.981	8205.81	8205.81	0	46708.17	46708.17	0	ICE	1845.981	0	3	2
2036	2a	1	32534.31	144622.5	0	144622.5	709089.8	0	709089.8	BEV	0	32534.31	3	3
2036	2a	1	1640.385	7291.889	0	7291.889	29147.21	0	29147.21	FCEV	0	1640.385	3	7
2036	2a	1	19558.3	86941.14	48860.92	38080.22	579399.1	325622.3	253776.8	PHEV	10991.76	8566.535	3	8
2036	2a	1	173696.2	782070.8	782070.8	0	4530910	4530910	0	ICE	173696.2	0	3	1
2036	2a	1	1829.15	8235.786	8235.786	0	47992.2	47992.2	0	ICE	1829.15	0	3	2
2036	2a	1	45442.1	204604	0	204604	1034283	0	1034283	BEV	0	45442.1	3	3
2036	2a	1	2666.596	12006.4	0	12006.4	52253.96	0	52253.96	FCEV	0	2666.596	3	7
2036	2a	1	25644.41	115464.5	63868.34	51596.12	794366.3	439398.1	354968.3	PHEV	14185.02	11459.39	3	8
2036	2a	1	170650.4	778133.6	778133.6	0	4617387	4617387	0	ICE	170650.4	0	3	1
2036	2a	1	1805.419	8232.369	8232.369	0	49159.82	49159.82	0	ICE	1805.419	0	3	2
2036	2a	1	60747.64	276997.7	0	276997.7	1444972	0	1444972	BEV	0	60747.64	3	3
2036	2a	1	4074.537	18579.11	0	18579.11	86188.46	0	86188.46	FCEV	0	4074.537	3	7

2036	2a	1	32133.09	146520.8	79749.16	66771.61	1039693	565889.9	473802.9	PHEV	17489.58	14643.51	3	8
2036	2a	1	163215.4	753581.7	753581.7	0	4580328	4580328	0	ICE	163215.4	0	3	1
2036	2a	1	1726.759	7972.618	7972.618	0	48762.33	48762.33	0	ICE	1726.759	0	3	2
2036	2a	1	77274	356781.8	0	356781.8	1921570	0	1921570	BEV	0	77274	3	3
2036	2a	1	5841.857	26972.44	0	26972.44	133513.7	0	133513.7	FCEV	0	5841.857	3	7
2036	2a	1	38245.51	176583.3	94547.77	82035.57	1293391	692518.5	600872.5	PHEV	20477.74	17767.77	3	8
2036	2a	1	153365.2	716888.6	716888.6	0	4464165	4464165	0	ICE	153365.2	0	3	1
2036	2a	1	1622.547	7584.419	7584.419	0	47523.3	47523.3	0	ICE	1622.547	0	3	2
2036	2a	1	95488.85	446352.1	0	446352.1	2481511	0	2481511	BEV	0	95488.85	3	3
2036	2a	1	8046.148	37610.84	0	37610.84	196244.8	0	196244.8	FCEV	0	8046.148	3	7
2036	2a	1	44130.2	206281.8	108622.1	97659.68	1558201	820504.3	737697	PHEV	23237.7	20892.5	3	8
2036	2a	1	139855.8	661753	661753	0	4223980	4223980	0	ICE	139855.8	0	3	1
2036	2a	1	1479.623	7001.104	7001.104	0	44964.82	44964.82	0	ICE	1479.623	0	3	2
2036	2a	1	114260.6	540644.4	0	540644.4	3102780	0	3102780	BEV	0	114260.6	3	3
2036	2a	1	10633.87	50316.06	0	50316.06	274868.3	0	274868.3	FCEV	0	10633.87	3	7
2036	2a	1	49191.13	232756.7	120501.5	112255.2	1813215	938727.2	874487.6	PHEV	25466.95	23724.18	3	8
2036	2a	1	124339.4	595457.5	595457.5	0	3896559	3896559	0	ICE	124339.4	0	3	1
2036	2a	1	1315.465	6299.722	6299.722	0	41478.31	41478.31	0	ICE	1315.465	0	3	2
2036	2a	1	134163.7	642505.9	0	642505.9	3805858	0	3805858	BEV	0	134163.7	3	3
2036	2a	1	13686.72	65545.31	0	65545.31	373279.8	0	373279.8	FCEV	0	13686.72	3	7
2036	2a	1	53658.74	256970.1	130761.1	126209	2064080	1050322	1013758	PHEV	27304.63	26354.11	3	8
2036	2a	1	106523.3	516239.7	516239.7	0	3464211	3464211	0	ICE	106523.3	0	3	1
2036	2a	1	1126.978	5461.627	5461.627	0	36875.42	36875.42	0	ICE	1126.978	0	3	2
2036	2a	1	154367.8	748106.5	0	748106.5	4573891	0	4573891	BEV	0	154367.8	3	3
2036	2a	1	17151.98	83122.94	0	83122.94	492199.4	0	492199.4	FCEV	0	17151.98	3	7
2036	2a	1	57173.26	277076.5	138538.2	138538.2	2294924	1147462	1147462	PHEV	28586.63	28586.63	3	8
2036	2a	1	87883.77	430942.5	430942.5	0	2965591	2965591	0	ICE	87883.77	0	3	1
2036	2a	1	929.7781	4559.213	4559.213	0	31567.47	31567.47	0	ICE	929.7781	0	3	2
2036	2a	1	174544	855885.3	0	855885.3	5386673	0	5386673	BEV	0	174544	3	3
2036	2a	1	21572.86	105783.6	0	105783.6	648914	0	648914	FCEV	0	21572.86	3	7
2036	2a	1	61931.64	303684.9	151842.5	151842.5	2590716	1295358	1295358	PHEV	30965.82	30965.82	3	8
2036	2a	1	67564.91	335178.7	335178.7	0	2365627	2365627	0	ICE	67564.91	0	3	1
2036	2a	1	714.812	3546.068	3546.068	0	25181.08	25181.08	0	ICE	714.812	0	3	2
2036	2a	1	194658.4	965669.3	0	965669.3	6255964	0	6255964	BEV	0	194658.4	3	3
2036	2a	1	26544.33	131682.2	0	131682.2	835449.1	0	835449.1	FCEV	0	26544.33	3	7
2036	2a	1	66073.55	327780.3	163890.2	163890.2	2880381	1440190	1440190	PHEV	33036.78	33036.78	3	8
2036	2a	1	45957.49	230620.7	230620.7	0	1669119	1669119	0	ICE	45957.49	0	3	1
2036	2a	1	486.2134	2439.882	2439.882	0	17767.12	17767.12	0	ICE	486.2134	0	3	2
2036	2a	1	214660.8	1077196	0	1077196	7181731	0	7181731	BEV	0	214660.8	3	3
2036	2a	1	32075.75	160960.3	0	160960.3	1054778	0	1054778	FCEV	0	32075.75	3	7
2036	2a	1	69592.35	349223.4	174611.7	174611.7	3160590	1580295	1580295	PHEV	34796.17	34796.17	3	8
2036	2a	1	23689.48	120234	120234	0	892352.2	892352.2	0	ICE	23689.48	0	3	1
2036	2a	1	250.626	1272.032	1272.032	0	9498.83	9498.83	0	ICE	250.626	0	3	2
2036	2a	1	237826	1207067	0	1207067	8281522	0	8281522	BEV	0	237826	3	3
2036	2a	1	38715.86	196499.3	0	196499.3	1328873	0	1328873	FCEV	0	38715.86	3	7
2036	2a	1	73511.13	373099.9	186549.9	186549.9	3477648	1738824	1738824	PHEV	36755.56	36755.56	3	8
2036	2a	1	262294.3	1346281	0	1346281	9502248	0	9502248	BEV	0	262294.3	3	3

2036	2a	1	46287.24	237579	0	237579	1656641	0	1656641	FCEV	0	46287.24	3	7
2036	2a	1	77145.4	395964.9	197982.5	197982.5	3799664	1899832	1899832	PHEV	38572.7	38572.7	3	8
2036	2a	1	238999.3	1240407	0	1240407	9001560	0	9001560	BEV	0	238999.3	3	3
2036	2a	1	45523.68	236267.9	0	236267.9	1695872	0	1695872	FCEV	0	45523.68	3	7
2036	2a	1	66739.97	346380.4	173190.2	173190.2	3410318	1705159	1705159	PHEV	33369.98	33369.98	3	8
2036	2a	1	3668.897	9793.167	9793.167	0	31676.78	31676.78	0	ICE	3668.897	0	4	1
2036	2a	1	3890.291	10606.99	10606.99	0	35245.91	35245.91	0	ICE	3890.291	0	4	1
2036	2a	1	5888.477	16392.46	16392.46	0	55043.8	55043.8	0	ICE	5888.477	0	4	1
2036	2a	1	6285.823	17858.72	17858.72	0	61037.33	61037.33	0	ICE	6285.823	0	4	1
2036	2a	1	5485.424	15898.95	15898.95	0	54887.19	54887.19	0	ICE	5485.424	0	4	1
2036	2a	1	6947.052	20533.33	20533.33	0	72491.91	72491.91	0	ICE	6947.052	0	4	1
2036	2a	1	7716.035	23248.26	23248.26	0	83173.59	83173.59	0	ICE	7716.035	0	4	1
2036	2a	1	12246.11	37598.88	37598.88	0	137783.2	137783.2	0	ICE	12246.11	0	4	1
2036	2a	1	13889.15	43439.16	43439.16	0	161438.3	161438.3	0	ICE	13889.15	0	4	1
2036	2a	1	17814.63	56736.91	56736.91	0	213941.9	213941.9	0	ICE	17814.63	0	4	1
2036	2a	1	20.97654	66.80714	66.80714	0	219.0792	219.0792	0	ICE	20.97654	0	4	2
2036	2a	1	21252.02	68902.01	68902.01	0	265131.7	265131.7	0	ICE	21252.02	0	4	1
2036	2a	1	23310.42	76911.09	76911.09	0	302975.1	302975.1	0	ICE	23310.42	0	4	1
2036	2a	1	25939.54	87071.76	87071.76	0	347602.1	347602.1	0	ICE	25939.54	0	4	1
2036	2a	1	40.22382	135.0201	135.0201	0	483.7512	483.7512	0	ICE	40.22382	0	4	2
2036	2a	1	25188.95	85995.31	85995.31	0	344679	344679	0	ICE	25188.95	0	4	1
2036	2a	1	25678.79	89138.79	89138.79	0	363091.9	363091.9	0	ICE	25678.79	0	4	1
2036	2a	1	26980.16	95201.92	95201.92	0	394570.9	394570.9	0	ICE	26980.16	0	4	1
2036	2a	1	21260.91	76239.06	76239.06	0	320225.3	320225.3	0	ICE	21260.91	0	4	1
2036	2a	1	9453.619	34441.14	34441.14	0	146461.9	146461.9	0	ICE	9453.619	0	4	1
2036	2a	1	14490.86	53622.84	53622.84	0	231372.8	231372.8	0	ICE	14490.86	0	4	1
2036	2a	1	22961.94	86285.24	86285.24	0	377372.5	377372.5	0	ICE	22961.94	0	4	1
2036	2a	1	654.5962	2459.809	2459.809	0	10474.47	10474.47	0	ICE	654.5962	0	4	2
2036	2a	1	25422.73	96988.73	96988.73	0	431026.6	431026.6	0	ICE	25422.73	0	4	1
2036	2a	1	31308.42	121236.5	121236.5	0	546227.3	546227.3	0	ICE	31308.42	0	4	1
2036	2a	1	670.6346	2596.919	2596.919	0	11519.14	11519.14	0	ICE	670.6346	0	4	2
2036	2a	1	53272.57	209341	209341	0	961902.2	961902.2	0	ICE	53272.57	0	4	1
2036	2a	1	1677.142	6590.529	6590.529	0	29753.9	29753.9	0	ICE	1677.142	0	4	2
2036	2a	1	63605.62	253589.9	253589.9	0	1191555	1191555	0	ICE	63605.62	0	4	1
2036	2a	1	74493.64	301267.2	301267.2	0	1445085	1445085	0	ICE	74493.64	0	4	1
2036	2a	1	72837.05	298740.4	298740.4	0	1457248	1457248	0	ICE	72837.05	0	4	1
2036	2a	1	2539.84	10417.13	10417.13	0	50851.01	50851.01	0	ICE	2539.84	0	4	2
2036	2a	1	609.3755	2499.348	1499.609	999.739	11561.89	6937.132	4624.755	PHEV	365.6253	243.7502	4	8
2036	2a	1	82383.92	342616.6	342616.6	0	1705577	1705577	0	ICE	82383.92	0	4	1
2036	2a	1	2872.741	11947.1	11947.1	0	59515.54	59515.54	0	ICE	2872.741	0	4	2
2036	2a	1	1.44114	5.993384	0	5.993384	20.46833	0	20.46833	BEV	0	1.44114	4	3
2036	2a	1	0.029411	0.122314	0	0.122314	0.417721	0	0.417721	FCEV	0	0.029411	4	7
2036	2a	1	1763.558	7334.251	4400.551	2933.7	35791.76	21475.05	14316.7	PHEV	1058.135	705.4233	4	8
2036	2a	1	93549.69	394412.1	394412.1	0	2004393	2004393	0	ICE	93549.69	0	4	1
2036	2a	1	3292.889	13883.05	13883.05	0	70665.92	70665.92	0	ICE	3292.889	0	4	2
2036	2a	1	801.9513	3381.083	0	3381.083	12442.63	0	12442.63	BEV	0	801.9513	4	3
2036	2a	1	18.75909	79.08966	0	79.08966	278.6102	0	278.6102	FCEV	0	18.75909	4	7

2036	2a	1	2086.512	8796.881	5227.861	3569.02	46606.19	27697.4	18908.8	PHEV	1239.984	846.5278	4	8
2036	2a	1	104122.5	444952.9	444952.9	0	2308229	2308229	0	ICE	104122.5	0	4	1
2036	2a	1	3722.525	15907.69	15907.69	0	82777.98	82777.98	0	ICE	3722.525	0	4	2
2036	2a	1	1795.463	7672.66	0	7672.66	31696.45	0	31696.45	BEV	0	1795.463	4	3
2036	2a	1	47.38759	202.5042	0	202.5042	735.4712	0	735.4712	FCEV	0	47.38759	4	7
2036	2a	1	2418.033	10333.12	6081.781	4251.342	54886.51	32304.63	22581.88	PHEV	1423.185	994.8477	4	8
2036	2a	1	107527.4	465663.5	465663.5	0	2468368	2468368	0	ICE	107527.4	0	4	1
2036	2a	1	3912.176	16942.26	16942.26	0	90232.73	90232.73	0	ICE	3912.176	0	4	2
2036	2a	1	5690.454	24643.36	0	24643.36	104475	0	104475	BEV	0	5690.454	4	3
2036	2a	1	195.0628	844.7488	0	844.7488	3161.807	0	3161.807	FCEV	0	195.0628	4	7
2036	2a	1	6791.848	29413.11	17051.2	12361.91	170013.1	98559.01	71454.07	PHEV	3937.331	2854.517	4	8
2036	2a	1	108581.2	476447.7	476447.7	0	2584444	2584444	0	ICE	108581.2	0	4	1
2036	2a	1	3972.186	17429.71	17429.71	0	95057.76	95057.76	0	ICE	3972.186	0	4	2
2036	2a	1	10682.05	46872.21	0	46872.21	207221.2	0	207221.2	BEV	0	10682.05	4	3
2036	2a	1	451.7128	1982.089	0	1982.089	7642.214	0	7642.214	FCEV	0	451.7128	4	7
2036	2a	1	11313.18	49641.57	28338.25	21303.33	301324	172013	129311.1	PHEV	6458.212	4854.972	4	8
2036	2a	1	108470.6	482176.6	482176.6	0	2677959	2677959	0	ICE	108470.6	0	4	1
2036	2a	1	3993.117	17750.32	17750.32	0	99175.13	99175.13	0	ICE	3993.117	0	4	2
2036	2a	1	16916.58	75198.07	0	75198.07	346740.9	0	346740.9	BEV	0	16916.58	4	3
2036	2a	1	852.9366	3791.499	0	3791.499	15052.25	0	15052.25	FCEV	0	852.9366	4	7
2036	2a	1	15900.61	70681.88	39723.22	30958.66	446364.8	250857	195507.8	PHEV	8936.145	6964.469	4	8
2036	2a	1	106147.3	477930.4	477930.4	0	2718980	2718980	0	ICE	106147.3	0	4	1
2036	2a	1	3930.421	17696.8	17696.8	0	101340.3	101340.3	0	ICE	3930.421	0	4	2
2036	2a	1	24288.8	109360.8	0	109360.8	525375.2	0	525375.2	BEV	0	24288.8	4	3
2036	2a	1	1425.296	6417.423	0	6417.423	26246.17	0	26246.17	FCEV	0	1425.296	4	7
2036	2a	1	20244.75	91152.41	50420.3	40732.11	597242.4	330360.3	266882	PHEV	11198.24	9046.513	4	8
2036	2a	1	103618.4	472480.2	472480.2	0	2755781	2755781	0	ICE	103618.4	0	4	1
2036	2a	1	3857.495	17589.44	17589.44	0	103326.1	103326.1	0	ICE	3857.495	0	4	2
2036	2a	1	33304.77	151863.4	0	151863.4	758824.5	0	758824.5	BEV	0	33304.77	4	3
2036	2a	1	2233.857	10185.96	0	10185.96	44825.68	0	44825.68	FCEV	0	2233.857	4	7
2036	2a	1	24568.77	112028.9	60975.74	51053.18	760449.1	413901.6	346547.5	PHEV	13372.43	11196.34	4	8
2036	2a	1	99105.52	457580.1	457580.1	0	2736317	2736317	0	ICE	99105.52	0	4	1
2036	2a	1	3689.489	17034.74	17034.74	0	102590.7	102590.7	0	ICE	3689.489	0	4	2
2036	2a	1	43614.17	201371	0	201371	1046890	0	1046890	BEV	0	43614.17	4	3
2036	2a	1	3297.199	15223.5	0	15223.5	72189.77	0	72189.77	FCEV	0	3297.199	4	7
2036	2a	1	28387.57	131068.2	70177.68	60890.56	922261	493804.9	428456.1	PHEV	15199.51	13188.05	4	8
2036	2a	1	93757.11	438257.3	438257.3	0	2687133	2687133	0	ICE	93757.11	0	4	1
2036	2a	1	3490.379	16315.39	16315.39	0	100742.1	100742.1	0	ICE	3490.379	0	4	2
2036	2a	1	55734.36	260524.2	0	260524.2	1407948	0	1407948	BEV	0	55734.36	4	3
2036	2a	1	4696.328	21952.47	0	21952.47	110675.1	0	110675.1	FCEV	0	4696.328	4	7
2036	2a	1	31864.95	148949.2	78432.39	70516.8	1085360	571519.7	513840.5	PHEV	16779.17	15085.78	4	8
2036	2a	1	85660.39	405317.6	405317.6	0	2549268	2549268	0	ICE	85660.39	0	4	1
2036	2a	1	3188.956	15089.12	15089.12	0	95570.7	95570.7	0	ICE	3188.956	0	4	2
2036	2a	1	68497.89	324110.1	0	324110.1	1820183	0	1820183	BEV	0	68497.89	4	3
2036	2a	1	6374.882	30163.9	0	30163.9	160459.6	0	160459.6	FCEV	0	6374.882	4	7
2036	2a	1	34191.58	161783.6	83757.68	78025.92	1220674	631960.4	588713.7	PHEV	17701.47	16490.11	4	8
2036	2a	1	77070.76	369089.6	369089.6	0	2381139	2381139	0	ICE	77070.76	0	4	1

2036	2a	1	2869.182	13740.43	13740.43	0	89265.68	89265.68	0	ICE	2869.182	0	4	2
2036	2a	1	83298.86	398915.8	0	398915.8	2326938	0	2326938	BEV	0	83298.86	4	3
2036	2a	1	8497.743	40695.44	0	40695.44	227313.8	0	227313.8	FCEV	0	8497.743	4	7
2036	2a	1	36009.24	172447.2	87750.98	84696.2	1346181	685014	661167.4	PHEV	18323.56	17685.68	4	8
2036	2a	1	66771.18	323590.5	323590.5	0	2141468	2141468	0	ICE	66771.18	0	4	1
2036	2a	1	2485.75	12046.59	12046.59	0	80279.68	80279.68	0	ICE	2485.75	0	4	2
2036	2a	1	99037.85	479963.2	0	479963.2	2907334	0	2907334	BEV	0	99037.85	4	3
2036	2a	1	11004.21	53329.24	0	53329.24	311820.8	0	311820.8	FCEV	0	11004.21	4	7
2036	2a	1	36680.68	177764.1	88882.07	88882.07	1434703	717351.6	717351.6	PHEV	18340.34	18340.34	4	8
2036	2a	1	55736.63	273307.4	273307.4	0	1855050	1855050	0	ICE	55736.63	0	4	1
2036	2a	1	2074.957	10174.66	10174.66	0	69541.83	69541.83	0	ICE	2074.957	0	4	2
2036	2a	1	113329	555714.2	0	555714.2	3464677	0	3464677	BEV	0	113329	4	3
2036	2a	1	14006.95	68683.77	0	68683.77	416276.3	0	416276.3	FCEV	0	14006.95	4	7
2036	2a	1	40211.34	197178.3	98589.15	98589.15	1639525	819762.7	819762.7	PHEV	20105.67	20105.67	4	8
2036	2a	1	42825.96	212452.8	212452.8	0	1479000	1479000	0	ICE	42825.96	0	4	1
2036	2a	1	1594.32	7909.168	7909.168	0	55444.48	55444.48	0	ICE	1594.32	0	4	2
2036	2a	1	126342.7	626766.1	0	626766.1	4021728	0	4021728	BEV	0	126342.7	4	3
2036	2a	1	17228.55	85468.1	0	85468.1	535935.1	0	535935.1	FCEV	0	17228.55	4	7
2036	2a	1	42884.93	212745.3	106372.6	106372.6	1822336	911167.9	911167.9	PHEV	21442.46	21442.46	4	8
2036	2a	1	29281.82	146940	146940	0	1048906	1048906	0	ICE	29281.82	0	4	1
2036	2a	1	1090.1	5470.265	5470.265	0	39321.24	39321.24	0	ICE	1090.1	0	4	2
2036	2a	1	140074.8	702913.3	0	702913.3	4640763	0	4640763	BEV	0	140074.8	4	3
2036	2a	1	20930.71	105033	0	105033	680403.7	0	680403.7	FCEV	0	20930.71	4	7
2036	2a	1	45411.8	227882.3	113941.1	113941.1	2009968	1004984	1004984	PHEV	22705.9	22705.9	4	8
2036	2a	1	15103.01	76654.13	76654.13	0	560758.5	560758.5	0	ICE	15103.01	0	4	1
2036	2a	1	562.2533	2853.672	2853.672	0	21021.6	21021.6	0	ICE	562.2533	0	4	2
2036	2a	1	155309.2	788259.4	0	788259.4	5352062	0	5352062	BEV	0	155309.2	4	3
2036	2a	1	25282.89	128321.3	0	128321.3	857593.8	0	857593.8	FCEV	0	25282.89	4	7
2036	2a	1	48005.49	243648	121824	121824	2210779	1105390	1105390	PHEV	24002.75	24002.75	4	8
2036	2a	1	169856.8	871825.6	0	871825.6	6085936	0	6085936	BEV	0	169856.8	4	3
2036	2a	1	29974.73	153851.6	0	153851.6	1059804	0	1059804	FCEV	0	29974.73	4	7
2036	2a	1	49957.88	256419.3	128209.6	128209.6	2392804	1196402	1196402	PHEV	24978.94	24978.94	4	8
2036	2a	1	148185.5	769082.5	0	769082.5	5508635	0	5508635	BEV	0	148185.5	4	3
2036	2a	1	28225.8	146491.9	0	146491.9	1036804	0	1036804	FCEV	0	28225.8	4	7
2036	2a	1	41380.42	214764.4	107382.2	107382.2	2047408	1023704	1023704	PHEV	20690.21	20690.21	4	8
2036	2a	1	26.71964	71.32113	71.32113	0	104.4957	104.4957	0	ICE	26.71964	0	1	2
2036	2a	1	14.54525	39.65805	39.65805	0	60.32828	60.32828	0	ICE	14.54525	0	1	2
2036	2a	1	29.86921	88.28413	88.28413	0	180.2796	180.2796	0	ICE	29.86921	0	1	2
2036	2a	1	38.25716	119.6516	119.6516	0	295.5807	295.5807	0	ICE	38.25716	0	1	2
2036	2a	1	5.865875	18.68193	0	18.68193	53.77692	0	53.77692	BEV	0	5.865875	1	3
2036	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2036	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2036	2a	1	89.42057	289.914	289.914	0	761.9315	761.9315	0	ICE	89.42057	0	1	2
2036	2a	1	120.8157	398.623	398.623	0	1096.793	1096.793	0	ICE	120.8157	0	1	2
2036	2a	1	43.06402	144.5539	144.5539	0	428.8847	428.8847	0	ICE	43.06402	0	1	2
2036	2a	1	80.94162	276.3355	276.3355	0	830.8513	830.8513	0	ICE	80.94162	0	1	2
2036	2a	1	258.6671	942.3682	942.3682	0	3271.059	3271.059	0	ICE	258.6671	0	1	2

2036	2a	1	954.5106	3641.496	3641.496	0	14114.01	14114.01	0	ICE	954.5106	0	1	2
2036	2a	1	1564.16	6056.943	6056.943	0	24529.34	24529.34	0	ICE	1564.16	0	1	2
2036	2a	1	1390.13	5383.041	0	5383.041	22214.72	0	22214.72	BEV	0	1390.13	1	3
2036	2a	1	0.081671	0.316259	0	0.316259	1.305136	0	1.305136	FCEV	0	0.081671	1	7
2036	2a	1	1453.017	5626.56	3375.936	2250.624	21934.2	13160.52	8773.682	PHEV	871.81	581.2067	1	8
2036	2a	1	1992.177	7828.499	0	7828.499	33422.71	0	33422.71	BEV	0	1992.177	1	3
2036	2a	1	0.279134	1.096889	0	1.096889	4.683019	0	4.683019	FCEV	0	0.279134	1	7
2036	2a	1	2515.274	9884.07	5930.442	3953.628	39945.73	23967.44	15978.29	PHEV	1509.164	1006.109	1	8
2036	2a	1	2159.635	8610.269	8610.269	0	37837.48	37837.48	0	ICE	2159.635	0	1	2
2036	2a	1	5390.418	21491.11	0	21491.11	95244.34	0	95244.34	BEV	0	5390.418	1	3
2036	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2036	2a	1	2563.289	10219.6	6131.761	4087.84	42897.12	25738.27	17158.85	PHEV	1537.973	1025.315	1	8
2036	2a	1	4642.784	15584.53	15584.53	0	66238.18	66238.18	0	ICE	4642.784	0	2	1
2036	2a	1	10468.6	39938.13	39938.13	0	186901.3	186901.3	0	ICE	10468.6	0	2	1
2036	2a	1	16139.93	62499.12	62499.12	0	296607.4	296607.4	0	ICE	16139.93	0	2	1
2036	2a	1	21112.56	82964.33	82964.33	0	397272.8	397272.8	0	ICE	21112.56	0	2	1
2036	2a	1	6.894681	24.7235	24.7235	0	104.6631	104.6631	0	ICE	6.894681	0	3	2
2036	2a	1	234.5488	894.8131	894.8131	0	4059.897	4059.897	0	ICE	234.5488	0	3	2
2036	2a	1	190.2248	736.6132	736.6132	0	3360.593	3360.593	0	ICE	190.2248	0	3	2
2036	2a	1	915.497	3650.004	3650.004	0	17436.78	17436.78	0	ICE	915.497	0	3	2
2036	2a	1	1063.714	4301.87	0	4301.87	13530.1	0	13530.1	BEV	0	1063.714	3	3
2036	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2036	2a	1	96.80575	391.5018	234.9011	156.6007	1843.372	1106.023	737.3489	PHEV	58.08345	38.7223	3	8
2036	2a	1	23.67671	65.9117	65.9117	0	203.1762	203.1762	0	ICE	23.67671	0	4	2
2036	2a	1	13.81732	42.42291	42.42291	0	127.3297	127.3297	0	ICE	13.81732	0	4	2
2036	2a	1	68.7768	234.8047	234.8047	0	887.664	887.664	0	ICE	68.7768	0	4	2
2036	2a	1	97.93573	339.9643	339.9643	0	1306.055	1306.055	0	ICE	97.93573	0	4	2
2036	2a	1	138.0159	487.0015	487.0015	0	1964.037	1964.037	0	ICE	138.0159	0	4	2
2036	2a	1	104.6504	375.2638	375.2638	0	1540.803	1540.803	0	ICE	104.6504	0	4	2
2036	2a	1	149.7699	545.6374	545.6374	0	2264.039	2264.039	0	ICE	149.7699	0	4	2
2036	2a	1	1252.679	4779.019	4779.019	0	20758.7	20758.7	0	ICE	1252.679	0	4	2
2036	2a	1	3594.785	14332.08	14332.08	0	66403.98	66403.98	0	ICE	3594.785	0	4	2
2036	2a	1	2473.925	10005.05	10005.05	0	47808.27	47808.27	0	ICE	2473.925	0	4	2
2036	2a	1	51.11457	156.9355	156.9355	0	358.3835	358.3835	0	ICE	51.11457	0	1	2
2036	2a	1	2.895969	9.886869	0	9.886869	31.7206	0	31.7206	BEV	0	2.895969	1	3
2036	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2036	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2036	2a	1	256.7934	979.6771	0	979.6771	3914.941	0	3914.941	BEV	0	256.7934	1	3
2036	2a	1	0.970456	3.702328	0	3.702328	14.79507	0	14.79507	FCEV	0	0.970456	1	7
2036	2a	1	539.7891	2059.317	1235.59	823.7268	7741.444	4644.866	3096.578	PHEV	323.8735	215.9156	1	8
2036	2a	1	4076.433	16485.91	0	16485.91	75566.46	0	75566.46	BEV	0	4076.433	1	3
2036	2a	1	124.1101	501.926	0	501.926	2300.678	0	2300.678	FCEV	0	124.1101	1	7
2036	2a	1	2931.501	11855.58	7113.345	4742.23	51761.31	31056.79	20704.52	PHEV	1758.9	1172.6	1	8
2036	2a	1	2.283679	6.357352	6.357352	0	19.56055	19.56055	0	ICE	2.283679	0	2	2
2036	2a	1	1.340278	3.807877	3.807877	0	11.61108	11.61108	0	ICE	1.340278	0	2	2
2036	2a	1	2.671891	8.050355	8.050355	0	29.8815	29.8815	0	ICE	2.671891	0	2	2
2036	2a	1	23.6628	80.78505	80.78505	0	326.459	326.459	0	ICE	23.6628	0	3	2

2036	2a	1	26.7823	92.9694	92.9694	0	389.0603	389.0603	0	ICE	26.7823	0	3	2
2036	2a	1	11.70457	35.26564	35.26564	0	102.7748	102.7748	0	ICE	11.70457	0	4	2
2036	2a	1	23.97747	79.11198	79.11198	0	286.6643	286.6643	0	ICE	23.97747	0	4	2
2036	2a	1	276.3972	1022.797	1022.797	0	4306.565	4306.565	0	ICE	276.3972	0	4	2
2036	2a	1	49.11925	139.5532	139.5532	0	255.9454	255.9454	0	ICE	49.11925	0	1	2
2036	2a	1	35.86116	103.94	103.94	0	203.8309	203.8309	0	ICE	35.86116	0	1	2
2036	2a	1	52.50254	158.1891	158.1891	0	355.7699	355.7699	0	ICE	52.50254	0	1	2
2036	2a	1	11.07201	35.89702	0	35.89702	106.0819	0	106.0819	BEV	0	11.07201	1	3
2036	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2036	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2036	2a	1	280.7858	1055.123	0	1055.123	4092.654	0	4092.654	BEV	0	280.7858	1	3
2036	2a	1	2.774119	10.42445	0	10.42445	40.43476	0	40.43476	FCEV	0	2.774119	1	7
2036	2a	1	78.05021	293.2932	175.9759	117.3173	1059.474	635.6843	423.7895	PHEV	46.83013	31.22009	1	8
2036	2a	1	340.2683	1376.113	1376.113	0	6158.206	6158.206	0	ICE	340.2683	0	1	2
2036	2a	1	210.5744	827.4772	0	827.4772	3523.314	0	3523.314	BEV	0	210.5744	2	3
2036	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2036	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2036	2a	1	18.20438	49.63479	49.63479	0	139.3593	139.3593	0	ICE	18.20438	0	4	2
2036	2a	1	27.15354	77.1462	77.1462	0	233.0985	233.0985	0	ICE	27.15354	0	4	2
2036	2a	1	25.07104	72.66591	72.66591	0	215.1223	215.1223	0	ICE	25.07104	0	4	2
2036	2a	1	19.95248	71.54719	71.54719	0	233.0229	233.0229	0	ICE	19.95248	0	1	2
2036	2a	1	4.108088	13.55435	13.55435	0	49.62228	49.62228	0	ICE	4.108088	0	2	2
2036	2a	1	0.280808	0.862158	0.862158	0	2.472985	2.472985	0	ICE	0.280808	0	3	2
2036	2a	1	14.21381	52.59764	52.59764	0	228.1613	228.1613	0	ICE	14.21381	0	3	2
2036	2a	1	45.60593	179.214	0	179.214	531.5195	0	531.5195	BEV	0	45.60593	3	3
2036	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2036	2a	1	20.64894	81.14249	48.68549	32.457	366.6685	220.0011	146.6674	PHEV	12.38936	8.259576	3	8
2036	2a	1	27.59178	81.55275	81.55275	0	253.5916	253.5916	0	ICE	27.59178	0	4	2
2036	2a	1	8.875112	28.77436	28.77436	0	104.1384	104.1384	0	ICE	8.875112	0	4	2
2036	2a	1	30.60332	114.9996	114.9996	0	516.8047	516.8047	0	ICE	30.60332	0	3	2
2036	2a	1	4.005836	12.52849	12.52849	0	43.38338	43.38338	0	ICE	4.005836	0	4	2
2036	2a	1	4.671853	15.1468	0	15.1468	30.36227	0	30.36227	BEV	0	4.671853	3	3
2036	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2036	2a	1	0	0	0	0	0	0	0	PHEV	0	0	3	8
2036	2a	1	20.2093	65.52138	0	65.52138	133.8189	0	133.8189	BEV	0	20.2093	4	3
2036	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2036	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2036	2a	1	8.613155	23.97747	23.97747	0	42.75293	42.75293	0	ICE	8.613155	0	1	2
2036	2a	1	12.32005	43.4724	43.4724	0	134.4885	134.4885	0	ICE	12.32005	0	1	2
2036	2a	1	41.42615	153.2958	0	153.2958	579.1224	0	579.1224	BEV	0	41.42615	1	3
2036	2a	1	4.205701	15.56303	0	15.56303	58.79415	0	58.79415	FCEV	0	4.205701	1	7
2036	2a	1	4.415986	16.34118	9.804707	6.536471	56.39373	33.83624	22.55749	PHEV	2.649591	1.766394	1	8
2036	2a	1	2.792249	7.453183	7.453183	0	20.05302	20.05302	0	ICE	2.792249	0	2	2
2036	2a	1	78.368	298.977	0	298.977	1184.916	0	1184.916	BEV	0	78.368	2	3
2036	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2036	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2036	2a	1	11.0287	40.17941	40.17941	0	172.0706	172.0706	0	ICE	11.0287	0	3	2

2036	2a	1	17.69852	47.24159	47.24159	0	144.0384	144.0384	0	ICE	17.69852	0	4	2
2036	2a	1	3.600554	12.4986	0	12.4986	41.55166	0	41.55166	BEV	0	3.600554	1	3
2036	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2036	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2036	2a	1	21.81713	78.23362	0	78.23362	270.4726	0	270.4726	BEV	0	21.81713	1	3
2036	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2036	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2036	2a	1	20.22105	73.66872	0	73.66872	272.9614	0	272.9614	BEV	0	20.22105	1	3
2036	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2036	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2036	2a	1	2.95418	8.562394	8.562394	0	33.51356	33.51356	0	ICE	2.95418	0	2	2
2036	2a	1	7.175631	26.14204	26.14204	0	107.2898	107.2898	0	ICE	7.175631	0	2	2
2036	2a	1	101.9116	394.6352	0	394.6352	1618.615	0	1618.615	BEV	0	101.9116	2	3
2036	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2036	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2036	2a	1	3.607078	12.7279	12.7279	0	54.58309	54.58309	0	ICE	3.607078	0	3	2
2036	2a	1	2.667236	8.800359	0	8.800359	26.64729	0	26.64729	BEV	0	2.667236	1	3
2036	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2036	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2036	2a	1	6.708538	23.67168	0	23.67168	81.01524	0	81.01524	BEV	0	6.708538	1	3
2036	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2036	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2036	2a	1	10.07194	36.11675	0	36.11675	126.8212	0	126.8212	BEV	0	10.07194	2	3
2036	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2036	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2036	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2036	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2036	2a	1	1.981894	7.561005	7.561005	0	33.62963	33.62963	0	ICE	1.981894	0	2	2
2036	2a	1	0.374618	1.300411	0	1.300411	3.334051	0	3.334051	BEV	0	0.374618	4	3
2036	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2036	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2036	2a	1	2.610834	8.315115	8.315115	0	27.55622	27.55622	0	ICE	2.610834	0	2	2
2036	2a	1	0.405058	1.336461	1.336461	0	5.857831	5.857831	0	ICE	0.405058	0	3	2
2036	2a	1	1.711344	4.66603	0	4.66603	11.06154	0	11.06154	BEV	0	1.711344	1	3
2036	2a	1	0.743354	1.98419	1.98419	0	7.042238	7.042238	0	ICE	0.743354	0	3	2
2036	2a	1	5.994754	21.83991	0	21.83991	57.85115	0	57.85115	BEV	0	5.994754	3	3
2036	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2036	2a	1	0	0	0	0	0	0	0	PHEV	0	0	3	8
2036	2a	1	3.813108	14.32871	0	14.32871	39.66058	0	39.66058	BEV	0	3.813108	3	3
2036	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2036	2a	1	2.639844	9.919873	5.951924	3.967949	42.57325	25.54395	17.0293	PHEV	1.583906	1.055938	3	8
2036	2a	1	0.672898	2.682783	0	2.682783	8.046615	0	8.046615	BEV	0	0.672898	4	3
2036	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2036	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2036	2a	1	1.502483	4.010487	0	4.010487	9.501569	0	9.501569	BEV	0	1.502483	1	3
2036	2a	1	15.48982	48.44533	0	48.44533	132.3333	0	132.3333	BEV	0	15.48982	2	3
2036	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2036	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2036	2a	1	5.685892	18.10871	0	18.10871	51.64559	0	51.64559	BEV	0	5.685892	2	3

2036	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2036	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2036	2a	1	4.679681	15.17218	15.17218	0	62.75814	62.75814	0	ICE	4.679681	0	2	2
2036	2a	1	2.19946	7.634985	0	7.634985	25.07507	0	25.07507	BEV	0	2.19946	2	3
2036	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2036	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2036	2a	1	4.109844	14.50195	14.50195	0	58.56119	58.56119	0	ICE	4.109844	0	2	2
2036	2a	1	1.249735	4.409803	0	4.409803	14.99089	0	14.99089	BEV	0	1.249735	2	3
2036	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2036	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2036	2a	1	5.066035	18.16619	18.16619	0	81.2366	81.2366	0	ICE	5.066035	0	2	2
2036	2a	1	4.319942	15.73828	0	15.73828	57.93808	0	57.93808	BEV	0	4.319942	2	3
2036	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2036	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2036	2a	1	4.079261	14.62774	0	14.62774	36.87321	0	36.87321	BEV	0	4.079261	3	3
2036	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2036	2a	1	0	0	0	0	0	0	0	PHEV	0	0	3	8
2036	2a	1	2.945994	11.40786	0	11.40786	32.97829	0	32.97829	BEV	0	2.945994	3	3
2036	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2036	2a	1	2.252819	8.723659	5.234195	3.489464	38.71334	23.22801	15.48534	PHEV	1.351691	0.901128	3	8
2036	2a	1	1.002544	3.135516	0	3.135516	6.282085	0	6.282085	BEV	0	1.002544	4	3
2036	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2036	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2036	2a	1	2.620584	8.646434	0	8.646434	18.17262	0	18.17262	BEV	0	2.620584	4	3
2036	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2036	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2036	2a	1	0.479613	1.637403	0	1.637403	3.700332	0	3.700332	BEV	0	0.479613	4	3
2036	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2036	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2036	2a	1	3.725867	10.15869	10.15869	0	29.04778	29.04778	0	ICE	3.725867	0	2	2
2036	2a	1	0.363911	1.242395	1.242395	0	4.606961	4.606961	0	ICE	0.363911	0	2	2
2036	2a	1	19.59111	63.51711	0	63.51711	180.9226	0	180.9226	BEV	0	19.59111	2	3
2036	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2036	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2036	2a	1	1.306253	4.384727	0	4.384727	13.43972	0	13.43972	BEV	0	1.306253	2	3
2036	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2036	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2036	2a	1	10.23547	31.42565	0	31.42565	83.77494	0	83.77494	BEV	0	10.23547	2	3
2036	2a	1	0.349451	1.032868	1.032868	0	3.598044	3.598044	0	ICE	0.349451	0	3	2
2036	2a	1	2.903115	8.913347	8.913347	0	29.4846	29.4846	0	ICE	2.903115	0	2	2
2036	2a	1	0.258117	0.836851	0.836851	0	2.828178	2.828178	0	ICE	0.258117	0	3	2
2036	2a	1	1.665987	4.733253	0	4.733253	11.54544	0	11.54544	BEV	0	1.665987	1	3
2036	2a	1	2.814621	9.770395	9.770395	0	42.58938	42.58938	0	ICE	2.814621	0	2	2
2036	2a	1	0.593298	1.855574	0	1.855574	3.914163	0	3.914163	BEV	0	0.593298	3	3
2036	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2036	2a	1	0	0	0	0	0	0	0	PHEV	0	0	3	8
2036	2a	1	0.54861	1.96725	0	1.96725	4.850195	0	4.850195	BEV	0	0.54861	4	3

2036	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2036	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2036	2a	1	2.175936	6.556052	0	6.556052	17.29623	0	17.29623	BEV	0	2.175936	1	3
2036	2a	1	1.508482	4.717868	0	4.717868	13.0232	0	13.0232	BEV	0	1.508482	1	3
2036	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2036	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2036	2a	1	2.631626	8.833633	0	8.833633	27.32898	0	27.32898	BEV	0	2.631626	1	3
2036	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2036	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2036	2a	1	3.277966	9.688653	9.688653	0	31.63443	31.63443	0	ICE	3.277966	0	2	2
2036	2a	1	3.11107	9.373593	0	9.373593	24.27662	0	24.27662	BEV	0	3.11107	2	3
2036	2a	1	0.456072	1.557034	0	1.557034	4.927743	0	4.927743	BEV	0	0.456072	2	3
2036	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2036	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2036	2a	1	0.977985	2.666504	2.666504	0	8.308001	8.308001	0	ICE	0.977985	0	3	2
2036	2a	1	2.484926	7.34467	0	7.34467	18.8085	0	18.8085	BEV	0	2.484926	1	3
2036	2a	1	2.437962	7.485201	0	7.485201	20.28599	0	20.28599	BEV	0	2.437962	1	3
2036	2a	1	0.934513	2.494439	0	2.494439	5.90879	0	5.90879	BEV	0	0.934513	2	3
2036	2a	1	0.388736	1.059902	0	1.059902	2.523946	0	2.523946	BEV	0	0.388736	2	3
2036	2a	1	0.384243	1.091676	0	1.091676	2.681645	0	2.681645	BEV	0	0.384243	2	3
2036	2a	1	2.443231	7.641352	7.641352	0	25.66602	25.66602	0	ICE	2.443231	0	2	2
2036	2a	1	1.763199	6.524646	6.524646	0	27.68359	27.68359	0	ICE	1.763199	0	2	2
2036	2a	1	2.958428	11.45601	11.45601	0	52.12396	52.12396	0	ICE	2.958428	0	2	2
2036	2a	1	0.533984	1.455923	0	1.455923	2.379717	0	2.379717	BEV	0	0.533984	3	3
2036	2a	1	0.644011	1.79281	1.79281	0	7.217604	7.217604	0	ICE	0.644011	0	3	2
2036	2a	1	0.533984	1.455923	0	1.455923	2.379717	0	2.379717	BEV	0	0.533984	3	3
2036	2a	1	0.644011	1.79281	1.79281	0	7.217604	7.217604	0	ICE	0.644011	0	3	2
2036	2a	1	2.370235	7.277261	0	7.277261	13.31797	0	13.31797	BEV	0	2.370235	3	3
2036	2a	1	0.318076	1.013026	1.013026	0	3.45395	3.45395	0	ICE	0.318076	0	3	2
2036	2a	1	0.203718	0.648811	0	0.648811	1.256826	0	1.256826	BEV	0	0.203718	3	3
2036	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2036	2a	1	0	0	0	0	0	0	0	PHEV	0	0	3	8
2036	2a	1	3.55884	13.16935	0	13.16935	34.65324	0	34.65324	BEV	0	3.55884	3	3
2036	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2036	2a	1	0	0	0	0	0	0	0	PHEV	0	0	3	8
2036	2a	1	8.79446	33.55122	0	33.55122	92.39608	0	92.39608	BEV	0	8.79446	3	3
2036	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2036	2a	1	2.25499	8.602876	5.161725	3.44115	40.91438	24.54863	16.36575	PHEV	1.352994	0.901996	3	8
2036	2a	1	0.718668	2.041815	0	2.041815	3.415861	0	3.415861	BEV	0	0.718668	4	3
2036	2a	1	0.84986	3.193562	3.193562	0	14.01231	14.01231	0	ICE	0.84986	0	2	2
2036	2a	1	0.224835	0.716066	0	0.716066	1.465706	0	1.465706	BEV	0	0.224835	4	3
2036	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2036	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2036	2a	1	0.773814	2.154158	0	2.154158	4.999736	0	4.999736	BEV	0	0.773814	1	3
2036	2a	1	1.774659	5.143673	0	5.143673	13.00854	0	13.00854	BEV	0	1.774659	1	3
2036	2a	1	0.424465	1.181633	0	1.181633	2.843078	0	2.843078	BEV	0	0.424465	2	3
2036	2a	1	0	0	0	0	0	0	0	BEV	0	0	2	3
2036	2a	1	12.52855	49.95018	0	49.95018	220.4682	0	220.4682	FCEV	0	12.52855	2	7
2036	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8

2036	2a	1	0	0	0	0	0	0	0	BEV	0	0	2	3
2036	2a	1	14.39392	58.2119	0	58.2119	265.6617	0	265.6617	FCEV	0	14.39392	2	7
2036	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2036	2a	1	0.061478	0.206364	0.206364	0	0.887225	0.887225	0	ICE	0.061478	0	3	2
2036	2a	1	0	0	0	0	0	0	0	BEV	0	0	3	3
2036	2a	1	0.531971	2.120922	0	2.120922	6.619959	0	6.619959	FCEV	0	0.531971	3	7
2036	2a	1	7.624923	30.39988	18.23993	12.15995	150.7027	90.42162	60.28108	PHEV	4.574954	3.049969	3	8
2036	2a	1	0.55717	2.189466	2.189466	0	9.539286	9.539286	0	ICE	0.55717	0	2	2
2036	2a	1	0.152599	0.459777	0	0.459777	0.830595	0	0.830595	BEV	0	0.152599	3	3
2036	2a	1	2.02386	5.518114	0	5.518114	9.305728	0	9.305728	BEV	0	2.02386	4	3
2036	2a	1	0.353323	1.084798	0	1.084798	2.019893	0	2.019893	BEV	0	0.353323	4	3
2036	2a	1	0.201324	0.71039	0	0.71039	1.662932	0	1.662932	BEV	0	0.201324	3	3
2036	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2036	2a	1	0	0	0	0	0	0	0	PHEV	0	0	3	8
2036	2a	1	0.714449	2.64379	0	2.64379	9.157042	0	9.157042	BEV	0	0.714449	2	3
2036	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2036	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2036	2a	1	0.427373	1.238698	0	1.238698	3.0042	0	3.0042	BEV	0	0.427373	2	3
2036	2a	1	1.243628	3.675778	0	3.675778	9.060618	0	9.060618	BEV	0	1.243628	2	3
2036	2a	1	0.354106	1.066914	0	1.066914	1.870998	0	1.870998	BEV	0	0.354106	4	3
2036	2a	1	0.944604	3.820168	3.820168	0	20.03542	20.03542	0	ICE	0.944604	0	2	2
2036	2a	1	0.545674	2.050506	0	2.050506	8.029567	0	8.029567	BEV	0	0.545674	2	3
2036	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2036	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2036	2a	1	0.128659	0.365534	0	0.365534	0.587811	0	0.587811	BEV	0	0.128659	3	3
2036	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2036	2a	1	0.128659	0.365534	0	0.365534	0.587811	0	0.587811	BEV	0	0.128659	3	3
2036	2a	1	0.102187	0.348868	0	0.348868	0.732685	0	0.732685	BEV	0	0.102187	3	3
2036	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2036	2a	1	0	0	0	0	0	0	0	PHEV	0	0	3	8
2036	2a	1	0.658251	1.907875	0	1.907875	3.350392	0	3.350392	BEV	0	0.658251	4	3
2036	2a	1	0.224658	0.741244	0	0.741244	2.187094	0	2.187094	BEV	0	0.224658	2	3
2036	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2036	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2036	2a	1	0.104939	0.352251	0.352251	0	1.830268	1.830268	0	ICE	0.104939	0	2	2
2036	2a	1	1.887988	5.039494	0	5.039494	8.154457	0	8.154457	BEV	0	1.887988	4	3
2036	2a	1	0.520728	1.837436	0	1.837436	4.268611	0	4.268611	BEV	0	0.520728	4	3
2036	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2036	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2036	2a	1	0.080469	0.237841	0	0.237841	0.424663	0	0.424663	BEV	0	0.080469	3	3
2036	2a	1	0	0	0	0	0	0	0	BEV	0	0	4	3
2036	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2036	2a	1	0.934369	3.618184	2.170911	1.447274	17.75997	10.65598	7.103989	PHEV	0.560621	0.373748	4	8
2036	2a	1	0.122545	0.348164	0.348164	0	1.364845	1.364845	0	ICE	0.122545	0	3	2
2037	2a	1	11381.56	30380.12	30380.12	0	48729.78	48729.78	0	ICE	11381.56	0	1	1
2037	2a	1	12220.77	33320.3	33320.3	0	55355.44	55355.44	0	ICE	12220.77	0	1	1
2037	2a	1	14194.16	39513.98	39513.98	0	68735.22	68735.22	0	ICE	14194.16	0	1	1
2037	2a	1	12928.05	36730.01	36730.01	0	66651.13	66651.13	0	ICE	12928.05	0	1	1
2037	2a	1	15491.81	44901.47	44901.47	0	85032.55	85032.55	0	ICE	15491.81	0	1	1

2037	2a	1	16715.89	49406.97	49406.97	0	98196.67	98196.67	0	ICE	16715.89	0	1	1
2037	2a	1	17497.79	52720.5	52720.5	0	109862.4	109862.4	0	ICE	17497.79	0	1	1
2037	2a	1	20866.4	64065.5	64065.5	0	140256.8	140256.8	0	ICE	20866.4	0	1	1
2037	2a	1	20737.07	64856.44	64856.44	0	148611.6	148611.6	0	ICE	20737.07	0	1	1
2037	2a	1	37.94285	118.6685	118.6685	0	282.665	282.665	0	ICE	37.94285	0	1	2
2037	2a	1	21031.54	66982.31	66982.31	0	161312.2	161312.2	0	ICE	21031.54	0	1	1
2037	2a	1	22652.21	73441.65	73441.65	0	185264.5	185264.5	0	ICE	22652.21	0	1	1
2037	2a	1	22444.16	74052.94	74052.94	0	195566.2	195566.2	0	ICE	22444.16	0	1	1
2037	2a	1	27018.44	90693.34	90693.34	0	251169.4	251169.4	0	ICE	27018.44	0	1	1
2037	2a	1	29047.81	99169.52	99169.52	0	287254.4	287254.4	0	ICE	29047.81	0	1	1
2037	2a	1	76.53749	261.2998	261.2998	0	768.505	768.505	0	ICE	76.53749	0	1	2
2037	2a	1	32994.66	114534.3	114534.3	0	346074.5	346074.5	0	ICE	32994.66	0	1	1
2037	2a	1	30549.14	107795.4	107795.4	0	340352.2	340352.2	0	ICE	30549.14	0	1	1
2037	2a	1	27045.13	96980.58	96980.58	0	319390	319390	0	ICE	27045.13	0	1	1
2037	2a	1	35716.46	130121.1	130121.1	0	446380.6	446380.6	0	ICE	35716.46	0	1	1
2037	2a	1	410.6692	1496.138	1496.138	0	5121.457	5121.457	0	ICE	410.6692	0	1	2
2037	2a	1	40319.04	149199	149199	0	533954.7	533954.7	0	ICE	40319.04	0	1	1
2037	2a	1	627.8809	2323.448	2323.448	0	8181.343	8181.343	0	ICE	627.8809	0	1	2
2037	2a	1	67585.38	253968.9	253968.9	0	948165.8	948165.8	0	ICE	67585.38	0	1	1
2037	2a	1	95335.5	363708.7	363708.7	0	1411432	1411432	0	ICE	95335.5	0	1	1
2037	2a	1	111780.4	432850.7	432850.7	0	1749091	1749091	0	ICE	111780.4	0	1	1
2037	2a	1	2104.985	8151.196	8151.196	0	32683.97	32683.97	0	ICE	2104.985	0	1	2
2037	2a	1	152496.4	599253	599253	0	2517651	2517651	0	ICE	152496.4	0	1	1
2037	2a	1	170411	679413.3	679413.3	0	2959374	2959374	0	ICE	170411	0	1	1
2037	2a	1	214173.2	866159.2	866159.2	0	3917058	3917058	0	ICE	214173.2	0	1	1
2037	2a	1	2620.917	10599.51	10599.51	0	47920.77	47920.77	0	ICE	2620.917	0	1	2
2037	2a	1	12456.59	50376.94	0	50376.94	228904	0	228904	BEV	0	12456.59	1	3
2037	2a	1	254.2161	1028.101	0	1028.101	4728.781	0	4728.781	FCEV	0	254.2161	1	7
2037	2a	1	11236.27	45441.71	24538.52	20903.18	205006.3	110703.4	94302.88	PHEV	6067.584	5168.682	1	8
2037	2a	1	261200.4	1071311	1071311	0	5015796	5015796	0	ICE	261200.4	0	1	1
2037	2a	1	3196.406	13110.03	13110.03	0	61365.35	61365.35	0	ICE	3196.406	0	1	2
2037	2a	1	18567.08	76152.7	0	76152.7	357452.4	0	357452.4	BEV	0	18567.08	1	3
2037	2a	1	378.92	1554.137	0	1554.137	7381.012	0	7381.012	FCEV	0	378.92	1	7
2037	2a	1	11999.81	49217.12	26577.24	22639.87	230137.9	124274.4	105863.4	PHEV	6479.9	5519.915	1	8
2037	2a	1	309496.3	1287127	1287127	0	6234410	6234410	0	ICE	309496.3	0	1	1
2037	2a	1	3771.319	15684.09	15684.09	0	75955.57	75955.57	0	ICE	3771.319	0	1	2
2037	2a	1	26978.8	112198.9	0	112198.9	544707.2	0	544707.2	BEV	0	26978.8	1	3
2037	2a	1	631.083	2624.535	0	2624.535	12867.57	0	12867.57	FCEV	0	631.083	1	7
2037	2a	1	13231.36	55026.34	29163.96	25862.38	266135.8	141052	125083.8	PHEV	7012.623	6218.742	1	8
2037	2a	1	360744.3	1520923	1520923	0	7614912	7614912	0	ICE	360744.3	0	1	1
2037	2a	1	4435.636	18700.95	18700.95	0	93615.15	93615.15	0	ICE	4435.636	0	1	2
2037	2a	1	37361.74	157519.7	0	157519.7	789953.2	0	789953.2	BEV	0	37361.74	1	3
2037	2a	1	986.0869	4157.411	0	4157.411	21030.44	0	21030.44	FCEV	0	986.0869	1	7
2037	2a	1	14246.24	60063.13	31232.83	28830.3	300611.2	156317.8	144293.4	PHEV	7408.042	6838.193	1	8
2037	2a	1	388909.2	1661949	1661949	0	8598123	8598123	0	ICE	388909.2	0	1	1
2037	2a	1	4805.017	20533.57	20533.57	0	106213.8	106213.8	0	ICE	4805.017	0	1	2
2037	2a	1	62833.88	268511.8	0	268511.8	1390985	0	1390985	BEV	0	62833.88	1	3

2037	2a	1	2153.88	9204.304	0	9204.304	48036.6	0	48036.6	FCEV	0	2153.88	1	7
2037	2a	1	23888.57	102084.5	50838.07	51246.4	527585.7	262737.7	264848	PHEV	11896.51	11992.06	1	8
2037	2a	1	410039.6	1775738	1775738	0	9483965	9483965	0	ICE	410039.6	0	1	1
2037	2a	1	5102.591	22097.54	22097.54	0	118000.7	118000.7	0	ICE	5102.591	0	1	2
2037	2a	1	93471.18	404791	0	404791	2164324	0	2164324	BEV	0	93471.18	1	3
2037	2a	1	3952.623	17117.43	0	17117.43	92111.81	0	92111.81	FCEV	0	3952.623	1	7
2037	2a	1	35432.38	153445.2	73039.93	80405.3	818603.9	389655.5	428948.4	PHEV	16865.81	18566.57	1	8
2037	2a	1	422342.1	1853212	1853212	0	10211967	10211967	0	ICE	422342.1	0	1	1
2037	2a	1	5299.791	23255.16	23255.16	0	128125.4	128125.4	0	ICE	5299.791	0	1	2
2037	2a	1	128745.3	564926.8	0	564926.8	3115732	0	3115732	BEV	0	128745.3	1	3
2037	2a	1	6491.361	28483.7	0	28483.7	157842	0	157842	FCEV	0	6491.361	1	7
2037	2a	1	48661.26	213522.7	96939.29	116583.4	1175473	533664.5	641808	PHEV	22092.21	26569.05	1	8
2037	2a	1	428850.8	1906340	1906340	0	10832182	10832182	0	ICE	428850.8	0	1	1
2037	2a	1	5424.551	24113.37	24113.37	0	136996.2	136996.2	0	ICE	5424.551	0	1	2
2037	2a	1	169418.2	753103	0	753103	4282201	0	4282201	BEV	0	169418.2	1	3
2037	2a	1	9941.662	44192.97	0	44192.97	252134.9	0	252134.9	FCEV	0	9941.662	1	7
2037	2a	1	63847.53	283816.9	122608.9	161208	1611530	696181	915349.2	PHEV	27582.13	36265.39	1	8
2037	2a	1	425128.1	1914148	1914148	0	11213841	11213841	0	ICE	425128.1	0	1	1
2037	2a	1	5418.109	24395.14	24395.14	0	142896.6	142896.6	0	ICE	5418.109	0	1	2
2037	2a	1	213665.7	962034.1	0	962034.1	5638821	0	5638821	BEV	0	213665.7	1	3
2037	2a	1	14331.24	64526.68	0	64526.68	379140.7	0	379140.7	FCEV	0	14331.24	1	7
2037	2a	1	80288.59	361501	148215.4	213285.6	2116791	867884.2	1248907	PHEV	32918.32	47370.27	1	8
2037	2a	1	416968.4	1901297	1901297	0	11468184	11468184	0	ICE	416968.4	0	1	1
2037	2a	1	5314.114	24231.35	24231.35	0	146141.5	146141.5	0	ICE	5314.114	0	1	2
2037	2a	1	264008.5	1203828	0	1203828	7263461	0	7263461	BEV	0	264008.5	1	3
2037	2a	1	19958.84	91008.54	0	91008.54	549965.7	0	549965.7	FCEV	0	19958.84	1	7
2037	2a	1	98917.86	451046.6	175006.1	276040.5	2720034	1055373	1664661	PHEV	38380.13	60537.73	1	8
2037	2a	1	395801.6	1827456	1827456	0	11343325	11343325	0	ICE	395801.6	0	1	1
2037	2a	1	5044.35	23290.27	23290.27	0	144553.8	144553.8	0	ICE	5044.35	0	1	2
2037	2a	1	314836.2	1453630	0	1453630	9024196	0	9024196	BEV	0	314836.2	1	3
2037	2a	1	26528.95	122486.8	0	122486.8	761159.4	0	761159.4	FCEV	0	26528.95	1	7
2037	2a	1	117620.3	543064.6	198761.6	344302.9	3371115	1233828	2137287	PHEV	43049.02	74571.25	1	8
2037	2a	1	371226.4	1735257	1735257	0	11079245	11079245	0	ICE	371226.4	0	1	1
2037	2a	1	4731.147	22115.23	22115.23	0	141191.7	141191.7	0	ICE	4731.147	0	1	2
2037	2a	1	372339.8	1740461	0	1740461	11112295	0	11112295	BEV	0	372339.8	1	3
2037	2a	1	34652.48	161979.2	0	161979.2	1034836	0	1034836	FCEV	0	34652.48	1	7
2037	2a	1	138701.3	648343.8	223030.3	425313.6	4141037	1424517	2716520	PHEV	47713.24	90988.04	1	8
2037	2a	1	336199.7	1590789	1590789	0	10444138	10444138	0	ICE	336199.7	0	1	1
2037	2a	1	4284.744	20274.04	20274.04	0	133101.8	133101.8	0	ICE	4284.744	0	1	2
2037	2a	1	429820.1	2033771	0	2033771	13349490	0	13349490	BEV	0	429820.1	1	3
2037	2a	1	43848.14	207475.4	0	207475.4	1362312	0	1362312	FCEV	0	43848.14	1	7
2037	2a	1	159651.9	755421.5	243245.7	512175.8	4963674	1598303	3365371	PHEV	51407.9	108244	1	8
2037	2a	1	296787.9	1421308	1421308	0	9591297	9591297	0	ICE	296787.9	0	1	1
2037	2a	1	3782.459	18114.08	18114.08	0	122236.9	122236.9	0	ICE	3782.459	0	1	2
2037	2a	1	493429.9	2363021	0	2363021	15939110	0	15939110	BEV	0	493429.9	1	3
2037	2a	1	54825.54	262557.9	0	262557.9	1771249	0	1771249	FCEV	0	54825.54	1	7
2037	2a	1	182751.8	875192.9	262557.9	612635	5913866	1774160	4139706	PHEV	54825.54	127926.3	1	8

2037	2a	1	247925	1201509	1201509	0	8331595	8331595	0	ICE	247925	0	1	1
2037	2a	1	3159.714	15312.8	15312.8	0	106185.8	106185.8	0	ICE	3159.714	0	1	2
2037	2a	1	558767.1	2707931	0	2707931	18765212	0	18765212	BEV	0	558767.1	1	3
2037	2a	1	69061.1	334688	0	334688	2319248	0	2319248	FCEV	0	69061.1	1	7
2037	2a	1	198261.5	960826.9	288248.1	672578.8	6675584	2002675	4672909	PHEV	59478.46	138783.1	1	8
2037	2a	1	194980.1	956094.7	956094.7	0	6807924	6807924	0	ICE	194980.1	0	1	1
2037	2a	1	2484.954	12185.1	12185.1	0	86769.07	86769.07	0	ICE	2484.954	0	1	2
2037	2a	1	631561.9	3096895	0	3096895	22033630	0	22033630	BEV	0	631561.9	1	3
2037	2a	1	86122.08	422303.9	0	422303.9	3004263	0	3004263	FCEV	0	86122.08	1	7
2037	2a	1	214373.1	1051189	315356.8	735832.6	7503637	2251091	5252546	PHEV	64311.94	150061.2	1	8
2037	2a	1	134656.9	668011.5	668011.5	0	4882474	4882474	0	ICE	134656.9	0	1	1
2037	2a	1	1716.156	8513.575	8513.575	0	62230.36	62230.36	0	ICE	1716.156	0	1	2
2037	2a	1	701489.8	3479979	0	3479979	25410259	0	25410259	BEV	0	701489.8	1	3
2037	2a	1	104820.3	519996.8	0	519996.8	3796297	0	3796297	FCEV	0	104820.3	1	7
2037	2a	1	227420.8	1128198	338459.4	789738.7	8271469	2481441	5790028	PHEV	68226.24	159194.6	1	8
2037	2a	1	69275.43	347633.1	347633.1	0	2606086	2606086	0	ICE	69275.43	0	1	1
2037	2a	1	882.8912	4430.463	4430.463	0	33216.98	33216.98	0	ICE	882.8912	0	1	2
2037	2a	1	770291.4	3865422	0	3865422	28946799	0	28946799	BEV	0	770291.4	1	3
2037	2a	1	125396.3	629254.8	0	629254.8	4711372	0	4711372	FCEV	0	125396.3	1	7
2037	2a	1	238094.2	1194788	358436.3	836351.3	8988921	2696676	6292244	PHEV	71428.26	166665.9	1	8
2037	2a	1	844112.7	4284227	0	4284227	32850398	0	32850398	BEV	0	844112.7	1	3
2037	2a	1	148961.1	756040	0	756040	5796216	0	5796216	FCEV	0	148961.1	1	7
2037	2a	1	248268.5	1260067	378020	882046.7	9705748	2911724	6794024	PHEV	74480.54	173787.9	1	8
2037	2a	1	856206.3	4394659	0	4394659	34400342	0	34400342	BEV	0	856206.3	1	3
2037	2a	1	163086.9	837077.9	0	837077.9	6551884	0	6551884	FCEV	0	163086.9	1	7
2037	2a	1	239093.5	1227198	368159.3	859038.3	9639960	2891988	6747972	PHEV	71728.05	167365.4	1	8
2037	2a	1	773935.5	4016725	0	4016725	32016519	0	32016519	BEV	0	773935.5	1	3
2037	2a	1	158516.9	822702.8	0	822702.8	6557685	0	6557685	FCEV	0	158516.9	1	7
2037	2a	1	204684.7	1062313	318694	743619.4	8482976	2544893	5938083	PHEV	61405.4	143279.3	1	8
2037	2a	1	2754.229	7351.697	7351.697	0	28425.82	28425.82	0	ICE	2754.229	0	2	1
2037	2a	1	3298.937	8994.65	8994.65	0	35082.59	35082.59	0	ICE	3298.937	0	2	1
2037	2a	1	3162.518	8803.88	8803.88	0	34814.25	34814.25	0	ICE	3162.518	0	2	1
2037	2a	1	3473.627	9868.955	9868.955	0	38861.66	38861.66	0	ICE	3473.627	0	2	1
2037	2a	1	4560.795	13219.01	13219.01	0	52544.48	52544.48	0	ICE	4560.795	0	2	1
2037	2a	1	5821.278	17205.89	17205.89	0	69427.63	69427.63	0	ICE	5821.278	0	2	1
2037	2a	1	5272.574	15886.16	15886.16	0	64662.58	64662.58	0	ICE	5272.574	0	2	1
2037	2a	1	5784.802	17760.9	17760.9	0	73166.84	73166.84	0	ICE	5784.802	0	2	1
2037	2a	1	6431.067	20113.55	20113.55	0	83536.92	83536.92	0	ICE	6431.067	0	2	1
2037	2a	1	6912.577	22015.52	22015.52	0	90763.66	90763.66	0	ICE	6912.577	0	2	1
2037	2a	1	4847.167	15715.19	15715.19	0	64865.22	64865.22	0	ICE	4847.167	0	2	1
2037	2a	1	2709.298	9094.353	9094.353	0	38147.95	38147.95	0	ICE	2709.298	0	2	1
2037	2a	1	4306.333	14701.86	14701.86	0	62745.7	62745.7	0	ICE	4306.333	0	2	1
2037	2a	1	6306.139	21890.5	21890.5	0	95127.41	95127.41	0	ICE	6306.139	0	2	1
2037	2a	1	11223.29	39602.38	39602.38	0	173998.4	173998.4	0	ICE	11223.29	0	2	1
2037	2a	1	8674.582	31106.01	31106.01	0	137621.8	137621.8	0	ICE	8674.582	0	2	1
2037	2a	1	4855.328	17688.78	17688.78	0	78550.35	78550.35	0	ICE	4855.328	0	2	1
2037	2a	1	4538.847	16795.82	16795.82	0	75561.9	75561.9	0	ICE	4538.847	0	2	1

2037	2a	1	42703.43	167808.3	167808.3	0	800214.7	800214.7	0	ICE	42703.43	0	2	1
2037	2a	1	41757.76	166484.4	166484.4	0	802876.8	802876.8	0	ICE	41757.76	0	2	1
2037	2a	1	39688.73	160509.2	160509.2	0	788302.4	788302.4	0	ICE	39688.73	0	2	1
2037	2a	1	5.376556	21.74387	21.74387	0	106.8024	106.8024	0	ICE	5.376556	0	2	2
2037	2a	1	1.337283	5.40824	0	5.40824	24.66311	0	24.66311	BEV	0	1.337283	2	3
2037	2a	1	0.027291	0.110372	0	0.110372	0.503329	0	0.503329	FCEV	0	0.027291	2	7
2037	2a	1	11.59888	46.90821	28.14492	18.76328	230.4213	138.2528	92.16854	PHEV	6.95933	4.639554	2	8
2037	2a	1	45014.95	184628.4	184628.4	0	921331.2	921331.2	0	ICE	45014.95	0	2	1
2037	2a	1	6.098089	25.01125	25.01125	0	124.8226	124.8226	0	ICE	6.098089	0	2	2
2037	2a	1	49083.16	204126.1	204126.1	0	1036520	1036520	0	ICE	49083.16	0	2	1
2037	2a	1	6.695591	27.84549	27.84549	0	141.418	141.418	0	ICE	6.695591	0	2	2
2037	2a	1	652.6305	2714.147	0	2714.147	13554.85	0	13554.85	BEV	0	652.6305	2	3
2037	2a	1	15.26621	63.48881	0	63.48881	308.6957	0	308.6957	FCEV	0	15.26621	2	7
2037	2a	1	501.1744	2084.274	1238.654	845.6197	10667.83	6339.737	4328.09	PHEV	297.8408	203.3336	2	8
2037	2a	1	53107.7	223905.8	223905.8	0	1158209	1158209	0	ICE	53107.7	0	2	1
2037	2a	1	7.328764	30.89858	30.89858	0	159.8673	159.8673	0	ICE	7.328764	0	2	2
2037	2a	1	1442.511	6081.727	0	6081.727	31057.33	0	31057.33	BEV	0	1442.511	2	3
2037	2a	1	38.07213	160.5148	0	160.5148	805.316	0	805.316	FCEV	0	38.07213	2	7
2037	2a	1	1110.995	4684.035	2756.889	1927.146	24385.21	14352.44	10032.77	PHEV	653.9002	457.0953	2	8
2037	2a	1	54212.22	231668.3	231668.3	0	1222639	1222639	0	ICE	54212.22	0	2	1
2037	2a	1	7.579504	32.38995	32.38995	0	170.978	170.978	0	ICE	7.579504	0	2	2
2037	2a	1	3820.794	16327.63	0	16327.63	85414.96	0	85414.96	BEV	0	3820.794	2	3
2037	2a	1	130.9728	559.6941	0	559.6941	2897.352	0	2897.352	FCEV	0	130.9728	2	7
2037	2a	1	2755.522	11775.34	6826.332	4949.007	62628.79	36306.8	26321.99	PHEV	1597.416	1158.107	2	8
2037	2a	1	54562.1	236289.4	236289.4	0	1273430	1273430	0	ICE	54562.1	0	2	1
2037	2a	1	7.659684	33.17141	33.17141	0	178.7936	178.7936	0	ICE	7.659684	0	2	2
2037	2a	1	6678.869	28923.85	0	28923.85	155164.5	0	155164.5	BEV	0	6678.869	2	3
2037	2a	1	282.4299	1223.105	0	1223.105	6528.773	0	6528.773	FCEV	0	282.4299	2	7
2037	2a	1	4506.23	19514.9	11140.22	8374.682	105724.3	60353.5	45370.85	PHEV	2572.414	1933.816	2	8
2037	2a	1	53834.07	236220.7	236220.7	0	1301249	1301249	0	ICE	53834.07	0	2	1
2037	2a	1	7.593072	33.31795	33.31795	0	183.5394	183.5394	0	ICE	7.593072	0	2	2
2037	2a	1	9961.43	43710.16	0	43710.16	240516.8	0	240516.8	BEV	0	9961.43	2	3
2037	2a	1	502.257	2203.873	0	2203.873	12125.25	0	12125.25	FCEV	0	502.257	2	7
2037	2a	1	6280.52	27558.55	15487.9	12070.64	152052.2	85453.33	66598.86	PHEV	3529.652	2750.868	2	8
2037	2a	1	52841.93	234894.5	234894.5	0	1323633	1323633	0	ICE	52841.93	0	2	1
2037	2a	1	7.485765	33.27595	33.27595	0	187.4915	187.4915	0	ICE	7.485765	0	2	2
2037	2a	1	13803.22	61358.48	0	61358.48	346314.9	0	346314.9	BEV	0	13803.22	2	3
2037	2a	1	809.9892	3600.588	0	3600.588	20376.5	0	20376.5	FCEV	0	809.9892	2	7
2037	2a	1	8121.06	36099.98	19968.45	16131.53	202997.8	112286.8	90711.03	PHEV	4492.106	3628.954	2	8
2037	2a	1	51063.22	229913.2	229913.2	0	1326927	1326927	0	ICE	51063.22	0	2	1
2037	2a	1	7.263094	32.70223	32.70223	0	188.6965	188.6965	0	ICE	7.263094	0	2	2
2037	2a	1	18123.66	81602.13	0	81602.13	472681.5	0	472681.5	BEV	0	18123.66	2	3
2037	2a	1	1215.611	5473.314	0	5473.314	31833.15	0	31833.15	FCEV	0	1215.611	2	7
2037	2a	1	9933.703	44726.69	24344.1	20382.59	256714.1	139725.8	116988.3	PHEV	5406.772	4526.93	2	8
2037	2a	1	49014.47	223496.7	223496.7	0	1320374	1320374	0	ICE	49014.47	0	2	1
2037	2a	1	6.971687	31.78957	31.78957	0	187.7468	187.7468	0	ICE	6.971687	0	2	2
2037	2a	1	23130.94	105472.7	0	105472.7	626292.5	0	626292.5	BEV	0	23130.94	2	3

2037	2a	1	1748.682	7973.659	0	7973.659	47546.83	0	47546.83	FCEV	0	1748.682	2	7
2037	2a	1	11787.75	53749.88	28779.22	24970.66	314779.2	168541.8	146237.4	PHEV	6311.496	5476.25	2	8
2037	2a	1	45868.47	211779.3	211779.3	0	1281498	1281498	0	ICE	45868.47	0	2	1
2037	2a	1	6.524208	30.12292	30.12292	0	182.2051	182.2051	0	ICE	6.524208	0	2	2
2037	2a	1	28476.73	131479.9	0	131479.9	800400.2	0	800400.2	BEV	0	28476.73	2	3
2037	2a	1	2399.526	11078.85	0	11078.85	67712.18	0	67712.18	FCEV	0	2399.526	2	7
2037	2a	1	13461.23	62151.85	32727.39	29424.46	371771.4	195764.2	176007.2	PHEV	7088.299	6372.931	2	8
2037	2a	1	42431.98	198343.6	198343.6	0	1229582	1229582	0	ICE	42431.98	0	2	1
2037	2a	1	6.035411	28.21186	28.21186	0	174.8126	174.8126	0	ICE	6.035411	0	2	2
2037	2a	1	34591.94	161696.2	0	161696.2	1009023	0	1009023	BEV	0	34591.94	2	3
2037	2a	1	3219.363	15048.56	0	15048.56	94247.12	0	94247.12	FCEV	0	3219.363	2	7
2037	2a	1	15126.35	70706.45	36605.74	34100.71	432218.1	223765.5	208452.6	PHEV	7831.126	7295.221	2	8
2037	2a	1	37840.03	179046.9	179046.9	0	1137771	1137771	0	ICE	37840.03	0	2	1
2037	2a	1	5.382263	25.46715	25.46715	0	161.7522	161.7522	0	ICE	5.382263	0	2	2
2037	2a	1	40781.16	192963.4	0	192963.4	1234545	0	1234545	BEV	0	40781.16	2	3
2037	2a	1	4160.294	19685.18	0	19685.18	126345.9	0	126345.9	FCEV	0	4160.294	2	7
2037	2a	1	16443.03	77803.14	39590.68	38212.46	486562.4	247590.7	238971.6	PHEV	8367.151	8075.875	2	8
2037	2a	1	32888.66	157502.8	157502.8	0	1026039	1026039	0	ICE	32888.66	0	2	1
2037	2a	1	4.677995	22.40278	22.40278	0	145.8628	145.8628	0	ICE	4.677995	0	2	2
2037	2a	1	47655.99	228223.1	0	228223.1	1496783	0	1496783	BEV	0	47655.99	2	3
2037	2a	1	5295.11	25358.12	0	25358.12	166775.3	0	166775.3	FCEV	0	5295.11	2	7
2037	2a	1	17650.37	84527.07	42263.54	42263.54	541041.6	270520.8	270520.8	PHEV	8825.183	8825.183	2	8
2037	2a	1	27405.37	132813.6	132813.6	0	887113.9	887113.9	0	ICE	27405.37	0	2	1
2037	2a	1	3.898066	18.89104	18.89104	0	126.1102	126.1102	0	ICE	3.898066	0	2	2
2037	2a	1	54376.16	263521	0	263521	1772048	0	1772048	BEV	0	54376.16	2	3
2037	2a	1	6720.65	32570.01	0	32570.01	219532.7	0	219532.7	FCEV	0	6720.65	2	7
2037	2a	1	19293.73	93502.43	46751.22	46751.22	612945.4	306472.7	306472.7	PHEV	9646.865	9646.865	2	8
2037	2a	1	21383.07	104853	104853	0	718173.1	718173.1	0	ICE	21383.07	0	2	1
2037	2a	1	3.04147	14.914	14.914	0	102.0926	102.0926	0	ICE	3.04147	0	2	2
2037	2a	1	61500.18	301569.2	0	301569.2	2079184	0	2079184	BEV	0	61500.18	2	3
2037	2a	1	8386.389	41123.08	0	41123.08	284083	0	284083	FCEV	0	8386.389	2	7
2037	2a	1	20875.21	102362.6	51181.32	51181.32	687577.9	343789	343789	PHEV	10437.6	10437.6	2	8
2037	2a	1	14618.62	72520.65	72520.65	0	509437.4	509437.4	0	ICE	14618.62	0	2	1
2037	2a	1	2.079313	10.31514	10.31514	0	72.41947	72.41947	0	ICE	2.079313	0	2	2
2037	2a	1	68121.15	337938.1	0	337938.1	2388903	0	2388903	BEV	0	68121.15	2	3
2037	2a	1	10179.02	50496.5	0	50496.5	357545.8	0	357545.8	FCEV	0	10179.02	2	7
2037	2a	1	22084.66	109558.5	54779.24	54779.24	754498.4	377249.2	377249.2	PHEV	11042.33	11042.33	2	8
2037	2a	1	7433.334	37301.44	37301.44	0	268763.3	268763.3	0	ICE	7433.334	0	2	1
2037	2a	1	1.057297	5.305656	5.305656	0	38.20654	38.20654	0	ICE	1.057297	0	2	2
2037	2a	1	74409.62	373397.1	0	373397.1	2706319	0	2706319	BEV	0	74409.62	2	3
2037	2a	1	12113.19	60785.58	0	60785.58	441157.8	0	441157.8	FCEV	0	12113.19	2	7
2037	2a	1	22999.73	115415.7	57707.83	57707.83	815271.1	407635.6	407635.6	PHEV	11499.87	11499.87	2	8
2037	2a	1	80914.69	410676	0	410676	3051174	0	3051174	BEV	0	80914.69	2	3
2037	2a	1	14279.06	72472.24	0	72472.24	539041.7	0	539041.7	FCEV	0	14279.06	2	7
2037	2a	1	23798.44	120787.1	60393.54	60393.54	875200.8	437600.4	437600.4	PHEV	11899.22	11899.22	2	8
2037	2a	1	82446.16	423172.2	0	423172.2	3221578	0	3221578	BEV	0	82446.16	2	3
2037	2a	1	15704.03	80604.23	0	80604.23	614234	0	614234	FCEV	0	15704.03	2	7

2037	2a	1	23022.88	118169.8	59084.89	59084.89	878265	439132.5	439132.5	PHEV	11511.44	11511.44	2	8
2037	2a	1	75613.44	392433.8	0	392433.8	3059674	0	3059674	BEV	0	75613.44	2	3
2037	2a	1	15487.09	80378	0	80378	627219.6	0	627219.6	FCEV	0	15487.09	2	7
2037	2a	1	19997.68	103788	51893.98	51893.98	790786.9	395393.4	395393.4	PHEV	9998.839	9998.839	2	8
2037	2a	1	5410.589	14442.16	14442.16	0	53821.31	53821.31	0	ICE	5410.589	0	3	1
2037	2a	1	5911.438	16117.71	16117.71	0	60357.39	60357.39	0	ICE	5911.438	0	3	1
2037	2a	1	7387.08	20564.3	20564.3	0	78208.32	78208.32	0	ICE	7387.08	0	3	1
2037	2a	1	7085.741	20131.37	20131.37	0	76833.4	76833.4	0	ICE	7085.741	0	3	1
2037	2a	1	10559.12	30604.55	30604.55	0	117595.8	117595.8	0	ICE	10559.12	0	3	1
2037	2a	1	11454.86	33857	33857	0	131133.5	131133.5	0	ICE	11454.86	0	3	1
2037	2a	1	12127.64	36540.33	36540.33	0	142993.8	142993.8	0	ICE	12127.64	0	3	1
2037	2a	1	16213.07	49778.5	49778.5	0	196859.1	196859.1	0	ICE	16213.07	0	3	1
2037	2a	1	15556.47	48653.81	48653.81	0	193551.8	193551.8	0	ICE	15556.47	0	3	1
2037	2a	1	15476.27	49289.58	49289.58	0	198813.1	198813.1	0	ICE	15476.27	0	3	1
2037	2a	1	17420.01	56478.11	56478.11	0	230285.8	230285.8	0	ICE	17420.01	0	3	1
2037	2a	1	20805.9	68647.62	68647.62	0	283105.3	283105.3	0	ICE	20805.9	0	3	1
2037	2a	1	23020.77	77274.27	77274.27	0	320904.7	320904.7	0	ICE	23020.77	0	3	1
2037	2a	1	21231.97	72486.17	72486.17	0	303986.1	303986.1	0	ICE	21231.97	0	3	1
2037	2a	1	22149.88	76888.89	76888.89	0	325740.2	325740.2	0	ICE	22149.88	0	3	1
2037	2a	1	17940.6	63305.02	63305.02	0	271802.9	271802.9	0	ICE	17940.6	0	3	1
2037	2a	1	11568.16	41482.05	41482.05	0	179640.9	179640.9	0	ICE	11568.16	0	3	1
2037	2a	1	21281.05	77530.5	77530.5	0	339517.3	339517.3	0	ICE	21281.05	0	3	1
2037	2a	1	30245.34	111921.7	111921.7	0	495935.2	495935.2	0	ICE	30245.34	0	3	1
2037	2a	1	31277.89	117534.5	117534.5	0	530256.3	530256.3	0	ICE	31277.89	0	3	1
2037	2a	1	46187.82	176208.4	176208.4	0	804345	804345	0	ICE	46187.82	0	3	1
2037	2a	1	47043.22	182166.9	182166.9	0	846302.3	846302.3	0	ICE	47043.22	0	3	1
2037	2a	1	500.646	1938.667	1938.667	0	8799.457	8799.457	0	ICE	500.646	0	3	2
2037	2a	1	61759.58	242691.7	242691.7	0	1144732	1144732	0	ICE	61759.58	0	3	1
2037	2a	1	67789.01	270268.7	270268.7	0	1293118	1293118	0	ICE	67789.01	0	3	1
2037	2a	1	493.8604	1968.977	1968.977	0	9450.074	9450.074	0	ICE	493.8604	0	3	2
2037	2a	1	86592.69	350198.2	350198.2	0	1700595	1700595	0	ICE	86592.69	0	3	1
2037	2a	1	885.074	3579.416	3579.416	0	17441.47	17441.47	0	ICE	885.074	0	3	2
2037	2a	1	105603.8	433133.1	433133.1	0	2141680	2141680	0	ICE	105603.8	0	3	1
2037	2a	1	1079.389	4427.104	4427.104	0	21963.38	21963.38	0	ICE	1079.389	0	3	2
2037	2a	1	364.348	1494.37	896.6217	597.7478	7427.701	4456.62	2971.08	PHEV	218.6088	145.7392	3	8
2037	2a	1	123760.9	514694.4	514694.4	0	2601370	2601370	0	ICE	123760.9	0	3	1
2037	2a	1	1261.786	5247.491	5247.491	0	26593.55	26593.55	0	ICE	1261.786	0	3	2
2037	2a	1	1459.604	6070.173	0	6070.173	23041.66	0	23041.66	BEV	0	1459.604	3	3
2037	2a	1	34.14279	141.9924	0	141.9924	480.1171	0	480.1171	FCEV	0	34.14279	3	7
2037	2a	1	1267.753	5272.305	3133.255	2139.049	26704.58	15870.15	10834.43	PHEV	753.4073	514.3454	3	8
2037	2a	1	140943.2	594226.4	594226.4	0	3060589	3060589	0	ICE	140943.2	0	3	1
2037	2a	1	1440.232	6072.121	6072.121	0	31363.45	31363.45	0	ICE	1440.232	0	3	2
2037	2a	1	3377.707	14240.65	0	14240.65	65059.61	0	65059.61	BEV	0	3377.707	3	3
2037	2a	1	89.14769	375.8529	0	375.8529	1310.536	0	1310.536	FCEV	0	89.14769	3	7
2037	2a	1	2437.628	10277.21	6048.872	4228.338	53083.39	31243.37	21840.02	PHEV	1434.718	1002.91	3	8
2037	2a	1	150366.6	642570.8	642570.8	0	3373777	3373777	0	ICE	150366.6	0	3	1
2037	2a	1	1559.756	6665.397	6665.397	0	35147.6	35147.6	0	ICE	1559.756	0	3	2

2037	2a	1	10269.8	43886.55	0	43886.55	197234	0	197234	BEV	0	10269.8	3	3
2037	2a	1	352.038	1504.385	0	1504.385	5407.51	0	5407.51	FCEV	0	352.038	3	7
2037	2a	1	6980.283	29829.26	17292.45	12536.81	175368.7	101663.7	73704.95	PHEV	4046.57	2933.713	3	8
2037	2a	1	157730.9	683077.3	683077.3	0	3661329	3661329	0	ICE	157730.9	0	3	1
2037	2a	1	1643.844	7118.912	7118.912	0	38345.26	38345.26	0	ICE	1643.844	0	3	2
2037	2a	1	19112.88	82771.19	0	82771.19	379564.8	0	379564.8	BEV	0	19112.88	3	3
2037	2a	1	808.2277	3500.151	0	3500.151	12964.01	0	12964.01	FCEV	0	808.2277	3	7
2037	2a	1	12223.96	52937.7	30219.86	22717.84	329947.1	188352.7	141594.4	PHEV	6978.136	5245.826	3	8
2037	2a	1	161055.1	706700.2	706700.2	0	3870678	3870678	0	ICE	161055.1	0	3	1
2037	2a	1	1687.558	7404.905	7404.905	0	40777.41	40777.41	0	ICE	1687.558	0	3	2
2037	2a	1	29742.21	130507	0	130507	617115.5	0	617115.5	BEV	0	29742.21	3	3
2037	2a	1	1499.607	6580.186	0	6580.186	25274.37	0	25274.37	FCEV	0	1499.607	3	7
2037	2a	1	17879.8	78455.5	44091.99	34363.51	507358.1	285135.2	222222.8	PHEV	10048.45	7831.353	3	8
2037	2a	1	162158.2	720830.6	720830.6	0	4037246	4037246	0	ICE	162158.2	0	3	1
2037	2a	1	1707.647	7590.882	7590.882	0	42766.65	42766.65	0	ICE	1707.647	0	3	2
2037	2a	1	42423.55	188582.4	0	188582.4	919297.1	0	919297.1	BEV	0	42423.55	3	3
2037	2a	1	2489.464	11066.24	0	11066.24	46341.04	0	46341.04	FCEV	0	2489.464	3	7
2037	2a	1	23940.94	106423	58867.12	47555.88	709804.2	392623.1	317181.1	PHEV	13242.76	10698.18	3	8
2037	2a	1	159037.6	716070.1	716070.1	0	4105739	4105739	0	ICE	159037.6	0	3	1
2037	2a	1	1682.56	7575.759	7575.759	0	43715.67	43715.67	0	ICE	1682.56	0	3	2
2037	2a	1	56613.74	254904.5	0	254904.5	1282298	0	1282298	BEV	0	56613.74	3	3
2037	2a	1	3797.263	17097.25	0	17097.25	76374.24	0	76374.24	FCEV	0	3797.263	3	7
2037	2a	1	29946.42	134834.4	73388.41	61445.94	926762.5	504423.6	422338.9	PHEV	16299.41	13647.01	3	8
2037	2a	1	154906.1	706342.5	706342.5	0	4146391	4146391	0	ICE	154906.1	0	3	1
2037	2a	1	1638.85	7472.845	7472.845	0	44145.28	44145.28	0	ICE	1638.85	0	3	2
2037	2a	1	73340	334416.5	0	334416.5	1736820	0	1736820	BEV	0	73340	3	3
2037	2a	1	5544.45	25281.64	0	25281.64	120574.2	0	120574.2	FCEV	0	5544.45	3	7
2037	2a	1	36298.44	165514	88620.92	76893.07	1173346	628242.8	545102.9	PHEV	19435.22	16863.22	3	8
2037	2a	1	145951.1	673870.9	673870.9	0	4051904	4051904	0	ICE	145951.1	0	3	1
2037	2a	1	1544.109	7129.307	7129.307	0	43136.71	43136.71	0	ICE	1544.109	0	3	2
2037	2a	1	90872.68	419568.2	0	419568.2	2249619	0	2249619	BEV	0	90872.68	3	3
2037	2a	1	7657.177	35353.95	0	35353.95	177812.4	0	177812.4	FCEV	0	7657.177	3	7
2037	2a	1	41996.83	193903.6	102104.1	91799.5	1416884	746090.5	670793.3	PHEV	22114.33	19882.5	3	8
2037	2a	1	135504	633398.6	633398.6	0	3902000	3902000	0	ICE	135504	0	3	1
2037	2a	1	1433.583	6701.125	6701.125	0	41538.78	41538.78	0	ICE	1433.583	0	3	2
2037	2a	1	110705.2	517479.2	0	517479.2	2863916	0	2863916	BEV	0	110705.2	3	3
2037	2a	1	10302.98	48160.15	0	48160.15	253633	0	253633	FCEV	0	10302.98	3	7
2037	2a	1	47660.48	222783.7	115338.3	107445.4	1677272	868347.7	808924.4	PHEV	24674.51	22985.97	3	8
2037	2a	1	121015.9	572608.5	572608.5	0	3615845	3615845	0	ICE	121015.9	0	3	1
2037	2a	1	1280.304	6057.989	6057.989	0	38491.16	38491.16	0	ICE	1280.304	0	3	2
2037	2a	1	130577.6	617851.6	0	617851.6	3529697	0	3529697	BEV	0	130577.6	3	3
2037	2a	1	13320.89	63030.2	0	63030.2	346134.3	0	346134.3	FCEV	0	13320.89	3	7
2037	2a	1	52224.5	247109.6	125743.5	121366.1	1917330	975646.9	941682.8	PHEV	26574.81	25649.69	3	8
2037	2a	1	104571.7	500790.7	500790.7	0	3242022	3242022	0	ICE	104571.7	0	3	1
2037	2a	1	1106.33	5298.182	5298.182	0	34510.88	34510.88	0	ICE	1106.33	0	3	2
2037	2a	1	151539.6	725718.6	0	725718.6	4279075	0	4279075	BEV	0	151539.6	3	3
2037	2a	1	16837.73	80635.4	0	80635.4	460431.9	0	460431.9	FCEV	0	16837.73	3	7

2037	2a	1	56125.78	268784.7	134392.3	134392.3	2149185	1074592	1074592	PHEV	28062.89	28062.89	3	8
2037	2a	1	85982.44	416693.2	416693.2	0	2766310	2766310	0	ICE	85982.44	0	3	1
2037	2a	1	909.6627	4408.462	4408.462	0	29446.5	29446.5	0	ICE	909.6627	0	3	2
2037	2a	1	170767.8	827585.2	0	827585.2	5023755	0	5023755	BEV	0	170767.8	3	3
2037	2a	1	21106.13	102285.8	0	102285.8	605168	0	605168	FCEV	0	21106.13	3	7
2037	2a	1	60591.77	293643.5	146821.7	146821.7	2417585	1208792	1208792	PHEV	30295.89	30295.89	3	8
2037	2a	1	66480.87	325992.3	325992.3	0	2219380	2219380	0	ICE	66480.87	0	3	1
2037	2a	1	703.3433	3448.879	3448.879	0	23624.38	23624.38	0	ICE	703.3433	0	3	2
2037	2a	1	191535.3	939202.7	0	939202.7	5869068	0	5869068	BEV	0	191535.3	3	3
2037	2a	1	26118.44	128073.1	0	128073.1	783775.3	0	783775.3	FCEV	0	26118.44	3	7
2037	2a	1	65013.44	318796.7	159398.3	159398.3	2702450	1351225	1351225	PHEV	32506.72	32506.72	3	8
2037	2a	1	45413.99	225291.5	225291.5	0	1573068	1573068	0	ICE	45413.99	0	3	1
2037	2a	1	480.4634	2383.502	2383.502	0	16744.64	16744.64	0	ICE	480.4634	0	3	2
2037	2a	1	212122.1	1052304	0	1052304	6768980	0	6768980	BEV	0	212122.1	3	3
2037	2a	1	31696.41	157240.8	0	157240.8	994166.1	0	994166.1	FCEV	0	31696.41	3	7
2037	2a	1	68769.33	341153.7	170576.8	170576.8	2978149	1489074	1489074	PHEV	34384.67	34384.67	3	8
2037	2a	1	23160.3	116221.4	116221.4	0	832160.8	832160.8	0	ICE	23160.3	0	3	1
2037	2a	1	245.0275	1229.58	1229.58	0	8858.033	8858.033	0	ICE	245.0275	0	3	2
2037	2a	1	232513.4	1166783	0	1166783	7724170	0	7724170	BEV	0	232513.4	3	3
2037	2a	1	37851.02	189941.4	0	189941.4	1239463	0	1239463	FCEV	0	37851.02	3	7
2037	2a	1	71869.03	360648.1	180324.1	180324.1	3241716	1620858	1620858	PHEV	35934.52	35934.52	3	8
2037	2a	1	256224.8	1300448	0	1300448	8859472	0	8859472	BEV	0	256224.8	3	3
2037	2a	1	45216.14	229490.9	0	229490.9	1544612	0	1544612	FCEV	0	45216.14	3	7
2037	2a	1	75360.24	382484.9	191242.4	191242.4	3540016	1770008	1770008	PHEV	37680.12	37680.12	3	8
2037	2a	1	264322.8	1356692	0	1356692	9510742	0	9510742	BEV	0	264322.8	3	3
2037	2a	1	50347.2	258417.6	0	258417.6	1791824	0	1791824	FCEV	0	50347.2	3	7
2037	2a	1	73811.48	378852.9	189426.5	189426.5	3601537	1800769	1800769	PHEV	36905.74	36905.74	3	8
2037	2a	1	240651.3	1248980	0	1248980	9002262	0	9002262	BEV	0	240651.3	3	3
2037	2a	1	49290.02	255815.2	0	255815.2	1825628	0	1825628	FCEV	0	49290.02	3	7
2037	2a	1	63645.65	330320.9	165160.5	165160.5	3220831	1610416	1610416	PHEV	31822.83	31822.83	3	8
2037	2a	1	3885.323	10370.86	10370.86	0	33806.94	33806.94	0	ICE	3885.323	0	4	1
2037	2a	1	5881.096	16034.99	16034.99	0	52784.62	52784.62	0	ICE	5881.096	0	4	1
2037	2a	1	6277.689	17475.95	17475.95	0	58513.66	58513.66	0	ICE	6277.689	0	4	1
2037	2a	1	5477.232	15561.42	15561.42	0	52586.42	52586.42	0	ICE	5477.232	0	4	1
2037	2a	1	6891.208	19973.48	19973.48	0	68997.21	68997.21	0	ICE	6891.208	0	4	1
2037	2a	1	7440.541	21991.93	21991.93	0	76822.19	76822.19	0	ICE	7440.541	0	4	1
2037	2a	1	11971.54	36070.02	36070.02	0	128744.8	128744.8	0	ICE	11971.54	0	4	1
2037	2a	1	13203.56	40538.51	40538.51	0	146867.7	146867.7	0	ICE	13203.56	0	4	1
2037	2a	1	16897.14	52846.81	52846.81	0	194099	194099	0	ICE	16897.14	0	4	1
2037	2a	1	20.32923	63.58089	63.58089	0	200.8288	200.8288	0	ICE	20.32923	0	4	2
2037	2a	1	19787.01	63018.67	63018.67	0	236271.4	236271.4	0	ICE	19787.01	0	4	1
2037	2a	1	21310.91	69092.96	69092.96	0	265088.4	265088.4	0	ICE	21310.91	0	4	1
2037	2a	1	23389.22	77171.11	77171.11	0	299679.7	299679.7	0	ICE	23389.22	0	4	1
2037	2a	1	36.90288	121.7585	121.7585	0	419.5782	419.5782	0	ICE	36.90288	0	4	2
2037	2a	1	22538.78	75656.39	75656.39	0	295412.1	295412.1	0	ICE	22538.78	0	4	1
2037	2a	1	22731.14	77604.34	77604.34	0	307417.7	307417.7	0	ICE	22731.14	0	4	1
2037	2a	1	23816.21	82673.23	82673.23	0	333053.7	333053.7	0	ICE	23816.21	0	4	1

2037	2a	1	18680.91	65917.27	65917.27	0	269880.6	269880.6	0	ICE	18680.91	0	4	1
2037	2a	1	8302.073	29770.24	29770.24	0	123135.7	123135.7	0	ICE	8302.073	0	4	1
2037	2a	1	12654.55	46102.67	46102.67	0	193497.8	193497.8	0	ICE	12654.55	0	4	1
2037	2a	1	19601.81	72535.71	72535.71	0	309032.4	309032.4	0	ICE	19601.81	0	4	1
2037	2a	1	560.1448	2072.793	2072.793	0	8584.962	8584.962	0	ICE	560.1448	0	4	2
2037	2a	1	21746.58	81718.22	81718.22	0	353380.7	353380.7	0	ICE	21746.58	0	4	1
2037	2a	1	26954.22	102831.4	102831.4	0	451216.9	451216.9	0	ICE	26954.22	0	4	1
2037	2a	1	577.6177	2203.635	2203.635	0	9514.681	9514.681	0	ICE	577.6177	0	4	2
2037	2a	1	46196.24	178887.1	178887.1	0	799412.4	799412.4	0	ICE	46196.24	0	4	1
2037	2a	1	1458.887	5649.291	5649.291	0	24748.38	24748.38	0	ICE	1458.887	0	4	2
2037	2a	1	55492.71	218065.3	218065.3	0	995758.6	995758.6	0	ICE	55492.71	0	4	1
2037	2a	1	65878.4	262651.3	262651.3	0	1223337	1223337	0	ICE	65878.4	0	4	1
2037	2a	1	64737.37	261810.9	261810.9	0	1239867	1239867	0	ICE	64737.37	0	4	1
2037	2a	1	2257.403	9129.388	9129.388	0	43266.32	43266.32	0	ICE	2257.403	0	4	2
2037	2a	1	541.6113	2190.385	1314.231	876.1538	9822.514	5893.509	3929.006	PHEV	324.9668	216.6445	4	8
2037	2a	1	73957.12	303334.4	303334.4	0	1464072	1464072	0	ICE	73957.12	0	4	1
2037	2a	1	2578.897	10577.32	10577.32	0	51089.15	51089.15	0	ICE	2578.897	0	4	2
2037	2a	1	1.29373	5.306221	0	5.306221	17.37224	0	17.37224	BEV	0	1.29373	4	3
2037	2a	1	0.026403	0.10829	0	0.10829	0.354536	0	0.354536	FCEV	0	0.026403	4	7
2037	2a	1	1583.169	6493.353	3896.012	2597.341	30708.55	18425.13	12283.42	PHEV	949.9015	633.2677	4	8
2037	2a	1	83262.42	346270.1	346270.1	0	1704305	1704305	0	ICE	83262.42	0	4	1
2037	2a	1	2930.783	12188.48	12188.48	0	60088.28	60088.28	0	ICE	2930.783	0	4	2
2037	2a	1	713.764	2968.388	0	2968.388	10486.1	0	10486.1	BEV	0	713.764	4	3
2037	2a	1	16.69623	69.43597	0	69.43597	234.5776	0	234.5776	FCEV	0	16.69623	4	7
2037	2a	1	1857.067	7723.133	4589.748	3133.385	39668.8	23574.6	16094.2	PHEV	1103.628	753.4386	4	8
2037	2a	1	94177.02	397056.9	397056.9	0	1993532	1993532	0	ICE	94177.02	0	4	1
2037	2a	1	3366.96	14195.34	14195.34	0	71496.73	71496.73	0	ICE	3366.96	0	4	2
2037	2a	1	1623.966	6846.752	0	6846.752	27225.08	0	27225.08	BEV	0	1623.966	4	3
2037	2a	1	42.86126	180.7061	0	180.7061	629.7146	0	629.7146	FCEV	0	42.86126	4	7
2037	2a	1	2187.069	9220.836	5427.12	3793.715	47434.62	27918.66	19515.96	PHEV	1287.246	899.8226	4	8
2037	2a	1	98470.52	420800	420800	0	2157062	2157062	0	ICE	98470.52	0	4	1
2037	2a	1	3582.659	15309.99	15309.99	0	78859.35	78859.35	0	ICE	3582.659	0	4	2
2037	2a	1	5211.155	22269.14	0	22269.14	90837.31	0	90837.31	BEV	0	5211.155	4	3
2037	2a	1	178.633	763.3629	0	763.3629	2742.593	0	2742.593	FCEV	0	178.633	4	7
2037	2a	1	6219.78	26579.36	15408.43	11170.92	148845.5	86287.88	62557.65	PHEV	3605.695	2614.085	4	8
2037	2a	1	100549	435442.5	435442.5	0	2282688	2282688	0	ICE	100549	0	4	1
2037	2a	1	3678.347	15929.63	15929.63	0	83965.98	83965.98	0	ICE	3678.347	0	4	2
2037	2a	1	9891.859	42838.18	0	42838.18	182277.2	0	182277.2	BEV	0	9891.859	4	3
2037	2a	1	418.2978	1811.501	0	1811.501	6707.301	0	6707.301	FCEV	0	418.2978	4	7
2037	2a	1	10476.3	45369.2	25899.33	19469.87	266685.7	152239.5	114446.3	PHEV	5980.472	4495.83	4	8
2037	2a	1	100708.1	441901.2	441901.2	0	2370814	2370814	0	ICE	100708.1	0	4	1
2037	2a	1	3707.359	16267.67	16267.67	0	87807.48	87807.48	0	ICE	3707.359	0	4	2
2037	2a	1	15705.98	68916.89	0	68916.89	305961.8	0	305961.8	BEV	0	15705.98	4	3
2037	2a	1	791.8981	3474.801	0	3474.801	13253.49	0	13253.49	FCEV	0	791.8981	4	7
2037	2a	1	14762.72	64777.94	36405.2	28372.74	395973.5	222537.1	173436.4	PHEV	8296.65	6466.072	4	8
2037	2a	1	99827.05	443754.2	443754.2	0	2437697	2437697	0	ICE	99827.05	0	4	1
2037	2a	1	3696.394	16431.32	16431.32	0	90863.36	90863.36	0	ICE	3696.394	0	4	2

2037	2a	1	22842.59	101540.6	0	101540.6	469808.7	0	469808.7	BEV	0	22842.59	4	3
2037	2a	1	1340.43	5958.521	0	5958.521	23423.4	0	23423.4	FCEV	0	1340.43	4	7
2037	2a	1	19039.33	84634.21	46814.81	37819.4	536482.4	296751.4	239731	PHEV	10531.47	8507.861	4	8
2037	2a	1	97177.3	437542.8	437542.8	0	2463258	2463258	0	ICE	97177.3	0	4	1
2037	2a	1	3617.706	16288.79	16288.79	0	92364.48	92364.48	0	ICE	3617.706	0	4	2
2037	2a	1	31234.49	140633.9	0	140633.9	676963	0	676963	BEV	0	31234.49	4	3
2037	2a	1	2094.996	9432.763	0	9432.763	39938.88	0	39938.88	FCEV	0	2094.996	4	7
2037	2a	1	23041.53	103744.9	56466.89	47278.06	680875.3	370590.7	310284.6	PHEV	12541.18	10500.35	4	8
2037	2a	1	94060.17	428896.5	428896.5	0	2474657	2474657	0	ICE	94060.17	0	4	1
2037	2a	1	3501.662	15966.91	15966.91	0	92785.56	92785.56	0	ICE	3501.662	0	4	2
2037	2a	1	41393.82	188748	0	188748	945444.1	0	945444.1	BEV	0	41393.82	4	3
2037	2a	1	3129.343	14269.21	0	14269.21	65146.4	0	65146.4	FCEV	0	3129.343	4	7
2037	2a	1	26942.39	122852.2	65778.56	57073.61	835284.6	447235.2	388049.4	PHEV	14425.72	12516.66	4	8
2037	2a	1	88624.18	409186.7	409186.7	0	2420647	2420647	0	ICE	88624.18	0	4	1
2037	2a	1	3299.291	15233.16	15233.16	0	90755.55	90755.55	0	ICE	3299.291	0	4	2
2037	2a	1	52683.07	243243	0	243243	1266967	0	1266967	BEV	0	52683.07	4	3
2037	2a	1	4439.218	20496.31	0	20496.31	99546.51	0	99546.51	FCEV	0	4439.218	4	7
2037	2a	1	30120.44	139069.1	73229.8	65839.27	978988	515507.1	463480.9	PHEV	15860.56	14259.87	4	8
2037	2a	1	82839.65	387224.8	387224.8	0	2348795	2348795	0	ICE	82839.65	0	4	1
2037	2a	1	3083.946	14415.56	14415.56	0	88057.7	88057.7	0	ICE	3083.946	0	4	2
2037	2a	1	66242.3	309642.3	0	309642.3	1676010	0	1676010	BEV	0	66242.3	4	3
2037	2a	1	6164.961	28817.43	0	28817.43	147714.6	0	147714.6	FCEV	0	6164.961	4	7
2037	2a	1	33065.67	154561.8	80018.88	74542.97	1125668	582774.5	542893.7	PHEV	17118.57	15947.1	4	8
2037	2a	1	74121.65	350719.9	350719.9	0	2182290	2182290	0	ICE	74121.65	0	4	1
2037	2a	1	2759.393	13056.56	13056.56	0	81812.97	81812.97	0	ICE	2759.393	0	4	2
2037	2a	1	80111.44	379061.7	0	379061.7	2131742	0	2131742	BEV	0	80111.44	4	3
2037	2a	1	8172.577	38670.02	0	38670.02	208214.7	0	208214.7	FCEV	0	8172.577	4	7
2037	2a	1	34631.35	163864.5	83383.6	80480.86	1234608	628238.9	606368.7	PHEV	17622.41	17008.94	4	8
2037	2a	1	64816.87	310406	310406	0	1981183	1981183	0	ICE	64816.87	0	4	1
2037	2a	1	2412.995	11555.76	11555.76	0	74271.96	74271.96	0	ICE	2412.995	0	4	2
2037	2a	1	96139.13	460407.4	0	460407.4	2689138	0	2689138	BEV	0	96139.13	4	3
2037	2a	1	10682.13	51156.38	0	51156.38	288395.6	0	288395.6	FCEV	0	10682.13	4	7
2037	2a	1	35607.09	170521.3	85260.63	85260.63	1327889	663944.5	663944.5	PHEV	17803.54	17803.54	4	8
2037	2a	1	53894.17	261185.1	261185.1	0	1710071	1710071	0	ICE	53894.17	0	4	1
2037	2a	1	2006.366	9723.372	9723.372	0	64107.5	64107.5	0	ICE	2006.366	0	4	2
2037	2a	1	109582.7	531066.1	0	531066.1	3193510	0	3193510	BEV	0	109582.7	4	3
2037	2a	1	13543.93	65637.39	0	65637.39	383679.2	0	383679.2	FCEV	0	13543.93	4	7
2037	2a	1	38882.08	188432.7	94216.35	94216.35	1511771	755885.7	755885.7	PHEV	19441.04	19441.04	4	8
2037	2a	1	42161.98	206743.4	206743.4	0	1388334	1388334	0	ICE	42161.98	0	4	1
2037	2a	1	1569.601	7696.619	7696.619	0	52045.76	52045.76	0	ICE	1569.601	0	4	2
2037	2a	1	124383.9	609922.5	0	609922.5	3775187	0	3775187	BEV	0	124383.9	4	3
2037	2a	1	16961.44	83171.25	0	83171.25	503075	0	503075	FCEV	0	16961.44	4	7
2037	2a	1	42220.03	207028	103514	103514	1710609	855304.5	855304.5	PHEV	21110.01	21110.01	4	8
2037	2a	1	28785.16	142798.6	142798.6	0	983547	983547	0	ICE	28785.16	0	4	1
2037	2a	1	1071.611	5316.089	5316.089	0	36871.11	36871.11	0	ICE	1071.611	0	4	2
2037	2a	1	137698.9	683102.2	0	683102.2	4351750	0	4351750	BEV	0	137698.9	4	3
2037	2a	1	20575.7	102072.7	0	102072.7	638027	0	638027	FCEV	0	20575.7	4	7

2037	2a	1	44641.55	221459.6	110729.8	110729.8	1884540	942270	942270	PHEV	22320.77	22320.77	4	8
2037	2a	1	14756.18	74048.41	74048.41	0	522979.2	522979.2	0	ICE	14756.18	0	4	1
2037	2a	1	549.3413	2756.666	2756.666	0	19605.43	19605.43	0	ICE	549.3413	0	4	2
2037	2a	1	151742.6	761463.9	0	761463.9	4991431	0	4991431	BEV	0	151742.6	4	3
2037	2a	1	24702.28	123959.2	0	123959.2	799797.2	0	799797.2	FCEV	0	24702.28	4	7
2037	2a	1	46903.06	235365.7	117682.8	117682.8	2061869	1030935	1030935	PHEV	23451.53	23451.53	4	8
2037	2a	1	167342	849331	0	849331	5725716	0	5725716	BEV	0	167342	4	3
2037	2a	1	29530.94	149881.9	0	149881.9	997072.6	0	997072.6	FCEV	0	29530.94	4	7
2037	2a	1	49218.24	249803.2	124901.6	124901.6	2250737	1125369	1125369	PHEV	24609.12	24609.12	4	8
2037	2a	1	171173.2	878582.7	0	878582.7	6091197	0	6091197	BEV	0	171173.2	4	3
2037	2a	1	32604.43	167349.1	0	167349.1	1146373	0	1146373	FCEV	0	32604.43	4	7
2037	2a	1	47799.7	245342	122671	122671	2267630	1133815	1133815	PHEV	23899.85	23899.85	4	8
2037	2a	1	149209.7	774398.4	0	774398.4	5508736	0	5508736	BEV	0	149209.7	4	3
2037	2a	1	30561.02	158611.7	0	158611.7	1116164	0	1116164	FCEV	0	30561.02	4	7
2037	2a	1	39461.87	204807.1	102403.5	102403.5	1933257	966628.3	966628.3	PHEV	19730.93	19730.93	4	8
2037	2a	1	14.20863	37.92624	37.92624	0	53.72649	53.72649	0	ICE	14.20863	0	1	2
2037	2a	1	28.63167	82.98604	82.98604	0	159.9597	159.9597	0	ICE	28.63167	0	1	2
2037	2a	1	36.9428	113.4244	113.4244	0	265.9546	265.9546	0	ICE	36.9428	0	1	2
2037	2a	1	5.473212	17.1178	0	17.1178	47.35603	0	47.35603	BEV	0	5.473212	1	3
2037	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2037	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2037	2a	1	84.12624	267.9295	267.9295	0	667.5874	667.5874	0	ICE	84.12624	0	1	2
2037	2a	1	110.9704	359.7817	359.7817	0	939.632	939.632	0	ICE	110.9704	0	1	2
2037	2a	1	39.40843	130.0253	130.0253	0	366.9809	366.9809	0	ICE	39.40843	0	1	2
2037	2a	1	73.30847	246.076	246.076	0	702.2708	702.2708	0	ICE	73.30847	0	1	2
2037	2a	1	220.4419	790.4781	790.4781	0	2603.306	2603.306	0	ICE	220.4419	0	1	2
2037	2a	1	786.7023	2956.231	2956.231	0	10894.53	10894.53	0	ICE	786.7023	0	1	2
2037	2a	1	1284.74	4901.334	4901.334	0	18897.6	18897.6	0	ICE	1284.74	0	1	2
2037	2a	1	1133.375	4323.873	0	4323.873	17078.45	0	17078.45	BEV	0	1133.375	1	3
2037	2a	1	0.066587	0.254032	0	0.254032	1.003375	0	1.003375	FCEV	0	0.066587	1	7
2037	2a	1	1184.647	4519.477	2711.686	1807.791	16781.36	10068.81	6712.543	PHEV	710.7884	473.8589	1	8
2037	2a	1	1621.55	6279.177	0	6279.177	25666.85	0	25666.85	BEV	0	1621.55	1	3
2037	2a	1	0.227203	0.879806	0	0.879806	3.596308	0	3.596308	FCEV	0	0.227203	1	7
2037	2a	1	2047.329	7927.933	4756.76	3171.173	30541.12	18324.67	12216.45	PHEV	1228.397	818.9316	1	8
2037	2a	1	1777.557	6985.124	6985.124	0	29288.57	29288.57	0	ICE	1777.557	0	1	2
2037	2a	1	4405.149	17310.56	0	17310.56	73480.97	0	73480.97	BEV	0	4405.149	1	3
2037	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2037	2a	1	2094.767	8231.637	4938.982	3292.655	32964.96	19778.98	13185.98	PHEV	1256.86	837.9066	1	8
2037	2a	1	4210.75	13893.07	13893.07	0	57677.16	57677.16	0	ICE	4210.75	0	2	1
2037	2a	1	9278.427	34866.01	34866.01	0	159335.1	159335.1	0	ICE	9278.427	0	2	1
2037	2a	1	14305.45	54575.87	54575.87	0	253525.9	253525.9	0	ICE	14305.45	0	2	1
2037	2a	1	18744.58	72585.2	72585.2	0	339549	339549	0	ICE	18744.58	0	2	1
2037	2a	1	6.163431	21.74822	21.74822	0	89.50775	89.50775	0	ICE	6.163431	0	3	2
2037	2a	1	206.6741	776.6294	776.6294	0	3432.181	3432.181	0	ICE	206.6741	0	3	2
2037	2a	1	166.6011	635.5897	635.5897	0	2826.99	2826.99	0	ICE	166.6011	0	3	2
2037	2a	1	787.9425	3096.315	3096.315	0	14398.28	14398.28	0	ICE	787.9425	0	3	2
2037	2a	1	892.768	3559.386	0	3559.386	10724.8	0	10724.8	BEV	0	892.768	3	3

2037	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2037	2a	1	81.24845	323.9303	194.3582	129.5721	1485.279	891.1674	594.1116	PHEV	48.74907	32.49938	3	8
2037	2a	1	23.65276	64.48995	64.48995	0	194.165	194.165	0	ICE	23.65276	0	4	2
2037	2a	1	13.65785	41.15084	41.15084	0	119.0479	119.0479	0	ICE	13.65785	0	4	2
2037	2a	1	62.04131	208.2553	208.2553	0	762.425	762.425	0	ICE	62.04131	0	4	2
2037	2a	1	87.1911	297.6713	297.6713	0	1106.254	1106.254	0	ICE	87.1911	0	4	2
2037	2a	1	122.4653	425.1138	425.1138	0	1659.976	1659.976	0	ICE	122.4653	0	4	2
2037	2a	1	92.40438	326.0572	326.0572	0	1299.742	1299.742	0	ICE	92.40438	0	4	2
2037	2a	1	131.9701	473.2289	473.2289	0	1906.045	1906.045	0	ICE	131.9701	0	4	2
2037	2a	1	1075.318	4040.775	4040.775	0	17025.33	17025.33	0	ICE	1075.318	0	4	2
2037	2a	1	3146.307	12363.79	12363.79	0	55495.83	55495.83	0	ICE	3146.307	0	4	2
2037	2a	1	2195.942	8755.021	8755.021	0	40495.19	40495.19	0	ICE	2195.942	0	4	2
2037	2a	1	49.21771	148.292	148.292	0	320.1112	320.1112	0	ICE	49.21771	0	1	2
2037	2a	1	2.643463	8.873366	0	8.873366	27.25133	0	27.25133	BEV	0	2.643463	1	3
2037	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2037	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2037	2a	1	210.6015	791.3879	0	791.3879	3026.369	0	3026.369	BEV	0	210.6015	1	3
2037	2a	1	0.795891	2.990758	0	2.990758	11.43705	0	11.43705	FCEV	0	0.795891	1	7
2037	2a	1	442.6921	1663.526	998.1158	665.4105	5947.393	3568.436	2378.957	PHEV	265.6153	177.0768	1	8
2037	2a	1	3364.129	13412.48	0	13412.48	58905.77	0	58905.77	BEV	0	3364.129	1	3
2037	2a	1	102.4234	408.353	0	408.353	1793.431	0	1793.431	FCEV	0	102.4234	1	7
2037	2a	1	2419.258	9645.365	5787.219	3858.146	40195.68	24117.41	16078.27	PHEV	1451.555	967.7033	1	8
2037	2a	1	2.06406	5.627721	5.627721	0	16.87974	16.87974	0	ICE	2.06406	0	2	2
2037	2a	1	1.209008	3.36566	3.36566	0	9.972461	9.972461	0	ICE	1.209008	0	2	2
2037	2a	1	2.425074	7.167768	7.167768	0	26.13124	26.13124	0	ICE	2.425074	0	2	2
2037	2a	1	21.81112	73.21382	73.21382	0	287.5531	287.5531	0	ICE	21.81112	0	3	2
2037	2a	1	24.12357	82.3581	82.3581	0	335.6551	335.6551	0	ICE	24.12357	0	3	2
2037	2a	1	11.47956	33.93003	33.93003	0	95.60461	95.60461	0	ICE	11.47956	0	4	2
2037	2a	1	22.22787	72.06587	72.06587	0	252.0973	252.0973	0	ICE	22.22787	0	4	2
2037	2a	1	242.061	881.8696	881.8696	0	3607.346	3607.346	0	ICE	242.061	0	4	2
2037	2a	1	47.22834	131.4752	131.4752	0	227.8568	227.8568	0	ICE	47.22834	0	1	2
2037	2a	1	34.38068	97.6793	97.6793	0	181.0021	181.0021	0	ICE	34.38068	0	1	2
2037	2a	1	50.22655	148.4541	148.4541	0	317.3234	317.3234	0	ICE	50.22655	0	1	2
2037	2a	1	10.40473	33.13751	0	33.13751	94.04881	0	94.04881	BEV	0	10.40473	1	3
2037	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2037	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2037	2a	1	232.4373	860.1249	0	860.1249	3192.295	0	3192.295	BEV	0	232.4373	1	3
2037	2a	1	2.296443	8.497896	0	8.497896	31.53937	0	31.53937	FCEV	0	2.296443	1	7
2037	2a	1	64.61074	239.0895	143.4537	95.63578	821.2932	492.7759	328.5173	PHEV	38.76644	25.8443	1	8
2037	2a	1	281.9508	1124.113	1124.113	0	4803.078	4803.078	0	ICE	281.9508	0	1	2
2037	2a	1	185.9533	720.0724	0	720.0724	2935.172	0	2935.172	BEV	0	185.9533	2	3
2037	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2037	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2037	2a	1	18.19071	48.55536	48.55536	0	132.8162	132.8162	0	ICE	18.19071	0	4	2
2037	2a	1	27.13139	75.52892	75.52892	0	222.5612	222.5612	0	ICE	27.13139	0	4	2
2037	2a	1	25.0473	71.16213	71.16213	0	204.8506	204.8506	0	ICE	25.0473	0	4	2
2037	2a	1	17.27161	60.94444	60.94444	0	188.4355	188.4355	0	ICE	17.27161	0	1	2

2037	2a	1	3.730148	12.09366	12.09366	0	43.0467	43.0467	0	ICE	3.730148	0	2	2
2037	2a	1	0.254674	0.767328	0.767328	0	2.096416	2.096416	0	ICE	0.254674	0	3	2
2037	2a	1	12.67514	46.17769	46.17769	0	194.6242	194.6242	0	ICE	12.67514	0	3	2
2037	2a	1	39.84459	154.2914	0	154.2914	438.0255	0	438.0255	BEV	0	39.84459	3	3
2037	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2037	2a	1	18.04038	69.85831	41.91499	27.94333	307.449	184.4694	122.9796	PHEV	10.82423	7.216153	3	8
2037	2a	1	27.46705	79.6105	79.6105	0	240.7437	240.7437	0	ICE	27.46705	0	4	2
2037	2a	1	8.358921	26.62191	26.62191	0	93.32522	93.32522	0	ICE	8.358921	0	4	2
2037	2a	1	27.16584	100.5261	100.5261	0	440.2103	440.2103	0	ICE	27.16584	0	3	2
2037	2a	1	3.838159	11.78418	11.78418	0	39.64814	39.64814	0	ICE	3.838159	0	4	2
2037	2a	1	4.305877	13.71357	0	13.71357	26.38762	0	26.38762	BEV	0	4.305877	3	3
2037	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2037	2a	1	0	0	0	0	0	0	0	PHEV	0	0	3	8
2037	2a	1	18.8319	59.97677	0	59.97677	117.6572	0	117.6572	BEV	0	18.8319	4	3
2037	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2037	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2037	2a	1	8.380052	22.84846	22.84846	0	38.44983	38.44983	0	ICE	8.380052	0	1	2
2037	2a	1	10.70905	37.17433	37.17433	0	108.7326	108.7326	0	ICE	10.70905	0	1	2
2037	2a	1	34.88525	127.0929	0	127.0929	459.3484	0	459.3484	BEV	0	34.88525	1	3
2037	2a	1	3.54165	12.90283	0	12.90283	46.63436	0	46.63436	FCEV	0	3.54165	1	7
2037	2a	1	3.718732	13.54797	8.128785	5.41919	44.34669	26.60801	17.73867	PHEV	2.231239	1.487493	1	8
2037	2a	1	69.11968	259.7345	0	259.7345	985.1731	0	985.1731	BEV	0	69.11968	2	3
2037	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2037	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2037	2a	1	9.847377	35.31151	35.31151	0	147.9388	147.9388	0	ICE	9.847377	0	3	2
2037	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2037	2a	1	9.847377	35.31151	35.31151	0	147.9388	147.9388	0	ICE	9.847377	0	3	2
2037	2a	1	3.19412	10.90476	0	10.90476	34.70076	0	34.70076	BEV	0	3.19412	1	3
2037	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2037	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2037	2a	1	18.77416	66.2463	0	66.2463	219.0291	0	219.0291	BEV	0	18.77416	1	3
2037	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2037	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2037	2a	1	17.32883	62.13911	0	62.13911	220.2874	0	220.2874	BEV	0	17.32883	1	3
2037	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2037	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2037	2a	1	2.651828	7.534136	7.534136	0	28.91244	28.91244	0	ICE	2.651828	0	2	2
2037	2a	1	6.286747	22.54352	22.54352	0	89.88827	89.88827	0	ICE	6.286747	0	2	2
2037	2a	1	89.82363	342.6807	0	342.6807	1345.155	0	1345.155	BEV	0	89.82363	2	3
2037	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2037	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2037	2a	1	3.20181	11.11444	11.11444	0	46.49403	46.49403	0	ICE	3.20181	0	3	2
2037	2a	1	2.453141	7.953428	0	7.953428	23.10088	0	23.10088	BEV	0	2.453141	1	3
2037	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2037	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2037	2a	1	5.819935	20.20274	0	20.20274	66.14956	0	66.14956	BEV	0	5.819935	1	3
2037	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2037	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2037	2a	1	8.9266	31.49831	0	31.49831	105.7855	0	105.7855	BEV	0	8.9266	2	3

2037	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2037	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2037	2a	1	1.776	6.673766	6.673766	0	28.57769	28.57769	0	ICE	1.776	0	2	2
2037	2a	1	0.335006	1.143713	0	1.143713	2.813019	0	2.813019	BEV	0	0.335006	4	3
2037	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2037	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2037	2a	1	2.303281	7.203651	7.203651	0	23.1595	23.1595	0	ICE	2.303281	0	2	2
2037	2a	1	0.377214	1.222982	1.222982	0	5.177744	5.177744	0	ICE	0.377214	0	3	2
2037	2a	1	1.666143	4.447335	0	4.447335	10.36105	0	10.36105	BEV	0	1.666143	1	3
2037	2a	1	5.327533	19.1039	0	19.1039	48.3754	0	48.3754	BEV	0	5.327533	3	3
2037	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2037	2a	1	0	0	0	0	0	0	0	PHEV	0	0	3	8
2037	2a	1	3.408403	12.61266	0	12.61266	33.41759	0	33.41759	BEV	0	3.408403	3	3
2037	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2037	2a	1	2.359664	8.731841	5.239105	3.492737	36.34397	21.80638	14.53759	PHEV	1.415798	0.943866	3	8
2037	2a	1	0.59244	2.328065	0	2.328065	6.681756	0	6.681756	BEV	0	0.59244	4	3
2037	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2037	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2037	2a	1	14.05167	43.14243	0	43.14243	113.4547	0	113.4547	BEV	0	14.05167	2	3
2037	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2037	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2037	2a	1	5.028458	15.7268	0	15.7268	43.10504	0	43.10504	BEV	0	5.028458	2	3
2037	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2037	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2037	2a	1	4.27029	13.60023	13.60023	0	55.18308	55.18308	0	ICE	4.27029	0	2	2
2037	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2037	2a	1	4.27029	13.60023	13.60023	0	55.18308	55.18308	0	ICE	4.27029	0	2	2
2037	2a	1	2.009399	6.860108	0	6.860108	21.5599	0	21.5599	BEV	0	2.009399	2	3
2037	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2037	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2037	2a	1	3.611464	12.53647	12.53647	0	49.33743	49.33743	0	ICE	3.611464	0	2	2
2037	2a	1	1.107692	3.84513	0	3.84513	12.50067	0	12.50067	BEV	0	1.107692	2	3
2037	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2037	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2037	2a	1	4.478294	15.80206	15.80206	0	69.32672	69.32672	0	ICE	4.478294	0	2	2
2037	2a	1	3.732795	13.38535	0	13.38535	47.14795	0	47.14795	BEV	0	3.732795	2	3
2037	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2037	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2037	2a	1	3.704759	13.07257	0	13.07257	31.49369	0	31.49369	BEV	0	3.704759	3	3
2037	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2037	2a	1	0	0	0	0	0	0	0	PHEV	0	0	3	8
2037	2a	1	2.56544	9.787257	0	9.787257	27.07173	0	27.07173	BEV	0	2.56544	3	3
2037	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2037	2a	1	1.961807	7.484373	4.490624	2.993749	32.40781	19.44468	12.96312	PHEV	1.177084	0.784723	3	8
2037	2a	1	0.955288	2.932991	0	2.932991	5.66253	0	5.66253	BEV	0	0.955288	4	3
2037	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2037	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2037	2a	1	2.38065	7.7184	0	7.7184	15.55812	0	15.55812	BEV	0	2.38065	4	3
2037	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7

2037	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2037	2a	1	0.432848	1.452949	0	1.452949	3.14129	0	3.14129	BEV	0	0.432848	4	3
2037	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2037	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2037	2a	1	3.398968	9.07266	9.07266	0	25.26154	25.26154	0	ICE	3.398968	0	2	2
2037	2a	1	0.329965	1.1076	1.1076	0	3.995536	3.995536	0	ICE	0.329965	0	2	2
2037	2a	1	17.91382	57.05284	0	57.05284	155.9096	0	155.9096	BEV	0	17.91382	2	3
2037	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2037	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2037	2a	1	1.188907	3.922717	0	3.922717	11.51338	0	11.51338	BEV	0	1.188907	2	3
2037	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2037	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2037	2a	1	9.044661	27.25138	0	27.25138	70.0797	0	70.0797	BEV	0	9.044661	2	3
2037	2a	1	0.330452	0.957781	0.957781	0	3.259488	3.259488	0	ICE	0.330452	0	3	2
2037	2a	1	2.52636	7.611871	7.611871	0	24.64327	24.64327	0	ICE	2.52636	0	2	2
2037	2a	1	0.242098	0.771047	0.771047	0	2.520638	2.520638	0	ICE	0.242098	0	3	2
2037	2a	1	1.609663	4.481011	0	4.481011	10.66034	0	10.66034	BEV	0	1.609663	1	3
2037	2a	1	2.535012	8.654556	8.654556	0	36.90145	36.90145	0	ICE	2.535012	0	2	2
2037	2a	1	0.555175	1.704539	0	1.704539	3.465385	0	3.465385	BEV	0	0.555175	3	3
2037	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2037	2a	1	0	0	0	0	0	0	0	PHEV	0	0	3	8
2037	2a	1	0.480676	1.69611	0	1.69611	3.998281	0	3.998281	BEV	0	0.480676	4	3
2037	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2037	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2037	2a	1	2.090789	6.179725	0	6.179725	15.76464	0	15.76464	BEV	0	2.090789	1	3
2037	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2037	2a	1	2.090789	6.179725	0	6.179725	15.76464	0	15.76464	BEV	0	2.090789	1	3
2037	2a	1	1.451762	4.457301	0	4.457301	11.84977	0	11.84977	BEV	0	1.451762	1	3
2037	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2037	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2037	2a	1	2.415634	7.970215	0	7.970215	23.6302	0	23.6302	BEV	0	2.415634	1	3
2037	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2037	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2037	2a	1	2.926201	8.481302	8.481302	0	26.98127	26.98127	0	ICE	2.926201	0	2	2
2037	2a	1	2.845936	8.411704	0	8.411704	21.06049	0	21.06049	BEV	0	2.845936	2	3
2037	2a	1	0.420949	1.413008	0	1.413008	4.281412	0	4.281412	BEV	0	0.420949	2	3
2037	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2037	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2037	2a	1	0.92555	2.470514	2.470514	0	7.554723	7.554723	0	ICE	0.92555	0	3	2
2037	2a	1	2.396205	6.945161	0	6.945161	17.2407	0	17.2407	BEV	0	2.396205	1	3
2037	2a	1	2.357081	7.101837	0	7.101837	18.57024	0	18.57024	BEV	0	2.357081	1	3
2037	2a	1	0.355474	0.948844	0	0.948844	2.221373	0	2.221373	BEV	0	0.355474	2	3
2037	2a	1	0.348079	0.96899	0	0.96899	2.321976	0	2.321976	BEV	0	0.348079	2	3
2037	2a	1	2.210467	6.78673	6.78673	0	22.20367	22.20367	0	ICE	2.210467	0	2	2
2037	2a	1	1.531434	5.579275	5.579275	0	22.9186	22.9186	0	ICE	1.531434	0	2	2
2037	2a	1	2.626501	10.02021	10.02021	0	44.53068	44.53068	0	ICE	2.626501	0	2	2
2037	2a	1	0.510644	1.363032	0	1.363032	2.188703	0	2.188703	BEV	0	0.510644	3	3
2037	2a	1	0.604197	1.64736	1.64736	0	6.506486	6.506486	0	ICE	0.604197	0	3	2
2037	2a	1	2.186712	6.588519	0	6.588519	11.62691	0	11.62691	BEV	0	2.186712	3	3

2037	2a	1	0.288857	0.903418	0.903418	0	2.995798	2.995798	0	ICE	0.288857	0	3	2
2037	2a	1	0.18513	0.579004	0	0.579004	1.077923	0	1.077923	BEV	0	0.18513	3	3
2037	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2037	2a	1	0	0	0	0	0	0	0	PHEV	0	0	3	8
2037	2a	1	3.144273	11.45512	0	11.45512	28.83233	0	28.83233	BEV	0	3.144273	3	3
2037	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2037	2a	1	0	0	0	0	0	0	0	PHEV	0	0	3	8
2037	2a	1	7.690673	28.89963	0	28.89963	76.11704	0	76.11704	BEV	0	7.690673	3	3
2037	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2037	2a	1	1.971967	7.410161	4.446097	2.964064	34.58763	20.75258	13.83505	PHEV	1.18318	0.788787	3	8
2037	2a	1	0.717143	1.996396	0	1.996396	3.256197	0	3.256197	BEV	0	0.717143	4	3
2037	2a	1	0.746737	2.76327	2.76327	0	11.69823	11.69823	0	ICE	0.746737	0	2	2
2037	2a	1	0.211807	0.66244	0	0.66244	1.304244	0	1.304244	BEV	0	0.211807	4	3
2037	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2037	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2037	2a	1	0.745981	2.033938	0	2.033938	4.619475	0	4.619475	BEV	0	0.745981	1	3
2037	2a	1	1.698272	4.824978	0	4.824978	11.86451	0	11.86451	BEV	0	1.698272	1	3
2037	2a	1	0.381826	1.04106	0	1.04106	2.451426	0	2.451426	BEV	0	0.381826	2	3
2037	2a	1	0	0	0	0	0	0	0	BEV	0	0	2	3
2037	2a	1	11.14382	43.79097	0	43.79097	185.036	0	185.036	FCEV	0	11.14382	2	7
2037	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2037	2a	1	0	0	0	0	0	0	0	BEV	0	0	2	3
2037	2a	1	12.88549	51.37328	0	51.37328	224.5475	0	224.5475	FCEV	0	12.88549	2	7
2037	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2037	2a	1	0.056801	0.18741	0.18741	0	0.786678	0.786678	0	ICE	0.056801	0	3	2
2037	2a	1	0	0	0	0	0	0	0	BEV	0	0	3	3
2037	2a	1	0.44659	1.754928	0	1.754928	5.24411	0	5.24411	FCEV	0	0.44659	3	7
2037	2a	1	6.401121	25.15397	15.09238	10.06159	122.313	73.38778	48.92519	PHEV	3.840673	2.560449	3	8
2037	2a	1	0.486023	1.882043	1.882043	0	7.979793	7.979793	0	ICE	0.486023	0	2	2
2037	2a	1	0.148545	0.439052	0	0.439052	0.766851	0	0.766851	BEV	0	0.148545	3	3
2037	2a	1	2.022738	5.399174	0	5.399174	8.949212	0	8.949212	BEV	0	2.022738	4	3
2037	2a	1	0.342517	1.031997	0	1.031997	1.854509	0	1.854509	BEV	0	0.342517	4	3
2037	2a	1	0.17506	0.607687	0	0.607687	1.359784	0	1.359784	BEV	0	0.17506	3	3
2037	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2037	2a	1	0	0	0	0	0	0	0	PHEV	0	0	3	8
2037	2a	1	0.622617	2.2683	0	2.2683	7.515594	0	7.515594	BEV	0	0.622617	2	3
2037	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2037	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2037	2a	1	0.381633	1.08426	0	1.08426	2.555411	0	2.555411	BEV	0	0.381633	2	3
2037	2a	1	1.11223	3.223688	0	3.223688	7.697676	0	7.697676	BEV	0	1.11223	2	3
2037	2a	1	0.337569	0.99775	0	0.99775	1.690867	0	1.690867	BEV	0	0.337569	4	3
2037	2a	1	0.846075	3.373227	3.373227	0	16.98602	16.98602	0	ICE	0.846075	0	2	2
2037	2a	1	0.484218	1.791828	0	1.791828	6.717854	0	6.717854	BEV	0	0.484218	2	3
2037	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2037	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2037	2a	1	0.119307	0.332129	0	0.332129	0.520341	0	0.520341	BEV	0	0.119307	3	3
2037	2a	1	0.092986	0.312127	0	0.312127	0.626948	0	0.626948	BEV	0	0.092986	3	3

2037	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2037	2a	1	0	0	0	0	0	0	0	PHEV	0	0	3	8
2037	2a	1	0.655785	1.863156	0	1.863156	3.179927	0	3.179927	BEV	0	0.655785	4	3
2037	2a	1	0.201533	0.653397	0	0.653397	1.848479	0	1.848479	BEV	0	0.201533	2	3
2037	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2037	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2037	2a	1	0.095394	0.314744	0.314744	0	1.617079	1.617079	0	ICE	0.095394	0	2	2
2037	2a	1	0.450838	1.564993	0	1.564993	3.476115	0	3.476115	BEV	0	0.450838	4	3
2037	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2037	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2037	2a	1	0.075771	0.219616	0	0.219616	0.380159	0	0.380159	BEV	0	0.075771	3	3
2037	2a	1	0	0	0	0	0	0	0	BEV	0	0	4	3
2037	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2037	2a	1	0.803764	3.066391	1.839835	1.226556	14.7182	8.83092	5.88728	PHEV	0.482258	0.321506	4	8
2037	2a	1	0.112952	0.314439	0.314439	0	1.205832	1.205832	0	ICE	0.112952	0	3	2
2038	2a	1	11875.99	31699.87	31699.87	0	49875.16	49875.16	0	ICE	11875.99	0	1	1
2038	2a	1	13773.29	37553.29	37553.29	0	61792.8	61792.8	0	ICE	13773.29	0	1	1
2038	2a	1	12457.17	34678.52	34678.52	0	59380.3	59380.3	0	ICE	12457.17	0	1	1
2038	2a	1	14895.37	42319.38	42319.38	0	75561.25	75561.25	0	ICE	14895.37	0	1	1
2038	2a	1	15995.33	46360.88	46360.88	0	86820.89	86820.89	0	ICE	15995.33	0	1	1
2038	2a	1	16763.86	49548.77	49548.77	0	97373.19	97373.19	0	ICE	16763.86	0	1	1
2038	2a	1	20049.86	60409.83	60409.83	0	124682	124682	0	ICE	20049.86	0	1	1
2038	2a	1	20038.49	61523.59	61523.59	0	133104.9	133104.9	0	ICE	20038.49	0	1	1
2038	2a	1	36.68732	112.64	112.64	0	254.1593	254.1593	0	ICE	36.68732	0	1	2
2038	2a	1	19723.5	61686.42	61686.42	0	140216	140216	0	ICE	19723.5	0	1	1
2038	2a	1	21231.74	67619.92	67619.92	0	161228.1	161228.1	0	ICE	21231.74	0	1	1
2038	2a	1	20603.41	66799.13	66799.13	0	166826.1	166826.1	0	ICE	20603.41	0	1	1
2038	2a	1	24804.85	81841.87	81841.87	0	214568.8	214568.8	0	ICE	24804.85	0	1	1
2038	2a	1	26312.99	88325.33	88325.33	0	241841	241841	0	ICE	26312.99	0	1	1
2038	2a	1	69.21774	232.3446	232.3446	0	647.7256	647.7256	0	ICE	69.21774	0	1	2
2038	2a	1	29325.09	100116.1	100116.1	0	286362.3	286362.3	0	ICE	29325.09	0	1	1
2038	2a	1	26480.83	91922.91	91922.91	0	274854.9	274854.9	0	ICE	26480.83	0	1	1
2038	2a	1	23344.33	82372.57	82372.57	0	257285.8	257285.8	0	ICE	23344.33	0	1	1
2038	2a	1	30395.63	108995.1	108995.1	0	354630.2	354630.2	0	ICE	30395.63	0	1	1
2038	2a	1	350.1866	1255.727	1255.727	0	4079.985	4079.985	0	ICE	350.1866	0	1	2
2038	2a	1	33813.63	123188.8	123188.8	0	418855.3	418855.3	0	ICE	33813.63	0	1	1
2038	2a	1	527.7873	1922.819	1922.819	0	6434.123	6434.123	0	ICE	527.7873	0	1	2
2038	2a	1	55983.81	207165.8	207165.8	0	735643.7	735643.7	0	ICE	55983.81	0	1	1
2038	2a	1	78310.5	294271.3	294271.3	0	1086451	1086451	0	ICE	78310.5	0	1	1
2038	2a	1	91453.24	348897.8	348897.8	0	1343037	1343037	0	ICE	91453.24	0	1	1
2038	2a	1	1727.172	6589.23	6589.23	0	25164.25	25164.25	0	ICE	1727.172	0	1	2
2038	2a	1	124557.8	482329.1	482329.1	0	1932371	1932371	0	ICE	124557.8	0	1	1
2038	2a	1	139831	549482.9	549482.9	0	2284254	2284254	0	ICE	139831	0	1	1
2038	2a	1	177565.7	707938.6	707938.6	0	3057999	3057999	0	ICE	177565.7	0	1	1
2038	2a	1	2172.938	8663.307	8663.307	0	37409.05	37409.05	0	ICE	2172.938	0	1	2
2038	2a	1	10327.45	41174.62	0	41174.62	178892.5	0	178892.5	BEV	0	10327.45	1	3
2038	2a	1	210.7643	840.2985	0	840.2985	3703.842	0	3703.842	FCEV	0	210.7643	1	7

2038	2a	1	9315.713	37140.91	20056.09	17084.82	159945.6	86370.64	73574.99	PHEV	5030.485	4285.228	1	8
2038	2a	1	218983.8	885614.3	885614.3	0	3964332	3964332	0	ICE	218983.8	0	1	1
2038	2a	1	2679.786	10837.59	10837.59	0	48499.11	48499.11	0	ICE	2679.786	0	1	2
2038	2a	1	15566.17	62952.72	0	62952.72	282673.8	0	282673.8	BEV	0	15566.17	1	3
2038	2a	1	317.677	1284.749	0	1284.749	5849.224	0	5849.224	FCEV	0	317.677	1	7
2038	2a	1	10060.34	40686.03	21970.46	18715.58	181831	98188.76	83642.28	PHEV	5432.584	4627.757	1	8
2038	2a	1	263467.9	1080611	1080611	0	5008257	5008257	0	ICE	263467.9	0	1	1
2038	2a	1	3210.447	13167.62	13167.62	0	61015.13	61015.13	0	ICE	3210.447	0	1	2
2038	2a	1	22966.5	94196.88	0	94196.88	437791.6	0	437791.6	BEV	0	22966.5	1	3
2038	2a	1	537.2281	2203.436	0	2203.436	10359.48	0	10359.48	FCEV	0	537.2281	1	7
2038	2a	1	11263.59	46197.51	24484.68	21712.83	213704.4	113263.3	100441.1	PHEV	5969.704	5293.888	1	8
2038	2a	1	310957	1293202	1293202	0	6200273	6200273	0	ICE	310957	0	1	1
2038	2a	1	3823.462	15900.94	15900.94	0	76221.72	76221.72	0	ICE	3823.462	0	1	2
2038	2a	1	32205.34	133934.9	0	133934.9	643396.2	0	643396.2	BEV	0	32205.34	1	3
2038	2a	1	849.9944	3534.94	0	3534.94	17154.56	0	17154.56	FCEV	0	849.9944	1	7
2038	2a	1	12280.07	51070.13	26556.47	24513.66	244741.1	127265.4	117475.7	PHEV	6385.639	5894.436	1	8
2038	2a	1	341499.5	1439786	1439786	0	7137564	7137564	0	ICE	341499.5	0	1	1
2038	2a	1	4219.266	17788.72	17788.72	0	88168.89	88168.89	0	ICE	4219.266	0	1	2
2038	2a	1	55174.17	232618.2	0	232618.2	1155031	0	1155031	BEV	0	55174.17	1	3
2038	2a	1	1891.313	7973.909	0	7973.909	39937.49	0	39937.49	FCEV	0	1891.313	1	7
2038	2a	1	20976.46	88438.21	44042.23	44395.98	437820.5	218034.6	219785.9	PHEV	10446.28	10530.18	1	8
2038	2a	1	363869.1	1554944	1554944	0	7964094	7964094	0	ICE	363869.1	0	1	1
2038	2a	1	4528.039	19349.94	19349.94	0	99087.74	99087.74	0	ICE	4528.039	0	1	2
2038	2a	1	82946.32	354459.5	0	354459.5	1817882	0	1817882	BEV	0	82946.32	1	3
2038	2a	1	3507.557	14989.05	0	14989.05	77441.09	0	77441.09	FCEV	0	3507.557	1	7
2038	2a	1	31442.69	134365.9	63958.19	70407.75	687204.5	327109.4	360095.2	PHEV	14966.72	16475.97	1	8
2038	2a	1	380527	1647929	1647929	0	8712715	8712715	0	ICE	380527	0	1	1
2038	2a	1	4775.071	20679.16	20679.16	0	109311.9	109311.9	0	ICE	4775.071	0	1	2
2038	2a	1	115998.6	502349.1	0	502349.1	2658859	0	2658859	BEV	0	115998.6	1	3
2038	2a	1	5848.666	25328.53	0	25328.53	134797.8	0	134797.8	FCEV	0	5848.666	1	7
2038	2a	1	43843.42	189870.5	86201.2	103669.3	1002573	455168.1	547404.9	PHEV	19904.91	23938.5	1	8
2038	2a	1	388908.6	1706508	1706508	0	9309058	9309058	0	ICE	388908.6	0	1	1
2038	2a	1	4919.32	21585.68	21585.68	0	117729.8	117729.8	0	ICE	4919.32	0	1	2
2038	2a	1	153639	674158.7	0	674158.7	3680773	0	3680773	BEV	0	153639	1	3
2038	2a	1	9015.718	39560.43	0	39560.43	216845.2	0	216845.2	FCEV	0	9015.718	1	7
2038	2a	1	57900.91	254065.7	109756.4	144309.3	1384504	598105.9	786398.5	PHEV	25013.19	32887.72	1	8
2038	2a	1	392832.3	1746230	1746230	0	9826582	9826582	0	ICE	392832.3	0	1	1
2038	2a	1	5006.51	22255.09	22255.09	0	125215.6	125215.6	0	ICE	5006.51	0	1	2
2038	2a	1	197434.1	877640.1	0	877640.1	4942059	0	4942059	BEV	0	197434.1	1	3
2038	2a	1	13242.53	58866.1	0	58866.1	332433.8	0	332433.8	FCEV	0	13242.53	1	7
2038	2a	1	74189.28	329788.4	135213.3	194575.2	1854406	760306.6	1094100	PHEV	30417.61	43771.68	1	8
2038	2a	1	386093.7	1738395	1738395	0	10077282	10077282	0	ICE	386093.7	0	1	1
2038	2a	1	4920.628	22155.22	22155.22	0	128413.7	128413.7	0	ICE	4920.628	0	1	2
2038	2a	1	244459.8	1100685	0	1100685	6383539	0	6383539	BEV	0	244459.8	1	3
2038	2a	1	18480.98	83210.99	0	83210.99	483491.5	0	483491.5	FCEV	0	18480.98	1	7
2038	2a	1	91593.43	412401.2	160011.7	252389.6	2389435	927100.6	1462334	PHEV	35538.25	56055.18	1	8
2038	2a	1	373047.8	1701027	1701027	0	10152516	10152516	0	ICE	373047.8	0	1	1

2038	2a	1	4754.36	21678.98	21678.98	0	129375.8	129375.8	0	ICE	4754.36	0	1	2
2038	2a	1	296736.9	1353064	0	1353064	8077965	0	8077965	BEV	0	296736.9	1	3
2038	2a	1	25003.85	114012.8	0	114012.8	681497.6	0	681497.6	FCEV	0	25003.85	1	7
2038	2a	1	110858.5	505493.8	185010.7	320483.1	3016403	1104003	1912399	PHEV	40574.22	70284.3	1	8
2038	2a	1	349881.7	1615439	1615439	0	9922132	9922132	0	ICE	349881.7	0	1	1
2038	2a	1	4459.117	20588.19	20588.19	0	126443	126443	0	ICE	4459.117	0	1	2
2038	2a	1	350931.1	1620284	0	1620284	9953033	0	9953033	BEV	0	350931.1	1	3
2038	2a	1	32660.04	150794.7	0	150794.7	927030.5	0	927030.5	FCEV	0	32660.04	1	7
2038	2a	1	130726.3	603576.2	207630.2	395946	3707541	1275394	2432147	PHEV	44969.83	85756.43	1	8
2038	2a	1	321374.7	1502231	1502231	0	9490890	9490890	0	ICE	321374.7	0	1	1
2038	2a	1	4095.804	19145.38	19145.38	0	120950.2	120950.2	0	ICE	4095.804	0	1	2
2038	2a	1	410866.8	1920551	0	1920551	12133310	0	12133310	BEV	0	410866.8	1	3
2038	2a	1	41914.62	195925.3	0	195925.3	1238408	0	1238408	FCEV	0	41914.62	1	7
2038	2a	1	152611.9	713367.4	229704.3	483663.1	4508766	1451823	3056944	PHEV	49141.02	103470.8	1	8
2038	2a	1	282883.9	1338516	1338516	0	8695816	8695816	0	ICE	282883.9	0	1	1
2038	2a	1	3605.258	17058.93	17058.93	0	110821.2	110821.2	0	ICE	3605.258	0	1	2
2038	2a	1	470313.6	2225373	0	2225373	14453846	0	14453846	BEV	0	470313.6	1	3
2038	2a	1	52257.07	247263.7	0	247263.7	1606425	0	1606425	FCEV	0	52257.07	1	7
2038	2a	1	174190.2	824212.4	247263.7	576948.7	5359229	1607769	3751461	PHEV	52257.07	121933.2	1	8
2038	2a	1	239668.9	1147767	1147767	0	7664296	7664296	0	ICE	239668.9	0	1	1
2038	2a	1	3054.494	14627.88	14627.88	0	97678.14	97678.14	0	ICE	3054.494	0	1	2
2038	2a	1	540159.8	2586809	0	2586809	17265859	0	17265859	BEV	0	540159.8	1	3
2038	2a	1	66761.32	319718	0	319718	2134195	0	2134195	FCEV	0	66761.32	1	7
2038	2a	1	191659.3	917850.6	275355.2	642495.4	6137691	1841307	4296384	PHEV	57497.79	134161.5	1	8
2038	2a	1	187641.2	909358.3	909358.3	0	6239768	6239768	0	ICE	187641.2	0	1	1
2038	2a	1	2391.423	11589.46	11589.46	0	79525.77	79525.77	0	ICE	2391.423	0	1	2
2038	2a	1	607790.5	2945511	0	2945511	20198162	0	20198162	BEV	0	607790.5	1	3
2038	2a	1	82880.53	401660.6	0	401660.6	2754226	0	2754226	FCEV	0	82880.53	1	7
2038	2a	1	206304.3	999804.5	299941.3	699863.1	6874356	2062307	4812049	PHEV	61891.3	144413	1	8
2038	2a	1	131124.6	642976.2	642976.2	0	4530474	4530474	0	ICE	131124.6	0	1	1
2038	2a	1	1671.138	8194.508	8194.508	0	57742.38	57742.38	0	ICE	1671.138	0	1	2
2038	2a	1	683088.4	3349558	0	3349558	23582450	0	23582450	BEV	0	683088.4	1	3
2038	2a	1	102070.7	500508.7	0	500508.7	3523474	0	3523474	FCEV	0	102070.7	1	7
2038	2a	1	221455.1	1085916	325774.9	760141.4	7671259	2301378	5369881	PHEV	66436.54	155018.6	1	8
2038	2a	1	67898.21	336832.2	336832.2	0	2436166	2436166	0	ICE	67898.21	0	1	1
2038	2a	1	865.339	4292.809	4292.809	0	31050.61	31050.61	0	ICE	865.339	0	1	2
2038	2a	1	754977.8	3745324	0	3745324	27062658	0	27062658	BEV	0	754977.8	1	3
2038	2a	1	122903.4	609703.9	0	609703.9	4404898	0	4404898	FCEV	0	122903.4	1	7
2038	2a	1	233360.8	1157666	347299.7	810366	8399739	2519922	5879818	PHEV	70008.25	163352.6	1	8
2038	2a	1	825319	4141558	0	4141558	30691542	0	30691542	BEV	0	825319	1	3
2038	2a	1	145644.5	730863.1	0	730863.1	5415251	0	5415251	FCEV	0	145644.5	1	7
2038	2a	1	242740.9	1218105	365431.6	852673.7	9069601	2720880	6348720	PHEV	72822.26	169918.6	1	8
2038	2a	1	851109	4319736	0	4319736	32777570	0	32777570	BEV	0	851109	1	3
2038	2a	1	162116	822806.8	0	822806.8	6242423	0	6242423	FCEV	0	162116	1	7
2038	2a	1	237670.1	1206275	361882.6	844392.8	9194852	2758455	6436396	PHEV	71301.02	166369.1	1	8
2038	2a	1	862581.8	4427382	0	4427382	34293746	0	34293746	BEV	0	862581.8	1	3
2038	2a	1	176673.4	906813.2	0	906813.2	7023439	0	7023439	FCEV	0	176673.4	1	7

2038	2a	1	228129.2	1170921	351276.3	819644.7	9101927	2730578	6371349	PHEV	68438.76	159690.4	1	8
2038	2a	1	778991	4042963	0	4042963	31886287	0	31886287	BEV	0	778991	1	3
2038	2a	1	170998	887479.7	0	887479.7	6999477	0	6999477	FCEV	0	170998	1	7
2038	2a	1	194576.1	1009850	302954.9	706894.8	7979583	2393875	5585708	PHEV	58372.82	136203.2	1	8
2038	2a	1	2995.084	7994.599	7994.599	0	30681.58	30681.58	0	ICE	2995.084	0	2	1
2038	2a	1	2841.127	7746.418	7746.418	0	30103.95	30103.95	0	ICE	2841.127	0	2	1
2038	2a	1	3133.488	8723.065	8723.065	0	33777.68	33777.68	0	ICE	3133.488	0	2	1
2038	2a	1	4080.903	11594.29	11594.29	0	45227.68	45227.68	0	ICE	4080.903	0	2	1
2038	2a	1	5205.25	15086.9	15086.9	0	59747.18	59747.18	0	ICE	5205.25	0	2	1
2038	2a	1	4788.204	14152.45	14152.45	0	56626.49	56626.49	0	ICE	4788.204	0	2	1
2038	2a	1	5096.181	15354.69	15354.69	0	62122.38	62122.38	0	ICE	5096.181	0	2	1
2038	2a	1	5817.596	17861.59	17861.59	0	72793.06	72793.06	0	ICE	5817.596	0	2	1
2038	2a	1	6120.324	19141.68	19141.68	0	77309.41	77309.41	0	ICE	6120.324	0	2	1
2038	2a	1	4392.103	13988.19	13988.19	0	56526.39	56526.39	0	ICE	4392.103	0	2	1
2038	2a	1	2457.443	8108.16	8108.16	0	33226.7	33226.7	0	ICE	2457.443	0	2	1
2038	2a	1	3922.258	13165.92	13165.92	0	54890.47	54890.47	0	ICE	3922.258	0	2	1
2038	2a	1	5678.296	19385.76	19385.76	0	82327.84	82327.84	0	ICE	5678.296	0	2	1
2038	2a	1	9888.121	34324.64	34324.64	0	147565	147565	0	ICE	9888.121	0	2	1
2038	2a	1	7665.582	27048.69	27048.69	0	117328.7	117328.7	0	ICE	7665.582	0	2	1
2038	2a	1	4242.92	15214.6	15214.6	0	66159.6	66159.6	0	ICE	4242.92	0	2	1
2038	2a	1	3993.524	14549.09	14549.09	0	64035.83	64035.83	0	ICE	3993.524	0	2	1
2038	2a	1	37921.41	146844.2	146844.2	0	684853.5	684853.5	0	ICE	37921.41	0	2	1
2038	2a	1	37307.87	146605.8	146605.8	0	690558.3	690558.3	0	ICE	37307.87	0	2	1
2038	2a	1	35735.04	142472.4	142472.4	0	682612.9	682612.9	0	ICE	35735.04	0	2	1
2038	2a	1	4.840957	19.30046	19.30046	0	92.4857	92.4857	0	ICE	4.840957	0	2	2
2038	2a	1	1.204066	4.800503	0	4.800503	20.97459	0	20.97459	BEV	0	1.204066	2	3
2038	2a	1	0.024573	0.097969	0	0.097969	0.428053	0	0.428053	FCEV	0	0.024573	2	7
2038	2a	1	10.44343	41.63702	24.98221	16.65481	199.5369	119.7221	79.81474	PHEV	6.266058	4.177372	2	8
2038	2a	1	40813.31	165057.2	165057.2	0	802267	802267	0	ICE	40813.31	0	2	1
2038	2a	1	5.5289	22.35998	22.35998	0	108.6944	108.6944	0	ICE	5.5289	0	2	2
2038	2a	1	44853.23	183965.1	183965.1	0	908626.5	908626.5	0	ICE	44853.23	0	2	1
2038	2a	1	6.118572	25.09526	25.09526	0	123.9753	123.9753	0	ICE	6.118572	0	2	2
2038	2a	1	596.3875	2446.077	0	2446.077	11818.47	0	11818.47	BEV	0	596.3875	2	3
2038	2a	1	13.95059	57.21819	0	57.21819	266.7588	0	266.7588	FCEV	0	13.95059	2	7
2038	2a	1	457.9837	1878.416	1116.316	762.1	9375.257	5571.581	3803.676	PHEV	272.1732	185.8105	2	8
2038	2a	1	48702.74	202544	202544	0	1017731	1017731	0	ICE	48702.74	0	2	1
2038	2a	1	6.720889	27.9507	27.9507	0	140.4901	140.4901	0	ICE	6.720889	0	2	2
2038	2a	1	1322.864	5501.499	0	5501.499	27149.9	0	27149.9	BEV	0	1322.864	2	3
2038	2a	1	34.91429	145.2008	0	145.2008	698.7949	0	698.7949	FCEV	0	34.91429	2	7
2038	2a	1	1018.845	4237.154	2493.867	1743.286	21480.96	12643.08	8837.882	PHEV	599.6632	419.1821	2	8
2038	2a	1	50252.43	211867.8	211867.8	0	1084896	1084896	0	ICE	50252.43	0	2	1
2038	2a	1	7.02588	29.6216	29.6216	0	151.735	151.735	0	ICE	7.02588	0	2	2
2038	2a	1	3541.714	14932.11	0	14932.11	75431.51	0	75431.51	BEV	0	3541.714	2	3
2038	2a	1	121.4063	511.8573	0	511.8573	2542.68	0	2542.68	FCEV	0	121.4063	2	7
2038	2a	1	2554.252	10768.91	6242.889	4526.018	55798.03	32346.91	23451.11	PHEV	1480.737	1073.516	2	8
2038	2a	1	50701	216663.6	216663.6	0	1131854	1131854	0	ICE	50701	0	2	1
2038	2a	1	7.117646	30.41626	30.41626	0	158.9365	158.9365	0	ICE	7.117646	0	2	2

2038	2a	1	6206.238	26521.49	0	26521.49	137357.6	0	137357.6	BEV	0	6206.238	2	3
2038	2a	1	262.4437	1121.516	0	1121.516	5747.384	0	5747.384	FCEV	0	262.4437	2	7
2038	2a	1	4187.346	17894.04	10214.94	7679.098	94383.91	53879.73	40504.18	PHEV	2390.376	1796.97	2	8
2038	2a	1	50614.98	219195.8	219195.8	0	1169351	1169351	0	ICE	50614.98	0	2	1
2038	2a	1	7.139033	30.91665	30.91665	0	164.9562	164.9562	0	ICE	7.139033	0	2	2
2038	2a	1	9365.77	40559.87	0	40559.87	215425.9	0	215425.9	BEV	0	9365.77	2	3
2038	2a	1	472.2237	2045.036	0	2045.036	10815.15	0	10815.15	FCEV	0	472.2237	2	7
2038	2a	1	5904.967	25572.34	14371.66	11200.69	137209.9	77111.94	60097.92	PHEV	3318.591	2586.375	2	8
2038	2a	1	49553.04	217435.8	217435.8	0	1185683	1185683	0	ICE	49553.04	0	2	1
2038	2a	1	7.01985	30.80268	30.80268	0	167.9714	167.9714	0	ICE	7.01985	0	2	2
2038	2a	1	12944.1	56797.95	0	56797.95	309390.1	0	309390.1	BEV	0	12944.1	2	3
2038	2a	1	759.5754	3332.971	0	3332.971	18153.45	0	18153.45	FCEV	0	759.5754	2	7
2038	2a	1	7615.605	33416.82	18484.27	14932.54	182533.1	100966.9	81566.24	PHEV	4212.517	3403.087	2	8
2038	2a	1	48384.35	215079.5	215079.5	0	1200322	1200322	0	ICE	48384.35	0	2	1
2038	2a	1	6.882059	30.59233	30.59233	0	170.7118	170.7118	0	ICE	6.882059	0	2	2
2038	2a	1	17172.86	76337.3	0	76337.3	426671.9	0	426671.9	BEV	0	17172.86	2	3
2038	2a	1	1151.838	5120.185	0	5120.185	28680.06	0	28680.06	FCEV	0	1151.838	2	7
2038	2a	1	9412.562	41841	22773.46	19067.54	232998.6	126817.8	106180.8	PHEV	5123.123	4289.439	2	8
2038	2a	1	46351.81	208700	208700	0	1191717	1191717	0	ICE	46351.81	0	2	1
2038	2a	1	6.592957	29.68492	29.68492	0	169.4689	169.4689	0	ICE	6.592957	0	2	2
2038	2a	1	21874.38	98489.83	0	98489.83	564316.7	0	564316.7	BEV	0	21874.38	2	3
2038	2a	1	1653.687	7445.759	0	7445.759	42790.54	0	42790.54	FCEV	0	1653.687	2	7
2038	2a	1	11147.39	50191.34	26873.88	23317.46	284949.2	152569.9	132379.2	PHEV	5968.631	5178.759	2	8
2038	2a	1	43830.08	199856.8	199856.8	0	1168197	1168197	0	ICE	43830.08	0	2	1
2038	2a	1	6.234272	28.4271	28.4271	0	166.1085	166.1085	0	ICE	6.234272	0	2	2
2038	2a	1	27211.22	124078	0	124078	728718.1	0	728718.1	BEV	0	27211.22	2	3
2038	2a	1	2292.891	10455.15	0	10455.15	61602.54	0	61602.54	FCEV	0	2292.891	2	7
2038	2a	1	12863.01	58652.89	30884.94	27767.95	339736.7	178895.6	160841.1	PHEV	6773.295	6089.717	2	8
2038	2a	1	40527.5	187119.5	187119.5	0	1120292	1120292	0	ICE	40527.5	0	2	1
2038	2a	1	5.764523	26.61538	26.61538	0	159.2847	159.2847	0	ICE	5.764523	0	2	2
2038	2a	1	33039.35	152546	0	152546	918441.4	0	918441.4	BEV	0	33039.35	2	3
2038	2a	1	3074.868	14196.97	0	14196.97	85744.6	0	85744.6	FCEV	0	3074.868	2	7
2038	2a	1	14447.43	66705.22	34534.25	32170.98	394634.5	204307.9	190326.6	PHEV	7479.64	6967.789	2	8
2038	2a	1	36716.09	171625.3	171625.3	0	1052695	1052695	0	ICE	36716.09	0	2	1
2038	2a	1	5.222397	24.41152	24.41152	0	149.6641	149.6641	0	ICE	5.222397	0	2	2
2038	2a	1	39569.86	184965	0	184965	1141491	0	1141491	BEV	0	39569.86	2	3
2038	2a	1	4036.724	18869.22	0	18869.22	116789.4	0	116789.4	FCEV	0	4036.724	2	7
2038	2a	1	15954.63	74578.16	37949.63	36628.53	450883.4	229435.2	221448.1	PHEV	8118.628	7836.003	2	8
2038	2a	1	31824.04	150581.2	150581.2	0	946770	946770	0	ICE	31824.04	0	2	1
2038	2a	1	4.526565	21.41826	21.41826	0	134.5985	134.5985	0	ICE	4.526565	0	2	2
2038	2a	1	46113.33	218193.5	0	218193.5	1380522	0	1380522	BEV	0	46113.33	2	3
2038	2a	1	5123.704	24243.73	0	24243.73	153794	0	153794	FCEV	0	5123.704	2	7
2038	2a	1	17079.01	80812.42	40406.21	40406.21	499842.7	249921.4	249921.4	PHEV	8539.506	8539.506	2	8
2038	2a	1	26546.63	127131	127131	0	819435.4	819435.4	0	ICE	26546.63	0	2	1
2038	2a	1	3.775921	18.08277	18.08277	0	116.4919	116.4919	0	ICE	3.775921	0	2	2
2038	2a	1	52672.31	252246.1	0	252246.1	1636379	0	1636379	BEV	0	52672.31	2	3
2038	2a	1	6510.06	31176.48	0	31176.48	202705.3	0	202705.3	FCEV	0	6510.06	2	7

2038	2a	1	18689.17	89501.87	44750.93	44750.93	566651.8	283325.9	283325.9	PHEV	9344.584	9344.584	2	8
2038	2a	1	20731.9	100472.2	100472.2	0	664005.8	664005.8	0	ICE	20731.9	0	2	1
2038	2a	1	2.948849	14.29089	14.29089	0	94.39369	94.39369	0	ICE	2.948849	0	2	2
2038	2a	1	59627.33	288969.6	0	288969.6	1922072	0	1922072	BEV	0	59627.33	2	3
2038	2a	1	8131	39404.94	0	39404.94	262604.5	0	262604.5	FCEV	0	8131	2	7
2038	2a	1	20239.5	98085.89	49042.95	49042.95	636008.8	318004.4	318004.4	PHEV	10119.75	10119.75	2	8
2038	2a	1	14373.78	70482.57	70482.57	0	477661.9	477661.9	0	ICE	14373.78	0	2	1
2038	2a	1	2.044488	10.02525	10.02525	0	67.90257	67.90257	0	ICE	2.044488	0	2	2
2038	2a	1	66980.23	328440.9	0	328440.9	2239853	0	2239853	BEV	0	66980.23	2	3
2038	2a	1	10008.54	49077.38	0	49077.38	335234.8	0	335234.8	FCEV	0	10008.54	2	7
2038	2a	1	21714.78	106479.5	53239.76	53239.76	707481.2	353740.6	353740.6	PHEV	10857.39	10857.39	2	8
2038	2a	1	7368.005	36551.49	36551.49	0	254053.5	254053.5	0	ICE	7368.005	0	2	1
2038	2a	1	1.048005	5.198986	5.198986	0	36.11521	36.11521	0	ICE	1.048005	0	2	2
2038	2a	1	73755.65	365890	0	365890	2558404	0	2558404	BEV	0	73755.65	2	3
2038	2a	1	12006.73	59563.49	0	59563.49	417052.1	0	417052.1	FCEV	0	12006.73	2	7
2038	2a	1	22797.6	113095.2	56547.62	56547.62	770434.5	385217.2	385217.2	PHEV	11398.8	11398.8	2	8
2038	2a	1	80145.02	402178.1	0	402178.1	2883261	0	2883261	BEV	0	80145.02	2	3
2038	2a	1	14143.24	70972.61	0	70972.61	509387.9	0	509387.9	FCEV	0	14143.24	2	7
2038	2a	1	23572.06	118287.7	59143.84	59143.84	826541	413270.5	413270.5	PHEV	11786.03	11786.03	2	8
2038	2a	1	81562.33	413963.1	0	413963.1	3042206	0	3042206	BEV	0	81562.33	2	3
2038	2a	1	15535.68	78850.11	0	78850.11	580049.2	0	580049.2	FCEV	0	15535.68	2	7
2038	2a	1	22776.08	115598.1	57799.07	57799.07	828737.4	414368.7	414368.7	PHEV	11388.04	11388.04	2	8
2038	2a	1	83047.84	426260.5	0	426260.5	3209838	0	3209838	BEV	0	83047.84	2	3
2038	2a	1	17009.8	87306.37	0	87306.37	658017.2	0	658017.2	FCEV	0	17009.8	2	7
2038	2a	1	21963.87	112734.2	56367.09	56367.09	829002	414501	414501	PHEV	10981.94	10981.94	2	8
2038	2a	1	76107.36	394997.2	0	394997.2	3046203	0	3046203	BEV	0	76107.36	2	3
2038	2a	1	16706.49	86706.71	0	86706.71	669198.7	0	669198.7	FCEV	0	16706.49	2	7
2038	2a	1	19010.07	98662.25	49331.12	49331.12	743790.9	371895.5	371895.5	PHEV	9505.034	9505.034	2	8
2038	2a	1	5653.687	15091.05	15091.05	0	55642.2	55642.2	0	ICE	5653.687	0	3	1
2038	2a	1	6963.032	18984.92	18984.92	0	70829.3	70829.3	0	ICE	6963.032	0	3	1
2038	2a	1	6665.579	18555.77	18555.77	0	69486.92	69486.92	0	ICE	6665.579	0	3	1
2038	2a	1	10119.25	28749.9	28749.9	0	108519.4	108519.4	0	ICE	10119.25	0	3	1
2038	2a	1	10900	31592.57	31592.57	0	119906.8	119906.8	0	ICE	10900	0	3	1
2038	2a	1	11805.17	34892.43	34892.43	0	133562.2	133562.2	0	ICE	11805.17	0	3	1
2038	2a	1	14793.06	44571.2	44571.2	0	172845.9	172845.9	0	ICE	14793.06	0	3	1
2038	2a	1	14382.31	44157.58	44157.58	0	171725.1	171725.1	0	ICE	14382.31	0	3	1
2038	2a	1	13984.28	43736.67	43736.67	0	172616.7	172616.7	0	ICE	13984.28	0	3	1
2038	2a	1	16090.73	51246.56	51246.56	0	204489.2	204489.2	0	ICE	16090.73	0	3	1
2038	2a	1	19104.09	61938.13	61938.13	0	249405.2	249405.2	0	ICE	19104.09	0	3	1
2038	2a	1	21089.95	69584.8	69584.8	0	282713.1	282713.1	0	ICE	21089.95	0	3	1
2038	2a	1	19457.28	65312.66	65312.66	0	267078.4	267078.4	0	ICE	19457.28	0	3	1
2038	2a	1	19950.21	68110.23	68110.23	0	281737.6	281737.6	0	ICE	19950.21	0	3	1
2038	2a	1	15896.08	55180.07	55180.07	0	231526.8	231526.8	0	ICE	15896.08	0	3	1
2038	2a	1	10324.84	36432.14	36432.14	0	154402.5	154402.5	0	ICE	10324.84	0	3	1
2038	2a	1	19012.87	68177.88	68177.88	0	291862.6	291862.6	0	ICE	19012.87	0	3	1
2038	2a	1	26818.56	97704.58	97704.58	0	422510.7	422510.7	0	ICE	26818.56	0	3	1
2038	2a	1	27793.59	102849.1	102849.1	0	452231.7	452231.7	0	ICE	27793.59	0	3	1

2038	2a	1	40755.78	153150.1	153150.1	0	680652.3	680652.3	0	ICE	40755.78	0	3	1
2038	2a	1	41228.82	157289.6	157289.6	0	713463.9	713463.9	0	ICE	41228.82	0	3	1
2038	2a	1	438.241	1671.907	1671.907	0	7406.073	7406.073	0	ICE	438.241	0	3	2
2038	2a	1	53813.69	208384.4	208384.4	0	958099.9	958099.9	0	ICE	53813.69	0	3	1
2038	2a	1	58458.23	229718.6	229718.6	0	1069923	1069923	0	ICE	58458.23	0	3	1
2038	2a	1	429.2489	1686.785	1686.785	0	7865.848	7865.848	0	ICE	429.2489	0	3	2
2038	2a	1	73305.56	292262.7	292262.7	0	1381079	1381079	0	ICE	73305.56	0	3	1
2038	2a	1	749.2647	2987.251	2987.251	0	14165.84	14165.84	0	ICE	749.2647	0	3	2
2038	2a	1	88754.16	358939.6	358939.6	0	1724990	1724990	0	ICE	88754.16	0	3	1
2038	2a	1	907.1666	3668.763	3668.763	0	17691.7	17691.7	0	ICE	907.1666	0	3	2
2038	2a	1	306.2142	1238.392	743.035	495.3567	5983.379	3590.028	2393.352	PHEV	183.7285	122.4857	3	8
2038	2a	1	105806.3	433963.3	433963.3	0	2130365	2130365	0	ICE	105806.3	0	3	1
2038	2a	1	1078.732	4424.409	4424.409	0	21780	21780	0	ICE	1078.732	0	3	2
2038	2a	1	1247.852	5118.051	0	5118.051	18698.84	0	18698.84	BEV	0	1247.852	3	3
2038	2a	1	29.18951	119.7205	0	119.7205	388.2232	0	388.2232	FCEV	0	29.18951	3	7
2038	2a	1	1083.833	4445.33	2641.796	1803.534	21870.52	12997.34	8873.183	PHEV	644.1065	439.7265	3	8
2038	2a	1	123496.6	513595.4	513595.4	0	2567133	2567133	0	ICE	123496.6	0	3	1
2038	2a	1	1261.954	5248.19	5248.19	0	26308.53	26308.53	0	ICE	1261.954	0	3	2
2038	2a	1	2959.6	12308.33	0	12308.33	54404.38	0	54404.38	BEV	0	2959.6	3	3
2038	2a	1	78.11261	324.8532	0	324.8532	1086.735	0	1086.735	FCEV	0	78.11261	3	7
2038	2a	1	2135.888	8882.687	5228.096	3654.591	44527.82	26207.8	18320.02	PHEV	1257.123	878.7653	3	8
2038	2a	1	133384.9	562359.9	562359.9	0	2863101	2863101	0	ICE	133384.9	0	3	1
2038	2a	1	1383.603	5833.368	5833.368	0	29830.3	29830.3	0	ICE	1383.603	0	3	2
2038	2a	1	9109.97	38408.27	0	38408.27	166625.7	0	166625.7	BEV	0	9109.97	3	3
2038	2a	1	312.2803	1316.596	0	1316.596	4541.949	0	4541.949	FCEV	0	312.2803	3	7
2038	2a	1	6191.959	26105.73	15133.87	10971.87	149304.9	86554.18	62750.71	PHEV	3589.567	2602.392	3	8
2038	2a	1	140658.9	601086.2	601086.2	0	3121915	3121915	0	ICE	140658.9	0	3	1
2038	2a	1	1465.923	6264.415	6264.415	0	32699.2	32699.2	0	ICE	1465.923	0	3	2
2038	2a	1	17044.2	72836	0	72836	322282.2	0	322282.2	BEV	0	17044.2	3	3
2038	2a	1	720.7494	3080.022	0	3080.022	10953.51	0	10953.51	FCEV	0	720.7494	3	7
2038	2a	1	10900.9	46583.49	26592.52	19990.97	282388.7	161203.6	121185.1	PHEV	6222.859	4678.045	3	8
2038	2a	1	146350.9	633794.6	633794.6	0	3360811	3360811	0	ICE	146350.9	0	3	1
2038	2a	1	1533.486	6640.99	6640.99	0	35409.45	35409.45	0	ICE	1533.486	0	3	2
2038	2a	1	27026.77	117043.5	0	117043.5	533919.2	0	533919.2	BEV	0	27026.77	3	3
2038	2a	1	1362.694	5901.352	0	5901.352	21774.93	0	21774.93	FCEV	0	1362.694	3	7
2038	2a	1	16247.39	70361.77	39543.31	30818.45	442117.2	248469.9	193647.3	PHEV	9131.034	7116.357	3	8
2038	2a	1	148277.8	650634.2	650634.2	0	3525588	3525588	0	ICE	148277.8	0	3	1
2038	2a	1	1561.476	6851.662	6851.662	0	37350.13	37350.13	0	ICE	1561.476	0	3	2
2038	2a	1	38792.18	170217.8	0	170217.8	800425.9	0	800425.9	BEV	0	38792.18	3	3
2038	2a	1	2276.371	9988.581	0	9988.581	40243.26	0	40243.26	FCEV	0	2276.371	3	7
2038	2a	1	21891.65	96059.25	53134.49	42924.76	621897.5	343998.2	277899.3	PHEV	12109.21	9782.441	3	8
2038	2a	1	148510.1	660161.5	660161.5	0	3659743	3659743	0	ICE	148510.1	0	3	1
2038	2a	1	1571.182	6984.267	6984.267	0	38970.36	38970.36	0	ICE	1571.182	0	3	2
2038	2a	1	52866.18	235002.3	0	235002.3	1140273	0	1140273	BEV	0	52866.18	3	3
2038	2a	1	3545.902	15762.35	0	15762.35	67797.6	0	67797.6	FCEV	0	3545.902	3	7
2038	2a	1	27964.11	124306.9	67658.47	56648.43	828526.1	450954.9	377571.2	PHEV	15220.47	12743.64	3	8
2038	2a	1	144400.7	650167.1	650167.1	0	3688329	3688329	0	ICE	144400.7	0	3	1

2038	2a	1	1527.707	6878.53	6878.53	0	39271.32	39271.32	0	ICE	1527.707	0	3	2
2038	2a	1	68366.24	307820.4	0	307820.4	1542016	0	1542016	BEV	0	68366.24	3	3
2038	2a	1	5168.437	23270.99	0	23270.99	106939.7	0	106939.7	FCEV	0	5168.437	3	7
2038	2a	1	33836.76	152350.7	81572.91	70777.78	1046430	560288.4	486141.4	PHEV	18117.17	15719.59	3	8
2038	2a	1	138556.1	631789.3	631789.3	0	3669441	3669441	0	ICE	138556.1	0	3	1
2038	2a	1	1465.872	6684.099	6684.099	0	39067.36	39067.36	0	ICE	1465.872	0	3	2
2038	2a	1	86268.33	393367.2	0	393367.2	2034270	0	2034270	BEV	0	86268.33	3	3
2038	2a	1	7269.203	33146.18	0	33146.18	160688.5	0	160688.5	FCEV	0	7269.203	3	7
2038	2a	1	39868.93	181794.8	95727.93	86066.84	1285991	677166.1	608824.9	PHEV	20993.84	18875.09	3	8
2038	2a	1	128987.2	595547	595547	0	3543053	3543053	0	ICE	128987.2	0	3	1
2038	2a	1	1364.638	6300.669	6300.669	0	37719.48	37719.48	0	ICE	1364.638	0	3	2
2038	2a	1	105381.1	486554.8	0	486554.8	2597482	0	2597482	BEV	0	105381.1	3	3
2038	2a	1	9807.481	45282.12	0	45282.12	229943.4	0	229943.4	FCEV	0	9807.481	3	7
2038	2a	1	45368.35	209470.2	108445.7	101024.5	1525864	789961.7	735902.5	PHEV	23487.84	21880.51	3	8
2038	2a	1	117278.5	548205.3	548205.3	0	3341461	3341461	0	ICE	117278.5	0	3	1
2038	2a	1	1240.763	5799.811	5799.811	0	35571.58	35571.58	0	ICE	1240.763	0	3	2
2038	2a	1	126544.9	591520.2	0	591520.2	3259330	0	3259330	BEV	0	126544.9	3	3
2038	2a	1	12909.49	60344	0	60344	319546.4	0	319546.4	FCEV	0	12909.49	3	7
2038	2a	1	50611.6	236578.4	120384.6	116193.8	1774320	902875.6	871444.8	PHEV	25754.07	24857.53	3	8
2038	2a	1	101800.4	481687	481687	0	3009569	3009569	0	ICE	101800.4	0	3	1
2038	2a	1	1077.011	5096.072	5096.072	0	32037.29	32037.29	0	ICE	1077.011	0	3	2
2038	2a	1	147523.6	698034.5	0	698034.5	3970176	0	3970176	BEV	0	147523.6	3	3
2038	2a	1	16391.51	77559.39	0	77559.39	427134.4	0	427134.4	FCEV	0	16391.51	3	7
2038	2a	1	54638.38	258531.3	129265.7	129265.7	1997179	998589.7	998589.7	PHEV	27319.19	27319.19	3	8
2038	2a	1	84428.61	404326.1	404326.1	0	2589890	2589890	0	ICE	84428.61	0	3	1
2038	2a	1	893.2237	4277.622	4277.622	0	27569.03	27569.03	0	ICE	893.2237	0	3	2
2038	2a	1	167681.8	803023	0	803023	4701834	0	4701834	BEV	0	167681.8	3	3
2038	2a	1	20724.71	99250.04	0	99250.04	566347.7	0	566347.7	FCEV	0	20724.71	3	7
2038	2a	1	59496.79	284928.3	142464.2	142464.2	2264966	1132483	1132483	PHEV	29748.39	29748.39	3	8
2038	2a	1	65061.26	315303.8	315303.8	0	2071122	2071122	0	ICE	65061.26	0	3	1
2038	2a	1	688.3243	3335.798	3335.798	0	22046.46	22046.46	0	ICE	688.3243	0	3	2
2038	2a	1	187445.3	908408.5	0	908408.5	5476020	0	5476020	BEV	0	187445.3	3	3
2038	2a	1	25560.72	123873.9	0	123873.9	731260.4	0	731260.4	FCEV	0	25560.72	3	7
2038	2a	1	63625.16	308344.1	154172	154172	2522939	1261470	1261470	PHEV	31812.58	31812.58	3	8
2038	2a	1	44698.11	219179.4	219179.4	0	1476445	1476445	0	ICE	44698.11	0	3	1
2038	2a	1	472.8896	2318.838	2318.838	0	15716.16	15716.16	0	ICE	472.8896	0	3	2
2038	2a	1	208778.3	1023755	0	1023755	6353064	0	6353064	BEV	0	208778.3	3	3
2038	2a	1	31196.76	152974.9	0	152974.9	933074.3	0	933074.3	FCEV	0	31196.76	3	7
2038	2a	1	67685.29	331898.2	165949.1	165949.1	2795364	1397682	1397682	PHEV	33842.64	33842.64	3	8
2038	2a	1	22893.43	113570.6	113570.6	0	784625.2	784625.2	0	ICE	22893.43	0	3	1
2038	2a	1	242.2041	1201.536	1201.536	0	8352.007	8352.007	0	ICE	242.2041	0	3	2
2038	2a	1	229834.2	1140171	0	1140171	7283486	0	7283486	BEV	0	229834.2	3	3
2038	2a	1	37414.87	185609.2	0	185609.2	1168758	0	1168758	FCEV	0	37414.87	3	7
2038	2a	1	71040.9	352422.5	176211.3	176211.3	3055949	1527974	1527974	PHEV	35520.45	35520.45	3	8
2038	2a	1	250593.8	1257512	0	1257512	8267404	0	8267404	BEV	0	250593.8	3	3
2038	2a	1	44222.44	221913.9	0	221913.9	1441411	0	1441411	FCEV	0	44222.44	3	7
2038	2a	1	73704.06	369856.6	184928.3	184928.3	3301523	1650761	1650761	PHEV	36852.03	36852.03	3	8

2038	2a	1	258302.9	1310996	0	1310996	8871913	0	8871913	BEV	0	258302.9	3	3
2038	2a	1	49200.55	249713.5	0	249713.5	1671501	0	1671501	FCEV	0	49200.55	3	7
2038	2a	1	72130.44	366092.3	183046.1	183046.1	3357161	1678581	1678581	PHEV	36065.22	36065.22	3	8
2038	2a	1	266272.8	1366701	0	1366701	9517282	0	9517282	BEV	0	266272.8	3	3
2038	2a	1	54537.81	279926.8	0	279926.8	1930094	0	1930094	FCEV	0	54537.81	3	7
2038	2a	1	70421.85	361454.9	180727.5	180727.5	3403527	1701763	1701763	PHEV	35210.93	35210.93	3	8
2038	2a	1	242223.3	1257139	0	1257139	9000967	0	9000967	BEV	0	242223.3	3	3
2038	2a	1	53170.96	275957.3	0	275957.3	1958151	0	1958151	FCEV	0	53170.96	3	7
2038	2a	1	60502.43	314007.6	157003.8	157003.8	3031600	1515800	1515800	PHEV	30251.22	30251.22	3	8
2038	2a	1	5874.793	15681.23	15681.23	0	50659.56	50659.56	0	ICE	5874.793	0	4	1
2038	2a	1	6270.721	17097.31	17097.31	0	56137.69	56137.69	0	ICE	6270.721	0	4	1
2038	2a	1	5470.974	15230.21	15230.21	0	50430.69	50430.69	0	ICE	5470.974	0	4	1
2038	2a	1	6881.782	19551.9	19551.9	0	66153.43	66153.43	0	ICE	6881.782	0	4	1
2038	2a	1	7382.972	21398.81	21398.81	0	73154.11	73154.11	0	ICE	7382.972	0	4	1
2038	2a	1	11541.16	34112.08	34112.08	0	118958.8	118958.8	0	ICE	11541.16	0	4	1
2038	2a	1	12907.26	38889.32	38889.32	0	137261	137261	0	ICE	12907.26	0	4	1
2038	2a	1	16063.84	49320.32	49320.32	0	176633.2	176633.2	0	ICE	16063.84	0	4	1
2038	2a	1	19.71662	60.53535	60.53535	0	184.3434	184.3434	0	ICE	19.71662	0	4	2
2038	2a	1	18759.85	58672.57	58672.57	0	214387.6	214387.6	0	ICE	18759.85	0	4	1
2038	2a	1	19836.79	63177.21	63177.21	0	236296.7	236296.7	0	ICE	19836.79	0	4	1
2038	2a	1	21389.77	69348.64	69348.64	0	262254.5	262254.5	0	ICE	21389.77	0	4	1
2038	2a	1	34.15767	110.7439	110.7439	0	367.4752	367.4752	0	ICE	34.15767	0	4	2
2038	2a	1	20347.19	67134.12	67134.12	0	254831.3	254831.3	0	ICE	20347.19	0	4	1
2038	2a	1	20348.14	68303.02	68303.02	0	263647.5	263647.5	0	ICE	20348.14	0	4	1
2038	2a	1	21088.38	71995.95	71995.95	0	282110.2	282110.2	0	ICE	21088.38	0	4	1
2038	2a	1	16494.84	57258.54	57258.54	0	227864.2	227864.2	0	ICE	16494.84	0	4	1
2038	2a	1	7295.142	25741.56	25741.56	0	103784.7	103784.7	0	ICE	7295.142	0	4	1
2038	2a	1	11121.72	39881.16	39881.16	0	162779	162779	0	ICE	11121.72	0	4	1
2038	2a	1	17120.81	62374.01	62374.01	0	258518.9	258518.9	0	ICE	17120.81	0	4	1
2038	2a	1	490.5532	1787.169	1787.169	0	7185.497	7185.497	0	ICE	490.5532	0	4	2
2038	2a	1	18569.38	68715.23	68715.23	0	289467.6	289467.6	0	ICE	18569.38	0	4	1
2038	2a	1	23063.94	86668.54	86668.54	0	369985.3	369985.3	0	ICE	23063.94	0	4	1
2038	2a	1	495.0843	1860.403	1860.403	0	7813.773	7813.773	0	ICE	495.0843	0	4	2
2038	2a	1	39768.99	151720.3	151720.3	0	660611.6	660611.6	0	ICE	39768.99	0	4	1
2038	2a	1	1258.976	4803.043	4803.043	0	20450.87	20450.87	0	ICE	1258.976	0	4	2
2038	2a	1	48118.38	186330.2	186330.2	0	828012.2	828012.2	0	ICE	48118.38	0	4	1
2038	2a	1	57483.75	225889.3	225889.3	0	1023231	1023231	0	ICE	57483.75	0	4	1
2038	2a	1	57173.07	227943.9	227943.9	0	1049460	1049460	0	ICE	57173.07	0	4	1
2038	2a	1	1993.634	7948.441	7948.441	0	36622.68	36622.68	0	ICE	1993.634	0	4	2
2038	2a	1	478.3262	1907.044	1144.226	762.8175	8300.444	4980.267	3320.178	PHEV	286.9957	191.3305	4	8
2038	2a	1	65747.71	265896.9	265896.9	0	1246096	1246096	0	ICE	65747.71	0	4	1
2038	2a	1	2292.633	9271.868	9271.868	0	43483.7	43483.7	0	ICE	2292.633	0	4	2
2038	2a	1	1.150123	4.651328	0	4.651328	14.59446	0	14.59446	BEV	0	1.150123	4	3
2038	2a	1	0.023472	0.094925	0	0.094925	0.297846	0	0.297846	FCEV	0	0.023472	4	7
2038	2a	1	1407.434	5691.944	3415.166	2276.777	26121.88	15673.13	10448.75	PHEV	844.4603	562.9735	4	8
2038	2a	1	74763.59	306642.1	306642.1	0	1463462	1463462	0	ICE	74763.59	0	4	1
2038	2a	1	2631.63	10793.6	10793.6	0	51598.99	51598.99	0	ICE	2631.63	0	4	2

2038	2a	1	640.9081	2628.678	0	2628.678	8912.889	0	8912.889	BEV	0	640.9081	4	3
2038	2a	1	14.992	61.48955	0	61.48955	199.1702	0	199.1702	FCEV	0	14.992	4	7
2038	2a	1	1667.511	6839.28	4064.486	2774.794	34102.4	20266.57	13835.83	PHEV	990.978	676.533	4	8
2038	2a	1	83841.2	348677.1	348677.1	0	1695617	1695617	0	ICE	83841.2	0	4	1
2038	2a	1	2997.44	12465.69	12465.69	0	60816.46	60816.46	0	ICE	2997.44	0	4	2
2038	2a	1	1445.737	6012.503	0	6012.503	23013.4	0	23013.4	BEV	0	1445.737	4	3
2038	2a	1	38.15729	158.6878	0	158.6878	530.3955	0	530.3955	FCEV	0	38.15729	4	7
2038	2a	1	1947.041	8097.314	4765.847	3331.466	40376.19	23764.27	16611.92	PHEV	1145.972	801.0681	4	8
2038	2a	1	89085.9	375592.4	375592.4	0	1863562	1863562	0	ICE	89085.9	0	4	1
2038	2a	1	3241.218	13665.2	13665.2	0	68135.96	68135.96	0	ICE	3241.218	0	4	2
2038	2a	1	4714.512	19876.71	0	19876.71	78016.45	0	78016.45	BEV	0	4714.512	4	3
2038	2a	1	161.6086	681.353	0	681.353	2349.107	0	2349.107	FCEV	0	161.6086	4	7
2038	2a	1	5627.011	23723.87	13753.07	9970.805	128868	74706.61	54161.38	PHEV	3262.059	2364.952	4	8
2038	2a	1	92102.25	393586.1	393586.1	0	1995485	1995485	0	ICE	92102.25	0	4	1
2038	2a	1	3369.343	14398.41	14398.41	0	73408.65	73408.65	0	ICE	3369.343	0	4	2
2038	2a	1	9060.88	38720.4	0	38720.4	158579.4	0	158579.4	BEV	0	9060.88	4	3
2038	2a	1	383.1581	1637.373	0	1637.373	5820.231	0	5820.231	FCEV	0	383.1581	4	7
2038	2a	1	9596.227	41008.13	23409.78	17598.35	233687.8	133402.3	100285.4	PHEV	5478.075	4118.152	4	8
2038	2a	1	93281.59	403969.9	403969.9	0	2094743	2094743	0	ICE	93281.59	0	4	1
2038	2a	1	3433.967	14871.31	14871.31	0	77589.94	77589.94	0	ICE	3433.967	0	4	2
2038	2a	1	14547.77	63001.31	0	63001.31	269299.6	0	269299.6	BEV	0	14547.77	4	3
2038	2a	1	733.5011	3176.537	0	3176.537	11636.66	0	11636.66	FCEV	0	733.5011	4	7
2038	2a	1	13674.07	59217.63	33280.31	25937.32	350689.3	197087.4	153601.9	PHEV	7684.829	5989.244	4	8
2038	2a	1	92706	406788.4	406788.4	0	2158871	2158871	0	ICE	92706	0	4	1
2038	2a	1	3432.716	15062.55	15062.55	0	80477.51	80477.51	0	ICE	3432.716	0	4	2
2038	2a	1	21213.14	93081.98	0	93081.98	414799.1	0	414799.1	BEV	0	21213.14	4	3
2038	2a	1	1244.812	5462.161	0	5462.161	20632.58	0	20632.58	FCEV	0	1244.812	4	7
2038	2a	1	17681.18	77583.97	42915.02	34668.95	476194.5	263403.6	212790.9	PHEV	9780.22	7900.963	4	8
2038	2a	1	91413.49	406354	406354	0	2209211	2209211	0	ICE	91413.49	0	4	1
2038	2a	1	3403.132	15127.7	15127.7	0	82845.38	82845.38	0	ICE	3403.132	0	4	2
2038	2a	1	29381.9	130609.3	0	130609.3	605692.1	0	605692.1	BEV	0	29381.9	4	3
2038	2a	1	1970.737	8760.38	0	8760.38	35678.64	0	35678.64	FCEV	0	1970.737	4	7
2038	2a	1	21674.88	96349.84	52441.84	43908	611923.6	333061.3	278862.3	PHEV	11797.33	9877.554	4	8
2038	2a	1	88235.48	397282	397282	0	2212793	2212793	0	ICE	88235.48	0	4	1
2038	2a	1	3284.821	14789.97	14789.97	0	82972.74	82972.74	0	ICE	3284.821	0	4	2
2038	2a	1	38830.5	174835.1	0	174835.1	843897.3	0	843897.3	BEV	0	38830.5	4	3
2038	2a	1	2935.557	13217.41	0	13217.41	58096.4	0	58096.4	FCEV	0	2935.557	4	7
2038	2a	1	25273.98	113796.6	60929.94	52866.64	748261.7	400640.7	347621	PHEV	13532.41	11741.57	4	8
2038	2a	1	84133.71	383633.8	383633.8	0	2189984	2189984	0	ICE	84133.71	0	4	1
2038	2a	1	3132.121	14281.88	14281.88	0	82111.9	82111.9	0	ICE	3132.121	0	4	2
2038	2a	1	50013.69	228052.9	0	228052.9	1144765	0	1144765	BEV	0	50013.69	4	3
2038	2a	1	4214.289	19216.36	0	19216.36	89895.59	0	89895.59	FCEV	0	4214.289	4	7
2038	2a	1	28594.27	130384.5	68656.73	61727.73	887079.4	467110.7	419968.7	PHEV	15056.93	13537.35	4	8
2038	2a	1	78324.74	361633.2	361633.2	0	2116662	2116662	0	ICE	78324.74	0	4	1
2038	2a	1	2915.865	13462.84	13462.84	0	79358.46	79358.46	0	ICE	2915.865	0	4	2
2038	2a	1	62631.97	289178.1	0	289178.1	1508918	0	1508918	BEV	0	62631.97	4	3
2038	2a	1	5828.959	26912.89	0	26912.89	132940.1	0	132940.1	FCEV	0	5828.959	4	7

2038	2a	1	31263.53	144346.9	74730.43	69616.43	1015805	525896.8	489908.3	PHEV	16185.58	15077.96	4	8
2038	2a	1	71698.95	335148.9	335148.9	0	2011423	2011423	0	ICE	71698.95	0	4	1
2038	2a	1	2669.201	12476.89	12476.89	0	75409.46	75409.46	0	ICE	2669.201	0	4	2
2038	2a	1	77492.96	362232.3	0	362232.3	1963760	0	1963760	BEV	0	77492.96	4	3
2038	2a	1	7905.453	36953.17	0	36953.17	191771.2	0	191771.2	FCEV	0	7905.453	4	7
2038	2a	1	33499.41	156589.3	79681.58	76907.71	1138984	579580.3	559404	PHEV	17046.41	16452.99	4	8
2038	2a	1	62352.64	295032.7	295032.7	0	1816418	1816418	0	ICE	62352.64	0	4	1
2038	2a	1	2321.257	10983.45	10983.45	0	68096.64	68096.64	0	ICE	2321.257	0	4	2
2038	2a	1	92484.08	437605.1	0	437605.1	2464620	0	2464620	BEV	0	92484.08	4	3
2038	2a	1	10276.01	48622.79	0	48622.79	264286	0	264286	FCEV	0	10276.01	4	7
2038	2a	1	34253.36	162076	81037.98	81037.98	1218315	609157.6	609157.6	PHEV	17126.68	17126.68	4	8
2038	2a	1	52330.66	250610	250610	0	1582687	1582687	0	ICE	52330.66	0	4	1
2038	2a	1	1948.16	9329.68	9329.68	0	59332.93	59332.93	0	ICE	1948.16	0	4	2
2038	2a	1	106403.6	509563.7	0	509563.7	2955020	0	2955020	BEV	0	106403.6	4	3
2038	2a	1	13151.01	62979.78	0	62979.78	355004.2	0	355004.2	FCEV	0	13151.01	4	7
2038	2a	1	37754.09	180803.2	90401.6	90401.6	1399757	699878.6	699878.6	PHEV	18877.04	18877.04	4	8
2038	2a	1	40779.49	197628	197628	0	1280340	1280340	0	ICE	40779.49	0	4	1
2038	2a	1	1518.134	7357.274	7357.274	0	47997.72	47997.72	0	ICE	1518.134	0	4	2
2038	2a	1	120305.3	583031	0	583031	3481139	0	3481139	BEV	0	120305.3	4	3
2038	2a	1	16405.27	79504.22	0	79504.22	463874.7	0	463874.7	FCEV	0	16405.27	4	7
2038	2a	1	40835.64	197900.1	98950.06	98950.06	1577932	788966	788966	PHEV	20417.82	20417.82	4	8
2038	2a	1	28346.9	139000.5	139000.5	0	923628.5	923628.5	0	ICE	28346.9	0	4	1
2038	2a	1	1055.295	5174.694	5174.694	0	34624.97	34624.97	0	ICE	1055.295	0	4	2
2038	2a	1	135602.4	664933.3	0	664933.3	4086660	0	4086660	BEV	0	135602.4	4	3
2038	2a	1	20262.43	99357.85	0	99357.85	599155.8	0	599155.8	FCEV	0	20262.43	4	7
2038	2a	1	43961.88	215569.3	107784.6	107784.6	1769694	884847.2	884847.2	PHEV	21980.94	21980.94	4	8
2038	2a	1	14510.51	71984.33	71984.33	0	490608.6	490608.6	0	ICE	14510.51	0	4	1
2038	2a	1	540.1957	2679.825	2679.825	0	18391.93	18391.93	0	ICE	540.1957	0	4	2
2038	2a	1	149216.3	740238.3	0	740238.3	4682667	0	4682667	BEV	0	149216.3	4	3
2038	2a	1	24291.03	120503.9	0	120503.9	750320.3	0	750320.3	FCEV	0	24291.03	4	7
2038	2a	1	46122.2	228804.9	114402.4	114402.4	1934028	967014.1	967014.1	PHEV	23061.1	23061.1	4	8
2038	2a	1	163558.6	820758.5	0	820758.5	5342550	0	5342550	BEV	0	163558.6	4	3
2038	2a	1	28863.29	144839.7	0	144839.7	930338.8	0	930338.8	FCEV	0	28863.29	4	7
2038	2a	1	48105.48	241399.5	120699.8	120699.8	2100134	1050067	1050067	PHEV	24052.74	24052.74	4	8
2038	2a	1	168695.4	856199.8	0	856199.8	5733312	0	5733312	BEV	0	168695.4	4	3
2038	2a	1	32132.45	163085.7	0	163085.7	1079017	0	1079017	FCEV	0	32132.45	4	7
2038	2a	1	47107.76	239091.7	119545.8	119545.8	2133944	1066972	1066972	PHEV	23553.88	23553.88	4	8
2038	2a	1	172438.7	885078.1	0	885078.1	6095203	0	6095203	BEV	0	172438.7	4	3
2038	2a	1	35318.78	181281	0	181281	1234917	0	1234917	FCEV	0	35318.78	4	7
2038	2a	1	45605.31	234078.8	117039.4	117039.4	2142492	1071246	1071246	PHEV	22802.65	22802.65	4	8
2038	2a	1	150184.4	779456.9	0	779456.9	5507628	0	5507628	BEV	0	150184.4	4	3
2038	2a	1	32967.3	171100.3	0	171100.3	1197213	0	1197213	FCEV	0	32967.3	4	7
2038	2a	1	37512.99	194692.4	97346.21	97346.21	1819235	909617.6	909617.6	PHEV	18756.5	18756.5	4	8
2038	2a	1	27.55042	78.27379	78.27379	0	142.4155	142.4155	0	ICE	27.55042	0	1	2
2038	2a	1	35.51177	106.9962	106.9962	0	237.9814	237.9814	0	ICE	35.51177	0	1	2
2038	2a	1	5.275277	16.19652	0	16.19652	43.15262	0	43.15262	BEV	0	5.275277	1	3
2038	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7

2038	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2038	2a	1	78.9747	246.9981	246.9981	0	582.6207	582.6207	0	ICE	78.9747	0	1	2
2038	2a	1	104.5732	333.0499	333.0499	0	825.3537	825.3537	0	ICE	104.5732	0	1	2
2038	2a	1	36.12972	117.1376	117.1376	0	314.5412	314.5412	0	ICE	36.12972	0	1	2
2038	2a	1	67.23445	221.8354	221.8354	0	601.2341	601.2341	0	ICE	67.23445	0	1	2
2038	2a	1	190.6014	672.5541	672.5541	0	2102.122	2102.122	0	ICE	190.6014	0	1	2
2038	2a	1	653.3094	2417.545	2417.545	0	8472.686	8472.686	0	ICE	653.3094	0	1	2
2038	2a	1	1059.908	3982.869	3982.869	0	14601.29	14601.29	0	ICE	1059.908	0	1	2
2038	2a	1	929.0371	3491.089	0	3491.089	13197.15	0	13197.15	BEV	0	929.0371	1	3
2038	2a	1	0.054582	0.205105	0	0.205105	0.775345	0	0.775345	FCEV	0	0.054582	1	7
2038	2a	1	971.0651	3649.02	2189.412	1459.608	12894.36	7736.619	5157.746	PHEV	582.639	388.426	1	8
2038	2a	1	1321.712	5042.384	0	5042.384	19728.85	0	19728.85	BEV	0	1321.712	1	3
2038	2a	1	0.185192	0.706513	0	0.706513	2.764306	0	2.764306	FCEV	0	0.185192	1	7
2038	2a	1	1668.761	6366.389	3819.834	2546.556	23360.02	14016.01	9344.008	PHEV	1001.256	667.5043	1	8
2038	2a	1	1457.47	5643.807	5643.807	0	22561.28	22561.28	0	ICE	1457.47	0	1	2
2038	2a	1	3587.084	13890.37	0	13890.37	56464.39	0	56464.39	BEV	0	3587.084	1	3
2038	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2038	2a	1	1705.755	6605.245	3963.147	2642.098	25217.38	15130.43	10086.95	PHEV	1023.453	682.3019	1	8
2038	2a	1	3808.329	12347.14	12347.14	0	50097.61	50097.61	0	ICE	3808.329	0	2	1
2038	2a	1	8201.166	30348.08	30348.08	0	135533	135533	0	ICE	8201.166	0	2	1
2038	2a	1	12687.06	47674.79	47674.79	0	216257.2	216257.2	0	ICE	12687.06	0	2	1
2038	2a	1	16617.94	63398.09	63398.09	0	290239.4	290239.4	0	ICE	16617.94	0	2	1
2038	2a	1	5.464912	18.97035	18.97035	0	75.89097	75.89097	0	ICE	5.464912	0	3	2
2038	2a	1	183.5646	679.2735	679.2735	0	2927.436	2927.436	0	ICE	183.5646	0	3	2
2038	2a	1	146.9511	552.2053	552.2053	0	2389.648	2389.648	0	ICE	146.9511	0	3	2
2038	2a	1	686.5376	2658.5	2658.5	0	12047.35	12047.35	0	ICE	686.5376	0	3	2
2038	2a	1	765.3692	3007.61	0	3007.61	8677.67	0	8677.67	BEV	0	765.3692	3	3
2038	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2038	2a	1	69.65422	273.7146	164.2288	109.4858	1223.617	734.1701	489.4467	PHEV	41.79253	27.86169	3	8
2038	2a	1	23.63268	63.08129	63.08129	0	185.6968	185.6968	0	ICE	23.63268	0	4	2
2038	2a	1	13.385	39.56191	39.56191	0	110.4153	110.4153	0	ICE	13.385	0	4	2
2038	2a	1	56.73423	187.1906	187.1906	0	661.0958	661.0958	0	ICE	56.73423	0	4	2
2038	2a	1	78.47725	263.4261	263.4261	0	948.0696	948.0696	0	ICE	78.47725	0	4	2
2038	2a	1	108.9876	372.0846	372.0846	0	1407.782	1407.782	0	ICE	108.9876	0	4	2
2038	2a	1	82.13352	285.1101	285.1101	0	1100.393	1100.393	0	ICE	82.13352	0	4	2
2038	2a	1	116.2475	410.1896	410.1896	0	1607.181	1607.181	0	ICE	116.2475	0	4	2
2038	2a	1	922.4391	3413.449	3413.449	0	13964.41	13964.41	0	ICE	922.4391	0	4	2
2038	2a	1	2739.175	10606.99	10606.99	0	46179.08	46179.08	0	ICE	2739.175	0	4	2
2038	2a	1	1922.962	7556.512	7556.512	0	33878.33	33878.33	0	ICE	1922.962	0	4	2
2038	2a	1	47.19309	139.4882	139.4882	0	284.9426	284.9426	0	ICE	47.19309	0	1	2
2038	2a	1	2.448852	8.079815	0	8.079815	23.77116	0	23.77116	BEV	0	2.448852	1	3
2038	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2038	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2038	2a	1	174.217	644.6832	0	644.6832	2358.806	0	2358.806	BEV	0	174.217	1	3
2038	2a	1	0.658389	2.436342	0	2.436342	8.914237	0	8.914237	FCEV	0	0.658389	1	7
2038	2a	1	366.2106	1355.148	813.0886	542.059	4606.673	2764.004	1842.669	PHEV	219.7263	146.4842	1	8
2038	2a	1	2749.047	10802.71	0	10802.71	45447.65	0	45447.65	BEV	0	2749.047	1	3

2038	2a	1	83.6968	328.8966	0	328.8966	1383.688	0	1383.688	FCEV	0	83.6968	1	7
2038	2a	1	1976.932	7768.593	4661.156	3107.437	30885.89	18531.53	12354.36	PHEV	1186.159	790.7729	1	8
2038	2a	1	1.883174	5.026642	5.026642	0	14.71954	14.71954	0	ICE	1.883174	0	2	2
2038	2a	1	1.09153	2.976089	2.976089	0	8.569445	8.569445	0	ICE	1.09153	0	2	2
2038	2a	1	2.172848	6.297783	6.297783	0	22.50775	22.50775	0	ICE	2.172848	0	2	2
2038	2a	1	19.87766	65.58494	65.58494	0	250.9662	250.9662	0	ICE	19.87766	0	3	2
2038	2a	1	22.30169	74.86053	74.86053	0	296.943	296.943	0	ICE	22.30169	0	3	2
2038	2a	1	11.43499	33.14318	33.14318	0	90.48017	90.48017	0	ICE	11.43499	0	4	2
2038	2a	1	21.08724	67.15969	67.15969	0	226.9321	226.9321	0	ICE	21.08724	0	4	2
2038	2a	1	213.0343	763.9154	763.9154	0	3034.197	3034.197	0	ICE	213.0343	0	4	2
2038	2a	1	45.74719	124.7311	124.7311	0	204.6032	204.6032	0	ICE	45.74719	0	1	2
2038	2a	1	33.05685	92.02432	92.02432	0	161.4909	161.4909	0	ICE	33.05685	0	1	2
2038	2a	1	47.96643	139.0259	139.0259	0	282.3238	282.3238	0	ICE	47.96643	0	1	2
2038	2a	1	9.736973	30.45297	0	30.45297	83.13011	0	83.13011	BEV	0	9.736973	1	3
2038	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2038	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2038	2a	1	194.6845	709.2688	0	709.2688	2518.843	0	2518.843	BEV	0	194.6845	1	3
2038	2a	1	1.923452	7.007462	0	7.007462	24.88577	0	24.88577	FCEV	0	1.923452	1	7
2038	2a	1	54.11658	197.1559	118.2935	78.86236	643.4269	386.0562	257.3708	PHEV	32.46995	21.64663	1	8
2038	2a	1	231.4378	909.4625	909.4625	0	3708.07	3708.07	0	ICE	231.4378	0	1	2
2038	2a	1	163.8982	625.2783	0	625.2783	2439.743	0	2439.743	BEV	0	163.8982	2	3
2038	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2038	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2038	2a	1	27.11344	73.92561	73.92561	0	212.6647	212.6647	0	ICE	27.11344	0	4	2
2038	2a	1	25.03099	69.68177	69.68177	0	195.2551	195.2551	0	ICE	25.03099	0	4	2
2038	2a	1	15.00634	52.0915	52.0915	0	152.8103	152.8103	0	ICE	15.00634	0	1	2
2038	2a	1	3.385639	10.78275	10.78275	0	37.40344	37.40344	0	ICE	3.385639	0	2	2
2038	2a	1	0.240272	0.71017	0.71017	0	1.848201	1.848201	0	ICE	0.240272	0	3	2
2038	2a	1	11.36747	40.76238	40.76238	0	167.0978	167.0978	0	ICE	11.36747	0	3	2
2038	2a	1	34.85888	132.988	0	132.988	361.4215	0	361.4215	BEV	0	34.85888	3	3
2038	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2038	2a	1	15.78301	60.21282	36.12769	24.08513	258.6892	155.2135	103.4757	PHEV	9.469807	6.313204	3	8
2038	2a	1	27.44841	77.98395	77.98395	0	229.6874	229.6874	0	ICE	27.44841	0	4	2
2038	2a	1	8.013265	25.06197	25.06197	0	85.11711	85.11711	0	ICE	8.013265	0	4	2
2038	2a	1	24.07717	87.71724	87.71724	0	374.7427	374.7427	0	ICE	24.07717	0	3	2
2038	2a	1	3.778751	11.3853	11.3853	0	37.10608	37.10608	0	ICE	3.778751	0	4	2
2038	2a	1	3.89096	12.16921	0	12.16921	22.51386	0	22.51386	BEV	0	3.89096	3	3
2038	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2038	2a	1	0	0	0	0	0	0	0	PHEV	0	0	3	8
2038	2a	1	17.89832	55.97808	0	55.97808	105.6293	0	105.6293	BEV	0	17.89832	4	3
2038	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2038	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2038	2a	1	8.16589	21.79672	21.79672	0	34.61208	34.61208	0	ICE	8.16589	0	1	2
2038	2a	1	9.519415	32.49938	32.49938	0	89.81164	89.81164	0	ICE	9.519415	0	1	2
2038	2a	1	29.81276	106.905	0	106.905	369.6861	0	369.6861	BEV	0	29.81276	1	3
2038	2a	1	3.026676	10.8533	0	10.8533	37.53158	0	37.53158	FCEV	0	3.026676	1	7
2038	2a	1	3.17801	11.39596	6.837577	4.558385	35.35049	21.21029	14.1402	PHEV	1.906806	1.271204	1	8

2038	2a	1	60.8854	225.304	0	225.304	817.7764	0	817.7764	BEV	0	60.8854	2	3
2038	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2038	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2038	2a	1	8.784422	30.99663	30.99663	0	127.2933	127.2933	0	ICE	8.784422	0	3	2
2038	2a	1	2.88992	9.700652	0	9.700652	29.56569	0	29.56569	BEV	0	2.88992	1	3
2038	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2038	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2038	2a	1	16.30272	56.59163	0	56.59163	178.9568	0	178.9568	BEV	0	16.30272	1	3
2038	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2038	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2038	2a	1	14.98283	52.86827	0	52.86827	179.3367	0	179.3367	BEV	0	14.98283	1	3
2038	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2038	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2038	2a	1	2.401655	6.685775	6.685775	0	25.23046	25.23046	0	ICE	2.401655	0	2	2
2038	2a	1	5.537467	19.53945	19.53945	0	75.83682	75.83682	0	ICE	5.537467	0	2	2
2038	2a	1	79.22943	297.7244	0	297.7244	1118.404	0	1118.404	BEV	0	79.22943	2	3
2038	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2038	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2038	2a	1	2.887293	9.857246	9.857246	0	40.18642	40.18642	0	ICE	2.887293	0	3	2
2038	2a	1	2.289822	7.292739	0	7.292739	20.34893	0	20.34893	BEV	0	2.289822	1	3
2038	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2038	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2038	2a	1	5.161972	17.62302	0	17.62302	55.23343	0	55.23343	BEV	0	5.161972	1	3
2038	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2038	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2038	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2038	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2038	2a	1	7.886721	27.37718	0	27.37718	87.96563	0	87.96563	BEV	0	7.886721	2	3
2038	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2038	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2038	2a	1	1.588973	5.879932	5.879932	0	24.26693	24.26693	0	ICE	1.588973	0	2	2
2038	2a	1	0.309655	1.039425	0	1.039425	2.455046	0	2.455046	BEV	0	0.309655	4	3
2038	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2038	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2038	2a	1	2.076936	6.376756	6.376756	0	19.90446	19.90446	0	ICE	2.076936	0	2	2
2038	2a	1	0.349793	1.114039	1.114039	0	4.567277	4.567277	0	ICE	0.349793	0	3	2
2038	2a	1	4.714598	16.63588	0	16.63588	40.27105	0	40.27105	BEV	0	4.714598	3	3
2038	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2038	2a	1	0	0	0	0	0	0	0	PHEV	0	0	3	8
2038	2a	1	3.013896	10.98014	0	10.98014	27.84538	0	27.84538	BEV	0	3.013896	3	3
2038	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2038	2a	1	2.086543	7.601632	4.560979	3.040653	30.7426	18.44556	12.29704	PHEV	1.251926	0.834617	3	8
2038	2a	1	0.518625	2.008286	0	2.008286	5.515078	0	5.515078	BEV	0	0.518625	4	3
2038	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2038	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2038	2a	1	12.36873	37.26674	0	37.26674	94.53735	0	94.53735	BEV	0	12.36873	2	3
2038	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2038	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2038	2a	1	4.568583	14.02678	0	14.02678	37.01041	0	37.01041	BEV	0	4.568583	2	3

2038	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2038	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2038	2a	1	3.78235	11.82953	11.82953	0	47.11277	47.11277	0	ICE	3.78235	0	2	2
2038	2a	1	1.855479	6.228323	0	6.228323	18.7447	0	18.7447	BEV	0	1.855479	2	3
2038	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2038	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2038	2a	1	3.249281	11.09308	11.09308	0	42.51194	42.51194	0	ICE	3.249281	0	2	2
2038	2a	1	1.016976	3.471965	0	3.471965	10.80276	0	10.80276	BEV	0	1.016976	2	3
2038	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2038	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2038	2a	1	3.946229	13.69854	13.69854	0	58.84764	58.84764	0	ICE	3.946229	0	2	2
2038	2a	1	3.269517	11.53679	0	11.53679	38.87934	0	38.87934	BEV	0	3.269517	2	3
2038	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2038	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2038	2a	1	3.310492	11.49171	0	11.49171	26.46113	0	26.46113	BEV	0	3.310492	3	3
2038	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2038	2a	1	0	0	0	0	0	0	0	PHEV	0	0	3	8
2038	2a	1	2.25936	8.490112	0	8.490112	22.46248	0	22.46248	BEV	0	2.25936	3	3
2038	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2038	2a	1	1.727746	6.492438	3.895463	2.596975	27.40236	16.44141	10.96094	PHEV	1.036648	0.691098	3	8
2038	2a	1	0.943335	2.842248	0	2.842248	5.297815	0	5.297815	BEV	0	0.943335	4	3
2038	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2038	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2038	2a	1	2.206445	7.027196	0	7.027196	13.60196	0	13.60196	BEV	0	2.206445	4	3
2038	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2038	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2038	2a	1	0.397091	1.310173	0	1.310173	2.712671	0	2.712671	BEV	0	0.397091	4	3
2038	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2038	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2038	2a	1	0.300781	0.992406	0.992406	0	3.493096	3.493096	0	ICE	0.300781	0	2	2
2038	2a	1	15.89822	49.72265	0	49.72265	130.5693	0	130.5693	BEV	0	15.89822	2	3
2038	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2038	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2038	2a	1	1.072274	3.476463	0	3.476463	9.779183	0	9.779183	BEV	0	1.072274	2	3
2038	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2038	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2038	2a	1	8.232041	24.33136	0	24.33136	60.50249	0	60.50249	BEV	0	8.232041	2	3
2038	2a	1	0.311152	0.884016	0.884016	0	2.95723	2.95723	0	ICE	0.311152	0	3	2
2038	2a	1	2.303716	6.80907	6.80907	0	21.519	21.519	0	ICE	2.303716	0	2	2
2038	2a	1	0.215086	0.672694	0.672694	0	2.136905	2.136905	0	ICE	0.215086	0	3	2
2038	2a	1	1.560778	4.255509	0	4.255509	9.911962	0	9.911962	BEV	0	1.560778	1	3
2038	2a	1	2.313023	7.764171	7.764171	0	32.38803	32.38803	0	ICE	2.313023	0	2	2
2038	2a	1	0.503516	1.517085	0	1.517085	2.976088	0	2.976088	BEV	0	0.503516	3	3
2038	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2038	2a	1	0	0	0	0	0	0	0	PHEV	0	0	3	8
2038	2a	1	0.429149	1.489704	0	1.489704	3.36026	0	3.36026	BEV	0	0.429149	4	3
2038	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7

2038	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2038	2a	1	2.012779	5.833839	0	5.833839	14.42835	0	14.42835	BEV	0	2.012779	1	3
2038	2a	1	1.393615	4.198935	0	4.198935	10.77295	0	10.77295	BEV	0	1.393615	1	3
2038	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2038	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2038	2a	1	2.214356	7.179254	0	7.179254	20.41614	0	20.41614	BEV	0	2.214356	1	3
2038	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2038	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2038	2a	1	2.645297	7.515578	7.515578	0	23.23247	23.23247	0	ICE	2.645297	0	2	2
2038	2a	1	2.549416	7.389228	0	7.389228	17.93505	0	17.93505	BEV	0	2.549416	2	3
2038	2a	1	0.388306	1.281187	0	1.281187	3.719932	0	3.719932	BEV	0	0.388306	2	3
2038	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2038	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2038	2a	1	2.322532	6.598568	0	6.598568	15.92682	0	15.92682	BEV	0	2.322532	1	3
2038	2a	1	2.268285	6.704347	0	6.704347	16.95495	0	16.95495	BEV	0	2.268285	1	3
2038	2a	1	0.313197	0.85394	0	0.85394	2.003645	0	2.003645	BEV	0	0.313197	2	3
2038	2a	1	1.927053	5.806171	5.806171	0	18.55283	18.55283	0	ICE	1.927053	0	2	2
2038	2a	1	1.324876	4.750846	4.750846	0	18.89644	18.89644	0	ICE	1.324876	0	2	2
2038	2a	1	2.33763	8.78423	8.78423	0	37.9727	37.9727	0	ICE	2.33763	0	2	2
2038	2a	1	0.578926	1.545293	1.545293	0	6.023707	6.023707	0	ICE	0.578926	0	3	2
2038	2a	1	2.12046	6.267423	0	6.267423	10.69048	0	10.69048	BEV	0	2.12046	3	3
2038	2a	1	0.269784	0.828311	0.828311	0	2.669589	2.669589	0	ICE	0.269784	0	3	2
2038	2a	1	0.171919	0.527838	0	0.527838	0.94613	0	0.94613	BEV	0	0.171919	3	3
2038	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2038	2a	1	0	0	0	0	0	0	0	PHEV	0	0	3	8
2038	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2038	2a	1	0	0	0	0	0	0	0	PHEV	0	0	3	8
2038	2a	1	2.807267	10.06652	0	10.06652	24.23858	0	24.23858	BEV	0	2.807267	3	3
2038	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2038	2a	1	0	0	0	0	0	0	0	PHEV	0	0	3	8
2038	2a	1	6.798062	25.15596	0	25.15596	63.37177	0	63.37177	BEV	0	6.798062	3	3
2038	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2038	2a	1	1.743093	6.450245	3.870147	2.580098	29.59436	17.75662	11.83775	PHEV	1.045856	0.697237	3	8
2038	2a	1	0.715783	1.951605	0	1.951605	3.115375	0	3.115375	BEV	0	0.715783	4	3
2038	2a	1	0.648026	2.360867	2.360867	0	9.651192	9.651192	0	ICE	0.648026	0	2	2
2038	2a	1	0.201617	0.619019	0	0.619019	1.174369	0	1.174369	BEV	0	0.201617	4	3
2038	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2038	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2038	2a	1	0.72244	1.928366	0	1.928366	4.305485	0	4.305485	BEV	0	0.72244	1	3
2038	2a	1	1.630013	4.537664	0	4.537664	10.88511	0	10.88511	BEV	0	1.630013	1	3
2038	2a	1	0.348314	0.929734	0	0.929734	2.151917	0	2.151917	BEV	0	0.348314	2	3
2038	2a	1	0	0	0	0	0	0	0	BEV	0	0	2	3
2038	2a	1	9.875203	38.24005	0	38.24005	154.6613	0	154.6613	FCEV	0	9.875203	2	7
2038	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2038	2a	1	0	0	0	0	0	0	0	BEV	0	0	2	3
2038	2a	1	11.45223	45.00292	0	45.00292	188.347	0	188.347	FCEV	0	11.45223	2	7
2038	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2038	2a	1	0.051658	0.167484	0.167484	0	0.686687	0.686687	0	ICE	0.051658	0	3	2
2038	2a	1	0	0	0	0	0	0	0	BEV	0	0	3	3

2038	2a	1	0.380649	1.473998	0	1.473998	4.215811	0	4.215811	FCEV	0	0.380649	3	7
2038	2a	1	5.455967	21.1273	12.67638	8.450921	101.0138	60.60831	40.40554	PHEV	3.27358	2.182387	3	8
2038	2a	1	0.422028	1.610055	1.610055	0	6.660282	6.660282	0	ICE	0.422028	0	2	2
2038	2a	1	0.140859	0.408264	0	0.408264	0.691195	0	0.691195	BEV	0	0.140859	3	3
2038	2a	1	0.325361	0.961668	0	0.961668	1.671139	0	1.671139	BEV	0	0.325361	4	3
2038	2a	1	0.156209	0.5333	0	0.5333	1.142102	0	1.142102	BEV	0	0.156209	3	3
2038	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2038	2a	1	0	0	0	0	0	0	0	PHEV	0	0	3	8
2038	2a	1	0.539594	1.934918	0	1.934918	6.134505	0	6.134505	BEV	0	0.539594	2	3
2038	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2038	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2038	2a	1	0.345564	0.961988	0	0.961988	2.211114	0	2.211114	BEV	0	0.345564	2	3
2038	2a	1	0.993174	2.821717	0	2.821717	6.547481	0	6.547481	BEV	0	0.993174	2	3
2038	2a	1	0.336491	0.975285	0	0.975285	1.601679	0	1.601679	BEV	0	0.336491	4	3
2038	2a	1	0.750853	2.950565	2.950565	0	14.25223	14.25223	0	ICE	0.750853	0	2	2
2038	2a	1	0.41756	1.521244	0	1.521244	5.461233	0	5.461233	BEV	0	0.41756	2	3
2038	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2038	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2038	2a	1	0.113657	0.309889	0	0.309889	0.475024	0	0.475024	BEV	0	0.113657	3	3
2038	2a	1	0.084023	0.277229	0	0.277229	0.533248	0	0.533248	BEV	0	0.084023	3	3
2038	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2038	2a	1	0	0	0	0	0	0	0	PHEV	0	0	3	8
2038	2a	1	0.653504	1.819239	0	1.819239	3.027997	0	3.027997	BEV	0	0.653504	4	3
2038	2a	1	0.182302	0.580606	0	0.580606	1.576821	0	1.576821	BEV	0	0.182302	2	3
2038	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2038	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2038	2a	1	0.086714	0.28114	0.28114	0	1.428962	1.428962	0	ICE	0.086714	0	2	2
2038	2a	1	0.393842	1.344579	0	1.344579	2.856978	0	2.856978	BEV	0	0.393842	4	3
2038	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2038	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2038	2a	1	0.073327	0.20833	0	0.20833	0.350666	0	0.350666	BEV	0	0.073327	3	3
2038	2a	1	0	0	0	0	0	0	0	BEV	0	0	4	3
2038	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2038	2a	1	0.680984	2.558969	1.535382	1.023588	11.97555	7.18533	4.79022	PHEV	0.408591	0.272394	4	8
2038	2a	1	0.106454	0.290249	0.290249	0	1.089475	1.089475	0	ICE	0.106454	0	3	2
2039	2a	1	13385.87	35730.09	35730.09	0	55708.35	55708.35	0	ICE	13385.87	0	1	1
2039	2a	1	12094.57	32976.22	32976.22	0	53385.37	53385.37	0	ICE	12094.57	0	1	1
2039	2a	1	14355.45	39962.98	39962.98	0	67316.82	67316.82	0	ICE	14355.45	0	1	1
2039	2a	1	15383.91	43707.37	43707.37	0	77188.46	77188.46	0	ICE	15383.91	0	1	1
2039	2a	1	16044.8	46504.24	46504.24	0	86119.73	86119.73	0	ICE	16044.8	0	1	1
2039	2a	1	19212.53	56786.29	56786.29	0	110560.9	110560.9	0	ICE	19212.53	0	1	1
2039	2a	1	19261.23	58033.69	58033.69	0	118368.9	118368.9	0	ICE	19261.23	0	1	1
2039	2a	1	35.3136	106.3992	106.3992	0	227.0632	227.0632	0	ICE	35.3136	0	1	2
2039	2a	1	19060.73	58521.58	58521.58	0	125619.2	125619.2	0	ICE	19060.73	0	1	1
2039	2a	1	19911.13	62273.24	62273.24	0	140165	140165	0	ICE	19911.13	0	1	1
2039	2a	1	19314.49	61513.75	61513.75	0	145240.2	145240.2	0	ICE	19314.49	0	1	1
2039	2a	1	22773.09	73833.53	73833.53	0	183116.8	183116.8	0	ICE	22773.09	0	1	1

2039	2a	1	24163.14	79724.6	79724.6	0	206677.2	206677.2	0	ICE	24163.14	0	1	1
2039	2a	1	63.66972	210.0738	210.0738	0	555.6454	555.6454	0	ICE	63.66972	0	1	2
2039	2a	1	26568.26	89182.21	89182.21	0	241171.6	241171.6	0	ICE	26568.26	0	1	1
2039	2a	1	23535.47	80350.33	80350.33	0	227470.3	227470.3	0	ICE	23535.47	0	1	1
2039	2a	1	20237.41	70250.13	70250.13	0	207829.5	207829.5	0	ICE	20237.41	0	1	1
2039	2a	1	26240.85	92593.2	92593.2	0	285756.5	285756.5	0	ICE	26240.85	0	1	1
2039	2a	1	302.8176	1068.519	1068.519	0	3295.986	3295.986	0	ICE	302.8176	0	1	2
2039	2a	1	28778.78	103197.2	103197.2	0	332831.7	332831.7	0	ICE	28778.78	0	1	1
2039	2a	1	450.4468	1615.248	1615.248	0	5128.197	5128.197	0	ICE	450.4468	0	1	2
2039	2a	1	46966.93	171108.5	171108.5	0	577339	577339	0	ICE	46966.93	0	1	1
2039	2a	1	64877.26	240075.7	240075.7	0	843151	843151	0	ICE	64877.26	0	1	1
2039	2a	1	75111.62	282250.7	282250.7	0	1033916	1033916	0	ICE	75111.62	0	1	1
2039	2a	1	1423.764	5350.15	5350.15	0	19438.08	19438.08	0	ICE	1423.764	0	1	2
2039	2a	1	101908	388783.2	388783.2	0	1484119	1484119	0	ICE	101908	0	1	1
2039	2a	1	114259.2	442449.3	442449.3	0	1753965	1753965	0	ICE	114259.2	0	1	1
2039	2a	1	145878.5	573247	573247	0	2363386	2363386	0	ICE	145878.5	0	1	1
2039	2a	1	1785.169	7015.036	7015.036	0	28909.83	28909.83	0	ICE	1785.169	0	1	2
2039	2a	1	8484.481	33340.79	0	33340.79	138430.5	0	138430.5	BEV	0	8484.481	1	3
2039	2a	1	173.1527	680.4242	0	680.4242	2873.498	0	2873.498	FCEV	0	173.1527	1	7
2039	2a	1	7653.29	30074.52	16240.24	13834.28	123522.9	66702.36	56820.53	PHEV	4132.777	3520.513	1	8
2039	2a	1	181588.7	723977.8	723977.8	0	3095959	3095959	0	ICE	181588.7	0	1	1
2039	2a	1	2222.168	8859.584	8859.584	0	37873.42	37873.42	0	ICE	2222.168	0	1	2
2039	2a	1	12907.99	51463	0	51463	220906.7	0	220906.7	BEV	0	12907.99	1	3
2039	2a	1	263.4284	1050.265	0	1050.265	4583.012	0	4583.012	FCEV	0	263.4284	1	7
2039	2a	1	8342.371	33260.28	17960.55	15299.73	141938.9	76647	65291.89	PHEV	4504.881	3837.491	1	8
2039	2a	1	220926.8	893472.2	893472.2	0	3959695	3959695	0	ICE	220926.8	0	1	1
2039	2a	1	2692.069	10887.27	10887.27	0	48238.79	48238.79	0	ICE	2692.069	0	1	2
2039	2a	1	19258.19	77883.98	0	77883.98	346342.2	0	346342.2	BEV	0	19258.19	1	3
2039	2a	1	450.484	1821.848	0	1821.848	8212.401	0	8212.401	FCEV	0	450.484	1	7
2039	2a	1	9444.905	38197.08	20244.45	17952.63	168873.4	89502.9	79370.5	PHEV	5005.8	4439.105	1	8
2039	2a	1	264764.4	1085928	1085928	0	4982623	4982623	0	ICE	264764.4	0	1	1
2039	2a	1	3255.487	13352.35	13352.35	0	61250.53	61250.53	0	ICE	3255.487	0	1	2
2039	2a	1	27421.24	112468	0	112468	517231.6	0	517231.6	BEV	0	27421.24	1	3
2039	2a	1	723.7278	2968.362	0	2968.362	13815.79	0	13815.79	FCEV	0	723.7278	1	7
2039	2a	1	10455.87	42884.65	22300.02	20584.63	196652.4	102259.2	94393.14	PHEV	5437.053	5018.818	1	8
2039	2a	1	294425.3	1224450	1224450	0	5813630	5813630	0	ICE	294425.3	0	1	1
2039	2a	1	3637.659	15128.22	15128.22	0	71812.22	71812.22	0	ICE	3637.659	0	1	2
2039	2a	1	47568.65	197827.6	0	197827.6	941113.1	0	941113.1	BEV	0	47568.65	1	3
2039	2a	1	1630.604	6781.323	0	6781.323	32588.45	0	32588.45	FCEV	0	1630.604	1	7
2039	2a	1	18084.95	75211.31	37455.23	37756.08	356464.1	177519.1	178945	PHEV	9006.303	9078.643	1	8
2039	2a	1	319573.4	1347344	1347344	0	6613544	6613544	0	ICE	319573.4	0	1	1
2039	2a	1	3976.817	16766.54	16766.54	0	82281.74	82281.74	0	ICE	3976.817	0	1	2
2039	2a	1	72848.83	307135.8	0	307135.8	1510066	0	1510066	BEV	0	72848.83	1	3
2039	2a	1	3080.564	12987.87	0	12987.87	64406.63	0	64406.63	FCEV	0	3080.564	1	7
2039	2a	1	27615.01	116426.8	55419.16	61007.65	570416.3	271518.2	298898.2	PHEV	13144.74	14470.26	1	8
2039	2a	1	337744.7	1443305	1443305	0	7318999	7318999	0	ICE	337744.7	0	1	1
2039	2a	1	4238.214	18111.41	18111.41	0	91823.36	91823.36	0	ICE	4238.214	0	1	2

2039	2a	1	102956.9	439972.1	0	439972.1	2234045	0	2234045	BEV	0	102956.9	1	3
2039	2a	1	5191.106	22183.47	0	22183.47	113352.8	0	113352.8	FCEV	0	5191.106	1	7
2039	2a	1	38914.14	166294.1	75497.54	90796.6	841905.5	382225.1	459680.4	PHEV	17667.02	21247.12	1	8
2039	2a	1	350472.2	1517772	1517772	0	7945153	7945153	0	ICE	350472.2	0	1	1
2039	2a	1	4433.136	19198.36	19198.36	0	100477.7	100477.7	0	ICE	4433.136	0	1	2
2039	2a	1	138454.6	599598.5	0	599598.5	3142158	0	3142158	BEV	0	138454.6	1	3
2039	2a	1	8124.681	35185.15	0	35185.15	185229.4	0	185229.4	FCEV	0	8124.681	1	7
2039	2a	1	52178.47	225966.7	97617.62	128349.1	1181243	510297	670946	PHEV	22541.1	29637.37	1	8
2039	2a	1	356314.2	1563485	1563485	0	8447810	8447810	0	ICE	356314.2	0	1	1
2039	2a	1	4541.099	19926.07	19926.07	0	107643.3	107643.3	0	ICE	4541.099	0	1	2
2039	2a	1	179080.4	785794.1	0	785794.1	4249446	0	4249446	BEV	0	179080.4	1	3
2039	2a	1	12011.49	52705.7	0	52705.7	285982.2	0	285982.2	FCEV	0	12011.49	1	7
2039	2a	1	67292.56	295275.7	121063	174212.7	1593694	653414.5	940279.4	PHEV	27589.95	39702.61	1	8
2039	2a	1	356834.5	1586211	1586211	0	8833738	8833738	0	ICE	356834.5	0	1	1
2039	2a	1	4547.729	20215.7	20215.7	0	112564.3	112564.3	0	ICE	4547.729	0	1	2
2039	2a	1	225934	1004329	0	1004329	5596719	0	5596719	BEV	0	225934	1	3
2039	2a	1	17080.44	75926.5	0	75926.5	424035.9	0	424035.9	FCEV	0	17080.44	1	7
2039	2a	1	84652.23	376298.6	146003.9	230294.8	2093949	812452.1	1281497	PHEV	32845.07	51807.17	1	8
2039	2a	1	345494.5	1555596	1555596	0	8924333	8924333	0	ICE	345494.5	0	1	1
2039	2a	1	4403.204	19825.52	19825.52	0	113721.9	113721.9	0	ICE	4403.204	0	1	2
2039	2a	1	274819.9	1237382	0	1237382	7101869	0	7101869	BEV	0	274819.9	1	3
2039	2a	1	23157.07	104265.2	0	104265.2	599296.3	0	599296.3	FCEV	0	23157.07	1	7
2039	2a	1	102670.5	462276.1	169193.1	293083.1	2650674	970146.6	1680527	PHEV	37577.41	65093.11	1	8
2039	2a	1	329835.3	1503986	1503986	0	8883692	8883692	0	ICE	329835.3	0	1	1
2039	2a	1	4203.632	19167.76	19167.76	0	113207	113207	0	ICE	4203.632	0	1	2
2039	2a	1	330824.5	1508497	0	1508497	8912582	0	8912582	BEV	0	330824.5	1	3
2039	2a	1	30788.79	140391	0	140391	830269.1	0	830269.1	FCEV	0	30788.79	1	7
2039	2a	1	123236.3	561934.2	193305.4	368628.8	3318577	1141590	2176987	PHEV	42393.29	80843.02	1	8
2039	2a	1	302960.2	1398797	1398797	0	8502741	8502741	0	ICE	302960.2	0	1	1
2039	2a	1	3861.118	17827.17	17827.17	0	108355.1	108355.1	0	ICE	3861.118	0	1	2
2039	2a	1	387324.4	1788316	0	1788316	10871459	0	10871459	BEV	0	387324.4	1	3
2039	2a	1	39512.95	182435.2	0	182435.2	1109764	0	1109764	FCEV	0	39512.95	1	7
2039	2a	1	143867.3	664249.9	213888.5	450361.4	4038197	1300299	2737897	PHEV	46325.28	97542.05	1	8
2039	2a	1	270463.8	1264253	1264253	0	7904910	7904910	0	ICE	270463.8	0	1	1
2039	2a	1	3446.968	16112.47	16112.47	0	100739	100739	0	ICE	3446.968	0	1	2
2039	2a	1	449664.3	2101906	0	2101906	13141650	0	13141650	BEV	0	449664.3	1	3
2039	2a	1	49962.7	233545.1	0	233545.1	1460788	0	1460788	FCEV	0	49962.7	1	7
2039	2a	1	166542.3	778483.8	233545.1	544938.6	4869720	1460916	3408804	PHEV	49962.7	116579.6	1	8
2039	2a	1	228488.5	1081134	1081134	0	6951221	6951221	0	ICE	228488.5	0	1	1
2039	2a	1	2912.003	13778.67	13778.67	0	88587.79	88587.79	0	ICE	2912.003	0	1	2
2039	2a	1	514961.5	2436633	0	2436633	15662454	0	15662454	BEV	0	514961.5	1	3
2039	2a	1	63646.93	301156.9	0	301156.9	1936225	0	1936225	FCEV	0	63646.93	1	7
2039	2a	1	182718.5	864565.3	259369.6	605195.7	5563999	1669200	3894800	PHEV	54815.54	127902.9	1	8
2039	2a	1	181428.6	868856.2	868856.2	0	5742003	5742003	0	ICE	181428.6	0	1	1
2039	2a	1	2312.245	11073.27	11073.27	0	73179.56	73179.56	0	ICE	2312.245	0	1	2
2039	2a	1	587667.1	2814320	0	2814320	18590607	0	18590607	BEV	0	587667.1	1	3
2039	2a	1	80136.43	383770.9	0	383770.9	2535271	0	2535271	FCEV	0	80136.43	1	7

2039	2a	1	199473.8	955274	286582.2	668691.8	6322572	1896771	4425800	PHEV	59842.14	139631.7	1	8
2039	2a	1	126217	611680.6	611680.6	0	4153924	4153924	0	ICE	126217	0	1	1
2039	2a	1	1608.592	7795.657	7795.657	0	52941.8	52941.8	0	ICE	1608.592	0	1	2
2039	2a	1	657522.5	3186525	0	3186525	21625828	0	21625828	BEV	0	657522.5	1	3
2039	2a	1	98250.49	476147.4	0	476147.4	3231356	0	3231356	FCEV	0	98250.49	1	7
2039	2a	1	213166.7	1033061	309918.4	723143	7030464	2109139	4921325	PHEV	63950.02	149216.7	1	8
2039	2a	1	66131.77	324280.4	324280.4	0	2261373	2261373	0	ICE	66131.77	0	1	1
2039	2a	1	842.8263	4132.841	4132.841	0	28821.99	28821.99	0	ICE	842.8263	0	1	2
2039	2a	1	735336.3	3605758	0	3605758	25125142	0	25125142	BEV	0	735336.3	1	3
2039	2a	1	119705.9	586983.9	0	586983.9	4089783	0	4089783	FCEV	0	119705.9	1	7
2039	2a	1	227289.7	1114526	334357.9	780168.4	7793045	2337914	5455132	PHEV	68186.91	159102.8	1	8
2039	2a	1	809129.5	4013962	0	4013962	28705808	0	28705808	BEV	0	809129.5	1	3
2039	2a	1	142787.6	708346.2	0	708346.2	5065071	0	5065071	FCEV	0	142787.6	1	7
2039	2a	1	237979.3	1180577	354173.1	826403.9	8478646	2543594	5935052	PHEV	71393.78	166585.5	1	8
2039	2a	1	832465.3	4177419	0	4177419	30639861	0	30639861	BEV	0	832465.3	1	3
2039	2a	1	158564.8	795698.9	0	795698.9	5835253	0	5835253	FCEV	0	158564.8	1	7
2039	2a	1	232463.9	1166534	349960.2	816573.7	8596726	2579018	6017708	PHEV	69739.16	162724.7	1	8
2039	2a	1	857805	4353721	0	4353721	32696271	0	32696271	BEV	0	857805	1	3
2039	2a	1	175695	891725.9	0	891725.9	6695897	0	6695897	FCEV	0	175695	1	7
2039	2a	1	226865.9	1151439	345431.8	806007.6	8686868	2606060	6080807	PHEV	68059.76	158806.1	1	8
2039	2a	1	868629.1	4458421	0	4458421	34178419	0	34178419	BEV	0	868629.1	1	3
2039	2a	1	190674.7	978677.8	0	978677.8	7501981	0	7501981	FCEV	0	190674.7	1	7
2039	2a	1	216965.8	1113623	334086.8	779535.9	8567574	2570272	5997302	PHEV	65089.75	151876.1	1	8
2039	2a	1	783798.2	4067913	0	4067913	31750532	0	31750532	BEV	0	783798.2	1	3
2039	2a	1	183853.9	954201.8	0	954201.8	7447669	0	7447669	FCEV	0	183853.9	1	7
2039	2a	1	184314.7	956593.3	286978	669615.3	7480786	2244236	5236550	PHEV	55294.41	129020.3	1	8
2039	2a	1	2579.519	6885.355	6885.355	0	26338.92	26338.92	0	ICE	2579.519	0	2	1
2039	2a	1	2816.766	7679.997	7679.997	0	29221.05	29221.05	0	ICE	2816.766	0	2	1
2039	2a	1	3681.773	10249.39	10249.39	0	39321.7	39321.7	0	ICE	3681.773	0	2	1
2039	2a	1	4657.771	13233.24	13233.24	0	51450.19	51450.19	0	ICE	4657.771	0	2	1
2039	2a	1	4282.023	12411.01	12411.01	0	48746.78	48746.78	0	ICE	4282.023	0	2	1
2039	2a	1	4628.726	13681.08	13681.08	0	54427.11	54427.11	0	ICE	4628.726	0	2	1
2039	2a	1	5126.032	15444.63	15444.63	0	61833.96	61833.96	0	ICE	5126.032	0	2	1
2039	2a	1	5537.436	17001.42	17001.42	0	67333.43	67333.43	0	ICE	5537.436	0	2	1
2039	2a	1	3887.532	12158.49	12158.49	0	48116.59	48116.59	0	ICE	3887.532	0	2	1
2039	2a	1	2224.132	7210.948	7210.948	0	28883.63	28883.63	0	ICE	2224.132	0	2	1
2039	2a	1	3558.141	11739.84	11739.84	0	47831.32	47831.32	0	ICE	3558.141	0	2	1
2039	2a	1	5173.231	17365.09	17365.09	0	72096.6	72096.6	0	ICE	5173.231	0	2	1
2039	2a	1	8903.595	30396.96	30396.96	0	127734.4	127734.4	0	ICE	8903.595	0	2	1
2039	2a	1	6755.1	23448.98	23448.98	0	99568.2	99568.2	0	ICE	6755.1	0	2	1
2039	2a	1	3750.34	13233.41	13233.41	0	56409.94	56409.94	0	ICE	3750.34	0	2	1
2039	2a	1	3489.565	12513.16	12513.16	0	53939.49	53939.49	0	ICE	3489.565	0	2	1
2039	2a	1	33617.45	128251.9	128251.9	0	586112.4	586112.4	0	ICE	33617.45	0	2	1
2039	2a	1	33127.74	128281.5	128281.5	0	591501.1	591501.1	0	ICE	33127.74	0	2	1
2039	2a	1	31936.73	125499.2	125499.2	0	587628.5	587628.5	0	ICE	31936.73	0	2	1
2039	2a	1	4.326407	17.00114	17.00114	0	79.61885	79.61885	0	ICE	4.326407	0	2	2
2039	2a	1	1.076085	4.228605	0	4.228605	17.69854	0	17.69854	BEV	0	1.076085	2	3

2039	2a	1	0.021961	0.086298	0	0.086298	0.361195	0	0.361195	FCEV	0	0.021961	2	7
2039	2a	1	9.33339	36.67668	22.00601	14.67067	171.7797	103.0678	68.71189	PHEV	5.600034	3.733356	2	8
2039	2a	1	36753.28	146532	146532	0	694913.9	694913.9	0	ICE	36753.28	0	2	1
2039	2a	1	4.978896	19.85041	19.85041	0	94.15231	94.15231	0	ICE	4.978896	0	2	2
2039	2a	1	40673.3	164491	164491	0	791434.9	791434.9	0	ICE	40673.3	0	2	1
2039	2a	1	5.548376	22.43874	22.43874	0	107.9916	107.9916	0	ICE	5.548376	0	2	2
2039	2a	1	540.8095	2187.142	0	2187.142	10232.09	0	10232.09	BEV	0	540.8095	2	3
2039	2a	1	12.65051	51.16121	0	51.16121	228.6538	0	228.6538	FCEV	0	12.65051	2	7
2039	2a	1	415.3037	1679.571	998.1451	681.426	8189.509	4866.908	3322.601	PHEV	246.809	168.4946	2	8
2039	2a	1	44513.23	182570.6	182570.6	0	892396.6	892396.6	0	ICE	44513.23	0	2	1
2039	2a	1	6.142743	25.1944	25.1944	0	123.2013	123.2013	0	ICE	6.142743	0	2	2
2039	2a	1	1209.068	4958.98	0	4958.98	23667.37	0	23667.37	BEV	0	1209.068	2	3
2039	2a	1	31.91088	130.8822	0	130.8822	604.0693	0	604.0693	FCEV	0	31.91088	2	7
2039	2a	1	931.202	3819.316	2247.94	1571.376	18889.18	11117.63	7771.55	PHEV	548.0789	383.1231	2	8
2039	2a	1	46091.96	191686.3	191686.3	0	953562.2	953562.2	0	ICE	46091.96	0	2	1
2039	2a	1	6.444197	26.8	26.8	0	133.3855	133.3855	0	ICE	6.444197	0	2	2
2039	2a	1	3248.49	13509.76	0	13509.76	65941.58	0	65941.58	BEV	0	3248.49	2	3
2039	2a	1	111.3549	463.1004	0	463.1004	2207.096	0	2207.096	FCEV	0	111.3549	2	7
2039	2a	1	2342.782	9743.116	5648.224	4094.893	49268.51	28561.66	20706.85	PHEV	1358.144	984.6379	2	8
2039	2a	1	47005.82	198179.8	198179.8	0	1004644	1004644	0	ICE	47005.82	0	2	1
2039	2a	1	6.598898	27.82142	27.82142	0	141.0944	141.0944	0	ICE	6.598898	0	2	2
2039	2a	1	5753.916	24258.91	0	24258.91	121354	0	121354	BEV	0	5753.916	2	3
2039	2a	1	243.3163	1025.838	0	1025.838	5045.567	0	5045.567	FCEV	0	243.3163	2	7
2039	2a	1	3882.164	16367.48	9343.491	7023.986	84198.59	48065.36	36133.22	PHEV	2216.161	1666.003	2	8
2039	2a	1	47041.59	201025.7	201025.7	0	1039673	1039673	0	ICE	47041.59	0	2	1
2039	2a	1	6.635022	28.35384	28.35384	0	146.6845	146.6845	0	ICE	6.635022	0	2	2
2039	2a	1	8704.553	37197.69	0	37197.69	190800.9	0	190800.9	BEV	0	8704.553	2	3
2039	2a	1	438.885	1875.514	0	1875.514	9532.876	0	9532.876	FCEV	0	438.885	2	7
2039	2a	1	5488.08	23452.54	13180.33	10272.21	122584.2	68892.33	53691.89	PHEV	3084.301	2403.779	2	8
2039	2a	1	46598.17	201800.4	201800.4	0	1065837	1065837	0	ICE	46598.17	0	2	1
2039	2a	1	6.601253	28.58772	28.58772	0	151.0144	151.0144	0	ICE	6.601253	0	2	2
2039	2a	1	12172.24	52713.72	0	52713.72	277246.4	0	277246.4	BEV	0	12172.24	2	3
2039	2a	1	714.2816	3093.303	0	3093.303	16215.21	0	16215.21	FCEV	0	714.2816	2	7
2039	2a	1	7161.483	31013.87	17155.1	13858.77	164809.6	91163.25	73646.35	PHEV	3961.323	3200.16	2	8
2039	2a	1	45381.21	199130	199130	0	1075576	1075576	0	ICE	45381.21	0	2	1
2039	2a	1	6.454901	28.32372	28.32372	0	152.9905	152.9905	0	ICE	6.454901	0	2	2
2039	2a	1	16106.97	70676.4	0	70676.4	381358.5	0	381358.5	BEV	0	16106.97	2	3
2039	2a	1	1080.345	4740.49	0	4740.49	25576.62	0	25576.62	FCEV	0	1080.345	2	7
2039	2a	1	8828.34	38738.23	21084.66	17653.56	209614.9	114090.4	95524.51	PHEV	4805.139	4023.201	2	8
2039	2a	1	43928.29	195271.4	195271.4	0	1078384	1078384	0	ICE	43928.29	0	2	1
2039	2a	1	6.248242	27.77487	27.77487	0	153.3695	153.3695	0	ICE	6.248242	0	2	2
2039	2a	1	20730.67	92152.6	0	92152.6	509628	0	509628	BEV	0	20730.67	2	3
2039	2a	1	1567.223	6966.668	0	6966.668	38589.16	0	38589.16	FCEV	0	1567.223	2	7
2039	2a	1	10564.54	46961.83	25144.71	21817.12	258757.1	138545.9	120211.1	PHEV	5656.559	4907.985	2	8
2039	2a	1	41456.76	186659.9	186659.9	0	1054733	1054733	0	ICE	41456.76	0	2	1
2039	2a	1	5.896698	26.55	26.55	0	149.989	149.989	0	ICE	5.896698	0	2	2
2039	2a	1	25737.78	115884.9	0	115884.9	656902.3	0	656902.3	BEV	0	25737.78	2	3

2039	2a	1	2168.735	9764.773	0	9764.773	55480.48	0	55480.48	FCEV	0	2168.735	2	7
2039	2a	1	12166.5	54779.93	28845.55	25934.38	307684.6	162017.9	145666.7	PHEV	6406.534	5759.971	2	8
2039	2a	1	38733.64	176618	176618	0	1021597	1021597	0	ICE	38733.64	0	2	1
2039	2a	1	5.509369	25.12167	25.12167	0	145.2631	145.2631	0	ICE	5.509369	0	2	2
2039	2a	1	31576.93	143984.8	0	143984.8	836545.8	0	836545.8	BEV	0	31576.93	2	3
2039	2a	1	2938.765	13400.21	0	13400.21	78053.4	0	78053.4	FCEV	0	2938.765	2	7
2039	2a	1	13807.94	62961.6	32596.12	30365.48	360784.9	186783.5	174001.4	PHEV	7148.57	6659.375	2	8
2039	2a	1	35075.18	161945.6	161945.6	0	959475	959475	0	ICE	35075.18	0	2	1
2039	2a	1	4.988999	23.03471	23.03471	0	136.4195	136.4195	0	ICE	4.988999	0	2	2
2039	2a	1	37801.41	174532.9	0	174532.9	1039464	0	1039464	BEV	0	37801.41	2	3
2039	2a	1	3856.315	17804.99	0	17804.99	106309	0	106309	FCEV	0	3856.315	2	7
2039	2a	1	15241.59	70371.94	35809.26	34562.67	411851.8	209573.7	202278.1	PHEV	7755.791	7485.797	2	8
2039	2a	1	30884.37	144365.6	144365.6	0	876276.2	876276.2	0	ICE	30884.37	0	2	1
2039	2a	1	4.39291	20.53417	20.53417	0	124.5824	124.5824	0	ICE	4.39291	0	2	2
2039	2a	1	44751.75	209187.1	0	209187.1	1276962	0	1276962	BEV	0	44751.75	2	3
2039	2a	1	4972.416	23243.01	0	23243.01	142224.2	0	142224.2	FCEV	0	4972.416	2	7
2039	2a	1	16574.72	77476.71	38738.36	38738.36	463367.1	231683.6	231683.6	PHEV	8287.361	8287.361	2	8
2039	2a	1	25692.31	121567.8	121567.8	0	756400.8	756400.8	0	ICE	25692.31	0	2	1
2039	2a	1	3.654405	17.29148	17.29148	0	107.5345	107.5345	0	ICE	3.654405	0	2	2
2039	2a	1	50977.21	241207.9	0	241207.9	1509849	0	1509849	BEV	0	50977.21	2	3
2039	2a	1	6300.555	29812.21	0	29812.21	187004.9	0	187004.9	FCEV	0	6300.555	2	7
2039	2a	1	18087.72	85585.29	42792.64	42792.64	523702.8	261851.4	261851.4	PHEV	9043.858	9043.858	2	8
2039	2a	1	20086.1	96191.74	96191.74	0	613567.6	613567.6	0	ICE	20086.1	0	2	1
2039	2a	1	2.856993	13.68205	13.68205	0	87.22555	87.22555	0	ICE	2.856993	0	2	2
2039	2a	1	57769.96	276658.6	0	276658.6	1775575	0	1775575	BEV	0	57769.96	2	3
2039	2a	1	7877.721	37726.17	0	37726.17	242569.9	0	242569.9	FCEV	0	7877.721	2	7
2039	2a	1	19609.05	93907.13	46953.57	46953.57	588191	294095.5	294095.5	PHEV	9804.523	9804.523	2	8
2039	2a	1	13938.7	67550.59	67550.59	0	441792.5	441792.5	0	ICE	13938.7	0	2	1
2039	2a	1	1.982604	9.608213	9.608213	0	62.80436	62.80436	0	ICE	1.982604	0	2	2
2039	2a	1	64952.81	314778.2	0	314778.2	2071354	0	2071354	BEV	0	64952.81	2	3
2039	2a	1	9705.593	47035.82	0	47035.82	310004.3	0	310004.3	FCEV	0	9705.593	2	7
2039	2a	1	21057.5	102050.1	51025.06	51025.06	654656.9	327328.4	327328.4	PHEV	10528.75	10528.75	2	8
2039	2a	1	7246.013	35531.19	35531.19	0	238293.7	238293.7	0	ICE	7246.013	0	2	1
2039	2a	1	1.030653	5.05386	5.05386	0	33.87494	33.87494	0	ICE	1.030653	0	2	2
2039	2a	1	72534.48	355676.5	0	355676.5	2399651	0	2399651	BEV	0	72534.48	2	3
2039	2a	1	11807.94	57900.82	0	57900.82	391170.8	0	391170.8	FCEV	0	11807.94	2	7
2039	2a	1	22420.14	109938.3	54969.13	54969.13	722686.2	361343.1	361343.1	PHEV	11210.07	11210.07	2	8
2039	2a	1	79458.52	394181	0	394181	2726739	0	2726739	BEV	0	79458.52	2	3
2039	2a	1	14022.09	69561.36	0	69561.36	481740.9	0	481740.9	FCEV	0	14022.09	2	7
2039	2a	1	23370.15	115935.6	57967.8	57967.8	781389.1	390694.6	390694.6	PHEV	11685.08	11685.08	2	8
2039	2a	1	80807.48	405502.4	0	405502.4	2876011	0	2876011	BEV	0	80807.48	2	3
2039	2a	1	15391.9	77238.56	0	77238.56	548371.7	0	548371.7	FCEV	0	15391.9	2	7
2039	2a	1	22565.29	113235.5	56617.77	56617.77	782998.7	391499.4	391499.4	PHEV	11282.64	11282.64	2	8
2039	2a	1	82181.12	417103.7	0	417103.7	3032501	0	3032501	BEV	0	82181.12	2	3
2039	2a	1	16832.28	85430.88	0	85430.88	621677.2	0	621677.2	FCEV	0	16832.28	2	7
2039	2a	1	21734.65	110312.5	55156.24	55156.24	782616	391308	391308	PHEV	10867.32	10867.32	2	8
2039	2a	1	83617.25	429183.1	0	429183.1	3197291	0	3197291	BEV	0	83617.25	2	3

2039	2a	1	18355.01	94210.92	0	94210.92	702404.3	0	702404.3	FCEV	0	18355.01	2	7
2039	2a	1	20885.88	107201.2	53600.59	53600.59	780130.6	390065.3	390065.3	PHEV	10442.94	10442.94	2	8
2039	2a	1	76577.03	397434.8	0	397434.8	3032211	0	3032211	BEV	0	76577.03	2	3
2039	2a	1	17962.51	93225.45	0	93225.45	711759.3	0	711759.3	FCEV	0	17962.51	2	7
2039	2a	1	18007.53	93459.09	46729.55	46729.55	697259.4	348629.7	348629.7	PHEV	9003.766	9003.766	2	8
2039	2a	1	6661.441	17780.98	17780.98	0	65342.59	65342.59	0	ICE	6661.441	0	3	1
2039	2a	1	6285.466	17137.51	17137.51	0	62960.5	62960.5	0	ICE	6285.466	0	3	1
2039	2a	1	9517.493	26494.99	26494.99	0	98142.01	98142.01	0	ICE	9517.493	0	3	1
2039	2a	1	10448.41	29685.08	29685.08	0	110685.7	110685.7	0	ICE	10448.41	0	3	1
2039	2a	1	11233.5	32559.16	32559.16	0	122147.2	122147.2	0	ICE	11233.5	0	3	1
2039	2a	1	14403.82	42573.22	42573.22	0	161530.6	161530.6	0	ICE	14403.82	0	3	1
2039	2a	1	13122.51	39537.87	39537.87	0	150756.5	150756.5	0	ICE	13122.51	0	3	1
2039	2a	1	12928.03	39692.53	39692.53	0	153176.3	153176.3	0	ICE	12928.03	0	3	1
2039	2a	1	14541.47	45479.33	45479.33	0	177606.1	177606.1	0	ICE	14541.47	0	3	1
2039	2a	1	17649.02	56209.48	56209.48	0	221534.1	221534.1	0	ICE	17649.02	0	3	1
2039	2a	1	19372	62806.75	62806.75	0	249126.3	249126.3	0	ICE	19372	0	3	1
2039	2a	1	17822.67	58804.65	58804.65	0	235225.3	235225.3	0	ICE	17822.67	0	3	1
2039	2a	1	18287.85	61387.18	61387.18	0	247621.1	247621.1	0	ICE	18287.85	0	3	1
2039	2a	1	14323.36	48900.1	48900.1	0	200403.4	200403.4	0	ICE	14323.36	0	3	1
2039	2a	1	9149.052	31759.1	31759.1	0	131535.3	131535.3	0	ICE	9149.052	0	3	1
2039	2a	1	16974.74	59896.91	59896.91	0	251027.7	251027.7	0	ICE	16974.74	0	3	1
2039	2a	1	23957.63	85909.18	85909.18	0	363153.1	363153.1	0	ICE	23957.63	0	3	1
2039	2a	1	24649.08	89800.8	89800.8	0	385373.4	385373.4	0	ICE	24649.08	0	3	1
2039	2a	1	36226.71	134055.5	134055.5	0	580626.3	580626.3	0	ICE	36226.71	0	3	1
2039	2a	1	36383.88	136721.5	136721.5	0	604036.6	604036.6	0	ICE	36383.88	0	3	1
2039	2a	1	386.7017	1453.128	1453.128	0	6268.744	6268.744	0	ICE	386.7017	0	3	2
2039	2a	1	47151.58	179885.2	179885.2	0	807999.7	807999.7	0	ICE	47151.58	0	3	1
2039	2a	1	50994.93	197469.2	197469.2	0	896414	896414	0	ICE	50994.93	0	3	1
2039	2a	1	376.5892	1458.278	1458.278	0	6613.422	6613.422	0	ICE	376.5892	0	3	2
2039	2a	1	63072.97	247852.8	247852.8	0	1141074	1141074	0	ICE	63072.97	0	3	1
2039	2a	1	644.6762	2533.332	2533.332	0	11705.32	11705.32	0	ICE	644.6762	0	3	2
2039	2a	1	75152.06	299624.5	299624.5	0	1401408	1401408	0	ICE	75152.06	0	3	1
2039	2a	1	768.138	3062.497	3062.497	0	14374.39	14374.39	0	ICE	768.138	0	3	2
2039	2a	1	259.2851	1033.746	620.2478	413.4985	4861.722	2917.033	1944.689	PHEV	155.5711	103.714	3	8
2039	2a	1	88944.77	359710.4	359710.4	0	1716670	1716670	0	ICE	88944.77	0	3	1
2039	2a	1	906.8233	3667.375	3667.375	0	17551.84	17551.84	0	ICE	906.8233	0	3	2
2039	2a	1	1048.992	4242.332	0	4242.332	14920.44	0	14920.44	BEV	0	1048.992	3	3
2039	2a	1	24.53782	99.23584	0	99.23584	308.5794	0	308.5794	FCEV	0	24.53782	3	7
2039	2a	1	911.1113	3684.716	2189.774	1494.942	17624.41	10473.94	7150.476	PHEV	541.4604	369.6509	3	8
2039	2a	1	105603.4	433131.2	433131.2	0	2103044	2103044	0	ICE	105603.4	0	3	1
2039	2a	1	1079.111	4425.964	4425.964	0	21554.04	21554.04	0	ICE	1079.111	0	3	2
2039	2a	1	2530.787	10380	0	10380	44420.71	0	44420.71	BEV	0	2530.787	3	3
2039	2a	1	66.79497	273.9589	0	273.9589	879.077	0	879.077	FCEV	0	66.79497	3	7
2039	2a	1	1826.422	7491.05	4409.018	3082.032	36480.73	21471.51	15009.21	PHEV	1074.98	751.4421	3	8
2039	2a	1	116900.6	486164	486164	0	2402309	2402309	0	ICE	116900.6	0	3	1
2039	2a	1	1212.612	5042.987	5042.987	0	25031.98	25031.98	0	ICE	1212.612	0	3	2
2039	2a	1	7984.124	33204.21	0	33204.21	139109.6	0	139109.6	BEV	0	7984.124	3	3

2039	2a	1	273.6875	1138.206	0	1138.206	3767.83	0	3767.83	FCEV	0	273.6875	3	7
2039	2a	1	5426.732	22568.58	13083.33	9485.254	125724.5	72884.31	52840.23	PHEV	3145.954	2280.778	3	8
2039	2a	1	124799	526161.1	526161.1	0	2650264	2650264	0	ICE	124799	0	3	1
2039	2a	1	1300.633	5483.559	5483.559	0	27762.17	27762.17	0	ICE	1300.633	0	3	2
2039	2a	1	15122.38	63757.03	0	63757.03	272291.1	0	272291.1	BEV	0	15122.38	3	3
2039	2a	1	639.4814	2696.098	0	2696.098	9203.675	0	9203.675	FCEV	0	639.4814	3	7
2039	2a	1	9671.774	40776.88	23277.77	17499.11	240734.5	137425	103309.5	PHEV	5521.202	4150.573	3	8
2039	2a	1	130535.1	557823.3	557823.3	0	2866609	2866609	0	ICE	130535.1	0	3	1
2039	2a	1	1367.765	5844.952	5844.952	0	30205.91	30205.91	0	ICE	1367.765	0	3	2
2039	2a	1	24106.04	103013.8	0	103013.8	453539.1	0	453539.1	BEV	0	24106.04	3	3
2039	2a	1	1215.43	5193.972	0	5193.972	18407.79	0	18407.79	FCEV	0	1215.43	3	7
2039	2a	1	14491.57	61927.68	34803.36	27124.32	378666.9	212810.8	165856.1	PHEV	8144.261	6347.306	3	8
2039	2a	1	134765.2	583621.1	583621.1	0	3062188	3062188	0	ICE	134765.2	0	3	1
2039	2a	1	1419.178	6145.964	6145.964	0	32444.37	32444.37	0	ICE	1419.178	0	3	2
2039	2a	1	35257.04	152685.9	0	152685.9	692826	0	692826	BEV	0	35257.04	3	3
2039	2a	1	2068.925	8959.791	0	8959.791	34727.95	0	34727.95	FCEV	0	2068.925	3	7
2039	2a	1	19896.66	86165.47	47661.82	38503.66	542233.4	299932.6	242300.9	PHEV	11005.7	8890.965	3	8
2039	2a	1	135823.2	595983.9	595983.9	0	3196991	3196991	0	ICE	135823.2	0	3	1
2039	2a	1	1436.959	6305.291	6305.291	0	34046.28	34046.28	0	ICE	1436.959	0	3	2
2039	2a	1	48349.92	212156.6	0	212156.6	993276.2	0	993276.2	BEV	0	48349.92	3	3
2039	2a	1	3242.983	14230.01	0	14230.01	58937.7	0	58937.7	FCEV	0	3242.983	3	7
2039	2a	1	25575.19	112222.4	61081.05	51141.35	726277.1	395302.3	330974.9	PHEV	13920.21	11654.98	3	8
2039	2a	1	134867.7	599517.8	599517.8	0	3288819	3288819	0	ICE	134867.7	0	3	1
2039	2a	1	1426.851	6342.679	6342.679	0	35020.61	35020.61	0	ICE	1426.851	0	3	2
2039	2a	1	63852.84	283840.5	0	283840.5	1371852	0	1371852	BEV	0	63852.84	3	3
2039	2a	1	4827.227	21458.14	0	21458.14	95021.62	0	95021.62	FCEV	0	4827.227	3	7
2039	2a	1	31602.92	140482.3	75218.22	65264.05	935979.4	501150.1	434829.3	PHEV	16921.11	14681.82	3	8
2039	2a	1	129184.1	581654.2	581654.2	0	3265213	3265213	0	ICE	129184.1	0	3	1
2039	2a	1	1366.721	6153.688	6153.688	0	34766.21	34766.21	0	ICE	1366.721	0	3	2
2039	2a	1	80433.16	362151.9	0	362151.9	1806905	0	1806905	BEV	0	80433.16	3	3
2039	2a	1	6777.515	30515.9	0	30515.9	142618.5	0	142618.5	FCEV	0	6777.515	3	7
2039	2a	1	37172.21	167368.6	88131.52	79237.08	1147424	604200.5	543223.1	PHEV	19573.82	17598.38	3	8
2039	2a	1	122475.7	558465.7	558465.7	0	3209766	3209766	0	ICE	122475.7	0	3	1
2039	2a	1	1295.748	5908.363	5908.363	0	34173.34	34173.34	0	ICE	1295.748	0	3	2
2039	2a	1	100061.2	456259.9	0	456259.9	2349854	0	2349854	BEV	0	100061.2	3	3
2039	2a	1	9312.376	42462.66	0	42462.66	207919.5	0	207919.5	FCEV	0	9312.376	3	7
2039	2a	1	43078.05	196427.7	101693.4	94734.29	1385515	717301	668214.1	PHEV	22302.12	20775.93	3	8
2039	2a	1	111660.9	515549.5	515549.5	0	3035191	3035191	0	ICE	111660.9	0	3	1
2039	2a	1	1181.331	5454.325	5454.325	0	32312.77	32312.77	0	ICE	1181.331	0	3	2
2039	2a	1	120483.5	556284.2	0	556284.2	2957387	0	2957387	BEV	0	120483.5	3	3
2039	2a	1	12291.13	56749.4	0	56749.4	289849.8	0	289849.8	FCEV	0	12291.13	3	7
2039	2a	1	48187.33	222485.7	113213.5	109272.3	1614848	821726.7	793120.9	PHEV	24520.47	23666.86	3	8
2039	2a	1	98674.29	461242.1	461242.1	0	2782148	2782148	0	ICE	98674.29	0	3	1
2039	2a	1	1043.938	4879.773	4879.773	0	29617.4	29617.4	0	ICE	1043.938	0	3	2
2039	2a	1	142993.4	668406.9	0	668406.9	3667502	0	3667502	BEV	0	142993.4	3	3
2039	2a	1	15888.16	74267.44	0	74267.44	394496.3	0	394496.3	FCEV	0	15888.16	3	7
2039	2a	1	52960.52	247558.1	123779.1	123779.1	1848928	924464	924464	PHEV	26480.26	26480.26	3	8

2039	2a	1	82205.5	388970.1	388970.1	0	2405011	2405011	0	ICE	82205.5	0	3	1
2039	2a	1	869.7041	4115.161	4115.161	0	25601.69	25601.69	0	ICE	869.7041	0	3	2
2039	2a	1	163266.5	772525	0	772525	4363987	0	4363987	BEV	0	163266.5	3	3
2039	2a	1	20179.01	95480.61	0	95480.61	525594.7	0	525594.7	FCEV	0	20179.01	3	7
2039	2a	1	57930.17	274107	137053.5	137053.5	2105531	1052766	1052766	PHEV	28965.08	28965.08	3	8
2039	2a	1	63897.96	306005.4	306005.4	0	1939734	1939734	0	ICE	63897.96	0	3	1
2039	2a	1	676.017	3237.425	3237.425	0	20648.23	20648.23	0	ICE	676.017	0	3	2
2039	2a	1	184093.7	881619.4	0	881619.4	5127031	0	5127031	BEV	0	184093.7	3	3
2039	2a	1	25103.69	120220.8	0	120220.8	684616.6	0	684616.6	FCEV	0	25103.69	3	7
2039	2a	1	62487.54	299251	149625.5	149625.5	2364549	1182274	1182274	PHEV	31243.77	31243.77	3	8
2039	2a	1	43753.57	212041.2	212041.2	0	1378360	1378360	0	ICE	43753.57	0	3	1
2039	2a	1	462.8968	2243.318	2243.318	0	14672.23	14672.23	0	ICE	462.8968	0	3	2
2039	2a	1	204366.6	990413.5	0	990413.5	5929992	0	5929992	BEV	0	204366.6	3	3
2039	2a	1	30537.53	147992.8	0	147992.8	870912.5	0	870912.5	FCEV	0	30537.53	3	7
2039	2a	1	66255	321089	160544.5	160544.5	2610729	1305364	1305364	PHEV	33127.5	33127.5	3	8
2039	2a	1	22537.66	110514.5	110514.5	0	736722.2	736722.2	0	ICE	22537.66	0	3	1
2039	2a	1	238.4401	1169.203	1169.203	0	7842.114	7842.114	0	ICE	238.4401	0	3	2
2039	2a	1	226262.5	1109490	0	1109490	6838672	0	6838672	BEV	0	226262.5	3	3
2039	2a	1	36833.43	180614.6	0	180614.6	1097374	0	1097374	FCEV	0	36833.43	3	7
2039	2a	1	69936.89	342939.1	171469.5	171469.5	2869523	1434762	1434762	PHEV	34968.45	34968.45	3	8
2039	2a	1	247767.5	1229135	0	1229135	7798964	0	7798964	BEV	0	247767.5	3	3
2039	2a	1	43723.68	216906.2	0	216906.2	1359748	0	1359748	FCEV	0	43723.68	3	7
2039	2a	1	72872.8	361510.3	180755.1	180755.1	3113618	1556809	1556809	PHEV	36436.4	36436.4	3	8
2039	2a	1	252704.1	1268102	0	1268102	8282936	0	8282936	BEV	0	252704.1	3	3
2039	2a	1	48134.12	241543.3	0	241543.3	1560559	0	1560559	FCEV	0	48134.12	3	7
2039	2a	1	70567	354114.4	177057.2	177057.2	3132485	1566242	1566242	PHEV	35283.5	35283.5	3	8
2039	2a	1	260289.6	1321079	0	1321079	8882251	0	8882251	BEV	0	260289.6	3	3
2039	2a	1	53312.33	270582.4	0	270582.4	1801342	0	1801342	FCEV	0	53312.33	3	7
2039	2a	1	68839.44	349389.1	174694.5	174694.5	3174124	1587062	1587062	PHEV	34419.72	34419.72	3	8
2039	2a	1	268119.8	1376181	0	1376181	9521445	0	9521445	BEV	0	268119.8	3	3
2039	2a	1	58855.57	302088.6	0	302088.6	2071402	0	2071402	FCEV	0	58855.57	3	7
2039	2a	1	66970.87	343742	171871	171871	3205451	1602726	1602726	PHEV	33485.43	33485.43	3	8
2039	2a	1	243718.1	1264897	0	1264897	8998090	0	8998090	BEV	0	243718.1	3	3
2039	2a	1	57168.43	296704.2	0	296704.2	2093568	0	2093568	FCEV	0	57168.43	3	7
2039	2a	1	57311.71	297447.8	148723.9	148723.9	2842708	1421354	1421354	PHEV	28655.86	28655.86	3	8
2039	2a	1	6264.666	16721.9	16721.9	0	53900.36	53900.36	0	ICE	6264.666	0	4	1
2039	2a	1	5465.52	14901.9	14901.9	0	48400.59	48400.59	0	ICE	5465.52	0	4	1
2039	2a	1	6874.546	19137.5	19137.5	0	63487.17	63487.17	0	ICE	6874.546	0	4	1
2039	2a	1	7373.779	20949.72	20949.72	0	70161.45	70161.45	0	ICE	7373.779	0	4	1
2039	2a	1	11451.43	33190.83	33190.83	0	113339.4	113339.4	0	ICE	11451.43	0	4	1
2039	2a	1	12443.57	36779.33	36779.33	0	126854.3	126854.3	0	ICE	12443.57	0	4	1
2039	2a	1	15706.38	47323.02	47323.02	0	165143	165143	0	ICE	15706.38	0	4	1
2039	2a	1	19.50126	58.75691	58.75691	0	172.8045	172.8045	0	ICE	19.50126	0	4	2
2039	2a	1	17824.19	54725.07	54725.07	0	195091	195091	0	ICE	17824.19	0	4	1
2039	2a	1	18801.84	58803.88	58803.88	0	214466.8	214466.8	0	ICE	18801.84	0	4	1
2039	2a	1	19918.53	63437.54	63437.54	0	233838.6	233838.6	0	ICE	19918.53	0	4	1
2039	2a	1	32.36432	103.0755	103.0755	0	329.9277	329.9277	0	ICE	32.36432	0	4	2

2039	2a	1	18625.11	60385.23	60385.23	0	223094.2	223094.2	0	ICE	18625.11	0	4	1
2039	2a	1	18371.16	60614.36	60614.36	0	227510.9	227510.9	0	ICE	18371.16	0	4	1
2039	2a	1	18867.74	63333.73	63333.73	0	241864.5	241864.5	0	ICE	18867.74	0	4	1
2039	2a	1	14607.87	49871.42	49871.42	0	193051.3	193051.3	0	ICE	14607.87	0	4	1
2039	2a	1	6441.871	22361.67	22361.67	0	87629.59	87629.59	0	ICE	6441.871	0	4	1
2039	2a	1	9778.87	34505.62	34505.62	0	137256.7	137256.7	0	ICE	9778.87	0	4	1
2039	2a	1	15048.35	53961.58	53961.58	0	217534.2	217534.2	0	ICE	15048.35	0	4	1
2039	2a	1	432.4944	1550.873	1550.873	0	6050.354	6050.354	0	ICE	432.4944	0	4	2
2039	2a	1	16224.47	59108.5	59108.5	0	242231.5	242231.5	0	ICE	16224.47	0	4	1
2039	2a	1	19700.64	72901.44	72901.44	0	303117.9	303117.9	0	ICE	19700.64	0	4	1
2039	2a	1	423.6087	1567.547	1567.547	0	6411.832	6411.832	0	ICE	423.6087	0	4	2
2039	2a	1	34027.61	127867.3	127867.3	0	541868	541868	0	ICE	34027.61	0	4	1
2039	2a	1	1079.921	4058.074	4058.074	0	16785.71	16785.71	0	ICE	1079.921	0	4	2
2039	2a	1	41419.84	158018.3	158018.3	0	684649.5	684649.5	0	ICE	41419.84	0	4	1
2039	2a	1	49856.04	193059	193059	0	851695.6	851695.6	0	ICE	49856.04	0	4	1
2039	2a	1	49856.51	195917.2	195917.2	0	878306.9	878306.9	0	ICE	49856.51	0	4	1
2039	2a	1	1738.505	6831.663	6831.663	0	30650.73	30650.73	0	ICE	1738.505	0	4	2
2039	2a	1	417.1138	1639.099	983.4593	655.6395	6934.084	4160.45	2773.633	PHEV	250.2683	166.8455	4	8
2039	2a	1	58075.29	231541	231541	0	1055066	1055066	0	ICE	58075.29	0	4	1
2039	2a	1	2025.095	8073.871	8073.871	0	36818.33	36818.33	0	ICE	2025.095	0	4	2
2039	2a	1	1.01591	4.05034	0	4.05034	12.17927	0	12.17927	BEV	0	1.01591	4	3
2039	2a	1	0.020733	0.08266	0	0.08266	0.248557	0	0.248557	FCEV	0	0.020733	4	7
2039	2a	1	1243.194	4956.501	2973.9	1982.6	22103.68	13262.21	8841.473	PHEV	745.9161	497.2774	4	8
2039	2a	1	66475.83	268841.5	268841.5	0	1245933	1245933	0	ICE	66475.83	0	4	1
2039	2a	1	2339.906	9463.048	9463.048	0	43931.34	43931.34	0	ICE	2339.906	0	4	2
2039	2a	1	569.8615	2304.634	0	2304.634	7499.451	0	7499.451	BEV	0	569.8615	4	3
2039	2a	1	13.33009	53.90957	0	53.90957	167.3799	0	167.3799	FCEV	0	13.33009	4	7
2039	2a	1	1482.662	5996.183	3563.446	2432.737	29071.74	17276.92	11794.82	PHEV	881.1251	601.5373	4	8
2039	2a	1	75296.95	308829.7	308829.7	0	1456419	1456419	0	ICE	75296.95	0	4	1
2039	2a	1	2691.971	11041.09	11041.09	0	52241.28	52241.28	0	ICE	2691.971	0	4	2
2039	2a	1	1298.402	5325.384	0	5325.384	19626.99	0	19626.99	BEV	0	1298.402	4	3
2039	2a	1	34.26868	140.5527	0	140.5527	450.4955	0	450.4955	FCEV	0	34.26868	4	7
2039	2a	1	1748.618	7171.939	4221.198	2950.741	34710.34	20429.51	14280.82	PHEV	1029.187	719.4314	4	8
2039	2a	1	79323.69	329889.8	329889.8	0	1585534	1585534	0	ICE	79323.69	0	4	1
2039	2a	1	2886.039	12002.4	12002.4	0	57976.88	57976.88	0	ICE	2886.039	0	4	2
2039	2a	1	4197.886	17458.09	0	17458.09	65935.22	0	65935.22	BEV	0	4197.886	4	3
2039	2a	1	143.8992	598.445	0	598.445	1979.312	0	1979.312	FCEV	0	143.8992	4	7
2039	2a	1	5010.392	20837.12	12079.58	8757.543	109906.7	63714.5	46192.23	PHEV	2904.596	2105.796	4	8
2039	2a	1	83339.48	351365.1	351365.1	0	1724500	1724500	0	ICE	83339.48	0	4	1
2039	2a	1	3048.778	12853.86	12853.86	0	63446.92	63446.92	0	ICE	3048.778	0	4	2
2039	2a	1	8198.813	34566.77	0	34566.77	136279.9	0	136279.9	BEV	0	8198.813	4	3
2039	2a	1	346.7038	1461.728	0	1461.728	4986.933	0	4986.933	FCEV	0	346.7038	4	7
2039	2a	1	8683.225	36609.09	20898.56	15710.53	202511.1	115604.9	86906.2	PHEV	4956.881	3726.344	4	8
2039	2a	1	85461.2	365206.5	365206.5	0	1831768	1831768	0	ICE	85461.2	0	4	1
2039	2a	1	3146.075	13444.31	13444.31	0	67856.59	67856.59	0	ICE	3146.075	0	4	2
2039	2a	1	13328.14	56955.94	0	56955.94	234435.1	0	234435.1	BEV	0	13328.14	4	3
2039	2a	1	672.007	2871.728	0	2871.728	10101.26	0	10101.26	FCEV	0	672.007	4	7

2039	2a	1	12527.69	53535.32	30086.85	23448.47	307507.8	172819.4	134688.4	PHEV	7040.561	5487.128	4	8
2039	2a	1	85886.08	371942.6	371942.6	0	1908104	1908104	0	ICE	85886.08	0	4	1
2039	2a	1	3180.189	13772.28	13772.28	0	71136.85	71136.85	0	ICE	3180.189	0	4	2
2039	2a	1	19652.59	85108.51	0	85108.51	365312.2	0	365312.2	BEV	0	19652.59	4	3
2039	2a	1	1153.238	4994.268	0	4994.268	18122.45	0	18122.45	FCEV	0	1153.238	4	7
2039	2a	1	16380.47	70938.07	39238.89	31699.18	421986.6	233418.9	188567.7	PHEV	9060.738	7319.729	4	8
2039	2a	1	84908.7	372574.3	372574.3	0	1957157	1957157	0	ICE	84908.7	0	4	1
2039	2a	1	3160.972	13870.15	13870.15	0	73400.51	73400.51	0	ICE	3160.972	0	4	2
2039	2a	1	27291.15	119751.9	0	119751.9	535064.2	0	535064.2	BEV	0	27291.15	4	3
2039	2a	1	1830.504	8032.14	0	8032.14	31461.09	0	31461.09	FCEV	0	1830.504	4	7
2039	2a	1	20132.54	88340.39	48082.41	40257.98	543441.7	295787.6	247654.2	PHEV	10957.86	9174.688	4	8
2039	2a	1	83017.58	369032.2	369032.2	0	1985238	1985238	0	ICE	83017.58	0	4	1
2039	2a	1	3090.569	13738.29	13738.29	0	74446.3	74446.3	0	ICE	3090.569	0	4	2
2039	2a	1	36534.22	162403	0	162403	755450.2	0	755450.2	BEV	0	36534.22	4	3
2039	2a	1	2761.96	12277.55	0	12277.55	51949.87	0	51949.87	FCEV	0	2761.96	4	7
2039	2a	1	23779.37	105704.8	56597.36	49107.42	672828.9	360251.8	312577.1	PHEV	12732.16	11047.22	4	8
2039	2a	1	78939.07	355424.7	355424.7	0	1958911	1958911	0	ICE	78939.07	0	4	1
2039	2a	1	2938.735	13231.71	13231.71	0	73452.91	73452.91	0	ICE	2938.735	0	4	2
2039	2a	1	46925.71	211284	0	211284	1022319	0	1022319	BEV	0	46925.71	4	3
2039	2a	1	3954.087	17803.36	0	17803.36	80225.67	0	80225.67	FCEV	0	3954.087	4	7
2039	2a	1	26828.79	120797.1	63608.33	57188.82	795034.5	418642.5	376392	PHEV	14127.27	12701.51	4	8
2039	2a	1	74370.63	339116	339116	0	1915620	1915620	0	ICE	74370.63	0	4	1
2039	2a	1	2768.662	12624.57	12624.57	0	71824.8	71824.8	0	ICE	2768.662	0	4	2
2039	2a	1	59470.09	271172.3	0	271172.3	1364017	0	1364017	BEV	0	59470.09	4	3
2039	2a	1	5534.693	25237.15	0	25237.15	120123	0	120123	FCEV	0	5534.693	4	7
2039	2a	1	29685.24	135359.1	70077.32	65281.74	920840.9	476732.5	444108.4	PHEV	15368.47	14316.77	4	8
2039	2a	1	67804.89	313062	313062	0	1813266	1813266	0	ICE	67804.89	0	4	1
2039	2a	1	2524.233	11654.64	11654.64	0	67983.45	67983.45	0	ICE	2524.233	0	4	2
2039	2a	1	73284.21	338360.5	0	338360.5	1768784	0	1768784	BEV	0	73284.21	4	3
2039	2a	1	7476.097	34517.89	0	34517.89	172681.7	0	172681.7	FCEV	0	7476.097	4	7
2039	2a	1	31680.01	146269.8	74430.42	71839.36	1028251	523233	505018.3	PHEV	16120.6	15559.41	4	8
2039	2a	1	60326.34	281988.8	281988.8	0	1674772	1674772	0	ICE	60326.34	0	4	1
2039	2a	1	2245.822	10497.85	10497.85	0	62788.22	62788.22	0	ICE	2245.822	0	4	2
2039	2a	1	89478.59	418257.8	0	418257.8	2271343	0	2271343	BEV	0	89478.59	4	3
2039	2a	1	9942.065	46473.09	0	46473.09	243523.8	0	243523.8	FCEV	0	9942.065	4	7
2039	2a	1	33140.22	154910.3	77455.15	77455.15	1124378	562188.9	562188.9	PHEV	16570.11	16570.11	4	8
2039	2a	1	50351.11	238245.3	238245.3	0	1451567	1451567	0	ICE	50351.11	0	4	1
2039	2a	1	1874.465	8869.371	8869.371	0	54418.59	54418.59	0	ICE	1874.465	0	4	2
2039	2a	1	102378.6	484422.7	0	484422.7	2709296	0	2709296	BEV	0	102378.6	4	3
2039	2a	1	12653.53	59872.47	0	59872.47	325453.8	0	325453.8	FCEV	0	12653.53	4	7
2039	2a	1	36325.93	171882.7	85941.35	85941.35	1284705	642352.4	642352.4	PHEV	18162.97	18162.97	4	8
2039	2a	1	39604.64	189665.4	189665.4	0	1185390	1185390	0	ICE	39604.64	0	4	1
2039	2a	1	1474.397	7060.844	7060.844	0	44438.83	44438.83	0	ICE	1474.397	0	4	2
2039	2a	1	116839.4	559540.2	0	559540.2	3222365	0	3222365	BEV	0	116839.4	4	3
2039	2a	1	15932.64	76300.94	0	76300.94	429371	0	429371	FCEV	0	15932.64	4	7
2039	2a	1	39659.17	189926.6	94963.29	94963.29	1461533	730766.4	730766.4	PHEV	19829.59	19829.59	4	8
2039	2a	1	27423.35	132900.7	132900.7	0	852095.7	852095.7	0	ICE	27423.35	0	4	1

2039	2a	1	1020.913	4947.612	4947.612	0	31943.64	31943.64	0	ICE	1020.913	0	4	2
2039	2a	1	131184.4	635753.9	0	635753.9	3769776	0	3769776	BEV	0	131184.4	4	3
2039	2a	1	19602.27	94997.71	0	94997.71	552681.7	0	552681.7	FCEV	0	19602.27	4	7
2039	2a	1	42529.59	206109.4	103054.7	103054.7	1633022	816511.2	816511.2	PHEV	21264.79	21264.79	4	8
2039	2a	1	14292.81	70085.5	70085.5	0	460894.3	460894.3	0	ICE	14292.81	0	4	1
2039	2a	1	532.0911	2609.135	2609.135	0	17278.03	17278.03	0	ICE	532.0911	0	4	2
2039	2a	1	146977.6	720712	0	720712	4399101	0	4399101	BEV	0	146977.6	4	3
2039	2a	1	23926.59	117325.2	0	117325.2	704878.8	0	704878.8	FCEV	0	23926.59	4	7
2039	2a	1	45430.23	222769.4	111384.7	111384.7	1816828	908413.9	908413.9	PHEV	22715.11	22715.11	4	8
2039	2a	1	160877.3	798086.6	0	798086.6	5014148	0	5014148	BEV	0	160877.3	4	3
2039	2a	1	28390.11	140838.8	0	140838.8	873150.1	0	873150.1	FCEV	0	28390.11	4	7
2039	2a	1	47316.86	234731.3	117365.7	117365.7	1970701	985350.7	985350.7	PHEV	23658.43	23658.43	4	8
2039	2a	1	164931.4	827647.3	0	827647.3	5352118	0	5352118	BEV	0	164931.4	4	3
2039	2a	1	31415.51	157647.1	0	157647.1	1007267	0	1007267	FCEV	0	31415.51	4	7
2039	2a	1	46056.69	231118.4	115559.2	115559.2	1992040	996020	996020	PHEV	23028.34	23028.34	4	8
2039	2a	1	169988.9	862765	0	862765	5739551	0	5739551	BEV	0	169988.9	4	3
2039	2a	1	34817	176710.9	0	176710.9	1162859	0	1162859	FCEV	0	34817	4	7
2039	2a	1	44957.39	228177.6	114088.8	114088.8	2017019	1008509	1008509	PHEV	22478.7	22478.7	4	8
2039	2a	1	173637.6	891231.4	0	891231.4	6097703	0	6097703	BEV	0	173637.6	4	3
2039	2a	1	38115.57	195636.2	0	195636.2	1325408	0	1325408	FCEV	0	38115.57	4	7
2039	2a	1	43371.13	222611.4	111305.7	111305.7	2017287	1008643	1008643	PHEV	21685.57	21685.57	4	8
2039	2a	1	151111.2	784267	0	784267	5505566	0	5505566	BEV	0	151111.2	4	3
2039	2a	1	35445.83	183963.9	0	183963.9	1280028	0	1280028	FCEV	0	35445.83	4	7
2039	2a	1	35534.67	184424.9	92212.46	92212.46	1705393	852696.4	852696.4	PHEV	17767.33	17767.33	4	8
2039	2a	1	26.55884	73.93502	73.93502	0	126.9823	126.9823	0	ICE	26.55884	0	1	2
2039	2a	1	34.01616	100.5412	100.5412	0	212.4717	212.4717	0	ICE	34.01616	0	1	2
2039	2a	1	5.063982	15.25768	0	15.25768	39.2287	0	39.2287	BEV	0	5.063982	1	3
2039	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2039	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2039	2a	1	76.37207	234.4829	234.4829	0	524.3191	524.3191	0	ICE	76.37207	0	1	2
2039	2a	1	98.19847	307.1216	307.1216	0	721.2644	721.2644	0	ICE	98.19847	0	1	2
2039	2a	1	33.92722	108.0531	108.0531	0	276.0853	276.0853	0	ICE	33.92722	0	1	2
2039	2a	1	61.73066	200.1395	200.1395	0	515.4735	515.4735	0	ICE	61.73066	0	1	2
2039	2a	1	165.5	574.5001	574.5001	0	1702.407	1702.407	0	ICE	165.5	0	1	2
2039	2a	1	549.3607	2001.414	2001.414	0	6664.319	6664.319	0	ICE	549.3607	0	1	2
2039	2a	1	880.6961	3258.981	3258.981	0	11363.9	11363.9	0	ICE	880.6961	0	1	2
2039	2a	1	768.2421	2842.849	0	2842.849	10284	0	10284	BEV	0	768.2421	1	3
2039	2a	1	0.045135	0.16702	0	0.16702	0.604195	0	0.604195	FCEV	0	0.045135	1	7
2039	2a	1	802.9961	2971.455	1782.873	1188.582	9990.162	5994.097	3996.065	PHEV	481.7976	321.1984	1	8
2039	2a	1	1083.202	4070.401	0	4070.401	15244.17	0	15244.17	BEV	0	1083.202	1	3
2039	2a	1	0.151773	0.570324	0	0.570324	2.135935	0	2.135935	FCEV	0	0.151773	1	7
2039	2a	1	1367.624	5139.187	3083.512	2055.675	17947.17	10768.3	7178.867	PHEV	820.5741	547.0494	1	8
2039	2a	1	1196.914	4566.273	4566.273	0	17390.36	17390.36	0	ICE	1196.914	0	1	2
2039	2a	1	2924.135	11155.69	0	11155.69	43417.78	0	43417.78	BEV	0	2924.135	1	3
2039	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2039	2a	1	1390.505	5304.832	3182.899	2121.933	19294.79	11576.87	7717.915	PHEV	834.3029	556.202	1	8
2039	2a	1	3451.574	10992.75	10992.75	0	43667.45	43667.45	0	ICE	3451.574	0	2	1

2039	2a	1	7215.432	26287.05	26287.05	0	114889.8	114889.8	0	ICE	7215.432	0	2	1
2039	2a	1	11219.06	41515.67	41515.67	0	184018.7	184018.7	0	ICE	11219.06	0	2	1
2039	2a	1	14739.35	55386.78	55386.78	0	247585.4	247585.4	0	ICE	14739.35	0	2	1
2039	2a	1	4.927209	16.82154	16.82154	0	65.41181	65.41181	0	ICE	4.927209	0	3	2
2039	2a	1	162.766	592.9841	592.9841	0	2495.806	2495.806	0	ICE	162.766	0	3	2
2039	2a	1	130.6871	483.6023	483.6023	0	2038.37	2038.37	0	ICE	130.6871	0	3	2
2039	2a	1	600.843	2292.24	2292.24	0	10146.15	10146.15	0	ICE	600.843	0	3	2
2039	2a	1	665.718	2577.88	0	2577.88	7119.903	0	7119.903	BEV	0	665.718	3	3
2039	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2039	2a	1	60.58523	234.606	140.7636	93.84241	1024.116	614.4695	409.6463	PHEV	36.35114	24.23409	3	8
2039	2a	1	13.34055	38.66625	38.66625	0	104.5319	104.5319	0	ICE	13.34055	0	4	2
2039	2a	1	52.46459	170.0975	170.0975	0	580.2643	580.2643	0	ICE	52.46459	0	4	2
2039	2a	1	71.60181	236.2451	236.2451	0	820.6769	820.6769	0	ICE	71.60181	0	4	2
2039	2a	1	98.01577	329.0115	329.0115	0	1207.517	1207.517	0	ICE	98.01577	0	4	2
2039	2a	1	73.08485	249.5124	249.5124	0	933.1031	933.1031	0	ICE	73.08485	0	4	2
2039	2a	1	103.175	358.1513	358.1513	0	1361.268	1361.268	0	ICE	103.175	0	4	2
2039	2a	1	809.3994	2948.78	2948.78	0	11690.9	11690.9	0	ICE	809.3994	0	4	2
2039	2a	1	2366.369	9027.792	9027.792	0	38183.66	38183.66	0	ICE	2366.369	0	4	2
2039	2a	1	1674.972	6486.044	6486.044	0	28219.11	28219.11	0	ICE	1674.972	0	4	2
2039	2a	1	45.18802	130.973	130.973	0	252.9867	252.9867	0	ICE	45.18802	0	1	2
2039	2a	1	2.252197	7.301939	0	7.301939	20.60144	0	20.60144	BEV	0	2.252197	1	3
2039	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2039	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2039	2a	1	145.8684	531.4235	0	531.4235	1860.527	0	1860.527	BEV	0	145.8684	1	3
2039	2a	1	0.551256	2.008319	0	2.008319	7.031176	0	7.031176	FCEV	0	0.551256	1	7
2039	2a	1	306.6208	1117.072	670.2429	446.8286	3607.427	2164.456	1442.971	PHEV	183.9725	122.6483	1	8
2039	2a	1	2237.325	8663.662	0	8663.662	34909.67	0	34909.67	BEV	0	2237.325	1	3
2039	2a	1	68.11705	263.7717	0	263.7717	1062.851	0	1062.851	FCEV	0	68.11705	1	7
2039	2a	1	1608.936	6230.332	3738.199	2492.133	23613.69	14168.21	9445.476	PHEV	965.3617	643.5744	1	8
2039	2a	1	0.994531	2.654643	2.654643	0	7.42623	7.42623	0	ICE	0.994531	0	2	2
2039	2a	1	1.951316	5.543903	5.543903	0	19.40673	19.40673	0	ICE	1.951316	0	2	2
2039	2a	1	18.39527	59.64005	59.64005	0	222.1851	222.1851	0	ICE	18.39527	0	3	2
2039	2a	1	20.34706	67.13371	67.13371	0	259.9837	259.9837	0	ICE	20.34706	0	3	2
2039	2a	1	11.43261	32.48131	32.48131	0	86.06998	86.06998	0	ICE	11.43261	0	4	2
2039	2a	1	20.31286	63.52968	63.52968	0	207.4931	207.4931	0	ICE	20.31286	0	4	2
2039	2a	1	187.5132	661.6571	661.6571	0	2557.052	2557.052	0	ICE	187.5132	0	4	2
2039	2a	1	44.4565	118.6651	118.6651	0	184.7798	184.7798	0	ICE	44.4565	0	1	2
2039	2a	1	32.07435	87.45168	87.45168	0	145.6314	145.6314	0	ICE	32.07435	0	1	2
2039	2a	1	46.03976	130.804	130.804	0	252.7349	252.7349	0	ICE	46.03976	0	1	2
2039	2a	1	9.399565	28.8592	0	28.8592	75.86545	0	75.86545	BEV	0	9.399565	1	3
2039	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2039	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2039	2a	1	166.3524	596.5197	0	596.5197	2026.925	0	2026.925	BEV	0	166.3524	1	3
2039	2a	1	1.643535	5.89352	0	5.89352	20.0257	0	20.0257	FCEV	0	1.643535	1	7
2039	2a	1	46.24108	165.815	99.48898	66.32599	513.4946	308.0968	205.3979	PHEV	27.74465	18.49643	1	8
2039	2a	1	189.358	733.2567	733.2567	0	2850.697	2850.697	0	ICE	189.358	0	1	2
2039	2a	1	144.6406	543.5232	0	543.5232	2029.988	0	2029.988	BEV	0	144.6406	2	3

2039	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2039	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2039	2a	1	27.09886	72.33336	72.33336	0	203.3754	203.3754	0	ICE	27.09886	0	4	2
2039	2a	1	25.01756	68.21112	68.21112	0	186.2639	186.2639	0	ICE	25.01756	0	4	2
2039	2a	1	13.31717	45.46495	45.46495	0	126.3814	126.3814	0	ICE	13.31717	0	1	2
2039	2a	1	2.985611	9.337676	9.337676	0	31.60029	31.60029	0	ICE	2.985611	0	2	2
2039	2a	1	0.226571	0.656694	0.656694	0	1.629698	1.629698	0	ICE	0.226571	0	3	2
2039	2a	1	10.19337	35.96822	35.96822	0	143.6445	143.6445	0	ICE	10.19337	0	3	2
2039	2a	1	30.77656	115.6506	0	115.6506	300.7691	0	300.7691	BEV	0	30.77656	3	3
2039	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2039	2a	1	13.93466	52.36299	31.41779	20.94519	219.2238	131.5343	87.68953	PHEV	8.360799	5.573866	3	8
2039	2a	1	27.43571	76.37608	76.37608	0	219.3282	219.3282	0	ICE	27.43571	0	4	2
2039	2a	1	7.692646	23.6185	23.6185	0	77.89817	77.89817	0	ICE	7.692646	0	4	2
2039	2a	1	21.52014	77.16865	77.16865	0	322.202	322.202	0	ICE	21.52014	0	3	2
2039	2a	1	3.663887	10.82931	10.82931	0	34.35368	34.35368	0	ICE	3.663887	0	4	2
2039	2a	1	3.610082	11.08393	0	11.08393	19.74788	0	19.74788	BEV	0	3.610082	3	3
2039	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2039	2a	1	0	0	0	0	0	0	0	PHEV	0	0	3	8
2039	2a	1	17.02022	52.25668	0	52.25668	95.004	0	95.004	BEV	0	17.02022	4	3
2039	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2039	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2039	2a	1	8.696219	29.19077	29.19077	0	76.09595	76.09595	0	ICE	8.696219	0	1	2
2039	2a	1	25.79882	91.03347	0	91.03347	301.2217	0	301.2217	BEV	0	25.79882	1	3
2039	2a	1	2.61917	9.241977	0	9.241977	30.58088	0	30.58088	FCEV	0	2.61917	1	7
2039	2a	1	2.750128	9.704076	5.822446	3.88163	28.50783	17.1047	11.40313	PHEV	1.650077	1.100051	1	8
2039	2a	1	53.38502	194.4907	0	194.4907	675.6271	0	675.6271	BEV	0	53.38502	2	3
2039	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2039	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2039	2a	1	7.791855	27.04786	27.04786	0	108.775	108.775	0	ICE	7.791855	0	3	2
2039	2a	1	2.658193	8.770522	0	8.770522	25.62461	0	25.62461	BEV	0	2.658193	1	3
2039	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2039	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2039	2a	1	14.42106	49.23363	0	49.23363	149.0226	0	149.0226	BEV	0	14.42106	1	3
2039	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2039	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2039	2a	1	13.02711	45.22102	0	45.22102	146.823	0	146.823	BEV	0	13.02711	1	3
2039	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2039	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2039	2a	1	2.164928	5.90274	5.90274	0	21.87441	21.87441	0	ICE	2.164928	0	2	2
2039	2a	1	4.884771	16.9565	16.9565	0	63.99692	63.99692	0	ICE	4.884771	0	2	2
2039	2a	1	69.78311	258.2296	0	258.2296	928.2444	0	928.2444	BEV	0	69.78311	2	3
2039	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2039	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2039	2a	1	2.652783	8.904651	8.904651	0	35.36968	35.36968	0	ICE	2.652783	0	3	2
2039	2a	1	2.14058	6.694794	0	6.694794	17.96791	0	17.96791	BEV	0	2.14058	1	3
2039	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2039	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8

2039	2a	1	4.684933	15.72601	0	15.72601	47.21107	0	47.21107	BEV	0	4.684933	1	3
2039	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2039	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2039	2a	1	7.125125	24.32525	0	24.32525	74.81135	0	74.81135	BEV	0	7.125125	2	3
2039	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2039	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2039	2a	1	1.408339	5.13082	5.13082	0	20.41181	20.41181	0	ICE	1.408339	0	2	2
2039	2a	1	0.289553	0.95536	0	0.95536	2.170459	0	2.170459	BEV	0	0.289553	4	3
2039	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2039	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2039	2a	1	1.807487	5.445923	5.445923	0	16.55326	16.55326	0	ICE	1.807487	0	2	2
2039	2a	1	0.319974	1.000737	1.000737	0	3.966774	3.966774	0	ICE	0.319974	0	3	2
2039	2a	1	4.15571	14.42572	0	14.42572	33.41179	0	33.41179	BEV	0	4.15571	3	3
2039	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2039	2a	1	0	0	0	0	0	0	0	PHEV	0	0	3	8
2039	2a	1	2.6803	9.611233	0	9.611233	23.3333	0	23.3333	BEV	0	2.6803	3	3
2039	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2039	2a	1	1.855592	6.653931	3.992358	2.661572	26.17984	15.70791	10.47194	PHEV	1.113355	0.742237	3	8
2039	2a	1	0.450027	1.716871	0	1.716871	4.511348	0	4.511348	BEV	0	0.450027	4	3
2039	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2039	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2039	2a	1	11.28367	33.35104	0	33.35104	81.81317	0	81.81317	BEV	0	11.28367	2	3
2039	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2039	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2039	2a	1	4.033087	12.15161	0	12.15161	30.92582	0	30.92582	BEV	0	4.033087	2	3
2039	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2039	2a	1	4.033087	12.15161	0	12.15161	30.92582	0	30.92582	BEV	0	4.033087	2	3
2039	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2039	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2039	2a	1	3.432086	10.53743	10.53743	0	41.25814	41.25814	0	ICE	3.432086	0	2	2
2039	2a	1	1.714993	5.658498	0	5.658498	16.32185	0	16.32185	BEV	0	1.714993	2	3
2039	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2039	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2039	2a	1	2.964568	9.951226	9.951226	0	37.14439	37.14439	0	ICE	2.964568	0	2	2
2039	2a	1	0.943636	3.167521	0	3.167521	9.437367	0	9.437367	BEV	0	0.943636	2	3
2039	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2039	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2039	2a	1	3.557509	12.14537	12.14537	0	51.1005	51.1005	0	ICE	3.557509	0	2	2
2039	2a	1	2.872521	9.971381	0	9.971381	32.16676	0	32.16676	BEV	0	2.872521	2	3
2039	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2039	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2039	2a	1	2.975891	10.15972	0	10.15972	22.37109	0	22.37109	BEV	0	2.975891	3	3
2039	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2039	2a	1	0	0	0	0	0	0	0	PHEV	0	0	3	8
2039	2a	1	2.000995	7.404601	0	7.404601	18.74148	0	18.74148	BEV	0	2.000995	3	3
2039	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2039	2a	1	1.530172	5.662342	3.397405	2.264937	23.3399	14.00394	9.335961	PHEV	0.918103	0.612069	3	8
2039	2a	1	0.910813	2.692081	0	2.692081	4.854783	0	4.854783	BEV	0	0.910813	4	3
2039	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7

2039	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2039	2a	1	2.083196	6.515322	0	6.515322	12.12734	0	12.12734	BEV	0	2.083196	4	3
2039	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2039	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2039	2a	1	0.375414	1.217144	0	1.217144	2.415406	0	2.415406	BEV	0	0.375414	4	3
2039	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2039	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2039	2a	1	0.26572	0.861501	0.861501	0	2.952909	2.952909	0	ICE	0.26572	0	2	2
2039	2a	1	14.50164	44.52395	0	44.52395	112.5508	0	112.5508	BEV	0	14.50164	2	3
2039	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2039	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2039	2a	1	0.97487	3.104814	0	3.104814	8.381224	0	8.381224	BEV	0	0.97487	2	3
2039	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2039	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2039	2a	1	7.38176	21.39529	0	21.39529	51.57378	0	51.57378	BEV	0	7.38176	2	3
2039	2a	1	0.290555	0.808852	0.808852	0	2.643489	2.643489	0	ICE	0.290555	0	3	2
2039	2a	1	2.057114	5.96234	5.96234	0	18.39658	18.39658	0	ICE	2.057114	0	2	2
2039	2a	1	0.196834	0.604332	0.604332	0	1.862837	1.862837	0	ICE	0.196834	0	3	2
2039	2a	1	1.518409	4.052998	0	4.052998	9.281543	0	9.281543	BEV	0	1.518409	1	3
2039	2a	1	2.098451	6.923694	6.923694	0	28.28057	28.28057	0	ICE	2.098451	0	2	2
2039	2a	1	0.499058	1.47506	0	1.47506	2.801634	0	2.801634	BEV	0	0.499058	3	3
2039	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2039	2a	1	0	0	0	0	0	0	0	PHEV	0	0	3	8
2039	2a	1	0.381873	1.303719	0	1.303719	2.814958	0	2.814958	BEV	0	0.381873	4	3
2039	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2039	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2039	2a	1	1.937284	5.504038	0	5.504038	13.23598	0	13.23598	BEV	0	1.937284	1	3
2039	2a	1	1.327948	3.925002	0	3.925002	9.740237	0	9.740237	BEV	0	1.327948	1	3
2039	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2039	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2039	2a	1	2.068489	6.587827	0	6.587827	17.99366	0	17.99366	BEV	0	2.068489	1	3
2039	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2039	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2039	2a	1	2.390569	6.654913	6.654913	0	20.07116	20.07116	0	ICE	2.390569	0	2	2
2039	2a	1	2.287001	6.497621	0	6.497621	15.33646	0	15.33646	BEV	0	2.287001	2	3
2039	2a	1	0.359297	1.164893	0	1.164893	3.244093	0	3.244093	BEV	0	0.359297	2	3
2039	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2039	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2039	2a	1	2.256651	6.282111	0	6.282111	14.79394	0	14.79394	BEV	0	2.256651	1	3
2039	2a	1	2.183397	6.328359	0	6.328359	15.52029	0	15.52029	BEV	0	2.183397	1	3
2039	2a	1	0.28501	0.760761	0	0.760761	1.755245	0	1.755245	BEV	0	0.28501	2	3
2039	2a	1	1.757606	5.194939	5.194939	0	16.17956	16.17956	0	ICE	1.757606	0	2	2
2039	2a	1	1.154907	4.075195	4.075195	0	15.71812	15.71812	0	ICE	1.154907	0	2	2
2039	2a	1	2.071373	7.665035	7.665035	0	32.2693	32.2693	0	ICE	2.071373	0	2	2
2039	2a	1	2.008757	5.822182	0	5.822182	9.625317	0	9.625317	BEV	0	2.008757	3	3
2039	2a	1	0.245838	0.740704	0.740704	0	2.333424	2.333424	0	ICE	0.245838	0	3	2
2039	2a	1	0.157498	0.474537	0	0.474537	0.820478	0	0.820478	BEV	0	0.157498	3	3

2039	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2039	2a	1	0	0	0	0	0	0	0	PHEV	0	0	3	8
2039	2a	1	2.502333	8.829708	0	8.829708	20.34317	0	20.34317	BEV	0	2.502333	3	3
2039	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2039	2a	1	0	0	0	0	0	0	0	PHEV	0	0	3	8
2039	2a	1	6.020403	21.93335	0	21.93335	52.85253	0	52.85253	BEV	0	6.020403	3	3
2039	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2039	2a	1	1.543693	5.623936	3.374362	2.249574	25.402	15.2412	10.1608	PHEV	0.926216	0.617477	3	8
2039	2a	1	0.714529	1.90725	0	1.90725	2.992487	0	2.992487	BEV	0	0.714529	4	3
2039	2a	1	0.559777	2.007292	2.007292	0	7.929332	7.929332	0	ICE	0.559777	0	2	2
2039	2a	1	0.198728	0.598763	0	0.598763	1.096561	0	1.096561	BEV	0	0.198728	4	3
2039	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2039	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2039	2a	1	1.571421	4.284527	0	4.284527	10.06498	0	10.06498	BEV	0	1.571421	1	3
2039	2a	1	0	0	0	0	0	0	0	BEV	0	0	2	3
2039	2a	1	8.734327	33.32181	0	33.32181	128.9884	0	128.9884	FCEV	0	8.734327	2	7
2039	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2039	2a	1	0	0	0	0	0	0	0	BEV	0	0	2	3
2039	2a	1	10.13171	39.23333	0	39.23333	157.2075	0	157.2075	FCEV	0	10.13171	2	7
2039	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2039	2a	1	0.048091	0.153162	0.153162	0	0.613592	0.613592	0	ICE	0.048091	0	3	2
2039	2a	1	0	0	0	0	0	0	0	BEV	0	0	3	3
2039	2a	1	0.327854	1.250777	0	1.250777	3.423717	0	3.423717	FCEV	0	0.327854	3	7
2039	2a	1	4.699244	17.9278	10.75668	7.171121	84.51788	50.71073	33.80715	PHEV	2.819546	1.879697	3	8
2039	2a	1	0.365676	1.374118	1.374118	0	5.530731	5.530731	0	ICE	0.365676	0	2	2
2039	2a	1	0.135348	0.384537	0	0.384537	0.632841	0	0.632841	BEV	0	0.135348	3	3
2039	2a	1	0.322305	0.934167	0	0.934167	1.573861	0	1.573861	BEV	0	0.322305	4	3
2039	2a	1	0.140524	0.471701	0	0.471701	0.966881	0	0.966881	BEV	0	0.140524	3	3
2039	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2039	2a	1	0	0	0	0	0	0	0	PHEV	0	0	3	8
2039	2a	1	0.474213	1.673305	0	1.673305	5.077339	0	5.077339	BEV	0	0.474213	2	3
2039	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2039	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2039	2a	1	0.310101	0.845499	0	0.845499	1.902391	0	1.902391	BEV	0	0.310101	2	3
2039	2a	1	0.900987	2.508185	0	2.508185	5.675635	0	5.675635	BEV	0	0.900987	2	3
2039	2a	1	0.33566	0.953646	0	0.953646	1.522437	0	1.522437	BEV	0	0.33566	4	3
2039	2a	1	0.660507	2.557701	2.557701	0	11.83766	11.83766	0	ICE	0.660507	0	2	2
2039	2a	1	0.35714	1.28066	0	1.28066	4.402818	0	4.402818	BEV	0	0.35714	2	3
2039	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2039	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2039	2a	1	0.106647	0.284667	0	0.284667	0.428696	0	0.428696	BEV	0	0.106647	3	3
2039	2a	1	0.076722	0.248745	0	0.248745	0.458593	0	0.458593	BEV	0	0.076722	3	3
2039	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2039	2a	1	0	0	0	0	0	0	0	PHEV	0	0	3	8
2039	2a	1	0.651338	1.775891	0	1.775891	2.893694	0	2.893694	BEV	0	0.651338	4	3
2039	2a	1	0.161158	0.504032	0	0.504032	1.316218	0	1.316218	BEV	0	0.161158	2	3
2039	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7

2039	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2039	2a	1	0.079529	0.253288	0.253288	0	1.274288	1.274288	0	ICE	0.079529	0	2	2
2039	2a	1	0.352046	1.18172	0	1.18172	2.403692	0	2.403692	BEV	0	0.352046	4	3
2039	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2039	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2039	2a	1	0.068615	0.191011	0	0.191011	0.313733	0	0.313733	BEV	0	0.068615	3	3
2039	2a	1	0	0	0	0	0	0	0	BEV	0	0	4	3
2039	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2039	2a	1	0.57699	2.135128	1.281077	0.854051	9.74577	5.847462	3.898308	PHEV	0.346194	0.230796	4	8
2039	2a	1	0.101343	0.270508	0.270508	0	0.994475	0.994475	0	ICE	0.101343	0	3	2
2040	2a	1	11761.19	31393.45	31393.45	0	48127.63	48127.63	0	ICE	11761.19	0	1	1
2040	2a	1	13940.67	38009.67	38009.67	0	60516.62	60516.62	0	ICE	13940.67	0	1	1
2040	2a	1	14830.31	41284.92	41284.92	0	68792.26	68792.26	0	ICE	14830.31	0	1	1
2040	2a	1	15434.41	43850.87	43850.87	0	76578.35	76578.35	0	ICE	15434.41	0	1	1
2040	2a	1	18391.88	53307.03	53307.03	0	97825.93	97825.93	0	ICE	18391.88	0	1	1
2040	2a	1	18464.38	54574.97	54574.97	0	105004.6	105004.6	0	ICE	18464.38	0	1	1
2040	2a	1	33.94607	100.3341	100.3341	0	202.9195	202.9195	0	ICE	33.94607	0	1	2
2040	2a	1	18323.87	55209.47	55209.47	0	111739.7	111739.7	0	ICE	18323.87	0	1	1
2040	2a	1	19242.39	59079.34	59079.34	0	125586.1	125586.1	0	ICE	19242.39	0	1	1
2040	2a	1	18116.49	56660.4	56660.4	0	126311.3	126311.3	0	ICE	18116.49	0	1	1
2040	2a	1	21356.39	68016.9	68016.9	0	159525	159525	0	ICE	21356.39	0	1	1
2040	2a	1	22187.8	71935.95	71935.95	0	176416.8	176416.8	0	ICE	22187.8	0	1	1
2040	2a	1	58.51532	189.7149	189.7149	0	476.1486	476.1486	0	ICE	58.51532	0	1	2
2040	2a	1	24397.04	80496.31	80496.31	0	206111.8	206111.8	0	ICE	24397.04	0	1	1
2040	2a	1	21323.77	71577.92	71577.92	0	191616.6	191616.6	0	ICE	21323.77	0	1	1
2040	2a	1	17989.01	61414.66	61414.66	0	172044.9	172044.9	0	ICE	17989.01	0	1	1
2040	2a	1	22749.22	78969.35	78969.35	0	230853.7	230853.7	0	ICE	22749.22	0	1	1
2040	2a	1	262.8213	912.3316	912.3316	0	2669.068	2669.068	0	ICE	262.8213	0	1	2
2040	2a	1	24849.34	87683.12	87683.12	0	268264.7	268264.7	0	ICE	24849.34	0	1	1
2040	2a	1	389.5992	1374.736	1374.736	0	4142.418	4142.418	0	ICE	389.5992	0	1	2
2040	2a	1	39978.25	143357.2	143357.2	0	458839.4	458839.4	0	ICE	39978.25	0	1	1
2040	2a	1	54438.57	198329	198329	0	661879.6	661879.6	0	ICE	54438.57	0	1	1
2040	2a	1	62224.9	230260.7	230260.7	0	802487.2	802487.2	0	ICE	62224.9	0	1	1
2040	2a	1	1182.639	4376.31	4376.31	0	15126.71	15126.71	0	ICE	1182.639	0	1	2
2040	2a	1	83697.81	314515.5	314515.5	0	1142727	1142727	0	ICE	83697.81	0	1	1
2040	2a	1	93521.02	356786.4	356786.4	0	1347565	1347565	0	ICE	93521.02	0	1	1
2040	2a	1	119346.3	462148.1	462148.1	0	1816990	1816990	0	ICE	119346.3	0	1	1
2040	2a	1	1460.484	5655.478	5655.478	0	22224.36	22224.36	0	ICE	1460.484	0	1	2
2040	2a	1	6941.333	26879.13	0	26879.13	106585.9	0	106585.9	BEV	0	6941.333	1	3
2040	2a	1	141.6598	548.5537	0	548.5537	2219.285	0	2219.285	FCEV	0	141.6598	1	7
2040	2a	1	6261.317	24245.89	13092.78	11153.11	94880.77	51235.62	43645.16	PHEV	3381.111	2880.206	1	8
2040	2a	1	149213.8	586353.5	586353.5	0	2393424	2393424	0	ICE	149213.8	0	1	1
2040	2a	1	1825.984	7175.424	7175.424	0	29277.26	29277.26	0	ICE	1825.984	0	1	2
2040	2a	1	10606.66	41680.16	0	41680.16	170916.4	0	170916.4	BEV	0	10606.66	1	3
2040	2a	1	216.4625	850.6154	0	850.6154	3556.63	0	3556.63	FCEV	0	216.4625	1	7
2040	2a	1	6855.035	26937.68	14546.35	12391.33	109672.5	59223.17	50449.37	PHEV	3701.719	3153.316	1	8
2040	2a	1	183238.1	730554	730554	0	3093238	3093238	0	ICE	183238.1	0	1	1

2040	2a	1	2232.82	8902.052	8902.052	0	37681.46	37681.46	0	ICE	2232.82	0	1	2
2040	2a	1	15972.87	63682.41	0	63682.41	270761.7	0	270761.7	BEV	0	15972.87	1	3
2040	2a	1	373.6344	1489.647	0	1489.647	6436.578	0	6436.578	FCEV	0	373.6344	1	7
2040	2a	1	7833.666	31232.12	16553.03	14679.1	131832.4	69871.15	61961.21	PHEV	4151.843	3681.823	1	8
2040	2a	1	222060	898055.2	898055.2	0	3940646	3940646	0	ICE	222060	0	1	1
2040	2a	1	2730.404	11042.3	11042.3	0	48439.5	48439.5	0	ICE	2730.404	0	1	2
2040	2a	1	22998.42	93010.21	0	93010.21	409250.8	0	409250.8	BEV	0	22998.42	1	3
2040	2a	1	606.9964	2454.815	0	2454.815	10955.69	0	10955.69	FCEV	0	606.9964	1	7
2040	2a	1	8769.424	35465.3	18441.96	17023.35	155503.4	80861.74	74641.61	PHEV	4560.1	4209.323	1	8
2040	2a	1	250743.2	1028421	1028421	0	4673390	4673390	0	ICE	250743.2	0	1	1
2040	2a	1	3097.961	12706.26	12706.26	0	57725.2	57725.2	0	ICE	3097.961	0	1	2
2040	2a	1	40511.18	166156.2	0	166156.2	756853	0	756853	BEV	0	40511.18	1	3
2040	2a	1	1388.681	5695.662	0	5695.662	26254.09	0	26254.09	FCEV	0	1388.681	1	7
2040	2a	1	15401.79	63170.29	31458.81	31711.49	286403.5	142628.9	143774.5	PHEV	7670.092	7731.699	1	8
2040	2a	1	275580.1	1146077	1146077	0	5388495	5388495	0	ICE	275580.1	0	1	1
2040	2a	1	3429.358	14261.94	14261.94	0	67037.78	67037.78	0	ICE	3429.358	0	1	2
2040	2a	1	62820.26	261255.6	0	261255.6	1230808	0	1230808	BEV	0	62820.26	1	3
2040	2a	1	2656.485	11047.74	0	11047.74	52571.23	0	52571.23	FCEV	0	2656.485	1	7
2040	2a	1	23813.45	99034.9	47140.61	51894.29	464502.1	221103	243399.1	PHEV	11335.2	12478.25	1	8
2040	2a	1	296691.5	1250872	1250872	0	6079722	6079722	0	ICE	296691.5	0	1	1
2040	2a	1	3723.055	15696.66	15696.66	0	76272.64	76272.64	0	ICE	3723.055	0	1	2
2040	2a	1	90442.44	381311.6	0	381311.6	1856346	0	1856346	BEV	0	90442.44	1	3
2040	2a	1	4560.123	19225.8	0	19225.8	94286.95	0	94286.95	FCEV	0	4560.123	1	7
2040	2a	1	34184.09	144122.5	65431.63	78690.9	699004.8	317348.2	381656.6	PHEV	15519.58	18664.51	1	8
2040	2a	1	311134.4	1329589	1329589	0	6676290	6676290	0	ICE	311134.4	0	1	1
2040	2a	1	3935.552	16818.03	16818.03	0	84428.39	84428.39	0	ICE	3935.552	0	1	2
2040	2a	1	122914.2	525256.5	0	525256.5	2640952	0	2640952	BEV	0	122914.2	1	3
2040	2a	1	7212.749	30822.67	0	30822.67	155789	0	155789	FCEV	0	7212.749	1	7
2040	2a	1	46321.85	197949.9	85514.38	112435.6	992223.7	428640.6	563583	PHEV	20011.04	26310.81	1	8
2040	2a	1	321167.5	1390864	1390864	0	7212336	7212336	0	ICE	321167.5	0	1	1
2040	2a	1	4093.167	17726.07	17726.07	0	91897.58	91897.58	0	ICE	4093.167	0	1	2
2040	2a	1	161416	699036.2	0	699036.2	3628750	0	3628750	BEV	0	161416	1	3
2040	2a	1	10826.68	46886.57	0	46886.57	244340.6	0	244340.6	FCEV	0	10826.68	1	7
2040	2a	1	60654.85	262674.9	107696.7	154978.2	1360118	557648.2	802469.3	PHEV	24868.49	35786.36	1	8
2040	2a	1	323731.5	1420514	1420514	0	7596608	7596608	0	ICE	323731.5	0	1	1
2040	2a	1	4125.843	18103.95	18103.95	0	96797.19	96797.19	0	ICE	4125.843	0	1	2
2040	2a	1	204974.4	899415.4	0	899415.4	4813831	0	4813831	BEV	0	204974.4	1	3
2040	2a	1	15495.91	67995.14	0	67995.14	364855.2	0	364855.2	FCEV	0	15495.91	1	7
2040	2a	1	76799.16	336990.1	130752.2	206238	1800068	698426.4	1101642	PHEV	29798.08	47001.09	1	8
2040	2a	1	319381.4	1419724	1419724	0	7825513	7825513	0	ICE	319381.4	0	1	1
2040	2a	1	4070.402	18093.87	18093.87	0	99717.04	99717.04	0	ICE	4070.402	0	1	2
2040	2a	1	254048.5	1129304	0	1129304	6228450	0	6228450	BEV	0	254048.5	1	3
2040	2a	1	21406.82	95158.23	0	95158.23	525727.6	0	525727.6	FCEV	0	21406.82	1	7
2040	2a	1	94910.5	421899	154415	267484	2323570	850426.7	1473143	PHEV	34737.24	60173.26	1	8
2040	2a	1	305540.3	1375701	1375701	0	7811456	7811456	0	ICE	305540.3	0	1	1
2040	2a	1	3894.001	17532.82	17532.82	0	99540.67	99540.67	0	ICE	3894.001	0	1	2
2040	2a	1	306456.7	1379827	0	1379827	7838087	0	7838087	BEV	0	306456.7	1	3

2040	2a	1	28520.95	128416.1	0	128416.1	730316.7	0	730316.7	FCEV	0	28520.95	1	7
2040	2a	1	114159	514003.1	176817.1	337186	2917087	1003478	1913609	PHEV	39270.69	74888.29	1	8
2040	2a	1	285665.8	1302582	1302582	0	7615280	7615280	0	ICE	285665.8	0	1	1
2040	2a	1	3640.707	16600.93	16600.93	0	97043.42	97043.42	0	ICE	3640.707	0	1	2
2040	2a	1	365214.2	1665307	0	1665307	9738092	0	9738092	BEV	0	365214.2	1	3
2040	2a	1	37257.36	169886.5	0	169886.5	994213.1	0	994213.1	FCEV	0	37257.36	1	7
2040	2a	1	135654.7	618559.7	199176.2	419383.5	3615658	1164242	2451416	PHEV	43680.82	91973.9	1	8
2040	2a	1	255024.9	1177476	1177476	0	7084182	7084182	0	ICE	255024.9	0	1	1
2040	2a	1	3250.204	15006.52	15006.52	0	90277.83	90277.83	0	ICE	3250.204	0	1	2
2040	2a	1	423996.1	1957632	0	1957632	11778741	0	11778741	BEV	0	423996.1	1	3
2040	2a	1	47110.68	217514.7	0	217514.7	1309437	0	1309437	FCEV	0	47110.68	1	7
2040	2a	1	157035.6	725049	217514.7	507534.3	4362853	1308856	3053997	PHEV	47110.68	109924.9	1	8
2040	2a	1	218504	1021373	1021373	0	6320963	6320963	0	ICE	218504	0	1	1
2040	2a	1	2784.755	13017.03	13017.03	0	80553.44	80553.44	0	ICE	2784.755	0	1	2
2040	2a	1	492458.8	2301945	0	2301945	14244869	0	14244869	BEV	0	492458.8	1	3
2040	2a	1	60865.7	284510	0	284510	1761179	0	1761179	FCEV	0	60865.7	1	7
2040	2a	1	174734.1	816775.2	245032.6	571742.6	5057316	1517195	3540121	PHEV	52420.22	122313.8	1	8
2040	2a	1	173004.2	818600.7	818600.7	0	5209445	5209445	0	ICE	173004.2	0	1	1
2040	2a	1	2204.879	10432.78	10432.78	0	66390.42	66390.42	0	ICE	2204.879	0	1	2
2040	2a	1	560379.7	2651537	0	2651537	16869449	0	16869449	BEV	0	560379.7	1	3
2040	2a	1	76415.41	361573.3	0	361573.3	2300770	0	2300770	FCEV	0	76415.41	1	7
2040	2a	1	190211.5	900020	270006	630014	5733379	1720014	4013365	PHEV	57063.45	133148.1	1	8
2040	2a	1	122064.6	584563.6	584563.6	0	3823734	3823734	0	ICE	122064.6	0	1	1
2040	2a	1	1555.671	7450.06	7450.06	0	48732.05	48732.05	0	ICE	1555.671	0	1	2
2040	2a	1	635890.4	3045260	0	3045260	19910625	0	19910625	BEV	0	635890.4	1	3
2040	2a	1	95018.1	455038.8	0	455038.8	2975316	0	2975316	FCEV	0	95018.1	1	7
2040	2a	1	206153.7	987263.8	296179.1	691084.6	6468080	1940424	4527656	PHEV	61846.1	144307.6	1	8
2040	2a	1	63671.92	308570.7	308570.7	0	2074109	2074109	0	ICE	63671.92	0	1	1
2040	2a	1	811.4764	3932.626	3932.626	0	26434.59	26434.59	0	ICE	811.4764	0	1	2
2040	2a	1	707984.5	3431077	0	3431077	23048034	0	23048034	BEV	0	707984.5	1	3
2040	2a	1	115253.3	558547.4	0	558547.4	3751896	0	3751896	FCEV	0	115253.3	1	7
2040	2a	1	218835.4	1060533	318159.9	742373.2	7144395	2143318	5001076	PHEV	65650.61	153184.8	1	8
2040	2a	1	788269	3865317	0	3865317	26659343	0	26659343	BEV	0	788269	1	3
2040	2a	1	139106.3	682114.7	0	682114.7	4704219	0	4704219	FCEV	0	139106.3	1	7
2040	2a	1	231843.8	1136858	341057.3	795800.5	7868805	2360641	5508163	PHEV	69553.15	162290.7	1	8
2040	2a	1	816371.5	4049889	0	4049889	28668308	0	28668308	BEV	0	816371.5	1	3
2040	2a	1	155499.3	771407.3	0	771407.3	5459959	0	5459959	FCEV	0	155499.3	1	7
2040	2a	1	227969.7	1130921	339276.4	791644.9	8039649	2411895	5627754	PHEV	68390.91	159578.8	1	8
2040	2a	1	839339.4	4211914	0	4211914	30578955	0	30578955	BEV	0	839339.4	1	3
2040	2a	1	171912.9	862681.2	0	862681.2	6262245	0	6262245	FCEV	0	171912.9	1	7
2040	2a	1	221982.2	1113936	334180.7	779754.9	8125740	2437722	5688018	PHEV	66594.66	155387.5	1	8
2040	2a	1	864203.6	4386196	0	4386196	32605352	0	32605352	BEV	0	864203.6	1	3
2040	2a	1	189703.2	962823.6	0	962823.6	7156339	0	7156339	FCEV	0	189703.2	1	7
2040	2a	1	215860.4	1095582	328674.7	766907.7	8181474	2454442	5727032	PHEV	64758.13	151102.3	1	8
2040	2a	1	874426.9	4488180	0	4488180	34055590	0	34055590	BEV	0	874426.9	1	3
2040	2a	1	205112.5	1052783	0	1052783	7987737	0	7987737	FCEV	0	205112.5	1	7
2040	2a	1	205626.6	1055421	316626.4	738795	8037074	2411122	5625952	PHEV	61687.97	143938.6	1	8

2040	2a	1	788343.9	4091505	0	4091505	31607170	0	31607170	BEV	0	788343.9	1	3
2040	2a	1	197086	1022876	0	1022876	7901774	0	7901774	FCEV	0	197086	1	7
2040	2a	1	173899.4	902537.8	270761.3	631776.4	6985950	2095785	4890165	PHEV	52169.81	121729.6	1	8
2040	2a	1	2558.244	6828.566	6828.566	0	25571.48	25571.48	0	ICE	2558.244	0	2	1
2040	2a	1	3309.326	9022.976	9022.976	0	34020.35	34020.35	0	ICE	3309.326	0	2	1
2040	2a	1	4203.367	11701.42	11701.42	0	44757.75	44757.75	0	ICE	4203.367	0	2	1
2040	2a	1	3832.458	10888.44	10888.44	0	41991.92	41991.92	0	ICE	3832.458	0	2	1
2040	2a	1	4139.602	11998.22	11998.22	0	46869.7	46869.7	0	ICE	4139.602	0	2	1
2040	2a	1	4657.24	13765.36	13765.36	0	54202.23	54202.23	0	ICE	4657.24	0	2	1
2040	2a	1	4880.127	14703.73	14703.73	0	57167.81	57167.81	0	ICE	4880.127	0	2	1
2040	2a	1	3516.006	10795.09	10795.09	0	41874.58	41874.58	0	ICE	3516.006	0	2	1
2040	2a	1	2016.948	6423.677	6423.677	0	25192.58	25192.58	0	ICE	2016.948	0	2	1
2040	2a	1	3218.705	10435.49	10435.49	0	41574.63	41574.63	0	ICE	3218.705	0	2	1
2040	2a	1	4693.137	15484.68	15484.68	0	62873.95	62873.95	0	ICE	4693.137	0	2	1
2040	2a	1	8113.596	27235.07	27235.07	0	111901.6	111901.6	0	ICE	8113.596	0	2	1
2040	2a	1	6084.413	20772.25	20772.25	0	86228.84	86228.84	0	ICE	6084.413	0	2	1
2040	2a	1	3305.789	11475.38	11475.38	0	47875.51	47875.51	0	ICE	3305.789	0	2	1
2040	2a	1	3084.109	10882.56	10882.56	0	45990.87	45990.87	0	ICE	3084.109	0	2	1
2040	2a	1	29818.9	112052	112052	0	500477.5	500477.5	0	ICE	29818.9	0	2	1
2040	2a	1	29368.99	112043.9	112043.9	0	506713.2	506713.2	0	ICE	29368.99	0	2	1
2040	2a	1	28370.18	109858.7	109858.7	0	503802.2	503802.2	0	ICE	28370.18	0	2	1
2040	2a	1	3.843254	14.88235	14.88235	0	68.2633	68.2633	0	ICE	3.843254	0	2	2
2040	2a	1	0.955913	3.70161	0	3.70161	14.83828	0	14.83828	BEV	0	0.955913	2	3
2040	2a	1	0.019508	0.075543	0	0.075543	0.302822	0	0.302822	FCEV	0	0.019508	2	7
2040	2a	1	8.29108	32.1058	19.26348	12.84232	147.2826	88.36957	58.91305	PHEV	4.974648	3.316432	2	8
2040	2a	1	32852.91	129099.4	129099.4	0	598372.5	598372.5	0	ICE	32852.91	0	2	1
2040	2a	1	4.45052	17.48885	17.48885	0	81.07455	81.07455	0	ICE	4.45052	0	2	2
2040	2a	1	36634.15	146057	146057	0	685697.6	685697.6	0	ICE	36634.15	0	2	1
2040	2a	1	4.997381	19.92411	19.92411	0	93.56964	93.56964	0	ICE	4.997381	0	2	2
2040	2a	1	487.1031	1942.036	0	1942.036	8805.136	0	8805.136	BEV	0	487.1031	2	3
2040	2a	1	11.39423	45.42775	0	45.42775	194.5765	0	194.5765	FCEV	0	11.39423	2	7
2040	2a	1	374.061	1491.347	886.2865	605.061	7118.459	4230.399	2888.061	PHEV	222.2991	151.7619	2	8
2040	2a	1	40372.92	163276.2	163276.2	0	777465.2	777465.2	0	ICE	40372.92	0	2	1
2040	2a	1	5.571388	22.53181	22.53181	0	107.3464	107.3464	0	ICE	5.571388	0	2	2
2040	2a	1	1096.609	4434.906	0	4434.906	20484.17	0	20484.17	BEV	0	1096.609	2	3
2040	2a	1	28.94276	117.0503	0	117.0503	517.934	0	517.934	FCEV	0	28.94276	2	7
2040	2a	1	844.5882	3415.683	2010.374	1405.31	16509.43	9716.976	6792.449	PHEV	497.1005	347.4877	2	8
2040	2a	1	42135.71	172819.2	172819.2	0	836318.7	836318.7	0	ICE	42135.71	0	2	1
2040	2a	1	5.891067	24.16215	24.16215	0	117.004	117.004	0	ICE	5.891067	0	2	2
2040	2a	1	2969.66	12180.03	0	12180.03	57477.8	0	57477.8	BEV	0	2969.66	2	3
2040	2a	1	101.7968	417.5188	0	417.5188	1908.495	0	1908.495	FCEV	0	101.7968	2	7
2040	2a	1	2141.692	8784.129	5092.285	3691.844	43436.21	25180.59	18255.62	PHEV	1241.57	900.1226	2	8
2040	2a	1	43122.76	179338.1	179338.1	0	883250.1	883250.1	0	ICE	43122.76	0	2	1
2040	2a	1	6.053776	25.17632	25.17632	0	124.066	124.066	0	ICE	6.053776	0	2	2
2040	2a	1	5278.596	21952.52	0	21952.52	106126.9	0	106126.9	BEV	0	5278.596	2	3
2040	2a	1	223.2164	928.3078	0	928.3078	4380.959	0	4380.959	FCEV	0	223.2164	2	7
2040	2a	1	3561.466	14811.35	8455.167	6356.187	74447.34	42498.79	31948.54	PHEV	2033.088	1528.378	2	8

2040	2a	1	43622.11	183913.9	183913.9	0	923071.1	923071.1	0	ICE	43622.11	0	2	1
2040	2a	1	6.152718	25.94029	25.94029	0	130.2549	130.2549	0	ICE	6.152718	0	2	2
2040	2a	1	8071.813	34031.33	0	34031.33	168653.4	0	168653.4	BEV	0	8071.813	2	3
2040	2a	1	406.9822	1715.865	0	1715.865	8380.234	0	8380.234	FCEV	0	406.9822	2	7
2040	2a	1	5089.148	21456.2	12058.39	9397.817	109439.4	61504.95	47934.46	PHEV	2860.101	2229.047	2	8
2040	2a	1	43317.52	185111.4	185111.4	0	947902.1	947902.1	0	ICE	43317.52	0	2	1
2040	2a	1	6.136505	26.2235	26.2235	0	134.3263	134.3263	0	ICE	6.136505	0	2	2
2040	2a	1	11315.28	48354.26	0	48354.26	245668.2	0	245668.2	BEV	0	11315.28	2	3
2040	2a	1	663.994	2837.485	0	2837.485	14315.1	0	14315.1	FCEV	0	663.994	2	7
2040	2a	1	6657.292	28449.01	15736.37	12712.64	147326.2	81492.46	65833.79	PHEV	3682.434	2974.859	2	8
2040	2a	1	42684.04	184849.6	184849.6	0	967129.9	967129.9	0	ICE	42684.04	0	2	1
2040	2a	1	6.071263	26.29252	26.29252	0	137.5861	137.5861	0	ICE	6.071263	0	2	2
2040	2a	1	15149.67	65607.93	0	65607.93	341889.8	0	341889.8	BEV	0	15149.67	2	3
2040	2a	1	1016.137	4400.532	0	4400.532	22869.98	0	22869.98	FCEV	0	1016.137	2	7
2040	2a	1	8303.64	35960.16	19572.6	16387.56	189353.4	103062.3	86291.05	PHEV	4519.553	3784.088	2	8
2040	2a	1	41210.64	180829.8	180829.8	0	966602.9	966602.9	0	ICE	41210.64	0	2	1
2040	2a	1	5.861691	25.72075	25.72075	0	137.49	137.49	0	ICE	5.861691	0	2	2
2040	2a	1	19448.16	85337.34	0	85337.34	455711.3	0	455711.3	BEV	0	19448.16	2	3
2040	2a	1	1470.266	6451.44	0	6451.44	34449.02	0	34449.02	FCEV	0	1470.266	2	7
2040	2a	1	9910.963	43488.71	23285.1	20203.61	232904.5	124703.7	108200.8	PHEV	5306.613	4604.35	2	8
2040	2a	1	39297.77	174687.6	174687.6	0	954719.1	954719.1	0	ICE	39297.77	0	2	1
2040	2a	1	5.589609	24.8471	24.8471	0	135.7816	135.7816	0	ICE	5.589609	0	2	2
2040	2a	1	24397.41	108452.1	0	108452.1	593496.2	0	593496.2	BEV	0	24397.41	2	3
2040	2a	1	2055.792	9138.466	0	9138.466	50070.98	0	50070.98	FCEV	0	2055.792	2	7
2040	2a	1	11532.9	51266.38	26995.41	24270.97	279528	147191.4	132336.5	PHEV	6072.893	5460.002	2	8
2040	2a	1	36644.28	164991.6	164991.6	0	922655.6	922655.6	0	ICE	36644.28	0	2	1
2040	2a	1	5.212183	23.46796	23.46796	0	131.2069	131.2069	0	ICE	5.212183	0	2	2
2040	2a	1	29873.62	134506.6	0	134506.6	754412.7	0	754412.7	BEV	0	29873.62	2	3
2040	2a	1	2780.243	12518.1	0	12518.1	70338.9	0	70338.9	FCEV	0	2780.243	2	7
2040	2a	1	13063.12	58816.95	30450.38	28366.58	326882.1	169231.5	157650.6	PHEV	6762.963	6300.156	2	8
2040	2a	1	33529.94	152890.2	152890.2	0	875217.5	875217.5	0	ICE	33529.94	0	2	1
2040	2a	1	4.769209	21.74668	21.74668	0	124.4491	124.4491	0	ICE	4.769209	0	2	2
2040	2a	1	36136.07	164773.6	0	164773.6	947145.6	0	947145.6	BEV	0	36136.07	2	3
2040	2a	1	3686.425	16809.4	0	16809.4	96821.76	0	96821.76	FCEV	0	3686.425	2	7
2040	2a	1	14570.12	66436.98	33806.93	32630.05	376669.7	191671.1	184998.7	PHEV	7414.11	7156.01	2	8
2040	2a	1	29510.95	136255	136255	0	798939.6	798939.6	0	ICE	29510.95	0	2	1
2040	2a	1	4.197558	19.38055	19.38055	0	113.5944	113.5944	0	ICE	4.197558	0	2	2
2040	2a	1	42761.65	197434.8	0	197434.8	1163284	0	1163284	BEV	0	42761.65	2	3
2040	2a	1	4751.295	21937.2	0	21937.2	129521.2	0	129521.2	FCEV	0	4751.295	2	7
2040	2a	1	15837.65	73124.01	36562	36562	423416.7	211708.3	211708.3	PHEV	7918.824	7918.824	2	8
2040	2a	1	24938.99	116574.6	116574.6	0	700295.3	700295.3	0	ICE	24938.99	0	2	1
2040	2a	1	3.547255	16.58125	16.58125	0	99.56277	99.56277	0	ICE	3.547255	0	2	2
2040	2a	1	49482.52	231300.6	0	231300.6	1397052	0	1397052	BEV	0	49482.52	2	3
2040	2a	1	6115.817	28587.71	0	28587.71	173001.9	0	173001.9	FCEV	0	6115.817	2	7
2040	2a	1	17557.37	82069.99	41034.99	41034.99	485648.3	242824.2	242824.2	PHEV	8778.684	8778.684	2	8
2040	2a	1	19444.09	92003.23	92003.23	0	566552.2	566552.2	0	ICE	19444.09	0	2	1
2040	2a	1	2.765676	13.08629	13.08629	0	80.54455	80.54455	0	ICE	2.765676	0	2	2

2040	2a	1	55923.47	264611.9	0	264611.9	1638843	0	1638843	BEV	0	55923.47	2	3
2040	2a	1	7625.927	36083.45	0	36083.45	223864.3	0	223864.3	FCEV	0	7625.927	2	7
2040	2a	1	18982.29	89818.1	44909.05	44909.05	543795.6	271897.8	271897.8	PHEV	9491.143	9491.143	2	8
2040	2a	1	13507.52	64687.09	64687.09	0	408364.5	408364.5	0	ICE	13507.52	0	2	1
2040	2a	1	1.921273	9.200917	9.200917	0	58.05365	58.05365	0	ICE	1.921273	0	2	2
2040	2a	1	62943.52	301434.6	0	301434.6	1914117	0	1914117	BEV	0	62943.52	2	3
2040	2a	1	9405.354	45041.96	0	45041.96	286452.9	0	286452.9	FCEV	0	9405.354	2	7
2040	2a	1	20406.09	97724.17	48862.08	48862.08	605638	302819	302819	PHEV	10203.05	10203.05	2	8
2040	2a	1	7028.237	34060.66	34060.66	0	220470	220470	0	ICE	7028.237	0	2	1
2040	2a	1	0.999677	4.844697	4.844697	0	31.3416	31.3416	0	ICE	0.999677	0	2	2
2040	2a	1	70354.48	340956.1	0	340956.1	2219859	0	2219859	BEV	0	70354.48	2	3
2040	2a	1	11453.06	55504.48	0	55504.48	361851.2	0	361851.2	FCEV	0	11453.06	2	7
2040	2a	1	21746.31	105388.3	52694.13	52694.13	668944.5	334472.2	334472.2	PHEV	10873.15	10873.15	2	8
2040	2a	1	78160.56	383264.2	0	383264.2	2558378	0	2558378	BEV	0	78160.56	2	3
2040	2a	1	13793.04	67634.86	0	67634.86	451993.5	0	451993.5	FCEV	0	13793.04	2	7
2040	2a	1	22988.4	112724.8	56362.38	56362.38	733200.8	366600.4	366600.4	PHEV	11494.2	11494.2	2	8
2040	2a	1	80135.75	397540.6	0	397540.6	2720844	0	2720844	BEV	0	80135.75	2	3
2040	2a	1	15263.95	75722.03	0	75722.03	518791.6	0	518791.6	FCEV	0	15263.95	2	7
2040	2a	1	22377.71	111012.2	55506.11	55506.11	740488.7	370244.4	370244.4	PHEV	11188.85	11188.85	2	8
2040	2a	1	81444.16	408697.4	0	408697.4	2867951	0	2867951	BEV	0	81444.16	2	3
2040	2a	1	16681.33	83709.11	0	83709.11	587954	0	587954	FCEV	0	16681.33	2	7
2040	2a	1	21539.74	108089.2	54044.62	54044.62	739714.9	369857.4	369857.4	PHEV	10769.87	10769.87	2	8
2040	2a	1	82770.92	420097.2	0	420097.2	3021920	0	3021920	BEV	0	82770.92	2	3
2040	2a	1	18169.23	92216.45	0	92216.45	663891.1	0	663891.1	FCEV	0	18169.23	2	7
2040	2a	1	20674.49	104931.7	52465.85	52465.85	736796.7	368398.4	368398.4	PHEV	10337.24	10337.24	2	8
2040	2a	1	84162.89	431983.7	0	431983.7	3184075	0	3184075	BEV	0	84162.89	2	3
2040	2a	1	19741.91	101329.5	0	101329.5	747420.1	0	747420.1	FCEV	0	19741.91	2	7
2040	2a	1	19791.39	101583.5	50791.74	50791.74	731672	365836	365836	PHEV	9895.696	9895.696	2	8
2040	2a	1	77021.14	399739.7	0	399739.7	3017496	0	3017496	BEV	0	77021.14	2	3
2040	2a	1	19255.28	99934.93	0	99934.93	754852.7	0	754852.7	FCEV	0	19255.28	2	7
2040	2a	1	16989.96	88177.88	44088.94	44088.94	651130.4	325565.2	325565.2	PHEV	8494.978	8494.978	2	8
2040	2a	1	6014.34	16053.72	16053.72	0	58093.26	58093.26	0	ICE	6014.34	0	3	1
2040	2a	1	8977.778	24478.18	24478.18	0	88959.85	88959.85	0	ICE	8977.778	0	3	1
2040	2a	1	9829.778	27364.33	27364.33	0	100129.6	100129.6	0	ICE	9829.778	0	3	1
2040	2a	1	10772.49	30605.84	30605.84	0	112806.4	112806.4	0	ICE	10772.49	0	3	1
2040	2a	1	13709.6	39735.9	39735.9	0	147790.9	147790.9	0	ICE	13709.6	0	3	1
2040	2a	1	12781.49	37778.11	37778.11	0	140913.8	140913.8	0	ICE	12781.49	0	3	1
2040	2a	1	11795.06	35538.27	35538.27	0	134489.9	134489.9	0	ICE	11795.06	0	3	1
2040	2a	1	13445.21	41280.42	41280.42	0	157648.9	157648.9	0	ICE	13445.21	0	3	1
2040	2a	1	15952.42	49892.16	49892.16	0	192457.9	192457.9	0	ICE	15952.42	0	3	1
2040	2a	1	17895.88	56995.69	56995.69	0	221234.3	221234.3	0	ICE	17895.88	0	3	1
2040	2a	1	16378.31	53100.77	53100.77	0	207335.7	207335.7	0	ICE	16378.31	0	3	1
2040	2a	1	16750.18	55266.06	55266.06	0	218071.8	218071.8	0	ICE	16750.18	0	3	1
2040	2a	1	13132.58	44082.39	44082.39	0	176220	176220	0	ICE	13132.58	0	3	1
2040	2a	1	8244.815	28147.88	28147.88	0	113865.3	113865.3	0	ICE	8244.815	0	3	1
2040	2a	1	15041.71	52214.3	52214.3	0	213921.5	213921.5	0	ICE	15041.71	0	3	1
2040	2a	1	21384.63	75457.58	75457.58	0	312236.7	312236.7	0	ICE	21384.63	0	3	1

2040	2a	1	22020.09	78961.41	78961.41	0	331233	331233	0	ICE	22020.09	0	3	1
2040	2a	1	32130.62	117057.3	117057.3	0	494768.8	494768.8	0	ICE	32130.62	0	3	1
2040	2a	1	32350.78	119712.8	119712.8	0	515576.8	515576.8	0	ICE	32350.78	0	3	1
2040	2a	1	344.0291	1273.066	1273.066	0	5354.71	5354.71	0	ICE	344.0291	0	3	2
2040	2a	1	41609.2	156357	156357	0	684361	684361	0	ICE	41609.2	0	3	1
2040	2a	1	44727.66	170637.8	170637.8	0	756617.8	756617.8	0	ICE	44727.66	0	3	1
2040	2a	1	332.3134	1267.789	1267.789	0	5601.336	5601.336	0	ICE	332.3134	0	3	2
2040	2a	1	54921.21	212673.1	212673.1	0	955134.3	955134.3	0	ICE	54921.21	0	3	1
2040	2a	1	561.3561	2173.756	2173.756	0	9799.029	9799.029	0	ICE	561.3561	0	3	2
2040	2a	1	64677.19	254156.8	254156.8	0	1158221	1158221	0	ICE	64677.19	0	3	1
2040	2a	1	661.0731	2597.766	2597.766	0	11881.23	11881.23	0	ICE	661.0731	0	3	2
2040	2a	1	223.1453	876.8764	526.1258	350.7506	4018.721	2411.233	1607.489	PHEV	133.8872	89.25813	3	8
2040	2a	1	75333.03	300346	300346	0	1395235	1395235	0	ICE	75333.03	0	3	1
2040	2a	1	768.0468	3062.133	3062.133	0	14266.52	14266.52	0	ICE	768.0468	0	3	2
2040	2a	1	888.4582	3542.203	0	3542.203	11995.23	0	11995.23	BEV	0	888.4582	3	3
2040	2a	1	20.78265	82.85855	0	82.85855	247.023	0	247.023	FCEV	0	20.78265	3	7
2040	2a	1	771.6785	3076.613	1828.387	1248.226	14325.17	8513.244	5811.926	PHEV	458.5975	313.081	3	8
2040	2a	1	88797.88	359116.4	359116.4	0	1695175	1695175	0	ICE	88797.88	0	3	1
2040	2a	1	907.3839	3669.642	3669.642	0	17375.16	17375.16	0	ICE	907.3839	0	3	2
2040	2a	1	2128.043	8606.233	0	8606.233	35678.4	0	35678.4	BEV	0	2128.043	3	3
2040	2a	1	56.16537	227.144	0	227.144	698.9846	0	698.9846	FCEV	0	56.16537	3	7
2040	2a	1	1535.769	6210.957	3655.592	2555.365	29407.88	17308.64	12099.24	PHEV	903.9097	631.8592	3	8
2040	2a	1	99988.64	410102.4	410102.4	0	1968577	1968577	0	ICE	99988.64	0	3	1
2040	2a	1	1037.184	4253.999	4253.999	0	20514.86	20514.86	0	ICE	1037.184	0	3	2
2040	2a	1	6829.063	28009.33	0	28009.33	113359.3	0	113359.3	BEV	0	6829.063	3	3
2040	2a	1	234.0932	960.1308	0	960.1308	3048.921	0	3048.921	FCEV	0	234.0932	3	7
2040	2a	1	4641.648	19037.67	11036.41	8001.262	103435.8	59963.18	43472.57	PHEV	2690.83	1950.818	3	8
2040	2a	1	109404.8	454990.6	454990.6	0	2224444	2224444	0	ICE	109404.8	0	3	1
2040	2a	1	1140.198	4741.832	4741.832	0	23304.41	23304.41	0	ICE	1140.198	0	3	2
2040	2a	1	13257.02	55133.01	0	55133.01	227333.1	0	227333.1	BEV	0	13257.02	3	3
2040	2a	1	560.6005	2331.414	0	2331.414	7637.786	0	7637.786	FCEV	0	560.6005	3	7
2040	2a	1	8478.747	35261.24	20129.13	15132.11	202995.3	115881.3	87113.97	PHEV	4840.153	3638.594	3	8
2040	2a	1	115844.3	488407.5	488407.5	0	2434262	2434262	0	ICE	115844.3	0	3	1
2040	2a	1	1213.833	5117.604	5117.604	0	25653.39	25653.39	0	ICE	1213.833	0	3	2
2040	2a	1	21393.07	90194.7	0	90194.7	383348.7	0	383348.7	BEV	0	21393.07	3	3
2040	2a	1	1078.642	4547.632	0	4547.632	15475.35	0	15475.35	FCEV	0	1078.642	3	7
2040	2a	1	12860.64	54221.38	30472.41	23748.96	323053.5	181556	141497.4	PHEV	7227.682	5632.962	3	8
2040	2a	1	120228	513777.6	513777.6	0	2612649	2612649	0	ICE	120228	0	3	1
2040	2a	1	1266.09	5410.46	5410.46	0	27684.83	27684.83	0	ICE	1266.09	0	3	2
2040	2a	1	31453.84	134413.6	0	134413.6	588770.3	0	588770.3	BEV	0	31453.84	3	3
2040	2a	1	1845.749	7887.548	0	7887.548	29410.19	0	29410.19	FCEV	0	1845.749	3	7
2040	2a	1	17750.39	75853.82	41958	33895.82	464672.6	257030.3	207642.3	PHEV	9818.503	7931.89	3	8
2040	2a	1	123472.7	534717.2	534717.2	0	2777587	2777587	0	ICE	123472.7	0	3	1
2040	2a	1	1306.296	5657.112	5657.112	0	29583.33	29583.33	0	ICE	1306.296	0	3	2
2040	2a	1	43953.46	190347	0	190347	860119.2	0	860119.2	BEV	0	43953.46	3	3
2040	2a	1	2948.098	12767.18	0	12767.18	50916.8	0	50916.8	FCEV	0	2948.098	3	7
2040	2a	1	23249.63	100686	54801.96	45884.06	633547.2	344830.7	288716.5	PHEV	12654.44	10595.19	3	8

2040	2a	1	123373.3	541354.6	541354.6	0	2873836	2873836	0	ICE	123373.3	0	3	1
2040	2a	1	1305.244	5727.333	5727.333	0	30604.83	30604.83	0	ICE	1305.244	0	3	2
2040	2a	1	58410.84	256303.3	0	256303.3	1195517	0	1195517	BEV	0	58410.84	3	3
2040	2a	1	4415.816	19376.34	0	19376.34	82688.23	0	82688.23	FCEV	0	4415.816	3	7
2040	2a	1	28909.5	126853.1	67920.79	58932.34	820868	439516.2	381351.8	PHEV	15478.97	13430.53	3	8
2040	2a	1	120682.6	536461.8	536461.8	0	2912429	2912429	0	ICE	120682.6	0	3	1
2040	2a	1	1276.777	5675.57	5675.57	0	31012.66	31012.66	0	ICE	1276.777	0	3	2
2040	2a	1	75139.88	334014.1	0	334014.1	1608186	0	1608186	BEV	0	75139.88	3	3
2040	2a	1	6331.489	28144.93	0	28144.93	126816.8	0	126816.8	FCEV	0	6331.489	3	7
2040	2a	1	34725.92	154364.7	81284.03	73080.65	1026770	540667.6	486102.1	PHEV	18285.68	16440.24	3	8
2040	2a	1	114217	514264.3	514264.3	0	2857063	2857063	0	ICE	114217	0	3	1
2040	2a	1	1208.374	5440.728	5440.728	0	30420.45	30420.45	0	ICE	1208.374	0	3	2
2040	2a	1	93313.93	420147.9	0	420147.9	2088065	0	2088065	BEV	0	93313.93	3	3
2040	2a	1	8684.432	39101.83	0	39101.83	184645.4	0	184645.4	FCEV	0	8684.432	3	7
2040	2a	1	40173.25	180880.9	93644.61	87236.26	1236737	640276.2	596460.4	PHEV	20798.27	19374.99	3	8
2040	2a	1	106048.2	483559.7	483559.7	0	2750549	2750549	0	ICE	106048.2	0	3	1
2040	2a	1	1121.951	5115.884	5115.884	0	29284.22	29284.22	0	ICE	1121.951	0	3	2
2040	2a	1	114427.3	521766.8	0	521766.8	2676509	0	2676509	BEV	0	114427.3	3	3
2040	2a	1	11673.32	53228.1	0	53228.1	262218.5	0	262218.5	FCEV	0	11673.32	3	7
2040	2a	1	45765.18	208680.5	106188.6	102491.9	1466894	746439.5	720454.5	PHEV	23287.94	22477.24	3	8
2040	2a	1	93970.07	433869.2	433869.2	0	2527972	2527972	0	ICE	93970.07	0	3	1
2040	2a	1	994.1689	4590.177	4590.177	0	26912.9	26912.9	0	ICE	994.1689	0	3	2
2040	2a	1	136176.3	628739.6	0	628739.6	3329056	0	3329056	BEV	0	136176.3	3	3
2040	2a	1	15130.7	69859.95	0	69859.95	357997.2	0	357997.2	FCEV	0	15130.7	3	7
2040	2a	1	50435.66	232866.5	116433.3	116433.3	1683403	841701.7	841701.7	PHEV	25217.83	25217.83	3	8
2040	2a	1	79698.11	372540	372540	0	2223950	2223950	0	ICE	79698.11	0	3	1
2040	2a	1	843.1768	3941.337	3941.337	0	23675.11	23675.11	0	ICE	843.1768	0	3	2
2040	2a	1	158286.6	739893.5	0	739893.5	4032632	0	4032632	BEV	0	158286.6	3	3
2040	2a	1	19563.52	91447.51	0	91447.51	485613.2	0	485613.2	FCEV	0	19563.52	3	7
2040	2a	1	56163.21	262528.8	131264.4	131264.4	1949889	974944.4	974944.4	PHEV	28081.61	28081.61	3	8
2040	2a	1	62228.31	294444.4	294444.4	0	1801808	1801808	0	ICE	62228.31	0	3	1
2040	2a	1	658.3527	3115.114	3115.114	0	19180.51	19180.51	0	ICE	658.3527	0	3	2
2040	2a	1	179283.4	848311.5	0	848311.5	4760161	0	4760161	BEV	0	179283.4	3	3
2040	2a	1	24447.73	115678.8	0	115678.8	635570.8	0	635570.8	FCEV	0	24447.73	3	7
2040	2a	1	60854.74	287945.2	143972.6	143972.6	2198809	1099404	1099404	PHEV	30427.37	30427.37	3	8
2040	2a	1	42980.99	205834.7	205834.7	0	1291334	1291334	0	ICE	42980.99	0	3	1
2040	2a	1	454.7231	2177.655	2177.655	0	13746.09	13746.09	0	ICE	454.7231	0	3	2
2040	2a	1	200757.9	961423.7	0	961423.7	5553928	0	5553928	BEV	0	200757.9	3	3
2040	2a	1	29998.31	143661	0	143661	815642.1	0	815642.1	FCEV	0	29998.31	3	7
2040	2a	1	65085.1	311690.6	155845.3	155845.3	2447639	1223819	1223819	PHEV	32542.55	32542.55	3	8
2040	2a	1	22067.13	106943.1	106943.1	0	688025.1	688025.1	0	ICE	22067.13	0	3	1
2040	2a	1	233.4622	1131.418	1131.418	0	7323.825	7323.825	0	ICE	233.4622	0	3	2
2040	2a	1	221538.8	1073634	0	1073634	6385593	0	6385593	BEV	0	221538.8	3	3
2040	2a	1	36064.45	174777.7	0	174777.7	1024646	0	1024646	FCEV	0	36064.45	3	7
2040	2a	1	68476.8	331856.4	165928.2	165928.2	2680961	1340481	1340481	PHEV	34238.4	34238.4	3	8
2040	2a	1	243980.1	1196369	0	1196369	7325297	0	7325297	BEV	0	243980.1	3	3
2040	2a	1	43055.31	211123.9	0	211123.9	1277158	0	1277158	FCEV	0	43055.31	3	7

2040	2a	1	71758.86	351873.1	175936.6	175936.6	2924717	1462359	1462359	PHEV	35879.43	35879.43	3	8
2040	2a	1	249923.5	1239831	0	1239831	7816561	0	7816561	BEV	0	249923.5	3	3
2040	2a	1	47604.48	236158.2	0	236158.2	1472699	0	1472699	FCEV	0	47604.48	3	7
2040	2a	1	69790.51	346219.6	173109.8	173109.8	2955317	1477658	1477658	PHEV	34895.26	34895.26	3	8
2040	2a	1	254733.9	1278288	0	1278288	8296198	0	8296198	BEV	0	254733.9	3	3
2040	2a	1	52174.42	261818	0	261818	1682512	0	1682512	FCEV	0	52174.42	3	7
2040	2a	1	67370.13	338072.1	169036	169036	2963000	1481500	1481500	PHEV	33685.06	33685.06	3	8
2040	2a	1	262185	1330699	0	1330699	8890063	0	8890063	BEV	0	262185	3	3
2040	2a	1	57552.8	292104.7	0	292104.7	1934075	0	1934075	FCEV	0	57552.8	3	7
2040	2a	1	65488.47	332381.5	166190.7	166190.7	2990744	1495372	1495372	PHEV	32744.23	32744.23	3	8
2040	2a	1	269891	1385272	0	1385272	9523599	0	9523599	BEV	0	269891	3	3
2040	2a	1	63307.77	324940.4	0	324940.4	2215857	0	2215857	FCEV	0	63307.77	3	7
2040	2a	1	63466.44	325754.8	162877.4	162877.4	3007395	1503697	1503697	PHEV	31733.22	31733.22	3	8
2040	2a	1	245131.5	1272232	0	1272232	8993003	0	8993003	BEV	0	245131.5	3	3
2040	2a	1	61282.87	318058.1	0	318058.1	2231771	0	2231771	FCEV	0	61282.87	3	7
2040	2a	1	54073.12	280639.5	140319.8	140319.8	2653902	1326951	1326951	PHEV	27036.56	27036.56	3	8
2040	2a	1	5461.009	14576.74	14576.74	0	46486.91	46486.91	0	ICE	5461.009	0	4	1
2040	2a	1	6868.519	18727.22	18727.22	0	60972.35	60972.35	0	ICE	6868.519	0	4	1
2040	2a	1	7367.13	20508.76	20508.76	0	67352.11	67352.11	0	ICE	7367.13	0	4	1
2040	2a	1	11438.18	32497.12	32497.12	0	108762.1	108762.1	0	ICE	11438.18	0	4	1
2040	2a	1	12348.64	35791.3	35791.3	0	120894.2	120894.2	0	ICE	12348.64	0	4	1
2040	2a	1	15142.07	44755.27	44755.27	0	152650.5	152650.5	0	ICE	15142.07	0	4	1
2040	2a	1	19.09027	56.42491	56.42491	0	160.4176	160.4176	0	ICE	19.09027	0	4	2
2040	2a	1	17421.15	52489.57	52489.57	0	182413.6	182413.6	0	ICE	17421.15	0	4	1
2040	2a	1	17861.23	54838.79	54838.79	0	195223.8	195223.8	0	ICE	17861.23	0	4	1
2040	2a	1	17421.15	52489.57	52489.57	0	182413.6	182413.6	0	ICE	17421.15	0	4	1
2040	2a	1	17861.23	54838.79	54838.79	0	195223.8	195223.8	0	ICE	17861.23	0	4	1
2040	2a	1	18888.68	59075.47	59075.47	0	212296.6	212296.6	0	ICE	18888.68	0	4	1
2040	2a	1	31.15268	97.43186	97.43186	0	301.0777	301.0777	0	ICE	31.15268	0	4	2
2040	2a	1	17361.79	55294.71	55294.71	0	198995	198995	0	ICE	17361.79	0	4	1
2040	2a	1	16813.79	54512.67	54512.67	0	199190.2	199190.2	0	ICE	16813.79	0	4	1
2040	2a	1	17028.65	56184.85	56184.85	0	208689.6	208689.6	0	ICE	17028.65	0	4	1
2040	2a	1	13077.23	43896.61	43896.61	0	165591.2	165591.2	0	ICE	13077.23	0	4	1
2040	2a	1	5707.475	19485.38	19485.38	0	74266.26	74266.26	0	ICE	5707.475	0	4	1
2040	2a	1	8642.285	29999.96	29999.96	0	115960.6	115960.6	0	ICE	8642.285	0	4	1
2040	2a	1	13232.2	46691.02	46691.02	0	183453.9	183453.9	0	ICE	13232.2	0	4	1
2040	2a	1	380.9593	1344.249	1344.249	0	5098.874	5098.874	0	ICE	380.9593	0	4	2
2040	2a	1	14268.33	51164.5	51164.5	0	203919.8	203919.8	0	ICE	14268.33	0	4	1
2040	2a	1	17218.07	62728.36	62728.36	0	253676.3	253676.3	0	ICE	17218.07	0	4	1
2040	2a	1	371.1334	1352.102	1352.102	0	5375.757	5375.757	0	ICE	371.1334	0	4	2
2040	2a	1	29063.35	107547.8	107547.8	0	444031.5	444031.5	0	ICE	29063.35	0	4	1
2040	2a	1	925.3307	3424.149	3424.149	0	13773.81	13773.81	0	ICE	925.3307	0	4	2
2040	2a	1	35440.66	133177.2	133177.2	0	561893.6	561893.6	0	ICE	35440.66	0	4	1
2040	2a	1	42927.33	163769.5	163769.5	0	704926.3	704926.3	0	ICE	42927.33	0	4	1
2040	2a	1	43226.78	167388.4	167388.4	0	731640	731640	0	ICE	43226.78	0	4	1
2040	2a	1	1507.325	5836.859	5836.859	0	25533.08	25533.08	0	ICE	1507.325	0	4	2
2040	2a	1	361.6476	1400.419	840.2512	560.1675	5764.821	3458.893	2305.929	PHEV	216.9885	144.659	4	8
2040	2a	1	50653.36	199048.5	199048.5	0	883236.1	883236.1	0	ICE	50653.36	0	4	1
2040	2a	1	1766.291	6940.852	6940.852	0	30822.76	30822.76	0	ICE	1766.291	0	4	2

2040	2a	1	0.886078	3.48195	0	3.48195	10.03025	0	10.03025	BEV	0	0.886078	4	3
2040	2a	1	0.018083	0.07106	0	0.07106	0.204699	0	0.204699	FCEV	0	0.018083	4	7
2040	2a	1	1084.315	4260.947	2556.568	1704.379	18491.13	11094.68	7396.453	PHEV	650.5892	433.7261	4	8
2040	2a	1	58730.57	234153.5	234153.5	0	1055190	1055190	0	ICE	58730.57	0	4	1
2040	2a	1	2067.278	8242.051	8242.051	0	37207.63	37207.63	0	ICE	2067.278	0	4	2
2040	2a	1	503.4656	2007.272	0	2007.272	6268.693	0	6268.693	BEV	0	503.4656	4	3
2040	2a	1	11.77697	46.95373	0	46.95373	139.7228	0	139.7228	FCEV	0	11.77697	4	7
2040	2a	1	1309.914	5222.509	3103.662	2118.846	24656.92	14653.26	10003.67	PHEV	778.4631	531.4508	4	8
2040	2a	1	66963.63	270814.3	270814.3	0	1240220	1240220	0	ICE	66963.63	0	4	1
2040	2a	1	2394.043	9681.989	9681.989	0	44490.27	44490.27	0	ICE	2394.043	0	4	2
2040	2a	1	1154.705	4669.856	0	4669.856	16577.34	0	16577.34	BEV	0	1154.705	4	3
2040	2a	1	30.47607	123.2513	0	123.2513	378.7026	0	378.7026	FCEV	0	30.47607	4	7
2040	2a	1	1555.094	6289.109	3701.59	2587.519	29587.3	17414.24	12173.06	PHEV	915.2836	639.8099	4	8
2040	2a	1	71255.28	292252.8	292252.8	0	1362194	1362194	0	ICE	71255.28	0	4	1
2040	2a	1	2592.485	10633.05	10633.05	0	49816.31	49816.31	0	ICE	2592.485	0	4	2
2040	2a	1	3770.898	15466.3	0	15466.3	56214.14	0	56214.14	BEV	0	3770.898	4	3
2040	2a	1	129.2625	530.1687	0	530.1687	1681.668	0	1681.668	FCEV	0	129.2625	4	7
2040	2a	1	4500.76	18459.82	10701.42	7758.399	94686.09	54890.88	39795.21	PHEV	2609.155	1891.605	4	8
2040	2a	1	74223.47	308679.1	308679.1	0	1467621	1467621	0	ICE	74223.47	0	4	1
2040	2a	1	2715.29	11292.29	11292.29	0	54002.68	54002.68	0	ICE	2715.29	0	4	2
2040	2a	1	7301.993	30367.38	0	30367.38	115245.7	0	115245.7	BEV	0	7301.993	4	3
2040	2a	1	308.7799	1284.148	0	1284.148	4203.224	0	4203.224	FCEV	0	308.7799	4	7
2040	2a	1	7733.418	32161.59	18359.67	13801.91	172882.6	98691.25	74191.32	PHEV	4414.677	3318.741	4	8
2040	2a	1	77346.78	326099.4	326099.4	0	1583443	1583443	0	ICE	77346.78	0	4	1
2040	2a	1	2847.36	12004.67	12004.67	0	58664.86	58664.86	0	ICE	2847.36	0	4	2
2040	2a	1	12062.65	50856.98	0	50856.98	201594.2	0	201594.2	BEV	0	12062.65	4	3
2040	2a	1	608.2009	2564.217	0	2564.217	8657.71	0	8657.71	FCEV	0	608.2009	4	7
2040	2a	1	11338.2	47802.65	26865.09	20937.56	266668.6	149867.7	116800.8	PHEV	6372.069	4966.132	4	8
2040	2a	1	78702.98	336326.2	336326.2	0	1669023	1669023	0	ICE	78702.98	0	4	1
2040	2a	1	2914.213	12453.48	12453.48	0	62231.01	62231.01	0	ICE	2914.213	0	4	2
2040	2a	1	18008.95	76958.71	0	76958.71	318203.8	0	318203.8	BEV	0	18008.95	4	3
2040	2a	1	1056.786	4516.028	0	4516.028	15736.56	0	15736.56	FCEV	0	1056.786	4	7
2040	2a	1	15010.48	64145.2	35481.46	28663.74	370245.4	204798.6	165446.8	PHEV	8302.942	6707.542	4	8
2040	2a	1	78680.2	340736.4	340736.4	0	1730318	1730318	0	ICE	78680.2	0	4	1
2040	2a	1	2929.098	12684.9	12684.9	0	64900.53	64900.53	0	ICE	2929.098	0	4	2
2040	2a	1	25289.2	109518.7	0	109518.7	471484.2	0	471484.2	BEV	0	25289.2	4	3
2040	2a	1	1696.227	7345.764	0	7345.764	27664.94	0	27664.94	FCEV	0	1696.227	4	7
2040	2a	1	18655.71	80791.37	43973.59	36817.78	481828.6	262252.4	219576.2	PHEV	10154.04	8501.676	4	8
2040	2a	1	77127.45	338430.6	338430.6	0	1759256	1759256	0	ICE	77127.45	0	4	1
2040	2a	1	2871.292	12599.06	12599.06	0	65978.42	65978.42	0	ICE	2871.292	0	4	2
2040	2a	1	33942.1	148935.9	0	148935.9	667708.7	0	667708.7	BEV	0	33942.1	4	3
2040	2a	1	2565.998	11259.45	0	11259.45	45856.73	0	45856.73	FCEV	0	2565.998	4	7
2040	2a	1	22092.22	96939.32	51904.08	45035.24	597834.6	320097.7	277736.9	PHEV	11828.8	10263.41	4	8
2040	2a	1	74287.32	330224.2	330224.2	0	1757979	1757979	0	ICE	74287.32	0	4	1
2040	2a	1	2765.56	12293.55	12293.55	0	65924.04	65924.04	0	ICE	2765.56	0	4	2
2040	2a	1	44160.46	196303.4	0	196303.4	915615	0	915615	BEV	0	44160.46	4	3
2040	2a	1	3721.079	16541.05	0	16541.05	71792.67	0	71792.67	FCEV	0	3721.079	4	7

2040	2a	1	25247.81	112232.3	59098.33	53133.99	715213.9	376611.2	338602.7	PHEV	13294.78	11953.03	4	8
2040	2a	1	69794.66	314251.9	314251.9	0	1714013	1714013	0	ICE	69794.66	0	4	1
2040	2a	1	2598.308	11698.93	11698.93	0	64269.97	64269.97	0	ICE	2598.308	0	4	2
2040	2a	1	55810.94	251289.9	0	251289.9	1218676	0	1218676	BEV	0	55810.94	4	3
2040	2a	1	5194.147	23386.75	0	23386.75	107267.1	0	107267.1	FCEV	0	5194.147	4	7
2040	2a	1	27858.73	125434.5	64939.22	60495.26	825642.4	427446.9	398195.6	PHEV	14422.86	13435.87	4	8
2040	2a	1	64396.54	293636	293636	0	1641538	1641538	0	ICE	64396.54	0	4	1
2040	2a	1	2397.347	10931.45	10931.45	0	61548.25	61548.25	0	ICE	2397.347	0	4	2
2040	2a	1	69600.43	317364.8	0	317364.8	1599612	0	1599612	BEV	0	69600.43	4	3
2040	2a	1	7100.296	32376	0	32376	156113.4	0	156113.4	FCEV	0	7100.296	4	7
2040	2a	1	30087.55	137193.5	69811.9	67381.62	932486.6	474502.5	457984.1	PHEV	15310.27	14777.29	4	8
2040	2a	1	57063.32	263467	263467	0	1510249	1510249	0	ICE	57063.32	0	4	1
2040	2a	1	2124.347	9808.322	9808.322	0	56622.66	56622.66	0	ICE	2124.347	0	4	2
2040	2a	1	84638.73	390785.5	0	390785.5	2046678	0	2046678	BEV	0	84638.73	4	3
2040	2a	1	9404.304	43420.61	0	43420.61	219385.9	0	219385.9	FCEV	0	9404.304	4	7
2040	2a	1	31347.68	144735.4	72367.69	72367.69	1015443	507721.4	507721.4	PHEV	15673.84	15673.84	4	8
2040	2a	1	48725.87	227763.7	227763.7	0	1338779	1338779	0	ICE	48725.87	0	4	1
2040	2a	1	1813.961	8479.162	8479.162	0	50191.68	50191.68	0	ICE	1813.961	0	4	2
2040	2a	1	99074	463110.5	0	463110.5	2497650	0	2497650	BEV	0	99074	4	3
2040	2a	1	12245.1	57238.38	0	57238.38	299994.2	0	299994.2	FCEV	0	12245.1	4	7
2040	2a	1	35153.4	164320.7	82160.35	82160.35	1186021	593010.6	593010.6	PHEV	17576.7	17576.7	4	8
2040	2a	1	38115.24	180349.1	180349.1	0	1087520	1087520	0	ICE	38115.24	0	4	1
2040	2a	1	1418.95	6714.018	6714.018	0	40770.67	40770.67	0	ICE	1418.95	0	4	2
2040	2a	1	112445.4	532055.8	0	532055.8	2955377	0	2955377	BEV	0	112445.4	4	3
2040	2a	1	15333.47	72553.06	0	72553.06	393766.5	0	393766.5	FCEV	0	15333.47	4	7
2040	2a	1	38167.72	180597.4	90298.72	90298.72	1341820	670910.2	670910.2	PHEV	19083.86	19083.86	4	8
2040	2a	1	26639.63	127576.4	127576.4	0	789155.2	789155.2	0	ICE	26639.63	0	4	1
2040	2a	1	991.7374	4749.4	4749.4	0	29584.5	29584.5	0	ICE	991.7374	0	4	2
2040	2a	1	127435.4	610284.3	0	610284.3	3490702	0	3490702	BEV	0	127435.4	4	3
2040	2a	1	19042.07	91191.91	0	91191.91	511747	0	511747	FCEV	0	19042.07	4	7
2040	2a	1	41314.16	197852.3	98926.13	98926.13	1513034	756516.8	756516.8	PHEV	20657.08	20657.08	4	8
2040	2a	1	13830.58	67026.59	67026.59	0	425339.4	425339.4	0	ICE	13830.58	0	4	1
2040	2a	1	514.8833	2495.258	2495.258	0	15945.28	15945.28	0	ICE	514.8833	0	4	2
2040	2a	1	142224.4	689256.2	0	689256.2	4059368	0	4059368	BEV	0	142224.4	4	3
2040	2a	1	23152.8	112204.5	0	112204.5	650428.6	0	650428.6	FCEV	0	23152.8	4	7
2040	2a	1	43961.02	213046.5	106523.3	106523.3	1677054	838526.9	838526.9	PHEV	21980.51	21980.51	4	8
2040	2a	1	158504.3	777233.8	0	777233.8	4712126	0	4712126	BEV	0	158504.3	4	3
2040	2a	1	27971.35	137158.9	0	137158.9	820552.9	0	820552.9	FCEV	0	27971.35	4	7
2040	2a	1	46618.91	228598.2	114299.1	114299.1	1851879	925939.7	925939.7	PHEV	23309.46	23309.46	4	8
2040	2a	1	162274.5	805018	0	805018	5025017	0	5025017	BEV	0	162274.5	4	3
2040	2a	1	30909.43	153336.8	0	153336.8	945705.8	0	945705.8	FCEV	0	30909.43	4	7
2040	2a	1	45314.76	224799.3	112399.6	112399.6	1869939	934969.7	934969.7	PHEV	22657.38	22657.38	4	8
2040	2a	1	166251.5	834271.8	0	834271.8	5360216	0	5360216	BEV	0	166251.5	4	3
2040	2a	1	34051.52	170874.9	0	170874.9	1085997	0	1085997	FCEV	0	34051.52	4	7
2040	2a	1	43968.96	220642	110321	110321	1883652	941826.2	941826.2	PHEV	21984.48	21984.48	4	8
2040	2a	1	171222.7	869027.3	0	869027.3	5744165	0	5744165	BEV	0	171222.7	4	3
2040	2a	1	37585.48	190762.1	0	190762.1	1248561	0	1248561	FCEV	0	37585.48	4	7

2040	2a	1	42767.95	217065.3	108532.7	108532.7	1899864	949932.1	949932.1	PHEV	21383.97	21383.97	4	8
2040	2a	1	174787.4	897133	0	897133	6098927	0	6098927	BEV	0	174787.4	4	3
2040	2a	1	40999.51	210438.6	0	210438.6	1417914	0	1417914	FCEV	0	40999.51	4	7
2040	2a	1	41102.27	210966	105483	105483	1892063	946031.6	946031.6	PHEV	20551.13	20551.13	4	8
2040	2a	1	151987.5	788815.3	0	788815.3	5502164	0	5502164	BEV	0	151987.5	4	3
2040	2a	1	37996.88	197203.8	0	197203.8	1364545	0	1364545	FCEV	0	37996.88	4	7
2040	2a	1	33526.66	174003.4	87001.69	87001.69	1591576	795788	795788	PHEV	16763.33	16763.33	4	8
2040	2a	1	25.82402	70.40996	70.40996	0	114.4237	114.4237	0	ICE	25.82402	0	1	2
2040	2a	1	32.4866	94.15916	94.15916	0	189.0366	189.0366	0	ICE	32.4866	0	1	2
2040	2a	1	4.837548	14.29829	0	14.29829	35.563	0	35.563	BEV	0	4.837548	1	3
2040	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2040	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2040	2a	1	73.61487	221.8001	221.8001	0	469.6506	469.6506	0	ICE	73.61487	0	1	2
2040	2a	1	95.00129	291.6796	291.6796	0	649.8676	649.8676	0	ICE	95.00129	0	1	2
2040	2a	1	31.75654	99.32047	99.32047	0	241.0943	241.0943	0	ICE	31.75654	0	1	2
2040	2a	1	57.98363	184.6692	184.6692	0	451.6459	451.6459	0	ICE	57.98363	0	1	2
2040	2a	1	146.9912	501.8294	501.8294	0	1409.403	1409.403	0	ICE	146.9912	0	1	2
2040	2a	1	468.671	1680.598	1680.598	0	5308.121	5308.121	0	ICE	468.671	0	1	2
2040	2a	1	740.6659	2698.372	2698.372	0	8940.884	8940.884	0	ICE	740.6659	0	1	2
2040	2a	1	642.8461	2341.998	0	2341.998	8107.842	0	8107.842	BEV	0	642.8461	1	3
2040	2a	1	0.037768	0.137595	0	0.137595	0.476343	0	0.476343	FCEV	0	0.037768	1	7
2040	2a	1	671.9274	2447.946	1468.767	979.1782	7822.608	4693.565	3129.043	PHEV	403.1564	268.7709	1	8
2040	2a	1	895.4601	3313.614	0	3313.614	11877.03	0	11877.03	BEV	0	895.4601	1	3
2040	2a	1	0.125467	0.464287	0	0.464287	1.664148	0	1.664148	FCEV	0	0.125467	1	7
2040	2a	1	1130.586	4183.688	2510.213	1673.475	13901.5	8340.902	5560.602	PHEV	678.3515	452.2343	1	8
2040	2a	1	987.5051	3710.797	3710.797	0	13446.79	13446.79	0	ICE	987.5051	0	1	2
2040	2a	1	2396.672	9006.095	0	9006.095	33557.79	0	33557.79	BEV	0	2396.672	1	3
2040	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2040	2a	1	1139.682	4282.64	2569.584	1713.056	14828.42	8897.05	5931.367	PHEV	683.8092	455.8728	1	8
2040	2a	1	3055.343	9555.769	9555.769	0	37172.45	37172.45	0	ICE	3055.343	0	2	1
2040	2a	1	6305.146	22609.5	22609.5	0	96802.98	96802.98	0	ICE	6305.146	0	2	1
2040	2a	1	9875.122	35976.75	35976.75	0	156039.5	156039.5	0	ICE	9875.122	0	2	1
2040	2a	1	13036.34	48240.46	48240.46	0	210696.6	210696.6	0	ICE	13036.34	0	2	1
2040	2a	1	4.526823	15.19528	15.19528	0	57.39173	57.39173	0	ICE	4.526823	0	3	2
2040	2a	1	145.436	521.5159	521.5159	0	2147.177	2147.177	0	ICE	145.436	0	3	2
2040	2a	1	115.8674	422.1248	422.1248	0	1735.637	1735.637	0	ICE	115.8674	0	3	2
2040	2a	1	530.0643	1991.849	1991.849	0	8591.185	8591.185	0	ICE	530.0643	0	3	2
2040	2a	1	580.2623	2213.724	0	2213.724	5853.682	0	5853.682	BEV	0	580.2623	3	3
2040	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2040	2a	1	52.80813	201.4651	120.8791	80.58605	861.1467	516.688	344.4587	PHEV	31.68488	21.12325	3	8
2040	2a	1	13.33336	37.88156	37.88156	0	99.36739	99.36739	0	ICE	13.33336	0	4	2
2040	2a	1	49.59019	157.9373	157.9373	0	520.8723	520.8723	0	ICE	49.59019	0	4	2
2040	2a	1	66.16353	214.5114	214.5114	0	720.0739	720.0739	0	ICE	66.16353	0	4	2
2040	2a	1	89.29308	294.6163	294.6163	0	1045.331	1045.331	0	ICE	89.29308	0	4	2
2040	2a	1	65.83763	220.9985	220.9985	0	801.5753	801.5753	0	ICE	65.83763	0	4	2
2040	2a	1	91.55574	312.5722	312.5722	0	1153.461	1153.461	0	ICE	91.55574	0	4	2
2040	2a	1	716.8382	2570.496	2570.496	0	9870.746	9870.746	0	ICE	716.8382	0	4	2

2040	2a	1	2030.246	7629.157	7629.157	0	31324.81	31324.81	0	ICE	2030.246	0	4	2
2040	2a	1	1447.978	5524.093	5524.093	0	23358.2	23358.2	0	ICE	1447.978	0	4	2
2040	2a	1	43.46661	123.4934	123.4934	0	225.6555	225.6555	0	ICE	43.46661	0	1	2
2040	2a	1	2.124259	6.765448	0	6.765448	18.33018	0	18.33018	BEV	0	2.124259	1	3
2040	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2040	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2040	2a	1	124.54	446.5853	0	446.5853	1495.953	0	1495.953	BEV	0	124.54	1	3
2040	2a	1	0.470653	1.687704	0	1.687704	5.653402	0	5.653402	FCEV	0	0.470653	1	7
2040	2a	1	261.7875	938.7387	563.2432	375.4955	2876.69	1726.014	1150.676	PHEV	157.0725	104.715	1	8
2040	2a	1	1823.238	6955.726	0	6955.726	26839.06	0	26839.06	BEV	0	1823.238	1	3
2040	2a	1	55.50986	211.7723	0	211.7723	817.1353	0	817.1353	FCEV	0	55.50986	1	7
2040	2a	1	1311.152	5002.097	3001.258	2000.839	18060.97	10836.58	7224.387	PHEV	786.6912	524.4608	1	8
2040	2a	1	1.765201	4.914002	4.914002	0	16.91459	16.91459	0	ICE	1.765201	0	2	2
2040	2a	1	17.06191	54.33961	54.33961	0	197.502	197.502	0	ICE	17.06191	0	3	2
2040	2a	1	18.87798	61.20506	61.20506	0	231.1544	231.1544	0	ICE	18.87798	0	3	2
2040	2a	1	11.43269	31.82656	31.82656	0	81.95366	81.95366	0	ICE	11.43269	0	4	2
2040	2a	1	19.6051	60.19294	60.19294	0	190.3307	190.3307	0	ICE	19.6051	0	4	2
2040	2a	1	166.2078	576.9573	576.9573	0	2163.588	2163.588	0	ICE	166.2078	0	4	2
2040	2a	1	31.14719	83.13933	83.13933	0	131.6137	131.6137	0	ICE	31.14719	0	1	2
2040	2a	1	44.34936	123.4606	123.4606	0	227.4192	227.4192	0	ICE	44.34936	0	1	2
2040	2a	1	9.020166	27.17758	0	27.17758	68.93181	0	68.93181	BEV	0	9.020166	1	3
2040	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2040	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2040	2a	1	143.511	506.3915	0	506.3915	1646.852	0	1646.852	BEV	0	143.511	1	3
2040	2a	1	1.417866	5.003066	0	5.003066	16.27063	0	16.27063	FCEV	0	1.417866	1	7
2040	2a	1	39.89184	140.762	84.45717	56.30478	413.5634	248.1381	165.4254	PHEV	23.9351	15.95674	1	8
2040	2a	1	155.213	592.1436	592.1436	0	2193.359	2193.359	0	ICE	155.213	0	1	2
2040	2a	1	127.3417	471.2227	0	471.2227	1684.476	0	1684.476	BEV	0	127.3417	2	3
2040	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2040	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2040	2a	1	25.00777	66.75173	66.75173	0	177.8216	177.8216	0	ICE	25.00777	0	4	2
2040	2a	1	12.08666	40.57153	40.57153	0	106.6872	106.6872	0	ICE	12.08666	0	1	2
2040	2a	1	2.69169	8.264215	8.264215	0	27.32245	27.32245	0	ICE	2.69169	0	2	2
2040	2a	1	0.213427	0.606369	0.606369	0	1.43543	1.43543	0	ICE	0.213427	0	3	2
2040	2a	1	9.080417	31.52085	31.52085	0	122.4441	122.4441	0	ICE	9.080417	0	3	2
2040	2a	1	27.38109	101.3226	0	101.3226	252.1922	0	252.1922	BEV	0	27.38109	3	3
2040	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2040	2a	1	12.3973	45.87571	27.52543	18.35028	187.4282	112.4569	74.97129	PHEV	7.438379	4.95892	3	8
2040	2a	1	27.42714	74.78093	74.78093	0	209.5717	209.5717	0	ICE	27.42714	0	4	2
2040	2a	1	7.562278	22.78499	22.78499	0	72.88391	72.88391	0	ICE	7.562278	0	4	2
2040	2a	1	19.24277	67.89985	67.89985	0	277.4323	277.4323	0	ICE	19.24277	0	3	2
2040	2a	1	3.63972	10.54937	10.54937	0	32.58397	32.58397	0	ICE	3.63972	0	4	2
2040	2a	1	3.316796	9.99344	0	9.99344	17.18012	0	17.18012	BEV	0	3.316796	3	3
2040	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2040	2a	1	0	0	0	0	0	0	0	PHEV	0	0	3	8
2040	2a	1	16.78755	50.58054	0	50.58054	88.75824	0	88.75824	BEV	0	16.78755	4	3
2040	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7

2040	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2040	2a	1	8.030844	26.49721	26.49721	0	65.23923	65.23923	0	ICE	8.030844	0	1	2
2040	2a	1	22.39345	77.73438	0	77.73438	246.1855	0	246.1855	BEV	0	22.39345	1	3
2040	2a	1	2.273446	7.891815	0	7.891815	24.99345	0	24.99345	FCEV	0	2.273446	1	7
2040	2a	1	2.387119	8.286405	4.971843	3.314562	23.04343	13.82606	9.217371	PHEV	1.432271	0.954848	1	8
2040	2a	1	46.48577	166.6924	0	166.6924	554.285	0	554.285	BEV	0	46.48577	2	3
2040	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2040	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2040	2a	1	7.013673	23.94475	23.94475	0	93.96613	93.96613	0	ICE	7.013673	0	3	2
2040	2a	1	2.435141	7.895069	0	7.895069	22.1313	0	22.1313	BEV	0	2.435141	1	3
2040	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2040	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2040	2a	1	13.04104	43.77512	0	43.77512	126.9739	0	126.9739	BEV	0	13.04104	1	3
2040	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2040	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2040	2a	1	11.59628	39.58981	0	39.58981	123.0838	0	123.0838	BEV	0	11.59628	1	3
2040	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2040	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2040	2a	1	1.973424	5.267543	5.267543	0	19.19789	19.19789	0	ICE	1.973424	0	2	2
2040	2a	1	4.407684	15.04788	15.04788	0	55.17295	55.17295	0	ICE	4.407684	0	2	2
2040	2a	1	61.18631	222.9121	0	222.9121	766.8318	0	766.8318	BEV	0	61.18631	2	3
2040	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2040	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2040	2a	1	2.426486	8.006021	8.006021	0	31.05574	31.05574	0	ICE	2.426486	0	3	2
2040	2a	1	2.066279	6.344033	0	6.344033	16.40874	0	16.40874	BEV	0	2.066279	1	3
2040	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2040	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2040	2a	1	4.286931	14.14443	0	14.14443	40.69399	0	40.69399	BEV	0	4.286931	1	3
2040	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2040	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2040	2a	1	6.501898	21.82505	0	21.82505	64.27595	0	64.27595	BEV	0	6.501898	2	3
2040	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2040	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2040	2a	1	1.242842	4.456682	4.456682	0	17.09778	17.09778	0	ICE	1.242842	0	2	2
2040	2a	1	0.272446	0.883307	0	0.883307	1.930818	0	1.930818	BEV	0	0.272446	4	3
2040	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2040	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2040	2a	1	1.645133	4.862502	4.862502	0	14.35547	14.35547	0	ICE	1.645133	0	2	2
2040	2a	1	0.296763	0.911141	0.911141	0	3.491074	3.491074	0	ICE	0.296763	0	3	2
2040	2a	1	3.722735	12.70946	0	12.70946	28.17769	0	28.17769	BEV	0	3.722735	3	3
2040	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2040	2a	1	0	0	0	0	0	0	0	PHEV	0	0	3	8
2040	2a	1	2.373553	8.375294	0	8.375294	19.47007	0	19.47007	BEV	0	2.373553	3	3
2040	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2040	2a	1	1.643229	5.79828	3.478968	2.319312	22.24679	13.34807	8.898716	PHEV	0.985937	0.657291	3	8
2040	2a	1	0.385556	1.448824	0	1.448824	3.642354	0	3.642354	BEV	0	0.385556	4	3
2040	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7

2040	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2040	2a	1	10.09099	29.24773	0	29.24773	69.56344	0	69.56344	BEV	0	10.09099	2	3
2040	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2040	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2040	2a	1	3.672872	10.85587	0	10.85587	26.7101	0	26.7101	BEV	0	3.672872	2	3
2040	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2040	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2040	2a	1	3.013138	9.078525	9.078525	0	35.06067	35.06067	0	ICE	3.013138	0	2	2
2040	2a	1	1.585633	5.140843	0	5.140843	14.22682	0	14.22682	BEV	0	1.585633	2	3
2040	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2040	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2040	2a	1	2.686322	8.863332	8.863332	0	32.25745	32.25745	0	ICE	2.686322	0	2	2
2040	2a	1	0.877673	2.89582	0	2.89582	8.271504	0	8.271504	BEV	0	0.877673	2	3
2040	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2040	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2040	2a	1	3.247024	10.89935	10.89935	0	44.9247	44.9247	0	ICE	3.247024	0	2	2
2040	2a	1	2.603609	8.888748	0	8.888748	27.46191	0	27.46191	BEV	0	2.603609	2	3
2040	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2040	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2040	2a	1	2.748185	9.224888	0	9.224888	19.43906	0	19.43906	BEV	0	2.748185	3	3
2040	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2040	2a	1	0	0	0	0	0	0	0	PHEV	0	0	3	8
2040	2a	1	1.773706	6.461913	0	6.461913	15.64986	0	15.64986	BEV	0	1.773706	3	3
2040	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2040	2a	1	1.356364	4.941463	2.964878	1.976585	19.92694	11.95616	7.970776	PHEV	0.813818	0.542545	3	8
2040	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2040	2a	1	1.356364	4.941463	2.964878	1.976585	19.92694	11.95616	7.970776	PHEV	0.813818	0.542545	3	8
2040	2a	1	0.908896	2.634345	0	2.634345	4.608944	0	4.608944	BEV	0	0.908896	4	3
2040	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2040	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2040	2a	1	1.967509	6.040784	0	6.040784	10.83274	0	10.83274	BEV	0	1.967509	4	3
2040	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2040	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2040	2a	1	0.350564	1.116493	0	1.116493	2.127412	0	2.127412	BEV	0	0.350564	4	3
2040	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2040	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2040	2a	1	0.234677	0.74741	0.74741	0	2.499092	2.499092	0	ICE	0.234677	0	2	2
2040	2a	1	12.87876	38.80346	0	38.80346	94.61853	0	94.61853	BEV	0	12.87876	2	3
2040	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2040	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2040	2a	1	0.860123	2.690085	0	2.690085	6.979596	0	6.979596	BEV	0	0.860123	2	3
2040	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2040	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2040	2a	1	6.627055	18.82819	0	18.82819	44.1308	0	44.1308	BEV	0	6.627055	2	3
2040	2a	1	0.272491	0.742955	0.742955	0	2.373851	2.373851	0	ICE	0.272491	0	3	2
2040	2a	1	1.857043	5.276063	5.276063	0	15.86376	15.86376	0	ICE	1.857043	0	2	2
2040	2a	1	0.173556	0.52292	0.52292	0	1.578888	1.578888	0	ICE	0.173556	0	3	2
2040	2a	1	1.907576	6.184628	6.184628	0	24.73342	24.73342	0	ICE	1.907576	0	2	2
2040	2a	1	0.476634	1.381476	0	1.381476	2.545792	0	2.545792	BEV	0	0.476634	3	3

2040	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2040	2a	1	0	0	0	0	0	0	0	PHEV	0	0	3	8
2040	2a	1	0.341429	1.146081	0	1.146081	2.369083	0	2.369083	BEV	0	0.341429	4	3
2040	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2040	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2040	2a	1	1.873253	5.214798	0	5.214798	12.23545	0	12.23545	BEV	0	1.873253	1	3
2040	2a	1	1.268283	3.675991	0	3.675991	8.848579	0	8.848579	BEV	0	1.268283	1	3
2040	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2040	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2040	2a	1	1.927003	6.026818	0	6.026818	15.8313	0	15.8313	BEV	0	1.927003	1	3
2040	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2040	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2040	2a	1	2.170339	5.917494	5.917494	0	17.35951	17.35951	0	ICE	2.170339	0	2	2
2040	2a	1	2.07547	5.777736	0	5.777736	13.30631	0	13.30631	BEV	0	2.07547	2	3
2040	2a	1	0.331133	1.054609	0	1.054609	2.820551	0	2.820551	BEV	0	0.331133	2	3
2040	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2040	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2040	2a	1	2.202915	6.006313	0	6.006313	13.85272	0	13.85272	BEV	0	2.202915	1	3
2040	2a	1	2.109011	5.991932	0	5.991932	14.29313	0	14.29313	BEV	0	2.109011	1	3
2040	2a	1	1.572347	4.557291	4.557291	0	13.83746	13.83746	0	ICE	1.572347	0	2	2
2040	2a	1	1.00992	3.505736	3.505736	0	13.10176	13.10176	0	ICE	1.00992	0	2	2
2040	2a	1	1.81556	6.614394	6.614394	0	27.15988	27.15988	0	ICE	1.81556	0	2	2
2040	2a	1	1.944347	5.524103	0	5.524103	8.879444	0	8.879444	BEV	0	1.944347	3	3
2040	2a	1	0.242663	0.717236	0.717236	0	2.19538	2.19538	0	ICE	0.242663	0	3	2
2040	2a	1	0.154242	0.455891	0	0.455891	0.762392	0	0.762392	BEV	0	0.154242	3	3
2040	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2040	2a	1	0	0	0	0	0	0	0	PHEV	0	0	3	8
2040	2a	1	2.216194	7.693074	0	7.693074	16.96707	0	16.96707	BEV	0	2.216194	3	3
2040	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2040	2a	1	0	0	0	0	0	0	0	PHEV	0	0	3	8
2040	2a	1	5.388714	19.32328	0	19.32328	44.54547	0	44.54547	BEV	0	5.388714	3	3
2040	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2040	2a	1	1.381721	4.954687	2.972812	1.981875	22.06201	13.23721	8.824804	PHEV	0.829033	0.552689	3	8
2040	2a	1	0.488309	1.723042	1.723042	0	6.583595	6.583595	0	ICE	0.488309	0	2	2
2040	2a	1	0.189642	0.560523	0	0.560523	0.993152	0	0.993152	BEV	0	0.189642	4	3
2040	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2040	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2040	2a	1	1.522123	4.062913	0	4.062913	9.3848	0	9.3848	BEV	0	1.522123	1	3
2040	2a	1	0	0	0	0	0	0	0	BEV	0	0	2	3
2040	2a	1	7.743776	29.09918	0	29.09918	107.796	0	107.796	FCEV	0	7.743776	2	7
2040	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2040	2a	1	0	0	0	0	0	0	0	BEV	0	0	2	3
2040	2a	1	8.944889	34.12511	0	34.12511	130.891	0	130.891	FCEV	0	8.944889	2	7
2040	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2040	2a	1	0.043603	0.136372	0.136372	0	0.534103	0.534103	0	ICE	0.043603	0	3	2
2040	2a	1	0	0	0	0	0	0	0	BEV	0	0	3	3
2040	2a	1	0.284921	1.070663	0	1.070663	2.804304	0	2.804304	FCEV	0	0.284921	3	7

2040	2a	1	4.083874	15.34618	9.207705	6.13847	70.99109	42.59466	28.39644	PHEV	2.450324	1.633549	3	8
2040	2a	1	0.317525	1.174987	1.174987	0	4.603397	4.603397	0	ICE	0.317525	0	2	2
2040	2a	1	0.12869	0.358249	0	0.358249	0.575343	0	0.575343	BEV	0	0.12869	3	3
2040	2a	1	0.321689	0.913952	0	0.913952	1.497911	0	1.497911	BEV	0	0.321689	4	3
2040	2a	1	0.126937	0.418821	0	0.418821	0.822692	0	0.822692	BEV	0	0.126937	3	3
2040	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2040	2a	1	0	0	0	0	0	0	0	PHEV	0	0	3	8
2040	2a	1	0.414825	1.439981	0	1.439981	4.182838	0	4.182838	BEV	0	0.414825	2	3
2040	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2040	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2040	2a	1	0.281473	0.751319	0	0.751319	1.661918	0	1.661918	BEV	0	0.281473	2	3
2040	2a	1	0.808347	2.203983	0	2.203983	4.882424	0	4.882424	BEV	0	0.808347	2	3
2040	2a	1	0.334867	0.932209	0	0.932209	1.451785	0	1.451785	BEV	0	0.334867	4	3
2040	2a	1	0.578659	2.207609	2.207609	0	9.777881	9.777881	0	ICE	0.578659	0	2	2
2040	2a	1	0.309984	1.093805	0	1.093805	3.601978	0	3.601978	BEV	0	0.309984	2	3
2040	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2040	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2040	2a	1	0.070238	0.223697	0	0.223697	0.39572	0	0.39572	BEV	0	0.070238	3	3
2040	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2040	2a	1	0	0	0	0	0	0	0	PHEV	0	0	3	8
2040	2a	1	0.649307	1.733157	0	1.733157	2.776193	0	2.776193	BEV	0	0.649307	4	3
2040	2a	1	0.145051	0.445347	0	0.445347	1.120035	0	1.120035	BEV	0	0.145051	2	3
2040	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2040	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2040	2a	1	0.070684	0.221068	0.221068	0	1.101456	1.101456	0	ICE	0.070684	0	2	2
2040	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2040	2a	1	0.070684	0.221068	0.221068	0	1.101456	1.101456	0	ICE	0.070684	0	2	2
2040	2a	1	0.313149	1.033212	0	1.033212	2.013636	0	2.013636	BEV	0	0.313149	4	3
2040	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2040	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2040	2a	1	0.063722	0.173741	0	0.173741	0.279459	0	0.279459	BEV	0	0.063722	3	3
2040	2a	1	0	0	0	0	0	0	0	BEV	0	0	4	3
2040	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2040	2a	1	0.497902	1.813941	1.088365	0.725576	8.078494	4.847096	3.231398	PHEV	0.298741	0.199161	4	8
2041	2a	1	13558.57	36191.07	36191.07	0	54544.24	54544.24	0	ICE	13558.57	0	1	1
2041	2a	1	14404.96	39275.55	39275.55	0	61859.58	61859.58	0	ICE	14404.96	0	1	1
2041	2a	1	14881.93	41428.63	41428.63	0	68255.67	68255.67	0	ICE	14881.93	0	1	1
2041	2a	1	17697.06	50279.28	50279.28	0	87034.16	87034.16	0	ICE	17697.06	0	1	1
2041	2a	1	17682.52	51251.02	51251.02	0	92934.66	92934.66	0	ICE	17682.52	0	1	1
2041	2a	1	32.53614	94.30276	94.30276	0	180.726	180.726	0	ICE	32.53614	0	1	2
2041	2a	1	17567.52	51924.14	51924.14	0	99143.15	99143.15	0	ICE	17567.52	0	1	1
2041	2a	1	18500.53	55741.72	55741.72	0	111729.7	111729.7	0	ICE	18500.53	0	1	1
2041	2a	1	17513.08	53769.88	53769.88	0	113224.4	113224.4	0	ICE	17513.08	0	1	1
2041	2a	1	20035.99	62663.77	62663.77	0	138795.8	138795.8	0	ICE	20035.99	0	1	1
2041	2a	1	20810.93	66279.69	66279.69	0	153714.9	153714.9	0	ICE	20810.93	0	1	1
2041	2a	1	55.05672	175.3474	175.3474	0	417.4425	417.4425	0	ICE	55.05672	0	1	2
2041	2a	1	22405.72	72642.48	72642.48	0	175959.4	175959.4	0	ICE	22405.72	0	1	1
2041	2a	1	19581.89	64609.06	64609.06	0	163783.1	163783.1	0	ICE	19581.89	0	1	1
2041	2a	1	16302.06	54721.44	54721.44	0	144965.5	144965.5	0	ICE	16302.06	0	1	1

2041	2a	1	20225.77	69050.99	69050.99	0	191145.6	191145.6	0	ICE	20225.77	0	1	1
2041	2a	1	233.1141	795.854	795.854	0	2207.708	2207.708	0	ICE	233.1141	0	1	2
2041	2a	1	21547.65	74798.36	74798.36	0	216771.4	216771.4	0	ICE	21547.65	0	1	1
2041	2a	1	338.228	1174.091	1174.091	0	3354.051	3354.051	0	ICE	338.228	0	1	2
2041	2a	1	34532.91	121852.5	121852.5	0	369974.6	369974.6	0	ICE	34532.91	0	1	1
2041	2a	1	46349.72	166204.5	166204.5	0	526148.9	526148.9	0	ICE	46349.72	0	1	1
2041	2a	1	52211.68	190216	190216	0	630005.4	630005.4	0	ICE	52211.68	0	1	1
2041	2a	1	994.2075	3622.067	3622.067	0	11899.29	11899.29	0	ICE	994.2075	0	1	2
2041	2a	1	69348.71	256622.1	256622.1	0	887190.4	887190.4	0	ICE	69348.71	0	1	1
2041	2a	1	76832.45	288717.1	288717.1	0	1037746	1037746	0	ICE	76832.45	0	1	1
2041	2a	1	97799.73	373109.9	373109.9	0	1397555	1397555	0	ICE	97799.73	0	1	1
2041	2a	1	1196.812	4565.884	4565.884	0	17092.53	17092.53	0	ICE	1196.812	0	1	2
2041	2a	1	5688.159	21700.55	0	21700.55	82121.46	0	82121.46	BEV	0	5688.159	1	3
2041	2a	1	116.0849	442.8684	0	442.8684	1715.893	0	1715.893	FCEV	0	116.0849	1	7
2041	2a	1	5130.912	19574.64	10570.3	9004.332	72904.35	39368.35	33536	PHEV	2770.693	2360.22	1	8
2041	2a	1	122100.3	472812.5	472812.5	0	1840507	1840507	0	ICE	122100.3	0	1	1
2041	2a	1	1494.186	5785.982	5785.982	0	22512	22512	0	ICE	1494.186	0	1	2
2041	2a	1	8679.335	33609.25	0	33609.25	131559.4	0	131559.4	BEV	0	8679.335	1	3
2041	2a	1	177.1293	685.9031	0	685.9031	2747.531	0	2747.531	FCEV	0	177.1293	1	7
2041	2a	1	5609.412	21721.49	11729.61	9991.887	84283.37	45513.02	38770.35	PHEV	3029.082	2580.329	1	8
2041	2a	1	150601.1	591805.2	591805.2	0	2391854	2391854	0	ICE	150601.1	0	1	1
2041	2a	1	1835.127	7211.35	7211.35	0	29135.69	29135.69	0	ICE	1835.127	0	1	2
2041	2a	1	13127.9	51587.67	0	51587.67	209554.6	0	209554.6	BEV	0	13127.9	1	3
2041	2a	1	307.0855	1206.729	0	1206.729	4996.272	0	4996.272	FCEV	0	307.0855	1	7
2041	2a	1	6438.392	25300.43	13409.23	11891.2	101858.6	53985.06	47873.54	PHEV	3412.348	3026.044	1	8
2041	2a	1	184218.2	734461.3	734461.3	0	3079128	3079128	0	ICE	184218.2	0	1	1
2041	2a	1	2265.108	9030.783	9030.783	0	37847.36	37847.36	0	ICE	2265.108	0	1	2
2041	2a	1	19079.2	76067.04	0	76067.04	319958	0	319958	BEV	0	19079.2	1	3
2041	2a	1	503.5565	2007.634	0	2007.634	8588.761	0	8588.761	FCEV	0	503.5565	1	7
2041	2a	1	7275.003	29004.78	15082.49	13922.29	121482.1	63170.71	58311.42	PHEV	3783.001	3492.001	1	8
2041	2a	1	210346.2	850682	850682	0	3696990	3696990	0	ICE	210346.2	0	1	1
2041	2a	1	2598.851	10510.27	10510.27	0	45662.58	45662.58	0	ICE	2598.851	0	1	2
2041	2a	1	33984.46	137439.9	0	137439.9	599040.8	0	599040.8	BEV	0	33984.46	1	3
2041	2a	1	1164.952	4711.298	0	4711.298	20824.16	0	20824.16	FCEV	0	1164.952	1	7
2041	2a	1	12920.42	52252.77	26021.88	26230.89	226420.5	112757.4	113663.1	PHEV	6434.369	6486.051	1	8
2041	2a	1	234747.5	962814.5	962814.5	0	4332767	4332767	0	ICE	234747.5	0	1	1
2041	2a	1	2921.232	11981.4	11981.4	0	53901.01	53901.01	0	ICE	2921.232	0	1	2
2041	2a	1	53512.22	219479.8	0	219479.8	990115.4	0	990115.4	BEV	0	53512.22	1	3
2041	2a	1	2262.875	9281.16	0	9281.16	42363.56	0	42363.56	FCEV	0	2262.875	1	7
2041	2a	1	20285.02	83198.82	39602.64	43596.18	373241.1	177662.8	195578.3	PHEV	9655.671	10629.35	1	8
2041	2a	1	255904.7	1064251	1064251	0	4954803	4954803	0	ICE	255904.7	0	1	1
2041	2a	1	3211.239	13354.84	13354.84	0	62157.28	62157.28	0	ICE	3211.239	0	1	2
2041	2a	1	78009.13	324422.8	0	324422.8	1513441	0	1513441	BEV	0	78009.13	1	3
2041	2a	1	3933.233	16357.45	0	16357.45	76964.53	0	76964.53	FCEV	0	3933.233	1	7
2041	2a	1	29484.74	122620.5	55669.72	66950.81	569320.8	258471.6	310849.2	PHEV	13386.07	16098.67	1	8
2041	2a	1	273375.6	1152571	1152571	0	5547216	5547216	0	ICE	273375.6	0	1	1
2041	2a	1	3457.939	14578.91	14578.91	0	70147.13	70147.13	0	ICE	3457.939	0	1	2

2041	2a	1	107997.5	455325	0	455325	2195013	0	2195013	BEV	0	107997.5	1	3
2041	2a	1	6337.422	26719.01	0	26719.01	129595.6	0	129595.6	FCEV	0	6337.422	1	7
2041	2a	1	40700.3	171595.3	74129.18	97466.15	823982.5	355960.4	468022.1	PHEV	17582.53	23117.77	1	8
2041	2a	1	285181.5	1218683	1218683	0	6062014	6062014	0	ICE	285181.5	0	1	1
2041	2a	1	3634.538	15531.69	15531.69	0	77237.68	77237.68	0	ICE	3634.538	0	1	2
2041	2a	1	143329.7	612499.5	0	612499.5	3050689	0	3050689	BEV	0	143329.7	1	3
2041	2a	1	9613.579	41082.28	0	41082.28	205536.2	0	205536.2	FCEV	0	9613.579	1	7
2041	2a	1	53858.62	230157.3	94364.49	135792.8	1142736	468521.7	674214.2	PHEV	22082.04	31776.59	1	8
2041	2a	1	291863.3	1263958	1263958	0	6487220	6487220	0	ICE	291863.3	0	1	1
2041	2a	1	3719.695	16108.7	16108.7	0	82658.4	82658.4	0	ICE	3719.695	0	1	2
2041	2a	1	184796.7	800289.9	0	800289.9	4111704	0	4111704	BEV	0	184796.7	1	3
2041	2a	1	13970.49	60501.32	0	60501.32	311766.1	0	311766.1	FCEV	0	13970.49	1	7
2041	2a	1	69239.05	299850.1	116341.8	183508.2	1536582	596194	940388.4	PHEV	26864.75	42374.3	1	8
2041	2a	1	289816.6	1271698	1271698	0	6731228	6731228	0	ICE	289816.6	0	1	1
2041	2a	1	3693.609	16207.33	16207.33	0	85770.44	85770.44	0	ICE	3693.609	0	1	2
2041	2a	1	230531.5	1011558	0	1011558	5358496	0	5358496	BEV	0	230531.5	1	3
2041	2a	1	19425.21	85236.64	0	85236.64	452428.5	0	452428.5	FCEV	0	19425.21	1	7
2041	2a	1	86124.72	377910.1	138315.1	239595	1997914	731236.5	1266677	PHEV	31521.65	54603.07	1	8
2041	2a	1	282510.2	1255823	1255823	0	6851370	6851370	0	ICE	282510.2	0	1	1
2041	2a	1	3600.491	16005.01	16005.01	0	87304.04	87304.04	0	ICE	3600.491	0	1	2
2041	2a	1	283357.5	1259589	0	1259589	6875831	0	6875831	BEV	0	283357.5	1	3
2041	2a	1	26371.19	117226	0	117226	640790.9	0	640790.9	FCEV	0	26371.19	1	7
2041	2a	1	105554.3	469213	161409.3	307803.7	2557711	879852.6	1677858	PHEV	36310.67	69243.6	1	8
2041	2a	1	264683.6	1191743	1191743	0	6697811	6697811	0	ICE	264683.6	0	1	1
2041	2a	1	3373.297	15188.34	15188.34	0	85349.69	85349.69	0	ICE	3373.297	0	1	2
2041	2a	1	338389.1	1523604	0	1523604	8566204	0	8566204	BEV	0	338389.1	1	3
2041	2a	1	34520.81	155430.6	0	155430.6	874710.6	0	874710.6	FCEV	0	34520.81	1	7
2041	2a	1	125690.9	565925.6	182228	383697.6	3178986	1023633	2155352	PHEV	40472.46	85218.4	1	8
2041	2a	1	240521.9	1096734	1096734	0	6346396	6346396	0	ICE	240521.9	0	1	1
2041	2a	1	3065.369	13977.5	13977.5	0	80873.93	80873.93	0	ICE	3065.369	0	1	2
2041	2a	1	399883.9	1823395	0	1823395	10553462	0	10553462	BEV	0	399883.9	1	3
2041	2a	1	44431.54	202599.4	0	202599.4	1173365	0	1173365	FCEV	0	44431.54	1	7
2041	2a	1	148105.1	675331.3	202599.4	472731.9	3907307	1172192	2735115	PHEV	44431.54	103673.6	1	8
2041	2a	1	206079.3	951488.7	951488.7	0	5666154	5666154	0	ICE	206079.3	0	1	1
2041	2a	1	2626.406	12126.38	12126.38	0	72207.08	72207.08	0	ICE	2626.406	0	1	2
2041	2a	1	464456.3	2144441	0	2144441	12770775	0	12770775	BEV	0	464456.3	1	3
2041	2a	1	57404.71	265043.3	0	265043.3	1579072	0	1579072	FCEV	0	57404.71	1	7
2041	2a	1	164798.2	760889.9	228267	532622.9	4532068	1359621	3172448	PHEV	49439.47	115358.8	1	8
2041	2a	1	165480.9	773522.1	773522.1	0	4738278	4738278	0	ICE	165480.9	0	1	1
2041	2a	1	2108.996	9858.272	9858.272	0	60384.09	60384.09	0	ICE	2108.996	0	1	2
2041	2a	1	536010.6	2505523	0	2505523	15346277	0	15346277	BEV	0	536010.6	1	3
2041	2a	1	73092.35	341662.2	0	341662.2	2093225	0	2093225	FCEV	0	73092.35	1	7
2041	2a	1	181939.8	850457.8	255137.3	595320.4	5212512	1563754	3648758	PHEV	54581.95	127357.9	1	8
2041	2a	1	116423.3	550877.9	550877.9	0	3469971	3469971	0	ICE	116423.3	0	1	1
2041	2a	1	1483.775	7020.748	7020.748	0	44222.21	44222.21	0	ICE	1483.775	0	1	2
2041	2a	1	606502.5	2869776	0	2869776	18071691	0	18071691	BEV	0	606502.5	1	3
2041	2a	1	90626.82	428817.1	0	428817.1	2700733	0	2700733	FCEV	0	90626.82	1	7

2041	2a	1	196626.2	930372.4	279111.7	651260.7	5866765	1760029	4106735	PHEV	58987.87	137638.4	1	8
2041	2a	1	61590.62	294955.6	294955.6	0	1909704	1909704	0	ICE	61590.62	0	1	1
2041	2a	1	784.9509	3759.106	3759.106	0	24338.5	24338.5	0	ICE	784.9509	0	1	2
2041	2a	1	684842	3279688	0	3279688	21224989	0	21224989	BEV	0	684842	1	3
2041	2a	1	111485.9	533902.7	0	533902.7	3455372	0	3455372	FCEV	0	111485.9	1	7
2041	2a	1	211682.1	1013739	304121.8	709617.5	6574431	1972329	4602102	PHEV	63504.63	148177.5	1	8
2041	2a	1	759130.7	3678945	0	3678945	24461713	0	24461713	BEV	0	759130.7	1	3
2041	2a	1	133964.2	649225.6	0	649225.6	4316646	0	4316646	FCEV	0	133964.2	1	7
2041	2a	1	223273.7	1082043	324612.8	757429.8	7215708	2164712	5050995	PHEV	66982.12	156291.6	1	8
2041	2a	1	795515.9	3900852	0	3900852	26631383	0	26631383	BEV	0	795515.9	1	3
2041	2a	1	151526.8	743019.5	0	743019.5	5072258	0	5072258	FCEV	0	151526.8	1	7
2041	2a	1	222145.8	1089303	326791	762512.3	7463365	2239009	5224355	PHEV	66643.75	155502.1	1	8
2041	2a	1	823349.6	4084505	0	4084505	28620172	0	28620172	BEV	0	823349.6	1	3
2041	2a	1	168637.9	836585.5	0	836585.5	5861285	0	5861285	FCEV	0	168637.9	1	7
2041	2a	1	217753.3	1080239	324071.8	756167.6	7601571	2280471	5321100	PHEV	65326	152427.3	1	8
2041	2a	1	845927.1	4244972	0	4244972	30506891	0	30506891	BEV	0	845927.1	1	3
2041	2a	1	185691.3	931823.2	0	931823.2	6695720	0	6695720	FCEV	0	185691.3	1	7
2041	2a	1	211295.3	1060308	318092.3	742215.3	7656198	2296859	5359338	PHEV	63388.6	147906.7	1	8
2041	2a	1	870356.2	4417423	0	4417423	32504768	0	32504768	BEV	0	870356.2	1	3
2041	2a	1	204157.6	1036186	0	1036186	7623644	0	7623644	FCEV	0	204157.6	1	7
2041	2a	1	204669.3	1038783	311634.8	727147.8	7678615	2303585	5375031	PHEV	61400.79	143268.5	1	8
2041	2a	1	879936.6	4516459	0	4516459	33921849	0	33921849	BEV	0	879936.6	1	3
2041	2a	1	219984.1	1129115	0	1129115	8479842	0	8479842	FCEV	0	219984.1	1	7
2041	2a	1	194103.7	996277.8	298883.3	697394.5	7509560	2252868	5256692	PHEV	58231.1	135872.6	1	8
2041	2a	1	792609.9	4113645	0	4113645	31453502	0	31453502	BEV	0	792609.9	1	3
2041	2a	1	210693.8	1093501	0	1093501	8361010	0	8361010	FCEV	0	210693.8	1	7
2041	2a	1	163328.5	847674.9	254302.5	593372.5	6494420	1948326	4546094	PHEV	48998.55	114330	1	8
2041	2a	1	3006.134	8024.093	8024.093	0	29778.1	29778.1	0	ICE	3006.134	0	2	1
2041	2a	1	3778.089	10301.07	10301.07	0	38732.11	38732.11	0	ICE	3778.089	0	2	1
2041	2a	1	3459.602	9630.909	9630.909	0	36541.54	36541.54	0	ICE	3459.602	0	2	1
2041	2a	1	3705.088	10526.56	10526.56	0	40385.66	40385.66	0	ICE	3705.088	0	2	1
2041	2a	1	4166.301	12075.61	12075.61	0	46694.06	46694.06	0	ICE	4166.301	0	2	1
2041	2a	1	4432.818	13102.04	13102.04	0	50063.61	50063.61	0	ICE	4432.818	0	2	1
2041	2a	1	3097.998	9334.207	9334.207	0	35527.95	35527.95	0	ICE	3097.998	0	2	1
2041	2a	1	1786.283	5586.709	5586.709	0	21456.07	21456.07	0	ICE	1786.283	0	2	1
2041	2a	1	2917.785	9292.707	9292.707	0	36260.67	36260.67	0	ICE	2917.785	0	2	1
2041	2a	1	4249.354	13777	13777	0	54732.12	54732.12	0	ICE	4249.354	0	2	1
2041	2a	1	7361.175	24287.68	24287.68	0	97601.37	97601.37	0	ICE	7361.175	0	2	1
2041	2a	1	5545.202	18613.69	18613.69	0	75558.72	75558.72	0	ICE	5545.202	0	2	1
2041	2a	1	2978.003	10166.93	10166.93	0	41450.57	41450.57	0	ICE	2978.003	0	2	1
2041	2a	1	2718.7	9437.423	9437.423	0	39031.55	39031.55	0	ICE	2718.7	0	2	1
2041	2a	1	26376.76	97606.13	97606.13	0	426312.8	426312.8	0	ICE	26376.76	0	2	1
2041	2a	1	26051.78	97896.09	97896.09	0	433031.6	433031.6	0	ICE	26051.78	0	2	1
2041	2a	1	25155.15	95967.89	95967.89	0	431853.7	431853.7	0	ICE	25155.15	0	2	1
2041	2a	1	3.407719	13.00059	13.00059	0	58.51659	58.51659	0	ICE	3.407719	0	2	2
2041	2a	1	0.847584	3.233569	0	3.233569	12.41202	0	12.41202	BEV	0	0.847584	2	3
2041	2a	1	0.017298	0.065991	0	0.065991	0.253307	0	0.253307	FCEV	0	0.017298	2	7

2041	2a	1	7.351498	28.04626	16.82775	11.2185	126.256	75.75359	50.50239	PHEV	4.410899	2.940599	2	8
2041	2a	1	29189.17	113030.1	113030.1	0	513106	513106	0	ICE	29189.17	0	2	1
2041	2a	1	3.954201	15.31197	15.31197	0	69.5239	69.5239	0	ICE	3.954201	0	2	2
2041	2a	1	32752.58	128705.2	128705.2	0	590538	590538	0	ICE	32752.58	0	2	1
2041	2a	1	4.467884	17.55709	17.55709	0	80.5898	80.5898	0	ICE	4.467884	0	2	2
2041	2a	1	435.4921	1711.319	0	1711.319	7526.261	0	7526.261	BEV	0	435.4921	2	3
2041	2a	1	10.18695	40.03084	0	40.03084	164.2686	0	164.2686	FCEV	0	10.18695	2	7
2041	2a	1	334.4273	1314.172	780.9939	533.1785	6152.983	3656.63	2496.353	PHEV	198.7454	135.682	2	8
2041	2a	1	36370.5	145005.9	145005.9	0	673685.4	673685.4	0	ICE	36370.5	0	2	1
2041	2a	1	5.019062	20.01055	20.01055	0	93.02895	93.02895	0	ICE	5.019062	0	2	2
2041	2a	1	987.8952	3938.649	0	3938.649	17619.41	0	17619.41	BEV	0	987.8952	2	3
2041	2a	1	26.07348	103.9526	0	103.9526	440.8429	0	440.8429	FCEV	0	26.07348	2	7
2041	2a	1	760.8588	3033.476	1785.417	1248.059	14357.77	8450.57	5907.195	PHEV	447.8198	313.0391	2	8
2041	2a	1	38224.09	154585.8	154585.8	0	728713.3	728713.3	0	ICE	38224.09	0	2	1
2041	2a	1	5.344175	21.61291	21.61291	0	101.9676	101.9676	0	ICE	5.344175	0	2	2
2041	2a	1	2693.974	10894.97	0	10894.97	49734.83	0	49734.83	BEV	0	2693.974	2	3
2041	2a	1	92.34664	373.4683	0	373.4683	1636.738	0	1636.738	FCEV	0	92.34664	2	7
2041	2a	1	1942.87	7857.356	4555.022	3302.335	38069.35	22069.35	16000	PHEV	1126.31	816.5606	2	8
2041	2a	1	39429.55	161719.9	161719.9	0	774800.9	774800.9	0	ICE	39429.55	0	2	1
2041	2a	1	5.535305	22.703	22.703	0	108.8528	108.8528	0	ICE	5.535305	0	2	2
2041	2a	1	4826.515	19795.9	0	19795.9	92535.19	0	92535.19	BEV	0	4826.515	2	3
2041	2a	1	204.0992	837.1108	0	837.1108	3789.173	0	3789.173	FCEV	0	204.0992	2	7
2041	2a	1	3256.447	13356.29	7624.531	5731.755	65729.14	37521.95	28207.19	PHEV	1858.966	1397.481	2	8
2041	2a	1	40026.6	166461.8	166461.8	0	811689.6	811689.6	0	ICE	40026.6	0	2	1
2041	2a	1	5.645585	23.47875	23.47875	0	114.559	114.559	0	ICE	5.645585	0	2	2
2041	2a	1	7406.501	30802.01	0	30802.01	147556.5	0	147556.5	BEV	0	7406.501	2	3
2041	2a	1	373.437	1553.043	0	1553.043	7286.825	0	7286.825	FCEV	0	373.437	2	7
2041	2a	1	4669.679	19420.17	10914.13	8506.034	96837.73	54422.81	42414.93	PHEV	2624.36	2045.32	2	8
2041	2a	1	40177.06	169389.3	169389.3	0	841763.1	841763.1	0	ICE	40177.06	0	2	1
2041	2a	1	5.691617	23.99626	23.99626	0	119.3072	119.3072	0	ICE	5.691617	0	2	2
2041	2a	1	10494.94	44247.39	0	44247.39	217241.8	0	217241.8	BEV	0	10494.94	2	3
2041	2a	1	615.8553	2596.489	0	2596.489	12605.38	0	12605.38	FCEV	0	615.8553	2	7
2041	2a	1	6174.648	26032.75	14399.83	11632.92	131599.4	72793.26	58806.12	PHEV	3415.463	2759.186	2	8
2041	2a	1	39687.39	169598.5	169598.5	0	860299.3	860299.3	0	ICE	39687.39	0	2	1
2041	2a	1	5.645027	24.12323	24.12323	0	122.4097	122.4097	0	ICE	5.645027	0	2	2
2041	2a	1	14086.08	60194.9	0	60194.9	303071.3	0	303071.3	BEV	0	14086.08	2	3
2041	2a	1	944.7982	4037.463	0	4037.463	20212.57	0	20212.57	FCEV	0	944.7982	2	7
2041	2a	1	7720.679	32993.24	17957.75	15035.49	169342.5	92170.71	77171.8	PHEV	4202.255	3518.424	2	8
2041	2a	1	38769.53	167897.3	167897.3	0	869342.1	869342.1	0	ICE	38769.53	0	2	1
2041	2a	1	5.514474	23.88126	23.88126	0	123.6745	123.6745	0	ICE	5.514474	0	2	2
2041	2a	1	18296.14	79234.2	0	79234.2	408712.9	0	408712.9	BEV	0	18296.14	2	3
2041	2a	1	1383.175	5990.047	0	5990.047	30836.64	0	30836.64	FCEV	0	1383.175	2	7
2041	2a	1	9323.887	40378.49	21619.8	18758.69	210488.1	112701.4	97786.77	PHEV	4992.276	4331.612	2	8
2041	2a	1	36874.6	161803.5	161803.5	0	855958.9	855958.9	0	ICE	36874.6	0	2	1
2041	2a	1	5.244944	23.0145	23.0145	0	121.7519	121.7519	0	ICE	5.244944	0	2	2
2041	2a	1	22893.02	100453.2	0	100453.2	530910.6	0	530910.6	BEV	0	22893.02	2	3
2041	2a	1	1929.028	8464.459	0	8464.459	44733.44	0	44733.44	FCEV	0	1929.028	2	7

2041	2a	1	10821.76	47485.22	25004.36	22480.86	251702.4	132539.3	119163.1	PHEV	5698.428	5123.329	2	8
2041	2a	1	34743.55	154443.1	154443.1	0	835366.8	835366.8	0	ICE	34743.55	0	2	1
2041	2a	1	4.941829	21.96756	21.96756	0	118.8071	118.8071	0	ICE	4.941829	0	2	2
2041	2a	1	28324.08	125907	0	125907	681841.6	0	681841.6	BEV	0	28324.08	2	3
2041	2a	1	2636.032	11717.77	0	11717.77	63518.17	0	63518.17	FCEV	0	2636.032	2	7
2041	2a	1	12385.54	55056.57	28503.57	26553	297077.4	153801.2	143276.2	PHEV	6412.17	5973.368	2	8
2041	2a	1	31728.23	142857	142857	0	790644.2	790644.2	0	ICE	31728.23	0	2	1
2041	2a	1	4.512938	20.31959	20.31959	0	112.4341	112.4341	0	ICE	4.512938	0	2	2
2041	2a	1	34194.32	153960.6	0	153960.6	854446.6	0	854446.6	BEV	0	34194.32	2	3
2041	2a	1	3488.338	15706.31	0	15706.31	87294.48	0	87294.48	FCEV	0	3488.338	2	7
2041	2a	1	13787.2	62077.16	31588.41	30488.75	341389.2	173718.3	167670.9	PHEV	7015.717	6771.487	2	8
2041	2a	1	28217.03	128664.3	128664.3	0	728957.3	728957.3	0	ICE	28217.03	0	2	1
2041	2a	1	4.013514	18.30086	18.30086	0	103.6521	103.6521	0	ICE	4.013514	0	2	2
2041	2a	1	40886.75	186435.8	0	186435.8	1060310	0	1060310	BEV	0	40886.75	2	3
2041	2a	1	4542.972	20715.09	0	20715.09	118010.5	0	118010.5	FCEV	0	4542.972	2	7
2041	2a	1	15143.24	69050.29	34525.15	34525.15	387367.3	193683.6	193683.6	PHEV	7571.62	7571.62	2	8
2041	2a	1	23835.54	110051	110051	0	638656.7	638656.7	0	ICE	23835.54	0	2	1
2041	2a	1	3.390302	15.65336	15.65336	0	90.80518	90.80518	0	ICE	3.390302	0	2	2
2041	2a	1	47293.1	218357	0	218357	1273061	0	1273061	BEV	0	47293.1	2	3
2041	2a	1	5845.215	26987.94	0	26987.94	157606.7	0	157606.7	FCEV	0	5845.215	2	7
2041	2a	1	16780.52	77477.34	38738.67	38738.67	443910.7	221955.3	221955.3	PHEV	8390.26	8390.26	2	8
2041	2a	1	18878	88243.13	88243.13	0	524654.4	524654.4	0	ICE	18878	0	2	1
2041	2a	1	2.685156	12.55146	12.55146	0	74.59149	74.59149	0	ICE	2.685156	0	2	2
2041	2a	1	54295.31	253797.4	0	253797.4	1516812	0	1516812	BEV	0	54295.31	2	3
2041	2a	1	7403.906	34608.74	0	34608.74	207163.4	0	207163.4	FCEV	0	7403.906	2	7
2041	2a	1	18429.64	86147.3	43073.65	43073.65	504415.2	252207.6	252207.6	PHEV	9214.818	9214.818	2	8
2041	2a	1	13078.74	61884.43	61884.43	0	377169.9	377169.9	0	ICE	13078.74	0	2	1
2041	2a	1	1.860285	8.802274	8.802274	0	53.62083	53.62083	0	ICE	1.860285	0	2	2
2041	2a	1	60945.49	288374.6	0	288374.6	1767204	0	1767204	BEV	0	60945.49	2	3
2041	2a	1	9106.797	43090.45	0	43090.45	264441.6	0	264441.6	FCEV	0	9106.797	2	7
2041	2a	1	19758.34	93490.13	46745.07	46745.07	560079.6	280039.8	280039.8	PHEV	9879.169	9879.169	2	8
2041	2a	1	6812.34	32624.09	32624.09	0	203840.1	203840.1	0	ICE	6812.34	0	2	1
2041	2a	1	0.968969	4.640363	4.640363	0	28.9782	28.9782	0	ICE	0.968969	0	2	2
2041	2a	1	68193.3	326575.7	0	326575.7	2051898	0	2051898	BEV	0	68193.3	2	3
2041	2a	1	11101.23	53163.48	0	53163.48	334454.1	0	334454.1	FCEV	0	11101.23	2	7
2041	2a	1	21078.29	100943.3	50471.66	50471.66	619020	309510	309510	PHEV	10539.15	10539.15	2	8
2041	2a	1	75828.25	367483.4	0	367483.4	2367312	0	2367312	BEV	0	75828.25	2	3
2041	2a	1	13381.46	64850.02	0	64850.02	418226.5	0	418226.5	FCEV	0	13381.46	2	7
2041	2a	1	22302.43	108083.4	54041.68	54041.68	678853.2	339426.6	339426.6	PHEV	11151.21	11151.21	2	8
2041	2a	1	78844.51	386618	0	386618	2553512	0	2553512	BEV	0	78844.51	2	3
2041	2a	1	15018	73641.53	0	73641.53	486883.6	0	486883.6	FCEV	0	15018	2	7
2041	2a	1	22017.13	107962.1	53981.06	53981.06	695002.9	347501.4	347501.4	PHEV	11008.57	11008.57	2	8
2041	2a	1	80787.75	400775.1	0	400775.1	2713996	0	2713996	BEV	0	80787.75	2	3
2041	2a	1	16546.89	82086.47	0	82086.47	556397.4	0	556397.4	FCEV	0	16546.89	2	7
2041	2a	1	21366.14	105994	52997	52997	699757.5	349878.7	349878.7	PHEV	10683.07	10683.07	2	8
2041	2a	1	82052.49	411750.1	0	411750.1	2858864	0	2858864	BEV	0	82052.49	2	3
2041	2a	1	18011.52	90384.16	0	90384.16	628079.1	0	628079.1	FCEV	0	18011.52	2	7

2041	2a	1	20495.04	102846.8	51423.38	51423.38	696636.8	348318.4	348318.4	PHEV	10247.52	10247.52	2	8
2041	2a	1	83337.53	422973	0	422973	3010489	0	3010489	BEV	0	83337.53	2	3
2041	2a	1	19548.31	99215.89	0	99215.89	706686.2	0	706686.2	FCEV	0	19548.31	2	7
2041	2a	1	19597.3	99464.55	49732.27	49732.27	691281.6	345640.8	345640.8	PHEV	9798.652	9798.652	2	8
2041	2a	1	84680.64	434641.2	0	434641.2	3169856	0	3169856	BEV	0	84680.64	2	3
2041	2a	1	21170.16	108660.3	0	108660.3	792979.8	0	792979.8	FCEV	0	21170.16	2	7
2041	2a	1	18679.55	95876.73	47938.36	47938.36	683542.2	341771.1	341771.1	PHEV	9339.776	9339.776	2	8
2041	2a	1	77437.93	401902.9	0	401902.9	3001809	0	3001809	BEV	0	77437.93	2	3
2041	2a	1	20584.77	106834.9	0	106834.9	798405.9	0	798405.9	FCEV	0	20584.77	2	7
2041	2a	1	15957.18	82817.78	41408.89	41408.89	605346.7	302673.3	302673.3	PHEV	7978.591	7978.591	2	8
2041	2a	1	8589.19	22926.61	22926.61	0	82074.78	82074.78	0	ICE	8589.19	0	3	1
2041	2a	1	9274.48	25287.15	25287.15	0	90778.5	90778.5	0	ICE	9274.48	0	3	1
2041	2a	1	10137.74	28221.65	28221.65	0	102076	102076	0	ICE	10137.74	0	3	1
2041	2a	1	13151	37363.45	37363.45	0	136541.4	136541.4	0	ICE	13151	0	3	1
2041	2a	1	12168.49	35269.14	35269.14	0	128935.5	128935.5	0	ICE	12168.49	0	3	1
2041	2a	1	11484.63	33945.02	33945.02	0	125680.6	125680.6	0	ICE	11484.63	0	3	1
2041	2a	1	12270.46	36970.65	36970.65	0	138462	138462	0	ICE	12270.46	0	3	1
2041	2a	1	14753.53	45297.33	45297.33	0	170875.6	170875.6	0	ICE	14753.53	0	3	1
2041	2a	1	16177.82	50597.09	50597.09	0	192171.5	192171.5	0	ICE	16177.82	0	3	1
2041	2a	1	15130.22	48187.47	48187.47	0	184070.7	184070.7	0	ICE	15130.22	0	3	1
2041	2a	1	15397.17	49919.77	49919.77	0	192258.3	192258.3	0	ICE	15397.17	0	3	1
2041	2a	1	12032.48	39700.34	39700.34	0	155267.7	155267.7	0	ICE	12032.48	0	3	1
2041	2a	1	7562.21	25384.22	25384.22	0	100152.4	100152.4	0	ICE	7562.21	0	3	1
2041	2a	1	13555.71	46279.34	46279.34	0	185215	185215	0	ICE	13555.71	0	3	1
2041	2a	1	18951.71	65787.08	65787.08	0	266068.7	266068.7	0	ICE	18951.71	0	3	1
2041	2a	1	19653.03	69347.49	69347.49	0	284728.5	284728.5	0	ICE	19653.03	0	3	1
2041	2a	1	28703.38	102926.9	102926.9	0	425181.1	425181.1	0	ICE	28703.38	0	3	1
2041	2a	1	28705.37	104578.5	104578.5	0	439607.6	439607.6	0	ICE	28705.37	0	3	1
2041	2a	1	305.4392	1112.767	1112.767	0	4569.234	4569.234	0	ICE	305.4392	0	3	2
2041	2a	1	36995.1	136898.9	136898.9	0	584354.9	584354.9	0	ICE	36995.1	0	3	1
2041	2a	1	39503.69	148445	148445	0	641276.3	641276.3	0	ICE	39503.69	0	3	1
2041	2a	1	294.7885	1107.741	1107.741	0	4759.402	4759.402	0	ICE	294.7885	0	3	2
2041	2a	1	48094.79	183483.5	183483.5	0	805645.8	805645.8	0	ICE	48094.79	0	3	1
2041	2a	1	491.5824	1875.407	1875.407	0	8266.411	8266.411	0	ICE	491.5824	0	3	2
2041	2a	1	56331.55	218134.3	218134.3	0	969720.8	969720.8	0	ICE	56331.55	0	3	1
2041	2a	1	575.7713	2229.576	2229.576	0	9948.691	9948.691	0	ICE	575.7713	0	3	2
2041	2a	1	194.3517	752.5939	451.5563	301.0375	3365.273	2019.164	1346.109	PHEV	116.611	77.74067	3	8
2041	2a	1	64848.81	254831.2	254831.2	0	1153525	1153525	0	ICE	64848.81	0	3	1
2041	2a	1	661.1565	2598.094	2598.094	0	11796.01	11796.01	0	ICE	661.1565	0	3	2
2041	2a	1	764.8101	3005.413	0	3005.413	9798.631	0	9798.631	BEV	0	764.8101	3	3
2041	2a	1	17.8903	70.30206	0	70.30206	200.8435	0	200.8435	FCEV	0	17.8903	3	7
2041	2a	1	664.2828	2610.379	1551.311	1059.068	11844.2	7038.841	4805.363	PHEV	394.7738	269.509	3	8
2041	2a	1	75228.56	299929.5	299929.5	0	1378099	1378099	0	ICE	75228.56	0	3	1
2041	2a	1	768.7254	3064.839	3064.839	0	14126.42	14126.42	0	ICE	768.7254	0	3	2
2041	2a	1	1802.854	7187.818	0	7187.818	28891.9	0	28891.9	BEV	0	1802.854	3	3
2041	2a	1	47.58267	189.7078	0	189.7078	559.7166	0	559.7166	FCEV	0	47.58267	3	7
2041	2a	1	1301.086	5187.313	3053.104	2134.209	23909.3	14072.33	9836.968	PHEV	765.7821	535.304	3	8

2041	2a	1	84099.74	340116.2	340116.2	0	1587162	1587162	0	ICE	84099.74	0	3	1
2041	2a	1	872.368	3528.03	3528.03	0	16542.08	16542.08	0	ICE	872.368	0	3	2
2041	2a	1	5743.877	23229.39	0	23229.39	90843.38	0	90843.38	BEV	0	5743.877	3	3
2041	2a	1	196.8941	796.2792	0	796.2792	2425.047	0	2425.047	FCEV	0	196.8941	3	7
2041	2a	1	3904.058	15788.79	9152.987	6635.803	83755.17	48554.07	35201.1	PHEV	2263.238	1640.82	3	8
2041	2a	1	93601.73	383906.6	383906.6	0	1823283	1823283	0	ICE	93601.73	0	3	1
2041	2a	1	975.5008	4001.007	4001.007	0	19104.17	19104.17	0	ICE	975.5008	0	3	2
2041	2a	1	11342.09	46519.48	0	46519.48	185236.9	0	185236.9	BEV	0	11342.09	3	3
2041	2a	1	479.6239	1967.173	0	1967.173	6182.304	0	6182.304	FCEV	0	479.6239	3	7
2041	2a	1	7254.026	29752.31	16984.32	12767.99	167244.1	95472.49	71771.61	PHEV	4141.012	3113.013	3	8
2041	2a	1	101582.1	422457.7	422457.7	0	2043692	2043692	0	ICE	101582.1	0	3	1
2041	2a	1	1064.392	4426.572	4426.572	0	21540.29	21540.29	0	ICE	1064.392	0	3	2
2041	2a	1	18759.27	78015.68	0	78015.68	320180.6	0	320180.6	BEV	0	18759.27	3	3
2041	2a	1	945.8456	3933.564	0	3933.564	12849.12	0	12849.12	FCEV	0	945.8456	3	7
2041	2a	1	11277.31	46899.85	26357.71	20542.13	272616.3	153210.3	119405.9	PHEV	6337.848	4939.461	3	8
2041	2a	1	106723.1	449952	449952	0	2219141	2219141	0	ICE	106723.1	0	3	1
2041	2a	1	1123.873	4738.329	4738.329	0	23518.27	23518.27	0	ICE	1123.873	0	3	2
2041	2a	1	27920.71	117715.6	0	117715.6	497846.4	0	497846.4	BEV	0	27920.71	3	3
2041	2a	1	1638.42	6907.694	0	6907.694	24772.52	0	24772.52	FCEV	0	1638.42	3	7
2041	2a	1	15756.53	66430.65	36745.64	29685.01	396642.4	219399.9	177242.5	PHEV	8715.614	7040.92	3	8
2041	2a	1	110178.4	470832.2	470832.2	0	2370367	2370367	0	ICE	110178.4	0	3	1
2041	2a	1	1165.648	4981.232	4981.232	0	25249.54	25249.54	0	ICE	1165.648	0	3	2
2041	2a	1	39221	167605.4	0	167605.4	731219.5	0	731219.5	BEV	0	39221	3	3
2041	2a	1	2630.677	11241.83	0	11241.83	43170.44	0	43170.44	FCEV	0	2630.677	3	7
2041	2a	1	20746.35	88656.62	48254.53	40402.09	543167.7	295638.4	247529.3	PHEV	11291.94	9454.407	3	8
2041	2a	1	112180	485812.5	485812.5	0	2497426	2497426	0	ICE	112180	0	3	1
2041	2a	1	1186.824	5139.719	5139.719	0	26599.4	26599.4	0	ICE	1186.824	0	3	2
2041	2a	1	53111.42	230007	0	230007	1035652	0	1035652	BEV	0	53111.42	3	3
2041	2a	1	4015.185	17388.36	0	17388.36	71511.67	0	71511.67	FCEV	0	4015.185	3	7
2041	2a	1	26286.64	113838.2	60952.24	52885.99	716385.8	383573.4	332812.4	PHEV	14074.62	12212.02	3	8
2041	2a	1	110421.7	484524	484524	0	2545553	2545553	0	ICE	110421.7	0	3	1
2041	2a	1	1168.222	5126.086	5126.086	0	27108.77	27108.77	0	ICE	1168.222	0	3	2
2041	2a	1	68751.23	301676.3	0	301676.3	1401996	0	1401996	BEV	0	68751.23	3	3
2041	2a	1	5793.165	25420.06	0	25420.06	110438.1	0	110438.1	FCEV	0	5793.165	3	7
2041	2a	1	31773.4	139419.8	73414.47	66005.31	900855.3	474364.7	426490.6	PHEV	16730.97	15042.44	3	8
2041	2a	1	106724.5	474415.1	474415.1	0	2549006	2549006	0	ICE	106724.5	0	3	1
2041	2a	1	1129.106	5019.138	5019.138	0	27142.77	27142.77	0	ICE	1129.106	0	3	2
2041	2a	1	87192.68	387591.5	0	387591.5	1859095	0	1859095	BEV	0	87192.68	3	3
2041	2a	1	8114.747	36071.92	0	36071.92	164280.8	0	164280.8	FCEV	0	8114.747	3	7
2041	2a	1	37537.95	166864.8	86388.3	80476.52	1107102	573162.7	533939.6	PHEV	19433.93	18104.02	3	8
2041	2a	1	98919.7	445387.9	445387.9	0	2448918	2448918	0	ICE	98919.7	0	3	1
2041	2a	1	1046.534	4712.041	4712.041	0	26074.74	26074.74	0	ICE	1046.534	0	3	2
2041	2a	1	106735.6	480579	0	480579	2379151	0	2379151	BEV	0	106735.6	3	3
2041	2a	1	10888.64	49026.32	0	49026.32	232975.6	0	232975.6	FCEV	0	10888.64	3	7
2041	2a	1	42688.86	192207.5	97806.14	94401.32	1309830	666516.3	643313.6	PHEV	21722.53	20966.33	3	8
2041	2a	1	89267.31	407042	407042	0	2291485	2291485	0	ICE	89267.31	0	3	1
2041	2a	1	944.4154	4306.355	4306.355	0	24396.71	24396.71	0	ICE	944.4154	0	3	2

2041	2a	1	129361.3	589863	0	589863	3013892	0	3013892	BEV	0	129361.3	3	3
2041	2a	1	14373.48	65540.33	0	65540.33	324002.4	0	324002.4	FCEV	0	14373.48	3	7
2041	2a	1	47911.6	218467.8	109233.9	109233.9	1529674	764836.9	764836.9	PHEV	23955.8	23955.8	3	8
2041	2a	1	75916.73	350515.1	350515.1	0	2021311	2021311	0	ICE	75916.73	0	3	1
2041	2a	1	803.1712	3708.322	3708.322	0	21518.97	21518.97	0	ICE	803.1712	0	3	2
2041	2a	1	150776.5	696150.3	0	696150.3	3661611	0	3661611	BEV	0	150776.5	3	3
2041	2a	1	18635.3	86041.05	0	86041.05	440842.2	0	440842.2	FCEV	0	18635.3	3	7
2041	2a	1	53498.47	247007.8	123503.9	123503.9	1775875	887937.5	887937.5	PHEV	26749.24	26749.24	3	8
2041	2a	1	60343.26	282067.9	282067.9	0	1666564	1666564	0	ICE	60343.26	0	3	1
2041	2a	1	638.4096	2984.175	2984.175	0	17741.45	17741.45	0	ICE	638.4096	0	3	2
2041	2a	1	173852.4	812654.1	0	812654.1	4399918	0	4399918	BEV	0	173852.4	3	3
2041	2a	1	23707.15	110816.5	0	110816.5	587399.7	0	587399.7	FCEV	0	23707.15	3	7
2041	2a	1	59011.31	275841.9	137920.9	137920.9	2036823	1018411	1018411	PHEV	29505.65	29505.65	3	8
2041	2a	1	41866.63	198099.5	198099.5	0	1199799	1199799	0	ICE	41866.63	0	3	1
2041	2a	1	442.9336	2095.82	2095.82	0	12772.04	12772.04	0	ICE	442.9336	0	3	2
2041	2a	1	195552.9	925293.9	0	925293.9	5157848	0	5157848	BEV	0	195552.9	3	3
2041	2a	1	29220.55	138262.3	0	138262.3	757418.3	0	757418.3	FCEV	0	29220.55	3	7
2041	2a	1	63397.65	299977.4	149988.7	149988.7	2276661	1138330	1138330	PHEV	31698.83	31698.83	3	8
2041	2a	1	21682.44	103836.6	103836.6	0	644751.9	644751.9	0	ICE	21682.44	0	3	1
2041	2a	1	229.3923	1098.553	1098.553	0	6863.31	6863.31	0	ICE	229.3923	0	3	2
2041	2a	1	217676.8	1042447	0	1042447	5982269	0	5982269	BEV	0	217676.8	3	3
2041	2a	1	35435.75	169700.8	0	169700.8	959888.9	0	959888.9	FCEV	0	35435.75	3	7
2041	2a	1	67283.07	322216.6	161108.3	161108.3	2514163	1257082	1257082	PHEV	33641.54	33641.54	3	8
2041	2a	1	238949	1158009	0	1158009	6842049	0	6842049	BEV	0	238949	3	3
2041	2a	1	42167.47	204354.5	0	204354.5	1192881	0	1192881	FCEV	0	42167.47	3	7
2041	2a	1	70279.11	340590.8	170295.4	170295.4	2733349	1366675	1366675	PHEV	35139.56	35139.56	3	8
2041	2a	1	246166.9	1207092	0	1207092	7343992	0	7343992	BEV	0	246166.9	3	3
2041	2a	1	46888.94	229922.2	0	229922.2	1383659	0	1383659	FCEV	0	46888.94	3	7
2041	2a	1	68741.5	337077.4	168538.7	168538.7	2776835	1388417	1388417	PHEV	34370.75	34370.75	3	8
2041	2a	1	252001.1	1250137	0	1250137	7831517	0	7831517	BEV	0	252001.1	3	3
2041	2a	1	51614.69	256052.2	0	256052.2	1588281	0	1588281	FCEV	0	51614.69	3	7
2041	2a	1	66647.38	330627	165313.5	165313.5	2796294	1398147	1398147	PHEV	33323.69	33323.69	3	8
2041	2a	1	256676.1	1288034	0	1288034	8306572	0	8306572	BEV	0	256676.1	3	3
2041	2a	1	56343.53	282739.2	0	282739.2	1807156	0	1807156	FCEV	0	56343.53	3	7
2041	2a	1	64112.45	321724.6	160862.3	160862.3	2792870	1396435	1396435	PHEV	32056.23	32056.23	3	8
2041	2a	1	264007.6	1339949	0	1339949	8895407	0	8895407	BEV	0	264007.6	3	3
2041	2a	1	61927.71	314309.1	0	314309.1	2069725	0	2069725	FCEV	0	61927.71	3	7
2041	2a	1	62082.91	315096.9	157548.4	157548.4	2807032	1403516	1403516	PHEV	31041.46	31041.46	3	8
2041	2a	1	271573	1393905	0	1393905	9522726	0	9522726	BEV	0	271573	3	3
2041	2a	1	67893.24	348476.3	0	348476.3	2363250	0	2363250	FCEV	0	67893.24	3	7
2041	2a	1	59905.8	307479.1	153739.6	153739.6	2809011	1404505	1404505	PHEV	29952.9	29952.9	3	8
2041	2a	1	246458	1279117	0	1279117	8984935	0	8984935	BEV	0	246458	3	3
2041	2a	1	65514.15	340018.4	0	340018.4	2372579	0	2372579	FCEV	0	65514.15	3	7
2041	2a	1	50786.16	263580.2	131790.1	131790.1	2464949	1232475	1232475	PHEV	25393.08	25393.08	3	8
2041	2a	1	6863.829	18321.21	18321.21	0	58597.93	58597.93	0	ICE	6863.829	0	4	1
2041	2a	1	7361.921	20072.5	20072.5	0	64698.62	64698.62	0	ICE	7361.921	0	4	1
2041	2a	1	11429.24	31816.93	31816.93	0	104459.9	104459.9	0	ICE	11429.24	0	4	1

2041	2a	1	12336.1	35048.22	35048.22	0	116035.3	116035.3	0	ICE	12336.1	0	4	1
2041	2a	1	15026.39	43552.48	43552.48	0	145479.4	145479.4	0	ICE	15026.39	0	4	1
2041	2a	1	19.02734	55.14885	55.14885	0	152.1359	152.1359	0	ICE	19.02734	0	4	2
2041	2a	1	16790.14	49626.45	49626.45	0	168634.5	168634.5	0	ICE	16790.14	0	4	1
2041	2a	1	17447.54	52569.08	52569.08	0	182507	182507	0	ICE	17447.54	0	4	1
2041	2a	1	17954.14	55124.06	55124.06	0	193326.9	193326.9	0	ICE	17954.14	0	4	1
2041	2a	1	29.99322	92.08727	92.08727	0	274.9678	274.9678	0	ICE	29.99322	0	4	2
2041	2a	1	16483.06	51551.77	51551.77	0	180737.9	180737.9	0	ICE	16483.06	0	4	1
2041	2a	1	15675.21	49923.21	49923.21	0	177718.6	177718.6	0	ICE	15675.21	0	4	1
2041	2a	1	15593.36	50555.87	50555.87	0	182824.6	182824.6	0	ICE	15593.36	0	4	1
2041	2a	1	11808.6	38961.64	38961.64	0	142919.5	142919.5	0	ICE	11808.6	0	4	1
2041	2a	1	5108.356	17147.32	17147.32	0	63683.33	63683.33	0	ICE	5108.356	0	4	1
2041	2a	1	7660.432	26152.79	26152.79	0	98292.48	98292.48	0	ICE	7660.432	0	4	1
2041	2a	1	11693.04	40590.06	40590.06	0	154976.9	154976.9	0	ICE	11693.04	0	4	1
2041	2a	1	337.9121	1172.994	1172.994	0	4313.545	4313.545	0	ICE	337.9121	0	4	2
2041	2a	1	12550.61	44285.96	44285.96	0	172005.1	172005.1	0	ICE	12550.61	0	4	1
2041	2a	1	15154.11	54340.8	54340.8	0	213667.5	213667.5	0	ICE	15154.11	0	4	1
2041	2a	1	326.717	1171.568	1171.568	0	4525.23	4525.23	0	ICE	326.717	0	4	2
2041	2a	1	25402.37	92545.16	92545.16	0	371728.7	371728.7	0	ICE	25402.37	0	4	1
2041	2a	1	811.2832	2955.643	2955.643	0	11540.21	11540.21	0	ICE	811.2832	0	4	2
2041	2a	1	30271.47	112018.4	112018.4	0	460681.8	460681.8	0	ICE	30271.47	0	4	1
2041	2a	1	36742.34	138068.5	138068.5	0	579011.2	579011.2	0	ICE	36742.34	0	4	1
2041	2a	1	37202.07	141927.4	141927.4	0	605995	605995	0	ICE	37202.07	0	4	1
2041	2a	1	1297.242	4949.031	4949.031	0	21148.87	21148.87	0	ICE	1297.242	0	4	2
2041	2a	1	311.2431	1187.405	712.443	474.962	4764.531	2858.719	1905.812	PHEV	186.7459	124.4972	4	8
2041	2a	1	43926.66	170098.5	170098.5	0	735901	735901	0	ICE	43926.66	0	4	1
2041	2a	1	1531.73	5931.363	5931.363	0	25681.79	25681.79	0	ICE	1531.73	0	4	2
2041	2a	1	0.768408	2.975529	0	2.975529	8.208729	0	8.208729	BEV	0	0.768408	4	3
2041	2a	1	0.015682	0.060725	0	0.060725	0.167525	0	0.167525	FCEV	0	0.015682	4	7
2041	2a	1	940.3196	3641.228	2184.737	1456.491	15395.19	9237.115	6158.077	PHEV	564.1918	376.1278	4	8
2041	2a	1	51235.29	201335.2	201335.2	0	883496	883496	0	ICE	51235.29	0	4	1
2041	2a	1	1803.449	7086.87	7086.87	0	31155.16	31155.16	0	ICE	1803.449	0	4	2
2041	2a	1	439.2127	1725.939	0	1725.939	5171.532	0	5171.532	BEV	0	439.2127	4	3
2041	2a	1	10.27398	40.37284	0	40.37284	115.0958	0	115.0958	FCEV	0	10.27398	4	7
2041	2a	1	1142.741	4490.537	2668.662	1821.875	20678.49	12288.93	8389.56	PHEV	679.1146	463.6263	4	8
2041	2a	1	59174.02	235921.5	235921.5	0	1050528	1050528	0	ICE	59174.02	0	4	1
2041	2a	1	2115.554	8434.522	8434.522	0	37689.18	37689.18	0	ICE	2115.554	0	4	2
2041	2a	1	1020.382	4068.173	0	4068.173	13914.56	0	13914.56	BEV	0	1020.382	4	3
2041	2a	1	26.93091	107.3711	0	107.3711	316.2047	0	316.2047	FCEV	0	26.93091	4	7
2041	2a	1	1374.196	5478.795	3224.662	2254.133	25090.08	14767.31	10322.78	PHEV	808.8124	565.3834	4	8
2041	2a	1	63382.39	256331.1	256331.1	0	1160171	1160171	0	ICE	63382.39	0	4	1
2041	2a	1	2306.045	9326.108	9326.108	0	42434.09	42434.09	0	ICE	2306.045	0	4	2
2041	2a	1	3354.257	13565.29	0	13565.29	47454.29	0	47454.29	BEV	0	3354.257	4	3
2041	2a	1	114.9804	465.0039	0	465.0039	1414.009	0	1414.009	FCEV	0	114.9804	4	7
2041	2a	1	4003.477	16190.86	9386.075	6804.789	80899.12	46898.37	34000.74	PHEV	2320.873	1682.604	4	8
2041	2a	1	66688.59	273522.6	273522.6	0	1261153	1261153	0	ICE	66688.59	0	4	1
2041	2a	1	2439.644	10006.18	10006.18	0	46412	46412	0	ICE	2439.644	0	4	2

2041	2a	1	6560.723	26908.74	0	26908.74	98311.3	0	98311.3	BEV	0	6560.723	4	3
2041	2a	1	277.4338	1137.892	0	1137.892	3572.062	0	3572.062	FCEV	0	277.4338	4	7
2041	2a	1	6948.352	28498.6	16268.63	12229.97	149090.3	85109.29	63981.06	PHEV	3966.516	2981.836	4	8
2041	2a	1	68901.86	286547.7	286547.7	0	1347867	1347867	0	ICE	68901.86	0	4	1
2041	2a	1	2536.478	10548.65	10548.65	0	49943.98	49943.98	0	ICE	2536.478	0	4	2
2041	2a	1	10745.62	44688.67	0	44688.67	170583.3	0	170583.3	BEV	0	10745.62	4	3
2041	2a	1	541.796	2253.21	0	2253.21	7299.021	0	7299.021	FCEV	0	541.796	4	7
2041	2a	1	10100.27	42004.8	23606.7	18398.1	227812.8	128030.8	99782.01	PHEV	5676.351	4423.918	4	8
2041	2a	1	71245.72	300377	300377	0	1443064	1443064	0	ICE	71245.72	0	4	1
2041	2a	1	2638.086	11122.35	11122.35	0	53813.29	53813.29	0	ICE	2638.086	0	4	2
2041	2a	1	16302.56	68732.75	0	68732.75	273782.5	0	273782.5	BEV	0	16302.56	4	3
2041	2a	1	956.6538	4033.319	0	4033.319	13491.37	0	13491.37	FCEV	0	956.6538	4	7
2041	2a	1	13588.21	57288.85	31688.92	25599.93	321259.1	177702.2	143556.9	PHEV	7516.222	6071.989	4	8
2041	2a	1	72115.89	308177.2	308177.2	0	1513844	1513844	0	ICE	72115.89	0	4	1
2041	2a	1	2684.723	11472.79	11472.79	0	56788.45	56788.45	0	ICE	2684.723	0	4	2
2041	2a	1	23179.31	99053.55	0	99053.55	410894.7	0	410894.7	BEV	0	23179.31	4	3
2041	2a	1	1554.71	6643.836	0	6643.836	24051.57	0	24051.57	FCEV	0	1554.71	4	7
2041	2a	1	17099.26	73071.31	39771.67	33299.64	422957.5	230209.7	192747.8	PHEV	9306.886	7792.379	4	8
2041	2a	1	71486.22	309581.8	309581.8	0	1555725	1555725	0	ICE	71486.22	0	4	1
2041	2a	1	2661.281	11525.08	11525.08	0	58351.79	58351.79	0	ICE	2661.281	0	4	2
2041	2a	1	31459.52	136240.2	0	136240.2	588661.5	0	588661.5	BEV	0	31459.52	4	3
2041	2a	1	2378.317	10299.66	0	10299.66	40367.85	0	40367.85	FCEV	0	2378.317	4	7
2041	2a	1	20476.36	88675.93	47479.63	41196.3	530313.2	283944.8	246368.4	PHEV	10963.63	9512.73	4	8
2041	2a	1	69032.26	302909.4	302909.4	0	1558232	1558232	0	ICE	69032.26	0	4	1
2041	2a	1	2569.926	11276.68	11276.68	0	58439.19	58439.19	0	ICE	2569.926	0	4	2
2041	2a	1	41036.56	180066	0	180066	809642.5	0	809642.5	BEV	0	41036.56	4	3
2041	2a	1	3457.852	15172.85	0	15172.85	63421.92	0	63421.92	FCEV	0	3457.852	4	7
2041	2a	1	23461.79	102948.9	54209.96	48738.96	635770.2	334778.4	300991.8	PHEV	12354.31	11107.48	4	8
2041	2a	1	65696.48	292036	292036	0	1538559	1538559	0	ICE	65696.48	0	4	1
2041	2a	1	2445.741	10871.88	10871.88	0	57695.73	57695.73	0	ICE	2445.741	0	4	2
2041	2a	1	52533.85	233525	0	233525	1091939	0	1091939	BEV	0	52533.85	4	3
2041	2a	1	4889.159	21733.44	0	21733.44	96050.11	0	96050.11	FCEV	0	4889.159	4	7
2041	2a	1	26222.93	116566.9	60348.37	56218.57	743036.3	384680.5	358355.8	PHEV	13575.98	12646.94	4	8
2041	2a	1	60448.22	272169.3	272169.3	0	1469129	1469129	0	ICE	60448.22	0	4	1
2041	2a	1	2250.36	10132.29	10132.29	0	55087.58	55087.58	0	ICE	2250.36	0	4	2
2041	2a	1	65333.05	294163.3	0	294163.3	1429733	0	1429733	BEV	0	65333.05	4	3
2041	2a	1	6664.958	30009.11	0	30009.11	139476.1	0	139476.1	FCEV	0	6664.958	4	7
2041	2a	1	28242.8	127163.8	64708.2	62455.59	836380.2	425598	410782.2	PHEV	14371.55	13871.25	4	8
2041	2a	1	54207.46	247175.7	247175.7	0	1367549	1367549	0	ICE	54207.46	0	4	1
2041	2a	1	2018.029	9201.83	9201.83	0	51275.22	51275.22	0	ICE	2018.029	0	4	2
2041	2a	1	80402.8	366621.5	0	366621.5	1851606	0	1851606	BEV	0	80402.8	4	3
2041	2a	1	8933.645	40735.72	0	40735.72	198422.1	0	198422.1	FCEV	0	8933.645	4	7
2041	2a	1	29778.82	135785.7	67892.87	67892.87	921166.2	460583.1	460583.1	PHEV	14889.41	14889.41	4	8
2041	2a	1	46101.26	212854.1	212854.1	0	1207564	1207564	0	ICE	46101.26	0	4	1
2041	2a	1	1716.253	7924.111	7924.111	0	45274.32	45274.32	0	ICE	1716.253	0	4	2
2041	2a	1	93737.41	432795	0	432795	2251238	0	2251238	BEV	0	93737.41	4	3
2041	2a	1	11585.52	53491.52	0	53491.52	270348.5	0	270348.5	FCEV	0	11585.52	4	7

2041	2a	1	33259.87	153564.2	76782.08	76782.08	1071406	535702.9	535702.9	PHEV	16629.94	16629.94	4	8
2041	2a	1	36893.41	172454.2	172454.2	0	1003262	1003262	0	ICE	36893.41	0	4	1
2041	2a	1	1373.464	6420.106	6420.106	0	37612.94	37612.94	0	ICE	1373.464	0	4	2
2041	2a	1	108840.8	508764.5	0	508764.5	2725231	0	2725231	BEV	0	108840.8	4	3
2041	2a	1	14841.93	69376.98	0	69376.98	363068.1	0	363068.1	FCEV	0	14841.93	4	7
2041	2a	1	36944.21	172691.6	86345.81	86345.81	1239060	619529.8	619529.8	PHEV	18472.1	18472.1	4	8
2041	2a	1	25643.75	121338	121338	0	724177.6	724177.6	0	ICE	25643.75	0	4	1
2041	2a	1	954.6627	4517.158	4517.158	0	27149.14	27149.14	0	ICE	954.6627	0	4	2
2041	2a	1	122671.4	580441.9	0	580441.9	3202327	0	3202327	BEV	0	122671.4	4	3
2041	2a	1	18330.21	86732.69	0	86732.69	469442.4	0	469442.4	FCEV	0	18330.21	4	7
2041	2a	1	39769.69	188177.4	94088.72	94088.72	1389446	694722.9	694722.9	PHEV	19884.84	19884.84	4	8
2041	2a	1	13438.56	64356.87	64356.87	0	394022.4	394022.4	0	ICE	13438.56	0	4	1
2041	2a	1	500.2893	2395.871	2395.871	0	14771.45	14771.45	0	ICE	500.2893	0	4	2
2041	2a	1	138193.1	661802.7	0	661802.7	3759868	0	3759868	BEV	0	138193.1	4	3
2041	2a	1	22496.55	107735.3	0	107735.3	602420.9	0	602420.9	FCEV	0	22496.55	4	7
2041	2a	1	42714.97	204560.7	102280.4	102280.4	1554219	777109.7	777109.7	PHEV	21357.49	21357.49	4	8
2041	2a	1	153416.7	743497.1	0	743497.1	4349419	0	4349419	BEV	0	153416.7	4	3
2041	2a	1	27073.53	131205.4	0	131205.4	757379.2	0	757379.2	FCEV	0	27073.53	4	7
2041	2a	1	45122.55	218675.6	109337.8	109337.8	1709848	854923.8	854923.8	PHEV	22561.28	22561.28	4	8
2041	2a	1	159922.1	784186.1	0	784186.1	4723656	0	4723656	BEV	0	159922.1	4	3
2041	2a	1	30461.36	149368.8	0	149368.8	888986.6	0	888986.6	FCEV	0	30461.36	4	7
2041	2a	1	44657.85	218982	109491	109491	1757651	878825.3	878825.3	PHEV	22328.93	22328.93	4	8
2041	2a	1	163620.9	811696.9	0	811696.9	5034182	0	5034182	BEV	0	163620.9	4	3
2041	2a	1	33512.71	166251.2	0	166251.2	1019941	0	1019941	FCEV	0	33512.71	4	7
2041	2a	1	43273.22	214671.5	107335.8	107335.8	1768715	884357.4	884357.4	PHEV	21636.61	21636.61	4	8
2041	2a	1	167514.3	840608.7	0	840608.7	5366448	0	5366448	BEV	0	167514.3	4	3
2041	2a	1	36771.44	184523.9	0	184523.9	1166453	0	1166453	FCEV	0	36771.44	4	7
2041	2a	1	41841.66	209966.9	104983.5	104983.5	1774847	887423.4	887423.4	PHEV	20920.83	20920.83	4	8
2041	2a	1	172408.9	875047.6	0	875047.6	5747185	0	5747185	BEV	0	172408.9	4	3
2041	2a	1	40441.6	205258.1	0	205258.1	1336139	0	1336139	FCEV	0	40441.6	4	7
2041	2a	1	40542.95	205772.5	102886.3	102886.3	1782483	891241.3	891241.3	PHEV	20271.48	20271.48	4	8
2041	2a	1	175879.4	902737.9	0	902737.9	6098214	0	6098214	BEV	0	175879.4	4	3
2041	2a	1	43969.85	225684.5	0	225684.5	1512300	0	1512300	FCEV	0	43969.85	4	7
2041	2a	1	38796.92	199133.4	99566.68	99566.68	1766599	883299.3	883299.3	PHEV	19398.46	19398.46	4	8
2041	2a	1	152810	793083.9	0	793083.9	5496943	0	5496943	BEV	0	152810	4	3
2041	2a	1	40620.38	210819.8	0	210819.8	1450650	0	1450650	FCEV	0	40620.38	4	7
2041	2a	1	31488.67	163426.2	81713.09	81713.09	1477640	738820.1	738820.1	PHEV	15744.33	15744.33	4	8
2041	2a	1	25.11031	67.02543	67.02543	0	103.1117	103.1117	0	ICE	25.11031	0	1	2
2041	2a	1	31.18618	88.60337	88.60337	0	168.9021	168.9021	0	ICE	31.18618	0	1	2
2041	2a	1	4.613554	13.37192	0	13.37192	32.25861	0	32.25861	BEV	0	4.613554	1	3
2041	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2041	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2041	2a	1	70.67967	208.9072	208.9072	0	419.2625	419.2625	0	ICE	70.67967	0	1	2
2041	2a	1	91.50439	275.7009	275.7009	0	582.0706	582.0706	0	ICE	91.50439	0	1	2
2041	2a	1	30.65028	94.10464	94.10464	0	217.4271	217.4271	0	ICE	30.65028	0	1	2
2041	2a	1	54.40992	170.1703	170.1703	0	394.6375	394.6375	0	ICE	54.40992	0	1	2
2041	2a	1	133.009	446.4739	446.4739	0	1186.968	1186.968	0	ICE	133.009	0	1	2

2041	2a	1	405.3433	1430.29	1430.29	0	4285.094	4285.094	0	ICE	405.3433	0	1	2
2041	2a	1	631.6202	2264.914	2264.914	0	7118.896	7118.896	0	ICE	631.6202	0	1	2
2041	2a	1	548.6998	1967.572	0	1967.572	6517.345	0	6517.345	BEV	0	548.6998	1	3
2041	2a	1	0.032237	0.115597	0	0.115597	0.3829	0	0.3829	FCEV	0	0.032237	1	7
2041	2a	1	573.522	2056.581	1233.949	822.6325	6238.591	3743.154	2495.436	PHEV	344.1132	229.4088	1	8
2041	2a	1	749.5452	2730.721	0	2730.721	9367.022	0	9367.022	BEV	0	749.5452	1	3
2041	2a	1	0.105022	0.382615	0	0.382615	1.312459	0	1.312459	FCEV	0	0.105022	1	7
2041	2a	1	946.3573	3447.741	2068.644	1379.096	10888.68	6533.208	4355.472	PHEV	567.8144	378.5429	1	8
2041	2a	1	820.6636	3036.833	3036.833	0	10470.11	10470.11	0	ICE	820.6636	0	1	2
2041	2a	1	1981.46	7332.313	0	7332.313	26149.67	0	26149.67	BEV	0	1981.46	1	3
2041	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2041	2a	1	942.2373	3486.712	2092.027	1394.685	11486.95	6892.171	4594.781	PHEV	565.3424	376.8949	1	8
2041	2a	1	2764.664	8488.264	8488.264	0	32362.4	32362.4	0	ICE	2764.664	0	2	1
2041	2a	1	5572.158	19661.86	19661.86	0	82547.53	82547.53	0	ICE	5572.158	0	2	1
2041	2a	1	8632.337	30954.52	30954.52	0	131486.2	131486.2	0	ICE	8632.337	0	2	1
2041	2a	1	11475.58	41807.49	41807.49	0	178647.5	178647.5	0	ICE	11475.58	0	2	1
2041	2a	1	4.139618	13.65838	13.65838	0	50.25321	50.25321	0	ICE	4.139618	0	3	2
2041	2a	1	130.0065	458.7395	458.7395	0	1850.322	1850.322	0	ICE	130.0065	0	3	2
2041	2a	1	103.4675	371.022	371.022	0	1490.355	1490.355	0	ICE	103.4675	0	3	2
2041	2a	1	471.4033	1744.409	1744.409	0	7339.252	7339.252	0	ICE	471.4033	0	3	2
2041	2a	1	511.2725	1921.234	0	1921.234	4861.433	0	4861.433	BEV	0	511.2725	3	3
2041	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2041	2a	1	46.52955	174.8464	104.9079	69.93857	730.0327	438.0196	292.0131	PHEV	27.91773	18.61182	3	8
2041	2a	1	13.32923	37.10617	37.10617	0	94.53071	94.53071	0	ICE	13.32923	0	4	2
2041	2a	1	47.63511	148.9817	148.9817	0	475.246	475.246	0	ICE	47.63511	0	4	2
2041	2a	1	62.35929	198.605	198.605	0	644.7127	644.7127	0	ICE	62.35929	0	4	2
2041	2a	1	82.40001	267.1524	267.1524	0	917.6396	917.6396	0	ICE	82.40001	0	4	2
2041	2a	1	60.0428	198.107	198.107	0	694.551	694.551	0	ICE	60.0428	0	4	2
2041	2a	1	82.322	276.3319	276.3319	0	991.2046	991.2046	0	ICE	82.322	0	4	2
2041	2a	1	633.2403	2234.446	2234.446	0	8325.604	8325.604	0	ICE	633.2403	0	4	2
2041	2a	1	1741.29	6443.574	6443.574	0	25707.3	25707.3	0	ICE	1741.29	0	4	2
2041	2a	1	1242.911	4670.549	4670.549	0	19179.22	19179.22	0	ICE	1242.911	0	4	2
2041	2a	1	41.97215	116.8429	116.8429	0	202.2587	202.2587	0	ICE	41.97215	0	1	2
2041	2a	1	2.000387	6.256329	0	6.256329	16.29918	0	16.29918	BEV	0	2.000387	1	3
2041	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2041	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2041	2a	1	107.4243	379.0563	0	379.0563	1215.096	0	1215.096	BEV	0	107.4243	1	3
2041	2a	1	0.40597	1.432503	0	1.432503	4.592008	0	4.592008	FCEV	0	0.40597	1	7
2041	2a	1	225.8098	796.7901	478.0741	318.716	2315.678	1389.407	926.271	PHEV	135.4859	90.32391	1	8
2041	2a	1	1493.962	5613.937	0	5613.937	20738.81	0	20738.81	BEV	0	1493.962	1	3
2041	2a	1	45.48481	170.9205	0	170.9205	631.4088	0	631.4088	FCEV	0	45.48481	1	7
2041	2a	1	1074.359	4037.172	2422.303	1614.869	13873.67	8324.202	5549.468	PHEV	644.6153	429.7435	1	8
2041	2a	1	1.593281	4.344129	4.344129	0	14.6726	14.6726	0	ICE	1.593281	0	2	2
2041	2a	1	15.32094	47.91717	47.91717	0	170.0205	170.0205	0	ICE	15.32094	0	3	2
2041	2a	1	17.55346	55.90513	55.90513	0	206.2806	206.2806	0	ICE	17.55346	0	3	2
2041	2a	1	11.43401	31.17516	31.17516	0	78.10052	78.10052	0	ICE	11.43401	0	4	2
2041	2a	1	19.32614	58.22927	58.22927	0	178.2027	178.2027	0	ICE	19.32614	0	4	2

2041	2a	1	147.3495	503.0527	503.0527	0	1832.248	1832.248	0	ICE	147.3495	0	4	2
2041	2a	1	43.11438	117.5527	117.5527	0	206.9202	206.9202	0	ICE	43.11438	0	1	2
2041	2a	1	8.654024	25.57861	0	25.57861	62.77238	0	62.77238	BEV	0	8.654024	1	3
2041	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2041	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2041	2a	1	124.3057	431.5024	0	431.5024	1342.995	0	1342.995	BEV	0	124.3057	1	3
2041	2a	1	1.228121	4.263175	0	4.263175	13.26857	0	13.26857	FCEV	0	1.228121	1	7
2041	2a	1	34.55334	119.945	71.967	47.978	333.9571	200.3742	133.5828	PHEV	20.732	13.82133	1	8
2041	2a	1	127.7924	480.2117	480.2117	0	1692.789	1692.789	0	ICE	127.7924	0	1	2
2041	2a	1	111.5573	406.4222	0	406.4222	1390.477	0	1390.477	BEV	0	111.5573	2	3
2041	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2041	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2041	2a	1	11.10257	36.63217	36.63217	0	91.1276	91.1276	0	ICE	11.10257	0	1	2
2041	2a	1	2.350824	7.082986	7.082986	0	22.93394	22.93394	0	ICE	2.350824	0	2	2
2041	2a	1	0.200876	0.559202	0.559202	0	1.262687	1.262687	0	ICE	0.200876	0	3	2
2041	2a	1	8.194043	27.97454	27.97454	0	105.6576	105.6576	0	ICE	8.194043	0	3	2
2041	2a	1	24.30011	88.52943	0	88.52943	210.8729	0	210.8729	BEV	0	24.30011	3	3
2041	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2041	2a	1	11.00233	40.08336	24.05002	16.03334	160.0532	96.03195	64.0213	PHEV	6.601398	4.400932	3	8
2041	2a	1	27.42321	73.19914	73.19914	0	200.3701	200.3701	0	ICE	27.42321	0	4	2
2041	2a	1	7.360794	21.75622	21.75622	0	67.70843	67.70843	0	ICE	7.360794	0	4	2
2041	2a	1	17.04947	59.18383	59.18383	0	236.345	236.345	0	ICE	17.04947	0	3	2
2041	2a	1	3.637496	10.33453	10.33453	0	31.14412	31.14412	0	ICE	3.637496	0	4	2
2041	2a	1	3.240544	9.578044	0	9.578044	15.92297	0	15.92297	BEV	0	3.240544	3	3
2041	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2041	2a	1	0	0	0	0	0	0	0	PHEV	0	0	3	8
2041	2a	1	16.20632	47.90085	0	47.90085	81.31973	0	81.31973	BEV	0	16.20632	4	3
2041	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2041	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2041	2a	1	7.410465	24.02577	24.02577	0	55.81007	55.81007	0	ICE	7.410465	0	1	2
2041	2a	1	19.86594	67.82251	0	67.82251	205.6656	0	205.6656	BEV	0	19.86594	1	3
2041	2a	1	2.016846	6.885534	0	6.885534	20.87976	0	20.87976	FCEV	0	2.016846	1	7
2041	2a	1	2.117689	7.229811	4.337886	2.891924	19.02692	11.41615	7.610767	PHEV	1.270613	0.847075	1	8
2041	2a	1	41.01818	144.7363	0	144.7363	460.7147	0	460.7147	BEV	0	41.01818	2	3
2041	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2041	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2041	2a	1	6.44793	21.64389	21.64389	0	82.7292	82.7292	0	ICE	6.44793	0	3	2
2041	2a	1	2.277361	7.253054	0	7.253054	19.52985	0	19.52985	BEV	0	2.277361	1	3
2041	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2041	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2041	2a	1	11.94545	39.41318	0	39.41318	109.547	0	109.547	BEV	0	11.94545	1	3
2041	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2041	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2041	2a	1	10.55684	35.43634	0	35.43634	105.5536	0	105.5536	BEV	0	10.55684	1	3
2041	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2041	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2041	2a	1	4.02409	13.50774	13.50774	0	48.14655	48.14655	0	ICE	4.02409	0	2	2

2041	2a	1	53.33236	191.2434	0	191.2434	629.6183	0	629.6183	BEV	0	53.33236	2	3
2041	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2041	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2041	2a	1	2.234479	7.244495	7.244495	0	27.41453	27.41453	0	ICE	2.234479	0	3	2
2041	2a	1	1.9947	6.009991	0	6.009991	15.0094	0	15.0094	BEV	0	1.9947	1	3
2041	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2041	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2041	2a	1	3.936847	12.76381	0	12.76381	35.22962	0	35.22962	BEV	0	3.936847	1	3
2041	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2041	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2041	2a	1	5.925867	19.55198	0	19.55198	55.19146	0	55.19146	BEV	0	5.925867	2	3
2041	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2041	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2041	2a	1	1.102817	3.891389	3.891389	0	14.41354	14.41354	0	ICE	1.102817	0	2	2
2041	2a	1	0.264621	0.842778	0	0.842778	1.774632	0	1.774632	BEV	0	0.264621	4	3
2041	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2041	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2041	2a	1	1.471554	4.265153	4.265153	0	12.23699	12.23699	0	ICE	1.471554	0	2	2
2041	2a	1	0.27155	0.818173	0.818173	0	3.035296	3.035296	0	ICE	0.27155	0	3	2
2041	2a	1	3.408152	11.44021	0	11.44021	24.31324	0	24.31324	BEV	0	3.408152	3	3
2041	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2041	2a	1	0	0	0	0	0	0	0	PHEV	0	0	3	8
2041	2a	1	2.095968	7.275735	0	7.275735	16.19515	0	16.19515	BEV	0	2.095968	3	3
2041	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2041	2a	1	1.451055	5.037047	3.022228	2.014819	18.82852	11.29711	7.531406	PHEV	0.870633	0.580422	3	8
2041	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2041	2a	1	1.451055	5.037047	3.022228	2.014819	18.82852	11.29711	7.531406	PHEV	0.870633	0.580422	3	8
2041	2a	1	0.334014	1.236007	0	1.236007	2.973601	0	2.973601	BEV	0	0.334014	4	3
2041	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2041	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2041	2a	1	9.060966	25.7432	0	25.7432	59.54724	0	59.54724	BEV	0	9.060966	2	3
2041	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2041	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2041	2a	1	3.293537	9.545986	0	9.545986	22.77435	0	22.77435	BEV	0	3.293537	2	3
2041	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2041	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2041	2a	1	2.754349	8.141001	8.141001	0	30.94331	30.94331	0	ICE	2.754349	0	2	2
2041	2a	1	1.466748	4.671372	0	4.671372	12.41661	0	12.41661	BEV	0	1.466748	2	3
2041	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2041	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2041	2a	1	2.444366	7.924975	7.924975	0	28.11038	28.11038	0	ICE	2.444366	0	2	2
2041	2a	1	0.816844	2.648322	0	2.648322	7.258717	0	7.258717	BEV	0	0.816844	2	3
2041	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2041	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2041	2a	1	2.94768	9.725663	9.725663	0	39.30505	39.30505	0	ICE	2.94768	0	2	2
2041	2a	1	2.391248	8.026751	0	8.026751	23.7665	0	23.7665	BEV	0	2.391248	2	3
2041	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2041	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2041	2a	1	2.490062	8.215786	0	8.215786	16.58237	0	16.58237	BEV	0	2.490062	3	3

2041	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2041	2a	1	0	0	0	0	0	0	0	PHEV	0	0	3	8
2041	2a	1	1.578305	5.659614	0	5.659614	13.11334	0	13.11334	BEV	0	1.578305	3	3
2041	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2041	2a	1	1.206939	4.32794	2.596764	1.731176	17.10737	10.26442	6.842948	PHEV	0.724164	0.482776	3	8
2041	2a	1	0.908513	2.581186	0	2.581186	4.394393	0	4.394393	BEV	0	0.908513	4	3
2041	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2041	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2041	2a	1	1.937575	5.837876	0	5.837876	10.1068	0	10.1068	BEV	0	1.937575	4	3
2041	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2041	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2041	2a	1	0.333271	1.042325	0	1.042325	1.909726	0	1.909726	BEV	0	0.333271	4	3
2041	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2041	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2041	2a	1	0.201707	0.630851	0.630851	0	2.063126	2.063126	0	ICE	0.201707	0	2	2
2041	2a	1	11.81338	34.9167	0	34.9167	82.31264	0	82.31264	BEV	0	11.81338	2	3
2041	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2041	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2041	2a	1	0.7823	2.401874	0	2.401874	5.999939	0	5.999939	BEV	0	0.7823	2	3
2041	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2041	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2041	2a	1	6.013517	16.74055	0	16.74055	38.28834	0	38.28834	BEV	0	6.013517	2	3
2041	2a	1	0.258944	0.691183	0.691183	0	2.16894	2.16894	0	ICE	0.258944	0	3	2
2041	2a	1	1.679495	4.675411	4.675411	0	13.74774	13.74774	0	ICE	1.679495	0	2	2
2041	2a	1	0.166609	0.492445	0.492445	0	1.445303	1.445303	0	ICE	0.166609	0	3	2
2041	2a	1	1.738738	5.537619	5.537619	0	21.72165	21.72165	0	ICE	1.738738	0	2	2
2041	2a	1	0.460684	1.308854	0	1.308854	2.349569	0	2.349569	BEV	0	0.460684	3	3
2041	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2041	2a	1	0	0	0	0	0	0	0	PHEV	0	0	3	8
2041	2a	1	0.308989	1.019486	0	1.019486	2.020013	0	2.020013	BEV	0	0.308989	4	3
2041	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2041	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2041	2a	1	1.818817	4.95906	0	4.95906	11.39424	0	11.39424	BEV	0	1.818817	1	3
2041	2a	1	1.213558	3.447853	0	3.447853	8.072128	0	8.072128	BEV	0	1.213558	1	3
2041	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2041	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2041	2a	1	1.859512	5.709203	0	5.709203	14.4494	0	14.4494	BEV	0	1.859512	1	3
2041	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2041	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2041	2a	1	1.981919	5.290218	5.290218	0	15.12642	15.12642	0	ICE	1.981919	0	2	2
2041	2a	1	1.87091	5.101092	0	5.101092	11.50649	0	11.50649	BEV	0	1.87091	2	3
2041	2a	1	0.296237	0.9265	0	0.9265	2.383041	0	2.383041	BEV	0	0.296237	2	3
2041	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2041	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2041	2a	1	2.157558	5.75904	0	5.75904	13.06241	0	13.06241	BEV	0	2.157558	1	3
2041	2a	1	2.04342	5.688514	0	5.688514	13.24167	0	13.24167	BEV	0	2.04342	1	3
2041	2a	1	1.421189	4.037754	4.037754	0	11.92752	11.92752	0	ICE	1.421189	0	2	2

2041	2a	1	0.902195	3.080102	3.080102	0	11.14814	11.14814	0	ICE	0.902195	0	2	2
2041	2a	1	1.585545	5.685574	5.685574	0	22.78818	22.78818	0	ICE	1.585545	0	2	2
2041	2a	1	1.827077	5.086252	0	5.086252	7.975955	0	7.975955	BEV	0	1.827077	3	3
2041	2a	1	0.23125	0.670255	0.670255	0	1.999037	1.999037	0	ICE	0.23125	0	3	2
2041	2a	1	0.146592	0.424883	0	0.424883	0.688987	0	0.688987	BEV	0	0.146592	3	3
2041	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2041	2a	1	0	0	0	0	0	0	0	PHEV	0	0	3	8
2041	2a	1	2.005389	6.846419	0	6.846419	14.4592	0	14.4592	BEV	0	2.005389	3	3
2041	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2041	2a	1	0	0	0	0	0	0	0	PHEV	0	0	3	8
2041	2a	1	4.828487	17.03775	0	17.03775	37.5797	0	37.5797	BEV	0	4.828487	3	3
2041	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2041	2a	1	1.238074	4.368654	2.621192	1.747462	19.20907	11.52544	7.683626	PHEV	0.742844	0.495229	3	8
2041	2a	1	0.426168	1.479358	1.479358	0	5.447343	5.447343	0	ICE	0.426168	0	2	2
2041	2a	1	0.188068	0.545095	0	0.545095	0.936811	0	0.936811	BEV	0	0.188068	4	3
2041	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2041	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2041	2a	1	0	0	0	0	0	0	0	BEV	0	0	2	3
2041	2a	1	6.861477	25.39062	0	25.39062	89.99748	0	89.99748	FCEV	0	6.861477	2	7
2041	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2041	2a	1	0	0	0	0	0	0	0	BEV	0	0	2	3
2041	2a	1	7.91255	29.73339	0	29.73339	109.148	0	109.148	FCEV	0	7.91255	2	7
2041	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2041	2a	1	0.040148	0.123267	0.123267	0	0.472148	0.472148	0	ICE	0.040148	0	3	2
2041	2a	1	0	0	0	0	0	0	0	BEV	0	0	3	3
2041	2a	1	0.251086	0.929135	0	0.929135	2.328698	0	2.328698	FCEV	0	0.251086	3	7
2041	2a	1	3.598903	13.3176	7.990558	5.327039	60.48755	36.29253	24.19502	PHEV	2.159342	1.439561	3	8
2041	2a	1	0.27345	0.996225	0.996225	0	3.800121	3.800121	0	ICE	0.27345	0	2	2
2041	2a	1	0.121784	0.332047	0	0.332047	0.522343	0	0.522343	BEV	0	0.121784	3	3
2041	2a	1	0.321143	0.894004	0	0.894004	1.430121	0	1.430121	BEV	0	0.321143	4	3
2041	2a	1	0.115966	0.375978	0	0.375978	0.708473	0	0.708473	BEV	0	0.115966	3	3
2041	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2041	2a	1	0	0	0	0	0	0	0	PHEV	0	0	3	8
2041	2a	1	0.371064	1.266817	0	1.266817	3.523783	0	3.523783	BEV	0	0.371064	2	3
2041	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2041	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2041	2a	1	0.734648	1.960952	0	1.960952	4.270183	0	4.270183	BEV	0	0.734648	2	3
2041	2a	1	0.334155	0.911084	0	0.911084	1.389275	0	1.389275	BEV	0	0.334155	4	3
2041	2a	1	0.505188	1.898369	1.898369	0	8.035971	8.035971	0	ICE	0.505188	0	2	2
2041	2a	1	0.269307	0.934845	0	0.934845	2.948756	0	2.948756	BEV	0	0.269307	2	3
2041	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2041	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2041	2a	1	0.063162	0.197541	0	0.197541	0.335786	0	0.335786	BEV	0	0.063162	3	3
2041	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2041	2a	1	0	0	0	0	0	0	0	PHEV	0	0	3	8
2041	2a	1	0.127311	0.383585	0	0.383585	0.93086	0	0.93086	BEV	0	0.127311	2	3
2041	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7

2041	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2041	2a	1	0.064579	0.198276	0.198276	0	0.978726	0.978726	0	ICE	0.064579	0	2	2
2041	2a	1	0.282864	0.917084	0	0.917084	1.714023	0	1.714023	BEV	0	0.282864	4	3
2041	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2041	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2041	2a	1	0.061202	0.163362	0	0.163362	0.258377	0	0.258377	BEV	0	0.061202	3	3
2041	2a	1	0	0	0	0	0	0	0	BEV	0	0	4	3
2041	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2041	2a	1	0.439058	1.57441	0.944646	0.629764	6.843436	4.106062	2.737375	PHEV	0.263435	0.175623	4	8
2042	2a	1	14014.06	37406.88	37406.88	0	55778.53	55778.53	0	ICE	14014.06	0	1	1
2042	2a	1	14458.05	39420.31	39420.31	0	61390.43	61390.43	0	ICE	14458.05	0	1	1
2042	2a	1	17066.69	47510.59	47510.59	0	77614.87	77614.87	0	ICE	17066.69	0	1	1
2042	2a	1	17020.7	48357.68	48357.68	0	82706.94	82706.94	0	ICE	17020.7	0	1	1
2042	2a	1	31.28455	88.88286	88.88286	0	161.3651	161.3651	0	ICE	31.28455	0	1	2
2042	2a	1	16824.93	48765.37	48765.37	0	87771.04	87771.04	0	ICE	16824.93	0	1	1
2042	2a	1	17736.69	52424.16	52424.16	0	99141.81	99141.81	0	ICE	17736.69	0	1	1
2042	2a	1	16840.83	50741.1	50741.1	0	100771.9	100771.9	0	ICE	16840.83	0	1	1
2042	2a	1	19373.7	59482.48	59482.48	0	124490	124490	0	ICE	19373.7	0	1	1
2042	2a	1	19527.58	61073.66	61073.66	0	133772.9	133772.9	0	ICE	19527.58	0	1	1
2042	2a	1	51.70083	161.6974	161.6974	0	364.558	364.558	0	ICE	51.70083	0	1	2
2042	2a	1	21013.02	66923.32	66923.32	0	153310.4	153310.4	0	ICE	21013.02	0	1	1
2042	2a	1	17984.95	58309.73	58309.73	0	139858.6	139858.6	0	ICE	17984.95	0	1	1
2042	2a	1	14972.31	49400.09	49400.09	0	123935.9	123935.9	0	ICE	14972.31	0	1	1
2042	2a	1	18332.23	61536.15	61536.15	0	161107.4	161107.4	0	ICE	18332.23	0	1	1
2042	2a	1	210.8381	707.7246	707.7246	0	1859.823	1859.823	0	ICE	210.8381	0	1	2
2042	2a	1	19159.82	65411.83	65411.83	0	179520.6	179520.6	0	ICE	19159.82	0	1	1
2042	2a	1	300.2792	1025.156	1025.156	0	2775.314	2775.314	0	ICE	300.2792	0	1	2
2042	2a	1	29944.64	103946.8	103946.8	0	298976	298976	0	ICE	29944.64	0	1	1
2042	2a	1	40045.14	141302.9	141302.9	0	424361.7	424361.7	0	ICE	40045.14	0	1	1
2042	2a	1	44447.77	159384.4	159384.4	0	500830.8	500830.8	0	ICE	44447.77	0	1	1
2042	2a	1	848.0554	3041.025	3041.025	0	9480.112	9480.112	0	ICE	848.0554	0	1	2
2042	2a	1	58192	212003.3	212003.3	0	696644.9	696644.9	0	ICE	58192	0	1	1
2042	2a	1	63676.28	235631.5	235631.5	0	805829.2	805829.2	0	ICE	63676.28	0	1	1
2042	2a	1	80446.53	302297.9	302297.9	0	1077568	1077568	0	ICE	80446.53	0	1	1
2042	2a	1	984.4539	3699.332	3699.332	0	13177.57	13177.57	0	ICE	984.4539	0	1	2
2042	2a	1	4678.874	17582.04	0	17582.04	63447.98	0	63447.98	BEV	0	4678.874	1	3
2042	2a	1	95.48722	358.8171	0	358.8171	1331.26	0	1331.26	FCEV	0	95.48722	1	7
2042	2a	1	4220.503	15859.59	8564.181	7295.414	56143.77	30317.64	25826.14	PHEV	2279.072	1941.431	1	8
2042	2a	1	100073.9	381785.8	381785.8	0	1416034	1416034	0	ICE	100073.9	0	1	1
2042	2a	1	1224.641	4672.055	4672.055	0	17318.54	17318.54	0	ICE	1224.641	0	1	2
2042	2a	1	7113.618	27138.74	0	27138.74	101329.9	0	101329.9	BEV	0	7113.618	1	3
2042	2a	1	145.1759	553.8518	0	553.8518	2124.916	0	2124.916	FCEV	0	145.1759	1	7
2042	2a	1	4597.497	17539.63	9471.402	8068.232	64798.66	34991.28	29807.38	PHEV	2482.648	2114.849	1	8
2042	2a	1	123256.8	477290.9	477290.9	0	1839783	1839783	0	ICE	123256.8	0	1	1
2042	2a	1	1501.926	5815.954	5815.954	0	22409.33	22409.33	0	ICE	1501.926	0	1	2
2042	2a	1	10744.29	41605.45	0	41605.45	161359.6	0	161359.6	BEV	0	10744.29	1	3
2042	2a	1	251.3285	973.227	0	973.227	3860.755	0	3860.755	FCEV	0	251.3285	1	7

2042	2a	1	5269.385	20404.8	10814.54	9590.255	78273.39	41484.9	36788.49	PHEV	2792.774	2476.611	1	8
2042	2a	1	151433.3	595075.3	595075.3	0	2381636	2381636	0	ICE	151433.3	0	1	1
2042	2a	1	1861.992	7316.921	7316.921	0	29272.15	29272.15	0	ICE	1861.992	0	1	2
2042	2a	1	15683.71	61631.04	0	61631.04	247642.6	0	247642.6	BEV	0	15683.71	1	3
2042	2a	1	413.9397	1626.626	0	1626.626	6668.761	0	6668.761	FCEV	0	413.9397	1	7
2042	2a	1	5980.287	23500.25	12220.13	11280.12	93941.12	48849.38	45091.74	PHEV	3109.749	2870.538	1	8
2042	2a	1	174532.3	695844.4	695844.4	0	2889585	2889585	0	ICE	174532.3	0	1	1
2042	2a	1	2156.366	8597.237	8597.237	0	35687.91	35687.91	0	ICE	2156.366	0	1	2
2042	2a	1	28198.2	112423.7	0	112423.7	468523.4	0	468523.4	BEV	0	28198.2	1	3
2042	2a	1	966.605	3853.767	0	3853.767	16329.94	0	16329.94	FCEV	0	966.605	1	7
2042	2a	1	10720.57	42741.93	21285.48	21456.45	176826.1	88059.38	88766.69	PHEV	5338.842	5381.724	1	8
2042	2a	1	196963.2	796558.6	796558.6	0	3428553	3428553	0	ICE	196963.2	0	1	1
2042	2a	1	2451.038	9912.49	9912.49	0	42649.82	42649.82	0	ICE	2451.038	0	1	2
2042	2a	1	44899.04	181580.7	0	181580.7	783927.8	0	783927.8	BEV	0	44899.04	1	3
2042	2a	1	1898.649	7678.517	0	7678.517	33611.63	0	33611.63	FCEV	0	1898.649	1	7
2042	2a	1	17020	68832.3	32764.17	36068.12	295096.2	140465.8	154630.4	PHEV	8101.522	8918.482	1	8
2042	2a	1	218029.3	894244.9	894244.9	0	3985269	3985269	0	ICE	218029.3	0	1	1
2042	2a	1	2735.956	11221.5	11221.5	0	49991.9	49991.9	0	ICE	2735.956	0	1	2
2042	2a	1	66463.3	272598.6	0	272598.6	1217863	0	1217863	BEV	0	66463.3	1	3
2042	2a	1	3351.091	13744.47	0	13744.47	62024.45	0	62024.45	FCEV	0	3351.091	1	7
2042	2a	1	25120.81	103032.8	46776.88	56255.89	457569.5	207736.5	249832.9	PHEV	11404.85	13715.96	1	8
2042	2a	1	235837.8	980797.4	980797.4	0	4522179	4522179	0	ICE	235837.8	0	1	1
2042	2a	1	2983.121	12406.15	12406.15	0	57182.17	57182.17	0	ICE	2983.121	0	1	2
2042	2a	1	93168.11	387465.7	0	387465.7	1790094	0	1790094	BEV	0	93168.11	1	3
2042	2a	1	5467.215	22736.94	0	22736.94	105796.8	0	105796.8	FCEV	0	5467.215	1	7
2042	2a	1	35111.65	146021.6	63081.34	82940.28	671282	289993.8	381288.2	PHEV	15168.23	19943.42	1	8
2042	2a	1	250618.1	1056624	1056624	0	5038316	5038316	0	ICE	250618.1	0	1	1
2042	2a	1	3194.04	13466.3	13466.3	0	64191.44	64191.44	0	ICE	3194.04	0	1	2
2042	2a	1	125958.5	531049.9	0	531049.9	2536319	0	2536319	BEV	0	125958.5	1	3
2042	2a	1	8448.436	35619.2	0	35619.2	171007.8	0	171007.8	FCEV	0	8448.436	1	7
2042	2a	1	47331.09	199551.2	81815.98	117735.2	949227.2	389183.2	560044.1	PHEV	19405.74	27925.34	1	8
2042	2a	1	259208.3	1107690	1107690	0	5454151	5454151	0	ICE	259208.3	0	1	1
2042	2a	1	3303.518	14117.12	14117.12	0	69492.78	69492.78	0	ICE	3303.518	0	1	2
2042	2a	1	164120.8	701347.3	0	701347.3	3457717	0	3457717	BEV	0	164120.8	1	3
2042	2a	1	12407.41	53021.34	0	53021.34	262294.4	0	262294.4	FCEV	0	12407.41	1	7
2042	2a	1	61492.27	262778.6	101958.1	160820.5	1291339	501039.7	790299.7	PHEV	23859	37633.27	1	8
2042	2a	1	261335.6	1131753	1131753	0	5749916	5749916	0	ICE	261335.6	0	1	1
2042	2a	1	3330.629	14423.79	14423.79	0	73263.92	73263.92	0	ICE	3330.629	0	1	2
2042	2a	1	207876.6	900241	0	900241	4578271	0	4578271	BEV	0	207876.6	1	3
2042	2a	1	17516.25	75856.74	0	75856.74	386676.9	0	386676.9	FCEV	0	17516.25	1	7
2042	2a	1	77661.05	336322.8	123094.2	213228.7	1705936	624372.4	1081563	PHEV	28423.94	49237.11	1	8
2042	2a	1	256406	1125094	1125094	0	5895040	5895040	0	ICE	256406	0	1	1
2042	2a	1	3267.802	14338.92	14338.92	0	75115.65	75115.65	0	ICE	3267.802	0	1	2
2042	2a	1	257174.9	1128468	0	1128468	5917186	0	5917186	BEV	0	257174.9	1	3
2042	2a	1	23934.46	105023	0	105023	551579.4	0	551579.4	FCEV	0	23934.46	1	7
2042	2a	1	95800.92	420368.7	144606.8	275761.9	2199852	756749.2	1443103	PHEV	32955.52	62845.41	1	8
2042	2a	1	244779.6	1088102	1088102	0	5876363	5876363	0	ICE	244779.6	0	1	1

2042	2a	1	3119.628	13867.46	13867.46	0	74880.02	74880.02	0	ICE	3119.628	0	1	2
2042	2a	1	312942.5	1391102	0	1391102	7516804	0	7516804	BEV	0	312942.5	1	3
2042	2a	1	31924.87	141913.4	0	141913.4	767684.9	0	767684.9	FCEV	0	31924.87	1	7
2042	2a	1	116239	516709.1	166380.3	350328.8	2788150	897784.2	1890365	PHEV	37428.96	78810.05	1	8
2042	2a	1	222898.1	1003603	1003603	0	5583482	5583482	0	ICE	222898.1	0	1	1
2042	2a	1	2840.759	12790.58	12790.58	0	71150.06	71150.06	0	ICE	2840.759	0	1	2
2042	2a	1	370583.1	1668558	0	1668558	9286239	0	9286239	BEV	0	370583.1	1	3
2042	2a	1	41175.9	185395.3	0	185395.3	1032610	0	1032610	FCEV	0	41175.9	1	7
2042	2a	1	137253	617984.4	185395.3	432589.1	3436414	1030924	2405490	PHEV	41175.9	96077.1	1	8
2042	2a	1	194397.8	886417	886417	0	5077604	5077604	0	ICE	194397.8	0	1	1
2042	2a	1	2477.53	11297.06	11297.06	0	64705.35	64705.35	0	ICE	2477.53	0	1	2
2042	2a	1	438128.8	1997784	0	1997784	11445734	0	11445734	BEV	0	438128.8	1	3
2042	2a	1	54150.75	246917.1	0	246917.1	1415373	0	1415373	FCEV	0	54150.75	1	7
2042	2a	1	155456.7	708853	212655.9	496197.1	4060074	1218022	2842051	PHEV	46637.01	108819.7	1	8
2042	2a	1	156102.5	720740.8	720740.8	0	4248744	4248744	0	ICE	156102.5	0	1	1
2042	2a	1	1989.472	9185.593	9185.593	0	54144.35	54144.35	0	ICE	1989.472	0	1	2
2042	2a	1	505633	2334558	0	2334558	13762404	0	13762404	BEV	0	505633	1	3
2042	2a	1	68949.96	318348.9	0	318348.9	1877326	0	1877326	FCEV	0	68949.96	1	7
2042	2a	1	171628.7	792426.8	237728	554698.8	4672572	1401772	3270800	PHEV	51488.61	120140.1	1	8
2042	2a	1	111381.4	520640.2	520640.2	0	3157074	3157074	0	ICE	111381.4	0	1	1
2042	2a	1	1419.518	6635.379	6635.379	0	40233.45	40233.45	0	ICE	1419.518	0	1	2
2042	2a	1	580237	2712254	0	2712254	16444753	0	16444753	BEV	0	580237	1	3
2042	2a	1	86702.07	405279.3	0	405279.3	2457785	0	2457785	FCEV	0	86702.07	1	7
2042	2a	1	188111	879304.2	263791.3	615513	5335334	1600600	3734734	PHEV	56433.3	131677.7	1	8
2042	2a	1	58755.78	278013.5	278013.5	0	1733555	1733555	0	ICE	58755.78	0	1	1
2042	2a	1	748.8219	3543.186	3543.186	0	22092.91	22092.91	0	ICE	748.8219	0	1	2
2042	2a	1	653320.7	3091305	0	3091305	19270422	0	19270422	BEV	0	653320.7	1	3
2042	2a	1	106354.5	503235.6	0	503235.6	3137384	0	3137384	FCEV	0	106354.5	1	7
2042	2a	1	201939	955510.7	286653.2	668857.5	5965013	1789504	4175509	PHEV	60581.7	141357.3	1	8
2042	2a	1	734453.5	3517276	0	3517276	22533311	0	22533311	BEV	0	734453.5	1	3
2042	2a	1	129609.4	620695.7	0	620695.7	3976586	0	3976586	FCEV	0	129609.4	1	7
2042	2a	1	216015.7	1034493	310347.9	724145	6641963	1992589	4649374	PHEV	64804.72	151211	1	8
2042	2a	1	766269.5	3713541	0	3713541	24443670	0	24443670	BEV	0	766269.5	1	3
2042	2a	1	145956.1	707341.2	0	707341.2	4655791	0	4655791	FCEV	0	145956.1	1	7
2042	2a	1	213978.9	1036997	311099.2	725898	6846101	2053830	4792271	PHEV	64193.66	149785.2	1	8
2042	2a	1	802483.4	3935017	0	3935017	26594945	0	26594945	BEV	0	802483.4	1	3
2042	2a	1	164364.1	805967.4	0	805967.4	5446758	0	5446758	FCEV	0	164364.1	1	7
2042	2a	1	212234.8	1040704	312211.2	728492.8	7058948	2117684	4941263	PHEV	63670.44	148564.4	1	8
2042	2a	1	830024.6	4117619	0	4117619	28563106	0	28563106	BEV	0	830024.6	1	3
2042	2a	1	182200.5	903867.6	0	903867.6	6269267	0	6269267	FCEV	0	182200.5	1	7
2042	2a	1	207323.2	1028497	308549.2	719948.1	7164964	2149489	5015475	PHEV	62196.97	145126.3	1	8
2042	2a	1	852250.6	4276705	0	4276705	30427337	0	30427337	BEV	0	852250.6	1	3
2042	2a	1	199910.6	1003178	0	1003178	7136365	0	7136365	FCEV	0	199910.6	1	7
2042	2a	1	200411.7	1005692	301707.6	703984.3	7189015	2156704	5032310	PHEV	60123.5	140288.2	1	8
2042	2a	1	876196.2	4447064	0	4447064	32395381	0	32395381	BEV	0	876196.2	1	3
2042	2a	1	219049	1111766	0	1111766	8097919	0	8097919	FCEV	0	219049	1	7
2042	2a	1	193278.6	980969.9	294291	686679	7178482	2153545	5024937	PHEV	57983.57	135295	1	8

2042	2a	1	885106.3	4542994	0	4542994	33778784	0	33778784	BEV	0	885106.3	1	3
2042	2a	1	235281.4	1207631	0	1207631	8978546	0	8978546	FCEV	0	235281.4	1	7
2042	2a	1	182388.7	936148.3	280844.5	655303.8	6985375	2095612	4889762	PHEV	54716.61	127672.1	1	8
2042	2a	1	796598	4134344	0	4134344	31293050	0	31293050	BEV	0	796598	1	3
2042	2a	1	224681.5	1166097	0	1166097	8826172	0	8826172	FCEV	0	224681.5	1	7
2042	2a	1	152605	792019.9	237606	554413.9	6006896	1802069	4204827	PHEV	45781.5	106823.5	1	8
2042	2a	1	3431.98	9160.777	9160.777	0	33912.92	33912.92	0	ICE	3431.98	0	2	1
2042	2a	1	3109.926	8479.306	8479.306	0	31630.17	31630.17	0	ICE	3109.926	0	2	1
2042	2a	1	3344.715	9311.085	9311.085	0	35155.98	35155.98	0	ICE	3344.715	0	2	1
2042	2a	1	3730.583	10599	10599	0	40257.5	40257.5	0	ICE	3730.583	0	2	1
2042	2a	1	3967.724	11500.05	11500.05	0	43124.44	43124.44	0	ICE	3967.724	0	2	1
2042	2a	1	2812.937	8314.169	8314.169	0	31087.73	31087.73	0	ICE	2812.937	0	2	1
2042	2a	1	1617.038	4964.744	4964.744	0	18688.44	18688.44	0	ICE	1617.038	0	2	1
2042	2a	1	2583.017	8078.541	8078.541	0	30881.87	30881.87	0	ICE	2583.017	0	2	1
2042	2a	1	3856.607	12282.71	12282.71	0	47822.84	47822.84	0	ICE	3856.607	0	2	1
2042	2a	1	6668.901	21621.51	21621.51	0	85020.61	85020.61	0	ICE	6668.901	0	2	1
2042	2a	1	5032.546	16604.53	16604.53	0	65938.29	65938.29	0	ICE	5032.546	0	2	1
2042	2a	1	2713.598	9108.787	9108.787	0	36304.43	36304.43	0	ICE	2713.598	0	2	1
2042	2a	1	2449.772	8363.546	8363.546	0	33806.57	33806.57	0	ICE	2449.772	0	2	1
2042	2a	1	23221.04	84598.19	84598.19	0	361827.6	361827.6	0	ICE	23221.04	0	2	1
2042	2a	1	23046.69	85283.37	85283.37	0	369213	369213	0	ICE	23046.69	0	2	1
2042	2a	1	22315.08	83854.48	83854.48	0	369222.5	369222.5	0	ICE	22315.08	0	2	1
2042	2a	1	3.022981	11.35961	11.35961	0	50.03151	50.03151	0	ICE	3.022981	0	2	2
2042	2a	1	0.75189	2.825416	0	2.825416	10.38438	0	10.38438	BEV	0	0.75189	2	3
2042	2a	1	0.015345	0.057662	0	0.057662	0.211926	0	0.211926	FCEV	0	0.015345	2	7
2042	2a	1	6.521498	24.50616	14.7037	9.802464	107.9504	64.77023	43.18015	PHEV	3.912899	2.608599	2	8
2042	2a	1	25884.8	98751.55	98751.55	0	439930.6	439930.6	0	ICE	25884.8	0	2	1
2042	2a	1	3.506564	13.37768	13.37768	0	59.61099	59.61099	0	ICE	3.506564	0	2	2
2042	2a	1	29103.94	112700.1	112700.1	0	506494	506494	0	ICE	29103.94	0	2	1
2042	2a	1	3.970162	15.37378	15.37378	0	69.12567	69.12567	0	ICE	3.970162	0	2	2
2042	2a	1	386.9784	1498.508	0	1498.508	6400.862	0	6400.862	BEV	0	386.9784	2	3
2042	2a	1	9.052126	35.05282	0	35.05282	137.7858	0	137.7858	FCEV	0	9.052126	2	7
2042	2a	1	297.1722	1150.749	683.8736	466.8752	5299.169	3149.22	2149.949	PHEV	176.6052	120.567	2	8
2042	2a	1	32521.63	127797.7	127797.7	0	580296.2	580296.2	0	ICE	32521.63	0	2	1
2042	2a	1	4.487925	17.63584	17.63584	0	80.14378	80.14378	0	ICE	4.487925	0	2	2
2042	2a	1	883.3523	3471.239	0	3471.239	15053.01	0	15053.01	BEV	0	883.3523	2	3
2042	2a	1	23.31428	91.61628	0	91.61628	372.277	0	372.277	FCEV	0	23.31428	2	7
2042	2a	1	680.3418	2673.485	1573.537	1099.948	12417.93	7308.841	5109.093	PHEV	400.4298	279.9121	2	8
2042	2a	1	34439.81	137308.4	137308.4	0	631554.2	631554.2	0	ICE	34439.81	0	2	1
2042	2a	1	4.81509	19.19733	19.19733	0	88.38945	88.38945	0	ICE	4.81509	0	2	2
2042	2a	1	2427.265	9677.286	0	9677.286	42766.4	0	42766.4	BEV	0	2427.265	2	3
2042	2a	1	83.20411	331.7273	0	331.7273	1393.503	0	1393.503	FCEV	0	83.20411	2	7
2042	2a	1	1750.522	6979.173	4045.926	2933.247	33210.92	19252.84	13958.08	PHEV	1014.802	735.7193	2	8
2042	2a	1	35774.71	144680.1	144680.1	0	675265.4	675265.4	0	ICE	35774.71	0	2	1
2042	2a	1	5.022223	20.31087	20.31087	0	94.88822	94.88822	0	ICE	5.022223	0	2	2
2042	2a	1	4379.132	17710.09	0	17710.09	80098.67	0	80098.67	BEV	0	4379.132	2	3
2042	2a	1	185.1807	748.9078	0	748.9078	3250.535	0	3250.535	FCEV	0	185.1807	2	7

2042	2a	1	2954.598	11948.99	6821.165	5127.822	57701.06	32939.06	24762	PHEV	1686.654	1267.945	2	8
2042	2a	1	36604.6	150133.4	150133.4	0	712202.4	712202.4	0	ICE	36604.6	0	2	1
2042	2a	1	5.162927	21.1757	21.1757	0	100.5385	100.5385	0	ICE	5.162927	0	2	2
2042	2a	1	6773.297	27780.61	0	27780.61	128726.7	0	128726.7	BEV	0	6773.297	2	3
2042	2a	1	341.5108	1400.703	0	1400.703	6312.936	0	6312.936	FCEV	0	341.5108	2	7
2042	2a	1	4270.454	17515.23	9843.557	7671.669	85572.66	48091.83	37480.82	PHEV	2399.995	1870.459	2	8
2042	2a	1	36871.32	153339.7	153339.7	0	740372.4	740372.4	0	ICE	36871.32	0	2	1
2042	2a	1	5.223314	21.72261	21.72261	0	104.958	104.958	0	ICE	5.223314	0	2	2
2042	2a	1	9631.42	40054.96	0	40054.96	190158.3	0	190158.3	BEV	0	9631.42	2	3
2042	2a	1	565.1831	2350.472	0	2350.472	10981.66	0	10981.66	FCEV	0	565.1831	2	7
2042	2a	1	5666.602	23566.15	13035.45	10530.7	116518.8	64451.55	52067.26	PHEV	3134.44	2532.162	2	8
2042	2a	1	36816.15	155219.5	155219.5	0	764163.3	764163.3	0	ICE	36816.15	0	2	1
2042	2a	1	5.23663	22.078	22.078	0	108.7525	108.7525	0	ICE	5.23663	0	2	2
2042	2a	1	13067	55091.41	0	55091.41	268129.6	0	268129.6	BEV	0	13067	2	3
2042	2a	1	876.4454	3695.155	0	3695.155	17821.32	0	17821.32	FCEV	0	876.4454	2	7
2042	2a	1	7162.116	30195.98	16435.24	13760.74	151345.2	82375.04	68970.18	PHEV	3898.237	3263.879	2	8
2042	2a	1	36053.81	154070.9	154070.9	0	773529.1	773529.1	0	ICE	36053.81	0	2	1
2042	2a	1	5.128197	21.91463	21.91463	0	110.0633	110.0633	0	ICE	5.128197	0	2	2
2042	2a	1	17014.54	72709.25	0	72709.25	362482.6	0	362482.6	BEV	0	17014.54	2	3
2042	2a	1	1286.287	5496.765	0	5496.765	27287.86	0	27287.86	FCEV	0	1286.287	2	7
2042	2a	1	8670.769	37053.32	19839.4	17213.91	188346.7	100846.2	87500.48	PHEV	4642.577	4028.191	2	8
2042	2a	1	34696.13	150256.8	150256.8	0	770045.5	770045.5	0	ICE	34696.13	0	2	1
2042	2a	1	4.935083	21.37212	21.37212	0	109.5483	109.5483	0	ICE	4.935083	0	2	2
2042	2a	1	21540.55	93284.58	0	93284.58	476371.1	0	476371.1	BEV	0	21540.55	2	3
2042	2a	1	1815.065	7860.41	0	7860.41	40078.54	0	40078.54	FCEV	0	1815.065	2	7
2042	2a	1	10182.43	44096.54	23219.98	20876.56	227585.2	119839.9	107745.3	PHEV	5361.777	4820.653	2	8
2042	2a	1	32606.84	143076.9	143076.9	0	749168	749168	0	ICE	32606.84	0	2	1
2042	2a	1	4.637909	20.35087	20.35087	0	106.5619	106.5619	0	ICE	4.637909	0	2	2
2042	2a	1	26582.17	116641	0	116641	610203.1	0	610203.1	BEV	0	26582.17	2	3
2042	2a	1	2473.918	10855.4	0	10855.4	56787	0	56787	FCEV	0	2473.918	2	7
2042	2a	1	11623.84	51004.69	26405.86	24598.84	267622.1	138551.8	129070.3	PHEV	6017.826	5606.01	2	8
2042	2a	1	30087.78	133747.1	133747.1	0	716053	716053	0	ICE	30087.78	0	2	1
2042	2a	1	4.279604	19.02383	19.02383	0	101.8381	101.8381	0	ICE	4.279604	0	2	2
2042	2a	1	32426.36	144142.6	0	144142.6	772570.1	0	772570.1	BEV	0	32426.36	2	3
2042	2a	1	3307.979	14704.73	0	14704.73	78875.06	0	78875.06	FCEV	0	3307.979	2	7
2042	2a	1	13074.36	58118.54	29574.03	28544.51	310387.4	157942.8	152444.6	PHEV	6652.982	6421.379	2	8
2042	2a	1	26705.48	120242	120242	0	658710.8	658710.8	0	ICE	26705.48	0	2	1
2042	2a	1	3.798516	17.10289	17.10289	0	93.67239	93.67239	0	ICE	3.798516	0	2	2
2042	2a	1	38696.5	174231.8	0	174231.8	956911.5	0	956911.5	BEV	0	38696.5	2	3
2042	2a	1	4299.611	19359.09	0	19359.09	106451.3	0	106451.3	FCEV	0	4299.611	2	7
2042	2a	1	14332.04	64530.29	32265.14	32265.14	351218.1	175609	175609	PHEV	7166.019	7166.019	2	8
2042	2a	1	22794.43	103938.3	103938.3	0	582885.9	582885.9	0	ICE	22794.43	0	2	1
2042	2a	1	3.242219	14.7839	14.7839	0	82.88186	82.88186	0	ICE	3.242219	0	2	2
2042	2a	1	45227.4	206228.4	0	206228.4	1160762	0	1160762	BEV	0	45227.4	2	3
2042	2a	1	5589.904	25488.9	0	25488.9	143659.4	0	143659.4	FCEV	0	5589.904	2	7
2042	2a	1	16047.57	73173.88	36586.94	36586.94	406256.2	203128.1	203128.1	PHEV	8023.786	8023.786	2	8
2042	2a	1	18046.12	83320.75	83320.75	0	478624.4	478624.4	0	ICE	18046.12	0	2	1

2042	2a	1	2.566832	11.85132	11.85132	0	68.05157	68.05157	0	ICE	2.566832	0	2	2
2042	2a	1	51902.73	239640.1	0	239640.1	1382672	0	1382672	BEV	0	51902.73	2	3
2042	2a	1	7077.646	32678.2	0	32678.2	188802.8	0	188802.8	FCEV	0	7077.646	2	7
2042	2a	1	17617.52	81341.83	40670.92	40670.92	461225.5	230612.8	230612.8	PHEV	8808.758	8808.758	2	8
2042	2a	1	12700.1	59365.23	59365.23	0	349379.1	349379.1	0	ICE	12700.1	0	2	1
2042	2a	1	1.806428	8.44395	8.44395	0	49.67217	49.67217	0	ICE	1.806428	0	2	2
2042	2a	1	59181.06	276635.4	0	276635.4	1636134	0	1636134	BEV	0	59181.06	2	3
2042	2a	1	8843.147	41336.32	0	41336.32	244797.6	0	244797.6	FCEV	0	8843.147	2	7
2042	2a	1	19186.31	89684.32	44842.16	44842.16	519683.7	259841.9	259841.9	PHEV	9593.157	9593.157	2	8
2042	2a	1	6597.298	31216.3	31216.3	0	188327.1	188327.1	0	ICE	6597.298	0	2	1
2042	2a	1	0.938382	4.440123	4.440123	0	26.77377	26.77377	0	ICE	0.938382	0	2	2
2042	2a	1	66040.68	312483.3	0	312483.3	1895031	0	1895031	BEV	0	66040.68	2	3
2042	2a	1	10750.81	50869.38	0	50869.38	308860.6	0	308860.6	FCEV	0	10750.81	2	7
2042	2a	1	20412.93	96587.43	48293.72	48293.72	572641.1	286320.6	286320.6	PHEV	10206.46	10206.46	2	8
2042	2a	1	73512.04	352047	0	352047	2188892	0	2188892	BEV	0	73512.04	2	3
2042	2a	1	12972.71	62125.94	0	62125.94	386687.7	0	386687.7	FCEV	0	12972.71	2	7
2042	2a	1	21621.19	103543.2	51771.61	51771.61	628387.8	314193.9	314193.9	PHEV	10810.59	10810.59	2	8
2042	2a	1	76505.33	370764.7	0	370764.7	2363549	0	2363549	BEV	0	76505.33	2	3
2042	2a	1	14572.44	70621.85	0	70621.85	450652.3	0	450652.3	FCEV	0	14572.44	2	7
2042	2a	1	21363.92	103535.1	51767.56	51767.56	643683.6	321841.8	321841.8	PHEV	10681.96	10681.96	2	8
2042	2a	1	79500.45	389834.4	0	389834.4	2547882	0	2547882	BEV	0	79500.45	2	3
2042	2a	1	16283.22	79845.6	0	79845.6	522340	0	522340	FCEV	0	16283.22	2	7
2042	2a	1	21025.68	103100.5	51550.25	51550.25	656977.8	328488.9	328488.9	PHEV	10512.84	10512.84	2	8
2042	2a	1	81408.4	403854.1	0	403854.1	2706315	0	2706315	BEV	0	81408.4	2	3
2042	2a	1	17870.14	88650.89	0	88650.89	594569.9	0	594569.9	FCEV	0	17870.14	2	7
2042	2a	1	20334.16	100874.5	50437.25	50437.25	659232.3	329616.1	329616.1	PHEV	10167.08	10167.08	2	8
2042	2a	1	82634.63	414671.3	0	414671.3	2849121	0	2849121	BEV	0	82634.63	2	3
2042	2a	1	19383.43	97268.58	0	97268.58	668816	0	668816	FCEV	0	19383.43	2	7
2042	2a	1	19432.01	97512.36	48756.18	48756.18	653853.4	326926.7	326926.7	PHEV	9716.006	9716.006	2	8
2042	2a	1	83873.19	425691.7	0	425691.7	2998265	0	2998265	BEV	0	83873.19	2	3
2042	2a	1	20968.3	106422.9	0	106422.9	750066.6	0	750066.6	FCEV	0	20968.3	2	7
2042	2a	1	18501.44	93902.58	46951.29	46951.29	646079.5	323039.8	323039.8	PHEV	9250.72	9250.72	2	8
2042	2a	1	85165.12	437127.9	0	437127.9	3154789	0	3154789	BEV	0	85165.12	2	3
2042	2a	1	22638.83	116198.5	0	116198.5	839106.9	0	839106.9	FCEV	0	22638.83	2	7
2042	2a	1	17549.48	90076.39	45038.2	45038.2	635773.5	317886.7	317886.7	PHEV	8774.74	8774.74	2	8
2042	2a	1	77827.57	403925.1	0	403925.1	2985488	0	2985488	BEV	0	77827.57	2	3
2042	2a	1	21951.37	113927.6	0	113927.6	842494.2	0	842494.2	FCEV	0	21951.37	2	7
2042	2a	1	14909.5	77380.28	38690.14	38690.14	559972.4	279986.2	279986.2	PHEV	7454.748	7454.748	2	8
2042	2a	1	8875.203	23690.05	23690.05	0	83773.57	83773.57	0	ICE	8875.203	0	3	1
2042	2a	1	9566.109	26082.28	26082.28	0	92557.26	92557.26	0	ICE	9566.109	0	3	1
2042	2a	1	12378.6	34459.8	34459.8	0	123602.1	123602.1	0	ICE	12378.6	0	3	1
2042	2a	1	11673	33164.29	33164.29	0	119105.1	119105.1	0	ICE	11673	0	3	1
2042	2a	1	10933.79	31690.49	31690.49	0	115019.3	115019.3	0	ICE	10933.79	0	3	1
2042	2a	1	11949.06	35317.73	35317.73	0	129427.5	129427.5	0	ICE	11949.06	0	3	1
2042	2a	1	13469.08	40582.07	40582.07	0	150146.6	150146.6	0	ICE	13469.08	0	3	1
2042	2a	1	14966.68	45951.75	45951.75	0	170644.1	170644.1	0	ICE	14966.68	0	3	1
2042	2a	1	13678.22	42779.46	42779.46	0	159866.5	159866.5	0	ICE	13678.22	0	3	1

2042	2a	1	14226.92	45310.6	45310.6	0	170727.6	170727.6	0	ICE	14226.92	0	3	1
2042	2a	1	11061.64	35863.4	35863.4	0	136934.2	136934.2	0	ICE	11061.64	0	3	1
2042	2a	1	6927.719	22857.52	22857.52	0	88232.13	88232.13	0	ICE	6927.719	0	3	1
2042	2a	1	12432.21	41731.44	41731.44	0	162933	162933	0	ICE	12432.21	0	3	1
2042	2a	1	17079.38	58309.19	58309.19	0	230331.5	230331.5	0	ICE	17079.38	0	3	1
2042	2a	1	17418.86	60466.09	60466.09	0	242654.6	242654.6	0	ICE	17418.86	0	3	1
2042	2a	1	25614.29	90382.34	90382.34	0	365414.6	365414.6	0	ICE	25614.29	0	3	1
2042	2a	1	25658.02	92006.57	92006.57	0	378092.9	378092.9	0	ICE	25658.02	0	3	1
2042	2a	1	273.1246	979.3921	979.3921	0	3932.266	3932.266	0	ICE	273.1246	0	3	2
2042	2a	1	32825.7	119589.6	119589.6	0	498504.9	498504.9	0	ICE	32825.7	0	3	1
2042	2a	1	35140.11	130034.6	130034.6	0	547782	547782	0	ICE	35140.11	0	3	1
2042	2a	1	263.3968	974.6892	974.6892	0	4075.815	4075.815	0	ICE	263.3968	0	3	2
2042	2a	1	42431.08	159445.4	159445.4	0	682602	682602	0	ICE	42431.08	0	3	1
2042	2a	1	433.693	1629.71	1629.71	0	7004.668	7004.668	0	ICE	433.693	0	3	2
2042	2a	1	49338.45	188228.1	188228.1	0	818160.8	818160.8	0	ICE	49338.45	0	3	1
2042	2a	1	504.294	1923.902	1923.902	0	8394.834	8394.834	0	ICE	504.294	0	3	2
2042	2a	1	170.2245	649.4134	389.648	259.7653	2839.862	1703.917	1135.945	PHEV	102.1347	68.08981	3	8
2042	2a	1	56492.27	218756.7	218756.7	0	966171.4	966171.4	0	ICE	56492.27	0	3	1
2042	2a	1	575.9586	2230.302	2230.302	0	9881.046	9881.046	0	ICE	575.9586	0	3	2
2042	2a	1	666.2552	2579.96	0	2579.96	8098.937	0	8098.937	BEV	0	666.2552	3	3
2042	2a	1	15.58492	60.34995	0	60.34995	165.1549	0	165.1549	FCEV	0	15.58492	3	7
2042	2a	1	578.6821	2240.848	1331.704	909.144	9921.126	5895.983	4025.142	PHEV	343.9025	234.7796	3	8
2042	2a	1	64772.19	254530.1	254530.1	0	1139653	1139653	0	ICE	64772.19	0	3	1
2042	2a	1	661.8767	2600.924	2600.924	0	11683.27	11683.27	0	ICE	661.8767	0	3	2
2042	2a	1	1552.267	6099.82	0	6099.82	23791.53	0	23791.53	BEV	0	1552.267	3	3
2042	2a	1	40.96893	160.9923	0	160.9923	455.2253	0	455.2253	FCEV	0	40.96893	3	7
2042	2a	1	1120.242	4402.126	2590.965	1811.16	19774.22	11638.54	8135.678	PHEV	659.3425	460.8996	3	8
2042	2a	1	71264.64	284125.7	284125.7	0	1290637	1290637	0	ICE	71264.64	0	3	1
2042	2a	1	739.2293	2947.241	2947.241	0	13453.36	13453.36	0	ICE	739.2293	0	3	2
2042	2a	1	4867.26	19405.33	0	19405.33	73373.19	0	73373.19	BEV	0	4867.26	3	3
2042	2a	1	166.8446	665.1944	0	665.1944	1942.54	0	1942.54	FCEV	0	166.8446	3	7
2042	2a	1	3308.23	13189.61	7646.208	5543.406	68434.95	39672.72	28762.23	PHEV	1917.828	1390.402	3	8
2042	2a	1	78746.34	318465.9	318465.9	0	1470468	1470468	0	ICE	78746.34	0	3	1
2042	2a	1	820.6805	3318.996	3318.996	0	15409.58	15409.58	0	ICE	820.6805	0	3	2
2042	2a	1	9542.006	38589.78	0	38589.78	148434.7	0	148434.7	BEV	0	9542.006	3	3
2042	2a	1	403.5035	1631.849	0	1631.849	4919.001	0	4919.001	FCEV	0	403.5035	3	7
2042	2a	1	6102.75	24680.74	14089.18	10591.56	135632.6	77426.85	58205.77	PHEV	3483.798	2618.952	3	8
2042	2a	1	86928.2	356535.2	356535.2	0	1675627	1675627	0	ICE	86928.2	0	3	1
2042	2a	1	910.8461	3735.826	3735.826	0	17663.54	17663.54	0	ICE	910.8461	0	3	2
2042	2a	1	16053.12	65841.7	0	65841.7	261005.2	0	261005.2	BEV	0	16053.12	3	3
2042	2a	1	809.4009	3319.75	0	3319.75	10406.56	0	10406.56	FCEV	0	809.4009	3	7
2042	2a	1	9650.48	39581.35	22244.72	17336.63	224792.5	126333.4	98459.1	PHEV	5423.57	4226.91	3	8
2042	2a	1	93605.33	389284	389284	0	1863670	1863670	0	ICE	93605.33	0	3	1
2042	2a	1	985.7337	4099.45	4099.45	0	19753.96	19753.96	0	ICE	985.7337	0	3	2
2042	2a	1	24488.86	101843.8	0	101843.8	416009.9	0	416009.9	BEV	0	24488.86	3	3
2042	2a	1	1437.035	5976.314	0	5976.314	20613	0	20613	FCEV	0	1437.035	3	7
2042	2a	1	13819.84	57473.66	31791.14	25682.51	334931.6	185265	149666.6	PHEV	7644.343	6175.492	3	8

2042	2a	1	97822.03	412424.5	412424.5	0	2013933	2013933	0	ICE	97822.03	0	3	1
2042	2a	1	1034.921	4363.3	4363.3	0	21455.95	21455.95	0	ICE	1034.921	0	3	2
2042	2a	1	34822.39	146813.7	0	146813.7	618585	0	618585	BEV	0	34822.39	3	3
2042	2a	1	2335.648	9847.257	0	9847.257	36411.65	0	36411.65	FCEV	0	2335.648	3	7
2042	2a	1	18419.66	77658.59	42268.46	35390.13	463894.3	252491.1	211403.3	PHEV	10025.56	8394.104	3	8
2042	2a	1	100120	427848.7	427848.7	0	2131891	2131891	0	ICE	100120	0	3	1
2042	2a	1	1059.233	4526.482	4526.482	0	22709.22	22709.22	0	ICE	1059.233	0	3	2
2042	2a	1	47401.6	202564.1	0	202564.1	880849.9	0	880849.9	BEV	0	47401.6	3	3
2042	2a	1	3583.526	15313.7	0	15313.7	60707	0	60707	FCEV	0	3583.526	3	7
2042	2a	1	23460.65	100255.8	53679.83	46575.99	614515.7	329029.2	285486.4	PHEV	12561.5	10899.15	3	8
2042	2a	1	100421.7	434891.2	434891.2	0	2212774	2212774	0	ICE	100421.7	0	3	1
2042	2a	1	1062.425	4600.989	4600.989	0	23567.63	23567.63	0	ICE	1062.425	0	3	2
2042	2a	1	62524.96	270773.7	0	270773.7	1215055	0	1215055	BEV	0	62524.96	3	3
2042	2a	1	5268.522	22816.12	0	22816.12	95593.21	0	95593.21	FCEV	0	5268.522	3	7
2042	2a	1	28895.93	125138.1	65894.17	59243.98	786566	414183.2	372382.8	PHEV	15215.77	13680.16	3	8
2042	2a	1	97667.97	428561.2	428561.2	0	2228550	2228550	0	ICE	97667.97	0	3	1
2042	2a	1	1033.291	4534.02	4534.02	0	23732.86	23732.86	0	ICE	1033.291	0	3	2
2042	2a	1	79793.58	350129.4	0	350129.4	1621419	0	1621419	BEV	0	79793.58	3	3
2042	2a	1	7426.136	32585.44	0	32585.44	143158.8	0	143158.8	FCEV	0	7426.136	3	7
2042	2a	1	34352.51	150736.7	78038.56	72698.17	971759.9	503094	468665.9	PHEV	17784.78	16567.72	3	8
2042	2a	1	92447.6	410950.8	410950.8	0	2185508	2185508	0	ICE	92447.6	0	3	1
2042	2a	1	978.0617	4347.709	4347.709	0	23272.11	23272.11	0	ICE	978.0617	0	3	2
2042	2a	1	99752.09	443421	0	443421	2119127	0	2119127	BEV	0	99752.09	3	3
2042	2a	1	10176.22	45235.64	0	45235.64	207395.6	0	207395.6	FCEV	0	10176.22	3	7
2042	2a	1	39895.82	177346.1	90243.84	87102.28	1173014	596896.6	576117.5	PHEV	20301.28	19594.55	3	8
2042	2a	1	83282.11	374979.4	374979.4	0	2040802	2040802	0	ICE	83282.11	0	3	1
2042	2a	1	881.0942	3967.144	3967.144	0	21729.34	21729.34	0	ICE	881.0942	0	3	2
2042	2a	1	120687.9	543399.6	0	543399.6	2680108	0	2680108	BEV	0	120687.9	3	3
2042	2a	1	13409.77	60377.74	0	60377.74	288008.6	0	288008.6	FCEV	0	13409.77	3	7
2042	2a	1	44699.22	201259.1	100629.6	100629.6	1366417	683208.7	683208.7	PHEV	22349.61	22349.61	3	8
2042	2a	1	72131.04	328903.8	328903.8	0	1832777	1832777	0	ICE	72131.04	0	3	1
2042	2a	1	763.1199	3479.682	3479.682	0	19512.99	19512.99	0	ICE	763.1199	0	3	2
2042	2a	1	143257.9	653228.6	0	653228.6	3316127	0	3316127	BEV	0	143257.9	3	3
2042	2a	1	17706.03	80736.12	0	80736.12	399146.3	0	399146.3	FCEV	0	17706.03	3	7
2042	2a	1	50830.7	231778.3	115889.2	115889.2	1614275	807137.4	807137.4	PHEV	25415.35	25415.35	3	8
2042	2a	1	57491.42	265443.6	265443.6	0	1515186	1515186	0	ICE	57491.42	0	3	1
2042	2a	1	608.2382	2808.296	2808.296	0	16130.75	16130.75	0	ICE	608.2382	0	3	2
2042	2a	1	165636.1	764758.5	0	764758.5	3996516	0	3996516	BEV	0	165636.1	3	3
2042	2a	1	22586.74	104285.3	0	104285.3	533453.9	0	533453.9	FCEV	0	22586.74	3	7
2042	2a	1	56222.41	259584.5	129792.2	129792.2	1855706	927853.1	927853.1	PHEV	28111.21	28111.21	3	8
2042	2a	1	40605.34	189805.2	189805.2	0	1110063	1110063	0	ICE	40605.34	0	3	1
2042	2a	1	429.5896	2008.069	2008.069	0	11817.21	11817.21	0	ICE	429.5896	0	3	2
2042	2a	1	189661.6	886552.4	0	886552.4	4769027	0	4769027	BEV	0	189661.6	3	3
2042	2a	1	28340.24	132473.3	0	132473.3	700250.4	0	700250.4	FCEV	0	28340.24	3	7
2042	2a	1	61487.71	287417.5	143708.8	143708.8	2109606	1054803	1054803	PHEV	30743.85	30743.85	3	8
2042	2a	1	21123.77	99950.93	99950.93	0	599220.2	599220.2	0	ICE	21123.77	0	3	1
2042	2a	1	223.4818	1057.444	1057.444	0	6378.795	6378.795	0	ICE	223.4818	0	3	2

2042	2a	1	212068.1	1003438	0	1003438	5557347	0	5557347	BEV	0	212068.1	3	3
2042	2a	1	34522.71	163350.4	0	163350.4	891653	0	891653	FCEV	0	34522.71	3	7
2042	2a	1	65549.45	310159	155079.5	155079.5	2339249	1169624	1169624	PHEV	32774.73	32774.73	3	8
2042	2a	1	234827	1124579	0	1124579	6411948	0	6411948	BEV	0	234827	3	3
2042	2a	1	41440.06	198455.2	0	198455.2	1117857	0	1117857	FCEV	0	41440.06	3	7
2042	2a	1	69066.77	330758.7	165379.3	165379.3	2564104	1282052	1282052	PHEV	34533.38	34533.38	3	8
2042	2a	1	241143.2	1168643	0	1168643	6861918	0	6861918	BEV	0	241143.2	3	3
2042	2a	1	45932.04	222598.6	0	222598.6	1292809	0	1292809	FCEV	0	45932.04	3	7
2042	2a	1	67338.64	326340.6	163170.3	163170.3	2596036	1298018	1298018	PHEV	33669.32	33669.32	3	8
2042	2a	1	248267	1217389	0	1217389	7360572	0	7360572	BEV	0	248267	3	3
2042	2a	1	50849.86	249344.8	0	249344.8	1492765	0	1492765	FCEV	0	50849.86	3	7
2042	2a	1	65659.79	321966.1	160983	160983	2628313	1314157	1314157	PHEV	32829.9	32829.9	3	8
2042	2a	1	253982.4	1259966	0	1259966	7844149	0	7844149	BEV	0	253982.4	3	3
2042	2a	1	55752.24	276578	0	276578	1706560	0	1706560	FCEV	0	55752.24	3	7
2042	2a	1	63439.63	314713.9	157356.9	157356.9	2636695	1318348	1318348	PHEV	31719.82	31719.82	3	8
2042	2a	1	258537.4	1297374	0	1297374	8315074	0	8315074	BEV	0	258537.4	3	3
2042	2a	1	60644.58	304322.4	0	304322.4	1934719	0	1934719	FCEV	0	60644.58	3	7
2042	2a	1	60796.57	305085.1	152542.5	152542.5	2622436	1311218	1311218	PHEV	30398.28	30398.28	3	8
2042	2a	1	265732.6	1348705	0	1348705	8898391	0	8898391	BEV	0	265732.6	3	3
2042	2a	1	66433.16	337176.2	0	337176.2	2208338	0	2208338	FCEV	0	66433.16	3	7
2042	2a	1	58617.49	297508.4	148754.2	148754.2	2623013	1311507	1311507	PHEV	29308.75	29308.75	3	8
2042	2a	1	273148.9	1401994	0	1401994	9519243	0	9519243	BEV	0	273148.9	3	3
2042	2a	1	72609.2	372682	0	372682	2513688	0	2513688	FCEV	0	72609.2	3	7
2042	2a	1	56286.2	288900.7	144450.4	144450.4	2610430	1305215	1305215	PHEV	28143.1	28143.1	3	8
2042	2a	1	247698.1	1285553	0	1285553	8974862	0	8974862	BEV	0	247698.1	3	3
2042	2a	1	69863.56	362591.9	0	362591.9	2516251	0	2516251	FCEV	0	69863.56	3	7
2042	2a	1	47451.74	246274.5	123137.3	123137.3	2276111	1138056	1138056	PHEV	23725.87	23725.87	3	8
2042	2a	1	7357.839	19639.84	19639.84	0	62195.85	62195.85	0	ICE	7357.839	0	4	1
2042	2a	1	11422.08	31142.64	31142.64	0	100400.1	100400.1	0	ICE	11422.08	0	4	1
2042	2a	1	12327.72	34318.17	34318.17	0	111474	111474	0	ICE	12327.72	0	4	1
2042	2a	1	15014.13	42656.78	42656.78	0	139675.9	139675.9	0	ICE	15014.13	0	4	1
2042	2a	1	19.03301	54.07487	54.07487	0	144.9928	144.9928	0	ICE	19.03301	0	4	2
2042	2a	1	16666.77	48306.97	48306.97	0	160837.4	160837.4	0	ICE	16666.77	0	4	1
2042	2a	1	16814.52	49698.51	49698.51	0	168790.5	168790.5	0	ICE	16814.52	0	4	1
2042	2a	1	17544.26	52860.5	52860.5	0	180764.9	180764.9	0	ICE	17544.26	0	4	1
2042	2a	1	29.61793	89.23823	89.23823	0	257.7822	257.7822	0	ICE	29.61793	0	4	2
2042	2a	1	15683.98	48154.06	48154.06	0	164673	164673	0	ICE	15683.98	0	4	1
2042	2a	1	14880.51	46539.68	46539.68	0	161442	161442	0	ICE	14880.51	0	4	1
2042	2a	1	14531.91	46281.96	46281.96	0	163091.1	163091.1	0	ICE	14531.91	0	4	1
2042	2a	1	10814.84	35063.21	35063.21	0	125211.3	125211.3	0	ICE	10814.84	0	4	1
2042	2a	1	4613.014	15220.32	15220.32	0	54965.3	54965.3	0	ICE	4613.014	0	4	1
2042	2a	1	6862.281	23034.75	23034.75	0	84324.63	84324.63	0	ICE	6862.281	0	4	1
2042	2a	1	10364.66	35385.06	35385.06	0	131376.7	131376.7	0	ICE	10364.66	0	4	1
2042	2a	1	299.9342	1023.978	1023.978	0	3653.344	3653.344	0	ICE	299.9342	0	4	2
2042	2a	1	11096.31	38518.63	38518.63	0	145368.2	145368.2	0	ICE	11096.31	0	4	1
2042	2a	1	13335.18	47054.37	47054.37	0	180270.3	180270.3	0	ICE	13335.18	0	4	1
2042	2a	1	287.6998	1015.175	1015.175	0	3817.232	3817.232	0	ICE	287.6998	0	4	2

2042	2a	1	22354.55	80160.73	80160.73	0	313167.3	313167.3	0	ICE	22354.55	0	4	1
2042	2a	1	716.3149	2568.619	2568.619	0	9729.948	9729.948	0	ICE	716.3149	0	4	2
2042	2a	1	26455.02	96380.13	96380.13	0	385830.3	385830.3	0	ICE	26455.02	0	4	1
2042	2a	1	31390.58	116159.6	116159.6	0	475077.1	475077.1	0	ICE	31390.58	0	4	1
2042	2a	1	31841.34	119651.8	119651.8	0	498287.6	498287.6	0	ICE	31841.34	0	4	1
2042	2a	1	1110.313	4172.278	4172.278	0	17390.39	17390.39	0	ICE	1110.313	0	4	2
2042	2a	1	266.3937	1001.041	600.6247	400.4164	3909.968	2345.981	1563.987	PHEV	159.8362	106.5575	4	8
2042	2a	1	37810.36	144248	144248	0	609679.4	609679.4	0	ICE	37810.36	0	4	1
2042	2a	1	1318.453	5029.953	5029.953	0	21277.45	21277.45	0	ICE	1318.453	0	4	2
2042	2a	1	0.661416	2.523327	0	2.523327	6.666177	0	6.666177	BEV	0	0.661416	4	3
2042	2a	1	0.013498	0.051496	0	0.051496	0.136044	0	0.136044	FCEV	0	0.013498	4	7
2042	2a	1	809.3906	3087.858	1852.715	1235.143	12744.28	7646.57	5097.713	PHEV	485.6344	323.7563	4	8
2042	2a	1	44438.47	172080.4	172080.4	0	736281.5	736281.5	0	ICE	44438.47	0	4	1
2042	2a	1	1564.205	6057.119	6057.119	0	25965.41	25965.41	0	ICE	1564.205	0	4	2
2042	2a	1	380.9471	1475.153	0	1475.153	4240.369	0	4240.369	BEV	0	380.9471	4	3
2042	2a	1	8.911044	34.5065	0	34.5065	94.22038	0	94.22038	FCEV	0	8.911044	4	7
2042	2a	1	991.146	3838.044	2280.895	1557.149	17263.26	10259.31	7003.95	PHEV	589.0239	402.1221	4	8
2042	2a	1	51630.39	202887.8	202887.8	0	879768.9	879768.9	0	ICE	51630.39	0	4	1
2042	2a	1	1845.858	7253.522	7253.522	0	31566.43	31566.43	0	ICE	1845.858	0	4	2
2042	2a	1	890.3019	3498.548	0	3498.548	11533.59	0	11533.59	BEV	0	890.3019	4	3
2042	2a	1	23.4977	92.33705	0	92.33705	260.5443	0	260.5443	FCEV	0	23.4977	4	7
2042	2a	1	1199.01	4711.655	2773.146	1938.51	21038.69	12382.77	8655.917	PHEV	705.7033	493.3071	4	8
2042	2a	1	56018.81	223342	223342	0	982927.5	982927.5	0	ICE	56018.81	0	4	1
2042	2a	1	2038.136	8125.864	8125.864	0	35956.79	35956.79	0	ICE	2038.136	0	4	2
2042	2a	1	2964.569	11819.47	0	11819.47	39807.55	0	39807.55	BEV	0	2964.569	4	3
2042	2a	1	101.6224	405.1592	0	405.1592	1180.995	0	1180.995	FCEV	0	101.6224	4	7
2042	2a	1	3538.365	14107.14	8178.113	5929.031	68781.29	39873.49	28907.79	PHEV	2051.241	1487.124	4	8
2042	2a	1	59330	239942.4	239942.4	0	1074368	1074368	0	ICE	59330	0	4	1
2042	2a	1	2170.447	8777.723	8777.723	0	39544.48	39544.48	0	ICE	2170.447	0	4	2
2042	2a	1	5836.795	23605.17	0	23605.17	83045.64	0	83045.64	BEV	0	5836.795	4	3
2042	2a	1	246.821	998.1935	0	998.1935	3004.378	0	3004.378	FCEV	0	246.821	4	7
2042	2a	1	6181.652	24999.84	14271.34	10728.5	127528.2	72800.36	54727.8	PHEV	3528.84	2652.812	4	8
2042	2a	1	61918.25	253957.1	253957.1	0	1158542	1158542	0	ICE	61918.25	0	4	1
2042	2a	1	2279.391	9348.899	9348.899	0	42935.51	42935.51	0	ICE	2279.391	0	4	2
2042	2a	1	9656.488	39605.99	0	39605.99	145619.8	0	145619.8	BEV	0	9656.488	4	3
2042	2a	1	486.8817	1996.941	0	1996.941	6204.849	0	6204.849	FCEV	0	486.8817	4	7
2042	2a	1	9076.546	37227.36	20921.78	16305.59	196620.3	110500.6	86119.69	PHEV	5101.019	3975.527	4	8
2042	2a	1	63478.57	263993.4	263993.4	0	1228696	1228696	0	ICE	63478.57	0	4	1
2042	2a	1	2350.484	9775.145	9775.145	0	45826.35	45826.35	0	ICE	2350.484	0	4	2
2042	2a	1	14525.27	60407.41	0	60407.41	231819.5	0	231819.5	BEV	0	14525.27	4	3
2042	2a	1	852.3602	3544.779	0	3544.779	11377.87	0	11377.87	FCEV	0	852.3602	4	7
2042	2a	1	12106.84	50349.67	27850.56	22499.11	274635.6	151912.7	122722.9	PHEV	6696.81	5410.026	4	8
2042	2a	1	65294.15	275284.7	275284.7	0	1309230	1309230	0	ICE	65294.15	0	4	1
2042	2a	1	2430.764	10248.27	10248.27	0	49120.17	49120.17	0	ICE	2430.764	0	4	2
2042	2a	1	20986.69	88481.34	0	88481.34	353744.1	0	353744.1	BEV	0	20986.69	4	3
2042	2a	1	1407.644	5934.724	0	5934.724	20648.67	0	20648.67	FCEV	0	1407.644	4	7
2042	2a	1	15481.78	65272.25	35526.75	29745.5	367208.8	199866.5	167342.3	PHEV	8426.509	7055.266	4	8

2042	2a	1	65533.95	280050.2	280050.2	0	1361471	1361471	0	ICE	65533.95	0	4	1
2042	2a	1	2439.691	10425.68	10425.68	0	51072.36	51072.36	0	ICE	2439.691	0	4	2
2042	2a	1	28840.06	123244	0	123244	513312.1	0	513312.1	BEV	0	28840.06	4	3
2042	2a	1	2180.287	9317.152	0	9317.152	35140.03	0	35140.03	FCEV	0	2180.287	4	7
2042	2a	1	18771.4	80216.95	42950.45	37266.51	465784.9	249394.5	216390.3	PHEV	10050.74	8720.657	4	8
2042	2a	1	63995.12	277140.5	277140.5	0	1378350	1378350	0	ICE	63995.12	0	4	1
2042	2a	1	2382.403	10317.36	10317.36	0	51698.72	51698.72	0	ICE	2382.403	0	4	2
2042	2a	1	38042.21	164747.5	0	164747.5	714179.9	0	714179.9	BEV	0	38042.21	4	3
2042	2a	1	3205.539	13882.07	0	13882.07	55881.71	0	55881.71	FCEV	0	3205.539	4	7
2042	2a	1	21749.83	94190.91	49598.24	44592.67	564256.7	297121.5	267135.3	PHEV	11452.84	10296.99	4	8
2042	2a	1	61060.33	267929.1	267929.1	0	1364127	1364127	0	ICE	61060.33	0	4	1
2042	2a	1	2273.148	9974.435	9974.435	0	51159.48	51159.48	0	ICE	2273.148	0	4	2
2042	2a	1	48826.58	214248.1	0	214248.1	966045.9	0	966045.9	BEV	0	48826.58	4	3
2042	2a	1	4544.135	19939.39	0	19939.39	84912.36	0	84912.36	FCEV	0	4544.135	4	7
2042	2a	1	24372.4	106944.6	55366.76	51577.86	660812.1	342111.9	318700.3	PHEV	12617.94	11754.46	4	8
2042	2a	1	56909.11	252974.1	252974.1	0	1319112	1319112	0	ICE	56909.11	0	4	1
2042	2a	1	2118.606	9417.692	9417.692	0	49466.42	49466.42	0	ICE	2118.606	0	4	2
2042	2a	1	61507.94	273417	0	273417	1281648	0	1281648	BEV	0	61507.94	4	3
2042	2a	1	6274.74	27892.66	0	27892.66	124966.1	0	124966.1	FCEV	0	6274.74	4	7
2042	2a	1	26589.25	118195.3	60144.54	58050.8	753019.9	383179.6	369840.3	PHEV	13530.13	13059.12	4	8
2042	2a	1	50893.42	229148.6	229148.6	0	1224270	1224270	0	ICE	50893.42	0	4	1
2042	2a	1	1894.655	8530.72	8530.72	0	45906.11	45906.11	0	ICE	1894.655	0	4	2
2042	2a	1	75487.28	339883	0	339883	1655700	0	1655700	BEV	0	75487.28	4	3
2042	2a	1	8387.475	37764.78	0	37764.78	177368.5	0	177368.5	FCEV	0	8387.475	4	7
2042	2a	1	27958.25	125882.6	62941.29	62941.29	826551.2	413275.6	413275.6	PHEV	13979.13	13979.13	4	8
2042	2a	1	43802.26	199730	199730	0	1093781	1093781	0	ICE	43802.26	0	4	1
2042	2a	1	1630.666	7435.526	7435.526	0	41010.47	41010.47	0	ICE	1630.666	0	4	2
2042	2a	1	89062.87	406109.7	0	406109.7	2037338	0	2037338	BEV	0	89062.87	4	3
2042	2a	1	11007.77	50193.34	0	50193.34	244609	0	244609	FCEV	0	11007.77	4	7
2042	2a	1	31601.25	144095.7	72047.86	72047.86	972245.4	486122.7	486122.7	PHEV	15800.63	15800.63	4	8
2042	2a	1	34912.92	161196.5	161196.5	0	905199.8	905199.8	0	ICE	34912.92	0	4	1
2042	2a	1	1299.734	6001.004	6001.004	0	33938	33938	0	ICE	1299.734	0	4	2
2042	2a	1	102998.1	475552.6	0	475552.6	2457177	0	2457177	BEV	0	102998.1	4	3
2042	2a	1	14045.2	64848.09	0	64848.09	327309	0	327309	FCEV	0	14045.2	4	7
2042	2a	1	34960.99	161418.4	80709.2	80709.2	1119674	559837.2	559837.2	PHEV	17480.5	17480.5	4	8
2042	2a	1	24826.31	116047.8	116047.8	0	668264.2	668264.2	0	ICE	24826.31	0	4	1
2042	2a	1	924.2311	4320.217	4320.217	0	25053.66	25053.66	0	ICE	924.2311	0	4	2
2042	2a	1	118761	555135.4	0	555135.4	2953875	0	2953875	BEV	0	118761	4	3
2042	2a	1	17745.9	82951.27	0	82951.27	432987.4	0	432987.4	FCEV	0	17745.9	4	7
2042	2a	1	38501.96	179973.2	89986.58	89986.58	1283419	641709.3	641709.3	PHEV	19250.98	19250.98	4	8
2042	2a	1	12938.62	61221.43	61221.43	0	361685.7	361685.7	0	ICE	12938.62	0	4	1
2042	2a	1	481.6777	2279.145	2279.145	0	13559.47	13559.47	0	ICE	481.6777	0	4	2
2042	2a	1	133052.1	629559.9	0	629559.9	3450334	0	3450334	BEV	0	133052.1	4	3
2042	2a	1	21659.64	102486.5	0	102486.5	552799.2	0	552799.2	FCEV	0	21659.64	4	7
2042	2a	1	41125.9	194594.6	97297.3	97297.3	1427688	713844.2	713844.2	PHEV	20562.95	20562.95	4	8
2042	2a	1	149097.7	714024.2	0	714024.2	4029794	0	4029794	BEV	0	149097.7	4	3
2042	2a	1	26311.35	126004.3	0	126004.3	701703.7	0	701703.7	FCEV	0	26311.35	4	7

2042	2a	1	43852.25	210007.1	105003.6	105003.6	1585084	792541.9	792541.9	PHEV	21926.13	21926.13	4	8
2042	2a	1	154821	750302.8	0	750302.8	4361475	0	4361475	BEV	0	154821	4	3
2042	2a	1	29489.72	142914.8	0	142914.8	820812.2	0	820812.2	FCEV	0	29489.72	4	7
2042	2a	1	43233.38	209520.2	104760.1	104760.1	1623338	811669.1	811669.1	PHEV	21616.69	21616.69	4	8
2042	2a	1	161283.5	790861.8	0	790861.8	4733821	0	4733821	BEV	0	161283.5	4	3
2042	2a	1	33033.97	161983.7	0	161983.7	959084.1	0	959084.1	FCEV	0	33033.97	4	7
2042	2a	1	42655.06	209161.2	104580.6	104580.6	1663020	831510.2	831510.2	PHEV	21327.53	21327.53	4	8
2042	2a	1	164904.6	818065.4	0	818065.4	5041855	0	5041855	BEV	0	164904.6	4	3
2042	2a	1	36198.57	179575.3	0	179575.3	1095900	0	1095900	FCEV	0	36198.57	4	7
2042	2a	1	41189.81	204336.1	102168	102168	1667124	833562	833562	PHEV	20594.9	20594.9	4	8
2042	2a	1	168724.3	846680.4	0	846680.4	5371474	0	5371474	BEV	0	168724.3	4	3
2042	2a	1	39577.3	198604	0	198604	1248786	0	1248786	FCEV	0	39577.3	4	7
2042	2a	1	39676.49	199101.8	99550.9	99550.9	1665844	832921.8	832921.8	PHEV	19838.25	19838.25	4	8
2042	2a	1	173531.3	880744.3	0	880744.3	5748686	0	5748686	BEV	0	173531.3	4	3
2042	2a	1	43382.83	220186.1	0	220186.1	1425621	0	1425621	FCEV	0	43382.83	4	7
2042	2a	1	38278.97	194281.8	97140.92	97140.92	1664892	832445.9	832445.9	PHEV	19139.48	19139.48	4	8
2042	2a	1	176902.9	907991.1	0	907991.1	6095839	0	6095839	BEV	0	176902.9	4	3
2042	2a	1	47024.81	241364.7	0	241364.7	1608637	0	1608637	FCEV	0	47024.81	4	7
2042	2a	1	36453.34	187104.4	93552.21	93552.21	1640978	820489.1	820489.1	PHEV	18226.67	18226.67	4	8
2042	2a	1	153578.9	797074.4	0	797074.4	5490492	0	5490492	BEV	0	153578.9	4	3
2042	2a	1	43317.12	224815.9	0	224815.9	1538501	0	1538501	FCEV	0	43317.12	4	7
2042	2a	1	29421.24	152696.2	76348.12	76348.12	1363739	681869.7	681869.7	PHEV	14710.62	14710.62	4	8
2042	2a	1	30.04686	83.64504	83.64504	0	151.7802	151.7802	0	ICE	30.04686	0	1	2
2042	2a	1	4.406671	12.51984	0	12.51984	29.3711	0	29.3711	BEV	0	4.406671	1	3
2042	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2042	2a	1	4.406671	12.51984	0	12.51984	29.3711	0	29.3711	BEV	0	4.406671	1	3
2042	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2042	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2042	2a	1	67.71928	196.2776	196.2776	0	373.0189	373.0189	0	ICE	67.71928	0	1	2
2042	2a	1	87.81458	259.5527	259.5527	0	519.8693	519.8693	0	ICE	87.81458	0	1	2
2042	2a	1	29.48933	88.85075	88.85075	0	195.138	195.138	0	ICE	29.48933	0	1	2
2042	2a	1	52.59415	161.4783	161.4783	0	355.626	355.626	0	ICE	52.59415	0	1	2
2042	2a	1	122.1406	402.9945	402.9945	0	1015.683	1015.683	0	ICE	122.1406	0	1	2
2042	2a	1	351.9215	1221.625	1221.625	0	3467.944	3467.944	0	ICE	351.9215	0	1	2
2042	2a	1	546.6896	1929.043	1929.043	0	5752.378	5752.378	0	ICE	546.6896	0	1	2
2042	2a	1	473.1331	1669.493	0	1669.493	5292.838	0	5292.838	BEV	0	473.1331	1	3
2042	2a	1	0.027797	0.098084	0	0.098084	0.310959	0	0.310959	FCEV	0	0.027797	1	7
2042	2a	1	494.5369	1745.018	1047.011	698.0071	5024.044	3014.426	2009.617	PHEV	296.7221	197.8147	1	8
2042	2a	1	639.5549	2293.367	0	2293.367	7528.158	0	7528.158	BEV	0	639.5549	1	3
2042	2a	1	0.089611	0.321335	0	0.321335	1.054807	0	1.054807	FCEV	0	0.089611	1	7
2042	2a	1	807.4863	2895.549	1737.329	1158.22	8682.252	5209.351	3472.901	PHEV	484.4918	322.9945	1	8
2042	2a	1	690.0992	2514.149	2514.149	0	8239.223	8239.223	0	ICE	690.0992	0	1	2
2042	2a	1	1658.627	6042.661	0	6042.661	20628.27	0	20628.27	BEV	0	1658.627	1	3
2042	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2042	2a	1	788.7218	2873.447	1724.068	1149.379	8999.364	5399.618	3599.745	PHEV	473.2331	315.4887	1	8
2042	2a	1	2436.266	7340.421	7340.421	0	27461.57	27461.57	0	ICE	2436.266	0	2	1
2042	2a	1	4911.42	17049.01	17049.01	0	70071.89	70071.89	0	ICE	4911.42	0	2	1
2042	2a	1	7630.307	26924.22	26924.22	0	112121.8	112121.8	0	ICE	7630.307	0	2	1
2042	2a	1	10031.84	35972.97	35972.97	0	150535.6	150535.6	0	ICE	10031.84	0	2	1

2042	2a	1	3.816522	12.3737	12.3737	0	44.27743	44.27743	0	ICE	3.816522	0	3	2
2042	2a	1	115.1204	399.6175	399.6175	0	1577.2	1577.2	0	ICE	115.1204	0	3	2
2042	2a	1	92.38628	325.9933	325.9933	0	1281.324	1281.324	0	ICE	92.38628	0	3	2
2042	2a	1	418.4585	1524.515	1524.515	0	6265.03	6265.03	0	ICE	418.4585	0	3	2
2042	2a	1	454.0918	1680.348	0	1680.348	4069.321	0	4069.321	BEV	0	454.0918	3	3
2042	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2042	2a	1	41.32569	152.9241	91.75444	61.16962	624.7035	374.8221	249.8814	PHEV	24.79541	16.53028	3	8
2042	2a	1	13.32643	36.33491	36.33491	0	89.99708	89.99708	0	ICE	13.32643	0	4	2
2042	2a	1	45.80522	140.6344	140.6344	0	434.4872	434.4872	0	ICE	45.80522	0	4	2
2042	2a	1	59.77454	186.9484	186.9484	0	587.2557	587.2557	0	ICE	59.77454	0	4	2
2042	2a	1	77.55978	247.0163	247.0163	0	822.0952	822.0952	0	ICE	77.55978	0	4	2
2042	2a	1	55.43228	179.7192	179.7192	0	609.753	609.753	0	ICE	55.43228	0	4	2
2042	2a	1	74.80198	246.8039	246.8039	0	858.4782	858.4782	0	ICE	74.80198	0	4	2
2042	2a	1	563.341	1955.526	1955.526	0	7047.651	7047.651	0	ICE	563.341	0	4	2
2042	2a	1	1526.887	5562.708	5562.708	0	21527.59	21527.59	0	ICE	1526.887	0	4	2
2042	2a	1	1066.771	3947.543	3947.543	0	15757.42	15757.42	0	ICE	1066.771	0	4	2
2042	2a	1	40.85431	111.3905	111.3905	0	183.0583	183.0583	0	ICE	40.85431	0	1	2
2042	2a	1	1.935876	5.943661	0	5.943661	14.91615	0	14.91615	BEV	0	1.935876	1	3
2042	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2042	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2042	2a	1	93.10082	323.1809	0	323.1809	991.4289	0	991.4289	BEV	0	93.10082	1	3
2042	2a	1	0.35184	1.221343	0	1.221343	3.74674	0	3.74674	FCEV	0	0.35184	1	7
2042	2a	1	195.7013	679.338	407.6028	271.7352	1870.578	1122.347	748.2314	PHEV	117.4208	78.28053	1	8
2042	2a	1	1234.791	4569.296	0	4569.296	16158.13	0	16158.13	BEV	0	1234.791	1	3
2042	2a	1	37.59415	139.1156	0	139.1156	491.9465	0	491.9465	FCEV	0	37.59415	1	7
2042	2a	1	887.98	3285.935	1971.561	1314.374	10743.69	6446.214	4297.476	PHEV	532.788	355.192	1	8
2042	2a	1	1.4525	3.877072	3.877072	0	12.87738	12.87738	0	ICE	1.4525	0	2	2
2042	2a	1	14.13487	43.39787	43.39787	0	150.3782	150.3782	0	ICE	14.13487	0	3	2
2042	2a	1	15.74886	49.25551	49.25551	0	177.8969	177.8969	0	ICE	15.74886	0	3	2
2042	2a	1	11.43676	30.52746	30.52746	0	74.50079	74.50079	0	ICE	11.43676	0	4	2
2042	2a	1	18.88032	55.80438	55.80438	0	165.6385	165.6385	0	ICE	18.88032	0	4	2
2042	2a	1	132.375	444.346	444.346	0	1573.987	1573.987	0	ICE	132.375	0	4	2
2042	2a	1	41.91532	111.882	111.882	0	188.8459	188.8459	0	ICE	41.91532	0	1	2
2042	2a	1	8.306556	24.07572	0	24.07572	57.32405	0	57.32405	BEV	0	8.306556	1	3
2042	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2042	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2042	2a	1	110.2064	376.2457	0	376.2457	1121.48	0	1121.48	BEV	0	110.2064	1	3
2042	2a	1	1.088822	3.717248	0	3.717248	11.08005	0	11.08005	FCEV	0	1.088822	1	7
2042	2a	1	30.63414	104.5853	62.75116	41.83411	275.8795	165.5277	110.3518	PHEV	18.38048	12.25366	1	8
2042	2a	1	106.1378	392.7585	392.7585	0	1317.278	1317.278	0	ICE	106.1378	0	1	2
2042	2a	1	97.20528	348.5665	0	348.5665	1141.567	0	1141.567	BEV	0	97.20528	2	3
2042	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2042	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2042	2a	1	10.22629	33.15506	33.15506	0	78.13566	78.13566	0	ICE	10.22629	0	1	2
2042	2a	1	2.139324	6.323179	6.323179	0	20.02109	20.02109	0	ICE	2.139324	0	2	2
2042	2a	1	0.182509	0.497617	0.497617	0	1.072187	1.072187	0	ICE	0.182509	0	3	2
2042	2a	1	7.568855	25.40653	25.40653	0	93.15282	93.15282	0	ICE	7.568855	0	3	2

2042	2a	1	21.72688	77.91	0	77.91	177.5677	0	177.5677	BEV	0	21.72688	3	3
2042	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2042	2a	1	9.837254	35.27521	21.16513	14.11009	137.8991	82.73947	55.15965	PHEV	5.902352	3.934902	3	8
2042	2a	1	7.314126	21.19926	21.19926	0	64.29719	64.29719	0	ICE	7.314126	0	4	2
2042	2a	1	15.37911	52.50445	52.50445	0	204.8916	204.8916	0	ICE	15.37911	0	3	2
2042	2a	1	3.636779	10.12414	10.12414	0	29.80101	29.80101	0	ICE	3.636779	0	4	2
2042	2a	1	3.082819	8.935241	0	8.935241	14.40689	0	14.40689	BEV	0	3.082819	3	3
2042	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2042	2a	1	0	0	0	0	0	0	0	PHEV	0	0	3	8
2042	2a	1	16.13535	46.76669	0	46.76669	76.99641	0	76.99641	BEV	0	16.13535	4	3
2042	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2042	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2042	2a	1	6.99161	22.26723	22.26723	0	48.75101	48.75101	0	ICE	6.99161	0	1	2
2042	2a	1	18.10573	60.77587	0	60.77587	176.6279	0	176.6279	BEV	0	18.10573	1	3
2042	2a	1	1.838145	6.170139	0	6.170139	17.93176	0	17.93176	FCEV	0	1.838145	1	7
2042	2a	1	1.930053	6.478646	3.887188	2.591458	16.1202	9.672123	6.448082	PHEV	1.158032	0.772021	1	8
2042	2a	1	36.0765	125.2324	0	125.2324	381.7398	0	381.7398	BEV	0	36.0765	2	3
2042	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2042	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2042	2a	1	5.903511	19.47822	19.47822	0	72.73578	72.73578	0	ICE	5.903511	0	3	2
2042	2a	1	2.118762	6.626554	0	6.626554	17.16079	0	17.16079	BEV	0	2.118762	1	3
2042	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2042	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2042	2a	1	10.95683	35.52356	0	35.52356	94.75131	0	94.75131	BEV	0	10.95683	1	3
2042	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2042	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2042	2a	1	9.745174	32.15352	0	32.15352	91.81782	0	91.81782	BEV	0	9.745174	1	3
2042	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2042	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2042	2a	1	3.649686	12.04188	12.04188	0	41.7564	41.7564	0	ICE	3.649686	0	2	2
2042	2a	1	47.0691	166.0876	0	166.0876	523.4081	0	523.4081	BEV	0	47.0691	2	3
2042	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2042	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2042	2a	1	2.068839	6.588943	6.588943	0	24.38954	24.38954	0	ICE	2.068839	0	3	2
2042	2a	1	1.905992	5.633521	0	5.633521	13.61608	0	13.61608	BEV	0	1.905992	1	3
2042	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2042	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2042	2a	1	3.679727	11.71938	0	11.71938	31.07538	0	31.07538	BEV	0	3.679727	1	3
2042	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2042	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2042	2a	1	5.367549	17.40235	0	17.40235	47.10932	0	47.10932	BEV	0	5.367549	2	3
2042	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2042	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2042	2a	1	0.976168	3.388572	3.388572	0	12.08171	12.08171	0	ICE	0.976168	0	2	2
2042	2a	1	0.258864	0.809613	0	0.809613	1.643981	0	1.643981	BEV	0	0.258864	4	3
2042	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2042	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8

2042	2a	1	1.330763	3.780843	3.780843	0	10.52534	10.52534	0	ICE	1.330763	0	2	2
2042	2a	1	0.260267	0.769267	0.769267	0	2.768621	2.768621	0	ICE	0.260267	0	3	2
2042	2a	1	3.112862	10.27067	0	10.27067	20.90778	0	20.90778	BEV	0	3.112862	3	3
2042	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2042	2a	1	0	0	0	0	0	0	0	PHEV	0	0	3	8
2042	2a	1	1.877768	6.41072	0	6.41072	13.66377	0	13.66377	BEV	0	1.877768	3	3
2042	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2042	2a	1	1.299993	4.438191	2.662914	1.775276	16.17244	9.703464	6.468976	PHEV	0.779996	0.519997	3	8
2042	2a	1	0.293473	1.069171	0	1.069171	2.46085	0	2.46085	BEV	0	0.293473	4	3
2042	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2042	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2042	2a	1	8.212323	22.86163	0	22.86163	51.60575	0	51.60575	BEV	0	8.212323	2	3
2042	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2042	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2042	2a	1	2.94881	8.377895	0	8.377895	19.43995	0	19.43995	BEV	0	2.94881	2	3
2042	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2042	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2042	2a	1	2.463663	7.14068	7.14068	0	26.69878	26.69878	0	ICE	2.463663	0	2	2
2042	2a	1	1.314892	4.112403	0	4.112403	10.51311	0	10.51311	BEV	0	1.314892	2	3
2042	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2042	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2042	2a	1	2.225303	7.087256	7.087256	0	24.5545	24.5545	0	ICE	2.225303	0	2	2
2042	2a	1	0.757641	2.412975	0	2.412975	6.354046	0	6.354046	BEV	0	0.757641	2	3
2042	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2042	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2042	2a	1	2.68235	8.696553	8.696553	0	34.4577	34.4577	0	ICE	2.68235	0	2	2
2042	2a	1	2.190257	7.2266	0	7.2266	20.51801	0	20.51801	BEV	0	2.190257	2	3
2042	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2042	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2042	2a	1	2.313037	7.499191	0	7.499191	14.51726	0	14.51726	BEV	0	2.313037	3	3
2042	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2042	2a	1	0	0	0	0	0	0	0	PHEV	0	0	3	8
2042	2a	1	1.406151	4.96173	0	4.96173	11.00271	0	11.00271	BEV	0	1.406151	3	3
2042	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2042	2a	1	1.075292	3.794264	2.276558	1.517706	14.73336	8.840015	5.893343	PHEV	0.645175	0.430117	3	8
2042	2a	1	0.908504	2.52911	0	2.52911	4.203646	0	4.203646	BEV	0	0.908504	4	3
2042	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2042	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2042	2a	1	1.86263	5.505357	0	5.505357	9.221452	0	9.221452	BEV	0	1.86263	4	3
2042	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2042	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2042	2a	1	0.315913	0.96994	0	0.96994	1.711882	0	1.711882	BEV	0	0.315913	4	3
2042	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2042	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2042	2a	1	0.179899	0.552338	0.552338	0	1.773776	1.773776	0	ICE	0.179899	0	2	2
2042	2a	1	10.57222	30.64252	0	30.64252	70.0489	0	70.0489	BEV	0	10.57222	2	3
2042	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7

2042	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2042	2a	1	0.694176	2.091538	0	2.091538	5.041253	0	5.041253	BEV	0	0.694176	2	3
2042	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2042	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2042	2a	1	5.423105	14.78626	0	14.78626	33.11842	0	33.11842	BEV	0	5.423105	2	3
2042	2a	1	1.52368	4.154359	4.154359	0	11.91903	11.91903	0	ICE	1.52368	0	2	2
2042	2a	1	0.156922	0.454823	0.454823	0	1.299455	1.299455	0	ICE	0.156922	0	3	2
2042	2a	1	1.543708	4.828039	4.828039	0	18.57717	18.57717	0	ICE	1.543708	0	2	2
2042	2a	1	0.43442	1.209346	0	1.209346	2.118765	0	2.118765	BEV	0	0.43442	3	3
2042	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2042	2a	1	0	0	0	0	0	0	0	PHEV	0	0	3	8
2042	2a	1	0.283316	0.91855	0	0.91855	1.745675	0	1.745675	BEV	0	0.283316	4	3
2042	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2042	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2042	2a	1	1.775834	4.740127	0	4.740127	10.71028	0	10.71028	BEV	0	1.775834	1	3
2042	2a	1	1.166143	3.246332	0	3.246332	7.417485	0	7.417485	BEV	0	1.166143	1	3
2042	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2042	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2042	2a	1	1.789764	5.392522	0	5.392522	13.1764	0	13.1764	BEV	0	1.789764	1	3
2042	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2042	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2042	2a	1	1.704542	4.549833	0	4.549833	10.09426	0	10.09426	BEV	0	1.704542	2	3
2042	2a	1	0.269605	0.82776	0	0.82776	2.050647	0	2.050647	BEV	0	0.269605	2	3
2042	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2042	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2042	2a	1	1.99054	5.427267	0	5.427267	12.37582	0	12.37582	BEV	0	1.99054	1	3
2042	2a	1	1.28601	3.58002	3.58002	0	10.32337	10.32337	0	ICE	1.28601	0	2	2
2042	2a	1	0.820498	2.754181	2.754181	0	9.660043	9.660043	0	ICE	0.820498	0	2	2
2042	2a	1	1.396669	4.928271	4.928271	0	19.31047	19.31047	0	ICE	1.396669	0	2	2
2042	2a	1	1.713196	4.671079	0	4.671079	7.173369	0	7.173369	BEV	0	1.713196	3	3
2042	2a	1	0.224377	0.637479	0.637479	0	1.854324	1.854324	0	ICE	0.224377	0	3	2
2042	2a	1	0.142774	0.405635	0	0.405635	0.639786	0	0.639786	BEV	0	0.142774	3	3
2042	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2042	2a	1	0	0	0	0	0	0	0	PHEV	0	0	3	8
2042	2a	1	1.835016	6.159635	0	6.159635	12.46526	0	12.46526	BEV	0	1.835016	3	3
2042	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2042	2a	1	0	0	0	0	0	0	0	PHEV	0	0	3	8
2042	2a	1	4.280588	14.85921	0	14.85921	31.3707	0	31.3707	BEV	0	4.280588	3	3
2042	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2042	2a	1	1.097587	3.810053	2.286032	1.524021	16.54455	9.926733	6.617822	PHEV	0.658552	0.439035	3	8
2042	2a	1	0.379985	1.297273	1.297273	0	4.62139	4.62139	0	ICE	0.379985	0	2	2
2042	2a	1	0.188332	0.535073	0	0.535073	0.894464	0	0.894464	BEV	0	0.188332	4	3
2042	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2042	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2042	2a	1	0	0	0	0	0	0	0	BEV	0	0	2	3
2042	2a	1	6.054983	22.05933	0	22.05933	74.82534	0	74.82534	FCEV	0	6.054983	2	7
2042	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8

2042	2a	1	0	0	0	0	0	0	0	BEV	0	0	2	3
2042	2a	1	6.996531	25.89038	0	25.89038	90.96223	0	90.96223	FCEV	0	6.996531	2	7
2042	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2042	2a	1	0.037259	0.112259	0.112259	0	0.420711	0.420711	0	ICE	0.037259	0	3	2
2042	2a	1	0	0	0	0	0	0	0	BEV	0	0	3	3
2042	2a	1	0.221869	0.808307	0	0.808307	1.938811	0	1.938811	FCEV	0	0.221869	3	7
2042	2a	1	3.180125	11.58573	6.951441	4.634294	51.70393	31.02236	20.68157	PHEV	1.908075	1.27205	3	8
2042	2a	1	0.233731	0.838132	0.838132	0	3.113536	3.113536	0	ICE	0.233731	0	2	2
2042	2a	1	0.116606	0.311249	0	0.311249	0.481427	0	0.481427	BEV	0	0.116606	3	3
2042	2a	1	0.320632	0.874212	0	0.874212	1.370214	0	1.370214	BEV	0	0.320632	4	3
2042	2a	1	0.105697	0.33663	0	0.33663	0.609212	0	0.609212	BEV	0	0.105697	3	3
2042	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2042	2a	1	0	0	0	0	0	0	0	PHEV	0	0	3	8
2042	2a	1	0.336491	1.129506	0	1.129506	3.010364	0	3.010364	BEV	0	0.336491	2	3
2042	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2042	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2042	2a	1	0.333459	0.890083	0	0.890083	1.334659	0	1.334659	BEV	0	0.333459	4	3
2042	2a	1	0.443135	1.639802	1.639802	0	6.622779	6.622779	0	ICE	0.443135	0	2	2
2042	2a	1	0.237193	0.809779	0	0.809779	2.44762	0	2.44762	BEV	0	0.237193	2	3
2042	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2042	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2042	2a	1	0.058833	0.180634	0	0.180634	0.295546	0	0.295546	BEV	0	0.058833	3	3
2042	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2042	2a	1	0	0	0	0	0	0	0	PHEV	0	0	3	8
2042	2a	1	0.116003	0.34287	0	0.34287	0.804883	0	0.804883	BEV	0	0.116003	2	3
2042	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2042	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2042	2a	1	0.057492	0.173223	0.173223	0	0.847659	0.847659	0	ICE	0.057492	0	2	2
2042	2a	1	0.260606	0.829992	0	0.829992	1.489679	0	1.489679	BEV	0	0.260606	4	3
2042	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2042	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2042	2a	1	0	0	0	0	0	0	0	BEV	0	0	4	3
2042	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2042	2a	1	0.388802	1.371923	0.823154	0.548769	5.822058	3.493235	2.328823	PHEV	0.233281	0.155521	4	8
2043	2a	1	14068.47	37552.12	37552.12	0	55362.03	55362.03	0	ICE	14068.47	0	1	1
2043	2a	1	16583.5	45215.41	45215.41	0	69839.58	69839.58	0	ICE	16583.5	0	1	1
2043	2a	1	16420.58	45711.95	45711.95	0	73772.13	73772.13	0	ICE	16420.58	0	1	1
2043	2a	1	30.27134	84.26996	84.26996	0	145.2146	145.2146	0	ICE	30.27134	0	1	2
2043	2a	1	16196.3	46015.48	46015.48	0	78134.4	78134.4	0	ICE	16196.3	0	1	1
2043	2a	1	16986.93	49234.91	49234.91	0	87773.37	87773.37	0	ICE	16986.93	0	1	1
2043	2a	1	16147.98	47728.43	47728.43	0	89450.48	89450.48	0	ICE	16147.98	0	1	1
2043	2a	1	18632.77	56140.17	56140.17	0	110844.4	110844.4	0	ICE	18632.77	0	1	1
2043	2a	1	18886.24	57985.85	57985.85	0	120012.3	120012.3	0	ICE	18886.24	0	1	1
2043	2a	1	50.03119	153.6093	153.6093	0	328.5396	328.5396	0	ICE	50.03119	0	1	2
2043	2a	1	19717.99	61669.19	61669.19	0	133430.9	133430.9	0	ICE	19717.99	0	1	1
2043	2a	1	16864.57	53711.11	53711.11	0	121860.4	121860.4	0	ICE	16864.57	0	1	1
2043	2a	1	13752.97	44589.05	44589.05	0	105845.8	105845.8	0	ICE	13752.97	0	1	1

2043	2a	1	16839.02	55559.17	55559.17	0	137760	137760	0	ICE	16839.02	0	1	1
2043	2a	1	193.3968	638.0993	638.0993	0	1590.734	1590.734	0	ICE	193.3968	0	1	2
2043	2a	1	17368.9	58302.55	58302.55	0	151337.2	151337.2	0	ICE	17368.9	0	1	1
2043	2a	1	271.9987	913.0234	913.0234	0	2340.067	2340.067	0	ICE	271.9987	0	1	2
2043	2a	1	26634.65	90930.97	90930.97	0	247681.8	247681.8	0	ICE	26634.65	0	1	1
2043	2a	1	34732.55	120567.1	120567.1	0	343004.6	343004.6	0	ICE	34732.55	0	1	1
2043	2a	1	38401.52	135503.2	135503.2	0	403988	403988	0	ICE	38401.52	0	1	1
2043	2a	1	733.9174	2589.694	2589.694	0	7661.365	7661.365	0	ICE	733.9174	0	1	2
2043	2a	1	49539.38	177642.3	177642.3	0	553820.4	553820.4	0	ICE	49539.38	0	1	1
2043	2a	1	53442.24	194699.2	194699.2	0	632785.3	632785.3	0	ICE	53442.24	0	1	1
2043	2a	1	66706.84	246846	246846	0	837224.1	837224.1	0	ICE	66706.84	0	1	1
2043	2a	1	816.3163	3020.746	3020.746	0	10237.31	10237.31	0	ICE	816.3163	0	1	2
2043	2a	1	3879.756	14356.88	0	14356.88	49393.55	0	49393.55	BEV	0	3879.756	1	3
2043	2a	1	79.17869	292.9976	0	292.9976	1040.695	0	1040.695	FCEV	0	79.17869	1	7
2043	2a	1	3499.671	12950.39	6993.213	5957.181	43571.13	23528.41	20042.72	PHEV	1889.822	1609.849	1	8
2043	2a	1	82329.65	309374.2	309374.2	0	1092023	1092023	0	ICE	82329.65	0	1	1
2043	2a	1	1007.498	3785.927	3785.927	0	13354.33	13354.33	0	ICE	1007.498	0	1	2
2043	2a	1	5852.294	21991.46	0	21991.46	78247.33	0	78247.33	BEV	0	5852.294	1	3
2043	2a	1	119.4346	448.8052	0	448.8052	1648.921	0	1648.921	FCEV	0	119.4346	1	7
2043	2a	1	3782.309	14212.97	7675.004	6537.967	49928.71	26961.5	22967.2	PHEV	2042.447	1739.862	1	8
2043	2a	1	101039.1	385468.1	385468.1	0	1415755	1415755	0	ICE	101039.1	0	1	1
2043	2a	1	1231.196	4697.062	4697.062	0	17243.2	17243.2	0	ICE	1231.196	0	1	2
2043	2a	1	8807.579	33601.26	0	33601.26	124321.9	0	124321.9	BEV	0	8807.579	1	3
2043	2a	1	206.0252	785.9945	0	785.9945	2986.52	0	2986.52	FCEV	0	206.0252	1	7
2043	2a	1	4319.551	16479.26	8734.007	7745.252	60167.53	31888.79	28278.74	PHEV	2289.362	2030.189	1	8
2043	2a	1	123958.9	480010	480010	0	1832334	1832334	0	ICE	123958.9	0	1	1
2043	2a	1	1524.173	5902.102	5902.102	0	22519.03	22519.03	0	ICE	1524.173	0	1	2
2043	2a	1	12838.24	49713.9	0	49713.9	190675.9	0	190675.9	BEV	0	12838.24	1	3
2043	2a	1	338.8392	1312.097	0	1312.097	5154.248	0	5154.248	FCEV	0	338.8392	1	7
2043	2a	1	4895.291	18956.18	9857.215	9098.968	72253.62	37571.88	34681.74	PHEV	2545.551	2349.74	1	8
2043	2a	1	143496.3	563886.1	563886.1	0	2235521	2235521	0	ICE	143496.3	0	1	1
2043	2a	1	1772.914	6966.877	6966.877	0	27607.91	27607.91	0	ICE	1772.914	0	1	2
2043	2a	1	23183.9	91103.92	0	91103.92	362755.2	0	362755.2	BEV	0	23183.9	1	3
2043	2a	1	794.72	3122.948	0	3122.948	12682.2	0	12682.2	FCEV	0	794.72	1	7
2043	2a	1	8814.199	34636.45	17248.95	17387.5	136667.3	68060.34	68607.01	PHEV	4389.471	4424.728	1	8
2043	2a	1	163457.6	651690.6	651690.6	0	2680398	2680398	0	ICE	163457.6	0	1	1
2043	2a	1	2034.089	8109.732	8109.732	0	33340.68	33340.68	0	ICE	2034.089	0	1	2
2043	2a	1	37261.21	148557.1	0	148557.1	613300.6	0	613300.6	BEV	0	37261.21	1	3
2043	2a	1	1575.668	6282.045	0	6282.045	26363.63	0	26363.63	FCEV	0	1575.668	1	7
2043	2a	1	14124.71	56313.95	26805.44	29508.51	230450.4	109694.4	120756	PHEV	6723.362	7401.349	1	8
2043	2a	1	182968.9	739963	739963	0	3154307	3154307	0	ICE	182968.9	0	1	1
2043	2a	1	2295.999	9285.479	9285.479	0	39565.55	39565.55	0	ICE	2295.999	0	1	2
2043	2a	1	55775.63	225567.8	0	225567.8	964482.9	0	964482.9	BEV	0	55775.63	1	3
2043	2a	1	2812.216	11373.17	0	11373.17	49207.77	0	49207.77	FCEV	0	2812.216	1	7
2043	2a	1	21081.25	85256.77	38706.58	46550.2	361816.4	164264.6	197551.7	PHEV	9570.886	11510.36	1	8
2043	2a	1	200970.9	824280.1	824280.1	0	3638182	3638182	0	ICE	200970.9	0	1	1
2043	2a	1	2542.089	10426.35	10426.35	0	46001.37	46001.37	0	ICE	2542.089	0	1	2

2043	2a	1	79393.89	325633.2	0	325633.2	1440845	0	1440845	BEV	0	79393.89	1	3
2043	2a	1	4658.928	19108.54	0	19108.54	85260.25	0	85260.25	FCEV	0	4658.928	1	7
2043	2a	1	29920.65	122719.2	53014.71	69704.53	539617.1	233114.6	306502.5	PHEV	12925.72	16994.93	1	8
2043	2a	1	216245.1	899315.9	899315.9	0	4108281	4108281	0	ICE	216245.1	0	1	1
2043	2a	1	2755.968	11461.47	11461.47	0	52339.24	52339.24	0	ICE	2755.968	0	1	2
2043	2a	1	108682.9	451988.4	0	451988.4	2068931	0	2068931	BEV	0	108682.9	1	3
2043	2a	1	7289.708	30316.29	0	30316.29	139616.6	0	139616.6	FCEV	0	7289.708	1	7
2043	2a	1	40839.49	169842.4	69635.4	100207	773470.2	317122.8	456347.4	PHEV	16744.19	24095.3	1	8
2043	2a	1	227834.6	960566.4	960566.4	0	4534134	4534134	0	ICE	227834.6	0	1	1
2043	2a	1	2903.671	12242.08	12242.08	0	57767.85	57767.85	0	ICE	2903.671	0	1	2
2043	2a	1	144256.1	608194	0	608194	2875367	0	2875367	BEV	0	144256.1	1	3
2043	2a	1	10905.66	45979.02	0	45979.02	218242.5	0	218242.5	FCEV	0	10905.66	1	7
2043	2a	1	54049.44	227876.2	88415.97	139460.2	1072866	416272	656594	PHEV	20971.18	33078.26	1	8
2043	2a	1	232138.8	992012.5	992012.5	0	4835370	4835370	0	ICE	232138.8	0	1	1
2043	2a	1	2958.526	12642.84	12642.84	0	61608.75	61608.75	0	ICE	2958.526	0	1	2
2043	2a	1	184652.3	789085.8	0	789085.8	3850949	0	3850949	BEV	0	184652.3	1	3
2043	2a	1	15559.3	66490.5	0	66490.5	325361.5	0	325361.5	FCEV	0	15559.3	1	7
2043	2a	1	68984.62	294796.1	107895.4	186900.7	1433959	524829.1	909130.2	PHEV	25248.37	43736.25	1	8
2043	2a	1	231251.3	1001469	1001469	0	5036797	5036797	0	ICE	231251.3	0	1	1
2043	2a	1	2947.215	12763.36	12763.36	0	64177.59	64177.59	0	ICE	2947.215	0	1	2
2043	2a	1	231944.9	1004472	0	1004472	5056775	0	5056775	BEV	0	231944.9	1	3
2043	2a	1	21586.38	93483.04	0	93483.04	471497	0	471497	FCEV	0	21586.38	1	7
2043	2a	1	86402.41	374178.6	128717.4	245461.2	1878764	646294.7	1232469	PHEV	29722.43	56679.98	1	8
2043	2a	1	222202.8	975012.7	975012.7	0	5057293	5057293	0	ICE	222202.8	0	1	1
2043	2a	1	2831.895	12426.18	12426.18	0	64440.97	64440.97	0	ICE	2831.895	0	1	2
2043	2a	1	284078.9	1246521	0	1246521	6470275	0	6470275	BEV	0	284078.9	1	3
2043	2a	1	28980.34	127164	0	127164	660930.6	0	660930.6	FCEV	0	28980.34	1	7
2043	2a	1	105517.9	463006.3	149088	313918.3	2398570	772339.5	1626230	PHEV	33976.77	71541.15	1	8
2043	2a	1	206175.5	916497.7	916497.7	0	4899861	4899861	0	ICE	206175.5	0	1	1
2043	2a	1	2627.636	11680.45	11680.45	0	62437.01	62437.01	0	ICE	2627.636	0	1	2
2043	2a	1	342780.7	1523739	0	1523739	8150551	0	8150551	BEV	0	342780.7	1	3
2043	2a	1	38086.75	169304.4	0	169304.4	906452.3	0	906452.3	FCEV	0	38086.75	1	7
2043	2a	1	126955.8	564347.9	169304.4	395043.5	3014613	904383.8	2110229	PHEV	38086.75	88869.08	1	8
2043	2a	1	180188	811300.3	811300.3	0	4468278	4468278	0	ICE	180188	0	1	1
2043	2a	1	2296.432	10339.73	10339.73	0	56939.06	56939.06	0	ICE	2296.432	0	1	2
2043	2a	1	406103.3	1828488	0	1828488	10073698	0	10073698	BEV	0	406103.3	1	3
2043	2a	1	50192.54	225992.9	0	225992.9	1245844	0	1245844	FCEV	0	50192.54	1	7
2043	2a	1	144093.4	648783.5	194635	454148.4	3571596	1071479	2500117	PHEV	43228.02	100865.4	1	8
2043	2a	1	147282.7	671581	671581	0	3808346	3808346	0	ICE	147282.7	0	1	1
2043	2a	1	1877.067	8559.069	8559.069	0	48530.96	48530.96	0	ICE	1877.067	0	1	2
2043	2a	1	477064.7	2175325	0	2175325	12337395	0	12337395	BEV	0	477064.7	1	3
2043	2a	1	65054.28	296635.2	0	296635.2	1683077	0	1683077	FCEV	0	65054.28	1	7
2043	2a	1	161931.7	738377.6	221513.3	516864.3	4186940	1256082	2930858	PHEV	48579.5	113352.2	1	8
2043	2a	1	105090.2	485211.8	485211.8	0	2831602	2831602	0	ICE	105090.2	0	1	1
2043	2a	1	1339.338	6183.856	6183.856	0	36084.88	36084.88	0	ICE	1339.338	0	1	2
2043	2a	1	547462.9	2527691	0	2527691	14751074	0	14751074	BEV	0	547462.9	1	3
2043	2a	1	81804.8	377700.9	0	377700.9	2204791	0	2204791	FCEV	0	81804.8	1	7

2043	2a	1	177485.8	819469.5	245840.8	573628.6	4783831	1435149	3348682	PHEV	53245.73	124240	1	8
2043	2a	1	56221.88	262803	262803	0	1577608	1577608	0	ICE	56221.88	0	1	1
2043	2a	1	716.5282	3349.332	3349.332	0	20104.91	20104.91	0	ICE	716.5282	0	1	2
2043	2a	1	625145.6	2922174	0	2922174	17539572	0	17539572	BEV	0	625145.6	1	3
2043	2a	1	101767.9	475702.8	0	475702.8	2855775	0	2855775	FCEV	0	101767.9	1	7
2043	2a	1	193230.2	903233.2	270970	632263.2	5425928	1627778	3798149	PHEV	57969.05	135261.1	1	8
2043	2a	1	700787.2	3315901	0	3315901	20463089	0	20463089	BEV	0	700787.2	1	3
2043	2a	1	123668.3	585159	0	585159	3611447	0	3611447	FCEV	0	123668.3	1	7
2043	2a	1	206113.9	975265	292579.5	682685.5	6027712	1808313	4219398	PHEV	61834.17	144279.7	1	8
2043	2a	1	741499.4	3551019	0	3551019	22521742	0	22521742	BEV	0	741499.4	1	3
2043	2a	1	141238	676384.5	0	676384.5	4289951	0	4289951	FCEV	0	141238	1	7
2043	2a	1	207061.9	991613.1	297483.9	694129.2	6303220	1890966	4412254	PHEV	62118.56	144943.3	1	8
2043	2a	1	773143	3746852	0	3746852	24416301	0	24416301	BEV	0	773143	1	3
2043	2a	1	158354.6	767427.5	0	767427.5	5000765	0	5000765	FCEV	0	158354.6	1	7
2043	2a	1	204475.1	990939.4	297281.8	693657.6	6476798	1943039	4533759	PHEV	61342.52	143132.6	1	8
2043	2a	1	809160.4	3967758	0	3967758	26548541	0	26548541	BEV	0	809160.4	1	3
2043	2a	1	177620.6	870971.3	0	870971.3	5827318	0	5827318	FCEV	0	177620.6	1	7
2043	2a	1	202111.8	991065.1	297319.5	693745.6	6655236	1996571	4658665	PHEV	60633.53	141478.2	1	8
2043	2a	1	836446.7	4149478	0	4149478	28497199	0	28497199	BEV	0	836446.7	1	3
2043	2a	1	196203.5	973334.4	0	973334.4	6683843	0	6683843	FCEV	0	196203.5	1	7
2043	2a	1	196695.3	975773.8	292732.1	683041.7	6729831	2018949	4710882	PHEV	59008.58	137686.7	1	8
2043	2a	1	858278.9	4306955	0	4306955	30337542	0	30337542	BEV	0	858278.9	1	3
2043	2a	1	214569.7	1076739	0	1076739	7583482	0	7583482	FCEV	0	214569.7	1	7
2043	2a	1	189326.2	950063.6	285019.1	665044.5	6723516	2017055	4706461	PHEV	56797.87	132528.4	1	8
2043	2a	1	881714.8	4475073	0	4475073	32274920	0	32274920	BEV	0	881714.8	1	3
2043	2a	1	234379.9	1189576	0	1189576	8578494	0	8578494	FCEV	0	234379.9	1	7
2043	2a	1	181689.8	922152.2	276645.7	645506.6	6680552	2004166	4676386	PHEV	54506.95	127182.9	1	8
2043	2a	1	889981.5	4568017	0	4568017	33625842	0	33625842	BEV	0	889981.5	1	3
2043	2a	1	251020.4	1288415	0	1288415	9483587	0	9483587	FCEV	0	251020.4	1	7
2043	2a	1	170494.5	875099	262529.7	612569.3	6464370	1939311	4525059	PHEV	51148.36	119346.2	1	8
2043	2a	1	800321.8	4153670	0	4153670	31124186	0	31124186	BEV	0	800321.8	1	3
2043	2a	1	239057.2	1240707	0	1240707	9296739	0	9296739	FCEV	0	239057.2	1	7
2043	2a	1	141733.5	735596.8	220679.1	514917.8	5522993	1656898	3866095	PHEV	42520.05	99213.45	1	8
2043	2a	1	2825.5	7541.938	7541.938	0	27700.73	27700.73	0	ICE	2825.5	0	2	1
2043	2a	1	3006.691	8197.833	8197.833	0	30438.96	30438.96	0	ICE	3006.691	0	2	1
2043	2a	1	3368.954	9378.56	9378.56	0	35060.53	35060.53	0	ICE	3368.954	0	2	1
2043	2a	1	3555.026	10100.22	10100.22	0	37176.03	37176.03	0	ICE	3555.026	0	2	1
2043	2a	1	2518.291	7299.016	7299.016	0	26771.67	26771.67	0	ICE	2518.291	0	2	1
2043	2a	1	1425.078	4293.732	4293.732	0	15860.22	15860.22	0	ICE	1425.078	0	2	1
2043	2a	1	2338.333	7179.312	7179.312	0	26908.54	26908.54	0	ICE	2338.333	0	2	1
2043	2a	1	3417.592	10688.72	10688.72	0	40789.92	40789.92	0	ICE	3417.592	0	2	1
2043	2a	1	6055.773	19286.73	19286.73	0	74330.25	74330.25	0	ICE	6055.773	0	2	1
2043	2a	1	4560.54	14785.91	14785.91	0	57465.78	57465.78	0	ICE	4560.54	0	2	1
2043	2a	1	2463.071	8126.732	8126.732	0	31674.9	31674.9	0	ICE	2463.071	0	2	1
2043	2a	1	2233.541	7497.371	7497.371	0	29627.08	29627.08	0	ICE	2233.541	0	2	1
2043	2a	1	20302.86	72803.61	72803.61	0	305192.3	305192.3	0	ICE	20302.86	0	2	1
2043	2a	1	20293.88	73934.05	73934.05	0	313680.5	313680.5	0	ICE	20293.88	0	2	1

2043	2a	1	19741.52	73052.72	73052.72	0	314892.2	314892.2	0	ICE	19741.52	0	2	1
2043	2a	1	2.674346	9.896311	9.896311	0	42.67077	42.67077	0	ICE	2.674346	0	2	2
2043	2a	1	0.665176	2.461458	0	2.461458	8.661154	0	8.661154	BEV	0	0.665176	2	3
2043	2a	1	0.013575	0.050234	0	0.050234	0.176758	0	0.176758	FCEV	0	0.013575	2	7
2043	2a	1	5.769387	21.34938	12.80963	8.539754	92.07011	55.24207	36.82805	PHEV	3.461632	2.307755	2	8
2043	2a	1	22965.61	86299.01	86299.01	0	376191.9	376191.9	0	ICE	22965.61	0	2	1
2043	2a	1	3.111106	11.69076	11.69076	0	50.97589	50.97589	0	ICE	3.111106	0	2	2
2043	2a	1	25813.03	98477.75	98477.75	0	434322.9	434322.9	0	ICE	25813.03	0	2	1
2043	2a	1	3.521238	13.43367	13.43367	0	59.28063	59.28063	0	ICE	3.521238	0	2	2
2043	2a	1	343.221	1309.402	0	1309.402	5438.178	0	5438.178	BEV	0	343.221	2	3
2043	2a	1	8.028561	30.62928	0	30.62928	115.3084	0	115.3084	FCEV	0	8.028561	2	7
2043	2a	1	263.5696	1005.529	597.5713	407.9573	4565.001	2712.915	1852.086	PHEV	156.6357	106.934	2	8
2043	2a	1	28903	111922	111922	0	497757.1	497757.1	0	ICE	28903	0	2	1
2043	2a	1	3.988561	15.44502	15.44502	0	68.75468	68.75468	0	ICE	3.988561	0	2	2
2043	2a	1	785.0631	3040.024	0	3040.024	12793.73	0	12793.73	BEV	0	785.0631	2	3
2043	2a	1	20.72014	80.23523	0	80.23523	312.3209	0	312.3209	FCEV	0	20.72014	2	7
2043	2a	1	604.6413	2341.371	1378.064	963.3067	10700.86	6298.221	4402.64	PHEV	355.8746	248.7667	2	8
2043	2a	1	30800.18	121033	121033	0	544062.6	544062.6	0	ICE	30800.18	0	2	1
2043	2a	1	4.306227	16.92184	16.92184	0	76.16061	76.16061	0	ICE	4.306227	0	2	2
2043	2a	1	2170.749	8530.22	0	8530.22	36519.64	0	36519.64	BEV	0	2170.749	2	3
2043	2a	1	74.41103	292.4071	0	292.4071	1177.011	0	1177.011	FCEV	0	74.41103	2	7
2043	2a	1	1565.525	6151.919	3566.355	2585.564	28819.79	16707.24	12112.54	PHEV	907.5573	657.9678	2	8
2043	2a	1	32238.16	128530.6	128530.6	0	585322.5	585322.5	0	ICE	32238.16	0	2	1
2043	2a	1	4.525744	18.04373	18.04373	0	82.26793	82.26793	0	ICE	4.525744	0	2	2
2043	2a	1	3946.227	15733.25	0	15733.25	68895.81	0	68895.81	BEV	0	3946.227	2	3
2043	2a	1	166.8744	665.3132	0	665.3132	2768.057	0	2768.057	FCEV	0	166.8744	2	7
2043	2a	1	2662.518	10615.22	6059.773	4555.445	50422.49	28784.04	21638.45	PHEV	1519.917	1142.6	2	8
2043	2a	1	33217.21	134337	134337	0	620812.4	620812.4	0	ICE	33217.21	0	2	1
2043	2a	1	4.68515	18.94768	18.94768	0	87.6574	87.6574	0	ICE	4.68515	0	2	2
2043	2a	1	6146.496	24857.66	0	24857.66	111479.2	0	111479.2	BEV	0	6146.496	2	3
2043	2a	1	309.9073	1253.327	0	1253.327	5424.993	0	5424.993	FCEV	0	309.9073	2	7
2043	2a	1	3875.266	15672.35	8807.861	6864.49	75186.48	42254.8	32931.68	PHEV	2177.9	1697.367	2	8
2043	2a	1	33725.07	138323.1	138323.1	0	649745.1	649745.1	0	ICE	33725.07	0	2	1
2043	2a	1	4.777607	19.59531	19.59531	0	92.13137	92.13137	0	ICE	4.777607	0	2	2
2043	2a	1	8809.568	36132.35	0	36132.35	165966.9	0	165966.9	BEV	0	8809.568	2	3
2043	2a	1	516.9559	2120.289	0	2120.289	9533.65	0	9533.65	FCEV	0	516.9559	2	7
2043	2a	1	5183.069	21258.31	11758.88	9499.426	103027.7	56989.01	46038.64	PHEV	2866.978	2316.091	2	8
2043	2a	1	33792.69	140536.4	140536.4	0	672239.6	672239.6	0	ICE	33792.69	0	2	1
2043	2a	1	4.806581	19.98951	19.98951	0	95.69167	95.69167	0	ICE	4.806581	0	2	2
2043	2a	1	11993.9	49880	0	49880	234802.2	0	234802.2	BEV	0	11993.9	2	3
2043	2a	1	804.469	3345.61	0	3345.61	15546.53	0	15546.53	FCEV	0	804.469	2	7
2043	2a	1	6573.94	27339.57	14880.54	12459.03	134067.5	72971.01	61096.46	PHEV	3578.102	2995.839	2	8
2043	2a	1	33451.37	141033.3	141033.3	0	687231.9	687231.9	0	ICE	33451.37	0	2	1
2043	2a	1	4.758032	20.0602	20.0602	0	97.80379	97.80379	0	ICE	4.758032	0	2	2
2043	2a	1	15786.39	66556.53	0	66556.53	320832.9	0	320832.9	BEV	0	15786.39	2	3
2043	2a	1	1193.44	5031.625	0	5031.625	24091.49	0	24091.49	FCEV	0	1193.44	2	7
2043	2a	1	8044.894	33917.84	18160.58	15757.26	168416.4	90174.93	78241.43	PHEV	4307.466	3737.428	2	8

2043	2a	1	32271.6	137908.2	137908.2	0	685323.1	685323.1	0	ICE	32271.6	0	2	1
2043	2a	1	4.590226	19.61569	19.61569	0	97.51258	97.51258	0	ICE	4.590226	0	2	2
2043	2a	1	20035.32	85618.14	0	85618.14	422662.6	0	422662.6	BEV	0	20035.32	2	3
2043	2a	1	1688.23	7214.416	0	7214.416	35499.16	0	35499.16	FCEV	0	1688.23	2	7
2043	2a	1	9470.894	40472.54	21311.68	19160.86	203736.1	107281.6	96454.48	PHEV	4987.102	4483.792	2	8
2043	2a	1	30686.01	132890.4	132890.4	0	674117.8	674117.8	0	ICE	30686.01	0	2	1
2043	2a	1	4.364695	18.90197	18.90197	0	95.90131	95.90131	0	ICE	4.364695	0	2	2
2043	2a	1	25016.24	108336.6	0	108336.6	547727.5	0	547727.5	BEV	0	25016.24	2	3
2043	2a	1	2328.182	10082.54	0	10082.54	50913.21	0	50913.21	FCEV	0	2328.182	2	7
2043	2a	1	10939.09	47373.36	24525.87	22847.5	242074.1	125325.2	116748.9	PHEV	5663.322	5275.766	2	8
2043	2a	1	28242.65	123927.1	123927.1	0	642309.2	642309.2	0	ICE	28242.65	0	2	1
2043	2a	1	4.017158	17.62705	17.62705	0	91.36219	91.36219	0	ICE	4.017158	0	2	2
2043	2a	1	30437.82	133559.3	0	133559.3	691651.6	0	691651.6	BEV	0	30437.82	2	3
2043	2a	1	3105.118	13625.07	0	13625.07	70556.1	0	70556.1	FCEV	0	3105.118	2	7
2043	2a	1	12272.58	53851.33	27402.63	26448.7	279712.7	142333.8	137378.9	PHEV	6244.988	6027.588	2	8
2043	2a	1	25329.51	112595.5	112595.5	0	596702.6	596702.6	0	ICE	25329.51	0	2	1
2043	2a	1	3.602801	16.01528	16.01528	0	84.86391	84.86391	0	ICE	3.602801	0	2	2
2043	2a	1	36702.7	163152	0	163152	865515.8	0	865515.8	BEV	0	36702.7	2	3
2043	2a	1	4078.078	18128	0	18128	96229.5	0	96229.5	FCEV	0	4078.078	2	7
2043	2a	1	13593.59	60426.65	30213.33	30213.33	319429.4	159714.7	159714.7	PHEV	6796.797	6796.797	2	8
2043	2a	1	21577.44	97152.85	97152.85	0	526836.9	526836.9	0	ICE	21577.44	0	2	1
2043	2a	1	3.069117	13.81876	13.81876	0	74.91918	74.91918	0	ICE	3.069117	0	2	2
2043	2a	1	42812.71	192765.1	0	192765.1	1047866	0	1047866	BEV	0	42812.71	2	3
2043	2a	1	5291.459	23824.9	0	23824.9	129636.9	0	129636.9	FCEV	0	5291.459	2	7
2043	2a	1	15190.79	68396.84	34198.42	34198.42	368452.2	184226.1	184226.1	PHEV	7595.396	7595.396	2	8
2043	2a	1	17261.13	78707.48	78707.48	0	436929.4	436929.4	0	ICE	17261.13	0	2	1
2043	2a	1	2.455177	11.19514	11.19514	0	62.12799	62.12799	0	ICE	2.455177	0	2	2
2043	2a	1	49645.01	226371.8	0	226371.8	1261051	0	1261051	BEV	0	49645.01	2	3
2043	2a	1	6769.774	30868.88	0	30868.88	172151.9	0	172151.9	FCEV	0	6769.774	2	7
2043	2a	1	16851.17	76838.13	38419.06	38419.06	422218.9	211109.4	211109.4	PHEV	8425.585	8425.585	2	8
2043	2a	1	12142.91	56065.04	56065.04	0	318805.6	318805.6	0	ICE	12142.91	0	2	1
2043	2a	1	1.727175	7.97454	7.97454	0	45.3283	45.3283	0	ICE	1.727175	0	2	2
2043	2a	1	56584.62	261256.8	0	261256.8	1491865	0	1491865	BEV	0	56584.62	2	3
2043	2a	1	8455.173	39038.38	0	39038.38	223173	0	223173	FCEV	0	8455.173	2	7
2043	2a	1	18344.56	84698.65	42349.33	42349.33	475320.5	237660.3	237660.3	PHEV	9172.278	9172.278	2	8
2043	2a	1	6407.466	29951	29951	0	174490.5	174490.5	0	ICE	6407.466	0	2	1
2043	2a	1	0.911381	4.260149	4.260149	0	24.80779	24.80779	0	ICE	0.911381	0	2	2
2043	2a	1	64140.41	299817.3	0	299817.3	1754926	0	1754926	BEV	0	64140.41	2	3
2043	2a	1	10441.46	48807.47	0	48807.47	285995.5	0	285995.5	FCEV	0	10441.46	2	7
2043	2a	1	19825.56	92672.4	46336.2	46336.2	531472.1	265736	265736	PHEV	9912.78	9912.78	2	8
2043	2a	1	71205.51	336921.7	0	336921.7	2022088	0	2022088	BEV	0	71205.51	2	3
2043	2a	1	12565.68	59456.77	0	59456.77	357196.2	0	357196.2	FCEV	0	12565.68	2	7
2043	2a	1	20942.8	99094.61	49547.31	49547.31	581458.3	290729.2	290729.2	PHEV	10471.4	10471.4	2	8
2043	2a	1	74182.7	355258.7	0	355258.7	2185974	0	2185974	BEV	0	74182.7	2	3
2043	2a	1	14130.04	67668.33	0	67668.33	416777	0	416777	FCEV	0	14130.04	2	7
2043	2a	1	20715.33	99205.11	49602.56	49602.56	595978	297989	297989	PHEV	10357.67	10357.67	2	8
2043	2a	1	77156.53	373920.6	0	373920.6	2358928	0	2358928	BEV	0	77156.53	2	3

2043	2a	1	15803.14	76586.15	0	76586.15	483592.3	0	483592.3	FCEV	0	15803.14	2	7
2043	2a	1	20405.78	98891.73	49445.86	49445.86	608613.8	304306.9	304306.9	PHEV	10202.89	10202.89	2	8
2043	2a	1	80126.91	392906.3	0	392906.3	2541307	0	2541307	BEV	0	80126.91	2	3
2043	2a	1	17588.83	86247.72	0	86247.72	558315.9	0	558315.9	FCEV	0	17588.83	2	7
2043	2a	1	20014.07	98139.98	49069.99	49069.99	619083.6	309541.8	309541.8	PHEV	10007.03	10007.03	2	8
2043	2a	1	82004.52	406811.3	0	406811.3	2697836	0	2697836	BEV	0	82004.52	2	3
2043	2a	1	19235.63	95424.87	0	95424.87	633307.9	0	633307.9	FCEV	0	19235.63	2	7
2043	2a	1	19283.84	95664.03	47832.02	47832.02	618919.3	309459.6	309459.6	PHEV	9641.919	9641.919	2	8
2043	2a	1	83187.59	417446.2	0	417446.2	2838439	0	2838439	BEV	0	83187.59	2	3
2043	2a	1	20796.9	104361.5	0	104361.5	710092.6	0	710092.6	FCEV	0	20796.9	2	7
2043	2a	1	18350.2	92083.71	46041.86	46041.86	611295	305647.5	305647.5	PHEV	9175.102	9175.102	2	8
2043	2a	1	84377.67	428252.1	0	428252.1	2985041	0	2985041	BEV	0	84377.67	2	3
2043	2a	1	22429.51	113839.2	0	113839.2	793969.4	0	793969.4	FCEV	0	22429.51	2	7
2043	2a	1	17387.22	88247.42	44123.71	44123.71	601144	300572	300572	PHEV	8693.608	8693.608	2	8
2043	2a	1	85621.5	439470.4	0	439470.4	3138837	0	3138837	BEV	0	85621.5	2	3
2043	2a	1	24149.66	123953.2	0	123953.2	885780.4	0	885780.4	FCEV	0	24149.66	2	7
2043	2a	1	16402.59	84189.72	42094.86	42094.86	588353.3	294176.7	294176.7	PHEV	8201.294	8201.294	2	8
2043	2a	1	78191.38	405813.3	0	405813.3	2968369	0	2968369	BEV	0	78191.38	2	3
2043	2a	1	23355.87	121217	0	121217	887064.9	0	887064.9	FCEV	0	23355.87	2	7
2043	2a	1	13847.35	71867.76	35933.88	35933.88	514968.2	257484.1	257484.1	PHEV	6923.676	6923.676	2	8
2043	2a	1	9154.907	24436.64	24436.64	0	85423.79	85423.79	0	ICE	9154.907	0	3	1
2043	2a	1	11685.25	31860.17	31860.17	0	112130.6	112130.6	0	ICE	11685.25	0	3	1
2043	2a	1	10990.67	30596.05	30596.05	0	107827.2	107827.2	0	ICE	10990.67	0	3	1
2043	2a	1	10490.47	29804.57	29804.57	0	106282.2	106282.2	0	ICE	10490.47	0	3	1
2043	2a	1	11377.31	32975.99	32975.99	0	118472.3	118472.3	0	ICE	11377.31	0	3	1
2043	2a	1	10490.47	29804.57	29804.57	0	106282.2	106282.2	0	ICE	10490.47	0	3	1
2043	2a	1	11377.31	32975.99	32975.99	0	118472.3	118472.3	0	ICE	11377.31	0	3	1
2043	2a	1	13118.26	38773.52	38773.52	0	140376.3	140376.3	0	ICE	13118.26	0	3	1
2043	2a	1	13658.4	41152.48	41152.48	0	149844.5	149844.5	0	ICE	13658.4	0	3	1
2043	2a	1	12657.77	38862.77	38862.77	0	141963.8	141963.8	0	ICE	12657.77	0	3	1
2043	2a	1	12861.34	40224.62	40224.62	0	148273.1	148273.1	0	ICE	12861.34	0	3	1
2043	2a	1	10224.58	32563.76	32563.76	0	121667.7	121667.7	0	ICE	10224.58	0	3	1
2043	2a	1	6369.766	20651.67	20651.67	0	77820.68	77820.68	0	ICE	6369.766	0	3	1
2043	2a	1	11390.45	37581.98	37581.98	0	143578.3	143578.3	0	ICE	11390.45	0	3	1
2043	2a	1	15667.31	52590.79	52590.79	0	202622.7	202622.7	0	ICE	15667.31	0	3	1
2043	2a	1	15698.86	53596.08	53596.08	0	210069.1	210069.1	0	ICE	15698.86	0	3	1
2043	2a	1	22703.66	78811.23	78811.23	0	311392.6	311392.6	0	ICE	22703.66	0	3	1
2043	2a	1	22912.59	80849.13	80849.13	0	325222.1	325222.1	0	ICE	22912.59	0	3	1
2043	2a	1	244.3821	862.3241	862.3241	0	3390.28	3390.28	0	ICE	244.3821	0	3	2
2043	2a	1	29341.51	105215.1	105215.1	0	428960.4	428960.4	0	ICE	29341.51	0	3	1
2043	2a	1	31185.61	113614.5	113614.5	0	467330.2	467330.2	0	ICE	31185.61	0	3	1
2043	2a	1	234.372	853.8571	853.8571	0	3479.298	3479.298	0	ICE	234.372	0	3	2
2043	2a	1	37700.95	139510.9	139510.9	0	582834	582834	0	ICE	37700.95	0	3	1
2043	2a	1	385.3458	1425.957	1425.957	0	5981.545	5981.545	0	ICE	385.3458	0	3	2
2043	2a	1	43535.95	163597.2	163597.2	0	693343.3	693343.3	0	ICE	43535.95	0	3	1
2043	2a	1	444.9861	1672.146	1672.146	0	7114.901	7114.901	0	ICE	444.9861	0	3	2
2043	2a	1	150.2051	564.4333	338.66	225.7733	2407.025	1444.215	962.81	PHEV	90.12307	60.08205	3	8
2043	2a	1	49487.85	188798.1	188798.1	0	815421	815421	0	ICE	49487.85	0	3	1
2043	2a	1	504.546	1924.863	1924.863	0	8340.184	8340.184	0	ICE	504.546	0	3	2

2043	2a	1	583.6469	2226.636	0	2226.636	6733.692	0	6733.692	BEV	0	583.6469	3	3
2043	2a	1	13.65256	52.08506	0	52.08506	136.5273	0	136.5273	FCEV	0	13.65256	3	7
2043	2a	1	506.9318	1933.965	1149.328	784.6373	8373.738	4976.393	3397.345	PHEV	301.2623	205.6695	3	8
2043	2a	1	56436.75	218541.7	218541.7	0	954720	954720	0	ICE	56436.75	0	3	1
2043	2a	1	576.7007	2233.175	2233.175	0	9788.395	9788.395	0	ICE	576.7007	0	3	2
2043	2a	1	1352.508	5237.357	0	5237.357	19838.98	0	19838.98	BEV	0	1352.508	3	3
2043	2a	1	35.69669	138.2294	0	138.2294	374.4236	0	374.4236	FCEV	0	35.69669	3	7
2043	2a	1	976.0796	3779.703	2224.625	1555.078	16567.09	9750.917	6816.175	PHEV	574.4926	401.5871	3	8
2043	2a	1	61372.02	241168.7	241168.7	0	1067506	1067506	0	ICE	61372.02	0	3	1
2043	2a	1	636.6129	2501.647	2501.647	0	11129.09	11129.09	0	ICE	636.6129	0	3	2
2043	2a	1	4191.61	16471.43	0	16471.43	60233.45	0	60233.45	BEV	0	4191.61	3	3
2043	2a	1	143.684	564.6236	0	564.6236	1580.287	0	1580.287	FCEV	0	143.684	3	7
2043	2a	1	2848.997	11195.47	6490.176	4705.298	56905.16	32988.74	23916.43	PHEV	1651.604	1197.393	3	8
2043	2a	1	66743.79	266101.5	266101.5	0	1196017	1196017	0	ICE	66743.79	0	3	1
2043	2a	1	695.592	2773.263	2773.263	0	12535.43	12535.43	0	ICE	695.592	0	3	2
2043	2a	1	8087.609	32244.57	0	32244.57	119865.3	0	119865.3	BEV	0	8087.609	3	3
2043	2a	1	342.0014	1363.529	0	1363.529	3941.36	0	3941.36	FCEV	0	342.0014	3	7
2043	2a	1	5172.566	20622.56	11772.53	8850.022	110999.2	63364.71	47634.53	PHEV	2952.796	2219.77	3	8
2043	2a	1	73149.52	295831.3	295831.3	0	1351708	1351708	0	ICE	73149.52	0	3	1
2043	2a	1	766.4711	3099.762	3099.762	0	14251.21	14251.21	0	ICE	766.4711	0	3	2
2043	2a	1	13508.59	54631.45	0	54631.45	209229.9	0	209229.9	BEV	0	13508.59	3	3
2043	2a	1	681.1055	2754.527	0	2754.527	8284.536	0	8284.536	FCEV	0	681.1055	3	7
2043	2a	1	8120.816	32842.2	18457.32	14384.88	182453.2	102538.7	79914.52	PHEV	4563.898	3556.917	3	8
2043	2a	1	80120.23	328612.3	328612.3	0	1528379	1528379	0	ICE	80120.23	0	3	1
2043	2a	1	843.7255	3460.532	3460.532	0	16202.69	16202.69	0	ICE	843.7255	0	3	2
2043	2a	1	20960.91	85970.97	0	85970.97	339263	0	339263	BEV	0	20960.91	3	3
2043	2a	1	1230.011	5044.879	0	5044.879	16732.45	0	16732.45	FCEV	0	1230.011	3	7
2043	2a	1	11828.9	48516.13	26836.35	21679.78	276340.9	152856	123484.9	PHEV	6543.073	5285.83	3	8
2043	2a	1	85818.6	356900.7	356900.7	0	1691749	1691749	0	ICE	85818.6	0	3	1
2043	2a	1	907.9293	3775.878	3775.878	0	18026.43	18026.43	0	ICE	907.9293	0	3	2
2043	2a	1	30549.45	127048.4	0	127048.4	517129.7	0	517129.7	BEV	0	30549.45	3	3
2043	2a	1	2049.048	8521.542	0	8521.542	30340.31	0	30340.31	FCEV	0	2049.048	3	7
2043	2a	1	16159.45	67203.58	36577.95	30625.63	391924.3	213318.8	178605.5	PHEV	8795.355	7364.09	3	8
2043	2a	1	88910.13	374851.3	374851.3	0	1811743	1811743	0	ICE	88910.13	0	3	1
2043	2a	1	940.6366	3965.79	3965.79	0	19301.84	19301.84	0	ICE	940.6366	0	3	2
2043	2a	1	42094.33	177472.6	0	177472.6	745486.1	0	745486.1	BEV	0	42094.33	3	3
2043	2a	1	3182.3	13416.8	0	13416.8	51269.13	0	51269.13	FCEV	0	3182.3	3	7
2043	2a	1	20833.9	87837.2	47030.55	40806.65	525098.2	281152.6	243945.6	PHEV	11155.07	9678.837	3	8
2043	2a	1	89642.73	383075.7	383075.7	0	1889316	1889316	0	ICE	89642.73	0	3	1
2043	2a	1	948.3872	4052.8	4052.8	0	20125.26	20125.26	0	ICE	948.3872	0	3	2
2043	2a	1	55813.72	238512.1	0	238512.1	1033846	0	1033846	BEV	0	55813.72	3	3
2043	2a	1	4703.015	20097.68	0	20097.68	81221.35	0	81221.35	FCEV	0	4703.015	3	7
2043	2a	1	25794.33	110228.4	58043.15	52185.3	675011.3	355441.7	319569.6	PHEV	13582.56	12211.77	3	8
2043	2a	1	88839.62	384733.3	384733.3	0	1937640	1937640	0	ICE	88839.62	0	3	1
2043	2a	1	939.8907	4070.337	4070.337	0	20637.24	20637.24	0	ICE	939.8907	0	3	2
2043	2a	1	72580.92	314322.6	0	314322.6	1405750	0	1405750	BEV	0	72580.92	3	3
2043	2a	1	6754.877	29253.01	0	29253.01	123997.3	0	123997.3	FCEV	0	6754.877	3	7

2043	2a	1	31247.34	135321.3	70057.76	65263.52	848809.2	439440.6	409368.5	PHEV	16177.19	15070.14	3	8
2043	2a	1	84618.38	371300.4	371300.4	0	1911175	1911175	0	ICE	84618.38	0	3	1
2043	2a	1	895.2315	3928.222	3928.222	0	20352.97	20352.97	0	ICE	895.2315	0	3	2
2043	2a	1	91304.27	400637.7	0	400637.7	1848869	0	1848869	BEV	0	91304.27	3	3
2043	2a	1	9314.416	40871.1	0	40871.1	180825.9	0	180825.9	FCEV	0	9314.416	3	7
2043	2a	1	36517.12	160234.9	81536.69	78698.25	1029985	524115	505869.6	PHEV	18582	17935.12	3	8
2043	2a	1	77848.01	346052.3	346052.3	0	1821705	1821705	0	ICE	77848.01	0	3	1
2043	2a	1	823.6034	3661.107	3661.107	0	19398.2	19398.2	0	ICE	823.6034	0	3	2
2043	2a	1	112813.1	501480.1	0	501480.1	2388014	0	2388014	BEV	0	112813.1	3	3
2043	2a	1	12534.79	55720.01	0	55720.01	256502	0	256502	FCEV	0	12534.79	3	7
2043	2a	1	41782.62	185733.4	92866.69	92866.69	1224105	612052.3	612052.3	PHEV	20891.31	20891.31	3	8
2043	2a	1	67307.72	303054.3	303054.3	0	1632654	1632654	0	ICE	67307.72	0	3	1
2043	2a	1	712.091	3206.204	3206.204	0	17383.6	17383.6	0	ICE	712.091	0	3	2
2043	2a	1	133678.4	601889.5	0	601889.5	2949725	0	2949725	BEV	0	133678.4	3	3
2043	2a	1	16522.04	74390.84	0	74390.84	354935.2	0	354935.2	FCEV	0	16522.04	3	7
2043	2a	1	47431.71	213562.2	106781.1	106781.1	1442416	721208.1	721208.1	PHEV	23715.85	23715.85	3	8
2043	2a	1	54635.25	249126.4	249126.4	0	1374188	1374188	0	ICE	54635.25	0	3	1
2043	2a	1	578.0209	2635.666	2635.666	0	14630.54	14630.54	0	ICE	578.0209	0	3	2
2043	2a	1	157407.3	717747.5	0	717747.5	3620469	0	3620469	BEV	0	157407.3	3	3
2043	2a	1	21464.63	97874.66	0	97874.66	483160.1	0	483160.1	FCEV	0	21464.63	3	7
2043	2a	1	53429.29	243627.4	121813.7	121813.7	1687326	843663	843663	PHEV	26714.64	26714.64	3	8
2043	2a	1	38694.2	178655	178655	0	1009484	1009484	0	ICE	38694.2	0	3	1
2043	2a	1	409.3704	1890.104	1890.104	0	10747.02	10747.02	0	ICE	409.3704	0	3	2
2043	2a	1	180735	834471.4	0	834471.4	4333033	0	4333033	BEV	0	180735	3	3
2043	2a	1	27006.38	124691.1	0	124691.1	636143.3	0	636143.3	FCEV	0	27006.38	3	7
2043	2a	1	58593.71	270533	135266.5	135266.5	1922568	961284.1	961284.1	PHEV	29296.86	29296.86	3	8
2043	2a	1	20491.08	95783.31	95783.31	0	554528.2	554528.2	0	ICE	20491.08	0	3	1
2043	2a	1	216.7881	1013.352	1013.352	0	5903.249	5903.249	0	ICE	216.7881	0	3	2
2043	2a	1	205716.3	961598.3	0	961598.3	5139717	0	5139717	BEV	0	205716.3	3	3
2043	2a	1	33488.7	156539.3	0	156539.3	824577.2	0	824577.2	FCEV	0	33488.7	3	7
2043	2a	1	63586.15	297226.4	148613.2	148613.2	2168145	1084072	1084072	PHEV	31793.07	31793.07	3	8
2043	2a	1	228816.2	1082685	0	1082685	5957951	0	5957951	BEV	0	228816.2	3	3
2043	2a	1	40379.32	191062	0	191062	1038654	0	1038654	FCEV	0	40379.32	3	7
2043	2a	1	67298.87	318436.7	159218.4	159218.4	2386284	1193142	1193142	PHEV	33649.43	33649.43	3	8
2043	2a	1	237029.3	1135126	0	1135126	6432220	0	6432220	BEV	0	237029.3	3	3
2043	2a	1	45148.44	216214.5	0	216214.5	1211816	0	1211816	FCEV	0	45148.44	3	7
2043	2a	1	66189.84	316981.1	158490.6	158490.6	2435892	1217946	1217946	PHEV	33094.92	33094.92	3	8
2043	2a	1	243255.6	1178880	0	1178880	6879379	0	6879379	BEV	0	243255.6	3	3
2043	2a	1	49823.43	241457.3	0	241457.3	1395154	0	1395154	FCEV	0	49823.43	3	7
2043	2a	1	64334.42	311781.3	155890.7	155890.7	2457870	1228935	1228935	PHEV	32167.21	32167.21	3	8
2043	2a	1	250275.5	1227239	0	1227239	7374509	0	7374509	BEV	0	250275.5	3	3
2043	2a	1	54938.53	269393.8	0	269393.8	1604381	0	1604381	FCEV	0	54938.53	3	7
2043	2a	1	62513.73	306539.2	153269.6	153269.6	2478990	1239495	1239495	PHEV	31256.86	31256.86	3	8
2043	2a	1	255887.5	1269417	0	1269417	7854518	0	7854518	BEV	0	255887.5	3	3
2043	2a	1	60022.99	297764.4	0	297764.4	1827566	0	1827566	FCEV	0	60022.99	3	7
2043	2a	1	60173.42	298510.7	149255.4	149255.4	2476535	1238268	1238268	PHEV	30086.71	30086.71	3	8
2043	2a	1	260307.3	1306256	0	1306256	8320835	0	8320835	BEV	0	260307.3	3	3

2043	2a	1	65076.81	326563.9	0	326563.9	2065025	0	2065025	FCEV	0	65076.81	3	7
2043	2a	1	57420.72	288144.6	144072.3	144072.3	2451412	1225706	1225706	PHEV	28710.36	28710.36	3	8
2043	2a	1	267359	1356959	0	1356959	8898376	0	8898376	BEV	0	267359	3	3
2043	2a	1	71070.12	360710.7	0	360710.7	2349767	0	2349767	FCEV	0	71070.12	3	7
2043	2a	1	55093.12	279620.7	139810.4	139810.4	2438497	1219249	1219249	PHEV	27546.56	27546.56	3	8
2043	2a	1	274634.3	1409618	0	1409618	9512985	0	9512985	BEV	0	274634.3	3	3
2043	2a	1	77460.94	397584.6	0	397584.6	2667140	0	2667140	FCEV	0	77460.94	3	7
2043	2a	1	52611.93	270041.8	135020.9	135020.9	2411593	1205797	1205797	PHEV	26305.96	26305.96	3	8
2043	2a	1	248856	1291563	0	1291563	8962262	0	8962262	BEV	0	248856	3	3
2043	2a	1	74333.6	385791.4	0	385791.4	2662666	0	2662666	FCEV	0	74333.6	3	7
2043	2a	1	44071.31	228730.1	114365	114365	2087227	1043614	1043614	PHEV	22035.65	22035.65	3	8
2043	2a	1	11416.61	30473.68	30473.68	0	96562.85	96562.85	0	ICE	11416.61	0	4	1
2043	2a	1	12321.19	33594.1	33594.1	0	107162.1	107162.1	0	ICE	12321.19	0	4	1
2043	2a	1	15006.88	41776.46	41776.46	0	134218.8	134218.8	0	ICE	15006.88	0	4	1
2043	2a	1	19.04264	53.01129	53.01129	0	138.2801	138.2801	0	ICE	19.04264	0	4	2
2043	2a	1	16654.11	47316.15	47316.15	0	154489.2	154489.2	0	ICE	16654.11	0	4	1
2043	2a	1	16688.4	48369.65	48369.65	0	161024.9	161024.9	0	ICE	16688.4	0	4	1
2043	2a	1	16915	49995.5	49995.5	0	167219.7	167219.7	0	ICE	16915	0	4	1
2043	2a	1	28.86755	85.32353	85.32353	0	238.7674	238.7674	0	ICE	28.86755	0	4	2
2043	2a	1	15343.06	46228.33	46228.33	0	154044.2	154044.2	0	ICE	15343.06	0	4	1
2043	2a	1	14155.6	43461.51	43461.51	0	147065.1	147065.1	0	ICE	14155.6	0	4	1
2043	2a	1	13792.29	43136.21	43136.21	0	148141.2	148141.2	0	ICE	13792.29	0	4	1
2043	2a	1	10083.65	32114.92	32114.92	0	111731.9	111731.9	0	ICE	10083.65	0	4	1
2043	2a	1	4226.952	13704.37	13704.37	0	48175.08	48175.08	0	ICE	4226.952	0	4	1
2043	2a	1	6203.564	20468.22	20468.22	0	72820.67	72820.67	0	ICE	6203.564	0	4	1
2043	2a	1	9284.18	31164.39	31164.39	0	112699.3	112699.3	0	ICE	9284.18	0	4	1
2043	2a	1	269.4098	904.3334	904.3334	0	3134.34	3134.34	0	ICE	269.4098	0	4	2
2043	2a	1	9839.241	33591.27	33591.27	0	123264.1	123264.1	0	ICE	9839.241	0	4	1
2043	2a	1	11798.25	40955.25	40955.25	0	152414.3	152414.3	0	ICE	11798.25	0	4	1
2043	2a	1	254.9241	884.918	884.918	0	3230.158	3230.158	0	ICE	254.9241	0	4	2
2043	2a	1	19671.56	69412.87	69412.87	0	264293.4	264293.4	0	ICE	19671.56	0	4	1
2043	2a	1	631.7165	2229.068	2229.068	0	8207.791	8207.791	0	ICE	631.7165	0	4	2
2043	2a	1	23268.2	83436.97	83436.97	0	325026.4	325026.4	0	ICE	23268.2	0	4	1
2043	2a	1	27437.69	99960.16	99960.16	0	398138.9	398138.9	0	ICE	27437.69	0	4	1
2043	2a	1	27189.7	100614.4	100614.4	0	409073.2	409073.2	0	ICE	27189.7	0	4	1
2043	2a	1	948.1093	3508.441	3508.441	0	14277.16	14277.16	0	ICE	948.1093	0	4	2
2043	2a	1	227.4768	841.7688	505.0613	336.7075	3203.341	1922.005	1281.336	PHEV	136.4861	90.99072	4	8
2043	2a	1	32366.97	121627	121627	0	501411.3	501411.3	0	ICE	32366.97	0	4	1
2043	2a	1	1128.641	4241.152	4241.152	0	17499.41	17499.41	0	ICE	1128.641	0	4	2
2043	2a	1	0.566195	2.127618	0	2.127618	5.381213	0	5.381213	BEV	0	0.566195	4	3
2043	2a	1	0.011555	0.043421	0	0.043421	0.109821	0	0.109821	FCEV	0	0.011555	4	7
2043	2a	1	692.8661	2603.618	1562.171	1041.447	10473.36	6284.019	4189.346	PHEV	415.7197	277.1465	4	8
2043	2a	1	38257.13	145952.5	145952.5	0	610086	610086	0	ICE	38257.13	0	4	1
2043	2a	1	1346.626	5137.433	5137.433	0	21516.46	21516.46	0	ICE	1346.626	0	4	2
2043	2a	1	327.9578	1251.172	0	1251.172	3450.341	0	3450.341	BEV	0	327.9578	4	3
2043	2a	1	7.671528	29.26719	0	29.26719	76.53072	0	76.53072	FCEV	0	7.671528	4	7
2043	2a	1	853.2787	3255.292	1934.574	1320.719	14332.18	8517.412	5814.772	PHEV	507.0913	346.1874	4	8

2043	2a	1	44788.6	173436.3	173436.3	0	733271.6	733271.6	0	ICE	44788.6	0	4	1
2043	2a	1	1601.255	6200.588	6200.588	0	26313.15	26313.15	0	ICE	1601.255	0	4	2
2043	2a	1	772.3238	2990.693	0	2990.693	9505.331	0	9505.331	BEV	0	772.3238	4	3
2043	2a	1	20.38391	78.93323	0	78.93323	213.3332	0	213.3332	FCEV	0	20.38391	4	7
2043	2a	1	1040.124	4027.703	2370.591	1657.112	17560.21	10335.44	7224.774	PHEV	612.1872	427.9367	4	8
2043	2a	1	48885.52	192101.5	192101.5	0	823261.8	823261.8	0	ICE	48885.52	0	4	1
2043	2a	1	1778.605	6989.241	6989.241	0	30121.14	30121.14	0	ICE	1778.605	0	4	2
2043	2a	1	2587.069	10166.2	0	10166.2	32967.92	0	32967.92	BEV	0	2587.069	4	3
2043	2a	1	88.68203	348.4867	0	348.4867	973.3148	0	973.3148	FCEV	0	88.68203	4	7
2043	2a	1	3087.799	12133.88	7034.182	5099.695	57836.79	33528.81	24307.98	PHEV	1790.041	1297.758	4	8
2043	2a	1	52446.4	209099.1	209099.1	0	910392	910392	0	ICE	52446.4	0	4	1
2043	2a	1	1918.627	7649.395	7649.395	0	33514.89	33514.89	0	ICE	1918.627	0	4	2
2043	2a	1	5159.598	20570.85	0	20570.85	69707.39	0	69707.39	BEV	0	5159.598	4	3
2043	2a	1	218.1843	869.8812	0	869.8812	2509.849	0	2509.849	FCEV	0	218.1843	4	7
2043	2a	1	5464.444	21786.25	12436.83	9349.412	108554	61968.82	46585.17	PHEV	3119.417	2345.027	4	8
2043	2a	1	55095.37	222816.7	222816.7	0	987125.4	987125.4	0	ICE	55095.37	0	4	1
2043	2a	1	2028.221	8202.531	8202.531	0	36589.42	36589.42	0	ICE	2028.221	0	4	2
2043	2a	1	8592.424	34749.48	0	34749.48	123091.9	0	123091.9	BEV	0	8592.424	4	3
2043	2a	1	433.2314	1752.075	0	1752.075	5219.888	0	5219.888	FCEV	0	433.2314	4	7
2043	2a	1	8076.387	32662.52	18356.34	14306.18	168320.3	94596.03	73724.31	PHEV	4538.929	3537.457	4	8
2043	2a	1	57055.16	234011.2	234011.2	0	1056311	1056311	0	ICE	57055.16	0	4	1
2043	2a	1	2112.637	8664.961	8664.961	0	39403.83	39403.83	0	ICE	2112.637	0	4	2
2043	2a	1	13055.45	53546.82	0	53546.82	198021.1	0	198021.1	BEV	0	13055.45	4	3
2043	2a	1	766.1096	3142.191	0	3142.191	9674.792	0	9674.792	FCEV	0	766.1096	4	7
2043	2a	1	10881.74	44631.35	24687.51	19943.84	237190.6	131200.3	105990.3	PHEV	6019.157	4862.584	4	8
2043	2a	1	58186.89	241986.5	241986.5	0	1114964	1114964	0	ICE	58186.89	0	4	1
2043	2a	1	2166.175	9008.646	9008.646	0	41838.65	41838.65	0	ICE	2166.175	0	4	2
2043	2a	1	18702.29	77778.7	0	77778.7	299698.1	0	299698.1	BEV	0	18702.29	4	3
2043	2a	1	1254.422	5216.864	0	5216.864	17439.45	0	17439.45	FCEV	0	1254.422	4	7
2043	2a	1	13796.58	57376.96	31229.46	26147.5	314093.6	170956.6	143136.9	PHEV	7509.284	6287.301	4	8
2043	2a	1	59345.58	250205.1	250205.1	0	1177692	1177692	0	ICE	59345.58	0	4	1
2043	2a	1	2209.311	9314.609	9314.609	0	44184.95	44184.95	0	ICE	2209.311	0	4	2
2043	2a	1	26116.69	110109.8	0	110109.8	442161.9	0	442161.9	BEV	0	26116.69	4	3
2043	2a	1	1974.403	8324.219	0	8324.219	30209.14	0	30209.14	FCEV	0	1974.403	4	7
2043	2a	1	16998.82	71668.2	38373.2	33295	404614.6	216642.2	187972.4	PHEV	9101.652	7897.165	4	8
2043	2a	1	58677.59	250750.4	250750.4	0	1206497	1206497	0	ICE	58677.59	0	4	1
2043	2a	1	2184.443	9334.911	9334.911	0	45258.79	45258.79	0	ICE	2184.443	0	4	2
2043	2a	1	34881.17	149059.8	0	149059.8	623082.5	0	623082.5	BEV	0	34881.17	4	3
2043	2a	1	2939.182	12560.18	0	12560.18	48690.69	0	48690.69	FCEV	0	2939.182	4	7
2043	2a	1	19942.58	85221.81	44875.37	40346.44	495840.6	261095.5	234745.1	PHEV	10501.19	9441.385	4	8
2043	2a	1	56615.87	245183.5	245183.5	0	1206917	1206917	0	ICE	56615.87	0	4	1
2043	2a	1	2107.69	9127.666	9127.666	0	45268.56	45268.56	0	ICE	2107.69	0	4	2
2043	2a	1	45272.59	196059.7	0	196059.7	852548.6	0	852548.6	BEV	0	45272.59	4	3
2043	2a	1	4213.377	18246.66	0	18246.66	74871.56	0	74871.56	FCEV	0	4213.377	4	7
2043	2a	1	22598.38	97865.67	50666.46	47199.21	586740.7	303764.1	282976.7	PHEV	11699.5	10898.88	4	8
2043	2a	1	52903.16	232135.9	232135.9	0	1169812	1169812	0	ICE	52903.16	0	4	1
2043	2a	1	1969.473	8641.93	8641.93	0	43871.92	43871.92	0	ICE	1969.473	0	4	2

2043	2a	1	57178.27	250894.8	0	250894.8	1134382	0	1134382	BEV	0	57178.27	4	3
2043	2a	1	5833.048	25595.06	0	25595.06	110540.9	0	110540.9	FCEV	0	5833.048	4	7
2043	2a	1	24717.58	108459.3	55190.27	53268.99	669954.3	340911	329043.3	PHEV	12577.72	12139.86	4	8
2043	2a	1	47922.74	213027.6	213027.6	0	1099492	1099492	0	ICE	47922.74	0	4	1
2043	2a	1	1784.062	7930.568	7930.568	0	41230.68	41230.68	0	ICE	1784.062	0	4	2
2043	2a	1	71081.04	315971.6	0	315971.6	1484814	0	1484814	BEV	0	71081.04	4	3
2043	2a	1	7897.893	35107.95	0	35107.95	158996.4	0	158996.4	FCEV	0	7897.893	4	7
2043	2a	1	26326.31	117026.5	58513.25	58513.25	744430.7	372215.3	372215.3	PHEV	13163.16	13163.16	4	8
2043	2a	1	41132.4	185199.4	185199.4	0	979403.9	979403.9	0	ICE	41132.4	0	4	1
2043	2a	1	1531.272	6894.584	6894.584	0	36724.4	36724.4	0	ICE	1531.272	0	4	2
2043	2a	1	83634.24	376564.9	0	376564.9	1822276	0	1822276	BEV	0	83634.24	4	3
2043	2a	1	10336.82	46541.72	0	46541.72	218729.5	0	218729.5	FCEV	0	10336.82	4	7
2043	2a	1	29675.07	133612.6	66806.3	66806.3	872617	436308.5	436308.5	PHEV	14837.54	14837.54	4	8
2043	2a	1	33178.35	151287	151287	0	820091.4	820091.4	0	ICE	33178.35	0	4	1
2043	2a	1	1235.16	5632.095	5632.095	0	30748.68	30748.68	0	ICE	1235.16	0	4	2
2043	2a	1	97880.89	446318.3	0	446318.3	2224298	0	2224298	BEV	0	97880.89	4	3
2043	2a	1	13347.39	60861.58	0	60861.58	296237	0	296237	FCEV	0	13347.39	4	7
2043	2a	1	33224.03	151495.3	75747.64	75747.64	1016304	508151.9	508151.9	PHEV	16612.02	16612.02	4	8
2043	2a	1	23498.33	108494.1	108494.1	0	603085.5	603085.5	0	ICE	23498.33	0	4	1
2043	2a	1	874.7933	4039.008	4039.008	0	22611.05	22611.05	0	ICE	874.7933	0	4	2
2043	2a	1	112408.4	519000.9	0	519000.9	2664038	0	2664038	BEV	0	112408.4	4	3
2043	2a	1	16796.66	77551.86	0	77551.86	390455.9	0	390455.9	FCEV	0	16796.66	4	7
2043	2a	1	36442.46	168258.5	84129.24	84129.24	1160050	580024.9	580024.9	PHEV	18221.23	18221.23	4	8
2043	2a	1	12528.61	58563.61	58563.61	0	333835.5	333835.5	0	ICE	12528.61	0	4	1
2043	2a	1	466.4137	2180.2	2180.2	0	12515.72	12515.72	0	ICE	466.4137	0	4	2
2043	2a	1	128835.8	602228.7	0	602228.7	3183432	0	3183432	BEV	0	128835.8	4	3
2043	2a	1	20973.27	98037.23	0	98037.23	510004.9	0	510004.9	FCEV	0	20973.27	4	7
2043	2a	1	39822.66	186146.6	93073.32	93073.32	1319048	659524.1	659524.1	PHEV	19911.33	19911.33	4	8
2043	2a	1	143579.2	679371	0	679371	3698954	0	3698954	BEV	0	143579.2	4	3
2043	2a	1	25337.51	119889	0	119889	644069	0	644069	FCEV	0	25337.51	4	7
2043	2a	1	42229.19	199815	99907.5	99907.5	1456374	728186.8	728186.8	PHEV	21114.59	21114.59	4	8
2043	2a	1	150493.4	720708.5	0	720708.5	4041984	0	4041984	BEV	0	150493.4	4	3
2043	2a	1	28665.41	137277.8	0	137277.8	760668.1	0	760668.1	FCEV	0	28665.41	4	7
2043	2a	1	42024.91	201256.1	100628	100628	1505232	752616.2	752616.2	PHEV	21012.46	21012.46	4	8
2043	2a	1	156172.6	756853.1	0	756853.1	4371993	0	4371993	BEV	0	156172.6	4	3
2043	2a	1	31987.16	155018.1	0	155018.1	885765.4	0	885765.4	FCEV	0	31987.16	4	7
2043	2a	1	41303.37	200166.9	100083.4	100083.4	1536306	768152.9	768152.9	PHEV	20651.68	20651.68	4	8
2043	2a	1	162585.4	797245.9	0	797245.9	4742284	0	4742284	BEV	0	162585.4	4	3
2043	2a	1	35689.49	175005.2	0	175005.2	1030783	0	1030783	FCEV	0	35689.49	4	7
2043	2a	1	40610.53	199135.8	99567.88	99567.88	1567887	783943.7	783943.7	PHEV	20305.26	20305.26	4	8
2043	2a	1	166138.8	824187.9	0	824187.9	5048075	0	5048075	BEV	0	166138.8	4	3
2043	2a	1	38970.82	193328	0	193328	1173601	0	1173601	FCEV	0	38970.82	4	7
2043	2a	1	39068.5	193812.6	96906.28	96906.28	1565177	782588.7	782588.7	PHEV	19534.25	19534.25	4	8
2043	2a	1	169874.5	852452.4	0	852452.4	5374732	0	5374732	BEV	0	169874.5	4	3
2043	2a	1	42468.63	213113.1	0	213113.1	1332879	0	1332879	FCEV	0	42468.63	4	7
2043	2a	1	37472.32	188041	94020.49	94020.49	1556458	778228.8	778228.8	PHEV	18736.16	18736.16	4	8
2043	2a	1	174589.3	886113.9	0	886113.9	5748253	0	5748253	BEV	0	174589.3	4	3

2043	2a	1	46409.8	235549.3	0	235549.3	1516914	0	1516914	FCEV	0	46409.8	4	7
2043	2a	1	35976.59	182596.3	91298.16	91298.16	1546971	773485.3	773485.3	PHEV	17988.3	17988.3	4	8
2043	2a	1	177867.6	912942.7	0	912942.7	6091676	0	6091676	BEV	0	177867.6	4	3
2043	2a	1	50167.78	257496.7	0	257496.7	1706901	0	1706901	FCEV	0	50167.78	4	7
2043	2a	1	34074.25	174893.2	87446.62	87446.62	1515157	757578.6	757578.6	PHEV	17037.12	17037.12	4	8
2043	2a	1	154296.8	800800.4	0	800800.4	5482506	0	5482506	BEV	0	154296.8	4	3
2043	2a	1	46088.66	239200.1	0	239200.1	1628027	0	1628027	FCEV	0	46088.66	4	7
2043	2a	1	27325.29	141818.3	70909.13	70909.13	1249785	624892.3	624892.3	PHEV	13662.65	13662.65	4	8
2043	2a	1	29.25145	79.75495	79.75495	0	138.135	138.135	0	ICE	29.25145	0	1	2
2043	2a	1	4.240194	11.80394	0	11.80394	27.01833	0	27.01833	BEV	0	4.240194	1	3
2043	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2043	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2043	2a	1	65.10592	184.9731	184.9731	0	332.6638	332.6638	0	ICE	65.10592	0	1	2
2043	2a	1	84.15613	243.9181	243.9181	0	463.4616	463.4616	0	ICE	84.15613	0	1	2
2043	2a	1	28.24418	83.48105	83.48105	0	174.5255	174.5255	0	ICE	28.24418	0	1	2
2043	2a	1	50.71479	152.8027	152.8027	0	319.3203	319.3203	0	ICE	50.71479	0	1	2
2043	2a	1	112.167	363.661	363.661	0	868.4337	868.4337	0	ICE	112.167	0	1	2
2043	2a	1	312.5764	1067.139	1067.139	0	2869.552	2869.552	0	ICE	312.5764	0	1	2
2043	2a	1	474.6553	1647.671	1647.671	0	4655.918	4655.918	0	ICE	474.6553	0	1	2
2043	2a	1	409.5726	1421.749	0	1421.749	4313.787	0	4313.787	BEV	0	409.5726	1	3
2043	2a	1	0.024063	0.083529	0	0.083529	0.253439	0	0.253439	FCEV	0	0.024063	1	7
2043	2a	1	428.1009	1486.067	891.64	594.4267	4055.938	2433.563	1622.375	PHEV	256.8605	171.2404	1	8
2043	2a	1	551.365	1945.541	0	1945.541	6113.008	0	6113.008	BEV	0	551.365	1	3
2043	2a	1	0.077254	0.272599	0	0.272599	0.856523	0	0.856523	FCEV	0	0.077254	1	7
2043	2a	1	696.1398	2456.392	1473.835	982.5568	6990.777	4194.466	2796.311	PHEV	417.6839	278.4559	1	8
2043	2a	1	588.4926	2110.264	2110.264	0	6562.191	6562.191	0	ICE	588.4926	0	1	2
2043	2a	1	1415.839	5077.03	0	5077.03	16587.62	0	16587.62	BEV	0	1415.839	1	3
2043	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2043	2a	1	673.2696	2414.264	1448.558	965.7057	7180.363	4308.218	2872.145	PHEV	403.9618	269.3079	1	8
2043	2a	1	2212.435	6539.271	6539.271	0	24031.5	24031.5	0	ICE	2212.435	0	2	1
2043	2a	1	4424.731	15106.07	15106.07	0	60695.19	60695.19	0	ICE	4424.731	0	2	1
2043	2a	1	6727.458	23353.03	23353.03	0	95182.09	95182.09	0	ICE	6727.458	0	2	1
2043	2a	1	8868.657	31293.86	31293.86	0	128372	128372	0	ICE	8868.657	0	2	1
2043	2a	1	3.522753	11.21944	11.21944	0	39.12505	39.12505	0	ICE	3.522753	0	3	2
2043	2a	1	103.6584	353.8909	353.8909	0	1364.308	1364.308	0	ICE	103.6584	0	3	2
2043	2a	1	81.84836	284.1202	284.1202	0	1090.911	1090.911	0	ICE	81.84836	0	3	2
2043	2a	1	374.12	1341.549	1341.549	0	5392.979	5392.979	0	ICE	374.12	0	3	2
2043	2a	1	402.9928	1468.171	0	1468.171	3402.716	0	3402.716	BEV	0	402.9928	3	3
2043	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2043	2a	1	36.6753	133.6144	80.16862	53.44575	534.8624	320.9174	213.9449	PHEV	22.00518	14.67012	3	8
2043	2a	1	13.32473	35.5669	35.5669	0	85.73232	85.73232	0	ICE	13.32473	0	4	2
2043	2a	1	45.08583	135.8427	135.8427	0	406.6335	406.6335	0	ICE	45.08583	0	4	2
2043	2a	1	57.37628	176.1607	176.1607	0	536.1237	536.1237	0	ICE	57.37628	0	4	2
2043	2a	1	74.27276	232.2925	232.2925	0	749.4218	749.4218	0	ICE	74.27276	0	4	2
2043	2a	1	52.22159	166.3179	166.3179	0	546.6007	546.6007	0	ICE	52.22159	0	4	2
2043	2a	1	68.75751	222.9215	222.9215	0	752.8214	752.8214	0	ICE	68.75751	0	4	2
2043	2a	1	501.8884	1713.452	1713.452	0	5976.539	5976.539	0	ICE	501.8884	0	4	2

2043	2a	1	1350.58	4843.019	4843.019	0	18173.39	18173.39	0	ICE	1350.58	0	4	2
2043	2a	1	935.7458	3409.081	3409.081	0	13204.28	13204.28	0	ICE	935.7458	0	4	2
2043	2a	1	39.78257	106.1892	106.1892	0	166.0041	166.0041	0	ICE	39.78257	0	1	2
2043	2a	1	1.868999	5.631255	0	5.631255	13.63908	0	13.63908	BEV	0	1.868999	1	3
2043	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2043	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2043	2a	1	82.62256	282.0743	0	282.0743	828.722	0	828.722	BEV	0	82.62256	1	3
2043	2a	1	0.312241	1.065995	0	1.065995	3.131849	0	3.131849	FCEV	0	0.312241	1	7
2043	2a	1	173.6756	592.9304	355.7582	237.1722	1546.202	927.7212	618.4808	PHEV	104.2054	69.47026	1	8
2043	2a	1	1033.267	3764.367	0	3764.367	12743.27	0	12743.27	BEV	0	1033.267	1	3
2043	2a	1	31.45859	114.609	0	114.609	387.9786	0	387.9786	FCEV	0	31.45859	1	7
2043	2a	1	743.0571	2707.083	1624.25	1082.833	8413.033	5047.82	3365.213	PHEV	445.8343	297.2229	1	8
2043	2a	1	12.71501	38.31008	38.31008	0	129.925	129.925	0	ICE	12.71501	0	3	2
2043	2a	1	14.51685	44.57065	44.57065	0	157.5721	157.5721	0	ICE	14.51685	0	3	2
2043	2a	1	18.7944	54.47369	54.47369	0	157.1887	157.1887	0	ICE	18.7944	0	4	2
2043	2a	1	120.051	396.0999	396.0999	0	1361.589	1361.589	0	ICE	120.051	0	4	2
2043	2a	1	7.984437	22.68466	0	22.68466	52.55432	0	52.55432	BEV	0	7.984437	1	3
2043	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2043	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2043	2a	1	99.7773	334.9245	0	334.9245	956.7682	0	956.7682	BEV	0	99.7773	1	3
2043	2a	1	0.985784	3.309	0	3.309	9.452716	0	9.452716	FCEV	0	0.985784	1	7
2043	2a	1	27.73516	93.09916	55.8595	37.23967	232.424	139.4544	92.96959	PHEV	16.6411	11.09406	1	8
2043	2a	1	89.16685	324.85	324.85	0	1035.513	1035.513	0	ICE	89.16685	0	1	2
2043	2a	1	85.66436	302.2744	0	302.2744	947.745	0	947.745	BEV	0	85.66436	2	3
2043	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2043	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2043	2a	1	9.600682	30.57673	30.57673	0	68.14366	68.14366	0	ICE	9.600682	0	1	2
2043	2a	1	1.91314	5.545046	5.545046	0	17.15639	17.15639	0	ICE	1.91314	0	2	2
2043	2a	1	0.174071	0.464638	0.464638	0	0.955503	0.955503	0	ICE	0.174071	0	3	2
2043	2a	1	6.920348	22.8332	22.8332	0	81.53238	81.53238	0	ICE	6.920348	0	3	2
2043	2a	1	19.42323	68.53661	0	68.53661	149.5141	0	149.5141	BEV	0	19.42323	3	3
2043	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2043	2a	1	8.794231	31.03124	18.61874	12.41249	118.9784	71.38705	47.59137	PHEV	5.276539	3.517692	3	8
2043	2a	1	7.308433	20.76406	20.76406	0	61.49683	61.49683	0	ICE	7.308433	0	4	2
2043	2a	1	14.10345	47.34135	47.34135	0	180.2551	180.2551	0	ICE	14.10345	0	3	2
2043	2a	1	3.636712	9.915604	9.915604	0	28.53347	28.53347	0	ICE	3.636712	0	4	2
2043	2a	1	2.962677	8.417291	0	8.417291	13.20127	0	13.20127	BEV	0	2.962677	3	3
2043	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2043	2a	1	0	0	0	0	0	0	0	PHEV	0	0	3	8
2043	2a	1	16.14135	45.85934	0	45.85934	73.44969	0	73.44969	BEV	0	16.14135	4	3
2043	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2043	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2043	2a	1	6.585133	20.5954	20.5954	0	42.38171	42.38171	0	ICE	6.585133	0	1	2
2043	2a	1	16.7114	55.13811	0	55.13811	153.6316	0	153.6316	BEV	0	16.7114	1	3
2043	2a	1	1.696589	5.597778	0	5.597778	15.59711	0	15.59711	FCEV	0	1.696589	1	7
2043	2a	1	1.781419	5.877667	3.5266	2.351067	13.84877	8.30926	5.539507	PHEV	1.068851	0.712568	1	8
2043	2a	1	32.49764	110.9473	0	110.9473	323.9915	0	323.9915	BEV	0	32.49764	2	3

2043	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2043	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2043	2a	1	5.441698	17.64275	17.64275	0	64.22342	64.22342	0	ICE	5.441698	0	3	2
2043	2a	1	2.04219	6.270074	0	6.270074	15.65208	0	15.65208	BEV	0	2.04219	1	3
2043	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2043	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2043	2a	1	10.20962	32.51611	0	32.51611	83.38323	0	83.38323	BEV	0	10.20962	1	3
2043	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2043	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2043	2a	1	8.994542	29.16156	0	29.16156	79.91614	0	79.91614	BEV	0	8.994542	1	3
2043	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2043	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2043	2a	1	3.313759	10.74367	10.74367	0	36.26117	36.26117	0	ICE	3.313759	0	2	2
2043	2a	1	41.38772	143.6692	0	143.6692	433.5068	0	433.5068	BEV	0	41.38772	2	3
2043	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2043	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2043	2a	1	1.866798	5.838524	5.838524	0	21.12207	21.12207	0	ICE	1.866798	0	3	2
2043	2a	1	1.823257	5.284529	0	5.284529	12.3922	0	12.3922	BEV	0	1.823257	1	3
2043	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2043	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2043	2a	1	3.453038	10.79958	0	10.79958	27.54521	0	27.54521	BEV	0	3.453038	1	3
2043	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2043	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2043	2a	1	4.869776	15.50951	0	15.50951	40.30799	0	40.30799	BEV	0	4.869776	2	3
2043	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2043	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2043	2a	1	0.876967	2.993975	2.993975	0	10.27119	10.27119	0	ICE	0.876967	0	2	2
2043	2a	1	0.253057	0.776954	0	0.776954	1.523721	0	1.523721	BEV	0	0.253057	4	3
2043	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2043	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2043	2a	1	1.205264	3.355237	3.355237	0	9.088344	9.088344	0	ICE	1.205264	0	2	2
2043	2a	1	0.248026	0.718878	0.718878	0	2.50596	2.50596	0	ICE	0.248026	0	3	2
2043	2a	1	2.859724	9.271626	0	9.271626	18.11287	0	18.11287	BEV	0	2.859724	3	3
2043	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2043	2a	1	0	0	0	0	0	0	0	PHEV	0	0	3	8
2043	2a	1	1.733079	5.81746	0	5.81746	11.88228	0	11.88228	BEV	0	1.733079	3	3
2043	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2043	2a	1	1.199824	4.027472	2.416483	1.610989	14.28215	8.569292	5.712861	PHEV	0.719894	0.479929	3	8
2043	2a	1	0.258082	0.92545	0	0.92545	2.037239	0	2.037239	BEV	0	0.258082	4	3
2043	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2043	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2043	2a	1	7.407295	20.19621	0	20.19621	44.65646	0	44.65646	BEV	0	7.407295	2	3
2043	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2043	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2043	2a	1	2.671493	7.436955	0	7.436955	16.83685	0	16.83685	BEV	0	2.671493	2	3
2043	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2043	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8

2043	2a	1	2.218897	6.30413	6.30413	0	23.13286	23.13286	0	ICE	2.218897	0	2	2
2043	2a	1	1.20022	3.684999	0	3.684999	9.073495	0	9.073495	BEV	0	1.20022	2	3
2043	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2043	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2043	2a	1	1.972222	6.168242	6.168242	0	20.88377	20.88377	0	ICE	1.972222	0	2	2
2043	2a	1	0.680955	2.129727	0	2.129727	5.395349	0	5.395349	BEV	0	0.680955	2	3
2043	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2043	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2043	2a	1	2.448945	7.799523	7.799523	0	30.36084	30.36084	0	ICE	2.448945	0	2	2
2043	2a	1	2.017289	6.540333	0	6.540333	17.82274	0	17.82274	BEV	0	2.017289	2	3
2043	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2043	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2043	2a	1	2.157136	6.870156	0	6.870156	12.76615	0	12.76615	BEV	0	2.157136	3	3
2043	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2043	2a	1	0	0	0	0	0	0	0	PHEV	0	0	3	8
2043	2a	1	1.240264	4.305329	0	4.305329	9.138824	0	9.138824	BEV	0	1.240264	3	3
2043	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2043	2a	1	0.948437	3.292311	1.975386	1.316924	12.55218	7.531307	5.020872	PHEV	0.569062	0.379375	3	8
2043	2a	1	0.908671	2.477518	0	2.477518	4.035121	0	4.035121	BEV	0	0.908671	4	3
2043	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2043	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2043	2a	1	1.861968	5.396727	0	5.396727	8.768187	0	8.768187	BEV	0	1.861968	4	3
2043	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2043	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2043	2a	1	0.315913	0.951841	0	0.951841	1.62156	0	1.62156	BEV	0	0.315913	4	3
2043	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2043	2a	1	0.315913	0.951841	0	0.951841	1.62156	0	1.62156	BEV	0	0.315913	4	3
2043	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2043	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2043	2a	1	0.155918	0.469778	0.469778	0	1.487999	1.487999	0	ICE	0.155918	0	2	2
2043	2a	1	9.449326	26.84658	0	26.84658	59.69001	0	59.69001	BEV	0	9.449326	2	3
2043	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2043	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2043	2a	1	0.635353	1.877906	0	1.877906	4.377369	0	4.377369	BEV	0	0.635353	2	3
2043	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2043	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2043	2a	1	4.940717	13.18796	0	13.18796	29.04824	0	29.04824	BEV	0	4.940717	2	3
2043	2a	1	1.392792	3.717697	3.717697	0	10.42537	10.42537	0	ICE	1.392792	0	2	2
2043	2a	1	0.14693	0.417443	0.417443	0	1.169933	1.169933	0	ICE	0.14693	0	3	2
2043	2a	1	1.400306	4.299318	4.299318	0	16.24563	16.24563	0	ICE	1.400306	0	2	2
2043	2a	1	0.417	1.136962	0	1.136962	1.952719	0	1.952719	BEV	0	0.417	3	3
2043	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2043	2a	1	0	0	0	0	0	0	0	PHEV	0	0	3	8
2043	2a	1	0.262533	0.836127	0	0.836127	1.525726	0	1.525726	BEV	0	0.262533	4	3
2043	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2043	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2043	2a	1	1.125835	3.069623	0	3.069623	6.87061	0	6.87061	BEV	0	1.125835	1	3
2043	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2043	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8

2043	2a	1	1.707903	5.048031	0	5.048031	11.93473	0	11.93473	BEV	0	1.707903	1	3
2043	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2043	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2043	2a	1	0.238187	0.717653	0	0.717653	1.715308	0	1.715308	BEV	0	0.238187	2	3
2043	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2043	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2043	2a	1	1.947347	5.197937	0	5.197937	11.65967	0	11.65967	BEV	0	1.947347	1	3
2043	2a	1	1.167417	3.182998	3.182998	0	8.940197	8.940197	0	ICE	1.167417	0	2	2
2043	2a	1	0.740044	2.441724	2.441724	0	8.30354	8.30354	0	ICE	0.740044	0	2	2
2043	2a	1	1.229439	4.267751	4.267751	0	16.3375	16.3375	0	ICE	1.229439	0	2	2
2043	2a	1	1.642659	4.38465	0	4.38465	6.621481	0	6.621481	BEV	0	1.642659	3	3
2043	2a	1	0.212021	0.590227	0.590227	0	1.6774	1.6774	0	ICE	0.212021	0	3	2
2043	2a	1	0.13421	0.373616	0	0.373616	0.575109	0	0.575109	BEV	0	0.13421	3	3
2043	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2043	2a	1	0	0	0	0	0	0	0	PHEV	0	0	3	8
2043	2a	1	1.689984	5.575982	0	5.575982	10.8205	0	10.8205	BEV	0	1.689984	3	3
2043	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2043	2a	1	0	0	0	0	0	0	0	PHEV	0	0	3	8
2043	2a	1	3.866319	13.19965	0	13.19965	26.68865	0	26.68865	BEV	0	3.866319	3	3
2043	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2043	2a	1	0.991364	3.384526	2.030716	1.35381	14.46324	8.677944	5.785296	PHEV	0.594818	0.396546	3	8
2043	2a	1	0.344493	1.156367	1.156367	0	3.985429	3.985429	0	ICE	0.344493	0	2	2
2043	2a	1	0.188619	0.525081	0	0.525081	0.856684	0	0.856684	BEV	0	0.188619	4	3
2043	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2043	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2043	2a	1	0	0	0	0	0	0	0	BEV	0	0	2	3
2043	2a	1	5.323054	19.08783	0	19.08783	61.96212	0	61.96212	FCEV	0	5.323054	2	7
2043	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2043	2a	1	0	0	0	0	0	0	0	BEV	0	0	2	3
2043	2a	1	6.159896	22.44155	0	22.44155	75.45848	0	75.45848	FCEV	0	6.159896	2	7
2043	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2043	2a	1	0.035978	0.106341	0.106341	0	0.390095	0.390095	0	ICE	0.035978	0	3	2
2043	2a	1	0	0	0	0	0	0	0	BEV	0	0	3	3
2043	2a	1	0.198984	0.713532	0	0.713532	1.637748	0	1.637748	FCEV	0	0.198984	3	7
2043	2a	1	2.852099	10.22729	6.136372	4.090914	44.90611	26.94367	17.96244	PHEV	1.71126	1.14084	3	8
2043	2a	1	0.202965	0.716181	0.716181	0	2.591976	2.591976	0	ICE	0.202965	0	2	2
2043	2a	1	0.320196	0.85468	0	0.85468	1.317847	0	1.317847	BEV	0	0.320196	4	3
2043	2a	1	0.094881	0.296745	0	0.296745	0.516432	0	0.516432	BEV	0	0.094881	3	3
2043	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2043	2a	1	0	0	0	0	0	0	0	PHEV	0	0	3	8
2043	2a	1	0.303389	1.00101	0	1.00101	2.558483	0	2.558483	BEV	0	0.303389	2	3
2043	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2043	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2043	2a	1	0.380751	1.387139	1.387139	0	5.337893	5.337893	0	ICE	0.380751	0	2	2
2043	2a	1	0.214244	0.719156	0	0.719156	2.084075	0	2.084075	BEV	0	0.214244	2	3
2043	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2043	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8

2043	2a	1	0.053382	0.16084	0	0.16084	0.253841	0	0.253841	BEV	0	0.053382	3	3
2043	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2043	2a	1	0	0	0	0	0	0	0	PHEV	0	0	3	8
2043	2a	1	0.102902	0.298251	0	0.298251	0.679086	0	0.679086	BEV	0	0.102902	2	3
2043	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2043	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2043	2a	1	0.052858	0.156231	0.156231	0	0.7582	0.7582	0	ICE	0.052858	0	2	2
2043	2a	1	0.244255	0.763923	0	0.763923	1.318487	0	1.318487	BEV	0	0.244255	4	3
2043	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2043	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2043	2a	1	0	0	0	0	0	0	0	BEV	0	0	4	3
2043	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2043	2a	1	0.34422	1.194891	0.716935	0.477957	4.95271	2.971626	1.981084	PHEV	0.206532	0.137688	4	8
2044	2a	1	16140	43081.54	43081.54	0	63016.57	63016.57	0	ICE	16140	0	1	1
2044	2a	1	15961.81	43520.36	43520.36	0	66397.75	66397.75	0	ICE	15961.81	0	1	1
2044	2a	1	29.51542	80.47468	80.47468	0	131.8656	131.8656	0	ICE	29.51542	0	1	2
2044	2a	1	15628.48	43506.88	43506.88	0	69726.27	69726.27	0	ICE	15628.48	0	1	1
2044	2a	1	16352.57	46459.46	46459.46	0	78144.08	78144.08	0	ICE	16352.57	0	1	1
2044	2a	1	15467.84	44832	44832	0	79226.16	79226.16	0	ICE	15467.84	0	1	1
2044	2a	1	17870.48	52819.6	52819.6	0	98449.17	98449.17	0	ICE	17870.48	0	1	1
2044	2a	1	18165.26	54731.58	54731.58	0	106867.9	106867.9	0	ICE	18165.26	0	1	1
2044	2a	1	48.23029	145.3169	145.3169	0	294.524	294.524	0	ICE	48.23029	0	1	2
2044	2a	1	19070.27	58550.88	58550.88	0	119710.3	119710.3	0	ICE	19070.27	0	1	1
2044	2a	1	15825.85	49496.31	49496.31	0	106087.9	106087.9	0	ICE	15825.85	0	1	1
2044	2a	1	12898.05	41078.37	41078.37	0	92242.32	92242.32	0	ICE	12898.05	0	1	1
2044	2a	1	15471.23	50159.9	50159.9	0	117688	117688	0	ICE	15471.23	0	1	1
2044	2a	1	177.4975	575.4718	575.4718	0	1360.581	1360.581	0	ICE	177.4975	0	1	2
2044	2a	1	15958.63	52654.39	52654.39	0	129460.2	129460.2	0	ICE	15958.63	0	1	1
2044	2a	1	249.629	823.6333	823.6333	0	2000.793	2000.793	0	ICE	249.629	0	1	2
2044	2a	1	24153.26	81075.73	81075.73	0	208881.5	208881.5	0	ICE	24153.26	0	1	1
2044	2a	1	30904.1	105506.9	105506.9	0	284256	284256	0	ICE	30904.1	0	1	1
2044	2a	1	33308.37	115623.3	115623.3	0	326594.9	326594.9	0	ICE	33308.37	0	1	1
2044	2a	1	637.295	2212.242	2212.242	0	6204.005	6204.005	0	ICE	637.295	0	1	2
2044	2a	1	42808.95	151055.2	151055.2	0	446890.9	446890.9	0	ICE	42808.95	0	1	1
2044	2a	1	45508.95	163189.6	163189.6	0	503134.1	503134.1	0	ICE	45508.95	0	1	1
2044	2a	1	56040.44	204164.9	204164.9	0	658250.7	658250.7	0	ICE	56040.44	0	1	1
2044	2a	1	685.7877	2498.441	2498.441	0	8047.874	8047.874	0	ICE	685.7877	0	1	2
2044	2a	1	3259.385	11874.49	0	11874.49	38923.32	0	38923.32	BEV	0	3259.385	1	3
2044	2a	1	66.51805	242.3366	0	242.3366	824.0288	0	824.0288	FCEV	0	66.51805	1	7
2044	2a	1	2940.075	10711.19	5784.045	4927.149	34211.2	18474.05	15737.15	PHEV	1587.641	1352.435	1	8
2044	2a	1	68280.49	252669.2	252669.2	0	848681	848681	0	ICE	68280.49	0	1	1
2044	2a	1	835.5736	3092.007	3092.007	0	10377.39	10377.39	0	ICE	835.5736	0	1	2
2044	2a	1	4853.628	17960.66	0	17960.66	60889.07	0	60889.07	BEV	0	4853.628	1	3
2044	2a	1	99.05363	366.544	0	366.544	1289.378	0	1289.378	FCEV	0	99.05363	1	7
2044	2a	1	3136.876	11607.88	6268.257	5339.627	38771.36	20936.54	17834.83	PHEV	1693.913	1442.963	1	8
2044	2a	1	83138.15	312412.4	312412.4	0	1092076	1092076	0	ICE	83138.15	0	1	1
2044	2a	1	1013.067	3806.852	3806.852	0	13299.75	13299.75	0	ICE	1013.067	0	1	2

2044	2a	1	7247.154	27232.99	0	27232.99	96039.21	0	96039.21	BEV	0	7247.154	1	3
2044	2a	1	169.5241	637.029	0	637.029	2318.151	0	2318.151	FCEV	0	169.5241	1	7
2044	2a	1	3554.263	13356.03	7078.696	6277.334	46351.04	24566.05	21784.99	PHEV	1883.759	1670.503	1	8
2044	2a	1	101634.2	387738.5	387738.5	0	1410446	1410446	0	ICE	101634.2	0	1	1
2044	2a	1	1249.673	4767.551	4767.551	0	17332.55	17332.55	0	ICE	1249.673	0	1	2
2044	2a	1	10526.1	40157.48	0	40157.48	146905.5	0	146905.5	BEV	0	10526.1	1	3
2044	2a	1	277.8149	1059.875	0	1059.875	3988.271	0	3988.271	FCEV	0	277.8149	1	7
2044	2a	1	4013.659	15312.27	7962.38	7349.889	55599.21	28911.59	26687.62	PHEV	2087.103	1926.556	1	8
2044	2a	1	117484.5	454938.7	454938.7	0	1720420	1720420	0	ICE	117484.5	0	1	1
2044	2a	1	1451.534	5620.82	5620.82	0	21244.77	21244.77	0	ICE	1451.534	0	1	2
2044	2a	1	18981.31	73501.91	0	73501.91	279431.8	0	279431.8	BEV	0	18981.31	1	3
2044	2a	1	650.6596	2519.569	0	2519.569	9804.858	0	9804.858	FCEV	0	650.6596	1	7
2044	2a	1	7216.433	27944.41	13916.32	14028.09	105053.3	52316.52	52736.73	PHEV	3593.784	3622.649	1	8
2044	2a	1	134417.4	528209.1	528209.1	0	2074308	2074308	0	ICE	134417.4	0	1	1
2044	2a	1	1672.709	6573.11	6573.11	0	25799.53	25799.53	0	ICE	1672.709	0	1	2
2044	2a	1	30641.31	120408.7	0	120408.7	475019.8	0	475019.8	BEV	0	30641.31	1	3
2044	2a	1	1295.731	5091.732	0	5091.732	20480.62	0	20480.62	FCEV	0	1295.731	1	7
2044	2a	1	11615.29	45643.66	21726.38	23917.28	178109.1	84779.94	93329.17	PHEV	5528.876	6086.41	1	8
2044	2a	1	151874.4	605509.6	605509.6	0	2466747	2466747	0	ICE	151874.4	0	1	1
2044	2a	1	1905.807	7598.281	7598.281	0	30938.7	30938.7	0	ICE	1905.807	0	1	2
2044	2a	1	46296.88	184581.5	0	184581.5	754798	0	754798	BEV	0	46296.88	1	3
2044	2a	1	2334.296	9306.629	0	9306.629	38594.45	0	38594.45	FCEV	0	2334.296	1	7
2044	2a	1	17498.61	69765.38	31673.48	38091.9	282604	128302.2	154301.8	PHEV	7944.368	9554.24	1	8
2044	2a	1	168687.6	682206.3	682206.3	0	2880465	2880465	0	ICE	168687.6	0	1	1
2044	2a	1	2133.736	8629.254	8629.254	0	36418.04	36418.04	0	ICE	2133.736	0	1	2
2044	2a	1	66640.31	269506.7	0	269506.7	1141430	0	1141430	BEV	0	66640.31	1	3
2044	2a	1	3910.532	15814.97	0	15814.97	67643.14	0	67643.14	FCEV	0	3910.532	1	7
2044	2a	1	25114.29	101567.2	43877.04	57690.18	426793.6	184374.9	242418.8	PHEV	10849.37	14264.92	1	8
2044	2a	1	184313.9	755961.6	755961.6	0	3306228	3306228	0	ICE	184313.9	0	1	1
2044	2a	1	2349.016	9634.465	9634.465	0	42118.26	42118.26	0	ICE	2349.016	0	1	2
2044	2a	1	92634.56	379939.7	0	379939.7	1665807	0	1665807	BEV	0	92634.56	1	3
2044	2a	1	6213.294	25483.76	0	25483.76	112530.6	0	112530.6	FCEV	0	6213.294	1	7
2044	2a	1	34809.04	142768.9	58535.26	84233.67	621929.4	254991	366938.3	PHEV	14271.71	20537.33	1	8
2044	2a	1	196626.7	817727.1	817727.1	0	3698274	3698274	0	ICE	196626.7	0	1	1
2044	2a	1	2505.938	10421.64	10421.64	0	47115.79	47115.79	0	ICE	2505.938	0	1	2
2044	2a	1	124496.5	517753.6	0	517753.6	2346199	0	2346199	BEV	0	124496.5	1	3
2044	2a	1	9411.845	39141.79	0	39141.79	178197.1	0	178197.1	FCEV	0	9411.845	1	7
2044	2a	1	46645.96	193990.3	75268.23	118722.1	874433.9	339280.4	535153.6	PHEV	18098.63	28547.33	1	8
2044	2a	1	204082.8	860427.6	860427.6	0	4020921	4020921	0	ICE	204082.8	0	1	1
2044	2a	1	2600.963	10965.84	10965.84	0	51229.2	51229.2	0	ICE	2600.963	0	1	2
2044	2a	1	162335.5	684417.9	0	684417.9	3203315	0	3203315	BEV	0	162335.5	1	3
2044	2a	1	13678.83	57670.91	0	57670.91	270764.5	0	270764.5	FCEV	0	13678.83	1	7
2044	2a	1	60647.25	255693.1	93583.66	162109.4	1191671	436151.7	755519.5	PHEV	22196.89	38450.36	1	8
2044	2a	1	205457.4	877993.3	877993.3	0	4236939	4236939	0	ICE	205457.4	0	1	1
2044	2a	1	2618.48	11189.71	11189.71	0	53984.02	53984.02	0	ICE	2618.48	0	1	2
2044	2a	1	206073.6	880626.5	0	880626.5	4254696	0	4254696	BEV	0	206073.6	1	3
2044	2a	1	19178.61	81957.12	0	81957.12	396822.1	0	396822.1	FCEV	0	19178.61	1	7

2044	2a	1	76765.01	328044.5	112847.3	215197.2	1579675	543408.3	1036267	PHEV	26407.16	50357.85	1	8
2044	2a	1	200445.1	868057.4	868057.4	0	4322311	4322311	0	ICE	200445.1	0	1	1
2044	2a	1	2554.6	11063.08	11063.08	0	55073.83	55073.83	0	ICE	2554.6	0	1	2
2044	2a	1	256262.3	1109782	0	1109782	5531089	0	5531089	BEV	0	256262.3	1	3
2044	2a	1	26142.63	113214.6	0	113214.6	565113.8	0	565113.8	FCEV	0	26142.63	1	7
2044	2a	1	95185.76	412216.2	132733.6	279482.6	2049060	659797.4	1389263	PHEV	30649.81	64535.95	1	8
2044	2a	1	187197.8	821412.8	821412.8	0	4218158	4218158	0	ICE	187197.8	0	1	1
2044	2a	1	2385.772	10468.62	10468.62	0	53748.69	53748.69	0	ICE	2385.772	0	1	2
2044	2a	1	311229	1365654	0	1365654	7017874	0	7017874	BEV	0	311229	1	3
2044	2a	1	34581	151739.3	0	151739.3	780607.8	0	780607.8	FCEV	0	34581	1	7
2044	2a	1	115270	505797.8	151739.3	354058.5	2594135	778240.4	1815894	PHEV	34581	80689	1	8
2044	2a	1	166704.9	741041.4	741041.4	0	3922391	3922391	0	ICE	166704.9	0	1	1
2044	2a	1	2124.593	9444.305	9444.305	0	49981.49	49981.49	0	ICE	2124.593	0	1	2
2044	2a	1	375715.2	1670140	0	1670140	8844331	0	8844331	BEV	0	375715.2	1	3
2044	2a	1	46436.71	206421.9	0	206421.9	1093931	0	1093931	FCEV	0	46436.71	1	7
2044	2a	1	133311.1	592598.6	177779.6	414819	3134134	940240.1	2193893	PHEV	39993.34	93317.79	1	8
2044	2a	1	136545.7	614799.7	614799.7	0	3352356	3352356	0	ICE	136545.7	0	1	1
2044	2a	1	1740.228	7835.41	7835.41	0	42719.01	42719.01	0	ICE	1740.228	0	1	2
2044	2a	1	442286.4	1991404	0	1991404	10861706	0	10861706	BEV	0	442286.4	1	3
2044	2a	1	60311.79	271555	0	271555	1481897	0	1481897	FCEV	0	60311.79	1	7
2044	2a	1	150126.7	675948.7	202784.6	473164.1	3684299	1105290	2579009	PHEV	45038.02	105088.7	1	8
2044	2a	1	99173.95	452214.4	452214.4	0	2538880	2538880	0	ICE	99173.95	0	1	1
2044	2a	1	1263.938	5763.315	5763.315	0	32353.78	32353.78	0	ICE	1263.938	0	1	2
2044	2a	1	516642.6	2355792	0	2355792	13227699	0	13227699	BEV	0	516642.6	1	3
2044	2a	1	77199.47	352014.9	0	352014.9	1977231	0	1977231	FCEV	0	77199.47	1	7
2044	2a	1	167493.9	763740.5	229122.1	534618.3	4287940	1286382	3001558	PHEV	50248.18	117245.7	1	8
2044	2a	1	53058	244974.1	244974.1	0	1415411	1415411	0	ICE	53058	0	1	1
2044	2a	1	676.2057	3122.109	3122.109	0	18037.5	18037.5	0	ICE	676.2057	0	1	2
2044	2a	1	589965.6	2723930	0	2723930	15737983	0	15737983	BEV	0	589965.6	1	3
2044	2a	1	96040.92	443430.5	0	443430.5	2562577	0	2562577	FCEV	0	96040.92	1	7
2044	2a	1	182356.2	841956.7	252587	589369.7	4866564	1459969	3406595	PHEV	54706.85	127649.3	1	8
2044	2a	1	670705	3135137	0	3135137	18630579	0	18630579	BEV	0	670705	1	3
2044	2a	1	118359.7	553259.5	0	553259.5	3288218	0	3288218	FCEV	0	118359.7	1	7
2044	2a	1	197266.2	922099.1	276629.7	645469.4	5484577	1645373	3839204	PHEV	59179.86	138086.3	1	8
2044	2a	1	707664	3348440	0	3348440	20458727	0	20458727	BEV	0	707664	1	3
2044	2a	1	134793.1	637798	0	637798	3897188	0	3897188	FCEV	0	134793.1	1	7
2044	2a	1	197613.4	935043.4	280513	654530.4	5722067	1716620	4005447	PHEV	59284.02	138329.4	1	8
2044	2a	1	748305.8	3583614	0	3583614	22503013	0	22503013	BEV	0	748305.8	1	3
2044	2a	1	153267.5	733993.3	0	733993.3	4609125	0	4609125	FCEV	0	153267.5	1	7
2044	2a	1	197906.3	947767.5	284330.3	663437.3	5964987	1789496	4175491	PHEV	59371.9	138534.4	1	8
2044	2a	1	779754.8	3778894	0	3778894	24381324	0	24381324	BEV	0	779754.8	1	3
2044	2a	1	171165.7	829513.4	0	829513.4	5351818	0	5351818	FCEV	0	171165.7	1	7
2044	2a	1	194766.8	943890.8	283167.2	660723.5	6108350	1832505	4275845	PHEV	58430.05	136336.8	1	8
2044	2a	1	815608.7	3999378	0	3999378	26495556	0	26495556	BEV	0	815608.7	1	3
2044	2a	1	191315.6	938125.7	0	938125.7	6214587	0	6214587	FCEV	0	191315.6	1	7
2044	2a	1	191795.1	940476.9	282143.1	658333.9	6253086	1875926	4377161	PHEV	57538.53	134256.6	1	8
2044	2a	1	842597.4	4179991	0	4179991	28423422	0	28423422	BEV	0	842597.4	1	3

2044	2a	1	210649.4	1044998	0	1044998	7105171	0	7105171	FCEV	0	210649.4	1	7
2044	2a	1	185867.1	922056.8	276617.1	645439.8	6296405	1888922	4407484	PHEV	55760.12	130107	1	8
2044	2a	1	864010.3	4335716	0	4335716	30239106	0	30239106	BEV	0	864010.3	1	3
2044	2a	1	229673.6	1152532	0	1152532	8037352	0	8037352	FCEV	0	229673.6	1	7
2044	2a	1	178041.6	893435.7	268030.7	625405	6260072	1878022	4382051	PHEV	53412.47	124629.1	1	8
2044	2a	1	886953.4	4501661	0	4501661	32146580	0	32146580	BEV	0	886953.4	1	3
2044	2a	1	250166.3	1269699	0	1269699	9066084	0	9066084	FCEV	0	250166.3	1	7
2044	2a	1	169914.4	862387.2	258716.1	603671	6185494	1855648	4329846	PHEV	50974.33	118940.1	1	8
2044	2a	1	894578.3	4591611	0	4591611	33465476	0	33465476	BEV	0	894578.3	1	3
2044	2a	1	267211.7	1371520	0	1371520	9995561	0	9995561	FCEV	0	267211.7	1	7
2044	2a	1	158425.9	813154.3	243946.3	569208	5946985	1784096	4162890	PHEV	47527.78	110898.1	1	8
2044	2a	1	803772.6	4171580	0	4171580	30948127	0	30948127	BEV	0	803772.6	1	3
2044	2a	1	253822.9	1317341	0	1317341	9772977	0	9772977	FCEV	0	253822.9	1	7
2044	2a	1	130714.1	678405.9	203521.8	474884.1	5042867	1512860	3530007	PHEV	39214.22	91499.84	1	8
2044	2a	1	2731.706	7291.579	7291.579	0	26665.79	26665.79	0	ICE	2731.706	0	2	1
2044	2a	1	3029.752	8260.709	8260.709	0	30371.98	30371.98	0	ICE	3029.752	0	2	1
2044	2a	1	3213.181	8944.919	8944.919	0	32380.61	32380.61	0	ICE	3213.181	0	2	1
2044	2a	1	2256.675	6411.462	6411.462	0	23073.53	23073.53	0	ICE	2256.675	0	2	1
2044	2a	1	1294.604	3826.448	3826.448	0	13884.1	13884.1	0	ICE	1294.604	0	2	1
2044	2a	1	2061.379	6210.894	6210.894	0	22851.1	22851.1	0	ICE	2061.379	0	2	1
2044	2a	1	3096.608	9507.421	9507.421	0	35593.66	35593.66	0	ICE	3096.608	0	2	1
2044	2a	1	5369.401	16793.12	16793.12	0	63439.35	63439.35	0	ICE	5369.401	0	2	1
2044	2a	1	4141.449	13189.89	13189.89	0	50257.88	50257.88	0	ICE	4141.449	0	2	1
2044	2a	1	2230.929	7232.985	7232.985	0	27584.89	27584.89	0	ICE	2230.929	0	2	1
2044	2a	1	2027.813	6690.626	6690.626	0	25856.42	25856.42	0	ICE	2027.813	0	2	1
2044	2a	1	17952.03	63345.35	63345.35	0	260525.5	260525.5	0	ICE	17952.03	0	2	1
2044	2a	1	17748.94	63645.56	63645.56	0	264892.5	264892.5	0	ICE	17748.94	0	2	1
2044	2a	1	17380.87	63321.45	63321.45	0	267573.6	267573.6	0	ICE	17380.87	0	2	1
2044	2a	1	2.354552	8.578035	8.578035	0	36.25982	36.25982	0	ICE	2.354552	0	2	2
2044	2a	1	0.585636	2.13357	0	2.13357	7.186937	0	7.186937	BEV	0	0.585636	2	3
2044	2a	1	0.011952	0.043542	0	0.043542	0.146672	0	0.146672	FCEV	0	0.011952	2	7
2044	2a	1	5.079493	18.50546	11.10327	7.402183	78.23873	46.94324	31.29549	PHEV	3.047696	2.031797	2	8
2044	2a	1	20320.14	75193.87	75193.87	0	320910.5	320910.5	0	ICE	20320.14	0	2	1
2044	2a	1	2.752731	10.18637	10.18637	0	43.48629	43.48629	0	ICE	2.752731	0	2	2
2044	2a	1	22905.53	86073.25	86073.25	0	371475.8	371475.8	0	ICE	22905.53	0	2	1
2044	2a	1	3.124617	11.74153	11.74153	0	50.70618	50.70618	0	ICE	3.124617	0	2	2
2044	2a	1	304.5616	1144.466	0	1144.466	4613.206	0	4613.206	BEV	0	304.5616	2	3
2044	2a	1	7.124248	26.77114	0	26.77114	96.51451	0	96.51451	FCEV	0	7.124248	2	7
2044	2a	1	233.8819	878.8697	522.2997	356.57	3920.482	2329.886	1590.595	PHEV	138.9927	94.88923	2	8
2044	2a	1	25638.99	97813.77	97813.77	0	426895.9	426895.9	0	ICE	25638.99	0	2	1
2044	2a	1	3.538133	13.49812	13.49812	0	58.97608	58.97608	0	ICE	3.538133	0	2	2
2044	2a	1	696.406	2656.817	0	2656.817	10862.2	0	10862.2	BEV	0	696.406	2	3
2044	2a	1	18.38022	70.12127	0	70.12127	261.4397	0	261.4397	FCEV	0	18.38022	2	7
2044	2a	1	536.3592	2046.232	1204.354	841.8782	9224.463	5429.255	3795.208	PHEV	315.6857	220.6735	2	8
2044	2a	1	27377.59	106015.1	106015.1	0	466747.3	466747.3	0	ICE	27377.59	0	2	1
2044	2a	1	3.827708	14.82215	14.82215	0	65.35276	65.35276	0	ICE	3.827708	0	2	2
2044	2a	1	1929.53	7471.777	0	7471.777	31020.99	0	31020.99	BEV	0	1929.53	2	3

2044	2a	1	66.14228	256.1247	0	256.1247	987.7116	0	987.7116	FCEV	0	66.14228	2	7
2044	2a	1	1391.56	5388.579	3123.836	2264.743	24927.51	14450.84	10476.68	PHEV	806.7071	584.8527	2	8
2044	2a	1	28836.29	113315.7	113315.7	0	504342.8	504342.8	0	ICE	28836.29	0	2	1
2044	2a	1	4.048174	15.90779	15.90779	0	70.90342	70.90342	0	ICE	4.048174	0	2	2
2044	2a	1	3529.809	13870.81	0	13870.81	58852.72	0	58852.72	BEV	0	3529.809	2	3
2044	2a	1	149.2653	586.556	0	586.556	2338.663	0	2338.663	FCEV	0	149.2653	2	7
2044	2a	1	2381.561	9358.628	5342.44	4016.189	43838.72	25025.64	18813.07	PHEV	1359.531	1022.03	2	8
2044	2a	1	29938.8	119363.3	119363.3	0	538242	538242	0	ICE	29938.8	0	2	1
2044	2a	1	4.222744	16.8357	16.8357	0	76.01773	76.01773	0	ICE	4.222744	0	2	2
2044	2a	1	5539.861	22086.93	0	22086.93	95941.54	0	95941.54	BEV	0	5539.861	2	3
2044	2a	1	279.3207	1113.627	0	1113.627	4628.965	0	4628.965	FCEV	0	279.3207	2	7
2044	2a	1	3492.793	13925.45	7826.104	6099.348	65768.38	36961.83	28806.55	PHEV	1962.95	1529.843	2	8
2044	2a	1	30609.79	123792.1	123792.1	0	566501.6	566501.6	0	ICE	30609.79	0	2	1
2044	2a	1	4.336286	17.53681	17.53681	0	80.34801	80.34801	0	ICE	4.336286	0	2	2
2044	2a	1	7995.803	32336.63	0	32336.63	143806.5	0	143806.5	BEV	0	7995.803	2	3
2044	2a	1	469.2032	1897.552	0	1897.552	8211.925	0	8211.925	FCEV	0	469.2032	2	7
2044	2a	1	4704.294	19025.11	10523.6	8501.505	90587.86	50108.03	40479.83	PHEV	2602.147	2102.147	2	8
2044	2a	1	30915.17	126798.3	126798.3	0	590098.5	590098.5	0	ICE	30915.17	0	2	1
2044	2a	1	4.39729	18.03544	18.03544	0	84.02005	84.02005	0	ICE	4.39729	0	2	2
2044	2a	1	10972.59	45003.98	0	45003.98	205039.9	0	205039.9	BEV	0	10972.59	2	3
2044	2a	1	735.9667	3018.56	0	3018.56	13517.67	0	13517.67	FCEV	0	735.9667	2	7
2044	2a	1	6014.155	24667	13425.89	11241.1	118615.6	64560.77	54054.82	PHEV	3273.419	2740.736	2	8
2044	2a	1	30709.99	127716.1	127716.1	0	604721.7	604721.7	0	ICE	30709.99	0	2	1
2044	2a	1	4.368106	18.16599	18.16599	0	86.0805	86.0805	0	ICE	4.368106	0	2	2
2044	2a	1	14492.68	60271.86	0	60271.86	281103.3	0	281103.3	BEV	0	14492.68	2	3
2044	2a	1	1095.636	4556.508	0	4556.508	21048.4	0	21048.4	FCEV	0	1095.636	2	7
2044	2a	1	7385.605	30715.11	16445.75	14269.36	149281	79929.31	69351.69	PHEV	3954.464	3431.141	2	8
2044	2a	1	29947.96	126262.7	126262.7	0	609031.5	609031.5	0	ICE	29947.96	0	2	1
2044	2a	1	4.259717	17.95926	17.95926	0	86.67453	86.67453	0	ICE	4.259717	0	2	2
2044	2a	1	18592.72	78388.22	0	78388.22	374285.3	0	374285.3	BEV	0	18592.72	2	3
2044	2a	1	1566.673	6605.203	0	6605.203	31375.04	0	31375.04	FCEV	0	1566.673	2	7
2044	2a	1	8788.964	37054.89	19512.04	17542.84	182275.2	95980.89	86294.27	PHEV	4628.017	4160.947	2	8
2044	2a	1	28547.38	121993.2	121993.2	0	600116.5	600116.5	0	ICE	28547.38	0	2	1
2044	2a	1	4.060502	17.35199	17.35199	0	85.38868	85.38868	0	ICE	4.060502	0	2	2
2044	2a	1	23272.76	99452.86	0	99452.86	486204.3	0	486204.3	BEV	0	23272.76	2	3
2044	2a	1	2165.922	9255.763	0	9255.763	45133.51	0	45133.51	FCEV	0	2165.922	2	7
2044	2a	1	10176.7	43488.7	22514.72	20973.98	216811.5	112246.4	104565.1	PHEV	5268.622	4908.076	2	8
2044	2a	1	26584.13	115126.5	115126.5	0	578124.2	578124.2	0	ICE	26584.13	0	2	1
2044	2a	1	3.781254	16.37529	16.37529	0	82.24501	82.24501	0	ICE	3.781254	0	2	2
2044	2a	1	28650.39	124074.8	0	124074.8	621112.3	0	621112.3	BEV	0	28650.39	2	3
2044	2a	1	2922.773	12657.5	0	12657.5	63300.54	0	63300.54	FCEV	0	2922.773	2	7
2044	2a	1	11551.88	50027.15	25456.67	24570.48	253120.9	128802.4	124318.5	PHEV	5878.257	5673.624	2	8
2044	2a	1	23781.02	104349.7	104349.7	0	535403.8	535403.8	0	ICE	23781.02	0	2	1
2044	2a	1	3.382548	14.84242	14.84242	0	76.1559	76.1559	0	ICE	3.382548	0	2	2
2044	2a	1	34458.92	151203.7	0	151203.7	775193.4	0	775193.4	BEV	0	34458.92	2	3
2044	2a	1	3828.769	16800.41	0	16800.41	86129.61	0	86129.61	FCEV	0	3828.769	2	7
2044	2a	1	12762.56	56001.36	28000.68	28000.68	287979	143989.5	143989.5	PHEV	6381.281	6381.281	2	8

2044	2a	1	20469.9	90993.42	90993.42	0	477381.8	477381.8	0	ICE	20469.9	0	2	1
2044	2a	1	2.911584	12.94266	12.94266	0	67.89391	67.89391	0	ICE	2.911584	0	2	2
2044	2a	1	40615.2	180543.9	0	180543.9	948121	0	948121	BEV	0	40615.2	2	3
2044	2a	1	5019.857	22314.42	0	22314.42	117243.5	0	117243.5	FCEV	0	5019.857	2	7
2044	2a	1	14411.07	64060.53	32030.26	32030.26	335226	167613	167613	PHEV	7205.536	7205.536	2	8
2044	2a	1	16342.91	73584.3	73584.3	0	395030.7	395030.7	0	ICE	16342.91	0	2	1
2044	2a	1	2.324572	10.46643	10.46643	0	56.17559	56.17559	0	ICE	2.324572	0	2	2
2044	2a	1	47004.11	211637	0	211637	1138796	0	1138796	BEV	0	47004.11	2	3
2044	2a	1	6409.652	28859.58	0	28859.58	155413.1	0	155413.1	FCEV	0	6409.652	2	7
2044	2a	1	15954.76	71836.63	35918.31	35918.31	383063.1	191531.5	191531.5	PHEV	7977.38	7977.38	2	8
2044	2a	1	11617.08	52971.69	52971.69	0	291118.4	291118.4	0	ICE	11617.08	0	2	1
2044	2a	1	1.652382	7.53455	7.53455	0	41.39479	41.39479	0	ICE	1.652382	0	2	2
2044	2a	1	54134.31	246842.2	0	246842.2	1361096	0	1361096	BEV	0	54134.31	2	3
2044	2a	1	8089.035	36884.46	0	36884.46	203568.3	0	203568.3	FCEV	0	8089.035	2	7
2044	2a	1	17550.17	80025.46	40012.73	40012.73	435267.2	217633.6	217633.6	PHEV	8775.087	8775.087	2	8
2044	2a	1	6127.696	28292.19	28292.19	0	159270.4	159270.4	0	ICE	6127.696	0	2	1
2044	2a	1	0.871587	4.024204	4.024204	0	22.64533	22.64533	0	ICE	0.871587	0	2	2
2044	2a	1	61339.84	283212.2	0	283212.2	1600734	0	1600734	BEV	0	61339.84	2	3
2044	2a	1	9985.555	46104.31	0	46104.31	260829.1	0	260829.1	FCEV	0	9985.555	2	7
2044	2a	1	18959.91	87539.82	43769.91	43769.91	486268.1	243134.1	243134.1	PHEV	9479.957	9479.957	2	8
2044	2a	1	69170.41	323329.5	0	323329.5	1873179	0	1873179	BEV	0	69170.41	2	3
2044	2a	1	12206.54	57058.14	0	57058.14	330862.5	0	330862.5	FCEV	0	12206.54	2	7
2044	2a	1	20344.24	95096.9	47548.45	47548.45	539822.3	269911.1	269911.1	PHEV	10172.12	10172.12	2	8
2044	2a	1	71870.44	340067.9	0	340067.9	2020049	0	2020049	BEV	0	71870.44	2	3
2044	2a	1	13689.61	64774.85	0	64774.85	385118.5	0	385118.5	FCEV	0	13689.61	2	7
2044	2a	1	20069.64	94963.12	47481.56	47481.56	551638.7	275819.3	275819.3	PHEV	10034.82	10034.82	2	8
2044	2a	1	74829.79	358357.6	0	358357.6	2182390	0	2182390	BEV	0	74829.79	2	3
2044	2a	1	15326.58	73398.55	0	73398.55	447384.3	0	447384.3	FCEV	0	15326.58	2	7
2044	2a	1	19790.42	94775.74	47387.87	47387.87	563678	281839	281839	PHEV	9895.211	9895.211	2	8
2044	2a	1	77780.71	376945.5	0	376945.5	2353571	0	2353571	BEV	0	77780.71	2	3
2044	2a	1	17073.81	82744.14	0	82744.14	517061.1	0	517061.1	FCEV	0	17073.81	2	7
2044	2a	1	19428.03	94153.31	47076.65	47076.65	573682.5	286841.2	286841.2	PHEV	9714.017	9714.017	2	8
2044	2a	1	80730.83	395867.7	0	395867.7	2534131	0	2534131	BEV	0	80730.83	2	3
2044	2a	1	18936.86	92857.85	0	92857.85	594876.4	0	594876.4	FCEV	0	18936.86	2	7
2044	2a	1	18984.32	93090.58	46545.29	46545.29	581404.6	290702.3	290702.3	PHEV	9492.162	9492.162	2	8
2044	2a	1	82573.29	409632.9	0	409632.9	2688623	0	2688623	BEV	0	82573.29	2	3
2044	2a	1	20643.32	102408.2	0	102408.2	672617.9	0	672617.9	FCEV	0	20643.32	2	7
2044	2a	1	18214.7	90360.19	45180.09	45180.09	578831.3	289415.6	289415.6	PHEV	9107.348	9107.348	2	8
2044	2a	1	83711.24	420073.9	0	420073.9	2826967	0	2826967	BEV	0	83711.24	2	3
2044	2a	1	22252.36	111665.2	0	111665.2	751933.3	0	751933.3	FCEV	0	22252.36	2	7
2044	2a	1	17249.89	86562.18	43281.09	43281.09	568995.2	284497.6	284497.6	PHEV	8624.944	8624.944	2	8
2044	2a	1	84855.75	430678.5	0	430678.5	2971133	0	2971133	BEV	0	84855.75	2	3
2044	2a	1	23933.67	121473.4	0	121473.4	838465.5	0	838465.5	FCEV	0	23933.67	2	7
2044	2a	1	16255.89	82505.47	41252.73	41252.73	556537.4	278268.7	278268.7	PHEV	8127.945	8127.945	2	8
2044	2a	1	86051.05	441675.1	0	441675.1	3122205	0	3122205	BEV	0	86051.05	2	3
2044	2a	1	25703.56	131928.9	0	131928.9	933048.2	0	933048.2	FCEV	0	25703.56	2	7
2044	2a	1	15239.27	78218.73	39109.36	39109.36	541315	270657.5	270657.5	PHEV	7619.633	7619.633	2	8

2044	2a	1	78528.52	407563	0	407563	2950571	0	2950571	BEV	0	78528.52	2	3
2044	2a	1	24798.48	128704.1	0	128704.1	932143.5	0	932143.5	FCEV	0	24798.48	2	7
2044	2a	1	12770.75	66280.21	33140.1	33140.1	470349.6	235174.8	235174.8	PHEV	6385.377	6385.377	2	8
2044	2a	1	11184.47	29854.02	29854.02	0	103518.8	103518.8	0	ICE	11184.47	0	3	1
2044	2a	1	10378.6	28297.56	28297.56	0	97844.52	97844.52	0	ICE	10378.6	0	3	1
2044	2a	1	9873.884	27487.12	27487.12	0	96202.87	96202.87	0	ICE	9873.884	0	3	1
2044	2a	1	10918.37	31020.29	31020.29	0	109511.2	109511.2	0	ICE	10918.37	0	3	1
2044	2a	1	12491.65	36205.8	36205.8	0	128515.8	128515.8	0	ICE	12491.65	0	3	1
2044	2a	1	13308.92	39337.03	39337.03	0	140131.4	140131.4	0	ICE	13308.92	0	3	1
2044	2a	1	11547.57	34792.6	34792.6	0	124593.1	124593.1	0	ICE	11547.57	0	3	1
2044	2a	1	11903.97	36548.4	36548.4	0	131701.1	131701.1	0	ICE	11903.97	0	3	1
2044	2a	1	9244.477	28912.66	28912.66	0	105711	105711	0	ICE	9244.477	0	3	1
2044	2a	1	5888.728	18754.71	18754.71	0	69158.01	69158.01	0	ICE	5888.728	0	3	1
2044	2a	1	10474	33958.18	33958.18	0	126675.6	126675.6	0	ICE	10474	0	3	1
2044	2a	1	14355.48	47364.89	47364.89	0	178544.5	178544.5	0	ICE	14355.48	0	3	1
2044	2a	1	14401.24	48340.94	48340.94	0	184813.1	184813.1	0	ICE	14401.24	0	3	1
2044	2a	1	20460.06	69850.85	69850.85	0	269518.2	269518.2	0	ICE	20460.06	0	3	1
2044	2a	1	20317.79	70529.15	70529.15	0	277344.1	277344.1	0	ICE	20317.79	0	3	1
2044	2a	1	216.613	751.9287	751.9287	0	2891.288	2891.288	0	ICE	216.613	0	3	2
2044	2a	1	26205.08	92467	92467	0	369230.4	369230.4	0	ICE	26205.08	0	3	1
2044	2a	1	27873.99	99952.79	99952.79	0	402091.9	402091.9	0	ICE	27873.99	0	3	1
2044	2a	1	209.9322	752.7916	752.7916	0	2993.492	2993.492	0	ICE	209.9322	0	3	2
2044	2a	1	33437.13	121817.1	121817.1	0	497300.1	497300.1	0	ICE	33437.13	0	3	1
2044	2a	1	341.7648	1245.107	1245.107	0	5104.321	5104.321	0	ICE	341.7648	0	3	2
2044	2a	1	38689.19	143167.8	143167.8	0	592153.6	592153.6	0	ICE	38689.19	0	3	1
2044	2a	1	395.4468	1463.335	1463.335	0	6077.196	6077.196	0	ICE	395.4468	0	3	2
2044	2a	1	133.4831	493.9489	296.3693	197.5796	2056.092	1233.655	822.4367	PHEV	80.08987	53.39324	3	8
2044	2a	1	43676.48	164125.3	164125.3	0	691290.8	691290.8	0	ICE	43676.48	0	3	1
2044	2a	1	445.2971	1673.315	1673.315	0	7071.206	7071.206	0	ICE	445.2971	0	3	2
2044	2a	1	515.1092	1935.651	0	1935.651	5633.445	0	5633.445	BEV	0	515.1092	3	3
2044	2a	1	12.04934	45.2784	0	45.2784	113.6394	0	113.6394	FCEV	0	12.04934	3	7
2044	2a	1	447.4028	1681.228	999.1296	682.0981	7099.448	4219.101	2880.348	PHEV	265.8851	181.5177	3	8
2044	2a	1	49448.98	188649.8	188649.8	0	805940.7	805940.7	0	ICE	49448.98	0	3	1
2044	2a	1	505.296	1927.724	1927.724	0	8263.932	8263.932	0	ICE	505.296	0	3	2
2044	2a	1	1185.046	4520.998	0	4520.998	16661.73	0	16661.73	BEV	0	1185.046	3	3
2044	2a	1	31.27687	119.3225	0	119.3225	309.6142	0	309.6142	FCEV	0	31.27687	3	7
2044	2a	1	855.2255	3262.719	1920.343	1342.376	13986.9	8232.291	5754.611	PHEV	503.3613	351.8642	3	8
2044	2a	1	53486.05	207115.6	207115.6	0	894491.8	894491.8	0	ICE	53486.05	0	3	1
2044	2a	1	554.8116	2148.414	2148.414	0	9326.818	9326.818	0	ICE	554.8116	0	3	2
2044	2a	1	3653.011	14145.66	0	14145.66	50050.84	0	50050.84	BEV	0	3653.011	3	3
2044	2a	1	125.2214	484.8986	0	484.8986	1300.21	0	1300.21	FCEV	0	125.2214	3	7
2044	2a	1	2482.916	9614.671	5573.762	4040.909	47963.94	27805.38	20158.56	PHEV	1439.382	1043.534	3	8
2044	2a	1	57492.03	225921.8	225921.8	0	989520.1	989520.1	0	ICE	57492.03	0	3	1
2044	2a	1	599.1718	2354.517	2354.517	0	10372.87	10372.87	0	ICE	599.1718	0	3	2
2044	2a	1	6966.537	27375.84	0	27375.84	98379.34	0	98379.34	BEV	0	6966.537	3	3
2044	2a	1	294.5945	1157.644	0	1157.644	3207.421	0	3207.421	FCEV	0	294.5945	3	7
2044	2a	1	4455.565	17508.68	9994.954	7513.724	92460.61	52781.8	39678.81	PHEV	2543.491	1912.074	3	8

2044	2a	1	62015.84	247251.6	247251.6	0	1099760	1099760	0	ICE	62015.84	0	3	1
2044	2a	1	649.8108	2590.737	2590.737	0	11596.89	11596.89	0	ICE	649.8108	0	3	2
2044	2a	1	11452.53	45660.19	0	45660.19	169037.5	0	169037.5	BEV	0	11452.53	3	3
2044	2a	1	577.4383	2302.195	0	2302.195	6642.258	0	6642.258	FCEV	0	577.4383	3	7
2044	2a	1	6884.792	27449.05	15426.36	12022.68	149457.6	83995.17	65462.43	PHEV	3869.253	3015.539	3	8
2044	2a	1	67438.26	272733.8	272733.8	0	1233314	1233314	0	ICE	67438.26	0	3	1
2044	2a	1	710.175	2872.09	2872.09	0	13076.92	13076.92	0	ICE	710.175	0	3	2
2044	2a	1	17643.08	71352.14	0	71352.14	272102.7	0	272102.7	BEV	0	17643.08	3	3
2044	2a	1	1035.317	4187.028	0	4187.028	13353.9	0	13353.9	FCEV	0	1035.317	3	7
2044	2a	1	9956.545	40266.26	22272.99	17993.27	224451.6	124153.8	100297.8	PHEV	5507.392	4449.153	3	8
2044	2a	1	73473.43	301350.5	301350.5	0	1387811	1387811	0	ICE	73473.43	0	3	1
2044	2a	1	777.322	3188.178	3188.178	0	14790.46	14790.46	0	ICE	777.322	0	3	2
2044	2a	1	26154.85	107273.9	0	107273.9	421947.6	0	421947.6	BEV	0	26154.85	3	3
2044	2a	1	1754.289	7195.199	0	7195.199	24667.41	0	24667.41	FCEV	0	1754.289	3	7
2044	2a	1	13834.88	56743.62	30884.74	25858.88	323560.5	176109.3	147451.1	PHEV	7530.127	6304.752	3	8
2044	2a	1	78020.29	324469.2	324469.2	0	1522413	1522413	0	ICE	78020.29	0	3	1
2044	2a	1	825.426	3432.765	3432.765	0	16222.04	16222.04	0	ICE	825.426	0	3	2
2044	2a	1	36938.55	153619.3	0	153619.3	623558.5	0	623558.5	BEV	0	36938.55	3	3
2044	2a	1	2792.527	11613.51	0	11613.51	42784.57	0	42784.57	FCEV	0	2792.527	3	7
2044	2a	1	18282.14	76031.38	40709.37	35322.01	443916.2	237685.4	206230.8	PHEV	9788.778	8493.358	3	8
2044	2a	1	79624.07	335700.7	335700.7	0	1606087	1606087	0	ICE	79624.07	0	3	1
2044	2a	1	842.3935	3551.59	3551.59	0	17110.81	17110.81	0	ICE	842.3935	0	3	2
2044	2a	1	49575.87	209015.3	0	209015.3	875411.8	0	875411.8	BEV	0	49575.87	3	3
2044	2a	1	4177.396	17612.2	0	17612.2	68665.74	0	68665.74	FCEV	0	4177.396	3	7
2044	2a	1	22911.5	96596.49	50864.95	45731.54	577108.8	303889	273219.8	PHEV	12064.54	10846.96	3	8
2044	2a	1	79320.42	338964.7	338964.7	0	1654879	1654879	0	ICE	79320.42	0	3	1
2044	2a	1	839.181	3586.122	3586.122	0	17627.98	17627.98	0	ICE	839.181	0	3	2
2044	2a	1	64803.85	276930.2	0	276930.2	1196662	0	1196662	BEV	0	64803.85	3	3
2044	2a	1	6031.089	25773.01	0	25773.01	105438.3	0	105438.3	FCEV	0	6031.089	3	7
2044	2a	1	27899.17	119223.2	61723.55	57499.65	728782.4	377301.1	351481.4	PHEV	14443.8	13455.37	3	8
2044	2a	1	76985.53	333397.4	333397.4	0	1662174	1662174	0	ICE	76985.53	0	3	1
2044	2a	1	814.4787	3527.222	3527.222	0	17703.32	17703.32	0	ICE	814.4787	0	3	2
2044	2a	1	83068.33	359739.8	0	359739.8	1603663	0	1603663	BEV	0	83068.33	3	3
2044	2a	1	8474.225	36698.9	0	36698.9	156723.9	0	156723.9	FCEV	0	8474.225	3	7
2044	2a	1	33223.16	143877.9	73213.28	70664.58	900071.9	458008	442063.9	PHEV	16905.84	16317.32	3	8
2044	2a	1	71269.91	312728.1	312728.1	0	1593500	1593500	0	ICE	71269.91	0	3	1
2044	2a	1	754.0096	3308.549	3308.549	0	16969.9	16969.9	0	ICE	754.0096	0	3	2
2044	2a	1	103280.5	453188.5	0	453188.5	2084356	0	2084356	BEV	0	103280.5	3	3
2044	2a	1	11475.61	50354.28	0	50354.28	223765.1	0	223765.1	FCEV	0	11475.61	3	7
2044	2a	1	38252.03	167847.6	83923.8	83923.8	1075297	537648.6	537648.6	PHEV	19126.01	19126.01	3	8
2044	2a	1	62929.15	279734.5	279734.5	0	1457807	1457807	0	ICE	62929.15	0	3	1
2044	2a	1	665.7673	2959.489	2959.489	0	15523.27	15523.27	0	ICE	665.7673	0	3	2
2044	2a	1	124982.2	555574.6	0	555574.6	2629207	0	2629207	BEV	0	124982.2	3	3
2044	2a	1	15447.24	68666.52	0	68666.52	316252.2	0	316252.2	FCEV	0	15447.24	3	7
2044	2a	1	44346.13	197128.8	98564.38	98564.38	1292670	646334.9	646334.9	PHEV	22173.07	22173.07	3	8
2044	2a	1	50992.59	229595.1	229595.1	0	1224504	1224504	0	ICE	50992.59	0	3	1
2044	2a	1	539.4829	2429.033	2429.033	0	13037.84	13037.84	0	ICE	539.4829	0	3	2

2044	2a	1	146912.6	661476.9	0	661476.9	3221590	0	3221590	BEV	0	146912.6	3	3
2044	2a	1	20033.54	90201.4	0	90201.4	429821.7	0	429821.7	FCEV	0	20033.54	3	7
2044	2a	1	49867.03	224527.3	112263.6	112263.6	1508231	754115.4	754115.4	PHEV	24933.51	24933.51	3	8
2044	2a	1	36779.77	167708.8	167708.8	0	915823.2	915823.2	0	ICE	36779.77	0	3	1
2044	2a	1	389.1165	1774.297	1774.297	0	9750.48	9750.48	0	ICE	389.1165	0	3	2
2044	2a	1	171793	783343.2	0	783343.2	3926706	0	3926706	BEV	0	171793	3	3
2044	2a	1	25670.21	117051.3	0	117051.3	576392.3	0	576392.3	FCEV	0	25670.21	3	7
2044	2a	1	55694.74	253957.4	126978.7	126978.7	1748734	874366.8	874366.8	PHEV	27847.37	27847.37	3	8
2044	2a	1	19531	90176.57	90176.57	0	504443	504443	0	ICE	19531	0	3	1
2044	2a	1	206.6308	954.0351	954.0351	0	5370.328	5370.328	0	ICE	206.6308	0	3	2
2044	2a	1	196077.7	905310.5	0	905310.5	4671490	0	4671490	BEV	0	196077.7	3	3
2044	2a	1	31919.63	147376.1	0	147376.1	749371.6	0	749371.6	FCEV	0	31919.63	3	7
2044	2a	1	60606.9	279828.1	139914.1	139914.1	1976609	988304.3	988304.3	PHEV	30303.45	30303.45	3	8
2044	2a	1	222007	1037747	0	1037747	5511978	0	5511978	BEV	0	222007	3	3
2044	2a	1	39177.7	183131.9	0	183131.9	960839.9	0	960839.9	FCEV	0	39177.7	3	7
2044	2a	1	65296.17	305219.8	152609.9	152609.9	2212434	1106217	1106217	PHEV	32648.09	32648.09	3	8
2044	2a	1	231006.5	1093049	0	1093049	5978637	0	5978637	BEV	0	231006.5	3	3
2044	2a	1	44001.25	208199.8	0	208199.8	1126310	0	1126310	FCEV	0	44001.25	3	7
2044	2a	1	64508	305231.2	152615.6	152615.6	2267630	1133815	1133815	PHEV	32254	32254	3	8
2044	2a	1	239156.4	1145313	0	1145313	6450657	0	6450657	BEV	0	239156.4	3	3
2044	2a	1	48983.84	234582.1	0	234582.1	1308172	0	1308172	FCEV	0	48983.84	3	7
2044	2a	1	63250.3	302903.8	151451.9	151451.9	2306962	1153481	1153481	PHEV	31625.15	31625.15	3	8
2044	2a	1	245283.8	1188709	0	1188709	6894816	0	6894816	BEV	0	245283.8	3	3
2044	2a	1	53842.79	260936.2	0	260936.2	1499998	0	1499998	FCEV	0	53842.79	3	7
2044	2a	1	61266.9	296915.3	148457.7	148457.7	2319023	1159511	1159511	PHEV	30633.45	30633.45	3	8
2044	2a	1	252214.5	1236746	0	1236746	7386787	0	7386787	BEV	0	252214.5	3	3
2044	2a	1	59161.41	290101	0	290101	1718731	0	1718731	FCEV	0	59161.41	3	7
2044	2a	1	59309.69	290828	145414	145414	2329201	1164600	1164600	PHEV	29654.84	29654.84	3	8
2044	2a	1	257707.3	1278445	0	1278445	7862782	0	7862782	BEV	0	257707.3	3	3
2044	2a	1	64426.82	319611.1	0	319611.1	1951355	0	1951355	FCEV	0	64426.82	3	7
2044	2a	1	56847.19	282009.8	141004.9	141004.9	2315863	1157931	1157931	PHEV	28423.6	28423.6	3	8
2044	2a	1	261985.9	1314679	0	1314679	8324291	0	8324291	BEV	0	261985.9	3	3
2044	2a	1	69641.82	349471.7	0	349471.7	2198190	0	2198190	FCEV	0	69641.82	3	7
2044	2a	1	53985.9	270908.3	135454.1	135454.1	2279935	1139968	1139968	PHEV	26992.95	26992.95	3	8
2044	2a	1	268901.3	1364787	0	1364787	8896258	0	8896258	BEV	0	268901.3	3	3
2044	2a	1	75843.96	384940	0	384940	2494256	0	2494256	FCEV	0	75843.96	3	7
2044	2a	1	51513.66	261453.5	130726.7	130726.7	2253731	1126866	1126866	PHEV	25756.83	25756.83	3	8
2044	2a	1	276033.7	1416801	0	1416801	9504566	0	9504566	BEV	0	276033.7	3	3
2044	2a	1	82451.62	423200.2	0	423200.2	2823800	0	2823800	FCEV	0	82451.62	3	7
2044	2a	1	48884.36	250909.2	125454.6	125454.6	2212642	1106321	1106321	PHEV	24442.18	24442.18	3	8
2044	2a	1	249929	1297131	0	1297131	8947467	0	8947467	BEV	0	249929	3	3
2044	2a	1	78924.94	409620.4	0	409620.4	2811937	0	2811937	FCEV	0	78924.94	3	7
2044	2a	1	40644.87	210946.9	105473.4	105473.4	1898359	949179.4	949179.4	PHEV	20322.43	20322.43	3	8
2044	2a	1	12316.76	32876.39	32876.39	0	103096.3	103096.3	0	ICE	12316.76	0	4	1
2044	2a	1	15002.23	40904.04	40904.04	0	129071.5	129071.5	0	ICE	15002.23	0	4	1
2044	2a	1	19.05495	51.9539	51.9539	0	131.9838	131.9838	0	ICE	19.05495	0	4	2
2044	2a	1	16647.43	46343.44	46343.44	0	148532.2	148532.2	0	ICE	16647.43	0	4	1

2044	2a	1	16677.14	47381.58	47381.58	0	154745.8	154745.8	0	ICE	16677.14	0	4	1
2044	2a	1	16790.66	48666.06	48666.06	0	159520	159520	0	ICE	16790.66	0	4	1
2044	2a	1	28.78168	83.42083	83.42083	0	226.9728	226.9728	0	ICE	28.78168	0	4	2
2044	2a	1	14801.03	43747.24	43747.24	0	142505.2	142505.2	0	ICE	14801.03	0	4	1
2044	2a	1	13853.13	41739.19	41739.19	0	137658.4	137658.4	0	ICE	13853.13	0	4	1
2044	2a	1	13121.05	40285.16	40285.16	0	134988.9	134988.9	0	ICE	13121.05	0	4	1
2044	2a	1	9574.667	29945.35	29945.35	0	101527.5	101527.5	0	ICE	9574.667	0	4	1
2044	2a	1	3940.87	12551.08	12551.08	0	42984.69	42984.69	0	ICE	3940.87	0	4	1
2044	2a	1	5688.826	18443.97	18443.97	0	63844.58	63844.58	0	ICE	5688.826	0	4	1
2044	2a	1	8392.144	27689.29	27689.29	0	97330.56	97330.56	0	ICE	8392.144	0	4	1
2044	2a	1	244.5762	806.962	806.962	0	2711.11	2711.11	0	ICE	244.5762	0	4	2
2044	2a	1	8815.833	29592.28	29592.28	0	105764.8	105764.8	0	ICE	8815.833	0	4	1
2044	2a	1	10469.12	35741.67	35741.67	0	129299.4	129299.4	0	ICE	10469.12	0	4	1
2044	2a	1	225.9308	771.3301	771.3301	0	2735.941	2735.941	0	ICE	225.9308	0	4	2
2044	2a	1	17403.52	60412.84	60412.84	0	223523.9	223523.9	0	ICE	17403.52	0	4	1
2044	2a	1	561.0484	1947.567	1947.567	0	6949.367	6949.367	0	ICE	561.0484	0	4	2
2044	2a	1	20473.64	72243.08	72243.08	0	274427.5	274427.5	0	ICE	20473.64	0	4	1
2044	2a	1	24129.76	86526.43	86526.43	0	335482	335482	0	ICE	24129.76	0	4	1
2044	2a	1	23763.89	86575.89	86575.89	0	343154.1	343154.1	0	ICE	23763.89	0	4	1
2044	2a	1	828.6507	3018.915	3018.915	0	11976.8	11976.8	0	ICE	828.6507	0	4	2
2044	2a	1	198.8155	724.3186	434.5911	289.7274	2682.089	1609.254	1072.836	PHEV	119.2893	79.52619	4	8
2044	2a	1	27643.37	102293.2	102293.2	0	411745.2	411745.2	0	ICE	27643.37	0	4	1
2044	2a	1	963.9287	3566.98	3566.98	0	14370.42	14370.42	0	ICE	963.9287	0	4	2
2044	2a	1	0.483565	1.789412	0	1.789412	4.332808	0	4.332808	BEV	0	0.483565	4	3
2044	2a	1	0.009869	0.036519	0	0.036519	0.088425	0	0.088425	FCEV	0	0.009869	4	7
2044	2a	1	591.75	2189.747	1313.848	875.899	8593.832	5156.299	3437.533	PHEV	355.05	236.7	4	8
2044	2a	1	32755.1	123085.5	123085.5	0	501857	501857	0	ICE	32755.1	0	4	1
2044	2a	1	1152.958	4332.529	4332.529	0	17700.5	17700.5	0	ICE	1152.958	0	4	2
2044	2a	1	280.7918	1055.146	0	1055.146	2790.61	0	2790.61	BEV	0	280.7918	4	3
2044	2a	1	6.56823	24.68177	0	24.68177	61.79562	0	61.79562	FCEV	0	6.56823	4	7
2044	2a	1	730.5626	2745.271	1631.476	1113.796	11810.63	7018.887	4791.74	PHEV	434.1629	296.3997	4	8
2044	2a	1	38565.61	147129.3	147129.3	0	607708.6	607708.6	0	ICE	38565.61	0	4	1
2044	2a	1	1378.774	5260.079	5260.079	0	21810.19	21810.19	0	ICE	1378.774	0	4	2
2044	2a	1	665.016	2537.062	0	2537.062	7779.204	0	7779.204	BEV	0	665.016	4	3
2044	2a	1	17.55174	66.96059	0	66.96059	173.3293	0	173.3293	FCEV	0	17.55174	4	7
2044	2a	1	895.6075	3416.778	2011.018	1405.76	14576.5	8579.309	5997.187	PHEV	527.129	368.4785	4	8
2044	2a	1	42415.37	164246.3	164246.3	0	686306.1	686306.1	0	ICE	42415.37	0	4	1
2044	2a	1	1543.201	5975.784	5975.784	0	25114.86	25114.86	0	ICE	1543.201	0	4	2
2044	2a	1	2244.662	8692.074	0	8692.074	27144.76	0	27144.76	BEV	0	2244.662	4	3
2044	2a	1	76.94469	297.9552	0	297.9552	797.1755	0	797.1755	FCEV	0	76.94469	4	7
2044	2a	1	2679.12	10374.43	6014.208	4360.227	48423.67	28071.89	20351.78	PHEV	1553.124	1125.996	4	8
2044	2a	1	45776.5	179884.3	179884.3	0	762684.5	762684.5	0	ICE	45776.5	0	4	1
2044	2a	1	1674.625	6580.639	6580.639	0	28082.76	28082.76	0	ICE	1674.625	0	4	2
2044	2a	1	4503.423	17696.74	0	17696.74	57772.72	0	57772.72	BEV	0	4503.423	4	3
2044	2a	1	190.4366	748.3434	0	748.3434	2069.077	0	2069.077	FCEV	0	190.4366	4	7
2044	2a	1	4769.5	18742.32	10699.19	8043.134	91404.73	52179.04	39225.69	PHEV	2722.703	2046.797	4	8
2044	2a	1	48712.58	194212.7	194212.7	0	836669.3	836669.3	0	ICE	48712.58	0	4	1

2044	2a	1	1793.252	7149.533	7149.533	0	31018.65	31018.65	0	ICE	1793.252	0	4	2
2044	2a	1	7596.992	30288.52	0	30288.52	103405	0	103405	BEV	0	7596.992	4	3
2044	2a	1	383.0416	1527.152	0	1527.152	4361.969	0	4361.969	FCEV	0	383.0416	4	7
2044	2a	1	7140.738	28469.48	15999.85	12469.63	143413.2	80598.24	62815	PHEV	4013.095	3127.643	4	8
2044	2a	1	50777.75	205355.4	205355.4	0	900237.9	900237.9	0	ICE	50777.75	0	4	1
2044	2a	1	1880.198	7603.896	7603.896	0	33588.48	33588.48	0	ICE	1880.198	0	4	2
2044	2a	1	11619.05	46989.76	0	46989.76	167513	0	167513	BEV	0	11619.05	4	3
2044	2a	1	681.8196	2757.415	0	2757.415	8141.644	0	8141.644	FCEV	0	681.8196	4	7
2044	2a	1	9684.494	39166.03	21664.41	17501.62	203212.1	112405.3	90806.79	PHEV	5356.909	4327.586	4	8
2044	2a	1	52309.6	214547.3	214547.3	0	958783.5	958783.5	0	ICE	52309.6	0	4	1
2044	2a	1	1947.376	7987.144	7987.144	0	35984.9	35984.9	0	ICE	1947.376	0	4	2
2044	2a	1	16813.22	68959.27	0	68959.27	256180.4	0	256180.4	BEV	0	16813.22	4	3
2044	2a	1	1127.716	4625.317	0	4625.317	14854.36	0	14854.36	FCEV	0	1127.716	4	7
2044	2a	1	12403.03	50870.91	27688.31	23182.6	271453.1	147748.1	123705.1	PHEV	6750.793	5652.239	4	8
2044	2a	1	52896.87	219986.4	219986.4	0	1003225	1003225	0	ICE	52896.87	0	4	1
2044	2a	1	1969.239	8189.631	8189.631	0	37645.56	37645.56	0	ICE	1969.239	0	4	2
2044	2a	1	23278.76	96811.22	0	96811.22	374860.7	0	374860.7	BEV	0	23278.76	4	3
2044	2a	1	1759.857	7318.857	0	7318.857	25554.11	0	25554.11	FCEV	0	1759.857	4	7
2044	2a	1	15151.66	63012.43	33738.66	29273.78	346323	185431.2	160891.8	PHEV	8112.633	7039.03	4	8
2044	2a	1	53147.3	224072.7	224072.7	0	1043922	1043922	0	ICE	53147.3	0	4	1
2044	2a	1	1978.562	8341.755	8341.755	0	39165.99	39165.99	0	ICE	1978.562	0	4	2
2044	2a	1	31593.67	133201.1	0	133201.1	537050.2	0	537050.2	BEV	0	31593.67	4	3
2044	2a	1	2662.168	11223.89	0	11223.89	41905.2	0	41905.2	FCEV	0	2662.168	4	7
2044	2a	1	18063.01	76154.93	40101.01	36053.92	430980.8	226942.2	204038.6	PHEV	9511.466	8551.546	4	8
2044	2a	1	51922.2	221882.2	221882.2	0	1056733	1056733	0	ICE	51922.2	0	4	1
2044	2a	1	1932.954	8260.208	8260.208	0	39640.63	39640.63	0	ICE	1932.954	0	4	2
2044	2a	1	41519.32	177427	0	177427	744232.8	0	744232.8	BEV	0	41519.32	4	3
2044	2a	1	3864.071	16512.57	0	16512.57	65293.62	0	65293.62	FCEV	0	3864.071	4	7
2044	2a	1	20724.89	88564.9	45851.31	42713.58	515877.9	267077.4	248800.5	PHEV	10729.57	9995.316	4	8
2044	2a	1	49062.89	212474.2	212474.2	0	1035292	1035292	0	ICE	49062.89	0	4	1
2044	2a	1	1826.508	7909.967	7909.967	0	38831.25	38831.25	0	ICE	1826.508	0	4	2
2044	2a	1	53027.67	229644.3	0	229644.3	1001655	0	1001655	BEV	0	53027.67	4	3
2044	2a	1	5409.624	23427.19	0	23427.19	97540.03	0	97540.03	FCEV	0	5409.624	4	7
2044	2a	1	22923.32	99272.86	50515.7	48757.16	595153.1	302847.9	292305.2	PHEV	11664.69	11258.62	4	8
2044	2a	1	44558.69	195520.9	195520.9	0	975326.1	975326.1	0	ICE	44558.69	0	4	1
2044	2a	1	1658.826	7278.83	7278.83	0	36577.97	36577.97	0	ICE	1658.826	0	4	2
2044	2a	1	66091.35	290004.9	0	290004.9	1314873	0	1314873	BEV	0	66091.35	4	3
2044	2a	1	7343.483	32222.76	0	32222.76	140730.5	0	140730.5	FCEV	0	7343.483	4	7
2044	2a	1	24478.28	107409.2	53704.61	53704.61	662608.8	331304.4	331304.4	PHEV	12239.14	12239.14	4	8
2044	2a	1	38739.49	172205.9	172205.9	0	879830.7	879830.7	0	ICE	38739.49	0	4	1
2044	2a	1	1442.189	6410.864	6410.864	0	32993.39	32993.39	0	ICE	1442.189	0	4	2
2044	2a	1	78768.76	350145.3	0	350145.3	1634753	0	1634753	BEV	0	78768.76	4	3
2044	2a	1	9735.465	43276.38	0	43276.38	196156.5	0	196156.5	FCEV	0	9735.465	4	7
2044	2a	1	27948.7	124238.4	62119.21	62119.21	786186	393093	393093	PHEV	13974.35	13974.35	4	8
2044	2a	1	31162.7	140310.7	140310.7	0	734547	734547	0	ICE	31162.7	0	4	1
2044	2a	1	1160.122	5223.471	5223.471	0	27543.05	27543.05	0	ICE	1160.122	0	4	2
2044	2a	1	91934.44	413936.6	0	413936.6	1990173	0	1990173	BEV	0	91934.44	4	3

2044	2a	1	12536.51	56445.91	0	56445.91	264998.6	0	264998.6	FCEV	0	12536.51	4	7
2044	2a	1	31205.61	140503.9	70251.94	70251.94	912460.8	456230.4	456230.4	PHEV	15602.8	15602.8	4	8
2044	2a	1	22335.64	101846.3	101846.3	0	546541.1	546541.1	0	ICE	22335.64	0	4	1
2044	2a	1	831.5088	3791.522	3791.522	0	20492.12	20492.12	0	ICE	831.5088	0	4	2
2044	2a	1	106846.5	487199.7	0	487199.7	2412349	0	2412349	BEV	0	106846.5	4	3
2044	2a	1	15965.57	72799.96	0	72799.96	353517.1	0	353517.1	FCEV	0	15965.57	4	7
2044	2a	1	34639.3	157948.6	78974.31	78974.31	1053284	526642.2	526642.2	PHEV	17319.65	17319.65	4	8
2044	2a	1	11861.06	54763.68	54763.68	0	301364.9	301364.9	0	ICE	11861.06	0	4	1
2044	2a	1	441.5621	2038.736	2038.736	0	11298.85	11298.85	0	ICE	441.5621	0	4	2
2044	2a	1	121971.1	563152.8	0	563152.8	2872022	0	2872022	BEV	0	121971.1	4	3
2044	2a	1	19855.76	91676.03	0	91676.03	460070.2	0	460070.2	FCEV	0	19855.76	4	7
2044	2a	1	37700.81	174068.4	87034.21	87034.21	1192630	596314.8	596314.8	PHEV	18850.41	18850.41	4	8
2044	2a	1	139058.9	650015.3	0	650015.3	3413889	0	3413889	BEV	0	139058.9	4	3
2044	2a	1	24539.8	114708.6	0	114708.6	594401.9	0	594401.9	FCEV	0	24539.8	4	7
2044	2a	1	40899.66	191181	95590.49	95590.49	1345948	672974	672974	PHEV	20449.83	20449.83	4	8
2044	2a	1	144954.5	685878.3	0	685878.3	3711304	0	3711304	BEV	0	144954.5	4	3
2044	2a	1	27610.38	130643.5	0	130643.5	698412.1	0	698412.1	FCEV	0	27610.38	4	7
2044	2a	1	40478.18	191529.8	95764.91	95764.91	1383403	691701.4	691701.4	PHEV	20239.09	20239.09	4	8
2044	2a	1	151841.2	727163.1	0	727163.1	4053013	0	4053013	BEV	0	151841.2	4	3
2044	2a	1	31100.01	148937	0	148937	821123.7	0	821123.7	FCEV	0	31100.01	4	7
2044	2a	1	40157.83	192314.7	96157.33	96157.33	1424950	712475.1	712475.1	PHEV	20078.92	20078.92	4	8
2044	2a	1	157470.1	763141.1	0	763141.1	4381223	0	4381223	BEV	0	157470.1	4	3
2044	2a	1	34566.61	167518.8	0	167518.8	952292.1	0	952292.1	FCEV	0	34566.61	4	7
2044	2a	1	39332.82	190617.1	95308.55	95308.55	1448860	724429.8	724429.8	PHEV	19666.41	19666.41	4	8
2044	2a	1	163842	803407.3	0	803407.3	4749681	0	4749681	BEV	0	163842	4	3
2044	2a	1	38432.07	188453.6	0	188453.6	1104228	0	1104228	FCEV	0	38432.07	4	7
2044	2a	1	38528.39	188925.9	94462.94	94462.94	1472466	736233	736233	PHEV	19264.19	19264.19	4	8
2044	2a	1	167317.5	830035.5	0	830035.5	5052942	0	5052942	BEV	0	167317.5	4	3
2044	2a	1	41829.38	207508.9	0	207508.9	1253080	0	1253080	FCEV	0	41829.38	4	7
2044	2a	1	36908.28	183096.1	91548.03	91548.03	1462905	731452.5	731452.5	PHEV	18454.14	18454.14	4	8
2044	2a	1	170965.1	857925	0	857925	5376506	0	5376506	BEV	0	170965.1	4	3
2044	2a	1	45446.42	228056	0	228056	1418809	0	1418809	FCEV	0	45446.42	4	7
2044	2a	1	35229.78	176787.6	88393.81	88393.81	1446780	723390.1	723390.1	PHEV	17614.89	17614.89	4	8
2044	2a	1	175592.2	891204.2	0	891204.2	5746460	0	5746460	BEV	0	175592.2	4	3
2044	2a	1	49526.01	251365.3	0	251365.3	1610173	0	1610173	FCEV	0	49526.01	4	7
2044	2a	1	33638.36	170728.8	85364.39	85364.39	1428874	714437.1	714437.1	PHEV	16819.18	16819.18	4	8
2044	2a	1	178776.6	917608.6	0	917608.6	6086142	0	6086142	BEV	0	178776.6	4	3
2044	2a	1	53400.81	274090.9	0	274090.9	1807221	0	1807221	FCEV	0	53400.81	4	7
2044	2a	1	31660.56	162504.5	81252.23	81252.23	1389237	694618.3	694618.3	PHEV	15830.28	15830.28	4	8
2044	2a	1	154962.1	804253.3	0	804253.3	5473196	0	5473196	BEV	0	154962.1	4	3
2044	2a	1	48935.4	253974.7	0	253974.7	1719299	0	1719299	FCEV	0	48935.4	4	7
2044	2a	1	25200.81	130792.2	65396.11	65396.11	1135816	567907.8	567907.8	PHEV	12600.41	12600.41	4	8
2044	2a	1	28.43377	75.89655	75.89655	0	125.7588	125.7588	0	ICE	28.43377	0	1	2
2044	2a	1	4.102002	11.18423	0	11.18423	25.08534	0	25.08534	BEV	0	4.102002	1	3
2044	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2044	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2044	2a	1	62.90114	175.1055	175.1055	0	298.8344	298.8344	0	ICE	62.90114	0	1	2

2044	2a	1	80.95094	229.9905	229.9905	0	414.4014	414.4014	0	ICE	80.95094	0	1	2
2044	2a	1	27.00157	78.26134	78.26134	0	155.7514	155.7514	0	ICE	27.00157	0	1	2
2044	2a	1	48.64156	143.7694	143.7694	0	285.2856	285.2856	0	ICE	48.64156	0	1	2
2044	2a	1	105.2618	335.2431	335.2431	0	758.5866	758.5866	0	ICE	105.2618	0	1	2
2044	2a	1	283.0858	950.2399	950.2399	0	2417.925	2417.925	0	ICE	283.0858	0	1	2
2044	2a	1	421.801	1440.033	1440.033	0	3855.645	3855.645	0	ICE	421.801	0	1	2
2044	2a	1	362.8036	1238.615	0	1238.615	3599.427	0	3599.427	BEV	0	362.8036	1	3
2044	2a	1	0.021315	0.07277	0	0.07277	0.21147	0	0.21147	FCEV	0	0.021315	1	7
2044	2a	1	379.2161	1294.648	776.7886	517.8591	3348.559	2009.135	1339.423	PHEV	227.5297	151.6865	1	8
2044	2a	1	477.0925	1656.131	0	1656.131	4980.574	0	4980.574	BEV	0	477.0925	1	3
2044	2a	1	0.066848	0.232049	0	0.232049	0.697853	0	0.697853	FCEV	0	0.066848	1	7
2044	2a	1	602.3652	2090.99	1254.594	836.3961	5641.854	3385.112	2256.742	PHEV	361.4191	240.9461	1	8
2044	2a	1	509.451	1797.644	1797.644	0	5305.364	5305.364	0	ICE	509.451	0	1	2
2044	2a	1	1220.337	4306.069	0	4306.069	13468.81	0	13468.81	BEV	0	1220.337	1	3
2044	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2044	2a	1	580.303	2047.651	1228.591	819.0605	5781.381	3468.829	2312.553	PHEV	348.1818	232.1212	1	8
2044	2a	1	1981.845	5744.179	5744.179	0	20706.44	20706.44	0	ICE	1981.845	0	2	1
2044	2a	1	4034.063	13541.22	13541.22	0	53205.16	53205.16	0	ICE	4034.063	0	2	1
2044	2a	1	6061.901	20695.39	20695.39	0	82461.12	82461.12	0	ICE	6061.901	0	2	1
2044	2a	1	7821.588	27151.08	27151.08	0	108999.8	108999.8	0	ICE	7821.588	0	2	1
2044	2a	1	3.187372	9.968696	9.968696	0	33.8752	33.8752	0	ICE	3.187372	0	3	2
2044	2a	1	95.01601	318.9422	318.9422	0	1199.642	1199.642	0	ICE	95.01601	0	3	2
2044	2a	1	73.74942	251.7813	251.7813	0	943.4012	943.4012	0	ICE	73.74942	0	3	2
2044	2a	1	334.6877	1180.976	1180.976	0	4651.04	4651.04	0	ICE	334.6877	0	3	2
2044	2a	1	360.8374	1293.92	0	1293.92	2869.689	0	2869.689	BEV	0	360.8374	3	3
2044	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2044	2a	1	32.83885	117.7562	70.65372	47.10248	462.7203	277.6322	185.0881	PHEV	19.70331	13.13554	3	8
2044	2a	1	43.84691	129.5979	129.5979	0	376.5622	376.5622	0	ICE	43.84691	0	4	2
2044	2a	1	56.43973	170.0518	170.0518	0	501.5579	501.5579	0	ICE	56.43973	0	4	2
2044	2a	1	71.22421	218.6775	218.6775	0	684.8475	684.8475	0	ICE	71.22421	0	4	2
2044	2a	1	50.02019	156.4411	156.4411	0	498.36	498.36	0	ICE	50.02019	0	4	2
2044	2a	1	64.45971	205.2945	205.2945	0	673.5622	673.5622	0	ICE	64.45971	0	4	2
2044	2a	1	451.9572	1517.094	1517.094	0	5125.291	5125.291	0	ICE	451.9572	0	4	2
2044	2a	1	1192.347	4207.304	4207.304	0	15337.88	15337.88	0	ICE	1192.347	0	4	2
2044	2a	1	827.3145	2966.651	2966.651	0	11145.59	11145.59	0	ICE	827.3145	0	4	2
2044	2a	1	1.799445	5.318601	0	5.318601	12.46209	0	12.46209	BEV	0	1.799445	1	3
2044	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2044	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2044	2a	1	75.00025	251.7548	0	251.7548	708.9567	0	708.9567	BEV	0	75.00025	1	3
2044	2a	1	0.283436	0.951414	0	0.951414	2.67924	0	2.67924	FCEV	0	0.283436	1	7
2044	2a	1	157.6533	529.1979	317.5187	211.6791	1305.361	783.2165	522.1443	PHEV	94.59196	63.06131	1	8
2044	2a	1	881.793	3162.004	0	3162.004	10245.6	0	10245.6	BEV	0	881.793	1	3
2044	2a	1	26.84685	96.26959	0	96.26959	311.9351	0	311.9351	FCEV	0	26.84685	1	7
2044	2a	1	634.1271	2273.904	1364.342	909.5615	6710.233	4026.14	2684.093	PHEV	380.4763	253.6508	1	8
2044	2a	1	12.34684	36.49344	36.49344	0	121.1295	121.1295	0	ICE	12.34684	0	3	2
2044	2a	1	12.99981	39.16817	39.16817	0	135.9407	135.9407	0	ICE	12.99981	0	3	2
2044	2a	1	18.79071	53.38649	53.38649	0	150.0589	150.0589	0	ICE	18.79071	0	4	2

2044	2a	1	110.1211	357.028	357.028	0	1192.505	1192.505	0	ICE	110.1211	0	4	2
2044	2a	1	7.695169	21.42196	0	21.42196	48.41561	0	48.41561	BEV	0	7.695169	1	3
2044	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2044	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2044	2a	1	91.39484	301.5509	0	301.5509	825.8538	0	825.8538	BEV	0	91.39484	1	3
2044	2a	1	0.902966	2.979274	0	2.979274	8.159304	0	8.159304	FCEV	0	0.902966	1	7
2044	2a	1	25.40508	83.82229	50.29337	33.52892	198.0057	118.8034	79.20228	PHEV	15.24305	10.16203	1	8
2044	2a	1	76.16886	273.1324	273.1324	0	826.3934	826.3934	0	ICE	76.16886	0	1	2
2044	2a	1	75.27057	261.2867	0	261.2867	784.4955	0	784.4955	BEV	0	75.27057	2	3
2044	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2044	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2044	2a	1	9.031869	28.24771	28.24771	0	59.53322	59.53322	0	ICE	9.031869	0	1	2
2044	2a	1	1.724906	4.900648	4.900648	0	14.79781	14.79781	0	ICE	1.724906	0	2	2
2044	2a	1	6.400439	20.75112	20.75112	0	72.00894	72.00894	0	ICE	6.400439	0	3	2
2044	2a	1	17.22734	59.80127	0	59.80127	124.9023	0	124.9023	BEV	0	17.22734	3	3
2044	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2044	2a	1	7.800001	27.07614	16.24569	10.83046	101.8076	61.08458	40.72306	PHEV	4.680001	3.12	3	8
2044	2a	1	7.30572	20.33781	20.33781	0	58.8885	58.8885	0	ICE	7.30572	0	4	2
2044	2a	1	12.92787	42.65462	42.65462	0	158.9693	158.9693	0	ICE	12.92787	0	3	2
2044	2a	1	3.637179	9.708504	9.708504	0	27.34268	27.34268	0	ICE	3.637179	0	4	2
2044	2a	1	2.812704	7.830061	0	7.830061	11.98616	0	11.98616	BEV	0	2.812704	3	3
2044	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2044	2a	1	0	0	0	0	0	0	0	PHEV	0	0	3	8
2044	2a	1	16.15269	44.96619	0	44.96619	70.29619	0	70.29619	BEV	0	16.15269	4	3
2044	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2044	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2044	2a	1	6.391823	19.62462	19.62462	0	38.00344	38.00344	0	ICE	6.391823	0	1	2
2044	2a	1	15.29184	49.57827	0	49.57827	132.5513	0	132.5513	BEV	0	15.29184	1	3
2044	2a	1	1.552471	5.033327	0	5.033327	13.45699	0	13.45699	FCEV	0	1.552471	1	7
2044	2a	1	1.630094	5.284993	3.170996	2.113997	11.78884	7.073304	4.715536	PHEV	0.978056	0.652038	1	8
2044	2a	1	29.63632	99.48081	0	99.48081	278.4157	0	278.4157	BEV	0	29.63632	2	3
2044	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2044	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2044	2a	1	5.023339	15.99858	15.99858	0	56.89142	56.89142	0	ICE	5.023339	0	3	2
2044	2a	1	1.963872	5.917106	0	5.917106	14.26369	0	14.26369	BEV	0	1.963872	1	3
2044	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2044	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2044	2a	1	9.53872	29.83292	0	29.83292	73.60464	0	73.60464	BEV	0	9.53872	1	3
2044	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2044	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2044	2a	1	8.447108	26.90277	0	26.90277	70.83423	0	70.83423	BEV	0	8.447108	1	3
2044	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2044	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2044	2a	1	3.008601	9.581941	9.581941	0	31.54237	31.54237	0	ICE	3.008601	0	2	2
2044	2a	1	37.23602	127.1241	0	127.1241	367.4266	0	367.4266	BEV	0	37.23602	2	3
2044	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2044	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8

2044	2a	1	1.725718	5.298422	5.298422	0	18.73975	18.73975	0	ICE	1.725718	0	3	2
2044	2a	1	1.748298	4.967106	0	4.967106	11.33465	0	11.33465	BEV	0	1.748298	1	3
2044	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2044	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2044	2a	1	3.330482	10.22548	0	10.22548	25.12957	0	25.12957	BEV	0	3.330482	1	3
2044	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2044	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2044	2a	1	4.30172	13.45389	0	13.45389	33.61662	0	33.61662	BEV	0	4.30172	2	3
2044	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2044	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2044	2a	1	0.793999	2.665232	2.665232	0	8.805148	8.805148	0	ICE	0.793999	0	2	2
2044	2a	1	0.249976	0.753174	0	0.753174	1.42874	0	1.42874	BEV	0	0.249976	4	3
2044	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2044	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2044	2a	1	1.094467	2.984096	2.984096	0	7.851566	7.851566	0	ICE	1.094467	0	2	2
2044	2a	1	0.237469	0.674676	0.674676	0	2.286055	2.286055	0	ICE	0.237469	0	3	2
2044	2a	1	2.631234	8.380084	0	8.380084	15.72596	0	15.72596	BEV	0	2.631234	3	3
2044	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2044	2a	1	0	0	0	0	0	0	0	PHEV	0	0	3	8
2044	2a	1	1.570159	5.180628	0	5.180628	10.14359	0	10.14359	BEV	0	1.570159	3	3
2044	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2044	2a	1	1.087033	3.586589	2.151953	1.434636	12.422	7.4532	4.9688	PHEV	0.65222	0.434813	3	8
2044	2a	1	0.228484	0.806225	0	0.806225	1.698085	0	1.698085	BEV	0	0.228484	4	3
2044	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2044	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2044	2a	1	6.751303	18.02085	0	18.02085	39.19193	0	39.19193	BEV	0	6.751303	2	3
2044	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2044	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2044	2a	1	2.405257	6.558005	0	6.558005	14.54418	0	14.54418	BEV	0	2.405257	2	3
2044	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2044	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2044	2a	1	2.01119	5.59879	5.59879	0	20.24782	20.24782	0	ICE	2.01119	0	2	2
2044	2a	1	1.068257	3.218636	0	3.218636	7.648758	0	7.648758	BEV	0	1.068257	2	3
2044	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2044	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2044	2a	1	1.786514	5.485081	5.485081	0	18.1691	18.1691	0	ICE	1.786514	0	2	2
2044	2a	1	0.620923	1.906402	0	1.906402	4.653079	0	4.653079	BEV	0	0.620923	2	3
2044	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2044	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2044	2a	1	2.174674	6.801424	6.801424	0	26.00811	26.00811	0	ICE	2.174674	0	2	2
2044	2a	1	1.844414	5.874183	0	5.874183	15.38412	0	15.38412	BEV	0	1.844414	2	3
2044	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2044	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2044	2a	1	1.916403	5.993665	0	5.993665	10.70243	0	10.70243	BEV	0	1.916403	3	3
2044	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2044	2a	1	0	0	0	0	0	0	0	PHEV	0	0	3	8
2044	2a	1	1.113615	3.801893	0	3.801893	7.732699	0	7.732699	BEV	0	1.113615	3	3

2044	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2044	2a	1	0.851588	2.90733	1.744398	1.162932	10.83066	6.498393	4.332262	PHEV	0.510953	0.340635	3	8
2044	2a	1	0.908925	2.42614	0	2.42614	3.888293	0	3.888293	BEV	0	0.908925	4	3
2044	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2044	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2044	2a	1	1.862058	5.290312	0	5.290312	8.362531	0	8.362531	BEV	0	1.862058	4	3
2044	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2044	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2044	2a	1	0.315913	0.933742	0	0.933742	1.538831	0	1.538831	BEV	0	0.315913	4	3
2044	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2044	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2044	2a	1	0.140243	0.414514	0.414514	0	1.293521	1.293521	0	ICE	0.140243	0	2	2
2044	2a	1	8.575711	23.87324	0	23.87324	51.79429	0	51.79429	BEV	0	8.575711	2	3
2044	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2044	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2044	2a	1	0.568818	1.648662	0	1.648662	3.72659	0	3.72659	BEV	0	0.568818	2	3
2044	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2044	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2044	2a	1	0.137883	0.38384	0.38384	0	1.048223	1.048223	0	ICE	0.137883	0	3	2
2044	2a	1	1.234186	3.718578	3.718578	0	13.82506	13.82506	0	ICE	1.234186	0	2	2
2044	2a	1	0.393212	1.049578	0	1.049578	1.773493	0	1.773493	BEV	0	0.393212	3	3
2044	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2044	2a	1	0	0	0	0	0	0	0	PHEV	0	0	3	8
2044	2a	1	0.249051	0.778921	0	0.778921	1.367008	0	1.367008	BEV	0	0.249051	4	3
2044	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2044	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2044	2a	1	1.09457	2.921671	0	2.921671	6.432823	0	6.432823	BEV	0	1.09457	1	3
2044	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2044	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2044	2a	1	1.63066	4.726306	0	4.726306	10.84066	0	10.84066	BEV	0	1.63066	1	3
2044	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2044	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2044	2a	1	0.21639	0.639582	0	0.639582	1.47882	0	1.47882	BEV	0	0.21639	2	3
2044	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2044	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2044	2a	1	1.06643	2.846557	2.846557	0	7.80052	7.80052	0	ICE	1.06643	0	2	2
2044	2a	1	0.67049	2.173822	2.173822	0	7.16298	7.16298	0	ICE	0.67049	0	2	2
2044	2a	1	1.105268	3.773396	3.773396	0	14.11876	14.11876	0	ICE	1.105268	0	2	2
2044	2a	1	0.202753	0.552813	0.552813	0	1.52927	1.52927	0	ICE	0.202753	0	3	2
2044	2a	1	0.127039	0.346375	0	0.346375	0.522385	0	0.522385	BEV	0	0.127039	3	3
2044	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2044	2a	1	0	0	0	0	0	0	0	PHEV	0	0	3	8
2044	2a	1	1.545919	5.012087	0	5.012087	9.335388	0	9.335388	BEV	0	1.545919	3	3
2044	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2044	2a	1	0	0	0	0	0	0	0	PHEV	0	0	3	8
2044	2a	1	3.545399	11.90091	0	11.90091	23.05334	0	23.05334	BEV	0	3.545399	3	3
2044	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7

2044	2a	1	0.909077	3.051516	1.83091	1.220606	12.81408	7.688446	5.125631	PHEV	0.545446	0.363631	3	8
2044	2a	1	0.30999	1.02279	1.02279	0	3.414257	3.414257	0	ICE	0.30999	0	2	2
2044	2a	1	0.188927	0.515114	0	0.515114	0.823392	0	0.823392	BEV	0	0.188927	4	3
2044	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2044	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2044	2a	1	0	0	0	0	0	0	0	BEV	0	0	2	3
2044	2a	1	4.734541	16.70625	0	16.70625	51.90672	0	51.90672	FCEV	0	4.734541	2	7
2044	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2044	2a	1	0	0	0	0	0	0	0	BEV	0	0	2	3
2044	2a	1	5.40106	19.36755	0	19.36755	62.32929	0	62.32929	FCEV	0	5.40106	2	7
2044	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2044	2a	1	0.034041	0.098665	0.098665	0	0.354422	0.354422	0	ICE	0.034041	0	3	2
2044	2a	1	0	0	0	0	0	0	0	BEV	0	0	3	3
2044	2a	1	0.178789	0.630874	0	0.630874	1.386105	0	1.386105	FCEV	0	0.178789	3	7
2044	2a	1	2.562646	9.042528	5.425517	3.617011	39.08565	23.45139	15.63426	PHEV	1.537588	1.025059	3	8
2044	2a	1	0.175787	0.61021	0.61021	0	2.152573	2.152573	0	ICE	0.175787	0	2	2
2044	2a	1	0.087597	0.268946	0	0.268946	0.450899	0	0.450899	BEV	0	0.087597	3	3
2044	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2044	2a	1	0	0	0	0	0	0	0	PHEV	0	0	3	8
2044	2a	1	0.274889	0.89123	0	0.89123	2.185932	0	2.185932	BEV	0	0.274889	2	3
2044	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2044	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2044	2a	1	0.324557	1.163824	1.163824	0	4.259996	4.259996	0	ICE	0.324557	0	2	2
2044	2a	1	0.192274	0.634394	0	0.634394	1.764213	0	1.764213	BEV	0	0.192274	2	3
2044	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2044	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2044	2a	1	0.052778	0.155996	0	0.155996	0.238017	0	0.238017	BEV	0	0.052778	3	3
2044	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2044	2a	1	0	0	0	0	0	0	0	PHEV	0	0	3	8
2044	2a	1	0.091483	0.259913	0	0.259913	0.575737	0	0.575737	BEV	0	0.091483	2	3
2044	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2044	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2044	2a	1	0.047297	0.137086	0.137086	0	0.660102	0.660102	0	ICE	0.047297	0	2	2
2044	2a	1	0.22778	0.699346	0	0.699346	1.162689	0	1.162689	BEV	0	0.22778	4	3
2044	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2044	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2044	2a	1	0	0	0	0	0	0	0	BEV	0	0	4	3
2044	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2044	2a	1	0.30245	1.032568	0.619541	0.413027	4.181854	2.509113	1.672742	PHEV	0.18147	0.12098	4	8
2045	2a	1	15539.13	41477.66	41477.66	0	59919.43	59919.43	0	ICE	15539.13	0	1	1
2045	2a	1	28.7151	76.64749	76.64749	0	119.6894	119.6894	0	ICE	28.7151	0	1	2
2045	2a	1	15191.86	41421.05	41421.05	0	62776.24	62776.24	0	ICE	15191.86	0	1	1
2045	2a	1	15779.84	43928.23	43928.23	0	69744.92	69744.92	0	ICE	15779.84	0	1	1
2045	2a	1	14892.97	42312.55	42312.55	0	70571	70571	0	ICE	14892.97	0	1	1
2045	2a	1	17120.35	49621.62	49621.62	0	87242.49	87242.49	0	ICE	17120.35	0	1	1
2045	2a	1	17424.96	51502.77	51502.77	0	94936.09	94936.09	0	ICE	17424.96	0	1	1
2045	2a	1	46.27111	136.7631	136.7631	0	262.9696	262.9696	0	ICE	46.27111	0	1	2

2045	2a	1	18343.87	55269.71	55269.71	0	106619.4	106619.4	0	ICE	18343.87	0	1	1
2045	2a	1	15305.85	46993.09	46993.09	0	95202.14	95202.14	0	ICE	15305.85	0	1	1
2045	2a	1	12104.7	37858.18	37858.18	0	80312.75	80312.75	0	ICE	12104.7	0	1	1
2045	2a	1	14512.21	46219.2	46219.2	0	102595.3	102595.3	0	ICE	14512.21	0	1	1
2045	2a	1	166.3579	529.8249	529.8249	0	1188.499	1188.499	0	ICE	166.3579	0	1	2
2045	2a	1	14663.33	47540.56	47540.56	0	110620.9	110620.9	0	ICE	14663.33	0	1	1
2045	2a	1	229.348	743.5784	743.5784	0	1711.513	1711.513	0	ICE	229.348	0	1	2
2045	2a	1	22199.5	73245.7	73245.7	0	178781.6	178781.6	0	ICE	22199.5	0	1	1
2045	2a	1	28036.36	94110.22	94110.22	0	239814.3	239814.3	0	ICE	28036.36	0	1	1
2045	2a	1	29635.65	101176.4	101176.4	0	270683.9	270683.9	0	ICE	29635.65	0	1	1
2045	2a	1	566.3228	1933.432	1933.432	0	5139.036	5139.036	0	ICE	566.3228	0	1	2
2045	2a	1	37139.73	128923.2	128923.2	0	361375.1	361375.1	0	ICE	37139.73	0	1	1
2045	2a	1	39338.95	138811	138811	0	406056.5	406056.5	0	ICE	39338.95	0	1	1
2045	2a	1	47746.14	171211.9	171211.9	0	523849.6	523849.6	0	ICE	47746.14	0	1	1
2045	2a	1	584.2871	2095.184	2095.184	0	6403.678	6403.678	0	ICE	584.2871	0	1	2
2045	2a	1	2776.977	9957.906	0	9957.906	31063.85	0	31063.85	BEV	0	2776.977	1	3
2045	2a	1	56.673	203.2226	0	203.2226	661.4939	0	661.4939	FCEV	0	56.673	1	7
2045	2a	1	2504.927	8982.369	4850.479	4131.89	27180.37	14677.4	12502.97	PHEV	1352.661	1152.267	1	8
2045	2a	1	57370.83	209011.7	209011.7	0	667413.2	667413.2	0	ICE	57370.83	0	1	1
2045	2a	1	702.0681	2557.754	2557.754	0	8159.888	8159.888	0	ICE	702.0681	0	1	2
2045	2a	1	4078.129	14857.32	0	14857.32	47955.2	0	47955.2	BEV	0	4078.129	1	3
2045	2a	1	83.22713	303.2106	0	303.2106	1021.188	0	1021.188	FCEV	0	83.22713	1	7
2045	2a	1	2635.675	9602.213	5185.195	4417.018	30461.55	16449.24	14012.31	PHEV	1423.265	1212.411	1	8
2045	2a	1	68961.34	255188.7	255188.7	0	848910.8	848910.8	0	ICE	68961.34	0	1	1
2045	2a	1	840.3176	3109.562	3109.562	0	10337.47	10337.47	0	ICE	840.3176	0	1	2
2045	2a	1	6011.361	22244.8	0	22244.8	74760.86	0	74760.86	BEV	0	6011.361	1	3
2045	2a	1	140.6166	520.3462	0	520.3462	1813.136	0	1813.136	FCEV	0	140.6166	1	7
2045	2a	1	2948.186	10909.64	5782.111	5127.533	35986.16	19072.67	16913.5	PHEV	1562.538	1385.647	1	8
2045	2a	1	83640.06	314298.4	314298.4	0	1088262	1088262	0	ICE	83640.06	0	1	1
2045	2a	1	1028.421	3864.548	3864.548	0	13371.87	13371.87	0	ICE	1028.421	0	1	2
2045	2a	1	8662.474	32551.41	0	32551.41	113470.4	0	113470.4	BEV	0	8662.474	1	3
2045	2a	1	228.6283	859.1282	0	859.1282	3096.479	0	3096.479	FCEV	0	228.6283	1	7
2045	2a	1	3303.049	12412.03	6454.257	5957.775	42881.9	22298.59	20583.31	PHEV	1717.585	1585.463	1	8
2045	2a	1	96341.65	367547.2	367547.2	0	1324655	1324655	0	ICE	96341.65	0	1	1
2045	2a	1	1190.312	4541.088	4541.088	0	16356.03	16356.03	0	ICE	1190.312	0	1	2
2045	2a	1	15565.38	59382.55	0	59382.55	215381.2	0	215381.2	BEV	0	15565.38	1	3
2045	2a	1	533.5651	2035.572	0	2035.572	7588.849	0	7588.849	FCEV	0	533.5651	1	7
2045	2a	1	5917.743	22576.43	11243.06	11333.37	80778.54	40227.71	40550.83	PHEV	2947.036	2970.707	1	8
2045	2a	1	110069.4	426224.9	426224.9	0	1596792	1596792	0	ICE	110069.4	0	1	1
2045	2a	1	1369.719	5304.004	5304.004	0	19858.34	19858.34	0	ICE	1369.719	0	1	2
2045	2a	1	25091.02	97160.72	0	97160.72	366035.9	0	366035.9	BEV	0	25091.02	1	3
2045	2a	1	1061.026	4108.643	0	4108.643	15838.17	0	15838.17	FCEV	0	1061.026	1	7
2045	2a	1	9511.324	36830.99	17531.55	19299.44	136893.2	65161.16	71732.04	PHEV	4527.39	4983.934	1	8
2045	2a	1	124913.1	490861	490861	0	1909492	1909492	0	ICE	124913.1	0	1	1
2045	2a	1	1567.481	6159.605	6159.605	0	23947.13	23947.13	0	ICE	1567.481	0	1	2
2045	2a	1	38078.08	149632.4	0	149632.4	584785.4	0	584785.4	BEV	0	38078.08	1	3
2045	2a	1	1919.903	7544.491	0	7544.491	29977.86	0	29977.86	FCEV	0	1919.903	1	7

2045	2a	1	14392.19	56555.84	25676.35	30879.49	218444.1	99173.6	119270.5	PHEV	6534.054	7858.136	1	8
2045	2a	1	140044.4	558344.5	558344.5	0	2253227	2253227	0	ICE	140044.4	0	1	1
2045	2a	1	1771.427	7062.522	7062.522	0	28485.16	28485.16	0	ICE	1771.427	0	1	2
2045	2a	1	55324.79	220574.9	0	220574.9	893535.6	0	893535.6	BEV	0	55324.79	1	3
2045	2a	1	3246.524	12943.6	0	12943.6	53049.55	0	53049.55	FCEV	0	3246.524	1	7
2045	2a	1	20849.89	83126.62	35910.7	47215.92	333419.5	144037.2	189382.3	PHEV	9007.151	11842.74	1	8
2045	2a	1	154733.1	625771.5	625771.5	0	2618379	2618379	0	ICE	154733.1	0	1	1
2045	2a	1	1972.019	7975.237	7975.237	0	33352.93	33352.93	0	ICE	1972.019	0	1	2
2045	2a	1	77767.49	314507.3	0	314507.3	1320017	0	1320017	BEV	0	77767.49	1	3
2045	2a	1	5216.112	21095	0	21095	89284.62	0	89284.62	FCEV	0	5216.112	1	7
2045	2a	1	29222.48	118181.6	48454.44	69727.12	492006.7	201722.7	290283.9	PHEV	11981.22	17241.26	1	8
2045	2a	1	167623.1	687504.5	687504.5	0	2977107	2977107	0	ICE	167623.1	0	1	1
2045	2a	1	2136.297	8762.002	8762.002	0	37925.57	37925.57	0	ICE	2136.297	0	1	2
2045	2a	1	106132.6	435301.6	0	435301.6	1889580	0	1889580	BEV	0	106132.6	1	3
2045	2a	1	8023.543	32908.48	0	32908.48	143631.3	0	143631.3	FCEV	0	8023.543	1	7
2045	2a	1	39765.41	163097.4	63281.81	99815.64	703267.1	272867.6	430399.4	PHEV	15428.98	24336.43	1	8
2045	2a	1	176159.4	732608.4	732608.4	0	3280574	3280574	0	ICE	176159.4	0	1	1
2045	2a	1	2245.089	9336.832	9336.832	0	41794.32	41794.32	0	ICE	2245.089	0	1	2
2045	2a	1	140124.2	582745.5	0	582745.5	2614505	0	2614505	BEV	0	140124.2	1	3
2045	2a	1	11807.24	49103.71	0	49103.71	221110.7	0	221110.7	FCEV	0	11807.24	1	7
2045	2a	1	52349.26	217709.1	79681.52	138027.5	971494.6	355567	615927.6	PHEV	19159.83	33189.43	1	8
2045	2a	1	180657.5	761664.8	761664.8	0	3524247	3524247	0	ICE	180657.5	0	1	1
2045	2a	1	2302.415	9707.144	9707.144	0	44901.27	44901.27	0	ICE	2302.415	0	1	2
2045	2a	1	181199.3	763949.1	0	763949.1	3540117	0	3540117	BEV	0	181199.3	1	3
2045	2a	1	16863.65	71098.33	0	71098.33	330294.1	0	330294.1	FCEV	0	16863.65	1	7
2045	2a	1	67499.05	284580.7	97895.77	186685	1313090	451702.9	861387	PHEV	23219.67	44279.38	1	8
2045	2a	1	178118.3	761163.5	761163.5	0	3636913	3636913	0	ICE	178118.3	0	1	1
2045	2a	1	2270.053	9700.754	9700.754	0	46338.95	46338.95	0	ICE	2270.053	0	1	2
2045	2a	1	227718.3	973122.1	0	973122.1	4655045	0	4655045	BEV	0	227718.3	1	3
2045	2a	1	23230.7	99273.16	0	99273.16	475717.4	0	475717.4	FCEV	0	23230.7	1	7
2045	2a	1	84583.4	361455.3	116388.6	245066.7	1723308	554905.2	1168403	PHEV	27235.86	57347.55	1	8
2045	2a	1	168897.6	731436.4	731436.4	0	3606126	3606126	0	ICE	168897.6	0	1	1
2045	2a	1	2152.542	9321.904	9321.904	0	45948.47	45948.47	0	ICE	2152.542	0	1	2
2045	2a	1	280803.6	1216062	0	1216062	6000850	0	6000850	BEV	0	280803.6	1	3
2045	2a	1	31200.4	135118	0	135118	667600.5	0	667600.5	FCEV	0	31200.4	1	7
2045	2a	1	104001.3	450393.4	135118	315275.4	2216713	665013.9	1551699	PHEV	31200.4	72800.94	1	8
2045	2a	1	151386.9	664276.6	664276.6	0	3377610	3377610	0	ICE	151386.9	0	1	1
2045	2a	1	1929.371	8465.965	8465.965	0	43038.23	43038.23	0	ICE	1929.371	0	1	2
2045	2a	1	341192	1497130	0	1497130	7617271	0	7617271	BEV	0	341192	1	3
2045	2a	1	42169.79	185038.5	0	185038.5	942281.6	0	942281.6	FCEV	0	42169.79	1	7
2045	2a	1	121061.6	531211.1	159363.3	371847.7	2697706	809311.9	1888395	PHEV	36318.48	84743.12	1	8
2045	2a	1	126351	561659	561659	0	2943625	2943625	0	ICE	126351	0	1	1
2045	2a	1	1610.299	7158.151	7158.151	0	37509.55	37509.55	0	ICE	1610.299	0	1	2
2045	2a	1	409264.6	1819275	0	1819275	9538778	0	9538778	BEV	0	409264.6	1	3
2045	2a	1	55808.8	248083	0	248083	1301529	0	1301529	FCEV	0	55808.8	1	7
2045	2a	1	138918	617522.5	185256.8	432265.8	3233921	970176.2	2263744	PHEV	41675.41	97242.61	1	8
2045	2a	1	91960.69	414054.9	414054.9	0	2235516	2235516	0	ICE	91960.69	0	1	1

2045	2a	1	1172.007	5276.985	5276.985	0	28487.17	28487.17	0	ICE	1172.007	0	1	2
2045	2a	1	479065.4	2157002	0	2157002	11648710	0	11648710	BEV	0	479065.4	1	3
2045	2a	1	71584.49	322310.6	0	322310.6	1741340	0	1741340	FCEV	0	71584.49	1	7
2045	2a	1	155311.5	699293.2	209788	489505.3	3774215	1132264	2641950	PHEV	46593.46	108718.1	1	8
2045	2a	1	50080.3	228356.6	228356.6	0	1269453	1269453	0	ICE	50080.3	0	1	1
2045	2a	1	638.2559	2910.326	2910.326	0	16177.08	16177.08	0	ICE	638.2559	0	1	2
2045	2a	1	556855.8	2539157	0	2539157	14116637	0	14116637	BEV	0	556855.8	1	3
2045	2a	1	90650.95	413351.1	0	413351.1	2298708	0	2298708	FCEV	0	90650.95	1	7
2045	2a	1	172122.1	784843.8	235453.2	549390.7	4363328	1308998	3054330	PHEV	51636.62	120485.4	1	8
2045	2a	1	633081.6	2923001	0	2923001	16721675	0	16721675	BEV	0	633081.6	1	3
2045	2a	1	111720.3	515823.7	0	515823.7	2951436	0	2951436	FCEV	0	111720.3	1	7
2045	2a	1	186200.5	859706.2	257911.9	601794.4	4920573	1476172	3444401	PHEV	55860.14	130340.3	1	8
2045	2a	1	677407.2	3166465	0	3166465	18631639	0	18631639	BEV	0	677407.2	1	3
2045	2a	1	129029.9	603136.3	0	603136.3	3549324	0	3549324	FCEV	0	129029.9	1	7
2045	2a	1	189164.3	884227.5	265268.3	618959.3	5207928	1562379	3645550	PHEV	56749.28	132415	1	8
2045	2a	1	714292.9	3379805	0	3379805	20447368	0	20447368	BEV	0	714292.9	1	3
2045	2a	1	146300.9	692249.3	0	692249.3	4188278	0	4188278	FCEV	0	146300.9	1	7
2045	2a	1	188910.8	893865.6	268159.7	625705.9	5416574	1624972	3791602	PHEV	56673.25	132237.6	1	8
2045	2a	1	754838.8	3614900	0	3614900	22476742	0	22476742	BEV	0	754838.8	1	3
2045	2a	1	165696.3	793514.7	0	793514.7	4933971	0	4933971	FCEV	0	165696.3	1	7
2045	2a	1	188543.3	902928.4	270878.5	632049.8	5627218	1688165	3939053	PHEV	56563	131980.3	1	8
2045	2a	1	786125.1	3809766	0	3809766	24339710	0	24339710	BEV	0	786125.1	1	3
2045	2a	1	184399.7	893648.9	0	893648.9	5709120	0	5709120	FCEV	0	184399.7	1	7
2045	2a	1	184861.9	895888.6	268766.6	627122	5740974	1722292	4018681	PHEV	55458.56	129403.3	1	8
2045	2a	1	821770.7	4029594	0	4029594	26434612	0	26434612	BEV	0	821770.7	1	3
2045	2a	1	205442.7	1007398	0	1007398	6608227	0	6608227	FCEV	0	205442.7	1	7
2045	2a	1	181272.9	888880.9	266664.3	622216.7	5852140	1755642	4096498	PHEV	54381.88	126891.1	1	8
2045	2a	1	848433.9	4208945	0	4208945	28340825	0	28340825	BEV	0	848433.9	1	3
2045	2a	1	225533.1	1118833	0	1118833	7532958	0	7532958	FCEV	0	225533.1	1	7
2045	2a	1	174831.8	867312.7	260193.8	607118.9	5864456	1759337	4105119	PHEV	52449.55	122382.3	1	8
2045	2a	1	869441.4	4362970	0	4362970	30132393	0	30132393	BEV	0	869441.4	1	3
2045	2a	1	245227.1	1230581	0	1230581	8498005	0	8498005	FCEV	0	245227.1	1	7
2045	2a	1	166559.6	835818	250745.4	585072.6	5798733	1739620	4059113	PHEV	49967.89	116591.8	1	8
2045	2a	1	891889.9	4526716	0	4526716	32010257	0	32010257	BEV	0	891889.9	1	3
2045	2a	1	266408.7	1352136	0	1352136	9560626	0	9560626	FCEV	0	266408.7	1	7
2045	2a	1	157949.8	801661.6	240498.5	561163.1	5693228	1707968	3985260	PHEV	47384.94	110564.9	1	8
2045	2a	1	898843.2	4613502	0	4613502	33296455	0	33296455	BEV	0	898843.2	1	3
2045	2a	1	283845.2	1456895	0	1456895	10514060	0	10514060	FCEV	0	283845.2	1	7
2045	2a	1	146175	750273.8	225082.1	525191.6	5432905	1629872	3803034	PHEV	43852.49	102322.5	1	8
2045	2a	1	806949.9	4188070	0	4188070	30765561	0	30765561	BEV	0	806949.9	1	3
2045	2a	1	268983.3	1396023	0	1396023	10255056	0	10255056	FCEV	0	268983.3	1	7
2045	2a	1	119548.1	620454.8	186136.4	434318.4	4566523	1369957	3196566	PHEV	35864.44	83683.7	1	8
2045	2a	1	2753.292	7349.196	7349.196	0	26616.82	26616.82	0	ICE	2753.292	0	2	1
2045	2a	1	2891.681	7884.256	7884.256	0	28052.63	28052.63	0	ICE	2891.681	0	2	1
2045	2a	1	2039.723	5678.221	5678.221	0	20090.17	20090.17	0	ICE	2039.723	0	2	1
2045	2a	1	1159.895	3361.839	3361.839	0	11965.5	11965.5	0	ICE	1159.895	0	2	1
2045	2a	1	1872.738	5535.232	5535.232	0	20013.75	20013.75	0	ICE	1872.738	0	2	1

2045	2a	1	2731.942	8231.286	8231.286	0	30267.03	30267.03	0	ICE	2731.942	0	2	1
2045	2a	1	4867.043	14943.13	14943.13	0	55386.72	55386.72	0	ICE	4867.043	0	2	1
2045	2a	1	3671.256	11482.07	11482.07	0	42897.56	42897.56	0	ICE	3671.256	0	2	1
2045	2a	1	2024.018	6446.194	6446.194	0	24098.45	24098.45	0	ICE	2024.018	0	2	1
2045	2a	1	1838.336	5960.144	5960.144	0	22537.59	22537.59	0	ICE	1838.336	0	2	1
2045	2a	1	15830.76	54953.33	54953.33	0	221409	221409	0	ICE	15830.76	0	2	1
2045	2a	1	15699.79	55398.12	55398.12	0	226408.1	226408.1	0	ICE	15699.79	0	2	1
2045	2a	1	15195.31	54488.56	54488.56	0	225935	225935	0	ICE	15195.31	0	2	1
2045	2a	1	2.058479	7.38146	7.38146	0	30.6182	30.6182	0	ICE	2.058479	0	2	2
2045	2a	1	0.511995	1.835953	0	1.835953	5.921337	0	5.921337	BEV	0	0.511995	2	3
2045	2a	1	0.010449	0.037468	0	0.037468	0.120844	0	0.120844	FCEV	0	0.010449	2	7
2045	2a	1	4.440773	15.92408	9.554447	6.369631	66.06688	39.64013	26.42675	PHEV	2.664464	1.776309	2	8
2045	2a	1	17892	65183.59	65183.59	0	272739.4	272739.4	0	ICE	17892	0	2	1
2045	2a	1	2.423794	8.830295	8.830295	0	36.95983	36.95983	0	ICE	2.423794	0	2	2
2045	2a	1	20269.32	75005.82	75005.82	0	316946	316946	0	ICE	20269.32	0	2	1
2045	2a	1	2.765003	10.23178	10.23178	0	43.26595	43.26595	0	ICE	2.765003	0	2	2
2045	2a	1	269.5095	997.3092	0	997.3092	3902.846	0	3902.846	BEV	0	269.5095	2	3
2045	2a	1	6.304316	23.32887	0	23.32887	80.53721	0	80.53721	FCEV	0	6.304316	2	7
2045	2a	1	206.9644	765.8634	455.1416	310.7217	3359.266	1996.364	1362.902	PHEV	122.996	83.9684	2	8
2045	2a	1	22753.82	85503.18	85503.18	0	365175.4	365175.4	0	ICE	22753.82	0	2	1
2045	2a	1	3.139986	11.79928	11.79928	0	50.4563	50.4563	0	ICE	3.139986	0	2	2
2045	2a	1	618.0392	2322.437	0	2322.437	9208.855	0	9208.855	BEV	0	618.0392	2	3
2045	2a	1	16.31189	61.29599	0	61.29599	218.879	0	218.879	FCEV	0	16.31189	2	7
2045	2a	1	476.0025	1788.698	1052.777	735.9216	7926.788	4665.481	3261.307	PHEV	280.1615	195.841	2	8
2045	2a	1	24288.9	92663.14	92663.14	0	400347.7	400347.7	0	ICE	24288.9	0	2	1
2045	2a	1	3.395874	12.95539	12.95539	0	56.06951	56.06951	0	ICE	3.395874	0	2	2
2045	2a	1	1711.844	6530.755	0	6530.755	26318.14	0	26318.14	BEV	0	1711.844	2	3
2045	2a	1	58.68025	223.8675	0	223.8675	826.9969	0	826.9969	FCEV	0	58.68025	2	7
2045	2a	1	1234.567	4709.922	2730.409	1979.513	21574.2	12506.87	9067.329	PHEV	715.6961	518.8708	2	8
2045	2a	1	25635.2	99267.94	99267.94	0	432746.5	432746.5	0	ICE	25635.2	0	2	1
2045	2a	1	3.59879	13.9357	13.9357	0	60.85428	60.85428	0	ICE	3.59879	0	2	2
2045	2a	1	3137.968	12151.25	0	12151.25	50006.33	0	50006.33	BEV	0	3137.968	2	3
2045	2a	1	132.6955	513.8408	0	513.8408	1963.004	0	1963.004	FCEV	0	132.6955	2	7
2045	2a	1	2117.186	8198.441	4680.139	3518.303	37995.07	21689.76	16305.31	PHEV	1208.611	908.5751	2	8
2045	2a	1	26783.3	105248.2	105248.2	0	463864.5	463864.5	0	ICE	26783.3	0	2	1
2045	2a	1	3.777674	14.84482	14.84482	0	65.53107	65.53107	0	ICE	3.777674	0	2	2
2045	2a	1	4955.969	19475.08	0	19475.08	82002.24	0	82002.24	BEV	0	4955.969	2	3
2045	2a	1	249.8808	981.9366	0	981.9366	3919.32	0	3919.32	FCEV	0	249.8808	2	7
2045	2a	1	3124.658	12278.72	6900.641	5378.079	57241.21	32169.56	25071.65	PHEV	1756.058	1368.6	2	8
2045	2a	1	27592.62	110009.3	110009.3	0	491251.8	491251.8	0	ICE	27592.62	0	2	1
2045	2a	1	3.908863	15.58429	15.58429	0	69.69453	69.69453	0	ICE	3.908863	0	2	2
2045	2a	1	7207.665	28736.31	0	28736.31	123829.1	0	123829.1	BEV	0	7207.665	2	3
2045	2a	1	422.9544	1686.281	0	1686.281	7024.894	0	7024.894	FCEV	0	422.9544	2	7
2045	2a	1	4240.597	16906.88	9351.919	7554.959	79299.23	43863.8	35435.43	PHEV	2345.656	1894.941	2	8
2045	2a	1	28063.57	113494.7	113494.7	0	514603.6	514603.6	0	ICE	28063.57	0	2	1
2045	2a	1	3.991687	16.14318	16.14318	0	73.29106	73.29106	0	ICE	3.991687	0	2	2
2045	2a	1	9960.489	40282.21	0	40282.21	177755.4	0	177755.4	BEV	0	9960.489	2	3

2045	2a	1	668.0816	2701.856	0	2701.856	11663.1	0	11663.1	FCEV	0	668.0816	2	7
2045	2a	1	5459.413	22078.96	12017.26	10061.7	104356.8	56799.9	47556.87	PHEV	2971.481	2487.933	2	8
2045	2a	1	28099.4	115249.4	115249.4	0	530960.8	530960.8	0	ICE	28099.4	0	2	1
2045	2a	1	3.996783	16.39276	16.39276	0	75.59967	75.59967	0	ICE	3.996783	0	2	2
2045	2a	1	13260.69	54388.58	0	54388.58	245606.1	0	245606.1	BEV	0	13260.69	2	3
2045	2a	1	1002.498	4111.736	0	4111.736	18332.07	0	18332.07	FCEV	0	1002.498	2	7
2045	2a	1	6757.771	27716.93	14840.44	12876.49	132160.4	70762.45	61397.94	PHEV	3618.304	3139.467	2	8
2045	2a	1	27497.79	114357.3	114357.3	0	536037.6	536037.6	0	ICE	27497.79	0	2	1
2045	2a	1	3.911211	16.26587	16.26587	0	76.30335	76.30335	0	ICE	3.911211	0	2	2
2045	2a	1	17071.57	70996.92	0	70996.92	328099.5	0	328099.5	BEV	0	17071.57	2	3
2045	2a	1	1438.497	5982.392	0	5982.392	27443.67	0	27443.67	FCEV	0	1438.497	2	7
2045	2a	1	8069.901	33560.94	17672.23	15888.71	161652.5	85121.57	76530.9	PHEV	4249.379	3820.522	2	8
2045	2a	1	26496	111709	111709	0	533441.7	533441.7	0	ICE	26496	0	2	1
2045	2a	1	3.76872	15.88919	15.88919	0	75.91682	75.91682	0	ICE	3.76872	0	2	2
2045	2a	1	21600.41	91068.84	0	91068.84	430757	0	430757	BEV	0	21600.41	2	3
2045	2a	1	2010.282	8475.488	0	8475.488	39925.27	0	39925.27	FCEV	0	2010.282	2	7
2045	2a	1	9445.416	39822.53	20616.69	19205.84	194067.1	100471.3	93595.77	PHEV	4890.027	4555.389	2	8
2045	2a	1	24735.33	105703	105703	0	514791	514791	0	ICE	24735.33	0	2	1
2045	2a	1	3.518287	15.03491	15.03491	0	73.24789	73.24789	0	ICE	3.518287	0	2	2
2045	2a	1	26657.9	113918.8	0	113918.8	551592.3	0	551592.3	BEV	0	26657.9	2	3
2045	2a	1	2719.508	11621.44	0	11621.44	56154.36	0	56154.36	FCEV	0	2719.508	2	7
2045	2a	1	10748.51	45932.24	23372.95	22559.29	226805	115411.3	111393.6	PHEV	5469.454	5279.052	2	8
2045	2a	1	22388.05	96954.8	96954.8	0	482024	482024	0	ICE	22388.05	0	2	1
2045	2a	1	3.184415	13.79059	13.79059	0	68.57355	68.57355	0	ICE	3.184415	0	2	2
2045	2a	1	32440.49	140488.4	0	140488.4	696424.6	0	696424.6	BEV	0	32440.49	2	3
2045	2a	1	3604.499	15609.82	0	15609.82	77317.98	0	77317.98	FCEV	0	3604.499	2	7
2045	2a	1	12015	52032.75	26016.37	26016.37	260705	130352.5	130352.5	PHEV	6007.499	6007.499	2	8
2045	2a	1	19221.67	84343.52	84343.52	0	428453.2	428453.2	0	ICE	19221.67	0	2	1
2045	2a	1	2.734038	11.99679	11.99679	0	60.9432	60.9432	0	ICE	2.734038	0	2	2
2045	2a	1	38138.53	167349.6	0	167349.6	849466.9	0	849466.9	BEV	0	38138.53	2	3
2045	2a	1	4713.751	20683.65	0	20683.65	104987.4	0	104987.4	FCEV	0	4713.751	2	7
2045	2a	1	13532.3	59378.91	29689.46	29689.46	302326.7	151163.3	151163.3	PHEV	6766.149	6766.149	2	8
2045	2a	1	15506.65	68930.62	68930.62	0	358043.9	358043.9	0	ICE	15506.65	0	2	1
2045	2a	1	2.205624	9.804506	9.804506	0	50.9215	50.9215	0	ICE	2.205624	0	2	2
2045	2a	1	44598.92	198252.4	0	198252.4	1030736	0	1030736	BEV	0	44598.92	2	3
2045	2a	1	6081.67	27034.42	0	27034.42	140613.7	0	140613.7	FCEV	0	6081.67	2	7
2045	2a	1	15138.36	67293.48	33646.74	33646.74	348635.9	174318	174318	PHEV	7569.179	7569.179	2	8
2045	2a	1	11000.93	49531.92	49531.92	0	263272.6	263272.6	0	ICE	11000.93	0	2	1
2045	2a	1	1.564743	7.045287	7.045287	0	37.43884	37.43884	0	ICE	1.564743	0	2	2
2045	2a	1	51263.12	230813.2	0	230813.2	1229538	0	1229538	BEV	0	51263.12	2	3
2045	2a	1	7660.007	34489.33	0	34489.33	183844.1	0	183844.1	FCEV	0	7660.007	2	7
2045	2a	1	16619.34	74828.93	37414.47	37414.47	395027.9	197513.9	197513.9	PHEV	8309.672	8309.672	2	8
2045	2a	1	5863.319	26735.62	26735.62	0	145477.5	145477.5	0	ICE	5863.319	0	2	1
2045	2a	1	0.833983	3.802803	3.802803	0	20.68578	20.68578	0	ICE	0.833983	0	2	2
2045	2a	1	58693.36	267630.6	0	267630.6	1460879	0	1460879	BEV	0	58693.36	2	3
2045	2a	1	9554.732	43567.76	0	43567.76	237999.1	0	237999.1	FCEV	0	9554.732	2	7
2045	2a	1	18141.9	82723.6	41361.8	41361.8	445429.1	222714.5	222714.5	PHEV	9070.948	9070.948	2	8

2045	2a	1	66162.13	305477.2	0	305477.2	1709145	0	1709145	BEV	0	66162.13	2	3
2045	2a	1	11675.67	53907.73	0	53907.73	301851.9	0	301851.9	FCEV	0	11675.67	2	7
2045	2a	1	19459.45	89846.22	44923.11	44923.11	494063.4	247031.7	247031.7	PHEV	9729.724	9729.724	2	8
2045	2a	1	69827.51	326401	0	326401	1871836	0	1871836	BEV	0	69827.51	2	3
2045	2a	1	13300.48	62171.62	0	62171.62	356833.5	0	356833.5	FCEV	0	13300.48	2	7
2045	2a	1	19499.16	91146.66	45573.33	45573.33	512275.3	256137.7	256137.7	PHEV	9749.578	9749.578	2	8
2045	2a	1	72509.99	343094.1	0	343094.1	2017346	0	2017346	BEV	0	72509.99	2	3
2045	2a	1	14851.44	70272.28	0	70272.28	413528	0	413528	FCEV	0	14851.44	2	7
2045	2a	1	19176.9	90738.95	45369.48	45369.48	521889.1	260944.6	260944.6	PHEV	9588.45	9588.45	2	8
2045	2a	1	75448.03	361318.4	0	361318.4	2178073	0	2178073	BEV	0	75448.03	2	3
2045	2a	1	16561.76	79313.79	0	79313.79	478489.3	0	478489.3	FCEV	0	16561.76	2	7
2045	2a	1	18845.38	90249.96	45124.98	45124.98	531474.1	265737.1	265737.1	PHEV	9422.69	9422.69	2	8
2045	2a	1	78380.26	379851.1	0	379851.1	2347600	0	2347600	BEV	0	78380.26	2	3
2045	2a	1	18385.49	89100.87	0	89100.87	551079.6	0	551079.6	FCEV	0	18385.49	2	7
2045	2a	1	18431.57	89324.18	44662.09	44662.09	538916.9	269458.4	269458.4	PHEV	9215.785	9215.785	2	8
2045	2a	1	81304.93	398682.8	0	398682.8	2526201	0	2526201	BEV	0	81304.93	2	3
2045	2a	1	20326.23	99670.7	0	99670.7	631982.6	0	631982.6	FCEV	0	20326.23	2	7
2045	2a	1	17934.91	87944.74	43972.37	43972.37	543901.6	271950.8	271950.8	PHEV	8967.456	8967.456	2	8
2045	2a	1	83110.02	412295.5	0	412295.5	2678593	0	2678593	BEV	0	83110.02	2	3
2045	2a	1	22092.54	109597.5	0	109597.5	712472.6	0	712472.6	FCEV	0	22092.54	2	7
2045	2a	1	17126	84959.34	42479.67	42479.67	538949.2	269474.6	269474.6	PHEV	8562.999	8562.999	2	8
2045	2a	1	84205.62	422554.8	0	422554.8	2814772	0	2814772	BEV	0	84205.62	2	3
2045	2a	1	23750.3	119182.1	0	119182.1	794348.2	0	794348.2	FCEV	0	23750.3	2	7
2045	2a	1	16131.35	80949.19	40474.59	40474.59	526963	263481.5	263481.5	PHEV	8065.673	8065.673	2	8
2045	2a	1	85304.19	432954.6	0	432954.6	2956504	0	2956504	BEV	0	85304.19	2	3
2045	2a	1	25480.47	129324.1	0	129324.1	883540.4	0	883540.4	FCEV	0	25480.47	2	7
2045	2a	1	15107	76674.37	38337.18	38337.18	512245.2	256122.6	256122.6	PHEV	7553.5	7553.5	2	8
2045	2a	1	86448.16	443713.4	0	443713.4	3104782	0	3104782	BEV	0	86448.16	2	3
2045	2a	1	27299.42	140120	0	140120	980871.8	0	980871.8	FCEV	0	27299.42	2	7
2045	2a	1	14058.69	72159.18	36079.59	36079.59	494630.6	247315.3	247315.3	PHEV	7029.345	7029.345	2	8
2045	2a	1	78838.95	409174.1	0	409174.1	2932168	0	2932168	BEV	0	78838.95	2	3
2045	2a	1	26279.65	136391.4	0	136391.4	977747.2	0	977747.2	FCEV	0	26279.65	2	7
2045	2a	1	11679.84	60618.39	30309.2	30309.2	426118	213059	213059	PHEV	5839.922	5839.922	2	8
2045	2a	1	9933.674	26515.36	26515.36	0	90322.42	90322.42	0	ICE	9933.674	0	3	1
2045	2a	1	9321.257	25414.69	25414.69	0	87289.51	87289.51	0	ICE	9321.257	0	3	1
2045	2a	1	10278.11	28612.42	28612.42	0	99154.68	99154.68	0	ICE	10278.11	0	3	1
2045	2a	1	11990.33	34065.84	34065.84	0	118831.2	118831.2	0	ICE	11990.33	0	3	1
2045	2a	1	12678.09	36746.19	36746.19	0	128322.4	128322.4	0	ICE	12678.09	0	3	1
2045	2a	1	11256.5	33270.74	33270.74	0	116548.3	116548.3	0	ICE	11256.5	0	3	1
2045	2a	1	10861.84	32726.52	32726.52	0	115618	115618	0	ICE	10861.84	0	3	1
2045	2a	1	8556.39	26270.43	26270.43	0	93925.98	93925.98	0	ICE	8556.39	0	3	1
2045	2a	1	5324.721	16653.38	16653.38	0	60094.92	60094.92	0	ICE	5324.721	0	3	1
2045	2a	1	9683.587	30840.77	30840.77	0	112606.8	112606.8	0	ICE	9683.587	0	3	1
2045	2a	1	13204.29	42810.16	42810.16	0	157554.6	157554.6	0	ICE	13204.29	0	3	1
2045	2a	1	13197.08	43542.85	43542.85	0	162884.2	162884.2	0	ICE	13197.08	0	3	1
2045	2a	1	18777.29	63030.1	63030.1	0	237178.9	237178.9	0	ICE	18777.29	0	3	1
2045	2a	1	18317.07	62534.64	62534.64	0	240246.1	240246.1	0	ICE	18317.07	0	3	1

2045	2a	1	195.1379	666.2029	666.2029	0	2501.613	2501.613	0	ICE	195.1379	0	3	2
2045	2a	1	23235	80655.65	80655.65	0	315047.4	315047.4	0	ICE	23235	0	3	1
2045	2a	1	24886.27	87813.45	87813.45	0	345986.3	345986.3	0	ICE	24886.27	0	3	1
2045	2a	1	188.0889	663.6886	663.6886	0	2578.806	2578.806	0	ICE	188.0889	0	3	2
2045	2a	1	29885.01	107164.1	107164.1	0	428204.9	428204.9	0	ICE	29885.01	0	3	1
2045	2a	1	305.4582	1095.337	1095.337	0	4395.672	4395.672	0	ICE	305.4582	0	3	2
2045	2a	1	34317.47	125024.4	125024.4	0	505358.3	505358.3	0	ICE	34317.47	0	3	1
2045	2a	1	350.7629	1277.889	1277.889	0	5187.035	5187.035	0	ICE	350.7629	0	3	2
2045	2a	1	118.4001	431.3515	258.8109	172.5406	1755.041	1053.025	702.0165	PHEV	71.04003	47.36002	3	8
2045	2a	1	38819.02	143648.2	143648.2	0	590597.3	590597.3	0	ICE	38819.02	0	3	1
2045	2a	1	395.7736	1464.544	1464.544	0	6041.772	6041.772	0	ICE	395.7736	0	3	2
2045	2a	1	457.8215	1694.15	0	1694.15	4746.297	0	4746.297	BEV	0	457.8215	3	3
2045	2a	1	10.70927	39.62924	0	39.62924	95.23579	0	95.23579	FCEV	0	10.70927	3	7
2045	2a	1	397.645	1471.47	874.4733	596.9962	6065.717	3604.769	2460.948	PHEV	236.3148	161.3303	3	8
2045	2a	1	43649.11	164022.4	164022.4	0	683401	683401	0	ICE	43649.11	0	3	1
2045	2a	1	446.0297	1676.068	1676.068	0	7008.113	7008.113	0	ICE	446.0297	0	3	2
2045	2a	1	1046.052	3930.801	0	3930.801	14065.31	0	14065.31	BEV	0	1046.052	3	3
2045	2a	1	27.60841	103.7455	0	103.7455	257.7793	0	257.7793	FCEV	0	27.60841	3	7
2045	2a	1	754.916	2836.786	1669.651	1167.135	11861.4	6981.28	4880.118	PHEV	444.322	310.594	3	8
2045	2a	1	46871.09	178815.1	178815.1	0	755233.4	755233.4	0	ICE	46871.09	0	3	1
2045	2a	1	486.1945	1854.852	1854.852	0	7876.136	7876.136	0	ICE	486.1945	0	3	2
2045	2a	1	3201.22	12212.78	0	12212.78	41858.82	0	41858.82	BEV	0	3201.22	3	3
2045	2a	1	109.7345	418.6414	0	418.6414	1075.446	0	1075.446	FCEV	0	109.7345	3	7
2045	2a	1	2175.838	8300.91	4812.156	3488.754	40767.11	23633.28	17133.83	PHEV	1261.364	914.4737	3	8
2045	2a	1	50113.84	194057.3	194057.3	0	829344.1	829344.1	0	ICE	50113.84	0	3	1
2045	2a	1	522.2776	2022.431	2022.431	0	8695.358	8695.358	0	ICE	522.2776	0	3	2
2045	2a	1	6072.493	23514.69	0	23514.69	81722.1	0	81722.1	BEV	0	6072.493	3	3
2045	2a	1	256.788	994.3677	0	994.3677	2639.741	0	2639.741	FCEV	0	256.788	3	7
2045	2a	1	3883.764	15039.22	8585.245	6453.973	78076.45	44570.5	33505.95	PHEV	2217.075	1666.69	3	8
2045	2a	1	53429.75	209958.6	209958.6	0	910113.1	910113.1	0	ICE	53429.75	0	3	1
2045	2a	1	559.8446	2199.976	2199.976	0	9598.866	9598.866	0	ICE	559.8446	0	3	2
2045	2a	1	9866.925	38773.27	0	38773.27	138795.4	0	138795.4	BEV	0	9866.925	3	3
2045	2a	1	497.492	1954.955	0	1954.955	5408.707	0	5408.707	FCEV	0	497.492	3	7
2045	2a	1	5931.593	23308.91	13099.61	10209.3	124614.2	70033.2	54581.03	PHEV	3333.555	2598.038	3	8
2045	2a	1	57186.28	227996.6	227996.6	0	1003715	1003715	0	ICE	57186.28	0	3	1
2045	2a	1	602.2141	2400.973	2400.973	0	10644.49	10644.49	0	ICE	602.2141	0	3	2
2045	2a	1	14960.97	59648.06	0	59648.06	219941.3	0	219941.3	BEV	0	14960.97	3	3
2045	2a	1	877.9277	3500.219	0	3500.219	10735.61	0	10735.61	FCEV	0	877.9277	3	7
2045	2a	1	8442.949	33661.28	18619.5	15041.78	183992.5	101774.1	82218.37	PHEV	4670.157	3772.792	3	8
2045	2a	1	61857.47	250164	250164	0	1120209	1120209	0	ICE	61857.47	0	3	1
2045	2a	1	654.4294	2646.643	2646.643	0	11940.78	11940.78	0	ICE	654.4294	0	3	2
2045	2a	1	22019.84	89052.63	0	89052.63	338596	0	338596	BEV	0	22019.84	3	3
2045	2a	1	1476.94	5973.043	0	5973.043	19719.21	0	19719.21	FCEV	0	1476.94	3	7
2045	2a	1	11647.62	47105.31	25638.74	21466.56	262967.2	143129.3	119837.9	PHEV	6339.633	5307.987	3	8
2045	2a	1	66810.96	274024.5	274024.5	0	1249265	1249265	0	ICE	66810.96	0	3	1
2045	2a	1	706.8355	2899.079	2899.079	0	13313.89	13313.89	0	ICE	706.8355	0	3	2
2045	2a	1	31631.52	129736.4	0	129736.4	509056.7	0	509056.7	BEV	0	31631.52	3	3

2045	2a	1	2391.319	9807.973	0	9807.973	34839.76	0	34839.76	FCEV	0	2391.319	3	7
2045	2a	1	15655.51	64210.9	34380.35	29830.55	366715.3	196349.8	170365.4	PHEV	8382.405	7273.101	3	8
2045	2a	1	69886.92	290644.3	290644.3	0	1350014	1350014	0	ICE	69886.92	0	3	1
2045	2a	1	739.378	3074.91	3074.91	0	14385.02	14385.02	0	ICE	739.378	0	3	2
2045	2a	1	43513.28	180962.1	0	180962.1	732619.6	0	732619.6	BEV	0	43513.28	3	3
2045	2a	1	3666.546	15248.36	0	15248.36	57366.17	0	57366.17	FCEV	0	3666.546	3	7
2045	2a	1	20109.67	83631.71	44038.07	39593.64	488168	257055.3	231112.7	PHEV	10589.18	9520.494	3	8
2045	2a	1	70468.75	297101.2	297101.2	0	1407186	1407186	0	ICE	70468.75	0	3	1
2045	2a	1	745.5336	3143.222	3143.222	0	14991.76	14991.76	0	ICE	745.5336	0	3	2
2045	2a	1	57572.14	242728.2	0	242728.2	1013764	0	1013764	BEV	0	57572.14	3	3
2045	2a	1	5358.057	22589.94	0	22589.94	89214.02	0	89214.02	FCEV	0	5358.057	3	7
2045	2a	1	24785.8	104498.6	54100.44	50398.21	623395.1	322740.6	300654.6	PHEV	12831.96	11953.84	3	8
2045	2a	1	68748.25	293786	293786	0	1419984	1419984	0	ICE	68748.25	0	3	1
2045	2a	1	727.3312	3108.148	3108.148	0	15125.84	15125.84	0	ICE	727.3312	0	3	2
2045	2a	1	74180.2	316998.7	0	316998.7	1365744	0	1365744	BEV	0	74180.2	3	3
2045	2a	1	7567.501	32338.66	0	32338.66	133356.1	0	133356.1	FCEV	0	7567.501	3	7
2045	2a	1	29668.35	126783.5	64514.71	62268.83	773143	393419.4	379723.7	PHEV	15096.95	14571.4	3	8
2045	2a	1	64852.11	280851.8	280851.8	0	1386253	1386253	0	ICE	64852.11	0	3	1
2045	2a	1	686.1116	2971.309	2971.309	0	14764.56	14764.56	0	ICE	686.1116	0	3	2
2045	2a	1	93980.14	406995.1	0	406995.1	1808685	0	1808685	BEV	0	93980.14	3	3
2045	2a	1	10442.24	45221.68	0	45221.68	194050.1	0	194050.1	FCEV	0	10442.24	3	7
2045	2a	1	34807.46	150738.9	75369.46	75369.46	940059.9	470030	470030	PHEV	17403.73	17403.73	3	8
2045	2a	1	57621.39	252839.2	252839.2	0	1275525	1275525	0	ICE	57621.39	0	3	1
2045	2a	1	609.6132	2674.946	2674.946	0	13583.63	13583.63	0	ICE	609.6132	0	3	2
2045	2a	1	114440.6	502158.4	0	502158.4	2295674	0	2295674	BEV	0	114440.6	3	3
2045	2a	1	14144.34	62064.52	0	62064.52	276015.1	0	276015.1	FCEV	0	14144.34	3	7
2045	2a	1	40605.76	178175.6	89087.82	89087.82	1135932	567966	567966	PHEV	20302.88	20302.88	3	8
2045	2a	1	47683.54	211964.3	211964.3	0	1093662	1093662	0	ICE	47683.54	0	3	1
2045	2a	1	504.4744	2242.505	2242.505	0	11645.71	11645.71	0	ICE	504.4744	0	3	2
2045	2a	1	137379.1	610681.5	0	610681.5	2872508	0	2872508	BEV	0	137379.1	3	3
2045	2a	1	18733.51	83274.75	0	83274.75	383133.8	0	383133.8	FCEV	0	18733.51	3	7
2045	2a	1	46631.02	207285.6	103642.8	103642.8	1352115	676057.4	676057.4	PHEV	23315.51	23315.51	3	8
2045	2a	1	34333.48	154587.2	154587.2	0	816289.3	816289.3	0	ICE	34333.48	0	3	1
2045	2a	1	363.2356	1635.476	1635.476	0	8691.4	8691.4	0	ICE	363.2356	0	3	2
2045	2a	1	160366.7	722054.2	0	722054.2	3495249	0	3495249	BEV	0	160366.7	3	3
2045	2a	1	23962.84	107893.2	0	107893.2	512954.7	0	512954.7	FCEV	0	23962.84	3	7
2045	2a	1	51990.38	234087.7	117043.9	117043.9	1563636	781818	781818	PHEV	25995.19	25995.19	3	8
2045	2a	1	18567.97	84666.4	84666.4	0	457767.9	457767.9	0	ICE	18567.97	0	3	1
2045	2a	1	196.4423	895.7395	895.7395	0	4873.711	4873.711	0	ICE	196.4423	0	3	2
2045	2a	1	186409.6	849992.2	0	849992.2	4234815	0	4234815	BEV	0	186409.6	3	3
2045	2a	1	30345.74	138370.8	0	138370.8	679227.7	0	679227.7	FCEV	0	30345.74	3	7
2045	2a	1	57618.5	262729.4	131364.7	131364.7	1798469	899234.5	899234.5	PHEV	28809.25	28809.25	3	8
2045	2a	1	211644.1	977181.9	0	977181.9	5011489	0	5011489	BEV	0	211644.1	3	3
2045	2a	1	37348.95	172443.9	0	172443.9	873510.5	0	873510.5	FCEV	0	37348.95	3	7
2045	2a	1	62248.26	287406.4	143703.2	143703.2	2017638	1008819	1008819	PHEV	31124.13	31124.13	3	8
2045	2a	1	224168.2	1047849	0	1047849	5532759	0	5532759	BEV	0	224168.2	3	3
2045	2a	1	42698.7	199590.4	0	199590.4	1042246	0	1042246	FCEV	0	42698.7	3	7

2045	2a	1	62598.4	292609.3	146304.7	146304.7	2103006	1051503	1051503	PHEV	31299.2	31299.2	3	8
2045	2a	1	233115.6	1103028	0	1103028	5997478	0	5997478	BEV	0	233115.6	3	3
2045	2a	1	47746.56	225921.4	0	225921.4	1216218	0	1216218	FCEV	0	47746.56	3	7
2045	2a	1	61652.66	291720.7	145860.3	145860.3	2148181	1074090	1074090	PHEV	30826.33	30826.33	3	8
2045	2a	1	241192.5	1155064	0	1155064	6467049	0	6467049	BEV	0	241192.5	3	3
2045	2a	1	52944.7	253550.6	0	253550.6	1406901	0	1406901	FCEV	0	52944.7	3	7
2045	2a	1	60244.97	288511.4	144255.7	144255.7	2177257	1088629	1088629	PHEV	30122.49	30122.49	3	8
2045	2a	1	247235.4	1198167	0	1198167	6908545	0	6908545	BEV	0	247235.4	3	3
2045	2a	1	57993.49	281051.5	0	281051.5	1607434	0	1607434	FCEV	0	57993.49	3	7
2045	2a	1	58138.84	281755.9	140878	140878	2179591	1089795	1089795	PHEV	29069.42	29069.42	3	8
2045	2a	1	254060.6	1245799	0	1245799	7396913	0	7396913	BEV	0	254060.6	3	3
2045	2a	1	63515.14	311449.7	0	311449.7	1835733	0	1835733	FCEV	0	63515.14	3	7
2045	2a	1	56042.77	274808.5	137404.3	137404.3	2178776	1089388	1089388	PHEV	28021.39	28021.39	3	8
2045	2a	1	259428	1286981	0	1286981	7868688	0	7868688	BEV	0	259428	3	3
2045	2a	1	68961.87	342108.8	0	342108.8	2077886	0	2077886	FCEV	0	68961.87	3	7
2045	2a	1	53458.81	265200.6	132600.3	132600.3	2154598	1077299	1077299	PHEV	26729.41	26729.41	3	8
2045	2a	1	263572.6	1322642	0	1322642	8325571	0	8325571	BEV	0	263572.6	3	3
2045	2a	1	74341	373052.8	0	373052.8	2334270	0	2334270	FCEV	0	74341	3	7
2045	2a	1	50492.84	253379.6	126689.8	126689.8	2108030	1054015	1054015	PHEV	25246.42	25246.42	3	8
2045	2a	1	270350.2	1372141	0	1372141	8891915	0	8891915	BEV	0	270350.2	3	3
2045	2a	1	80753.96	409860.3	0	409860.3	2641806	0	2641806	FCEV	0	80753.96	3	7
2045	2a	1	47877.84	243000.2	121500.1	121500.1	2068657	1034329	1034329	PHEV	23938.92	23938.92	3	8
2045	2a	1	277329.5	1423452	0	1423452	9493616	0	9493616	BEV	0	277329.5	3	3
2045	2a	1	87577.74	449511.1	0	449511.1	2983591	0	2983591	FCEV	0	87577.74	3	7
2045	2a	1	45100.9	231489.8	115744.9	115744.9	2013459	1006730	1006730	PHEV	22550.45	22550.45	3	8
2045	2a	1	250917	1302259	0	1302259	8930667	0	8930667	BEV	0	250917	3	3
2045	2a	1	83638.98	434086.3	0	434086.3	2964153	0	2964153	FCEV	0	83638.98	3	7
2045	2a	1	37172.88	192927.3	96463.63	96463.63	1709510	854755.1	854755.1	PHEV	18586.44	18586.44	3	8
2045	2a	1	14999.6	40037.53	40037.53	0	124213.4	124213.4	0	ICE	14999.6	0	4	1
2045	2a	1	19.06802	50.89712	50.89712	0	126.067	126.067	0	ICE	19.06802	0	4	2
2045	2a	1	16643.02	45377.69	45377.69	0	142907.5	142907.5	0	ICE	16643.02	0	4	1
2045	2a	1	16671.46	46410.33	46410.33	0	148848	148848	0	ICE	16671.46	0	4	1
2045	2a	1	16781.76	47678.84	47678.84	0	153305	153305	0	ICE	16781.76	0	4	1
2045	2a	1	28.78893	81.79251	81.79251	0	216.7782	216.7782	0	ICE	28.78893	0	4	2
2045	2a	1	14693.59	42587.9	42587.9	0	135873.4	135873.4	0	ICE	14693.59	0	4	1
2045	2a	1	13363.73	39499.05	39499.05	0	127369.4	127369.4	0	ICE	13363.73	0	4	1
2045	2a	1	12838.5	38682.15	38682.15	0	126355.2	126355.2	0	ICE	12838.5	0	4	1
2045	2a	1	9109.407	27968.34	27968.34	0	92511.72	92511.72	0	ICE	9109.407	0	4	1
2045	2a	1	3742.314	11704.31	11704.31	0	39060.19	39060.19	0	ICE	3742.314	0	4	1
2045	2a	1	5309.831	16911.01	16911.01	0	57003.11	57003.11	0	ICE	5309.831	0	4	1
2045	2a	1	7695.937	24951.31	24951.31	0	85347.99	85347.99	0	ICE	7695.937	0	4	1
2045	2a	1	224.63	728.2819	728.2819	0	2374.707	2374.707	0	ICE	224.63	0	4	2
2045	2a	1	7972.172	26303.62	26303.62	0	91376.57	91376.57	0	ICE	7972.172	0	4	1
2045	2a	1	9381.166	31489.95	31489.95	0	110934.1	110934.1	0	ICE	9381.166	0	4	1
2045	2a	1	203.049	681.5788	681.5788	0	2352.124	2352.124	0	ICE	203.049	0	4	2
2045	2a	1	15440.37	52713.56	52713.56	0	189664.3	189664.3	0	ICE	15440.37	0	4	1
2045	2a	1	498.7918	1702.88	1702.88	0	5892.832	5892.832	0	ICE	498.7918	0	4	2

2045	2a	1	18106.61	62853.47	62853.47	0	232154	232154	0	ICE	18106.61	0	4	1
2045	2a	1	21233.24	74923.38	74923.38	0	283390.8	283390.8	0	ICE	21233.24	0	4	1
2045	2a	1	20871.32	74842.05	74842.05	0	289065.2	289065.2	0	ICE	20871.32	0	4	1
2045	2a	1	727.7863	2609.754	2609.754	0	10089.22	10089.22	0	ICE	727.7863	0	4	2
2045	2a	1	174.6154	626.1499	375.69	250.46	2255.3	1353.18	902.12	PHEV	104.7692	69.84617	4	8
2045	2a	1	24163.97	88033.47	88033.47	0	345480.1	345480.1	0	ICE	24163.97	0	4	1
2045	2a	1	842.6017	3069.741	3069.741	0	12057.98	12057.98	0	ICE	842.6017	0	4	2
2045	2a	1	0.4227	1.539967	0	1.539967	3.569312	0	3.569312	BEV	0	0.4227	4	3
2045	2a	1	0.008627	0.031428	0	0.031428	0.072843	0	0.072843	FCEV	0	0.008627	4	7
2045	2a	1	517.2681	1884.496	1130.697	753.7983	7205.687	4323.412	2882.275	PHEV	310.3609	206.9072	4	8
2045	2a	1	27978.6	103533.7	103533.7	0	412193.1	412193.1	0	ICE	27978.6	0	4	1
2045	2a	1	984.8287	3644.319	3644.319	0	14538.96	14538.96	0	ICE	984.8287	0	4	2
2045	2a	1	239.8455	887.5388	0	887.5388	2251.354	0	2251.354	BEV	0	239.8455	4	3
2045	2a	1	5.610422	20.76114	0	20.76114	49.76838	0	49.76838	FCEV	0	5.610422	4	7
2045	2a	1	624.0287	2309.193	1372.321	936.8727	9718.452	5775.537	3942.915	PHEV	370.8513	253.1774	4	8
2045	2a	1	33023.64	124094.6	124094.6	0	499987	499987	0	ICE	33023.64	0	4	1
2045	2a	1	1180.641	4436.554	4436.554	0	17946.27	17946.27	0	ICE	1180.641	0	4	2
2045	2a	1	569.4516	2139.857	0	2139.857	6325.861	0	6325.861	BEV	0	569.4516	4	3
2045	2a	1	15.02951	56.47716	0	56.47716	139.9911	0	139.9911	FCEV	0	15.02951	4	7
2045	2a	1	766.9066	2881.843	1696.171	1185.673	12010.48	7069.024	4941.454	PHEV	451.3793	315.5273	4	8
2045	2a	1	36527.42	139353.6	139353.6	0	568875.7	568875.7	0	ICE	36527.42	0	4	1
2045	2a	1	1328.979	5070.109	5070.109	0	20821.77	20821.77	0	ICE	1328.979	0	4	2
2045	2a	1	1933.066	7374.724	0	7374.724	22189.24	0	22189.24	BEV	0	1933.066	4	3
2045	2a	1	66.26349	252.7979	0	252.7979	647.8562	0	647.8562	FCEV	0	66.26349	4	7
2045	2a	1	2307.213	8802.111	5102.71	3699.402	40330.75	23380.31	16950.44	PHEV	1337.525	969.6888	4	8
2045	2a	1	39723.74	153823.4	153823.4	0	635936	635936	0	ICE	39723.74	0	4	1
2045	2a	1	1453.199	5627.266	5627.266	0	23420.72	23420.72	0	ICE	1453.199	0	4	2
2045	2a	1	3907.962	15132.92	0	15132.92	47603.35	0	47603.35	BEV	0	3907.962	4	3
2045	2a	1	165.2563	639.9268	0	639.9268	1695.077	0	1695.077	FCEV	0	165.2563	4	7
2045	2a	1	4138.857	16027.02	9149.139	6877.881	76637.44	43749.03	32888.41	PHEV	2362.696	1776.161	4	8
2045	2a	1	42523.82	167102.5	167102.5	0	701068.6	701068.6	0	ICE	42523.82	0	4	1
2045	2a	1	1565.426	6151.528	6151.528	0	25997.13	25997.13	0	ICE	1565.426	0	4	2
2045	2a	1	6631.821	26060.54	0	26060.54	85772.28	0	85772.28	BEV	0	6631.821	4	3
2045	2a	1	334.3776	1313.977	0	1313.977	3596.864	0	3596.864	FCEV	0	334.3776	4	7
2045	2a	1	6233.533	24495.41	13766.42	10728.99	120878.1	67933.48	52944.6	PHEV	3503.245	2730.287	4	8
2045	2a	1	44902.25	179021.2	179021.2	0	763193.3	763193.3	0	ICE	44902.25	0	4	1
2045	2a	1	1662.64	6628.796	6628.796	0	28481.48	28481.48	0	ICE	1662.64	0	4	2
2045	2a	1	10274.61	40963.93	0	40963.93	140832.3	0	140832.3	BEV	0	10274.61	4	3
2045	2a	1	602.9261	2403.812	0	2403.812	6805.61	0	6805.61	FCEV	0	602.9261	4	7
2045	2a	1	8563.9	34143.5	18886.23	15257.27	173286.4	95852.16	77434.29	PHEV	4737.06	3826.84	4	8
2045	2a	1	46561.41	188303.6	188303.6	0	817297.4	817297.4	0	ICE	46561.41	0	4	1
2045	2a	1	1733.383	7010.148	7010.148	0	30681.34	30681.34	0	ICE	1733.383	0	4	2
2045	2a	1	14965.65	60524.1	0	60524.1	216866.4	0	216866.4	BEV	0	14965.65	4	3
2045	2a	1	1003.794	4059.543	0	4059.543	12523.86	0	12523.86	FCEV	0	1003.794	4	7
2045	2a	1	11040.09	44648.33	24301.45	20346.88	232730.3	126671.8	106058.5	PHEV	6008.963	5031.126	4	8
2045	2a	1	47561.87	195074.5	195074.5	0	862912.9	862912.9	0	ICE	47561.87	0	4	1
2045	2a	1	1770.628	7262.213	7262.213	0	32386.57	32386.57	0	ICE	1770.628	0	4	2

2045	2a	1	20930.94	85848.04	0	85848.04	320654.1	0	320654.1	BEV	0	20930.94	4	3
2045	2a	1	1582.364	6490.048	0	6490.048	21803.63	0	21803.63	FCEV	0	1582.364	4	7
2045	2a	1	13623.52	55876.72	29917.99	25958.73	299519.4	160371.3	139148.2	PHEV	7294.421	6329.097	4	8
2045	2a	1	47380.28	197044.2	197044.2	0	889498.8	889498.8	0	ICE	47380.28	0	4	1
2045	2a	1	1763.868	7335.539	7335.539	0	33377.91	33377.91	0	ICE	1763.868	0	4	2
2045	2a	1	28165.44	117133.9	0	117133.9	455600.9	0	455600.9	BEV	0	28165.44	4	3
2045	2a	1	2373.296	9870.016	0	9870.016	35490.61	0	35490.61	FCEV	0	2373.296	4	7
2045	2a	1	16103	66968.82	35263.87	31704.95	369123.1	194369.7	174753.4	PHEV	8479.378	7623.618	4	8
2045	2a	1	47036.28	198308.2	198308.2	0	914563.8	914563.8	0	ICE	47036.28	0	4	1
2045	2a	1	1751.062	7382.598	7382.598	0	34312.62	34312.62	0	ICE	1751.062	0	4	2
2045	2a	1	37612.32	158576.2	0	158576.2	641854.9	0	641854.9	BEV	0	37612.32	4	3
2045	2a	1	3500.459	14758.18	0	14758.18	56246.6	0	56246.6	FCEV	0	3500.459	4	7
2045	2a	1	18774.66	79155.27	40979.82	38175.46	448647.7	232271.3	216376.4	PHEV	9719.909	9054.75	4	8
2045	2a	1	45003.01	192314.1	192314.1	0	906694.3	906694.3	0	ICE	45003.01	0	4	1
2045	2a	1	1675.367	7159.448	7159.448	0	34012.23	34012.23	0	ICE	1675.367	0	4	2
2045	2a	1	48639.72	207855	0	207855	874881.8	0	874881.8	BEV	0	48639.72	4	3
2045	2a	1	4961.986	21204.35	0	21204.35	85126.97	0	85126.97	FCEV	0	4961.986	4	7
2045	2a	1	21026.45	89853.58	45722.64	44130.95	523538.1	266406.1	257132	PHEV	10699.46	10326.99	4	8
2045	2a	1	41331.46	178992.1	178992.1	0	863396.5	863396.5	0	ICE	41331.46	0	4	1
2045	2a	1	1538.683	6663.498	6663.498	0	32383.79	32383.79	0	ICE	1538.683	0	4	2
2045	2a	1	61304.58	265488.7	0	265488.7	1161636	0	1161636	BEV	0	61304.58	4	3
2045	2a	1	6811.62	29498.74	0	29498.74	124260.1	0	124260.1	FCEV	0	6811.62	4	7
2045	2a	1	22705.4	98329.14	49164.57	49164.57	588897	294448.5	294448.5	PHEV	11352.7	11352.7	4	8
2045	2a	1	36026.32	158081.3	158081.3	0	780673.1	780673.1	0	ICE	36026.32	0	4	1
2045	2a	1	1341.184	5885.034	5885.034	0	29277.78	29277.78	0	ICE	1341.184	0	4	2
2045	2a	1	73252.09	321425.8	0	321425.8	1448124	0	1448124	BEV	0	73252.09	4	3
2045	2a	1	9053.629	39726.78	0	39726.78	173695.6	0	173695.6	FCEV	0	9053.629	4	7
2045	2a	1	25991.28	114048.2	57024.08	57024.08	700005.5	350002.7	350002.7	PHEV	12995.64	12995.64	4	8
2045	2a	1	29354.78	130488.7	130488.7	0	660037.2	660037.2	0	ICE	29354.78	0	4	1
2045	2a	1	1092.816	4857.82	4857.82	0	24751.16	24751.16	0	ICE	1092.816	0	4	2
2045	2a	1	86600.79	384960.4	0	384960.4	1785935	0	1785935	BEV	0	86600.79	4	3
2045	2a	1	11809.2	52494.61	0	52494.61	237740.6	0	237740.6	FCEV	0	11809.2	4	7
2045	2a	1	29395.19	130668.4	65334.19	65334.19	822337.8	411168.9	411168.9	PHEV	14697.6	14697.6	4	8
2045	2a	1	20982.41	94473.74	94473.74	0	489660.5	489660.5	0	ICE	20982.41	0	4	1
2045	2a	1	781.131	3517.058	3517.058	0	18360.61	18360.61	0	ICE	781.131	0	4	2
2045	2a	1	100373.1	451931.9	0	451931.9	2159107	0	2159107	BEV	0	100373.1	4	3
2045	2a	1	14998.28	67530.05	0	67530.05	316350	0	316350	FCEV	0	14998.28	4	7
2045	2a	1	32540.64	146514.9	73257.45	73257.45	945947.5	472973.8	472973.8	PHEV	16270.32	16270.32	4	8
2045	2a	1	11276.17	51417.2	51417.2	0	273182	273182	0	ICE	11276.17	0	4	1
2045	2a	1	419.7881	1914.154	1914.154	0	10242.73	10242.73	0	ICE	419.7881	0	4	2
2045	2a	1	115956.5	528739.8	0	528739.8	2601478	0	2601478	BEV	0	115956.5	4	3
2045	2a	1	18876.65	86073.92	0	86073.92	416683.1	0	416683.1	FCEV	0	18876.65	4	7
2045	2a	1	35841.73	163431.5	81715.75	81715.75	1083179	541589.6	541589.6	PHEV	17920.87	17920.87	4	8
2045	2a	1	131673.5	607949.9	0	607949.9	3080877	0	3080877	BEV	0	131673.5	4	3
2045	2a	1	23236.51	107285.3	0	107285.3	536376.6	0	536376.6	FCEV	0	23236.51	4	7
2045	2a	1	38727.51	178808.8	89404.39	89404.39	1217301	608650.6	608650.6	PHEV	19363.76	19363.76	4	8
2045	2a	1	140415.4	656356.3	0	656356.3	3426281	0	3426281	BEV	0	140415.4	4	3

2045	2a	1	26745.79	125020.2	0	125020.2	644744.9	0	644744.9	FCEV	0	26745.79	4	7
2045	2a	1	39210.65	183285.9	91642.93	91642.93	1278844	639421.8	639421.8	PHEV	19605.32	19605.32	4	8
2045	2a	1	146278.7	692144	0	692144	3722501	0	3722501	BEV	0	146278.7	4	3
2045	2a	1	29960.7	141764.4	0	141764.4	754139.6	0	754139.6	FCEV	0	29960.7	4	7
2045	2a	1	38686.7	183053.1	91526.53	91526.53	1309961	654980.3	654980.3	PHEV	19343.35	19343.35	4	8
2045	2a	1	153131.4	733341.6	0	733341.6	4062753	0	4062753	BEV	0	153131.4	4	3
2045	2a	1	33614.21	160977.4	0	160977.4	883054.8	0	883054.8	FCEV	0	33614.21	4	7
2045	2a	1	38249.1	183173.8	91586.89	91586.89	1344204	672101.8	672101.8	PHEV	19124.55	19124.55	4	8
2045	2a	1	158718.4	769190.5	0	769190.5	4389364	0	4389364	BEV	0	158718.4	4	3
2045	2a	1	37230.24	180427.4	0	180427.4	1020450	0	1020450	FCEV	0	37230.24	4	7
2045	2a	1	37323.54	180879.6	90439.8	90439.8	1361061	680530.4	680530.4	PHEV	18661.77	18661.77	4	8
2045	2a	1	165038.2	809273.3	0	809273.3	4755691	0	4755691	BEV	0	165038.2	4	3
2045	2a	1	41259.56	202318.3	0	202318.3	1179364	0	1179364	FCEV	0	41259.56	4	7
2045	2a	1	36405.49	178516.2	89258.08	89258.08	1376646	688322.8	688322.8	PHEV	18202.75	18202.75	4	8
2045	2a	1	168431.9	835563.6	0	835563.6	5056294	0	5056294	BEV	0	168431.9	4	3
2045	2a	1	44773.03	222111.8	0	222111.8	1334310	0	1334310	FCEV	0	44773.03	4	7
2045	2a	1	34707.78	172179.7	86089.86	86089.86	1360257	680128.3	680128.3	PHEV	17353.89	17353.89	4	8
2045	2a	1	171995.7	863096.8	0	863096.8	5376869	0	5376869	BEV	0	171995.7	4	3
2045	2a	1	48511.61	243437.5	0	243437.5	1506609	0	1506609	FCEV	0	48511.61	4	7
2045	2a	1	32949.37	165344.2	82672.1	82672.1	1336820	668410.1	668410.1	PHEV	16474.68	16474.68	4	8
2045	2a	1	176534.1	895984.6	0	895984.6	5743237	0	5743237	BEV	0	176534.1	4	3
2045	2a	1	52730.96	267631.8	0	267631.8	1705401	0	1705401	FCEV	0	52730.96	4	7
2045	2a	1	31263.42	158675	79337.48	79337.48	1310570	655284.9	655284.9	PHEV	15631.71	15631.71	4	8
2045	2a	1	179618.7	921930.7	0	921930.7	6079004	0	6079004	BEV	0	179618.7	4	3
2045	2a	1	56721.7	291136	0	291136	1909550	0	1909550	FCEV	0	56721.7	4	7
2045	2a	1	29210.61	149929.6	74964.8	74964.8	1263141	631570.6	631570.6	PHEV	14605.31	14605.31	4	8
2045	2a	1	155574.7	807432.5	0	807432.5	5462667	0	5462667	BEV	0	155574.7	4	3
2045	2a	1	51858.22	269144.2	0	269144.2	1812370	0	1812370	FCEV	0	51858.22	4	7
2045	2a	1	23048.1	119619.6	59809.82	59809.82	1021830	510914.8	510914.8	PHEV	11524.05	11524.05	4	8
2045	2a	1	3.985196	10.63744	0	10.63744	23.47483	0	23.47483	BEV	0	3.985196	1	3
2045	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2045	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2045	2a	1	61.29586	167.125	167.125	0	271.2336	271.2336	0	ICE	61.29586	0	1	2
2045	2a	1	78.19999	217.6947	217.6947	0	372.8115	372.8115	0	ICE	78.19999	0	1	2
2045	2a	1	25.89186	73.56162	73.56162	0	139.2079	139.2079	0	ICE	25.89186	0	1	2
2045	2a	1	46.5605	134.9509	134.9509	0	254.0243	254.0243	0	ICE	46.5605	0	1	2
2045	2a	1	98.7177	308.7455	308.7455	0	660.9379	660.9379	0	ICE	98.7177	0	1	2
2045	2a	1	260.0699	858.0824	858.0824	0	2069.03	2069.03	0	ICE	260.0699	0	1	2
2045	2a	1	382.1241	1282.684	1282.684	0	3250.54	3250.54	0	ICE	382.1241	0	1	2
2045	2a	1	328.5275	1102.775	0	1102.775	3072.001	0	3072.001	BEV	0	328.5275	1	3
2045	2a	1	0.019301	0.064789	0	0.064789	0.180483	0	0.180483	FCEV	0	0.019301	1	7
2045	2a	1	343.3895	1152.662	691.5974	461.065	2823.219	1693.931	1129.287	PHEV	206.0337	137.3558	1	8
2045	2a	1	422.2153	1441.447	0	1441.447	4152.302	0	4152.302	BEV	0	422.2153	1	3
2045	2a	1	0.059159	0.201968	0	0.201968	0.581799	0	0.581799	FCEV	0	0.059159	1	7
2045	2a	1	533.0786	1819.936	1091.961	727.9743	4654.931	2792.959	1861.972	PHEV	319.8472	213.2314	1	8
2045	2a	1	442.3274	1535.451	1535.451	0	4295.893	4295.893	0	ICE	442.3274	0	1	2
2045	2a	1	1054.93	3661.979	0	3661.979	10966.18	0	10966.18	BEV	0	1054.93	1	3

2045	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2045	2a	1	501.6476	1741.369	1044.822	696.5477	4663.555	2798.133	1865.422	PHEV	300.9885	200.659	1	8
2045	2a	1	1776.468	5047.142	5047.142	0	17851.02	17851.02	0	ICE	1776.468	0	2	1
2045	2a	1	3661.358	12080.4	12080.4	0	46434.83	46434.83	0	ICE	3661.358	0	2	1
2045	2a	1	5527.304	18553.61	18553.61	0	72295.24	72295.24	0	ICE	5527.304	0	2	1
2045	2a	1	7050.601	24070.82	24070.82	0	94448.98	94448.98	0	ICE	7050.601	0	2	1
2045	2a	1	2.951286	9.061245	9.061245	0	29.99489	29.99489	0	ICE	2.951286	0	3	2
2045	2a	1	86.97	286.9514	286.9514	0	1055.832	1055.832	0	ICE	86.97	0	3	2
2045	2a	1	67.74595	227.4042	227.4042	0	830.1111	830.1111	0	ICE	67.74595	0	3	2
2045	2a	1	296.5889	1029.549	1029.549	0	3967.319	3967.319	0	ICE	296.5889	0	3	2
2045	2a	1	323.1707	1140.337	0	1140.337	2421.096	0	2421.096	BEV	0	323.1707	3	3
2045	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2045	2a	1	29.41091	103.7791	62.26743	41.51162	401.0559	240.6335	160.4223	PHEV	17.64655	11.76436	3	8
2045	2a	1	43.60968	126.3983	126.3983	0	357.688	357.688	0	ICE	43.60968	0	4	2
2045	2a	1	54.85571	162.1365	162.1365	0	464.4644	464.4644	0	ICE	54.85571	0	4	2
2045	2a	1	70.0034	210.9188	210.9188	0	641.3569	641.3569	0	ICE	70.0034	0	4	2
2045	2a	1	47.99651	147.3622	147.3622	0	455.5136	455.5136	0	ICE	47.99651	0	4	2
2045	2a	1	61.45618	192.2079	192.2079	0	613.042	613.042	0	ICE	61.45618	0	4	2
2045	2a	1	412.3381	1360.481	1360.481	0	4438.582	4438.582	0	ICE	412.3381	0	4	2
2045	2a	1	1060.218	3680.334	3680.334	0	12995.7	12995.7	0	ICE	1060.218	0	4	2
2045	2a	1	730.8096	2578.728	2578.728	0	9415.801	9415.801	0	ICE	730.8096	0	4	2
2045	2a	1	1.735294	5.029575	0	5.029575	11.43162	0	11.43162	BEV	0	1.735294	1	3
2045	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2045	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2045	2a	1	68.78563	226.9534	0	226.9534	612.7396	0	612.7396	BEV	0	68.78563	1	3
2045	2a	1	0.25995	0.857686	0	0.857686	2.315623	0	2.315623	FCEV	0	0.25995	1	7
2045	2a	1	144.5899	477.0643	286.2386	190.8257	1112.86	667.7157	445.1438	PHEV	86.75394	57.83596	1	8
2045	2a	1	759.7565	2680.869	0	2680.869	8317.445	0	8317.445	BEV	0	759.7565	1	3
2045	2a	1	23.13136	81.62108	0	81.62108	253.2309	0	253.2309	FCEV	0	23.13136	1	7
2045	2a	1	546.3665	1927.903	1156.742	771.1614	5400.32	3240.192	2160.128	PHEV	327.8199	218.5466	1	8
2045	2a	1	11.72781	33.99189	33.99189	0	110.6474	110.6474	0	ICE	11.72781	0	3	2
2045	2a	1	12.592	37.21805	37.21805	0	126.6956	126.6956	0	ICE	12.592	0	3	2
2045	2a	1	18.79146	52.31204	52.31204	0	143.3766	143.3766	0	ICE	18.79146	0	4	2
2045	2a	1	103.0555	328.2164	328.2164	0	1066.108	1066.108	0	ICE	103.0555	0	4	2
2045	2a	1	7.458856	20.3368	0	20.3368	45.04164	0	45.04164	BEV	0	7.458856	1	3
2045	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2045	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2045	2a	1	83.88458	271.9656	0	271.9656	714.9404	0	714.9404	BEV	0	83.88458	1	3
2045	2a	1	0.828766	2.686976	0	2.686976	7.063497	0	7.063497	FCEV	0	0.828766	1	7
2045	2a	1	23.31745	75.59844	45.35906	30.23938	168.9745	101.3847	67.58978	PHEV	13.99047	9.32698	1	8
2045	2a	1	65.88814	232.4922	232.4922	0	667.6489	667.6489	0	ICE	65.88814	0	1	2
2045	2a	1	67.64885	230.9538	0	230.9538	664.3188	0	664.3188	BEV	0	67.64885	2	3
2045	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2045	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2045	2a	1	8.736188	26.82246	26.82246	0	53.40286	53.40286	0	ICE	8.736188	0	1	2
2045	2a	1	1.561649	4.347348	4.347348	0	12.85387	12.85387	0	ICE	1.561649	0	2	2
2045	2a	1	5.929351	18.88409	18.88409	0	63.84056	63.84056	0	ICE	5.929351	0	3	2

2045	2a	1	15.4882	52.87687	0	52.87687	105.8156	0	105.8156	BEV	0	15.4882	3	3
2045	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2045	2a	1	7.012573	23.94099	14.3646	9.576397	87.89016	52.7341	35.15606	PHEV	4.207544	2.805029	3	8
2045	2a	1	7.303844	19.91415	19.91415	0	56.4391	56.4391	0	ICE	7.303844	0	4	2
2045	2a	1	11.87885	38.51289	38.51289	0	140.1459	140.1459	0	ICE	11.87885	0	3	2
2045	2a	1	2.665089	7.266445	0	7.266445	10.89574	0	10.89574	BEV	0	2.665089	3	3
2045	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2045	2a	1	0	0	0	0	0	0	0	PHEV	0	0	3	8
2045	2a	1	16.16586	44.07669	0	44.07669	67.51384	0	67.51384	BEV	0	16.16586	4	3
2045	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2045	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2045	2a	1	6.179055	18.61737	18.61737	0	33.86009	33.86009	0	ICE	6.179055	0	1	2
2045	2a	1	14.38847	45.82512	0	45.82512	117.7577	0	117.7577	BEV	0	14.38847	1	3
2045	2a	1	1.460758	4.652296	0	4.652296	11.95509	0	11.95509	FCEV	0	1.460758	1	7
2045	2a	1	1.533796	4.884911	2.930947	1.953964	10.31922	6.191529	4.127686	PHEV	0.920278	0.613519	1	8
2045	2a	1	26.91933	88.81843	0	88.81843	238.4558	0	238.4558	BEV	0	26.91933	2	3
2045	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2045	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2045	2a	1	4.550296	14.23132	14.23132	0	49.42702	49.42702	0	ICE	4.550296	0	3	2
2045	2a	1	1.877139	5.54824	0	5.54824	12.94538	0	12.94538	BEV	0	1.877139	1	3
2045	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2045	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2045	2a	1	9.194331	28.22908	0	28.22908	67.12807	0	67.12807	BEV	0	9.194331	1	3
2045	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2045	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2045	2a	1	7.938708	24.82879	0	24.82879	62.89383	0	62.89383	BEV	0	7.938708	1	3
2045	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2045	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2045	2a	1	2.654473	8.302023	8.302023	0	26.68907	26.68907	0	ICE	2.654473	0	2	2
2045	2a	1	33.9132	113.8371	0	113.8371	315.3371	0	315.3371	BEV	0	33.9132	2	3
2045	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2045	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2045	2a	1	1.568602	4.726167	4.726167	0	16.37634	16.37634	0	ICE	1.568602	0	3	2
2045	2a	1	1.682259	4.683107	0	4.683107	10.43307	0	10.43307	BEV	0	1.682259	1	3
2045	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2045	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2045	2a	1	3.208821	9.668113	0	9.668113	22.9408	0	22.9408	BEV	0	3.208821	1	3
2045	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2045	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2045	2a	1	3.900384	11.97523	0	11.97523	28.82232	0	28.82232	BEV	0	3.900384	2	3
2045	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2045	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2045	2a	1	0.720975	2.378808	2.378808	0	7.569272	7.569272	0	ICE	0.720975	0	2	2
2045	2a	1	0.246311	0.72802	0	0.72802	1.338907	0	1.338907	BEV	0	0.246311	4	3
2045	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2045	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2045	2a	1	1.001792	2.674024	2.674024	0	6.843253	6.843253	0	ICE	1.001792	0	2	2

2045	2a	1	0.224003	0.623585	0.623585	0	2.045597	2.045597	0	ICE	0.224003	0	3	2
2045	2a	1	2.381883	7.44948	0	7.44948	13.45254	0	13.45254	BEV	0	2.381883	3	3
2045	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2045	2a	1	0	0	0	0	0	0	0	PHEV	0	0	3	8
2045	2a	1	1.447944	4.694438	0	4.694438	8.825125	0	8.825125	BEV	0	1.447944	3	3
2045	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2045	2a	1	1.002423	3.249996	1.949997	1.299998	10.97985	6.58791	4.39194	PHEV	0.601454	0.400969	3	8
2045	2a	1	0.206437	0.716606	0	0.716606	1.445101	0	1.445101	BEV	0	0.206437	4	3
2045	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2045	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2045	2a	1	2.189291	5.843742	0	5.843742	12.74623	0	12.74623	BEV	0	2.189291	2	3
2045	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2045	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2045	2a	1	1.819491	4.960896	4.960896	0	17.63001	17.63001	0	ICE	1.819491	0	2	2
2045	2a	1	0.973689	2.877922	0	2.877922	6.615547	0	6.615547	BEV	0	0.973689	2	3
2045	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2045	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2045	2a	1	1.566745	4.720572	4.720572	0	15.34114	15.34114	0	ICE	1.566745	0	2	2
2045	2a	1	0.551687	1.662221	0	1.662221	3.917255	0	3.917255	BEV	0	0.551687	2	3
2045	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2045	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2045	2a	1	1.978889	6.075722	6.075722	0	22.85197	22.85197	0	ICE	1.978889	0	2	2
2045	2a	1	1.643575	5.140379	0	5.140379	12.95228	0	12.95228	BEV	0	1.643575	2	3
2045	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2045	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2045	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2045	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2045	2a	1	1.756589	5.393202	0	5.393202	9.275278	0	9.275278	BEV	0	1.756589	3	3
2045	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2045	2a	1	0	0	0	0	0	0	0	PHEV	0	0	3	8
2045	2a	1	1.016878	3.413376	0	3.413376	6.651927	0	6.651927	BEV	0	1.016878	3	3
2045	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2045	2a	1	0.777613	2.610228	1.566137	1.044091	9.497894	5.698736	3.799158	PHEV	0.466568	0.311045	3	8
2045	2a	1	1.862465	5.184768	0	5.184768	8.000722	0	8.000722	BEV	0	1.862465	4	3
2045	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2045	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2045	2a	1	0.315913	0.915644	0	0.915644	1.463854	0	1.463854	BEV	0	0.315913	4	3
2045	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2045	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2045	2a	1	0.1257	0.36433	0.36433	0	1.127217	1.127217	0	ICE	0.1257	0	2	2
2045	2a	1	7.701753	20.99906	0	20.99906	44.6335	0	44.6335	BEV	0	7.701753	2	3
2045	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2045	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2045	2a	1	0.506295	1.43844	0	1.43844	3.162719	0	3.162719	BEV	0	0.506295	2	3
2045	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2045	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2045	2a	1	0.129139	0.352102	0.352102	0	0.93611	0.93611	0	ICE	0.129139	0	3	2
2045	2a	1	1.12481	3.324589	3.324589	0	12.1594	12.1594	0	ICE	1.12481	0	2	2
2045	2a	1	0.233929	0.718224	0	0.718224	1.21417	0	1.21417	BEV	0	0.233929	4	3

2045	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2045	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2045	2a	1	1.559707	4.4313	0	4.4313	9.888219	0	9.888219	BEV	0	1.559707	1	3
2045	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2045	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2045	2a	1	0.194587	0.56399	0	0.56399	1.264586	0	1.264586	BEV	0	0.194587	2	3
2045	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2045	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2045	2a	1	0.60659	1.931899	1.931899	0	6.175142	6.175142	0	ICE	0.60659	0	2	2
2045	2a	1	1.008944	3.386743	3.386743	0	12.38368	12.38368	0	ICE	1.008944	0	2	2
2045	2a	1	0.192149	0.512893	0.512893	0	1.392152	1.392152	0	ICE	0.192149	0	3	2
2045	2a	1	0.121071	0.323168	0	0.323168	0.479334	0	0.479334	BEV	0	0.121071	3	3
2045	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2045	2a	1	0	0	0	0	0	0	0	PHEV	0	0	3	8
2045	2a	1	1.432274	4.561578	0	4.561578	8.163709	0	8.163709	BEV	0	1.432274	3	3
2045	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2045	2a	1	0	0	0	0	0	0	0	PHEV	0	0	3	8
2045	2a	1	3.254063	10.73655	0	10.73655	19.9449	0	19.9449	BEV	0	3.254063	3	3
2045	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2045	2a	1	0.834375	2.752962	1.651777	1.101185	11.38536	6.831213	4.554142	PHEV	0.500625	0.33375	3	8
2045	2a	1	0.280191	0.908419	0.908419	0	2.936775	2.936775	0	ICE	0.280191	0	2	2
2045	2a	1	0.189299	0.505285	0	0.505285	0.794444	0	0.794444	BEV	0	0.189299	4	3
2045	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2045	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2045	2a	1	0	0	0	0	0	0	0	BEV	0	0	2	3
2045	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2045	2a	1	0	0	0	0	0	0	0	BEV	0	0	2	3
2045	2a	1	4.181055	14.5137	0	14.5137	43.17621	0	43.17621	FCEV	0	4.181055	2	7
2045	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2045	2a	1	0	0	0	0	0	0	0	BEV	0	0	2	3
2045	2a	1	4.793054	16.91272	0	16.91272	52.10605	0	52.10605	FCEV	0	4.793054	2	7
2045	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2045	2a	1	0.033095	0.094026	0.094026	0	0.330906	0.330906	0	ICE	0.033095	0	3	2
2045	2a	1	0	0	0	0	0	0	0	BEV	0	0	3	3
2045	2a	1	0.158637	0.550676	0	0.550676	1.158369	0	1.158369	FCEV	0	0.158637	3	7
2045	2a	1	2.273793	7.893016	4.73581	3.157206	33.54207	20.12524	13.41683	PHEV	1.364276	0.909517	3	8
2045	2a	1	0.155856	0.532093	0.532093	0	1.829739	1.829739	0	ICE	0.155856	0	2	2
2045	2a	1	0.079949	0.240884	0	0.240884	0.389823	0	0.389823	BEV	0	0.079949	3	3
2045	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2045	2a	1	0	0	0	0	0	0	0	PHEV	0	0	3	8
2045	2a	1	0.24839	0.791086	0	0.791086	1.865523	0	1.865523	BEV	0	0.24839	2	3
2045	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2045	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2045	2a	1	0.281025	0.991622	0.991622	0	3.444289	3.444289	0	ICE	0.281025	0	2	2
2045	2a	1	0.172033	0.557755	0	0.557755	1.489582	0	1.489582	BEV	0	0.172033	2	3
2045	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2045	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2045	2a	1	0.050748	0.147089	0	0.147089	0.217532	0	0.217532	BEV	0	0.050748	3	3
2045	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7

2045	2a	1	0	0	0	0	0	0	0	PHEV	0	0	3	8
2045	2a	1	0.082169	0.228743	0	0.228743	0.494566	0	0.494566	BEV	0	0.082169	2	3
2045	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2045	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2045	2a	1	0.042253	0.120045	0.120045	0	0.573877	0.573877	0	ICE	0.042253	0	2	2
2045	2a	1	0.219031	0.659937	0	0.659937	1.059077	0	1.059077	BEV	0	0.219031	4	3
2045	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2045	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2045	2a	1	0	0	0	0	0	0	0	BEV	0	0	4	3
2045	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2045	2a	1	0.269667	0.905198	0.543119	0.362079	3.583045	2.149827	1.433218	PHEV	0.1618	0.107867	4	8
2046	2a	1	14792.85	39485.68	39485.68	0	56678.76	56678.76	0	ICE	14792.85	0	1	1
2046	2a	1	15338.99	41822.21	41822.21	0	62793.84	62793.84	0	ICE	15338.99	0	1	1
2046	2a	1	14374.07	40014.81	40014.81	0	63012.31	63012.31	0	ICE	14374.07	0	1	1
2046	2a	1	16488.42	46845.41	46845.41	0	77759.85	77759.85	0	ICE	16488.42	0	1	1
2046	2a	1	16696.41	48392.86	48392.86	0	84142.05	84142.05	0	ICE	16696.41	0	1	1
2046	2a	1	44.3266	128.4762	128.4762	0	234.2993	234.2993	0	ICE	44.3266	0	1	2
2046	2a	1	17596.62	52010.14	52010.14	0	94718.6	94718.6	0	ICE	17596.62	0	1	1
2046	2a	1	14724.27	44363.94	44363.94	0	84818.12	84818.12	0	ICE	14724.27	0	1	1
2046	2a	1	11708.74	35949.01	35949.01	0	72082.34	72082.34	0	ICE	11708.74	0	1	1
2046	2a	1	13622.03	42603.72	42603.72	0	89347.48	89347.48	0	ICE	13622.03	0	1	1
2046	2a	1	155.9439	487.7239	487.7239	0	1036.454	1036.454	0	ICE	155.9439	0	1	2
2046	2a	1	13757.64	43816.01	43816.01	0	96467.15	96467.15	0	ICE	13757.64	0	1	1
2046	2a	1	215.1019	685.0673	685.0673	0	1493.962	1493.962	0	ICE	215.1019	0	1	2
2046	2a	1	20401.83	66145.58	66145.58	0	152817	152817	0	ICE	20401.83	0	1	1
2046	2a	1	25778.57	85054.6	85054.6	0	205326.5	205326.5	0	ICE	25778.57	0	1	1
2046	2a	1	26882.87	90238.26	90238.26	0	228377.6	228377.6	0	ICE	26882.87	0	1	1
2046	2a	1	512.9509	1721.833	1721.833	0	4333.184	4333.184	0	ICE	512.9509	0	1	2
2046	2a	1	33054.01	112846.7	112846.7	0	299601.8	299601.8	0	ICE	33054.01	0	1	1
2046	2a	1	34138.33	118504.4	118504.4	0	328359.2	328359.2	0	ICE	34138.33	0	1	1
2046	2a	1	41286.04	145681.5	145681.5	0	423020.9	423020.9	0	ICE	41286.04	0	1	1
2046	2a	1	505.2326	1782.759	1782.759	0	5170.297	5170.297	0	ICE	505.2326	0	1	2
2046	2a	1	2401.25	8473.025	0	8473.025	25155.6	0	25155.6	BEV	0	2401.25	1	3
2046	2a	1	49.00509	172.9189	0	172.9189	538.9342	0	538.9342	FCEV	0	49.00509	1	7
2046	2a	1	2166.009	7642.956	4127.196	3515.76	21913.17	11833.11	10080.06	PHEV	1169.645	996.364	1	8
2046	2a	1	48887.95	175306.3	175306.3	0	531248.3	531248.3	0	ICE	48887.95	0	1	1
2046	2a	1	598.2599	2145.288	2145.288	0	6494.111	6494.111	0	ICE	598.2599	0	1	2
2046	2a	1	3475.135	12461.42	0	12461.42	38242.18	0	38242.18	BEV	0	3475.135	1	3
2046	2a	1	70.92112	254.3146	0	254.3146	819.9511	0	819.9511	FCEV	0	70.92112	1	7
2046	2a	1	2245.963	8053.752	4349.026	3704.726	24218.04	13077.74	11140.3	PHEV	1212.82	1033.143	1	8
2046	2a	1	57953.17	211133.3	211133.3	0	667723.8	667723.8	0	ICE	57953.17	0	1	1
2046	2a	1	706.1793	2572.731	2572.731	0	8130.248	8130.248	0	ICE	706.1793	0	1	2
2046	2a	1	5051.779	18404.49	0	18404.49	58901.28	0	58901.28	BEV	0	5051.779	1	3
2046	2a	1	118.1703	430.5144	0	430.5144	1436.341	0	1436.341	FCEV	0	118.1703	1	7
2046	2a	1	2477.573	9026.218	4783.896	4242.322	28264.99	14980.45	13284.55	PHEV	1313.113	1164.459	1	8
2046	2a	1	69390.18	256775.6	256775.6	0	846152.2	846152.2	0	ICE	69390.18	0	1	1
2046	2a	1	853.2072	3157.259	3157.259	0	10395.86	10395.86	0	ICE	853.2072	0	1	2

2046	2a	1	7186.636	26593.86	0	26593.86	88320.07	0	88320.07	BEV	0	7186.636	1	3
2046	2a	1	189.6766	701.8907	0	701.8907	2422.476	0	2422.476	FCEV	0	189.6766	1	7
2046	2a	1	2740.304	10140.38	5273	4867.384	33329.36	17331.26	15998.09	PHEV	1424.958	1315.346	1	8
2046	2a	1	79298.72	297984.7	297984.7	0	1022307	1022307	0	ICE	79298.72	0	1	1
2046	2a	1	979.7447	3681.636	3681.636	0	12621.34	12621.34	0	ICE	979.7447	0	1	2
2046	2a	1	12811.85	48143.73	0	48143.73	166433.9	0	166433.9	BEV	0	12811.85	1	3
2046	2a	1	439.1769	1650.317	0	1650.317	5893.343	0	5893.343	FCEV	0	439.1769	1	7
2046	2a	1	4870.888	18303.58	9115.183	9188.397	62240.94	30995.99	31244.95	PHEV	2425.702	2445.186	1	8
2046	2a	1	90278.69	344416.8	344416.8	0	1229790	1229790	0	ICE	90278.69	0	1	1
2046	2a	1	1123.441	4285.972	4285.972	0	15292.39	15292.39	0	ICE	1123.441	0	1	2
2046	2a	1	20579.61	78512.05	0	78512.05	282230.6	0	282230.6	BEV	0	20579.61	1	3
2046	2a	1	870.2517	3320.045	0	3320.045	12261.67	0	12261.67	FCEV	0	870.2517	1	7
2046	2a	1	7801.171	29761.78	14166.61	15595.17	105242.2	50095.3	55146.93	PHEV	3713.357	4087.814	1	8
2046	2a	1	102306.7	396165.4	396165.4	0	1470298	1470298	0	ICE	102306.7	0	1	1
2046	2a	1	1283.803	4971.311	4971.311	0	18437.03	18437.03	0	ICE	1283.803	0	1	2
2046	2a	1	31186.84	120765.7	0	120765.7	450745.2	0	450745.2	BEV	0	31186.84	1	3
2046	2a	1	1572.446	6089.028	0	6089.028	23177.15	0	23177.15	FCEV	0	1572.446	1	7
2046	2a	1	11787.54	45645.24	20722.94	24922.3	167906.9	76229.71	91677.14	PHEV	5351.542	6435.996	1	8
2046	2a	1	115206.3	452717.2	452717.2	0	1744662	1744662	0	ICE	115206.3	0	1	1
2046	2a	1	1457.25	5726.437	5726.437	0	22053.51	22053.51	0	ICE	1457.25	0	1	2
2046	2a	1	45512.46	178846.7	0	178846.7	692463.6	0	692463.6	BEV	0	45512.46	1	3
2046	2a	1	2670.725	10494.93	0	10494.93	41199.53	0	41199.53	FCEV	0	2670.725	1	7
2046	2a	1	17151.98	67400.76	29117.13	38283.63	257762	111353.2	146408.8	PHEV	7409.655	9742.325	1	8
2046	2a	1	128485.9	512261.8	512261.8	0	2048756	2048756	0	ICE	128485.9	0	1	1
2046	2a	1	1637.508	6528.597	6528.597	0	26094.37	26094.37	0	ICE	1637.508	0	1	2
2046	2a	1	64575.91	257458.3	0	257458.3	1033618	0	1033618	BEV	0	64575.91	1	3
2046	2a	1	4331.311	17268.55	0	17268.55	70022.39	0	70022.39	FCEV	0	4331.311	1	7
2046	2a	1	24265.52	96744.43	39665.21	57079.21	384440	157620.4	226819.6	PHEV	9948.861	14316.65	1	8
2046	2a	1	140750	569221.3	569221.3	0	2358336	2358336	0	ICE	140750	0	1	1
2046	2a	1	1793.809	7254.524	7254.524	0	30040.51	30040.51	0	ICE	1793.809	0	1	2
2046	2a	1	89117.55	360409.2	0	360409.2	1497723	0	1497723	BEV	0	89117.55	1	3
2046	2a	1	6737.221	27246.67	0	27246.67	113955.9	0	113955.9	FCEV	0	6737.221	1	7
2046	2a	1	33390.28	135037	52394.35	82642.63	556451.9	215903.4	340548.6	PHEV	12955.43	20434.85	1	8
2046	2a	1	150207.5	616074.6	616074.6	0	2641567	2641567	0	ICE	150207.5	0	1	1
2046	2a	1	1914.341	7851.65	7851.65	0	33651.12	33651.12	0	ICE	1914.341	0	1	2
2046	2a	1	119481	490050	0	490050	2106230	0	2106230	BEV	0	119481	1	3
2046	2a	1	10067.79	41292.93	0	41292.93	178237.9	0	178237.9	FCEV	0	10067.79	1	7
2046	2a	1	44637.13	183078.7	67006.82	116071.9	781498.9	286028.6	495470.3	PHEV	16337.19	28299.94	1	8
2046	2a	1	155972	648653.1	648653.1	0	2876102	2876102	0	ICE	155972	0	1	1
2046	2a	1	1987.807	8266.851	8266.851	0	36641.39	36641.39	0	ICE	1987.807	0	1	2
2046	2a	1	156439.8	650598.5	0	650598.5	2890150	0	2890150	BEV	0	156439.8	1	3
2046	2a	1	14559.35	60549.14	0	60549.14	269766	0	269766	FCEV	0	14559.35	1	7
2046	2a	1	58275.79	242356.2	83370.53	158985.7	1070724	368329	702394.8	PHEV	20046.87	38228.92	1	8
2046	2a	1	156650.9	660451.3	660451.3	0	3025935	3025935	0	ICE	156650.9	0	1	1
2046	2a	1	1996.46	8417.213	8417.213	0	38552.45	38552.45	0	ICE	1996.46	0	1	2
2046	2a	1	200273	844364.9	0	844364.9	3874224	0	3874224	BEV	0	200273	1	3
2046	2a	1	20430.87	86137.99	0	86137.99	396038.7	0	396038.7	FCEV	0	20430.87	1	7

2046	2a	1	74389.16	313629.9	100988.8	212641.1	1432821	461368.4	971452.7	PHEV	23953.31	50435.85	1	8
2046	2a	1	150116.1	641499.9	641499.9	0	3035090	3035090	0	ICE	150116.1	0	1	1
2046	2a	1	1913.177	8175.695	8175.695	0	38671.02	38671.02	0	ICE	1913.177	0	1	2
2046	2a	1	249578.1	1066537	0	1066537	5051717	0	5051717	BEV	0	249578.1	1	3
2046	2a	1	27730.89	118504.1	0	118504.1	562116.1	0	562116.1	FCEV	0	27730.89	1	7
2046	2a	1	92436.32	395013.7	118504.1	276509.6	1864770	559431	1305339	PHEV	27730.89	64705.42	1	8
2046	2a	1	136616.4	591637.7	591637.7	0	2888300	2888300	0	ICE	136616.4	0	1	1
2046	2a	1	1741.126	7540.208	7540.208	0	36802.07	36802.07	0	ICE	1741.126	0	1	2
2046	2a	1	307902.5	1333418	0	1333418	6515045	0	6515045	BEV	0	307902.5	1	3
2046	2a	1	38055.37	164804.5	0	164804.5	806048.5	0	806048.5	FCEV	0	38055.37	1	7
2046	2a	1	109249.9	473122.9	141936.9	331186	2305803	691740.8	1614062	PHEV	32774.96	76474.9	1	8
2046	2a	1	114765.1	503582.2	503582.2	0	2535452	2535452	0	ICE	114765.1	0	1	1
2046	2a	1	1462.641	6417.981	6417.981	0	32307.34	32307.34	0	ICE	1462.641	0	1	2
2046	2a	1	371736.6	1631158	0	1631158	8217466	0	8217466	BEV	0	371736.6	1	3
2046	2a	1	50691.35	222430.6	0	222430.6	1121362	0	1121362	FCEV	0	50691.35	1	7
2046	2a	1	126179.8	553669.3	166100.8	387568.5	2784309	835292.6	1949016	PHEV	37853.93	88325.84	1	8
2046	2a	1	85112.99	378346.8	378346.8	0	1963481	1963481	0	ICE	85112.99	0	1	1
2046	2a	1	1084.736	4821.899	4821.899	0	25019.95	25019.95	0	ICE	1084.736	0	1	2
2046	2a	1	443392.6	1970982	0	1970982	10232605	0	10232605	BEV	0	443392.6	1	3
2046	2a	1	66254.07	294514.6	0	294514.6	1529771	0	1529771	FCEV	0	66254.07	1	7
2046	2a	1	143746.5	638986.3	191695.9	447290.4	3313715	994114.5	2319600	PHEV	43123.95	100622.6	1	8
2046	2a	1	46447.77	209132	209132	0	1118071	1118071	0	ICE	46447.77	0	1	1
2046	2a	1	591.9606	2665.315	2665.315	0	14247.59	14247.59	0	ICE	591.9606	0	1	2
2046	2a	1	516464.8	2325393	0	2325393	12434809	0	12434809	BEV	0	516464.8	1	3
2046	2a	1	84075.66	378552.4	0	378552.4	2024973	0	2024973	FCEV	0	84075.66	1	7
2046	2a	1	159637.3	718770.3	215631.1	503139.2	3841587	1152476	2689111	PHEV	47891.2	111746.1	1	8
2046	2a	1	597683.1	2725321	0	2725321	15003019	0	15003019	BEV	0	597683.1	1	3
2046	2a	1	105473.5	480939.1	0	480939.1	2648214	0	2648214	FCEV	0	105473.5	1	7
2046	2a	1	175789.1	801565.1	240469.5	561095.6	4412946	1323884	3089062	PHEV	52736.74	123052.4	1	8
2046	2a	1	639551.2	2952872	0	2952872	16727207	0	16727207	BEV	0	639551.2	1	3
2046	2a	1	121819.3	562451.7	0	562451.7	3186659	0	3186659	FCEV	0	121819.3	1	7
2046	2a	1	178593.1	824582	247374.6	577207.4	4673682	1402104	3271577	PHEV	53577.92	125015.1	1	8
2046	2a	1	683897.1	3196802	0	3196802	18626133	0	18626133	BEV	0	683897.1	1	3
2046	2a	1	140075.3	654766.7	0	654766.7	3815404	0	3815404	FCEV	0	140075.3	1	7
2046	2a	1	180872	845466.3	253639.9	591826.4	4931213	1479364	3451849	PHEV	54261.6	126610.4	1	8
2046	2a	1	720687.2	3410061	0	3410061	20428958	0	20428958	BEV	0	720687.2	1	3
2046	2a	1	158199.6	748550.1	0	748550.1	4484643	0	4484643	FCEV	0	158199.6	1	7
2046	2a	1	180013	851763.8	255529.1	596234.7	5111283	1533385	3577898	PHEV	54003.89	126009.1	1	8
2046	2a	1	761164.9	3645196	0	3645196	22444127	0	22444127	BEV	0	761164.9	1	3
2046	2a	1	178544.9	855046	0	855046	5264703	0	5264703	FCEV	0	178544.9	1	7
2046	2a	1	178992.3	857189	257156.7	600032.3	5290207	1587062	3703145	PHEV	53697.7	125294.6	1	8
2046	2a	1	792247.2	3839436	0	3839436	24290541	0	24290541	BEV	0	792247.2	1	3
2046	2a	1	198061.8	959859	0	959859	6072428	0	6072428	FCEV	0	198061.8	1	7
2046	2a	1	174760.4	846934.4	254080.3	592854.1	5374439	1612332	3762107	PHEV	52428.12	122332.3	1	8
2046	2a	1	827654.1	4058443	0	4058443	26365179	0	26365179	BEV	0	827654.1	1	3
2046	2a	1	220009.3	1078827	0	1078827	7008036	0	7008036	FCEV	0	220009.3	1	7
2046	2a	1	170549.9	836299.8	250889.9	585409.9	5452282	1635685	3816597	PHEV	51164.96	119384.9	1	8

2046	2a	1	854003	4236572	0	4236572	28250103	0	28250103	BEV	0	854003	1	3
2046	2a	1	240872.6	1194931	0	1194931	7967308	0	7967308	FCEV	0	240872.6	1	7
2046	2a	1	163602.1	811603.9	243481.2	568122.7	5434128	1630238	3803890	PHEV	49080.63	114521.5	1	8
2046	2a	1	874608.6	4388899	0	4388899	30017820	0	30017820	BEV	0	874608.6	1	3
2046	2a	1	261246.7	1310970	0	1310970	8965509	0	8965509	FCEV	0	261246.7	1	7
2046	2a	1	154889.4	777254.9	233176.5	544078.4	5339550	1601865	3737685	PHEV	46466.81	108422.5	1	8
2046	2a	1	896532.1	4550277	0	4550277	31865187	0	31865187	BEV	0	896532.1	1	3
2046	2a	1	283115.4	1436930	0	1436930	10061838	0	10061838	FCEV	0	283115.4	1	7
2046	2a	1	145799.1	739991.8	221997.5	517994.3	5203557	1561067	3642490	PHEV	43739.74	102059.4	1	8
2046	2a	1	902842.9	4634031	0	4634031	33119718	0	33119718	BEV	0	902842.9	1	3
2046	2a	1	300947.6	1544677	0	1544677	11039311	0	11039311	FCEV	0	300947.6	1	7
2046	2a	1	133754.5	686523.1	205956.9	480566.2	4922206	1476662	3445544	PHEV	40126.35	93628.16	1	8
2046	2a	1	811794.5	4213213	0	4213213	30647421	0	30647421	BEV	0	811794.5	1	3
2046	2a	1	270598.2	1404404	0	1404404	10215659	0	10215659	FCEV	0	270598.2	1	7
2046	2a	1	120265.9	624179.8	187253.9	436925.8	4549238	1364771	3184467	PHEV	36079.76	84186.1	1	8
2046	2a	1	2630.228	7020.71	7020.71	0	24589.18	24589.18	0	ICE	2630.228	0	2	1
2046	2a	1	1835.972	5005.834	5005.834	0	17401.49	17401.49	0	ICE	1835.972	0	2	1
2046	2a	1	1040.234	2955.419	2955.419	0	10319.86	10319.86	0	ICE	1040.234	0	2	1
2046	2a	1	1678.229	4864.178	4864.178	0	17256.93	17256.93	0	ICE	1678.229	0	2	1
2046	2a	1	2483.72	7341.105	7341.105	0	26541.17	26541.17	0	ICE	2483.72	0	2	1
2046	2a	1	4295.113	12941.09	12941.09	0	47114.49	47114.49	0	ICE	4295.113	0	2	1
2046	2a	1	3329.348	10222	10222	0	37478.91	37478.91	0	ICE	3329.348	0	2	1
2046	2a	1	1793.051	5607.875	5607.875	0	20550.75	20550.75	0	ICE	1793.051	0	2	1
2046	2a	1	1669.806	5318.081	5318.081	0	19709.79	19709.79	0	ICE	1669.806	0	2	1
2046	2a	1	14266.99	48707.65	48707.65	0	192014.6	192014.6	0	ICE	14266.99	0	2	1
2046	2a	1	13848.07	48070.81	48070.81	0	192631.6	192631.6	0	ICE	13848.07	0	2	1
2046	2a	1	13435.76	47409.3	47409.3	0	193069.7	193069.7	0	ICE	13435.76	0	2	1
2046	2a	1	1.820117	6.422447	6.422447	0	26.16522	26.16522	0	ICE	1.820117	0	2	2
2046	2a	1	0.452708	1.597422	0	1.597422	4.933361	0	4.933361	BEV	0	0.452708	2	3
2046	2a	1	0.009239	0.0326	0	0.0326	0.100681	0	0.100681	FCEV	0	0.009239	2	7
2046	2a	1	3.926552	13.85519	8.313115	5.542076	56.45943	33.87566	22.58377	PHEV	2.355931	1.570621	2	8
2046	2a	1	15644.24	56098.36	56098.36	0	230335	230335	0	ICE	15644.24	0	2	1
2046	2a	1	2.119295	7.599537	7.599537	0	31.21447	31.21447	0	ICE	2.119295	0	2	2
2046	2a	1	17849.72	65029.55	65029.55	0	269409.6	269409.6	0	ICE	17849.72	0	2	1
2046	2a	1	2.434937	8.87089	8.87089	0	36.7795	36.7795	0	ICE	2.434937	0	2	2
2046	2a	1	237.3374	864.6605	0	864.6605	3287.627	0	3287.627	BEV	0	237.3374	2	3
2046	2a	1	5.551752	20.22598	0	20.22598	66.85545	0	66.85545	FCEV	0	5.551752	2	7
2046	2a	1	182.2584	663.9985	394.6048	269.3937	2868.561	1704.745	1163.816	PHEV	108.3136	73.94485	2	8
2046	2a	1	20138.29	74520.94	74520.94	0	311607.9	311607.9	0	ICE	20138.29	0	2	1
2046	2a	1	2.779047	10.28375	10.28375	0	43.06086	43.06086	0	ICE	2.779047	0	2	2
2046	2a	1	546.9962	2024.137	0	2024.137	7785.763	0	7785.763	BEV	0	546.9962	2	3
2046	2a	1	14.43685	53.42298	0	53.42298	182.684	0	182.684	FCEV	0	14.43685	2	7
2046	2a	1	421.2864	1558.954	917.5555	641.3981	6795.998	3999.93	2796.068	PHEV	247.9572	173.3293	2	8
2046	2a	1	21559.22	81014.16	81014.16	0	342505.1	342505.1	0	ICE	21559.22	0	2	1
2046	2a	1	3.014232	11.32673	11.32673	0	47.97883	47.97883	0	ICE	3.014232	0	2	2
2046	2a	1	1519.46	5709.753	0	5709.753	22296.7	0	22296.7	BEV	0	1519.46	2	3
2046	2a	1	52.08552	195.7244	0	195.7244	692.518	0	692.518	FCEV	0	52.08552	2	7

2046	2a	1	1095.821	4117.823	2387.161	1730.662	18604.19	10785.12	7819.077	PHEV	635.2633	460.5581	2	8
2046	2a	1	22747	86780.7	86780.7	0	371239.4	371239.4	0	ICE	22747	0	2	1
2046	2a	1	3.19333	12.18268	12.18268	0	52.21987	52.21987	0	ICE	3.19333	0	2	2
2046	2a	1	2784.428	10622.7	0	10622.7	42436.36	0	42436.36	BEV	0	2784.428	2	3
2046	2a	1	117.7453	449.203	0	449.203	1643.964	0	1643.964	FCEV	0	117.7453	2	7
2046	2a	1	1878.652	7167.132	4091.409	3075.724	32954.53	18812.33	14142.2	PHEV	1072.442	806.2101	2	8
2046	2a	1	23814.24	92216.61	92216.61	0	398077.9	398077.9	0	ICE	23814.24	0	2	1
2046	2a	1	3.3589	13.00677	13.00677	0	56.25412	56.25412	0	ICE	3.3589	0	2	2
2046	2a	1	4406.576	17063.71	0	17063.71	69715.95	0	69715.95	BEV	0	4406.576	2	3
2046	2a	1	222.1803	860.3554	0	860.3554	3297.516	0	3297.516	FCEV	0	222.1803	2	7
2046	2a	1	2778.275	10758.4	6046.219	4712.177	49666.43	27912.54	21753.9	PHEV	1561.39	1216.884	2	8
2046	2a	1	24689	97018.39	97018.39	0	423442.3	423442.3	0	ICE	24689	0	2	1
2046	2a	1	3.497527	13.74395	13.74395	0	60.09248	60.09248	0	ICE	3.497527	0	2	2
2046	2a	1	6449.19	25342.87	0	25342.87	105896	0	105896	BEV	0	6449.19	2	3
2046	2a	1	378.4461	1487.15	0	1487.15	5964.529	0	5964.529	FCEV	0	378.4461	2	7
2046	2a	1	3794.352	14910.36	8247.559	6662.801	69071.35	38206.32	30865.03	PHEV	2098.818	1695.533	2	8
2046	2a	1	25302.15	100877.4	100877.4	0	446329.1	446329.1	0	ICE	25302.15	0	2	1
2046	2a	1	3.598909	14.34853	14.34853	0	63.58657	63.58657	0	ICE	3.598909	0	2	2
2046	2a	1	8980.388	35804	0	35804	153144.3	0	153144.3	BEV	0	8980.388	2	3
2046	2a	1	602.3431	2401.488	0	2401.488	9995.348	0	9995.348	FCEV	0	602.3431	2	7
2046	2a	1	4922.213	19624.42	10681.29	8943.129	91409.74	49753.02	41656.73	PHEV	2679.09	2243.123	2	8
2046	2a	1	25512.52	103177.7	103177.7	0	463132.7	463132.7	0	ICE	25512.52	0	2	1
2046	2a	1	3.628832	14.67572	14.67572	0	65.96027	65.96027	0	ICE	3.628832	0	2	2
2046	2a	1	12039.89	48691.71	0	48691.71	213041.8	0	213041.8	BEV	0	12039.89	2	3
2046	2a	1	910.2066	3681.057	0	3681.057	15845.53	0	15845.53	FCEV	0	910.2066	2	7
2046	2a	1	6135.64	24813.75	13285.99	11527.76	116350.4	62297.32	54053.07	PHEV	3285.197	2850.443	2	8
2046	2a	1	25165.46	103215.9	103215.9	0	470763	470763	0	ICE	25165.46	0	2	1
2046	2a	1	3.579467	14.68115	14.68115	0	67.02838	67.02838	0	ICE	3.579467	0	2	2
2046	2a	1	15623.58	64079.97	0	64079.97	286818.5	0	286818.5	BEV	0	15623.58	2	3
2046	2a	1	1316.485	5399.551	0	5399.551	23932.34	0	23932.34	FCEV	0	1316.485	2	7
2046	2a	1	7385.422	30291.23	15950.5	14340.74	143195.3	75402.54	67792.73	PHEV	3888.952	3496.47	2	8
2046	2a	1	24333.09	101196	101196	0	469612.8	469612.8	0	ICE	24333.09	0	2	1
2046	2a	1	3.461073	14.39384	14.39384	0	66.84784	66.84784	0	ICE	3.461073	0	2	2
2046	2a	1	19837.13	82498.27	0	82498.27	377784.1	0	377784.1	BEV	0	19837.13	2	3
2046	2a	1	1846.179	7677.853	0	7677.853	34955.4	0	34955.4	FCEV	0	1846.179	2	7
2046	2a	1	8674.371	36074.8	18676.44	17398.36	172195.2	89147.93	83047.3	PHEV	4490.846	4183.525	2	8
2046	2a	1	22962.61	96811.95	96811.95	0	457702.8	457702.8	0	ICE	22962.61	0	2	1
2046	2a	1	3.266139	13.77027	13.77027	0	65.13791	65.13791	0	ICE	3.266139	0	2	2
2046	2a	1	24747.38	104336.7	0	104336.7	488910.6	0	488910.6	BEV	0	24747.38	2	3
2046	2a	1	2524.607	10643.92	0	10643.92	49711.77	0	49711.77	FCEV	0	2524.607	2	7
2046	2a	1	9978.184	42068.72	21406.97	20661.75	203102.9	103350.4	99752.55	PHEV	5077.47	4900.714	2	8
2046	2a	1	20835.48	89037.51	89037.51	0	429322	429322	0	ICE	20835.48	0	2	1
2046	2a	1	2.963583	12.66446	12.66446	0	61.08672	61.08672	0	ICE	2.963583	0	2	2
2046	2a	1	30190.81	129016.2	0	129016.2	618742.5	0	618742.5	BEV	0	30190.81	2	3
2046	2a	1	3354.534	14335.13	0	14335.13	68632.46	0	68632.46	FCEV	0	3354.534	2	7
2046	2a	1	11181.78	47783.78	23891.89	23891.89	233696.2	116848.1	116848.1	PHEV	5590.891	5590.891	2	8
2046	2a	1	18099.56	78382.86	78382.86	0	385829.6	385829.6	0	ICE	18099.56	0	2	1

2046	2a	1	2.574433	11.14897	11.14897	0	54.88872	54.88872	0	ICE	2.574433	0	2	2
2046	2a	1	35912.11	155522.8	0	155522.8	763404.5	0	763404.5	BEV	0	35912.11	2	3
2046	2a	1	4438.575	19221.92	0	19221.92	94292.03	0	94292.03	FCEV	0	4438.575	2	7
2046	2a	1	12742.32	55182.54	27591.27	27591.27	273788.3	136894.1	136894.1	PHEV	6371.161	6371.161	2	8
2046	2a	1	14564.22	63906.91	63906.91	0	321427.1	321427.1	0	ICE	14564.22	0	2	1
2046	2a	1	2.071575	9.089946	9.089946	0	45.71978	45.71978	0	ICE	2.071575	0	2	2
2046	2a	1	41888.37	183803.7	0	183803.7	923788.1	0	923788.1	BEV	0	41888.37	2	3
2046	2a	1	5712.051	25064.14	0	25064.14	125968.3	0	125968.3	FCEV	0	5712.051	2	7
2046	2a	1	14218.31	62389.08	31194.54	31194.54	314524.5	157262.3	157262.3	PHEV	7109.154	7109.154	2	8
2046	2a	1	10440.3	46409.55	46409.55	0	238683.2	238683.2	0	ICE	10440.3	0	2	1
2046	2a	1	1.485001	6.60117	6.60117	0	33.94584	33.94584	0	ICE	1.485001	0	2	2
2046	2a	1	48650.65	216263.3	0	216263.3	1113223	0	1113223	BEV	0	48650.65	2	3
2046	2a	1	7269.638	32315.21	0	32315.21	166401.2	0	166401.2	FCEV	0	7269.638	2	7
2046	2a	1	15772.39	70111.9	35055.95	35055.95	359639.2	179819.6	179819.6	PHEV	7886.195	7886.195	2	8
2046	2a	1	5553.555	25004.99	25004.99	0	131596.2	131596.2	0	ICE	5553.555	0	2	1
2046	2a	1	0.789923	3.556642	3.556642	0	18.71372	18.71372	0	ICE	0.789923	0	2	2
2046	2a	1	55592.53	250306.5	0	250306.5	1320086	0	1320086	BEV	0	55592.53	2	3
2046	2a	1	9049.947	40747.57	0	40747.57	215014.9	0	215014.9	FCEV	0	9049.947	2	7
2046	2a	1	17183.44	77368.8	38684.4	38684.4	404373.3	202186.7	202186.7	PHEV	8591.722	8591.722	2	8
2046	2a	1	63321.42	288733.6	0	288733.6	1560287	0	1560287	BEV	0	63321.42	2	3
2046	2a	1	11174.37	50953	0	50953	275521.7	0	275521.7	FCEV	0	11174.37	2	7
2046	2a	1	18623.95	84921.66	42460.83	42460.83	452701.9	226350.9	226350.9	PHEV	9311.973	9311.973	2	8
2046	2a	1	66806.18	308450.8	0	308450.8	1708450	0	1708450	BEV	0	66806.18	2	3
2046	2a	1	12724.99	58752.53	0	58752.53	325650.7	0	325650.7	FCEV	0	12724.99	2	7
2046	2a	1	18655.46	86134.11	43067.06	43067.06	468981.8	234490.9	234490.9	PHEV	9327.729	9327.729	2	8
2046	2a	1	70463.84	329375.5	0	329375.5	1869856	0	1869856	BEV	0	70463.84	2	3
2046	2a	1	14432.35	67462.45	0	67462.45	383267.1	0	383267.1	FCEV	0	14432.35	2	7
2046	2a	1	18635.75	87110.76	43555.38	43555.38	484772	242386	242386	PHEV	9317.875	9317.875	2	8
2046	2a	1	73125.62	346007	0	346007	2013942	0	2013942	BEV	0	73125.62	2	3
2046	2a	1	16051.97	75952.77	0	75952.77	442410.4	0	442410.4	FCEV	0	16051.97	2	7
2046	2a	1	18265.29	86425.5	43212.75	43212.75	492205.4	246102.7	246102.7	PHEV	9132.645	9132.645	2	8
2046	2a	1	76046.53	364184.5	0	364184.5	2173162	0	2173162	BEV	0	76046.53	2	3
2046	2a	1	17838.07	85426	0	85426	510116.2	0	510116.2	FCEV	0	17838.07	2	7
2046	2a	1	17882.78	85640.1	42820.05	42820.05	499399.5	249699.7	249699.7	PHEV	8941.39	8941.39	2	8
2046	2a	1	78955.07	382636.8	0	382636.8	2340902	0	2340902	BEV	0	78955.07	2	3
2046	2a	1	19738.77	95659.2	0	95659.2	585617.1	0	585617.1	FCEV	0	19738.77	2	7
2046	2a	1	17416.56	84405.18	42202.59	42202.59	504288.9	252144.5	252144.5	PHEV	8708.28	8708.28	2	8
2046	2a	1	81851.86	401364.7	0	401364.7	2517473	0	2517473	BEV	0	81851.86	2	3
2046	2a	1	21758.09	106691.9	0	106691.9	669614.8	0	669614.8	FCEV	0	21758.09	2	7
2046	2a	1	16866.74	82706.88	41353.44	41353.44	506564.9	253282.4	253282.4	PHEV	8433.368	8433.368	2	8
2046	2a	1	83622.04	414835.6	0	414835.6	2667841	0	2667841	BEV	0	83622.04	2	3
2046	2a	1	23585.7	117004.9	0	117004.9	752887.7	0	752887.7	FCEV	0	23585.7	2	7
2046	2a	1	16019.55	79470.41	39735.21	39735.21	499289.8	249644.9	249644.9	PHEV	8009.774	8009.774	2	8
2046	2a	1	84675.06	424910.4	0	424910.4	2801855	0	2801855	BEV	0	84675.06	2	3
2046	2a	1	25292.55	126921.3	0	126921.3	837331.9	0	837331.9	FCEV	0	25292.55	2	7
2046	2a	1	14995.58	75249.78	37624.89	37624.89	485193.8	242596.9	242596.9	PHEV	7497.791	7497.791	2	8
2046	2a	1	85725.03	435090.5	0	435090.5	2941084	0	2941084	BEV	0	85725.03	2	3

2046	2a	1	27071.06	137397	0	137397	929165.8	0	929165.8	FCEV	0	27071.06	2	7
2046	2a	1	13941.09	70756.89	35378.44	35378.44	468249	234124.5	234124.5	PHEV	6970.545	6970.545	2	8
2046	2a	1	86820.45	445624.2	0	445624.2	3086666	0	3086666	BEV	0	86820.45	2	3
2046	2a	1	28940.15	148541.4	0	148541.4	1029275	0	1029275	FCEV	0	28940.15	2	7
2046	2a	1	12862.29	66018.4	33009.2	33009.2	448308	224154	224154	PHEV	6431.145	6431.145	2	8
2046	2a	1	79312.26	411630.6	0	411630.6	2920766	0	2920766	BEV	0	79312.26	2	3
2046	2a	1	26437.42	137210.2	0	137210.2	973944.7	0	973944.7	FCEV	0	26437.42	2	7
2046	2a	1	11749.96	60982.32	30491.16	30491.16	424472.7	212236.4	212236.4	PHEV	5874.982	5874.982	2	8
2046	2a	1	8920.922	23812.08	23812.08	0	80584.43	80584.43	0	ICE	8920.922	0	3	1
2046	2a	1	9704.677	26460.09	26460.09	0	89990.76	89990.76	0	ICE	9704.677	0	3	1
2046	2a	1	11292.19	31435.42	31435.42	0	107638.8	107638.8	0	ICE	11292.19	0	3	1
2046	2a	1	12166.2	34565.51	34565.51	0	118591.8	118591.8	0	ICE	12166.2	0	3	1
2046	2a	1	10726.76	31090.45	31090.45	0	106745.1	106745.1	0	ICE	10726.76	0	3	1
2046	2a	1	10589.87	31300.37	31300.37	0	108174.5	108174.5	0	ICE	10589.87	0	3	1
2046	2a	1	7813.532	23542.02	23542.02	0	82540.75	82540.75	0	ICE	7813.532	0	3	1
2046	2a	1	4929.923	15136.2	15136.2	0	53409.96	53409.96	0	ICE	4929.923	0	3	1
2046	2a	1	8757.001	27388.04	27388.04	0	97874.56	97874.56	0	ICE	8757.001	0	3	1
2046	2a	1	12207.08	38877.72	38877.72	0	140018.9	140018.9	0	ICE	12207.08	0	3	1
2046	2a	1	12140.71	39361.88	39361.88	0	143760.2	143760.2	0	ICE	12140.71	0	3	1
2046	2a	1	17202.81	56759.48	56759.48	0	208944.1	208944.1	0	ICE	17202.81	0	3	1
2046	2a	1	16812.77	56435.75	56435.75	0	211521.7	211521.7	0	ICE	16812.77	0	3	1
2046	2a	1	179.1367	601.3118	601.3118	0	2201.824	2201.824	0	ICE	179.1367	0	3	2
2046	2a	1	20949.29	71521.1	71521.1	0	273051.9	273051.9	0	ICE	20949.29	0	3	1
2046	2a	1	22067.85	76604.11	76604.11	0	295237	295237	0	ICE	22067.85	0	3	1
2046	2a	1	166.8768	579.2795	579.2795	0	2196.419	2196.419	0	ICE	166.8768	0	3	2
2046	2a	1	26674.99	94125.11	94125.11	0	368632.2	368632.2	0	ICE	26674.99	0	3	1
2046	2a	1	272.6482	962.0637	962.0637	0	3784.623	3784.623	0	ICE	272.6482	0	3	2
2046	2a	1	30676.26	110001.4	110001.4	0	435218.3	435218.3	0	ICE	30676.26	0	3	1
2046	2a	1	313.5456	1124.337	1124.337	0	4467.671	4467.671	0	ICE	313.5456	0	3	2
2046	2a	1	105.8374	379.5201	227.7121	151.808	1511.75	907.0502	604.7001	PHEV	63.50242	42.33495	3	8
2046	2a	1	34438.26	125464.4	125464.4	0	504185.8	504185.8	0	ICE	34438.26	0	3	1
2046	2a	1	351.1102	1279.154	1279.154	0	5158.289	5158.289	0	ICE	351.1102	0	3	2
2046	2a	1	406.1559	1479.695	0	1479.695	3991.793	0	3991.793	BEV	0	406.1559	3	3
2046	2a	1	9.500724	34.61275	0	34.61275	79.64211	0	79.64211	FCEV	0	9.500724	3	7
2046	2a	1	352.7705	1285.203	763.7776	521.4251	5178.561	3077.545	2101.016	PHEV	209.6464	143.124	3	8
2046	2a	1	38801.59	143583.7	143583.7	0	583951.8	583951.8	0	ICE	38801.59	0	3	1
2046	2a	1	396.4952	1467.215	1467.215	0	5988.88	5988.88	0	ICE	396.4952	0	3	2
2046	2a	1	929.881	3440.987	0	3440.987	11963.03	0	11963.03	BEV	0	929.881	3	3
2046	2a	1	24.54231	90.81785	0	90.81785	216.0806	0	216.0806	FCEV	0	24.54231	3	7
2046	2a	1	671.0777	2483.296	1461.597	1021.699	10136.32	5965.95	4170.373	PHEV	394.9771	276.1005	3	8
2046	2a	1	41382.26	155504.2	155504.2	0	640518.2	640518.2	0	ICE	41382.26	0	3	1
2046	2a	1	429.2589	1613.048	1613.048	0	6680.8	6680.8	0	ICE	429.2589	0	3	2
2046	2a	1	2826.342	10620.69	0	10620.69	35201.68	0	35201.68	BEV	0	2826.342	3	3
2046	2a	1	96.88405	364.0661	0	364.0661	895.6261	0	895.6261	FCEV	0	96.88405	3	7
2046	2a	1	1921.037	7218.778	4184.829	3033.949	34778.46	20161.57	14616.89	PHEV	1113.653	807.3845	3	8
2046	2a	1	43925.18	167576.3	167576.3	0	700365.6	700365.6	0	ICE	43925.18	0	3	1
2046	2a	1	457.7805	1746.451	1746.451	0	7344.53	7344.53	0	ICE	457.7805	0	3	2

2046	2a	1	5322.589	20305.89	0	20305.89	68315.26	0	68315.26	BEV	0	5322.589	3	3
2046	2a	1	225.0767	858.6766	0	858.6766	2183.976	0	2183.976	FCEV	0	225.0767	3	7
2046	2a	1	3404.151	12986.97	7413.705	5573.266	66491.98	37957.42	28534.56	PHEV	1943.284	1460.867	3	8
2046	2a	1	46583.8	180387.8	180387.8	0	762962.4	762962.4	0	ICE	46583.8	0	3	1
2046	2a	1	488.1117	1890.13	1890.13	0	8048.509	8048.509	0	ICE	488.1117	0	3	2
2046	2a	1	8602.676	33312.4	0	33312.4	115341.3	0	115341.3	BEV	0	8602.676	3	3
2046	2a	1	433.7484	1679.617	0	1679.617	4454.205	0	4454.205	FCEV	0	433.7484	3	7
2046	2a	1	5171.578	20026.06	11254.64	8771.413	105331.6	59196.35	46135.23	PHEV	2906.427	2265.151	3	8
2046	2a	1	49280.79	193654.8	193654.8	0	830827.8	830827.8	0	ICE	49280.79	0	3	1
2046	2a	1	518.9634	2039.329	2039.329	0	8812.817	8812.817	0	ICE	518.9634	0	3	2
2046	2a	1	12892.75	50663.62	0	50663.62	180677.5	0	180677.5	BEV	0	12892.75	3	3
2046	2a	1	756.5621	2973.001	0	2973.001	8767.167	0	8767.167	FCEV	0	756.5621	3	7
2046	2a	1	7275.787	28591.08	15814.95	12776.13	153518.6	84917.7	68600.87	PHEV	4024.55	3251.237	3	8
2046	2a	1	52467.93	209184.9	209184.9	0	911908.3	911908.3	0	ICE	52467.93	0	3	1
2046	2a	1	555.0915	2213.1	2213.1	0	9722.438	9722.438	0	ICE	555.0915	0	3	2
2046	2a	1	18677.38	74465.03	0	74465.03	273831.6	0	273831.6	BEV	0	18677.38	3	3
2046	2a	1	1252.751	4994.605	0	4994.605	15880.95	0	15880.95	FCEV	0	1252.751	3	7
2046	2a	1	9879.591	39389.04	21438.89	17950.15	215701.3	117403.1	98298.15	PHEV	5377.32	4502.271	3	8
2046	2a	1	56263.77	227542	227542	0	1008672	1008672	0	ICE	56263.77	0	3	1
2046	2a	1	595.2501	2407.311	2407.311	0	10751.83	10751.83	0	ICE	595.2501	0	3	2
2046	2a	1	26637.97	107729.3	0	107729.3	408720.8	0	408720.8	BEV	0	26637.97	3	3
2046	2a	1	2013.811	8144.255	0	8144.255	27897.42	0	27897.42	FCEV	0	2013.811	3	7
2046	2a	1	13184.03	53318.86	28548.44	24770.42	298236.4	159684.3	138552.1	PHEV	7059.107	6124.925	3	8
2046	2a	1	59861.64	245521.9	245521.9	0	1108106	1108106	0	ICE	59861.64	0	3	1
2046	2a	1	633.3142	2597.532	2597.532	0	11809.48	11809.48	0	ICE	633.3142	0	3	2
2046	2a	1	37271.3	152867.8	0	152867.8	598404.1	0	598404.1	BEV	0	37271.3	3	3
2046	2a	1	3140.58	12881.06	0	12881.06	46768.3	0	46768.3	FCEV	0	3140.58	3	7
2046	2a	1	17224.94	70647.92	37201.17	33446.74	403505.3	212474.4	191031	PHEV	9070.161	8154.779	3	8
2046	2a	1	61867.81	257294.6	257294.6	0	1183172	1183172	0	ICE	61867.81	0	3	1
2046	2a	1	654.5387	2722.083	2722.083	0	12607.22	12607.22	0	ICE	654.5387	0	3	2
2046	2a	1	50545.27	210206.7	0	210206.7	848843.5	0	848843.5	BEV	0	50545.27	3	3
2046	2a	1	4704.088	19563.27	0	19563.27	74600.89	0	74600.89	FCEV	0	4704.088	3	7
2046	2a	1	21760.61	90497.58	46851.89	43645.69	527606.6	273149.5	254457.1	PHEV	11265.78	10494.83	3	8
2046	2a	1	61091	257563.9	257563.9	0	1207770	1207770	0	ICE	61091	0	3	1
2046	2a	1	646.3204	2724.932	2724.932	0	12867.22	12867.22	0	ICE	646.3204	0	3	2
2046	2a	1	65917.94	277914.6	0	277914.6	1157549	0	1157549	BEV	0	65917.94	3	3
2046	2a	1	6724.626	28351.49	0	28351.49	112917.6	0	112917.6	FCEV	0	6724.626	3	7
2046	2a	1	26363.86	111151.9	56560.43	54591.46	661655.1	336687.9	324967.2	PHEV	13415.44	12948.42	3	8
2046	2a	1	57925.93	247538.4	247538.4	0	1184563	1184563	0	ICE	57925.93	0	3	1
2046	2a	1	612.8351	2618.865	2618.865	0	12618.09	12618.09	0	ICE	612.8351	0	3	2
2046	2a	1	83943.1	358719.1	0	358719.1	1541020	0	1541020	BEV	0	83943.1	3	3
2046	2a	1	9327.011	39857.68	0	39857.68	165216	0	165216	FCEV	0	9327.011	3	7
2046	2a	1	31090.04	132858.9	66429.46	66429.46	807835.5	403917.7	403917.7	PHEV	15545.02	15545.02	3	8
2046	2a	1	52444.18	227117.4	227117.4	0	1109912	1109912	0	ICE	52444.18	0	3	1
2046	2a	1	554.8402	2402.819	2402.819	0	11821.32	11821.32	0	ICE	554.8402	0	3	2
2046	2a	1	104158.2	451072.8	0	451072.8	1992746	0	1992746	BEV	0	104158.2	3	3
2046	2a	1	12873.49	55750.58	0	55750.58	239474.7	0	239474.7	FCEV	0	12873.49	3	7

2046	2a	1	36957.38	160049.5	80024.75	80024.75	993423.7	496711.9	496711.9	PHEV	18478.69	18478.69	3	8
2046	2a	1	43671.24	191626.8	191626.8	0	957153.9	957153.9	0	ICE	43671.24	0	3	1
2046	2a	1	462.0257	2027.341	2027.341	0	10193.15	10193.15	0	ICE	462.0257	0	3	2
2046	2a	1	125819.4	552087.9	0	552087.9	2508953	0	2508953	BEV	0	125819.4	3	3
2046	2a	1	17157.19	75284.72	0	75284.72	334526.8	0	334526.8	FCEV	0	17157.19	3	7
2046	2a	1	42707.29	187397	93698.51	93698.51	1188570	594285.2	594285.2	PHEV	21353.64	21353.64	3	8
2046	2a	1	32112.63	142748	142748	0	729254.6	729254.6	0	ICE	32112.63	0	3	1
2046	2a	1	339.7398	1510.222	1510.222	0	7765.367	7765.367	0	ICE	339.7398	0	3	2
2046	2a	1	149993.4	666755.2	0	666755.2	3117541	0	3117541	BEV	0	149993.4	3	3
2046	2a	1	22412.81	99630.08	0	99630.08	457411.6	0	457411.6	FCEV	0	22412.81	3	7
2046	2a	1	48627.39	216159.9	108080	108080	1402242	701121.1	701121.1	PHEV	24313.7	24313.7	3	8
2046	2a	1	17336.85	78059.53	78059.53	0	408123.3	408123.3	0	ICE	17336.85	0	3	1
2046	2a	1	183.4176	825.8412	825.8412	0	4345.472	4345.472	0	ICE	183.4176	0	3	2
2046	2a	1	174050	783663.8	0	783663.8	3770716	0	3770716	BEV	0	174050	3	3
2046	2a	1	28333.73	127573.2	0	127573.2	604687.5	0	604687.5	FCEV	0	28333.73	3	7
2046	2a	1	53798.22	242227.6	121113.8	121113.8	1608614	804307	804307	PHEV	26899.11	26899.11	3	8
2046	2a	1	201254.2	917681	0	917681	4544473	0	4544473	BEV	0	201254.2	3	3
2046	2a	1	35515.45	161943.7	0	161943.7	792016.1	0	792016.1	FCEV	0	35515.45	3	7
2046	2a	1	59192.41	269906.2	134953.1	134953.1	1836367	918183.7	918183.7	PHEV	29596.21	29596.21	3	8
2046	2a	1	213754.7	986926.9	0	986926.9	5032004	0	5032004	BEV	0	213754.7	3	3
2046	2a	1	40715.18	187986.1	0	187986.1	947832	0	947832	FCEV	0	40715.18	3	7
2046	2a	1	59690.47	275596.9	137798.4	137798.4	1918407	959203.5	959203.5	PHEV	29845.23	29845.23	3	8
2046	2a	1	226262.7	1057640	0	1057640	5551785	0	5551785	BEV	0	226262.7	3	3
2046	2a	1	46342.96	216625.1	0	216625.1	1125773	0	1125773	FCEV	0	46342.96	3	7
2046	2a	1	59840.26	279716.7	139858.4	139858.4	1992753	996376.5	996376.5	PHEV	29920.13	29920.13	3	8
2046	2a	1	235148.5	1112647	0	1112647	6014368	0	6014368	BEV	0	235148.5	3	3
2046	2a	1	51617.96	244239.7	0	244239.7	1308372	0	1308372	FCEV	0	51617.96	3	7
2046	2a	1	58735.3	277916.6	138958.3	138958.3	2027922	1013961	1013961	PHEV	29367.65	29367.65	3	8
2046	2a	1	243166.2	1164516	0	1164516	6481781	0	6481781	BEV	0	243166.2	3	3
2046	2a	1	57038.98	273158	0	273158	1508105	0	1508105	FCEV	0	57038.98	3	7
2046	2a	1	57181.93	273842.6	136921.3	136921.3	2046906	1023453	1023453	PHEV	28590.97	28590.97	3	8
2046	2a	1	249109.1	1207247	0	1207247	6920196	0	6920196	BEV	0	249109.1	3	3
2046	2a	1	62277.28	301811.9	0	301811.9	1717403	0	1717403	FCEV	0	62277.28	3	7
2046	2a	1	54950.54	266304.6	133152.3	133152.3	2039451	1019725	1019725	PHEV	27475.27	27475.27	3	8
2046	2a	1	255822.2	1254437	0	1254437	7404746	0	7404746	BEV	0	255822.2	3	3
2046	2a	1	68003.38	333458	0	333458	1955369	0	1955369	FCEV	0	68003.38	3	7
2046	2a	1	52715.8	258494.6	129247.3	129247.3	2027675	1013838	1013838	PHEV	26357.9	26357.9	3	8
2046	2a	1	261070.8	1295130	0	1295130	7872444	0	7872444	BEV	0	261070.8	3	3
2046	2a	1	73635.34	365293.2	0	365293.2	2207233	0	2207233	FCEV	0	73635.34	3	7
2046	2a	1	50013.56	248109.3	124054.6	124054.6	1992795	996397.6	996397.6	PHEV	25006.78	25006.78	3	8
2046	2a	1	265081.5	1330213	0	1330213	8324677	0	8324677	BEV	0	265081.5	3	3
2046	2a	1	79180.19	397336.5	0	397336.5	2473297	0	2473297	FCEV	0	79180.19	3	7
2046	2a	1	46944.78	235575	117787.5	117787.5	1935680	967840	967840	PHEV	23472.39	23472.39	3	8
2046	2a	1	271711.7	1379051	0	1379051	8885106	0	8885106	BEV	0	271711.7	3	3
2046	2a	1	85803.69	435489.8	0	435489.8	2792376	0	2792376	FCEV	0	85803.69	3	7
2046	2a	1	44187.29	224269.1	112134.5	112134.5	1883198	941599	941599	PHEV	22093.65	22093.65	3	8
2046	2a	1	278545.4	1429693	0	1429693	9480399	0	9480399	BEV	0	278545.4	3	3

2046	2a	1	92848.47	476564.3	0	476564.3	3146627	0	3146627	FCEV	0	92848.47	3	7
2046	2a	1	41265.99	211806.3	105903.2	105903.2	1814071	907035.7	907035.7	PHEV	20632.99	20632.99	3	8
2046	2a	1	252423.3	1310077	0	1310077	8895933	0	8895933	BEV	0	252423.3	3	3
2046	2a	1	84141.12	436692.4	0	436692.4	2952624	0	2952624	FCEV	0	84141.12	3	7
2046	2a	1	37396.05	194085.5	97042.75	97042.75	1702910	851455.2	851455.2	PHEV	18698.03	18698.03	3	8
2046	2a	1	16641.41	44419.92	44419.92	0	137596.2	137596.2	0	ICE	16641.41	0	4	1
2046	2a	1	16668.54	45447.27	45447.27	0	143274.4	143274.4	0	ICE	16668.54	0	4	1
2046	2a	1	16779.01	46709.74	46709.74	0	147466.6	147466.6	0	ICE	16779.01	0	4	1
2046	2a	1	28.80264	80.18137	80.18137	0	207.2071	207.2071	0	ICE	28.80264	0	4	2
2046	2a	1	14690.07	41736.11	41736.11	0	130546.6	130546.6	0	ICE	14690.07	0	4	1
2046	2a	1	13275.94	38479	38479	0	121556.7	121556.7	0	ICE	13275.94	0	4	1
2046	2a	1	12380.65	36593.36	36593.36	0	116888.9	116888.9	0	ICE	12380.65	0	4	1
2046	2a	1	8916.421	26865	26865	0	86621.38	86621.38	0	ICE	8916.421	0	4	1
2046	2a	1	3560.153	10930.63	10930.63	0	35586.3	35586.3	0	ICE	3560.153	0	4	1
2046	2a	1	5046.82	15784.23	15784.23	0	51821.86	51821.86	0	ICE	5046.82	0	4	1
2046	2a	1	7182.589	22875.47	22875.47	0	76201.71	76201.71	0	ICE	7182.589	0	4	1
2046	2a	1	210.4249	670.1716	670.1716	0	2122.547	2122.547	0	ICE	210.4249	0	4	2
2046	2a	1	7312.091	23706.82	23706.82	0	80140.32	80140.32	0	ICE	7312.091	0	4	1
2046	2a	1	8488.444	28007.03	28007.03	0	95872.41	95872.41	0	ICE	8488.444	0	4	1
2046	2a	1	184.1445	607.5719	607.5719	0	2035.81	2035.81	0	ICE	184.1445	0	4	2
2046	2a	1	13834.7	46439.22	46439.22	0	162770.1	162770.1	0	ICE	13834.7	0	4	1
2046	2a	1	448.554	1505.67	1505.67	0	5058.666	5058.666	0	ICE	448.554	0	4	2
2046	2a	1	16058.6	54824.23	54824.23	0	197026.6	197026.6	0	ICE	16058.6	0	4	1
2046	2a	1	18782.22	65198.71	65198.71	0	239889.8	239889.8	0	ICE	18782.22	0	4	1
2046	2a	1	18357.52	64776.16	64776.16	0	244318.5	244318.5	0	ICE	18357.52	0	4	1
2046	2a	1	640.1297	2258.755	2258.755	0	8527.642	8527.642	0	ICE	640.1297	0	4	2
2046	2a	1	153.5842	541.9358	325.1615	216.7743	1902.445	1141.467	760.978	PHEV	92.15054	61.43369	4	8
2046	2a	1	21227.64	76119.76	76119.76	0	291100.9	291100.9	0	ICE	21227.64	0	4	1
2046	2a	1	740.2112	2654.309	2654.309	0	10160.27	10160.27	0	ICE	740.2112	0	4	2
2046	2a	1	0.371335	1.331561	0	1.331561	2.954718	0	2.954718	BEV	0	0.371335	4	3
2046	2a	1	0.007578	0.027175	0	0.027175	0.0603	0	0.0603	FCEV	0	0.007578	4	7
2046	2a	1	454.4112	1629.464	977.6784	651.7856	6067.449	3640.469	2426.98	PHEV	272.6467	181.7645	4	8
2046	2a	1	24461.91	89118.9	89118.9	0	345923	345923	0	ICE	24461.91	0	4	1
2046	2a	1	861.0434	3136.927	3136.927	0	12202.16	12202.16	0	ICE	861.0434	0	4	2
2046	2a	1	209.6988	763.9684	0	763.9684	1857.957	0	1857.957	BEV	0	209.6988	4	3
2046	2a	1	4.905235	17.87061	0	17.87061	41.00859	0	41.00859	FCEV	0	4.905235	4	7
2046	2a	1	545.5931	1987.689	1181.255	806.4336	8169.951	4855.285	3314.666	PHEV	324.2382	221.3549	4	8
2046	2a	1	28213.22	104401.9	104401.9	0	410721	410721	0	ICE	28213.22	0	4	1
2046	2a	1	1008.662	3732.512	3732.512	0	14744.01	14744.01	0	ICE	1008.662	0	4	2
2046	2a	1	486.5018	1800.281	0	1800.281	5132.706	0	5132.706	BEV	0	486.5018	4	3
2046	2a	1	12.84022	47.51474	0	47.51474	112.7707	0	112.7707	FCEV	0	12.84022	4	7
2046	2a	1	655.1943	2424.52	1427.003	997.5169	9881.692	5816.082	4065.61	PHEV	385.6287	269.5657	4	8
2046	2a	1	31284.14	117558	117558	0	468106	468106	0	ICE	31284.14	0	4	1
2046	2a	1	1138.213	4277.12	4277.12	0	17136.58	17136.58	0	ICE	1138.213	0	4	2
2046	2a	1	1655.587	6221.282	0	6221.282	18023.22	0	18023.22	BEV	0	1655.587	4	3
2046	2a	1	56.7518	213.2591	0	213.2591	523.369	0	523.369	FCEV	0	56.7518	4	7
2046	2a	1	1976.028	7425.419	4304.621	3120.797	33333	19323.62	14009.38	PHEV	1145.532	830.4963	4	8

2046	2a	1	34216.13	130535.9	130535.9	0	527220.3	527220.3	0	ICE	34216.13	0	4	1
2046	2a	1	1251.716	4775.347	4775.347	0	19421.37	19421.37	0	ICE	1251.716	0	4	2
2046	2a	1	3366.131	12841.93	0	12841.93	38942.67	0	38942.67	BEV	0	3366.131	4	3
2046	2a	1	142.3439	543.0475	0	543.0475	1377.906	0	1377.906	FCEV	0	142.3439	4	7
2046	2a	1	3565.013	13600.67	7764.039	5836.63	63926.68	36493	27433.68	PHEV	2035.113	1529.9	4	8
2046	2a	1	36908.48	142921.8	142921.8	0	584671.4	584671.4	0	ICE	36908.48	0	4	1
2046	2a	1	1358.709	5261.368	5261.368	0	21686.02	21686.02	0	ICE	1358.709	0	4	2
2046	2a	1	5756.078	22289.44	0	22289.44	70735.57	0	70735.57	BEV	0	5756.078	4	3
2046	2a	1	290.2224	1123.837	0	1123.837	2947.429	0	2947.429	FCEV	0	290.2224	4	7
2046	2a	1	5410.384	20950.79	11774.35	9176.448	101456.2	57018.39	44437.82	PHEV	3040.636	2369.748	4	8
2046	2a	1	39205.34	154062.1	154062.1	0	639624.2	639624.2	0	ICE	39205.34	0	4	1
2046	2a	1	1451.695	5704.609	5704.609	0	23875.84	23875.84	0	ICE	1451.695	0	4	2
2046	2a	1	8971.031	35252.74	0	35252.74	116914.2	0	116914.2	BEV	0	8971.031	4	3
2046	2a	1	526.4307	2068.673	0	2068.673	5613.501	0	5613.501	FCEV	0	526.4307	4	7
2046	2a	1	7477.368	29383.21	16253.11	13130.1	146186.4	80861.97	65324.44	PHEV	4136.052	3341.315	4	8
2046	2a	1	41182.37	164190.4	164190.4	0	693021.5	693021.5	0	ICE	41182.37	0	4	1
2046	2a	1	1533.133	6112.462	6112.462	0	26022.24	26022.24	0	ICE	1533.133	0	4	2
2046	2a	1	13236.74	52773.67	0	52773.67	182463	0	182463	BEV	0	13236.74	4	3
2046	2a	1	887.8298	3539.698	0	3539.698	10490.11	0	10490.11	FCEV	0	887.8298	4	7
2046	2a	1	9764.674	38930.88	21189.52	17741.36	198606.7	108098.8	90507.9	PHEV	5314.773	4449.902	4	8
2046	2a	1	42343.96	171247.4	171247.4	0	735736.5	735736.5	0	ICE	42343.96	0	4	1
2046	2a	1	1576.376	6375.181	6375.181	0	27619.42	27619.42	0	ICE	1576.376	0	4	2
2046	2a	1	18634.65	75362.25	0	75362.25	271646.8	0	271646.8	BEV	0	18634.65	4	3
2046	2a	1	1408.766	5697.331	0	5697.331	18417.95	0	18417.95	FCEV	0	1408.766	4	7
2046	2a	1	12128.91	49051.74	26263.7	22788.04	256985.6	137597.4	119388.2	PHEV	6494.165	5634.745	4	8
2046	2a	1	42610.93	174768.3	174768.3	0	765272.9	765272.9	0	ICE	42610.93	0	4	1
2046	2a	1	1586.315	6506.255	6506.255	0	28721.86	28721.86	0	ICE	1586.315	0	4	2
2046	2a	1	25330.27	103891.8	0	103891.8	389986.4	0	389986.4	BEV	0	25330.27	4	3
2046	2a	1	2134.397	8754.208	0	8754.208	30321.79	0	30321.79	FCEV	0	2134.397	4	7
2046	2a	1	14482.05	59397.98	31277.28	28120.7	319451.6	168214.1	151237.5	PHEV	7625.833	6856.215	4	8
2046	2a	1	41941.68	174426.2	174426.2	0	779464.3	779464.3	0	ICE	41941.68	0	4	1
2046	2a	1	1561.4	6493.52	6493.52	0	29248.83	29248.83	0	ICE	1561.4	0	4	2
2046	2a	1	33538.45	139479	0	139479	544857.5	0	544857.5	BEV	0	33538.45	4	3
2046	2a	1	3121.317	12980.87	0	12980.87	47684.82	0	47684.82	FCEV	0	3121.317	4	7
2046	2a	1	16741.14	69622.7	36044.67	33578.03	384484.1	199052.9	185431.2	PHEV	8667.125	8074.01	4	8
2046	2a	1	40776.87	171918.1	171918.1	0	784894	784894	0	ICE	40776.87	0	4	1
2046	2a	1	1518.037	6400.15	6400.15	0	29447.57	29447.57	0	ICE	1518.037	0	4	2
2046	2a	1	44072.06	185810.9	0	185810.9	754974.4	0	754974.4	BEV	0	44072.06	4	3
2046	2a	1	4496.016	18955.52	0	18955.52	73392.15	0	73392.15	FCEV	0	4496.016	4	7
2046	2a	1	19051.9	80324.13	40873.51	39450.62	455550.3	231810	223740.3	PHEV	9694.694	9357.203	4	8
2046	2a	1	37919.66	162044.4	162044.4	0	756332.3	756332.3	0	ICE	37919.66	0	4	1
2046	2a	1	1411.669	6032.57	6032.57	0	28371.72	28371.72	0	ICE	1411.669	0	4	2
2046	2a	1	56244.05	240351.1	0	240351.1	1015172	0	1015172	BEV	0	56244.05	4	3
2046	2a	1	6249.339	26705.67	0	26705.67	108522.4	0	108522.4	FCEV	0	6249.339	4	7
2046	2a	1	20831.13	89018.92	44509.46	44509.46	518280.3	259140.2	259140.2	PHEV	10415.56	10415.56	4	8
2046	2a	1	33424.62	144750.3	144750.3	0	691254.5	691254.5	0	ICE	33424.62	0	4	1
2046	2a	1	1244.328	5388.749	5388.749	0	25927.13	25927.13	0	ICE	1244.328	0	4	2

2046	2a	1	67962.06	294319.9	0	294319.9	1279777	0	1279777	BEV	0	67962.06	4	3
2046	2a	1	8399.806	36376.62	0	36376.62	153435.1	0	153435.1	FCEV	0	8399.806	4	7
2046	2a	1	24114.27	104430.5	52215.24	52215.24	622340.7	311170.4	311170.4	PHEV	12057.14	12057.14	4	8
2046	2a	1	27304.93	119812.4	119812.4	0	585794.7	585794.7	0	ICE	27304.93	0	4	1
2046	2a	1	1016.505	4460.363	4460.363	0	21969.17	21969.17	0	ICE	1016.505	0	4	2
2046	2a	1	80553.47	353463.8	0	353463.8	1582546	0	1582546	BEV	0	80553.47	4	3
2046	2a	1	10984.56	48199.61	0	48199.61	210600.2	0	210600.2	FCEV	0	10984.56	4	7
2046	2a	1	27342.53	119977.4	59988.69	59988.69	732421.9	366211	366211	PHEV	13671.26	13671.26	4	8
2046	2a	1	19769.43	87879.66	87879.66	0	440098.7	440098.7	0	ICE	19769.43	0	4	1
2046	2a	1	735.9742	3271.575	3271.575	0	16503.53	16503.53	0	ICE	735.9742	0	4	2
2046	2a	1	94570.57	420387.9	0	420387.9	1938122	0	1938122	BEV	0	94570.57	4	3
2046	2a	1	14131.23	62816.59	0	62816.59	283909.9	0	283909.9	FCEV	0	14131.23	4	7
2046	2a	1	30659.48	136288.5	68144.23	68144.23	852766.5	426383.3	426383.3	PHEV	15329.74	15329.74	4	8
2046	2a	1	10595.39	47705.96	47705.96	0	244813	244813	0	ICE	10595.39	0	4	1
2046	2a	1	394.4441	1775.992	1775.992	0	9179.65	9179.65	0	ICE	394.4441	0	4	2
2046	2a	1	108955.9	490575.9	0	490575.9	2329085	0	2329085	BEV	0	108955.9	4	3
2046	2a	1	17737	79861.2	0	79861.2	372999.2	0	372999.2	FCEV	0	17737	4	7
2046	2a	1	33677.85	151635.2	75817.59	75817.59	973074.2	486537.1	486537.1	PHEV	16838.92	16838.92	4	8
2046	2a	1	125208.9	570928.7	0	570928.7	2791480	0	2791480	BEV	0	125208.9	4	3
2046	2a	1	22095.69	100752.1	0	100752.1	485945.8	0	485945.8	FCEV	0	22095.69	4	7
2046	2a	1	36826.14	167920.2	83960.11	83960.11	1105891	552945.4	552945.4	PHEV	18413.07	18413.07	4	8
2046	2a	1	132988.9	614023	0	614023	3092982	0	3092982	BEV	0	132988.9	4	3
2046	2a	1	25331.22	116956.8	0	116956.8	581983.5	0	581983.5	FCEV	0	25331.22	4	7
2046	2a	1	37136.82	171464.4	85732.2	85732.2	1156912	578456.1	578456.1	PHEV	18568.41	18568.41	4	8
2046	2a	1	141729.9	662500.9	0	662500.9	3437577	0	3437577	BEV	0	141729.9	4	3
2046	2a	1	29029.02	135693	0	135693	696388.2	0	696388.2	FCEV	0	29029.02	4	7
2046	2a	1	37483.67	175213.3	87606.64	87606.64	1211253	605626.7	605626.7	PHEV	18741.83	18741.83	4	8
2046	2a	1	147555	698183.3	0	698183.3	3732481	0	3732481	BEV	0	147555	4	3
2046	2a	1	32390.13	153259.7	0	153259.7	811246.3	0	811246.3	FCEV	0	32390.13	4	7
2046	2a	1	36856.24	174391.9	87195.97	87195.97	1236038	618019.2	618019.2	PHEV	18428.12	18428.12	4	8
2046	2a	1	154381.6	739329	0	739329	4071446	0	4071446	BEV	0	154381.6	4	3
2046	2a	1	36212.97	173422.8	0	173422.8	946524.7	0	946524.7	FCEV	0	36212.97	4	7
2046	2a	1	36303.73	173857.5	86928.75	86928.75	1263072	631536	631536	PHEV	18151.87	18151.87	4	8
2046	2a	1	159916.4	774996.3	0	774996.3	4396180	0	4396180	BEV	0	159916.4	4	3
2046	2a	1	39979.09	193749.1	0	193749.1	1090199	0	1090199	FCEV	0	39979.09	4	7
2046	2a	1	35275.67	170955.1	85477.53	85477.53	1272830	636415.1	636415.1	PHEV	17637.83	17637.83	4	8
2046	2a	1	166179.4	814869.2	0	814869.2	4760226	0	4760226	BEV	0	166179.4	4	3
2046	2a	1	44174.28	216610.8	0	216610.8	1256180	0	1256180	FCEV	0	44174.28	4	7
2046	2a	1	34243.63	167915.4	83957.68	83957.68	1280404	640202	640202	PHEV	17121.81	17121.81	4	8
2046	2a	1	169495.5	840840.1	0	840840.1	5058260	0	5058260	BEV	0	169495.5	4	3
2046	2a	1	47806.42	237160	0	237160	1417336	0	1417336	FCEV	0	47806.42	4	7
2046	2a	1	32470.4	161080.5	80540.24	80540.24	1257264	628631.8	628631.8	PHEV	16235.2	16235.2	4	8
2046	2a	1	172975.3	868012.4	0	868012.4	5375835	0	5375835	BEV	0	172975.3	4	3
2046	2a	1	51667.94	259276.4	0	259276.4	1596301	0	1596301	FCEV	0	51667.94	4	7
2046	2a	1	30633.17	153721.2	76860.6	76860.6	1226574	613286.9	613286.9	PHEV	15316.58	15316.58	4	8
2046	2a	1	177418.8	900474.7	0	900474.7	5738435	0	5738435	BEV	0	177418.8	4	3
2046	2a	1	56026.98	284360.4	0	284360.4	1802573	0	1802573	FCEV	0	56026.98	4	7

2046	2a	1	28852.84	146440.3	73220.15	73220.15	1192011	596005.3	596005.3	PHEV	14426.42	14426.42	4	8
2046	2a	1	180408.8	925986.1	0	925986.1	6070422	0	6070422	BEV	0	180408.8	4	3
2046	2a	1	60136.27	308662	0	308662	2013959	0	2013959	FCEV	0	60136.27	4	7
2046	2a	1	26727.23	137183.1	68591.56	68591.56	1136885	568442.6	568442.6	PHEV	13363.62	13363.62	4	8
2046	2a	1	156508.7	812280	0	812280	5442120	0	5442120	BEV	0	156508.7	4	3
2046	2a	1	52169.56	270760	0	270760	1805549	0	1805549	FCEV	0	52169.56	4	7
2046	2a	1	23186.47	120337.8	60168.89	60168.89	1018120	509060.2	509060.2	PHEV	11593.23	11593.23	4	8
2046	2a	1	59.66858	159.2697	159.2697	0	246.2615	246.2615	0	ICE	59.66858	0	1	2
2046	2a	1	76.24746	207.891	207.891	0	339.2347	339.2347	0	ICE	76.24746	0	1	2
2046	2a	1	24.96709	69.50389	69.50389	0	125.4948	125.4948	0	ICE	24.96709	0	1	2
2046	2a	1	44.74713	127.1315	127.1315	0	226.8813	226.8813	0	ICE	44.74713	0	1	2
2046	2a	1	95.39937	292.9018	292.9018	0	593.8257	593.8257	0	ICE	95.39937	0	1	2
2046	2a	1	238.9677	774.7666	774.7666	0	1769.173	1769.173	0	ICE	238.9677	0	1	2
2046	2a	1	351.3161	1159.143	1159.143	0	2784.645	2784.645	0	ICE	351.3161	0	1	2
2046	2a	1	300.6487	991.9694	0	991.9694	2649.334	0	2649.334	BEV	0	300.6487	1	3
2046	2a	1	0.017663	0.058279	0	0.058279	0.155651	0	0.155651	FCEV	0	0.017663	1	7
2046	2a	1	314.2495	1036.844	622.1066	414.7377	2404.225	1442.535	961.6899	PHEV	188.5497	125.6998	1	8
2046	2a	1	381.9125	1281.973	0	1281.973	3539.934	0	3539.934	BEV	0	381.9125	1	3
2046	2a	1	0.053512	0.179624	0	0.179624	0.495997	0	0.495997	FCEV	0	0.053512	1	7
2046	2a	1	482.1933	1618.588	971.1527	647.4351	3921.267	2352.76	1568.507	PHEV	289.316	192.8773	1	8
2046	2a	1	393.3961	1343.058	1343.058	0	3561.463	3561.463	0	ICE	393.3961	0	1	2
2046	2a	1	933.7745	3187.915	0	3187.915	9145.048	0	9145.048	BEV	0	933.7745	1	3
2046	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2046	2a	1	444.0348	1515.939	909.5636	606.3757	3848.858	2309.315	1539.543	PHEV	266.4209	177.6139	1	8
2046	2a	1	1606.474	4472.134	4472.134	0	15549.68	15549.68	0	ICE	1606.474	0	2	1
2046	2a	1	3319.256	10761.49	10761.49	0	40483.62	40483.62	0	ICE	3319.256	0	2	1
2046	2a	1	5017.493	16554.87	16554.87	0	63103.27	63103.27	0	ICE	5017.493	0	2	1
2046	2a	1	6430.782	21586.33	21586.33	0	82808.79	82808.79	0	ICE	6430.782	0	2	1
2046	2a	1	2.684392	8.08802	8.08802	0	26.13958	26.13958	0	ICE	2.684392	0	3	2
2046	2a	1	79.98745	259.3305	259.3305	0	931.5497	931.5497	0	ICE	79.98745	0	3	2
2046	2a	1	61.9973	204.5558	204.5558	0	729.8007	729.8007	0	ICE	61.9973	0	3	2
2046	2a	1	267.2614	912.433	912.433	0	3435.693	3435.693	0	ICE	267.2614	0	3	2
2046	2a	1	286.6463	995.0353	0	995.0353	2022.686	0	2022.686	BEV	0	286.6463	3	3
2046	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2046	2a	1	26.08692	90.55552	54.33331	36.22221	344.0631	206.4379	137.6253	PHEV	15.65215	10.43477	3	8
2046	2a	1	43.61072	123.9029	123.9029	0	342.0679	342.0679	0	ICE	43.61072	0	4	2
2046	2a	1	54.5241	158.0327	158.0327	0	440.9391	440.9391	0	ICE	54.5241	0	4	2
2046	2a	1	67.91021	200.7215	200.7215	0	593.7547	593.7547	0	ICE	67.91021	0	4	2
2046	2a	1	47.22925	142.3008	142.3008	0	426.9524	426.9524	0	ICE	47.22925	0	4	2
2046	2a	1	58.66894	180.1295	180.1295	0	558.7454	558.7454	0	ICE	58.66894	0	4	2
2046	2a	1	380.8184	1234.667	1234.667	0	3894.271	3894.271	0	ICE	380.8184	0	4	2
2046	2a	1	944.2676	3223.739	3223.739	0	11032.18	11032.18	0	ICE	944.2676	0	4	2
2046	2a	1	650.4073	2257.759	2257.759	0	7987.149	7987.149	0	ICE	650.4073	0	4	2
2046	2a	1	1.675545	4.760406	0	4.760406	10.52388	0	10.52388	BEV	0	1.675545	1	3
2046	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2046	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2046	2a	1	63.22061	204.9701	0	204.9701	531.1632	0	531.1632	BEV	0	63.22061	1	3

2046	2a	1	0.238919	0.774609	0	0.774609	2.007335	0	2.007335	FCEV	0	0.238919	1	7
2046	2a	1	132.892	430.8546	258.5128	172.3418	950.2113	570.1268	380.0845	PHEV	79.73522	53.15682	1	8
2046	2a	1	656.8029	2279.96	0	2279.96	6772.927	0	6772.927	BEV	0	656.8029	1	3
2046	2a	1	19.99686	69.4151	0	69.4151	206.2069	0	206.2069	FCEV	0	19.99686	1	7
2046	2a	1	472.3291	1639.596	983.7577	655.8384	4355.524	2613.314	1742.21	PHEV	283.3975	188.9316	1	8
2046	2a	1	11.13103	31.62447	31.62447	0	101.1481	101.1481	0	ICE	11.13103	0	3	2
2046	2a	1	11.9484	34.63126	34.63126	0	115.8969	115.8969	0	ICE	11.9484	0	3	2
2046	2a	1	18.79472	51.24437	51.24437	0	137.0757	137.0757	0	ICE	18.79472	0	4	2
2046	2a	1	98.10728	306.8364	306.8364	0	969.6819	969.6819	0	ICE	98.10728	0	4	2
2046	2a	1	7.275666	19.4205	0	19.4205	42.31986	0	42.31986	BEV	0	7.275666	1	3
2046	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2046	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2046	2a	1	78.35666	249.5542	0	249.5542	630.686	0	630.686	BEV	0	78.35666	1	3
2046	2a	1	0.774151	2.465556	0	2.465556	6.231076	0	6.231076	FCEV	0	0.774151	1	7
2046	2a	1	21.78085	69.36874	41.62125	27.7475	146.6649	87.99894	58.66596	PHEV	13.06851	8.71234	1	8
2046	2a	1	57.2405	198.699	198.699	0	541.0098	541.0098	0	ICE	57.2405	0	1	2
2046	2a	1	61.5764	206.6947	0	206.6947	569.8323	0	569.8323	BEV	0	61.5764	2	3
2046	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2046	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2046	2a	1	8.424413	25.38259	25.38259	0	47.66623	47.66623	0	ICE	8.424413	0	1	2
2046	2a	1	1.413593	3.854204	3.854204	0	11.14105	11.14105	0	ICE	1.413593	0	2	2
2046	2a	1	5.35919	16.76119	16.76119	0	55.19536	55.19536	0	ICE	5.35919	0	3	2
2046	2a	1	14.25143	47.83807	0	47.83807	91.74395	0	91.74395	BEV	0	14.25143	3	3
2046	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2046	2a	1	6.452603	21.65958	12.99575	8.663832	77.52322	46.51393	31.00929	PHEV	3.871562	2.581041	3	8
2046	2a	1	7.302973	19.49339	19.49339	0	54.13734	54.13734	0	ICE	7.302973	0	4	2
2046	2a	1	10.99058	35.00336	35.00336	0	124.7316	124.7316	0	ICE	10.99058	0	3	2
2046	2a	1	2.554278	6.81798	0	6.81798	10.05813	0	10.05813	BEV	0	2.554278	3	3
2046	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2046	2a	1	0	0	0	0	0	0	0	PHEV	0	0	3	8
2046	2a	1	16.18214	43.19401	0	43.19401	65.09027	0	65.09027	BEV	0	16.18214	4	3
2046	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2046	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2046	2a	1	5.950658	17.5883	17.5883	0	30.02609	30.02609	0	ICE	5.950658	0	1	2
2046	2a	1	13.45889	42.09348	0	42.09348	104.0573	0	104.0573	BEV	0	13.45889	1	3
2046	2a	1	1.366385	4.27345	0	4.27345	10.56419	0	10.56419	FCEV	0	1.366385	1	7
2046	2a	1	1.434704	4.487122	2.692273	1.794849	8.968352	5.381011	3.587341	PHEV	0.860822	0.573881	1	8
2046	2a	1	24.50065	79.43454	0	79.43454	204.694	0	204.694	BEV	0	24.50065	2	3
2046	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2046	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2046	2a	1	4.227263	12.97884	12.97884	0	43.98218	43.98218	0	ICE	4.227263	0	3	2
2046	2a	1	1.79476	5.201932	0	5.201932	11.77781	0	11.77781	BEV	0	1.79476	1	3
2046	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2046	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2046	2a	1	8.826503	26.59408	0	26.59408	61.0627	0	61.0627	BEV	0	8.826503	1	3
2046	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2046	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8

2046	2a	1	7.700902	23.64385	0	23.64385	57.72959	0	57.72959	BEV	0	7.700902	1	3
2046	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2046	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2046	2a	1	2.399619	7.367478	7.367478	0	23.14667	23.14667	0	ICE	2.399619	0	2	2
2046	2a	1	30.74074	101.4269	0	101.4269	269.4704	0	269.4704	BEV	0	30.74074	2	3
2046	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2046	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2046	2a	1	1.525868	4.509994	4.509994	0	15.30464	15.30464	0	ICE	1.525868	0	3	2
2046	2a	1	1.626923	4.435854	0	4.435854	9.684924	0	9.684924	BEV	0	1.626923	1	3
2046	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2046	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2046	2a	1	3.071611	9.078731	0	9.078731	20.84623	0	20.84623	BEV	0	3.071611	1	3
2046	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2046	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2046	2a	1	3.439324	10.36261	0	10.36261	24.07064	0	24.07064	BEV	0	3.439324	2	3
2046	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2046	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2046	2a	1	0.638164	2.069018	2.069018	0	6.341617	6.341617	0	ICE	0.638164	0	2	2
2046	2a	1	0.246102	0.713301	0	0.713301	1.273799	0	1.273799	BEV	0	0.246102	4	3
2046	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2046	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2046	2a	1	0.207553	0.565898	0.565898	0	1.809569	1.809569	0	ICE	0.207553	0	3	2
2046	2a	1	2.208326	6.780156	0	6.780156	11.80688	0	11.80688	BEV	0	2.208326	3	3
2046	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2046	2a	1	0	0	0	0	0	0	0	PHEV	0	0	3	8
2046	2a	1	1.337089	4.258429	0	4.258429	7.693589	0	7.693589	BEV	0	1.337089	3	3
2046	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2046	2a	1	0.925677	2.948143	1.768886	1.179257	9.746792	5.848075	3.898717	PHEV	0.555406	0.370271	3	8
2046	2a	1	0.183499	0.626467	0	0.626467	1.209725	0	1.209725	BEV	0	0.183499	4	3
2046	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2046	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2046	2a	1	1.660564	4.432444	4.432444	0	15.51491	15.51491	0	ICE	1.660564	0	2	2
2046	2a	1	0.874741	2.535348	0	2.535348	5.653091	0	5.653091	BEV	0	0.874741	2	3
2046	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2046	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2046	2a	1	1.427284	4.218608	4.218608	0	13.4343	13.4343	0	ICE	1.427284	0	2	2
2046	2a	1	0.501039	1.480915	0	1.480915	3.377051	0	3.377051	BEV	0	0.501039	2	3
2046	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2046	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2046	2a	1	1.748329	5.267681	5.267681	0	19.52752	19.52752	0	ICE	1.748329	0	2	2
2046	2a	1	1.492246	4.581598	0	4.581598	11.12652	0	11.12652	BEV	0	1.492246	2	3
2046	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2046	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2046	2a	1	1.550265	4.670917	0	4.670917	7.746366	0	7.746366	BEV	0	1.550265	3	3
2046	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2046	2a	1	0	0	0	0	0	0	0	PHEV	0	0	3	8
2046	2a	1	0.927324	3.05964	0	3.05964	5.719057	0	5.719057	BEV	0	0.927324	3	3

2046	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2046	2a	1	0.70913	2.339725	1.403835	0.93589	8.328495	4.997097	3.331398	PHEV	0.425478	0.283652	3	8
2046	2a	1	1.863281	5.080291	0	5.080291	7.681774	0	7.681774	BEV	0	1.863281	4	3
2046	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2046	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2046	2a	1	0.315913	0.897545	0	0.897545	1.396267	0	1.396267	BEV	0	0.315913	4	3
2046	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2046	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2046	2a	1	0.111356	0.316373	0.316373	0	0.96673	0.96673	0	ICE	0.111356	0	2	2
2046	2a	1	7.005868	18.70034	0	18.70034	39.09446	0	39.09446	BEV	0	7.005868	2	3
2046	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2046	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2046	2a	1	0.459296	1.278598	0	1.278598	2.743675	0	2.743675	BEV	0	0.459296	2	3
2046	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2046	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2046	2a	1	0.122437	0.326813	0.326813	0	0.851186	0.851186	0	ICE	0.122437	0	3	2
2046	2a	1	1.00636	2.916835	2.916835	0	10.48365	10.48365	0	ICE	1.00636	0	2	2
2046	2a	1	0.230585	0.694749	0	0.694749	1.13399	0	1.13399	BEV	0	0.230585	4	3
2046	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2046	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2046	2a	1	1.498788	4.172357	0	4.172357	9.088994	0	9.088994	BEV	0	1.498788	1	3
2046	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2046	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2046	2a	1	0.17564	0.499014	0	0.499014	1.088639	0	1.088639	BEV	0	0.17564	2	3
2046	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2046	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2046	2a	1	0.537213	1.680166	1.680166	0	5.216511	5.216511	0	ICE	0.537213	0	2	2
2046	2a	1	0.914817	3.018376	3.018376	0	10.79891	10.79891	0	ICE	0.914817	0	2	2
2046	2a	1	1.298442	4.060955	0	4.060955	6.99361	0	6.99361	BEV	0	1.298442	3	3
2046	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2046	2a	1	0	0	0	0	0	0	0	PHEV	0	0	3	8
2046	2a	1	2.984042	9.674681	0	9.674681	17.2457	0	17.2457	BEV	0	2.984042	3	3
2046	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2046	2a	1	0.765139	2.480687	1.488412	0.992275	10.08277	6.049664	4.033109	PHEV	0.459083	0.306056	3	8
2046	2a	1	0.252831	0.805227	0.805227	0	2.526594	2.526594	0	ICE	0.252831	0	2	2
2046	2a	1	0	0	0	0	0	0	0	BEV	0	0	2	3
2046	2a	1	3.771027	12.87432	0	12.87432	36.68264	0	36.68264	FCEV	0	3.771027	2	7
2046	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2046	2a	1	0	0	0	0	0	0	0	BEV	0	0	2	3
2046	2a	1	4.225612	14.66837	0	14.66837	43.27086	0	43.27086	FCEV	0	4.225612	2	7
2046	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2046	2a	1	0.031108	0.086599	0.086599	0	0.298762	0.298762	0	ICE	0.031108	0	3	2
2046	2a	1	0	0	0	0	0	0	0	BEV	0	0	3	3
2046	2a	1	0.144136	0.492082	0	0.492082	0.991708	0	0.991708	FCEV	0	0.144136	3	7
2046	2a	1	2.06595	7.053173	4.231904	2.821269	29.43161	17.65897	11.77265	PHEV	1.23957	0.82638	3	8
2046	2a	1	0.140484	0.471565	0.471565	0	1.581181	1.581181	0	ICE	0.140484	0	2	2
2046	2a	1	0.07932	0.234446	0	0.234446	0.367287	0	0.367287	BEV	0	0.07932	3	3

2046	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2046	2a	1	0	0	0	0	0	0	0	PHEV	0	0	3	8
2046	2a	1	0.220012	0.688101	0	0.688101	1.561152	0	1.561152	BEV	0	0.220012	2	3
2046	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2046	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2046	2a	1	0.243122	0.84395	0.84395	0	2.777064	2.777064	0	ICE	0.243122	0	2	2
2046	2a	1	0.154243	0.491241	0	0.491241	1.261185	0	1.261185	BEV	0	0.154243	2	3
2046	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2046	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2046	2a	1	0.047915	0.136133	0	0.136133	0.1958	0	0.1958	BEV	0	0.047915	3	3
2046	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2046	2a	1	0	0	0	0	0	0	0	PHEV	0	0	3	8
2046	2a	1	0.073226	0.199652	0	0.199652	0.422978	0	0.422978	BEV	0	0.073226	2	3
2046	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2046	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2046	2a	1	0.038391	0.106874	0.106874	0	0.507414	0.507414	0	ICE	0.038391	0	2	2
2046	2a	1	0.20866	0.616734	0	0.616734	0.957472	0	0.957472	BEV	0	0.20866	4	3
2046	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2046	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2046	2a	1	0	0	0	0	0	0	0	BEV	0	0	4	3
2046	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2046	2a	1	0.240732	0.794278	0.476567	0.317711	3.074582	1.844749	1.229833	PHEV	0.144439	0.096293	4	8
2047	2a	1	14936.78	39869.84	39869.84	0	56697.86	56697.86	0	ICE	14936.78	0	1	1
2047	2a	1	13974.15	38100.93	38100.93	0	56756.93	56756.93	0	ICE	13974.15	0	1	1
2047	2a	1	15917.29	44310.88	44310.88	0	69474.85	69474.85	0	ICE	15917.29	0	1	1
2047	2a	1	16082.36	45691.76	45691.76	0	75009.69	75009.69	0	ICE	16082.36	0	1	1
2047	2a	1	42.64113	121.1481	121.1481	0	209.5464	209.5464	0	ICE	42.64113	0	1	2
2047	2a	1	16861.44	48871.21	48871.21	0	83954.89	83954.89	0	ICE	16861.44	0	1	1
2047	2a	1	14123.4	41744.4	41744.4	0	75365.62	75365.62	0	ICE	14123.4	0	1	1
2047	2a	1	11264.57	33939.93	33939.93	0	64224.42	64224.42	0	ICE	11264.57	0	1	1
2047	2a	1	13178.36	40461.11	40461.11	0	80210.48	80210.48	0	ICE	13178.36	0	1	1
2047	2a	1	150.5639	462.2717	462.2717	0	931.5251	931.5251	0	ICE	150.5639	0	1	2
2047	2a	1	12914.76	40391.67	40391.67	0	84032.84	84032.84	0	ICE	12914.76	0	1	1
2047	2a	1	201.7789	631.0756	631.0756	0	1301.61	1301.61	0	ICE	201.7789	0	1	2
2047	2a	1	19153.74	61001.77	61001.77	0	133369.7	133369.7	0	ICE	19153.74	0	1	1
2047	2a	1	23697.43	76830.39	76830.39	0	175549.2	175549.2	0	ICE	23697.43	0	1	1
2047	2a	1	24714.85	81544.92	81544.92	0	195551.6	195551.6	0	ICE	24714.85	0	1	1
2047	2a	1	471.3015	1555.026	1555.026	0	3710.63	3710.63	0	ICE	471.3015	0	1	2
2047	2a	1	29982	100641.2	100641.2	0	252786.8	252786.8	0	ICE	29982	0	1	1
2047	2a	1	30392.77	103761.2	103761.2	0	272258.7	272258.7	0	ICE	30392.77	0	1	1
2047	2a	1	35840.3	124412.4	124412.4	0	342377.5	342377.5	0	ICE	35840.3	0	1	1
2047	2a	1	438.591	1522.481	1522.481	0	4183.857	4183.857	0	ICE	438.591	0	1	2
2047	2a	1	2084.518	7235.988	0	7235.988	20427.73	0	20427.73	BEV	0	2084.518	1	3
2047	2a	1	42.54119	147.6732	0	147.6732	440.7694	0	440.7694	FCEV	0	42.54119	1	7
2047	2a	1	1880.306	6527.106	3524.637	3002.469	17701.83	9558.99	8142.843	PHEV	1015.365	864.9408	1	8
2047	2a	1	42278.95	149185.1	149185.1	0	429077.1	429077.1	0	ICE	42278.95	0	1	1
2047	2a	1	517.3831	1825.633	1825.633	0	5244.308	5244.308	0	ICE	517.3831	0	1	2

2047	2a	1	3005.343	10604.62	0	10604.62	30944.57	0	30944.57	BEV	0	3005.343	1	3
2047	2a	1	61.33353	216.4209	0	216.4209	668.1724	0	668.1724	FCEV	0	61.33353	1	7
2047	2a	1	1942.338	6853.716	3701.007	3152.709	19538.06	10550.55	8987.509	PHEV	1048.863	893.4757	1	8
2047	2a	1	49389.8	177105.9	177105.9	0	531570.9	531570.9	0	ICE	49389.8	0	1	1
2047	2a	1	601.8317	2158.096	2158.096	0	6471.609	6471.609	0	ICE	601.8317	0	1	2
2047	2a	1	4305.31	15438.33	0	15438.33	46987.24	0	46987.24	BEV	0	4305.31	1	3
2047	2a	1	100.709	361.1304	0	361.1304	1153.513	0	1153.513	FCEV	0	100.709	1	7
2047	2a	1	2111.478	7571.505	4012.898	3558.607	22461.01	11904.34	10556.68	PHEV	1119.083	992.3945	1	8
2047	2a	1	58320.64	212472	212472	0	665689.9	665689.9	0	ICE	58320.64	0	1	1
2047	2a	1	717.0984	2612.511	2612.511	0	8177.669	8177.669	0	ICE	717.0984	0	1	2
2047	2a	1	6040.18	22005.4	0	22005.4	69569.54	0	69569.54	BEV	0	6040.18	1	3
2047	2a	1	159.4182	580.7878	0	580.7878	1919.432	0	1919.432	FCEV	0	159.4182	1	7
2047	2a	1	2303.154	8390.781	4363.206	4027.575	26209.65	13629.02	12580.63	PHEV	1197.64	1105.514	1	8
2047	2a	1	65796.63	243477.8	243477.8	0	795029.9	795029.9	0	ICE	65796.63	0	1	1
2047	2a	1	812.9249	3008.196	3008.196	0	9814.238	9814.238	0	ICE	812.9249	0	1	2
2047	2a	1	10630.39	39337.35	0	39337.35	129592.8	0	129592.8	BEV	0	10630.39	1	3
2047	2a	1	364.3988	1348.443	0	1348.443	4611.475	0	4611.475	FCEV	0	364.3988	1	7
2047	2a	1	4041.529	14955.52	7447.847	7507.669	48330.52	24068.6	24261.92	PHEV	2012.681	2028.847	1	8
2047	2a	1	74317.35	279266	279266	0	949295.5	949295.5	0	ICE	74317.35	0	1	1
2047	2a	1	924.8158	3475.227	3475.227	0	11802.82	11802.82	0	ICE	924.8158	0	1	2
2047	2a	1	16941.12	63660.5	0	63660.5	218157.9	0	218157.9	BEV	0	16941.12	1	3
2047	2a	1	716.3905	2692.017	0	2692.017	9524.054	0	9524.054	FCEV	0	716.3905	1	7
2047	2a	1	6421.918	24131.96	11486.81	12645.15	81064.6	38586.75	42477.85	PHEV	3056.833	3365.085	1	8
2047	2a	1	83923.4	320171.1	320171.1	0	1132626	1132626	0	ICE	83923.4	0	1	1
2047	2a	1	1053.119	4017.691	4017.691	0	14200.87	14200.87	0	ICE	1053.119	0	1	2
2047	2a	1	25582.92	97599.87	0	97599.87	347633	0	347633	BEV	0	25582.92	1	3
2047	2a	1	1289.895	4921.002	0	4921.002	17937.33	0	17937.33	FCEV	0	1289.895	1	7
2047	2a	1	9669.455	36889.36	16747.77	20141.59	129087.6	58605.76	70481.82	PHEV	4389.932	5279.522	1	8
2047	2a	1	94369.7	365430.6	365430.6	0	1343682	1343682	0	ICE	94369.7	0	1	1
2047	2a	1	1193.686	4622.347	4622.347	0	16982.69	16982.69	0	ICE	1193.686	0	1	2
2047	2a	1	37280.91	144364	0	144364	533870.7	0	533870.7	BEV	0	37280.91	1	3
2047	2a	1	2187.688	8471.45	0	8471.45	31844.59	0	31844.59	FCEV	0	2187.688	1	7
2047	2a	1	14049.81	54405.5	23503.18	30902.32	198147.5	85599.73	112547.8	PHEV	6069.518	7980.292	1	8
2047	2a	1	105712.8	415411.1	415411.1	0	1586698	1586698	0	ICE	105712.8	0	1	1
2047	2a	1	1347.272	5294.269	5294.269	0	20206.84	20206.84	0	ICE	1347.272	0	1	2
2047	2a	1	53130.33	208782	0	208782	801209	0	801209	BEV	0	53130.33	1	3
2047	2a	1	3563.62	14003.67	0	14003.67	54376.74	0	54376.74	FCEV	0	3563.62	1	7
2047	2a	1	19964.64	78453.45	32165.92	46287.54	297247.3	121871.4	175375.9	PHEV	8185.503	11779.14	1	8
2047	2a	1	116892	466037.9	466037.9	0	1845690	1845690	0	ICE	116892	0	1	1
2047	2a	1	1489.747	5939.488	5939.488	0	23507.99	23507.99	0	ICE	1489.747	0	1	2
2047	2a	1	74011.56	295077.4	0	295077.4	1173024	0	1173024	BEV	0	74011.56	1	3
2047	2a	1	5595.219	22307.63	0	22307.63	89357.71	0	89357.71	FCEV	0	5595.219	1	7
2047	2a	1	27730.42	110558.7	42896.77	67661.91	434848.2	168721.1	266127.1	PHEV	10759.4	16971.01	1	8
2047	2a	1	126144.9	510155.3	510155.3	0	2092999	2092999	0	ICE	126144.9	0	1	1
2047	2a	1	1607.672	6501.747	6501.747	0	26660.64	26660.64	0	ICE	1607.672	0	1	2
2047	2a	1	100340.6	405797.6	0	405797.6	1669809	0	1669809	BEV	0	100340.6	1	3
2047	2a	1	8454.972	34193.6	0	34193.6	141414.1	0	141414.1	FCEV	0	8454.972	1	7

2047	2a	1	37486.45	151602.7	55486.6	96116.13	618451	226353	392097.9	PHEV	13720.04	23766.41	1	8
2047	2a	1	133014.9	545559.1	545559.1	0	2316418	2316418	0	ICE	133014.9	0	1	1
2047	2a	1	1695.226	6952.954	6952.954	0	29509.03	29509.03	0	ICE	1695.226	0	1	2
2047	2a	1	133413.8	547195.3	0	547195.3	2328822	0	2328822	BEV	0	133413.8	1	3
2047	2a	1	12416.4	50925.73	0	50925.73	217482	0	217482	FCEV	0	12416.4	1	7
2047	2a	1	49698.32	203837.2	70119.99	133717.2	861487.4	296351.7	565135.7	PHEV	17096.22	32602.1	1	8
2047	2a	1	135265.8	562540.8	562540.8	0	2469990	2469990	0	ICE	135265.8	0	1	1
2047	2a	1	1723.914	7169.379	7169.379	0	31467.55	31467.55	0	ICE	1723.914	0	1	2
2047	2a	1	172932.8	719189.6	0	719189.6	3163618	0	3163618	BEV	0	172932.8	1	3
2047	2a	1	17641.76	73368.21	0	73368.21	323509.7	0	323509.7	FCEV	0	17641.76	1	7
2047	2a	1	64233.97	267134.9	86017.45	181117.5	1168586	376284.8	792301.5	PHEV	20683.34	43550.63	1	8
2047	2a	1	132043	556702.5	556702.5	0	2525776	2525776	0	ICE	132043	0	1	1
2047	2a	1	1682.842	7094.981	7094.981	0	32180.15	32180.15	0	ICE	1682.842	0	1	2
2047	2a	1	219530.4	925555.4	0	925555.4	4205286	0	4205286	BEV	0	219530.4	1	3
2047	2a	1	24392.26	102839.5	0	102839.5	468046.2	0	468046.2	FCEV	0	24392.26	1	7
2047	2a	1	81307.55	342798.3	102839.5	239958.8	1550753	465226	1085527	PHEV	24392.26	56915.28	1	8
2047	2a	1	121442.4	518967.1	518967.1	0	2431480	2431480	0	ICE	121442.4	0	1	1
2047	2a	1	1547.739	6614.048	6614.048	0	30980.23	30980.23	0	ICE	1547.739	0	1	2
2047	2a	1	273703.8	1169635	0	1169635	5485762	0	5485762	BEV	0	273703.8	1	3
2047	2a	1	33828.56	144561.6	0	144561.6	678810.1	0	678810.1	FCEV	0	33828.56	1	7
2047	2a	1	97115.48	415009.4	124502.8	290506.6	1940134	582040.3	1358094	PHEV	29134.64	67980.84	1	8
2047	2a	1	103583.1	448582.3	448582.3	0	2168635	2168635	0	ICE	103583.1	0	1	1
2047	2a	1	1320.131	5717.027	5717.027	0	27632.33	27632.33	0	ICE	1320.131	0	1	2
2047	2a	1	335517.1	1453007	0	1453007	7029920	0	7029920	BEV	0	335517.1	1	3
2047	2a	1	45752.33	198137.3	0	198137.3	959421.7	0	959421.7	FCEV	0	45752.33	1	7
2047	2a	1	113885.7	493199	147959.7	345239.3	2380345	714103.4	1666241	PHEV	34165.7	79719.97	1	8
2047	2a	1	77319.91	339275.1	339275.1	0	1691599	1691599	0	ICE	77319.91	0	1	1
2047	2a	1	985.4154	4323.944	4323.944	0	21554.78	21554.78	0	ICE	985.4154	0	1	2
2047	2a	1	402794.9	1767440	0	1767440	8817096	0	8817096	BEV	0	402794.9	1	3
2047	2a	1	60187.74	264100.2	0	264100.2	1318271	0	1318271	FCEV	0	60187.74	1	7
2047	2a	1	130584.8	572998.5	171899.5	401098.9	2853634	856090.2	1997544	PHEV	39175.45	91409.39	1	8
2047	2a	1	42995.7	191125.8	191125.8	0	982242.5	982242.5	0	ICE	42995.7	0	1	1
2047	2a	1	547.9652	2435.831	2435.831	0	12516.38	12516.38	0	ICE	547.9652	0	1	2
2047	2a	1	478080.3	2125177	0	2125177	10925587	0	10925587	BEV	0	478080.3	1	3
2047	2a	1	77827.03	345959.1	0	345959.1	1779319	0	1779319	FCEV	0	77827.03	1	7
2047	2a	1	147772.8	656884.3	197065.3	459819	3373631	1012089	2361542	PHEV	44331.85	103441	1	8
2047	2a	1	554415.6	2496267	0	2496267	13218555	0	13218555	BEV	0	554415.6	1	3
2047	2a	1	97838.05	440517.8	0	440517.8	2333360	0	2333360	FCEV	0	97838.05	1	7
2047	2a	1	163063.4	734196.3	220258.9	513937.4	3886155	1165846	2720308	PHEV	48919.03	114144.4	1	8
2047	2a	1	603886.4	2753607	0	2753607	15011439	0	15011439	BEV	0	603886.4	1	3
2047	2a	1	115026	524496.6	0	524496.6	2859916	0	2859916	FCEV	0	115026	1	7
2047	2a	1	168633.8	768938	230681.4	538256.6	4192523	1257757	2934766	PHEV	50590.13	118043.6	1	8
2047	2a	1	645783.8	2981648	0	2981648	16726187	0	16726187	BEV	0	645783.8	1	3
2047	2a	1	132269	610699	0	610699	3426342	0	3426342	FCEV	0	132269	1	7
2047	2a	1	170792.1	788564	236569.2	551994.8	4426423	1327927	3098496	PHEV	51237.62	119554.4	1	8
2047	2a	1	690124.2	3225910	0	3225910	18613481	0	18613481	BEV	0	690124.2	1	3
2047	2a	1	151490.7	708126.5	0	708126.5	4086270	0	4086270	FCEV	0	151490.7	1	7

2047	2a	1	172378.9	805766.4	241729.9	564036.5	4654361	1396308	3258053	PHEV	51713.68	120665.3	1	8
2047	2a	1	726844	3439193	0	3439193	20403969	0	20403969	BEV	0	726844	1	3
2047	2a	1	170494.3	806724.3	0	806724.3	4786329	0	4786329	FCEV	0	170494.3	1	7
2047	2a	1	170921.6	808746.2	242623.9	566122.3	4806330	1441899	3364431	PHEV	51276.47	119645.1	1	8
2047	2a	1	767209.4	3674143	0	3674143	22403649	0	22403649	BEV	0	767209.4	1	3
2047	2a	1	191802.3	918535.6	0	918535.6	5600925	0	5600925	FCEV	0	191802.3	1	7
2047	2a	1	169237.4	810472.6	243141.8	567330.8	4953605	1486082	3467524	PHEV	50771.21	118466.2	1	8
2047	2a	1	798058.2	3867597	0	3867597	24232580	0	24232580	BEV	0	798058.2	1	3
2047	2a	1	212142	1028096	0	1028096	6441354	0	6441354	FCEV	0	212142	1	7
2047	2a	1	164451.2	796973.3	239092	557881.3	5008502	1502551	3505951	PHEV	49335.36	115115.8	1	8
2047	2a	1	833232.3	4085796	0	4085796	26287089	0	26287089	BEV	0	833232.3	1	3
2047	2a	1	235014.2	1152404	0	1152404	7413877	0	7413877	FCEV	0	235014.2	1	7
2047	2a	1	159623	782719.6	234815.9	547903.7	5053508	1516053	3537456	PHEV	47886.91	111736.1	1	8
2047	2a	1	859269.4	4262698	0	4262698	28150849	0	28150849	BEV	0	859269.4	1	3
2047	2a	1	256664.9	1273273	0	1273273	8408039	0	8408039	FCEV	0	256664.9	1	7
2047	2a	1	152172.9	754905.2	226471.6	528433.6	5005345	1501603	3503741	PHEV	45651.86	106521	1	8
2047	2a	1	879442.5	4413157	0	4413157	29893777	0	29893777	BEV	0	879442.5	1	3
2047	2a	1	277718.7	1393629	0	1393629	9439314	0	9439314	FCEV	0	277718.7	1	7
2047	2a	1	143019.9	717692.6	215307.8	502384.8	4882211	1464663	3417548	PHEV	42905.98	100113.9	1	8
2047	2a	1	900855.8	4572221	0	4572221	31711261	0	31711261	BEV	0	900855.8	1	3
2047	2a	1	300285.3	1524074	0	1524074	10569600	0	10569600	FCEV	0	300285.3	1	7
2047	2a	1	133460.1	677366.1	203209.8	474156.3	4716423	1414927	3301496	PHEV	40038.03	93422.08	1	8
2047	2a	1	908654.9	4663862	0	4663862	33010450	0	33010450	BEV	0	908654.9	1	3
2047	2a	1	302885	1554621	0	1554621	11002871	0	11002871	FCEV	0	302885	1	7
2047	2a	1	134615.5	690942.6	207282.8	483659.8	4906230	1471869	3434361	PHEV	40384.66	94230.88	1	8
2047	2a	1	816636.9	4238346	0	4238346	30531328	0	30531328	BEV	0	816636.9	1	3
2047	2a	1	272212.3	1412782	0	1412782	10176944	0	10176944	FCEV	0	272212.3	1	7
2047	2a	1	120983.2	627903	188370.9	439532.1	4532251	1359675	3172575	PHEV	36294.97	84688.27	1	8
2047	2a	1	1670.431	4458.782	4458.782	0	15251.46	15251.46	0	ICE	1670.431	0	2	1
2047	2a	1	940.8907	2619.27	2619.27	0	8990.766	8990.766	0	ICE	940.8907	0	2	1
2047	2a	1	1504.546	4274.58	4274.58	0	14884.54	14884.54	0	ICE	1504.546	0	2	1
2047	2a	1	2225.727	6451.047	6451.047	0	22897.42	22897.42	0	ICE	2225.727	0	2	1
2047	2a	1	3905.89	11544.6	11544.6	0	41328.29	41328.29	0	ICE	3905.89	0	2	1
2047	2a	1	2938.473	8853.561	8853.561	0	31894.94	31894.94	0	ICE	2938.473	0	2	1
2047	2a	1	1625.48	4990.664	4990.664	0	17944.28	17944.28	0	ICE	1625.48	0	2	1
2047	2a	1	1480.761	4631.17	4631.17	0	16824.31	16824.31	0	ICE	1480.761	0	2	1
2047	2a	1	13012.56	43679.51	43679.51	0	168530.3	168530.3	0	ICE	13012.56	0	2	1
2047	2a	1	12484.7	42622.89	42622.89	0	167232.3	167232.3	0	ICE	12484.7	0	2	1
2047	2a	1	11846.71	41123.48	41123.48	0	164274.9	164274.9	0	ICE	11846.71	0	2	1
2047	2a	1	1.604851	5.570918	5.570918	0	22.26354	22.26354	0	ICE	1.604851	0	2	2
2047	2a	1	0.399166	1.385626	0	1.385626	4.098905	0	4.098905	BEV	0	0.399166	2	3
2047	2a	1	0.008146	0.028278	0	0.028278	0.083651	0	0.083651	FCEV	0	0.008146	2	7
2047	2a	1	3.462156	12.01818	7.21091	4.807273	48.04119	28.82471	19.21648	PHEV	2.077294	1.384862	2	8
2047	2a	1	13833.66	48813.33	48813.33	0	196857.5	196857.5	0	ICE	13833.66	0	2	1
2047	2a	1	1.87402	6.612648	6.612648	0	26.67854	26.67854	0	ICE	1.87402	0	2	2
2047	2a	1	15608.33	55969.6	55969.6	0	227549	227549	0	ICE	15608.33	0	2	1
2047	2a	1	2.129183	7.634993	7.634993	0	31.06703	31.06703	0	ICE	2.129183	0	2	2

2047	2a	1	207.535	744.1956	0	744.1956	2750.883	0	2750.883	BEV	0	207.535	2	3
2047	2a	1	4.85462	17.40808	0	17.40808	55.10109	0	55.10109	FCEV	0	4.85462	2	7
2047	2a	1	159.3723	571.4899	339.6283	231.8616	2434.495	1446.786	987.7094	PHEV	94.71267	64.65961	2	8
2047	2a	1	17735.62	64613.89	64613.89	0	264890.6	264890.6	0	ICE	17735.62	0	2	1
2047	2a	1	2.447483	8.916598	8.916598	0	36.61033	36.61033	0	ICE	2.447483	0	2	2
2047	2a	1	481.7349	1755.042	0	1755.042	6553.461	0	6553.461	BEV	0	481.7349	2	3
2047	2a	1	12.71441	46.32076	0	46.32076	151.6735	0	151.6735	FCEV	0	12.71441	2	7
2047	2a	1	371.0234	1351.701	795.5728	556.1286	5806.484	3417.531	2388.954	PHEV	218.3738	152.6496	2	8
2047	2a	1	19082.81	70615.16	70615.16	0	292286.9	292286.9	0	ICE	19082.81	0	2	1
2047	2a	1	2.668	9.872827	9.872827	0	40.95299	40.95299	0	ICE	2.668	0	2	2
2047	2a	1	1344.927	4976.847	0	4976.847	18835.79	0	18835.79	BEV	0	1344.927	2	3
2047	2a	1	46.10268	170.6011	0	170.6011	578.1043	0	578.1043	FCEV	0	46.10268	2	7
2047	2a	1	969.9491	3589.258	2080.744	1508.514	16006.43	9279.158	6727.275	PHEV	562.2933	407.6557	2	8
2047	2a	1	20192.6	75878.74	75878.74	0	317643.2	317643.2	0	ICE	20192.6	0	2	1
2047	2a	1	2.834732	10.65221	10.65221	0	44.69193	44.69193	0	ICE	2.834732	0	2	2
2047	2a	1	2471.747	9288.209	0	9288.209	35959.48	0	35959.48	BEV	0	2471.747	2	3
2047	2a	1	104.523	392.7712	0	392.7712	1376.894	0	1376.894	FCEV	0	104.523	2	7
2047	2a	1	1667.687	6266.75	3577.419	2689.331	28470.91	16252.82	12218.09	PHEV	952.0109	715.6759	2	8
2047	2a	1	21133.4	80624.77	80624.77	0	341540.2	341540.2	0	ICE	21133.4	0	2	1
2047	2a	1	2.980778	11.37179	11.37179	0	48.27999	48.27999	0	ICE	2.980778	0	2	2
2047	2a	1	3910.514	14918.77	0	14918.77	59195.7	0	59195.7	BEV	0	3910.514	2	3
2047	2a	1	197.1688	752.2067	0	752.2067	2768.553	0	2768.553	FCEV	0	197.1688	2	7
2047	2a	1	2465.516	9406.041	5286.195	4119.846	43127.55	24237.68	18889.87	PHEV	1385.62	1079.896	2	8
2047	2a	1	21954.4	85014.68	85014.68	0	363435.3	363435.3	0	ICE	21954.4	0	2	1
2047	2a	1	3.110134	12.04347	12.04347	0	51.59372	51.59372	0	ICE	3.110134	0	2	2
2047	2a	1	5734.866	22207.29	0	22207.29	90078.56	0	90078.56	BEV	0	5734.866	2	3
2047	2a	1	336.5287	1303.15	0	1303.15	5033.512	0	5033.512	FCEV	0	336.5287	2	7
2047	2a	1	3374.082	13065.56	7227.121	5838.438	59979.1	33177.01	26802.09	PHEV	1866.349	1507.733	2	8
2047	2a	1	22642.2	88975.24	88975.24	0	384776.1	384776.1	0	ICE	22642.2	0	2	1
2047	2a	1	3.220565	12.6556	12.6556	0	54.8355	54.8355	0	ICE	3.220565	0	2	2
2047	2a	1	8036.303	31579.62	0	31579.62	131036.1	0	131036.1	BEV	0	8036.303	2	3
2047	2a	1	539.0203	2118.145	0	2118.145	8503.134	0	8503.134	FCEV	0	539.0203	2	7
2047	2a	1	4404.753	17309.01	9421.045	7887.962	79670.99	43363.78	36307.21	PHEV	2397.444	2007.309	2	8
2047	2a	1	23004.84	91718.22	91718.22	0	401758.2	401758.2	0	ICE	23004.84	0	2	1
2047	2a	1	3.272146	13.04575	13.04575	0	57.23655	57.23655	0	ICE	3.272146	0	2	2
2047	2a	1	10856.46	43283.73	0	43283.73	183646.8	0	183646.8	BEV	0	10856.46	2	3
2047	2a	1	820.7403	3272.218	0	3272.218	13606.1	0	13606.1	FCEV	0	820.7403	2	7
2047	2a	1	5532.554	22057.79	11810.37	10247.42	101984.5	54605.41	47379.08	PHEV	2962.287	2570.266	2	8
2047	2a	1	22851.5	92416.05	92416.05	0	410700.3	410700.3	0	ICE	22851.5	0	2	1
2047	2a	1	3.250336	13.14501	13.14501	0	58.49258	58.49258	0	ICE	3.250336	0	2	2
2047	2a	1	14187	57375.06	0	57375.06	248917.9	0	248917.9	BEV	0	14187	2	3
2047	2a	1	1195.435	4834.578	0	4834.578	20713.89	0	20713.89	FCEV	0	1195.435	2	7
2047	2a	1	6706.335	27121.76	14281.54	12840.22	126137.4	66420.36	59717.05	PHEV	3531.364	3174.97	2	8
2047	2a	1	22272.16	91349.05	91349.05	0	412508.1	412508.1	0	ICE	22272.16	0	2	1
2047	2a	1	3.167932	12.99324	12.99324	0	58.73376	58.73376	0	ICE	3.167932	0	2	2
2047	2a	1	18157	74470.74	0	74470.74	330412.6	0	330412.6	BEV	0	18157	2	3
2047	2a	1	1689.814	6930.756	0	6930.756	30513.56	0	30513.56	FCEV	0	1689.814	2	7

2047	2a	1	7939.682	32564.53	16859.12	15705.41	152611.4	79009.12	73602.32	PHEV	4110.487	3829.195	2	8
2047	2a	1	21090.76	87711.85	87711.85	0	403012.7	403012.7	0	ICE	21090.76	0	2	1
2047	2a	1	2.999893	12.4759	12.4759	0	57.36742	57.36742	0	ICE	2.999893	0	2	2
2047	2a	1	22730.05	94529.29	0	94529.29	428975.5	0	428975.5	BEV	0	22730.05	2	3
2047	2a	1	2318.809	9643.416	0	9643.416	43557.43	0	43557.43	FCEV	0	2318.809	2	7
2047	2a	1	9164.793	38114.36	19394.76	18719.59	180291.1	91742.42	88548.69	PHEV	4663.57	4501.223	2	8
2047	2a	1	19344.78	81558.96	81558.96	0	381787.8	381787.8	0	ICE	19344.78	0	2	1
2047	2a	1	2.75155	11.60073	11.60073	0	54.33399	54.33399	0	ICE	2.75155	0	2	2
2047	2a	1	28030.78	118179.7	0	118179.7	548659.4	0	548659.4	BEV	0	28030.78	2	3
2047	2a	1	3114.531	13131.08	0	13131.08	60797.19	0	60797.19	FCEV	0	3114.531	2	7
2047	2a	1	10381.77	43770.26	21885.13	21885.13	209356.6	104678.3	104678.3	PHEV	5190.884	5190.884	2	8
2047	2a	1	16846.69	71991.96	71991.96	0	343715.9	343715.9	0	ICE	16846.69	0	2	1
2047	2a	1	2.396227	10.23994	10.23994	0	48.90606	48.90606	0	ICE	2.396227	0	2	2
2047	2a	1	33426.23	142842.3	0	142842.3	678462.1	0	678462.1	BEV	0	33426.23	2	3
2047	2a	1	4131.332	17654.67	0	17654.67	83740.31	0	83740.31	FCEV	0	4131.332	2	7
2047	2a	1	11860.28	50683.26	25341.63	25341.63	245504.6	122752.3	122752.3	PHEV	5930.142	5930.142	2	8
2047	2a	1	13715.83	59398.45	59398.45	0	289510.2	289510.2	0	ICE	13715.83	0	2	1
2047	2a	1	1.950902	8.448676	8.448676	0	41.18614	41.18614	0	ICE	1.950902	0	2	2
2047	2a	1	39448.31	170836.8	0	170836.8	830441.1	0	830441.1	BEV	0	39448.31	2	3
2047	2a	1	5379.315	23295.93	0	23295.93	113181.9	0	113181.9	FCEV	0	5379.315	2	7
2047	2a	1	13390.07	57987.7	28993.85	28993.85	284920.4	142460.2	142460.2	PHEV	6695.035	6695.035	2	8
2047	2a	1	9807.15	43033.19	43033.19	0	214319.2	214319.2	0	ICE	9807.15	0	2	1
2047	2a	1	1.394943	6.120924	6.120924	0	30.48474	30.48474	0	ICE	1.394943	0	2	2
2047	2a	1	45700.23	200529.9	0	200529.9	998006.6	0	998006.6	BEV	0	45700.23	2	3
2047	2a	1	6828.77	29964.23	0	29964.23	149124.7	0	149124.7	FCEV	0	6828.77	2	7
2047	2a	1	14815.87	65011.15	32505.58	32505.58	324545	162272.5	162272.5	PHEV	7407.936	7407.936	2	8
2047	2a	1	5271.285	23432.07	23432.07	0	119331.4	119331.4	0	ICE	5271.285	0	2	1
2047	2a	1	0.749773	3.332915	3.332915	0	16.97147	16.97147	0	ICE	0.749773	0	2	2
2047	2a	1	52766.94	234561.2	0	234561.2	1195544	0	1195544	BEV	0	52766.94	2	3
2047	2a	1	8589.967	38184.38	0	38184.38	194679.7	0	194679.7	FCEV	0	8589.967	2	7
2047	2a	1	16310.06	72501.99	36250.99	36250.99	368249.2	184124.6	184124.6	PHEV	8155.032	8155.032	2	8
2047	2a	1	59984.57	270081.7	0	270081.7	1410300	0	1410300	BEV	0	59984.57	2	3
2047	2a	1	10585.51	47661.48	0	47661.48	248990.7	0	248990.7	FCEV	0	10585.51	2	7
2047	2a	1	17642.52	79435.8	39717.9	39717.9	411084.4	205542.2	205542.2	PHEV	8821.26	8821.26	2	8
2047	2a	1	63946.84	291585.4	0	291585.4	1560067	0	1560067	BEV	0	63946.84	2	3
2047	2a	1	12180.35	55540.08	0	55540.08	297327.7	0	297327.7	FCEV	0	12180.35	2	7
2047	2a	1	17857	81424.51	40712.25	40712.25	429817.5	214908.8	214908.8	PHEV	8928.498	8928.498	2	8
2047	2a	1	67425.37	311309.7	0	311309.7	1707109	0	1707109	BEV	0	67425.37	2	3
2047	2a	1	13810.01	63762.22	0	63762.22	349873.5	0	349873.5	FCEV	0	13810.01	2	7
2047	2a	1	17832.16	82332.85	41166.43	41166.43	443908.4	221954.2	221954.2	PHEV	8916.078	8916.078	2	8
2047	2a	1	71071.72	332216.9	0	332216.9	1867157	0	1867157	BEV	0	71071.72	2	3
2047	2a	1	15601.11	72925.67	0	72925.67	410138.8	0	410138.8	FCEV	0	15601.11	2	7
2047	2a	1	17752.27	82981.02	41490.51	41490.51	457298.1	228649.1	228649.1	PHEV	8876.133	8876.133	2	8
2047	2a	1	73716.73	348804	0	348804	2009913	0	2009913	BEV	0	73716.73	2	3
2047	2a	1	17291.58	81818.22	0	81818.22	471774.8	0	471774.8	FCEV	0	17291.58	2	7
2047	2a	1	17334.92	82023.28	41011.64	41011.64	462607.6	231303.8	231303.8	PHEV	8667.458	8667.458	2	8
2047	2a	1	76615.41	366908.9	0	366908.9	2167496	0	2167496	BEV	0	76615.41	2	3

2047	2a	1	19153.85	91727.22	0	91727.22	542221.4	0	542221.4	FCEV	0	19153.85	2	7
2047	2a	1	16900.46	80935.78	40467.89	40467.89	467417.4	233708.7	233708.7	PHEV	8450.229	8450.229	2	8
2047	2a	1	79497.68	385266.4	0	385266.4	2333375	0	2333375	BEV	0	79497.68	2	3
2047	2a	1	21132.29	102412.6	0	102412.6	620638.3	0	620638.3	FCEV	0	21132.29	2	7
2047	2a	1	16381.62	79389.61	39694.8	39694.8	469778.9	234889.4	234889.4	PHEV	8190.812	8190.812	2	8
2047	2a	1	82368.4	403897.6	0	403897.6	2507967	0	2507967	BEV	0	82368.4	2	3
2047	2a	1	23232.11	113919.8	0	113919.8	707768.2	0	707768.2	FCEV	0	23232.11	2	7
2047	2a	1	15779.39	77375.02	38687.51	38687.51	469399.6	234699.8	234699.8	PHEV	7889.694	7889.694	2	8
2047	2a	1	84103.24	417222.7	0	417222.7	2656299	0	2656299	BEV	0	84103.24	2	3
2047	2a	1	25121.75	124625	0	124625	793836.9	0	793836.9	FCEV	0	25121.75	2	7
2047	2a	1	14894.32	73888.32	36944.16	36944.16	459838.7	229919.4	229919.4	PHEV	7447.158	7447.158	2	8
2047	2a	1	85111.04	427098.2	0	427098.2	2788077	0	2788077	BEV	0	85111.04	2	3
2047	2a	1	26877.17	134873.1	0	134873.1	880834.4	0	880834.4	FCEV	0	26877.17	2	7
2047	2a	1	13841.24	69457.14	34728.57	34728.57	443660.9	221830.5	221830.5	PHEV	6920.62	6920.62	2	8
2047	2a	1	86115.02	437069.9	0	437069.9	2924888	0	2924888	BEV	0	86115.02	2	3
2047	2a	1	28705.01	145690	0	145690	975337.9	0	975337.9	FCEV	0	28705.01	2	7
2047	2a	1	12757.78	64751.1	32375.55	32375.55	424547.4	212273.7	212273.7	PHEV	6378.89	6378.89	2	8
2047	2a	1	87365.88	448423.7	0	448423.7	3075830	0	3075830	BEV	0	87365.88	2	3
2047	2a	1	29121.96	149474.6	0	149474.6	1025661	0	1025661	FCEV	0	29121.96	2	7
2047	2a	1	12943.09	66433.15	33216.57	33216.57	446748.2	223374.1	223374.1	PHEV	6471.547	6471.547	2	8
2047	2a	1	79785.37	414086.1	0	414086.1	2909565	0	2909565	BEV	0	79785.37	2	3
2047	2a	1	26595.12	138028.7	0	138028.7	970209.3	0	970209.3	FCEV	0	26595.12	2	7
2047	2a	1	11820.05	61346.08	30673.04	30673.04	422856.6	211428.3	211428.3	PHEV	5910.027	5910.027	2	8
2047	2a	1	9289.034	24794.66	24794.66	0	83098.17	83098.17	0	ICE	9289.034	0	3	1
2047	2a	1	10664.84	29078	29078	0	97717.53	97717.53	0	ICE	10664.84	0	3	1
2047	2a	1	11457.22	31894.84	31894.84	0	107400.6	107400.6	0	ICE	11457.22	0	3	1
2047	2a	1	10290.36	29236.06	29236.06	0	98599.1	98599.1	0	ICE	10290.36	0	3	1
2047	2a	1	10090.9	29247.46	29247.46	0	99075.96	99075.96	0	ICE	10090.9	0	3	1
2047	2a	1	7615.848	22510.09	22510.09	0	77231.87	77231.87	0	ICE	7615.848	0	3	1
2047	2a	1	4502.553	13566.1	13566.1	0	46946.1	46946.1	0	ICE	4502.553	0	3	1
2047	2a	1	8108.358	24894.85	24894.85	0	87010.2	87010.2	0	ICE	8108.358	0	3	1
2047	2a	1	11041.72	34533.65	34533.65	0	121705.9	121705.9	0	ICE	11041.72	0	3	1
2047	2a	1	11223.85	35746.28	35746.28	0	127763.4	127763.4	0	ICE	11223.85	0	3	1
2047	2a	1	15830.77	51325.57	51325.57	0	184434.6	184434.6	0	ICE	15830.77	0	3	1
2047	2a	1	15409.45	50842.39	50842.39	0	186499.8	186499.8	0	ICE	15409.45	0	3	1
2047	2a	1	163.9342	540.8895	540.8895	0	1936.771	1936.771	0	ICE	163.9342	0	3	2
2047	2a	1	19225.81	64535.65	64535.65	0	240478.5	240478.5	0	ICE	19225.81	0	3	1
2047	2a	1	19892.28	67912.45	67912.45	0	255799	255799	0	ICE	19892.28	0	3	1
2047	2a	1	150.3443	513.277	513.277	0	1898.432	1898.432	0	ICE	150.3443	0	3	2
2047	2a	1	23649.28	82093.76	82093.76	0	314773.6	314773.6	0	ICE	23649.28	0	3	1
2047	2a	1	241.7221	839.0898	839.0898	0	3232.055	3232.055	0	ICE	241.7221	0	3	2
2047	2a	1	27382.73	96622.43	96622.43	0	374717.7	374717.7	0	ICE	27382.73	0	3	1
2047	2a	1	279.8821	987.5891	987.5891	0	3847.104	3847.104	0	ICE	279.8821	0	3	2
2047	2a	1	94.47424	333.3609	200.0165	133.3443	1301.86	781.1162	520.7442	PHEV	56.68454	37.7897	3	8
2047	2a	1	30786.57	110397	110397	0	434327.6	434327.6	0	ICE	30786.57	0	3	1
2047	2a	1	313.88	1125.536	1125.536	0	4444.035	4444.035	0	ICE	313.88	0	3	2
2047	2a	1	363.0889	1301.993	0	1301.993	3383.093	0	3383.093	BEV	0	363.0889	3	3

2047	2a	1	8.493307	30.45598	0	30.45598	67.08188	0	67.08188	FCEV	0	8.493307	3	7
2047	2a	1	315.3642	1130.858	672.0528	458.8053	4461.339	2651.31	1810.029	PHEV	187.4164	127.9478	3	8
2047	2a	1	34426.13	125420.2	125420.2	0	498574	498574	0	ICE	34426.13	0	3	1
2047	2a	1	351.7844	1281.61	1281.61	0	5113.796	5113.796	0	ICE	351.7844	0	3	2
2047	2a	1	825.0229	3005.699	0	3005.699	10164.18	0	10164.18	BEV	0	825.0229	3	3
2047	2a	1	21.7748	79.32929	0	79.32929	180.7328	0	180.7328	FCEV	0	21.7748	3	7
2047	2a	1	595.4036	2169.156	1276.703	892.4529	8655.223	5094.217	3561.006	PHEV	350.4375	244.966	3	8
2047	2a	1	36790.59	136142.1	136142.1	0	547373.5	547373.5	0	ICE	36790.59	0	3	1
2047	2a	1	381.6293	1412.204	1412.204	0	5710.153	5710.153	0	ICE	381.6293	0	3	2
2047	2a	1	2512.738	9298.285	0	9298.285	29814.66	0	29814.66	BEV	0	2512.738	3	3
2047	2a	1	86.13403	318.7355	0	318.7355	750.8945	0	750.8945	FCEV	0	86.13403	3	7
2047	2a	1	1707.884	6319.955	3663.768	2656.187	29904.95	17336.32	12568.62	PHEV	990.0845	717.799	3	8
2047	2a	1	38786.89	145751.4	145751.4	0	594091.9	594091.9	0	ICE	38786.89	0	3	1
2047	2a	1	404.2302	1518.996	1518.996	0	6231.149	6231.149	0	ICE	404.2302	0	3	2
2047	2a	1	4699.962	17661.28	0	17661.28	57426.82	0	57426.82	BEV	0	4699.962	3	3
2047	2a	1	198.7476	746.8439	0	746.8439	1819.217	0	1819.217	FCEV	0	198.7476	3	7
2047	2a	1	3005.939	11295.57	6448.156	4847.412	56821.75	32437.1	24384.65	PHEV	1715.962	1289.977	3	8
2047	2a	1	40836.92	155794.5	155794.5	0	644417.1	644417.1	0	ICE	40836.92	0	3	1
2047	2a	1	427.895	1632.437	1632.437	0	6799.489	6799.489	0	ICE	427.895	0	3	2
2047	2a	1	7541.394	28770.72	0	28770.72	96453.52	0	96453.52	BEV	0	7541.394	3	3
2047	2a	1	380.2383	1450.624	0	1450.624	3687.425	0	3687.425	FCEV	0	380.2383	3	7
2047	2a	1	4533.579	17295.78	9720.23	7575.553	89794.4	50464.46	39329.95	PHEV	2547.871	1985.707	3	8
2047	2a	1	42973.61	166408	166408	0	696632.7	696632.7	0	ICE	42973.61	0	3	1
2047	2a	1	452.544	1752.4	1752.4	0	7391.022	7391.022	0	ICE	452.544	0	3	2
2047	2a	1	11242.68	43535.36	0	43535.36	150213.8	0	150213.8	BEV	0	11242.68	3	3
2047	2a	1	659.7337	2554.707	0	2554.707	7242.376	0	7242.376	FCEV	0	659.7337	3	7
2047	2a	1	6344.598	24568.38	13589.82	10978.55	129857.2	71829.6	58027.63	PHEV	3509.469	2835.129	3	8
2047	2a	1	45222.66	177707.9	177707.9	0	754991.4	754991.4	0	ICE	45222.66	0	3	1
2047	2a	1	478.4392	1880.084	1880.084	0	8051.262	8051.262	0	ICE	478.4392	0	3	2
2047	2a	1	16098.23	63259.92	0	63259.92	225057.8	0	225057.8	BEV	0	16098.23	3	3
2047	2a	1	1079.759	4243.043	0	4243.043	12993.1	0	12993.1	FCEV	0	1079.759	3	7
2047	2a	1	8515.323	33461.98	18212.88	15249.1	180085.8	98018.15	82067.69	PHEV	4634.769	3880.554	3	8
2047	2a	1	47732.87	190306.7	190306.7	0	821319.8	821319.8	0	ICE	47732.87	0	3	1
2047	2a	1	504.9963	2013.375	2013.375	0	8756.591	8756.591	0	ICE	504.9963	0	3	2
2047	2a	1	22599.04	90100.32	0	90100.32	330720.1	0	330720.1	BEV	0	22599.04	3	3
2047	2a	1	1708.47	6811.518	0	6811.518	22506.92	0	22506.92	FCEV	0	1708.47	3	7
2047	2a	1	11185.03	44593.69	23876.74	20716.95	244792.9	131069.1	113723.8	PHEV	5988.782	5196.243	3	8
2047	2a	1	50421.83	203916	203916	0	894929.7	894929.7	0	ICE	50421.83	0	3	1
2047	2a	1	533.4445	2157.356	2157.356	0	9539.391	9539.391	0	ICE	533.4445	0	3	2
2047	2a	1	31393.84	126963	0	126963	480708.2	0	480708.2	BEV	0	31393.84	3	3
2047	2a	1	2645.33	10698.24	0	10698.24	37494.37	0	37494.37	FCEV	0	2645.33	3	7
2047	2a	1	14508.67	58675.98	30897.09	27778.89	328349.2	172899.3	155449.9	PHEV	7639.853	6868.821	3	8
2047	2a	1	53002.81	217390.5	217390.5	0	971398.8	971398.8	0	ICE	53002.81	0	3	1
2047	2a	1	560.7504	2299.912	2299.912	0	10352.52	10352.52	0	ICE	560.7504	0	3	2
2047	2a	1	43302.68	177605.5	0	177605.5	693678.4	0	693678.4	BEV	0	43302.68	3	3
2047	2a	1	4030.043	16529.18	0	16529.18	60875.25	0	60875.25	FCEV	0	4030.043	3	7
2047	2a	1	18642.55	76462.21	39585.58	36876.63	436332.8	225895.7	210437.1	PHEV	9651.512	8991.033	3	8

2047	2a	1	53645.2	223098.6	223098.6	0	1015764	1015764	0	ICE	53645.2	0	3	1
2047	2a	1	567.5465	2360.301	2360.301	0	10823.4	10823.4	0	ICE	567.5465	0	3	2
2047	2a	1	57883.82	240726.1	0	240726.1	969709.5	0	969709.5	BEV	0	57883.82	3	3
2047	2a	1	5905.025	24557.7	0	24557.7	94493.82	0	94493.82	FCEV	0	5905.025	3	7
2047	2a	1	23150.62	96278.34	48991.92	47286.42	560264	285094.3	275169.6	PHEV	11780.36	11370.26	3	8
2047	2a	1	51482.68	217054.6	217054.6	0	1007766	1007766	0	ICE	51482.68	0	3	1
2047	2a	1	544.6679	2296.358	2296.358	0	10736.42	10736.42	0	ICE	544.6679	0	3	2
2047	2a	1	74605.9	314543.7	0	314543.7	1306681	0	1306681	BEV	0	74605.9	3	3
2047	2a	1	8289.544	34949.3	0	34949.3	139981.9	0	139981.9	FCEV	0	8289.544	3	7
2047	2a	1	27631.81	116497.7	58248.83	58248.83	691643.1	345821.5	345821.5	PHEV	13815.91	13815.91	3	8
2047	2a	1	46850.11	200207.4	200207.4	0	948632.1	948632.1	0	ICE	46850.11	0	3	1
2047	2a	1	495.657	2118.121	2118.121	0	10104.92	10104.92	0	ICE	495.657	0	3	2
2047	2a	1	93047.96	397627.4	0	397627.4	1698394	0	1698394	BEV	0	93047.96	3	3
2047	2a	1	11500.31	49144.96	0	49144.96	203986.5	0	203986.5	FCEV	0	11500.31	3	7
2047	2a	1	33015.24	141086	70543.01	70543.01	853983	426991.5	426991.5	PHEV	16507.62	16507.62	3	8
2047	2a	1	39753.2	172157.2	172157.2	0	833057.2	833057.2	0	ICE	39753.2	0	3	1
2047	2a	1	420.5743	1821.36	1821.36	0	8872.623	8872.623	0	ICE	420.5743	0	3	2
2047	2a	1	114531.3	495994.9	0	495994.9	2178562	0	2178562	BEV	0	114531.3	3	3
2047	2a	1	15617.9	67635.67	0	67635.67	290358.1	0	290358.1	FCEV	0	15617.9	3	7
2047	2a	1	38875.73	168357.2	84178.59	84178.59	1039787	519893.7	519893.7	PHEV	19437.86	19437.86	3	8
2047	2a	1	29414.75	129070.2	129070.2	0	638368.9	638368.9	0	ICE	29414.75	0	3	1
2047	2a	1	311.1973	1365.515	1365.515	0	6798.266	6798.266	0	ICE	311.1973	0	3	2
2047	2a	1	137392	602868	0	602868	2723791	0	2723791	BEV	0	137392	3	3
2047	2a	1	20529.84	90083.72	0	90083.72	399525.9	0	399525.9	FCEV	0	20529.84	3	7
2047	2a	1	44542.07	195447.9	97723.96	97723.96	1233002	616501.1	616501.1	PHEV	22271.03	22271.03	3	8
2047	2a	1	16217.81	72091.89	72091.89	0	364689.1	364689.1	0	ICE	16217.81	0	3	1
2047	2a	1	171.5785	762.7058	762.7058	0	3883.341	3883.341	0	ICE	171.5785	0	3	2
2047	2a	1	162815.6	723752.8	0	723752.8	3364228	0	3364228	BEV	0	162815.6	3	3
2047	2a	1	26504.86	117820.2	0	117820.2	539392.3	0	539392.3	FCEV	0	26504.86	3	7
2047	2a	1	50325.69	223709.3	111854.6	111854.6	1442992	721496.2	721496.2	PHEV	25162.85	25162.85	3	8
2047	2a	1	187938.2	846195.5	0	846195.5	4047592	0	4047592	BEV	0	187938.2	3	3
2047	2a	1	33165.56	149328.6	0	149328.6	705318.7	0	705318.7	FCEV	0	33165.56	3	7
2047	2a	1	55275.94	248881	124440.5	124440.5	1642966	821482.8	821482.8	PHEV	27637.97	27637.97	3	8
2047	2a	1	203292.1	926973.5	0	926973.5	4564376	0	4564376	BEV	0	203292.1	3	3
2047	2a	1	38722.31	176566.4	0	176566.4	859658.5	0	859658.5	FCEV	0	38722.31	3	7
2047	2a	1	56768.82	258855	129427.5	129427.5	1746490	873245.1	873245.1	PHEV	28384.41	28384.41	3	8
2047	2a	1	215786.2	996306.3	0	996306.3	5050745	0	5050745	BEV	0	215786.2	3	3
2047	2a	1	44197.17	204062.7	0	204062.7	1024093	0	1024093	FCEV	0	44197.17	3	7
2047	2a	1	57069.51	263495.7	131747.8	131747.8	1818294	909146.8	909146.8	PHEV	28534.76	28534.76	3	8
2047	2a	1	228266.9	1067009	0	1067009	5568808	0	5568808	BEV	0	228266.9	3	3
2047	2a	1	50107.38	234221.4	0	234221.4	1211382	0	1211382	FCEV	0	50107.38	3	7
2047	2a	1	57016.43	266517	133258.5	133258.5	1881618	940808.8	940808.8	PHEV	28508.21	28508.21	3	8
2047	2a	1	237103.6	1121898	0	1121898	6029497	0	6029497	BEV	0	237103.6	3	3
2047	2a	1	55616.89	263161.3	0	263161.3	1402825	0	1402825	FCEV	0	55616.89	3	7
2047	2a	1	55756.28	263820.9	131910.4	131910.4	1906924	953461.9	953461.9	PHEV	27878.14	27878.14	3	8
2047	2a	1	245045.7	1173517	0	1173517	6494325	0	6494325	BEV	0	245045.7	3	3
2047	2a	1	61261.43	293379.2	0	293379.2	1611682	0	1611682	FCEV	0	61261.43	3	7

2047	2a	1	54054.2	258864	129432	129432	1915743	957871.6	957871.6	PHEV	27027.1	27027.1	3	8
2047	2a	1	250882.3	1215841	0	1215841	6929445	0	6929445	BEV	0	250882.3	3	3
2047	2a	1	66690.24	323198.2	0	323198.2	1829836	0	1829836	FCEV	0	66690.24	3	7
2047	2a	1	51697.86	250541.3	125270.6	125270.6	1898519	949259.4	949259.4	PHEV	25848.93	25848.93	3	8
2047	2a	1	257488.8	1262609	0	1262609	7410275	0	7410275	BEV	0	257488.8	3	3
2047	2a	1	72625.04	356120.5	0	356120.5	2077648	0	2077648	FCEV	0	72625.04	3	7
2047	2a	1	49327.35	241879.1	120939.6	120939.6	1875904	937951.8	937951.8	PHEV	24663.68	24663.68	3	8
2047	2a	1	262618.1	1302806	0	1302806	7873849	0	7873849	BEV	0	262618.1	3	3
2047	2a	1	78444.36	389149.9	0	389149.9	2339361	0	2339361	FCEV	0	78444.36	3	7
2047	2a	1	46508.51	230721.3	115360.6	115360.6	1830398	915198.8	915198.8	PHEV	23254.26	23254.26	3	8
2047	2a	1	266486.4	1337263	0	1337263	8321165	0	8321165	BEV	0	266486.4	3	3
2047	2a	1	84153.59	422293.7	0	422293.7	2615160	0	2615160	FCEV	0	84153.59	3	7
2047	2a	1	43337.52	217473.3	108736.7	108736.7	1762773	881386.4	881386.4	PHEV	21668.76	21668.76	3	8
2047	2a	1	272975.6	1385466	0	1385466	8875836	0	8875836	BEV	0	272975.6	3	3
2047	2a	1	90991.87	461821.9	0	461821.9	2945989	0	2945989	FCEV	0	90991.87	3	7
2047	2a	1	40440.83	205254.2	102627.1	102627.1	1697339	848669.7	848669.7	PHEV	20220.41	20220.41	3	8
2047	2a	1	280317.4	1438788	0	1438788	9447872	0	9447872	BEV	0	280317.4	3	3
2047	2a	1	93439.15	479596	0	479596	3135830	0	3135830	FCEV	0	93439.15	3	7
2047	2a	1	41528.51	213153.8	106576.9	106576.9	1807907	903953.5	903953.5	PHEV	20764.26	20764.26	3	8
2047	2a	1	253929.1	1317892	0	1317892	8861812	0	8861812	BEV	0	253929.1	3	3
2047	2a	1	84643.02	439297.3	0	439297.3	2941297	0	2941297	FCEV	0	84643.02	3	7
2047	2a	1	37619.12	195243.2	97621.62	97621.62	1696428	848213.8	848213.8	PHEV	18809.56	18809.56	3	8
2047	2a	1	16667.75	44490.22	44490.22	0	138005.7	138005.7	0	ICE	16667.75	0	4	1
2047	2a	1	16778.42	45746.85	45746.85	0	141946.6	141946.6	0	ICE	16778.42	0	4	1
2047	2a	1	28.81925	78.57654	78.57654	0	198.2076	198.2076	0	ICE	28.81925	0	4	2
2047	2a	1	14691.38	40898.16	40898.16	0	125542	125542	0	ICE	14691.38	0	4	1
2047	2a	1	13274.33	37713.82	37713.82	0	116835	116835	0	ICE	13274.33	0	4	1
2047	2a	1	12289.67	35620.39	35620.39	0	111468.3	111468.3	0	ICE	12289.67	0	4	1
2047	2a	1	8600.604	25420.72	25420.72	0	80141.28	80141.28	0	ICE	8600.604	0	4	1
2047	2a	1	3485.718	10502.4	10502.4	0	33326.96	33326.96	0	ICE	3485.718	0	4	1
2047	2a	1	4805.893	14755.39	14755.39	0	47237.63	47237.63	0	ICE	4805.893	0	4	1
2047	2a	1	6825.861	21348.29	21348.29	0	69273.37	69273.37	0	ICE	6825.861	0	4	1
2047	2a	1	200.548	627.2258	627.2258	0	1930.44	1930.44	0	ICE	200.548	0	4	2
2047	2a	1	6826.705	21742.03	21742.03	0	71573.06	71573.06	0	ICE	6826.705	0	4	1
2047	2a	1	7788.989	25252.99	25252.99	0	84100.52	84100.52	0	ICE	7788.989	0	4	1
2047	2a	1	168.9838	547.8692	547.8692	0	1784.521	1784.521	0	ICE	168.9838	0	4	2
2047	2a	1	12513.41	41287.12	41287.12	0	140671.6	140671.6	0	ICE	12513.41	0	4	1
2047	2a	1	407.9632	1346.046	1346.046	0	4380.068	4380.068	0	ICE	407.9632	0	4	2
2047	2a	1	14388.72	48298.92	48298.92	0	169186.6	169186.6	0	ICE	14388.72	0	4	1
2047	2a	1	16656.24	56864.57	56864.57	0	203672.6	203672.6	0	ICE	16656.24	0	4	1
2047	2a	1	16226.33	56326.45	56326.45	0	206896.8	206896.8	0	ICE	16226.33	0	4	1
2047	2a	1	565.8147	1964.112	1964.112	0	7221.637	7221.637	0	ICE	565.8147	0	4	2
2047	2a	1	135.7541	471.2431	282.7459	188.4973	1608.424	965.0545	643.3697	PHEV	81.45245	54.30163	4	8
2047	2a	1	18673.27	65890.31	65890.31	0	246089.4	246089.4	0	ICE	18673.27	0	4	1
2047	2a	1	651.1399	2297.606	2297.606	0	8589.453	8589.453	0	ICE	651.1399	0	4	2
2047	2a	1	0.326651	1.152618	0	1.152618	2.44887	0	2.44887	BEV	0	0.326651	4	3
2047	2a	1	0.006666	0.023523	0	0.023523	0.049977	0	0.049977	FCEV	0	0.006666	4	7

2047	2a	1	399.7308	1410.486	846.2918	564.1945	5125.509	3075.306	2050.204	PHEV	239.8385	159.8923	4	8
2047	2a	1	21492.81	77070.64	77070.64	0	291533.8	291533.8	0	ICE	21492.81	0	4	1
2047	2a	1	756.533	2712.837	2712.837	0	10284.17	10284.17	0	ICE	756.533	0	4	2
2047	2a	1	184.2463	660.6852	0	660.6852	1540.634	0	1540.634	BEV	0	184.2463	4	3
2047	2a	1	4.309855	15.45462	0	15.45462	33.95578	0	33.95578	FCEV	0	4.309855	4	7
2047	2a	1	479.371	1718.967	1021.557	697.4094	6896.663	4098.588	2798.075	PHEV	284.8833	194.4877	4	8
2047	2a	1	24670.16	89877.58	89877.58	0	344736.3	344736.3	0	ICE	24670.16	0	4	1
2047	2a	1	881.9926	3213.249	3213.249	0	12376.69	12376.69	0	ICE	881.9926	0	4	2
2047	2a	1	425.4062	1549.827	0	1549.827	4258.543	0	4258.543	BEV	0	425.4062	4	3
2047	2a	1	11.22773	40.90453	0	40.90453	92.94165	0	92.94165	FCEV	0	11.22773	4	7
2047	2a	1	572.9141	2087.223	1228.48	858.7433	8306.629	4889.044	3417.584	PHEV	337.2008	235.7132	4	8
2047	2a	1	26730.12	98913.75	98913.75	0	384577.5	384577.5	0	ICE	26730.12	0	4	1
2047	2a	1	972.5237	3598.785	3598.785	0	14081.43	14081.43	0	ICE	972.5237	0	4	2
2047	2a	1	1414.584	5234.611	0	5234.611	14604.76	0	14604.76	BEV	0	1414.584	4	3
2047	2a	1	48.49046	179.437	0	179.437	421.6871	0	421.6871	FCEV	0	48.49046	4	7
2047	2a	1	1688.378	6247.776	3621.925	2625.851	27511.55	15948.84	11562.71	PHEV	978.777	709.6013	4	8
2047	2a	1	29307.95	110131.9	110131.9	0	433896	433896	0	ICE	29307.95	0	4	1
2047	2a	1	1072.162	4028.916	4028.916	0	15986.95	15986.95	0	ICE	1072.162	0	4	2
2047	2a	1	2883.271	10834.61	0	10834.61	31652.86	0	31652.86	BEV	0	2883.271	4	3
2047	2a	1	121.9251	458.1641	0	458.1641	1113.36	0	1113.36	FCEV	0	121.9251	4	7
2047	2a	1	3053.624	11474.76	6550.447	4924.31	52907.91	30202.86	22705.05	PHEV	1743.183	1310.441	4	8
2047	2a	1	31795.13	121299.7	121299.7	0	484795	484795	0	ICE	31795.13	0	4	1
2047	2a	1	1170.471	4465.394	4465.394	0	17986.19	17986.19	0	ICE	1170.471	0	4	2
2047	2a	1	4958.623	18917.35	0	18917.35	57918.31	0	57918.31	BEV	0	4958.623	4	3
2047	2a	1	250.0146	953.8157	0	953.8157	2396.43	0	2396.43	FCEV	0	250.0146	4	7
2047	2a	1	4660.822	17781.22	9993.047	7788.175	84723.62	47614.67	37108.94	PHEV	2619.382	2041.44	4	8
2047	2a	1	34032.51	131785.1	131785.1	0	533514.3	533514.3	0	ICE	34032.51	0	4	1
2047	2a	1	1260.155	4879.737	4879.737	0	19920.2	19920.2	0	ICE	1260.155	0	4	2
2047	2a	1	7787.375	30155.29	0	30155.29	96499.64	0	96499.64	BEV	0	7787.375	4	3
2047	2a	1	456.9724	1769.548	0	1769.548	4601.14	0	4601.14	FCEV	0	456.9724	4	7
2047	2a	1	6490.789	25134.48	13902.96	11231.52	122811.1	67932.1	54879.03	PHEV	3590.333	2900.455	4	8
2047	2a	1	35961.93	141316.7	141316.7	0	580907.9	580907.9	0	ICE	35961.93	0	4	1
2047	2a	1	1338.787	5260.923	5260.923	0	21818.3	21818.3	0	ICE	1338.787	0	4	2
2047	2a	1	11558.8	45421.67	0	45421.67	151592.5	0	151592.5	BEV	0	11558.8	4	3
2047	2a	1	775.285	3046.576	0	3046.576	8671.851	0	8671.851	FCEV	0	775.285	4	7
2047	2a	1	8526.866	33507.34	18237.57	15269.77	167677.9	91264.69	76413.22	PHEV	4641.051	3885.815	4	8
2047	2a	1	37457.24	149338.6	149338.6	0	623984.4	623984.4	0	ICE	37457.24	0	4	1
2047	2a	1	1394.454	5559.563	5559.563	0	23429.86	23429.86	0	ICE	1394.454	0	4	2
2047	2a	1	16484.11	65720.67	0	65720.67	228729.1	0	228729.1	BEV	0	16484.11	4	3
2047	2a	1	1246.187	4968.434	0	4968.434	15458.83	0	15458.83	FCEV	0	1246.187	4	7
2047	2a	1	10729.17	42776.23	22903.62	19872.62	219479.1	117515.4	101963.7	PHEV	5744.704	4984.466	4	8
2047	2a	1	37941.06	153441.2	153441.2	0	652609.4	652609.4	0	ICE	37941.06	0	4	1
2047	2a	1	1412.466	5712.294	5712.294	0	24498.73	24498.73	0	ICE	1412.466	0	4	2
2047	2a	1	22554.25	91213.88	0	91213.88	330615.2	0	330615.2	BEV	0	22554.25	4	3
2047	2a	1	1900.482	7685.928	0	7685.928	25650.01	0	25650.01	FCEV	0	1900.482	4	7
2047	2a	1	12894.92	52149.62	27460.5	24689.12	274277	144426.4	129850.6	PHEV	6790.094	6104.821	4	8
2047	2a	1	37725.2	154729.5	154729.5	0	670742	670742	0	ICE	37725.2	0	4	1

2047	2a	1	1404.43	5760.255	5760.255	0	25173.87	25173.87	0	ICE	1404.43	0	4	2
2047	2a	1	30166.76	123728.7	0	123728.7	466693.9	0	466693.9	BEV	0	30166.76	4	3
2047	2a	1	2807.525	11515.04	0	11515.04	40784.01	0	40784.01	FCEV	0	2807.525	4	7
2047	2a	1	15058.12	61760.72	31974.4	29786.31	332951.6	172373.8	160577.8	PHEV	7795.802	7262.315	4	8
2047	2a	1	36365.65	151236.7	151236.7	0	669088.6	669088.6	0	ICE	36365.65	0	4	1
2047	2a	1	1353.817	5630.225	5630.225	0	25106.97	25106.97	0	ICE	1353.817	0	4	2
2047	2a	1	39304.37	163458.2	0	163458.2	641271.4	0	641271.4	BEV	0	39304.37	4	3
2047	2a	1	4009.639	16675.21	0	16675.21	62274.62	0	62274.62	FCEV	0	4009.639	4	7
2047	2a	1	16990.87	70661.3	35956.51	34704.79	390614.4	198766.9	191847.5	PHEV	8645.927	8344.946	4	8
2047	2a	1	34363.51	144878.9	144878.9	0	654861.7	654861.7	0	ICE	34363.51	0	4	1
2047	2a	1	1279.281	5393.538	5393.538	0	24568.96	24568.96	0	ICE	1279.281	0	4	2
2047	2a	1	50969.41	214890.6	0	214890.6	876525.9	0	876525.9	BEV	0	50969.41	4	3
2047	2a	1	5663.268	23876.73	0	23876.73	93630.84	0	93630.84	FCEV	0	5663.268	4	7
2047	2a	1	18877.56	79589.12	39794.56	39794.56	451191.2	225595.6	225595.6	PHEV	9438.78	9438.78	4	8
2047	2a	1	30669.98	131063.9	131063.9	0	605661.6	605661.6	0	ICE	30669.98	0	4	1
2047	2a	1	1141.779	4879.231	4879.231	0	22719.66	22719.66	0	ICE	1141.779	0	4	2
2047	2a	1	62361.07	266491.3	0	266491.3	1118751	0	1118751	BEV	0	62361.07	4	3
2047	2a	1	7707.548	32937.13	0	32937.13	134060	0	134060	FCEV	0	7707.548	4	7
2047	2a	1	22126.93	94556.35	47278.17	47278.17	547883.1	273941.5	273941.5	PHEV	11063.47	11063.47	4	8
2047	2a	1	25336.92	109725.3	109725.3	0	518808.7	518808.7	0	ICE	25336.92	0	4	1
2047	2a	1	943.2402	4084.843	4084.843	0	19459.1	19459.1	0	ICE	943.2402	0	4	2
2047	2a	1	74747.55	323705.5	0	323705.5	1398984	0	1398984	BEV	0	74747.55	4	3
2047	2a	1	10192.85	44141.66	0	44141.66	186105.5	0	186105.5	FCEV	0	10192.85	4	7
2047	2a	1	25371.81	109876.4	54938.21	54938.21	651351.6	325675.8	325675.8	PHEV	12685.9	12685.9	4	8
2047	2a	1	18391.65	80701.46	80701.46	0	390677.8	390677.8	0	ICE	18391.65	0	4	1
2047	2a	1	684.6824	3004.345	3004.345	0	14651.64	14651.64	0	ICE	684.6824	0	4	2
2047	2a	1	87979.72	386049.7	0	386049.7	1717883	0	1717883	BEV	0	87979.72	4	3
2047	2a	1	13146.39	57685.59	0	57685.59	251583.5	0	251583.5	FCEV	0	13146.39	4	7
2047	2a	1	28522.75	125156.1	62578.06	62578.06	759729.9	379865	379865	PHEV	14261.37	14261.37	4	8
2047	2a	1	9984.324	44382.62	44382.62	0	220079.8	220079.8	0	ICE	9984.324	0	4	1
2047	2a	1	371.6953	1652.271	1652.271	0	8252.894	8252.894	0	ICE	371.6953	0	4	2
2047	2a	1	102672.1	456400.9	0	456400.9	2091264	0	2091264	BEV	0	102672.1	4	3
2047	2a	1	16714.06	74297.82	0	74297.82	334852.4	0	334852.4	FCEV	0	16714.06	4	7
2047	2a	1	31735.55	141071.8	70535.91	70535.91	877444.4	438722.2	438722.2	PHEV	15867.77	15867.77	4	8
2047	2a	1	117667.5	529800.1	0	529800.1	2499857	0	2499857	BEV	0	117667.5	4	3
2047	2a	1	20764.85	93494.14	0	93494.14	435126.6	0	435126.6	FCEV	0	20764.85	4	7
2047	2a	1	34608.08	155823.6	77911.79	77911.79	993723	496861.5	496861.5	PHEV	17304.04	17304.04	4	8
2047	2a	1	126478.9	576719.7	0	576719.7	2803177	0	2803177	BEV	0	126478.9	4	3
2047	2a	1	24091.22	109851.4	0	109851.4	527407.4	0	527407.4	FCEV	0	24091.22	4	7
2047	2a	1	35318.92	161047.5	80523.77	80523.77	1051260	525630	525630	PHEV	17659.46	17659.46	4	8
2047	2a	1	134255	619868.7	0	619868.7	3103985	0	3103985	BEV	0	134255	4	3
2047	2a	1	27498.01	126961.1	0	126961.1	628767.7	0	628767.7	FCEV	0	27498.01	4	7
2047	2a	1	35506.75	163938.2	81969.12	81969.12	1096009	548004.4	548004.4	PHEV	17753.38	17753.38	4	8
2047	2a	1	142988.1	668382.3	0	668382.3	3447627	0	3447627	BEV	0	142988.1	4	3
2047	2a	1	31387.64	146718.1	0	146718.1	749306.1	0	749306.1	FCEV	0	31387.64	4	7
2047	2a	1	35715.52	166948.3	83474.13	83474.13	1143142	571570.8	571570.8	PHEV	17857.76	17857.76	4	8
2047	2a	1	148782.6	703991.5	0	703991.5	3741362	0	3741362	BEV	0	148782.6	4	3

2047	2a	1	34899.61	165133.8	0	165133.8	869765.7	0	869765.7	FCEV	0	34899.61	4	7
2047	2a	1	34987.08	165547.7	82773.84	82773.84	1161680	580840	580840	PHEV	17493.54	17493.54	4	8
2047	2a	1	155572.1	745030.1	0	745030.1	4078756	0	4078756	BEV	0	155572.1	4	3
2047	2a	1	38893.03	186257.5	0	186257.5	1011469	0	1011469	FCEV	0	38893.03	4	7
2047	2a	1	34317.38	164344.9	82172.44	82172.44	1181452	590725.8	590725.8	PHEV	17158.69	17158.69	4	8
2047	2a	1	161049.8	780489.1	0	780489.1	4401466	0	4401466	BEV	0	161049.8	4	3
2047	2a	1	42810.7	207471.8	0	207471.8	1161498	0	1161498	FCEV	0	42810.7	4	7
2047	2a	1	33186.59	160830.8	80415.42	80415.42	1184117	592058.3	592058.3	PHEV	16593.3	16593.3	4	8
2047	2a	1	167258.8	820161.9	0	820161.9	4763272	0	4763272	BEV	0	167258.8	4	3
2047	2a	1	47175.56	231327.7	0	231327.7	1334680	0	1334680	FCEV	0	47175.56	4	7
2047	2a	1	32041.91	157119.1	78559.57	78559.57	1183739	591869.5	591869.5	PHEV	16020.96	16020.96	4	8
2047	2a	1	170497.1	845808.9	0	845808.9	5058718	0	5058718	BEV	0	170497.1	4	3
2047	2a	1	50927.71	252644.2	0	252644.2	1502139	0	1502139	FCEV	0	50927.71	4	7
2047	2a	1	30194.29	149789.1	74894.53	74894.53	1153894	576947	576947	PHEV	15097.15	15097.15	4	8
2047	2a	1	173887	872587.5	0	872587.5	5373118	0	5373118	BEV	0	173887	4	3
2047	2a	1	54911.68	275553.9	0	275553.9	1687816	0	1687816	FCEV	0	54911.68	4	7
2047	2a	1	28278.49	141905.1	70952.56	70952.56	1115969	557984.4	557984.4	PHEV	14139.24	14139.24	4	8
2047	2a	1	178239.7	904641.1	0	904641.1	5732047	0	5732047	BEV	0	178239.7	4	3
2047	2a	1	59413.22	301547	0	301547	1901701	0	1901701	FCEV	0	59413.22	4	7
2047	2a	1	26405.88	134020.9	67010.45	67010.45	1073183	536591.3	536591.3	PHEV	13202.94	13202.94	4	8
2047	2a	1	181559.3	931891.3	0	931891.3	6050346	0	6050346	BEV	0	181559.3	4	3
2047	2a	1	60519.77	310630.4	0	310630.4	2007295	0	2007295	FCEV	0	60519.77	4	7
2047	2a	1	26897.68	138058	69028.99	69028.99	1133259	566629.6	566629.6	PHEV	13448.84	13448.84	4	8
2047	2a	1	157442.3	817125.3	0	817125.3	5421928	0	5421928	BEV	0	157442.3	4	3
2047	2a	1	52480.75	272375.1	0	272375.1	1798846	0	1798846	FCEV	0	52480.75	4	7
2047	2a	1	23324.78	121055.6	60527.8	60527.8	1014474	507237.2	507237.2	PHEV	11662.39	11662.39	4	8
2047	2a	1	74.16284	197.9584	197.9584	0	308.3083	308.3083	0	ICE	74.16284	0	1	2
2047	2a	1	24.31456	66.29438	66.29438	0	114.4884	114.4884	0	ICE	24.31456	0	1	2
2047	2a	1	43.20114	120.2642	120.2642	0	204.0246	204.0246	0	ICE	43.20114	0	1	2
2047	2a	1	91.8129	276.6304	276.6304	0	530.3216	530.3216	0	ICE	91.8129	0	1	2
2047	2a	1	224.3596	714.5516	714.5516	0	1545.709	1545.709	0	ICE	224.3596	0	1	2
2047	2a	1	322.8082	1046.589	1046.589	0	2382.451	2382.451	0	ICE	322.8082	0	1	2
2047	2a	1	276.0419	894.9665	0	894.9665	2294.505	0	2294.505	BEV	0	276.0419	1	3
2047	2a	1	0.016218	0.05258	0	0.05258	0.134804	0	0.134804	FCEV	0	0.016218	1	7
2047	2a	1	288.5295	935.4532	561.2719	374.1813	2053.005	1231.803	821.2022	PHEV	173.1177	115.4118	1	8
2047	2a	1	349.079	1151.762	0	1151.762	3049.506	0	3049.506	BEV	0	349.079	1	3
2047	2a	1	0.048911	0.161379	0	0.161379	0.427281	0	0.427281	FCEV	0	0.048911	1	7
2047	2a	1	440.7385	1454.186	872.5115	581.6743	3336.525	2001.915	1334.61	PHEV	264.4431	176.2954	1	8
2047	2a	1	356.7824	1197.619	1197.619	0	3006.263	3006.263	0	ICE	356.7824	0	1	2
2047	2a	1	845.5257	2838.193	0	2838.193	7805.083	0	7805.083	BEV	0	845.5257	1	3
2047	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2047	2a	1	402.0702	1349.637	809.7822	539.8548	3245.655	1947.393	1298.262	PHEV	241.2421	160.8281	1	8
2047	2a	1	1446.575	3944.129	3944.129	0	13473.52	13473.52	0	ICE	1446.575	0	2	1
2047	2a	1	3014.939	9602.129	9602.129	0	35412.36	35412.36	0	ICE	3014.939	0	2	1
2047	2a	1	4547.508	14743.66	14743.66	0	55001.26	55001.26	0	ICE	4547.508	0	2	1
2047	2a	1	5840.682	19270.92	19270.92	0	72300.08	72300.08	0	ICE	5840.682	0	2	1
2047	2a	1	2.617844	7.737535	7.737535	0	24.36783	24.36783	0	ICE	2.617844	0	3	2

2047	2a	1	73.91816	235.4183	235.4183	0	827.6551	827.6551	0	ICE	73.91816	0	3	2
2047	2a	1	57.07063	185.031	185.031	0	643.637	643.637	0	ICE	57.07063	0	3	2
2047	2a	1	245.169	822.9636	822.9636	0	3023.9	3023.9	0	ICE	245.169	0	3	2
2047	2a	1	257.9802	880.7471	0	880.7471	1715.508	0	1715.508	BEV	0	257.9802	3	3
2047	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2047	2a	1	23.4781	80.15446	48.09268	32.06178	298.074	178.8444	119.2296	PHEV	14.08686	9.391239	3	8
2047	2a	1	43.62283	121.4381	121.4381	0	327.4286	327.4286	0	ICE	43.62283	0	4	2
2047	2a	1	54.53543	154.9411	154.9411	0	421.7798	421.7798	0	ICE	54.53543	0	4	2
2047	2a	1	67.47061	195.5568	195.5568	0	564.4369	564.4369	0	ICE	67.47061	0	4	2
2047	2a	1	45.89967	135.6652	135.6652	0	395.8689	395.8689	0	ICE	45.89967	0	4	2
2047	2a	1	57.76988	174.0595	174.0595	0	525.2513	525.2513	0	ICE	57.76988	0	4	2
2047	2a	1	358.6969	1142.396	1142.396	0	3488.275	3488.275	0	ICE	358.6969	0	4	2
2047	2a	1	849.1481	2850.352	2850.352	0	9463.636	9463.636	0	ICE	849.1481	0	4	2
2047	2a	1	579.2378	1977.524	1977.524	0	6781.669	6781.669	0	ICE	579.2378	0	4	2
2047	2a	1	1.621689	4.514491	0	4.514491	9.74028	0	9.74028	BEV	0	1.621689	1	3
2047	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2047	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2047	2a	1	59.17159	188.4526	0	188.4526	469.536	0	469.536	BEV	0	59.17159	1	3
2047	2a	1	0.223617	0.712187	0	0.712187	1.774438	0	1.774438	FCEV	0	0.223617	1	7
2047	2a	1	124.3808	396.1343	237.6806	158.4537	825.3444	495.2066	330.1378	PHEV	74.62851	49.75234	1	8
2047	2a	1	581.0888	1983.843	0	1983.843	5646.14	0	5646.14	BEV	0	581.0888	1	3
2047	2a	1	17.69169	60.39959	0	60.39959	171.901	0	171.901	FCEV	0	17.69169	1	7
2047	2a	1	417.8806	1426.648	855.9891	570.6594	3592.479	2155.487	1436.992	PHEV	250.7283	167.1522	1	8
2047	2a	1	10.49198	29.20777	29.20777	0	91.8428	91.8428	0	ICE	10.49198	0	3	2
2047	2a	1	11.31739	32.15395	32.15395	0	106.0146	106.0146	0	ICE	11.31739	0	3	2
2047	2a	1	18.80025	50.18238	50.18238	0	131.1371	131.1371	0	ICE	18.80025	0	4	2
2047	2a	1	93.52088	287.1344	287.1344	0	883.2961	883.2961	0	ICE	93.52088	0	4	2
2047	2a	1	73.30034	229.2512	0	229.2512	557.5196	0	557.5196	BEV	0	73.30034	1	3
2047	2a	1	0.724196	2.264965	0	2.264965	5.508204	0	5.508204	FCEV	0	0.724196	1	7
2047	2a	1	20.37534	63.72511	38.23506	25.49004	127.2164	76.32986	50.88657	PHEV	12.22521	8.150137	1	8
2047	2a	1	50.82646	173.5221	173.5221	0	447.8088	447.8088	0	ICE	50.82646	0	1	2
2047	2a	1	55.73738	183.9016	0	183.9016	486.3318	0	486.3318	BEV	0	55.73738	2	3
2047	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2047	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2047	2a	1	8.087494	23.90412	23.90412	0	42.44325	42.44325	0	ICE	8.087494	0	1	2
2047	2a	1	1.292021	3.448714	3.448714	0	9.758399	9.758399	0	ICE	1.292021	0	2	2
2047	2a	1	4.966951	15.24988	15.24988	0	48.8955	48.8955	0	ICE	4.966951	0	3	2
2047	2a	1	13.02637	42.97959	0	42.97959	79.05748	0	79.05748	BEV	0	13.02637	3	3
2047	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2047	2a	1	5.897932	19.45981	11.67589	7.783925	68.08271	40.84963	27.23309	PHEV	3.538759	2.359173	3	8
2047	2a	1	9.94473	31.10274	31.10274	0	108.5135	108.5135	0	ICE	9.94473	0	3	2
2047	2a	1	5.728638	16.60388	16.60388	0	26.55823	26.55823	0	ICE	5.728638	0	1	2
2047	2a	1	13.02464	39.98916	0	39.98916	95.28442	0	95.28442	BEV	0	13.02464	1	3
2047	2a	1	1.322298	4.059813	0	4.059813	9.673545	0	9.673545	FCEV	0	1.322298	1	7
2047	2a	1	1.388413	4.262804	2.557682	1.705121	8.066854	4.840112	3.226742	PHEV	0.833048	0.555365	1	8
2047	2a	1	22.28854	70.98564	0	70.98564	175.8213	0	175.8213	BEV	0	22.28854	2	3
2047	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7

2047	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2047	2a	1	3.878074	11.68456	11.68456	0	38.72094	38.72094	0	ICE	3.878074	0	3	2
2047	2a	1	1.72041	4.887875	0	4.887875	10.76933	0	10.76933	BEV	0	1.72041	1	3
2047	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2047	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2047	2a	1	8.434723	24.93043	0	24.93043	55.40699	0	55.40699	BEV	0	8.434723	1	3
2047	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2047	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2047	2a	1	7.462229	22.48355	0	22.48355	53.02041	0	53.02041	BEV	0	7.462229	1	3
2047	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2047	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2047	2a	1	2.096245	6.315945	6.315945	0	19.44687	19.44687	0	ICE	2.096245	0	2	2
2047	2a	1	27.93032	90.554	0	90.554	230.934	0	230.934	BEV	0	27.93032	2	3
2047	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2047	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2047	2a	1	1.451606	4.207335	4.207335	0	14.00502	14.00502	0	ICE	1.451606	0	3	2
2047	2a	1	1.582094	4.222988	0	4.222988	9.073877	0	9.073877	BEV	0	1.582094	1	3
2047	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2047	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2047	2a	1	2.938469	8.516859	0	8.516859	18.97258	0	18.97258	BEV	0	2.938469	1	3
2047	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2047	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2047	2a	1	3.127399	9.243623	0	9.243623	20.77159	0	20.77159	BEV	0	3.127399	2	3
2047	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2047	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2047	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2047	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2047	2a	1	0.565021	1.799507	1.799507	0	5.315454	5.315454	0	ICE	0.565021	0	2	2
2047	2a	1	0.24595	0.69877	0	0.69877	1.215922	0	1.215922	BEV	0	0.24595	4	3
2047	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2047	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2047	2a	1	0.199645	0.532901	0.532901	0	1.656693	1.656693	0	ICE	0.199645	0	3	2
2047	2a	1	2.009962	6.055977	0	6.055977	10.18377	0	10.18377	BEV	0	2.009962	3	3
2047	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2047	2a	1	0	0	0	0	0	0	0	PHEV	0	0	3	8
2047	2a	1	1.207181	3.77553	0	3.77553	6.559068	0	6.559068	BEV	0	1.207181	3	3
2047	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2047	2a	1	0.83574	2.613828	1.568297	1.045531	8.439889	5.063934	3.375956	PHEV	0.501444	0.334296	3	8
2047	2a	1	0.165072	0.554099	0	0.554099	1.025098	0	1.025098	BEV	0	0.165072	4	3
2047	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2047	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2047	2a	1	0.78608	2.233338	0	2.233338	4.844336	0	4.844336	BEV	0	0.78608	2	3
2047	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2047	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2047	2a	1	1.277366	3.702318	3.702318	0	11.54411	11.54411	0	ICE	1.277366	0	2	2
2047	2a	1	0.450594	1.306002	0	1.306002	2.889398	0	2.889398	BEV	0	0.450594	2	3
2047	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2047	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2047	2a	1	1.598188	4.723748	4.723748	0	17.25823	17.25823	0	ICE	1.598188	0	2	2

2047	2a	1	1.310179	3.947544	0	3.947544	9.254268	0	9.254268	BEV	0	1.310179	2	3
2047	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2047	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2047	2a	1	1.499339	4.431582	0	4.431582	7.106685	0	7.106685	BEV	0	1.499339	3	3
2047	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2047	2a	1	0	0	0	0	0	0	0	PHEV	0	0	3	8
2047	2a	1	0.850925	2.758817	0	2.758817	4.947707	0	4.947707	BEV	0	0.850925	3	3
2047	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2047	2a	1	0.650707	2.109684	1.26581	0.843873	7.338557	4.403134	2.935423	PHEV	0.390424	0.260283	3	8
2047	2a	1	1.864322	4.976324	0	4.976324	7.40348	0	7.40348	BEV	0	1.864322	4	3
2047	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2047	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2047	2a	1	0.315913	0.879446	0	0.879446	1.335533	0	1.335533	BEV	0	0.315913	4	3
2047	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2047	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2047	2a	1	0.100363	0.279393	0.279393	0	0.849303	0.849303	0	ICE	0.100363	0	2	2
2047	2a	1	0.411545	1.12209	0	1.12209	2.359085	0	2.359085	BEV	0	0.411545	2	3
2047	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2047	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2047	2a	1	0.904014	2.568402	2.568402	0	9.064237	9.064237	0	ICE	0.904014	0	2	2
2047	2a	1	0.223403	0.66031	0	0.66031	1.042616	0	1.042616	BEV	0	0.223403	4	3
2047	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2047	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2047	2a	1	1.446586	3.944159	0	3.944159	8.419625	0	8.419625	BEV	0	1.446586	1	3
2047	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2047	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2047	2a	1	0.16021	0.445996	0	0.445996	0.949744	0	0.949744	BEV	0	0.16021	2	3
2047	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2047	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2047	2a	1	0.484409	1.487265	1.487265	0	4.485	4.485	0	ICE	0.484409	0	2	2
2047	2a	1	0.831448	2.69567	2.69567	0	9.435912	9.435912	0	ICE	0.831448	0	2	2
2047	2a	1	1.200308	3.685268	0	3.685268	6.117684	0	6.117684	BEV	0	1.200308	3	3
2047	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2047	2a	1	0	0	0	0	0	0	0	PHEV	0	0	3	8
2047	2a	1	2.765906	8.808995	0	8.808995	15.08902	0	15.08902	BEV	0	2.765906	3	3
2047	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2047	2a	1	0.709207	2.258717	1.35523	0.903487	9.046068	5.427641	3.618427	PHEV	0.425524	0.283683	3	8
2047	2a	1	0.223461	0.698886	0.698886	0	2.126263	2.126263	0	ICE	0.223461	0	2	2
2047	2a	1	0	0	0	0	0	0	0	BEV	0	0	2	3
2047	2a	1	3.439295	11.54475	0	11.54475	31.52261	0	31.52261	FCEV	0	3.439295	2	7
2047	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2047	2a	1	0	0	0	0	0	0	0	BEV	0	0	2	3
2047	2a	1	3.805464	12.99189	0	12.99189	36.71081	0	36.71081	FCEV	0	3.805464	2	7
2047	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2047	2a	1	0.02901	0.079097	0.079097	0	0.267636	0.267636	0	ICE	0.02901	0	3	2
2047	2a	1	0	0	0	0	0	0	0	BEV	0	0	3	3
2047	2a	1	0.131638	0.441872	0	0.441872	0.853466	0	0.853466	FCEV	0	0.131638	3	7

2047	2a	1	1.886813	6.333502	3.800101	2.533401	25.95999	15.57599	10.38399	PHEV	1.132088	0.754725	3	8
2047	2a	1	0.125667	0.414631	0.414631	0	1.356369	1.356369	0	ICE	0.125667	0	2	2
2047	2a	1	0.07624	0.220973	0	0.220973	0.33593	0	0.33593	BEV	0	0.07624	3	3
2047	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2047	2a	1	0	0	0	0	0	0	0	PHEV	0	0	3	8
2047	2a	1	0.200334	0.615078	0	0.615078	1.344924	0	1.344924	BEV	0	0.200334	2	3
2047	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2047	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2047	2a	1	0.214072	0.730845	0.730845	0	2.292812	2.292812	0	ICE	0.214072	0	2	2
2047	2a	1	0.137559	0.430223	0	0.430223	1.063355	0	1.063355	BEV	0	0.137559	2	3
2047	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2047	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2047	2a	1	0.044537	0.123982	0	0.123982	0.173987	0	0.173987	BEV	0	0.044537	3	3
2047	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2047	2a	1	0	0	0	0	0	0	0	PHEV	0	0	3	8
2047	2a	1	0.066145	0.176558	0	0.176558	0.368049	0	0.368049	BEV	0	0.066145	2	3
2047	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2047	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2047	2a	1	0.034457	0.093949	0.093949	0	0.443271	0.443271	0	ICE	0.034457	0	2	2
2047	2a	1	0.208104	0.603169	0	0.603169	0.908403	0	0.908403	BEV	0	0.208104	4	3
2047	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2047	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2047	2a	1	0	0	0	0	0	0	0	BEV	0	0	4	3
2047	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2047	2a	1	0.217992	0.706761	0.424057	0.282705	2.67637	1.605822	1.070548	PHEV	0.130795	0.087197	4	8
2048	2a	1	13609.73	36327.62	36327.62	0	51271.83	51271.83	0	ICE	13609.73	0	1	1
2048	2a	1	15477.99	42201.2	42201.2	0	62618.75	62618.75	0	ICE	15477.99	0	1	1
2048	2a	1	15527.46	43225.67	43225.67	0	67027.89	67027.89	0	ICE	15527.46	0	1	1
2048	2a	1	41.20709	114.7131	114.7131	0	188.5887	188.5887	0	ICE	41.20709	0	1	2
2048	2a	1	16242.14	46145.72	46145.72	0	74850.23	74850.23	0	ICE	16242.14	0	1	1
2048	2a	1	13532.87	39223.68	39223.68	0	66820.73	66820.73	0	ICE	13532.87	0	1	1
2048	2a	1	10806.37	31940.29	31940.29	0	57075.14	57075.14	0	ICE	10806.37	0	1	1
2048	2a	1	12680.58	38206.33	38206.33	0	71486.59	71486.59	0	ICE	12680.58	0	1	1
2048	2a	1	144.8041	436.2918	436.2918	0	832.7883	832.7883	0	ICE	144.8041	0	1	2
2048	2a	1	12498.81	38374.71	38374.71	0	75481.24	75481.24	0	ICE	12498.81	0	1	1
2048	2a	1	195.0377	598.8185	598.8185	0	1169.713	1169.713	0	ICE	195.0377	0	1	2
2048	2a	1	17987.04	56255.55	56255.55	0	116241.4	116241.4	0	ICE	17987.04	0	1	1
2048	2a	1	22255.82	70881.46	70881.46	0	153252	153252	0	ICE	22255.82	0	1	1
2048	2a	1	22720.2	73662.07	73662.07	0	167231.1	167231.1	0	ICE	22720.2	0	1	1
2048	2a	1	433.1738	1404.41	1404.41	0	3176.238	3176.238	0	ICE	433.1738	0	1	2
2048	2a	1	27567.97	90958.59	90958.59	0	216505.1	216505.1	0	ICE	27567.97	0	1	1
2048	2a	1	27580.23	92579.12	92579.12	0	229760.5	229760.5	0	ICE	27580.23	0	1	1
2048	2a	1	31904.23	108921.4	108921.4	0	283982.6	283982.6	0	ICE	31904.23	0	1	1
2048	2a	1	390.4239	1332.911	1332.911	0	3469.557	3469.557	0	ICE	390.4239	0	1	2
2048	2a	1	1855.591	6335.007	0	6335.007	17003.41	0	17003.41	BEV	0	1855.591	1	3
2048	2a	1	37.86921	129.2859	0	129.2859	369.7192	0	369.7192	FCEV	0	37.86921	1	7
2048	2a	1	1673.806	5714.391	3085.771	2628.62	14653.38	7912.825	6740.555	PHEV	903.8554	769.9509	1	8

2048	2a	1	36706.17	127418.1	127418.1	0	347338.2	347338.2	0	ICE	36706.17	0	1	1
2048	2a	1	449.187	1559.263	1559.263	0	4244.466	4244.466	0	ICE	449.187	0	1	2
2048	2a	1	2609.209	9057.349	0	9057.349	25104.49	0	25104.49	BEV	0	2609.209	1	3
2048	2a	1	53.24917	184.8439	0	184.8439	546.5745	0	546.5745	FCEV	0	53.24917	1	7
2048	2a	1	1686.319	5853.72	3161.009	2692.711	15794.83	8529.211	7265.624	PHEV	910.6124	775.7069	1	8
2048	2a	1	42718.94	150737.6	150737.6	0	429416.3	429416.3	0	ICE	42718.94	0	1	1
2048	2a	1	520.545	1836.79	1836.79	0	5227.235	5227.235	0	ICE	520.545	0	1	2
2048	2a	1	3723.811	13139.8	0	13139.8	38035.18	0	38035.18	BEV	0	3723.811	1	3
2048	2a	1	87.10669	307.3638	0	307.3638	940.2046	0	940.2046	FCEV	0	87.10669	1	7
2048	2a	1	1826.29	6444.228	3415.441	3028.787	18113.26	9600.025	8513.23	PHEV	967.9335	858.3562	1	8
2048	2a	1	49709.03	178250.6	178250.6	0	530065.7	530065.7	0	ICE	49709.03	0	1	1
2048	2a	1	611.2118	2191.732	2191.732	0	6510.582	6510.582	0	ICE	611.2118	0	1	2
2048	2a	1	5148.288	18461.14	0	18461.14	55480.69	0	55480.69	BEV	0	5148.288	1	3
2048	2a	1	135.8786	487.2442	0	487.2442	1541.804	0	1541.804	FCEV	0	135.8786	1	7
2048	2a	1	1963.071	7039.335	3660.454	3378.881	20858.38	10846.36	10012.02	PHEV	1020.797	942.2739	1	8
2048	2a	1	55307.51	201494.7	201494.7	0	625604.8	625604.8	0	ICE	55307.51	0	1	1
2048	2a	1	683.3306	2489.489	2489.489	0	7721.72	7721.72	0	ICE	683.3306	0	1	2
2048	2a	1	8935.725	32554.36	0	32554.36	102122.6	0	102122.6	BEV	0	8935.725	1	3
2048	2a	1	306.3073	1115.93	0	1115.93	3654.67	0	3654.67	FCEV	0	306.3073	1	7
2048	2a	1	3397.239	12376.72	6163.606	6213.113	37963.96	18906.05	19057.91	PHEV	1691.825	1705.414	1	8
2048	2a	1	61671.55	228213.1	228213.1	0	738421.3	738421.3	0	ICE	61671.55	0	1	1
2048	2a	1	767.4496	2839.917	2839.917	0	9179.701	9179.701	0	ICE	767.4496	0	1	2
2048	2a	1	14058.43	52022.66	0	52022.66	169921.1	0	169921.1	BEV	0	14058.43	1	3
2048	2a	1	594.4899	2199.886	0	2199.886	7454.105	0	7454.105	FCEV	0	594.4899	1	7
2048	2a	1	5329.168	19720.37	9386.898	10333.48	62930.02	29954.69	32975.33	PHEV	2536.684	2792.484	1	8
2048	2a	1	69094.67	259640.5	259640.5	0	874496.2	874496.2	0	ICE	69094.67	0	1	1
2048	2a	1	867.0396	3258.118	3258.118	0	10962.69	10962.69	0	ICE	867.0396	0	1	2
2048	2a	1	21062.59	79147.93	0	79147.93	268782.7	0	268782.7	BEV	0	21062.59	1	3
2048	2a	1	1061.979	3990.652	0	3990.652	13926.4	0	13926.4	FCEV	0	1061.979	1	7
2048	2a	1	7960.924	29915.16	13581.48	16333.68	99429.87	45141.16	54288.71	PHEV	3614.26	4346.665	1	8
2048	2a	1	77423.93	295375.4	295375.4	0	1035345	1035345	0	ICE	77423.93	0	1	1
2048	2a	1	979.3384	3736.215	3736.215	0	13083.7	13083.7	0	ICE	979.3384	0	1	2
2048	2a	1	30586.45	116688.5	0	116688.5	411851.8	0	411851.8	BEV	0	30586.45	1	3
2048	2a	1	1794.849	6847.422	0	6847.422	24637.55	0	24637.55	FCEV	0	1794.849	1	7
2048	2a	1	11526.91	43975.64	18997.48	24978.16	152352.1	65816.11	86536	PHEV	4979.627	6547.288	1	8
2048	2a	1	86605.85	335366.4	335366.4	0	1222322	1222322	0	ICE	86605.85	0	1	1
2048	2a	1	1103.761	4274.128	4274.128	0	15564.2	15564.2	0	ICE	1103.761	0	1	2
2048	2a	1	43527.35	168552.3	0	168552.3	617866.1	0	617866.1	BEV	0	43527.35	1	3
2048	2a	1	2919.517	11305.33	0	11305.33	42024.75	0	42024.75	FCEV	0	2919.517	1	7
2048	2a	1	16356.15	63336.43	25967.93	37368.49	228533.8	93698.87	134835	PHEV	6706.023	9650.131	1	8
2048	2a	1	96188.2	377983.1	377983.1	0	1429761	1429761	0	ICE	96188.2	0	1	1
2048	2a	1	1225.885	4817.261	4817.261	0	18208.22	18208.22	0	ICE	1225.885	0	1	2
2048	2a	1	60902.7	239324.5	0	239324.5	909479	0	909479	BEV	0	60902.7	1	3
2048	2a	1	4604.199	18092.75	0	18092.75	69378.15	0	69378.15	FCEV	0	4604.199	1	7
2048	2a	1	22818.83	89669.33	34791.7	54877.63	336260.9	130469.2	205791.7	PHEV	8853.706	13965.12	1	8
2048	2a	1	104778.8	417743.7	417743.7	0	1638422	1638422	0	ICE	104778.8	0	1	1
2048	2a	1	1335.369	5323.995	5323.995	0	20868.07	20868.07	0	ICE	1335.369	0	1	2

2048	2a	1	83345.2	332289.8	0	332289.8	1308111	0	1308111	BEV	0	83345.2	1	3
2048	2a	1	7022.892	27999.64	0	27999.64	110886.6	0	110886.6	FCEV	0	7022.892	1	7
2048	2a	1	31137.1	124140.8	45435.54	78705.27	483375.8	176915.5	306460.2	PHEV	11396.18	19740.92	1	8
2048	2a	1	111723.8	451833.2	451833.2	0	1835813	1835813	0	ICE	111723.8	0	1	1
2048	2a	1	1423.879	5758.452	5758.452	0	23384.6	23384.6	0	ICE	1423.879	0	1	2
2048	2a	1	112058.8	453188.3	0	453188.3	1846715	0	1846715	BEV	0	112058.8	1	3
2048	2a	1	10428.96	42176.8	0	42176.8	172565.3	0	172565.3	FCEV	0	10428.96	1	7
2048	2a	1	41743.33	168818.4	58073.52	110744.9	681880.6	234566.9	447313.7	PHEV	14359.71	27383.63	1	8
2048	2a	1	115375.4	473211.2	473211.2	0	1989832	1989832	0	ICE	115375.4	0	1	1
2048	2a	1	1470.418	6030.905	6030.905	0	25348.62	25348.62	0	ICE	1470.418	0	1	2
2048	2a	1	147503.6	604984.7	0	604984.7	2549805	0	2549805	BEV	0	147503.6	1	3
2048	2a	1	15047.6	61717.58	0	61717.58	260849.8	0	260849.8	FCEV	0	15047.6	1	7
2048	2a	1	54788.57	224714.8	72358.16	152356.6	940429.4	302818.3	637611.2	PHEV	17641.92	37146.65	1	8
2048	2a	1	114035.2	474247.4	474247.4	0	2062223	2062223	0	ICE	114035.2	0	1	1
2048	2a	1	1453.34	6044.119	6044.119	0	26272.67	26272.67	0	ICE	1453.34	0	1	2
2048	2a	1	189591.2	788468.3	0	788468.3	3434780	0	3434780	BEV	0	189591.2	1	3
2048	2a	1	21065.69	87607.58	0	87607.58	382399.3	0	382399.3	FCEV	0	21065.69	1	7
2048	2a	1	70218.98	292025.3	87607.58	204417.7	1265047	379514.2	885533.2	PHEV	21065.69	49153.28	1	8
2048	2a	1	106838.1	450436.9	450436.9	0	2023942	2023942	0	ICE	106838.1	0	1	1
2048	2a	1	1361.613	5740.655	5740.655	0	25786.42	25786.42	0	ICE	1361.613	0	1	2
2048	2a	1	240789	1015183	0	1015183	4567636	0	4567636	BEV	0	240789	1	3
2048	2a	1	29760.44	125472.1	0	125472.1	565313.4	0	565313.4	FCEV	0	29760.44	1	7
2048	2a	1	85436.66	360206.9	108062.1	252144.9	1613790	484137.1	1129653	PHEV	25631	59805.66	1	8
2048	2a	1	92092.49	393544.4	393544.4	0	1826079	1826079	0	ICE	92092.49	0	1	1
2048	2a	1	1173.687	5015.587	5015.587	0	23266.68	23266.68	0	ICE	1173.687	0	1	2
2048	2a	1	298297.7	1274733	0	1274733	5920661	0	5920661	BEV	0	298297.7	1	3
2048	2a	1	40676.95	173827.3	0	173827.3	808137.2	0	808137.2	FCEV	0	40676.95	1	7
2048	2a	1	101252.2	432686.9	129806.1	302880.8	2003323	600996.9	1402326	PHEV	30375.65	70876.51	1	8
2048	2a	1	69797.42	302268.2	302268.2	0	1447217	1447217	0	ICE	69797.42	0	1	1
2048	2a	1	889.5438	3852.303	3852.303	0	18440.17	18440.17	0	ICE	889.5438	0	1	2
2048	2a	1	363606.8	1574654	0	1574654	7544653	0	7544653	BEV	0	363606.8	1	3
2048	2a	1	54332.04	235293.1	0	235293.1	1128135	0	1128135	FCEV	0	54332.04	1	7
2048	2a	1	117880.2	510497.8	153149.3	357348.4	2440187	732056	1708131	PHEV	35364.05	82516.12	1	8
2048	2a	1	39065.08	171415.2	171415.2	0	846435.7	846435.7	0	ICE	39065.08	0	1	1
2048	2a	1	497.8708	2184.627	2184.627	0	10785.51	10785.51	0	ICE	497.8708	0	1	2
2048	2a	1	434374.7	1906010	0	1906010	9416410	0	9416410	BEV	0	434374.7	1	3
2048	2a	1	70712.17	310280.7	0	310280.7	1533653	0	1533653	FCEV	0	70712.17	1	7
2048	2a	1	134263.6	589140.7	176742.2	412398.5	2905917	871775	2034142	PHEV	40279.08	93984.52	1	8
2048	2a	1	513293.4	2281707	0	2281707	11616986	0	11616986	BEV	0	513293.4	1	3
2048	2a	1	90581.19	402654.2	0	402654.2	2050764	0	2050764	FCEV	0	90581.19	1	7
2048	2a	1	150968.6	671090.4	201327.1	469763.3	3413596	1024079	2389517	PHEV	45290.59	105678.1	1	8
2048	2a	1	560260.4	2522584	0	2522584	13229145	0	13229145	BEV	0	560260.4	1	3
2048	2a	1	106716.3	480492.1	0	480492.1	2520483	0	2520483	FCEV	0	106716.3	1	7
2048	2a	1	156451.3	704425.2	211327.6	493097.6	3692962	1107889	2585074	PHEV	46935.39	109515.9	1	8
2048	2a	1	609872.6	2780903	0	2780903	15014196	0	15014196	BEV	0	609872.6	1	3
2048	2a	1	124913.7	569582.6	0	569582.6	3075763	0	3075763	FCEV	0	124913.7	1	7
2048	2a	1	161294.5	735472.5	220641.7	514830.7	3971725	1191518	2780208	PHEV	48388.36	112906.2	1	8

2048	2a	1	651775.5	3009313	0	3009313	16718996	0	16718996	BEV	0	651775.5	1	3
2048	2a	1	143072.7	660580.8	0	660580.8	3670490	0	3670490	FCEV	0	143072.7	1	7
2048	2a	1	162800.2	751664.9	225499.5	526165.5	4178988	1253696	2925291	PHEV	48840.07	113960.2	1	8
2048	2a	1	696130.6	3253986	0	3253986	18595090	0	18595090	BEV	0	696130.6	1	3
2048	2a	1	163289.9	763280.6	0	763280.6	4362168	0	4362168	FCEV	0	163289.9	1	7
2048	2a	1	163699.1	765193.6	229558.1	535635.5	4377756	1313327	3064429	PHEV	49109.74	114589.4	1	8
2048	2a	1	732738.7	3467085	0	3467085	20372100	0	20372100	BEV	0	732738.7	1	3
2048	2a	1	183184.7	866771.2	0	866771.2	5093214	0	5093214	FCEV	0	183184.7	1	7
2048	2a	1	161633.5	764798.1	229439.4	535358.7	4501672	1350502	3151171	PHEV	48490.06	113143.5	1	8
2048	2a	1	772958.6	3701675	0	3701675	22355338	0	22355338	BEV	0	772958.6	1	3
2048	2a	1	205470	983989.6	0	983989.6	5942553	0	5942553	FCEV	0	205470	1	7
2048	2a	1	159279.1	762782.7	228834.8	533947.9	4617470	1385241	3232229	PHEV	47783.72	111495.3	1	8
2048	2a	1	803580.3	3894359	0	3894359	24166934	0	24166934	BEV	0	803580.3	1	3
2048	2a	1	226650.9	1098409	0	1098409	6816089	0	6816089	FCEV	0	226650.9	1	7
2048	2a	1	153942.6	746045.8	223813.8	522232.1	4643444	1393033	3250411	PHEV	46182.78	107759.8	1	8
2048	2a	1	838520.9	4111729	0	4111729	26201353	0	26201353	BEV	0	838520.9	1	3
2048	2a	1	250467.3	1228179	0	1228179	7825951	0	7825951	FCEV	0	250467.3	1	7
2048	2a	1	148498.4	728169.3	218450.8	509718.5	4656040	1396812	3259228	PHEV	44549.52	103948.9	1	8
2048	2a	1	864213.9	4287227	0	4287227	28042988	0	28042988	BEV	0	864213.9	1	3
2048	2a	1	272909.7	1353861	0	1353861	8855041	0	8855041	FCEV	0	272909.7	1	7
2048	2a	1	140543.4	697213.1	209163.9	488049.2	4578098	1373429	3204668	PHEV	42163.01	98380.35	1	8
2048	2a	1	883969	4435871	0	4435871	29761601	0	29761601	BEV	0	883969	1	3
2048	2a	1	294656.3	1478624	0	1478624	9919740	0	9919740	FCEV	0	294656.3	1	7
2048	2a	1	130958.4	657166.1	197149.8	460016.3	4426932	1328080	3098852	PHEV	39287.51	91670.86	1	8
2048	2a	1	907004	4603426	0	4603426	31621867	0	31621867	BEV	0	907004	1	3
2048	2a	1	302334.7	1534475	0	1534475	10539788	0	10539788	FCEV	0	302334.7	1	7
2048	2a	1	134371	681989.1	204596.7	477392.3	4703366	1411010	3292356	PHEV	40311.29	94059.67	1	8
2048	2a	1	914476.9	4693745	0	4693745	32903321	0	32903321	BEV	0	914476.9	1	3
2048	2a	1	304825.6	1564582	0	1564582	10967145	0	10967145	FCEV	0	304825.6	1	7
2048	2a	1	135478.1	695369.6	208610.9	486758.7	4890563	1467169	3423394	PHEV	40643.42	94834.65	1	8
2048	2a	1	821486.4	4263514	0	4263514	30417502	0	30417502	BEV	0	821486.4	1	3
2048	2a	1	273828.8	1421171	0	1421171	10138985	0	10138985	FCEV	0	273828.8	1	7
2048	2a	1	121701.7	631631.8	189489.5	442142.2	4515597	1354679	3160918	PHEV	36510.51	85191.18	1	8
2048	2a	1	847.5866	2310.97	2310.97	0	7792.75	7792.75	0	ICE	847.5866	0	2	1
2048	2a	1	1360.977	3788.714	3788.714	0	12974.03	12974.03	0	ICE	1360.977	0	2	1
2048	2a	1	1995.964	5670.752	5670.752	0	19764.63	19764.63	0	ICE	1995.964	0	2	1
2048	2a	1	3500.706	10146.45	10146.45	0	35663.4	35663.4	0	ICE	3500.706	0	2	1
2048	2a	1	2672.7	7899.671	7899.671	0	27991.65	27991.65	0	ICE	2672.7	0	2	1
2048	2a	1	1434.162	4321.101	4321.101	0	15262.36	15262.36	0	ICE	1434.162	0	2	1
2048	2a	1	1342.883	4123.012	4123.012	0	14695.65	14695.65	0	ICE	1342.883	0	2	1
2048	2a	1	11813.9	38979.14	38979.14	0	147252.8	147252.8	0	ICE	11813.9	0	2	1
2048	2a	1	11390.94	38236.18	38236.18	0	146929.8	146929.8	0	ICE	11390.94	0	2	1
2048	2a	1	10673.5	36439.42	36439.42	0	142592	142592	0	ICE	10673.5	0	2	1
2048	2a	1	1.445918	4.936378	4.936378	0	19.32545	19.32545	0	ICE	1.445918	0	2	2
2048	2a	1	0.359636	1.2278	0	1.2278	3.480258	0	3.480258	BEV	0	0.359636	2	3
2048	2a	1	0.00734	0.025057	0	0.025057	0.071026	0	0.071026	FCEV	0	0.00734	2	7
2048	2a	1	3.119289	10.64928	6.389571	4.259714	41.70191	25.02115	16.68076	PHEV	1.871574	1.247716	2	8

2048	2a	1	12198.71	42345.38	42345.38	0	167526.5	167526.5	0	ICE	12198.71	0	2	1
2048	2a	1	1.652536	5.736446	5.736446	0	22.70421	22.70421	0	ICE	1.652536	0	2	2
2048	2a	1	13802.97	48705.02	48705.02	0	194501.6	194501.6	0	ICE	13802.97	0	2	1
2048	2a	1	1.882907	6.644007	6.644007	0	26.55708	26.55708	0	ICE	1.882907	0	2	2
2048	2a	1	183.5301	647.6025	0	647.6025	2328.659	0	2328.659	BEV	0	183.5301	2	3
2048	2a	1	4.293102	15.1486	0	15.1486	45.92241	0	45.92241	FCEV	0	4.293102	2	7
2048	2a	1	140.9382	497.3132	295.5461	201.7671	2091.354	1242.862	848.4924	PHEV	83.75757	57.18065	2	8
2048	2a	1	15509.75	55616.11	55616.11	0	223749.6	223749.6	0	ICE	15509.75	0	2	1
2048	2a	1	2.140317	7.67492	7.67492	0	30.92878	30.92878	0	ICE	2.140317	0	2	2
2048	2a	1	421.2758	1510.644	0	1510.644	5479.194	0	5479.194	BEV	0	421.2758	2	3
2048	2a	1	11.11872	39.87038	0	39.87038	125.028	0	125.028	FCEV	0	11.11872	2	7
2048	2a	1	324.4589	1163.471	684.7856	478.6851	4930.671	2902.052	2028.619	PHEV	190.9672	133.4917	2	8
2048	2a	1	16807.43	61232.33	61232.33	0	248484.3	248484.3	0	ICE	16807.43	0	2	1
2048	2a	1	2.349876	8.560998	8.560998	0	34.82354	34.82354	0	ICE	2.349876	0	2	2
2048	2a	1	1184.562	4315.56	0	4315.56	15839.6	0	15839.6	BEV	0	1184.562	2	3
2048	2a	1	40.60555	147.9329	0	147.9329	480.0555	0	480.0555	FCEV	0	40.60555	2	7
2048	2a	1	854.2955	3112.344	1804.27	1308.074	13726.36	7957.368	5768.994	PHEV	495.2473	359.0482	2	8
2048	2a	1	17875.01	66145.76	66145.76	0	271107.6	271107.6	0	ICE	17875.01	0	2	1
2048	2a	1	2.509378	9.285853	9.285853	0	38.15396	38.15396	0	ICE	2.509378	0	2	2
2048	2a	1	2188.055	8096.809	0	8096.809	30383.88	0	30383.88	BEV	0	2188.055	2	3
2048	2a	1	92.52643	342.3904	0	342.3904	1149.639	0	1149.639	FCEV	0	92.52643	2	7
2048	2a	1	1476.279	5462.913	3118.543	2344.37	24541.77	14009.85	10531.93	PHEV	842.7446	633.5348	2	8
2048	2a	1	18762.23	70503.75	70503.75	0	292274.3	292274.3	0	ICE	18762.23	0	2	1
2048	2a	1	2.646334	9.944262	9.944262	0	41.32726	41.32726	0	ICE	2.646334	0	2	2
2048	2a	1	3471.753	13045.98	0	13045.98	50187.46	0	50187.46	BEV	0	3471.753	2	3
2048	2a	1	175.0464	657.7805	0	657.7805	2324.079	0	2324.079	FCEV	0	175.0464	2	7
2048	2a	1	2188.884	8225.279	4622.607	3602.672	37299.09	20962.09	16337	PHEV	1230.153	958.7312	2	8
2048	2a	1	19485.13	74336.55	74336.55	0	311860.5	311860.5	0	ICE	19485.13	0	2	1
2048	2a	1	2.760329	10.53077	10.53077	0	44.28777	44.28777	0	ICE	2.760329	0	2	2
2048	2a	1	5089.85	19417.98	0	19417.98	76530.52	0	76530.52	BEV	0	5089.85	2	3
2048	2a	1	298.6784	1139.47	0	1139.47	4240.064	0	4240.064	FCEV	0	298.6784	2	7
2048	2a	1	2994.59	11424.48	6319.37	5105.111	52127.82	28834.13	23293.69	PHEV	1656.436	1338.154	2	8
2048	2a	1	20136.6	77975.57	77975.57	0	330295.6	330295.6	0	ICE	20136.6	0	2	1
2048	2a	1	2.864176	11.09104	11.09104	0	47.0884	47.0884	0	ICE	2.864176	0	2	2
2048	2a	1	7147.002	27675.55	0	27675.55	111528.4	0	111528.4	BEV	0	7147.002	2	3
2048	2a	1	479.3721	1856.287	0	1856.287	7191.281	0	7191.281	FCEV	0	479.3721	2	7
2048	2a	1	3917.321	15169.16	8256.358	6912.804	69231.94	37681.96	31549.99	PHEV	2132.142	1785.179	2	8
2048	2a	1	20589	80906.95	80906.95	0	346416.7	346416.7	0	ICE	20589	0	2	1
2048	2a	1	2.928524	11.50799	11.50799	0	49.36862	49.36862	0	ICE	2.928524	0	2	2
2048	2a	1	9716.376	38181.66	0	38181.66	157230.6	0	157230.6	BEV	0	9716.376	2	3
2048	2a	1	734.5508	2886.506	0	2886.506	11599.51	0	11599.51	FCEV	0	734.5508	2	7
2048	2a	1	4951.556	19457.74	10418.23	9039.508	88953.91	47628.46	41325.44	PHEV	2651.205	2300.352	2	8
2048	2a	1	20608.01	82162.26	82162.26	0	356342	356342	0	ICE	20608.01	0	2	1
2048	2a	1	2.931227	11.68654	11.68654	0	50.76615	50.76615	0	ICE	2.931227	0	2	2
2048	2a	1	12794.16	51009.16	0	51009.16	214693.4	0	214693.4	BEV	0	12794.16	2	3
2048	2a	1	1078.07	4298.17	0	4298.17	17812.69	0	17812.69	FCEV	0	1078.07	2	7
2048	2a	1	6047.925	24112.53	12696.97	11415.56	110632.6	58255.98	52376.65	PHEV	3184.665	2863.261	2	8

2048	2a	1	20226.94	81801.79	81801.79	0	359949	359949	0	ICE	20226.94	0	2	1
2048	2a	1	2.877025	11.63527	11.63527	0	51.26435	51.26435	0	ICE	2.877025	0	2	2
2048	2a	1	16489.66	66687.5	0	66687.5	286901.7	0	286901.7	BEV	0	16489.66	2	3
2048	2a	1	1534.641	6206.394	0	6206.394	26439.06	0	26439.06	FCEV	0	1534.641	2	7
2048	2a	1	7210.592	29161.07	15097.1	14063.97	134505.4	69635.38	64870.04	PHEV	3733.026	3477.565	2	8
2048	2a	1	19307.23	79188.41	79188.41	0	354081.1	354081.1	0	ICE	19307.23	0	2	1
2048	2a	1	2.746208	11.26355	11.26355	0	50.41468	50.41468	0	ICE	2.746208	0	2	2
2048	2a	1	20807.89	85343.36	0	85343.36	375371.7	0	375371.7	BEV	0	20807.89	2	3
2048	2a	1	2122.719	8706.312	0	8706.312	38055.68	0	38055.68	FCEV	0	2122.719	2	7
2048	2a	1	8389.774	34410.58	17510.07	16900.51	159865	81348.47	78516.58	PHEV	4269.197	4120.578	2	8
2048	2a	1	17770.27	73902.64	73902.64	0	336237.2	336237.2	0	ICE	17770.27	0	2	1
2048	2a	1	2.527595	10.51171	10.51171	0	47.86206	47.86206	0	ICE	2.527595	0	2	2
2048	2a	1	25749.29	107085.6	0	107085.6	481618.1	0	481618.1	BEV	0	25749.29	2	3
2048	2a	1	2861.032	11898.4	0	11898.4	53307.93	0	53307.93	FCEV	0	2861.032	2	7
2048	2a	1	9536.774	39661.35	19830.67	19830.67	185921.8	92960.92	92960.92	PHEV	4768.387	4768.387	2	8
2048	2a	1	15643.6	65954.5	65954.5	0	305724.8	305724.8	0	ICE	15643.6	0	2	1
2048	2a	1	2.225103	9.38119	9.38119	0	43.50904	43.50904	0	ICE	2.225103	0	2	2
2048	2a	1	31039.13	130863.1	0	130863.1	601815	0	601815	BEV	0	31039.13	2	3
2048	2a	1	3836.297	16174.1	0	16174.1	74219.63	0	74219.63	FCEV	0	3836.297	2	7
2048	2a	1	11013.29	46432.81	23216.4	23216.4	220012.6	110006.3	110006.3	PHEV	5506.646	5506.646	2	8
2048	2a	1	12768.28	54563.44	54563.44	0	257966.3	257966.3	0	ICE	12768.28	0	2	1
2048	2a	1	1.816125	7.760956	7.760956	0	36.70503	36.70503	0	ICE	1.816125	0	2	2
2048	2a	1	36723.04	156930.8	0	156930.8	738278.4	0	738278.4	BEV	0	36723.04	2	3
2048	2a	1	5007.687	21399.65	0	21399.65	100562	0	100562	FCEV	0	5007.687	2	7
2048	2a	1	12465.02	53267.53	26633.76	26633.76	255571	127785.5	127785.5	PHEV	6232.511	6232.511	2	8
2048	2a	1	9237.202	40003.09	40003.09	0	193080	193080	0	ICE	9237.202	0	2	1
2048	2a	1	1.313875	5.689931	5.689931	0	27.46781	27.46781	0	ICE	1.313875	0	2	2
2048	2a	1	43044.33	186409.9	0	186409.9	897435.9	0	897435.9	BEV	0	43044.33	2	3
2048	2a	1	6431.912	27854.36	0	27854.36	134040.9	0	134040.9	FCEV	0	6431.912	2	7
2048	2a	1	13954.84	60433.52	30216.76	30216.76	294087.5	147043.8	147043.8	PHEV	6977.419	6977.419	2	8
2048	2a	1	4952.356	21730.64	21730.64	0	107174.8	107174.8	0	ICE	4952.356	0	2	1
2048	2a	1	0.70441	3.090908	3.090908	0	15.24452	15.24452	0	ICE	0.70441	0	2	2
2048	2a	1	49574.37	217529.4	0	217529.4	1072132	0	1072132	BEV	0	49574.37	2	3
2048	2a	1	8070.247	35411.76	0	35411.76	174530.6	0	174530.6	FCEV	0	8070.247	2	7
2048	2a	1	15323.25	67237.52	33618.76	33618.76	332413	166206.5	166206.5	PHEV	7661.627	7661.627	2	8
2048	2a	1	56944.51	253131.5	0	253131.5	1277624	0	1277624	BEV	0	56944.51	2	3
2048	2a	1	10049.03	44670.26	0	44670.26	225517.8	0	225517.8	FCEV	0	10049.03	2	7
2048	2a	1	16748.39	74450.43	37225.22	37225.22	374466.9	187233.5	187233.5	PHEV	8374.193	8374.193	2	8
2048	2a	1	60586.32	272791.1	0	272791.1	1410506	0	1410506	BEV	0	60586.32	2	3
2048	2a	1	11540.25	51960.22	0	51960.22	268779	0	268779	FCEV	0	11540.25	2	7
2048	2a	1	16918.58	76176.24	38088.12	38088.12	390397.4	195198.7	195198.7	PHEV	8459.29	8459.29	2	8
2048	2a	1	64549.4	294333	0	294333	1559273	0	1559273	BEV	0	64549.4	2	3
2048	2a	1	13220.96	60285.07	0	60285.07	319536.2	0	319536.2	FCEV	0	13220.96	2	7
2048	2a	1	17071.54	77842.99	38921.5	38921.5	406933.3	203466.7	203466.7	PHEV	8535.772	8535.772	2	8
2048	2a	1	68018.39	314047.7	0	314047.7	1705130	0	1705130	BEV	0	68018.39	2	3
2048	2a	1	14930.87	68937.3	0	68937.3	374514.2	0	374514.2	FCEV	0	14930.87	2	7
2048	2a	1	16989.61	78442.71	39221.35	39221.35	418853.5	209426.8	209426.8	PHEV	8494.803	8494.803	2	8

2048	2a	1	71656.81	334951.9	0	334951.9	1863897	0	1863897	BEV	0	71656.81	2	3
2048	2a	1	16808.39	78568.96	0	78568.96	437475.6	0	437475.6	FCEV	0	16808.39	2	7
2048	2a	1	16850.51	78765.88	39382.94	39382.94	429895.6	214947.8	214947.8	PHEV	8425.257	8425.257	2	8
2048	2a	1	74280.21	351470.2	0	351470.2	2005204	0	2005204	BEV	0	74280.21	2	3
2048	2a	1	18570.05	87867.55	0	87867.55	501602.2	0	501602.2	FCEV	0	18570.05	2	7
2048	2a	1	16385.34	77530.19	38765.09	38765.09	433085.3	216542.6	216542.6	PHEV	8192.67	8192.67	2	8
2048	2a	1	77154.15	369488.9	0	369488.9	2161080	0	2161080	BEV	0	77154.15	2	3
2048	2a	1	20509.33	98218.57	0	98218.57	574796.5	0	574796.5	FCEV	0	20509.33	2	7
2048	2a	1	15898.71	76138.42	38069.21	38069.21	435533.6	217766.8	217766.8	PHEV	7949.353	7949.353	2	8
2048	2a	1	80011.9	387758.5	0	387758.5	2325146	0	2325146	BEV	0	80011.9	2	3
2048	2a	1	22567.46	109367.8	0	109367.8	656166.2	0	656166.2	FCEV	0	22567.46	2	7
2048	2a	1	15327.95	74283.23	37141.62	37141.62	435415.9	217707.9	217707.9	PHEV	7663.975	7663.975	2	8
2048	2a	1	82855.75	406287.3	0	406287.3	2497740	0	2497740	BEV	0	82855.75	2	3
2048	2a	1	24749.12	121358.6	0	121358.6	746449.7	0	746449.7	FCEV	0	24749.12	2	7
2048	2a	1	14673.39	71951.71	35975.86	35975.86	432416.8	216208.4	216208.4	PHEV	7336.696	7336.696	2	8
2048	2a	1	84552.4	419450.9	0	419450.9	2643961	0	2643961	BEV	0	84552.4	2	3
2048	2a	1	26700.76	132458.2	0	132458.2	835308.1	0	835308.1	FCEV	0	26700.76	2	7
2048	2a	1	13750.39	68213.49	34106.74	34106.74	420595.1	210297.6	210297.6	PHEV	6875.195	6875.195	2	8
2048	2a	1	85517.6	429138.5	0	429138.5	2773581	0	2773581	BEV	0	85517.6	2	3
2048	2a	1	28505.87	143046.2	0	143046.2	924889.7	0	924889.7	FCEV	0	28505.87	2	7
2048	2a	1	12669.27	63576.07	31788.03	31788.03	402385.7	201192.9	201192.9	PHEV	6334.637	6334.637	2	8
2048	2a	1	86678.15	439928	0	439928	2915632	0	2915632	BEV	0	86678.15	2	3
2048	2a	1	28892.72	146642.7	0	146642.7	972251.1	0	972251.1	FCEV	0	28892.72	2	7
2048	2a	1	12841.21	65174.52	32587.26	32587.26	423218.3	211609.1	211609.1	PHEV	6420.603	6420.603	2	8
2048	2a	1	87912.57	451229.7	0	451229.7	3065217	0	3065217	BEV	0	87912.57	2	3
2048	2a	1	29304.19	150409.9	0	150409.9	1022122	0	1022122	FCEV	0	29304.19	2	7
2048	2a	1	13024.08	66848.85	33424.42	33424.42	445220.7	222610.3	222610.3	PHEV	6512.042	6512.042	2	8
2048	2a	1	80259.16	416545.1	0	416545.1	2898586	0	2898586	BEV	0	80259.16	2	3
2048	2a	1	26753.05	138848.4	0	138848.4	966547.9	0	966547.9	FCEV	0	26753.05	2	7
2048	2a	1	11890.25	61710.38	30855.19	30855.19	421273.3	210636.6	210636.6	PHEV	5945.123	5945.123	2	8
2048	2a	1	10209.2	27250.8	27250.8	0	90247.45	90247.45	0	ICE	10209.2	0	3	1
2048	2a	1	10825.06	29514.85	29514.85	0	97530.44	97530.44	0	ICE	10825.06	0	3	1
2048	2a	1	9692.061	26980.95	26980.95	0	89296.27	89296.27	0	ICE	9692.061	0	3	1
2048	2a	1	9681.121	27505.13	27505.13	0	91529.16	91529.16	0	ICE	9681.121	0	3	1
2048	2a	1	7255.491	21029.32	21029.32	0	70740.51	70740.51	0	ICE	7255.491	0	3	1
2048	2a	1	4389.702	12974.6	12974.6	0	43939.14	43939.14	0	ICE	4389.702	0	3	1
2048	2a	1	7408.342	22321.19	22321.19	0	76518.47	76518.47	0	ICE	7408.342	0	3	1
2048	2a	1	10226.93	31399.44	31399.44	0	108209.6	108209.6	0	ICE	10226.93	0	3	1
2048	2a	1	10152.67	31753.09	31753.09	0	111064.5	111064.5	0	ICE	10152.67	0	3	1
2048	2a	1	14635.03	46610.39	46610.39	0	163889.8	163889.8	0	ICE	14635.03	0	3	1
2048	2a	1	14181.97	45979.93	45979.93	0	164707.6	164707.6	0	ICE	14181.97	0	3	1
2048	2a	1	150.9485	489.3963	489.3963	0	1709.939	1709.939	0	ICE	150.9485	0	3	2
2048	2a	1	17623.26	58146.72	58146.72	0	212157.5	212157.5	0	ICE	17623.26	0	3	1
2048	2a	1	18260.96	61296.93	61296.93	0	225323.1	225323.1	0	ICE	18260.96	0	3	1
2048	2a	1	137.9884	463.1886	463.1886	0	1669.802	1669.802	0	ICE	137.9884	0	3	2
2048	2a	1	21325.11	72804.13	72804.13	0	273071	273071	0	ICE	21325.11	0	3	1
2048	2a	1	217.9664	744.1395	744.1395	0	2804.159	2804.159	0	ICE	217.9664	0	3	2

2048	2a	1	24279.05	84279.87	84279.87	0	320029.8	320029.8	0	ICE	24279.05	0	3	1
2048	2a	1	248.159	861.4343	861.4343	0	3286.027	3286.027	0	ICE	248.159	0	3	2
2048	2a	1	83.76611	290.7773	174.4664	116.3109	1112.066	667.2396	444.8264	PHEV	50.25966	33.50644	3	8
2048	2a	1	27482.79	96975.51	96975.51	0	374055.6	374055.6	0	ICE	27482.79	0	3	1
2048	2a	1	280.1968	988.6995	988.6995	0	3827.74	3827.74	0	ICE	280.1968	0	3	2
2048	2a	1	324.1249	1143.704	0	1143.704	2864.061	0	2864.061	BEV	0	324.1249	3	3
2048	2a	1	7.58187	26.75331	0	26.75331	56.42403	0	56.42403	FCEV	0	7.58187	3	7
2048	2a	1	281.5217	993.3746	590.3483	403.0263	3842.497	2283.541	1558.956	PHEV	167.3043	114.2174	3	8
2048	2a	1	30778.2	110366.9	110366.9	0	429546.6	429546.6	0	ICE	30778.2	0	3	1
2048	2a	1	314.508	1127.788	1127.788	0	4406.284	4406.284	0	ICE	314.508	0	3	2
2048	2a	1	737.6004	2644.946	0	2644.946	8711.196	0	8711.196	BEV	0	737.6004	3	3
2048	2a	1	19.46746	69.80797	0	69.80797	152.258	0	152.258	FCEV	0	19.46746	3	7
2048	2a	1	532.3124	1908.808	1123.47	785.3382	7457.74	4389.413	3068.327	PHEV	313.3038	219.0085	3	8
2048	2a	1	32645.19	118932	118932	0	467402.9	467402.9	0	ICE	32645.19	0	3	1
2048	2a	1	338.6291	1233.683	1233.683	0	4876.697	4876.697	0	ICE	338.6291	0	3	2
2048	2a	1	2229.614	8122.863	0	8122.863	25214.4	0	25214.4	BEV	0	2229.614	3	3
2048	2a	1	76.42885	278.4433	0	278.4433	628.1879	0	628.1879	FCEV	0	76.42885	3	7
2048	2a	1	1515.447	5521.032	3200.621	2320.411	25704.89	14901.49	10803.4	PHEV	878.5264	636.9208	3	8
2048	2a	1	34487.18	127618.4	127618.4	0	507785.4	507785.4	0	ICE	34487.18	0	3	1
2048	2a	1	359.4194	1330.017	1330.017	0	5326.87	5326.87	0	ICE	359.4194	0	3	2
2048	2a	1	4178.949	15464.03	0	15464.03	48615.75	0	48615.75	BEV	0	4178.949	3	3
2048	2a	1	176.7155	653.9287	0	653.9287	1525.57	0	1525.57	FCEV	0	176.7155	3	7
2048	2a	1	2672.717	9890.281	5645.938	4244.344	48944.75	27940.46	21004.29	PHEV	1525.739	1146.977	3	8
2048	2a	1	36065.2	135524	135524	0	546745.8	546745.8	0	ICE	36065.2	0	3	1
2048	2a	1	377.8963	1420.04	1420.04	0	5770.042	5770.042	0	ICE	377.8963	0	3	2
2048	2a	1	6660.196	25027.35	0	25027.35	81109.9	0	81109.9	BEV	0	6660.196	3	3
2048	2a	1	335.8082	1261.883	0	1261.883	3073.4	0	3073.4	FCEV	0	335.8082	3	7
2048	2a	1	4003.839	15045.42	8455.528	6589.896	76807.59	43165.87	33641.73	PHEV	2250.157	1753.681	3	8
2048	2a	1	37677.67	143741.8	143741.8	0	588507.3	588507.3	0	ICE	37677.67	0	3	1
2048	2a	1	396.7739	1513.708	1513.708	0	6245.39	6245.39	0	ICE	396.7739	0	3	2
2048	2a	1	9857.166	37605.48	0	37605.48	125675.7	0	125675.7	BEV	0	9857.166	3	3
2048	2a	1	578.4302	2206.734	0	2206.734	6016.314	0	6016.314	FCEV	0	578.4302	3	7
2048	2a	1	5562.71	21221.96	11738.78	9483.184	110789.4	61282.34	49507.02	PHEV	3076.973	2485.737	3	8
2048	2a	1	39441.64	152731.1	152731.1	0	633184	633184	0	ICE	39441.64	0	3	1
2048	2a	1	417.2781	1615.839	1615.839	0	6753.949	6753.949	0	ICE	417.2781	0	3	2
2048	2a	1	14040.32	54368.75	0	54368.75	187210.4	0	187210.4	BEV	0	14040.32	3	3
2048	2a	1	941.7287	3646.684	0	3646.684	10754.95	0	10754.95	FCEV	0	941.7287	3	7
2048	2a	1	7426.771	28758.91	15653.06	13105.84	152431.2	82966.14	69465.09	PHEV	4042.285	3384.486	3	8
2048	2a	1	41148.93	161699.6	161699.6	0	680161	680161	0	ICE	41148.93	0	3	1
2048	2a	1	435.3406	1710.723	1710.723	0	7253.244	7253.244	0	ICE	435.3406	0	3	2
2048	2a	1	19481.88	76556.38	0	76556.38	271965.4	0	271965.4	BEV	0	19481.88	3	3
2048	2a	1	1472.816	5787.606	0	5787.606	18449.16	0	18449.16	FCEV	0	1472.816	3	7
2048	2a	1	9642.239	37890.34	20287.57	17602.77	204517.3	109504.4	95012.88	PHEV	5162.73	4479.509	3	8
2048	2a	1	42785.5	170582	170582	0	728904.1	728904.1	0	ICE	42785.5	0	3	1
2048	2a	1	452.655	1804.695	1804.695	0	7771.27	7771.27	0	ICE	452.655	0	3	2
2048	2a	1	26639.28	106208.4	0	106208.4	389189.3	0	389189.3	BEV	0	26639.28	3	3
2048	2a	1	2244.698	8949.409	0	8949.409	30289.47	0	30289.47	FCEV	0	2244.698	3	7

2048	2a	1	12311.35	49084.26	25846.37	23237.89	269681.8	142006.7	127675.1	PHEV	6482.807	5828.546	3	8
2048	2a	1	44654.02	180589.8	180589.8	0	784740.8	784740.8	0	ICE	44654.02	0	3	1
2048	2a	1	472.4231	1910.574	1910.574	0	8364.825	8364.825	0	ICE	472.4231	0	3	2
2048	2a	1	36481.8	147539.7	0	147539.7	557549	0	557549	BEV	0	36481.8	3	3
2048	2a	1	3395.246	13731.05	0	13731.05	48853.08	0	48853.08	FCEV	0	3395.246	3	7
2048	2a	1	15706.04	63518.38	32884.37	30634.01	355268.7	183927.7	171341	PHEV	8131.243	7574.801	3	8
2048	2a	1	45967.38	188534.7	188534.7	0	834174.9	834174.9	0	ICE	45967.38	0	3	1
2048	2a	1	486.318	1994.629	1994.629	0	8890.062	8890.062	0	ICE	486.318	0	3	2
2048	2a	1	49599.36	203431.3	0	203431.3	792860.5	0	792860.5	BEV	0	49599.36	3	3
2048	2a	1	5059.885	20753.07	0	20753.07	77171.26	0	77171.26	FCEV	0	5059.885	3	7
2048	2a	1	19837.25	81362.3	41401.79	39960.51	463584	235898	227686	PHEV	10094.33	9742.925	3	8
2048	2a	1	45217.25	188048.6	188048.6	0	847790.7	847790.7	0	ICE	45217.25	0	3	1
2048	2a	1	478.382	1989.485	1989.485	0	9033.554	9033.554	0	ICE	478.382	0	3	2
2048	2a	1	65526.37	272509.8	0	272509.8	1095198	0	1095198	BEV	0	65526.37	3	3
2048	2a	1	7280.708	30278.86	0	30278.86	117225.5	0	117225.5	FCEV	0	7280.708	3	7
2048	2a	1	24269.03	100929.5	50464.77	50464.77	585949	292974.5	292974.5	PHEV	12134.51	12134.51	3	8
2048	2a	1	41646.17	175583.2	175583.2	0	807248.5	807248.5	0	ICE	41646.17	0	3	1
2048	2a	1	440.6012	1857.606	1857.606	0	8600.159	8600.159	0	ICE	440.6012	0	3	2
2048	2a	1	82712.54	348721.8	0	348721.8	1440661	0	1440661	BEV	0	82712.54	3	3
2048	2a	1	10222.9	43100.45	0	43100.45	172922.8	0	172922.8	FCEV	0	10222.9	3	7
2048	2a	1	29348.03	123733.4	61866.68	61866.68	731436.8	365718.4	365718.4	PHEV	14674.02	14674.02	3	8
2048	2a	1	35518.4	151782.9	151782.9	0	712171.5	712171.5	0	ICE	35518.4	0	3	1
2048	2a	1	375.7716	1605.807	1605.807	0	7586.112	7586.112	0	ICE	375.7716	0	3	2
2048	2a	1	102330.6	437295.3	0	437295.3	1857400	0	1857400	BEV	0	102330.6	3	3
2048	2a	1	13954.17	59631.18	0	59631.18	247440.7	0	247440.7	FCEV	0	13954.17	3	7
2048	2a	1	34734.4	148432.6	74216.3	74216.3	894149.7	447074.8	447074.8	PHEV	17367.2	17367.2	3	8
2048	2a	1	26779.88	115974.3	115974.3	0	555731.4	555731.4	0	ICE	26779.88	0	3	1
2048	2a	1	283.3213	1226.965	1226.965	0	5918.911	5918.911	0	ICE	283.3213	0	3	2
2048	2a	1	125084.9	541698.9	0	541698.9	2365887	0	2365887	BEV	0	125084.9	3	3
2048	2a	1	18690.85	80943.52	0	80943.52	346914	0	346914	FCEV	0	18690.85	3	7
2048	2a	1	40552.14	175617.1	87808.55	87808.55	1079009	539504.7	539504.7	PHEV	20276.07	20276.07	3	8
2048	2a	1	14857.58	65194.17	65194.17	0	319312.6	319312.6	0	ICE	14857.58	0	3	1
2048	2a	1	157.1878	689.7304	689.7304	0	3400.496	3400.496	0	ICE	157.1878	0	3	2
2048	2a	1	149159.9	654504.5	0	654504.5	2940253	0	2940253	BEV	0	149159.9	3	3
2048	2a	1	24281.84	106547.2	0	106547.2	471304	0	471304	FCEV	0	24281.84	3	7
2048	2a	1	46104.75	202304.9	101152.4	101152.4	1269227	634613.5	634613.5	PHEV	23052.38	23052.38	3	8
2048	2a	1	175834.8	781626.2	0	781626.2	3612374	0	3612374	BEV	0	175834.8	3	3
2048	2a	1	31029.68	137934	0	137934	629372.4	0	629372.4	FCEV	0	31029.68	3	7
2048	2a	1	51716.13	229890.1	114945	114945	1474248	737123.8	737123.8	PHEV	25858.06	25858.06	3	8
2048	2a	1	189871.2	854898.8	0	854898.8	4066561	0	4066561	BEV	0	189871.2	3	3
2048	2a	1	36165.94	162837.9	0	162837.9	765801.3	0	765801.3	FCEV	0	36165.94	3	7
2048	2a	1	53021.05	238728.4	119364.2	119364.2	1562967	781483.7	781483.7	PHEV	26510.53	26510.53	3	8
2048	2a	1	205257.3	935934.4	0	935934.4	4582745	0	4582745	BEV	0	205257.3	3	3
2048	2a	1	42040.66	191697.4	0	191697.4	929112.5	0	929112.5	FCEV	0	42040.66	3	7
2048	2a	1	54284.92	247528.9	123764.5	123764.5	1655782	827890.8	827890.8	PHEV	27142.46	27142.46	3	8
2048	2a	1	217734.6	1005302	0	1005302	5067749	0	5067749	BEV	0	217734.6	3	3
2048	2a	1	47795.4	220676.1	0	220676.1	1102308	0	1102308	FCEV	0	47795.4	3	7

2048	2a	1	54385.66	251104	125552	125552	1717344	858671.8	858671.8	PHEV	27192.83	27192.83	3	8
2048	2a	1	230198.6	1076038	0	1076038	5584288	0	5584288	BEV	0	230198.6	3	3
2048	2a	1	53997.2	252404	0	252404	1299182	0	1299182	FCEV	0	53997.2	3	7
2048	2a	1	54132.53	253036.6	126518.3	126518.3	1769766	884883.1	884883.1	PHEV	27066.27	27066.27	3	8
2048	2a	1	238969.8	1130729	0	1130729	6042680	0	6042680	BEV	0	238969.8	3	3
2048	2a	1	59742.46	282682.2	0	282682.2	1499552	0	1499552	FCEV	0	59742.46	3	7
2048	2a	1	52713.94	249425.5	124712.7	124712.7	1785138	892569	892569	PHEV	26356.97	26356.97	3	8
2048	2a	1	246829.5	1182059	0	1182059	6504706	0	6504706	BEV	0	246829.5	3	3
2048	2a	1	65612.9	314218.2	0	314218.2	1717646	0	1717646	FCEV	0	65612.9	3	7
2048	2a	1	50862.71	243580	121790	121790	1783795	891897.7	891897.7	PHEV	25431.36	25431.36	3	8
2048	2a	1	252565.2	1223997	0	1223997	6936623	0	6936623	BEV	0	252565.2	3	3
2048	2a	1	71236.33	345229.8	0	345229.8	1944830	0	1944830	FCEV	0	71236.33	3	7
2048	2a	1	48384.13	234482.1	117241	117241	1756901	878450.6	878450.6	PHEV	24192.07	24192.07	3	8
2048	2a	1	259064.4	1270335	0	1270335	7413681	0	7413681	BEV	0	259064.4	3	3
2048	2a	1	77382.88	379450.8	0	379450.8	2202639	0	2202639	FCEV	0	77382.88	3	7
2048	2a	1	45879.18	224970.8	112485.4	112485.4	1723511	861755.4	861755.4	PHEV	22939.59	22939.59	3	8
2048	2a	1	264065.8	1309988	0	1309988	7872869	0	7872869	BEV	0	264065.8	3	3
2048	2a	1	83389.19	413680.4	0	413680.4	2474277	0	2474277	FCEV	0	83389.19	3	7
2048	2a	1	42943.87	213037.7	106518.8	106518.8	1667400	833699.9	833699.9	PHEV	21471.94	21471.94	3	8
2048	2a	1	267799.1	1343851	0	1343851	8315430	0	8315430	BEV	0	267799.1	3	3
2048	2a	1	89266.38	447950.3	0	447950.3	2760000	0	2760000	FCEV	0	89266.38	3	7
2048	2a	1	39673.95	199089	99544.51	99544.51	1589388	794694.2	794694.2	PHEV	19836.97	19836.97	3	8
2048	2a	1	274788.7	1394668	0	1394668	8848661	0	8848661	BEV	0	274788.7	3	3
2048	2a	1	91596.24	464889.4	0	464889.4	2936968	0	2936968	FCEV	0	91596.24	3	7
2048	2a	1	40709.44	206617.5	103308.8	103308.8	1692202	846100.9	846100.9	PHEV	20354.72	20354.72	3	8
2048	2a	1	282093.5	1447904	0	1447904	9416022	0	9416022	BEV	0	282093.5	3	3
2048	2a	1	94031.16	482634.7	0	482634.7	3125257	0	3125257	FCEV	0	94031.16	3	7
2048	2a	1	41791.63	214504.3	107252.1	107252.1	1801872	900935.8	900935.8	PHEV	20895.81	20895.81	3	8
2048	2a	1	255437	1325718	0	1325718	8828367	0	8828367	BEV	0	255437	3	3
2048	2a	1	85145.67	441906	0	441906	2930196	0	2930196	FCEV	0	85145.67	3	7
2048	2a	1	37842.52	196402.7	98201.34	98201.34	1690076	845038.1	845038.1	PHEV	18921.26	18921.26	3	8
2048	2a	1	16779.88	44789.53	44789.53	0	136731.9	136731.9	0	ICE	16779.88	0	4	1
2048	2a	1	28.83804	76.97565	76.97565	0	189.7515	189.7515	0	ICE	28.83804	0	4	2
2048	2a	1	14694.48	40064.94	40064.94	0	120815.1	120815.1	0	ICE	14694.48	0	4	1
2048	2a	1	13276.72	36959.99	36959.99	0	112398.6	112398.6	0	ICE	13276.72	0	4	1
2048	2a	1	12289.85	34916.81	34916.81	0	107149.1	107149.1	0	ICE	12289.85	0	4	1
2048	2a	1	8542.248	24758.85	24758.85	0	76470.53	76470.53	0	ICE	8542.248	0	4	1
2048	2a	1	3361.254	9934.824	9934.824	0	30823.72	30823.72	0	ICE	3361.254	0	4	1
2048	2a	1	4708.399	14186.31	14186.31	0	44253.8	44253.8	0	ICE	4708.399	0	4	1
2048	2a	1	6499.691	19955.81	19955.81	0	63148.93	63148.93	0	ICE	6499.691	0	4	1
2048	2a	1	191.4392	587.7699	587.7699	0	1759.443	1759.443	0	ICE	191.4392	0	4	2
2048	2a	1	6489.932	20297.65	20297.65	0	65088.03	65088.03	0	ICE	6489.932	0	4	1
2048	2a	1	7274.658	23168.69	23168.69	0	75122.72	75122.72	0	ICE	7274.658	0	4	1
2048	2a	1	158.1834	503.7904	503.7904	0	1596.305	1596.305	0	ICE	158.1834	0	4	2
2048	2a	1	11477.7	37212.3	37212.3	0	123401.5	123401.5	0	ICE	11477.7	0	4	1
2048	2a	1	375.6641	1217.956	1217.956	0	3843.16	3843.16	0	ICE	375.6641	0	4	2
2048	2a	1	13008.23	42919.74	42919.74	0	146246.1	146246.1	0	ICE	13008.23	0	4	1

2048	2a	1	14929.83	50115.27	50115.27	0	175059.6	175059.6	0	ICE	14929.83	0	4	1
2048	2a	1	14369.92	49059.05	49059.05	0	175656.4	175656.4	0	ICE	14369.92	0	4	1
2048	2a	1	501.0815	1710.697	1710.697	0	6131.334	6131.334	0	ICE	501.0815	0	4	2
2048	2a	1	120.2228	410.442	246.2652	164.1768	1363.327	817.9963	545.3308	PHEV	72.13371	48.08914	4	8
2048	2a	1	16508	57304.22	57304.22	0	208444.8	208444.8	0	ICE	16508	0	4	1
2048	2a	1	575.6367	1998.208	1998.208	0	7275.67	7275.67	0	ICE	575.6367	0	4	2
2048	2a	1	0.288774	1.002421	0	1.002421	2.039858	0	2.039858	BEV	0	0.288774	4	3
2048	2a	1	0.005893	0.020458	0	0.020458	0.04163	0	0.04163	FCEV	0	0.005893	4	7
2048	2a	1	353.3799	1226.688	736.0126	490.675	4338.815	2603.289	1735.526	PHEV	212.0279	141.352	4	8
2048	2a	1	18909.08	66722.4	66722.4	0	246501.1	246501.1	0	ICE	18909.08	0	4	1
2048	2a	1	665.5874	2348.585	2348.585	0	8696.11	8696.11	0	ICE	665.5874	0	4	2
2048	2a	1	162.0974	571.9753	0	571.9753	1279.24	0	1279.24	BEV	0	162.0974	4	3
2048	2a	1	3.791752	13.37954	0	13.37954	28.14911	0	28.14911	FCEV	0	3.791752	4	7
2048	2a	1	421.7441	1488.162	884.3933	603.7685	5841.834	3471.718	2370.115	PHEV	250.6365	171.1076	4	8
2048	2a	1	21679.47	77739.98	77739.98	0	290591.4	290591.4	0	ICE	21679.47	0	4	1
2048	2a	1	775.0713	2779.313	2779.313	0	10433.89	10433.89	0	ICE	775.0713	0	4	2
2048	2a	1	373.8355	1340.529	0	1340.529	3549.746	0	3549.746	BEV	0	373.8355	4	3
2048	2a	1	9.866627	35.38054	0	35.38054	76.97779	0	76.97779	FCEV	0	9.866627	4	7
2048	2a	1	503.4614	1805.352	1062.579	742.7735	7012.324	4127.254	2885.07	PHEV	296.323	207.1384	4	8
2048	2a	1	23376.49	85164.51	85164.51	0	322841	322841	0	ICE	23376.49	0	4	1
2048	2a	1	850.5081	3098.546	3098.546	0	11822.99	11822.99	0	ICE	850.5081	0	4	2
2048	2a	1	1237.106	4506.988	0	4506.988	12102.03	0	12102.03	BEV	0	1237.106	4	3
2048	2a	1	42.40671	154.4949	0	154.4949	347.6204	0	347.6204	FCEV	0	42.40671	4	7
2048	2a	1	1476.55	5379.321	3118.469	2260.852	23194.96	13446.45	9748.511	PHEV	855.9769	620.5727	4	8
2048	2a	1	25044.65	92676.72	92676.72	0	356533	356533	0	ICE	25044.65	0	4	1
2048	2a	1	916.1991	3390.358	3390.358	0	13139.4	13139.4	0	ICE	916.1991	0	4	2
2048	2a	1	2463.855	9117.395	0	9117.395	25667.8	0	25667.8	BEV	0	2463.855	4	3
2048	2a	1	104.1892	385.548	0	385.548	897.2484	0	897.2484	FCEV	0	104.1892	4	7
2048	2a	1	2609.427	9656.081	5512.243	4143.838	43731.11	24964.21	18766.89	PHEV	1489.61	1119.817	4	8
2048	2a	1	27237.54	102351.9	102351.9	0	399048.9	399048.9	0	ICE	27237.54	0	4	1
2048	2a	1	1002.693	3767.87	3767.87	0	14808.48	14808.48	0	ICE	1002.693	0	4	2
2048	2a	1	4247.843	15962.33	0	15962.33	47116.8	0	47116.8	BEV	0	4247.843	4	3
2048	2a	1	214.1769	804.8234	0	804.8234	1936.759	0	1936.759	FCEV	0	214.1769	4	7
2048	2a	1	3992.729	15003.68	8432.067	6571.611	70193.96	39449.01	30744.96	PHEV	2243.914	1748.815	4	8
2048	2a	1	29321.49	111862.6	111862.6	0	442452.8	442452.8	0	ICE	29321.49	0	4	1
2048	2a	1	1085.716	4142.048	4142.048	0	16524.93	16524.93	0	ICE	1085.716	0	4	2
2048	2a	1	6709.391	25596.59	0	25596.59	79087.52	0	79087.52	BEV	0	6709.391	4	3
2048	2a	1	393.715	1502.038	0	1502.038	3742.04	0	3742.04	FCEV	0	393.715	4	7
2048	2a	1	5592.287	21334.8	11801.19	9533.607	102660.8	56786.07	45874.7	PHEV	3093.334	2498.953	4	8
2048	2a	1	31221.27	120899.1	120899.1	0	484624.2	484624.2	0	ICE	31221.27	0	4	1
2048	2a	1	1162.302	4500.817	4500.817	0	18207.21	18207.21	0	ICE	1162.302	0	4	2
2048	2a	1	10035.06	38859.08	0	38859.08	125229	0	125229	BEV	0	10035.06	4	3
2048	2a	1	673.0836	2606.402	0	2606.402	7125.141	0	7125.141	FCEV	0	673.0836	4	7
2048	2a	1	7402.817	28666.15	15602.58	13063.57	140987.2	76737.34	64249.89	PHEV	4029.247	3373.569	4	8
2048	2a	1	32713.4	128551.2	128551.2	0	523143.8	523143.8	0	ICE	32713.4	0	4	1
2048	2a	1	1217.851	4785.692	4785.692	0	19648.64	19648.64	0	ICE	1217.851	0	4	2
2048	2a	1	14396.45	56572.59	0	56572.59	190192	0	190192	BEV	0	14396.45	4	3

2048	2a	1	1088.361	4276.846	0	4276.846	12808.66	0	12808.66	FCEV	0	1088.361	4	7
2048	2a	1	9370.356	36821.94	19715.52	17106.42	185462.2	99301.74	86160.42	PHEV	5017.156	4353.2	4	8
2048	2a	1	33567.33	133829.9	133829.9	0	553599.8	553599.8	0	ICE	33567.33	0	4	1
2048	2a	1	1249.641	4982.206	4982.206	0	20786.9	20786.9	0	ICE	1249.641	0	4	2
2048	2a	1	19954.26	79555.84	0	79555.84	278599.5	0	278599.5	BEV	0	19954.26	4	3
2048	2a	1	1681.4	6703.59	0	6703.59	21563.07	0	21563.07	FCEV	0	1681.4	4	7
2048	2a	1	11408.43	45484.38	23950.77	21533.6	234428.6	123443.4	110985.2	PHEV	6007.352	5401.076	4	8
2048	2a	1	33595.41	135866.6	135866.6	0	572111.6	572111.6	0	ICE	33595.41	0	4	1
2048	2a	1	1250.686	5058.026	5058.026	0	21476.78	21476.78	0	ICE	1250.686	0	4	2
2048	2a	1	26864.4	108645	0	108645	395931.3	0	395931.3	BEV	0	26864.4	4	3
2048	2a	1	2500.184	10111.25	0	10111.25	34541.98	0	34541.98	FCEV	0	2500.184	4	7
2048	2a	1	13409.7	54231.51	28076.43	26155.08	286064.4	148099.6	137964.8	PHEV	6942.393	6467.306	4	8
2048	2a	1	32714.74	134179.2	134179.2	0	575887.6	575887.6	0	ICE	32714.74	0	4	1
2048	2a	1	1217.901	4995.209	4995.209	0	21613.76	21613.76	0	ICE	1217.901	0	4	2
2048	2a	1	35358.43	145022.2	0	145022.2	549648.7	0	549648.7	BEV	0	35358.43	4	3
2048	2a	1	3607.094	14794.46	0	14794.46	53314.4	0	53314.4	FCEV	0	3607.094	4	7
2048	2a	1	15285.08	62691.62	31901.08	30790.54	338468.9	172232.3	166236.6	PHEV	7777.925	7507.16	4	8
2048	2a	1	30650.92	127470.4	127470.4	0	558366.3	558366.3	0	ICE	30650.92	0	4	1
2048	2a	1	1141.069	4745.456	4745.456	0	20952.13	20952.13	0	ICE	1141.069	0	4	2
2048	2a	1	45462.75	189069.6	0	189069.6	744985.9	0	744985.9	BEV	0	45462.75	4	3
2048	2a	1	5051.417	21007.73	0	21007.73	79512.88	0	79512.88	FCEV	0	5051.417	4	7
2048	2a	1	16838.06	70025.77	35012.89	35012.89	387087.7	193543.9	193543.9	PHEV	8419.028	8419.028	4	8
2048	2a	1	27797.85	117197.7	117197.7	0	524518	524518	0	ICE	27797.85	0	4	1
2048	2a	1	1034.855	4363.023	4363.023	0	19678.69	19678.69	0	ICE	1034.855	0	4	2
2048	2a	1	56521.2	238297.3	0	238297.3	966268.2	0	966268.2	BEV	0	56521.2	4	3
2048	2a	1	6985.766	29452.48	0	29452.48	115719	0	115719	FCEV	0	6985.766	4	7
2048	2a	1	20054.83	84552.57	42276.28	42276.28	477122.9	238561.4	238561.4	PHEV	10027.42	10027.42	4	8
2048	2a	1	23252.42	99365.94	99365.94	0	454669.1	454669.1	0	ICE	23252.42	0	4	1
2048	2a	1	865.6384	3699.184	3699.184	0	17055.56	17055.56	0	ICE	865.6384	0	4	2
2048	2a	1	68597.96	293143.8	0	293143.8	1223343	0	1223343	BEV	0	68597.96	4	3
2048	2a	1	9354.267	39974.15	0	39974.15	162672.1	0	162672.1	FCEV	0	9354.267	4	7
2048	2a	1	23284.43	99502.75	49751.38	49751.38	573604.5	286802.3	286802.3	PHEV	11642.22	11642.22	4	8
2048	2a	1	17068.82	73919.08	73919.08	0	346082.7	346082.7	0	ICE	17068.82	0	4	1
2048	2a	1	635.4362	2751.852	2751.852	0	12980.59	12980.59	0	ICE	635.4362	0	4	2
2048	2a	1	81651.72	353605	0	353605	1519092	0	1519092	BEV	0	81651.72	4	3
2048	2a	1	12200.83	52837.53	0	52837.53	222405.3	0	222405.3	FCEV	0	12200.83	4	7
2048	2a	1	26471.23	114637.6	57318.82	57318.82	675841.3	337920.6	337920.6	PHEV	13235.62	13235.62	4	8
2048	2a	1	9289.954	40763.76	40763.76	0	195410	195410	0	ICE	9289.954	0	4	1
2048	2a	1	345.8454	1517.549	1517.549	0	7328.473	7328.473	0	ICE	345.8454	0	4	2
2048	2a	1	95531.63	419187	0	419187	1854171	0	1854171	BEV	0	95531.63	4	3
2048	2a	1	15551.66	68239.75	0	68239.75	296826.5	0	296826.5	FCEV	0	15551.66	4	7
2048	2a	1	29528.47	129569.1	64784.57	64784.57	781936.5	390968.2	390968.2	PHEV	14764.23	14764.23	4	8
2048	2a	1	110898.4	492968.7	0	492968.7	2245234	0	2245234	BEV	0	110898.4	4	3
2048	2a	1	19570.3	86994.47	0	86994.47	390748.3	0	390748.3	FCEV	0	19570.3	4	7
2048	2a	1	32617.16	144990.8	72495.39	72495.39	896301.8	448150.9	448150.9	PHEV	16308.58	16308.58	4	8
2048	2a	1	118880.2	535260.4	0	535260.4	2511047	0	2511047	BEV	0	118880.2	4	3
2048	2a	1	22643.84	101954.4	0	101954.4	472392.7	0	472392.7	FCEV	0	22643.84	4	7

2048	2a	1	33196.99	149470.1	74735.06	74735.06	944858.6	472429.3	472429.3	PHEV	16598.5	16598.5	4	8
2048	2a	1	127703.6	582304.3	0	582304.3	2813923	0	2813923	BEV	0	127703.6	4	3
2048	2a	1	26156.17	119267.2	0	119267.2	569966	0	569966	FCEV	0	26156.17	4	7
2048	2a	1	33774.1	154003.5	77001.75	77001.75	996149.7	498074.9	498074.9	PHEV	16887.05	16887.05	4	8
2048	2a	1	135469.5	625476.3	0	625476.3	3113913	0	3113913	BEV	0	135469.5	4	3
2048	2a	1	29737.21	137299.7	0	137299.7	676737.3	0	676737.3	FCEV	0	29737.21	4	7
2048	2a	1	33837.52	156231.2	78115.61	78115.61	1034619	517309.6	517309.6	PHEV	16918.76	16918.76	4	8
2048	2a	1	144200.8	674051	0	674051	3456713	0	3456713	BEV	0	144200.8	4	3
2048	2a	1	33824.89	158110.7	0	158110.7	803565.9	0	803565.9	FCEV	0	33824.89	4	7
2048	2a	1	33909.66	158507	79253.5	79253.5	1074611	537305.5	537305.5	PHEV	16954.83	16954.83	4	8
2048	2a	1	149954.3	709535.8	0	709535.8	3749026	0	3749026	BEV	0	149954.3	4	3
2048	2a	1	37488.58	177383.9	0	177383.9	929680.1	0	929680.1	FCEV	0	37488.58	4	7
2048	2a	1	33078.16	156515.2	78257.62	78257.62	1086854	543427	543427	PHEV	16539.08	16539.08	4	8
2048	2a	1	156701.7	750439.6	0	750439.6	4084703	0	4084703	BEV	0	156701.7	4	3
2048	2a	1	41654.88	199484	0	199484	1077895	0	1077895	FCEV	0	41654.88	4	7
2048	2a	1	32290.6	154638.7	77319.36	77319.36	1099361	549680.6	549680.6	PHEV	16145.3	16145.3	4	8
2048	2a	1	162125.1	785700.5	0	785700.5	4405429	0	4405429	BEV	0	162125.1	4	3
2048	2a	1	45727.6	221607.8	0	221607.8	1234404	0	1234404	FCEV	0	45727.6	4	7
2048	2a	1	31058.45	150517.3	75258.67	75258.67	1094985	547492.4	547492.4	PHEV	15529.23	15529.23	4	8
2048	2a	1	168279.1	825164.8	0	825164.8	4764955	0	4764955	BEV	0	168279.1	4	3
2048	2a	1	50265.18	246477.8	0	246477.8	1414909	0	1414909	FCEV	0	50265.18	4	7
2048	2a	1	29801.49	146133.1	73066.54	73066.54	1086688	543344.1	543344.1	PHEV	14900.74	14900.74	4	8
2048	2a	1	171434.1	850457.1	0	850457.1	5057650	0	5057650	BEV	0	171434.1	4	3
2048	2a	1	54137.08	268565.4	0	268565.4	1588723	0	1588723	FCEV	0	54137.08	4	7
2048	2a	1	27879.58	138306.1	69153.07	69153.07	1050146	525072.9	525072.9	PHEV	13939.79	13939.79	4	8
2048	2a	1	174738.5	876860.4	0	876860.4	5368969	0	5368969	BEV	0	174738.5	4	3
2048	2a	1	58246.16	292286.8	0	292286.8	1781242	0	1781242	FCEV	0	58246.16	4	7
2048	2a	1	25887.18	129905.2	64952.62	64952.62	1005055	502527.3	502527.3	PHEV	12943.59	12943.59	4	8
2048	2a	1	179419.2	910627.7	0	910627.7	5714889	0	5714889	BEV	0	179419.2	4	3
2048	2a	1	59806.39	303542.6	0	303542.6	1896005	0	1896005	FCEV	0	59806.39	4	7
2048	2a	1	26580.62	134907.8	67453.9	67453.9	1070084	535042.2	535042.2	PHEV	13290.31	13290.31	4	8
2048	2a	1	182712.3	937809.4	0	937809.4	6030688	0	6030688	BEV	0	182712.3	4	3
2048	2a	1	60904.11	312603.1	0	312603.1	2000769	0	2000769	FCEV	0	60904.11	4	7
2048	2a	1	27068.49	138934.7	69467.37	69467.37	1129709	564854.4	564854.4	PHEV	13534.25	13534.25	4	8
2048	2a	1	158377.2	821977.7	0	821977.7	5402141	0	5402141	BEV	0	158377.2	4	3
2048	2a	1	52792.4	273992.6	0	273992.6	1792277	0	1792277	FCEV	0	52792.4	4	7
2048	2a	1	23463.29	121774.5	60887.24	60887.24	1010904	505451.9	505451.9	PHEV	11731.65	11731.65	4	8
2048	2a	1	23.65088	63.12988	63.12988	0	104.5846	104.5846	0	ICE	23.65088	0	1	2
2048	2a	1	42.08624	114.7494	114.7494	0	185.4978	185.4978	0	ICE	42.08624	0	1	2
2048	2a	1	88.08608	260.3551	260.3551	0	472.5228	472.5228	0	ICE	88.08608	0	1	2
2048	2a	1	210.5316	658.4502	658.4502	0	1346.792	1346.792	0	ICE	210.5316	0	1	2
2048	2a	1	303.437	966.4013	966.4013	0	2085.082	2085.082	0	ICE	303.437	0	1	2
2048	2a	1	257.6766	820.6613	0	820.6613	2023.023	0	2023.023	BEV	0	257.6766	1	3
2048	2a	1	0.015139	0.048215	0	0.048215	0.118855	0	0.118855	FCEV	0	0.015139	1	7
2048	2a	1	269.3334	857.7866	514.672	343.1146	1781.208	1068.725	712.4832	PHEV	161.6001	107.7334	1	8
2048	2a	1	320.3798	1038.716	0	1038.716	2640.269	0	2640.269	BEV	0	320.3798	1	3
2048	2a	1	0.04489	0.14554	0	0.14554	0.369941	0	0.369941	FCEV	0	0.04489	1	7

2048	2a	1	404.5037	1311.458	786.8745	524.583	2848.932	1709.359	1139.573	PHEV	242.7022	161.8015	1	8
2048	2a	1	328.3103	1083.237	1083.237	0	2578.958	2578.958	0	ICE	328.3103	0	1	2
2048	2a	1	772.4686	2548.706	0	2548.706	6721.782	0	6721.782	BEV	0	772.4686	1	3
2048	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2048	2a	1	367.3295	1211.978	727.1869	484.7912	2760.861	1656.516	1104.344	PHEV	220.3977	146.9318	1	8
2048	2a	1	1316.635	3514.416	3514.416	0	11813.33	11813.33	0	ICE	1316.635	0	2	1
2048	2a	1	2673.861	8362.662	8362.662	0	30238.85	30238.85	0	ICE	2673.861	0	2	1
2048	2a	1	4130.251	13154.23	13154.23	0	48107.99	48107.99	0	ICE	4130.251	0	2	1
2048	2a	1	5295.165	17167.67	17167.67	0	63023.87	63023.87	0	ICE	5295.165	0	2	1
2048	2a	1	2.496354	7.235432	7.235432	0	22.26383	22.26383	0	ICE	2.496354	0	3	2
2048	2a	1	66.82778	209.0079	209.0079	0	719.1244	719.1244	0	ICE	66.82778	0	3	2
2048	2a	1	52.74562	167.9869	167.9869	0	571.3465	571.3465	0	ICE	52.74562	0	3	2
2048	2a	1	224.4817	740.6618	740.6618	0	2663.369	2663.369	0	ICE	224.4817	0	3	2
2048	2a	1	236.8818	795.1457	0	795.1457	1484.338	0	1484.338	BEV	0	236.8818	3	3
2048	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2048	2a	1	21.55798	72.3641	43.41846	28.94564	263.0529	157.8317	105.2212	PHEV	12.93479	8.623192	3	8
2048	2a	1	43.63895	118.9829	118.9829	0	313.6597	313.6597	0	ICE	43.63895	0	4	2
2048	2a	1	54.56071	151.8872	151.8872	0	403.8425	403.8425	0	ICE	54.56071	0	4	2
2048	2a	1	67.49677	191.7657	191.7657	0	541.1693	541.1693	0	ICE	67.49677	0	4	2
2048	2a	1	45.66813	132.3645	132.3645	0	376.8712	376.8712	0	ICE	45.66813	0	4	2
2048	2a	1	56.01548	165.5644	165.5644	0	487.1274	487.1274	0	ICE	56.01548	0	4	2
2048	2a	1	343.6554	1074.803	1074.803	0	3179.319	3179.319	0	ICE	343.6554	0	4	2
2048	2a	1	773.2983	2551.444	2551.444	0	8197.861	8197.861	0	ICE	773.2983	0	4	2
2048	2a	1	521.6466	1751.022	1751.022	0	5826.98	5826.98	0	ICE	521.6466	0	4	2
2048	2a	1	1.576657	4.298803	0	4.298803	9.085968	0	9.085968	BEV	0	1.576657	1	3
2048	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2048	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2048	2a	1	55.47286	173.4947	0	173.4947	415.9732	0	415.9732	BEV	0	55.47286	1	3
2048	2a	1	0.209639	0.655659	0	0.655659	1.572017	0	1.572017	FCEV	0	0.209639	1	7
2048	2a	1	116.606	364.6922	218.8153	145.8769	716.433	429.8598	286.5732	PHEV	69.96359	46.64239	1	8
2048	2a	1	526.1797	1766.238	0	1766.238	4819.041	0	4819.041	BEV	0	526.1797	1	3
2048	2a	1	16.01994	53.77445	0	53.77445	146.7193	0	146.7193	FCEV	0	16.01994	1	7
2048	2a	1	378.3936	1270.161	762.0968	508.0645	3028.61	1817.166	1211.444	PHEV	227.0362	151.3574	1	8
2048	2a	1	9.890753	26.96743	26.96743	0	83.51589	83.51589	0	ICE	9.890753	0	3	2
2048	2a	1	10.65624	29.66505	29.66505	0	96.41648	96.41648	0	ICE	10.65624	0	3	2
2048	2a	1	92.00689	277.2149	277.2149	0	830.2146	830.2146	0	ICE	92.00689	0	4	2
2048	2a	1	70.79894	217.3719	0	217.3719	509.5588	0	509.5588	BEV	0	70.79894	1	3
2048	2a	1	0.699482	2.147599	0	2.147599	5.034359	0	5.034359	FCEV	0	0.699482	1	7
2048	2a	1	19.68003	60.42299	36.2538	24.1692	113.9349	68.36095	45.57397	PHEV	11.80802	7.87201	1	8
2048	2a	1	46.08578	154.6971	154.6971	0	378.0418	378.0418	0	ICE	46.08578	0	1	2
2048	2a	1	50.58693	164.0099	0	164.0099	416.3787	0	416.3787	BEV	0	50.58693	2	3
2048	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2048	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2048	2a	1	7.755915	22.47975	22.47975	0	37.66967	37.66967	0	ICE	7.755915	0	1	2
2048	2a	1	4.514399	13.60179	13.60179	0	42.6051	42.6051	0	ICE	4.514399	0	3	2
2048	2a	1	12.02657	38.99183	0	38.99183	68.84217	0	68.84217	BEV	0	12.02657	3	3
2048	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7

2048	2a	1	5.445255	17.65428	10.59257	7.061712	60.26116	36.15669	24.10446	PHEV	3.267153	2.178102	3	8
2048	2a	1	9.209812	28.27661	28.27661	0	96.50354	96.50354	0	ICE	9.209812	0	3	2
2048	2a	1	5.544812	15.75342	15.75342	0	23.6094	23.6094	0	ICE	5.544812	0	1	2
2048	2a	1	12.56486	37.85768	0	37.85768	87.12913	0	87.12913	BEV	0	12.56486	1	3
2048	2a	1	1.275621	3.843419	0	3.843419	8.845597	0	8.845597	FCEV	0	1.275621	1	7
2048	2a	1	1.339402	4.03559	2.421354	1.614236	7.23181	4.339086	2.892724	PHEV	0.803641	0.535761	1	8
2048	2a	1	19.79361	61.9057	0	61.9057	147.5475	0	147.5475	BEV	0	19.79361	2	3
2048	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2048	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2048	2a	1	3.786289	11.1911	11.1911	0	36.20753	36.20753	0	ICE	3.786289	0	3	2
2048	2a	1	1.653652	4.603469	0	4.603469	9.90249	0	9.90249	BEV	0	1.653652	1	3
2048	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2048	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2048	2a	1	8.072395	23.39703	0	23.39703	50.44982	0	50.44982	BEV	0	8.072395	1	3
2048	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2048	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2048	2a	1	7.146496	21.12283	0	21.12283	48.21256	0	48.21256	BEV	0	7.146496	1	3
2048	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2048	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2048	2a	1	1.911996	5.651269	5.651269	0	17.01556	17.01556	0	ICE	1.911996	0	2	2
2048	2a	1	25.38361	80.84299	0	80.84299	198.1607	0	198.1607	BEV	0	25.38361	2	3
2048	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2048	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2048	2a	1	1.389094	3.946569	3.946569	0	12.90838	12.90838	0	ICE	1.389094	0	3	2
2048	2a	1	2.830043	8.040463	0	8.040463	17.43125	0	17.43125	BEV	0	2.830043	1	3
2048	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2048	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2048	2a	1	2.806732	8.135033	0	8.135033	17.73601	0	17.73601	BEV	0	2.806732	2	3
2048	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2048	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2048	2a	1	0.489577	1.531181	1.531181	0	4.363915	4.363915	0	ICE	0.489577	0	2	2
2048	2a	1	0.245814	0.684301	0	0.684301	1.164786	0	1.164786	BEV	0	0.245814	4	3
2048	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2048	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2048	2a	1	1.971173	5.826176	0	5.826176	9.490014	0	9.490014	BEV	0	1.971173	3	3
2048	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2048	2a	1	0	0	0	0	0	0	0	PHEV	0	0	3	8
2048	2a	1	1.121177	3.442316	0	3.442316	5.761428	0	5.761428	BEV	0	1.121177	3	3
2048	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2048	2a	1	0.7762	2.383142	1.429885	0.953257	7.515756	4.509453	3.006302	PHEV	0.46572	0.31048	3	8
2048	2a	1	0.150233	0.495685	0	0.495685	0.879441	0	0.879441	BEV	0	0.150233	4	3
2048	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2048	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2048	2a	1	0.717866	1.99841	0	1.99841	4.232131	0	4.232131	BEV	0	0.717866	2	3
2048	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2048	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2048	2a	1	1.152228	3.273605	3.273605	0	9.977578	9.977578	0	ICE	1.152228	0	2	2

2048	2a	1	0.405907	1.153226	0	1.153226	2.483002	0	2.483002	BEV	0	0.405907	2	3
2048	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2048	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2048	2a	1	1.432214	4.151129	4.151129	0	14.92531	14.92531	0	ICE	1.432214	0	2	2
2048	2a	1	1.185309	3.503405	0	3.503405	7.954385	0	7.954385	BEV	0	1.185309	2	3
2048	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2048	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2048	2a	1	1.419163	4.113303	0	4.113303	6.397652	0	6.397652	BEV	0	1.419163	3	3
2048	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2048	2a	1	0	0	0	0	0	0	0	PHEV	0	0	3	8
2048	2a	1	0.784067	2.497136	0	2.497136	4.304392	0	4.304392	BEV	0	0.784067	3	3
2048	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2048	2a	1	0.599581	1.909574	1.145745	0.76383	6.505971	3.903583	2.602388	PHEV	0.359748	0.239832	3	8
2048	2a	1	0.315913	0.861347	0	0.861347	1.28187	0	1.28187	BEV	0	0.315913	4	3
2048	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2048	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2048	2a	1	0.090122	0.24572	0.24572	0	0.743039	0.743039	0	ICE	0.090122	0	2	2
2048	2a	1	0.374815	1.000471	0	1.000471	2.069209	0	2.069209	BEV	0	0.374815	2	3
2048	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2048	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2048	2a	1	0.818314	2.278038	2.278038	0	7.9163	7.9163	0	ICE	0.818314	0	2	2
2048	2a	1	0.223187	0.646885	0	0.646885	0.990794	0	0.990794	BEV	0	0.223187	4	3
2048	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2048	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2048	2a	1	1.405805	3.75243	0	3.75243	7.882188	0	7.882188	BEV	0	1.405805	1	3
2048	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2048	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2048	2a	1	0.145221	0.39595	0	0.39595	0.826409	0	0.826409	BEV	0	0.145221	2	3
2048	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2048	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2048	2a	1	0.423185	1.275046	1.275046	0	3.744233	3.744233	0	ICE	0.423185	0	2	2
2048	2a	1	0.758077	2.41436	2.41436	0	8.284659	8.284659	0	ICE	0.758077	0	2	2
2048	2a	1	1.10161	3.319129	0	3.319129	5.320439	0	5.320439	BEV	0	1.10161	3	3
2048	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2048	2a	1	0	0	0	0	0	0	0	PHEV	0	0	3	8
2048	2a	1	2.503341	7.829348	0	7.829348	12.90442	0	12.90442	BEV	0	2.503341	3	3
2048	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2048	2a	1	0.641882	2.007525	1.204515	0.80301	7.921897	4.753138	3.168759	PHEV	0.385129	0.256753	3	8
2048	2a	1	0.201642	0.619094	0.619094	0	1.829621	1.829621	0	ICE	0.201642	0	2	2
2048	2a	1	0	0	0	0	0	0	0	BEV	0	0	2	3
2048	2a	1	3.123414	10.30549	0	10.30549	26.98683	0	26.98683	FCEV	0	3.123414	2	7
2048	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2048	2a	1	0	0	0	0	0	0	0	BEV	0	0	2	3
2048	2a	1	3.466886	11.63737	0	11.63737	31.51644	0	31.51644	FCEV	0	3.466886	2	7
2048	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2048	2a	1	0.027979	0.074681	0.074681	0	0.247929	0.247929	0	ICE	0.027979	0	3	2
2048	2a	1	0	0	0	0	0	0	0	BEV	0	0	3	3

2048	2a	1	0.121787	0.401827	0	0.401827	0.744322	0	0.744322	FCEV	0	0.121787	3	7
2048	2a	1	1.745613	5.759527	3.455716	2.303811	23.21823	13.93094	9.287292	PHEV	1.047368	0.698245	3	8
2048	2a	1	0.113449	0.367818	0.367818	0	1.174353	1.174353	0	ICE	0.113449	0	2	2
2048	2a	1	0.072536	0.206082	0	0.206082	0.304978	0	0.304978	BEV	0	0.072536	3	3
2048	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2048	2a	1	0	0	0	0	0	0	0	PHEV	0	0	3	8
2048	2a	1	0.176565	0.531986	0	0.531986	1.123684	0	1.123684	BEV	0	0.176565	2	3
2048	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2048	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2048	2a	1	0.192592	0.646477	0.646477	0	1.933235	1.933235	0	ICE	0.192592	0	2	2
2048	2a	1	0.123484	0.379131	0	0.379131	0.903625	0	0.903625	BEV	0	0.123484	2	3
2048	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2048	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2048	2a	1	0.042537	0.115978	0	0.115978	0.159397	0	0.159397	BEV	0	0.042537	3	3
2048	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2048	2a	1	0	0	0	0	0	0	0	PHEV	0	0	3	8
2048	2a	1	0.03135	0.08368	0.08368	0	0.392551	0.392551	0	ICE	0.03135	0	2	2
2048	2a	1	0.207738	0.590206	0	0.590206	0.864847	0	0.864847	BEV	0	0.207738	4	3
2048	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2048	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2048	2a	1	0	0	0	0	0	0	0	BEV	0	0	4	3
2048	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2048	2a	1	0.201803	0.642713	0.385628	0.257085	2.381899	1.429139	0.95276	PHEV	0.121082	0.080721	4	8
2049	2a	1	15078.22	40247.38	40247.38	0	56607.51	56607.51	0	ICE	15078.22	0	1	1
2049	2a	1	15100.86	41172.95	41172.95	0	60421.53	60421.53	0	ICE	15100.86	0	1	1
2049	2a	1	40.14847	109.466	109.466	0	171.5065	171.5065	0	ICE	40.14847	0	1	2
2049	2a	1	15681.5	43654.46	43654.46	0	66883.75	66883.75	0	ICE	15681.5	0	1	1
2049	2a	1	13035.27	37034.63	37034.63	0	59591.44	59591.44	0	ICE	13035.27	0	1	1
2049	2a	1	10355.76	30015.12	30015.12	0	50607.8	50607.8	0	ICE	10355.76	0	1	1
2049	2a	1	12166.59	35960.67	35960.67	0	63542.17	63542.17	0	ICE	12166.59	0	1	1
2049	2a	1	138.825	410.3237	410.3237	0	742.8076	742.8076	0	ICE	138.825	0	1	2
2049	2a	1	12028.01	36240.16	36240.16	0	67287.77	67287.77	0	ICE	12028.01	0	1	1
2049	2a	1	187.8266	565.9177	565.9177	0	1045.397	1045.397	0	ICE	187.8266	0	1	2
2049	2a	1	17413.63	53464.53	53464.53	0	104468.7	104468.7	0	ICE	17413.63	0	1	1
2049	2a	1	20905.07	65381.88	65381.88	0	133585.6	133585.6	0	ICE	20905.07	0	1	1
2049	2a	1	21331.6	67937.95	67937.95	0	145973.5	145973.5	0	ICE	21331.6	0	1	1
2049	2a	1	406.545	1294.785	1294.785	0	2775.856	2775.856	0	ICE	406.545	0	1	2
2049	2a	1	25345.37	82173.25	82173.25	0	185177.5	185177.5	0	ICE	25345.37	0	1	1
2049	2a	1	25373.2	83717.09	83717.09	0	196842	196842	0	ICE	25373.2	0	1	1
2049	2a	1	28965.54	97229.19	97229.19	0	239874.1	239874.1	0	ICE	28965.54	0	1	1
2049	2a	1	354.462	1189.83	1189.83	0	2929.956	2929.956	0	ICE	354.462	0	1	2
2049	2a	1	1684.673	5654.975	0	5654.975	14420.31	0	14420.31	BEV	0	1684.673	1	3
2049	2a	1	34.38108	115.4077	0	115.4077	316.3774	0	316.3774	FCEV	0	34.38108	1	7
2049	2a	1	1519.632	5100.979	2754.529	2346.451	12349.7	6668.839	5680.863	PHEV	820.6013	699.0308	1	8
2049	2a	1	32679.61	111568.5	111568.5	0	288144.6	288144.6	0	ICE	32679.61	0	1	1
2049	2a	1	399.9125	1365.305	1365.305	0	3520.397	3520.397	0	ICE	399.9125	0	1	2
2049	2a	1	2322.987	7930.7	0	7930.7	20874.76	0	20874.76	BEV	0	2322.987	1	3

2049	2a	1	47.40789	161.851	0	161.851	458.557	0	458.557	FCEV	0	47.40789	1	7
2049	2a	1	1501.335	5125.572	2767.809	2357.763	13084.78	7065.781	6018.999	PHEV	810.7209	690.6141	1	8
2049	2a	1	37092.61	128759.6	128759.6	0	347652	347652	0	ICE	37092.61	0	1	1
2049	2a	1	451.9862	1568.98	1568.98	0	4231.261	4231.261	0	ICE	451.9862	0	1	2
2049	2a	1	3233.363	11223.97	0	11223.97	30867.44	0	30867.44	BEV	0	3233.363	1	3
2049	2a	1	75.63423	262.5491	0	262.5491	769.231	0	769.231	FCEV	0	75.63423	1	7
2049	2a	1	1585.757	5504.637	2917.458	2587.179	14634.51	7756.288	6878.218	PHEV	840.451	745.3056	1	8
2049	2a	1	43001.64	151735.2	151735.2	0	428291.5	428291.5	0	ICE	43001.64	0	1	1
2049	2a	1	528.7392	1865.704	1865.704	0	5259.69	5259.69	0	ICE	528.7392	0	1	2
2049	2a	1	4453.615	15714.98	0	15714.98	44898.28	0	44898.28	BEV	0	4453.615	1	3
2049	2a	1	117.5441	414.7649	0	414.7649	1256.947	0	1256.947	FCEV	0	117.5441	1	7
2049	2a	1	1698.188	5992.208	3115.948	2876.26	16844.59	8759.187	8085.403	PHEV	883.0577	815.1301	1	8
2049	2a	1	47147.19	169064.2	169064.2	0	498235.1	498235.1	0	ICE	47147.19	0	1	1
2049	2a	1	582.509	2088.807	2088.807	0	6148.582	6148.582	0	ICE	582.509	0	1	2
2049	2a	1	7617.308	27314.75	0	27314.75	81477.02	0	81477.02	BEV	0	7617.308	1	3
2049	2a	1	261.1134	936.3213	0	936.3213	2936.191	0	2936.191	FCEV	0	261.1134	1	7
2049	2a	1	2895.995	10384.69	5171.577	5213.115	30167.36	15023.34	15144.01	PHEV	1442.206	1453.79	1	8
2049	2a	1	51847.42	188889	188889	0	581177.1	581177.1	0	ICE	51847.42	0	1	1
2049	2a	1	645.1968	2350.562	2350.562	0	7223.756	7223.756	0	ICE	645.1968	0	1	2
2049	2a	1	11818.96	43058.47	0	43058.47	133942.6	0	133942.6	BEV	0	11818.96	1	3
2049	2a	1	499.7891	1820.817	0	1820.817	5908.635	0	5908.635	FCEV	0	499.7891	1	7
2049	2a	1	4480.245	16322.29	7769.411	8552.881	49412.71	23520.45	25892.26	PHEV	2132.596	2347.648	1	8
2049	2a	1	57345.88	212206.1	212206.1	0	680377.4	680377.4	0	ICE	57345.88	0	1	1
2049	2a	1	719.6089	2662.884	2662.884	0	8527.87	8527.87	0	ICE	719.6089	0	1	2
2049	2a	1	17481.12	64688.19	0	64688.19	209400.8	0	209400.8	BEV	0	17481.12	1	3
2049	2a	1	881.4011	3261.589	0	3261.589	10894.63	0	10894.63	FCEV	0	881.4011	1	7
2049	2a	1	6607.256	24449.88	11100.25	13349.64	77184.15	35041.6	42142.55	PHEV	2999.694	3607.562	1	8
2049	2a	1	63752.79	239567.1	239567.1	0	799550.2	799550.2	0	ICE	63752.79	0	1	1
2049	2a	1	806.4116	3030.293	3030.293	0	10102.14	10102.14	0	ICE	806.4116	0	1	2
2049	2a	1	25185.65	94641.37	0	94641.37	318507.9	0	318507.9	BEV	0	25185.65	1	3
2049	2a	1	1477.924	5553.668	0	5553.668	19119.62	0	19119.62	FCEV	0	1477.924	1	7
2049	2a	1	9491.548	35666.87	15408.09	20258.78	117352.9	50696.44	66656.43	PHEV	4100.349	5391.2	1	8
2049	2a	1	71065.67	271118.4	271118.4	0	942042.8	942042.8	0	ICE	71065.67	0	1	1
2049	2a	1	905.707	3455.308	3455.308	0	11993.33	11993.33	0	ICE	905.707	0	1	2
2049	2a	1	35716.99	136261.7	0	136261.7	476759.5	0	476759.5	BEV	0	35716.99	1	3
2049	2a	1	2395.652	9139.507	0	9139.507	32507.56	0	32507.56	FCEV	0	2395.652	1	7
2049	2a	1	13421.28	51202.7	20993.11	30209.59	175734.8	72051.25	103683.5	PHEV	5502.723	7918.553	1	8
2049	2a	1	78815.45	305199.4	305199.4	0	1101651	1101651	0	ICE	78815.45	0	1	1
2049	2a	1	1004.475	3889.659	3889.659	0	14027.65	14027.65	0	ICE	1004.475	0	1	2
2049	2a	1	49902.94	193240.6	0	193240.6	701503.2	0	701503.2	BEV	0	49902.94	1	3
2049	2a	1	3772.625	14608.85	0	14608.85	53602.1	0	53602.1	FCEV	0	3772.625	1	7
2049	2a	1	18697.48	72402.79	28092.28	44310.51	258545.2	100315.5	158229.6	PHEV	7254.62	11442.85	1	8
2049	2a	1	86234.7	338869.6	338869.6	0	1269464	1269464	0	ICE	86234.7	0	1	1
2049	2a	1	1099.03	4318.772	4318.772	0	16166.81	16166.81	0	ICE	1099.03	0	1	2
2049	2a	1	68594.47	269550.2	0	269550.2	1014423	0	1014423	BEV	0	68594.47	1	3
2049	2a	1	5779.956	22713.03	0	22713.03	86085.4	0	86085.4	FCEV	0	5779.956	1	7
2049	2a	1	25626.35	100701.8	36856.86	63844.94	373829.2	136821.5	237007.7	PHEV	9379.243	16247.1	1	8

2049	2a	1	92816.11	370049.5	370049.5	0	1437402	1437402	0	ICE	92816.11	0	1	1
2049	2a	1	1182.908	4716.147	4716.147	0	18307.74	18307.74	0	ICE	1182.908	0	1	2
2049	2a	1	93094.47	371159.3	0	371159.3	1447002	0	1447002	BEV	0	93094.47	1	3
2049	2a	1	8664.008	34542.62	0	34542.62	135316.7	0	135316.7	FCEV	0	8664.008	1	7
2049	2a	1	34678.87	138261.5	47561.97	90699.57	533032.5	183363.2	349669.3	PHEV	11929.53	22749.34	1	8
2049	2a	1	96924.26	391981.1	391981.1	0	1577326	1577326	0	ICE	96924.26	0	1	1
2049	2a	1	1235.265	4995.657	4995.657	0	20092	20092	0	ICE	1235.265	0	1	2
2049	2a	1	123914.4	501134.7	0	501134.7	2022380	0	2022380	BEV	0	123914.4	1	3
2049	2a	1	12641.14	51123.31	0	51123.31	206997.2	0	206997.2	FCEV	0	12641.14	1	7
2049	2a	1	46026.63	186140.9	59937.36	126203.5	744494.2	239727.1	504767.1	PHEV	14820.57	31206.05	1	8
2049	2a	1	97284.3	399010.6	399010.6	0	1661711	1661711	0	ICE	97284.3	0	1	1
2049	2a	1	1239.855	5085.252	5085.252	0	21168.7	21168.7	0	ICE	1239.855	0	1	2
2049	2a	1	161741.7	663382	0	663382	2768976	0	2768976	BEV	0	161741.7	1	3
2049	2a	1	17971.3	73709.11	0	73709.11	308380.5	0	308380.5	FCEV	0	17971.3	1	7
2049	2a	1	59904.33	245697	73709.11	171987.9	1018259	305477.8	712781.6	PHEV	17971.3	41933.03	1	8
2049	2a	1	92283.72	383787.7	383787.7	0	1652854	1652854	0	ICE	92283.72	0	1	1
2049	2a	1	1176.123	4891.236	4891.236	0	21057.3	21057.3	0	ICE	1176.123	0	1	2
2049	2a	1	207986.7	864971	0	864971	3731498	0	3731498	BEV	0	207986.7	1	3
2049	2a	1	25706.22	106906.5	0	106906.5	461936.9	0	461936.9	FCEV	0	25706.22	1	7
2049	2a	1	73797.77	306908.7	92072.61	214836.1	1316737	395021.1	921715.8	PHEV	22139.33	51658.44	1	8
2049	2a	1	81031.56	341634.7	341634.7	0	1520341	1520341	0	ICE	81031.56	0	1	1
2049	2a	1	1032.719	4354.017	4354.017	0	19370.24	19370.24	0	ICE	1032.719	0	1	2
2049	2a	1	262470.1	1106592	0	1106592	4930750	0	4930750	BEV	0	262470.1	1	3
2049	2a	1	35791.38	150899	0	150899	673130.3	0	673130.3	FCEV	0	35791.38	1	7
2049	2a	1	89091.09	375614.3	112684.3	262930	1666691	500007.3	1166684	PHEV	26727.33	62363.76	1	8
2049	2a	1	62065.31	265227.4	265227.4	0	1218882	1218882	0	ICE	62065.31	0	1	1
2049	2a	1	791.0008	3380.231	3380.231	0	15530.19	15530.19	0	ICE	791.0008	0	1	2
2049	2a	1	323326.7	1381691	0	1381691	6355501	0	6355501	BEV	0	323326.7	1	3
2049	2a	1	48313.18	206459.6	0	206459.6	950425.6	0	950425.6	FCEV	0	48313.18	1	7
2049	2a	1	104821.5	447940	134382	313558	2054122	616236.7	1437886	PHEV	31446.45	73375.05	1	8
2049	2a	1	35270.57	152744.5	152744.5	0	724312.9	724312.9	0	ICE	35270.57	0	1	1
2049	2a	1	449.5111	1946.675	1946.675	0	9229.068	9229.068	0	ICE	449.5111	0	1	2
2049	2a	1	392182.6	1698405	0	1698405	8059183	0	8059183	BEV	0	392182.6	1	3
2049	2a	1	63843.67	276484.6	0	276484.6	1312710	0	1312710	FCEV	0	63843.67	1	7
2049	2a	1	121222.2	524970.8	157491.2	367479.5	2485429	745628.6	1739800	PHEV	36366.65	84855.52	1	8
2049	2a	1	466449.2	2046751	0	2046751	10014416	0	10014416	BEV	0	466449.2	1	3
2049	2a	1	82314.56	361191.4	0	361191.4	1767973	0	1767973	FCEV	0	82314.56	1	7
2049	2a	1	137190.9	601985.6	180595.7	421389.9	2940971	882291.3	2058680	PHEV	41157.28	96033.66	1	8
2049	2a	1	518796.6	2306170	0	2306170	11628826	0	11628826	BEV	0	518796.6	1	3
2049	2a	1	98818.41	439270.6	0	439270.6	2215695	0	2215695	FCEV	0	98818.41	1	7
2049	2a	1	144872.7	643992.3	193197.7	450794.6	3244633	973389.8	2271243	PHEV	43461.8	101410.9	1	8
2049	2a	1	565914.3	2548040	0	2548040	13234461	0	13234461	BEV	0	565914.3	1	3
2049	2a	1	115910.2	521887.8	0	521887.8	2711291	0	2711291	FCEV	0	115910.2	1	7
2049	2a	1	149668.8	673886.7	202166	471720.7	3499271	1049781	2449490	PHEV	44900.64	104768.1	1	8
2049	2a	1	615643.5	2807217	0	2807217	15011107	0	15011107	BEV	0	615643.5	1	3
2049	2a	1	135141.3	616218.5	0	616218.5	3295657	0	3295657	FCEV	0	135141.3	1	7
2049	2a	1	153775.2	701185.7	210355.7	490830	3750583	1125175	2625408	PHEV	46132.56	107642.6	1	8

2049	2a	1	657571.5	3036074	0	3036074	16706299	0	16706299	BEV	0	657571.5	1	3
2049	2a	1	154245.2	712165.4	0	712165.4	3919199	0	3919199	FCEV	0	154245.2	1	7
2049	2a	1	154631.8	713950.3	214185.1	499765.2	3931569	1179471	2752098	PHEV	46389.53	108242.2	1	8
2049	2a	1	701899.5	3280952	0	3280952	18570039	0	18570039	BEV	0	701899.5	1	3
2049	2a	1	175474.9	820238	0	820238	4642838	0	4642838	FCEV	0	175474.9	1	7
2049	2a	1	154830.8	723739.5	217121.8	506617.6	4101204	1230361	2870843	PHEV	46449.23	108381.5	1	8
2049	2a	1	738365.5	3493709	0	3493709	20332674	0	20332674	BEV	0	738365.5	1	3
2049	2a	1	196274.4	928707.6	0	928707.6	5405054	0	5405054	FCEV	0	196274.4	1	7
2049	2a	1	152150.7	719928.3	215978.5	503949.8	4197206	1259162	2938044	PHEV	45645.2	106505.5	1	8
2049	2a	1	778442.6	3727938	0	3727938	22299459	0	22299459	BEV	0	778442.6	1	3
2049	2a	1	219560.7	1051470	0	1051470	6289570	0	6289570	FCEV	0	219560.7	1	7
2049	2a	1	149126.9	714164.5	214249.3	499915.1	4281906	1284572	2997334	PHEV	44738.08	104388.9	1	8
2049	2a	1	808839.3	3919845	0	3919845	24093744	0	24093744	BEV	0	808839.3	1	3
2049	2a	1	241601.3	1170863	0	1170863	7196601	0	7196601	FCEV	0	241601.3	1	7
2049	2a	1	143241.9	694187.5	208256.2	485931.2	4279317	1283795	2995522	PHEV	42972.57	100269.3	1	8
2049	2a	1	843511.9	4136203	0	4136203	26107043	0	26107043	BEV	0	843511.9	1	3
2049	2a	1	266372.2	1306169	0	1306169	8243909	0	8243909	FCEV	0	266372.2	1	7
2049	2a	1	137176.7	672652.7	201795.8	470856.9	4259717	1277915	2981802	PHEV	41153.01	96023.68	1	8
2049	2a	1	868873.3	4310341	0	4310341	27926876	0	27926876	BEV	0	868873.3	1	3
2049	2a	1	289624.4	1436780	0	1436780	9308342	0	9308342	FCEV	0	289624.4	1	7
2049	2a	1	128722	638569.1	191570.7	446998.4	4152448	1245734	2906714	PHEV	38616.59	90105.38	1	8
2049	2a	1	890306.3	4467673	0	4467673	29689319	0	29689319	BEV	0	890306.3	1	3
2049	2a	1	296768.8	1489224	0	1489224	9895633	0	9895633	FCEV	0	296768.8	1	7
2049	2a	1	131897.2	661877.4	198563.2	463314.2	4416391	1324917	3091474	PHEV	39569.17	92328.06	1	8
2049	2a	1	913178.9	4634766	0	4634766	31533728	0	31533728	BEV	0	913178.9	1	3
2049	2a	1	304393	1544922	0	1544922	10510394	0	10510394	FCEV	0	304393	1	7
2049	2a	1	135285.8	686632.1	205989.6	480642.5	4690488	1407147	3283342	PHEV	40585.73	94700.03	1	8
2049	2a	1	920329.6	4723785	0	4723785	32798051	0	32798051	BEV	0	920329.6	1	3
2049	2a	1	306776.5	1574595	0	1574595	10932039	0	10932039	FCEV	0	306776.5	1	7
2049	2a	1	136345.1	699820	209946	489874	4875171	1462551	3412620	PHEV	40903.54	95441.59	1	8
2049	2a	1	826327.2	4288638	0	4288638	30304347	0	30304347	BEV	0	826327.2	1	3
2049	2a	1	275442.4	1429546	0	1429546	10101250	0	10101250	FCEV	0	275442.4	1	7
2049	2a	1	122418.8	635353.8	190606.1	444747.6	4499046	1349714	3149332	PHEV	36725.65	85693.19	1	8
2049	2a	1	771.5582	2059.474	2059.474	0	6832.529	6832.529	0	ICE	771.5582	0	2	1
2049	2a	1	1225.736	3342.007	3342.007	0	11247.56	11247.56	0	ICE	1225.736	0	2	1
2049	2a	1	1805.952	5027.446	5027.446	0	17240.01	17240.01	0	ICE	1805.952	0	2	1
2049	2a	1	3140.611	8922.82	8922.82	0	30796.72	30796.72	0	ICE	3140.611	0	2	1
2049	2a	1	2396.772	6946.803	6946.803	0	24172.21	24172.21	0	ICE	2396.772	0	2	1
2049	2a	1	1303.697	3853.323	3853.323	0	13383.72	13383.72	0	ICE	1303.697	0	2	1
2049	2a	1	1185.255	3571.149	3571.149	0	12502.69	12502.69	0	ICE	1185.255	0	2	1
2049	2a	1	10712.33	34730.88	34730.88	0	128515.9	128515.9	0	ICE	10712.33	0	2	1
2049	2a	1	10345.86	34135.44	34135.44	0	128514.9	128514.9	0	ICE	10345.86	0	2	1
2049	2a	1	9736.156	32681.55	32681.55	0	125303.4	125303.4	0	ICE	9736.156	0	2	1
2049	2a	1	1.318938	4.427306	4.427306	0	16.98277	16.98277	0	ICE	1.318938	0	2	2
2049	2a	1	0.328053	1.101181	0	1.101181	2.992357	0	2.992357	BEV	0	0.328053	2	3
2049	2a	1	0.006695	0.022473	0	0.022473	0.061069	0	0.061069	FCEV	0	0.006695	2	7
2049	2a	1	2.845355	9.55106	5.730636	3.820424	36.64724	21.98835	14.6589	PHEV	1.707213	1.138142	2	8

2049	2a	1	10991.81	37526.14	37526.14	0	145435.1	145435.1	0	ICE	10991.81	0	2	1
2049	2a	1	1.489039	5.083594	5.083594	0	19.71077	19.71077	0	ICE	1.489039	0	2	2
2049	2a	1	12172.9	42255.77	42255.77	0	165542.1	165542.1	0	ICE	12172.9	0	2	1
2049	2a	1	1.660544	5.764245	5.764245	0	22.60452	22.60452	0	ICE	1.660544	0	2	2
2049	2a	1	161.856	561.8506	0	561.8506	1963.764	0	1963.764	BEV	0	161.856	2	3
2049	2a	1	3.786105	13.14271	0	13.14271	38.16817	0	38.16817	FCEV	0	3.786105	2	7
2049	2a	1	124.294	431.4618	256.4116	175.0502	1788.577	1062.926	725.6512	PHEV	73.86615	50.42786	2	8
2049	2a	1	13716.96	48401.54	48401.54	0	191264.4	191264.4	0	ICE	13716.96	0	2	1
2049	2a	1	1.892916	6.679324	6.679324	0	26.44226	26.44226	0	ICE	1.892916	0	2	2
2049	2a	1	372.5801	1314.682	0	1314.682	4634.254	0	4634.254	BEV	0	372.5801	2	3
2049	2a	1	9.833492	34.69836	0	34.69836	104.2158	0	104.2158	FCEV	0	9.833492	2	7
2049	2a	1	286.9544	1012.544	595.9546	416.5897	4238.052	2494.397	1743.656	PHEV	168.8931	118.0612	2	8
2049	2a	1	14699.31	52709.97	52709.97	0	209900.3	209900.3	0	ICE	14699.31	0	2	1
2049	2a	1	2.055136	7.369471	7.369471	0	29.42292	29.42292	0	ICE	2.055136	0	2	2
2049	2a	1	1035.985	3714.917	0	3714.917	13228.88	0	13228.88	BEV	0	1035.985	2	3
2049	2a	1	35.51248	127.3435	0	127.3435	395.7775	0	395.7775	FCEV	0	35.51248	2	7
2049	2a	1	747.1429	2679.165	1553.15	1126.015	11699.46	6782.345	4917.116	PHEV	433.1294	314.0135	2	8
2049	2a	1	15745.09	57362.03	57362.03	0	230500.3	230500.3	0	ICE	15745.09	0	2	1
2049	2a	1	2.210369	8.052752	8.052752	0	32.44758	32.44758	0	ICE	2.210369	0	2	2
2049	2a	1	1927.334	7021.605	0	7021.605	25554.18	0	25554.18	BEV	0	1927.334	2	3
2049	2a	1	81.50131	296.9231	0	296.9231	954.7973	0	954.7973	FCEV	0	81.50131	2	7
2049	2a	1	1300.371	4737.473	2704.421	2033.053	21086.45	12037.35	9049.1	PHEV	742.3262	558.045	2	8
2049	2a	1	16610.69	61467.21	61467.21	0	249484.3	249484.3	0	ICE	16610.69	0	2	1
2049	2a	1	2.342869	8.669695	8.669695	0	35.28668	35.28668	0	ICE	2.342869	0	2	2
2049	2a	1	3073.634	11373.86	0	11373.86	42427.16	0	42427.16	BEV	0	3073.634	2	3
2049	2a	1	154.9732	573.472	0	573.472	1944.982	0	1944.982	FCEV	0	154.9732	2	7
2049	2a	1	1937.877	7171.035	4030.122	3140.913	32185.03	18087.99	14097.04	PHEV	1089.087	848.79	2	8
2049	2a	1	17300.94	65012.61	65012.61	0	266908.2	266908.2	0	ICE	17300.94	0	2	1
2049	2a	1	2.450909	9.209905	9.209905	0	37.91567	37.91567	0	ICE	2.450909	0	2	2
2049	2a	1	4519.303	16982.41	0	16982.41	64917.91	0	64917.91	BEV	0	4519.303	2	3
2049	2a	1	265.198	996.5479	0	996.5479	3569.789	0	3569.789	FCEV	0	265.198	2	7
2049	2a	1	2658.911	9991.523	5526.739	4464.783	45117.71	24956.54	20161.17	PHEV	1470.758	1188.153	2	8
2049	2a	1	17874	68190.02	68190.02	0	283455.4	283455.4	0	ICE	17874	0	2	1
2049	2a	1	2.542349	9.699164	9.699164	0	40.42631	40.42631	0	ICE	2.542349	0	2	2
2049	2a	1	6343.945	24202.4	0	24202.4	94810.5	0	94810.5	BEV	0	6343.945	2	3
2049	2a	1	425.5085	1623.332	0	1623.332	6071.578	0	6071.578	FCEV	0	425.5085	2	7
2049	2a	1	3477.16	13265.51	7220.225	6045.28	60213.2	32773.18	27440.02	PHEV	1892.569	1584.592	2	8
2049	2a	1	18312.91	70913.62	70913.62	0	297412	297412	0	ICE	18312.91	0	2	1
2049	2a	1	2.604779	10.08656	10.08656	0	42.40019	42.40019	0	ICE	2.604779	0	2	2
2049	2a	1	8642.24	33465.61	0	33465.61	133905.9	0	133905.9	BEV	0	8642.24	2	3
2049	2a	1	653.347	2529.975	0	2529.975	9832.596	0	9832.596	FCEV	0	653.347	2	7
2049	2a	1	4404.167	17054.39	9131.406	7922.981	77358.53	41419.97	35938.56	PHEV	2358.117	2046.05	2	8
2049	2a	1	18446.4	72487.34	72487.34	0	307306.3	307306.3	0	ICE	18446.4	0	2	1
2049	2a	1	2.623766	10.3104	10.3104	0	43.79474	43.79474	0	ICE	2.623766	0	2	2
2049	2a	1	11452.16	45002.64	0	45002.64	183917	0	183917	BEV	0	11452.16	2	3
2049	2a	1	964.9899	3792.044	0	3792.044	15209.67	0	15209.67	FCEV	0	964.9899	2	7
2049	2a	1	5413.549	21273.19	11201.85	10071.34	96560.07	50845.77	45714.29	PHEV	2850.62	2562.929	2	8

2049	2a	1	18243.65	72735.8	72735.8	0	312359.8	312359.8	0	ICE	18243.65	0	2	1
2049	2a	1	2.594928	10.34574	10.34574	0	44.5001	44.5001	0	ICE	2.594928	0	2	2
2049	2a	1	14872.82	59296.61	0	59296.61	247586.7	0	247586.7	BEV	0	14872.82	2	3
2049	2a	1	1384.167	5518.547	0	5518.547	22762.54	0	22762.54	FCEV	0	1384.167	2	7
2049	2a	1	6503.58	25929.19	13423.91	12505.28	118038.4	61110.14	56928.21	PHEV	3366.996	3136.584	2	8
2049	2a	1	17536.81	70922.35	70922.35	0	309019.9	309019.9	0	ICE	17536.81	0	2	1
2049	2a	1	2.494388	10.0878	10.0878	0	44.01085	44.01085	0	ICE	2.494388	0	2	2
2049	2a	1	18899.86	76434.82	0	76434.82	326102.2	0	326102.2	BEV	0	18899.86	2	3
2049	2a	1	1928.072	7797.507	0	7797.507	33004.13	0	33004.13	FCEV	0	1928.072	2	7
2049	2a	1	7620.454	30818.64	15682.29	15136.36	140967.8	71732.49	69235.34	PHEV	3877.722	3742.732	2	8
2049	2a	1	16270.07	66731.55	66731.55	0	295468.4	295468.4	0	ICE	16270.07	0	2	1
2049	2a	1	2.314212	9.491715	9.491715	0	42.0692	42.0692	0	ICE	2.314212	0	2	2
2049	2a	1	23575.49	96694.65	0	96694.65	421635.2	0	421635.2	BEV	0	23575.49	2	3
2049	2a	1	2619.499	10743.85	0	10743.85	46609.61	0	46609.61	FCEV	0	2619.499	2	7
2049	2a	1	8731.664	35812.83	17906.42	17906.42	164931.2	82465.6	82465.6	PHEV	4365.832	4365.832	2	8
2049	2a	1	14372.46	59771.89	59771.89	0	269297.8	269297.8	0	ICE	14372.46	0	2	1
2049	2a	1	2.0443	8.501793	8.501793	0	38.33342	38.33342	0	ICE	2.0443	0	2	2
2049	2a	1	28517.01	118596	0	118596	528446.3	0	528446.3	BEV	0	28517.01	2	3
2049	2a	1	3524.574	14657.93	0	14657.93	65112	0	65112	FCEV	0	3524.574	2	7
2049	2a	1	10118.39	42080.17	21040.09	21040.09	195451.7	97725.84	97725.84	PHEV	5059.197	5059.197	2	8
2049	2a	1	11858.26	49995.27	49995.27	0	229496.5	229496.5	0	ICE	11858.26	0	2	1
2049	2a	1	1.686687	7.111192	7.111192	0	32.66061	32.66061	0	ICE	1.686687	0	2	2
2049	2a	1	34105.74	143792.2	0	143792.2	655076.1	0	655076.1	BEV	0	34105.74	2	3
2049	2a	1	4650.783	19608.02	0	19608.02	89169.69	0	89169.69	FCEV	0	4650.783	2	7
2049	2a	1	11576.62	48807.85	24403.93	24403.93	229106.5	114553.3	114553.3	PHEV	5788.312	5788.312	2	8
2049	2a	1	8600.419	36752.69	36752.69	0	172076.5	172076.5	0	ICE	8600.419	0	2	1
2049	2a	1	1.2233	5.227603	5.227603	0	24.48407	24.48407	0	ICE	1.2233	0	2	2
2049	2a	1	40077	171263.4	0	171263.4	798077.6	0	798077.6	BEV	0	40077	2	3
2049	2a	1	5988.517	25591.09	0	25591.09	119143.1	0	119143.1	FCEV	0	5988.517	2	7
2049	2a	1	12992.84	55523.07	27761.53	27761.53	263872.6	131936.3	131936.3	PHEV	6496.418	6496.418	2	8
2049	2a	1	4665.28	20203.69	20203.69	0	96572.61	96572.61	0	ICE	4665.28	0	2	1
2049	2a	1	0.663577	2.873719	2.873719	0	13.73853	13.73853	0	ICE	0.663577	0	2	2
2049	2a	1	46700.67	202244.3	0	202244.3	964366.9	0	964366.9	BEV	0	46700.67	2	3
2049	2a	1	7602.435	32923.48	0	32923.48	156932.6	0	156932.6	FCEV	0	7602.435	2	7
2049	2a	1	14435	62512.94	31256.47	31256.47	301300.6	150650.3	150650.3	PHEV	7217.501	7217.501	2	8
2049	2a	1	53507.95	234789.7	0	234789.7	1146061	0	1146061	BEV	0	53507.95	2	3
2049	2a	1	9442.579	41433.47	0	41433.47	202243.6	0	202243.6	FCEV	0	9442.579	2	7
2049	2a	1	15737.63	69055.79	34527.89	34527.89	338116.4	169058.2	169058.2	PHEV	7868.816	7868.816	2	8
2049	2a	1	57525.38	255713.6	0	255713.6	1278162	0	1278162	BEV	0	57525.38	2	3
2049	2a	1	10957.22	48707.35	0	48707.35	243512.7	0	243512.7	FCEV	0	10957.22	2	7
2049	2a	1	16063.82	71407.37	35703.69	35703.69	355700.5	177850.3	177850.3	PHEV	8031.91	8031.91	2	8
2049	2a	1	61167.36	275407.3	0	275407.3	1410162	0	1410162	BEV	0	61167.36	2	3
2049	2a	1	12528.25	56408.72	0	56408.72	288936.3	0	288936.3	FCEV	0	12528.25	2	7
2049	2a	1	16177.09	72837.66	36418.83	36418.83	369690.9	184845.5	184845.5	PHEV	8088.543	8088.543	2	8
2049	2a	1	65127.98	296971.2	0	296971.2	1557864	0	1557864	BEV	0	65127.98	2	3
2049	2a	1	14296.38	65188.8	0	65188.8	342131.8	0	342131.8	FCEV	0	14296.38	2	7
2049	2a	1	16267.64	74177.35	37088.67	37088.67	384046	192023	192023	PHEV	8133.82	8133.82	2	8

2049	2a	1	68590.69	316690.1	0	316690.1	1702603	0	1702603	BEV	0	68590.69	2	3
2049	2a	1	16089.18	74285.33	0	74285.33	399585.6	0	399585.6	FCEV	0	16089.18	2	7
2049	2a	1	16129.5	74471.51	37235.76	37235.76	393842	196921	196921	PHEV	8064.75	8064.75	2	8
2049	2a	1	72216.18	337566.6	0	337566.6	1859967	0	1859967	BEV	0	72216.18	2	3
2049	2a	1	18054.05	84391.65	0	84391.65	465246.5	0	465246.5	FCEV	0	18054.05	2	7
2049	2a	1	15930.04	74463.22	37231.61	37231.61	402541.7	201270.8	201270.8	PHEV	7965.02	7965.02	2	8
2049	2a	1	74815.64	354003.7	0	354003.7	1999759	0	1999759	BEV	0	74815.64	2	3
2049	2a	1	19887.7	94102.25	0	94102.25	531869.6	0	531869.6	FCEV	0	19887.7	2	7
2049	2a	1	15416.82	72947.48	36473.74	36473.74	403630.7	201815.3	201815.3	PHEV	7708.412	7708.412	2	8
2049	2a	1	77666.53	371942.7	0	371942.7	2153969	0	2153969	BEV	0	77666.53	2	3
2049	2a	1	21905.94	104906.9	0	104906.9	607845.8	0	607845.8	FCEV	0	21905.94	2	7
2049	2a	1	14878.65	71253.39	35626.69	35626.69	403762.1	201881.1	201881.1	PHEV	7439.323	7439.323	2	8
2049	2a	1	80499.01	390119.1	0	390119.1	2316198	0	2316198	BEV	0	80499.01	2	3
2049	2a	1	24045.16	116529.1	0	116529.1	692188.2	0	692188.2	FCEV	0	24045.16	2	7
2049	2a	1	14256.02	69088.39	34544.2	34544.2	401197.5	200598.8	200598.8	PHEV	7128.011	7128.011	2	8
2049	2a	1	83312.84	408528.7	0	408528.7	2486712	0	2486712	BEV	0	83312.84	2	3
2049	2a	1	26309.32	129009.1	0	129009.1	785626.6	0	785626.6	FCEV	0	26309.32	2	7
2049	2a	1	13548.81	66437.25	33218.62	33218.62	395603.6	197801.8	197801.8	PHEV	6774.403	6774.403	2	8
2049	2a	1	84973.66	421540.7	0	421540.7	2630886	0	2630886	BEV	0	84973.66	2	3
2049	2a	1	28324.55	140513.6	0	140513.6	877310	0	877310	FCEV	0	28324.55	2	7
2049	2a	1	12588.69	62450.48	31225.24	31225.24	381567.4	190783.7	190783.7	PHEV	6294.345	6294.345	2	8
2049	2a	1	86097.44	432048.1	0	432048.1	2765627	0	2765627	BEV	0	86097.44	2	3
2049	2a	1	28699.15	144016	0	144016	922236.8	0	922236.8	FCEV	0	28699.15	2	7
2049	2a	1	12755.18	64007.13	32003.57	32003.57	401245.9	200622.9	200622.9	PHEV	6377.588	6377.588	2	8
2049	2a	1	87243.91	442799.5	0	442799.5	2906529	0	2906529	BEV	0	87243.91	2	3
2049	2a	1	29081.3	147599.8	0	147599.8	969215.1	0	969215.1	FCEV	0	29081.3	2	7
2049	2a	1	12925.02	65599.92	32799.96	32799.96	421911.3	210955.7	210955.7	PHEV	6462.512	6462.512	2	8
2049	2a	1	88461.68	454048.1	0	454048.1	3054785	0	3054785	BEV	0	88461.68	2	3
2049	2a	1	29487.23	151349.4	0	151349.4	1018642	0	1018642	FCEV	0	29487.23	2	7
2049	2a	1	13105.43	67266.39	33633.19	33633.19	443720	221860	221860	PHEV	6552.717	6552.717	2	8
2049	2a	1	80732.1	418999.6	0	418999.6	2887669	0	2887669	BEV	0	80732.1	2	3
2049	2a	1	26910.7	139666.5	0	139666.5	962907.1	0	962907.1	FCEV	0	26910.7	2	7
2049	2a	1	11960.31	62074.02	31037.01	31037.01	419698.7	209849.4	209849.4	PHEV	5980.156	5980.156	2	8
2049	2a	1	10360.6	27654.92	27654.92	0	90042.56	90042.56	0	ICE	10360.6	0	3	1
2049	2a	1	9161.189	24978.26	24978.26	0	81116.55	81116.55	0	ICE	9161.189	0	3	1
2049	2a	1	9122.042	25394.12	25394.12	0	82929.28	82929.28	0	ICE	9122.042	0	3	1
2049	2a	1	6963.32	19783.56	19783.56	0	65394.68	65394.68	0	ICE	6963.32	0	3	1
2049	2a	1	4182.201	12121.69	12121.69	0	40247.76	40247.76	0	ICE	4182.201	0	3	1
2049	2a	1	7224.637	21353.79	21353.79	0	71645.41	71645.41	0	ICE	7224.637	0	3	1
2049	2a	1	9342.496	28148.75	28148.75	0	95121.86	95121.86	0	ICE	9342.496	0	3	1
2049	2a	1	9404.342	28873.87	28873.87	0	98758.17	98758.17	0	ICE	9404.342	0	3	1
2049	2a	1	13240.57	41410.67	41410.67	0	142459.9	142459.9	0	ICE	13240.57	0	3	1
2049	2a	1	13115.8	41771.85	41771.85	0	146472.8	146472.8	0	ICE	13115.8	0	3	1
2049	2a	1	139.5666	444.4986	444.4986	0	1519.527	1519.527	0	ICE	139.5666	0	3	2
2049	2a	1	16218.25	52581.85	52581.85	0	187430	187430	0	ICE	16218.25	0	3	1
2049	2a	1	16734.91	55215.67	55215.67	0	198726.1	198726.1	0	ICE	16734.91	0	3	1
2049	2a	1	126.2723	416.6265	416.6265	0	1468.118	1468.118	0	ICE	126.2723	0	3	2

2049	2a	1	19564.46	65672.43	65672.43	0	240602	240602	0	ICE	19564.46	0	3	1
2049	2a	1	199.9707	671.2456	671.2456	0	2470.972	2470.972	0	ICE	199.9707	0	3	2
2049	2a	1	21894.79	74749.03	74749.03	0	277665.3	277665.3	0	ICE	21894.79	0	3	1
2049	2a	1	223.7892	764.0186	764.0186	0	2851.34	2851.34	0	ICE	223.7892	0	3	2
2049	2a	1	75.54008	257.8946	154.7367	103.1578	965.0168	579.0101	386.0067	PHEV	45.32405	30.21603	3	8
2049	2a	1	24370.18	84596.19	84596.19	0	319550.6	319550.6	0	ICE	24370.18	0	3	1
2049	2a	1	248.4625	862.488	862.488	0	3270.305	3270.305	0	ICE	248.4625	0	3	2
2049	2a	1	287.4156	997.7056	0	997.7056	2407.454	0	2407.454	BEV	0	287.4156	3	3
2049	2a	1	6.723171	23.33814	0	23.33814	47.14682	0	47.14682	FCEV	0	6.723171	3	7
2049	2a	1	249.6374	866.5664	514.988	351.5784	3282.794	1950.918	1331.876	PHEV	148.356	101.2815	3	8
2049	2a	1	27477.01	96955.11	96955.11	0	369960.9	369960.9	0	ICE	27477.01	0	3	1
2049	2a	1	280.7747	990.7388	990.7388	0	3795.488	3795.488	0	ICE	280.7747	0	3	2
2049	2a	1	658.4872	2323.532	0	2323.532	7462.319	0	7462.319	BEV	0	658.4872	3	3
2049	2a	1	17.37943	61.32488	0	61.32488	128.0828	0	128.0828	FCEV	0	17.37943	3	7
2049	2a	1	475.2179	1676.849	986.9455	689.9036	6423.953	3780.955	2642.998	PHEV	279.6997	195.5182	3	8
2049	2a	1	29188.45	104666.3	104666.3	0	402717.4	402717.4	0	ICE	29188.45	0	3	1
2049	2a	1	302.7723	1085.705	1085.705	0	4202.52	4202.52	0	ICE	302.7723	0	3	2
2049	2a	1	1993.524	7148.539	0	7148.539	21495.78	0	21495.78	BEV	0	1993.524	3	3
2049	2a	1	68.33594	245.0445	0	245.0445	529.2918	0	529.2918	FCEV	0	68.33594	3	7
2049	2a	1	1354.979	4858.793	2816.712	2042.081	22307.3	12931.86	9375.441	PHEV	785.5008	569.4784	3	8
2049	2a	1	30604.6	111497.8	111497.8	0	433650.7	433650.7	0	ICE	30604.6	0	3	1
2049	2a	1	318.9558	1162.01	1162.01	0	4550.021	4550.021	0	ICE	318.9558	0	3	2
2049	2a	1	3708.481	13510.63	0	13510.63	41090.46	0	41090.46	BEV	0	3708.481	3	3
2049	2a	1	156.8208	571.3249	0	571.3249	1276.483	0	1276.483	FCEV	0	156.8208	3	7
2049	2a	1	2371.821	8640.948	4932.747	3708.201	42145.23	24058.9	18086.32	PHEV	1353.971	1017.85	3	8
2049	2a	1	32071.11	118677.8	118677.8	0	467380.5	467380.5	0	ICE	32071.11	0	3	1
2049	2a	1	336.0456	1243.523	1243.523	0	4933.451	4933.451	0	ICE	336.0456	0	3	2
2049	2a	1	5922.603	21916.35	0	21916.35	68685.33	0	68685.33	BEV	0	5922.603	3	3
2049	2a	1	298.6186	1105.026	0	1105.026	2578.708	0	2578.708	FCEV	0	298.6186	3	7
2049	2a	1	3560.427	13175.22	7404.473	5770.746	66219.43	37215.32	29004.11	PHEV	2000.96	1559.467	3	8
2049	2a	1	33280.23	125058.8	125058.8	0	499394.4	499394.4	0	ICE	33280.23	0	3	1
2049	2a	1	350.4655	1316.962	1316.962	0	5300.839	5300.839	0	ICE	350.4655	0	3	2
2049	2a	1	8706.714	32717.65	0	32717.65	105727.6	0	105727.6	BEV	0	8706.714	3	3
2049	2a	1	510.9203	1919.911	0	1919.911	5029.795	0	5029.795	FCEV	0	510.9203	3	7
2049	2a	1	4913.473	18463.6	10213.01	8250.593	94831.49	52455.36	42376.13	PHEV	2717.852	2195.62	3	8
2049	2a	1	34586.37	131948.4	131948.4	0	534991	534991	0	ICE	34586.37	0	3	1
2049	2a	1	365.9111	1395.966	1395.966	0	5708.099	5708.099	0	ICE	365.9111	0	3	2
2049	2a	1	12311.95	46970.59	0	46970.59	156707.9	0	156707.9	BEV	0	12311.95	3	3
2049	2a	1	825.8017	3150.467	0	3150.467	8953.564	0	8953.564	FCEV	0	825.8017	3	7
2049	2a	1	6512.534	24845.58	13523.09	11322.48	130135	70830.62	59304.38	PHEV	3544.679	2967.855	3	8
2049	2a	1	35895.12	138997.8	138997.8	0	570543.1	570543.1	0	ICE	35895.12	0	3	1
2049	2a	1	379.7573	1470.545	1470.545	0	6085.76	6085.76	0	ICE	379.7573	0	3	2
2049	2a	1	16994.48	65808.22	0	65808.22	226352.6	0	226352.6	BEV	0	16994.48	3	3
2049	2a	1	1284.77	4975.053	0	4975.053	15301.74	0	15301.74	FCEV	0	1284.77	3	7
2049	2a	1	8411.14	32570.71	17439.29	15131.42	173232.7	92753.76	80478.98	PHEV	4503.565	3907.575	3	8
2049	2a	1	36890.94	144967.4	144967.4	0	603758.7	603758.7	0	ICE	36890.94	0	3	1
2049	2a	1	390.2926	1533.702	1533.702	0	6438.467	6438.467	0	ICE	390.2926	0	3	2

2049	2a	1	22969.19	90260.18	0	90260.18	320218.7	0	320218.7	BEV	0	22969.19	3	3
2049	2a	1	1935.446	7605.567	0	7605.567	24862.32	0	24862.32	FCEV	0	1935.446	3	7
2049	2a	1	10615.22	41713.77	21965.28	19748.49	225451.4	118716.2	106735.1	PHEV	5589.67	5025.547	3	8
2049	2a	1	37899.33	151101.2	151101.2	0	639311.4	639311.4	0	ICE	37899.33	0	3	1
2049	2a	1	400.961	1598.595	1598.595	0	6816.051	6816.051	0	ICE	400.961	0	3	2
2049	2a	1	30963.3	123447.9	0	123447.9	451644.6	0	451644.6	BEV	0	30963.3	3	3
2049	2a	1	2881.657	11488.91	0	11488.91	39506.57	0	39506.57	FCEV	0	2881.657	3	7
2049	2a	1	13330.23	53146.44	27514.67	25631.77	291960.9	151152.3	140808.6	PHEV	6901.253	6428.982	3	8
2049	2a	1	38735.28	156653.2	156653.2	0	674051.7	674051.7	0	ICE	38735.28	0	3	1
2049	2a	1	409.8051	1657.334	1657.334	0	7184.934	7184.934	0	ICE	409.8051	0	3	2
2049	2a	1	41795.85	169030.8	0	169030.8	637599.7	0	637599.7	BEV	0	41795.85	3	3
2049	2a	1	4263.808	17243.69	0	17243.69	61982.96	0	61982.96	FCEV	0	4263.808	3	7
2049	2a	1	16716.24	67603.81	34400.68	33203.13	377658.2	192174.1	185484.1	PHEV	8506.177	8210.061	3	8
2049	2a	1	38753.61	158947.6	158947.6	0	696394.1	696394.1	0	ICE	38753.61	0	3	1
2049	2a	1	409.999	1681.607	1681.607	0	7421.674	7421.674	0	ICE	409.999	0	3	2
2049	2a	1	56159.62	230338.1	0	230338.1	895903.8	0	895903.8	BEV	0	56159.62	3	3
2049	2a	1	6239.958	25593.12	0	25593.12	95803.92	0	95803.92	FCEV	0	6239.958	3	7
2049	2a	1	20799.86	85310.41	42655.21	42655.21	485071.5	242535.7	242535.7	PHEV	10399.93	10399.93	3	8
2049	2a	1	36585.75	152152.1	152152.1	0	679273.4	679273.4	0	ICE	36585.75	0	3	1
2049	2a	1	387.0638	1609.713	1609.713	0	7237.922	7237.922	0	ICE	387.0638	0	3	2
2049	2a	1	72662.14	302185.8	0	302185.8	1207961	0	1207961	BEV	0	72662.14	3	3
2049	2a	1	8980.714	37348.81	0	37348.81	144892.6	0	144892.6	FCEV	0	8980.714	3	7
2049	2a	1	25781.95	107221.5	53610.74	53610.74	619912.1	309956.1	309956.1	PHEV	12890.98	12890.98	3	8
2049	2a	1	31579.01	133139.3	133139.3	0	606163.7	606163.7	0	ICE	31579.01	0	3	1
2049	2a	1	334.0943	1408.565	1408.565	0	6457.859	6457.859	0	ICE	334.0943	0	3	2
2049	2a	1	90980.95	383582	0	383582	1576083	0	1576083	BEV	0	90980.95	3	3
2049	2a	1	12406.49	52306.64	0	52306.64	209857.3	0	209857.3	FCEV	0	12406.49	3	7
2049	2a	1	30881.96	130200.5	65100.26	65100.26	766109.7	383054.9	383054.9	PHEV	15440.98	15440.98	3	8
2049	2a	1	23931.08	102266.1	102266.1	0	475185.7	475185.7	0	ICE	23931.08	0	3	1
2049	2a	1	253.182	1081.938	1081.938	0	5061.713	5061.713	0	ICE	253.182	0	3	2
2049	2a	1	111778.6	477670.1	0	477670.1	2017749	0	2017749	BEV	0	111778.6	3	3
2049	2a	1	16702.55	71375.99	0	71375.99	295755	0	295755	FCEV	0	16702.55	3	7
2049	2a	1	36238.26	154859.1	77429.57	77429.57	928170.6	464085.3	464085.3	PHEV	18119.13	18119.13	3	8
2049	2a	1	13528.92	58589.03	58589.03	0	278034.2	278034.2	0	ICE	13528.92	0	3	1
2049	2a	1	143.1311	619.8505	619.8505	0	2961.248	2961.248	0	ICE	143.1311	0	3	2
2049	2a	1	135821.1	588193.4	0	588193.4	2554682	0	2554682	BEV	0	135821.1	3	3
2049	2a	1	22110.4	95752.42	0	95752.42	409387.3	0	409387.3	FCEV	0	22110.4	3	7
2049	2a	1	41981.78	181808.4	90904.2	90904.2	1111039	555519.6	555519.6	PHEV	20990.89	20990.89	3	8
2049	2a	1	161113.6	706956.9	0	706956.9	3158048	0	3158048	BEV	0	161113.6	3	3
2049	2a	1	28431.81	124757.1	0	124757.1	550107.3	0	550107.3	FCEV	0	28431.81	3	7
2049	2a	1	47386.36	207928.5	103964.2	103964.2	1297082	648541.2	648541.2	PHEV	23693.18	23693.18	3	8
2049	2a	1	177673.2	789798.3	0	789798.3	3630359	0	3630359	BEV	0	177673.2	3	3
2049	2a	1	33842.52	150437.8	0	150437.8	683552.8	0	683552.8	FCEV	0	33842.52	3	7
2049	2a	1	49614.8	220549.2	110274.6	110274.6	1402805	701402.6	701402.6	PHEV	24807.4	24807.4	3	8
2049	2a	1	191739	863308.8	0	863308.8	4084073	0	4084073	BEV	0	191739	3	3
2049	2a	1	39271.85	176822.3	0	176822.3	827915.2	0	827915.2	FCEV	0	39271.85	3	7
2049	2a	1	50709.7	228321.5	114160.7	114160.7	1482141	741070.3	741070.3	PHEV	25354.85	25354.85	3	8

2049	2a	1	207146.7	944549.7	0	944549.7	4599441	0	4599441	BEV	0	207146.7	3	3
2049	2a	1	45471.23	207340.2	0	207340.2	1000359	0	1000359	FCEV	0	45471.23	3	7
2049	2a	1	51741.03	235929.3	117964.6	117964.6	1564222	782110.8	782110.8	PHEV	25870.51	25870.51	3	8
2049	2a	1	219617.1	1013994	0	1013994	5083241	0	5083241	BEV	0	219617.1	3	3
2049	2a	1	51515.12	237850.5	0	237850.5	1182538	0	1182538	FCEV	0	51515.12	3	7
2049	2a	1	51644.23	238446.6	119223.3	119223.3	1615644	807821.9	807821.9	PHEV	25822.12	25822.12	3	8
2049	2a	1	232047.4	1084680	0	1084680	5597845	0	5597845	BEV	0	232047.4	3	3
2049	2a	1	58011.85	271170	0	271170	1389104	0	1389104	FCEV	0	58011.85	3	7
2049	2a	1	51186.92	239267.6	119633.8	119633.8	1657088	828544.2	828544.2	PHEV	25593.46	25593.46	3	8
2049	2a	1	240746.2	1139134	0	1139134	6053720	0	6053720	BEV	0	240746.2	3	3
2049	2a	1	63995.82	302807.8	0	302807.8	1598514	0	1598514	FCEV	0	63995.82	3	7
2049	2a	1	49609.17	234734.7	117367.3	117367.3	1662523	831261.6	831261.6	PHEV	24804.58	24804.58	3	8
2049	2a	1	248527.8	1190192	0	1190192	6513001	0	6513001	BEV	0	248527.8	3	3
2049	2a	1	70097.58	335695.2	0	335695.2	1826029	0	1826029	FCEV	0	70097.58	3	7
2049	2a	1	47610.69	228006.2	114003.1	114003.1	1651098	825549.2	825549.2	PHEV	23805.34	23805.34	3	8
2049	2a	1	254162.6	1231738	0	1231738	6941667	0	6941667	BEV	0	254162.6	3	3
2049	2a	1	75918.7	367921.8	0	367921.8	2062383	0	2062383	FCEV	0	75918.7	3	7
2049	2a	1	45011.09	218135.4	109067.7	109067.7	1614586	807293.1	807293.1	PHEV	22505.54	22505.54	3	8
2049	2a	1	260545.6	1277598	0	1277598	7414688	0	7414688	BEV	0	260545.6	3	3
2049	2a	1	82277.56	403452.1	0	403452.1	2330277	0	2330277	FCEV	0	82277.56	3	7
2049	2a	1	42371.4	207770.3	103885.1	103885.1	1570436	785217.9	785217.9	PHEV	21185.7	21185.7	3	8
2049	2a	1	265426	1316736	0	1316736	7869624	0	7869624	BEV	0	265426	3	3
2049	2a	1	88475.33	438912	0	438912	2612037	0	2612037	FCEV	0	88475.33	3	7
2049	2a	1	39322.37	195072	97535.99	97535.99	1503824	751911.9	751911.9	PHEV	19661.18	19661.18	3	8
2049	2a	1	269654.6	1353162	0	1353162	8292817	0	8292817	BEV	0	269654.6	3	3
2049	2a	1	89884.88	451054	0	451054	2752493	0	2752493	FCEV	0	89884.88	3	7
2049	2a	1	39948.83	200468.4	100234.2	100234.2	1585124	792561.9	792561.9	PHEV	19974.42	19974.42	3	8
2049	2a	1	276610	1403912	0	1403912	8821932	0	8821932	BEV	0	276610	3	3
2049	2a	1	92203.33	467970.6	0	467970.6	2928095	0	2928095	FCEV	0	92203.33	3	7
2049	2a	1	40979.26	207986.9	103993.5	103993.5	1687150	843574.9	843574.9	PHEV	20489.63	20489.63	3	8
2049	2a	1	283877.5	1457061	0	1457061	9384730	0	9384730	BEV	0	283877.5	3	3
2049	2a	1	94625.84	485687	0	485687	3114870	0	3114870	FCEV	0	94625.84	3	7
2049	2a	1	42055.93	215860.9	107930.4	107930.4	1795946	897972.8	897972.8	PHEV	21027.97	21027.97	3	8
2049	2a	1	256942.2	1333530	0	1333530	8795110	0	8795110	BEV	0	256942.2	3	3
2049	2a	1	85647.4	444510	0	444510	2919157	0	2919157	FCEV	0	85647.4	3	7
2049	2a	1	38065.51	197560	98780	98780	1683760	841880	841880	PHEV	19032.76	19032.76	3	8
2049	2a	1	14699.36	39236.12	39236.12	0	116347.6	116347.6	0	ICE	14699.36	0	4	1
2049	2a	1	13280.74	36210.34	36210.34	0	108203.9	108203.9	0	ICE	13280.74	0	4	1
2049	2a	1	12293.85	34223.87	34223.87	0	103085.8	103085.8	0	ICE	12293.85	0	4	1
2049	2a	1	8543.5	24273.02	24273.02	0	73521.94	73521.94	0	ICE	8543.5	0	4	1
2049	2a	1	3337.47	9673.323	9673.323	0	29399.67	29399.67	0	ICE	3337.47	0	4	1
2049	2a	1	4544.955	13433.48	13433.48	0	40950.99	40950.99	0	ICE	4544.955	0	4	1
2049	2a	1	6368.513	19188.2	19188.2	0	59169.68	59169.68	0	ICE	6368.513	0	4	1
2049	2a	1	188.3859	567.6029	567.6029	0	1652.428	1652.428	0	ICE	188.3859	0	4	2
2049	2a	1	6181.787	18979.75	18979.75	0	59351.58	59351.58	0	ICE	6181.787	0	4	1
2049	2a	1	6919.745	21641.92	21641.92	0	68335.79	68335.79	0	ICE	6919.745	0	4	1
2049	2a	1	150.5461	470.8419	470.8419	0	1452.134	1452.134	0	ICE	150.5461	0	4	2

2049	2a	1	10715.52	34127.31	34127.31	0	110229.5	110229.5	0	ICE	10715.52	0	4	1
2049	2a	1	352.5707	1122.885	1122.885	0	3439.235	3439.235	0	ICE	352.5707	0	4	2
2049	2a	1	11929.58	38677.37	38677.37	0	128341.3	128341.3	0	ICE	11929.58	0	4	1
2049	2a	1	13499.88	44541.9	44541.9	0	151419.4	151419.4	0	ICE	13499.88	0	4	1
2049	2a	1	12880.79	43237.22	43237.22	0	151187.5	151187.5	0	ICE	12880.79	0	4	1
2049	2a	1	449.1554	1507.689	1507.689	0	5277.357	5277.357	0	ICE	449.1554	0	4	2
2049	2a	1	107.7644	361.7349	217.0409	144.694	1171.368	702.8206	468.5471	PHEV	64.65864	43.10576	4	8
2049	2a	1	14621.66	49918.5	49918.5	0	177005.6	177005.6	0	ICE	14621.66	0	4	1
2049	2a	1	509.8598	1740.666	1740.666	0	6178.427	6178.427	0	ICE	509.8598	0	4	2
2049	2a	1	0.255776	0.873223	0	0.873223	1.70295	0	1.70295	BEV	0	0.255776	4	3
2049	2a	1	0.00522	0.017821	0	0.017821	0.034754	0	0.034754	FCEV	0	0.00522	4	7
2049	2a	1	312.9998	1068.585	641.1507	427.4338	3682.157	2209.294	1472.863	PHEV	187.7999	125.1999	4	8
2049	2a	1	16719.18	58037.31	58037.31	0	208830.1	208830.1	0	ICE	16719.18	0	4	1
2049	2a	1	588.5045	2042.876	2042.876	0	7367.506	7367.506	0	ICE	588.5045	0	4	2
2049	2a	1	143.3246	497.5227	0	497.5227	1067.146	0	1067.146	BEV	0	143.3246	4	3
2049	2a	1	3.352622	11.63796	0	11.63796	23.4528	0	23.4528	FCEV	0	3.352622	4	7
2049	2a	1	372.9011	1294.452	769.274	525.1775	4956.582	2945.626	2010.956	PHEV	221.6098	151.2913	4	8
2049	2a	1	19076.01	67311.42	67311.42	0	245736.9	245736.9	0	ICE	19076.01	0	4	1
2049	2a	1	681.994	2406.477	2406.477	0	8824.387	8824.387	0	ICE	681.994	0	4	2
2049	2a	1	328.9421	1160.702	0	1160.702	2964.593	0	2964.593	BEV	0	328.9421	4	3
2049	2a	1	8.681756	30.63436	0	30.63436	63.82685	0	63.82685	FCEV	0	8.681756	4	7
2049	2a	1	443.0014	1563.17	920.0374	643.1329	5939.674	3495.923	2443.752	PHEV	260.738	182.2634	4	8
2049	2a	1	20546.31	73676.61	73676.61	0	272179.8	272179.8	0	ICE	20546.31	0	4	1
2049	2a	1	747.5377	2680.58	2680.58	0	9969.336	9969.336	0	ICE	747.5377	0	4	2
2049	2a	1	1087.331	3899.037	0	3899.037	10074.79	0	10074.79	BEV	0	1087.331	4	3
2049	2a	1	37.27256	133.6549	0	133.6549	287.9807	0	287.9807	FCEV	0	37.27256	4	7
2049	2a	1	1297.785	4653.7	2697.817	1955.884	19636.67	11383.66	8253.013	PHEV	752.3443	545.4404	4	8
2049	2a	1	21905.62	79805.88	79805.88	0	299345	299345	0	ICE	21905.62	0	4	1
2049	2a	1	801.3651	2919.509	2919.509	0	11034.07	11034.07	0	ICE	801.3651	0	4	2
2049	2a	1	2155.041	7851.182	0	7851.182	21283.05	0	21283.05	BEV	0	2155.041	4	3
2049	2a	1	91.1304	332.0035	0	332.0035	739.8009	0	739.8009	FCEV	0	91.1304	4	7
2049	2a	1	2282.368	8315.056	4746.709	3568.347	36919.05	21075.5	15843.55	PHEV	1302.906	979.462	4	8
2049	2a	1	23278.44	86140.93	86140.93	0	327947.2	327947.2	0	ICE	23278.44	0	4	1
2049	2a	1	856.947	3171.098	3171.098	0	12172.95	12172.95	0	ICE	856.947	0	4	2
2049	2a	1	3630.399	13434.15	0	13434.15	38240.66	0	38240.66	BEV	0	3630.399	4	3
2049	2a	1	183.0453	677.3519	0	677.3519	1561.111	0	1561.111	FCEV	0	183.0453	4	7
2049	2a	1	3412.367	12627.33	7096.559	5530.77	58080.91	32641.47	25439.44	PHEV	1917.751	1494.617	4	8
2049	2a	1	25121.76	94401.28	94401.28	0	364248.5	364248.5	0	ICE	25121.76	0	4	1
2049	2a	1	930.208	3495.489	3495.489	0	13607.7	13607.7	0	ICE	930.208	0	4	2
2049	2a	1	5748.402	21601.06	0	21601.06	64392.43	0	64392.43	BEV	0	5748.402	4	3
2049	2a	1	337.323	1267.576	0	1267.576	3024.977	0	3024.977	FCEV	0	337.323	4	7
2049	2a	1	4791.301	18004.51	9959.067	8045.445	85133.44	47090.96	38042.49	PHEV	2650.274	2141.027	4	8
2049	2a	1	26903.21	102636.8	102636.8	0	401965.6	401965.6	0	ICE	26903.21	0	4	1
2049	2a	1	1001.55	3820.952	3820.952	0	15106.5	15106.5	0	ICE	1001.55	0	4	2
2049	2a	1	8647.164	32989.28	0	32989.28	102724.4	0	102724.4	BEV	0	8647.164	4	3
2049	2a	1	579.9927	2212.695	0	2212.695	5810.025	0	5810.025	FCEV	0	579.9927	4	7
2049	2a	1	6378.97	24336.03	13245.75	11090.27	117961.9	64204.97	53756.92	PHEV	3471.982	2906.988	4	8

2049	2a	1	28405.07	109993.8	109993.8	0	436510.3	436510.3	0	ICE	28405.07	0	4	1
2049	2a	1	1057.461	4094.838	4094.838	0	16399.49	16399.49	0	ICE	1057.461	0	4	2
2049	2a	1	12500.45	48405.87	0	48405.87	157253.8	0	157253.8	BEV	0	12500.45	4	3
2049	2a	1	945.0249	3659.448	0	3659.448	10549.86	0	10549.86	FCEV	0	945.0249	4	7
2049	2a	1	8136.287	31506.39	16869.42	14636.97	156084.2	83571.95	72512.26	PHEV	4356.401	3779.886	4	8
2049	2a	1	29320.35	115217.8	115217.8	0	464213.9	464213.9	0	ICE	29320.35	0	4	1
2049	2a	1	1091.535	4289.317	4289.317	0	17435.21	17435.21	0	ICE	1091.535	0	4	2
2049	2a	1	17429.62	68491.79	0	68491.79	231849.9	0	231849.9	BEV	0	17429.62	4	3
2049	2a	1	1468.667	5771.304	0	5771.304	17897.05	0	17897.05	FCEV	0	1468.667	4	7
2049	2a	1	9965.02	39158.74	20619.87	18538.87	198256.9	104396.4	93860.49	PHEV	5247.295	4717.725	4	8
2049	2a	1	29727.24	118519.8	118519.8	0	485403.9	485403.9	0	ICE	29727.24	0	4	1
2049	2a	1	1106.682	4412.243	4412.243	0	18226.14	18226.14	0	ICE	1106.682	0	4	2
2049	2a	1	23771.23	94773.77	0	94773.77	333894.3	0	333894.3	BEV	0	23771.23	4	3
2049	2a	1	2212.313	8820.295	0	8820.295	29075.91	0	29075.91	FCEV	0	2212.313	4	7
2049	2a	1	11865.71	47307.51	24491.77	22815.74	244682.2	126675.5	118006.7	PHEV	6143.047	5722.662	4	8
2049	2a	1	29137.76	117838.9	117838.9	0	491291.9	491291.9	0	ICE	29137.76	0	4	1
2049	2a	1	1084.737	4386.894	4386.894	0	18442.76	18442.76	0	ICE	1084.737	0	4	2
2049	2a	1	31492.38	127361.5	0	127361.5	466637.1	0	466637.1	BEV	0	31492.38	4	3
2049	2a	1	3212.699	12992.8	0	12992.8	45201.85	0	45201.85	FCEV	0	3212.699	4	7
2049	2a	1	13613.83	55057.06	28016.18	27040.88	290991.7	148073.2	142918.5	PHEV	6927.496	6686.337	4	8
2049	2a	1	27578.25	113111.9	113111.9	0	480680.9	480680.9	0	ICE	27578.25	0	4	1
2049	2a	1	1026.68	4210.918	4210.918	0	18040.46	18040.46	0	ICE	1026.68	0	4	2
2049	2a	1	40905.23	167772.4	0	167772.4	638966.3	0	638966.3	BEV	0	40905.23	4	3
2049	2a	1	4545.025	18641.38	0	18641.38	68132.2	0	68132.2	FCEV	0	4545.025	4	7
2049	2a	1	15150.08	62137.92	31068.96	31068.96	335604.2	167802.1	167802.1	PHEV	7575.042	7575.042	4	8
2049	2a	1	24798.79	103132.7	103132.7	0	447317.5	447317.5	0	ICE	24798.79	0	4	1
2049	2a	1	923.2066	3839.413	3839.413	0	16785.08	16785.08	0	ICE	923.2066	0	4	2
2049	2a	1	50423.22	209699.1	0	209699.1	821520.5	0	821520.5	BEV	0	50423.22	4	3
2049	2a	1	6232.083	25917.86	0	25917.86	98318.47	0	98318.47	FCEV	0	6232.083	4	7
2049	2a	1	17891.15	74405.35	37202.68	37202.68	409474.1	204737	204737	PHEV	8945.574	8945.574	4	8
2049	2a	1	21078.27	88867.48	88867.48	0	393829.4	393829.4	0	ICE	21078.27	0	4	1
2049	2a	1	784.6997	3308.349	3308.349	0	14775.51	14775.51	0	ICE	784.6997	0	4	2
2049	2a	1	62183.93	262171.8	0	262171.8	1056918	0	1056918	BEV	0	62183.93	4	3
2049	2a	1	8479.626	35750.7	0	35750.7	140474.2	0	140474.2	FCEV	0	8479.626	4	7
2049	2a	1	21107.29	88989.83	44494.92	44494.92	499674.2	249837.1	249837.1	PHEV	10553.65	10553.65	4	8
2049	2a	1	15667.13	66951.28	66951.28	0	303356.3	303356.3	0	ICE	15667.13	0	4	1
2049	2a	1	583.2541	2492.455	2492.455	0	11379.48	11379.48	0	ICE	583.2541	0	4	2
2049	2a	1	74946.48	320273.3	0	320273.3	1328756	0	1328756	BEV	0	74946.48	4	3
2049	2a	1	11198.9	47856.93	0	47856.93	194472.1	0	194472.1	FCEV	0	11198.9	4	7
2049	2a	1	24297.41	103831.6	51915.8	51915.8	595341.1	297670.5	297670.5	PHEV	12148.71	12148.71	4	8
2049	2a	1	8623.256	37344.3	37344.3	0	173139.7	173139.7	0	ICE	8623.256	0	4	1
2049	2a	1	321.0256	1390.25	1390.25	0	6493.97	6493.97	0	ICE	321.0256	0	4	2
2049	2a	1	88675.74	384023.6	0	384023.6	1640078	0	1640078	BEV	0	88675.74	4	3
2049	2a	1	14435.59	62515.47	0	62515.47	262489.2	0	262489.2	FCEV	0	14435.59	4	7
2049	2a	1	27409.34	118700.3	59350.13	59350.13	695786.1	347893.1	347893.1	PHEV	13704.67	13704.67	4	8
2049	2a	1	103203.2	452849.3	0	452849.3	1991225	0	1991225	BEV	0	103203.2	4	3
2049	2a	1	18212.32	79914.58	0	79914.58	346480.7	0	346480.7	FCEV	0	18212.32	4	7

2049	2a	1	30353.87	133191	66595.49	66595.49	798944.2	399472.1	399472.1	PHEV	15176.94	15176.94	4	8
2049	2a	1	112059.8	498131.8	0	498131.8	2255882	0	2255882	BEV	0	112059.8	4	3
2049	2a	1	21344.73	94882.25	0	94882.25	424332.4	0	424332.4	FCEV	0	21344.73	4	7
2049	2a	1	31292.43	139102.1	69551.03	69551.03	852408.5	426204.3	426204.3	PHEV	15646.22	15646.22	4	8
2049	2a	1	120052.1	540536.8	0	540536.8	2521328	0	2521328	BEV	0	120052.1	4	3
2049	2a	1	24588.98	110712.4	0	110712.4	510650.3	0	510650.3	FCEV	0	24588.98	4	7
2049	2a	1	31750.47	142957.1	71478.56	71478.56	895515	447757.5	447757.5	PHEV	15875.24	15875.24	4	8
2049	2a	1	128881.3	587674.2	0	587674.2	2823631	0	2823631	BEV	0	128881.3	4	3
2049	2a	1	28291.01	129001.6	0	129001.6	613608.3	0	613608.3	FCEV	0	28291.01	4	7
2049	2a	1	32191.92	146789	73394.51	73394.51	940546.5	470273.3	470273.3	PHEV	16095.96	16095.96	4	8
2049	2a	1	136643	630894.3	0	630894.3	3122902	0	3122902	BEV	0	136643	4	3
2049	2a	1	32052.06	147987.5	0	147987.5	725928.4	0	725928.4	FCEV	0	32052.06	4	7
2049	2a	1	32132.39	148358.4	74179.22	74179.22	972796	486398	486398	PHEV	16066.19	16066.19	4	8
2049	2a	1	145361.6	679476.8	0	679476.8	3464597	0	3464597	BEV	0	145361.6	4	3
2049	2a	1	36340.4	169869.2	0	169869.2	859122.3	0	859122.3	FCEV	0	36340.4	4	7
2049	2a	1	32065.06	149884.6	74942.3	74942.3	1005591	502795.7	502795.7	PHEV	16032.53	16032.53	4	8
2049	2a	1	151069.5	714812.6	0	714812.6	3755353	0	3755353	BEV	0	151069.5	4	3
2049	2a	1	40157.72	190013.5	0	190013.5	990965	0	990965	FCEV	0	40157.72	4	7
2049	2a	1	31130.02	147297.3	73648.64	73648.64	1011537	505768.6	505768.6	PHEV	15565.01	15565.01	4	8
2049	2a	1	157776.9	755588.9	0	755588.9	4089329	0	4089329	BEV	0	157776.9	4	3
2049	2a	1	44501.18	213114.8	0	213114.8	1145821	0	1145821	FCEV	0	44501.18	4	7
2049	2a	1	30225.46	144748.8	72374.41	72374.41	1016820	508410.2	508410.2	PHEV	15112.73	15112.73	4	8
2049	2a	1	163145.5	790645.6	0	790645.6	4408034	0	4408034	BEV	0	163145.5	4	3
2049	2a	1	48731.78	236166.9	0	236166.9	1308918	0	1308918	FCEV	0	48731.78	4	7
2049	2a	1	28892.36	140019.9	70009.94	70009.94	1005431	502715.3	502715.3	PHEV	14446.18	14446.18	4	8
2049	2a	1	169238	829866.9	0	829866.9	4765097	0	4765097	BEV	0	169238	4	3
2049	2a	1	53443.57	262063.2	0	262063.2	1496827	0	1496827	FCEV	0	53443.57	4	7
2049	2a	1	27522.44	134957.7	67478.83	67478.83	989212	494606	494606	PHEV	13761.22	13761.22	4	8
2049	2a	1	172314.1	854822.9	0	854822.9	5055124	0	5055124	BEV	0	172314.1	4	3
2049	2a	1	57438.05	284941	0	284941	1677122	0	1677122	FCEV	0	57438.05	4	7
2049	2a	1	25528.02	126640.4	63320.21	63320.21	946029.3	473014.6	473014.6	PHEV	12764.01	12764.01	4	8
2049	2a	1	175944.1	882910.6	0	882910.6	5354628	0	5354628	BEV	0	175944.1	4	3
2049	2a	1	58648.05	294303.5	0	294303.5	1776481	0	1776481	FCEV	0	58648.05	4	7
2049	2a	1	26065.8	130801.6	65400.78	65400.78	1002465	501232.4	501232.4	PHEV	13032.9	13032.9	4	8
2049	2a	1	180603.9	916640.8	0	916640.8	5698002	0	5698002	BEV	0	180603.9	4	3
2049	2a	1	60201.31	305546.9	0	305546.9	1890399	0	1890399	FCEV	0	60201.31	4	7
2049	2a	1	26756.14	135798.6	67899.32	67899.32	1067035	533517.5	533517.5	PHEV	13378.07	13378.07	4	8
2049	2a	1	183870.6	943754.5	0	943754.5	6011376	0	6011376	BEV	0	183870.6	4	3
2049	2a	1	61290.2	314584.8	0	314584.8	1994358	0	1994358	FCEV	0	61290.2	4	7
2049	2a	1	27240.09	139815.5	69907.74	69907.74	1126223	563111.5	563111.5	PHEV	13620.05	13620.05	4	8
2049	2a	1	159310.5	826821.4	0	826821.4	5382476	0	5382476	BEV	0	159310.5	4	3
2049	2a	1	53103.49	275607.1	0	275607.1	1785749	0	1785749	FCEV	0	53103.49	4	7
2049	2a	1	23601.55	122492.1	61246.03	61246.03	1007357	503678.5	503678.5	PHEV	11800.78	11800.78	4	8
2049	2a	1	40.99483	109.425	109.425	0	168.9502	168.9502	0	ICE	40.99483	0	1	2
2049	2a	1	84.40391	244.6363	244.6363	0	420.0693	420.0693	0	ICE	84.40391	0	1	2
2049	2a	1	203.5294	624.8902	624.8902	0	1209.614	1209.614	0	ICE	203.5294	0	1	2
2049	2a	1	285.0095	891.3844	891.3844	0	1819.863	1819.863	0	ICE	285.0095	0	1	2

2049	2a	1	241.0145	753.7872	0	753.7872	1788.192	0	1788.192	BEV	0	241.0145	1	3
2049	2a	1	0.01416	0.044286	0	0.044286	0.105058	0	0.105058	FCEV	0	0.01416	1	7
2049	2a	1	251.9175	787.8872	472.7323	315.1549	1545.164	927.0984	618.0656	PHEV	151.1505	100.767	1	8
2049	2a	1	298.6145	951.0423	0	951.0423	2324.362	0	2324.362	BEV	0	298.6145	1	3
2049	2a	1	0.04184	0.133255	0	0.133255	0.325678	0	0.325678	FCEV	0	0.04184	1	7
2049	2a	1	377.0233	1200.763	720.4575	480.305	2469.257	1481.554	987.7027	PHEV	226.214	150.8093	1	8
2049	2a	1	301.9712	979.0328	979.0328	0	2209.133	2209.133	0	ICE	301.9712	0	1	2
2049	2a	1	709.3212	2299.719	0	2299.719	5822.752	0	5822.752	BEV	0	709.3212	1	3
2049	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2049	2a	1	337.3013	1093.578	656.1467	437.4312	2358.485	1415.091	943.3941	PHEV	202.3808	134.9205	1	8
2049	2a	1	2425.265	7446.217	7446.217	0	26422.41	26422.41	0	ICE	2425.265	0	2	1
2049	2a	1	3663.019	11456.31	11456.31	0	41079.85	41079.85	0	ICE	3663.019	0	2	1
2049	2a	1	4808.952	15315.79	15315.79	0	55109.07	55109.07	0	ICE	4808.952	0	2	1
2049	2a	1	2.391869	6.795564	6.795564	0	20.46298	20.46298	0	ICE	2.391869	0	3	2
2049	2a	1	61.93139	190.1461	190.1461	0	639.8175	639.8175	0	ICE	61.93139	0	3	2
2049	2a	1	47.76044	149.3736	149.3736	0	496.4679	496.4679	0	ICE	47.76044	0	3	2
2049	2a	1	206.6031	669.8362	669.8362	0	2352.029	2352.029	0	ICE	206.6031	0	3	2
2049	2a	1	216.8813	715.5846	0	715.5846	1281.355	0	1281.355	BEV	0	216.8813	3	3
2049	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2049	2a	1	19.73779	65.12346	39.07407	26.04938	231.959	139.1754	92.78358	PHEV	11.84267	7.895116	3	8
2049	2a	1	43.65859	116.5353	116.5353	0	300.6808	300.6808	0	ICE	43.65859	0	4	2
2049	2a	1	54.59051	148.8427	148.8427	0	386.9436	386.9436	0	ICE	54.59051	0	4	2
2049	2a	1	67.54001	188.0192	188.0192	0	519.3367	519.3367	0	ICE	67.54001	0	4	2
2049	2a	1	45.69506	129.8247	129.8247	0	361.2463	361.2463	0	ICE	45.69506	0	4	2
2049	2a	1	55.86076	161.9068	161.9068	0	465.7374	465.7374	0	ICE	55.86076	0	4	2
2049	2a	1	329.6751	1012.192	1012.192	0	2903.808	2903.808	0	ICE	329.6751	0	4	2
2049	2a	1	714.0122	2314.928	2314.928	0	7205.807	7205.807	0	ICE	714.0122	0	4	2
2049	2a	1	475.4047	1568.565	1568.565	0	5050.609	5050.609	0	ICE	475.4047	0	4	2
2049	2a	1	1.542626	4.117638	0	4.117638	8.5608	0	8.5608	BEV	0	1.542626	1	3
2049	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2049	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2049	2a	1	53.66432	164.764	0	164.764	380.7983	0	380.7983	BEV	0	53.66432	1	3
2049	2a	1	0.202804	0.622665	0	0.622665	1.439086	0	1.439086	FCEV	0	0.202804	1	7
2049	2a	1	112.8044	346.3399	207.8039	138.5359	641.8288	385.0973	256.7315	PHEV	67.68262	45.12175	1	8
2049	2a	1	480.4737	1585.289	0	1585.289	4148.45	0	4148.45	BEV	0	480.4737	1	3
2049	2a	1	14.62838	48.26533	0	48.26533	126.3027	0	126.3027	FCEV	0	14.62838	1	7
2049	2a	1	345.5249	1140.035	684.0211	456.014	2575.126	1545.076	1030.051	PHEV	207.3149	138.2099	1	8
2049	2a	1	9.442472	25.20422	25.20422	0	77.0968	77.0968	0	ICE	9.442472	0	3	2
2049	2a	1	10.04187	27.37947	27.37947	0	87.80557	87.80557	0	ICE	10.04187	0	3	2
2049	2a	1	89.0163	263.1046	263.1046	0	768.893	768.893	0	ICE	89.0163	0	4	2
2049	2a	1	68.09869	205.18	0	205.18	464.5738	0	464.5738	BEV	0	68.09869	1	3
2049	2a	1	0.672804	2.027146	0	2.027146	4.589915	0	4.589915	FCEV	0	0.672804	1	7
2049	2a	1	18.92944	57.03401	34.22041	22.81361	101.4547	60.87285	40.5819	PHEV	11.35766	7.571775	1	8
2049	2a	1	42.32848	139.6598	139.6598	0	323.4739	323.4739	0	ICE	42.32848	0	1	2
2049	2a	1	45.89421	146.1662	0	146.1662	356.6929	0	356.6929	BEV	0	45.89421	2	3
2049	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2049	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8

2049	2a	1	7.479741	21.25077	21.25077	0	33.71116	33.71116	0	ICE	7.479741	0	1	2
2049	2a	1	4.391457	12.97979	12.97979	0	39.63591	39.63591	0	ICE	4.391457	0	3	2
2049	2a	1	11.10558	35.3696	0	35.3696	60.01335	0	60.01335	BEV	0	11.10558	3	3
2049	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2049	2a	1	5.028259	16.01425	9.608551	6.4057	53.47302	32.08381	21.38921	PHEV	3.016955	2.011304	3	8
2049	2a	1	8.443689	25.44066	25.44066	0	85.18576	85.18576	0	ICE	8.443689	0	3	2
2049	2a	1	5.369204	14.9469	14.9469	0	20.95186	20.95186	0	ICE	5.369204	0	1	2
2049	2a	1	12.06091	35.6483	0	35.6483	79.41299	0	79.41299	BEV	0	12.06091	1	3
2049	2a	1	1.224458	3.619117	0	3.619117	8.062233	0	8.062233	FCEV	0	1.224458	1	7
2049	2a	1	1.28568	3.800073	2.280044	1.520029	6.457156	3.874294	2.582862	PHEV	0.771408	0.514272	1	8
2049	2a	1	18.0094	55.29372	0	55.29372	127.0171	0	127.0171	BEV	0	18.0094	2	3
2049	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2049	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2049	2a	1	3.608357	10.45846	10.45846	0	33.10424	33.10424	0	ICE	3.608357	0	3	2
2049	2a	1	1.602362	4.368887	0	4.368887	9.211516	0	9.211516	BEV	0	1.602362	1	3
2049	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2049	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2049	2a	1	7.753412	22.0283	0	22.0283	46.22183	0	46.22183	BEV	0	7.753412	1	3
2049	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2049	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2049	2a	1	6.861113	19.88625	0	19.88625	44.04921	0	44.04921	BEV	0	6.861113	1	3
2049	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2049	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2049	2a	1	1.712128	4.962431	4.962431	0	14.60284	14.60284	0	ICE	1.712128	0	2	2
2049	2a	1	22.51931	70.4305	0	70.4305	166.1229	0	166.1229	BEV	0	22.51931	2	3
2049	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2049	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2049	2a	1	1.308664	3.643086	3.643086	0	11.716	11.716	0	ICE	1.308664	0	3	2
2049	2a	1	2.725327	7.58682	0	7.58682	16.05755	0	16.05755	BEV	0	2.725327	1	3
2049	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2049	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2049	2a	1	2.513825	7.142052	0	7.142052	15.15027	0	15.15027	BEV	0	2.513825	2	3
2049	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2049	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2049	2a	1	0.437035	1.341816	1.341816	0	3.688035	3.688035	0	ICE	0.437035	0	2	2
2049	2a	1	0.245687	0.669874	0	0.669874	1.118666	0	1.118666	BEV	0	0.245687	4	3
2049	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2049	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2049	2a	1	1.883027	5.457766	0	5.457766	8.627464	0	8.627464	BEV	0	1.883027	3	3
2049	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2049	2a	1	0	0	0	0	0	0	0	PHEV	0	0	3	8
2049	2a	1	1.012973	3.052067	0	3.052067	4.928058	0	4.928058	BEV	0	1.012973	3	3
2049	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2049	2a	1	0.701289	2.11297	1.267782	0.845188	6.532606	3.919564	2.613042	PHEV	0.420773	0.280516	3	8
2049	2a	1	0.140241	0.454682	0	0.454682	0.774444	0	0.774444	BEV	0	0.140241	4	3
2049	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2049	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8

2049	2a	1	0.647933	1.766608	0	1.766608	3.666284	0	3.666284	BEV	0	0.647933	2	3
2049	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2049	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2049	2a	1	1.042817	2.903014	2.903014	0	8.682443	8.682443	0	ICE	1.042817	0	2	2
2049	2a	1	0.371161	1.033246	0	1.033246	2.173102	0	2.173102	BEV	0	0.371161	2	3
2049	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2049	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2049	2a	1	1.286508	3.655111	3.655111	0	12.92341	12.92341	0	ICE	1.286508	0	2	2
2049	2a	1	1.067274	3.093387	0	3.093387	6.816179	0	6.816179	BEV	0	1.067274	2	3
2049	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2049	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2049	2a	1	1.326565	3.768917	0	3.768917	5.703577	0	5.703577	BEV	0	1.326565	3	3
2049	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2049	2a	1	0	0	0	0	0	0	0	PHEV	0	0	3	8
2049	2a	1	0.707195	2.211794	0	2.211794	3.669522	0	3.669522	BEV	0	0.707195	3	3
2049	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2049	2a	1	0.540796	1.691372	1.014823	0.676549	5.645964	3.387578	2.258386	PHEV	0.324478	0.216318	3	8
2049	2a	1	0.315913	0.843249	0	0.843249	1.235475	0	1.235475	BEV	0	0.315913	4	3
2049	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2049	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2049	2a	1	0.082692	0.220724	0.220724	0	0.668676	0.668676	0	ICE	0.082692	0	2	2
2049	2a	1	0.738039	2.012285	2.012285	0	6.874457	6.874457	0	ICE	0.738039	0	2	2
2049	2a	1	0.223049	0.633707	0	0.633707	0.944237	0	0.944237	BEV	0	0.223049	4	3
2049	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2049	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2049	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2049	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2049	2a	1	0.133001	0.35501	0	0.35501	0.729102	0	0.729102	BEV	0	0.133001	2	3
2049	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2049	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2049	2a	1	0.382867	1.131637	1.131637	0	3.227254	3.227254	0	ICE	0.382867	0	2	2
2049	2a	1	0.673725	2.107117	2.107117	0	7.084224	7.084224	0	ICE	0.673725	0	2	2
2049	2a	1	1.071416	3.166774	0	3.166774	4.914208	0	4.914208	BEV	0	1.071416	3	3
2049	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2049	2a	1	0	0	0	0	0	0	0	PHEV	0	0	3	8
2049	2a	1	2.320004	7.12304	0	7.12304	11.31357	0	11.31357	BEV	0	2.320004	3	3
2049	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2049	2a	1	0.594873	1.82642	1.095852	0.730568	7.094003	4.256402	2.837601	PHEV	0.356924	0.237949	3	8
2049	2a	1	0.176363	0.531377	0.531377	0	1.528007	1.528007	0	ICE	0.176363	0	2	2
2049	2a	1	0	0	0	0	0	0	0	BEV	0	0	2	3
2049	2a	1	2.838287	9.202124	0	9.202124	23.13002	0	23.13002	FCEV	0	2.838287	2	7
2049	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2049	2a	1	0	0	0	0	0	0	0	BEV	0	0	2	3
2049	2a	1	3.144577	10.37531	0	10.37531	26.94836	0	26.94836	FCEV	0	3.144577	2	7
2049	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2049	2a	1	0	0	0	0	0	0	0	BEV	0	0	3	3
2049	2a	1	0.111088	0.360162	0	0.360162	0.640296	0	0.640296	FCEV	0	0.111088	3	7
2049	2a	1	1.59226	5.162328	3.097397	2.064931	20.46818	12.28091	8.187274	PHEV	0.955356	0.636904	3	8
2049	2a	1	0.101093	0.321967	0.321967	0	1.003382	1.003382	0	ICE	0.101093	0	2	2

2049	2a	1	0.068926	0.191878	0	0.191878	0.277283	0	0.277283	BEV	0	0.068926	3	3
2049	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2049	2a	1	0	0	0	0	0	0	0	PHEV	0	0	3	8
2049	2a	1	0.160275	0.473723	0	0.473723	0.968924	0	0.968924	BEV	0	0.160275	2	3
2049	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2049	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2049	2a	1	0.172142	0.56797	0.56797	0	1.617778	1.617778	0	ICE	0.172142	0	2	2
2049	2a	1	0.109345	0.329454	0	0.329454	0.758693	0	0.758693	BEV	0	0.109345	2	3
2049	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2049	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2049	2a	1	0.040012	0.106803	0	0.106803	0.144332	0	0.144332	BEV	0	0.040012	3	3
2049	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2049	2a	1	0	0	0	0	0	0	0	PHEV	0	0	3	8
2049	2a	1	0.207407	0.577384	0	0.577384	0.825931	0	0.825931	BEV	0	0.207407	4	3
2049	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2049	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2049	2a	1	0	0	0	0	0	0	0	BEV	0	0	4	3
2049	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2049	2a	1	0.189666	0.593193	0.355916	0.237277	2.15249	1.291494	0.860996	PHEV	0.1138	0.075867	4	8
2050	2a	1	14712.5	39271.18	39271.18	0	54629.19	54629.19	0	ICE	14712.5	0	1	1
2050	2a	1	39.07822	104.3091	104.3091	0	156.125	156.125	0	ICE	39.07822	0	1	2
2050	2a	1	15250.08	41579.81	41579.81	0	60289.01	60289.01	0	ICE	15250.08	0	1	1
2050	2a	1	12584.27	35032.33	35032.33	0	53265.63	53265.63	0	ICE	12584.27	0	1	1
2050	2a	1	9975.595	28341.76	28341.76	0	45133.34	45133.34	0	ICE	9975.595	0	1	1
2050	2a	1	11660.76	33797.54	33797.54	0	56353.08	56353.08	0	ICE	11660.76	0	1	1
2050	2a	1	132.904	385.209	385.209	0	661.1391	661.1391	0	ICE	132.904	0	1	2
2050	2a	1	11541.62	34113.46	34113.46	0	59829.82	59829.82	0	ICE	11541.62	0	1	1
2050	2a	1	180.1875	532.5784	532.5784	0	931.3525	931.3525	0	ICE	180.1875	0	1	2
2050	2a	1	16762.14	50503.98	50503.98	0	93169.05	93169.05	0	ICE	16762.14	0	1	1
2050	2a	1	20242.98	62151.4	62151.4	0	120064.7	120064.7	0	ICE	20242.98	0	1	1
2050	2a	1	20033.96	62657.42	62657.42	0	127255.5	127255.5	0	ICE	20033.96	0	1	1
2050	2a	1	381.568	1193.377	1193.377	0	2421.732	2421.732	0	ICE	381.568	0	1	2
2050	2a	1	23789.38	75765.6	75765.6	0	161604.7	161604.7	0	ICE	23789.38	0	1	1
2050	2a	1	23334.88	75654.94	75654.94	0	168377.9	168377.9	0	ICE	23334.88	0	1	1
2050	2a	1	26646.5	87918.27	87918.27	0	205582	205582	0	ICE	26646.5	0	1	1
2050	2a	1	326.0831	1075.888	1075.888	0	2510.534	2510.534	0	ICE	326.0831	0	1	2
2050	2a	1	1549.795	5113.44	0	5113.44	12402.91	0	12402.91	BEV	0	1549.795	1	3
2050	2a	1	31.62847	104.3559	0	104.3559	274.3749	0	274.3749	FCEV	0	31.62847	1	7
2050	2a	1	1397.968	4612.496	2490.748	2121.748	10563.94	5704.529	4859.413	PHEV	754.9025	643.0651	1	8
2050	2a	1	29673.99	99607.28	99607.28	0	243434	243434	0	ICE	29673.99	0	1	1
2050	2a	1	363.1316	1218.931	1218.931	0	2973.428	2973.428	0	ICE	363.1316	0	1	2
2050	2a	1	2109.336	7080.451	0	7080.451	17682.92	0	17682.92	BEV	0	2109.336	1	3
2050	2a	1	43.04768	144.499	0	144.499	392.4826	0	392.4826	FCEV	0	43.04768	1	7
2050	2a	1	1363.254	4576.061	2471.073	2104.988	11037.21	5960.092	5077.116	PHEV	736.157	627.0967	1	8
2050	2a	1	33026.85	112754	112754	0	288431.3	288431.3	0	ICE	33026.85	0	1	1
2050	2a	1	402.4435	1373.946	1373.946	0	3509.886	3509.886	0	ICE	402.4435	0	1	2
2050	2a	1	2878.951	9828.767	0	9828.767	25675.26	0	25675.26	BEV	0	2878.951	1	3

2050	2a	1	67.34388	229.9127	0	229.9127	645.4607	0	645.4607	FCEV	0	67.34388	1	7
2050	2a	1	1411.94	4820.378	2554.8	2265.578	12115.94	6421.447	5694.491	PHEV	748.3283	663.6119	1	8
2050	2a	1	37340.92	129621.5	129621.5	0	346790.1	346790.1	0	ICE	37340.92	0	1	1
2050	2a	1	459.1362	1593.799	1593.799	0	4257.991	4257.991	0	ICE	459.1362	0	1	2
2050	2a	1	3867.343	13424.71	0	13424.71	36421.77	0	36421.77	BEV	0	3867.343	1	3
2050	2a	1	102.0706	354.3178	0	354.3178	1028.515	0	1028.515	FCEV	0	102.0706	1	7
2050	2a	1	1474.639	5118.914	2661.835	2457.079	13630.63	7087.926	6542.701	PHEV	766.8123	707.8267	1	8
2050	2a	1	40789.93	143930.9	143930.9	0	402637.6	402637.6	0	ICE	40789.93	0	1	1
2050	2a	1	503.9643	1778.283	1778.283	0	4967.976	4967.976	0	ICE	503.9643	0	1	2
2050	2a	1	6590.201	23254.12	0	23254.12	65961.2	0	65961.2	BEV	0	6590.201	1	3
2050	2a	1	225.9052	797.127	0	797.127	2394.118	0	2394.118	FCEV	0	225.9052	1	7
2050	2a	1	2505.503	8840.894	4402.765	4438.129	24327.17	12114.93	12212.24	PHEV	1247.741	1257.763	1	8
2050	2a	1	44201.61	158501.7	158501.7	0	462924.4	462924.4	0	ICE	44201.61	0	1	1
2050	2a	1	550.0511	1972.417	1972.417	0	5752.784	5752.784	0	ICE	550.0511	0	1	2
2050	2a	1	10076.04	36131.48	0	36131.48	106894.2	0	106894.2	BEV	0	10076.04	1	3
2050	2a	1	426.0864	1527.895	0	1527.895	4747.754	0	4747.754	FCEV	0	426.0864	1	7
2050	2a	1	3819.554	13696.46	6519.515	7176.945	39241.61	18679.01	20562.6	PHEV	1818.107	2001.446	1	8
2050	2a	1	48215.53	175657.4	175657.4	0	535580.9	535580.9	0	ICE	48215.53	0	1	1
2050	2a	1	605.0361	2204.249	2204.249	0	6711.752	6711.752	0	ICE	605.0361	0	1	2
2050	2a	1	14697.86	53546.79	0	53546.79	165095.3	0	165095.3	BEV	0	14697.86	1	3
2050	2a	1	741.0685	2699.838	0	2699.838	8630.688	0	8630.688	FCEV	0	741.0685	1	7
2050	2a	1	5555.279	20238.82	9188.426	11050.4	60597.73	27511.37	33086.36	PHEV	2522.097	3033.182	1	8
2050	2a	1	52917.64	195819.6	195819.6	0	622171.8	622171.8	0	ICE	52917.64	0	1	1
2050	2a	1	669.3573	2476.93	2476.93	0	7859.608	7859.608	0	ICE	669.3573	0	1	2
2050	2a	1	20905.2	77358.86	0	77358.86	248186.7	0	248186.7	BEV	0	20905.2	1	3
2050	2a	1	1226.742	4539.51	0	4539.51	14949.92	0	14949.92	FCEV	0	1226.742	1	7
2050	2a	1	7878.405	29153.72	12594.41	16559.31	91096.9	39353.86	51743.04	PHEV	3403.471	4474.934	1	8
2050	2a	1	58523.06	219915	219915	0	727620.4	727620.4	0	ICE	58523.06	0	1	1
2050	2a	1	745.8558	2802.74	2802.74	0	9261.637	9261.637	0	ICE	745.8558	0	1	2
2050	2a	1	29413.18	110527.4	0	110527.4	368771	0	368771	BEV	0	29413.18	1	3
2050	2a	1	1972.835	7413.422	0	7413.422	25218.93	0	25218.93	FCEV	0	1972.835	1	7
2050	2a	1	11052.51	41532.57	17028.36	24504.22	135368.1	55500.92	79867.18	PHEV	4531.53	6520.982	1	8
2050	2a	1	64680.63	246759.2	246759.2	0	849184.6	849184.6	0	ICE	64680.63	0	1	1
2050	2a	1	824.3317	3144.859	3144.859	0	10811.13	10811.13	0	ICE	824.3317	0	1	2
2050	2a	1	40953.31	156238.5	0	156238.5	541385.9	0	541385.9	BEV	0	40953.31	1	3
2050	2a	1	3096.04	11811.52	0	11811.52	41445.9	0	41445.9	FCEV	0	3096.04	1	7
2050	2a	1	15344.26	58538.95	22713.11	35825.84	198813.6	77139.68	121673.9	PHEV	5953.571	9390.685	1	8
2050	2a	1	70667.8	273649	273649	0	978303.7	978303.7	0	ICE	70667.8	0	1	1
2050	2a	1	900.6359	3487.559	3487.559	0	12457.03	12457.03	0	ICE	900.6359	0	1	2
2050	2a	1	56211.95	217671.2	0	217671.2	782577.9	0	782577.9	BEV	0	56211.95	1	3
2050	2a	1	4736.571	18341.56	0	18341.56	66497.64	0	66497.64	FCEV	0	4736.571	1	7
2050	2a	1	21000.33	81320.22	29763.2	51557.02	287446.4	105205.4	182241	PHEV	7686.122	13314.21	1	8
2050	2a	1	76398.22	300216	300216	0	1113902	1113902	0	ICE	76398.22	0	1	1
2050	2a	1	973.6679	3826.145	3826.145	0	14185.7	14185.7	0	ICE	973.6679	0	1	2
2050	2a	1	76627.35	301116.4	0	301116.4	1122318	0	1122318	BEV	0	76627.35	1	3
2050	2a	1	7131.465	28023.95	0	28023.95	105046.4	0	105046.4	FCEV	0	7131.465	1	7
2050	2a	1	28544.66	112169.7	38586.36	73583.3	412270.6	141821.1	270449.5	PHEV	9819.362	18725.3	1	8

2050	2a	1	80531.2	321070.7	321070.7	0	1235231	1235231	0	ICE	80531.2	0	1	1
2050	2a	1	1026.341	4091.929	4091.929	0	15732.76	15732.76	0	ICE	1026.341	0	1	2
2050	2a	1	102956.4	410478.1	0	410478.1	1584920	0	1584920	BEV	0	102956.4	1	3
2050	2a	1	10503.11	41874.97	0	41874.97	162322.2	0	162322.2	FCEV	0	10503.11	1	7
2050	2a	1	38242.02	152467.5	49094.53	103373	582050	187420.1	394629.9	PHEV	12313.93	25928.09	1	8
2050	2a	1	81736.44	330558.5	330558.5	0	1317463	1317463	0	ICE	81736.44	0	1	1
2050	2a	1	1041.703	4212.854	4212.854	0	16781.89	16781.89	0	ICE	1041.703	0	1	2
2050	2a	1	135892.3	549575.8	0	549575.8	2196601	0	2196601	BEV	0	135892.3	1	3
2050	2a	1	15099.15	61063.98	0	61063.98	244737.3	0	244737.3	FCEV	0	15099.15	1	7
2050	2a	1	50330.5	203546.6	61063.98	142482.6	806224.2	241867.3	564356.9	PHEV	15099.15	35231.35	1	8
2050	2a	1	78738.5	322945.2	322945.2	0	1332100	1332100	0	ICE	78738.5	0	1	1
2050	2a	1	1003.494	4115.82	4115.82	0	16969.74	16969.74	0	ICE	1003.494	0	1	2
2050	2a	1	177458.8	727845.7	0	727845.7	3008690	0	3008690	BEV	0	177458.8	1	3
2050	2a	1	21933.12	89958.46	0	89958.46	372562.1	0	372562.1	FCEV	0	21933.12	1	7
2050	2a	1	62965.88	258253.9	77476.18	180777.8	1060043	318012.9	742030.1	PHEV	18889.77	44076.12	1	8
2050	2a	1	70001.64	291121.4	291121.4	0	1241815	1241815	0	ICE	70001.64	0	1	1
2050	2a	1	892.1467	3710.242	3710.242	0	15820.71	15820.71	0	ICE	892.1467	0	1	2
2050	2a	1	226743	942974.1	0	942974.1	4028814	0	4028814	BEV	0	226743	1	3
2050	2a	1	30919.49	128587.4	0	128587.4	550107.1	0	550107.1	FCEV	0	30919.49	1	7
2050	2a	1	76964.11	320076.8	96023.04	224053.8	1360127	408038.2	952089.1	PHEV	23089.23	53874.88	1	8
2050	2a	1	54617.61	230271.7	230271.7	0	1014989	1014989	0	ICE	54617.61	0	1	1
2050	2a	1	696.0825	2934.733	2934.733	0	12931.7	12931.7	0	ICE	696.0825	0	1	2
2050	2a	1	284528.2	1199591	0	1199591	5293769	0	5293769	BEV	0	284528.2	1	3
2050	2a	1	42515.71	179249.2	0	179249.2	791758.6	0	791758.6	FCEV	0	42515.71	1	7
2050	2a	1	92243.15	388903.6	116671.1	272232.5	1709243	512772.9	1196470	PHEV	27672.95	64570.21	1	8
2050	2a	1	31367.23	134043.5	134043.5	0	610146.1	610146.1	0	ICE	31367.23	0	1	1
2050	2a	1	399.7644	1708.337	1708.337	0	7774.085	7774.085	0	ICE	399.7644	0	1	2
2050	2a	1	348780.3	1490464	0	1490464	6790110	0	6790110	BEV	0	348780.3	1	3
2050	2a	1	56778.2	242633.7	0	242633.7	1106098	0	1106098	FCEV	0	56778.2	1	7
2050	2a	1	107806.7	460696.8	138209.1	322487.8	2092578	627773.4	1464805	PHEV	32342.01	75464.69	1	8
2050	2a	1	421195.1	1824048	0	1824048	8572504	0	8572504	BEV	0	421195.1	1	3
2050	2a	1	74328.54	321890.9	0	321890.9	1513520	0	1513520	FCEV	0	74328.54	1	7
2050	2a	1	123880.9	536484.8	160945.4	375539.4	2515863	754758.8	1761104	PHEV	37164.27	86716.63	1	8
2050	2a	1	471509.4	2068955	0	2068955	10026384	0	10026384	BEV	0	471509.4	1	3
2050	2a	1	89811.31	394086.7	0	394086.7	1910484	0	1910484	FCEV	0	89811.31	1	7
2050	2a	1	131667.8	577750.5	173325.1	404425.3	2795922	838776.7	1957146	PHEV	39500.35	92167.47	1	8
2050	2a	1	524100.3	2329746	0	2329746	11635619	0	11635619	BEV	0	524100.3	1	3
2050	2a	1	107345.8	477176.9	0	477176.9	2383852	0	2383852	FCEV	0	107345.8	1	7
2050	2a	1	138610.1	616153.9	184846.2	431307.7	3075048	922514.3	2152533	PHEV	41583.04	97027.08	1	8
2050	2a	1	571344	2572488	0	2572488	13234170	0	13234170	BEV	0	571344	1	3
2050	2a	1	125417	564692.5	0	564692.5	2905650	0	2905650	FCEV	0	125417	1	7
2050	2a	1	142710.1	642555	192766.5	449788.5	3305077	991523.2	2313554	PHEV	42813.03	99897.06	1	8
2050	2a	1	621202.7	2832566	0	2832566	15002551	0	15002551	BEV	0	621202.7	1	3
2050	2a	1	145714.2	664429.1	0	664429.1	3519623	0	3519623	FCEV	0	145714.2	1	7
2050	2a	1	146079.4	666094.3	199828.3	466266	3529234	1058770	2470464	PHEV	43823.82	102255.6	1	8
2050	2a	1	663114.7	3061667	0	3061667	16687033	0	16687033	BEV	0	663114.7	1	3
2050	2a	1	165778.7	765416.7	0	765416.7	4172167	0	4172167	FCEV	0	165778.7	1	7

2050	2a	1	146275.3	675367.7	202610.3	472757.4	3683957	1105187	2578770	PHEV	43882.59	102392.7	1	8
2050	2a	1	707381.3	3306576	0	3306576	18537455	0	18537455	BEV	0	707381.3	1	3
2050	2a	1	188038.1	878963.3	0	878963.3	4927979	0	4927979	FCEV	0	188038.1	1	7
2050	2a	1	145766	681366.9	204410.1	476956.8	3824579	1147374	2677205	PHEV	43729.79	102036.2	1	8
2050	2a	1	743706.7	3518982	0	3518982	20285653	0	20285653	BEV	0	743706.7	1	3
2050	2a	1	209763.4	992533.4	0	992533.4	5721737	0	5721737	FCEV	0	209763.4	1	7
2050	2a	1	142472.5	674134.5	202240.3	471894.1	3892993	1167898	2725095	PHEV	42741.76	99730.78	1	8
2050	2a	1	783638	3752819	0	3752819	22235846	0	22235846	BEV	0	783638	1	3
2050	2a	1	234073.7	1120972	0	1120972	6641840	0	6641840	FCEV	0	234073.7	1	7
2050	2a	1	138778.9	664607.9	199382.4	465225.5	3946927	1184078	2762849	PHEV	41633.66	97145.21	1	8
2050	2a	1	813776.3	3943772	0	3943772	24011829	0	24011829	BEV	0	813776.3	1	3
2050	2a	1	256982	1245402	0	1245402	7582448	0	7582448	FCEV	0	256982	1	7
2050	2a	1	132340.9	641358.5	192407.5	448950.9	3915944	1174783	2741161	PHEV	39702.28	92638.64	1	8
2050	2a	1	848188.4	4159134	0	4159134	26004141	0	26004141	BEV	0	848188.4	1	3
2050	2a	1	282729.5	1386378	0	1386378	8667636	0	8667636	FCEV	0	282729.5	1	7
2050	2a	1	125657.5	616168.1	184850.4	431317.6	3864572	1159372	2705200	PHEV	37697.26	87960.28	1	8
2050	2a	1	875275.9	4342103	0	4342103	27866153	0	27866153	BEV	0	875275.9	1	3
2050	2a	1	291758.6	1447368	0	1447368	9288090	0	9288090	FCEV	0	291758.6	1	7
2050	2a	1	129670.5	643274.6	192982.4	450292.2	4143608	1243082	2900525	PHEV	38901.15	90769.35	1	8
2050	2a	1	896633.2	4499422	0	4499422	29617131	0	29617131	BEV	0	896633.2	1	3
2050	2a	1	298877.7	1499807	0	1499807	9871558	0	9871558	FCEV	0	298877.7	1	7
2050	2a	1	132834.5	666581	199974.3	466606.7	4405859	1321758	3084101	PHEV	39850.36	92984.18	1	8
2050	2a	1	919350.6	4666091	0	4666091	31446269	0	31446269	BEV	0	919350.6	1	3
2050	2a	1	306450.2	1555364	0	1555364	10481226	0	10481226	FCEV	0	306450.2	1	7
2050	2a	1	136200.1	691272.7	207381.8	483890.9	4677713	1403314	3274399	PHEV	40860.03	95340.06	1	8
2050	2a	1	926139.6	4753606	0	4753606	32692267	0	32692267	BEV	0	926139.6	1	3
2050	2a	1	308713.2	1584535	0	1584535	10896762	0	10896762	FCEV	0	308713.2	1	7
2050	2a	1	137205.9	704237.9	211271.4	492966.5	4859709	1457913	3401796	PHEV	41161.76	96044.1	1	8
2050	2a	1	831176.6	4313807	0	4313807	30192675	0	30192675	BEV	0	831176.6	1	3
2050	2a	1	277058.9	1437936	0	1437936	10064009	0	10064009	FCEV	0	277058.9	1	7
2050	2a	1	123137.3	639082.5	191724.7	447357.7	4482710	1344813	3137897	PHEV	36941.18	86196.09	1	8
2050	2a	1	1115.848	2978.467	2978.467	0	9865.712	9865.712	0	ICE	1115.848	0	2	1
2050	2a	1	1626.723	4435.31	4435.31	0	14953.53	14953.53	0	ICE	1626.723	0	2	1
2050	2a	1	2842.074	7911.822	7911.822	0	26867.67	26867.67	0	ICE	2842.074	0	2	1
2050	2a	1	2150.401	6109.525	6109.525	0	20879.95	20879.95	0	ICE	2150.401	0	2	1
2050	2a	1	1169.542	3389.801	3389.801	0	11558.4	11558.4	0	ICE	1169.542	0	2	1
2050	2a	1	1078.055	3186.396	3186.396	0	10968.96	10968.96	0	ICE	1078.055	0	2	1
2050	2a	1	9735.021	31004.58	31004.58	0	112566.1	112566.1	0	ICE	9735.021	0	2	1
2050	2a	1	9387.509	30435.62	30435.62	0	112307.5	112307.5	0	ICE	9387.509	0	2	1
2050	2a	1	8836.613	29155.79	29155.79	0	109567.7	109567.7	0	ICE	8836.613	0	2	1
2050	2a	1	1.197079	3.949678	3.949678	0	14.85043	14.85043	0	ICE	1.197079	0	2	2
2050	2a	1	0.297743	0.982383	0	0.982383	2.56127	0	2.56127	BEV	0	0.297743	2	3
2050	2a	1	0.006076	0.020049	0	0.020049	0.052271	0	0.052271	FCEV	0	0.006076	2	7
2050	2a	1	2.582467	8.52067	5.112402	3.408268	32.04631	19.22779	12.81853	PHEV	1.54948	1.032987	2	8
2050	2a	1	10027.43	33659.26	33659.26	0	127817.2	127817.2	0	ICE	10027.43	0	2	1
2050	2a	1	1.358396	4.559755	4.559755	0	17.32347	17.32347	0	ICE	1.358396	0	2	2
2050	2a	1	10969.35	37449.47	37449.47	0	143724.5	143724.5	0	ICE	10969.35	0	2	1

2050	2a	1	1.496364	5.108603	5.108603	0	19.62657	19.62657	0	ICE	1.496364	0	2	2
2050	2a	1	145.8531	497.9441	0	497.9441	1690.298	0	1690.298	BEV	0	145.8531	2	3
2050	2a	1	3.411769	11.64781	0	11.64781	32.4169	0	32.4169	FCEV	0	3.411769	2	7
2050	2a	1	112.005	382.3861	227.2466	155.1395	1559.977	927.0719	632.9049	PHEV	66.56295	45.44201	2	8
2050	2a	1	12097.91	41995.48	41995.48	0	162793.7	162793.7	0	ICE	12097.91	0	2	1
2050	2a	1	1.669489	5.795298	5.795298	0	22.50923	22.50923	0	ICE	1.669489	0	2	2
2050	2a	1	328.6034	1140.681	0	1140.681	3904.87	0	3904.87	BEV	0	328.6034	2	3
2050	2a	1	8.672816	30.10595	0	30.10595	86.62942	0	86.62942	FCEV	0	8.672816	2	7
2050	2a	1	253.0843	878.5315	517.0785	361.453	3626.33	2134.354	1491.976	PHEV	148.9582	104.1261	2	8
2050	2a	1	13000.89	45874.81	45874.81	0	179427.2	179427.2	0	ICE	13000.89	0	2	1
2050	2a	1	1.817677	6.413837	6.413837	0	25.15708	25.15708	0	ICE	1.817677	0	2	2
2050	2a	1	916.2827	3233.186	0	3233.186	11175.28	0	11175.28	BEV	0	916.2827	2	3
2050	2a	1	31.40922	110.8303	0	110.8303	329.9321	0	329.9321	FCEV	0	31.40922	2	7
2050	2a	1	660.8149	2331.745	1351.746	979.9991	10093.75	5851.493	4242.26	PHEV	383.0838	277.7311	2	8
2050	2a	1	13770.96	49380.99	49380.99	0	194718.9	194718.9	0	ICE	13770.96	0	2	1
2050	2a	1	1.933232	6.932337	6.932337	0	27.41783	27.41783	0	ICE	1.933232	0	2	2
2050	2a	1	1685.683	6044.658	0	6044.658	21343.81	0	21343.81	BEV	0	1685.683	2	3
2050	2a	1	71.28261	255.6109	0	255.6109	787.2606	0	787.2606	FCEV	0	71.28261	2	7
2050	2a	1	1137.33	4078.328	2328.142	1750.185	18007.07	10279.46	7727.606	PHEV	649.2528	488.0769	2	8
2050	2a	1	14632.28	53307.88	53307.88	0	212128.3	212128.3	0	ICE	14632.28	0	2	1
2050	2a	1	2.063822	7.518855	7.518855	0	30.01186	30.01186	0	ICE	2.063822	0	2	2
2050	2a	1	2707.55	9864.063	0	9864.063	35699.68	0	35699.68	BEV	0	2707.55	2	3
2050	2a	1	136.5151	497.3477	0	497.3477	1619.229	0	1619.229	FCEV	0	136.5151	2	7
2050	2a	1	1707.066	6219.132	3495.152	2723.98	27682.13	15557.36	12124.77	PHEV	959.3712	747.695	2	8
2050	2a	1	15318.23	56684.48	56684.48	0	227850.5	227850.5	0	ICE	15318.23	0	2	1
2050	2a	1	2.170031	8.030114	8.030114	0	32.37733	32.37733	0	ICE	2.170031	0	2	2
2050	2a	1	4001.383	14806.96	0	14806.96	54906.67	0	54906.67	BEV	0	4001.383	2	3
2050	2a	1	234.8059	868.8899	0	868.8899	2996.359	0	2996.359	FCEV	0	234.8059	2	7
2050	2a	1	2354.196	8711.607	4818.763	3892.844	38960.59	21550.77	17409.82	PHEV	1302.206	1051.989	2	8
2050	2a	1	15871.77	59642.16	59642.16	0	242618.3	242618.3	0	ICE	15871.77	0	2	1
2050	2a	1	2.257558	8.48334	8.48334	0	34.61379	34.61379	0	ICE	2.257558	0	2	2
2050	2a	1	5633.304	21168.55	0	21168.55	80465.27	0	80465.27	BEV	0	5633.304	2	3
2050	2a	1	377.8435	1419.842	0	1419.842	5122.059	0	5122.059	FCEV	0	377.8435	2	7
2050	2a	1	3087.653	11602.63	6315.144	5287.483	52148.65	28383.76	23764.88	PHEV	1680.565	1407.087	2	8
2050	2a	1	16256.71	62019.98	62019.98	0	255263.5	255263.5	0	ICE	16256.71	0	2	1
2050	2a	1	2.31231	8.821555	8.821555	0	36.40542	36.40542	0	ICE	2.31231	0	2	2
2050	2a	1	7671.875	29268.51	0	29268.51	113904.6	0	113904.6	BEV	0	7671.875	2	3
2050	2a	1	579.9881	2212.678	0	2212.678	8321.974	0	8321.974	FCEV	0	579.9881	2	7
2050	2a	1	3909.66	14915.51	7986.19	6929.319	67334.84	36053	31281.84	PHEV	2093.344	1816.316	2	8
2050	2a	1	16408.68	63539.81	63539.81	0	263864.2	263864.2	0	ICE	16408.68	0	2	1
2050	2a	1	2.333926	9.037731	9.037731	0	37.61733	37.61733	0	ICE	2.333926	0	2	2
2050	2a	1	10187.07	39447.7	0	39447.7	156723.8	0	156723.8	BEV	0	10187.07	2	3
2050	2a	1	858.3901	3323.97	0	3323.97	12914.53	0	12914.53	FCEV	0	858.3901	2	7
2050	2a	1	4815.529	18647.32	9819.144	8828.173	84029.18	44247.36	39781.81	PHEV	2535.72	2279.809	2	8
2050	2a	1	16331.75	64177.57	64177.57	0	269410.8	269410.8	0	ICE	16331.75	0	2	1
2050	2a	1	2.322984	9.128444	9.128444	0	38.39403	38.39403	0	ICE	2.322984	0	2	2
2050	2a	1	13314.18	52319.66	0	52319.66	212208.8	0	212208.8	BEV	0	13314.18	2	3

2050	2a	1	1239.108	4869.225	0	4869.225	19460.11	0	19460.11	FCEV	0	1239.108	2	7
2050	2a	1	5822.016	22878.31	11844.43	11033.88	103082.6	53367.33	49715.27	PHEV	3014.141	2807.875	2	8
2050	2a	1	15818.97	63068.79	63068.79	0	268199.3	268199.3	0	ICE	15818.97	0	2	1
2050	2a	1	2.250047	8.970735	8.970735	0	38.20867	38.20867	0	ICE	2.250047	0	2	2
2050	2a	1	17048.5	67970.84	0	67970.84	281554.9	0	281554.9	BEV	0	17048.5	2	3
2050	2a	1	1739.205	6934.053	0	6934.053	28441.81	0	28441.81	FCEV	0	1739.205	2	7
2050	2a	1	6873.982	27405.95	13945.71	13460.24	123770.6	62981.56	60789.05	PHEV	3497.875	3376.107	2	8
2050	2a	1	14779.8	59772.46	59772.46	0	257902.2	257902.2	0	ICE	14779.8	0	2	1
2050	2a	1	2.102239	8.501874	8.501874	0	36.73051	36.73051	0	ICE	2.102239	0	2	2
2050	2a	1	21416.07	86610.87	0	86610.87	366461.9	0	366461.9	BEV	0	21416.07	2	3
2050	2a	1	2379.563	9623.43	0	9623.43	40453.72	0	40453.72	FCEV	0	2379.563	2	7
2050	2a	1	7931.877	32078.1	16039.05	16039.05	145497.9	72748.96	72748.96	PHEV	3965.939	3965.939	2	8
2050	2a	1	13160.73	53978.59	53978.59	0	236681.6	236681.6	0	ICE	13160.73	0	2	1
2050	2a	1	1.871946	7.677769	7.677769	0	33.69897	33.69897	0	ICE	1.871946	0	2	2
2050	2a	1	26112.76	107101.2	0	107101.2	462774.1	0	462774.1	BEV	0	26112.76	2	3
2050	2a	1	3227.42	13237.23	0	13237.23	56962.17	0	56962.17	FCEV	0	3227.42	2	7
2050	2a	1	9265.32	38001.62	19000.81	19000.81	173443.3	86721.66	86721.66	PHEV	4632.66	4632.66	2	8
2050	2a	1	10895.94	45313.83	45313.83	0	202181.5	202181.5	0	ICE	10895.94	0	2	1
2050	2a	1	1.54981	6.445317	6.445317	0	28.77963	28.77963	0	ICE	1.54981	0	2	2
2050	2a	1	31338	130327.8	0	130327.8	575376.5	0	575376.5	BEV	0	31338	2	3
2050	2a	1	4273.363	17771.98	0	17771.98	78262.67	0	78262.67	FCEV	0	4273.363	2	7
2050	2a	1	10637.16	44237.6	22118.8	22118.8	203589.9	101794.9	101794.9	PHEV	5318.58	5318.58	2	8
2050	2a	1	7988.41	33679.7	33679.7	0	153109.3	153109.3	0	ICE	7988.41	0	2	1
2050	2a	1	1.13625	4.790509	4.790509	0	21.78959	21.78959	0	ICE	1.13625	0	2	2
2050	2a	1	37225.1	156943.6	0	156943.6	708330.2	0	708330.2	BEV	0	37225.1	2	3
2050	2a	1	5562.372	23451.35	0	23451.35	105686.9	0	105686.9	FCEV	0	5562.372	2	7
2050	2a	1	12068.26	50880.64	25440.32	25440.32	236613.1	118306.6	118306.6	PHEV	6034.131	6034.131	2	8
2050	2a	1	4344.212	18564.38	18564.38	0	86081.22	86081.22	0	ICE	4344.212	0	2	1
2050	2a	1	0.617909	2.640548	2.640548	0	12.24813	12.24813	0	ICE	0.617909	0	2	2
2050	2a	1	43486.7	185834.3	0	185834.3	857826.2	0	857826.2	BEV	0	43486.7	2	3
2050	2a	1	7079.23	30252.1	0	30252.1	139538.8	0	139538.8	FCEV	0	7079.23	2	7
2050	2a	1	13441.58	57440.69	28720.35	28720.35	270414	135207	135207	PHEV	6720.788	6720.788	2	8
2050	2a	1	50412.4	218318.5	0	218318.5	1031123	0	1031123	BEV	0	50412.4	2	3
2050	2a	1	8896.306	38526.79	0	38526.79	181906.9	0	181906.9	FCEV	0	8896.306	2	7
2050	2a	1	14827.18	64211.32	32105.66	32105.66	306542.5	153271.3	153271.3	PHEV	7413.589	7413.589	2	8
2050	2a	1	54060.75	237215.3	0	237215.3	1146829	0	1146829	BEV	0	54060.75	2	3
2050	2a	1	10297.29	45183.87	0	45183.87	218441.1	0	218441.1	FCEV	0	10297.29	2	7
2050	2a	1	15096.33	66241.79	33120.89	33120.89	321230.4	160615.2	160615.2	PHEV	7548.165	7548.165	2	8
2050	2a	1	58084.72	258200	0	258200	1278156	0	1278156	BEV	0	58084.72	2	3
2050	2a	1	11896.87	52884.33	0	52884.33	261842.9	0	261842.9	FCEV	0	11896.87	2	7
2050	2a	1	15361.81	68286.8	34143.4	34143.4	336894.5	168447.3	168447.3	PHEV	7680.907	7680.907	2	8
2050	2a	1	61723.73	277912.3	0	277912.3	1409213	0	1409213	BEV	0	61723.73	2	3
2050	2a	1	13549.11	61005.15	0	61005.15	309444	0	309444	FCEV	0	13549.11	2	7
2050	2a	1	15417.33	69416.84	34708.42	34708.42	348959	174479.5	174479.5	PHEV	7708.665	7708.665	2	8
2050	2a	1	65684.62	299509.4	0	299509.4	1555899	0	1555899	BEV	0	65684.62	2	3
2050	2a	1	15407.5	70255.29	0	70255.29	365120	0	365120	FCEV	0	15407.5	2	7
2050	2a	1	15446.12	70431.37	35215.69	35215.69	361174.6	180587.3	180587.3	PHEV	7723.06	7723.06	2	8

2050	2a	1	69136.13	319208.4	0	319208.4	1699402	0	1699402	BEV	0	69136.13	2	3
2050	2a	1	17284.03	79802.11	0	79802.11	425052	0	425052	FCEV	0	17284.03	2	7
2050	2a	1	15250.62	70413.62	35206.81	35206.81	368849.3	184424.7	184424.7	PHEV	7625.308	7625.308	2	8
2050	2a	1	72745.91	340042.8	0	340042.8	1855289	0	1855289	BEV	0	72745.91	2	3
2050	2a	1	19337.52	90391.12	0	90391.12	493421.7	0	493421.7	FCEV	0	19337.52	2	7
2050	2a	1	14990.33	70070.63	35035.32	35035.32	375225.1	187612.5	187612.5	PHEV	7495.163	7495.163	2	8
2050	2a	1	75323.02	356404.4	0	356404.4	1993599	0	1993599	BEV	0	75323.02	2	3
2050	2a	1	21244.96	100524.3	0	100524.3	562571.2	0	562571.2	FCEV	0	21244.96	2	7
2050	2a	1	14429.7	68276.71	34138.36	34138.36	374252.9	187126.5	187126.5	PHEV	7214.849	7214.849	2	8
2050	2a	1	78150.03	374258.1	0	374258.1	2146115	0	2146115	BEV	0	78150.03	2	3
2050	2a	1	23343.51	111791.4	0	111791.4	641346.3	0	641346.3	FCEV	0	23343.51	2	7
2050	2a	1	13840.03	66279.48	33139.74	33139.74	372097.1	186048.5	186048.5	PHEV	6920.014	6920.014	2	8
2050	2a	1	80954.04	392324.3	0	392324.3	2306425	0	2306425	BEV	0	80954.04	2	3
2050	2a	1	25564.43	123891.9	0	123891.9	728661.2	0	728661.2	FCEV	0	25564.43	2	7
2050	2a	1	13165.2	63802.01	31901	31901	367108.1	183554.1	183554.1	PHEV	6582.602	6582.602	2	8
2050	2a	1	83739.65	410621.5	0	410621.5	2474899	0	2474899	BEV	0	83739.65	2	3
2050	2a	1	27913.22	136873.8	0	136873.8	825292.2	0	825292.2	FCEV	0	27913.22	2	7
2050	2a	1	12405.87	60832.82	30416.41	30416.41	358964.1	179482	179482	PHEV	6202.937	6202.937	2	8
2050	2a	1	85564.2	424470.3	0	424470.3	2623930	0	2623930	BEV	0	85564.2	2	3
2050	2a	1	28521.4	141490.1	0	141490.1	874989.7	0	874989.7	FCEV	0	28521.4	2	7
2050	2a	1	12676.18	62884.49	31442.25	31442.25	380571.9	190286	190286	PHEV	6338.089	6338.089	2	8
2050	2a	1	86677.07	434956.8	0	434956.8	2757715	0	2757715	BEV	0	86677.07	2	3
2050	2a	1	28892.36	144985.6	0	144985.6	919598.1	0	919598.1	FCEV	0	28892.36	2	7
2050	2a	1	12841.05	64438.04	32219.02	32219.02	400112.1	200056.1	200056.1	PHEV	6420.524	6420.524	2	8
2050	2a	1	87809.31	445669.1	0	445669.1	2897493	0	2897493	BEV	0	87809.31	2	3
2050	2a	1	29269.77	148556.4	0	148556.4	966201.3	0	966201.3	FCEV	0	29269.77	2	7
2050	2a	1	13008.79	66025.06	33012.53	33012.53	420614.5	210307.2	210307.2	PHEV	6504.393	6504.393	2	8
2050	2a	1	89007.04	456847.3	0	456847.3	3044308	0	3044308	BEV	0	89007.04	2	3
2050	2a	1	29669.01	152282.4	0	152282.4	1015148	0	1015148	FCEV	0	29669.01	2	7
2050	2a	1	13186.23	67681.08	33840.54	33840.54	442212.7	221106.3	221106.3	PHEV	6593.114	6593.114	2	8
2050	2a	1	81205.9	421458.6	0	421458.6	2876901	0	2876901	BEV	0	81205.9	2	3
2050	2a	1	27068.63	140486.2	0	140486.2	959315.9	0	959315.9	FCEV	0	27068.63	2	7
2050	2a	1	12030.5	62438.31	31219.16	31219.16	418146.4	209073.2	209073.2	PHEV	6015.252	6015.252	2	8
2050	2a	1	8766.914	23401	23401	0	74868.6	74868.6	0	ICE	8766.914	0	3	1
2050	2a	1	8623.284	23511.64	23511.64	0	75344.78	75344.78	0	ICE	8623.284	0	3	1
2050	2a	1	6564.368	18274.02	18274.02	0	59289.09	59289.09	0	ICE	6564.368	0	3	1
2050	2a	1	4014.329	11405.15	11405.15	0	37212.01	37212.01	0	ICE	4014.329	0	3	1
2050	2a	1	6883.999	19952.58	19952.58	0	65644.31	65644.31	0	ICE	6883.999	0	3	1
2050	2a	1	9114.035	26938.26	26938.26	0	89075.52	89075.52	0	ICE	9114.035	0	3	1
2050	2a	1	8588.806	25877.9	25877.9	0	86789.02	86789.02	0	ICE	8588.806	0	3	1
2050	2a	1	12269.37	37670.28	37670.28	0	126696.1	126696.1	0	ICE	12269.37	0	3	1
2050	2a	1	11865.8	37111.02	37111.02	0	127376.4	127376.4	0	ICE	11865.8	0	3	1
2050	2a	1	126.2097	394.7285	394.7285	0	1320.014	1320.014	0	ICE	126.2097	0	3	2
2050	2a	1	14998.88	47769.18	47769.18	0	166752.4	166752.4	0	ICE	14998.88	0	3	1
2050	2a	1	15407.05	49951.83	49951.83	0	175619.1	175619.1	0	ICE	15407.05	0	3	1
2050	2a	1	116.4255	377.4677	377.4677	0	1297.939	1297.939	0	ICE	116.4255	0	3	2
2050	2a	1	17946.31	59212.59	59212.59	0	212578.5	212578.5	0	ICE	17946.31	0	3	1

2050	2a	1	183.4313	605.2188	605.2188	0	2183.405	2183.405	0	ICE	183.4313	0	3	2
2050	2a	1	20089.19	67433.78	67433.78	0	244683.5	244683.5	0	ICE	20089.19	0	3	1
2050	2a	1	205.3339	689.2485	689.2485	0	2512.89	2512.89	0	ICE	205.3339	0	3	2
2050	2a	1	69.3105	232.6559	139.5936	93.06237	850.5169	510.3101	340.2068	PHEV	41.5863	27.7242	3	8
2050	2a	1	21978.28	75034.07	75034.07	0	277307.5	277307.5	0	ICE	21978.28	0	3	1
2050	2a	1	224.0763	764.9988	764.9988	0	2838.238	2838.238	0	ICE	224.0763	0	3	2
2050	2a	1	259.2062	884.9324	0	884.9324	2057.727	0	2057.727	BEV	0	259.2062	3	3
2050	2a	1	6.063302	20.70017	0	20.70017	40.07681	0	40.07681	FCEV	0	6.063302	3	7
2050	2a	1	225.1359	768.6161	456.7776	311.8385	2848.979	1693.107	1155.871	PHEV	133.795	91.34084	3	8
2050	2a	1	24366.92	84584.9	84584.9	0	316076.7	316076.7	0	ICE	24366.92	0	3	1
2050	2a	1	248.9941	864.3334	864.3334	0	3243.02	3243.02	0	ICE	248.9941	0	3	2
2050	2a	1	583.9539	2027.079	0	2027.079	6343.771	0	6343.771	BEV	0	583.9539	3	3
2050	2a	1	15.41227	53.50062	0	53.50062	107.0379	0	107.0379	FCEV	0	15.41227	3	7
2050	2a	1	421.4285	1462.905	861.024	601.8809	5488.889	3230.603	2258.286	PHEV	248.0408	173.3877	3	8
2050	2a	1	26058.73	91950.58	91950.58	0	346857.9	346857.9	0	ICE	26058.73	0	3	1
2050	2a	1	270.3076	953.8048	953.8048	0	3620.247	3620.247	0	ICE	270.3076	0	3	2
2050	2a	1	1779.769	6280.076	0	6280.076	18307.37	0	18307.37	BEV	0	1779.769	3	3
2050	2a	1	61.00864	215.2745	0	215.2745	445.2934	0	445.2934	FCEV	0	61.00864	3	7
2050	2a	1	1209.692	4268.507	2474.515	1793.993	19358.61	11222.46	8136.148	PHEV	701.2757	508.4163	3	8
2050	2a	1	27365.58	98129.67	98129.67	0	373662.5	373662.5	0	ICE	27365.58	0	3	1
2050	2a	1	285.1992	1022.69	1022.69	0	3921.388	3921.388	0	ICE	285.1992	0	3	2
2050	2a	1	3315.995	11890.76	0	11890.76	35005.07	0	35005.07	BEV	0	3315.995	3	3
2050	2a	1	140.2238	502.8255	0	502.8255	1075.652	0	1075.652	FCEV	0	140.2238	3	7
2050	2a	1	2120.8	7604.936	4341.332	3263.604	36641.52	20917.07	15724.45	PHEV	1210.674	910.1264	3	8
2050	2a	1	28462.86	103695	103695	0	399182.3	399182.3	0	ICE	28462.86	0	3	1
2050	2a	1	298.2379	1086.532	1086.532	0	4214.469	4214.469	0	ICE	298.2379	0	3	2
2050	2a	1	5256.265	19149.47	0	19149.47	58068.44	0	58068.44	BEV	0	5256.265	3	3
2050	2a	1	265.0218	965.5193	0	965.5193	2158.81	0	2158.81	FCEV	0	265.0218	3	7
2050	2a	1	3159.852	11511.88	6469.676	5042.203	57071.23	32074.03	24997.2	PHEV	1775.837	1384.015	3	8
2050	2a	1	29597.39	109524	109524	0	426948.1	426948.1	0	ICE	29597.39	0	3	1
2050	2a	1	311.6826	1153.369	1153.369	0	4532.856	4532.856	0	ICE	311.6826	0	3	2
2050	2a	1	7743.218	28653.47	0	28653.47	89564.85	0	89564.85	BEV	0	7743.218	3	3
2050	2a	1	454.3812	1681.42	0	1681.42	4233.372	0	4233.372	FCEV	0	454.3812	3	7
2050	2a	1	4369.742	16170.06	8944.35	7225.705	81811.75	45253.59	36558.17	PHEV	2417.092	1952.65	3	8
2050	2a	1	30553.62	114812.9	114812.9	0	454045.5	454045.5	0	ICE	30553.62	0	3	1
2050	2a	1	323.2461	1214.678	1214.678	0	4845.586	4845.586	0	ICE	323.2461	0	3	2
2050	2a	1	10876.39	40870.74	0	40870.74	131893.1	0	131893.1	BEV	0	10876.39	3	3
2050	2a	1	729.5137	2741.33	0	2741.33	7499.699	0	7499.699	FCEV	0	729.5137	3	7
2050	2a	1	5753.176	21619	11766.91	9852.086	111456	60663.92	50792.1	PHEV	3131.372	2621.805	3	8
2050	2a	1	31480.48	120099.3	120099.3	0	482137.7	482137.7	0	ICE	31480.48	0	3	1
2050	2a	1	333.0519	1270.606	1270.606	0	5144.159	5144.159	0	ICE	333.0519	0	3	2
2050	2a	1	14904.37	56860.77	0	56860.77	189573.5	0	189573.5	BEV	0	14904.37	3	3
2050	2a	1	1126.759	4298.632	0	4298.632	12766.24	0	12766.24	FCEV	0	1126.759	3	7
2050	2a	1	7376.676	28142.31	15068.2	13074.12	147999.8	79243.3	68756.46	PHEV	3949.683	3426.993	3	8
2050	2a	1	32185.67	124633.6	124633.6	0	506542.5	506542.5	0	ICE	32185.67	0	3	1
2050	2a	1	340.5126	1318.577	1318.577	0	5403.071	5403.071	0	ICE	340.5126	0	3	2
2050	2a	1	20039.58	77599.85	0	77599.85	266653.7	0	266653.7	BEV	0	20039.58	3	3

2050	2a	1	1688.589	6538.773	0	6538.773	20650.1	0	20650.1	FCEV	0	1688.589	3	7
2050	2a	1	9261.296	35862.79	18884.32	16978.47	191084.1	100619.4	90464.68	PHEV	4876.734	4384.562	3	8
2050	2a	1	32683.17	128432.4	128432.4	0	529646.1	529646.1	0	ICE	32683.17	0	3	1
2050	2a	1	345.776	1358.768	1358.768	0	5648.115	5648.115	0	ICE	345.776	0	3	2
2050	2a	1	26701.76	104927.8	0	104927.8	371797.1	0	371797.1	BEV	0	26701.76	3	3
2050	2a	1	2485.049	9765.297	0	9765.297	32462.29	0	32462.29	FCEV	0	2485.049	3	7
2050	2a	1	11495.57	45173.21	23386.82	21786.4	244213.9	126433	117780.9	PHEV	5951.42	5544.148	3	8
2050	2a	1	32881.95	131097.4	131097.4	0	549250.7	549250.7	0	ICE	32881.95	0	3	1
2050	2a	1	347.879	1386.962	1386.962	0	5855.847	5855.847	0	ICE	347.879	0	3	2
2050	2a	1	35480.03	141455.7	0	141455.7	516756	0	516756	BEV	0	35480.03	3	3
2050	2a	1	3619.499	14430.62	0	14430.62	50167.86	0	50167.86	FCEV	0	3619.499	3	7
2050	2a	1	14190.23	56575.17	28788.68	27786.49	310525.1	158012.9	152512.2	PHEV	7220.8	6969.43	3	8
2050	2a	1	32662.67	132094.4	132094.4	0	562840.6	562840.6	0	ICE	32662.67	0	3	1
2050	2a	1	345.5591	1397.51	1397.51	0	5999.484	5999.484	0	ICE	345.5591	0	3	2
2050	2a	1	47332.96	191424	0	191424	720822	0	720822	BEV	0	47332.96	3	3
2050	2a	1	5259.218	21269.33	0	21269.33	77004.62	0	77004.62	FCEV	0	5259.218	3	7
2050	2a	1	17530.73	70897.76	35448.88	35448.88	395356.1	197678	197678	PHEV	8765.363	8765.363	3	8
2050	2a	1	31361.41	128628.5	128628.5	0	558083.9	558083.9	0	ICE	31361.41	0	3	1
2050	2a	1	331.7922	1360.842	1360.842	0	5947.65	5947.65	0	ICE	331.7922	0	3	2
2050	2a	1	62286.2	255466.2	0	255466.2	988499.5	0	988499.5	BEV	0	62286.2	3	3
2050	2a	1	7698.294	31574.48	0	31574.48	118480	0	118480	FCEV	0	7698.294	3	7
2050	2a	1	22100.37	90644.43	45322.22	45322.22	513380.5	256690.3	256690.3	PHEV	11050.18	11050.18	3	8
2050	2a	1	27746.93	115393.4	115393.4	0	510177.6	510177.6	0	ICE	27746.93	0	3	1
2050	2a	1	293.5523	1220.819	1220.819	0	5436.131	5436.131	0	ICE	293.5523	0	3	2
2050	2a	1	79940.5	332455	0	332455	1321980	0	1321980	BEV	0	79940.5	3	3
2050	2a	1	10900.98	45334.77	0	45334.77	175925.6	0	175925.6	FCEV	0	10900.98	3	7
2050	2a	1	27134.47	112846.3	56423.14	56423.14	649533.9	324767	324767	PHEV	13567.23	13567.23	3	8
2050	2a	1	21280.09	89718.36	89718.36	0	404529.5	404529.5	0	ICE	21280.09	0	3	1
2050	2a	1	225.1356	949.1873	949.1873	0	4309.712	4309.712	0	ICE	225.1356	0	3	2
2050	2a	1	99396.21	419061.4	0	419061.4	1712686	0	1712686	BEV	0	99396.21	3	3
2050	2a	1	14852.31	62618.37	0	62618.37	250935.1	0	250935.1	FCEV	0	14852.31	3	7
2050	2a	1	32223.94	135858.4	67929.2	67929.2	795507.8	397753.9	397753.9	PHEV	16111.97	16111.97	3	8
2050	2a	1	12091.36	51670.75	51670.75	0	237777.8	237777.8	0	ICE	12091.36	0	3	1
2050	2a	1	127.9222	546.6576	546.6576	0	2532.824	2532.824	0	ICE	127.9222	0	3	2
2050	2a	1	121388.9	518738.6	0	518738.6	2179387	0	2179387	BEV	0	121388.9	3	3
2050	2a	1	19760.99	84445.82	0	84445.82	349137.4	0	349137.4	FCEV	0	19760.99	3	7
2050	2a	1	37520.87	160340.2	80170.09	80170.09	955988.2	477994.1	477994.1	PHEV	18760.43	18760.43	3	8
2050	2a	1	146725.2	635415.7	0	635415.7	2744663	0	2744663	BEV	0	146725.2	3	3
2050	2a	1	25892.69	112132.2	0	112132.2	477989.2	0	477989.2	FCEV	0	25892.69	3	7
2050	2a	1	43154.48	186887	93443.48	93443.48	1135717	567858.7	567858.7	PHEV	21577.24	21577.24	3	8
2050	2a	1	162819.5	714442.2	0	714442.2	3174619	0	3174619	BEV	0	162819.5	3	3
2050	2a	1	31013.24	136084.2	0	136084.2	597635.4	0	597635.4	FCEV	0	31013.24	3	7
2050	2a	1	45466.94	199506.2	99753.1	99753.1	1234486	617242.8	617242.8	PHEV	22733.47	22733.47	3	8
2050	2a	1	179445.2	797675.2	0	797675.2	3646933	0	3646933	BEV	0	179445.2	3	3
2050	2a	1	36753.84	163379.3	0	163379.3	739197.2	0	739197.2	FCEV	0	36753.84	3	7
2050	2a	1	47458.33	210963.2	105481.6	105481.6	1330534	665266.8	665266.8	PHEV	23729.16	23729.16	3	8
2050	2a	1	193530.4	871374.3	0	871374.3	4099971	0	4099971	BEV	0	193530.4	3	3

2050	2a	1	42482.27	191277.3	0	191277.3	891632.8	0	891632.8	FCEV	0	42482.27	3	7
2050	2a	1	48339.94	217651.5	108825.8	108825.8	1400462	700230.8	700230.8	PHEV	24169.97	24169.97	3	8
2050	2a	1	208967.1	952850.3	0	952850.3	4614622	0	4614622	BEV	0	208967.1	3	3
2050	2a	1	49016.98	223508.1	0	223508.1	1073437	0	1073437	FCEV	0	49016.98	3	7
2050	2a	1	49139.83	224068.3	112034.1	112034.1	1471880	735940.1	735940.1	PHEV	24569.91	24569.91	3	8
2050	2a	1	221413.7	1022289	0	1022289	5096819	0	5096819	BEV	0	221413.7	3	3
2050	2a	1	55353.42	255572.3	0	255572.3	1264701	0	1264701	FCEV	0	55353.42	3	7
2050	2a	1	48841.26	225505	112752.5	112752.5	1513083	756541.4	756541.4	PHEV	24420.63	24420.63	3	8
2050	2a	1	233801.7	1092880	0	1092880	5609235	0	5609235	BEV	0	233801.7	3	3
2050	2a	1	62149.81	290512.4	0	290512.4	1481090	0	1481090	FCEV	0	62149.81	3	7
2050	2a	1	48178.15	225203.4	112601.7	112601.7	1543535	771767.7	771767.7	PHEV	24089.07	24089.07	3	8
2050	2a	1	242431.6	1147109	0	1147109	6062620	0	6062620	BEV	0	242431.6	3	3
2050	2a	1	68378.15	323543.5	0	323543.5	1699715	0	1699715	FCEV	0	68378.15	3	7
2050	2a	1	46442.84	219752.7	109876.3	109876.3	1539103	769551.3	769551.3	PHEV	23221.42	23221.42	3	8
2050	2a	1	250134.2	1197885	0	1197885	6519075	0	6519075	BEV	0	250134.2	3	3
2050	2a	1	74715.42	357809.9	0	357809.9	1936803	0	1936803	FCEV	0	74715.42	3	7
2050	2a	1	44297.68	212140.3	106070.1	106070.1	1517631	758815.6	758815.6	PHEV	22148.84	22148.84	3	8
2050	2a	1	255659.4	1238992	0	1238992	6944233	0	6944233	BEV	0	255659.4	3	3
2050	2a	1	80734.56	391260.7	0	391260.7	2182406	0	2182406	FCEV	0	80734.56	3	7
2050	2a	1	41576.79	201491.9	100746	100746	1471507	735753.3	735753.3	PHEV	20788.39	20788.39	3	8
2050	2a	1	261932.2	1284398	0	1284398	7413309	0	7413309	BEV	0	261932.2	3	3
2050	2a	1	87310.75	428132.6	0	428132.6	2460577	0	2460577	FCEV	0	87310.75	3	7
2050	2a	1	38804.78	190281.2	95140.58	95140.58	1416688	708344.1	708344.1	PHEV	19402.39	19402.39	3	8
2050	2a	1	267315.6	1326110	0	1326110	7850159	0	7850159	BEV	0	267315.6	3	3
2050	2a	1	89105.21	442036.7	0	442036.7	2605576	0	2605576	FCEV	0	89105.21	3	7
2050	2a	1	39602.31	196460.7	98230.37	98230.37	1500159	750079.6	750079.6	PHEV	19801.16	19801.16	3	8
2050	2a	1	271509.7	1362471	0	1362471	8270317	0	8270317	BEV	0	271509.7	3	3
2050	2a	1	90503.23	454157	0	454157	2745024	0	2745024	FCEV	0	90503.23	3	7
2050	2a	1	40223.66	201847.5	100923.8	100923.8	1580881	790440.4	790440.4	PHEV	20111.83	20111.83	3	8
2050	2a	1	278430.8	1413153	0	1413153	8795412	0	8795412	BEV	0	278430.8	3	3
2050	2a	1	92810.26	471051.1	0	471051.1	2919292	0	2919292	FCEV	0	92810.26	3	7
2050	2a	1	41249.01	209356	104678	104678	1682140	841069.9	841069.9	PHEV	20624.5	20624.5	3	8
2050	2a	1	285650.1	1466159	0	1466159	9353305	0	9353305	BEV	0	285650.1	3	3
2050	2a	1	95216.69	488719.7	0	488719.7	3104438	0	3104438	FCEV	0	95216.69	3	7
2050	2a	1	42318.53	217208.7	108604.4	108604.4	1789993	894996.5	894996.5	PHEV	21159.26	21159.26	3	8
2050	2a	1	258450.1	1341356	0	1341356	8762307	0	8762307	BEV	0	258450.1	3	3
2050	2a	1	86150.04	447118.7	0	447118.7	2908268	0	2908268	FCEV	0	86150.04	3	7
2050	2a	1	38288.91	198719.4	99359.71	99359.71	1677533	838766.4	838766.4	PHEV	19144.45	19144.45	3	8
2050	2a	1	13286.01	35463.56	35463.56	0	104236.6	104236.6	0	ICE	13286.01	0	4	1
2050	2a	1	12299.01	33533.63	33533.63	0	99239.06	99239.06	0	ICE	12299.01	0	4	1
2050	2a	1	8547.054	23793.46	23793.46	0	70745.74	70745.74	0	ICE	8547.054	0	4	1
2050	2a	1	3338.406	9484.779	9484.779	0	28265.56	28265.56	0	ICE	3338.406	0	4	1
2050	2a	1	4514.777	13085.63	13085.63	0	39059.38	39059.38	0	ICE	4514.777	0	4	1
2050	2a	1	6146	18165.67	18165.67	0	54742.97	54742.97	0	ICE	6146	0	4	1
2050	2a	1	182.3972	539.1097	539.1097	0	1530.011	1530.011	0	ICE	182.3972	0	4	2
2050	2a	1	6059.757	18257.93	18257.93	0	55634.72	55634.72	0	ICE	6059.757	0	4	1
2050	2a	1	6593.769	20244.65	20244.65	0	62327.36	62327.36	0	ICE	6593.769	0	4	1

2050	2a	1	143.586	440.8478	440.8478	0	1323.894	1323.894	0	ICE	143.586	0	4	2
2050	2a	1	10188.54	31865.26	31865.26	0	100270.8	100270.8	0	ICE	10188.54	0	4	1
2050	2a	1	336.6483	1052.888	1052.888	0	3131.784	3131.784	0	ICE	336.6483	0	4	2
2050	2a	1	11132.65	35455.81	35455.81	0	114660	114660	0	ICE	11132.65	0	4	1
2050	2a	1	12377.94	40131.03	40131.03	0	132914	132914	0	ICE	12377.94	0	4	1
2050	2a	1	11631.43	38377.08	38377.08	0	130792.7	130792.7	0	ICE	11631.43	0	4	1
2050	2a	1	405.5897	1338.215	1338.215	0	4565.542	4565.542	0	ICE	405.5897	0	4	2
2050	2a	1	97.31183	321.0736	192.6441	128.4294	1011.886	607.1315	404.7543	PHEV	58.3871	38.92473	4	8
2050	2a	1	13107.44	43998.01	43998.01	0	152366	152366	0	ICE	13107.44	0	4	1
2050	2a	1	457.0586	1534.218	1534.218	0	5318.494	5318.494	0	ICE	457.0586	0	4	2
2050	2a	1	0.229288	0.769656	0	0.769656	1.439066	0	1.439066	BEV	0	0.229288	4	3
2050	2a	1	0.004679	0.015707	0	0.015707	0.029369	0	0.029369	FCEV	0	0.004679	4	7
2050	2a	1	280.5855	941.847	565.1082	376.7388	3167.533	1900.52	1267.013	PHEV	168.3513	112.2342	4	8
2050	2a	1	14810.67	50563.76	50563.76	0	177356.9	177356.9	0	ICE	14810.67	0	4	1
2050	2a	1	521.3258	1779.812	1779.812	0	6257.441	6257.441	0	ICE	521.3258	0	4	2
2050	2a	1	126.9639	433.456	0	433.456	892.1612	0	892.1612	BEV	0	126.9639	4	3
2050	2a	1	2.969915	10.13932	0	10.13932	19.58297	0	19.58297	FCEV	0	2.969915	4	7
2050	2a	1	330.3339	1127.763	670.2135	457.5496	4216.002	2505.51	1710.492	PHEV	196.3127	134.0212	4	8
2050	2a	1	16869.07	58557.62	58557.62	0	208207.9	208207.9	0	ICE	16869.07	0	4	1
2050	2a	1	603.0929	2093.517	2093.517	0	7477.449	7477.449	0	ICE	603.0929	0	4	2
2050	2a	1	290.8862	1009.753	0	1009.753	2485.183	0	2485.183	BEV	0	290.8862	4	3
2050	2a	1	7.677349	26.65038	0	26.65038	53.18833	0	53.18833	FCEV	0	7.677349	4	7
2050	2a	1	391.7498	1359.881	800.3872	559.494	5039.928	2966.358	2073.57	PHEV	230.5727	161.1771	4	8
2050	2a	1	18081.03	63800.56	63800.56	0	230188.6	230188.6	0	ICE	18081.03	0	4	1
2050	2a	1	657.8433	2321.259	2321.259	0	8432.824	8432.824	0	ICE	657.8433	0	4	2
2050	2a	1	956.8657	3376.387	0	3376.387	8400.916	0	8400.916	BEV	0	956.8657	4	3
2050	2a	1	32.80036	115.739	0	115.739	238.823	0	238.823	FCEV	0	32.80036	4	7
2050	2a	1	1142.068	4029.891	2336.185	1693.705	16683.43	9671.623	7011.808	PHEV	662.0733	479.995	4	8
2050	2a	1	19256.47	69051.38	69051.38	0	252412.6	252412.6	0	ICE	19256.47	0	4	1
2050	2a	1	704.4522	2526.081	2526.081	0	9305.885	9305.885	0	ICE	704.4522	0	4	2
2050	2a	1	1894.422	6793.17	0	6793.17	17728.94	0	17728.94	BEV	0	1894.422	4	3
2050	2a	1	80.10957	287.2633	0	287.2633	613.0048	0	613.0048	FCEV	0	80.10957	4	7
2050	2a	1	2006.351	7194.533	4107.051	3087.483	31295.95	17865.51	13430.43	PHEV	1145.34	861.0111	4	8
2050	2a	1	20363.13	74186.35	74186.35	0	275378.6	275378.6	0	ICE	20363.13	0	4	1
2050	2a	1	749.6261	2731.015	2731.015	0	10223.99	10223.99	0	ICE	749.6261	0	4	2
2050	2a	1	3175.741	11569.76	0	11569.76	31732.92	0	31732.92	BEV	0	3175.741	4	3
2050	2a	1	160.1214	583.3495	0	583.3495	1287.39	0	1287.39	FCEV	0	160.1214	4	7
2050	2a	1	2985.015	10874.92	6111.703	4763.214	49081.85	27584	21497.85	PHEV	1677.578	1307.437	4	8
2050	2a	1	21472.38	79457.67	79457.67	0	299381.5	299381.5	0	ICE	21472.38	0	4	1
2050	2a	1	795.0788	2942.157	2942.157	0	11187.44	11187.44	0	ICE	795.0788	0	4	2
2050	2a	1	4913.345	18181.64	0	18181.64	52306.17	0	52306.17	BEV	0	4913.345	4	3
2050	2a	1	288.3209	1066.92	0	1066.92	2438.769	0	2438.769	FCEV	0	288.3209	4	7
2050	2a	1	4095.28	15154.42	8382.559	6771.861	70507.78	39000.88	31506.91	PHEV	2265.275	1830.005	4	8
2050	2a	1	23052.21	86624.44	86624.44	0	330954.4	330954.4	0	ICE	23052.21	0	4	1
2050	2a	1	858.1852	3224.845	3224.845	0	12441.38	12441.38	0	ICE	858.1852	0	4	2
2050	2a	1	7409.385	27842.62	0	27842.62	83704.65	0	83704.65	BEV	0	7409.385	4	3
2050	2a	1	496.9709	1867.493	0	1867.493	4708.144	0	4708.144	FCEV	0	496.9709	4	7

2050	2a	1	5465.867	20539.36	11179.28	9360.08	97902.22	53286.78	44615.44	PHEV	2974.993	2490.874	4	8
2050	2a	1	24479.26	93389.36	93389.36	0	362108.3	362108.3	0	ICE	24479.26	0	4	1
2050	2a	1	911.3113	3476.689	3476.689	0	13608.52	13608.52	0	ICE	911.3113	0	4	2
2050	2a	1	10772.79	41098.62	0	41098.62	129113.3	0	129113.3	BEV	0	10772.79	4	3
2050	2a	1	814.4148	3107.025	0	3107.025	8625.495	0	8625.495	FCEV	0	814.4148	4	7
2050	2a	1	7011.786	26750.24	14322.85	12427.4	130720.5	69991.52	60729.03	PHEV	3754.311	3257.475	4	8
2050	2a	1	25461.8	98596.49	98596.49	0	387393.7	387393.7	0	ICE	25461.8	0	4	1
2050	2a	1	947.8891	3670.539	3670.539	0	14554.12	14554.12	0	ICE	947.8891	0	4	2
2050	2a	1	15135.89	58611.16	0	58611.16	191859.9	0	191859.9	BEV	0	15135.89	4	3
2050	2a	1	1275.391	4938.735	0	4938.735	14767.69	0	14767.69	FCEV	0	1275.391	4	7
2050	2a	1	8653.626	33509.69	17645.25	15864.45	166995	87934.79	79060.2	PHEV	4556.752	4096.874	4	8
2050	2a	1	25969.06	102048.6	102048.6	0	407086	407086	0	ICE	25969.06	0	4	1
2050	2a	1	966.7735	3799.052	3799.052	0	15289.49	15289.49	0	ICE	966.7735	0	4	2
2050	2a	1	20766.03	81602.6	0	81602.6	278087.3	0	278087.3	BEV	0	20766.03	4	3
2050	2a	1	1932.628	7594.495	0	7594.495	24166.21	0	24166.21	FCEV	0	1932.628	4	7
2050	2a	1	10365.62	40732.96	21088.03	19644.92	207086.7	107211.7	99874.93	PHEV	5366.431	4999.191	4	8
2050	2a	1	25786.05	102806.7	102806.7	0	416895.9	416895.9	0	ICE	25786.05	0	4	1
2050	2a	1	959.9604	3827.276	3827.276	0	15653.7	15653.7	0	ICE	959.9604	0	4	2
2050	2a	1	27869.83	111114.5	0	111114.5	393813.6	0	393813.6	BEV	0	27869.83	4	3
2050	2a	1	2843.144	11335.36	0	11335.36	38091.43	0	38091.43	FCEV	0	2843.144	4	7
2050	2a	1	12047.84	48033.66	24442.27	23591.39	249065.3	126738.7	122326.7	PHEV	6130.63	5917.211	4	8
2050	2a	1	24565.77	99348.88	99348.88	0	410129.8	410129.8	0	ICE	24565.77	0	4	1
2050	2a	1	914.5317	3698.549	3698.549	0	15395.92	15395.92	0	ICE	914.5317	0	4	2
2050	2a	1	36436.99	147358.5	0	147358.5	542837.1	0	542837.1	BEV	0	36436.99	4	3
2050	2a	1	4048.554	16373.16	0	16373.16	57818.9	0	57818.9	FCEV	0	4048.554	4	7
2050	2a	1	13495.18	54577.21	27288.61	27288.61	288698	144349	144349	PHEV	6747.591	6747.591	4	8
2050	2a	1	22315.74	91527.77	91527.77	0	385144	385144	0	ICE	22315.74	0	4	1
2050	2a	1	830.7678	3407.386	3407.386	0	14454.8	14454.8	0	ICE	830.7678	0	4	2
2050	2a	1	45374.45	186102.8	0	186102.8	704818.1	0	704818.1	BEV	0	45374.45	4	3
2050	2a	1	5608.078	23001.48	0	23001.48	84287.55	0	84287.55	FCEV	0	5608.078	4	7
2050	2a	1	16099.75	66032.94	33016.47	33016.47	355128.5	177564.3	177564.3	PHEV	8049.873	8049.873	4	8
2050	2a	1	18806.75	78213.15	78213.15	0	335919.5	335919.5	0	ICE	18806.75	0	4	1
2050	2a	1	700.1358	2911.711	2911.711	0	12604.95	12604.95	0	ICE	700.1358	0	4	2
2050	2a	1	55482.62	230740	0	230740	898848.2	0	898848.2	BEV	0	55482.62	4	3
2050	2a	1	7565.812	31464.55	0	31464.55	119400.6	0	119400.6	FCEV	0	7565.812	4	7
2050	2a	1	18832.65	78320.84	39160.42	39160.42	428955.5	214477.7	214477.7	PHEV	9416.324	9416.324	4	8
2050	2a	1	14204.04	59885.21	59885.21	0	262805.1	262805.1	0	ICE	14204.04	0	4	1
2050	2a	1	528.7863	2229.4	2229.4	0	9859.768	9859.768	0	ICE	528.7863	0	4	2
2050	2a	1	67947.52	286471.5	0	286471.5	1148296	0	1148296	BEV	0	67947.52	4	3
2050	2a	1	10153.08	42806.09	0	42806.09	167994	0	167994	FCEV	0	10153.08	4	7
2050	2a	1	22028.37	92873.17	46436.58	46436.58	518746.1	259373.1	259373.1	PHEV	11014.19	11014.19	4	8
2050	2a	1	7916.171	33828.65	33828.65	0	151789.2	151789.2	0	ICE	7916.171	0	4	1
2050	2a	1	294.7024	1259.369	1259.369	0	5693.891	5693.891	0	ICE	294.7024	0	4	2
2050	2a	1	81404.57	347871	0	347871	1434954	0	1434954	BEV	0	81404.57	4	3
2050	2a	1	13251.91	56630.17	0	56630.17	229594.4	0	229594.4	FCEV	0	13251.91	4	7
2050	2a	1	25161.85	107525.6	53762.82	53762.82	613062.2	306531.1	306531.1	PHEV	12580.92	12580.92	4	8
2050	2a	1	95810.19	414920.4	0	414920.4	1761753	0	1761753	BEV	0	95810.19	4	3

2050	2a	1	16907.68	73221.25	0	73221.25	306489.2	0	306489.2	FCEV	0	16907.68	4	7
2050	2a	1	28179.47	122035.4	61017.71	61017.71	711087.8	355543.9	355543.9	PHEV	14089.73	14089.73	4	8
2050	2a	1	104298.3	457654.5	0	457654.5	2001160	0	2001160	BEV	0	104298.3	4	3
2050	2a	1	19866.33	87172.28	0	87172.28	376359.3	0	376359.3	FCEV	0	19866.33	4	7
2050	2a	1	29125.03	127798.9	63899.43	63899.43	759960.3	379980.2	379980.2	PHEV	14562.51	14562.51	4	8
2050	2a	1	113179.5	503109	0	503109	2265643	0	2265643	BEV	0	113179.5	4	3
2050	2a	1	23181.35	103046.4	0	103046.4	458810.3	0	458810.3	FCEV	0	23181.35	4	7
2050	2a	1	29932.87	133058.5	66529.26	66529.26	808034.1	404017.1	404017.1	PHEV	14966.44	14966.44	4	8
2050	2a	1	121176.1	545598	0	545598	2530603	0	2530603	BEV	0	121176.1	4	3
2050	2a	1	26599.64	119765.4	0	119765.4	549881.5	0	549881.5	FCEV	0	26599.64	4	7
2050	2a	1	30267.33	136279.3	68139.63	68139.63	845676.5	422838.2	422838.2	PHEV	15133.67	15133.67	4	8
2050	2a	1	130016	592848.4	0	592848.4	2832399	0	2832399	BEV	0	130016	4	3
2050	2a	1	30497.59	139063.2	0	139063.2	658358.7	0	658358.7	FCEV	0	30497.59	4	7
2050	2a	1	30574.02	139411.7	69705.86	69705.86	884493.8	442246.9	442246.9	PHEV	15287.01	15287.01	4	8
2050	2a	1	137763	636065.7	0	636065.7	3130704	0	3130704	BEV	0	137763	4	3
2050	2a	1	34440.76	159016.4	0	159016.4	776289.8	0	776289.8	FCEV	0	34440.76	4	7
2050	2a	1	30388.9	140308.6	70154.31	70154.31	910470.9	455235.5	455235.5	PHEV	15194.45	15194.45	4	8
2050	2a	1	146463.2	684626	0	684626	3471132	0	3471132	BEV	0	146463.2	4	3
2050	2a	1	38933.25	181989.2	0	181989.2	915940.7	0	915940.7	FCEV	0	38933.25	4	7
2050	2a	1	30180.81	141076.9	70538.44	70538.44	936057.3	468028.7	468028.7	PHEV	15090.41	15090.41	4	8
2050	2a	1	152127.6	719819.3	0	719819.3	3760341	0	3760341	BEV	0	152127.6	4	3
2050	2a	1	42907.79	203025.9	0	203025.9	1053621	0	1053621	FCEV	0	42907.79	4	7
2050	2a	1	29143.22	137896.4	68948.21	68948.21	935742.8	467871.4	467871.4	PHEV	14571.61	14571.61	4	8
2050	2a	1	158793.8	760458.7	0	760458.7	4092558	0	4092558	BEV	0	158793.8	4	3
2050	2a	1	47431.91	227150	0	227150	1215230	0	1215230	FCEV	0	47431.91	4	7
2050	2a	1	28121.69	134673.9	67336.95	67336.95	933820.4	466910.2	466910.2	PHEV	14060.84	14060.84	4	8
2050	2a	1	164101.4	795277.9	0	795277.9	4409066	0	4409066	BEV	0	164101.4	4	3
2050	2a	1	51821.49	251140.4	0	251140.4	1384983	0	1384983	FCEV	0	51821.49	4	7
2050	2a	1	26687.1	129332.6	64666.3	64666.3	915412.8	457706.4	457706.4	PHEV	13343.55	13343.55	4	8
2050	2a	1	170135.4	834267.4	0	834267.4	4763703	0	4763703	BEV	0	170135.4	4	3
2050	2a	1	56711.8	278089.1	0	278089.1	1580439	0	1580439	FCEV	0	56711.8	4	7
2050	2a	1	25205.24	123595.2	61797.58	61797.58	891315.7	445657.9	445657.9	PHEV	12602.62	12602.62	4	8
2050	2a	1	173538	860894.2	0	860894.2	5042851	0	5042851	BEV	0	173538	4	3
2050	2a	1	57846	286964.7	0	286964.7	1673048	0	1673048	FCEV	0	57846	4	7
2050	2a	1	25709.33	127539.9	63769.94	63769.94	943810.2	471905.1	471905.1	PHEV	12854.67	12854.67	4	8
2050	2a	1	177149.5	888959	0	888959	5340348	0	5340348	BEV	0	177149.5	4	3
2050	2a	1	59049.82	296319.7	0	296319.7	1771741	0	1771741	FCEV	0	59049.82	4	7
2050	2a	1	26244.36	131697.6	65848.81	65848.81	999884.5	499942.3	499942.3	PHEV	13122.18	13122.18	4	8
2050	2a	1	181788.3	922652	0	922652	5681245	0	5681245	BEV	0	181788.3	4	3
2050	2a	1	60596.1	307550.7	0	307550.7	1884836	0	1884836	FCEV	0	60596.1	4	7
2050	2a	1	26931.6	136689.2	68344.59	68344.59	1064009	532004.7	532004.7	PHEV	13465.8	13465.8	4	8
2050	2a	1	185021.5	949661.6	0	949661.6	5991992	0	5991992	BEV	0	185021.5	4	3
2050	2a	1	61673.83	316553.9	0	316553.9	1987923	0	1987923	FCEV	0	61673.83	4	7
2050	2a	1	27410.59	140690.6	70345.31	70345.31	1122725	561362.5	561362.5	PHEV	13705.3	13705.3	4	8
2050	2a	1	160245.4	831673.7	0	831673.7	5363073	0	5363073	BEV	0	160245.4	4	3
2050	2a	1	53415.14	277224.6	0	277224.6	1779308	0	1779308	FCEV	0	53415.14	4	7
2050	2a	1	23740.06	123210.9	61605.46	61605.46	1003858	501929	501929	PHEV	11870.03	11870.03	4	8

2050	2a	1	81.21936	230.7531	230.7531	0	375.0676	375.0676	0	ICE	81.21936	0	1	2
2050	2a	1	195.9963	590.533	590.533	0	1080.162	1080.162	0	ICE	195.9963	0	1	2
2050	2a	1	275.73	846.5655	846.5655	0	1637.284	1637.284	0	ICE	275.73	0	1	2
2050	2a	1	232.7143	714.4957	0	714.4957	1633.925	0	1633.925	BEV	0	232.7143	1	3
2050	2a	1	0.013672	0.041977	0	0.041977	0.095995	0	0.095995	FCEV	0	0.013672	1	7
2050	2a	1	243.2419	746.8182	448.0909	298.7273	1383.862	830.317	553.5447	PHEV	145.9451	97.29675	1	8
2050	2a	1	279.1479	873.0519	0	873.0519	2053.579	0	2053.579	BEV	0	279.1479	1	3
2050	2a	1	0.039113	0.122328	0	0.122328	0.287737	0	0.287737	FCEV	0	0.039113	1	7
2050	2a	1	352.4453	1102.294	661.3763	440.9175	2142.563	1285.538	857.0252	PHEV	211.4672	140.9781	1	8
2050	2a	1	283.9623	904.3772	904.3772	0	1934.272	1934.272	0	ICE	283.9623	0	1	2
2050	2a	1	662.0213	2108.439	0	2108.439	5133.084	0	5133.084	BEV	0	662.0213	1	3
2050	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2050	2a	1	314.8089	1002.619	601.5715	401.0477	2046.727	1228.036	818.6907	PHEV	188.8854	125.9236	1	8
2050	2a	1	2140.414	6449.024	6449.024	0	22483.28	22483.28	0	ICE	2140.414	0	2	1
2050	2a	1	3321.374	10197.51	10197.51	0	35883.07	35883.07	0	ICE	3321.374	0	2	1
2050	2a	1	4264.472	13337.39	13337.39	0	47044.69	47044.69	0	ICE	4264.472	0	2	1
2050	2a	1	2.256476	6.281623	6.281623	0	18.51479	18.51479	0	ICE	2.256476	0	3	2
2050	2a	1	56.77781	171.0704	171.0704	0	564.3664	564.3664	0	ICE	56.77781	0	3	2
2050	2a	1	44.30923	136.0413	136.0413	0	441.5541	441.5541	0	ICE	44.30923	0	3	2
2050	2a	1	190.9994	608.3043	608.3043	0	2091.139	2091.139	0	ICE	190.9994	0	3	2
2050	2a	1	199.8622	647.9812	0	647.9812	1113.637	0	1113.637	BEV	0	199.8622	3	3
2050	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2050	2a	1	18.18893	58.97105	35.38263	23.58842	205.3869	123.2321	82.15477	PHEV	10.91336	7.275571	3	8
2050	2a	1	54.62436	145.8055	145.8055	0	371.0242	371.0242	0	ICE	54.62436	0	4	2
2050	2a	1	67.58842	184.2819	184.2819	0	498.7523	498.7523	0	ICE	67.58842	0	4	2
2050	2a	1	45.73289	127.3121	127.3121	0	346.5696	346.5696	0	ICE	45.73289	0	4	2
2050	2a	1	55.89177	158.7947	158.7947	0	447.1177	447.1177	0	ICE	55.89177	0	4	2
2050	2a	1	324.9715	979.1327	979.1327	0	2725.17	2725.17	0	ICE	324.9715	0	4	2
2050	2a	1	670.8929	2136.693	2136.693	0	6450.031	6450.031	0	ICE	670.8929	0	4	2
2050	2a	1	439.0345	1423.411	1423.411	0	4439.452	4439.452	0	ICE	439.0345	0	4	2
2050	2a	1	51.66978	155.68	0	155.68	347.5366	0	347.5366	BEV	0	51.66978	1	3
2050	2a	1	0.195267	0.588335	0	0.588335	1.313386	0	1.313386	FCEV	0	0.195267	1	7
2050	2a	1	108.6118	327.2451	196.347	130.898	571.2199	342.7319	228.488	PHEV	65.16706	43.44471	1	8
2050	2a	1	441.3362	1430.874	0	1430.874	3594.914	0	3594.914	BEV	0	441.3362	1	3
2050	2a	1	13.43681	43.56403	0	43.56403	109.4499	0	109.4499	FCEV	0	13.43681	1	7
2050	2a	1	317.3798	1028.99	617.3938	411.5959	2200.37	1320.222	880.148	PHEV	190.4279	126.9519	1	8
2050	2a	1	9.564028	25.52869	25.52869	0	81.08865	81.08865	0	ICE	9.564028	0	3	2
2050	2a	1	88.75598	257.2503	257.2503	0	735.4894	735.4894	0	ICE	88.75598	0	4	2
2050	2a	1	65.1505	192.5647	0	192.5647	422.0813	0	422.0813	BEV	0	65.1505	1	3
2050	2a	1	0.643676	1.902508	0	1.902508	4.170096	0	4.170096	FCEV	0	0.643676	1	7
2050	2a	1	18.10993	53.52732	32.11639	21.41093	89.85927	53.91556	35.94371	PHEV	10.86596	7.24397	1	8
2050	2a	1	38.95224	126.2886	126.2886	0	277.0468	277.0468	0	ICE	38.95224	0	1	2
2050	2a	1	40.65254	127.1433	0	127.1433	298.5925	0	298.5925	BEV	0	40.65254	2	3
2050	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2050	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2050	2a	1	7.235142	20.14133	20.14133	0	30.25281	30.25281	0	ICE	7.235142	0	1	2
2050	2a	1	4.176542	12.10529	12.10529	0	36.10786	36.10786	0	ICE	4.176542	0	3	2

2050	2a	1	10.05591	31.45045	0	31.45045	51.35924	0	51.35924	BEV	0	10.05591	3	3
2050	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2050	2a	1	4.553001	14.23978	8.543869	5.695913	46.4848	27.89088	18.59392	PHEV	2.7318	1.8212	3	8
2050	2a	1	8.23342	24.33544	24.33544	0	79.77743	79.77743	0	ICE	8.23342	0	3	2
2050	2a	1	5.24419	14.29844	14.29844	0	18.8007	18.8007	0	ICE	5.24419	0	1	2
2050	2a	1	11.60423	33.63369	0	33.63369	72.71741	0	72.71741	BEV	0	11.60423	1	3
2050	2a	1	1.178094	3.414588	0	3.414588	7.382478	0	7.382478	FCEV	0	1.178094	1	7
2050	2a	1	1.236999	3.585318	2.151191	1.434127	5.782892	3.469735	2.313157	PHEV	0.742199	0.4948	1	8
2050	2a	1	15.90695	47.92733	0	47.92733	106.3454	0	106.3454	BEV	0	15.90695	2	3
2050	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2050	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2050	2a	1	3.467319	9.851034	9.851034	0	30.54783	30.54783	0	ICE	3.467319	0	3	2
2050	2a	1	1.558223	4.159272	0	4.159272	8.630401	0	8.630401	BEV	0	1.558223	1	3
2050	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2050	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2050	2a	1	7.450727	20.74148	0	20.74148	42.49801	0	42.49801	BEV	0	7.450727	1	3
2050	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2050	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2050	2a	1	6.595682	18.73906	0	18.73906	40.39536	0	40.39536	BEV	0	6.595682	1	3
2050	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2050	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2050	2a	1	1.54513	4.389884	4.389884	0	12.60957	12.60957	0	ICE	1.54513	0	2	2
2050	2a	1	20.49109	62.91317	0	62.91317	143.0268	0	143.0268	BEV	0	20.49109	2	3
2050	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2050	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2050	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2050	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2050	2a	1	1.233987	3.364502	3.364502	0	10.65336	10.65336	0	ICE	1.233987	0	3	2
2050	2a	1	2.648747	7.221887	0	7.221887	14.98077	0	14.98077	BEV	0	2.648747	1	3
2050	2a	1	0	0	0	0	0	0	0	FCEV	0	0	1	7
2050	2a	1	0	0	0	0	0	0	0	PHEV	0	0	1	8
2050	2a	1	2.279693	6.346255	0	6.346255	13.14351	0	13.14351	BEV	0	2.279693	2	3
2050	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2050	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2050	2a	1	0.380699	1.147038	1.147038	0	3.045085	3.045085	0	ICE	0.380699	0	2	2
2050	2a	1	0.245564	0.65547	0	0.65547	1.079187	0	1.079187	BEV	0	0.245564	4	3
2050	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2050	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2050	2a	1	1.810425	5.143616	0	5.143616	7.918135	0	7.918135	BEV	0	1.810425	3	3
2050	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2050	2a	1	0	0	0	0	0	0	0	PHEV	0	0	3	8
2050	2a	1	0.995735	2.943084	0	2.943084	4.597416	0	4.597416	BEV	0	0.995735	3	3
2050	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2050	2a	1	0.689355	2.03752	1.222512	0.815008	6.154977	3.692986	2.461991	PHEV	0.413613	0.275742	3	8
2050	2a	1	0.130703	0.416269	0	0.416269	0.680947	0	0.680947	BEV	0	0.130703	4	3
2050	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2050	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2050	2a	1	0.592571	1.581714	0	1.581714	3.229851	0	3.229851	BEV	0	0.592571	2	3
2050	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7

2050	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2050	2a	1	0.944429	2.575014	2.575014	0	7.538944	7.538944	0	ICE	0.944429	0	2	2
2050	2a	1	0.335758	0.915454	0	0.915454	1.88707	0	1.88707	BEV	0	0.335758	2	3
2050	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2050	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2050	2a	1	1.166809	3.248185	3.248185	0	11.32859	11.32859	0	ICE	1.166809	0	2	2
2050	2a	1	0.96525	2.742381	0	2.742381	5.883989	0	5.883989	BEV	0	0.96525	2	3
2050	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2050	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2050	2a	1	1.245593	3.467507	0	3.467507	5.122661	0	5.122661	BEV	0	1.245593	3	3
2050	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2050	2a	1	0	0	0	0	0	0	0	PHEV	0	0	3	8
2050	2a	1	0.655958	2.013969	0	2.013969	3.219912	0	3.219912	BEV	0	0.655958	3	3
2050	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2050	2a	1	0.501615	1.540094	0.924057	0.616038	5.034592	3.020755	2.013837	PHEV	0.300969	0.200646	3	8
2050	2a	1	0.671877	1.7934	1.7934	0	6.03368	6.03368	0	ICE	0.671877	0	2	2
2050	2a	1	0.222916	0.620558	0	0.620558	0.902642	0	0.902642	BEV	0	0.222916	4	3
2050	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2050	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2050	2a	1	0.342349	0.992263	0.992263	0	2.750769	2.750769	0	ICE	0.342349	0	2	2
2050	2a	1	0.611474	1.877391	1.877391	0	6.197612	6.197612	0	ICE	0.611474	0	2	2
2050	2a	1	1.020118	2.956711	0	2.956711	4.453663	0	4.453663	BEV	0	1.020118	3	3
2050	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2050	2a	1	0	0	0	0	0	0	0	PHEV	0	0	3	8
2050	2a	1	2.146382	6.467005	0	6.467005	9.9188	0	9.9188	BEV	0	2.146382	3	3
2050	2a	1	0	0	0	0	0	0	0	PHEV	0	0	3	8
2050	2a	1	2.146382	6.467005	0	6.467005	9.9188	0	9.9188	BEV	0	2.146382	3	3
2050	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2050	2a	1	0.550354	1.658206	0.994924	0.663283	6.355257	3.813154	2.542103	PHEV	0.330213	0.220142	3	8
2050	2a	1	0.159298	0.470837	0.470837	0	1.319139	1.319139	0	ICE	0.159298	0	2	2
2050	2a	1	0	0	0	0	0	0	0	BEV	0	0	2	3
2050	2a	1	2.598381	8.275455	0	8.275455	19.98956	0	19.98956	FCEV	0	2.598381	2	7
2050	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2050	2a	1	0	0	0	0	0	0	0	BEV	0	0	2	3
2050	2a	1	2.855925	9.259309	0	9.259309	23.08529	0	23.08529	FCEV	0	2.855925	2	7
2050	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2050	2a	1	0	0	0	0	0	0	0	BEV	0	0	3	3
2050	2a	1	0.103225	0.328755	0	0.328755	0.561731	0	0.561731	FCEV	0	0.103225	3	7
2050	2a	1	1.479552	4.712151	2.82729	1.88486	18.37515	11.02509	7.35006	PHEV	0.887731	0.591821	3	8
2050	2a	1	0.089189	0.278945	0.278945	0	0.848952	0.848952	0	ICE	0.089189	0	2	2
2050	2a	1	0.065385	0.178275	0	0.178275	0.252506	0	0.252506	BEV	0	0.065385	3	3
2050	2a	1	0	0	0	0	0	0	0	FCEV	0	0	3	7
2050	2a	1	0	0	0	0	0	0	0	PHEV	0	0	3	8
2050	2a	1	0.144551	0.418968	0	0.418968	0.83103	0	0.83103	BEV	0	0.144551	2	3
2050	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7
2050	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2050	2a	1	0.154069	0.499514	0.499514	0	1.355115	1.355115	0	ICE	0.154069	0	2	2
2050	2a	1	0.097327	0.287668	0	0.287668	0.641658	0	0.641658	BEV	0	0.097327	2	3
2050	2a	1	0	0	0	0	0	0	0	FCEV	0	0	2	7

2050	2a	1	0	0	0	0	0	0	0	PHEV	0	0	2	8
2050	2a	1	0.207088	0.564631	0	0.564631	0.791454	0	0.791454	BEV	0	0.207088	4	3
2050	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2050	2a	1	0	0	0	0	0	0	0	PHEV	0	0	4	8
2050	2a	1	0	0	0	0	0	0	0	BEV	0	0	4	3
2050	2a	1	0	0	0	0	0	0	0	FCEV	0	0	4	7
2050	2a	1	0.183049	0.56201	0.337206	0.224804	1.997426	1.198455	0.79897	PHEV	0.109829	0.07322	4	8

cy	scenario	total_pop	sum of trip	ctrip	etrip	total_vmt	cvmt	evmt	Tech	cpop	epop	veh_class_	fuel_ID
2017	0	49269.97	255711.1	0	255711.1	2398766	0	2398766	BEV	0	49269.97	1	3
2017	0	44443.18	230660.1	124556.5	106103.7	2591798	1399571	1192227	PHEV	23999.32	20443.86	1	8
2017	0	3.133165	16.26113	0	16.26113	125.8602	0	125.8602	BEV	0	3.133165	2	3
2017	0	27.17541	141.0404	84.62422	56.41615	1445.495	867.2968	578.1979	PHEV	16.30525	10.87016	2	8
2017	0	1472.23	7640.875	4584.525	3056.35	73285.55	43971.33	29314.22	PHEV	883.3381	588.8921	4	8
2017	0	102.0746	436.2016	0	436.2016	2176.572	0	2176.572	BEV	0	102.0746	1	3
2017	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2017	0	10757.99	53368.64	0	53368.64	370984.2	0	370984.2	BEV	0	10757.99	1	3
2017	0	11244.66	55782.95	33469.77	22313.18	520689.1	312413.4	208275.6	PHEV	6746.795	4497.863	1	8
2017	0	12939.04	64929.8	0	64929.8	464044.2	0	464044.2	BEV	0	12939.04	1	3
2017	0	16336.52	81978.76	49187.26	32791.5	788118.2	472870.9	315247.3	PHEV	9801.909	6534.606	1	8
2017	0	28830.92	146329	0	146329	1073802	0	1073802	BEV	0	28830.92	1	3
2017	0	13709.88	69583.38	41750.03	27833.35	688667.5	413200.5	275467	PHEV	8225.926	5483.951	1	8
2017	0	4185.812	21484.56	0	21484.56	153196.6	0	153196.6	BEV	0	4185.812	3	3
2017	0	380.9397	1955.253	1173.152	782.1011	19239.28	11543.57	7695.713	PHEV	228.5638	152.3759	3	8
2017	0	56.9835	256.5693	0	256.5693	1438.191	0	1438.191	BEV	0	56.9835	1	3
2017	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2017	0	2340.174	11475.16	0	11475.16	77779.72	0	77779.72	BEV	0	2340.174	1	3
2017	0	4919.132	24121.21	14472.73	9648.484	219469.3	131681.6	87787.7	PHEV	2951.479	1967.653	1	8
2017	0	18373.13	94303.94	0	94303.94	710385	0	710385	BEV	0	18373.13	1	3
2017	0	13212.74	67817.14	40690.28	27126.86	690400.9	414240.5	276160.4	PHEV	7927.641	5285.094	1	8
2017	0	202.5612	877.2218	0	877.2218	4495.291	0	4495.291	BEV	0	202.5612	1	3
2017	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2017	0	3021.329	14642.14	0	14642.14	96490.78	0	96490.78	BEV	0	3021.329	1	3
2017	0	839.8406	4070.086	2442.052	1628.034	35893.89	21536.33	14357.55	PHEV	503.9044	335.9362	1	8
2017	0	686.7347	3446.124	0	3446.124	24630.08	0	24630.08	BEV	0	686.7347	2	3
2017	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2017	0	224.1042	1124.584	0	1124.584	7619.344	0	7619.344	BEV	0	224.1042	3	3
2017	0	101.4674	509.1764	305.5058	203.6705	4740.808	2844.485	1896.323	PHEV	60.88041	40.58694	3	8
2017	0	53.59322	232.0935	0	232.0935	1135.688	0	1135.688	BEV	0	53.59322	3	3
2017	0	0	0	0	0	0	0	0	PHEV	0	0	3	8
2017	0	200.2117	867.047	0	867.047	4228.417	0	4228.417	BEV	0	200.2117	4	3
2017	0	0	0	0	0	0	0	0	PHEV	0	0	4	8
2017	0	533.7475	2556.101	0	2556.101	16376.96	0	16376.96	BEV	0	533.7475	1	3
2017	0	56.89694	272.4778	163.4867	108.9911	2329.165	1397.499	931.6659	PHEV	34.13817	22.75878	1	8
2017	0	316.4942	1551.945	0	1551.945	10537.46	0	10537.46	BEV	0	316.4942	2	3
2017	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2017	0	70.6808	322.291	0	322.291	1863.984	0	1863.984	BEV	0	70.6808	1	3
2017	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2017	0	368.3298	1721.717	0	1721.717	10491.66	0	10491.66	BEV	0	368.3298	1	3
2017	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2017	0	294.7399	1394.615	0	1394.615	8749.831	0	8749.831	BEV	0	294.7399	1	3
2017	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2017	0	379.0041	1880.179	0	1880.179	13105.19	0	13105.19	BEV	0	379.0041	2	3
2017	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2017	0	54.84637	240.6626	0	240.6626	1279.648	0	1279.648	BEV	0	54.84637	1	3

2017	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2017	0	118.5419	547.3197	0	547.3197	3253.295	0	3253.295	BEV	0	118.5419	1	3
2017	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2017	0	54.97298	256.9651	0	256.9651	1570.791	0	1570.791	BEV	0	54.97298	2	3
2017	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2017	0	2.608216	11.89297	0	11.89297	66.52203	0	66.52203	BEV	0	2.608216	4	3
2017	0	0	0	0	0	0	0	0	PHEV	0	0	4	8
2017	0	10.59824	40.43269	0	40.43269	154.2245	0	154.2245	BEV	0	10.59824	1	3
2017	0	47.2068	223.3675	0	223.3675	1335.004	0	1335.004	BEV	0	47.2068	3	3
2017	0	0	0	0	0	0	0	0	PHEV	0	0	3	8
2017	0	20.88341	101.2064	0	101.2064	636.1056	0	636.1056	BEV	0	20.88341	3	3
2017	0	14.45774	70.06598	42.03959	28.02639	604.8208	362.8925	241.9283	PHEV	8.674646	5.783097	3	8
2017	0	1.911222	9.700254	0	9.700254	66.34982	0	66.34982	BEV	0	1.911222	4	3
2017	0	0	0	0	0	0	0	0	PHEV	0	0	4	8
2017	0	7.311099	27.47328	0	27.47328	103.0404	0	103.0404	BEV	0	7.311099	1	3
2017	0	125.6842	529.8932	0	529.8932	2560.923	0	2560.923	BEV	0	125.6842	2	3
2017	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2017	0	53.20132	227.3484	0	227.3484	1138.847	0	1138.847	BEV	0	53.20132	2	3
2017	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2017	0	13.88405	63.30865	0	63.30865	367.1873	0	367.1873	BEV	0	13.88405	2	3
2017	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2017	0	6.914276	31.9239	0	31.9239	190.2986	0	190.2986	BEV	0	6.914276	2	3
2017	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2017	0	21.47019	101.5901	0	101.5901	634.8718	0	634.8718	BEV	0	21.47019	2	3
2017	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2017	0	19.35755	90.48475	0	90.48475	535.1782	0	535.1782	BEV	0	19.35755	3	3
2017	0	0	0	0	0	0	0	0	PHEV	0	0	3	8
2017	0	16.41389	81.42669	0	81.42669	539.9222	0	539.9222	BEV	0	16.41389	3	3
2017	0	12.5518	62.26747	37.36048	24.90699	559.8976	335.9386	223.9591	PHEV	7.53108	5.02072	3	8
2017	0	15.05604	63.47733	0	63.47733	291.6905	0	291.6905	BEV	0	15.05604	4	3
2017	0	0	0	0	0	0	0	0	PHEV	0	0	4	8
2017	0	31.94106	140.1555	0	140.1555	706.1905	0	706.1905	BEV	0	31.94106	4	3
2017	0	0	0	0	0	0	0	0	PHEV	0	0	4	8
2017	0	3.580719	16.12226	0	16.12226	87.17571	0	87.17571	BEV	0	3.580719	4	3
2017	0	0	0	0	0	0	0	0	PHEV	0	0	4	8
2017	0	163.1615	706.5951	0	706.5951	3655.461	0	3655.461	BEV	0	163.1615	2	3
2017	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2017	0	8.909709	39.60571	0	39.60571	218.2356	0	218.2356	BEV	0	8.909709	2	3
2017	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2017	0	4.120638	12.65147	0	12.65147	32.19996	0	32.19996	BEV	0	4.120638	1	3
2017	0	86.16839	358.3554	0	358.3554	1679.362	0	1679.362	BEV	0	86.16839	2	3
2017	0	13.50659	53.07576	0	53.07576	218.8011	0	218.8011	BEV	0	13.50659	1	3
2017	0	5.199916	21.92321	0	21.92321	102.8866	0	102.8866	BEV	0	5.199916	3	3
2017	0	0	0	0	0	0	0	0	PHEV	0	0	3	8
2017	0	2.356033	8.178498	0	8.178498	26.16555	0	26.16555	BEV	0	2.356033	2	3
2017	0	4.310981	20.1512	0	20.1512	118.7572	0	118.7572	BEV	0	4.310981	4	3
2017	0	0	0	0	0	0	0	0	PHEV	0	0	4	8

2017	0	28.0495	115.0448	0	115.0448	525.0119	0	525.0119	BEV	0	28.0495	1	3
2017	0	25.61582	107.9981	0	107.9981	521.647	0	521.647	BEV	0	25.61582	1	3
2017	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2017	0	55.27326	245.7024	0	245.7024	1339.283	0	1339.283	BEV	0	55.27326	1	3
2017	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2017	0	27.7271	113.7224	0	113.7224	517.5113	0	517.5113	BEV	0	27.7271	2	3
2017	0	3.030515	13.64495	0	13.64495	76.15808	0	76.15808	BEV	0	3.030515	2	3
2017	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2017	0	25.512	103.1756	0	103.1756	453.5382	0	453.5382	BEV	0	25.512	1	3
2017	0	34.55283	143.6976	0	143.6976	674.0291	0	674.0291	BEV	0	34.55283	1	3
2017	0	4.034769	12.61898	0	12.61898	32.61447	0	32.61447	BEV	0	4.034769	2	3
2017	0	6.547891	24.60534	0	24.60534	91.98218	0	91.98218	BEV	0	6.547891	2	3
2017	0	3.158472	12.0497	0	12.0497	45.66295	0	45.66295	BEV	0	3.158472	2	3
2017	0	3.186568	12.522	0	12.522	51.68318	0	51.68318	BEV	0	3.186568	2	3
2017	0	2.990751	11.40984	0	11.40984	42.15611	0	42.15611	BEV	0	2.990751	3	3
2017	0	26.64365	110.8051	0	110.8051	497.8726	0	497.8726	BEV	0	26.64365	3	3
2017	0	2.329155	9.953317	0	9.953317	47.41848	0	47.41848	BEV	0	2.329155	3	3
2017	0	0	0	0	0	0	0	0	PHEV	0	0	3	8
2017	0	31.03235	148.613	0	148.613	916.0386	0	916.0386	BEV	0	31.03235	3	3
2017	0	0	0	0	0	0	0	0	PHEV	0	0	3	8
2017	0	66.2242	324.7337	0	324.7337	2105.759	0	2105.759	BEV	0	66.2242	3	3
2017	0	16.98056	83.26504	49.95902	33.30602	739.4714	443.6828	295.7886	PHEV	10.18834	6.792225	3	8
2017	0	1.560634	5.059795	0	5.059795	13.25618	0	13.25618	BEV	0	1.560634	4	3
2017	0	1.630697	5.75406	0	5.75406	17.65852	0	17.65852	BEV	0	1.630697	4	3
2017	0	5.161168	20.28143	0	20.28143	80.29353	0	80.29353	BEV	0	5.161168	4	3
2017	0	3.219847	13.75957	0	13.75957	65.32519	0	65.32519	BEV	0	3.219847	4	3
2017	0	0	0	0	0	0	0	0	PHEV	0	0	4	8
2017	0	2.349305	8.020551	0	8.020551	24.50471	0	24.50471	BEV	0	2.349305	2	3
2017	0	0.844368	2.544062	0	2.544062	6.348899	0	6.348899	BEV	0	0.844368	1	3
2017	0	1.586097	5.05148	0	5.05148	13.69953	0	13.69953	BEV	0	1.586097	1	3
2017	0	3.113909	10.27412	0	10.27412	28.91447	0	28.91447	BEV	0	3.113909	1	3
2017	0	4.324678	14.76449	0	14.76449	45.39329	0	45.39329	BEV	0	4.324678	1	3
2017	0	3.756124	13.03863	0	13.03863	41.42143	0	41.42143	BEV	0	3.756124	1	3
2017	0	3.009635	10.61977	0	10.61977	34.96703	0	34.96703	BEV	0	3.009635	1	3
2017	0	2.83391	10.16206	0	10.16206	34.22355	0	34.22355	BEV	0	2.83391	1	3
2017	0	2.908573	10.59643	0	10.59643	37.20155	0	37.20155	BEV	0	2.908573	1	3
2017	0	3.1757	11.75155	0	11.75155	41.64744	0	41.64744	BEV	0	3.1757	1	3
2017	0	5.448785	21.09949	0	21.09949	83.77382	0	83.77382	BEV	0	5.448785	1	3
2017	0	18.37546	73.26129	0	73.26129	313.7479	0	313.7479	BEV	0	18.37546	1	3
2017	0	1.589479	5.062253	0	5.062253	13.69644	0	13.69644	BEV	0	1.589479	2	3
2017	0	1.599297	5.276769	0	5.276769	15.17846	0	15.17846	BEV	0	1.599297	2	3
2017	0	1.582529	5.312107	0	5.312107	15.77233	0	15.77233	BEV	0	1.582529	2	3
2017	0	3.103935	12.01946	0	12.01946	48.30272	0	48.30272	BEV	0	3.103935	2	3
2017	0	0	0	0	0	0	0	0	BEV	0	0	2	3
2017	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2017	0	0	0	0	0	0	0	0	BEV	0	0	2	3
2017	0	0	0	0	0	0	0	0	PHEV	0	0	2	8

2017	0	0	0	0	0	0	0	0	BEV	0	0	3	3
2017	0	42.96778	218.0795	130.8477	87.23181	2124.994	1274.996	849.9976	PHEV	25.78067	17.18711	3	8
2017	0	1.477329	6.059249	0	6.059249	26.2509	0	26.2509	BEV	0	1.477329	3	3
2017	0	0.819532	2.750938	0	2.750938	7.67738	0	7.67738	BEV	0	0.819532	4	3
2017	0	2.243398	8.044554	0	8.044554	25.97061	0	25.97061	BEV	0	2.243398	4	3
2017	0	9.831796	37.50869	0	37.50869	136.765	0	136.765	BEV	0	9.831796	4	3
2017	0	3.745018	15.5747	0	15.5747	69.67635	0	69.67635	BEV	0	3.745018	4	3
2017	0	0.688589	2.153605	0	2.153605	5.566275	0	5.566275	BEV	0	0.688589	1	3
2017	0	0.544508	1.765372	0	1.765372	4.602425	0	4.602425	BEV	0	0.544508	3	3
2017	0	1.468954	6.782306	0	6.782306	38.33927	0	38.33927	BEV	0	1.468954	3	3
2017	0	0	0	0	0	0	0	0	PHEV	0	0	3	8
2017	0	0.635679	2.060959	0	2.060959	5.53249	0	5.53249	BEV	0	0.635679	2	3
2017	0	3.801784	18.20663	0	18.20663	116.1356	0	116.1356	BEV	0	3.801784	2	3
2017	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2017	0	3.735569	14.89338	0	14.89338	63.65492	0	63.65492	BEV	0	3.735569	2	3
2017	0	10.44693	42.24949	0	42.24949	187.3451	0	187.3451	BEV	0	10.44693	2	3
2017	0	3.65471	14.98976	0	14.98976	65.25964	0	65.25964	BEV	0	3.65471	4	3
2017	0	1.674727	8.116164	0	8.116164	52.99966	0	52.99966	BEV	0	1.674727	2	3
2017	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2017	0	1.431525	5.051263	0	5.051263	16.40705	0	16.40705	BEV	0	1.431525	2	3
2017	0	0.662972	2.453302	0	2.453302	8.284898	0	8.284898	BEV	0	0.662972	4	3
2017	0	0.58795	2.108318	0	2.108318	7.062952	0	7.062952	BEV	0	0.58795	2	3
2017	0	0.838845	3.296343	0	3.296343	12.55083	0	12.55083	BEV	0	0.838845	3	3
2017	0	0.912817	4.109978	0	4.109978	21.30189	0	21.30189	BEV	0	0.912817	3	3
2017	0	0	0	0	0	0	0	0	PHEV	0	0	3	8
2017	0	1.441359	5.333692	0	5.333692	18.61368	0	18.61368	BEV	0	1.441359	3	3
2017	0	0.893564	2.794676	0	2.794676	7.013756	0	7.013756	BEV	0	0.893564	4	3
2017	0	5.882568	23.45327	0	23.45327	96.61203	0	96.61203	BEV	0	5.882568	4	3
2017	0	0.758949	2.460617	0	2.460617	6.893233	0	6.893233	BEV	0	0.758949	1	3
2017	0	0.747094	2.507785	0	2.507785	7.482002	0	7.482002	BEV	0	0.747094	1	3
2017	0	1.617126	7.095852	0	7.095852	37.47387	0	37.47387	BEV	0	1.617126	2	3
2017	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2017	0	1.514378	5.170102	0	5.170102	15.21155	0	15.21155	BEV	0	1.514378	3	3
2017	0	9.263906	34.81144	0	34.81144	125.1943	0	125.1943	BEV	0	9.263906	4	3
2017	0	5.430592	25.07358	0	25.07358	143.5334	0	143.5334	BEV	0	5.430592	4	3
2017	0	0	0	0	0	0	0	0	PHEV	0	0	4	8
2017	0	0.72166	2.918536	0	2.918536	12.32349	0	12.32349	BEV	0	0.72166	3	3
2017	0	0	0	0	0	0	0	0	BEV	0	0	4	3
2017	0	4.322678	21.44412	12.86647	8.577646	207.6672	124.6003	83.06687	PHEV	2.593607	1.729071	4	8
2017	0	0.996552	3.687701	0	3.687701	12.85119	0	12.85119	BEV	0	0.996552	2	3
2018	0	54492.26	279693	0	279693	2571205	0	2571205	BEV	0	54492.26	1	3
2018	0	49153.87	252292.5	136238	116054.6	2708518	1462600	1245918	PHEV	26543.09	22610.78	1	8
2018	0	61551.95	319454.6	0	319454.6	3113570	0	3113570	BEV	0	61551.95	1	3
2018	0	39780.73	206462	111489.5	94972.51	2230478	1204458	1026020	PHEV	21481.59	18299.13	1	8
2018	0	3.431376	17.61226	0	17.61226	137.0222	0	137.0222	BEV	0	3.431376	2	3
2018	0	29.76194	152.7594	91.65564	61.10376	1503.874	902.3242	601.5494	PHEV	17.85716	11.90478	2	8
2018	0	1036.209	5377.923	3226.754	2151.169	54326.87	32596.12	21730.75	PHEV	621.7252	414.4835	3	8

2018	0	1692.233	8685.742	5211.445	3474.297	80243.62	48146.17	32097.45	PHEV	1015.34	676.8933	4	8
2018	0	3.126045	16.22417	0	16.22417	116.7985	0	116.7985	BEV	0	3.126045	4	3
2018	0	3825.418	19853.92	11912.35	7941.567	192915.5	115749.3	77166.19	PHEV	2295.251	1530.167	4	8
2018	0	89.7685	378.4703	0	378.4703	1889.347	0	1889.347	BEV	0	89.7685	1	3
2018	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2018	0	10485.64	51416.88	0	51416.88	358543.5	0	358543.5	BEV	0	10485.64	1	3
2018	0	10960	53742.89	32245.73	21497.15	480560.3	288336.2	192224.1	PHEV	6575.997	4383.998	1	8
2018	0	12674.38	62875.55	0	62875.55	450865.7	0	450865.7	BEV	0	12674.38	1	3
2018	0	16002.35	79385.11	47631.07	31754.05	731224.9	438735	292490	PHEV	9601.412	6400.941	1	8
2018	0	28112.46	141072	0	141072	1039500	0	1039500	BEV	0	28112.46	1	3
2018	0	13368.23	67083.52	40250.11	26833.41	636777.7	382066.6	254711.1	PHEV	8020.938	5347.292	1	8
2018	0	4063.285	20622.88	0	20622.88	141063.1	0	141063.1	BEV	0	4063.285	3	3
2018	0	369.7888	1876.833	1126.1	750.7333	17677.75	10606.65	7071.098	PHEV	221.8733	147.9155	3	8
2018	0	52.43259	233.0749	0	233.0749	1308.307	0	1308.307	BEV	0	52.43259	1	3
2018	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2018	0	2253.789	10922.45	0	10922.45	74252.89	0	74252.89	BEV	0	2253.789	1	3
2018	0	4737.548	22959.39	13775.63	9183.755	200115.8	120069.5	80046.32	PHEV	2842.529	1895.019	1	8
2018	0	18076.96	91748.18	0	91748.18	694249.7	0	694249.7	BEV	0	18076.96	1	3
2018	0	12999.75	65979.21	39587.53	26391.69	645094.7	387056.8	258037.9	PHEV	7799.853	5199.902	1	8
2018	0	178.8043	764.0949	0	764.0949	3921.682	0	3921.682	BEV	0	178.8043	1	3
2018	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2018	0	2919.428	13981.05	0	13981.05	92412.75	0	92412.75	BEV	0	2919.428	1	3
2018	0	811.5152	3886.322	2331.793	1554.529	32821.74	19693.04	13128.7	PHEV	486.9091	324.6061	1	8
2018	0	683.6299	3391.379	0	3391.379	24320.84	0	24320.84	BEV	0	683.6299	2	3
2018	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2018	0	221.1673	1097.176	0	1097.176	7133.518	0	7133.518	BEV	0	221.1673	3	3
2018	0	100.1376	496.7668	298.0601	198.7067	4431.971	2659.183	1772.788	PHEV	60.08258	40.05505	3	8
2018	0	46.80319	200.0069	0	200.0069	934.7883	0	934.7883	BEV	0	46.80319	3	3
2018	0	0	0	0	0	0	0	0	PHEV	0	0	3	8
2018	0	183.5052	784.1837	0	784.1837	3662.043	0	3662.043	BEV	0	183.5052	4	3
2018	0	0	0	0	0	0	0	0	PHEV	0	0	4	8
2018	0	505.8046	2393.305	0	2393.305	15386.66	0	15386.66	BEV	0	505.8046	1	3
2018	0	53.91825	255.1239	153.0743	102.0496	2089.029	1253.418	835.6118	PHEV	32.35095	21.5673	1	8
2018	0	307.4292	1489.882	0	1489.882	10132.67	0	10132.67	BEV	0	307.4292	2	3
2018	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2018	0	65.32398	294.1225	0	294.1225	1703.486	0	1703.486	BEV	0	65.32398	1	3
2018	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2018	0	346.7331	1600.902	0	1600.902	9753.573	0	9753.573	BEV	0	346.7331	1	3
2018	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2018	0	280.9712	1313.369	0	1313.369	8278.056	0	8278.056	BEV	0	280.9712	1	3
2018	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2018	0	373.4204	1831.085	0	1831.085	12793.72	0	12793.72	BEV	0	373.4204	2	3
2018	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2018	0	49.18046	212.9834	0	212.9834	1132.669	0	1132.669	BEV	0	49.18046	1	3
2018	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2018	0	111.6458	509.0838	0	509.0838	3032.27	0	3032.27	BEV	0	111.6458	1	3
2018	0	0	0	0	0	0	0	0	PHEV	0	0	1	8

2018	0	52.77968	243.689	0	243.689	1492.823	0	1492.823	BEV	0	52.77968	2	3
2018	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2018	0	2.474547	11.1417	0	11.1417	60.11993	0	60.11993	BEV	0	2.474547	4	3
2018	0	0	0	0	0	0	0	0	PHEV	0	0	4	8
2018	0	8.765525	32.93865	0	32.93865	125.401	0	125.401	BEV	0	8.765525	1	3
2018	0	45.89755	214.543	0	214.543	1235.171	0	1235.171	BEV	0	45.89755	3	3
2018	0	0	0	0	0	0	0	0	PHEV	0	0	3	8
2018	0	20.74515	99.34791	0	99.34791	600.815	0	600.815	BEV	0	20.74515	3	3
2018	0	14.36203	68.77932	41.26759	27.51173	571.9229	343.1537	228.7692	PHEV	8.617217	5.744811	3	8
2018	0	1.927968	9.674792	0	9.674792	63.60644	0	63.60644	BEV	0	1.927968	4	3
2018	0	0	0	0	0	0	0	0	PHEV	0	0	4	8
2018	0	6.109029	22.60622	0	22.60622	84.50341	0	84.50341	BEV	0	6.109029	1	3
2018	0	115.5829	480.6839	0	480.6839	2321.097	0	2321.097	BEV	0	115.5829	2	3
2018	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2018	0	43.30116	182.5607	0	182.5607	917.3263	0	917.3263	BEV	0	43.30116	2	3
2018	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2018	0	13.18306	59.357	0	59.357	344.7088	0	344.7088	BEV	0	13.18306	2	3
2018	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2018	0	6.661629	30.37576	0	30.37576	181.669	0	181.669	BEV	0	6.661629	2	3
2018	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2018	0	21.03915	98.34521	0	98.34521	617.6649	0	617.6649	BEV	0	21.03915	2	3
2018	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2018	0	18.96223	87.55051	0	87.55051	499.4044	0	499.4044	BEV	0	18.96223	3	3
2018	0	0	0	0	0	0	0	0	PHEV	0	0	3	8
2018	0	16.31614	80.00699	0	80.00699	509.4396	0	509.4396	BEV	0	16.31614	3	3
2018	0	12.47705	61.18182	36.70909	24.47273	527.9782	316.7869	211.1913	PHEV	7.486228	4.990818	3	8
2018	0	8.678095	36.09029	0	36.09029	159.9562	0	159.9562	BEV	0	8.678095	4	3
2018	0	0	0	0	0	0	0	0	PHEV	0	0	4	8
2018	0	26.13264	113.1713	0	113.1713	546.6209	0	546.6209	BEV	0	26.13264	4	3
2018	0	0	0	0	0	0	0	0	PHEV	0	0	4	8
2018	0	3.400331	15.11525	0	15.11525	78.70802	0	78.70802	BEV	0	3.400331	4	3
2018	0	0	0	0	0	0	0	0	PHEV	0	0	4	8
2018	0	144.1037	615.807	0	615.807	3180.799	0	3180.799	BEV	0	144.1037	2	3
2018	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2018	0	8.358526	36.67671	0	36.67671	201.9953	0	201.9953	BEV	0	8.358526	2	3
2018	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2018	0	3.948506	11.89677	0	11.89677	30.6476	0	30.6476	BEV	0	3.948506	1	3
2018	0	76.99475	315.7932	0	315.7932	1478.578	0	1478.578	BEV	0	76.99475	2	3
2018	0	11.05734	42.81765	0	42.81765	175.9611	0	175.9611	BEV	0	11.05734	1	3
2018	0	4.744435	19.73106	0	19.73106	89.50647	0	89.50647	BEV	0	4.744435	3	3
2018	0	0	0	0	0	0	0	0	PHEV	0	0	3	8
2018	0	2.130685	7.274179	0	7.274179	23.21817	0	23.21817	BEV	0	2.130685	2	3
2018	0	4.078676	18.83165	0	18.83165	106.4778	0	106.4778	BEV	0	4.078676	4	3
2018	0	0	0	0	0	0	0	0	PHEV	0	0	4	8
2018	0	23.44368	94.81092	0	94.81092	432.2205	0	432.2205	BEV	0	23.44368	1	3
2018	0	21.96557	91.34996	0	91.34996	440.9356	0	440.9356	BEV	0	21.96557	1	3
2018	0	0	0	0	0	0	0	0	PHEV	0	0	1	8

2018	0	50.01036	219.4425	0	219.4425	1196.234	0	1196.234	BEV	0	50.01036	1	3
2018	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2018	0	24.24579	98.05481	0	98.05481	445.4355	0	445.4355	BEV	0	24.24579	2	3
2018	0	2.890548	12.84915	0	12.84915	71.75884	0	71.75884	BEV	0	2.890548	2	3
2018	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2018	0	21.15834	84.35641	0	84.35641	370.4485	0	370.4485	BEV	0	21.15834	1	3
2018	0	29.4231	120.6785	0	120.6785	566.1135	0	566.1135	BEV	0	29.4231	1	3
2018	0	3.671664	11.273	0	11.273	29.15102	0	29.15102	BEV	0	3.671664	2	3
2018	0	5.785202	21.40791	0	21.40791	79.95379	0	79.95379	BEV	0	5.785202	2	3
2018	0	2.821907	10.60402	0	10.60402	40.13885	0	40.13885	BEV	0	2.821907	2	3
2018	0	2.836769	10.98491	0	10.98491	45.22987	0	45.22987	BEV	0	2.836769	2	3
2018	0	2.614805	9.825784	0	9.825784	34.55193	0	34.55193	BEV	0	2.614805	3	3
2018	0	22.42717	91.98482	0	91.98482	393.8983	0	393.8983	BEV	0	22.42717	3	3
2018	0	2.064588	8.704449	0	8.704449	39.59835	0	39.59835	BEV	0	2.064588	3	3
2018	0	0	0	0	0	0	0	0	PHEV	0	0	3	8
2018	0	30.27993	143.275	0	143.275	846.8728	0	846.8728	BEV	0	30.27993	3	3
2018	0	0	0	0	0	0	0	0	PHEV	0	0	3	8
2018	0	64.46002	312.39	0	312.39	1940.124	0	1940.124	BEV	0	64.46002	3	3
2018	0	16.52821	80.1	48.06	32.04	681.802	409.0812	272.7208	PHEV	9.916926	6.611284	3	8
2018	0	1.44555	4.603861	0	4.603861	11.59523	0	11.59523	BEV	0	1.44555	4	3
2018	0	1.4759	5.12329	0	5.12329	15.00287	0	15.00287	BEV	0	1.4759	4	3
2018	0	4.457656	17.26151	0	17.26151	65.02147	0	65.02147	BEV	0	4.457656	4	3
2018	0	2.103525	8.868609	0	8.868609	40.57685	0	40.57685	BEV	0	2.103525	4	3
2018	0	0	0	0	0	0	0	0	PHEV	0	0	4	8
2018	0	2.145564	7.202057	0	7.202057	22.01721	0	22.01721	BEV	0	2.145564	2	3
2018	0	0	0	0	0	0	0	0	PHEV	0	0	4	8
2018	0	2.145564	7.202057	0	7.202057	22.01721	0	22.01721	BEV	0	2.145564	2	3
2018	0	0.807824	2.387676	0	2.387676	6.025473	0	6.025473	BEV	0	0.807824	1	3
2018	0	1.483682	4.640304	0	4.640304	12.60707	0	12.60707	BEV	0	1.483682	1	3
2018	0	2.869735	9.304083	0	9.304083	26.18449	0	26.18449	BEV	0	2.869735	1	3
2018	0	3.909441	13.1229	0	13.1229	40.28012	0	40.28012	BEV	0	3.909441	1	3
2018	0	3.34754	11.42853	0	11.42853	36.18916	0	36.18916	BEV	0	3.34754	1	3
2018	0	2.645379	9.182904	0	9.182904	30.24138	0	30.24138	BEV	0	2.645379	1	3
2018	0	2.462461	8.689017	0	8.689017	28.99916	0	28.99916	BEV	0	2.462461	1	3
2018	0	2.521897	9.043222	0	9.043222	31.70266	0	31.70266	BEV	0	2.521897	1	3
2018	0	2.69419	9.815391	0	9.815391	34.6409	0	34.6409	BEV	0	2.69419	1	3
2018	0	4.474732	17.07128	0	17.07128	67.15682	0	67.15682	BEV	0	4.474732	1	3
2018	0	15.0684	59.21308	0	59.21308	253.0003	0	253.0003	BEV	0	15.0684	1	3
2018	0	1.419033	4.438111	0	4.438111	12.07308	0	12.07308	BEV	0	1.419033	2	3
2018	0	1.459538	4.732028	0	4.732028	13.60809	0	13.60809	BEV	0	1.459538	2	3
2018	0	1.44572	4.770052	0	4.770052	14.19334	0	14.19334	BEV	0	1.44572	2	3
2018	0	2.775688	10.58936	0	10.58936	42.42762	0	42.42762	BEV	0	2.775688	2	3
2018	0	0	0	0	0	0	0	0	BEV	0	0	2	3
2018	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2018	0	0	0	0	0	0	0	0	BEV	0	0	2	3
2018	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2018	0	0	0	0	0	0	0	0	BEV	0	0	3	3
2018	0	40.82305	204.8554	122.9132	81.94214	1913.537	1148.122	765.415	PHEV	24.49383	16.32922	3	8
2018	0	1.223619	4.94856	0	4.94856	20.4553	0	20.4553	BEV	0	1.223619	3	3

2018	0	0.740031	2.441682	0	2.441682	6.519636	0	6.519636	BEV	0	0.740031	4	3
2018	0	1.963847	6.92961	0	6.92961	21.29028	0	21.29028	BEV	0	1.963847	4	3
2018	0	8.436849	31.70357	0	31.70357	110.7967	0	110.7967	BEV	0	8.436849	4	3
2018	0	3.377051	13.85094	0	13.85094	59.09274	0	59.09274	BEV	0	3.377051	4	3
2018	0	0.658519	2.021831	0	2.021831	5.273519	0	5.273519	BEV	0	0.658519	1	3
2018	0	0.503392	1.603227	0	1.603227	3.968693	0	3.968693	BEV	0	0.503392	3	3
2018	0	1.416855	6.460592	0	6.460592	34.97735	0	34.97735	BEV	0	1.416855	3	3
2018	0	0	0	0	0	0	0	0	PHEV	0	0	3	8
2018	0	0.566941	1.805622	0	1.805622	4.691678	0	4.691678	BEV	0	0.566941	2	3
2018	0	3.675495	17.39126	0	17.39126	110.2799	0	110.2799	BEV	0	3.675495	2	3
2018	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2018	0	3.332672	13.09613	0	13.09613	55.63499	0	55.63499	BEV	0	3.332672	2	3
2018	0	9.408534	37.51098	0	37.51098	165.3757	0	165.3757	BEV	0	9.408534	2	3
2018	0	3.241237	13.10821	0	13.10821	54.27978	0	54.27978	BEV	0	3.241237	4	3
2018	0	1.813341	8.684036	0	8.684036	57.07057	0	57.07057	BEV	0	1.813341	2	3
2018	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2018	0	1.27532	4.427019	0	4.427019	14.31202	0	14.31202	BEV	0	1.27532	2	3
2018	0	0.593508	2.162251	0	2.162251	6.966955	0	6.966955	BEV	0	0.593508	4	3
2018	0	0.515286	1.818232	0	1.818232	6.058443	0	6.058443	BEV	0	0.515286	2	3
2018	0	0.737334	2.855201	0	2.855201	10.36697	0	10.36697	BEV	0	0.737334	3	3
2018	0	0.871877	3.875695	0	3.875695	19.23386	0	19.23386	BEV	0	0.871877	3	3
2018	0	0	0	0	0	0	0	0	PHEV	0	0	3	8
2018	0	1.281593	4.669062	0	4.669062	15.63138	0	15.63138	BEV	0	1.281593	3	3
2018	0	0.847025	2.600596	0	2.600596	6.280657	0	6.280657	BEV	0	0.847025	4	3
2018	0	5.11243	20.08991	0	20.08991	78.92637	0	78.92637	BEV	0	5.11243	4	3
2018	0	0.702345	2.236863	0	2.236863	6.245286	0	6.245286	BEV	0	0.702345	1	3
2018	0	0.682556	2.252047	0	2.252047	6.683355	0	6.683355	BEV	0	0.682556	1	3
2018	0	1.52349	6.5977	0	6.5977	34.75978	0	34.75978	BEV	0	1.52349	2	3
2018	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2018	0	1.387553	4.657627	0	4.657627	13.02969	0	13.02969	BEV	0	1.387553	3	3
2018	0	7.883224	29.17155	0	29.17155	99.65662	0	99.65662	BEV	0	7.883224	4	3
2018	0	5.123595	23.36262	0	23.36262	127.7454	0	127.7454	BEV	0	5.123595	4	3
2018	0	0	0	0	0	0	0	0	PHEV	0	0	4	8
2018	0	0.594698	2.371009	0	2.371009	9.531439	0	9.531439	BEV	0	0.594698	3	3
2018	0	0	0	0	0	0	0	0	BEV	0	0	4	3
2018	0	4.240621	20.7941	12.47646	8.317638	192.9633	115.778	77.18531	PHEV	2.544372	1.696248	4	8
2018	0	0.894501	3.258819	0	3.258819	11.3348	0	11.3348	BEV	0	0.894501	2	3
2019	0	53974.08	273941.2	0	273941.2	2462189	0	2462189	BEV	0	53974.08	1	3
2019	0	48686.46	247104.2	133436.3	113667.9	2530836	1366652	1164185	PHEV	26290.69	22395.77	1	8
2019	0	68242.08	350266.8	0	350266.8	3321114	0	3321114	BEV	0	68242.08	1	3
2019	0	44104.52	226375.7	122242.9	104132.8	2341190	1264242	1076947	PHEV	23816.44	20288.08	1	8
2019	0	76294.24	395967.1	0	395967.1	3817893	0	3817893	BEV	0	76294.24	1	3
2019	0	37417.42	194196.4	102924.1	91272.31	2091805	1108657	983148.3	PHEV	19831.23	17586.19	1	8
2019	0	3.396063	17.23645	0	17.23645	134.355	0	134.355	BEV	0	3.396063	2	3
2019	0	29.45565	149.4998	89.69987	59.79991	1412.047	847.2284	564.8189	PHEV	17.67339	11.78226	2	8
2019	0	1270.441	6593.587	0	6593.587	61021.54	0	61021.54	BEV	0	1270.441	2	3
2019	0	975.6091	5063.411	3009.113	2054.298	52053.99	30934.94	21119.05	PHEV	579.7905	395.8185	2	8

2019	0	1143.604	5869.79	3521.874	2347.916	56907.06	34144.24	22762.83	PHEV	686.1627	457.4418	3	8
2019	0	3556.701	18459.28	0	18459.28	144083.7	0	144083.7	BEV	0	3556.701	3	3
2019	0	3089.205	16032.97	9528.168	6504.807	159500.2	94788.7	64711.52	PHEV	1835.87	1253.335	3	8
2019	0	1668.73	8469.508	5081.705	3387.803	75158.01	45094.8	30063.2	PHEV	1001.238	667.4922	4	8
2019	0	3.601616	18.48605	0	18.48605	127.7891	0	127.7891	BEV	0	3.601616	4	3
2019	0	4407.386	22621.83	13573.1	9048.733	211554	126932.4	84621.6	PHEV	2644.431	1762.954	4	8
2019	0	1552.152	8055.668	0	8055.668	59288.59	0	59288.59	BEV	0	1552.152	4	3
2019	0	4038.379	20959.19	12455.75	8503.442	211483.7	125681.7	85801.96	PHEV	2399.951	1638.428	4	8
2019	0	77.34845	321.6752	0	321.6752	1600.95	0	1600.95	BEV	0	77.34845	1	3
2019	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2019	0	10115.74	49023.48	0	49023.48	341742.2	0	341742.2	BEV	0	10115.74	1	3
2019	0	10573.35	51241.22	30744.73	20496.49	438269.5	262961.7	175307.8	PHEV	6344.012	4229.341	1	8
2019	0	12372.8	60670.64	0	60670.64	435063.5	0	435063.5	BEV	0	12372.8	1	3
2019	0	15621.59	76601.25	45960.75	30640.5	675006.8	405004.1	270002.7	PHEV	9372.954	6248.636	1	8
2019	0	27664.2	137237.7	0	137237.7	1012097	0	1012097	BEV	0	27664.2	1	3
2019	0	13155.07	65260.19	39156.11	26104.08	593025.9	355815.5	237210.4	PHEV	7893.041	5262.027	1	8
2019	0	3972.932	19936.69	0	19936.69	130610.5	0	130610.5	BEV	0	3972.932	3	3
2019	0	361.566	1814.385	1088.631	725.754	16338.14	9802.883	6535.255	PHEV	216.9396	144.6264	3	8
2019	0	47.37407	207.8746	0	207.8746	1164.348	0	1164.348	BEV	0	47.37407	1	3
2019	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2019	0	2186.166	10469.49	0	10469.49	71134.14	0	71134.14	BEV	0	2186.166	1	3
2019	0	4595.402	22007.24	13204.34	8802.896	183452.6	110071.6	73381.04	PHEV	2757.241	1838.161	1	8
2019	0	17669.28	88666.74	0	88666.74	671730.4	0	671730.4	BEV	0	17669.28	1	3
2019	0	12706.57	63763.24	38257.95	25505.3	597371.8	358423.1	238948.7	PHEV	7623.945	5082.63	1	8
2019	0	156.7373	660.8155	0	660.8155	3384.796	0	3384.796	BEV	0	156.7373	1	3
2019	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2019	0	2790.053	13201.64	0	13201.64	87213.6	0	87213.6	BEV	0	2790.053	1	3
2019	0	775.5529	3669.668	2201.801	1467.867	29634.8	17780.88	11853.92	PHEV	465.3317	310.2212	1	8
2019	0	674.6052	3307.96	0	3307.96	23721.02	0	23721.02	BEV	0	674.6052	2	3
2019	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2019	0	218.9095	1073.433	0	1073.433	6686.458	0	6686.458	BEV	0	218.9095	3	3
2019	0	99.11535	486.0171	291.6103	194.4068	4150.04	2490.024	1660.016	PHEV	59.46921	39.64614	3	8
2019	0	41.45168	174.7632	0	174.7632	778.6827	0	778.6827	BEV	0	41.45168	3	3
2019	0	0	0	0	0	0	0	0	PHEV	0	0	3	8
2019	0	166.6148	702.4598	0	702.4598	3135.379	0	3135.379	BEV	0	166.6148	4	3
2019	0	0	0	0	0	0	0	0	PHEV	0	0	4	8
2019	0	482.1463	2253.74	0	2253.74	14488.38	0	14488.38	BEV	0	482.1463	1	3
2019	0	51.3963	240.2464	144.1478	96.09855	1881.925	1129.155	752.7699	PHEV	30.83778	20.55852	1	8
2019	0	298.4245	1429.146	0	1429.146	9701.627	0	9701.627	BEV	0	298.4245	2	3
2019	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2019	0	60.1478	267.3708	0	267.3708	1545.229	0	1545.229	BEV	0	60.1478	1	3
2019	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2019	0	326.2826	1487.787	0	1487.787	9031.448	0	9031.448	BEV	0	326.2826	1	3
2019	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2019	0	263.455	1216.398	0	1216.398	7673.319	0	7673.319	BEV	0	263.455	1	3
2019	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2019	0	362.6291	1757.395	0	1757.395	12265.55	0	12265.55	BEV	0	362.6291	2	3

2019	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2019	0	43.46716	185.7508	0	185.7508	984.4494	0	984.4494	BEV	0	43.46716	1	3
2019	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2019	0	103.4374	465.729	0	465.729	2769.625	0	2769.625	BEV	0	103.4374	1	3
2019	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2019	0	50.6762	231.0739	0	231.0739	1413.062	0	1413.062	BEV	0	50.6762	2	3
2019	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2019	0	2.3556	10.47118	0	10.47118	54.40582	0	54.40582	BEV	0	2.3556	4	3
2019	0	0	0	0	0	0	0	0	PHEV	0	0	4	8
2019	0	7.268066	26.89519	0	26.89519	101.8234	0	101.8234	BEV	0	7.268066	1	3
2019	0	43.87703	202.5846	0	202.5846	1121.15	0	1121.15	BEV	0	43.87703	3	3
2019	0	0	0	0	0	0	0	0	PHEV	0	0	3	8
2019	0	20.33503	96.21886	0	96.21886	558.5706	0	558.5706	BEV	0	20.33503	3	3
2019	0	14.0781	66.61306	39.96784	26.64522	532.5219	319.5131	213.0088	PHEV	8.446859	5.63124	3	8
2019	0	1.93172	9.582955	0	9.582955	60.46449	0	60.46449	BEV	0	1.93172	4	3
2019	0	0	0	0	0	0	0	0	PHEV	0	0	4	8
2019	0	5.139927	18.72563	0	18.72563	69.51338	0	69.51338	BEV	0	5.139927	1	3
2019	0	106.0143	434.8165	0	434.8165	2089.848	0	2089.848	BEV	0	106.0143	2	3
2019	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2019	0	39.77239	165.4046	0	165.4046	828.6695	0	828.6695	BEV	0	39.77239	2	3
2019	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2019	0	12.56598	55.85869	0	55.85869	323.5438	0	323.5438	BEV	0	12.56598	2	3
2019	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2019	0	6.364183	28.65486	0	28.65486	171.2606	0	171.2606	BEV	0	6.364183	2	3
2019	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2019	0	20.30165	93.73475	0	93.73475	589.2562	0	589.2562	BEV	0	20.30165	2	3
2019	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2019	0	18.3902	83.85583	0	83.85583	459.9222	0	459.9222	BEV	0	18.3902	3	3
2019	0	0	0	0	0	0	0	0	PHEV	0	0	3	8
2019	0	16.06249	77.84299	0	77.84299	475.1507	0	475.1507	BEV	0	16.06249	3	3
2019	0	12.28308	59.52699	35.71619	23.8108	492.3178	295.3907	196.9271	PHEV	7.369847	4.913231	3	8
2019	0	7.787821	31.94167	0	31.94167	135.7697	0	135.7697	BEV	0	7.787821	4	3
2019	0	0	0	0	0	0	0	0	PHEV	0	0	4	8
2019	0	23.9471	102.3346	0	102.3346	472.4213	0	472.4213	BEV	0	23.9471	4	3
2019	0	0	0	0	0	0	0	0	PHEV	0	0	4	8
2019	0	3.193549	14.0131	0	14.0131	70.08086	0	70.08086	BEV	0	3.193549	4	3
2019	0	0	0	0	0	0	0	0	PHEV	0	0	4	8
2019	0	133.5991	563.2632	0	563.2632	2891.646	0	2891.646	BEV	0	133.5991	2	3
2019	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2019	0	7.884923	34.14684	0	34.14684	187.2465	0	187.2465	BEV	0	7.884923	2	3
2019	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2019	0	3.810174	11.26169	0	11.26169	29.326	0	29.326	BEV	0	3.810174	1	3
2019	0	70.00564	283.1168	0	283.1168	1319.216	0	1319.216	BEV	0	70.00564	2	3
2019	0	9.107314	34.74477	0	34.74477	141.8437	0	141.8437	BEV	0	9.107314	1	3
2019	0	4.165694	17.08555	0	17.08555	74.74789	0	74.74789	BEV	0	4.165694	3	3
2019	0	0	0	0	0	0	0	0	PHEV	0	0	3	8
2019	0	1.953572	6.557594	0	6.557594	20.80788	0	20.80788	BEV	0	1.953572	2	3

2019	0	3.884654	17.71328	0	17.71328	95.86074	0	95.86074	BEV	0	3.884654	4	3
2019	0	0	0	0	0	0	0	0	PHEV	0	0	4	8
2019	0	19.43923	77.50245	0	77.50245	351.679	0	351.679	BEV	0	19.43923	1	3
2019	0	18.64013	76.4523	0	76.4523	367.5234	0	367.5234	BEV	0	18.64013	1	3
2019	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2019	0	44.88305	194.3728	0	194.3728	1056.003	0	1056.003	BEV	0	44.88305	1	3
2019	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2019	0	21.91935	87.39049	0	87.39049	394.6987	0	394.6987	BEV	0	21.91935	2	3
2019	0	2.732629	11.99061	0	11.99061	66.76723	0	66.76723	BEV	0	2.732629	2	3
2019	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2019	0	17.42317	68.46643	0	68.46643	299.3136	0	299.3136	BEV	0	17.42317	1	3
2019	0	24.74227	100.0627	0	100.0627	467.7944	0	467.7944	BEV	0	24.74227	1	3
2019	0	3.21651	9.691281	0	9.691281	25.04661	0	25.04661	BEV	0	3.21651	2	3
2019	0	5.09763	18.57153	0	18.57153	69.02165	0	69.02165	BEV	0	5.09763	2	3
2019	0	2.48563	9.197975	0	9.197975	34.63665	0	34.63665	BEV	0	2.48563	2	3
2019	0	2.528129	9.644913	0	9.644913	39.4712	0	39.4712	BEV	0	2.528129	2	3
2019	0	2.320421	8.586625	0	8.586625	28.68981	0	28.68981	BEV	0	2.320421	3	3
2019	0	18.49148	74.78324	0	74.78324	304.6816	0	304.6816	BEV	0	18.49148	3	3
2019	0	1.809358	7.524722	0	7.524722	32.62125	0	32.62125	BEV	0	1.809358	3	3
2019	0	0	0	0	0	0	0	0	PHEV	0	0	3	8
2019	0	29.36471	137.2621	0	137.2621	776.6671	0	776.6671	BEV	0	29.36471	3	3
2019	0	0	0	0	0	0	0	0	PHEV	0	0	3	8
2019	0	63.34714	303.3676	0	303.3676	1801.706	0	1801.706	BEV	0	63.34714	3	3
2019	0	16.24286	77.78656	46.67193	31.11462	634.2	380.52	253.68	PHEV	9.745715	6.497143	3	8
2019	0	1.379829	4.315499	0	4.315499	10.43927	0	10.43927	BEV	0	1.379829	4	3
2019	0	1.32145	4.511445	0	4.511445	12.59715	0	12.59715	BEV	0	1.32145	4	3
2019	0	3.845434	14.67048	0	14.67048	52.48783	0	52.48783	BEV	0	3.845434	4	3
2019	0	1.883946	7.834917	0	7.834917	34.36073	0	34.36073	BEV	0	1.883946	4	3
2019	0	0	0	0	0	0	0	0	PHEV	0	0	4	8
2019	0	1.981714	6.538527	0	6.538527	19.94688	0	19.94688	BEV	0	1.981714	2	3
2019	0	0.776871	2.251682	0	2.251682	5.740556	0	5.740556	BEV	0	0.776871	1	3
2019	0	1.432662	4.398658	0	4.398658	11.95162	0	11.95162	BEV	0	1.432662	1	3
2019	0	2.705608	8.616956	0	8.616956	24.20966	0	24.20966	BEV	0	2.705608	1	3
2019	0	3.603833	11.89059	0	11.89059	36.34502	0	36.34502	BEV	0	3.603833	1	3
2019	0	3.041936	10.21093	0	10.21093	32.14153	0	32.14153	BEV	0	3.041936	1	3
2019	0	2.373173	8.102037	0	8.102037	26.60628	0	26.60628	BEV	0	2.373173	1	3
2019	0	2.165258	7.516261	0	7.516261	24.78222	0	24.78222	BEV	0	2.165258	1	3
2019	0	2.19046	7.729236	0	7.729236	26.96733	0	26.96733	BEV	0	2.19046	1	3
2019	0	2.281019	8.179461	0	8.179461	28.68248	0	28.68248	BEV	0	2.281019	1	3
2019	0	3.693278	13.87842	0	13.87842	53.94511	0	53.94511	BEV	0	3.693278	1	3
2019	0	12.33965	47.78318	0	47.78318	203.0159	0	203.0159	BEV	0	12.33965	1	3
2019	0	1.301879	3.997119	0	3.997119	10.91157	0	10.91157	BEV	0	1.301879	2	3
2019	0	1.346597	4.28871	0	4.28871	12.30506	0	12.30506	BEV	0	1.346597	2	3
2019	0	1.320287	4.280556	0	4.280556	12.73022	0	12.73022	BEV	0	1.320287	2	3
2019	0	2.480338	9.320489	0	9.320489	37.0925	0	37.0925	BEV	0	2.480338	2	3
2019	0	0	0	0	0	0	0	0	BEV	0	0	2	3
2019	0	0	0	0	0	0	0	0	PHEV	0	0	2	8

2019	0	0	0	0	0	0	0	0	BEV	0	0	2	3
2019	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2019	0	0	0	0	0	0	0	0	BEV	0	0	3	3
2019	0	39.77946	197.3395	118.4037	78.9358	1765.929	1059.557	706.3716	PHEV	23.86767	15.91178	3	8
2019	0	1.019407	4.064284	0	4.064284	16.00479	0	16.00479	BEV	0	1.019407	3	3
2019	0	0.671538	2.177221	0	2.177221	5.560182	0	5.560182	BEV	0	0.671538	4	3
2019	0	1.723821	5.983901	0	5.983901	17.47763	0	17.47763	BEV	0	1.723821	4	3
2019	0	7.159593	26.49379	0	26.49379	88.52425	0	88.52425	BEV	0	7.159593	4	3
2019	0	3.006215	12.15773	0	12.15773	49.3985	0	49.3985	BEV	0	3.006215	4	3
2019	0	0.629239	1.895883	0	1.895883	4.983321	0	4.983321	BEV	0	0.629239	1	3
2019	0	0.455325	1.424056	0	1.424056	3.348481	0	3.348481	BEV	0	0.455325	3	3
2019	0	1.337951	6.024149	0	6.024149	31.17254	0	31.17254	BEV	0	1.337951	3	3
2019	0	0	0	0	0	0	0	0	PHEV	0	0	3	8
2019	0	0.500841	1.56641	0	1.56641	3.93733	0	3.93733	BEV	0	0.500841	2	3
2019	0	3.579636	16.73261	0	16.73261	105.137	0	105.137	BEV	0	3.579636	2	3
2019	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2019	0	2.967953	11.49289	0	11.49289	48.36755	0	48.36755	BEV	0	2.967953	2	3
2019	0	8.435365	33.14778	0	33.14778	144.7788	0	144.7788	BEV	0	8.435365	2	3
2019	0	2.857848	11.39398	0	11.39398	44.80325	0	44.80325	BEV	0	2.857848	4	3
2019	0	1.797611	8.505721	0	8.505721	56.01418	0	56.01418	BEV	0	1.797611	2	3
2019	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2019	0	1.141895	3.898441	0	3.898441	12.51646	0	12.51646	BEV	0	1.141895	2	3
2019	0	0.521035	1.868368	0	1.868368	5.741962	0	5.741962	BEV	0	0.521035	4	3
2019	0	0.451727	1.56808	0	1.56808	5.1833	0	5.1833	BEV	0	0.451727	2	3
2019	0	0.640642	2.444075	0	2.444075	8.447527	0	8.447527	BEV	0	0.640642	3	3
2019	0	0.800401	3.51211	0	3.51211	16.656	0	16.656	BEV	0	0.800401	3	3
2019	0	0	0	0	0	0	0	0	PHEV	0	0	3	8
2019	0	1.126567	4.039733	0	4.039733	12.93524	0	12.93524	BEV	0	1.126567	3	3
2019	0	0.847025	2.55207	0	2.55207	5.929957	0	5.929957	BEV	0	0.847025	4	3
2019	0	4.426087	17.13927	0	17.13927	64.10332	0	64.10332	BEV	0	4.426087	4	3
2019	0	0.653676	2.044411	0	2.044411	5.677746	0	5.677746	BEV	0	0.653676	1	3
2019	0	0.627595	2.034752	0	2.034752	5.992015	0	5.992015	BEV	0	0.627595	1	3
2019	0	1.417622	6.058008	0	6.058008	31.7454	0	31.7454	BEV	0	1.417622	2	3
2019	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2019	0	1.289547	4.25477	0	4.25477	11.30924	0	11.30924	BEV	0	1.289547	3	3
2019	0	6.868607	25.0235	0	25.0235	81.08892	0	81.08892	BEV	0	6.868607	4	3
2019	0	4.791699	21.57472	0	21.57472	112.4773	0	112.4773	BEV	0	4.791699	4	3
2019	0	0	0	0	0	0	0	0	PHEV	0	0	4	8
2019	0	0.502281	1.973773	0	1.973773	7.545189	0	7.545189	BEV	0	0.502281	3	3
2019	0	0	0	0	0	0	0	0	BEV	0	0	4	3
2019	0	4.0858	19.80085	11.88051	7.92034	176.0844	105.6506	70.43375	PHEV	2.45148	1.63432	4	8
2019	0	0.764825	2.74257	0	2.74257	9.494351	0	9.494351	BEV	0	0.764825	2	3
2020	0	52529.24	263598.6	0	263598.6	2319232	0	2319232	BEV	0	52529.24	1	3
2020	0	47383.16	237774.8	128398.4	109376.4	2327783	1257003	1070780	PHEV	25586.9	21796.25	1	8
2020	0	67361.13	341886	0	341886	3160069	0	3160069	BEV	0	67361.13	1	3
2020	0	43535.17	220959.3	119318	101641.3	2193383	1184427	1008956	PHEV	23508.99	20026.18	1	8
2020	0	84233.68	432347	0	432347	4072233	0	4072233	BEV	0	84233.68	1	3

48.55346

2020	0	41311.2	212038.4	112380.4	99658.05	2187939	1159608	1028331	PHEV	21894.94	19416.26	1	8
2020	0	90784.91	471173.7	0	471173.7	4604489	0	4604489	BEV	0	90784.91	1	3
2020	0	34616.79	179661.1	93423.78	86237.34	1832042	952661.7	879380	PHEV	18000.73	16616.06	1	8
2020	0	3.351702	16.81928	0	16.81928	131.4731	0	131.4731	BEV	0	3.351702	2	3
2020	0	29.07088	145.8815	87.52888	58.35259	1325.773	795.464	530.3093	PHEV	17.44253	11.62835	2	8
2020	0	1387.675	7122.535	0	7122.535	64437.55	0	64437.55	BEV	0	1387.675	2	3
2020	0	1065.637	5469.606	3250.509	2219.097	53735.64	31934.33	21801.32	PHEV	633.2929	432.3442	2	8
2020	0	2568.235	13329.14	0	13329.14	122982.1	0	122982.1	BEV	0	2568.235	2	3
2020	0	1978.007	10265.86	6042.19	4223.667	103770.8	61076.51	42694.26	PHEV	1164.199	813.8087	2	8
2020	0	1112.208	5644.924	3386.955	2257.97	52667.19	31600.31	21066.87	PHEV	667.325	444.8833	3	8
2020	0	3906.327	20050.04	0	20050.04	150723.1	0	150723.1	BEV	0	3906.327	3	3
2020	0	3392.876	17414.65	10349.28	7065.372	166788.8	99120.19	67668.59	PHEV	2016.338	1376.538	3	8
2020	0	7189.98	37315.99	0	37315.99	328963.1	0	328963.1	BEV	0	7189.98	3	3
2020	0	5188.873	26930.25	15850.38	11079.88	264567.9	155717.1	108850.8	PHEV	3054.023	2134.851	3	8
2020	0	1623.919	8149.034	4889.421	3259.614	69683.47	41810.08	27873.39	PHEV	974.3511	649.5674	4	8
2020	0	3.535347	17.94337	0	17.94337	119.4601	0	119.4601	BEV	0	3.535347	4	3
2020	0	4326.291	21957.74	13174.64	8783.097	197935.9	118761.6	79174.37	PHEV	2595.774	1730.516	4	8
2020	0	1779.67	9134.529	0	9134.529	64778.25	0	64778.25	BEV	0	1779.67	4	3
2020	0	4630.334	23766.16	14123.89	9642.272	231743.1	137721.6	94021.48	PHEV	2751.742	1878.593	4	8
2020	0	3134.5	16268.06	0	16268.06	127430.5	0	127430.5	BEV	0	3134.5	4	3
2020	0	4221.375	21908.94	12894.97	9013.962	214764.5	126404.2	88360.25	PHEV	2484.581	1736.794	4	8
2020	0	65.25617	267.6475	0	267.6475	1329.076	0	1329.076	BEV	0	65.25617	1	3
2020	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2020	0	9757.516	46728.45	0	46728.45	325909.7	0	325909.7	BEV	0	9757.516	1	3
2020	0	10198.93	48842.36	29305.42	19536.95	400619.3	240371.6	160247.7	PHEV	6119.357	4079.572	1	8
2020	0	11865.2	57501.82	0	57501.82	412704.3	0	412704.3	BEV	0	11865.2	1	3
2020	0	14980.7	72600.38	43560.23	29040.15	613683.4	368210.1	245473.4	PHEV	8988.422	5992.281	1	8
2020	0	26926.21	132034	0	132034	975452.3	0	975452.3	BEV	0	26926.21	1	3
2020	0	12804.14	62785.72	37671.43	25114.29	547634	328580.4	219053.6	PHEV	7682.482	5121.654	1	8
2020	0	3900.837	19351.43	0	19351.43	121770.7	0	121770.7	BEV	0	3900.837	3	3
2020	0	355.0048	1761.122	1056.673	704.4489	15213.09	9127.857	6085.238	PHEV	213.0029	142.0019	3	8
2020	0	42.07335	182.2049	0	182.2049	1019.026	0	1019.026	BEV	0	42.07335	1	3
2020	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2020	0	2079.631	9840.15	0	9840.15	66876.58	0	66876.58	BEV	0	2079.631	1	3
2020	0	4371.461	20684.35	12410.61	8273.742	165349.6	99209.76	66139.84	PHEV	2622.877	1748.584	1	8
2020	0	17285.34	85749.83	0	85749.83	651011	0	651011	BEV	0	17285.34	1	3
2020	0	12430.47	61665.59	36999.36	24666.24	554832.7	332899.6	221933.1	PHEV	7458.285	4972.19	1	8
2020	0	134.8621	560.862	0	560.862	2869.077	0	2869.077	BEV	0	134.8621	1	3
2020	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2020	0	2662.237	12444.34	0	12444.34	82233.52	0	82233.52	BEV	0	2662.237	1	3
2020	0	740.0238	3459.16	2075.496	1383.664	26783.97	16070.38	10713.59	PHEV	444.0143	296.0095	1	8
2020	0	649.7039	3148.634	0	3148.634	22593.63	0	22593.63	BEV	0	649.7039	2	3
2020	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2020	0	214.6197	1040.103	0	1040.103	6223.404	0	6223.404	BEV	0	214.6197	3	3
2020	0	97.17308	470.926	282.5556	188.3704	3860.574	2316.345	1544.23	PHEV	58.30385	38.86923	3	8
2020	0	36.55926	152.0419	0	152.0419	647.667	0	647.667	BEV	0	36.55926	3	3
2020	0	0	0	0	0	0	0	0	PHEV	0	0	3	8

2020	0	149.2688	620.7762	0	620.7762	2654.339	0	2654.339	BEV	0	149.2688	4	3
2020	0	0	0	0	0	0	0	0	PHEV	0	0	4	8
2020	0	451.6016	2085.09	0	2085.09	13413.32	0	13413.32	BEV	0	451.6016	1	3
2020	0	48.14027	222.2684	133.3611	88.90738	1670.148	1002.089	668.0592	PHEV	28.88416	19.25611	1	8
2020	0	286.8635	1357.346	0	1357.346	9205.038	0	9205.038	BEV	0	286.8635	2	3
2020	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2020	0	53.70916	235.6726	0	235.6726	1360.147	0	1360.147	BEV	0	53.70916	1	3
2020	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2020	0	298.5177	1344.082	0	1344.082	8136.348	0	8136.348	BEV	0	298.5177	1	3
2020	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2020	0	245.222	1118.166	0	1118.166	7063.173	0	7063.173	BEV	0	245.222	1	3
2020	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2020	0	348.2056	1667.546	0	1667.546	11634.86	0	11634.86	BEV	0	348.2056	2	3
2020	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2020	0	37.5196	158.1853	0	158.1853	836.1115	0	836.1115	BEV	0	37.5196	1	3
2020	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2020	0	94.55889	420.336	0	420.336	2497.292	0	2497.292	BEV	0	94.55889	1	3
2020	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2020	0	47.64582	214.5263	0	214.5263	1310.39	0	1310.39	BEV	0	47.64582	2	3
2020	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2020	0	2.211541	9.704108	0	9.704108	48.63238	0	48.63238	BEV	0	2.211541	4	3
2020	0	0	0	0	0	0	0	0	PHEV	0	0	4	8
2020	0	6.07295	22.12479	0	22.12479	83.34442	0	83.34442	BEV	0	6.07295	1	3
2020	0	41.56726	189.5388	0	189.5388	1010.393	0	1010.393	BEV	0	41.56726	3	3
2020	0	0	0	0	0	0	0	0	PHEV	0	0	3	8
2020	0	19.75046	92.32136	0	92.32136	515.4683	0	515.4683	BEV	0	19.75046	3	3
2020	0	13.6734	63.91479	38.34887	25.56591	492.3921	295.4353	196.9569	PHEV	8.204038	5.469358	3	8
2020	0	1.92724	9.450317	0	9.450317	57.35598	0	57.35598	BEV	0	1.92724	4	3
2020	0	0	0	0	0	0	0	0	PHEV	0	0	4	8
2020	0	4.385614	15.72629	0	15.72629	58.03614	0	58.03614	BEV	0	4.385614	1	3
2020	0	95.43808	385.9707	0	385.9707	1847.559	0	1847.559	BEV	0	95.43808	2	3
2020	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2020	0	40.60538	166.5426	0	166.5426	832.905	0	832.905	BEV	0	40.60538	2	3
2020	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2020	0	11.73699	51.50122	0	51.50122	297.7161	0	297.7161	BEV	0	11.73699	2	3
2020	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2020	0	6.04338	26.86421	0	26.86421	160.4505	0	160.4505	BEV	0	6.04338	2	3
2020	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2020	0	19.48722	88.85804	0	88.85804	559.1573	0	559.1573	BEV	0	19.48722	2	3
2020	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2020	0	17.52314	78.89828	0	78.89828	416.5418	0	416.5418	BEV	0	17.52314	3	3
2020	0	0	0	0	0	0	0	0	PHEV	0	0	3	8
2020	0	15.71001	75.23477	0	75.23477	441.2557	0	441.2557	BEV	0	15.71001	3	3
2020	0	12.01354	57.53247	34.51948	23.01299	457.2542	274.3525	182.9017	PHEV	7.208123	4.805415	3	8
2020	0	10.63917	43.02692	0	43.02692	175.7901	0	175.7901	BEV	0	10.63917	4	3
2020	0	0	0	0	0	0	0	0	PHEV	0	0	4	8
2020	0	24.2282	102.1478	0	102.1478	452.562	0	452.562	BEV	0	24.2282	4	3

2020	0	0	0	0	0	0	0	0	PHEV	0	0	4	8
2020	0	2.993073	12.96195	0	12.96195	62.29439	0	62.29439	BEV	0	2.993073	4	3
2020	0	0	0	0	0	0	0	0	PHEV	0	0	4	8
2020	0	126.1955	524.8194	0	524.8194	2682.095	0	2682.095	BEV	0	126.1955	2	3
2020	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2020	0	7.24197	30.94754	0	30.94754	169.1115	0	169.1115	BEV	0	7.24197	2	3
2020	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2020	0	3.604071	10.44604	0	10.44604	27.57389	0	27.57389	BEV	0	3.604071	1	3
2020	0	63.87936	254.6812	0	254.6812	1182.103	0	1182.103	BEV	0	63.87936	2	3
2020	0	7.454839	28.01342	0	28.01342	113.7367	0	113.7367	BEV	0	7.454839	1	3
2020	0	3.596418	14.54463	0	14.54463	61.42993	0	61.42993	BEV	0	3.596418	3	3
2020	0	0	0	0	0	0	0	0	PHEV	0	0	3	8
2020	0	1.755754	5.792988	0	5.792988	18.30146	0	18.30146	BEV	0	1.755754	2	3
2020	0	3.614595	16.27479	0	16.27479	84.48937	0	84.48937	BEV	0	3.614595	4	3
2020	0	0	0	0	0	0	0	0	PHEV	0	0	4	8
2020	0	15.78168	62.01602	0	62.01602	280.3127	0	280.3127	BEV	0	15.78168	1	3
2020	0	15.44829	62.47598	0	62.47598	299.358	0	299.358	BEV	0	15.44829	1	3
2020	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2020	0	39.22672	167.6299	0	167.6299	908.3018	0	908.3018	BEV	0	39.22672	1	3
2020	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2020	0	20.03571	78.73273	0	78.73273	353.9876	0	353.9876	BEV	0	20.03571	2	3
2020	0	2.577968	11.16428	0	11.16428	62.02555	0	62.02555	BEV	0	2.577968	2	3
2020	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2020	0	14.18128	54.91461	0	54.91461	239.145	0	239.145	BEV	0	14.18128	1	3
2020	0	20.3691	81.20978	0	81.20978	378.6188	0	378.6188	BEV	0	20.3691	1	3
2020	0	2.888326	8.536997	0	8.536997	22.12896	0	22.12896	BEV	0	2.888326	2	3
2020	0	4.403391	15.79003	0	15.79003	58.42371	0	58.42371	BEV	0	4.403391	2	3
2020	0	2.180828	7.945127	0	7.945127	29.78202	0	29.78202	BEV	0	2.180828	2	3
2020	0	2.236536	8.404343	0	8.404343	34.21188	0	34.21188	BEV	0	2.236536	2	3
2020	0	2.019324	7.356741	0	7.356741	23.41987	0	23.41987	BEV	0	2.019324	3	3
2020	0	15.19358	60.57543	0	60.57543	235.3941	0	235.3941	BEV	0	15.19358	3	3
2020	0	1.527787	6.266203	0	6.266203	25.94946	0	25.94946	BEV	0	1.527787	3	3
2020	0	0	0	0	0	0	0	0	PHEV	0	0	3	8
2020	0	27.56344	127.2631	0	127.2631	690.9452	0	690.9452	BEV	0	27.56344	3	3
2020	0	0	0	0	0	0	0	0	PHEV	0	0	3	8
2020	0	61.07229	288.9745	0	288.9745	1645.516	0	1645.516	BEV	0	61.07229	3	3
2020	0	15.65956	74.09603	44.45762	29.63841	580.6881	348.4129	232.2752	PHEV	9.395737	6.263825	3	8
2020	0	1.299459	3.989691	0	3.989691	9.303536	0	9.303536	BEV	0	1.299459	4	3
2020	0	1.167971	3.920551	0	3.920551	10.47047	0	10.47047	BEV	0	1.167971	4	3
2020	0	3.242077	12.18292	0	12.18292	41.51455	0	41.51455	BEV	0	3.242077	4	3
2020	0	2.337754	9.588274	0	9.588274	40.40261	0	40.40261	BEV	0	2.337754	4	3
2020	0	0	0	0	0	0	0	0	PHEV	0	0	4	8
2020	0	1.812076	5.875003	0	5.875003	17.91399	0	17.91399	BEV	0	1.812076	2	3
2020	0	0.742031	2.108191	0	2.108191	5.450224	0	5.450224	BEV	0	0.742031	1	3
2020	0	1.372323	4.134781	0	4.134781	11.27109	0	11.27109	BEV	0	1.372323	1	3
2020	0	2.525941	7.900031	0	7.900031	22.2126	0	22.2126	BEV	0	2.525941	1	3
2020	0	3.29282	10.67578	0	10.67578	32.55539	0	32.55539	BEV	0	3.29282	1	3

2020	0	2.768121	9.13322	0	9.13322	28.63496	0	28.63496	BEV	0	2.768121	1	3
2020	0	2.129707	7.148831	0	7.148831	23.44118	0	23.44118	BEV	0	2.129707	1	3
2020	0	1.921975	6.561643	0	6.561643	21.42644	0	21.42644	BEV	0	1.921975	1	3
2020	0	1.902438	6.603933	0	6.603933	22.95974	0	22.95974	BEV	0	1.902438	1	3
2020	0	1.96742	6.942218	0	6.942218	24.21354	0	24.21354	BEV	0	1.96742	1	3
2020	0	3.058249	11.31693	0	11.31693	43.54329	0	43.54329	BEV	0	3.058249	1	3
2020	0	9.981341	38.07922	0	38.07922	161.0355	0	161.0355	BEV	0	9.981341	1	3
2020	0	1.160235	3.495765	0	3.495765	9.602498	0	9.602498	BEV	0	1.160235	2	3
2020	0	1.190314	3.722778	0	3.722778	10.68442	0	10.68442	BEV	0	1.190314	2	3
2020	0	1.212616	3.862	0	3.862	11.50132	0	11.50132	BEV	0	1.212616	2	3
2020	0	2.188003	8.096617	0	8.096617	32.03287	0	32.03287	BEV	0	2.188003	2	3
2020	0	0	0	0	0	0	0	0	BEV	0	0	2	3
2020	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2020	0	0	0	0	0	0	0	0	BEV	0	0	2	3
2020	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2020	0	0	0	0	0	0	0	0	BEV	0	0	3	3
2020	0	38.28231	187.7192	112.6315	75.0877	1614.136	968.4816	645.6544	PHEV	22.96939	15.31293	3	8
2020	0	0.860839	3.382772	0	3.382772	12.72237	0	12.72237	BEV	0	0.860839	3	3
2020	0	0.62337	1.98534	0	1.98534	4.867078	0	4.867078	BEV	0	0.62337	4	3
2020	0	1.496128	5.107796	0	5.107796	14.22982	0	14.22982	BEV	0	1.496128	4	3
2020	0	6.208615	22.61904	0	22.61904	72.37814	0	72.37814	BEV	0	6.208615	4	3
2020	0	2.624225	10.46255	0	10.46255	40.59447	0	40.59447	BEV	0	2.624225	4	3
2020	0	0.602482	1.780749	0	1.780749	4.727902	0	4.727902	BEV	0	0.602482	1	3
2020	0	0.425575	1.306632	0	1.306632	2.932768	0	2.932768	BEV	0	0.425575	3	3
2020	0	1.266234	5.628703	0	5.628703	27.90051	0	27.90051	BEV	0	1.266234	3	3
2020	0	0	0	0	0	0	0	0	PHEV	0	0	3	8
2020	0	0.453471	1.39228	0	1.39228	3.406274	0	3.406274	BEV	0	0.453471	2	3
2020	0	3.373642	15.57644	0	15.57644	97.10196	0	97.10196	BEV	0	3.373642	2	3
2020	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2020	0	2.59156	9.886905	0	9.886905	41.26442	0	41.26442	BEV	0	2.59156	2	3
2020	0	7.386367	28.60245	0	28.60245	123.8935	0	123.8935	BEV	0	7.386367	2	3
2020	0	2.446638	9.614359	0	9.614359	35.99519	0	35.99519	BEV	0	2.446638	4	3
2020	0	1.735481	8.112314	0	8.112314	53.55076	0	53.55076	BEV	0	1.735481	2	3
2020	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2020	0	1.029837	3.456874	0	3.456874	11.04317	0	11.04317	BEV	0	1.029837	2	3
2020	0	0.455748	1.608147	0	1.608147	4.731305	0	4.731305	BEV	0	0.455748	4	3
2020	0	0.396995	1.355346	0	1.355346	4.450061	0	4.450061	BEV	0	0.396995	2	3
2020	0	0.579049	2.175922	0	2.175922	7.171543	0	7.171543	BEV	0	0.579049	3	3
2020	0	0.75226	3.257773	0	3.257773	14.78653	0	14.78653	BEV	0	0.75226	3	3
2020	0	0	0	0	0	0	0	0	PHEV	0	0	3	8
2020	0	1.002492	3.537385	0	3.537385	10.86218	0	10.86218	BEV	0	1.002492	3	3
2020	0	0.847025	2.503544	0	2.503544	5.621065	0	5.621065	BEV	0	0.847025	4	3
2020	0	3.732718	14.24047	0	14.24047	50.84544	0	50.84544	BEV	0	3.732718	4	3
2020	0	0.610326	1.873865	0	1.873865	5.192061	0	5.192061	BEV	0	0.610326	1	3
2020	0	0.570605	1.817292	0	1.817292	5.323598	0	5.323598	BEV	0	0.570605	1	3
2020	0	1.299897	5.480456	0	5.480456	28.59309	0	28.59309	BEV	0	1.299897	2	3
2020	0	0	0	0	0	0	0	0	PHEV	0	0	2	8

2020	0	1.155094	3.744976	0	3.744976	9.495663	0	9.495663	BEV	0	1.155094	3	3
2020	0	5.805764	20.81877	0	20.81877	64.19427	0	64.19427	BEV	0	5.805764	4	3
2020	0	4.40339	19.57408	0	19.57408	97.55716	0	97.55716	BEV	0	4.40339	4	3
2020	0	0	0	0	0	0	0	0	PHEV	0	0	4	8
2020	0	0.422068	1.634386	0	1.634386	5.958812	0	5.958812	BEV	0	0.422068	3	3
2020	0	0	0	0	0	0	0	0	BEV	0	0	4	3
2020	0	3.906193	18.70664	11.22398	7.482656	159.9913	95.99478	63.99652	PHEV	2.343716	1.562477	4	8
2020	0	0.671099	2.368035	0	2.368035	8.169707	0	8.169707	BEV	0	0.671099	2	3
2021	0	51229.03	254139	0	254139	2186353	0	2186353	BEV	0	51229.03	1	3
2021	0	46210.33	229242	123790.7	105451.3	2143991	1157755	986236.1	PHEV	24953.58	21256.75	1	8
2021	0	65401.6	328193.7	0	328193.7	2953211	0	2953211	BEV	0	65401.6	1	3
2021	0	42268.73	212110	114539.4	97570.6	2018816	1090161	928655.5	PHEV	22825.12	19443.62	1	8
2021	0	83017.37	421348	0	421348	3873829	0	3873829	BEV	0	83017.37	1	3
2021	0	40714.68	206644.1	109521.4	97122.73	2041993	1082256	959736.7	PHEV	21578.78	19135.9	1	8
2021	0	100187.1	514231.4	0	514231.4	4894805	0	4894805	BEV	0	100187.1	1	3
2021	0	38201.9	196079.3	101961.2	94118.04	1930958	1004098	926859.8	PHEV	19864.99	18336.91	1	8
2021	0	95365.99	494949.5	0	494949.5	4804010	0	4804010	BEV	0	95365.99	1	3
2021	0	35868.59	186158	94940.58	91217.42	1866593	951962.7	914630.8	PHEV	18292.98	17575.61	1	8
2021	0	3.31084	16.42455	0	16.42455	128.5934	0	128.5934	BEV	0	3.31084	2	3
2021	0	28.71647	142.4578	85.4747	56.98313	1246.503	747.9021	498.6014	PHEV	17.22988	11.48659	2	8
2021	0	1366.26	6934.344	0	6934.344	61317.19	0	61317.19	BEV	0	1366.26	2	3
2021	0	1049.192	5325.089	3164.624	2160.465	50035.11	29735.15	20299.96	PHEV	623.5197	425.6721	2	8
2021	0	2804.576	14395.08	0	14395.08	130041.6	0	130041.6	BEV	0	2804.576	2	3
2021	0	2160.033	11086.82	6525.388	4561.436	107135.2	63056.73	44078.49	PHEV	1271.334	888.6994	2	8
2021	0	2955.795	15340.58	0	15340.58	142425.3	0	142425.3	BEV	0	2955.795	2	3
2021	0	2171.114	11268.08	6567.68	4700.399	109440.8	63788.35	45652.44	PHEV	1265.449	905.6645	2	8
2021	0	1082.233	5430.788	3258.473	2172.315	48787.47	29272.48	19514.99	PHEV	649.34	432.8933	3	8
2021	0	3797.162	19272.19	0	19272.19	139593.3	0	139593.3	BEV	0	3797.162	3	3
2021	0	3298.06	16739.04	9947.772	6791.267	154384.2	91748.3	62635.86	PHEV	1959.99	1338.07	3	8
2021	0	7895.489	40525.25	0	40525.25	344237.3	0	344237.3	BEV	0	7895.489	3	3
2021	0	5698.026	29246.32	17213.55	12032.77	276803.8	162918.8	113885	PHEV	3353.695	2344.331	3	8
2021	0	8099.404	42035.91	0	42035.91	343664.5	0	343664.5	BEV	0	8099.404	3	3
2021	0	7801.02	40487.29	23598.31	16888.98	393231.3	229197.7	164033.6	PHEV	4546.88	3254.14	3	8
2021	0	1590.215	7888.802	4733.281	3155.521	64986.37	38991.82	25994.55	PHEV	954.1289	636.086	4	8
2021	0	3.438027	17.25247	0	17.25247	110.6526	0	110.6526	BEV	0	3.438027	4	3
2021	0	4207.198	21112.27	12667.36	8444.906	183429	110057.4	73371.6	PHEV	2524.319	1682.879	4	8
2021	0	1746.03	8861.833	0	8861.833	60571.5	0	60571.5	BEV	0	1746.03	4	3
2021	0	4542.809	23056.67	13702.25	9354.419	216726.6	128797.5	87929.06	PHEV	2699.727	1843.083	4	8
2021	0	3593.535	18444.58	0	18444.58	139391.2	0	139391.2	BEV	0	3593.535	4	3
2021	0	4839.579	24840.16	14620.21	10219.95	235264.2	138469.8	96794.4	PHEV	2848.438	1991.141	4	8
2021	0	4698.629	24385.88	0	24385.88	189612.1	0	189612.1	BEV	0	4698.629	4	3
2021	0	4560.233	23667.61	13794.83	9872.774	225248.4	131287.7	93960.78	PHEV	2657.964	1902.269	4	8
2021	0	54.72283	221.3101	0	221.3101	1095.149	0	1095.149	BEV	0	54.72283	1	3
2021	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2021	0	9275.39	43888.18	0	43888.18	305891.8	0	305891.8	BEV	0	9275.39	1	3
2021	0	9694.992	45873.6	27524.16	18349.44	360943.6	216566.1	144377.4	PHEV	5816.995	3877.997	1	8
2021	0	11442.95	54799.95	0	54799.95	393175.9	0	393175.9	BEV	0	11442.95	1	3

2021	0	14447.59	69189.07	41513.44	27675.63	561095.7	336657.4	224438.3	PHEV	8668.553	5779.035	1	8
2021	0	25847.77	125265	0	125265	925864.1	0	925864.1	BEV	0	25847.77	1	3
2021	0	12291.31	59566.88	35740.13	23826.75	498744.2	299246.5	199497.7	PHEV	7374.785	4916.524	1	8
2021	0	3833.007	18795.34	0	18795.34	113661	0	113661	BEV	0	3833.007	3	3
2021	0	348.8318	1710.514	1026.309	684.2057	14188.62	8513.171	5675.448	PHEV	209.2991	139.5327	3	8
2021	0	37.11835	158.6201	0	158.6201	884.6448	0	884.6448	BEV	0	37.11835	1	3
2021	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2021	0	1980.92	9259.592	0	9259.592	62868.8	0	62868.8	BEV	0	1980.92	1	3
2021	0	4163.966	19464	11678.4	7785.6	149235.6	89541.35	59694.23	PHEV	2498.379	1665.586	1	8
2021	0	16811.42	82435.64	0	82435.64	626440.5	0	626440.5	BEV	0	16811.42	1	3
2021	0	12089.66	59282.25	35569.35	23712.9	512322.2	307393.3	204928.9	PHEV	7253.795	4835.864	1	8
2021	0	113.9806	467.4901	0	467.4901	2384.663	0	2384.663	BEV	0	113.9806	1	3
2021	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2021	0	2494.013	11515.11	0	11515.11	76003.92	0	76003.92	BEV	0	2494.013	1	3
2021	0	693.2624	3200.862	1920.517	1280.345	23763.16	14257.9	9505.266	PHEV	415.9575	277.305	1	8
2021	0	628.8364	3011.479	0	3011.479	21600.14	0	21600.14	BEV	0	628.8364	2	3
2021	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2021	0	209.9443	1005.417	0	1005.417	5780.17	0	5780.17	BEV	0	209.9443	3	3
2021	0	95.0562	455.2213	273.1328	182.0885	3585.665	2151.399	1434.266	PHEV	57.03372	38.02248	3	8
2021	0	30.57451	125.4011	0	125.4011	510.5669	0	510.5669	BEV	0	30.57451	3	3
2021	0	0	0	0	0	0	0	0	PHEV	0	0	3	8
2021	0	133.6561	548.1891	0	548.1891	2245.421	0	2245.421	BEV	0	133.6561	4	3
2021	0	0	0	0	0	0	0	0	PHEV	0	0	4	8
2021	0	420.4343	1917.101	0	1917.101	12322.81	0	12322.81	BEV	0	420.4343	1	3
2021	0	44.81787	204.361	122.6166	81.74439	1472.339	883.4033	588.9356	PHEV	26.89072	17.92715	1	8
2021	0	278.7176	1302.835	0	1302.835	8817.663	0	8817.663	BEV	0	278.7176	2	3
2021	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2021	0	48.16391	208.581	0	208.581	1200.611	0	1200.611	BEV	0	48.16391	1	3
2021	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2021	0	274.4778	1220.117	0	1220.117	7358.247	0	7358.247	BEV	0	274.4778	1	3
2021	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2021	0	225.2665	1014.267	0	1014.267	6405.926	0	6405.926	BEV	0	225.2665	1	3
2021	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2021	0	336.3203	1591.36	0	1591.36	11088.33	0	11088.33	BEV	0	336.3203	2	3
2021	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2021	0	32.09233	133.4649	0	133.4649	702.6962	0	702.6962	BEV	0	32.09233	1	3
2021	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2021	0	85.44742	374.9382	0	374.9382	2222.581	0	2222.581	BEV	0	85.44742	1	3
2021	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2021	0	45.19187	200.8883	0	200.8883	1224.185	0	1224.185	BEV	0	45.19187	2	3
2021	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2021	0	2.061567	8.927924	0	8.927924	43.1572	0	43.1572	BEV	0	2.061567	4	3
2021	0	0	0	0	0	0	0	0	PHEV	0	0	4	8
2021	0	5.165974	18.52456	0	18.52456	69.37353	0	69.37353	BEV	0	5.165974	1	3
2021	0	38.78999	174.6527	0	174.6527	896.7214	0	896.7214	BEV	0	38.78999	3	3
2021	0	0	0	0	0	0	0	0	PHEV	0	0	3	8
2021	0	18.88649	87.2008	0	87.2008	468.4041	0	468.4041	BEV	0	18.88649	3	3

2021	0	13.07526	60.36978	36.22187	24.14791	448.6042	269.1625	179.4417	PHEV	7.845156	5.230104	3	8
2021	0	1.89403	9.178962	0	9.178962	53.58977	0	53.58977	BEV	0	1.89403	4	3
2021	0	0	0	0	0	0	0	0	PHEV	0	0	4	8
2021	0	3.791986	13.38036	0	13.38036	49.05264	0	49.05264	BEV	0	3.791986	1	3
2021	0	85.91373	342.5303	0	342.5303	1630.962	0	1630.962	BEV	0	85.91373	2	3
2021	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2021	0	32.45012	131.2348	0	131.2348	653.3383	0	653.3383	BEV	0	32.45012	2	3
2021	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2021	0	11.10876	48.10814	0	48.10814	277.2026	0	277.2026	BEV	0	11.10876	2	3
2021	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2021	0	5.723291	25.11346	0	25.11346	149.6686	0	149.6686	BEV	0	5.723291	2	3
2021	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2021	0	18.45579	83.09755	0	83.09755	522.749	0	522.749	BEV	0	18.45579	2	3
2021	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2021	0	16.73476	74.38986	0	74.38986	377.8731	0	377.8731	BEV	0	16.73476	3	3
2021	0	0	0	0	0	0	0	0	PHEV	0	0	3	8
2021	0	15.32405	72.50851	0	72.50851	408.8474	0	408.8474	BEV	0	15.32405	3	3
2021	0	11.71839	55.44768	33.26861	22.17907	424.1339	254.4803	169.6535	PHEV	7.031036	4.687357	3	8
2021	0	6.056051	24.14493	0	24.14493	94.65905	0	94.65905	BEV	0	6.056051	4	3
2021	0	0	0	0	0	0	0	0	PHEV	0	0	4	8
2021	0	19.06384	79.28231	0	79.28231	335.8743	0	335.8743	BEV	0	19.06384	4	3
2021	0	0	0	0	0	0	0	0	PHEV	0	0	4	8
2021	0	2.779692	11.87862	0	11.87862	54.81948	0	54.81948	BEV	0	2.779692	4	3
2021	0	0	0	0	0	0	0	0	PHEV	0	0	4	8
2021	0	109.7649	450.1996	0	450.1996	2284.429	0	2284.429	BEV	0	109.7649	2	3
2021	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2021	0	6.710659	28.29261	0	28.29261	153.8573	0	153.8573	BEV	0	6.710659	2	3
2021	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2021	0	3.416571	9.706855	0	9.706855	25.9854	0	25.9854	BEV	0	3.416571	1	3
2021	0	55.76006	219.1158	0	219.1158	1011.106	0	1011.106	BEV	0	55.76006	2	3
2021	0	6.195835	22.92744	0	22.92744	92.46843	0	92.46843	BEV	0	6.195835	1	3
2021	0	3.138492	12.51288	0	12.51288	50.97756	0	50.97756	BEV	0	3.138492	3	3
2021	0	0	0	0	0	0	0	0	PHEV	0	0	3	8
2021	0	1.600768	5.189915	0	5.189915	16.32176	0	16.32176	BEV	0	1.600768	2	3
2021	0	3.400839	15.11751	0	15.11751	75.28779	0	75.28779	BEV	0	3.400839	4	3
2021	0	0	0	0	0	0	0	0	PHEV	0	0	4	8
2021	0	12.90335	49.96601	0	49.96601	224.7132	0	224.7132	BEV	0	12.90335	1	3
2021	0	12.76193	50.88067	0	50.88067	242.697	0	242.697	BEV	0	12.76193	1	3
2021	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2021	0	34.23805	144.35	0	144.35	779.1717	0	779.1717	BEV	0	34.23805	1	3
2021	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2021	0	17.19816	66.59696	0	66.59696	297.4253	0	297.4253	BEV	0	17.19816	2	3
2021	0	2.409274	10.29569	0	10.29569	57.01003	0	57.01003	BEV	0	2.409274	2	3
2021	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2021	0	11.60119	44.25899	0	44.25899	191.7544	0	191.7544	BEV	0	11.60119	1	3
2021	0	16.7111	65.66828	0	65.66828	304.9037	0	304.9037	BEV	0	16.7111	1	3
2021	0	2.593491	7.516975	0	7.516975	19.58009	0	19.58009	BEV	0	2.593491	2	3

2021	0	3.888284	13.72016	0	13.72016	50.47808	0	50.47808	BEV	0	3.888284	2	3
2021	0	1.894439	6.793232	0	6.793232	25.31969	0	25.31969	BEV	0	1.894439	2	3
2021	0	1.981138	7.331121	0	7.331121	29.65498	0	29.65498	BEV	0	1.981138	2	3
2021	0	1.799089	6.451316	0	6.451316	19.58337	0	19.58337	BEV	0	1.799089	3	3
2021	0	12.86654	50.56063	0	50.56063	187.526	0	187.526	BEV	0	12.86654	3	3
2021	0	1.279941	5.176339	0	5.176339	20.48688	0	20.48688	BEV	0	1.279941	3	3
2021	0	0	0	0	0	0	0	0	PHEV	0	0	3	8
2021	0	26.10557	119.0364	0	119.0364	620.3959	0	620.3959	BEV	0	26.10557	3	3
2021	0	0	0	0	0	0	0	0	PHEV	0	0	3	8
2021	0	59.13453	276.4179	0	276.4179	1509.939	0	1509.939	BEV	0	59.13453	3	3
2021	0	15.1627	70.87637	42.52582	28.35055	534.6637	320.7982	213.8655	PHEV	9.09762	6.06508	3	8
2021	0	1.280496	3.858108	0	3.858108	8.688992	0	8.688992	BEV	0	1.280496	4	3
2021	0	1.058107	3.491151	0	3.491151	8.930908	0	8.930908	BEV	0	1.058107	4	3
2021	0	2.758933	10.20932	0	10.20932	33.15939	0	33.15939	BEV	0	2.758933	4	3
2021	0	1.50557	6.088828	0	6.088828	24.60693	0	24.60693	BEV	0	1.50557	4	3
2021	0	0	0	0	0	0	0	0	PHEV	0	0	4	8
2021	0	1.658696	5.282697	0	5.282697	16.10136	0	16.10136	BEV	0	1.658696	2	3
2021	0	0.714922	1.990213	0	1.990213	5.228013	0	5.228013	BEV	0	0.714922	1	3
2021	0	1.304457	3.855571	0	3.855571	10.55674	0	10.55674	BEV	0	1.304457	1	3
2021	0	2.450442	7.523517	0	7.523517	21.18655	0	21.18655	BEV	0	2.450442	1	3
2021	0	3.066927	9.767702	0	9.767702	29.72815	0	29.72815	BEV	0	3.066927	1	3
2021	0	2.553299	8.278153	0	8.278153	25.85048	0	25.85048	BEV	0	2.553299	1	3
2021	0	1.959199	6.464239	0	6.464239	21.15879	0	21.15879	BEV	0	1.959199	1	3
2021	0	1.732523	5.815593	0	5.815593	18.82976	0	18.82976	BEV	0	1.732523	1	3
2021	0	1.696949	5.793401	0	5.793401	20.05456	0	20.05456	BEV	0	1.696949	1	3
2021	0	1.713458	5.947927	0	5.947927	20.62664	0	20.62664	BEV	0	1.713458	1	3
2021	0	2.568735	9.358337	0	9.358337	35.63867	0	35.63867	BEV	0	2.568735	1	3
2021	0	8.217206	30.87821	0	30.87821	129.84	0	129.84	BEV	0	8.217206	1	3
2021	0	1.067554	3.155359	0	3.155359	8.729669	0	8.729669	BEV	0	1.067554	2	3
2021	0	1.08787	3.340054	0	3.340054	9.596049	0	9.596049	BEV	0	1.08787	2	3
2021	0	1.079103	3.374959	0	3.374959	10.06518	0	10.06518	BEV	0	1.079103	2	3
2021	0	1.939653	7.066485	0	7.066485	27.76133	0	27.76133	BEV	0	1.939653	2	3
2021	0	0	0	0	0	0	0	0	BEV	0	0	2	3
2021	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2021	0	0	0	0	0	0	0	0	BEV	0	0	2	3
2021	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2021	0	0	0	0	0	0	0	0	BEV	0	0	3	3
2021	0	36.94511	179.0456	107.4274	71.61824	1481.101	888.6605	592.4403	PHEV	22.16707	14.77804	3	8
2021	0	0.744591	2.883303	0	2.883303	10.36216	0	10.36216	BEV	0	0.744591	3	3
2021	0	0.585623	1.83157	0	1.83157	4.318456	0	4.318456	BEV	0	0.585623	4	3
2021	0	1.338654	4.493486	0	4.493486	11.9567	0	11.9567	BEV	0	1.338654	4	3
2021	0	5.460375	19.58025	0	19.58025	59.98645	0	59.98645	BEV	0	5.460375	4	3
2021	0	2.283457	8.973119	0	8.973119	33.27072	0	33.27072	BEV	0	2.283457	4	3
2021	0	0.579457	1.679497	0	1.679497	4.509588	0	4.509588	BEV	0	0.579457	1	3
2021	0	0.38966	1.174038	0	1.174038	2.524387	0	2.524387	BEV	0	0.38966	3	3
2021	0	1.169569	5.131997	0	5.131997	24.37744	0	24.37744	BEV	0	1.169569	3	3
2021	0	0	0	0	0	0	0	0	PHEV	0	0	3	8

2021	0	0.392686	1.183155	0	1.183155	2.828214	0	2.828214	BEV	0	0.392686	2	3
2021	0	3.216736	14.6677	0	14.6677	90.6887	0	90.6887	BEV	0	3.216736	2	3
2021	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2021	0	2.297426	8.633152	0	8.633152	35.70813	0	35.70813	BEV	0	2.297426	2	3
2021	0	6.559951	25.02647	0	25.02647	107.4155	0	107.4155	BEV	0	6.559951	2	3
2021	0	2.110037	8.170759	0	8.170759	29.14486	0	29.14486	BEV	0	2.110037	4	3
2021	0	1.713827	7.912909	0	7.912909	52.27147	0	52.27147	BEV	0	1.713827	2	3
2021	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2021	0	0.935776	3.087529	0	3.087529	9.817099	0	9.817099	BEV	0	0.935776	2	3
2021	0	0.396871	1.377657	0	1.377657	3.88673	0	3.88673	BEV	0	0.396871	4	3
2021	0	0.360013	1.208462	0	1.208462	3.944586	0	3.944586	BEV	0	0.360013	2	3
2021	0	0.514103	1.902417	0	1.902417	5.98012	0	5.98012	BEV	0	0.514103	3	3
2021	0	0.684305	2.924281	0	2.924281	12.70178	0	12.70178	BEV	0	0.684305	3	3
2021	0	0	0	0	0	0	0	0	PHEV	0	0	3	8
2021	0	0.86415	2.999723	0	2.999723	8.834778	0	8.834778	BEV	0	0.86415	3	3
2021	0	0.847025	2.455018	0	2.455018	5.340536	0	5.340536	BEV	0	0.847025	4	3
2021	0	3.189216	11.98428	0	11.98428	40.87009	0	40.87009	BEV	0	3.189216	4	3
2021	0	0.582423	1.75483	0	1.75483	4.857261	0	4.857261	BEV	0	0.582423	1	3
2021	0	0.529001	1.654483	0	1.654483	4.824745	0	4.824745	BEV	0	0.529001	1	3
2021	0	1.196171	4.974611	0	4.974611	25.81869	0	25.81869	BEV	0	1.196171	2	3
2021	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2021	0	1.077127	3.430488	0	3.430488	8.314793	0	8.314793	BEV	0	1.077127	3	3
2021	0	5.052172	17.82704	0	17.82704	52.36333	0	52.36333	BEV	0	5.052172	4	3
2021	0	4.059315	17.81203	0	17.81203	84.91476	0	84.91476	BEV	0	4.059315	4	3
2021	0	0	0	0	0	0	0	0	PHEV	0	0	4	8
2021	0	0.362893	1.384452	0	1.384452	4.818861	0	4.818861	BEV	0	0.362893	3	3
2021	0	0	0	0	0	0	0	0	BEV	0	0	4	3
2021	0	3.739779	17.69544	10.61726	7.078174	145.7622	87.45734	58.30489	PHEV	2.243867	1.495911	4	8
2021	0	0.598612	2.077962	0	2.077962	7.138698	0	7.138698	BEV	0	0.598612	2	3
2022	0	49978.03	245069.8	0	245069.8	2054651	0	2054651	BEV	0	49978.03	1	3
2022	0	45081.88	221061.2	119373.1	101688.2	1970446	1064041	906405.1	PHEV	24344.21	20737.66	1	8
2022	0	64159.51	318285.1	0	318285.1	2778006	0	2778006	BEV	0	64159.51	1	3
2022	0	41465.98	205706.1	111081.3	94624.8	1871125	1010408	860717.6	PHEV	22391.63	19074.35	1	8
2022	0	81074.63	406843	0	406843	3634954	0	3634954	BEV	0	81074.63	1	3
2022	0	39761.89	199530.3	105751.1	93779.25	1880604	996720.2	883884	PHEV	21073.8	18688.09	1	8
2022	0	99305.37	504016.5	0	504016.5	4655316	0	4655316	BEV	0	99305.37	1	3
2022	0	37865.68	192184.3	99935.81	92248.44	1821003	946921.7	874081.5	PHEV	19690.16	18175.53	1	8
2022	0	105816.1	543123.6	0	543123.6	5124195	0	5124195	BEV	0	105816.1	1	3
2022	0	39799.05	204277	104181.3	100095.7	1975202	1007353	967848.9	PHEV	20297.52	19501.54	1	8
2022	0	99504.54	516428.6	0	516428.6	4962329	0	4962329	BEV	0	99504.54	1	3
2022	0	36873.35	191372.7	95686.34	95686.34	1880787	940393.5	940393.5	PHEV	18436.67	18436.67	1	8
2022	0	3.262341	15.99705	0	15.99705	124.957	0	124.957	BEV	0	3.262341	2	3
2022	0	28.29582	138.75	83.24998	55.49998	1166.67	700.0021	466.6681	PHEV	16.97749	11.31833	2	8
2022	0	1354.516	6797.136	0	6797.136	58559.66	0	58559.66	BEV	0	1354.516	2	3
2022	0	1040.173	5219.723	3102.007	2117.716	46807.96	27817.3	18990.66	PHEV	618.1599	422.013	2	8
2022	0	2775.499	14086.82	0	14086.82	124178.7	0	124178.7	BEV	0	2775.499	2	3
2022	0	2137.638	10849.41	6385.654	4463.758	99992.93	58852.98	41139.95	PHEV	1258.153	879.4855	2	8

2022	0	3244.745	16654.34	0	16654.34	150765.5	0	150765.5	BEV	0	3244.745	2	3
2022	0	2383.355	12233.07	7130.133	5102.939	114138.2	66526.25	47611.93	PHEV	1389.156	994.1997	2	8
2022	0	3609.982	18735.81	0	18735.81	173887.9	0	173887.9	BEV	0	3609.982	2	3
2022	0	2298.044	11926.85	6883.495	5043.352	114153.2	65882.71	48270.5	PHEV	1326.3	971.7442	2	8
2022	0	1071.02	5313.159	3187.896	2125.264	45863.53	27518.12	18345.41	PHEV	642.612	428.408	3	8
2022	0	3713.841	18636.54	0	18636.54	129948.8	0	129948.8	BEV	0	3713.841	3	3
2022	0	3225.691	16186.93	9619.664	6567.271	143408.8	85225.81	58183.01	PHEV	1916.982	1308.709	3	8
2022	0	7714.427	39153.96	0	39153.96	319791.7	0	319791.7	BEV	0	7714.427	3	3
2022	0	5567.358	28256.68	16631.07	11625.6	256902.7	151205.6	105697.1	PHEV	3276.788	2290.57	3	8
2022	0	8941.489	45894.07	0	45894.07	361086.5	0	361086.5	BEV	0	8941.489	3	3
2022	0	8612.082	44203.32	25764.22	18439.1	412514.4	240437	172077.4	PHEV	5019.613	3592.468	3	8
2022	0	9878.464	51269.23	0	51269.23	412872.7	0	412872.7	BEV	0	9878.464	3	3
2022	0	7877.064	40881.96	23594.73	17287.23	391285.9	225827.9	165458	PHEV	4546.191	3330.873	3	8
2022	0	1568.383	7690.644	4614.386	3076.257	60916.01	36549.6	24366.4	PHEV	941.0297	627.3531	4	8
2022	0	3.383972	16.78734	0	16.78734	103.7005	0	103.7005	BEV	0	3.383972	4	3
2022	0	4141.05	20543.08	12325.85	8217.234	171609.8	102965.9	68643.92	PHEV	2484.63	1656.42	4	8
2022	0	1706.682	8564.353	0	8564.353	56388.36	0	56388.36	BEV	0	1706.682	4	3
2022	0	4440.435	22282.68	13242.28	9040.402	201392.8	119684.8	81707.92	PHEV	2638.887	1801.548	4	8
2022	0	3543.633	17985.42	0	17985.42	130905.8	0	130905.8	BEV	0	3543.633	4	3
2022	0	4772.373	24221.8	14256.26	9965.539	220595.5	129836.2	90759.29	PHEV	2808.882	1963.49	4	8
2022	0	5415.528	27796.34	0	27796.34	208342.6	0	208342.6	BEV	0	5415.528	4	3
2022	0	5256.017	26977.61	15724.09	11253.52	247433.1	144218.2	103215	PHEV	3063.507	2192.51	4	8
2022	0	4730.477	24551.17	0	24551.17	175279.4	0	175279.4	BEV	0	4730.477	4	3
2022	0	4620.829	23982.1	13841.1	10141	224960.3	129834.2	95126.08	PHEV	2666.879	1953.951	4	8
2022	0	45.49233	181.3738	0	181.3738	892.7356	0	892.7356	BEV	0	45.49233	1	3
2022	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2022	0	8869.943	41461.57	0	41461.57	288106.1	0	288106.1	BEV	0	8869.943	1	3
2022	0	9271.204	43337.22	26002.33	17334.89	326854.6	196112.8	130741.8	PHEV	5562.722	3708.482	1	8
2022	0	10917.16	51656.51	0	51656.51	369469.7	0	369469.7	BEV	0	10917.16	1	3
2022	0	13783.74	65220.24	39132.14	26088.09	506839.8	304103.9	202735.9	PHEV	8270.243	5513.495	1	8
2022	0	25054.65	119985.9	0	119985.9	884286.8	0	884286.8	BEV	0	25054.65	1	3
2022	0	11914.16	57056.54	34233.92	22822.62	457757.1	274654.3	183102.9	PHEV	7148.494	4765.663	1	8
2022	0	3753.495	18190.41	0	18190.41	105686.5	0	105686.5	BEV	0	3753.495	3	3
2022	0	341.5956	1655.461	993.2766	662.1844	13165.6	7899.361	5266.24	PHEV	204.9574	136.6382	3	8
2022	0	32.49659	137.0079	0	137.0079	760.4435	0	760.4435	BEV	0	32.49659	1	3
2022	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2022	0	1867.746	8623.568	0	8623.568	58340.85	0	58340.85	BEV	0	1867.746	1	3
2022	0	3926.069	18127.06	10876.23	7250.822	133183.7	79910.22	53273.48	PHEV	2355.642	1570.428	1	8
2022	0	16215.15	78582.82	0	78582.82	595497.9	0	595497.9	BEV	0	16215.15	1	3
2022	0	11660.86	56511.55	33906.93	22604.62	468070.3	280842.2	187228.1	PHEV	6996.515	4664.343	1	8
2022	0	95.88092	387.7616	0	387.7616	1968.741	0	1968.741	BEV	0	95.88092	1	3
2022	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2022	0	2348.814	10710.15	0	10710.15	70475.39	0	70475.39	BEV	0	2348.814	1	3
2022	0	652.9014	2977.106	1786.264	1190.842	21185.68	12711.41	8474.272	PHEV	391.7408	261.1605	1	8
2022	0	608.8988	2881.114	0	2881.114	20592.27	0	20592.27	BEV	0	608.8988	2	3
2022	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2022	0	204.5392	967.8139	0	967.8139	5344.876	0	5344.876	BEV	0	204.5392	3	3

2022	0	92.60894	438.1959	262.9175	175.2783	3314.132	1988.479	1325.653	PHEV	55.56536	37.04358	3	8
2022	0	25.63145	103.6587	0	103.6587	403.4084	0	403.4084	BEV	0	25.63145	3	3
2022	0	0	0	0	0	0	0	0	PHEV	0	0	3	8
2022	0	119.1981	482.0609	0	482.0609	1890.466	0	1890.466	BEV	0	119.1981	4	3
2022	0	0	0	0	0	0	0	0	PHEV	0	0	4	8
2022	0	387.6833	1745.552	0	1745.552	11190.28	0	11190.28	BEV	0	387.6833	1	3
2022	0	41.32665	186.0741	111.6444	74.42963	1285.069	771.0415	514.0277	PHEV	24.79599	16.53066	1	8
2022	0	266.0054	1228.173	0	1228.173	8275.464	0	8275.464	BEV	0	266.0054	2	3
2022	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2022	0	42.60114	182.05	0	182.05	1043.077	0	1043.077	BEV	0	42.60114	1	3
2022	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2022	0	248.0036	1088.225	0	1088.225	6526.329	0	6526.329	BEV	0	248.0036	1	3
2022	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2022	0	206.9215	919.8139	0	919.8139	5795.747	0	5795.747	BEV	0	206.9215	1	3
2022	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2022	0	327.0159	1528.6	0	1528.6	10608.38	0	10608.38	BEV	0	327.0159	2	3
2022	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2022	0	27.1303	111.2747	0	111.2747	582.4638	0	582.4638	BEV	0	27.1303	1	3
2022	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2022	0	76.86599	332.8797	0	332.8797	1964.779	0	1964.779	BEV	0	76.86599	1	3
2022	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2022	0	42.49149	186.4501	0	186.4501	1131.358	0	1131.358	BEV	0	42.49149	2	3
2022	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2022	0	1.91239	8.172332	0	8.172332	38.06523	0	38.06523	BEV	0	1.91239	4	3
2022	0	0	0	0	0	0	0	0	PHEV	0	0	4	8
2022	0	4.459614	15.73615	0	15.73615	58.48275	0	58.48275	BEV	0	4.459614	1	3
2022	0	36.35757	161.6177	0	161.6177	798.4387	0	798.4387	BEV	0	36.35757	3	3
2022	0	0	0	0	0	0	0	0	PHEV	0	0	3	8
2022	0	18.01336	82.13749	0	82.13749	424.1091	0	424.1091	BEV	0	18.01336	3	3
2022	0	12.47079	56.86442	34.11865	22.74577	407.4356	244.4613	162.9742	PHEV	7.482472	4.988315	3	8
2022	0	1.862582	8.91985	0	8.91985	50.06649	0	50.06649	BEV	0	1.862582	4	3
2022	0	0	0	0	0	0	0	0	PHEV	0	0	4	8
2022	0	3.291429	11.42554	0	11.42554	41.5568	0	41.5568	BEV	0	3.291429	1	3
2022	0	76.93307	302.3177	0	302.3177	1429.025	0	1429.025	BEV	0	76.93307	2	3
2022	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2022	0	29.18963	116.3764	0	116.3764	575.9038	0	575.9038	BEV	0	29.18963	2	3
2022	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2022	0	10.3974	44.43185	0	44.43185	254.6575	0	254.6575	BEV	0	10.3974	2	3
2022	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2022	0	5.453555	23.61744	0	23.61744	140.0992	0	140.0992	BEV	0	5.453555	2	3
2022	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2022	0	17.56352	78.07388	0	78.07388	489.8645	0	489.8645	BEV	0	17.56352	2	3
2022	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2022	0	15.74273	69.07815	0	69.07815	337.2961	0	337.2961	BEV	0	15.74273	3	3
2022	0	0	0	0	0	0	0	0	PHEV	0	0	3	8
2022	0	14.8976	69.63718	0	69.63718	377.2707	0	377.2707	BEV	0	14.8976	3	3
2022	0	11.39228	53.25196	31.95118	21.30078	391.6927	235.0156	156.6771	PHEV	6.835368	4.556912	3	8

2022	0	5.286082	20.77229	0	20.77229	78.10587	0	78.10587	BEV	0	5.286082	4	3
2022	0	0	0	0	0	0	0	0	PHEV	0	0	4	8
2022	0	17.09657	70.12141	0	70.12141	284.4106	0	284.4106	BEV	0	17.09657	4	3
2022	0	0	0	0	0	0	0	0	PHEV	0	0	4	8
2022	0	2.545981	10.73403	0	10.73403	47.48217	0	47.48217	BEV	0	2.545981	4	3
2022	0	0	0	0	0	0	0	0	PHEV	0	0	4	8
2022	0	99.31369	401.6444	0	401.6444	2021.541	0	2021.541	BEV	0	99.31369	2	3
2022	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2022	0	6.168205	25.65221	0	25.65221	138.5628	0	138.5628	BEV	0	6.168205	2	3
2022	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2022	0	3.252061	9.053153	0	9.053153	24.60838	0	24.60838	BEV	0	3.252061	1	3
2022	0	49.48117	191.6074	0	191.6074	877.6305	0	877.6305	BEV	0	49.48117	2	3
2022	0	5.222817	19.02761	0	19.02761	76.10169	0	76.10169	BEV	0	5.222817	1	3
2022	0	2.754676	10.82483	0	10.82483	42.45367	0	42.45367	BEV	0	2.754676	3	3
2022	0	0	0	0	0	0	0	0	PHEV	0	0	3	8
2022	0	1.464714	4.664894	0	4.664894	14.59112	0	14.59112	BEV	0	1.464714	2	3
2022	0	3.159044	13.8617	0	13.8617	66.17581	0	66.17581	BEV	0	3.159044	4	3
2022	0	0	0	0	0	0	0	0	PHEV	0	0	4	8
2022	0	10.57482	40.34335	0	40.34335	180.2008	0	180.2008	BEV	0	10.57482	1	3
2022	0	10.48286	41.19364	0	41.19364	195.2188	0	195.2188	BEV	0	10.48286	1	3
2022	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2022	0	29.36656	122.1291	0	122.1291	655.4753	0	655.4753	BEV	0	29.36656	1	3
2022	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2022	0	15.25966	58.21621	0	58.21621	257.9011	0	257.9011	BEV	0	15.25966	2	3
2022	0	2.2456	9.467609	0	9.467609	52.1477	0	52.1477	BEV	0	2.2456	2	3
2022	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2022	0	9.57198	35.96911	0	35.96911	154.7372	0	154.7372	BEV	0	9.57198	1	3
2022	0	13.68046	52.97526	0	52.97526	244.4809	0	244.4809	BEV	0	13.68046	1	3
2022	0	2.341138	6.651431	0	6.651431	17.43929	0	17.43929	BEV	0	2.341138	2	3
2022	0	3.443912	11.95485	0	11.95485	43.65305	0	43.65305	BEV	0	3.443912	2	3
2022	0	1.660739	5.860065	0	5.860065	21.68127	0	21.68127	BEV	0	1.660739	2	3
2022	0	1.751316	6.380341	0	6.380341	25.60039	0	25.60039	BEV	0	1.751316	2	3
2022	0	1.60262	5.654989	0	5.654989	16.3683	0	16.3683	BEV	0	1.60262	3	3
2022	0	11.04944	42.78707	0	42.78707	151.4393	0	151.4393	BEV	0	11.04944	3	3
2022	0	1.084441	4.323567	0	4.323567	16.34631	0	16.34631	BEV	0	1.084441	3	3
2022	0	0	0	0	0	0	0	0	PHEV	0	0	3	8
2022	0	24.31814	109.4929	0	109.4929	547.5326	0	547.5326	BEV	0	24.31814	3	3
2022	0	0	0	0	0	0	0	0	PHEV	0	0	3	8
2022	0	55.98598	258.4929	0	258.4929	1354.064	0	1354.064	BEV	0	55.98598	3	3
2022	0	14.35538	66.28022	39.76813	26.51209	481.2491	288.7494	192.4996	PHEV	8.613228	5.742152	3	8
2022	0	1.214279	3.589033	0	3.589033	7.817383	0	7.817383	BEV	0	1.214279	4	3
2022	0	0.963257	3.123013	0	3.123013	7.65614	0	7.65614	BEV	0	0.963257	4	3
2022	0	2.39717	8.733298	0	8.733298	27.03556	0	27.03556	BEV	0	2.39717	4	3
2022	0	1.328991	5.298567	0	5.298567	20.52853	0	20.52853	BEV	0	1.328991	4	3
2022	0	0	0	0	0	0	0	0	PHEV	0	0	4	8
2022	0	1.47122	4.601329	0	4.601329	14.01074	0	14.01074	BEV	0	1.47122	2	3
2022	0	0.692076	1.886966	0	1.886966	5.045516	0	5.045516	BEV	0	0.692076	1	3

2022	0	1.245862	3.611006	0	3.611006	9.941489	0	9.941489	BEV	0	1.245862	1	3
2022	0	2.327216	7.011855	0	7.011855	19.76988	0	19.76988	BEV	0	2.327216	1	3
2022	0	2.880037	9.007487	0	9.007487	27.34866	0	27.34866	BEV	0	2.880037	1	3
2022	0	2.379482	7.578292	0	7.578292	23.56172	0	23.56172	BEV	0	2.379482	1	3
2022	0	1.814039	5.881368	0	5.881368	19.19657	0	19.19657	BEV	0	1.814039	1	3
2022	0	1.604774	5.294838	0	5.294838	16.97447	0	16.97447	BEV	0	1.604774	1	3
2022	0	1.546167	5.19005	0	5.19005	17.86646	0	17.86646	BEV	0	1.546167	1	3
2022	0	1.536479	5.245554	0	5.245554	18.06236	0	18.06236	BEV	0	1.536479	1	3
2022	0	2.212562	7.933981	0	7.933981	29.88313	0	29.88313	BEV	0	2.212562	1	3
2022	0	6.833168	25.28586	0	25.28586	105.5428	0	105.5428	BEV	0	6.833168	1	3
2022	0	0.958033	2.776763	0	2.776763	7.742569	0	7.742569	BEV	0	0.958033	2	3
2022	0	0.972449	2.92997	0	2.92997	8.42933	0	8.42933	BEV	0	0.972449	2	3
2022	0	0.989214	3.037154	0	3.037154	9.067887	0	9.067887	BEV	0	0.989214	2	3
2022	0	1.704405	6.111793	0	6.111793	23.80216	0	23.80216	BEV	0	1.704405	2	3
2022	0	0	0	0	0	0	0	0	BEV	0	0	2	3
2022	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2022	0	0	0	0	0	0	0	0	BEV	0	0	2	3
2022	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2022	0	0	0	0	0	0	0	0	BEV	0	0	3	3
2022	0	36.13639	173.0561	103.8336	69.22243	1375.586	825.3516	550.2344	PHEV	21.68183	14.45456	3	8
2022	0	0.645072	2.460977	0	2.460977	8.448037	0	8.448037	BEV	0	0.645072	3	3
2022	0	0.558276	1.714059	0	1.714059	3.891127	0	3.891127	BEV	0	0.558276	4	3
2022	0	1.19847	3.954267	0	3.954267	10.05623	0	10.05623	BEV	0	1.19847	4	3
2022	0	4.805505	16.95666	0	16.95666	49.70441	0	49.70441	BEV	0	4.805505	4	3
2022	0	1.9717	7.635073	0	7.635073	27.04846	0	27.04846	BEV	0	1.9717	4	3
2022	0	0.55609	1.579914	0	1.579914	4.293175	0	4.293175	BEV	0	0.55609	1	3
2022	0	0.381051	1.126268	0	1.126268	2.326584	0	2.326584	BEV	0	0.381051	3	3
2022	0	1.076719	4.662894	0	4.662894	21.2137	0	21.2137	BEV	0	1.076719	3	3
2022	0	0	0	0	0	0	0	0	PHEV	0	0	3	8
2022	0	0.350119	1.034844	0	1.034844	2.425383	0	2.425383	BEV	0	0.350119	2	3
2022	0	3.028837	13.6374	0	13.6374	83.52528	0	83.52528	BEV	0	3.028837	2	3
2022	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2022	0	2.038589	7.543719	0	7.543719	30.87795	0	30.87795	BEV	0	2.038589	2	3
2022	0	5.838623	21.94009	0	21.94009	93.17412	0	93.17412	BEV	0	5.838623	2	3
2022	0	1.807193	6.894513	0	6.894513	23.43023	0	23.43023	BEV	0	1.807193	4	3
2022	0	1.664452	7.589584	0	7.589584	50.05846	0	50.05846	BEV	0	1.664452	2	3
2022	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2022	0	0.847908	2.749037	0	2.749037	8.69689	0	8.69689	BEV	0	0.847908	2	3
2022	0	0.353714	1.207582	0	1.207582	3.269168	0	3.269168	BEV	0	0.353714	4	3
2022	0	0.325043	1.072456	0	1.072456	3.4743	0	3.4743	BEV	0	0.325043	2	3
2022	0	0.457114	1.665344	0	1.665344	4.99221	0	4.99221	BEV	0	0.457114	3	3
2022	0	0.61784	2.604856	0	2.604856	10.82255	0	10.82255	BEV	0	0.61784	3	3
2022	0	0	0	0	0	0	0	0	PHEV	0	0	3	8
2022	0	0.77317	2.639609	0	2.639609	7.452409	0	7.452409	BEV	0	0.77317	3	3
2022	0	0.847025	2.406492	0	2.406492	5.08344	0	5.08344	BEV	0	0.847025	4	3
2022	0	2.710921	10.03165	0	10.03165	32.67358	0	32.67358	BEV	0	2.710921	4	3
2022	0	0.551414	1.629809	0	1.629809	4.511048	0	4.511048	BEV	0	0.551414	1	3

2022	0	0.502292	1.542173	0	1.542173	4.478537	0	4.478537	BEV	0	0.502292	1	3
2022	0	1.102185	4.5206	0	4.5206	23.30183	0	23.30183	BEV	0	1.102185	2	3
2022	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2022	0	0.978019	3.058812	0	3.058812	7.098282	0	7.098282	BEV	0	0.978019	3	3
2022	0	4.386186	15.22577	0	15.22577	42.62154	0	42.62154	BEV	0	4.386186	4	3
2022	0	3.731562	16.16009	0	16.16009	73.67458	0	73.67458	BEV	0	3.731562	4	3
2022	0	0	0	0	0	0	0	0	PHEV	0	0	4	8
2022	0	0.316342	1.188733	0	1.188733	3.950146	0	3.950146	BEV	0	0.316342	3	3
2022	0	0	0	0	0	0	0	0	BEV	0	0	4	3
2022	0	3.581215	16.74	10.044	6.695999	132.7781	79.66687	53.11125	PHEV	2.148729	1.432486	4	8
2022	0	0.5437	1.856198	0	1.856198	6.341234	0	6.341234	BEV	0	0.5437	2	3
2023	0	48357.53	234353.2	0	234353.2	1918635	0	1918635	BEV	0	48357.53	1	3
2023	0	43620.13	211394.5	114153	97241.47	1801385	972748.1	828637.3	PHEV	23554.87	20065.26	1	8
2023	0	62817.12	308026.9	0	308026.9	2613610	0	2613610	BEV	0	62817.12	1	3
2023	0	40598.4	199076.3	107501.2	91575.09	1735542	937192.5	798349.2	PHEV	21923.14	18675.26	1	8
2023	0	79823.25	395990.4	0	395990.4	3444560	0	3444560	BEV	0	79823.25	1	3
2023	0	39148.17	194207.8	102930.1	91277.67	1749963	927480.3	822482.5	PHEV	20748.53	18399.64	1	8
2023	0	97334.9	488439.2	0	488439.2	4384305	0	4384305	BEV	0	97334.9	1	3
2023	0	37114.33	186244.5	96847.16	89397.38	1700569	884295.7	816273	PHEV	19299.45	17814.88	1	8
2023	0	105265.4	534266.1	0	534266.1	4911009	0	4911009	BEV	0	105265.4	1	3
2023	0	39591.91	200945.6	102482.2	98463.33	1878034	957797.4	920236.7	PHEV	20191.87	19400.04	1	8
2023	0	110789.6	568651	0	568651	5336372	0	5336372	BEV	0	110789.6	1	3
2023	0	41055.26	210724.7	105362.4	105362.4	2008019	1004009	1004009	PHEV	20527.63	20527.63	1	8
2023	0	104664.3	543207.6	0	543207.6	5192484	0	5192484	BEV	0	104664.3	1	3
2023	0	38575.1	200204.8	98100.34	102104.4	1946145	953611	992533.9	PHEV	18901.8	19673.3	1	8
2023	0	3.17869	15.40476	0	15.40476	120.1995	0	120.1995	BEV	0	3.17869	2	3
2023	0	27.57027	133.6127	80.16763	53.44509	1083.032	649.8192	433.2128	PHEV	16.54216	11.02811	2	8
2023	0	1348.588	6690.129	0	6690.129	56310.2	0	56310.2	BEV	0	1348.588	2	3
2023	0	1035.621	5137.549	3053.172	2084.377	44133.49	26227.9	17905.59	PHEV	615.4546	420.1661	2	8
2023	0	2759.381	13846.93	0	13846.93	119431.9	0	119431.9	BEV	0	2759.381	2	3
2023	0	2125.225	10664.65	6276.91	4387.743	94096.54	55382.54	38714.01	PHEV	1250.846	874.3781	2	8
2023	0	3220.132	16343.52	0	16343.52	144739	0	144739	BEV	0	3220.132	2	3
2023	0	2365.276	12004.77	6997.066	5007.704	107981	62937.49	45043.5	PHEV	1378.618	986.6581	2	8
2023	0	3974.21	20398.47	0	20398.47	185290.5	0	185290.5	BEV	0	3974.21	2	3
2023	0	2529.904	12985.26	7494.353	5490.912	119857	69174.6	50682.38	PHEV	1460.116	1069.788	2	8
2023	0	3985.025	20682.28	0	20682.28	192452.1	0	192452.1	BEV	0	3985.025	2	3
2023	0	2502.042	12985.6	7420.343	5565.257	122946.3	70255.03	52691.27	PHEV	1429.739	1072.304	2	8
2023	0	1058.762	5191.692	3115.015	2076.677	43195.72	25917.43	17278.29	PHEV	635.2571	423.5047	3	8
2023	0	3685.888	18285.1	0	18285.1	122914.9	0	122914.9	BEV	0	3685.888	3	3
2023	0	3201.412	15881.69	9438.262	6443.429	135630	80602.99	55027.04	PHEV	1902.553	1298.858	3	8
2023	0	7566.944	37971.91	0	37971.91	298974.2	0	298974.2	BEV	0	7566.944	3	3
2023	0	5460.921	27403.61	16128.98	11274.63	240144.2	141342	98802.17	PHEV	3214.142	2246.779	3	8
2023	0	8761.425	44467.91	0	44467.91	337397.9	0	337397.9	BEV	0	8761.425	3	3
2023	0	8438.651	42829.7	24963.6	17866.1	385327.8	224591.1	160736.7	PHEV	4918.528	3520.123	3	8
2023	0	10937.62	56139.65	0	56139.65	436189.1	0	436189.1	BEV	0	10937.62	3	3
2023	0	8721.635	44765.63	25836.16	18929.46	413289.9	238527.3	174762.6	PHEV	5033.63	3688.006	3	8
2023	0	11624.31	60330.16	0	60330.16	481418.9	0	481418.9	BEV	0	11624.31	3	3

2023	0	8313.244	43145.74	24654.71	18491.03	408499.3	233428.2	175071.1	PHEV	4750.425	3562.819	3	8
2023	0	1523.762	7384.549	4430.729	2953.819	56394.32	33836.59	22557.73	PHEV	914.2574	609.5049	4	8
2023	0	3.347117	16.41275	0	16.41275	97.70084	0	97.70084	BEV	0	3.347117	4	3
2023	0	4095.949	20084.69	12050.81	8033.876	161782.6	97069.54	64713.03	PHEV	2457.569	1638.379	4	8
2023	0	1684.687	8357.465	0	8357.465	53049.24	0	53049.24	BEV	0	1684.687	4	3
2023	0	4383.21	21744.4	12922.39	8822.015	189570	112658.8	76911.27	PHEV	2604.879	1778.331	4	8
2023	0	3473.742	17431.69	0	17431.69	122386.5	0	122386.5	BEV	0	3473.742	4	3
2023	0	4678.248	23476.05	13817.33	9658.72	206347.3	121450.1	84897.17	PHEV	2753.483	1924.765	4	8
2023	0	5355.352	27180.66	0	27180.66	196591.3	0	196591.3	BEV	0	5355.352	4	3
2023	0	5197.613	26380.07	15375.81	11004.26	233557.1	136130.4	97426.67	PHEV	3029.466	2168.147	4	8
2023	0	5468.349	28067.45	0	28067.45	193467.6	0	193467.6	BEV	0	5468.349	4	3
2023	0	5341.598	27416.88	15823.45	11593.42	248856.7	143625.9	105230.8	PHEV	3082.865	2258.733	4	8
2023	0	4977.693	25834.22	0	25834.22	176896.2	0	176896.2	BEV	0	4977.693	4	3
2023	0	4677.249	24274.92	13871.38	10403.54	225339.9	128765.7	96574.24	PHEV	2672.714	2004.535	4	8
2023	0	37.45193	147.1719	0	147.1719	719.7521	0	719.7521	BEV	0	37.45193	1	3
2023	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2023	0	8368.373	38637.62	0	38637.62	267539.1	0	267539.1	BEV	0	8368.373	1	3
2023	0	8746.943	40385.51	24231.31	16154.21	292288.3	175373	116915.3	PHEV	5248.166	3498.777	1	8
2023	0	10451.65	48855.1	0	48855.1	348385.9	0	348385.9	BEV	0	10451.65	1	3
2023	0	13196	61683.24	37009.94	24673.3	460111	276066.6	184044.4	PHEV	7917.598	5278.399	1	8
2023	0	23981.86	113474.5	0	113474.5	834387.6	0	834387.6	BEV	0	23981.86	1	3
2023	0	11404.02	53960.16	32376.1	21584.07	415708.5	249425.1	166283.4	PHEV	6842.411	4561.607	1	8
2023	0	3696.052	17700.28	0	17700.28	98868.88	0	98868.88	BEV	0	3696.052	3	3
2023	0	336.3679	1610.856	966.5135	644.3424	12321.05	7392.628	4928.419	PHEV	201.8208	134.5472	3	8
2023	0	27.87109	115.9098	0	115.9098	639.5532	0	639.5532	BEV	0	27.87109	1	3
2023	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2023	0	1763.445	8040.973	0	8040.973	54191.47	0	54191.47	BEV	0	1763.445	1	3
2023	0	3706.825	16902.42	10141.45	6760.968	119145.4	71487.22	47658.15	PHEV	2224.095	1482.73	1	8
2023	0	15734.48	75351.94	0	75351.94	569923.5	0	569923.5	BEV	0	15734.48	1	3
2023	0	11315.19	54188.12	32512.87	21675.25	431145.9	258687.6	172458.4	PHEV	6789.116	4526.077	1	8
2023	0	80.17523	319.6514	0	319.6514	1613.685	0	1613.685	BEV	0	80.17523	1	3
2023	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2023	0	2178.342	9808.028	0	9808.028	64284.54	0	64284.54	BEV	0	2178.342	1	3
2023	0	605.5151	2726.344	1635.806	1090.538	18608.17	11164.9	7443.269	PHEV	363.3091	242.206	1	8
2023	0	591.6099	2765.415	0	2765.415	19698.36	0	19698.36	BEV	0	591.6099	2	3
2023	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2023	0	199.4695	932.3984	0	932.3984	4949.544	0	4949.544	BEV	0	199.4695	3	3
2023	0	90.31356	422.1608	253.2965	168.8643	3072.929	1843.757	1229.172	PHEV	54.18814	36.12543	3	8
2023	0	21.95258	87.52295	0	87.52295	325.9936	0	325.9936	BEV	0	21.95258	3	3
2023	0	0	0	0	0	0	0	0	PHEV	0	0	3	8
2023	0	106.1624	423.2599	0	423.2599	1589.894	0	1589.894	BEV	0	106.1624	4	3
2023	0	0	0	0	0	0	0	0	PHEV	0	0	4	8
2023	0	358.4974	1593.604	0	1593.604	10179.6	0	10179.6	BEV	0	358.4974	1	3
2023	0	38.21546	169.8765	101.9259	67.95061	1125.369	675.2212	450.1474	PHEV	22.92928	15.28619	1	8
2023	0	254.1998	1159.103	0	1159.103	7772.97	0	7772.97	BEV	0	254.1998	2	3
2023	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2023	0	37.22053	156.9243	0	156.9243	894.047	0	894.047	BEV	0	37.22053	1	3

2023	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2023	0	222.3867	963.079	0	963.079	5738.421	0	5738.421	BEV	0	222.3867	1	3
2023	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2023	0	186.4328	818.0557	0	818.0557	5135.833	0	5135.833	BEV	0	186.4328	1	3
2023	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2023	0	311.1898	1436.794	0	1436.794	9929.549	0	9929.549	BEV	0	311.1898	2	3
2023	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2023	0	22.62014	91.48037	0	91.48037	475.6083	0	475.6083	BEV	0	22.62014	1	3
2023	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2023	0	68.02886	290.7118	0	290.7118	1706.633	0	1706.633	BEV	0	68.02886	1	3
2023	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2023	0	40.02863	173.35	0	173.35	1046.066	0	1046.066	BEV	0	40.02863	2	3
2023	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2023	0	1.751635	7.385016	0	7.385016	33.13946	0	33.13946	BEV	0	1.751635	4	3
2023	0	0	0	0	0	0	0	0	PHEV	0	0	4	8
2023	0	3.84611	13.351	0	13.351	49.21224	0	49.21224	BEV	0	3.84611	1	3
2023	0	33.31619	146.1894	0	146.1894	694.8382	0	694.8382	BEV	0	33.31619	3	3
2023	0	0	0	0	0	0	0	0	PHEV	0	0	3	8
2023	0	16.86572	75.93825	0	75.93825	376.9352	0	376.9352	BEV	0	16.86572	3	3
2023	0	11.67627	52.57263	31.54358	21.02905	363.462	218.0772	145.3848	PHEV	7.005761	4.670508	3	8
2023	0	1.811665	8.572219	0	8.572219	46.26523	0	46.26523	BEV	0	1.811665	4	3
2023	0	0	0	0	0	0	0	0	PHEV	0	0	4	8
2023	0	2.943684	10.04977	0	10.04977	36.23303	0	36.23303	BEV	0	2.943684	1	3
2023	0	68.34429	264.6516	0	264.6516	1240.559	0	1240.559	BEV	0	68.34429	2	3
2023	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2023	0	29.33964	115.2936	0	115.2936	567.8898	0	567.8898	BEV	0	29.33964	2	3
2023	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2023	0	9.688273	40.84644	0	40.84644	232.6086	0	232.6086	BEV	0	9.688273	2	3
2023	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2023	0	5.128114	21.91428	0	21.91428	129.2288	0	129.2288	BEV	0	5.128114	2	3
2023	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2023	0	16.51157	72.4518	0	72.4518	452.765	0	452.765	BEV	0	16.51157	2	3
2023	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2023	0	14.70571	63.6853	0	63.6853	298.5682	0	298.5682	BEV	0	14.70571	3	3
2023	0	0	0	0	0	0	0	0	PHEV	0	0	3	8
2023	0	14.17964	65.4688	0	65.4688	340.87	0	340.87	BEV	0	14.17964	3	3
2023	0	10.84325	50.06438	30.03863	20.02575	354.7104	212.8263	141.8842	PHEV	6.505951	4.337301	3	8
2023	0	7.077201	27.40526	0	27.40526	99.20006	0	99.20006	BEV	0	7.077201	4	3
2023	0	0	0	0	0	0	0	0	PHEV	0	0	4	8
2023	0	17.14614	69.3424	0	69.3424	270.4055	0	270.4055	BEV	0	17.14614	4	3
2023	0	0	0	0	0	0	0	0	PHEV	0	0	4	8
2023	0	2.293899	9.53982	0	9.53982	40.43681	0	40.43681	BEV	0	2.293899	4	3
2023	0	0	0	0	0	0	0	0	PHEV	0	0	4	8
2023	0	93.40101	372.3814	0	372.3814	1860.629	0	1860.629	BEV	0	93.40101	2	3
2023	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2023	0	5.634651	23.11046	0	23.11046	123.8663	0	123.8663	BEV	0	5.634651	2	3
2023	0	0	0	0	0	0	0	0	PHEV	0	0	2	8

2023	0	3.158231	8.611013	0	8.611013	23.84092	0	23.84092	BEV	0	3.158231	1	3
2023	0	44.77611	170.8227	0	170.8227	776.4394	0	776.4394	BEV	0	44.77611	2	3
2023	0	4.469172	16.02591	0	16.02591	63.51276	0	63.51276	BEV	0	4.469172	1	3
2023	0	2.446756	9.474648	0	9.474648	35.7425	0	35.7425	BEV	0	2.446756	3	3
2023	0	0	0	0	0	0	0	0	PHEV	0	0	3	8
2023	0	1.296949	4.056286	0	4.056286	12.62236	0	12.62236	BEV	0	1.296949	2	3
2023	0	2.927411	12.67759	0	12.67759	58.01578	0	58.01578	BEV	0	2.927411	4	3
2023	0	0	0	0	0	0	0	0	PHEV	0	0	4	8
2023	0	8.710211	32.73079	0	32.73079	145.0616	0	145.0616	BEV	0	8.710211	1	3
2023	0	8.570196	33.18663	0	33.18663	156.1244	0	156.1244	BEV	0	8.570196	1	3
2023	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2023	0	24.82099	101.803	0	101.803	542.7269	0	542.7269	BEV	0	24.82099	1	3
2023	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2023	0	13.97315	52.5076	0	52.5076	230.7715	0	230.7715	BEV	0	13.97315	2	3
2023	0	2.072593	8.619459	0	8.619459	47.1707	0	47.1707	BEV	0	2.072593	2	3
2023	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2023	0	7.955258	29.43812	0	29.43812	125.6309	0	125.6309	BEV	0	7.955258	1	3
2023	0	11.20794	42.75875	0	42.75875	195.9248	0	195.9248	BEV	0	11.20794	1	3
2023	0	2.105638	5.861718	0	5.861718	15.51403	0	15.51403	BEV	0	2.105638	2	3
2023	0	3.157887	10.78106	0	10.78106	39.04263	0	39.04263	BEV	0	3.157887	2	3
2023	0	1.462353	5.076266	0	5.076266	18.63276	0	18.63276	BEV	0	1.462353	2	3
2023	0	1.54184	5.528853	0	5.528853	21.98936	0	21.98936	BEV	0	1.54184	2	3
2023	0	1.415558	4.913827	0	4.913827	13.57423	0	13.57423	BEV	0	1.415558	3	3
2023	0	9.555154	36.4533	0	36.4533	123.1873	0	123.1873	BEV	0	9.555154	3	3
2023	0	0.927397	3.644318	0	3.644318	13.16632	0	13.16632	BEV	0	0.927397	3	3
2023	0	0	0	0	0	0	0	0	PHEV	0	0	3	8
2023	0	22.65888	100.7239	0	100.7239	483.4261	0	483.4261	BEV	0	22.65888	3	3
2023	0	0	0	0	0	0	0	0	PHEV	0	0	3	8
2023	0	52.88909	241.1642	0	241.1642	1211.959	0	1211.959	BEV	0	52.88909	3	3
2023	0	13.56131	61.83698	37.10219	24.73479	433.0832	259.8499	173.2333	PHEV	8.136783	5.424522	3	8
2023	0	1.196194	3.467049	0	3.467049	7.322621	0	7.322621	BEV	0	1.196194	4	3
2023	0	0.894436	2.848644	0	2.848644	6.703061	0	6.703061	BEV	0	0.894436	4	3
2023	0	2.072319	7.431088	0	7.431088	21.94367	0	21.94367	BEV	0	2.072319	4	3
2023	0	1.590271	6.24916	0	6.24916	23.30122	0	23.30122	BEV	0	1.590271	4	3
2023	0	0	0	0	0	0	0	0	PHEV	0	0	4	8
2023	0	1.337932	4.107813	0	4.107813	12.5035	0	12.5035	BEV	0	1.337932	2	3
2023	0	0.672214	1.7943	0	1.7943	4.89867	0	4.89867	BEV	0	0.672214	1	3
2023	0	1.188266	3.375995	0	3.375995	9.365896	0	9.365896	BEV	0	1.188266	1	3
2023	0	2.228439	6.586576	0	6.586576	18.63295	0	18.63295	BEV	0	2.228439	1	3
2023	0	2.758117	8.468165	0	8.468165	25.68225	0	25.68225	BEV	0	2.758117	1	3
2023	0	2.22508	6.95907	0	6.95907	21.55823	0	21.55823	BEV	0	2.22508	1	3
2023	0	1.697933	5.407663	0	5.407663	17.60896	0	17.60896	BEV	0	1.697933	1	3
2023	0	1.475513	4.78382	0	4.78382	15.20783	0	15.20783	BEV	0	1.475513	1	3
2023	0	1.429494	4.716516	0	4.716516	16.14418	0	16.14418	BEV	0	1.429494	1	3
2023	0	1.401342	4.703912	0	4.703912	16.08175	0	16.08175	BEV	0	1.401342	1	3
2023	0	1.918913	6.771056	0	6.771056	25.2095	0	25.2095	BEV	0	1.918913	1	3
2023	0	5.736811	20.90018	0	20.90018	86.52743	0	86.52743	BEV	0	5.736811	1	3

2023	0	0.857326	2.435757	0	2.435757	6.858515	0	6.858515	BEV	0	0.857326	2	3
2023	0	0.896381	2.649425	0	2.649425	7.645435	0	7.645435	BEV	0	0.896381	2	3
2023	0	0.882578	2.659189	0	2.659189	7.955782	0	7.955782	BEV	0	0.882578	2	3
2023	0	1.518887	5.359528	0	5.359528	20.67678	0	20.67678	BEV	0	1.518887	2	3
2023	0	0	0	0	0	0	0	0	BEV	0	0	2	3
2023	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2023	0	0	0	0	0	0	0	0	BEV	0	0	2	3
2023	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2023	0	0	0	0	0	0	0	0	BEV	0	0	3	3
2023	0	35.19523	166.5326	99.91954	66.61303	1275.627	765.3764	510.2509	PHEV	21.11714	14.07809	3	8
2023	0	0.565797	2.126123	0	2.126123	6.974979	0	6.974979	BEV	0	0.565797	3	3
2023	0	0.552904	1.665889	0	1.665889	3.64997	0	3.64997	BEV	0	0.552904	4	3
2023	0	1.083744	3.513651	0	3.513651	8.55407	0	8.55407	BEV	0	1.083744	4	3
2023	0	4.19402	14.5587	0	14.5587	40.84721	0	40.84721	BEV	0	4.19402	4	3
2023	0	1.686114	6.432591	0	6.432591	21.78676	0	21.78676	BEV	0	1.686114	4	3
2023	0	0.538356	1.498685	0	1.498685	4.129025	0	4.129025	BEV	0	0.538356	1	3
2023	0	0.36102	1.046381	0	1.046381	2.084316	0	2.084316	BEV	0	0.36102	3	3
2023	0	0.973426	4.159799	0	4.159799	18.12812	0	18.12812	BEV	0	0.973426	3	3
2023	0	0	0	0	0	0	0	0	PHEV	0	0	3	8
2023	0	0.316136	0.916288	0	0.916288	2.115091	0	2.115091	BEV	0	0.316136	2	3
2023	0	2.85816	12.70518	0	12.70518	77.04498	0	77.04498	BEV	0	2.85816	2	3
2023	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2023	0	1.798436	6.552008	0	6.552008	26.52883	0	26.52883	BEV	0	1.798436	2	3
2023	0	5.185423	19.18845	0	19.18845	80.57784	0	80.57784	BEV	0	5.185423	2	3
2023	0	1.543522	5.800168	0	5.800168	18.79259	0	18.79259	BEV	0	1.543522	4	3
2023	0	1.604439	7.224017	0	7.224017	47.48571	0	47.48571	BEV	0	1.604439	2	3
2023	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2023	0	0.771425	2.456874	0	2.456874	7.739044	0	7.739044	BEV	0	0.771425	2	3
2023	0	0.313305	1.051676	0	1.051676	2.736585	0	2.736585	BEV	0	0.313305	4	3
2023	0	0.292033	0.946811	0	0.946811	3.046483	0	3.046483	BEV	0	0.292033	2	3
2023	0	0.399236	1.431614	0	1.431614	4.092394	0	4.092394	BEV	0	0.399236	3	3
2023	0	0.556394	2.313919	0	2.313919	9.191536	0	9.191536	BEV	0	0.556394	3	3
2023	0	0	0	0	0	0	0	0	PHEV	0	0	3	8
2023	0	0.689067	2.313005	0	2.313005	6.264637	0	6.264637	BEV	0	0.689067	3	3
2023	0	0.847025	2.357966	0	2.357966	4.85312	0	4.85312	BEV	0	0.847025	4	3
2023	0	2.348427	8.555718	0	8.555718	26.63095	0	26.63095	BEV	0	2.348427	4	3
2023	0	0.522256	1.513706	0	1.513706	4.198387	0	4.198387	BEV	0	0.522256	1	3
2023	0	0.478596	1.441999	0	1.441999	4.176235	0	4.176235	BEV	0	0.478596	1	3
2023	0	1.005274	4.065527	0	4.065527	20.7948	0	20.7948	BEV	0	1.005274	2	3
2023	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2023	0	0.900864	2.765896	0	2.765896	6.160715	0	6.160715	BEV	0	0.900864	3	3
2023	0	3.836451	13.09768	0	13.09768	34.98656	0	34.98656	BEV	0	3.836451	4	3
2023	0	3.391226	14.49193	0	14.49193	63.21284	0	63.21284	BEV	0	3.391226	4	3
2023	0	0	0	0	0	0	0	0	PHEV	0	0	4	8
2023	0	0.279919	1.035829	0	1.035829	3.289679	0	3.289679	BEV	0	0.279919	3	3
2023	0	0	0	0	0	0	0	0	BEV	0	0	4	3
2023	0	3.418081	15.78162	9.468972	6.312648	120.7589	72.45537	48.30358	PHEV	2.050848	1.367232	4	8

2023	0	0.497759	1.670836	0	1.670836	5.673377	0	5.673377	BEV	0	0.497759	2	3
2024	0	46583.36	223086.3	0	223086.3	1782201	0	1782201	BEV	0	46583.36	1	3
2024	0	42019.77	201231.4	108665	92566.46	1639349	885248.4	754100.5	PHEV	22690.68	19329.1	1	8
2024	0	60215.43	291819.6	0	291819.6	2406476	0	2406476	BEV	0	60215.43	1	3
2024	0	38916.94	188601.6	101844.9	86756.73	1576333	851219.7	725113.1	PHEV	21015.15	17901.79	1	8
2024	0	77422.57	379645.4	0	379645.4	3213498	0	3213498	BEV	0	77422.57	1	3
2024	0	37970.79	186191.7	98681.58	87510.08	1604112	850179.6	753932.8	PHEV	20124.52	17846.27	1	8
2024	0	94941.43	470989.2	0	470989.2	4104831	0	4104831	BEV	0	94941.43	1	3
2024	0	36201.69	179590.8	93387.21	86203.58	1578803	820977.3	757825.2	PHEV	18824.88	17376.81	1	8
2024	0	102230.7	513006.9	0	513006.9	4586921	0	4586921	BEV	0	102230.7	1	3
2024	0	38450.51	192949.7	98404.32	94545.33	1740048	887424.7	852623.7	PHEV	19609.76	18840.75	1	8
2024	0	109224.8	554361.8	0	554361.8	5075449	0	5075449	BEV	0	109224.8	1	3
2024	0	40475.38	205429.6	102714.8	102714.8	1895876	947938.2	947938.2	PHEV	20237.69	20237.69	1	8
2024	0	115521.2	592936.8	0	592936.8	5544537	0	5544537	BEV	0	115521.2	1	3
2024	0	42576.53	218533	107081.2	111451.8	2061337	1010055	1051282	PHEV	20862.5	21714.03	1	8
2024	0	107023.6	555452.6	0	555452.6	5295160	0	5295160	BEV	0	107023.6	1	3
2024	0	39272.53	203824.4	97835.72	105988.7	1960848	941207	1019641	PHEV	18850.81	20421.71	1	8
2024	0	3.066505	14.6854	0	14.6854	114.3353	0	114.3353	BEV	0	3.066505	2	3
2024	0	26.59724	127.3734	76.42402	50.94935	995.9743	597.5846	398.3897	PHEV	15.95834	10.6389	2	8
2024	0	1320.549	6475.376	0	6475.376	53248.48	0	53248.48	BEV	0	1320.549	2	3
2024	0	1014.088	4972.633	2955.165	2017.468	40961.88	24343.06	16618.82	PHEV	602.6583	411.4302	2	8
2024	0	2722.597	13506.37	0	13506.37	113966.2	0	113966.2	BEV	0	2722.597	2	3
2024	0	2096.894	10402.36	6122.53	4279.827	87938.29	51757.96	36180.32	PHEV	1234.172	862.7222	2	8
2024	0	3172.688	15920.96	0	15920.96	137940.2	0	137940.2	BEV	0	3172.688	2	3
2024	0	2330.427	11694.39	6816.157	4878.23	101434.9	59122.08	42312.86	PHEV	1358.306	972.1211	2	8
2024	0	3908.542	19837.49	0	19837.49	176363.1	0	176363.1	BEV	0	3908.542	2	3
2024	0	2488.101	12628.16	7288.251	5339.906	112428.6	64887.39	47541.26	PHEV	1435.99	1052.111	2	8
2024	0	4347.39	22313.89	0	22313.89	203464.8	0	203464.8	BEV	0	4347.39	2	3
2024	0	2729.558	14010.03	8005.731	6004.298	127989.1	73136.66	54852.49	PHEV	1559.747	1169.81	2	8
2024	0	4201.25	21804.49	0	21804.49	203818.6	0	203818.6	BEV	0	4201.25	2	3
2024	0	2737.843	14209.41	8038.464	6170.942	133147	75323.18	57823.85	PHEV	1548.837	1189.006	2	8
2024	0	1031.426	4998.558	2999.135	1999.423	40111.73	24067.04	16044.69	PHEV	618.8555	412.5704	3	8
2024	0	3611.387	17708.62	0	17708.62	114786.9	0	114786.9	BEV	0	3611.387	3	3
2024	0	3136.704	15380.98	9140.699	6240.285	126673.7	75280.39	51393.34	PHEV	1864.098	1272.605	3	8
2024	0	7443.172	36924.38	0	36924.38	280405.1	0	280405.1	BEV	0	7443.172	3	3
2024	0	5371.597	26647.64	15684.04	10963.6	225214.1	132554.6	92659.51	PHEV	3161.569	2210.029	3	8
2024	0	8517.721	42743.03	0	42743.03	312840.1	0	312840.1	BEV	0	8517.721	3	3
2024	0	8203.925	41168.36	23995.28	17173.09	357182.3	208186.2	148996	PHEV	4781.717	3422.209	3	8
2024	0	10621.7	53909.58	0	53909.58	404164.6	0	404164.6	BEV	0	10621.7	3	3
2024	0	8469.717	42987.37	24809.85	18177.52	382805.1	220933.2	161871.9	PHEV	4888.237	3581.48	3	8
2024	0	12755.8	65471.84	0	65471.84	504367.8	0	504367.8	BEV	0	12755.8	3	3
2024	0	9122.444	46822.86	26755.92	20066.94	427855.7	244489	183366.7	PHEV	5212.825	3909.619	3	8
2024	0	12428.78	64505.38	0	64505.38	504433.8	0	504433.8	BEV	0	12428.78	3	3
2024	0	8662.968	44960.8	25434.97	19525.83	421298.2	238334.4	182963.8	PHEV	4900.765	3762.203	3	8
2024	0	1473.329	7055.729	4233.437	2822.291	51968	31180.8	20787.2	PHEV	883.9974	589.3316	4	8
2024	0	3.223029	15.61964	0	15.61964	89.61814	0	89.61814	BEV	0	3.223029	4	3
2024	0	3944.099	19114.13	11468.48	7645.652	148531.5	89118.88	59412.59	PHEV	2366.46	1577.64	4	8

2024	0	1651.513	8098.278	0	8098.278	49568.43	0	49568.43	BEV	0	1651.513	4	3
2024	0	4296.897	21070.05	12521.63	8548.421	177223.7	105321.5	71902.19	PHEV	2553.585	1743.313	4	8
2024	0	3398.489	16859.36	0	16859.36	114194.7	0	114194.7	BEV	0	3398.489	4	3
2024	0	4576.9	22705.27	13363.67	9341.597	192588.8	113352.3	79236.53	PHEV	2693.833	1883.068	4	8
2024	0	5203.138	26110.03	0	26110.03	182266.2	0	182266.2	BEV	0	5203.138	4	3
2024	0	5049.883	25340.97	14770.16	10570.8	216623.1	126260.3	90362.8	PHEV	2943.36	2106.522	4	8
2024	0	5359.125	27199.81	0	27199.81	181000.6	0	181000.6	BEV	0	5359.125	4	3
2024	0	5234.907	26569.35	15334.31	11235.04	232898.6	134415.8	98482.84	PHEV	3021.289	2213.618	4	8
2024	0	5702.939	29271.53	0	29271.53	193588.8	0	193588.8	BEV	0	5702.939	4	3
2024	0	5358.721	27504.76	15717.01	11787.76	247174.9	141242.8	105932.1	PHEV	3062.126	2296.595	4	8
2024	0	5171.749	26841.38	0	26841.38	179452	0	179452	BEV	0	5171.749	4	3
2024	0	5950.18	30881.43	17470.07	13411.37	283810.8	160555.8	123255	PHEV	3366.102	2584.078	4	8
2024	0	30.59145	118.4602	0	118.4602	575.2217	0	575.2217	BEV	0	30.59145	1	3
2024	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2024	0	7846.615	35779.07	0	35779.07	246619.7	0	246619.7	BEV	0	7846.615	1	3
2024	0	8201.582	37397.66	22438.59	14959.06	259727.3	155836.4	103890.9	PHEV	4920.949	3280.633	1	8
2024	0	9796.316	45230.57	0	45230.57	321199.8	0	321199.8	BEV	0	9796.316	1	3
2024	0	12368.59	57107	34264.2	22842.8	408877.7	245326.6	163551.1	PHEV	7421.152	4947.435	1	8
2024	0	22834.42	106737	0	106737	782172.6	0	782172.6	BEV	0	22834.42	1	3
2024	0	10858.38	50756.3	30453.78	20302.52	375470.1	225282	150188	PHEV	6515.028	4343.352	1	8
2024	0	3583.253	16954.81	0	16954.81	91089.74	0	91089.74	BEV	0	3583.253	3	3
2024	0	326.1024	1543.012	925.8073	617.2049	11363.26	6817.959	4545.306	PHEV	195.6614	130.441	3	8
2024	0	23.45557	96.20278	0	96.20278	527.1767	0	527.1767	BEV	0	23.45557	1	3
2024	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2024	0	1624.802	7315.705	0	7315.705	49061.22	0	49061.22	BEV	0	1624.802	1	3
2024	0	3415.394	15377.88	9226.727	6151.152	103986.5	62391.89	41594.59	PHEV	2049.236	1366.158	1	8
2024	0	14953.23	70753.91	0	70753.91	533569.1	0	533569.1	BEV	0	14953.23	1	3
2024	0	10753.37	50881.52	30528.91	20352.61	388922.7	233353.6	155569.1	PHEV	6452.024	4301.349	1	8
2024	0	65.75599	258.396	0	258.396	1295.434	0	1295.434	BEV	0	65.75599	1	3
2024	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2024	0	2001.152	8895.58	0	8895.58	58004.59	0	58004.59	BEV	0	2001.152	1	3
2024	0	556.2614	2472.71	1483.626	989.084	16182.91	9709.746	6473.164	PHEV	333.7569	222.5046	1	8
2024	0	561.2624	2591.405	0	2591.405	18378.85	0	18378.85	BEV	0	561.2624	2	3
2024	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2024	0	188.8168	871.7862	0	871.7862	4448.549	0	4448.549	BEV	0	188.8168	3	3
2024	0	85.49035	394.7175	236.8305	157.887	2767.279	1660.367	1106.912	PHEV	51.29421	34.19614	3	8
2024	0	18.77425	73.77568	0	73.77568	262.9069	0	262.9069	BEV	0	18.77425	3	3
2024	0	0	0	0	0	0	0	0	PHEV	0	0	3	8
2024	0	92.59905	363.8791	0	363.8791	1309.22	0	1309.22	BEV	0	92.59905	4	3
2024	0	0	0	0	0	0	0	0	PHEV	0	0	4	8
2024	0	322.2414	1413.976	0	1413.976	8988.511	0	8988.511	BEV	0	322.2414	1	3
2024	0	34.35061	150.7284	90.43704	60.29136	957.3072	574.3843	382.9229	PHEV	20.61036	13.74024	1	8
2024	0	239.0192	1076.189	0	1076.189	7176.591	0	7176.591	BEV	0	239.0192	2	3
2024	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2024	0	31.69958	131.8316	0	131.8316	746.1876	0	746.1876	BEV	0	31.69958	1	3
2024	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2024	0	195.4737	835.3294	0	835.3294	4940.63	0	4940.63	BEV	0	195.4737	1	3

2024	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2024	0	166.2015	719.7604	0	719.7604	4497.341	0	4497.341	BEV	0	166.2015	1	3
2024	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2024	0	295.7767	1348.686	0	1348.686	9273.024	0	9273.024	BEV	0	295.7767	2	3
2024	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2024	0	18.54739	73.94678	0	73.94678	381.5527	0	381.5527	BEV	0	18.54739	1	3
2024	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2024	0	59.24151	249.7664	0	249.7664	1456.84	0	1456.84	BEV	0	59.24151	1	3
2024	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2024	0	37.12299	158.6399	0	158.6399	951.159	0	951.159	BEV	0	37.12299	2	3
2024	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2024	0	1.574993	6.550047	0	6.550047	28.32641	0	28.32641	BEV	0	1.574993	4	3
2024	0	0	0	0	0	0	0	0	PHEV	0	0	4	8
2024	0	3.373484	11.51711	0	11.51711	42.09228	0	42.09228	BEV	0	3.373484	1	3
2024	0	30.24191	130.9671	0	130.9671	598.9027	0	598.9027	BEV	0	30.24191	3	3
2024	0	0	0	0	0	0	0	0	PHEV	0	0	3	8
2024	0	15.76313	70.07073	0	70.07073	334.4028	0	334.4028	BEV	0	15.76313	3	3
2024	0	10.91294	48.51051	29.1063	19.4042	323.8249	194.2949	129.53	PHEV	6.547761	4.365174	3	8
2024	0	1.753793	8.197912	0	8.197912	42.56532	0	42.56532	BEV	0	1.753793	4	3
2024	0	0	0	0	0	0	0	0	PHEV	0	0	4	8
2024	0	2.669219	8.95982	0	8.95982	32.02027	0	32.02027	BEV	0	2.669219	1	3
2024	0	60.36818	230.307	0	230.307	1069.711	0	1069.711	BEV	0	60.36818	2	3
2024	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2024	0	25.81808	99.97614	0	99.97614	488.6239	0	488.6239	BEV	0	25.81808	2	3
2024	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2024	0	8.899503	37.01107	0	37.01107	209.2024	0	209.2024	BEV	0	8.899503	2	3
2024	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2024	0	4.783422	20.16724	0	20.16724	118.0931	0	118.0931	BEV	0	4.783422	2	3
2024	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2024	0	15.56791	67.41919	0	67.41919	419.1435	0	419.1435	BEV	0	15.56791	2	3
2024	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2024	0	13.57153	57.99604	0	57.99604	260.9926	0	260.9926	BEV	0	13.57153	3	3
2024	0	0	0	0	0	0	0	0	PHEV	0	0	3	8
2024	0	13.41856	61.1861	0	61.1861	306.201	0	306.201	BEV	0	13.41856	3	3
2024	0	10.26125	46.78937	28.07362	18.71575	319.5501	191.7301	127.8201	PHEV	6.156752	4.104502	3	8
2024	0	6.069847	23.15671	0	23.15671	80.46643	0	80.46643	BEV	0	6.069847	4	3
2024	0	0	0	0	0	0	0	0	PHEV	0	0	4	8
2024	0	15.01682	59.87073	0	59.87073	223.7532	0	223.7532	BEV	0	15.01682	4	3
2024	0	0	0	0	0	0	0	0	PHEV	0	0	4	8
2024	0	2.082559	8.541593	0	8.541593	34.68797	0	34.68797	BEV	0	2.082559	4	3
2024	0	0	0	0	0	0	0	0	PHEV	0	0	4	8
2024	0	82.63367	324.7189	0	324.7189	1607.05	0	1607.05	BEV	0	82.63367	2	3
2024	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2024	0	5.086717	20.5717	0	20.5717	109.3147	0	109.3147	BEV	0	5.086717	2	3
2024	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2024	0	3.054897	8.154252	0	8.154252	23.06366	0	23.06366	BEV	0	3.054897	1	3
2024	0	39.4865	148.3804	0	148.3804	668.2455	0	668.2455	BEV	0	39.4865	2	3

2024	0	3.852576	13.59416	0	13.59416	53.3655	0	53.3655	BEV	0	3.852576	1	3
2024	0	2.164543	8.25782	0	8.25782	29.94833	0	29.94833	BEV	0	2.164543	3	3
2024	0	0	0	0	0	0	0	0	PHEV	0	0	3	8
2024	0	1.170877	3.594908	0	3.594908	11.14208	0	11.14208	BEV	0	1.170877	2	3
2024	0	2.67253	11.42068	0	11.42068	50.11253	0	50.11253	BEV	0	2.67253	4	3
2024	0	0	0	0	0	0	0	0	PHEV	0	0	4	8
2024	0	7.192042	26.61386	0	26.61386	116.9476	0	116.9476	BEV	0	7.192042	1	3
2024	0	6.988942	26.66309	0	26.66309	124.407	0	124.407	BEV	0	6.988942	1	3
2024	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2024	0	20.55963	83.14728	0	83.14728	439.9214	0	439.9214	BEV	0	20.55963	1	3
2024	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2024	0	12.2837	45.45533	0	45.45533	197.8691	0	197.8691	BEV	0	12.2837	2	3
2024	0	1.891724	7.758889	0	7.758889	42.13737	0	42.13737	BEV	0	1.891724	2	3
2024	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2024	0	6.646851	24.21561	0	24.21561	102.4362	0	102.4362	BEV	0	6.646851	1	3
2024	0	9.181908	34.50332	0	34.50332	156.8229	0	156.8229	BEV	0	9.181908	1	3
2024	0	1.902929	5.188392	0	5.188392	13.90649	0	13.90649	BEV	0	1.902929	2	3
2024	0	2.920798	9.804301	0	9.804301	35.19294	0	35.19294	BEV	0	2.920798	2	3
2024	0	1.323007	4.516758	0	4.516758	16.44778	0	16.44778	BEV	0	1.323007	2	3
2024	0	1.361451	4.804002	0	4.804002	18.93049	0	18.93049	BEV	0	1.361451	2	3
2024	0	1.271572	4.34116	0	4.34116	11.45771	0	11.45771	BEV	0	1.271572	3	3
2024	0	8.265625	31.06015	0	31.06015	100.276	0	100.276	BEV	0	8.265625	3	3
2024	0	0.800514	3.099854	0	3.099854	10.70649	0	10.70649	BEV	0	0.800514	3	3
2024	0	0	0	0	0	0	0	0	PHEV	0	0	3	8
2024	0	20.52399	90.05802	0	90.05802	414.971	0	414.971	BEV	0	20.52399	3	3
2024	0	0	0	0	0	0	0	0	PHEV	0	0	3	8
2024	0	48.77081	219.5915	0	219.5915	1059.122	0	1059.122	BEV	0	48.77081	3	3
2024	0	12.50534	56.30552	33.78331	22.52221	380.9508	228.5705	152.3803	PHEV	7.503201	5.002134	3	8
2024	0	1.195435	3.396363	0	3.396363	6.979216	0	6.979216	BEV	0	1.195435	4	3
2024	0	0.848427	2.653505	0	2.653505	6.004937	0	6.004937	BEV	0	0.848427	4	3
2024	0	1.790444	6.317743	0	6.317743	17.81217	0	17.81217	BEV	0	1.790444	4	3
2024	0	1.379793	5.343015	0	5.343015	19.11537	0	19.11537	BEV	0	1.379793	4	3
2024	0	0	0	0	0	0	0	0	PHEV	0	0	4	8
2024	0	1.173996	3.537225	0	3.537225	10.77541	0	10.77541	BEV	0	1.173996	2	3
2024	0	1.136359	3.163419	0	3.163419	8.868427	0	8.868427	BEV	0	1.136359	1	3
2024	0	2.124598	6.157935	0	6.157935	17.51216	0	17.51216	BEV	0	2.124598	1	3
2024	0	2.633467	7.934585	0	7.934585	24.06154	0	24.06154	BEV	0	2.633467	1	3
2024	0	2.135653	6.557031	0	6.557031	20.26389	0	20.26389	BEV	0	2.135653	1	3
2024	0	1.588227	4.967274	0	4.967274	16.14414	0	16.14414	BEV	0	1.588227	1	3
2024	0	1.364805	4.346701	0	4.346701	13.72262	0	13.72262	BEV	0	1.364805	1	3
2024	0	1.318549	4.274921	0	4.274921	14.55202	0	14.55202	BEV	0	1.318549	1	3
2024	0	1.293188	4.266784	0	4.266784	14.48158	0	14.48158	BEV	0	1.293188	1	3
2024	0	1.677863	5.824366	0	5.824366	21.42319	0	21.42319	BEV	0	1.677863	1	3
2024	0	4.873314	17.47512	0	17.47512	71.72881	0	71.72881	BEV	0	4.873314	1	3
2024	0	0.78029	2.172186	0	2.172186	6.191614	0	6.191614	BEV	0	0.78029	2	3
2024	0	0.799579	2.317501	0	2.317501	6.721824	0	6.721824	BEV	0	0.799579	2	3
2024	0	0.813223	2.403634	0	2.403634	7.215844	0	7.215844	BEV	0	0.813223	2	3

2024	0	1.342276	4.659443	0	4.659443	17.79926	0	17.79926	BEV	0	1.342276	2	3
2024	0	0	0	0	0	0	0	0	BEV	0	0	2	3
2024	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2024	0	0	0	0	0	0	0	0	BEV	0	0	2	3
2024	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2024	0	0	0	0	0	0	0	0	BEV	0	0	3	3
2024	0	33.78346	157.9171	94.75025	63.16683	1167.035	700.2207	466.8138	PHEV	20.27008	13.51339	3	8
2024	0	0.498568	1.844932	0	1.844932	5.786772	0	5.786772	BEV	0	0.498568	3	3
2024	0	0.53032	1.567461	0	1.567461	3.323158	0	3.323158	BEV	0	0.53032	4	3
2024	0	0.995648	3.170991	0	3.170991	7.403642	0	7.403642	BEV	0	0.995648	4	3
2024	0	3.690876	12.60069	0	12.60069	33.85413	0	33.85413	BEV	0	3.690876	4	3
2024	0	1.43207	5.381363	0	5.381363	17.43356	0	17.43356	BEV	0	1.43207	4	3
2024	0	0.52289	1.425675	0	1.425675	3.994094	0	3.994094	BEV	0	0.52289	1	3
2024	0	0.342987	0.974463	0	0.974463	1.880078	0	1.880078	BEV	0	0.342987	3	3
2024	0	0.880726	3.713204	0	3.713204	15.50335	0	15.50335	BEV	0	0.880726	3	3
2024	0	0	0	0	0	0	0	0	PHEV	0	0	3	8
2024	0	0.284511	0.808328	0	0.808328	1.84662	0	1.84662	BEV	0	0.284511	2	3
2024	0	2.651804	11.63596	0	11.63596	69.82668	0	69.82668	BEV	0	2.651804	2	3
2024	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2024	0	1.566357	5.61677	0	5.61677	22.48775	0	22.48775	BEV	0	1.566357	2	3
2024	0	4.544392	16.55599	0	16.55599	68.71358	0	68.71358	BEV	0	4.544392	2	3
2024	0	1.301189	4.814997	0	4.814997	14.88373	0	14.88373	BEV	0	1.301189	4	3
2024	0	1.544308	6.864804	0	6.864804	44.92609	0	44.92609	BEV	0	1.544308	2	3
2024	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2024	0	0.684877	2.141993	0	2.141993	6.723259	0	6.723259	BEV	0	0.684877	2	3
2024	0	0.280155	0.924352	0	0.924352	2.314305	0	2.314305	BEV	0	0.280155	4	3
2024	0	0.26161	0.83319	0	0.83319	2.664522	0	2.664522	BEV	0	0.26161	2	3
2024	0	0.344592	1.215922	0	1.215922	3.318033	0	3.318033	BEV	0	0.344592	3	3
2024	0	0.47902	1.964696	0	1.964696	7.465691	0	7.465691	BEV	0	0.47902	3	3
2024	0	0	0	0	0	0	0	0	PHEV	0	0	3	8
2024	0	0.621311	2.049973	0	2.049973	5.329613	0	5.329613	BEV	0	0.621311	3	3
2024	0	0.847025	2.309439	0	2.309439	4.64806	0	4.64806	BEV	0	0.847025	4	3
2024	0	1.995495	7.155607	0	7.155607	21.30054	0	21.30054	BEV	0	1.995495	4	3
2024	0	0.491752	1.397122	0	1.397122	3.892982	0	3.892982	BEV	0	0.491752	1	3
2024	0	0.4481	1.324445	0	1.324445	3.832405	0	3.832405	BEV	0	0.4481	1	3
2024	0	0.902298	3.597382	0	3.597382	18.24361	0	18.24361	BEV	0	0.902298	2	3
2024	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2024	0	0.828067	2.49495	0	2.49495	5.348955	0	5.348955	BEV	0	0.828067	3	3
2024	0	3.399093	11.4098	0	11.4098	29.12366	0	29.12366	BEV	0	3.399093	4	3
2024	0	3.018173	12.72483	0	12.72483	53.12947	0	53.12947	BEV	0	3.018173	4	3
2024	0	0	0	0	0	0	0	0	PHEV	0	0	4	8
2024	0	0.245937	0.895989	0	0.895989	2.721967	0	2.721967	BEV	0	0.245937	3	3
2024	0	0	0	0	0	0	0	0	BEV	0	0	4	3
2024	0	3.209996	14.63697	8.782184	5.854789	108.164	64.89843	43.26562	PHEV	1.925998	1.283999	4	8
2024	0	0.444419	1.466329	0	1.466329	4.947382	0	4.947382	BEV	0	0.444419	2	3
2025	0	44039.82	208382.3	0	208382.3	1623272	0	1623272	BEV	0	44039.82	1	3
2025	0	39725.41	187967.9	101502.7	86465.24	1464062	790593.3	673468.4	PHEV	21451.72	18273.69	1	8

2025	0	57745.33	276540.7	0	276540.7	2214666	0	2214666	BEV	0	57745.33	1	3
2025	0	37320.53	178726.9	96512.51	82214.36	1431667	773100.2	658566.8	PHEV	20153.08	17167.44	1	8
2025	0	73882.92	358055.8	0	358055.8	2947415	0	2947415	BEV	0	73882.92	1	3
2025	0	36234.82	175603.4	93069.78	82533.58	1446676	766738.5	679937.9	PHEV	19204.45	17030.37	1	8
2025	0	91672.35	449519.9	0	449519.9	3801578	0	3801578	BEV	0	91672.35	1	3
2025	0	34955.17	171404.4	89130.3	82274.12	1450081	754041.9	696038.7	PHEV	18176.69	16778.48	1	8
2025	0	99276.37	492494.2	0	492494.2	4278040	0	4278040	BEV	0	99276.37	1	3
2025	0	37339.35	185234.5	94469.61	90764.92	1609797	820996.5	788800.6	PHEV	19043.07	18296.28	1	8
2025	0	105632.1	530075.7	0	530075.7	4725231	0	4725231	BEV	0	105632.1	1	3
2025	0	39144.04	196429.9	98214.94	98214.94	1751822	875910.9	875910.9	PHEV	19572.02	19572.02	1	8
2025	0	113443.1	575771.4	0	575771.4	5259110	0	5259110	BEV	0	113443.1	1	3
2025	0	41810.63	212206.5	103981.2	108225.3	1939187	950201.4	988985.2	PHEV	20487.21	21323.42	1	8
2025	0	117706.3	604152.3	0	604152.3	5641379	0	5641379	BEV	0	117706.3	1	3
2025	0	43192.56	221694.9	106413.5	115281.3	2070417	993800.1	1076617	PHEV	20732.43	22460.13	1	8
2025	0	109971.8	570753.9	0	570753.9	5440798	0	5440798	BEV	0	109971.8	1	3
2025	0	39809.12	206609.4	97106.4	109503	1968556	925221.4	1043335	PHEV	18710.29	21098.84	1	8
2025	0	2.943927	13.92972	0	13.92972	108.0699	0	108.0699	BEV	0	2.943927	2	3
2025	0	25.53406	120.819	72.49139	48.32759	911.8189	547.0913	364.7276	PHEV	15.32043	10.21362	2	8
2025	0	1270.317	6156.284	0	6156.284	49450.47	0	49450.47	BEV	0	1270.317	2	3
2025	0	975.5138	4727.593	2809.541	1918.052	37375.13	22211.5	15163.62	PHEV	579.7339	395.7799	2	8
2025	0	2655.957	13023.62	0	13023.62	107475.8	0	107475.8	BEV	0	2655.957	2	3
2025	0	2045.569	10030.55	5903.696	4126.855	81307.13	47855.05	33452.08	PHEV	1203.964	841.6056	2	8
2025	0	3118.76	15471.67	0	15471.67	131125.3	0	131125.3	BEV	0	3118.76	2	3
2025	0	2290.816	11364.37	6623.805	4740.566	95071.5	55413.1	39658.4	PHEV	1335.218	955.5975	2	8
2025	0	3836.935	19254.24	0	19254.24	167492.3	0	167492.3	BEV	0	3836.935	2	3
2025	0	2442.517	12256.87	7073.965	5182.905	105254	60746.61	44507.42	PHEV	1409.681	1032.836	2	8
2025	0	4260.285	21622.73	0	21622.73	193141.6	0	193141.6	BEV	0	4260.285	2	3
2025	0	2674.868	13576.08	7757.758	5818.319	119657.4	68375.66	51281.74	PHEV	1528.496	1146.372	2	8
2025	0	4567.177	23441.99	0	23441.99	214958.1	0	214958.1	BEV	0	4567.177	2	3
2025	0	2976.308	15276.52	8642.148	6634.377	138156.4	78157.06	59999.36	PHEV	1683.74	1292.568	2	8
2025	0	4606.845	23909.53	0	23909.53	224913.3	0	224913.3	BEV	0	4606.845	2	3
2025	0	2807.335	14570.07	8159.238	6410.83	135227.7	75727.52	59500.19	PHEV	1572.108	1235.227	2	8
2025	0	1004.873	4812.307	2887.384	1924.923	37260.35	22356.21	14904.14	PHEV	602.9239	401.9492	3	8
2025	0	3504.83	16985.32	0	16985.32	106162.8	0	106162.8	BEV	0	3504.83	3	3
2025	0	3044.153	14752.75	8767.351	5985.403	117217.3	69660.56	47556.73	PHEV	1809.096	1235.056	3	8
2025	0	7265.227	35625.4	0	35625.4	260957.7	0	260957.7	BEV	0	7265.227	3	3
2025	0	5243.178	25710.19	15132.28	10577.91	209603.9	123366.8	86237.02	PHEV	3085.985	2157.193	3	8
2025	0	8347.204	41409.14	0	41409.14	292404.5	0	292404.5	BEV	0	8347.204	3	3
2025	0	8039.69	39883.62	23246.45	16637.17	333813.4	194565.5	139247.9	PHEV	4685.991	3353.699	3	8
2025	0	10288.87	51630.9	0	51630.9	373485.9	0	373485.9	BEV	0	10288.87	3	3
2025	0	8204.323	41170.36	23761.18	17409.18	353645.9	204104.2	149541.7	PHEV	4735.066	3469.257	3	8
2025	0	12343.29	62647.36	0	62647.36	465792.4	0	465792.4	BEV	0	12343.29	3	3
2025	0	8827.428	44802.9	25601.66	19201.24	394982.8	225704.4	169278.3	PHEV	5044.244	3783.183	3	8
2025	0	13592.3	69765.34	0	69765.34	526847.5	0	526847.5	BEV	0	13592.3	3	3
2025	0	9473.951	48627.05	27509.01	21118.03	439882.7	248847.9	191034.8	PHEV	5359.55	4114.402	3	8
2025	0	12921.46	67062.36	0	67062.36	512950	0	512950	BEV	0	12921.46	3	3
2025	0	9496.742	49288.09	27601.33	21686.76	457452.6	256173.4	201279.1	PHEV	5318.175	4178.566	3	8

2025	0	1406.206	6653.715	3992.229	2661.486	47278.54	28367.12	18911.41	PHEV	843.7234	562.4823	4	8
2025	0	3.104508	14.8674	0	14.8674	82.20319	0	82.20319	BEV	0	3.104508	4	3
2025	0	3799.063	18193.6	10916.16	7277.439	136398.2	81838.91	54559.27	PHEV	2279.438	1519.625	4	8
2025	0	1584.272	7677.795	0	7677.795	45312.29	0	45312.29	BEV	0	1584.272	4	3
2025	0	4121.95	19976.04	11871.48	8104.566	162145	96360.48	65784.56	PHEV	2449.616	1672.334	4	8
2025	0	3319.004	16274.9	0	16274.9	106337.2	0	106337.2	BEV	0	3319.004	4	3
2025	0	4469.855	21918.16	12900.4	9017.756	179387.5	105582.3	73805.13	PHEV	2630.829	1839.026	4	8
2025	0	5071.543	25159.11	0	25159.11	169467.8	0	169467.8	BEV	0	5071.543	4	3
2025	0	4922.163	24418.06	14232.24	10185.82	201448	117415.4	84032.58	PHEV	2868.918	2053.245	4	8
2025	0	5188.029	26034.2	0	26034.2	167218.9	0	167218.9	BEV	0	5188.029	4	3
2025	0	5067.776	25430.76	14677.18	10753.58	215248.8	124229.3	91019.48	PHEV	2924.831	2142.945	4	8
2025	0	5568.948	28264.75	0	28264.75	180500.6	0	180500.6	BEV	0	5568.948	4	3
2025	0	5232.817	26558.75	15176.43	11382.32	230502.9	131716	98786.96	PHEV	2990.181	2242.636	4	8
2025	0	5905.421	30310.81	0	30310.81	195769.4	0	195769.4	BEV	0	5905.421	4	3
2025	0	6794.281	34873.07	19728.2	15144.88	310284.7	175532.5	134752.2	PHEV	3843.622	2950.659	4	8
2025	0	5652.684	29337.43	0	29337.43	193825.7	0	193825.7	BEV	0	5652.684	4	3
2025	0	6201.096	32183.69	18022.87	14160.82	293000.4	164080.2	128920.2	PHEV	3472.614	2728.482	4	8
2025	0	25.05962	95.60347	0	95.60347	460.5185	0	460.5185	BEV	0	25.05962	1	3
2025	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2025	0	7208.453	32456.2	0	32456.2	222425.6	0	222425.6	BEV	0	7208.453	1	3
2025	0	7534.55	33924.46	20354.68	13569.79	226037.2	135622.3	90414.89	PHEV	4520.73	3013.82	1	8
2025	0	9157.349	41755.77	0	41755.77	294938.9	0	294938.9	BEV	0	9157.349	1	3
2025	0	11561.84	52719.8	31631.88	21087.92	362246.8	217348.1	144898.7	PHEV	6937.105	4624.737	1	8
2025	0	21369.81	98666.53	0	98666.53	719571.2	0	719571.2	BEV	0	21369.81	1	3
2025	0	10161.92	46918.59	28151.15	18767.43	333189.4	199913.7	133275.8	PHEV	6097.15	4064.767	1	8
2025	0	3454.307	16146.78	0	16146.78	83437.34	0	83437.34	BEV	0	3454.307	3	3
2025	0	314.3673	1469.476	881.6853	587.7902	10426.02	6255.615	4170.41	PHEV	188.6204	125.7469	3	8
2025	0	19.48944	78.81919	0	78.81919	428.4806	0	428.4806	BEV	0	19.48944	1	3
2025	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2025	0	1489.72	6622.146	0	6622.146	44134.87	0	44134.87	BEV	0	1489.72	1	3
2025	0	3131.445	13919.99	8351.996	5567.997	90270.08	54162.05	36108.03	PHEV	1878.867	1252.578	1	8
2025	0	14199.02	66371.76	0	66371.76	498435.5	0	498435.5	BEV	0	14199.02	1	3
2025	0	10210.99	47730.17	28638.1	19092.07	350445.3	210267.2	140178.1	PHEV	6126.596	4084.398	1	8
2025	0	53.43898	206.9334	0	206.9334	1028.976	0	1028.976	BEV	0	53.43898	1	3
2025	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2025	0	1797.605	7887.785	0	7887.785	51101.09	0	51101.09	BEV	0	1797.605	1	3
2025	0	499.6815	2192.572	1315.543	877.029	13753.04	8251.823	5501.215	PHEV	299.8089	199.8726	1	8
2025	0	534.1596	2435.666	0	2435.666	17180.57	0	17180.57	BEV	0	534.1596	2	3
2025	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2025	0	177.5789	809.726	0	809.726	3970.935	0	3970.935	BEV	0	177.5789	3	3
2025	0	80.40217	366.6186	219.9712	146.6474	2477.014	1486.209	990.8057	PHEV	48.2413	32.16087	3	8
2025	0	16.00589	61.98009	0	61.98009	211.1296	0	211.1296	BEV	0	16.00589	3	3
2025	0	0	0	0	0	0	0	0	PHEV	0	0	3	8
2025	0	79.91324	309.4504	0	309.4504	1066.303	0	1066.303	BEV	0	79.91324	4	3
2025	0	0	0	0	0	0	0	0	PHEV	0	0	4	8
2025	0	285.9088	1238.171	0	1238.171	7821.461	0	7821.461	BEV	0	285.9088	1	3
2025	0	30.47758	131.9878	79.19265	52.7951	803.133	481.8798	321.2532	PHEV	18.28655	12.19103	1	8

2025	0	225.4071	1001.987	0	1001.987	6637.18	0	6637.18	BEV	0	225.4071	2	3
2025	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2025	0	26.65209	109.3133	0	109.3133	613.9734	0	613.9734	BEV	0	26.65209	1	3
2025	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2025	0	170.0253	716.8386	0	716.8386	4204.032	0	4204.032	BEV	0	170.0253	1	3
2025	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2025	0	146.056	624.1499	0	624.1499	3876.464	0	3876.464	BEV	0	146.056	1	3
2025	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2025	0	277.6766	1250.244	0	1250.244	8543.513	0	8543.513	BEV	0	277.6766	2	3
2025	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2025	0	15.09447	59.31552	0	59.31552	303.4124	0	303.4124	BEV	0	15.09447	1	3
2025	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2025	0	50.67054	210.7276	0	210.7276	1219.833	0	1219.833	BEV	0	50.67054	1	3
2025	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2025	0	34.2894	144.5665	0	144.5665	860.1252	0	860.1252	BEV	0	34.2894	2	3
2025	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2025	0	1.43141	5.870915	0	5.870915	24.46224	0	24.46224	BEV	0	1.43141	4	3
2025	0	0	0	0	0	0	0	0	PHEV	0	0	4	8
2025	0	3.07	10.30513	0	10.30513	37.33328	0	37.33328	BEV	0	3.07	1	3
2025	0	26.95731	115.1983	0	115.1983	506.7718	0	506.7718	BEV	0	26.95731	3	3
2025	0	0	0	0	0	0	0	0	PHEV	0	0	3	8
2025	0	14.44173	63.36945	0	63.36945	290.7846	0	290.7846	BEV	0	14.44173	3	3
2025	0	9.998122	43.87116	26.3227	17.54846	282.9851	169.7911	113.194	PHEV	5.998873	3.999249	3	8
2025	0	1.672395	7.721616	0	7.721616	38.55002	0	38.55002	BEV	0	1.672395	4	3
2025	0	0	0	0	0	0	0	0	PHEV	0	0	4	8
2025	0	2.465893	8.136043	0	8.136043	28.81282	0	28.81282	BEV	0	2.465893	1	3
2025	0	53.43729	200.804	0	200.804	923.2456	0	923.2456	BEV	0	53.43729	2	3
2025	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2025	0	20.18278	76.99811	0	76.99811	371.7146	0	371.7146	BEV	0	20.18278	2	3
2025	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2025	0	8.095114	33.20203	0	33.20203	186.0488	0	186.0488	BEV	0	8.095114	2	3
2025	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2025	0	4.424518	18.4006	0	18.4006	106.8479	0	106.8479	BEV	0	4.424518	2	3
2025	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2025	0	14.49829	61.95639	0	61.95639	382.7657	0	382.7657	BEV	0	14.49829	2	3
2025	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2025	0	12.46707	52.56204	0	52.56204	226.9655	0	226.9655	BEV	0	12.46707	3	3
2025	0	0	0	0	0	0	0	0	PHEV	0	0	3	8
2025	0	12.46335	56.11649	0	56.11649	269.9441	0	269.9441	BEV	0	12.46335	3	3
2025	0	9.530799	42.91261	25.74757	17.16505	282.7588	169.6553	113.1035	PHEV	5.718479	3.81232	3	8
2025	0	3.384333	12.71748	0	12.71748	42.20246	0	42.20246	BEV	0	3.384333	4	3
2025	0	0	0	0	0	0	0	0	PHEV	0	0	4	8
2025	0	11.5199	45.26883	0	45.26883	161.3287	0	161.3287	BEV	0	11.5199	4	3
2025	0	0	0	0	0	0	0	0	PHEV	0	0	4	8
2025	0	1.875654	7.585519	0	7.585519	29.49917	0	29.49917	BEV	0	1.875654	4	3
2025	0	0	0	0	0	0	0	0	PHEV	0	0	4	8
2025	0	69.64637	269.6937	0	269.6937	1317.533	0	1317.533	BEV	0	69.64637	2	3

2025	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2025	0	4.569592	18.21855	0	18.21855	95.86483	0	95.86483	BEV	0	4.569592	2	3
2025	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2025	0	34.04442	125.98	0	125.98	561.1443	0	561.1443	BEV	0	34.04442	2	3
2025	0	3.349475	11.62703	0	11.62703	45.17375	0	45.17375	BEV	0	3.349475	1	3
2025	0	1.925606	7.235946	0	7.235946	25.20196	0	25.20196	BEV	0	1.925606	3	3
2025	0	0	0	0	0	0	0	0	PHEV	0	0	3	8
2025	0	1.022956	3.082147	0	3.082147	9.522178	0	9.522178	BEV	0	1.022956	2	3
2025	0	2.407539	10.15035	0	10.15035	42.70053	0	42.70053	BEV	0	2.407539	4	3
2025	0	0	0	0	0	0	0	0	PHEV	0	0	4	8
2025	0	6.010278	21.89646	0	21.89646	95.30686	0	95.30686	BEV	0	6.010278	1	3
2025	0	5.722855	21.50506	0	21.50506	99.41485	0	99.41485	BEV	0	5.722855	1	3
2025	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2025	0	16.84798	67.17137	0	67.17137	352.3399	0	352.3399	BEV	0	16.84798	1	3
2025	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2025	0	10.43555	38.0185	0	38.0185	163.5566	0	163.5566	BEV	0	10.43555	2	3
2025	0	1.720573	6.95834	0	6.95834	37.47028	0	37.47028	BEV	0	1.720573	2	3
2025	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2025	0	5.658317	20.29004	0	20.29004	84.99611	0	84.99611	BEV	0	5.658317	1	3
2025	0	7.601385	28.12862	0	28.12862	126.7055	0	126.7055	BEV	0	7.601385	1	3
2025	0	1.722243	4.597081	0	4.597081	12.52339	0	12.52339	BEV	0	1.722243	2	3
2025	0	2.707881	8.934463	0	8.934463	31.78227	0	31.78227	BEV	0	2.707881	2	3
2025	0	1.211183	4.065601	0	4.065601	14.68497	0	14.68497	BEV	0	1.211183	2	3
2025	0	1.198031	4.158726	0	4.158726	16.22702	0	16.22702	BEV	0	1.198031	2	3
2025	0	1.159122	3.890849	0	3.890849	9.820605	0	9.820605	BEV	0	1.159122	3	3
2025	0	7.24222	26.79954	0	26.79954	82.68423	0	82.68423	BEV	0	7.24222	3	3
2025	0	0.693918	2.647324	0	2.647324	8.742002	0	8.742002	BEV	0	0.693918	3	3
2025	0	0	0	0	0	0	0	0	PHEV	0	0	3	8
2025	0	18.47346	80.00211	0	80.00211	353.9031	0	353.9031	BEV	0	18.47346	3	3
2025	0	0	0	0	0	0	0	0	PHEV	0	0	3	8
2025	0	45.03777	200.2033	0	200.2033	926.8384	0	926.8384	BEV	0	45.03777	3	3
2025	0	11.54815	51.33417	30.8005	20.53367	335.9841	201.5904	134.3936	PHEV	6.928888	4.619259	3	8
2025	0	1.194813	3.326143	0	3.326143	6.674598	0	6.674598	BEV	0	1.194813	4	3
2025	0	0.804416	2.469775	0	2.469775	5.385151	0	5.385151	BEV	0	0.804416	4	3
2025	0	1.555753	5.400487	0	5.400487	14.54722	0	14.54722	BEV	0	1.555753	4	3
2025	0	0.857474	3.271296	0	3.271296	11.17042	0	11.17042	BEV	0	0.857474	4	3
2025	0	0	0	0	0	0	0	0	PHEV	0	0	4	8
2025	0	1.072599	3.170271	0	3.170271	9.676643	0	9.676643	BEV	0	1.072599	2	3
2025	0	1.09319	2.980616	0	2.980616	8.467434	0	8.467434	BEV	0	1.09319	1	3
2025	0	2.018783	5.735583	0	5.735583	16.41817	0	16.41817	BEV	0	2.018783	1	3
2025	0	2.503151	7.398539	0	7.398539	22.46559	0	22.46559	BEV	0	2.503151	1	3
2025	0	2.052838	6.18516	0	6.18516	19.09123	0	19.09123	BEV	0	2.052838	1	3
2025	0	1.534601	4.71164	0	4.71164	15.29142	0	15.29142	BEV	0	1.534601	1	3
2025	0	1.272224	3.978958	0	3.978958	12.47786	0	12.47786	BEV	0	1.272224	1	3
2025	0	1.230257	3.918184	0	3.918184	13.26705	0	13.26705	BEV	0	1.230257	1	3
2025	0	1.183954	3.838546	0	3.838546	12.93769	0	12.93769	BEV	0	1.183954	1	3
2025	0	1.496548	5.109228	0	5.109228	18.58032	0	18.58032	BEV	0	1.496548	1	3

2025	0	4.17821	14.74319	0	14.74319	59.95464	0	59.95464	BEV	0	4.17821	1	3
2025	0	0.70175	1.913343	0	1.913343	5.535929	0	5.535929	BEV	0	0.70175	2	3
2025	0	0.712208	2.023461	0	2.023461	5.912043	0	5.912043	BEV	0	0.712208	2	3
2025	0	0.729384	2.114046	0	2.114046	6.378475	0	6.378475	BEV	0	0.729384	2	3
2025	0	1.219766	4.164295	0	4.164295	15.74533	0	15.74533	BEV	0	1.219766	2	3
2025	0	0	0	0	0	0	0	0	BEV	0	0	2	3
2025	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2025	0	0	0	0	0	0	0	0	BEV	0	0	2	3
2025	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2025	0	0	0	0	0	0	0	0	BEV	0	0	3	3
2025	0	31.69571	146.3423	87.80535	58.5369	1044.555	626.7328	417.8219	PHEV	19.01742	12.67828	3	8
2025	0	0.43983	1.602376	0	1.602376	4.806867	0	4.806867	BEV	0	0.43983	3	3
2025	0	0.529502	1.534709	0	1.534709	3.157716	0	3.157716	BEV	0	0.529502	4	3
2025	0	0.929226	2.90621	0	2.90621	6.51903	0	6.51903	BEV	0	0.929226	4	3
2025	0	3.257036	10.93296	0	10.93296	28.14809	0	28.14809	BEV	0	3.257036	4	3
2025	0	1.209784	4.476759	0	4.476759	13.87703	0	13.87703	BEV	0	1.209784	4	3
2025	0	0.504664	1.347068	0	1.347068	3.849177	0	3.849177	BEV	0	0.504664	1	3
2025	0	0.328038	0.913199	0	0.913199	1.714179	0	1.714179	BEV	0	0.328038	3	3
2025	0	0.788205	3.27797	0	3.27797	13.11602	0	13.11602	BEV	0	0.788205	3	3
2025	0	0	0	0	0	0	0	0	PHEV	0	0	3	8
2025	0	0.255054	0.710025	0	0.710025	1.61219	0	1.61219	BEV	0	0.255054	2	3
2025	0	2.466291	10.68064	0	10.68064	63.38546	0	63.38546	BEV	0	2.466291	2	3
2025	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2025	0	1.380701	4.871929	0	4.871929	19.27726	0	19.27726	BEV	0	1.380701	2	3
2025	0	3.96727	14.22615	0	14.22615	58.31496	0	58.31496	BEV	0	3.96727	2	3
2025	0	1.122601	4.089827	0	4.089827	12.06545	0	12.06545	BEV	0	1.122601	4	3
2025	0	1.477661	6.483886	0	6.483886	42.18366	0	42.18366	BEV	0	1.477661	2	3
2025	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2025	0	0.617983	1.897373	0	1.897373	5.93981	0	5.93981	BEV	0	0.617983	2	3
2025	0	0.258766	0.838954	0	0.838954	2.024173	0	2.024173	BEV	0	0.258766	4	3
2025	0	0.233334	0.729767	0	0.729767	2.320133	0	2.320133	BEV	0	0.233334	2	3
2025	0	0.300052	1.04157	0	1.04157	2.714525	0	2.714525	BEV	0	0.300052	3	3
2025	0	0.406389	1.643518	0	1.643518	5.973495	0	5.973495	BEV	0	0.406389	3	3
2025	0	0	0	0	0	0	0	0	PHEV	0	0	3	8
2025	0	0.56437	1.829767	0	1.829767	4.570661	0	4.570661	BEV	0	0.56437	3	3
2025	0	0.847025	2.260913	0	2.260913	4.469855	0	4.469855	BEV	0	0.847025	4	3
2025	0	1.717047	6.058756	0	6.058756	17.25501	0	17.25501	BEV	0	1.717047	4	3
2025	0	0.465416	1.295633	0	1.295633	3.636246	0	3.636246	BEV	0	0.465416	1	3
2025	0	0.4203	1.218197	0	1.218197	3.528335	0	3.528335	BEV	0	0.4203	1	3
2025	0	0.804151	3.160007	0	3.160007	15.87263	0	15.87263	BEV	0	0.804151	2	3
2025	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2025	0	0.792015	2.34095	0	2.34095	4.843657	0	4.843657	BEV	0	0.792015	3	3
2025	0	2.996873	9.887973	0	9.887973	24.14522	0	24.14522	BEV	0	2.996873	4	3
2025	0	2.633587	10.95251	0	10.95251	43.77356	0	43.77356	BEV	0	2.633587	4	3
2025	0	0	0	0	0	0	0	0	PHEV	0	0	4	8
2025	0	0.218681	0.784162	0	0.784162	2.280343	0	2.280343	BEV	0	0.218681	3	3
2025	0	0	0	0	0	0	0	0	BEV	0	0	4	3

2025	0	2.984368	13.43718	8.062305	5.37487	95.98644	57.59186	38.39457	PHEV	1.790621	1.193747	4	8
2025	0	0.39533	1.281714	0	1.281714	4.295987	0	4.295987	BEV	0	0.39533	2	3
2026	0	42062.85	196618.2	0	196618.2	1473101	0	1473101	BEV	0	42062.85	1	3
2026	0	37942.12	177356.3	95772.38	81583.88	1328102	717175.3	610927.1	PHEV	20488.74	17453.37	1	8
2026	0	54986.36	260177.9	0	260177.9	2004421	0	2004421	BEV	0	54986.36	1	3
2026	0	35537.42	168151.7	90801.91	77349.78	1295397	699514.2	595882.5	PHEV	19190.21	16347.21	1	8
2026	0	71364.48	341762.3	0	341762.3	2706809	0	2706809	BEV	0	71364.48	1	3
2026	0	34999.68	167612.4	88834.59	78777.85	1328071	703877.8	624193.6	PHEV	18549.83	16449.85	1	8
2026	0	88118.18	427043.6	0	427043.6	3476367	0	3476367	BEV	0	88118.18	1	3
2026	0	33599.95	162834.1	84673.72	78160.36	1325818	689425.5	636392.7	PHEV	17471.97	16127.97	1	8
2026	0	96557.19	473473	0	473473	3959679	0	3959679	BEV	0	96557.19	1	3
2026	0	36316.62	178080.4	90820.99	87259.39	1489743	759768.8	729973.9	PHEV	18521.48	17795.15	1	8
2026	0	103330	512603.4	0	512603.4	4401554	0	4401554	BEV	0	103330	1	3
2026	0	38290.93	189955.2	94977.59	94977.59	1631644	815821.9	815821.9	PHEV	19145.47	19145.47	1	8
2026	0	110518.7	554597.1	0	554597.1	4885496	0	4885496	BEV	0	110518.7	1	3
2026	0	40732.8	204402.5	100157.2	104245.3	1801577	882772.7	918804.2	PHEV	19959.07	20773.73	1	8
2026	0	116425.1	590906.1	0	590906.1	5332798	0	5332798	BEV	0	116425.1	1	3
2026	0	42722.41	216834.2	104080.4	112753.8	1957954	939817.9	1018136	PHEV	20506.76	22215.65	1	8
2026	0	121796.2	625144.7	0	625144.7	5768465	0	5768465	BEV	0	121796.2	1	3
2026	0	44089.47	226298.5	106360.3	119938.2	2088577	981631.2	1106946	PHEV	20722.05	23367.42	1	8
2026	0	93389.28	484690.3	0	484690.3	4560173	0	4560173	BEV	0	93389.28	1	3
2026	0	38837.86	201568.5	91512.09	110056.4	1895477	860546.4	1034930	PHEV	17632.39	21205.47	1	8
2026	0	2.853003	13.33605	0	13.33605	99.51922	0	99.51922	BEV	0	2.853003	2	3
2026	0	24.74543	115.6698	69.40188	46.26792	841.8079	505.0847	336.7232	PHEV	14.84726	9.898173	2	8
2026	0	1228.796	5884.667	0	5884.667	45527.63	0	45527.63	BEV	0	1228.796	2	3
2026	0	943.6289	4519.011	2685.584	1833.427	34434.58	20463.98	13970.6	PHEV	560.7852	382.8437	2	8
2026	0	2571.51	12462.21	0	12462.21	99044.91	0	99044.91	BEV	0	2571.51	2	3
2026	0	1980.53	9598.164	5649.205	3948.959	74962.07	44120.53	30841.54	PHEV	1165.683	814.8467	2	8
2026	0	3062.178	15015.54	0	15015.54	122536.1	0	122536.1	BEV	0	3062.178	2	3
2026	0	2249.255	11029.33	6428.526	4600.808	88850.76	51787.3	37063.46	PHEV	1310.994	938.2607	2	8
2026	0	3796.285	18832.76	0	18832.76	157730.1	0	157730.1	BEV	0	3796.285	2	3
2026	0	2416.641	11988.57	6919.116	5069.451	99106.57	57198.65	41907.92	PHEV	1394.747	1021.894	2	8
2026	0	4209.579	21124.21	0	21124.21	181673.3	0	181673.3	BEV	0	4209.579	2	3
2026	0	2643.031	13263.07	7578.9	5684.175	112523.3	64299.01	48224.25	PHEV	1510.304	1132.728	2	8
2026	0	4505.068	22865.11	0	22865.11	201914.8	0	201914.8	BEV	0	4505.068	2	3
2026	0	2935.833	14900.59	8429.475	6471.112	129725.1	73387.36	56337.77	PHEV	1660.843	1274.99	2	8
2026	0	5041.401	25876.05	0	25876.05	234429.2	0	234429.2	BEV	0	5041.401	2	3
2026	0	3072.146	15768.44	8830.324	6938.112	140896.1	78901.82	61994.28	PHEV	1720.402	1351.744	2	8
2026	0	4545.156	23589.36	0	23589.36	218914.4	0	218914.4	BEV	0	4545.156	2	3
2026	0	2865.639	14872.67	8179.968	6692.701	136193.9	74906.63	61287.24	PHEV	1576.102	1289.538	2	8
2026	0	977.2695	4624.127	2774.476	1849.651	34514.99	20709	13806	PHEV	586.3617	390.9078	3	8
2026	0	3437.006	16459.72	0	16459.72	99218.35	0	99218.35	BEV	0	3437.006	3	3
2026	0	2985.243	14296.24	8496.05	5800.188	109450	65044.58	44405.43	PHEV	1774.087	1211.156	3	8
2026	0	7097.35	34395.6	0	34395.6	242840.3	0	242840.3	BEV	0	7097.35	3	3
2026	0	5122.024	24822.66	14609.91	10212.75	194946.4	114739.9	80206.53	PHEV	3014.677	2107.347	3	8
2026	0	8201.192	40214.96	0	40214.96	273800.2	0	273800.2	BEV	0	8201.192	3	3
2026	0	7899.058	38733.43	22576.05	16157.37	312182.6	181957.9	130224.7	PHEV	4604.022	3295.036	3	8

2026	0	10149.33	50349.18	0	50349.18	351227.3	0	351227.3	BEV	0	10149.33	3	3
2026	0	8093.049	40148.32	23171.32	16977.01	332061.5	191646.9	140414.6	PHEV	4670.846	3422.204	3	8
2026	0	12035.81	60397.24	0	60397.24	433042.2	0	433042.2	BEV	0	12035.81	3	3
2026	0	8607.531	43193.71	24682.12	18511.59	366565.9	209466.2	157099.7	PHEV	4918.589	3688.942	3	8
2026	0	13239.75	67197.28	0	67197.28	489508.9	0	489508.9	BEV	0	13239.75	3	3
2026	0	9228.217	46837.08	26496.4	20340.67	407872.1	230739.1	177133	PHEV	5220.534	4007.683	3	8
2026	0	14226.91	73022.58	0	73022.58	539085.7	0	539085.7	BEV	0	14226.91	3	3
2026	0	10456.19	53668.61	30054.42	23614.19	479678.1	268619.7	211058.4	PHEV	5855.468	4600.725	3	8
2026	0	14656.24	76065.9	0	76065.9	591984.7	0	591984.7	BEV	0	14656.24	3	3
2026	0	9104.706	47253.43	25989.38	21264.04	432715	237993.2	194721.7	PHEV	5007.589	4097.118	3	8
2026	0	1358.56	6350.437	3810.262	2540.175	43493.82	26096.29	17397.53	PHEV	815.1357	543.4238	4	8
2026	0	2.982489	14.11218	0	14.11218	75.25099	0	75.25099	BEV	0	2.982489	4	3
2026	0	3649.745	17269.43	10361.66	6907.77	124784.6	74870.79	49913.86	PHEV	2189.847	1459.898	4	8
2026	0	1536.035	7356.024	0	7356.024	41879.11	0	41879.11	BEV	0	1536.035	4	3
2026	0	3996.446	19138.86	11373.95	7764.908	149665.6	88944.14	60721.48	PHEV	2375.031	1621.415	4	8
2026	0	3204.83	15531.44	0	15531.44	97888.46	0	97888.46	BEV	0	3204.83	4	3
2026	0	4316.091	20916.9	12311.09	8605.81	164935.8	97076.52	67859.32	PHEV	2540.328	1775.763	4	8
2026	0	4985.525	24446.77	0	24446.77	158847.4	0	158847.4	BEV	0	4985.525	4	3
2026	0	4838.679	23726.7	13829.28	9897.424	188560.9	109904.1	78656.85	PHEV	2820.258	2018.42	4	8
2026	0	5090.165	25251.49	0	25251.49	156602.8	0	156602.8	BEV	0	5090.165	4	3
2026	0	4972.181	24666.19	14235.92	10430.28	201128.8	116080.1	85048.77	PHEV	2869.659	2102.522	4	8
2026	0	5426.794	27232.36	0	27232.36	168018.4	0	168018.4	BEV	0	5426.794	4	3
2026	0	5099.244	25588.67	14622.1	10966.57	214027.7	122301.6	91726.17	PHEV	2913.854	2185.39	4	8
2026	0	5804.42	29459.87	0	29459.87	183931.9	0	183931.9	BEV	0	5804.42	4	3
2026	0	6678.078	33894.05	19174.35	14719.7	290644.5	164421.7	126222.7	PHEV	3777.884	2900.194	4	8
2026	0	6498.526	33355.05	0	33355.05	213138.4	0	213138.4	BEV	0	6498.526	4	3
2026	0	7129.001	36591.09	20491.01	16100.08	321765.5	180188.7	141576.8	PHEV	3992.24	3136.76	4	8
2026	0	5351.594	27774.77	0	27774.77	180448.5	0	180448.5	BEV	0	5351.594	4	3
2026	0	5551.544	28812.51	15846.88	12965.63	258889.9	142389.4	116500.4	PHEV	3053.349	2498.195	4	8
2026	0	20.66104	77.63903	0	77.63903	358.7906	0	358.7906	BEV	0	20.66104	1	3
2026	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2026	0	6639.472	29513.98	0	29513.98	194440.8	0	194440.8	BEV	0	6639.472	1	3
2026	0	6939.83	30849.14	18509.48	12339.66	197263.9	118358.3	78905.56	PHEV	4163.898	2775.932	1	8
2026	0	8448.454	38039.33	0	38039.33	258290.1	0	258290.1	BEV	0	8448.454	1	3
2026	0	10666.81	48027.53	28816.52	19211.01	316661.2	189996.7	126664.5	PHEV	6400.086	4266.724	1	8
2026	0	20105.51	91677.3	0	91677.3	642821.7	0	642821.7	BEV	0	20105.51	1	3
2026	0	9560.709	43595.02	26157.01	17438.01	297043.7	178226.2	118817.5	PHEV	5736.425	3824.284	1	8
2026	0	3273.404	15113.63	0	15113.63	75175.44	0	75175.44	BEV	0	3273.404	3	3
2026	0	297.9038	1375.452	825.2709	550.1806	9399.583	5639.75	3759.833	PHEV	178.7423	119.1615	3	8
2026	0	16.08461	64.12787	0	64.12787	334.5006	0	334.5006	BEV	0	16.08461	1	3
2026	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2026	0	1347.334	5912.02	0	5912.02	37857.53	0	37857.53	BEV	0	1347.334	1	3
2026	0	2832.145	12427.28	7456.369	4970.913	77295.69	46377.41	30918.28	PHEV	1699.287	1132.858	1	8
2026	0	13364.94	61707.28	0	61707.28	445559.2	0	445559.2	BEV	0	13364.94	1	3
2026	0	9611.182	44375.79	26625.47	17750.31	312661	187596.6	125064.4	PHEV	5766.709	3844.473	1	8
2026	0	43.76412	166.9619	0	166.9619	796.5389	0	796.5389	BEV	0	43.76412	1	3
2026	0	0	0	0	0	0	0	0	PHEV	0	0	1	8

2026	0	1614.055	6989.906	0	6989.906	43524.81	0	43524.81	BEV	0	1614.055	1	3
2026	0	448.6598	1942.988	1165.793	777.1954	11691.06	7014.634	4676.422	PHEV	269.1959	179.4639	1	8
2026	0	503.1996	2265.666	0	2265.666	15357.4	0	15357.4	BEV	0	503.1996	2	3
2026	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2026	0	165.1702	743.6821	0	743.6821	3508.457	0	3508.457	BEV	0	165.1702	3	3
2026	0	74.7839	336.716	202.0296	134.6864	2193.79	1316.274	877.5161	PHEV	44.87034	29.91356	3	8
2026	0	13.94171	53.18819	0	53.18819	173.5154	0	173.5154	BEV	0	13.94171	3	3
2026	0	0	0	0	0	0	0	0	PHEV	0	0	3	8
2026	0	68.97033	263.1246	0	263.1246	869.1308	0	869.1308	BEV	0	68.97033	4	3
2026	0	0	0	0	0	0	0	0	PHEV	0	0	4	8
2026	0	252.07	1077.186	0	1077.186	6541.362	0	6541.362	BEV	0	252.07	1	3
2026	0	26.87041	114.8269	68.89616	45.93077	669.9786	401.9871	267.9914	PHEV	16.12224	10.74816	1	8
2026	0	210.6432	924.2896	0	924.2896	5879.754	0	5879.754	BEV	0	210.6432	2	3
2026	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2026	0	22.17079	89.6631	0	89.6631	483.3644	0	483.3644	BEV	0	22.17079	1	3
2026	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2026	0	145.4767	605.0058	0	605.0058	3403.594	0	3403.594	BEV	0	145.4767	1	3
2026	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2026	0	127.3108	536.751	0	536.751	3204.426	0	3204.426	BEV	0	127.3108	1	3
2026	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2026	0	262.058	1164.908	0	1164.908	7646.865	0	7646.865	BEV	0	262.058	2	3
2026	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2026	0	12.25944	47.47258	0	47.47258	232.8807	0	232.8807	BEV	0	12.25944	1	3
2026	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2026	0	42.89045	175.9148	0	175.9148	977.4715	0	977.4715	BEV	0	42.89045	1	3
2026	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2026	0	31.44616	130.7777	0	130.7777	746.8062	0	746.8062	BEV	0	31.44616	2	3
2026	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2026	0	1.283593	5.191105	0	5.191105	20.84342	0	20.84342	BEV	0	1.283593	4	3
2026	0	0	0	0	0	0	0	0	PHEV	0	0	4	8
2026	0	2.799963	9.238282	0	9.238282	32.11602	0	32.11602	BEV	0	2.799963	1	3
2026	0	24.0076	101.2177	0	101.2177	428.5717	0	428.5717	BEV	0	24.0076	3	3
2026	0	0	0	0	0	0	0	0	PHEV	0	0	3	8
2026	0	13.19305	57.13449	0	57.13449	252.1857	0	252.1857	BEV	0	13.19305	3	3
2026	0	9.133651	39.55464	23.73279	15.82186	246.8131	148.0878	98.72522	PHEV	5.48019	3.65346	3	8
2026	0	1.594759	7.271798	0	7.271798	34.92749	0	34.92749	BEV	0	1.594759	4	3
2026	0	0	0	0	0	0	0	0	PHEV	0	0	4	8
2026	0	2.270884	7.362522	0	7.362522	25.02932	0	25.02932	BEV	0	2.270884	1	3
2026	0	47.13426	174.4184	0	174.4184	767.9713	0	767.9713	BEV	0	47.13426	2	3
2026	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2026	0	17.81302	66.93689	0	66.93689	309.6203	0	309.6203	BEV	0	17.81302	2	3
2026	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2026	0	7.362722	29.77632	0	29.77632	160.0112	0	160.0112	BEV	0	7.362722	2	3
2026	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2026	0	4.049575	16.60929	0	16.60929	92.48466	0	92.48466	BEV	0	4.049575	2	3
2026	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2026	0	13.47023	56.79145	0	56.79145	337.1579	0	337.1579	BEV	0	13.47023	2	3

2026	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2026	0	11.3792	47.32361	0	47.32361	196.1238	0	196.1238	BEV	0	11.3792	3	3
2026	0	0	0	0	0	0	0	0	PHEV	0	0	3	8
2026	0	11.62636	51.68184	0	51.68184	239.1221	0	239.1221	BEV	0	11.62636	3	3
2026	0	8.890746	39.52141	23.71285	15.80856	251.4284	150.857	100.5713	PHEV	5.334447	3.556298	3	8
2026	0	2.895955	10.71637	0	10.71637	34.13011	0	34.13011	BEV	0	2.895955	4	3
2026	0	0	0	0	0	0	0	0	PHEV	0	0	4	8
2026	0	9.971017	38.61107	0	38.61107	131.8906	0	131.8906	BEV	0	9.971017	4	3
2026	0	0	0	0	0	0	0	0	PHEV	0	0	4	8
2026	0	1.676314	6.683312	0	6.683312	24.89865	0	24.89865	BEV	0	1.676314	4	3
2026	0	0	0	0	0	0	0	0	PHEV	0	0	4	8
2026	0	61.41426	234.2978	0	234.2978	1095.173	0	1095.173	BEV	0	61.41426	2	3
2026	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2026	0	4.083106	16.04506	0	16.04506	80.85999	0	80.85999	BEV	0	4.083106	2	3
2026	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2026	0	29.88717	108.8841	0	108.8841	464.4544	0	464.4544	BEV	0	29.88717	2	3
2026	0	2.981491	10.17884	0	10.17884	37.88382	0	37.88382	BEV	0	2.981491	1	3
2026	0	1.718084	6.357701	0	6.357701	21.28118	0	21.28118	BEV	0	1.718084	3	3
2026	0	0	0	0	0	0	0	0	PHEV	0	0	3	8
2026	0	0.933265	2.758442	0	2.758442	8.239631	0	8.239631	BEV	0	0.933265	2	3
2026	0	2.135016	8.879061	0	8.879061	35.83037	0	35.83037	BEV	0	2.135016	4	3
2026	0	0	0	0	0	0	0	0	PHEV	0	0	4	8
2026	0	5.124348	18.3753	0	18.3753	76.65803	0	76.65803	BEV	0	5.124348	1	3
2026	0	4.763162	17.62589	0	17.62589	78.10055	0	78.10055	BEV	0	4.763162	1	3
2026	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2026	0	13.74767	54.02312	0	54.02312	271.7349	0	271.7349	BEV	0	13.74767	1	3
2026	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2026	0	9.118399	32.69749	0	32.69749	134.6682	0	134.6682	BEV	0	9.118399	2	3
2026	0	1.545028	6.159886	0	6.159886	31.80731	0	31.80731	BEV	0	1.545028	2	3
2026	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2026	0	4.896902	17.27916	0	17.27916	69.36489	0	69.36489	BEV	0	4.896902	1	3
2026	0	6.369754	23.2061	0	23.2061	100.2015	0	100.2015	BEV	0	6.369754	1	3
2026	0	2.51626	8.158068	0	8.158068	27.84971	0	27.84971	BEV	0	2.51626	2	3
2026	0	1.104467	3.64411	0	3.64411	12.64442	0	12.64442	BEV	0	1.104467	2	3
2026	0	1.080148	3.687637	0	3.687637	13.79111	0	13.79111	BEV	0	1.080148	2	3
2026	0	1.057196	3.488143	0	3.488143	8.433146	0	8.433146	BEV	0	1.057196	3	3
2026	0	6.377328	23.23369	0	23.23369	68.56328	0	68.56328	BEV	0	6.377328	3	3
2026	0	0.605916	2.276881	0	2.276881	7.194366	0	7.194366	BEV	0	0.605916	3	3
2026	0	0	0	0	0	0	0	0	PHEV	0	0	3	8
2026	0	16.35003	69.86958	0	69.86958	296.9019	0	296.9019	BEV	0	16.35003	3	3
2026	0	0	0	0	0	0	0	0	PHEV	0	0	3	8
2026	0	40.82382	179.1325	0	179.1325	796.532	0	796.532	BEV	0	40.82382	3	3
2026	0	10.46765	45.93141	27.55884	18.37256	291.242	174.7452	116.4968	PHEV	6.280588	4.187059	3	8
2026	0	1.197671	3.265485	0	3.265485	6.427885	0	6.427885	BEV	0	1.197671	4	3
2026	0	0.787991	2.3742	0	2.3742	5.002801	0	5.002801	BEV	0	0.787991	4	3
2026	0	1.363879	4.656296	0	4.656296	11.99988	0	11.99988	BEV	0	1.363879	4	3
2026	0	0.735224	2.762789	0	2.762789	9.05101	0	9.05101	BEV	0	0.735224	4	3

2026	0	0	0	0	0	0	0	0	PHEV	0	0	4	8
2026	0	0.95724	2.774465	0	2.774465	8.22779	0	8.22779	BEV	0	0.95724	2	3
2026	0	1.057501	2.822723	0	2.822723	7.893995	0	7.893995	BEV	0	1.057501	1	3
2026	0	1.937639	5.394039	0	5.394039	15.09479	0	15.09479	BEV	0	1.937639	1	3
2026	0	2.388729	6.923492	0	6.923492	20.42073	0	20.42073	BEV	0	2.388729	1	3
2026	0	1.950493	5.765053	0	5.765053	17.23277	0	17.23277	BEV	0	1.950493	1	3
2026	0	1.479262	4.456987	0	4.456987	13.99877	0	13.99877	BEV	0	1.479262	1	3
2026	0	1.227662	3.769255	0	3.769255	11.38278	0	11.38278	BEV	0	1.227662	1	3
2026	0	1.153225	3.60678	0	3.60678	11.76865	0	11.76865	BEV	0	1.153225	1	3
2026	0	1.111606	3.540297	0	3.540297	11.47467	0	11.47467	BEV	0	1.111606	1	3
2026	0	1.343886	4.511049	0	4.511049	15.72257	0	15.72257	BEV	0	1.343886	1	3
2026	0	3.636269	12.62258	0	12.62258	49.21286	0	49.21286	BEV	0	3.636269	1	3
2026	0	0.640328	1.709189	0	1.709189	4.875779	0	4.875779	BEV	0	0.640328	2	3
2026	0	0.646233	1.798995	0	1.798995	5.140218	0	5.140218	BEV	0	0.646233	2	3
2026	0	0.653778	1.857456	0	1.857456	5.464943	0	5.464943	BEV	0	0.653778	2	3
2026	0	1.121631	3.765001	0	3.765001	13.63978	0	13.63978	BEV	0	1.121631	2	3
2026	0	0	0	0	0	0	0	0	BEV	0	0	2	3
2026	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2026	0	0	0	0	0	0	0	0	BEV	0	0	2	3
2026	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2026	0	0	0	0	0	0	0	0	BEV	0	0	3	3
2026	0	29.76303	135.7137	81.42825	54.2855	935.6701	561.4021	374.268	PHEV	17.85782	11.90521	3	8
2026	0	0.39364	1.411545	0	1.411545	4.053574	0	4.053574	BEV	0	0.39364	3	3
2026	0	0.530064	1.505971	0	1.505971	3.018544	0	3.018544	BEV	0	0.530064	4	3
2026	0	0.870999	2.674201	0	2.674201	5.778374	0	5.778374	BEV	0	0.870999	4	3
2026	0	2.919764	9.633558	0	9.633558	23.80514	0	23.80514	BEV	0	2.919764	4	3
2026	0	1.050536	3.827283	0	3.827283	11.3632	0	11.3632	BEV	0	1.050536	4	3
2026	0	0.313738	0.855417	0	0.855417	1.570066	0	1.570066	BEV	0	0.313738	3	3
2026	0	0.694987	2.850482	0	2.850482	10.93881	0	10.93881	BEV	0	0.694987	3	3
2026	0	0	0	0	0	0	0	0	PHEV	0	0	3	8
2026	0	0.231504	0.631201	0	0.631201	1.386134	0	1.386134	BEV	0	0.231504	2	3
2026	0	2.268486	9.694057	0	9.694057	55.06093	0	55.06093	BEV	0	2.268486	2	3
2026	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2026	0	1.211929	4.206969	0	4.206969	15.92397	0	15.92397	BEV	0	1.211929	2	3
2026	0	3.512297	12.39345	0	12.39345	48.55772	0	48.55772	BEV	0	3.512297	2	3
2026	0	0.965113	3.460778	0	3.460778	9.753743	0	9.753743	BEV	0	0.965113	4	3
2026	0	1.410512	6.108434	0	6.108434	38.22498	0	38.22498	BEV	0	1.410512	2	3
2026	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2026	0	0.547649	1.650055	0	1.650055	4.995668	0	4.995668	BEV	0	0.547649	2	3
2026	0	0.239798	0.763722	0	0.763722	1.779824	0	1.779824	BEV	0	0.239798	4	3
2026	0	0.209875	0.644373	0	0.644373	1.975775	0	1.975775	BEV	0	0.209875	2	3
2026	0	0.270294	0.922785	0	0.922785	2.299871	0	2.299871	BEV	0	0.270294	3	3
2026	0	0.354168	1.412036	0	1.412036	4.911747	0	4.911747	BEV	0	0.354168	3	3
2026	0	0	0	0	0	0	0	0	PHEV	0	0	3	8
2026	0	0.513962	1.636892	0	1.636892	3.936004	0	3.936004	BEV	0	0.513962	3	3
2026	0	1.477559	5.129052	0	5.129052	13.99025	0	13.99025	BEV	0	1.477559	4	3
2026	0	0.445869	1.215674	0	1.215674	3.33756	0	3.33756	BEV	0	0.445869	1	3

2026	0	0.396848	1.127488	0	1.127488	3.172268	0	3.172268	BEV	0	0.396848	1	3
2026	0	0.715833	2.77194	0	2.77194	13.33973	0	13.33973	BEV	0	0.715833	2	3
2026	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2026	0	0.744113	2.156736	0	2.156736	4.322267	0	4.322267	BEV	0	0.744113	3	3
2026	0	2.689704	8.720397	0	8.720397	20.40977	0	20.40977	BEV	0	2.689704	4	3
2026	0	2.328331	9.549628	0	9.549628	36.5562	0	36.5562	BEV	0	2.328331	4	3
2026	0	0	0	0	0	0	0	0	PHEV	0	0	4	8
2026	0	0.195856	0.691097	0	0.691097	1.926213	0	1.926213	BEV	0	0.195856	3	3
2026	0	0	0	0	0	0	0	0	BEV	0	0	4	3
2026	0	2.801959	12.45535	7.473211	4.982141	86.0578	51.63468	34.42312	PHEV	1.681175	1.120784	4	8
2026	0	0.355299	1.131573	0	1.131573	3.648254	0	3.648254	BEV	0	0.355299	2	3
2027	0	39635.58	183001.4	0	183001.4	1321849	0	1321849	BEV	0	39635.58	1	3
2027	0	35752.63	165073.5	89139.68	75933.8	1191437	643376.1	548061.1	PHEV	19306.42	16446.21	1	8
2027	0	52560.75	245689.4	0	245689.4	1825405	0	1825405	BEV	0	52560.75	1	3
2027	0	33969.75	158787.9	85745.46	73042.43	1179412	636882.4	542529.5	PHEV	18343.67	15626.09	1	8
2027	0	68011.88	321810.5	0	321810.5	2459154	0	2459154	BEV	0	68011.88	1	3
2027	0	33355.45	157827.3	83648.48	74178.84	1206154	639261.7	566892.4	PHEV	17678.39	15677.06	1	8
2027	0	85185.82	407952.3	0	407952.3	3205029	0	3205029	BEV	0	85185.82	1	3
2027	0	32481.82	155554.5	80888.33	74666.15	1222095	635489.4	586605.6	PHEV	16890.55	15591.27	1	8
2027	0	92896.15	450198.9	0	450198.9	3635963	0	3635963	BEV	0	92896.15	1	3
2027	0	34939.65	169326.6	86356.58	82970.05	1367735	697544.9	670190.2	PHEV	17819.22	17120.43	1	8
2027	0	100591.7	493256.5	0	493256.5	4091955	0	4091955	BEV	0	100591.7	1	3
2027	0	37276.22	182785.8	91392.92	91392.92	1516622	758311.2	758311.2	PHEV	18638.11	18638.11	1	8
2027	0	108220.9	536866.6	0	536866.6	4572181	0	4572181	BEV	0	108220.9	1	3
2027	0	39885.93	197867.7	96955.18	100912.5	1685833	826058.3	859775	PHEV	19544.11	20341.82	1	8
2027	0	113565.7	569887.5	0	569887.5	4979078	0	4979078	BEV	0	113565.7	1	3
2027	0	41673.16	209121.3	100378.2	108743.1	1828257	877563.5	950693.8	PHEV	20003.12	21670.04	1	8
2027	0	120649.5	612347.1	0	612347.1	5483064	0	5483064	BEV	0	120649.5	1	3
2027	0	43674.38	221665.8	104182.9	117482.9	1986102	933468	1052634	PHEV	20526.96	23147.42	1	8
2027	0	103609.8	531799.2	0	531799.2	4864154	0	4864154	BEV	0	103609.8	1	3
2027	0	43088.29	221159.7	100406.5	120753.2	2023447	918645.1	1104802	PHEV	19562.08	23526.2	1	8
2027	0	95807.43	497240.6	0	497240.6	4636542	0	4636542	BEV	0	95807.43	1	3
2027	0	40549.96	210454.3	92178.99	118275.3	1961560	859163.3	1102397	PHEV	17760.88	22789.08	1	8
2027	0	2.723768	12.57591	0	12.57591	90.48476	0	90.48476	BEV	0	2.723768	2	3
2027	0	23.62452	109.0768	65.44606	43.63071	768.0925	460.8555	307.237	PHEV	14.17471	9.449808	2	8
2027	0	1188.679	5624.451	0	5624.451	42043.8	0	42043.8	BEV	0	1188.679	2	3
2027	0	912.8223	4319.183	2566.829	1752.354	31832.75	18917.75	12915	PHEV	542.4772	370.345	2	8
2027	0	2490.312	11926.03	0	11926.03	91578.49	0	91578.49	BEV	0	2490.312	2	3
2027	0	1917.992	9185.208	5406.151	3779.057	69365.72	40826.68	28539.04	PHEV	1128.876	789.1169	2	8
2027	0	2968.234	14384.84	0	14384.84	113429.4	0	113429.4	BEV	0	2968.234	2	3
2027	0	2180.251	10566.06	6158.504	4407.557	82274.14	47954.07	34320.07	PHEV	1270.775	909.4759	2	8
2027	0	3731.753	18298.84	0	18298.84	148098.1	0	148098.1	BEV	0	3731.753	2	3
2027	0	2375.561	11648.68	6722.954	4925.728	93062.23	53710.2	39352.03	PHEV	1371.038	1004.523	2	8
2027	0	4170.056	20686.98	0	20686.98	171940.5	0	171940.5	BEV	0	4170.056	2	3
2027	0	2618.217	12988.55	7422.031	5566.523	106481.2	60846.41	45634.8	PHEV	1496.124	1122.093	2	8
2027	0	4457.246	22367.04	0	22367.04	190929.8	0	190929.8	BEV	0	4457.246	2	3
2027	0	2904.669	14576	8245.854	6330.151	122634.5	69376.1	53258.42	PHEV	1643.213	1261.456	2	8

2027	0	4979.722	25274.18	0	25274.18	221426.4	0	221426.4	BEV	0	4979.722	2	3
2027	0	3034.56	15401.67	8624.933	6776.733	133032.8	74498.35	58534.42	PHEV	1699.354	1335.206	2	8
2027	0	4981.262	25567.37	0	25567.37	229545.2	0	229545.2	BEV	0	4981.262	2	3
2027	0	3140.597	16119.77	8865.874	7253.897	142755.5	78515.53	64239.98	PHEV	1727.328	1413.268	2	8
2027	0	4849.001	25166.32	0	25166.32	231560.4	0	231560.4	BEV	0	4849.001	2	3
2027	0	3438.105	17843.76	9635.633	8208.132	161577.4	87251.78	74325.59	PHEV	1856.577	1581.528	2	8
2027	0	947.0026	4426.659	2655.996	1770.664	31953.02	19171.81	12781.21	PHEV	568.2015	378.801	3	8
2027	0	3345.96	15832.01	0	15832.01	92154.49	0	92154.49	BEV	0	3345.96	3	3
2027	0	2906.164	13751.04	8172.045	5578.992	101790.6	60492.72	41297.91	PHEV	1727.092	1179.072	3	8
2027	0	6967.263	33366.01	0	33366.01	227628.7	0	227628.7	BEV	0	6967.263	3	3
2027	0	5028.143	24079.62	14172.58	9907.045	182798	107589.7	75208.33	PHEV	2959.421	2068.722	3	8
2027	0	8020.537	38869.61	0	38869.61	255696.5	0	255696.5	BEV	0	8020.537	3	3
2027	0	7725.058	37437.64	21820.79	15616.84	291640.9	169985	121655.9	PHEV	4502.605	3222.453	3	8
2027	0	9983.041	48952.34	0	48952.34	329988.1	0	329988.1	BEV	0	9983.041	3	3
2027	0	7960.454	39034.48	22528.47	16506.01	312008.7	180073.6	131935.1	PHEV	4594.319	3366.135	3	8
2027	0	11886.61	58967.55	0	58967.55	408667.2	0	408667.2	BEV	0	11886.61	3	3
2027	0	8500.828	42171.25	24097.86	18073.39	345903	197658.8	148244.1	PHEV	4857.616	3643.212	3	8
2027	0	12926.85	64868.59	0	64868.59	456814.9	0	456814.9	BEV	0	12926.85	3	3
2027	0	9010.123	45213.97	25578.19	19635.78	380529.1	215270.7	165258.3	PHEV	5097.155	3912.968	3	8
2027	0	13877.09	70432.08	0	70432.08	502826.7	0	502826.7	BEV	0	13877.09	3	3
2027	0	10199.1	51764.69	28988.23	22776.47	447243.3	250456.2	196787	PHEV	5711.494	4487.602	3	8
2027	0	16162.57	82957.76	0	82957.76	624691.9	0	624691.9	BEV	0	16162.57	3	3
2027	0	10040.46	51534.76	28344.12	23190.64	456519.1	251085.5	205433.6	PHEV	5522.252	4518.207	3	8
2027	0	16126.89	83698.55	0	83698.55	658696.2	0	658696.2	BEV	0	16126.89	3	3
2027	0	9897.842	51369.8	27739.69	23630.11	466214.4	251755.8	214458.6	PHEV	5344.834	4553.007	3	8
2027	0	1283.999	5928.354	3557.012	2371.342	39248.2	23548.92	15699.28	PHEV	770.3997	513.5998	4	8
2027	0	2.884412	13.48287	0	13.48287	69.3517	0	69.3517	BEV	0	2.884412	4	3
2027	0	3529.726	16499.32	9899.589	6599.726	115220.8	69132.47	46088.31	PHEV	2117.836	1411.89	4	8
2027	0	1477.217	6989.72	0	6989.72	38410.49	0	38410.49	BEV	0	1477.217	4	3
2027	0	3843.415	18185.81	10807.57	7378.244	137485.4	81705.59	55779.78	PHEV	2284.087	1559.329	4	8
2027	0	3110.608	14896.61	0	14896.61	90681.89	0	90681.89	BEV	0	3110.608	4	3
2027	0	4189.199	20061.95	11807.89	8254.058	152911.3	89999.21	62912.07	PHEV	2465.643	1723.556	4	8
2027	0	4819.382	23355.98	0	23355.98	146631.6	0	146631.6	BEV	0	4819.382	4	3
2027	0	4677.43	22668.04	13212.23	9455.812	174148.5	101503.7	72644.81	PHEV	2726.274	1951.157	4	8
2027	0	5009.549	24564.57	0	24564.57	147210.1	0	147210.1	BEV	0	5009.549	4	3
2027	0	4893.433	23995.19	13848.66	10146.54	189137.4	109159.3	79978.09	PHEV	2824.21	2069.223	4	8
2027	0	5330.905	26445.77	0	26445.77	157716.4	0	157716.4	BEV	0	5330.905	4	3
2027	0	5009.142	24849.55	14199.74	10649.81	200969.5	114839.7	86129.77	PHEV	2862.367	2146.775	4	8
2027	0	5663.754	28421.45	0	28421.45	171580.3	0	171580.3	BEV	0	5663.754	4	3
2027	0	6516.239	32699.34	18498.48	14200.85	271273.5	153463.3	117810.2	PHEV	3686.33	2829.91	4	8
2027	0	6395.971	32462.24	0	32462.24	200666.2	0	200666.2	BEV	0	6395.971	4	3
2027	0	7016.496	35611.66	19942.53	15669.13	303025.6	169694.4	133331.3	PHEV	3929.237	3087.258	4	8
2027	0	6162.324	31629.42	0	31629.42	198890.1	0	198890.1	BEV	0	6162.324	4	3
2027	0	6392.564	32811.18	18046.15	14765.03	286022.6	157312.4	128710.2	PHEV	3515.91	2876.654	4	8
2027	0	5744.143	29812.1	0	29812.1	194306.8	0	194306.8	BEV	0	5744.143	4	3
2027	0	5800.799	30106.15	16257.32	13848.83	268159.5	144806.1	123353.4	PHEV	3132.431	2668.367	4	8
2027	0	17.16491	63.51806	0	63.51806	281.6163	0	281.6163	BEV	0	17.16491	1	3

2027	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2027	0	6002.839	26340.1	0	26340.1	166968	0	166968	BEV	0	6002.839	1	3
2027	0	6274.397	27531.68	16519.01	11012.67	169098.2	101458.9	67639.28	PHEV	3764.638	2509.759	1	8
2027	0	7780.18	34584.69	0	34584.69	226049.4	0	226049.4	BEV	0	7780.18	1	3
2027	0	9823.064	43665.78	26199.47	17466.31	276645.6	165987.3	110658.2	PHEV	5893.838	3929.226	1	8
2027	0	18569.71	83610.5	0	83610.5	564676.8	0	564676.8	BEV	0	18569.71	1	3
2027	0	8830.396	39759.04	23855.42	15903.61	260407.6	156244.6	104163.1	PHEV	5298.238	3532.159	1	8
2027	0	3099.732	14134.19	0	14134.19	67701.27	0	67701.27	BEV	0	3099.732	3	3
2027	0	282.0984	1286.315	771.7892	514.5261	8493.44	5096.064	3397.376	PHEV	169.2591	112.8394	3	8
2027	0	13.1858	51.81518	0	51.81518	259.3732	0	259.3732	BEV	0	13.1858	1	3
2027	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2027	0	1210.976	5244.313	0	5244.313	32297.41	0	32297.41	BEV	0	1210.976	1	3
2027	0	2545.516	11023.74	6614.243	4409.495	65827.91	39496.75	26331.16	PHEV	1527.309	1018.206	1	8
2027	0	12572.81	57329.62	0	57329.62	398894.3	0	398894.3	BEV	0	12572.81	1	3
2027	0	9041.53	41227.66	24736.6	16491.06	279369.2	167621.5	111747.7	PHEV	5424.918	3616.612	1	8
2027	0	36.158	135.8727	0	135.8727	622.0701	0	622.0701	BEV	0	36.158	1	3
2027	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2027	0	1427.136	6098.665	0	6098.665	36512.78	0	36512.78	BEV	0	1427.136	1	3
2027	0	396.7018	1695.25	1017.15	678.0999	9788.048	5872.829	3915.219	PHEV	238.0211	158.6807	1	8
2027	0	475.5454	2113.909	0	2113.909	13790.11	0	13790.11	BEV	0	475.5454	2	3
2027	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2027	0	153.9276	684.2437	0	684.2437	3106.643	0	3106.643	BEV	0	153.9276	3	3
2027	0	69.69361	309.8041	185.8825	123.9217	1951.459	1170.876	780.5837	PHEV	41.81617	27.87744	3	8
2027	0	12.27105	46.11153	0	46.11153	144.1121	0	144.1121	BEV	0	12.27105	3	3
2027	0	0	0	0	0	0	0	0	PHEV	0	0	3	8
2027	0	59.09119	222.0499	0	222.0499	703.3516	0	703.3516	BEV	0	59.09119	4	3
2027	0	0	0	0	0	0	0	0	PHEV	0	0	4	8
2027	0	220.1073	927.9879	0	927.9879	5418.443	0	5418.443	BEV	0	220.1073	1	3
2027	0	23.46322	98.92257	59.35354	39.56903	553.4354	332.0613	221.3742	PHEV	14.07793	9.385287	1	8
2027	0	197.5202	855.3907	0	855.3907	5231.63	0	5231.63	BEV	0	197.5202	2	3
2027	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2027	0	18.27323	72.85371	0	72.85371	377.0435	0	377.0435	BEV	0	18.27323	1	3
2027	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2027	0	123.0166	504.5512	0	504.5512	2723.746	0	2723.746	BEV	0	123.0166	1	3
2027	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2027	0	109.0259	453.4149	0	453.4149	2602.281	0	2602.281	BEV	0	109.0259	1	3
2027	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2027	0	244.5787	1073.197	0	1073.197	6775.717	0	6775.717	BEV	0	244.5787	2	3
2027	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2027	0	10.01002	38.18863	0	38.18863	179.7252	0	179.7252	BEV	0	10.01002	1	3
2027	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2027	0	35.84537	144.9659	0	144.9659	773.4188	0	773.4188	BEV	0	35.84537	1	3
2027	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2027	0	28.72596	117.8192	0	117.8192	645.8762	0	645.8762	BEV	0	28.72596	2	3
2027	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2027	0	1.150555	4.587161	0	4.587161	17.75206	0	17.75206	BEV	0	1.150555	4	3
2027	0	0	0	0	0	0	0	0	PHEV	0	0	4	8

2027	0	2.556823	8.289579	0	8.289579	27.69338	0	27.69338	BEV	0	2.556823	1	3
2027	0	21.15817	87.99217	0	87.99217	358.6325	0	358.6325	BEV	0	21.15817	3	3
2027	0	0	0	0	0	0	0	0	PHEV	0	0	3	8
2027	0	11.87162	50.73169	0	50.73169	215.4596	0	215.4596	BEV	0	11.87162	3	3
2027	0	8.218811	35.12194	21.07316	14.04878	212.2336	127.3402	84.89344	PHEV	4.931287	3.287524	3	8
2027	0	1.504932	6.775985	0	6.775985	31.30607	0	31.30607	BEV	0	1.504932	4	3
2027	0	0	0	0	0	0	0	0	PHEV	0	0	4	8
2027	0	2.129823	6.783166	0	6.783166	22.16702	0	22.16702	BEV	0	2.129823	1	3
2027	0	41.44909	151.0061	0	151.0061	637.0548	0	637.0548	BEV	0	41.44909	2	3
2027	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2027	0	15.73313	58.21983	0	58.21983	258.1368	0	258.1368	BEV	0	15.73313	2	3
2027	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2027	0	6.610852	26.35687	0	26.35687	135.8352	0	135.8352	BEV	0	6.610852	2	3
2027	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2027	0	3.708037	14.99604	0	14.99604	80.10276	0	80.10276	BEV	0	3.708037	2	3
2027	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2027	0	12.37748	51.47522	0	51.47522	293.7059	0	293.7059	BEV	0	12.37748	2	3
2027	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2027	0	10.22098	41.92126	0	41.92126	166.7324	0	166.7324	BEV	0	10.22098	3	3
2027	0	0	0	0	0	0	0	0	PHEV	0	0	3	8
2027	0	10.62116	46.60502	0	46.60502	207.4907	0	207.4907	BEV	0	10.62116	3	3
2027	0	8.122064	35.63913	21.38348	14.25565	219.3984	131.6391	87.75937	PHEV	4.873239	3.248826	3	8
2027	0	2.551078	9.294012	0	9.294012	28.42606	0	28.42606	BEV	0	2.551078	4	3
2027	0	0	0	0	0	0	0	0	PHEV	0	0	4	8
2027	0	8.559221	32.65377	0	32.65377	106.9566	0	106.9566	BEV	0	8.559221	4	3
2027	0	0	0	0	0	0	0	0	PHEV	0	0	4	8
2027	0	1.484033	5.831686	0	5.831686	20.81636	0	20.81636	BEV	0	1.484033	4	3
2027	0	0	0	0	0	0	0	0	PHEV	0	0	4	8
2027	0	54.48065	204.7247	0	204.7247	916.0263	0	916.0263	BEV	0	54.48065	2	3
2027	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2027	0	3.640307	14.09647	0	14.09647	68.05273	0	68.05273	BEV	0	3.640307	2	3
2027	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2027	0	26.06112	93.45204	0	93.45204	382.0048	0	382.0048	BEV	0	26.06112	2	3
2027	0	2.707721	9.089062	0	9.089062	32.45675	0	32.45675	BEV	0	2.707721	1	3
2027	0	1.509202	5.498279	0	5.498279	17.66904	0	17.66904	BEV	0	1.509202	3	3
2027	0	0	0	0	0	0	0	0	PHEV	0	0	3	8
2027	0	0.832167	2.411952	0	2.411952	6.988164	0	6.988164	BEV	0	0.832167	2	3
2027	0	1.915734	7.857364	0	7.857364	30.41885	0	30.41885	BEV	0	1.915734	4	3
2027	0	0	0	0	0	0	0	0	PHEV	0	0	4	8
2027	0	4.422375	15.60475	0	15.60475	62.43614	0	62.43614	BEV	0	4.422375	1	3
2027	0	4.007183	14.59885	0	14.59885	62.02605	0	62.02605	BEV	0	4.007183	1	3
2027	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2027	0	11.1855	43.31396	0	43.31396	208.9976	0	208.9976	BEV	0	11.1855	1	3
2027	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2027	0	8.063469	28.45267	0	28.45267	112.2711	0	112.2711	BEV	0	8.063469	2	3
2027	0	1.377829	5.414346	0	5.414346	26.8162	0	26.8162	BEV	0	1.377829	2	3
2027	0	0	0	0	0	0	0	0	PHEV	0	0	2	8

2027	0	4.264288	14.80262	0	14.80262	56.98021	0	56.98021	BEV	0	4.264288	1	3
2027	0	5.431542	19.47686	0	19.47686	80.65407	0	80.65407	BEV	0	5.431542	1	3
2027	0	2.328691	7.416533	0	7.416533	24.33125	0	24.33125	BEV	0	2.328691	2	3
2027	0	1.010355	3.275712	0	3.275712	10.93463	0	10.93463	BEV	0	1.010355	2	3
2027	0	0.985547	3.308204	0	3.308204	11.87164	0	11.87164	BEV	0	0.985547	2	3
2027	0	0.962613	3.120925	0	3.120925	7.239592	0	7.239592	BEV	0	0.962613	3	3
2027	0	5.683842	20.38158	0	20.38158	57.57641	0	57.57641	BEV	0	5.683842	3	3
2027	0	0.535173	1.980387	0	1.980387	5.990924	0	5.990924	BEV	0	0.535173	3	3
2027	0	0	0	0	0	0	0	0	PHEV	0	0	3	8
2027	0	14.40262	60.72246	0	60.72246	247.9292	0	247.9292	BEV	0	14.40262	3	3
2027	0	0	0	0	0	0	0	0	PHEV	0	0	3	8
2027	0	36.80264	159.3794	0	159.3794	680.9795	0	680.9795	BEV	0	36.80264	3	3
2027	0	9.436575	40.8665	24.5199	16.3466	251.7079	151.0248	100.6832	PHEV	5.661945	3.77463	3	8
2027	0	1.198179	3.198228	0	3.198228	6.204034	0	6.204034	BEV	0	1.198179	4	3
2027	0	0.761897	2.251932	0	2.251932	4.598382	0	4.598382	BEV	0	0.761897	4	3
2027	0	1.214992	4.078388	0	4.078388	10.06764	0	10.06764	BEV	0	1.214992	4	3
2027	0	0.62612	2.316931	0	2.316931	7.286375	0	7.286375	BEV	0	0.62612	4	3
2027	0	0	0	0	0	0	0	0	PHEV	0	0	4	8
2027	0	0.857796	2.437092	0	2.437092	7.043368	0	7.043368	BEV	0	0.857796	2	3
2027	0	1.872306	5.104899	0	5.104899	14.02495	0	14.02495	BEV	0	1.872306	1	3
2027	0	2.280918	6.480338	0	6.480338	18.62945	0	18.62945	BEV	0	2.280918	1	3
2027	0	1.860233	5.391698	0	5.391698	15.65866	0	15.65866	BEV	0	1.860233	1	3
2027	0	1.416349	4.186289	0	4.186289	12.7644	0	12.7644	BEV	0	1.416349	1	3
2027	0	1.186836	3.575912	0	3.575912	10.43138	0	10.43138	BEV	0	1.186836	1	3
2027	0	1.11712	3.42986	0	3.42986	10.80908	0	10.80908	BEV	0	1.11712	1	3
2027	0	1.038285	3.247298	0	3.247298	10.14005	0	10.14005	BEV	0	1.038285	1	3
2027	0	1.240541	4.09308	0	4.09308	13.67375	0	13.67375	BEV	0	1.240541	1	3
2027	0	3.231957	11.03393	0	11.03393	41.2818	0	41.2818	BEV	0	3.231957	1	3
2027	0	0.579234	1.579298	0	1.579298	4.431782	0	4.431782	BEV	0	0.579234	2	3
2027	0	0.594716	1.655582	0	1.655582	4.768282	0	4.768282	BEV	0	0.594716	2	3
2027	0	1.032914	3.408027	0	3.408027	11.84455	0	11.84455	BEV	0	1.032914	2	3
2027	0	0	0	0	0	0	0	0	BEV	0	0	2	3
2027	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2027	0	0	0	0	0	0	0	0	BEV	0	0	2	3
2027	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2027	0	0	0	0	0	0	0	0	BEV	0	0	3	3
2027	0	27.50288	123.8323	74.29936	49.53291	827.0834	496.2501	330.8334	PHEV	16.50173	11.00115	3	8
2027	0	0.352475	1.243738	0	1.243738	3.421964	0	3.421964	BEV	0	0.352475	3	3
2027	0	0.529554	1.474182	0	1.474182	2.890331	0	2.890331	BEV	0	0.529554	4	3
2027	0	0.846544	2.550619	0	2.550619	5.323612	0	5.323612	BEV	0	0.846544	4	3
2027	0	2.683406	8.699977	0	8.699977	20.66157	0	20.66157	BEV	0	2.683406	4	3
2027	0	0.912188	3.270996	0	3.270996	9.309266	0	9.309266	BEV	0	0.912188	4	3
2027	0	0.298286	0.796196	0	0.796196	1.436211	0	1.436211	BEV	0	0.298286	3	3
2027	0	0.604897	2.446324	0	2.446324	9.00598	0	9.00598	BEV	0	0.604897	3	3
2027	0	0	0	0	0	0	0	0	PHEV	0	0	3	8
2027	0	0.209254	0.55855	0	0.55855	1.194274	0	1.194274	BEV	0	0.209254	2	3
2027	0	2.085167	8.79121	0	8.79121	47.8359	0	47.8359	BEV	0	2.085167	2	3

2027	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2027	0	1.08965	3.720077	0	3.720077	13.48598	0	13.48598	BEV	0	1.08965	2	3
2027	0	3.09948	10.75922	0	10.75922	40.33289	0	40.33289	BEV	0	3.09948	2	3
2027	0	0.83961	2.962638	0	2.962638	7.985885	0	7.985885	BEV	0	0.83961	4	3
2027	0	1.329773	5.682599	0	5.682599	34.21042	0	34.21042	BEV	0	1.329773	2	3
2027	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2027	0	0.495655	1.465003	0	1.465003	4.30043	0	4.30043	BEV	0	0.495655	2	3
2027	0	0.226324	0.707843	0	0.707843	1.595981	0	1.595981	BEV	0	0.226324	4	3
2027	0	0.185861	0.559996	0	0.559996	1.660128	0	1.660128	BEV	0	0.185861	2	3
2027	0	0.246748	0.828264	0	0.828264	1.976223	0	1.976223	BEV	0	0.246748	3	3
2027	0	0.310807	1.221355	0	1.221355	4.066983	0	4.066983	BEV	0	0.310807	3	3
2027	0	0	0	0	0	0	0	0	PHEV	0	0	3	8
2027	0	0.461341	1.442871	0	1.442871	3.346596	0	3.346596	BEV	0	0.461341	3	3
2027	0	1.289057	4.400855	0	4.400855	11.50831	0	11.50831	BEV	0	1.289057	4	3
2027	0	0.430259	1.148465	0	1.148465	3.099321	0	3.099321	BEV	0	0.430259	1	3
2027	0	0.378288	1.053087	0	1.053087	2.890037	0	2.890037	BEV	0	0.378288	1	3
2027	0	0.637509	2.432122	0	2.432122	11.21851	0	11.21851	BEV	0	0.637509	2	3
2027	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2027	0	0.72153	2.049947	0	2.049947	3.993948	0	3.993948	BEV	0	0.72153	3	3
2027	0	2.47269	7.875147	0	7.875147	17.69882	0	17.69882	BEV	0	2.47269	4	3
2027	0	2.055116	8.311298	0	8.311298	30.485	0	30.485	BEV	0	2.055116	4	3
2027	0	0	0	0	0	0	0	0	PHEV	0	0	4	8
2027	0	0.173135	0.601005	0	0.601005	1.60692	0	1.60692	BEV	0	0.173135	3	3
2027	0	0	0	0	0	0	0	0	BEV	0	0	4	3
2027	0	2.607212	11.44029	6.864173	4.576115	76.5956	45.95736	30.63824	PHEV	1.564327	1.042885	4	8
2027	0	0.315407	0.986456	0	0.986456	3.063905	0	3.063905	BEV	0	0.315407	2	3
2028	0	37376.39	170429.2	0	170429.2	1186641	0	1186641	BEV	0	37376.39	1	3
2028	0	33714.77	153732.9	83015.79	70717.16	1069277	577409.7	491867.5	PHEV	18205.98	15508.79	1	8
2028	0	49560.26	228824.7	0	228824.7	1639451	0	1639451	BEV	0	49560.26	1	3
2028	0	32030.56	147888.3	79859.67	68028.61	1059089	571907.9	487180.8	PHEV	17296.5	14734.06	1	8
2028	0	65052.92	304082.7	0	304082.7	2241650	0	2241650	BEV	0	65052.92	1	3
2028	0	31904.27	149133	79040.49	70092.51	1099131	582539.6	516591.7	PHEV	16909.26	14995.01	1	8
2028	0	81236.16	384383.5	0	384383.5	2914414	0	2914414	BEV	0	81236.16	1	3
2028	0	30975.79	146567.5	76215.12	70352.42	1111080	577761.4	533318.2	PHEV	16107.41	14868.38	1	8
2028	0	89861.36	430343.4	0	430343.4	3355333	0	3355333	BEV	0	89861.36	1	3
2028	0	33798.22	161858.7	82547.92	79310.74	1261921	643579.9	618341.4	PHEV	17237.09	16561.13	1	8
2028	0	96841.38	469318.5	0	469318.5	3761120	0	3761120	BEV	0	96841.38	1	3
2028	0	35886.46	173915.1	86957.56	86957.56	1393783	696891.6	696891.6	PHEV	17943.23	17943.23	1	8
2028	0	105422.1	516942.3	0	516942.3	4254767	0	4254767	BEV	0	105422.1	1	3
2028	0	38854.38	190524.4	93356.97	97167.45	1568501	768565.4	799935.4	PHEV	19038.65	19815.74	1	8
2028	0	111283.5	552059.5	0	552059.5	4664618	0	4664618	BEV	0	111283.5	1	3
2028	0	40835.69	202579.3	97238.07	105341.2	1712558	822027.8	890530.1	PHEV	19601.13	21234.56	1	8
2028	0	117783.9	591055	0	591055	5125385	0	5125385	BEV	0	117783.9	1	3
2028	0	42637.05	213958.2	100560.4	113397.9	1856732	872664	984067.9	PHEV	20039.41	22597.64	1	8
2028	0	102730	521397.7	0	521397.7	4629491	0	4629491	BEV	0	102730	1	3
2028	0	42722.38	216834	98442.65	118391.4	1926785	874760.3	1052025	PHEV	19395.96	23326.42	1	8
2028	0	106398.8	546114.1	0	546114.1	4953248	0	4953248	BEV	0	106398.8	1	3

2028	0	45032.69	231139.7	101239.2	129900.5	2097124	918540.3	1178584	PHEV	19724.32	25308.37	1	8
2028	0	99918.76	518578.4	0	518578.4	4794121	0	4794121	BEV	0	99918.76	1	3
2028	0	42699.24	221609.1	93519.03	128090	2048027	864267.2	1183759	PHEV	18019.08	24680.16	1	8
2028	0	2.603754	11.87262	0	11.87262	82.35553	0	82.35553	BEV	0	2.603754	2	3
2028	0	22.58358	102.9768	61.78611	41.19074	702.043	421.2258	280.8172	PHEV	13.55015	9.033433	2	8
2028	0	1153.918	5393.862	0	5393.862	38966.72	0	38966.72	BEV	0	1153.918	2	3
2028	0	886.1277	4142.106	2461.595	1680.512	29543.49	17557.27	11986.22	PHEV	526.613	359.5147	2	8
2028	0	2410.441	11405.44	0	11405.44	84643.87	0	84643.87	BEV	0	2410.441	2	3
2028	0	1856.478	8784.259	5170.164	3614.095	64186.22	37778.17	26408.04	PHEV	1092.67	763.808	2	8
2028	0	2876.208	13774.08	0	13774.08	104975.5	0	104975.5	BEV	0	2876.208	2	3
2028	0	2112.655	10117.44	5897.023	4220.418	76184.46	44404.65	31779.8	PHEV	1231.376	881.2789	2	8
2028	0	3619.398	17540.54	0	17540.54	137218.9	0	137218.9	BEV	0	3619.398	2	3
2028	0	2304.038	11165.97	6444.358	4721.609	86253.76	49780.74	36473.02	PHEV	1329.759	974.2789	2	8
2028	0	4101.578	20112.29	0	20112.29	161589.9	0	161589.9	BEV	0	4101.578	2	3
2028	0	2575.222	12627.73	7215.846	5411.884	100079.6	57188.36	42891.27	PHEV	1471.556	1103.667	2	8
2028	0	4418.099	21917.48	0	21917.48	180875.1	0	180875.1	BEV	0	4418.099	2	3
2028	0	2879.157	14283.04	8080.119	6202.92	116159.9	65713.33	50446.59	PHEV	1628.78	1250.377	2	8
2028	0	4930.081	24739.79	0	24739.79	209589.6	0	209589.6	BEV	0	4930.081	2	3
2028	0	3004.31	15076.02	8442.57	6633.447	125887.1	70496.76	55390.31	PHEV	1682.413	1321.896	2	8
2028	0	4923.681	24989.75	0	24989.75	217038.5	0	217038.5	BEV	0	4923.681	2	3
2028	0	3104.293	15755.59	8665.575	7090.016	134928.6	74210.72	60717.86	PHEV	1707.361	1396.932	2	8
2028	0	5318.132	27296.43	0	27296.43	243076.8	0	243076.8	BEV	0	5318.132	2	3
2028	0	3770.734	19354.09	10451.21	8902.879	169536	91549.44	77986.56	PHEV	2036.196	1734.538	2	8
2028	0	5447.115	28270.53	0	28270.53	257750.1	0	257750.1	BEV	0	5447.115	2	3
2028	0	3863.048	20049.22	10626.09	9423.133	179685.3	95233.2	84452.08	PHEV	2047.416	1815.633	2	8
2028	0	901.6099	4162.823	2497.694	1665.129	29082.61	17449.56	11633.04	PHEV	540.966	360.644	3	8
2028	0	3244.259	15164.93	0	15164.93	85241.98	0	85241.98	BEV	0	3244.259	3	3
2028	0	2817.831	13171.64	7827.719	5343.923	94321.71	56054.04	38267.66	PHEV	1674.597	1143.234	3	8
2028	0	6786.688	32112.44	0	32112.44	211784	0	211784	BEV	0	6786.688	3	3
2028	0	4897.825	23174.94	13640.11	9534.833	170161.6	100152.2	70009.34	PHEV	2882.72	2015.105	3	8
2028	0	7878.334	37729.1	0	37729.1	239853.8	0	239853.8	BEV	0	7878.334	3	3
2028	0	7588.093	36339.15	21180.53	15158.62	273724	159542	114182	PHEV	4422.774	3165.319	3	8
2028	0	9769.438	47345.24	0	47345.24	308471.9	0	308471.9	BEV	0	9769.438	3	3
2028	0	7790.127	37752.98	21788.86	15964.12	291764.4	168389.7	123374.6	PHEV	4496.016	3294.111	3	8
2028	0	11699.29	57368.04	0	57368.04	384329.6	0	384329.6	BEV	0	11699.29	3	3
2028	0	8366.866	41027.34	23444.2	17583.15	325330.3	185903	139427.3	PHEV	4781.066	3585.8	3	8
2028	0	12774.9	63374.26	0	63374.26	431532.8	0	431532.8	BEV	0	12774.9	3	3
2028	0	8904.218	44172.4	24988.96	19183.44	359435.2	203337.6	156097.6	PHEV	5037.244	3866.975	3	8
2028	0	13558.75	68039.57	0	68039.57	469749.1	0	469749.1	BEV	0	13558.75	3	3
2028	0	9965.126	50006.3	28003.53	22002.77	417702	233913.1	183788.9	PHEV	5580.471	4384.656	3	8
2028	0	15776.5	80072.35	0	80072.35	583264.9	0	583264.9	BEV	0	15776.5	3	3
2028	0	9800.627	49742.3	27358.26	22384.03	426107.5	234359.1	191748.4	PHEV	5390.345	4410.282	3	8
2028	0	17799.32	91358.76	0	91358.76	695918.3	0	695918.3	BEV	0	17799.32	3	3
2028	0	10924.29	56071.23	30278.46	25792.77	492463.3	265930.2	226533.1	PHEV	5899.119	5025.175	3	8
2028	0	18094.53	93910.6	0	93910.6	748181.7	0	748181.7	BEV	0	18094.53	3	3
2028	0	10647.29	55259.41	29287.49	25971.92	497214.6	263523.8	233690.9	PHEV	5643.061	5004.224	3	8
2028	0	1219.367	5560.082	3336.049	2224.033	35592.96	21355.78	14237.18	PHEV	731.6203	487.7469	4	8

2028	0	2.727837	12.5947	0	12.5947	62.48505	0	62.48505	BEV	0	2.727837	4	3
2028	0	3338.121	15412.44	9247.464	6164.976	104094.9	62456.92	41637.95	PHEV	2002.873	1335.249	4	8
2028	0	1429.515	6682.109	0	6682.109	35440.74	0	35440.74	BEV	0	1429.515	4	3
2028	0	3719.303	17385.47	10331.94	7053.534	127102.7	75535.34	51567.4	PHEV	2210.329	1508.974	4	8
2028	0	2993.346	14163.56	0	14163.56	83284.96	0	83284.96	BEV	0	2993.346	4	3
2028	0	4031.276	19074.71	11226.83	7847.88	140589.5	82746.95	57842.53	PHEV	2372.694	1658.582	4	8
2028	0	4680.624	22415.37	0	22415.37	135971.7	0	135971.7	BEV	0	4680.624	4	3
2028	0	4542.759	21755.14	12680.14	9075	161595.3	94186.97	67408.32	PHEV	2647.78	1894.98	4	8
2028	0	4845.694	23483.49	0	23483.49	135993.5	0	135993.5	BEV	0	4845.694	4	3
2028	0	4733.376	22939.17	13239.18	9699.993	174849.6	100913.2	73936.4	PHEV	2731.834	2001.542	4	8
2028	0	5249.82	25742.76	0	25742.76	148394.8	0	148394.8	BEV	0	5249.82	4	3
2028	0	4932.952	24188.98	13822.27	10366.7	189170.4	108097.4	81073.03	PHEV	2818.83	2114.122	4	8
2028	0	5567.38	27618.88	0	27618.88	161219.7	0	161219.7	BEV	0	5567.38	4	3
2028	0	6405.36	31775.97	17976.12	13799.85	254977.2	144244.3	110733	PHEV	3623.604	2781.756	4	8
2028	0	6245.404	31340.25	0	31340.25	187389	0	187389	BEV	0	6245.404	4	3
2028	0	6851.321	34380.82	19253.26	15127.56	283126.9	158551.1	124575.9	PHEV	3836.74	3014.581	4	8
2028	0	6069.171	30803.59	0	30803.59	187442	0	187442	BEV	0	6069.171	4	3
2028	0	6295.931	31954.49	17574.97	14379.52	269639.7	148301.8	121337.9	PHEV	3462.762	2833.169	4	8
2028	0	6620.11	33979.11	0	33979.11	214453.7	0	214453.7	BEV	0	6620.11	4	3
2028	0	6685.406	34314.25	18529.7	15784.56	296635.3	160183	136452.2	PHEV	3610.119	3075.287	4	8
2028	0	6099.858	31658.26	0	31658.26	207912.1	0	207912.1	BEV	0	6099.858	4	3
2028	0	6030.061	31296.02	16586.89	14709.13	276433	146509.5	129923.5	PHEV	3195.932	2834.129	4	8
2028	0	14.48177	52.75954	0	52.75954	224.5143	0	224.5143	BEV	0	14.48177	1	3
2028	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2028	0	5394.208	23360.43	0	23360.43	142472.2	0	142472.2	BEV	0	5394.208	1	3
2028	0	5638.232	24417.21	14650.33	9766.884	144034	86420.38	57613.59	PHEV	3382.939	2255.293	1	8
2028	0	7034.385	30866.46	0	30866.46	194196.9	0	194196.9	BEV	0	7034.385	1	3
2028	0	8881.441	38971.23	23382.74	15588.49	237219.7	142331.8	94887.87	PHEV	5328.865	3552.577	1	8
2028	0	17123.77	76119.09	0	76119.09	495122.6	0	495122.6	BEV	0	17123.77	1	3
2028	0	8142.812	36196.67	21718	14478.67	227868.7	136721.2	91147.49	PHEV	4885.687	3257.125	1	8
2028	0	2881.655	12974.71	0	12974.71	59850.93	0	59850.93	BEV	0	2881.655	3	3
2028	0	262.2518	1180.794	708.4764	472.3176	7541.137	4524.682	3016.455	PHEV	157.3511	104.9007	3	8
2028	0	10.78618	41.76765	0	41.76765	200.6877	0	200.6877	BEV	0	10.78618	1	3
2028	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2028	0	1071.955	4580.85	0	4580.85	27131.51	0	27131.51	BEV	0	1071.955	1	3
2028	0	2253.289	9629.113	5777.468	3851.645	55195.23	33117.14	22078.09	PHEV	1351.973	901.3154	1	8
2028	0	11615.71	52299.96	0	52299.96	350649.5	0	350649.5	BEV	0	11615.71	1	3
2028	0	8353.248	37610.67	22566.4	15044.27	245093.1	147055.9	98037.24	PHEV	5011.949	3341.299	1	8
2028	0	30.19598	111.739	0	111.739	491.0533	0	491.0533	BEV	0	30.19598	1	3
2028	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2028	0	1249.438	5267.718	0	5267.718	30320.98	0	30320.98	BEV	0	1249.438	1	3
2028	0	347.307	1464.271	878.5624	585.7083	8109.962	4865.977	3243.985	PHEV	208.3842	138.9228	1	8
2028	0	444.2135	1949.182	0	1949.182	12237.89	0	12237.89	BEV	0	444.2135	2	3
2028	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2028	0	140.4536	616.302	0	616.302	2693.048	0	2693.048	BEV	0	140.4536	3	3
2028	0	63.593	279.0423	167.4254	111.6169	1701.211	1020.727	680.4844	PHEV	38.1558	25.4372	3	8
2028	0	10.89001	40.29806	0	40.29806	120.704	0	120.704	BEV	0	10.89001	3	3

2028	0	0	0	0	0	0	0	0	PHEV	0	0	3	8
2028	0	50.58513	187.1882	0	187.1882	568.7	0	568.7	BEV	0	50.58513	4	3
2028	0	0	0	0	0	0	0	0	PHEV	0	0	4	8
2028	0	188.619	784.4249	0	784.4249	4403.533	0	4403.533	BEV	0	188.619	1	3
2028	0	20.10659	83.6189	50.17134	33.44756	448.4385	269.0631	179.3754	PHEV	12.06396	8.042637	1	8
2028	0	182.9182	781.6752	0	781.6752	4596.612	0	4596.612	BEV	0	182.9182	2	3
2028	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2028	0	14.95676	58.77439	0	58.77439	292.0119	0	292.0119	BEV	0	14.95676	1	3
2028	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2028	0	102.4969	414.518	0	414.518	2147.677	0	2147.677	BEV	0	102.4969	1	3
2028	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2028	0	92.26787	378.4358	0	378.4358	2087.747	0	2087.747	BEV	0	92.26787	1	3
2028	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2028	0	229.0181	991.7971	0	991.7971	6022.842	0	6022.842	BEV	0	229.0181	2	3
2028	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2028	0	8.207303	30.84099	0	30.84099	139.2573	0	139.2573	BEV	0	8.207303	1	3
2028	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2028	0	29.62143	118.098	0	118.098	604.9566	0	604.9566	BEV	0	29.62143	1	3
2028	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2028	0	26.1164	105.62	0	105.62	555.88	0	555.88	BEV	0	26.1164	2	3
2028	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2028	0	1.017837	3.999711	0	3.999711	14.91559	0	14.91559	BEV	0	1.017837	4	3
2028	0	0	0	0	0	0	0	0	PHEV	0	0	4	8
2028	0	2.394558	7.626308	0	7.626308	24.51296	0	24.51296	BEV	0	2.394558	1	3
2028	0	18.22561	74.75218	0	74.75218	293.2009	0	293.2009	BEV	0	18.22561	3	3
2028	0	0	0	0	0	0	0	0	PHEV	0	0	3	8
2028	0	10.68434	45.04593	0	45.04593	184.0533	0	184.0533	BEV	0	10.68434	3	3
2028	0	7.396851	31.18564	18.71139	12.47426	182.566	109.5396	73.0264	PHEV	4.438111	2.958741	3	8
2028	0	1.425678	6.337465	0	6.337465	28.16274	0	28.16274	BEV	0	1.425678	4	3
2028	0	0	0	0	0	0	0	0	PHEV	0	0	4	8
2028	0	2.012018	6.292708	0	6.292708	19.80218	0	19.80218	BEV	0	2.012018	1	3
2028	0	36.26481	130.0412	0	130.0412	525.8197	0	525.8197	BEV	0	36.26481	2	3
2028	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2028	0	13.82725	50.37501	0	50.37501	214.1122	0	214.1122	BEV	0	13.82725	2	3
2028	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2028	0	5.893535	23.15935	0	23.15935	114.4691	0	114.4691	BEV	0	5.893535	2	3
2028	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2028	0	3.33405	13.29256	0	13.29256	68.10049	0	68.10049	BEV	0	3.33405	2	3
2028	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2028	0	11.30023	46.34778	0	46.34778	254.1233	0	254.1233	BEV	0	11.30023	2	3
2028	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2028	0	9.152719	37.01543	0	37.01543	141.279	0	141.279	BEV	0	9.152719	3	3
2028	0	0	0	0	0	0	0	0	PHEV	0	0	3	8
2028	0	9.640915	41.75143	0	41.75143	178.8527	0	178.8527	BEV	0	9.640915	3	3
2028	0	7.372465	31.92756	19.15654	12.77103	190.3817	114.229	76.15268	PHEV	4.423479	2.948986	3	8
2028	0	2.260292	8.105136	0	8.105136	23.80781	0	23.80781	BEV	0	2.260292	4	3
2028	0	0	0	0	0	0	0	0	PHEV	0	0	4	8

2028	0	7.323432	27.51963	0	27.51963	86.44098	0	86.44098	BEV	0	7.323432	4	3
2028	0	0	0	0	0	0	0	0	PHEV	0	0	4	8
2028	0	1.30655	5.059392	0	5.059392	17.30592	0	17.30592	BEV	0	1.30655	4	3
2028	0	0	0	0	0	0	0	0	PHEV	0	0	4	8
2028	0	48.27999	178.6582	0	178.6582	765.4005	0	765.4005	BEV	0	48.27999	2	3
2028	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2028	0	3.239675	12.35949	0	12.35949	57.16475	0	57.16475	BEV	0	3.239675	2	3
2028	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2028	0	23.02422	81.24303	0	81.24303	318.3874	0	318.3874	BEV	0	23.02422	2	3
2028	0	2.506566	8.270239	0	8.270239	28.34781	0	28.34781	BEV	0	2.506566	1	3
2028	0	1.334592	4.785687	0	4.785687	14.76498	0	14.76498	BEV	0	1.334592	3	3
2028	0	0	0	0	0	0	0	0	PHEV	0	0	3	8
2028	0	0.746348	2.120458	0	2.120458	5.979541	0	5.979541	BEV	0	0.746348	2	3
2028	0	1.70373	6.890226	0	6.890226	25.5833	0	25.5833	BEV	0	1.70373	4	3
2028	0	0	0	0	0	0	0	0	PHEV	0	0	4	8
2028	0	3.854238	13.37922	0	13.37922	51.36612	0	51.36612	BEV	0	3.854238	1	3
2028	0	3.425662	12.28401	0	12.28401	50.05918	0	50.05918	BEV	0	3.425662	1	3
2028	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2028	0	9.121888	34.80037	0	34.80037	161.0959	0	161.0959	BEV	0	9.121888	1	3
2028	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2028	0	7.104923	24.66332	0	24.66332	93.28751	0	93.28751	BEV	0	7.104923	2	3
2028	0	1.218663	4.719065	0	4.719065	22.41859	0	22.41859	BEV	0	1.218663	2	3
2028	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2028	0	3.845099	13.1272	0	13.1272	48.47942	0	48.47942	BEV	0	3.845099	1	3
2028	0	4.707774	16.6118	0	16.6118	66.00998	0	66.00998	BEV	0	4.707774	1	3
2028	0	2.09117	6.54026	0	6.54026	20.65257	0	20.65257	BEV	0	2.09117	2	3
2028	0	0.924571	2.944619	0	2.944619	9.466393	0	9.466393	BEV	0	0.924571	2	3
2028	0	0.89443	2.951111	0	2.951111	10.17219	0	10.17219	BEV	0	0.89443	2	3
2028	0	0.890264	2.835357	0	2.835357	6.319676	0	6.319676	BEV	0	0.890264	3	3
2028	0	5.075569	17.9096	0	17.9096	48.45686	0	48.45686	BEV	0	5.075569	3	3
2028	0	0.468878	1.708201	0	1.708201	4.948349	0	4.948349	BEV	0	0.468878	3	3
2028	0	0	0	0	0	0	0	0	PHEV	0	0	3	8
2028	0	12.4988	51.97978	0	51.97978	203.9127	0	203.9127	BEV	0	12.4988	3	3
2028	0	0	0	0	0	0	0	0	PHEV	0	0	3	8
2028	0	32.51206	138.9357	0	138.9357	570.4399	0	570.4399	BEV	0	32.51206	3	3
2028	0	8.336425	35.62455	21.37473	14.24982	213.5072	128.1043	85.40288	PHEV	5.001855	3.33457	3	8
2028	0	0.755338	2.189271	0	2.189271	4.344651	0	4.344651	BEV	0	0.755338	4	3
2028	0	1.085545	3.581679	0	3.581679	8.478818	0	8.478818	BEV	0	1.085545	4	3
2028	0	0.551042	2.007541	0	2.007541	6.06015	0	6.06015	BEV	0	0.551042	4	3
2028	0	0	0	0	0	0	0	0	PHEV	0	0	4	8
2028	0	0.778746	2.167888	0	2.167888	6.127723	0	6.127723	BEV	0	0.778746	2	3
2028	0	1.815179	4.845148	0	4.845148	13.12328	0	13.12328	BEV	0	1.815179	1	3
2028	0	2.188193	6.091536	0	6.091536	17.13123	0	17.13123	BEV	0	2.188193	1	3
2028	0	1.77526	5.043708	0	5.043708	14.27746	0	14.27746	BEV	0	1.77526	1	3
2028	0	1.359577	3.940598	0	3.940598	11.69678	0	11.69678	BEV	0	1.359577	1	3
2028	0	1.12862	3.335851	0	3.335851	9.421588	0	9.421588	BEV	0	1.12862	1	3
2028	0	1.085332	3.270083	0	3.270083	9.975182	0	9.975182	BEV	0	1.085332	1	3

2028	0	1.002369	3.077543	0	3.077543	9.27682	0	9.27682	BEV	0	1.002369	1	3
2028	0	1.14034	3.697141	0	3.697141	11.86901	0	11.86901	BEV	0	1.14034	1	3
2028	0	2.904945	9.751088	0	9.751088	35.03551	0	35.03551	BEV	0	2.904945	1	3
2028	0	0.526318	1.404868	0	1.404868	3.888727	0	3.888727	BEV	0	0.526318	2	3
2028	0	0.53457	1.45752	0	1.45752	4.125335	0	4.125335	BEV	0	0.53457	2	3
2028	0	0.950795	3.08261	0	3.08261	10.28983	0	10.28983	BEV	0	0.950795	2	3
2028	0	0	0	0	0	0	0	0	BEV	0	0	2	3
2028	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2028	0	0	0	0	0	0	0	0	BEV	0	0	2	3
2028	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2028	0	0	0	0	0	0	0	0	BEV	0	0	3	3
2028	0	25.46084	113.1793	67.90759	45.27172	733.2004	439.9202	293.2802	PHEV	15.27651	10.18434	3	8
2028	0	0.31239	1.0844	0	1.0844	2.860276	0	2.860276	BEV	0	0.31239	3	3
2028	0	0.529293	1.443134	0	1.443134	2.778769	0	2.778769	BEV	0	0.529293	4	3
2028	0	0.807825	2.387681	0	2.387681	4.826059	0	4.826059	BEV	0	0.807825	4	3
2028	0	2.489883	7.929905	0	7.929905	18.1191	0	18.1191	BEV	0	2.489883	4	3
2028	0	0.797017	2.812346	0	2.812346	7.675645	0	7.675645	BEV	0	0.797017	4	3
2028	0	0.528175	2.105786	0	2.105786	7.436871	0	7.436871	BEV	0	0.528175	3	3
2028	0	0	0	0	0	0	0	0	PHEV	0	0	3	8
2028	0	1.89544	7.882716	0	7.882716	41.108	0	41.108	BEV	0	1.89544	2	3
2028	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2028	0	0.991138	3.326972	0	3.326972	11.56208	0	11.56208	BEV	0	0.991138	2	3
2028	0	2.793144	9.53582	0	9.53582	34.22935	0	34.22935	BEV	0	2.793144	2	3
2028	0	0.730036	2.534175	0	2.534175	6.537445	0	6.537445	BEV	0	0.730036	4	3
2028	0	1.249068	5.266157	0	5.266157	30.49434	0	30.49434	BEV	0	1.249068	2	3
2028	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2028	0	0.444279	1.287697	0	1.287697	3.676581	0	3.676581	BEV	0	0.444279	2	3
2028	0	0.216322	0.664168	0	0.664168	1.451373	0	1.451373	BEV	0	0.216322	4	3
2028	0	0.165601	0.489464	0	0.489464	1.406627	0	1.406627	BEV	0	0.165601	2	3
2028	0	0.223795	0.738397	0	0.738397	1.688712	0	1.688712	BEV	0	0.223795	3	3
2028	0	0.272964	1.057007	0	1.057007	3.370199	0	3.370199	BEV	0	0.272964	3	3
2028	0	0	0	0	0	0	0	0	PHEV	0	0	3	8
2028	0	0.424662	1.303825	0	1.303825	2.922063	0	2.922063	BEV	0	0.424662	3	3
2028	0	1.15067	3.862477	0	3.862477	9.691392	0	9.691392	BEV	0	1.15067	4	3
2028	0	0.364075	0.992661	0	0.992661	2.668213	0	2.668213	BEV	0	0.364075	1	3
2028	0	0.568894	2.137761	0	2.137761	9.452605	0	9.452605	BEV	0	0.568894	2	3
2028	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2028	0	0.676507	1.883274	0	1.883274	3.58059	0	3.58059	BEV	0	0.676507	3	3
2028	0	2.312284	7.231806	0	7.231806	15.63487	0	15.63487	BEV	0	2.312284	4	3
2028	0	1.801181	7.181148	0	7.181148	25.24011	0	25.24011	BEV	0	1.801181	4	3
2028	0	0	0	0	0	0	0	0	PHEV	0	0	4	8
2028	0	0.157404	0.537379	0	0.537379	1.379369	0	1.379369	BEV	0	0.157404	3	3
2028	0	0	0	0	0	0	0	0	BEV	0	0	4	3
2028	0	2.413531	10.45216	6.271294	4.180863	67.86783	40.7207	27.14713	PHEV	1.448118	0.965412	4	8
2028	0	0.282763	0.868159	0	0.868159	2.601687	0	2.601687	BEV	0	0.282763	2	3
2029	0	34618.47	155870.3	0	155870.3	1046021	0	1046021	BEV	0	34618.47	1	3
2029	0	31227.03	140600.3	75924.18	64676.15	942253.2	508816.8	433436.5	PHEV	16862.6	14364.43	1	8

2029	0	46722.36	213045.1	0	213045.1	1471801	0	1471801	BEV	0	46722.36	1	3
2029	0	30196.43	137690	74352.6	63337.4	950608.8	513328.7	437280	PHEV	16306.07	13890.36	1	8
2029	0	61322.97	283134.3	0	283134.3	2013523	0	2013523	BEV	0	61322.97	1	3
2029	0	30074.97	138859.1	73595.35	65263.8	987063.2	523143.5	463919.7	PHEV	15939.73	14135.24	1	8
2029	0	77679.82	363105.8	0	363105.8	2656775	0	2656775	BEV	0	77679.82	1	3
2029	0	29619.74	138454.2	71996.2	66458.03	1012679	526593.3	486086.1	PHEV	15402.27	14217.48	1	8
2029	0	85671.67	405370.9	0	405370.9	3051447	0	3051447	BEV	0	85671.67	1	3
2029	0	32222.41	152466.2	77757.74	74708.41	1147415	585181.7	562233.4	PHEV	16433.43	15788.98	1	8
2029	0	93651.01	448491.9	0	448491.9	3471219	0	3471219	BEV	0	93651.01	1	3
2029	0	34704.21	166197.4	83098.7	83098.7	1286093	643046.7	643046.7	PHEV	17352.1	17352.1	1	8
2029	0	101465.5	491728.2	0	491728.2	3911323	0	3911323	BEV	0	101465.5	1	3
2029	0	37396.16	181231.5	88803.43	92428.06	1441629	706398	735230.6	PHEV	18324.12	19072.04	1	8
2029	0	108377.4	531434	0	531434	4341414	0	4341414	BEV	0	108377.4	1	3
2029	0	39769.3	195010.7	93605.16	101405.6	1593554	764905.9	828648	PHEV	19089.26	20680.03	1	8
2029	0	115394.1	572451.5	0	572451.5	4802664	0	4802664	BEV	0	115394.1	1	3
2029	0	41771.93	207223.9	97395.22	109828.7	1739557	817591.9	921965.4	PHEV	19632.81	22139.12	1	8
2029	0	100284.3	503239.7	0	503239.7	4329011	0	4329011	BEV	0	100284.3	1	3
2029	0	41705.3	209282.6	95014.31	114268.3	1801929	818075.7	983853.1	PHEV	18934.21	22771.1	1	8
2029	0	105505.4	535484.4	0	535484.4	4717184	0	4717184	BEV	0	105505.4	1	3
2029	0	44654.58	226640.8	99268.66	127372.1	1998101	875168.5	1122933	PHEV	19558.71	25095.88	1	8
2029	0	110991.4	569686.4	0	569686.4	5125921	0	5125921	BEV	0	110991.4	1	3
2029	0	47431	243449.6	102735.7	140713.8	2191283	924721.5	1266562	PHEV	20015.88	27415.12	1	8
2029	0	103881.4	539144.3	0	539144.3	4943740	0	4943740	BEV	0	103881.4	1	3
2029	0	44947.08	233275.3	94709.78	138565.5	2138483	868223.9	1270259	PHEV	18248.51	26698.56	1	8
2029	0	2.462534	11.08761	0	11.08761	74.14758	0	74.14758	BEV	0	2.462534	2	3
2029	0	21.35871	96.16802	57.70081	38.46721	635.4025	381.2415	254.161	PHEV	12.81523	8.543484	2	8
2029	0	1102.057	5088.308	0	5088.308	35547.05	0	35547.05	BEV	0	1102.057	2	3
2029	0	846.3023	3907.462	2322.149	1585.313	27001.82	16046.8	10955.02	PHEV	502.9454	343.3569	2	8
2029	0	2339.327	10934.93	0	10934.93	78453.31	0	78453.31	BEV	0	2339.327	2	3
2029	0	1801.707	8421.881	4956.878	3465.002	59581.34	35067.87	24513.46	PHEV	1060.433	741.2737	2	8
2029	0	2783.273	13169.56	0	13169.56	97041.98	0	97041.98	BEV	0	2783.273	2	3
2029	0	2044.391	9673.406	5638.214	4035.192	70483.11	41081.59	29401.53	PHEV	1191.588	852.8033	2	8
2029	0	3506.328	16791.7	0	16791.7	127013.6	0	127013.6	BEV	0	3506.328	2	3
2029	0	2232.06	10689.27	6169.235	4520.033	79883.16	46104	33779.17	PHEV	1288.217	943.8425	2	8
2029	0	3977.129	19274.2	0	19274.2	149743.5	0	149743.5	BEV	0	3977.129	2	3
2029	0	2497.085	12101.52	6915.156	5186.367	92774.03	53013.73	39760.3	PHEV	1426.906	1070.179	2	8
2029	0	4344.513	21303.54	0	21303.54	170016.4	0	170016.4	BEV	0	4344.513	2	3
2029	0	2831.203	13882.95	7853.782	6029.166	109196	61773.75	47422.27	PHEV	1601.652	1229.551	2	8
2029	0	4885.774	24237.54	0	24237.54	198594.8	0	198594.8	BEV	0	4885.774	2	3
2029	0	2977.309	14769.96	8271.175	6498.78	119266.2	66789.07	52477.13	PHEV	1667.293	1310.016	2	8
2029	0	4873.869	24457.71	0	24457.71	205492.5	0	205492.5	BEV	0	4873.869	2	3
2029	0	3072.887	15420.15	8481.08	6939.066	127716.3	70243.96	57472.33	PHEV	1690.088	1382.799	2	8
2029	0	5256.161	26677.22	0	26677.22	229915.4	0	229915.4	BEV	0	5256.161	2	3
2029	0	3726.795	18915.05	10214.13	8700.922	160283.7	86553.18	73730.49	PHEV	2012.469	1714.326	2	8
2029	0	5974.034	30662.99	0	30662.99	270683.3	0	270683.3	BEV	0	5974.034	2	3
2029	0	4236.735	21745.93	11525.34	10220.59	188607.9	99962.21	88645.73	PHEV	2245.469	1991.265	2	8
2029	0	6243.974	32406.23	0	32406.23	292667.7	0	292667.7	BEV	0	6243.974	2	3

2029	0	4154.851	21563.68	11213.11	10350.56	191470.8	99564.83	91906	PHEV	2160.523	1994.328	2	8
2029	0	855.9251	3902.856	2341.714	1561.142	26407.52	15844.51	10563.01	PHEV	513.5551	342.3701	3	8
2029	0	3087.944	14257.35	0	14257.35	77407.47	0	77407.47	BEV	0	3087.944	3	3
2029	0	2682.062	12383.35	7359.247	5024.101	85861.12	51026.04	34835.08	PHEV	1593.911	1088.151	3	8
2029	0	6578.478	30750.37	0	30750.37	196129.8	0	196129.8	BEV	0	6578.478	3	3
2029	0	4747.564	22191.96	13061.56	9130.408	157693.7	92813.99	64879.68	PHEV	2794.28	1953.283	3	8
2029	0	7671.864	36300.81	0	36300.81	223111	0	223111	BEV	0	7671.864	3	3
2029	0	7389.23	34963.47	20378.71	14584.76	254830.5	148529.8	106300.7	PHEV	4306.866	3082.365	3	8
2029	0	9593.623	45943.57	0	45943.57	289399.2	0	289399.2	BEV	0	9593.623	3	3
2029	0	7649.933	36635.3	21143.8	15491.5	273878	158066.8	115811.3	PHEV	4415.104	3234.829	3	8
2029	0	11446.33	55471.9	0	55471.9	359339.6	0	359339.6	BEV	0	11446.33	3	3
2029	0	8185.962	39671.3	22669.32	17001.99	304278.3	173873.3	130405	PHEV	4677.693	3508.27	3	8
2029	0	12570.71	61641.11	0	61641.11	405908.8	0	405908.8	BEV	0	12570.71	3	3
2029	0	8761.893	42964.38	24305.56	18658.82	338121.5	191280.2	146841.4	PHEV	4956.728	3805.165	3	8
2029	0	13396.73	66459.02	0	66459.02	443854.2	0	443854.2	BEV	0	13396.73	3	3
2029	0	9846.046	48844.66	27353.01	21491.65	394636.1	220996.2	173639.9	PHEV	5513.786	4332.26	3	8
2029	0	15412.78	77343.36	0	77343.36	545040	0	545040	BEV	0	15412.78	3	3
2029	0	9574.683	48047	26425.85	21621.15	398086.4	218947.5	179138.9	PHEV	5266.075	4308.607	3	8
2029	0	17372.81	88174.28	0	88174.28	649971.2	0	649971.2	BEV	0	17372.81	3	3
2029	0	10662.52	54116.77	29223.05	24893.71	459821.3	248303.5	211517.8	PHEV	5757.761	4904.759	3	8
2029	0	19972.75	102514.3	0	102514.3	790865.3	0	790865.3	BEV	0	19972.75	3	3
2029	0	11752.48	60322.06	31970.69	28351.37	525495.1	278512.4	246982.7	PHEV	6228.814	5523.665	3	8
2029	0	20045.76	104037.5	0	104037.5	830584.7	0	830584.7	BEV	0	20045.76	3	3
2029	0	11534.56	59864.37	31129.47	28734.9	540143.5	280874.6	259268.9	PHEV	5997.971	5536.589	3	8
2029	0	1143.924	5150.542	3090.325	2060.217	31903.28	19141.97	12761.31	PHEV	686.3546	457.5697	4	8
2029	0	2.589771	11.80886	0	11.80886	56.50606	0	56.50606	BEV	0	2.589771	4	3
2029	0	3169.166	14450.8	8670.478	5780.319	94433.72	56660.23	37773.49	PHEV	1901.5	1267.667	4	8
2029	0	1351.546	6240.222	0	6240.222	31946.01	0	31946.01	BEV	0	1351.546	4	3
2029	0	3516.444	16235.77	9648.688	6587.085	114891.1	68278.13	46612.96	PHEV	2089.772	1426.672	4	8
2029	0	2895.846	13536.31	0	13536.31	76894.21	0	76894.21	BEV	0	2895.846	4	3
2029	0	3899.969	18229.97	10729.64	7500.332	129975.1	76499.62	53475.46	PHEV	2295.41	1604.559	4	8
2029	0	4502.935	21306.45	0	21306.45	124903.8	0	124903.8	BEV	0	4502.935	4	3
2029	0	4370.303	20678.88	12052.83	8626.046	148576.5	86598.88	61977.63	PHEV	2547.263	1823.041	4	8
2029	0	4704.957	22531.9	0	22531.9	126091	0	126091	BEV	0	4704.957	4	3
2029	0	4595.901	22009.63	12702.7	9306.93	162266.2	93650.79	68615.43	PHEV	2652.492	1943.41	4	8
2029	0	5076.895	24603.95	0	24603.95	137100.6	0	137100.6	BEV	0	5076.895	4	3
2029	0	4770.464	23118.91	13210.8	9908.103	174905.8	99946.18	74959.64	PHEV	2725.979	2044.484	4	8
2029	0	5481.453	26878.58	0	26878.58	151717	0	151717	BEV	0	5481.453	4	3
2029	0	6306.499	30924.23	17494.28	13429.95	240044.7	135796.7	104248	PHEV	3567.677	2738.823	4	8
2029	0	6138.01	30449.69	0	30449.69	176115.8	0	176115.8	BEV	0	6138.01	4	3
2029	0	6733.508	33403.85	18706.16	14697.7	266171.8	149056.2	117115.6	PHEV	3770.764	2962.743	4	8
2029	0	5925.62	29735.53	0	29735.53	175091.9	0	175091.9	BEV	0	5925.62	4	3
2029	0	6147.017	30846.53	16965.59	13880.94	252001.3	138600.7	113400.6	PHEV	3380.859	2766.158	4	8
2029	0	6519.232	33087.84	0	33087.84	202174.4	0	202174.4	BEV	0	6519.232	4	3
2029	0	6583.533	33414.19	18043.66	15370.53	279717.2	151047.3	128669.9	PHEV	3555.108	3028.425	4	8
2029	0	7030.874	36087.43	0	36087.43	229628.8	0	229628.8	BEV	0	7030.874	4	3
2029	0	6950.423	35674.51	18907.49	16767.02	305947.8	162152.4	143795.5	PHEV	3683.724	3266.699	4	8

2029	0	6522.36	33851.05	0	33851.05	227752.2	0	227752.2	BEV	0	6522.36	4	3
2029	0	6452.425	33488.09	17413.81	16074.28	293445.2	152591.5	140853.7	PHEV	3355.261	3097.164	4	8
2029	0	12.37909	44.38994	0	44.38994	181.3573	0	181.3573	BEV	0	12.37909	1	3
2029	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2029	0	4771.759	20391.44	0	20391.44	119661.8	0	119661.8	BEV	0	4771.759	1	3
2029	0	4987.625	21313.92	12788.35	8525.566	120747.1	72448.28	48298.85	PHEV	2992.575	1995.05	1	8
2029	0	6318.203	27361.92	0	27361.92	165709.9	0	165709.9	BEV	0	6318.203	1	3
2029	0	7977.207	34546.49	20727.89	13818.6	202036.1	121221.7	80814.44	PHEV	4786.324	3190.883	1	8
2029	0	15494.52	67989.04	0	67989.04	425955.5	0	425955.5	BEV	0	15494.52	1	3
2029	0	7368.062	32330.61	19398.37	12932.25	195617.6	117370.6	78247.04	PHEV	4420.837	2947.225	1	8
2029	0	2683.546	11928.98	0	11928.98	52997.96	0	52997.96	BEV	0	2683.546	3	3
2029	0	244.2224	1085.625	651.375	434.25	6713.541	4028.125	2685.417	PHEV	146.5335	97.68898	3	8
2029	0	8.828924	33.6827	0	33.6827	155.3428	0	155.3428	BEV	0	8.828924	1	3
2029	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2029	0	939.0454	3959.081	0	3959.081	22551.31	0	22551.31	BEV	0	939.0454	1	3
2029	0	1973.908	8322.133	4993.28	3328.853	45777.92	27466.75	18311.17	PHEV	1184.345	789.5631	1	8
2029	0	10710.77	47611.85	0	47611.85	307599.8	0	307599.8	BEV	0	10710.77	1	3
2029	0	7702.477	34239.28	20543.57	13695.71	214568.6	128741.2	85827.45	PHEV	4621.486	3080.991	1	8
2029	0	25.45465	92.73561	0	92.73561	391.2315	0	391.2315	BEV	0	25.45465	1	3
2029	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2029	0	1074.231	4467.492	0	4467.492	24725.66	0	24725.66	BEV	0	1074.231	1	3
2029	0	298.6047	1241.831	745.0989	496.7326	6596.934	3958.16	2638.773	PHEV	179.1628	119.4419	1	8
2029	0	416.1746	1802.307	0	1802.307	10891.73	0	10891.73	BEV	0	416.1746	2	3
2029	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2029	0	127.354	551.5258	0	551.5258	2319.668	0	2319.668	BEV	0	127.354	3	3
2029	0	57.66193	249.7136	149.8282	99.88545	1475.283	885.1697	590.1132	PHEV	34.59716	23.06477	3	8
2029	0	9.640946	35.1236	0	35.1236	100.8793	0	100.8793	BEV	0	9.640946	3	3
2029	0	0	0	0	0	0	0	0	PHEV	0	0	3	8
2029	0	44.35212	161.5823	0	161.5823	470.9625	0	470.9625	BEV	0	44.35212	4	3
2029	0	0	0	0	0	0	0	0	PHEV	0	0	4	8
2029	0	159.8593	655.6614	0	655.6614	3538.764	0	3538.764	BEV	0	159.8593	1	3
2029	0	17.04084	69.89284	41.9357	27.95714	359.1426	215.4856	143.657	PHEV	10.2245	6.816336	1	8
2029	0	169.0504	712.7284	0	712.7284	4029.955	0	4029.955	BEV	0	169.0504	2	3
2029	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2029	0	12.2027	47.25289	0	47.25289	225.431	0	225.431	BEV	0	12.2027	1	3
2029	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2029	0	84.41566	336.5576	0	336.5576	1673.92	0	1673.92	BEV	0	84.41566	1	3
2029	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2029	0	77.12785	311.9204	0	311.9204	1654.007	0	1654.007	BEV	0	77.12785	1	3
2029	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2029	0	211.7245	904.775	0	904.775	5285.249	0	5285.249	BEV	0	211.7245	2	3
2029	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2029	0	6.797987	25.15568	0	25.15568	109.0049	0	109.0049	BEV	0	6.797987	1	3
2029	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2029	0	24.28205	95.41922	0	95.41922	469.3272	0	469.3272	BEV	0	24.28205	1	3
2029	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2029	0	23.5481	93.88414	0	93.88414	474.3593	0	474.3593	BEV	0	23.5481	2	3

2029	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2029	0	0.898144	3.477909	0	3.477909	12.50147	0	12.50147	BEV	0	0.898144	4	3
2029	0	0	0	0	0	0	0	0	PHEV	0	0	4	8
2029	0	2.246342	7.025569	0	7.025569	21.7663	0	21.7663	BEV	0	2.246342	1	3
2029	0	15.44101	62.44653	0	62.44653	235.7335	0	235.7335	BEV	0	15.44101	3	3
2029	0	0	0	0	0	0	0	0	PHEV	0	0	3	8
2029	0	9.541777	39.68215	0	39.68215	156.0014	0	156.0014	BEV	0	9.541777	3	3
2029	0	6.605845	27.47226	16.48335	10.9889	155.8901	93.53409	62.35606	PHEV	3.963507	2.642338	3	8
2029	0	1.33467	5.856451	0	5.856451	25.02559	0	25.02559	BEV	0	1.33467	4	3
2029	0	0	0	0	0	0	0	0	PHEV	0	0	4	8
2029	0	1.935115	5.941324	0	5.941324	18.04777	0	18.04777	BEV	0	1.935115	1	3
2029	0	32.03118	113.0249	0	113.0249	438.2538	0	438.2538	BEV	0	32.03118	2	3
2029	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2029	0	12.09068	43.35574	0	43.35574	176.7135	0	176.7135	BEV	0	12.09068	2	3
2029	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2029	0	5.229034	20.24855	0	20.24855	95.99962	0	95.99962	BEV	0	5.229034	2	3
2029	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2029	0	2.974972	11.69051	0	11.69051	57.44735	0	57.44735	BEV	0	2.974972	2	3
2029	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2029	0	10.26058	41.49584	0	41.49584	218.6638	0	218.6638	BEV	0	10.26058	2	3
2029	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2029	0	8.170907	32.57667	0	32.57667	119.2068	0	119.2068	BEV	0	8.170907	3	3
2029	0	0	0	0	0	0	0	0	PHEV	0	0	3	8
2029	0	8.575366	36.64562	0	36.64562	151.0657	0	151.0657	BEV	0	8.575366	3	3
2029	0	6.557633	28.02312	16.81387	11.20925	162.0687	97.24125	64.8275	PHEV	3.93458	2.623053	3	8
2029	0	1.996722	7.045612	0	7.045612	19.88439	0	19.88439	BEV	0	1.996722	4	3
2029	0	0	0	0	0	0	0	0	PHEV	0	0	4	8
2029	0	6.24567	23.11185	0	23.11185	69.64079	0	69.64079	BEV	0	6.24567	4	3
2029	0	0	0	0	0	0	0	0	PHEV	0	0	4	8
2029	0	1.13787	4.341018	0	4.341018	14.22911	0	14.22911	BEV	0	1.13787	4	3
2029	0	0	0	0	0	0	0	0	PHEV	0	0	4	8
2029	0	42.60813	155.2287	0	155.2287	636.9743	0	636.9743	BEV	0	42.60813	2	3
2029	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2029	0	2.889371	10.85753	0	10.85753	48.12092	0	48.12092	BEV	0	2.889371	2	3
2029	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2029	0	20.29452	70.44835	0	70.44835	264.8525	0	264.8525	BEV	0	20.29452	2	3
2029	0	2.314071	7.502542	0	7.502542	24.72803	0	24.72803	BEV	0	2.314071	1	3
2029	0	1.167101	4.118222	0	4.118222	12.19721	0	12.19721	BEV	0	1.167101	3	3
2029	0	0	0	0	0	0	0	0	PHEV	0	0	3	8
2029	0	0.675305	1.879927	0	1.879927	5.178037	0	5.178037	BEV	0	0.675305	2	3
2029	0	1.508048	6.012453	0	6.012453	21.41789	0	21.41789	BEV	0	1.508048	4	3
2029	0	0	0	0	0	0	0	0	PHEV	0	0	4	8
2029	0	3.440635	11.74636	0	11.74636	43.29735	0	43.29735	BEV	0	3.440635	1	3
2029	0	2.964983	10.46221	0	10.46221	40.91541	0	40.91541	BEV	0	2.964983	1	3
2029	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2029	0	7.487524	28.13624	0	28.13624	124.9826	0	124.9826	BEV	0	7.487524	1	3
2029	0	0	0	0	0	0	0	0	PHEV	0	0	1	8

2029	0	6.406148	21.87065	0	21.87065	79.36131	0	79.36131	BEV	0	6.406148	2	3
2029	0	1.083754	4.134567	0	4.134567	18.84912	0	18.84912	BEV	0	1.083754	2	3
2029	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2029	0	3.529264	11.84675	0	11.84675	42.01137	0	42.01137	BEV	0	3.529264	1	3
2029	0	4.095721	14.21748	0	14.21748	54.22685	0	54.22685	BEV	0	4.095721	1	3
2029	0	1.904874	5.848477	0	5.848477	17.81516	0	17.81516	BEV	0	1.904874	2	3
2029	0	0.822358	2.571973	0	2.571973	7.974887	0	7.974887	BEV	0	0.822358	2	3
2029	0	0.813882	2.63872	0	2.63872	8.747031	0	8.747031	BEV	0	0.813882	2	3
2029	0	0.806919	2.523686	0	2.523686	5.415189	0	5.415189	BEV	0	0.806919	3	3
2029	0	4.486897	15.57537	0	15.57537	40.38792	0	40.38792	BEV	0	4.486897	3	3
2029	0	0.415378	1.489494	0	1.489494	4.133867	0	4.133867	BEV	0	0.415378	3	3
2029	0	0	0	0	0	0	0	0	PHEV	0	0	3	8
2029	0	10.56508	43.33257	0	43.33257	163.3376	0	163.3376	BEV	0	10.56508	3	3
2029	0	0	0	0	0	0	0	0	PHEV	0	0	3	8
2029	0	28.49253	120.1265	0	120.1265	473.9672	0	473.9672	BEV	0	28.49253	3	3
2029	0	7.305776	30.80166	18.481	12.32067	179.9281	107.9569	71.97125	PHEV	4.383466	2.922311	3	8
2029	0	0.754053	2.142346	0	2.142346	4.145993	0	4.145993	BEV	0	0.754053	4	3
2029	0	0.980327	3.178358	0	3.178358	7.225201	0	7.225201	BEV	0	0.980327	4	3
2029	0	0.488516	1.751758	0	1.751758	5.078416	0	5.078416	BEV	0	0.488516	4	3
2029	0	0	0	0	0	0	0	0	PHEV	0	0	4	8
2029	0	0.702893	1.916458	0	1.916458	5.318768	0	5.318768	BEV	0	0.702893	2	3
2029	0	2.107851	5.747118	0	5.747118	15.87378	0	15.87378	BEV	0	2.107851	1	3
2029	0	1.704345	4.74459	0	4.74459	13.13929	0	13.13929	BEV	0	1.704345	1	3
2029	0	1.301755	3.69843	0	3.69843	10.71893	0	10.71893	BEV	0	1.301755	1	3
2029	0	1.080888	3.132846	0	3.132846	8.589137	0	8.589137	BEV	0	1.080888	1	3
2029	0	1.034102	3.056486	0	3.056486	9.045915	0	9.045915	BEV	0	1.034102	1	3
2029	0	0.960145	2.892899	0	2.892899	8.437535	0	8.437535	BEV	0	0.960145	1	3
2029	0	1.057579	3.368231	0	3.368231	10.41422	0	10.41422	BEV	0	1.057579	1	3
2029	0	2.657679	8.768824	0	8.768824	30.28679	0	30.28679	BEV	0	2.657679	1	3
2029	0	0.487181	1.300404	0	1.300404	3.632256	0	3.632256	BEV	0	0.487181	2	3
2029	0	0.878567	2.798105	0	2.798105	8.98467	0	8.98467	BEV	0	0.878567	2	3
2029	0	0	0	0	0	0	0	0	BEV	0	0	2	3
2029	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2029	0	0	0	0	0	0	0	0	BEV	0	0	2	3
2029	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2029	0	0	0	0	0	0	0	0	BEV	0	0	3	3
2029	0	23.09253	101.3286	60.79718	40.53146	637.5175	382.5105	255.007	PHEV	13.85552	9.237012	3	8
2029	0	0.280555	0.957817	0	0.957817	2.423672	0	2.423672	BEV	0	0.280555	3	3
2029	0	0.529052	1.412166	0	1.412166	2.682568	0	2.682568	BEV	0	0.529052	4	3
2029	0	0.80519	2.333763	0	2.333763	4.58207	0	4.58207	BEV	0	0.80519	4	3
2029	0	2.352527	7.357669	0	7.357669	16.20706	0	16.20706	BEV	0	2.352527	4	3
2029	0	0.692343	2.40333	0	2.40333	6.293693	0	6.293693	BEV	0	0.692343	4	3
2029	0	0.465603	1.829645	0	1.829645	6.199255	0	6.199255	BEV	0	0.465603	3	3
2029	0	0	0	0	0	0	0	0	PHEV	0	0	3	8
2029	0	1.714294	7.031158	0	7.031158	35.15634	0	35.15634	BEV	0	1.714294	2	3
2029	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2029	0	0.89755	2.961404	0	2.961404	9.878038	0	9.878038	BEV	0	0.89755	2	3

2029	0	2.545098	8.54318	0	8.54318	29.39474	0	29.39474	BEV	0	2.545098	2	3
2029	0	0.638275	2.179078	0	2.179078	5.385538	0	5.385538	BEV	0	0.638275	4	3
2029	0	1.157745	4.814806	0	4.814806	26.82016	0	26.82016	BEV	0	1.157745	2	3
2029	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2029	0	0.397264	1.12867	0	1.12867	3.144722	0	3.144722	BEV	0	0.397264	2	3
2029	0	0.2081	0.627002	0	0.627002	1.330659	0	1.330659	BEV	0	0.2081	4	3
2029	0	0.148067	0.429159	0	0.429159	1.199186	0	1.199186	BEV	0	0.148067	2	3
2029	0	0.205104	0.664977	0	0.664977	1.459544	0	1.459544	BEV	0	0.205104	3	3
2029	0	0.241453	0.921151	0	0.921151	2.812622	0	2.812622	BEV	0	0.241453	3	3
2029	0	0	0	0	0	0	0	0	PHEV	0	0	3	8
2029	0	0.386913	1.16576	0	1.16576	2.529489	0	2.529489	BEV	0	0.386913	3	3
2029	0	1.02219	3.372643	0	3.372643	8.12836	0	8.12836	BEV	0	1.02219	4	3
2029	0	0.351438	0.938071	0	0.938071	2.480997	0	2.480997	BEV	0	0.351438	1	3
2029	0	0.503313	1.862488	0	1.862488	7.89699	0	7.89699	BEV	0	0.503313	2	3
2029	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2029	0	0.629392	1.716056	0	1.716056	3.197325	0	3.197325	BEV	0	0.629392	3	3
2029	0	2.151472	6.6056	0	6.6056	13.76711	0	13.76711	BEV	0	2.151472	4	3
2029	0	1.55845	6.124114	0	6.124114	20.63021	0	20.63021	BEV	0	1.55845	4	3
2029	0	0	0	0	0	0	0	0	PHEV	0	0	4	8
2029	0	0.143441	0.481493	0	0.481493	1.18747	0	1.18747	BEV	0	0.143441	3	3
2029	0	0	0	0	0	0	0	0	BEV	0	0	4	3
2029	0	2.210244	9.44517	5.667102	3.778068	59.54792	35.72875	23.81917	PHEV	1.326147	0.884098	4	8
2029	0	0.247273	0.745027	0	0.745027	2.158804	0	2.158804	BEV	0	0.247273	2	3
2030	0	32005.21	142270.5	0	142270.5	920082	0	920082	BEV	0	32005.21	1	3
2030	0	28869.78	128332.8	69299.72	59033.1	828518.7	447400.1	381118.6	PHEV	15589.68	13280.1	1	8
2030	0	43285.31	194893	0	194893	1298078	0	1298078	BEV	0	43285.31	1	3
2030	0	27975.09	125958.4	68017.53	57940.86	838218.5	452638	385580.5	PHEV	15106.55	12868.54	1	8
2030	0	57825.99	263675.5	0	263675.5	1808751	0	1808751	BEV	0	57825.99	1	3
2030	0	28359.93	129315.9	68537.42	60778.46	886472	469830.2	416641.9	PHEV	15030.76	13329.17	1	8
2030	0	73244.74	338178.3	0	338178.3	2387827	0	2387827	BEV	0	73244.74	1	3
2030	0	27928.62	128949.2	67053.61	61895.64	910047	473224.4	436822.5	PHEV	14522.88	13405.74	1	8
2030	0	81940.78	383023.2	0	383023.2	2783413	0	2783413	BEV	0	81940.78	1	3
2030	0	30819.17	144060.8	73471.02	70589.8	1046437	533682.7	512753.9	PHEV	15717.78	15101.39	1	8
2030	0	89307.19	422573	0	422573	3158865	0	3158865	BEV	0	89307.19	1	3
2030	0	33094.52	156592.7	78296.34	78296.34	1170140	585069.8	585069.8	PHEV	16547.26	16547.26	1	8
2030	0	98146.32	470019.8	0	470019.8	3612111	0	3612111	BEV	0	98146.32	1	3
2030	0	36172.84	173230.6	84883.01	88347.62	1331039	652209.1	678829.9	PHEV	17724.69	18448.15	1	8
2030	0	104338	505648.8	0	505648.8	3993596	0	3993596	BEV	0	104338	1	3
2030	0	38287.02	185548.8	89063.44	96485.4	1465581	703478.9	762102.1	PHEV	18377.77	19909.25	1	8
2030	0	112410.8	551211.8	0	551211.8	4472817	0	4472817	BEV	0	112410.8	1	3
2030	0	40691.99	199535.2	93781.56	105753.7	1619700	761259.2	858441.2	PHEV	19125.24	21566.76	1	8
2030	0	98281.48	487558.7	0	487558.7	4059368	0	4059368	BEV	0	98281.48	1	3
2030	0	40872.38	202761.4	92053.66	110707.7	1689389	766982.5	922406.3	PHEV	18556.06	22316.32	1	8
2030	0	103040.1	517068.8	0	517068.8	4414801	0	4414801	BEV	0	103040.1	1	3
2030	0	43611.16	218846.5	95854.76	122991.7	1870210	819151.9	1051058	PHEV	19101.69	24509.47	1	8
2030	0	110121.3	558911.9	0	558911.9	4886785	0	4886785	BEV	0	110121.3	1	3
2030	0	47059.19	238845.2	100792.7	138052.5	2089940	881954.5	1207985	PHEV	19858.98	27200.21	1	8

2030	0	115470.7	592677.5	0	592677.5	5292436	0	5292436	BEV	0	115470.7	1	3
2030	0	49961.5	256437.9	104113.8	152324.1	2290766	930051	1360715	PHEV	20284.37	29677.13	1	8
2030	0	108314.7	562153.4	0	562153.4	5114921	0	5114921	BEV	0	108314.7	1	3
2030	0	47447.07	246250.3	96037.62	150212.7	2240146	873657	1366489	PHEV	18504.36	28942.71	1	8
2030	0	2.334126	10.37573	0	10.37573	66.88846	0	66.88846	BEV	0	2.334126	2	3
2030	0	20.24497	89.99354	53.99613	35.99742	576.7671	346.0602	230.7068	PHEV	12.14698	8.097988	2	8
2030	0	1053.473	4803.635	0	4803.635	32463.89	0	32463.89	BEV	0	1053.473	2	3
2030	0	808.993	3688.854	2192.233	1496.621	24715.87	14688.29	10027.58	PHEV	480.773	328.22	2	8
2030	0	2234.777	10318.19	0	10318.19	71606.71	0	71606.71	BEV	0	2234.777	2	3
2030	0	1721.184	7946.88	4677.307	3269.574	54494.63	32073.98	22420.65	PHEV	1013.04	708.1444	2	8
2030	0	2701.794	12629.24	0	12629.24	90000.78	0	90000.78	BEV	0	2701.794	2	3
2030	0	1984.543	9276.526	5406.889	3869.636	65437.57	38140.75	27296.81	PHEV	1156.705	827.8377	2	8
2030	0	3393.881	16058.76	0	16058.76	117490.2	0	117490.2	BEV	0	3393.881	2	3
2030	0	2160.478	10222.69	5899.953	4322.738	73952.79	42681.32	31271.46	PHEV	1246.904	913.5735	2	8
2030	0	3853.844	18455.95	0	18455.95	138692.3	0	138692.3	BEV	0	3853.844	2	3
2030	0	2419.68	11587.77	6621.584	4966.188	85977.49	49129.99	36847.49	PHEV	1382.674	1037.006	2	8
2030	0	4213.74	20420.88	0	20420.88	157651.1	0	157651.1	BEV	0	4213.74	2	3
2030	0	2745.983	13307.75	7528.382	5779.364	101290.6	57301.53	43989.05	PHEV	1553.442	1192.541	2	8
2030	0	4805.597	23564.49	0	23564.49	186793.7	0	186793.7	BEV	0	4805.597	2	3
2030	0	2928.451	14359.81	8041.492	6318.315	112188.9	62825.78	49363.11	PHEV	1639.933	1288.519	2	8
2030	0	4831.403	23967.82	0	23967.82	194844.6	0	194844.6	BEV	0	4831.403	2	3
2030	0	3046.113	15111.28	8311.203	6800.076	121081.3	66594.73	54486.59	PHEV	1675.362	1370.751	2	8
2030	0	5204.658	26117.65	0	26117.65	217846.3	0	217846.3	BEV	0	5204.658	2	3
2030	0	3690.278	18518.29	9999.879	8518.415	151818.2	81981.82	69836.37	PHEV	1992.75	1697.528	2	8
2030	0	5906.523	29978.08	0	29978.08	256221.8	0	256221.8	BEV	0	5906.523	2	3
2030	0	4188.856	21260.2	11267.91	9992.296	178442.8	94574.67	83868.11	PHEV	2220.094	1968.762	2	8
2030	0	6850.832	35163.33	0	35163.33	307601.4	0	307601.4	BEV	0	6850.832	2	3
2030	0	4558.664	23398.3	12167.12	11231.19	201141.4	104593.5	96547.88	PHEV	2370.506	2188.159	2	8
2030	0	6847.129	35536.6	0	35536.6	318371.5	0	318371.5	BEV	0	6847.129	2	3
2030	0	4655.389	24161.47	12322.35	11839.12	212579.8	108415.7	104164.1	PHEV	2374.248	2281.141	2	8
2030	0	798.1134	3593.522	2156.113	1437.409	23569.56	14141.74	9427.826	PHEV	478.8681	319.2454	3	8
2030	0	2932.217	13370.35	0	13370.35	70125.8	0	70125.8	BEV	0	2932.217	3	3
2030	0	2546.804	11612.94	6901.405	4711.536	78013.52	46362.32	31651.2	PHEV	1513.529	1033.275	3	8
2030	0	6263.154	28917.61	0	28917.61	178483.5	0	178483.5	BEV	0	6263.154	3	3
2030	0	4520.001	20869.29	12283.07	8586.224	143642.9	84544.09	59098.78	PHEV	2660.343	1859.657	3	8
2030	0	7438.207	34769.08	0	34769.08	206657.4	0	206657.4	BEV	0	7438.207	3	3
2030	0	7164.182	33488.18	19518.82	13969.35	236305.6	137732.4	98573.2	PHEV	4175.694	2988.487	3	8
2030	0	9344.283	44214.16	0	44214.16	269363	0	269363	BEV	0	9344.283	3	3
2030	0	7451.109	35256.27	20347.9	14908.36	255131.2	147247.1	107884	PHEV	4300.355	3150.755	3	8
2030	0	11243.12	53842.98	0	53842.98	337342	0	337342	BEV	0	11243.12	3	3
2030	0	8040.636	38506.36	22003.64	16502.73	285808.4	163319.1	122489.3	PHEV	4594.649	3445.987	3	8
2030	0	12302.4	59620.61	0	59620.61	379767.7	0	379767.7	BEV	0	12302.4	3	3
2030	0	8574.875	41556.07	23508.87	18047.21	316457.7	179024.6	137433	PHEV	4850.929	3723.946	3	8
2030	0	13186.25	64659.44	0	64659.44	417779.5	0	417779.5	BEV	0	13186.25	3	3
2030	0	9691.354	47522.04	26612.34	20909.7	371486.9	208032.7	163454.2	PHEV	5427.158	4264.196	3	8
2030	0	15233.16	75569.28	0	75569.28	515348.7	0	515348.7	BEV	0	15233.16	3	3
2030	0	9463.098	46944.92	25819.7	21125.21	376368.5	207002.7	169365.8	PHEV	5204.704	4258.394	3	8

2030	0	16978.51	85200.36	0	85200.36	607826	0	607826	BEV	0	16978.51	3	3
2030	0	10420.52	52291.53	28237.43	24054.1	429916.6	232154.9	197761.6	PHEV	5627.081	4793.44	3	8
2030	0	19501.64	98979.04	0	98979.04	739207	0	739207	BEV	0	19501.64	3	3
2030	0	11475.27	58241.81	30868.16	27373.65	491055.9	260259.6	230796.3	PHEV	6081.892	5393.376	3	8
2030	0	22137.97	113627.8	0	113627.8	878794.8	0	878794.8	BEV	0	22137.97	3	3
2030	0	12738.44	65382.71	33999.01	31383.7	571398	297127	274271.1	PHEV	6623.988	6114.45	3	8
2030	0	21939.33	113865.1	0	113865.1	901134.1	0	901134.1	BEV	0	21939.33	3	3
2030	0	12580.49	65292.76	33299.31	31993.45	598755.8	305365.5	293390.3	PHEV	6416.051	6164.442	3	8
2030	0	1076.458	4785.102	2871.061	1914.041	28699.03	17219.42	11479.61	PHEV	645.8746	430.5831	4	8
2030	0	2.430145	10.94177	0	10.94177	50.49912	0	50.49912	BEV	0	2.430145	4	3
2030	0	2973.828	13389.72	8033.831	5355.887	84723.44	50834.06	33889.38	PHEV	1784.297	1189.531	4	8
2030	0	1283.46	5852.335	0	5852.335	28918.11	0	28918.11	BEV	0	1283.46	4	3
2030	0	3339.299	15226.57	9048.934	6177.637	104344.3	62010.34	42333.98	PHEV	1984.498	1354.802	4	8
2030	0	2738.62	12644.48	0	12644.48	69408.6	0	69408.6	BEV	0	2738.62	4	3
2030	0	3688.225	17028.9	10022.73	7006.177	117550.1	69186.62	48363.46	PHEV	2170.784	1517.441	4	8
2030	0	4357.323	20367.83	0	20367.83	115401.3	0	115401.3	BEV	0	4357.323	4	3
2030	0	4228.98	19767.9	11521.86	8246.039	137427.8	80100.8	57327.04	PHEV	2464.891	1764.089	4	8
2030	0	4527.486	21422.62	0	21422.62	115857.3	0	115857.3	BEV	0	4527.486	4	3
2030	0	4422.544	20926.06	12077.33	8848.736	149287.4	86160.13	63127.23	PHEV	2552.44	1870.104	4	8
2030	0	4930.736	23613.15	0	23613.15	127187.4	0	127187.4	BEV	0	4930.736	4	3
2030	0	4633.127	22187.91	12678.8	9509.103	162422.3	92812.76	69609.57	PHEV	2647.501	1985.626	4	8
2030	0	5302.362	25696.62	0	25696.62	140260.2	0	140260.2	BEV	0	5302.362	4	3
2030	0	6100.452	29564.38	16724.99	12839.39	222089.6	125639.2	96450.33	PHEV	3451.113	2649.339	4	8
2030	0	6044.976	29641.84	0	29641.84	165848.1	0	165848.1	BEV	0	6044.976	4	3
2030	0	6631.448	32517.64	18209.88	14307.76	250749.4	140419.7	110329.8	PHEV	3713.611	2917.837	4	8
2030	0	5825.559	28899.67	0	28899.67	164675.2	0	164675.2	BEV	0	5825.559	4	3
2030	0	6043.218	29979.44	16488.69	13490.75	237075.2	130391.3	106683.8	PHEV	3323.77	2719.448	4	8
2030	0	6367.381	31952.35	0	31952.35	189004.6	0	189004.6	BEV	0	6367.381	4	3
2030	0	6430.184	32267.5	17424.45	14843.05	261616.5	141272.9	120343.6	PHEV	3472.3	2957.885	4	8
2030	0	6926.108	35152.91	0	35152.91	216646.4	0	216646.4	BEV	0	6926.108	4	3
2030	0	6846.856	34750.67	18417.86	16332.82	288709	153015.8	135693.2	PHEV	3628.834	3218.023	4	8
2030	0	7521.956	38608.02	0	38608.02	251851.6	0	251851.6	BEV	0	7521.956	4	3
2030	0	7441.304	38194.05	19860.91	18333.15	325086.7	169045.1	156041.6	PHEV	3869.478	3571.826	4	8
2030	0	7020.193	36434.8	0	36434.8	251066.9	0	251066.9	BEV	0	7020.193	4	3
2030	0	6910.2	35863.94	18290.61	17573.33	311891.8	159064.8	152827	PHEV	3524.202	3385.998	4	8
2030	0	10.69397	37.73465	0	37.73465	148.0356	0	148.0356	BEV	0	10.69397	1	3
2030	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2030	0	4178.217	17615.66	0	17615.66	99459.11	0	99459.11	BEV	0	4178.217	1	3
2030	0	4367.232	18412.56	11047.53	7365.023	100148.3	60088.97	40059.31	PHEV	2620.339	1746.893	1	8
2030	0	5588.378	23881.15	0	23881.15	139220	0	139220	BEV	0	5588.378	1	3
2030	0	7055.749	30151.75	18091.05	12060.7	169401.3	101640.8	67760.51	PHEV	4233.449	2822.299	1	8
2030	0	13929.78	60325.01	0	60325.01	364003.4	0	364003.4	BEV	0	13929.78	1	3
2030	0	6623.985	28686.16	17211.7	11474.46	166805.4	100083.3	66722.17	PHEV	3974.391	2649.594	1	8
2030	0	2446.578	10735.44	0	10735.44	45939.36	0	45939.36	BEV	0	2446.578	3	3
2030	0	222.6566	977.0036	586.2022	390.8014	5857.445	3514.467	2342.978	PHEV	133.5939	89.06262	3	8
2030	0	7.27187	27.32587	0	27.32587	120.9807	0	120.9807	BEV	0	7.27187	1	3
2030	0	0	0	0	0	0	0	0	PHEV	0	0	1	8

2030	0	807.914	3359.937	0	3359.937	18407.64	0	18407.64	BEV	0	807.914	1	3
2030	0	1698.265	7062.709	4237.626	2825.084	37276.75	22366.05	14910.7	PHEV	1018.959	679.3059	1	8
2030	0	9693.832	42535.95	0	42535.95	264802.2	0	264802.2	BEV	0	9693.832	1	3
2030	0	6971.161	30589.04	18353.42	12235.61	184322.2	110593.3	73728.87	PHEV	4182.697	2788.464	1	8
2030	0	21.7266	77.90896	0	77.90896	315.6327	0	315.6327	BEV	0	21.7266	1	3
2030	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2030	0	912.3636	3742.05	0	3742.05	19912.58	0	19912.58	BEV	0	912.3636	1	3
2030	0	253.6103	1040.18	624.108	416.072	5297.681	3178.609	2119.072	PHEV	152.1662	101.4441	1	8
2030	0	385.0815	1645.592	0	1645.592	9572.252	0	9572.252	BEV	0	385.0815	2	3
2030	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2030	0	113.3008	484.1752	0	484.1752	1960.292	0	1960.292	BEV	0	113.3008	3	3
2030	0	51.29907	219.2194	131.5316	87.68775	1256.749	754.0492	502.6995	PHEV	30.77944	20.51963	3	8
2030	0	8.613505	30.88699	0	30.88699	85.0692	0	85.0692	BEV	0	8.613505	3	3
2030	0	0	0	0	0	0	0	0	PHEV	0	0	3	8
2030	0	39.18579	140.5156	0	140.5156	393.0855	0	393.0855	BEV	0	39.18579	4	3
2030	0	0	0	0	0	0	0	0	PHEV	0	0	4	8
2030	0	133.5604	540.1452	0	540.1452	2802.929	0	2802.929	BEV	0	133.5604	1	3
2030	0	14.23741	57.57893	34.54736	23.03157	283.342	170.0052	113.3368	PHEV	8.542445	5.694963	1	8
2030	0	154.6307	643.0753	0	643.0753	3496.726	0	3496.726	BEV	0	154.6307	2	3
2030	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2030	0	9.975369	38.05643	0	38.05643	174.3723	0	174.3723	BEV	0	9.975369	1	3
2030	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2030	0	68.87729	270.6616	0	270.6616	1292.634	0	1292.634	BEV	0	68.87729	1	3
2030	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2030	0	63.84045	254.5261	0	254.5261	1297.282	0	1297.282	BEV	0	63.84045	1	3
2030	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2030	0	195.4211	823.9089	0	823.9089	4629.683	0	4629.683	BEV	0	195.4211	2	3
2030	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2030	0	5.705575	20.78638	0	20.78638	86.45781	0	86.45781	BEV	0	5.705575	1	3
2030	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2030	0	19.8209	76.75305	0	76.75305	362.5297	0	362.5297	BEV	0	19.8209	1	3
2030	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2030	0	21.08412	82.85257	0	82.85257	401.9357	0	401.9357	BEV	0	21.08412	2	3
2030	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2030	0	0.784399	2.992515	0	2.992515	10.36469	0	10.36469	BEV	0	0.784399	4	3
2030	0	0	0	0	0	0	0	0	PHEV	0	0	4	8
2030	0	2.177714	6.68617	0	6.68617	20.0013	0	20.0013	BEV	0	2.177714	1	3
2030	0	13.17013	52.50811	0	52.50811	190.7714	0	190.7714	BEV	0	13.17013	3	3
2030	0	0	0	0	0	0	0	0	PHEV	0	0	3	8
2030	0	8.340215	34.20731	0	34.20731	129.4162	0	129.4162	BEV	0	8.340215	3	3
2030	0	5.773995	23.68198	14.20919	9.472793	130.3604	78.21625	52.14417	PHEV	3.464397	2.309598	3	8
2030	0	1.24546	5.393651	0	5.393651	22.16838	0	22.16838	BEV	0	1.24546	4	3
2030	0	0	0	0	0	0	0	0	PHEV	0	0	4	8
2030	0	1.874411	5.647562	0	5.647562	16.59768	0	16.59768	BEV	0	1.874411	1	3
2030	0	28.25082	98.06708	0	98.06708	364.8791	0	364.8791	BEV	0	28.25082	2	3
2030	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2030	0	10.69675	37.74444	0	37.74444	147.5886	0	147.5886	BEV	0	10.69675	2	3

2030	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2030	0	4.663512	17.79149	0	17.79149	80.93088	0	80.93088	BEV	0	4.663512	2	3
2030	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2030	0	2.63883	10.21842	0	10.21842	48.16888	0	48.16888	BEV	0	2.63883	2	3
2030	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2030	0	9.200005	36.67959	0	36.67959	185.7603	0	185.7603	BEV	0	9.200005	2	3
2030	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2030	0	7.389833	29.03924	0	29.03924	101.9026	0	101.9026	BEV	0	7.389833	3	3
2030	0	0	0	0	0	0	0	0	PHEV	0	0	3	8
2030	0	7.590759	32.00317	0	32.00317	126.9411	0	126.9411	BEV	0	7.590759	3	3
2030	0	5.804698	24.47301	14.68381	9.789205	137.4154	82.44926	54.96617	PHEV	3.482819	2.321879	3	8
2030	0	1.776638	6.167242	0	6.167242	16.72802	0	16.72802	BEV	0	1.776638	4	3
2030	0	0	0	0	0	0	0	0	PHEV	0	0	4	8
2030	0	5.468146	19.92138	0	19.92138	57.59919	0	57.59919	BEV	0	5.468146	4	3
2030	0	0	0	0	0	0	0	0	PHEV	0	0	4	8
2030	0	0.979608	3.681121	0	3.681121	11.56435	0	11.56435	BEV	0	0.979608	4	3
2030	0	0	0	0	0	0	0	0	PHEV	0	0	4	8
2030	0	37.45995	134.3269	0	134.3269	528.1863	0	528.1863	BEV	0	37.45995	2	3
2030	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2030	0	2.576435	9.533996	0	9.533996	40.50374	0	40.50374	BEV	0	2.576435	2	3
2030	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2030	0	18.34877	62.64287	0	62.64287	226.1074	0	226.1074	BEV	0	18.34877	2	3
2030	0	2.168989	6.907904	0	6.907904	21.93269	0	21.93269	BEV	0	2.168989	1	3
2030	0	1.028487	3.570187	0	3.570187	10.16185	0	10.16185	BEV	0	1.028487	3	3
2030	0	0	0	0	0	0	0	0	PHEV	0	0	3	8
2030	0	0.60838	1.658767	0	1.658767	4.482592	0	4.482592	BEV	0	0.60838	2	3
2030	0	1.318078	5.179547	0	5.179547	17.7032	0	17.7032	BEV	0	1.318078	4	3
2030	0	0	0	0	0	0	0	0	PHEV	0	0	4	8
2030	0	3.135684	10.52561	0	10.52561	37.27088	0	37.27088	BEV	0	3.135684	1	3
2030	0	2.574119	8.935538	0	8.935538	33.55031	0	33.55031	BEV	0	2.574119	1	3
2030	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2030	0	6.202259	22.95121	0	22.95121	97.84177	0	97.84177	BEV	0	6.202259	1	3
2030	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2030	0	5.845383	19.62131	0	19.62131	68.36394	0	68.36394	BEV	0	5.845383	2	3
2030	0	0.961067	3.61145	0	3.61145	15.80123	0	15.80123	BEV	0	0.961067	2	3
2030	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2030	0	3.280664	10.82432	0	10.82432	36.8982	0	36.8982	BEV	0	3.280664	1	3
2030	0	3.657968	12.48834	0	12.48834	45.74542	0	45.74542	BEV	0	3.657968	1	3
2030	0	1.689745	5.091167	0	5.091167	14.99327	0	14.99327	BEV	0	1.689745	2	3
2030	0	0.74236	2.279246	0	2.279246	6.829265	0	6.829265	BEV	0	0.74236	2	3
2030	0	0.744717	2.37181	0	2.37181	7.572591	0	7.572591	BEV	0	0.744717	2	3
2030	0	0.745526	2.288967	0	2.288967	4.73859	0	4.73859	BEV	0	0.745526	3	3
2030	0	4.065986	13.88132	0	13.88132	34.52364	0	34.52364	BEV	0	4.065986	3	3
2030	0	0.366416	1.29293	0	1.29293	3.439619	0	3.439619	BEV	0	0.366416	3	3
2030	0	0	0	0	0	0	0	0	PHEV	0	0	3	8
2030	0	8.746275	35.37168	0	35.37168	128.1245	0	128.1245	BEV	0	8.746275	3	3
2030	0	0	0	0	0	0	0	0	PHEV	0	0	3	8

2030	0	24.56388	102.1558	0	102.1558	387.345	0	387.345	BEV	0	24.56388	3	3
2030	0	6.298431	26.19379	15.71627	10.47752	149.3798	89.62789	59.75193	PHEV	3.779059	2.519372	3	8
2030	0	0.753435	2.097428	0	2.097428	3.972648	0	3.972648	BEV	0	0.753435	4	3
2030	0	0.903214	2.876602	0	2.876602	6.289631	0	6.289631	BEV	0	0.903214	4	3
2030	0	0.430608	1.519438	0	1.519438	4.231616	0	4.231616	BEV	0	0.430608	4	3
2030	0	0	0	0	0	0	0	0	PHEV	0	0	4	8
2030	0	0.64142	1.712103	0	1.712103	4.686126	0	4.686126	BEV	0	0.64142	2	3
2030	0	2.039311	5.443411	0	5.443411	14.83428	0	14.83428	BEV	0	2.039311	1	3
2030	0	1.644197	4.482951	0	4.482951	12.19416	0	12.19416	BEV	0	1.644197	1	3
2030	0	1.252849	3.487707	0	3.487707	9.904847	0	9.904847	BEV	0	1.252849	1	3
2030	0	1.032794	2.93428	0	2.93428	7.837527	0	7.837527	BEV	0	1.032794	1	3
2030	0	0.989982	2.869365	0	2.869365	8.263996	0	8.263996	BEV	0	0.989982	1	3
2030	0	0.920397	2.720408	0	2.720408	7.694307	0	7.694307	BEV	0	0.920397	1	3
2030	0	0.990234	3.097016	0	3.097016	9.233026	0	9.233026	BEV	0	0.990234	1	3
2030	0	2.448443	7.938196	0	7.938196	26.38703	0	26.38703	BEV	0	2.448443	1	3
2030	0	0.786348	2.459352	0	2.459352	7.609924	0	7.609924	BEV	0	0.786348	2	3
2030	0	0	0	0	0	0	0	0	BEV	0	0	2	3
2030	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2030	0	0	0	0	0	0	0	0	BEV	0	0	2	3
2030	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2030	0	0	0	0	0	0	0	0	BEV	0	0	3	3
2030	0	20.80932	90.11787	54.07072	36.04715	551.4458	330.8675	220.5783	PHEV	12.48559	8.323727	3	8
2030	0	0.257372	0.863925	0	0.863925	2.099193	0	2.099193	BEV	0	0.257372	3	3
2030	0	0.80316	2.281865	0	2.281865	4.366199	0	4.366199	BEV	0	0.80316	4	3
2030	0	2.238253	6.872041	0	6.872041	14.6179	0	14.6179	BEV	0	2.238253	4	3
2030	0	0.606604	2.070951	0	2.070951	5.207729	0	5.207729	BEV	0	0.606604	4	3
2030	0	0.411433	1.593205	0	1.593205	5.177836	0	5.177836	BEV	0	0.411433	3	3
2030	0	0	0	0	0	0	0	0	PHEV	0	0	3	8
2030	0	1.538808	6.223248	0	6.223248	29.84639	0	29.84639	BEV	0	1.538808	2	3
2030	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2030	0	0.813935	2.63889	0	2.63889	8.459387	0	8.459387	BEV	0	0.813935	2	3
2030	0	2.30955	7.620198	0	7.620198	25.16232	0	25.16232	BEV	0	2.30955	2	3
2030	0	0.570173	1.913911	0	1.913911	4.53671	0	4.53671	BEV	0	0.570173	4	3
2030	0	1.074697	4.407859	0	4.407859	23.62528	0	23.62528	BEV	0	1.074697	2	3
2030	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2030	0	0.356016	0.991086	0	0.991086	2.70381	0	2.70381	BEV	0	0.356016	2	3
2030	0	0.193545	0.57206	0	0.57206	1.182074	0	1.182074	BEV	0	0.193545	4	3
2030	0	0.134001	0.380712	0	0.380712	1.038774	0	1.038774	BEV	0	0.134001	2	3
2030	0	0.188427	0.600112	0	0.600112	1.266205	0	1.266205	BEV	0	0.188427	3	3
2030	0	0.215356	0.809253	0	0.809253	2.367095	0	2.367095	BEV	0	0.215356	3	3
2030	0	0	0	0	0	0	0	0	PHEV	0	0	3	8
2030	0	0.386679	1.142902	0	1.142902	2.406709	0	2.406709	BEV	0	0.386679	3	3
2030	0	0.922067	2.98947	0	2.98947	6.929334	0	6.929334	BEV	0	0.922067	4	3
2030	0	0.448118	1.63257	0	1.63257	6.639354	0	6.639354	BEV	0	0.448118	2	3
2030	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2030	0	0.605556	1.616375	0	1.616375	2.964817	0	2.964817	BEV	0	0.605556	3	3
2030	0	2.06445	6.220148	0	6.220148	12.5274	0	12.5274	BEV	0	2.06445	4	3

2030	0	1.336837	5.176675	0	5.176675	16.71732	0	16.71732	BEV	0	1.336837	4	3
2030	0	0	0	0	0	0	0	0	PHEV	0	0	4	8
2030	0	0.132205	0.4362	0	0.4362	1.03452	0	1.03452	BEV	0	0.132205	3	3
2030	0	0	0	0	0	0	0	0	BEV	0	0	4	3
2030	0	1.999144	8.428529	5.057117	3.371412	51.65001	30.99001	20.66001	PHEV	1.199486	0.799657	4	8
2030	0	0.225623	0.666873	0	0.666873	1.872894	0	1.872894	BEV	0	0.225623	2	3
2031	0	28979.22	127159.1	0	127159.1	792427.4	0	792427.4	BEV	0	28979.22	1	3
2031	0	26140.24	114701.8	61938.97	52762.83	713255.4	385157.9	328097.5	PHEV	14115.73	12024.51	1	8
2031	0	39933.26	177512.5	0	177512.5	1139778	0	1139778	BEV	0	39933.26	1	3
2031	0	25808.67	114725.5	61951.76	52773.72	735815.2	397340.2	338475	PHEV	13936.68	11871.99	1	8
2031	0	53458.47	240697.9	0	240697.9	1592577	0	1592577	BEV	0	53458.47	1	3
2031	0	26217.94	118046.8	62564.81	55482	780291.3	413554.4	366736.9	PHEV	13895.51	12322.43	1	8
2031	0	68921.31	314268.1	0	314268.1	2141295	0	2141295	BEV	0	68921.31	1	3
2031	0	26280.08	119832.2	62312.72	57519.43	815964.7	424301.6	391663	PHEV	13665.64	12614.44	1	8
2031	0	77098.43	355971.2	0	355971.2	2497428	0	2497428	BEV	0	77098.43	1	3
2031	0	28997.89	133886.1	68281.94	65604.21	938781.4	478778.5	460002.9	PHEV	14788.92	14208.97	1	8
2031	0	85234.19	398417.9	0	398417.9	2876495	0	2876495	BEV	0	85234.19	1	3
2031	0	31585.19	147641.5	73820.75	73820.75	1065329	532664.6	532664.6	PHEV	15792.6	15792.6	1	8
2031	0	93392.8	441904.8	0	441904.8	3281502	0	3281502	BEV	0	93392.8	1	3
2031	0	34420.88	162868.6	79805.61	83062.98	1208932	592376.6	616555.2	PHEV	16866.23	17554.65	1	8
2031	0	100705.4	482274.9	0	482274.9	3681743	0	3681743	BEV	0	100705.4	1	3
2031	0	36954.03	176971.7	84946.43	92025.3	1350769	648369	702399.8	PHEV	17737.93	19216.1	1	8
2031	0	107987.4	523335	0	523335	4107441	0	4107441	BEV	0	107987.4	1	3
2031	0	39090.77	189444	89038.69	100405.3	1487032	698904.9	788126.8	PHEV	18372.66	20718.11	1	8
2031	0	95532.44	468448.1	0	468448.1	3774133	0	3774133	BEV	0	95532.44	1	3
2031	0	39729.14	194813.8	88445.47	106368.3	1570224	712881.9	857342.6	PHEV	18037.03	21692.11	1	8
2031	0	100766.9	499888.5	0	499888.5	4132771	0	4132771	BEV	0	100766.9	1	3
2031	0	42649.03	211575	92669.86	118905.2	1750408	766678.8	983729.5	PHEV	18680.28	23968.75	1	8
2031	0	107329.4	538592.7	0	538592.7	4566390	0	4566390	BEV	0	107329.4	1	3
2031	0	45866.09	230162	97128.36	133033.6	1953068	824194.7	1128873	PHEV	19355.49	26510.6	1	8
2031	0	114341.9	580333	0	580333	5038446	0	5038446	BEV	0	114341.9	1	3
2031	0	49473.09	251096.7	101945.3	149151.4	2181648	885749.1	1295899	PHEV	20086.07	29387.01	1	8
2031	0	120175.8	616827.7	0	616827.7	5468887	0	5468887	BEV	0	120175.8	1	3
2031	0	52642.81	270200.3	105378.1	164822.2	2396521	934643.1	1461878	PHEV	20530.7	32112.12	1	8
2031	0	109041.3	565924.3	0	565924.3	5111856	0	5111856	BEV	0	109041.3	1	3
2031	0	47765.35	247902.2	96681.84	151220.3	2238877	873161.9	1365715	PHEV	18628.49	29136.86	1	8
2031	0	2.185143	9.588277	0	9.588277	59.59163	0	59.59163	BEV	0	2.185143	2	3
2031	0	18.95277	83.16363	49.89818	33.26545	517.618	310.5708	207.0472	PHEV	11.37166	7.581109	2	8
2031	0	994.5292	4477.887	0	4477.887	29295.45	0	29295.45	BEV	0	994.5292	2	3
2031	0	763.7285	3438.703	2043.572	1395.131	22366.35	13292	9074.347	PHEV	453.8729	309.8556	2	8
2031	0	2131.833	9720.752	0	9720.752	65279.89	0	65279.89	BEV	0	2131.833	2	3
2031	0	1641.898	7486.745	4406.484	3080.261	49802.41	29312.28	20490.13	PHEV	966.3745	675.5239	2	8
2031	0	2575.731	11892.41	0	11892.41	82013.88	0	82013.88	BEV	0	2575.731	2	3
2031	0	1891.946	8735.304	5091.434	3643.87	59715.62	34805.67	24909.94	PHEV	1102.734	789.2118	2	8
2031	0	3287.616	15367.6	0	15367.6	108784.9	0	108784.9	BEV	0	3287.616	2	3
2031	0	2092.832	9782.712	5646.022	4136.69	68544.38	39559.9	28984.48	PHEV	1207.863	884.9689	2	8
2031	0	3722.45	17613.44	0	17613.44	128077.5	0	128077.5	BEV	0	3722.45	2	3

2031	0	2337.182	11058.8	6319.313	4739.485	79462.93	45407.39	34055.54	PHEV	1335.533	1001.649	2	8
2031	0	4074.525	19512.78	0	19512.78	145770	0	145770	BEV	0	4074.525	2	3
2031	0	2655.259	12715.96	7193.599	5522.359	93713.71	53015.18	40698.53	PHEV	1502.118	1153.141	2	8
2031	0	4651.085	22540.37	0	22540.37	172921.2	0	172921.2	BEV	0	4651.085	2	3
2031	0	2834.294	13735.73	7692.007	6043.72	103892.6	58179.84	45712.73	PHEV	1587.205	1247.089	2	8
2031	0	4742.025	23252.76	0	23252.76	182961.5	0	182961.5	BEV	0	4742.025	2	3
2031	0	2989.762	14660.45	8063.246	6597.201	113704.9	62537.68	51167.2	PHEV	1644.369	1345.393	2	8
2031	0	5148.425	25540.51	0	25540.51	206219.9	0	206219.9	BEV	0	5148.425	2	3
2031	0	3650.407	18109.08	9778.905	8330.178	143686.7	77590.8	66095.87	PHEV	1971.22	1679.187	2	8
2031	0	5836.42	29287.92	0	29287.92	242376	0	242376	BEV	0	5836.42	2	3
2031	0	4139.14	20770.74	11008.49	9762.249	168733.6	89428.8	79304.79	PHEV	2193.744	1945.396	2	8
2031	0	6759.286	34306.22	0	34306.22	290688.7	0	290688.7	BEV	0	6759.286	2	3
2031	0	4497.749	22827.96	11870.54	10957.42	189983.8	98791.56	91192.21	PHEV	2338.829	2158.919	2	8
2031	0	7497.119	38480.54	0	38480.54	334086.7	0	334086.7	BEV	0	7497.119	2	3
2031	0	5097.319	26163.06	13343.16	12819.9	222950.1	113704.5	109245.5	PHEV	2599.633	2497.687	2	8
2031	0	6893.06	35774.98	0	35774.98	318157.9	0	318157.9	BEV	0	6893.06	2	3
2031	0	4686.617	24323.54	12405.01	11918.54	212442.6	108345.7	104096.9	PHEV	2390.175	2296.443	2	8
2031	0	744.0408	3307.433	1984.46	1322.973	21048.37	12629.02	8419.349	PHEV	446.4245	297.6163	3	8
2031	0	2728.779	12286.38	0	12286.38	62271.34	0	62271.34	BEV	0	2728.779	3	3
2031	0	2370.106	10671.45	6341.89	4329.56	69521.61	41315.7	28205.91	PHEV	1408.52	961.5859	3	8
2031	0	5935.545	27064.96	0	27064.96	161733.6	0	161733.6	BEV	0	5935.545	3	3
2031	0	4283.572	19532.27	11496.14	8036.135	130311.5	76697.6	53613.86	PHEV	2521.188	1762.384	3	8
2031	0	7067.67	32632.14	0	32632.14	187662.9	0	187662.9	BEV	0	7067.67	3	3
2031	0	6807.295	31429.96	18319.18	13110.78	214917.3	125266.1	89651.2	PHEV	3967.68	2839.614	3	8
2031	0	9041.355	42262.82	0	42262.82	249104	0	249104	BEV	0	9041.355	3	3
2031	0	7209.555	33700.27	19449.87	14250.4	236207.3	136325.3	99881.93	PHEV	4160.943	3048.612	3	8
2031	0	10928.53	51710.3	0	51710.3	313491	0	313491	BEV	0	10928.53	3	3
2031	0	7815.65	36981.15	21132.09	15849.07	265816.2	151895	113921.2	PHEV	4466.086	3349.564	3	8
2031	0	12059.44	57752.28	0	57752.28	355946.1	0	355946.1	BEV	0	12059.44	3	3
2031	0	8405.531	40253.84	22772.17	17481.67	296774.2	167889.4	128884.8	PHEV	4755.129	3650.402	3	8
2031	0	12878.85	62414.28	0	62414.28	390259.1	0	390259.1	BEV	0	12878.85	3	3
2031	0	9465.431	45871.94	25688.29	20183.65	347140.1	194398.4	152741.6	PHEV	5300.641	4164.79	3	8
2031	0	14963.27	73373.16	0	73373.16	484316.2	0	484316.2	BEV	0	14963.27	3	3
2031	0	9295.439	45580.65	25069.36	20511.29	353726.5	194549.6	159176.9	PHEV	5112.491	4182.948	3	8
2031	0	16746.37	83076.05	0	83076.05	573799.9	0	573799.9	BEV	0	16746.37	3	3
2031	0	10278.04	50987.73	27533.38	23454.36	405814.8	219140	186674.8	PHEV	5550.144	4727.9	3	8
2031	0	19020.74	95448.52	0	95448.52	690185.9	0	690185.9	BEV	0	19020.74	3	3
2031	0	11192.29	56164.36	29767.11	26397.25	458406.3	242955.4	215451	PHEV	5931.913	5260.376	3	8
2031	0	21571.77	109485.8	0	109485.8	820094.5	0	820094.5	BEV	0	21571.77	3	3
2031	0	12412.64	62999.37	32759.67	30239.7	533092.1	277207.9	255884.2	PHEV	6454.573	5958.068	3	8
2031	0	24182.03	124119.3	0	124119.3	952057.8	0	952057.8	BEV	0	24182.03	3	3
2031	0	13866.51	71172.75	36298.1	34874.65	632444.7	322546.8	309897.9	PHEV	7071.918	6794.588	3	8
2031	0	22086.5	114628.9	0	114628.9	900533.2	0	900533.2	BEV	0	22086.5	3	3
2031	0	12664.88	65730.74	33522.68	32208.06	598366.3	305166.8	293199.5	PHEV	6459.09	6205.793	3	8
2031	0	998.0329	4379.309	2627.585	1751.723	25449.4	15269.64	10179.76	PHEV	598.8197	399.2132	4	8
2031	0	2.282288	10.1453	0	10.1453	45.16166	0	45.16166	BEV	0	2.282288	4	3
2031	0	2792.892	12415.05	7449.029	4966.019	76119.86	45671.91	30447.94	PHEV	1675.735	1117.157	4	8

2031	0	1201.961	5411.852	0	5411.852	25815.72	0	25815.72	BEV	0	1201.961	4	3
2031	0	3127.254	14080.53	8367.855	5712.67	93520.03	55577.62	37942.41	PHEV	1858.483	1268.772	4	8
2031	0	2595.47	11834.85	0	11834.85	62786.96	0	62786.96	BEV	0	2595.47	4	3
2031	0	3495.438	15938.53	9380.965	6557.568	106573.8	62726.29	43847.5	PHEV	2057.315	1438.123	4	8
2031	0	4112.534	18987.98	0	18987.98	104018.2	0	104018.2	BEV	0	4112.534	4	3
2031	0	3991.402	18428.7	10741.3	7687.401	124070	72315.08	51754.91	PHEV	2326.417	1664.985	4	8
2031	0	4372.215	20437.44	0	20437.44	106824.1	0	106824.1	BEV	0	4372.215	4	3
2031	0	4270.872	19963.72	11521.92	8441.803	137861.4	79565.74	58295.69	PHEV	2464.903	1805.969	4	8
2031	0	4735.114	22405.05	0	22405.05	116665.1	0	116665.1	BEV	0	4735.114	4	3
2031	0	4449.313	21052.72	12030.13	9022.596	149188.9	85250.82	63938.12	PHEV	2542.464	1906.848	4	8
2031	0	5139.232	24611.63	0	24611.63	129910.3	0	129910.3	BEV	0	5139.232	4	3
2031	0	5912.768	28316.07	16018.81	12297.26	205905.1	116483.4	89421.63	PHEV	3344.937	2567.831	4	8
2031	0	5835.554	28280.61	0	28280.61	153085	0	153085	BEV	0	5835.554	4	3
2031	0	6401.708	31024.34	17373.63	13650.71	231620.1	129707.2	101912.8	PHEV	3584.957	2816.752	4	8
2031	0	5725.49	28075.23	0	28075.23	154829.3	0	154829.3	BEV	0	5725.49	4	3
2031	0	5939.409	29124.19	16018.3	13105.89	222977.8	122637.8	100340	PHEV	3266.675	2672.734	4	8
2031	0	6247.088	30990.8	0	30990.8	177486	0	177486	BEV	0	6247.088	4	3
2031	0	6308.704	31296.47	16900.1	14396.38	245728	132693.1	113034.9	PHEV	3406.7	2902.004	4	8
2031	0	6751.1	33877.9	0	33877.9	202228.4	0	202228.4	BEV	0	6751.1	4	3
2031	0	6673.851	33490.25	17749.83	15740.42	269603.1	142889.6	126713.4	PHEV	3537.141	3136.71	4	8
2031	0	7394.401	37529.69	0	37529.69	237236.8	0	237236.8	BEV	0	7394.401	4	3
2031	0	7315.117	37127.29	19306.19	17821.1	306270.7	159260.7	147009.9	PHEV	3803.861	3511.256	4	8
2031	0	8080.552	41475.13	0	41475.13	277309.3	0	277309.3	BEV	0	8080.552	4	3
2031	0	7953.945	40825.3	20820.9	20004.39	345028.5	175964.5	169063.9	PHEV	4056.512	3897.433	4	8
2031	0	7067.284	36679.21	0	36679.21	250915.2	0	250915.2	BEV	0	7067.284	4	3
2031	0	6956.554	36104.51	18413.3	17691.21	311763.4	158999.3	152764.1	PHEV	3547.842	3408.711	4	8
2031	0	9.313028	32.32832	0	32.32832	121.9275	0	121.9275	BEV	0	9.313028	1	3
2031	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2031	0	3585.26	14910.31	0	14910.31	81008.05	0	81008.05	BEV	0	3585.26	1	3
2031	0	3747.451	15584.83	9350.895	6233.93	81377.13	48826.28	32550.85	PHEV	2248.471	1498.981	1	8
2031	0	4881.937	20582.59	0	20582.59	115502.7	0	115502.7	BEV	0	4881.937	1	3
2031	0	6163.814	25987.07	15592.24	10394.83	140225.1	84135.05	56090.03	PHEV	3698.288	2465.525	1	8
2031	0	12303.72	52578.24	0	52578.24	305572.5	0	305572.5	BEV	0	12303.72	1	3
2031	0	5850.751	25002.37	15001.42	10000.95	139713	83827.79	55885.19	PHEV	3510.451	2340.3	1	8
2031	0	2211.443	9576.987	0	9576.987	39475.61	0	39475.61	BEV	0	2211.443	3	3
2031	0	201.2576	871.5762	522.9457	348.6305	5072.268	3043.361	2028.907	PHEV	120.7546	80.50303	3	8
2031	0	6.027752	22.30545	0	22.30545	94.81995	0	94.81995	BEV	0	6.027752	1	3
2031	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2031	0	685.1963	2810.326	0	2810.326	14808.48	0	14808.48	BEV	0	685.1963	1	3
2031	0	1440.308	5907.408	3544.445	2362.963	29904.03	17942.42	11961.61	PHEV	864.1846	576.1231	1	8
2031	0	8697.092	37664.06	0	37664.06	225941.2	0	225941.2	BEV	0	8697.092	1	3
2031	0	6254.372	27085.5	16251.3	10834.2	156928.4	94157.01	62771.34	PHEV	3752.623	2501.749	1	8
2031	0	18.78293	66.27726	0	66.27726	257.9307	0	257.9307	BEV	0	18.78293	1	3
2031	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2031	0	761.595	3080.042	0	3080.042	15761.61	0	15761.61	BEV	0	761.595	1	3
2031	0	211.701	856.1613	513.6968	342.4645	4179.879	2507.927	1671.952	PHEV	127.0206	84.68041	1	8
2031	0	354.768	1495.727	0	1495.727	8374.726	0	8374.726	BEV	0	354.768	2	3

2031	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2031	0	100.0979	422.0196	0	422.0196	1644.793	0	1644.793	BEV	0	100.0979	3	3
2031	0	45.32119	191.0773	114.6464	76.43092	1064.141	638.4848	425.6565	PHEV	27.19271	18.12847	3	8
2031	0	7.680201	27.10028	0	27.10028	71.635	0	71.635	BEV	0	7.680201	3	3
2031	0	0	0	0	0	0	0	0	PHEV	0	0	3	8
2031	0	34.47593	121.6514	0	121.6514	326.7973	0	326.7973	BEV	0	34.47593	4	3
2031	0	0	0	0	0	0	0	0	PHEV	0	0	4	8
2031	0	110.4027	440.1656	0	440.1656	2196.438	0	2196.438	BEV	0	110.4027	1	3
2031	0	11.76881	46.92121	28.15272	18.76848	221.0023	132.6014	88.40092	PHEV	7.061289	4.707526	1	8
2031	0	140.3763	575.7518	0	575.7518	3010.798	0	3010.798	BEV	0	140.3763	2	3
2031	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2031	0	8.179286	30.73571	0	30.73571	135.2705	0	135.2705	BEV	0	8.179286	1	3
2031	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2031	0	55.91466	216.52	0	216.52	993.0376	0	993.0376	BEV	0	55.91466	1	3
2031	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2031	0	52.34056	205.6785	0	205.6785	1007.687	0	1007.687	BEV	0	52.34056	1	3
2031	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2031	0	178.0927	740.6483	0	740.6483	4003.971	0	4003.971	BEV	0	178.0927	2	3
2031	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2031	0	4.860366	17.42869	0	17.42869	69.62248	0	69.62248	BEV	0	4.860366	1	3
2031	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2031	0	16.14343	61.58784	0	61.58784	279.393	0	279.393	BEV	0	16.14343	1	3
2031	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2031	0	18.71323	72.46379	0	72.46379	337.5861	0	337.5861	BEV	0	18.71323	2	3
2031	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2031	0	0.680914	2.558704	0	2.558704	8.542299	0	8.542299	BEV	0	0.680914	4	3
2031	0	0	0	0	0	0	0	0	PHEV	0	0	4	8
2031	0	2.091541	6.301773	0	6.301773	18.25158	0	18.25158	BEV	0	2.091541	1	3
2031	0	11.35266	44.61162	0	44.61162	155.9631	0	155.9631	BEV	0	11.35266	3	3
2031	0	0	0	0	0	0	0	0	PHEV	0	0	3	8
2031	0	7.202006	29.12635	0	29.12635	106.0955	0	106.0955	BEV	0	7.202006	3	3
2031	0	4.986004	20.1644	12.09864	8.065759	107.7606	64.65635	43.10424	PHEV	2.991602	1.994402	3	8
2031	0	1.147837	4.905122	0	4.905122	19.39767	0	19.39767	BEV	0	1.147837	4	3
2031	0	0	0	0	0	0	0	0	PHEV	0	0	4	8
2031	0	1.79893	5.317079	0	5.317079	15.15285	0	15.15285	BEV	0	1.79893	1	3
2031	0	25.46362	86.93305	0	86.93305	310.6545	0	310.6545	BEV	0	25.46362	2	3
2031	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2031	0	9.395862	32.61585	0	32.61585	122.4186	0	122.4186	BEV	0	9.395862	2	3
2031	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2031	0	4.135569	15.54043	0	15.54043	67.84111	0	67.84111	BEV	0	4.135569	2	3
2031	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2031	0	2.356883	8.991602	0	8.991602	40.68124	0	40.68124	BEV	0	2.356883	2	3
2031	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2031	0	8.18987	32.18308	0	32.18308	156.6635	0	156.6635	BEV	0	8.18987	2	3
2031	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2031	0	6.656205	25.77502	0	25.77502	86.74406	0	86.74406	BEV	0	6.656205	3	3
2031	0	0	0	0	0	0	0	0	PHEV	0	0	3	8

2031	0	6.619519	27.52912	0	27.52912	105.055	0	105.055	BEV	0	6.619519	3	3
2031	0	5.061985	21.05168	12.63101	8.420673	114.8783	68.92697	45.95132	PHEV	3.037191	2.024794	3	8
2031	0	1.563744	5.338637	0	5.338637	13.924	0	13.924	BEV	0	1.563744	4	3
2031	0	0	0	0	0	0	0	0	PHEV	0	0	4	8
2031	0	4.784788	17.15767	0	17.15767	47.6268	0	47.6268	BEV	0	4.784788	4	3
2031	0	0	0	0	0	0	0	0	PHEV	0	0	4	8
2031	0	0.85756	3.173365	0	3.173365	9.559713	0	9.559713	BEV	0	0.85756	4	3
2031	0	0	0	0	0	0	0	0	PHEV	0	0	4	8
2031	0	33.22693	117.2442	0	117.2442	442.0426	0	442.0426	BEV	0	33.22693	2	3
2031	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2031	0	2.285366	8.325977	0	8.325977	33.92025	0	33.92025	BEV	0	2.285366	2	3
2031	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2031	0	16.75371	56.23751	0	56.23751	195.0481	0	195.0481	BEV	0	16.75371	2	3
2031	0	2.037829	6.373433	0	6.373433	19.52097	0	19.52097	BEV	0	2.037829	1	3
2031	0	0.91778	3.13331	0	3.13331	8.577187	0	8.577187	BEV	0	0.91778	3	3
2031	0	0	0	0	0	0	0	0	PHEV	0	0	3	8
2031	0	0.552829	1.475634	0	1.475634	3.92964	0	3.92964	BEV	0	0.552829	2	3
2031	0	1.142785	4.425239	0	4.425239	14.51527	0	14.51527	BEV	0	1.142785	4	3
2031	0	0	0	0	0	0	0	0	PHEV	0	0	4	8
2031	0	2.887654	9.527613	0	9.527613	32.45088	0	32.45088	BEV	0	2.887654	1	3
2031	0	2.282296	7.79178	0	7.79178	28.10796	0	28.10796	BEV	0	2.282296	1	3
2031	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2031	0	5.188133	18.90125	0	18.90125	77.35599	0	77.35599	BEV	0	5.188133	1	3
2031	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2031	0	5.294663	17.46937	0	17.46937	58.51029	0	58.51029	BEV	0	5.294663	2	3
2031	0	0.846538	3.13258	0	3.13258	13.15542	0	13.15542	BEV	0	0.846538	2	3
2031	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2031	0	3.030093	9.823986	0	9.823986	32.23291	0	32.23291	BEV	0	3.030093	1	3
2031	0	3.341851	11.21766	0	11.21766	39.49789	0	39.49789	BEV	0	3.341851	1	3
2031	0	1.530298	4.523087	0	4.523087	12.91097	0	12.91097	BEV	0	1.530298	2	3
2031	0	0.647293	1.950282	0	1.950282	5.661435	0	5.661435	BEV	0	0.647293	2	3
2031	0	0.65838	2.059124	0	2.059124	6.343306	0	6.343306	BEV	0	0.65838	2	3
2031	0	0.684454	2.062247	0	2.062247	4.128466	0	4.128466	BEV	0	0.684454	3	3
2031	0	3.709774	12.45267	0	12.45267	29.73571	0	29.73571	BEV	0	3.709774	3	3
2031	0	0.322258	1.118655	0	1.118655	2.855027	0	2.855027	BEV	0	0.322258	3	3
2031	0	0	0	0	0	0	0	0	PHEV	0	0	3	8
2031	0	7.296713	29.09134	0	29.09134	101.273	0	101.273	BEV	0	7.296713	3	3
2031	0	0	0	0	0	0	0	0	PHEV	0	0	3	8
2031	0	20.60493	84.51092	0	84.51092	307.9799	0	307.9799	BEV	0	20.60493	3	3
2031	0	5.283316	21.66947	13.00168	8.667787	120.8837	72.53025	48.3535	PHEV	3.16999	2.113326	3	8
2031	0	0.750802	2.047083	0	2.047083	3.810505	0	3.810505	BEV	0	0.750802	4	3
2031	0	0.848636	2.654159	0	2.654159	5.592762	0	5.592762	BEV	0	0.848636	4	3
2031	0	0.378095	1.312481	0	1.312481	3.513051	0	3.513051	BEV	0	0.378095	4	3
2031	0	0	0	0	0	0	0	0	PHEV	0	0	4	8
2031	0	1.588896	4.241145	0	4.241145	11.38236	0	11.38236	BEV	0	1.588896	1	3
2031	0	1.202689	3.279168	0	3.279168	9.160884	0	9.160884	BEV	0	1.202689	1	3
2031	0	0.991947	2.761402	0	2.761402	7.213799	0	7.213799	BEV	0	0.991947	1	3

2031	0	0.943177	2.679671	0	2.679671	7.534242	0	7.534242	BEV	0	0.943177	1	3
2031	0	0.878693	2.546803	0	2.546803	7.007726	0	7.007726	BEV	0	0.878693	1	3
2031	0	0.958795	2.94376	0	2.94376	8.479766	0	8.479766	BEV	0	0.958795	1	3
2031	0	2.271768	7.235241	0	7.235241	23.18495	0	23.18495	BEV	0	2.271768	1	3
2031	0	0.717241	2.202124	0	2.202124	6.579731	0	6.579731	BEV	0	0.717241	2	3
2031	0	0	0	0	0	0	0	0	BEV	0	0	2	3
2031	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2031	0	0	0	0	0	0	0	0	BEV	0	0	2	3
2031	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2031	0	0	0	0	0	0	0	0	BEV	0	0	3	3
2031	0	18.30181	78.2102	46.92612	31.28408	466.272	279.7632	186.5088	PHEV	10.98108	7.320722	3	8
2031	0	0.234906	0.775055	0	0.775055	1.810239	0	1.810239	BEV	0	0.234906	3	3
2031	0	0.799427	2.225461	0	2.225461	4.16597	0	4.16597	BEV	0	0.799427	4	3
2031	0	2.182487	6.575789	0	6.575789	13.54184	0	13.54184	BEV	0	2.182487	4	3
2031	0	0.539842	1.812099	0	1.812099	4.379523	0	4.379523	BEV	0	0.539842	4	3
2031	0	0.364219	1.389511	0	1.389511	4.333369	0	4.333369	BEV	0	0.364219	3	3
2031	0	0	0	0	0	0	0	0	PHEV	0	0	3	8
2031	0	1.371618	5.468516	0	5.468516	25.16493	0	25.16493	BEV	0	1.371618	2	3
2031	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2031	0	0.740089	2.357071	0	2.357071	7.274653	0	7.274653	BEV	0	0.740089	2	3
2031	0	2.091658	6.781448	0	6.781448	21.52122	0	21.52122	BEV	0	2.091658	2	3
2031	0	0.507183	1.673414	0	1.673414	3.808938	0	3.808938	BEV	0	0.507183	4	3
2031	0	0.984635	3.982062	0	3.982062	20.53816	0	20.53816	BEV	0	0.984635	2	3
2031	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2031	0	0.320263	0.873208	0	0.873208	2.343413	0	2.343413	BEV	0	0.320263	2	3
2031	0	0.187813	0.544357	0	0.544357	1.098388	0	1.098388	BEV	0	0.187813	4	3
2031	0	0.119575	0.332876	0	0.332876	0.889664	0	0.889664	BEV	0	0.119575	2	3
2031	0	0.170045	0.531825	0	0.531825	1.08064	0	1.08064	BEV	0	0.170045	3	3
2031	0	0.191062	0.707018	0	0.707018	1.981728	0	1.981728	BEV	0	0.191062	3	3
2031	0	0	0	0	0	0	0	0	PHEV	0	0	3	8
2031	0	0.374272	1.084789	0	1.084789	2.223552	0	2.223552	BEV	0	0.374272	3	3
2031	0	0.845682	2.693371	0	2.693371	6.012998	0	6.012998	BEV	0	0.845682	4	3
2031	0	0.39303	1.409358	0	1.409358	5.500108	0	5.500108	BEV	0	0.39303	2	3
2031	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2031	0	1.95703	5.784374	0	5.784374	11.28928	0	11.28928	BEV	0	1.95703	4	3
2031	0	1.138133	4.342024	0	4.342024	13.44637	0	13.44637	BEV	0	1.138133	4	3
2031	0	0	0	0	0	0	0	0	PHEV	0	0	4	8
2031	0	0.119278	0.386716	0	0.386716	0.883223	0	0.883223	BEV	0	0.119278	3	3
2031	0	0	0	0	0	0	0	0	BEV	0	0	4	3
2031	0	1.771434	7.367005	4.420203	2.946802	43.94303	26.36582	17.57721	PHEV	1.06286	0.708574	4	8
2031	0	0.199628	0.578602	0	0.578602	1.579662	0	1.579662	BEV	0	0.199628	2	3
2032	0	26073.48	112915.1	0	112915.1	677965.3	0	677965.3	BEV	0	26073.48	1	3
2032	0	23519.16	101853.3	55000.76	46852.5	609939.4	329367.3	280572.1	PHEV	12700.35	10818.81	1	8
2032	0	36163.25	158682.2	0	158682.2	982103.7	0	982103.7	BEV	0	36163.25	1	3
2032	0	23372.13	102555.5	55379.98	47175.54	633848.3	342278.1	291570.2	PHEV	12620.95	10751.18	1	8
2032	0	49326.44	219267.4	0	219267.4	1399185	0	1399185	BEV	0	49326.44	1	3
2032	0	24191.45	107536.5	56994.37	50542.17	685335.7	363227.9	322107.8	PHEV	12821.47	11369.98	1	8

2032	0	63725.84	286926.9	0	286926.9	1886395	0	1886395	BEV	0	63725.84	1	3
2032	0	24299.01	109406.8	56891.53	52515.26	718711.8	373730.1	344981.7	PHEV	12635.49	11663.53	1	8
2032	0	72559.36	330856.9	0	330856.9	2240905	0	2240905	BEV	0	72559.36	1	3
2032	0	27290.67	124440.3	63464.55	60975.74	842225.7	429535.1	412690.6	PHEV	13918.24	13372.43	1	8
2032	0	80211.31	370343.6	0	370343.6	2582517	0	2582517	BEV	0	80211.31	1	3
2032	0	29723.87	137238.1	68619.03	68619.03	956309.2	478154.6	478154.6	PHEV	14861.93	14861.93	1	8
2032	0	89147.58	416710.6	0	416710.6	2989945	0	2989945	BEV	0	89147.58	1	3
2032	0	32856.26	153583	75255.66	78327.32	1101278	539626.1	561651.7	PHEV	16099.57	16756.69	1	8
2032	0	95844.75	453506.7	0	453506.7	3346808	0	3346808	BEV	0	95844.75	1	3
2032	0	35170.42	166415.2	79879.28	86535.89	1227575	589236.1	638339.1	PHEV	16881.8	18288.62	1	8
2032	0	104245.2	499227	0	499227	3788952	0	3788952	BEV	0	104245.2	1	3
2032	0	37736.11	180717.1	84937.03	95780.05	1371330	644525.2	726805	PHEV	17735.97	20000.14	1	8
2032	0	91792.17	444848.7	0	444848.7	3468083	0	3468083	BEV	0	91792.17	1	3
2032	0	38173.67	184999.5	83989.79	101009.7	1442500	654895.2	787605.2	PHEV	17330.85	20842.82	1	8
2032	0	97969.11	480396.4	0	480396.4	3844696	0	3844696	BEV	0	97969.11	1	3
2032	0	41464.88	203325.1	89056.4	114268.7	1627955	713044.4	914910.9	PHEV	18161.62	23303.26	1	8
2032	0	104991	520843.4	0	520843.4	4277582	0	4277582	BEV	0	104991	1	3
2032	0	44866.8	222577	93927.49	128649.5	1829233	771936.5	1057297	PHEV	18933.79	25933.01	1	8
2032	0	111489	559466.2	0	559466.2	4712133	0	4712133	BEV	0	111489	1	3
2032	0	48238.71	242068.1	98279.66	143788.5	2040507	828445.8	1212061	PHEV	19584.92	28653.8	1	8
2032	0	119059.2	604275.7	0	604275.7	5211692	0	5211692	BEV	0	119059.2	1	3
2032	0	52153.7	264701.9	103233.7	161468.2	2284602	890994.9	1393607	PHEV	20339.94	31813.75	1	8
2032	0	121047.3	621300.7	0	621300.7	5471493	0	5471493	BEV	0	121047.3	1	3
2032	0	53024.56	272159.7	106142.3	166017.4	2397746	935120.8	1462625	PHEV	20679.58	32344.98	1	8
2032	0	109750.2	569603.8	0	569603.8	5109991	0	5109991	BEV	0	109750.2	1	3
2032	0	48075.9	249513.9	97310.44	152203.5	2238144	872876	1365268	PHEV	18749.6	29326.3	1	8
2032	0	2.051254	8.883261	0	8.883261	53.22602	0	53.22602	BEV	0	2.051254	2	3
2032	0	17.79148	77.04869	46.22922	30.81948	466.2715	279.7629	186.5086	PHEV	10.67489	7.116594	2	8
2032	0	940.809	4182.112	0	4182.112	26499.87	0	26499.87	BEV	0	940.809	2	3
2032	0	722.4752	3211.568	1908.589	1302.979	20299.56	12063.74	8235.823	PHEV	429.3567	293.1185	2	8
2032	0	2012.711	9062.27	0	9062.27	58926.75	0	58926.75	BEV	0	2012.711	2	3
2032	0	1550.153	6979.594	4107.99	2871.604	45094.46	26541.31	18553.15	PHEV	912.3757	637.7772	2	8
2032	0	2457.27	11204.68	0	11204.68	74804.25	0	74804.25	BEV	0	2457.27	2	3
2032	0	1804.933	8230.152	4797.003	3433.149	54559.42	31800.35	22759.07	PHEV	1052.018	752.9149	2	8
2032	0	3134.543	14472.5	0	14472.5	99181.84	0	99181.84	BEV	0	3134.543	2	3
2032	0	1995.389	9212.909	5317.164	3895.744	62583.33	36119.52	26463.81	PHEV	1151.624	843.7643	2	8
2032	0	3606.159	16856.59	0	16856.59	118638.8	0	118638.8	BEV	0	3606.159	2	3
2032	0	2264.167	10583.6	6047.772	4535.829	73687.56	42107.17	31580.38	PHEV	1293.81	970.3575	2	8
2032	0	3935.983	18623.81	0	18623.81	134675.5	0	134675.5	BEV	0	3935.983	2	3
2032	0	2564.976	12136.64	6865.873	5270.771	86657.75	49023.53	37634.22	PHEV	1451.043	1113.932	2	8
2032	0	4497.852	21540.08	0	21540.08	159972	0	159972	BEV	0	4497.852	2	3
2032	0	2740.916	13126.17	7350.653	5775.513	96170.97	53855.74	42315.23	PHEV	1534.913	1206.003	2	8
2032	0	4590.008	22244.37	0	22244.37	169462.2	0	169462.2	BEV	0	4590.008	2	3
2032	0	2893.918	14024.68	7713.574	6311.106	105351.6	57943.36	47408.2	PHEV	1591.655	1302.263	2	8
2032	0	5053.719	24781.16	0	24781.16	193745.4	0	193745.4	BEV	0	5053.719	2	3
2032	0	3583.256	17570.68	9488.166	8082.511	135006	72903.25	62102.77	PHEV	1934.958	1648.298	2	8
2032	0	5774.215	28644.96	0	28644.96	229571.1	0	229571.1	BEV	0	5774.215	2	3

2032	0	4095.024	20314.76	10766.82	9547.938	159784.2	84685.6	75098.55	PHEV	2170.363	1924.661	2	8
2032	0	6680.413	33523.18	0	33523.18	275147.1	0	275147.1	BEV	0	6680.413	2	3
2032	0	4445.265	22306.92	11599.6	10707.32	179756.1	93473.17	86282.93	PHEV	2311.538	2133.727	2	8
2032	0	7398.745	37551.74	0	37551.74	315932.1	0	315932.1	BEV	0	7398.745	2	3
2032	0	5030.435	25531.57	13021.1	12510.47	210718.5	107466.4	103252.1	PHEV	2565.522	2464.913	2	8
2032	0	7549.648	38750.15	0	38750.15	334110.9	0	334110.9	BEV	0	7549.648	2	3
2032	0	5133.034	26346.37	13436.65	12909.72	222974.2	113716.8	109257.3	PHEV	2617.847	2515.187	2	8
2032	0	6937.877	36007.58	0	36007.58	318015.4	0	318015.4	BEV	0	6937.877	2	3
2032	0	4717.088	24481.69	12485.66	11996.03	212353.7	108300.4	104053.3	PHEV	2405.715	2311.373	2	8
2032	0	679.3083	2980.764	1788.458	1192.306	18425.19	11055.12	7370.077	PHEV	407.585	271.7233	3	8
2032	0	2544.155	11309.36	0	11309.36	55402.89	0	55402.89	BEV	0	2544.155	3	3
2032	0	2209.749	9822.844	5837.576	3985.268	62116.26	36914.81	25201.45	PHEV	1313.222	896.5269	3	8
2032	0	5524.295	24873.25	0	24873.25	144001.9	0	144001.9	BEV	0	5524.295	3	3
2032	0	3986.78	17950.56	10565.18	7385.372	116185.9	68383.68	47802.18	PHEV	2346.505	1640.275	3	8
2032	0	6698.721	30544.9	0	30544.9	170016.6	0	170016.6	BEV	0	6698.721	3	3
2032	0	6451.938	29419.61	17147.43	12272.18	195072.4	113699.3	81373.04	PHEV	3760.558	2691.38	3	8
2032	0	8592.023	39670.23	0	39670.23	226327.4	0	226327.4	BEV	0	8592.023	3	3
2032	0	6851.259	31632.95	18256.73	13376.22	214943.4	124053.1	90890.36	PHEV	3954.155	2897.104	3	8
2032	0	10575.2	49432.61	0	49432.61	290063.7	0	290063.7	BEV	0	10575.2	3	3
2032	0	7562.963	35352.24	20201.28	15150.96	246223.6	140699.2	105524.4	PHEV	4321.693	3241.27	3	8
2032	0	11723.04	55469.66	0	55469.66	330930.4	0	330930.4	BEV	0	11723.04	3	3
2032	0	8171.058	38662.83	21872.12	16790.71	276154.1	156224.3	119929.8	PHEV	4622.484	3548.574	3	8
2032	0	12626.06	60465.84	0	60465.84	365961.7	0	365961.7	BEV	0	12626.06	3	3
2032	0	9279.64	44439.92	24886.35	19553.56	325723.9	182405.4	143318.5	PHEV	5196.598	4083.042	3	8
2032	0	14616.93	70837.45	0	70837.45	452705.8	0	452705.8	BEV	0	14616.93	3	3
2032	0	9080.285	44005.42	24202.98	19802.44	330739.2	181906.5	148832.6	PHEV	4994.157	4086.128	3	8
2032	0	16452.44	80675.37	0	80675.37	539570.2	0	539570.2	BEV	0	16452.44	3	3
2032	0	10097.65	49514.33	26737.74	22776.59	381627.2	206078.7	175548.5	PHEV	5452.731	4644.919	3	8
2032	0	18764.4	93087.21	0	93087.21	651947.6	0	651947.6	BEV	0	18764.4	3	3
2032	0	11041.46	54774.9	29030.7	25744.2	432978.8	229478.8	203500.1	PHEV	5851.972	5189.485	3	8
2032	0	21045.79	105610.5	0	105610.5	766248.6	0	766248.6	BEV	0	21045.79	3	3
2032	0	12109.98	60769.48	31600.13	29169.35	497992.8	258956.2	239036.5	PHEV	6297.192	5812.793	3	8
2032	0	23570.49	119630.2	0	119630.2	889128.1	0	889128.1	BEV	0	23570.49	3	3
2032	0	13515.84	68598.56	34985.26	33613.29	590442	301125.4	289316.6	PHEV	6893.078	6622.761	3	8
2032	0	24354.59	125005	0	125005	952261.6	0	952261.6	BEV	0	24354.59	3	3
2032	0	13965.45	71680.63	36557.12	35123.51	632594.7	322623.3	309971.4	PHEV	7122.382	6843.073	3	8
2032	0	22230.1	115374.2	0	115374.2	900134.2	0	900134.2	BEV	0	22230.1	3	3
2032	0	12747.23	66158.1	33740.63	32417.47	598112.4	305037.3	293075.1	PHEV	6501.085	6246.141	3	8
2032	0	923.0176	3997.266	2398.36	1598.907	22524.5	13514.7	9009.8	PHEV	553.8106	369.2071	4	8
2032	0	2.116249	9.285972	0	9.285972	39.86863	0	39.86863	BEV	0	2.116249	4	3
2032	0	2589.705	11363.47	6818.083	4545.389	67564.96	40538.98	27025.99	PHEV	1553.823	1035.882	4	8
2032	0	1128.953	5018.457	0	5018.457	23110.69	0	23110.69	BEV	0	1128.953	4	3
2032	0	2937.304	13056.99	7759.584	5297.408	84127.75	49995.92	34131.83	PHEV	1745.598	1191.706	4	8
2032	0	2430.94	10945.36	0	10945.36	56139.53	0	56139.53	BEV	0	2430.94	4	3
2032	0	3273.858	14740.61	8675.903	6064.709	95555.75	56241.38	39314.36	PHEV	1926.899	1346.959	4	8
2032	0	3898.033	17774.29	0	17774.29	94158.58	0	94158.58	BEV	0	3898.033	4	3
2032	0	3783.218	17250.76	10054.73	7196.03	112522.4	65584.46	46937.9	PHEV	2205.076	1578.142	4	8

2032	0	4127.136	19055.4	0	19055.4	96272.38	0	96272.38	BEV	0	4127.136	4	3
2032	0	4031.474	18613.72	10742.77	7870.944	124530.2	71871.74	52658.51	PHEV	2326.736	1704.738	4	8
2032	0	4573.256	21377.18	0	21377.18	107606	0	107606	BEV	0	4573.256	4	3
2032	0	4297.224	20086.9	11478.23	8608.671	137844.4	78768.23	59076.17	PHEV	2455.556	1841.667	4	8
2032	0	4935.979	23355.48	0	23355.48	119220.8	0	119220.8	BEV	0	4935.979	4	3
2032	0	5678.923	26870.85	15201.22	11669.63	189233.1	107051.9	82181.24	PHEV	3212.648	2466.275	4	8
2032	0	5656.847	27090.47	0	27090.47	141868	0	141868	BEV	0	5656.847	4	3
2032	0	6205.663	29718.73	16642.49	13076.24	214862.9	120323.2	94539.69	PHEV	3475.171	2730.492	4	8
2032	0	5528.048	26790.36	0	26790.36	142994.9	0	142994.9	BEV	0	5528.048	4	3
2032	0	5734.59	27791.31	15285.22	12506.09	206088.2	113348.5	92739.7	PHEV	3154.025	2580.566	4	8
2032	0	6140.851	30111.97	0	30111.97	166976	0	166976	BEV	0	6140.851	4	3
2032	0	6201.42	30408.97	16420.85	13988.13	231254.3	124877.3	106377	PHEV	3348.767	2852.653	4	8
2032	0	6625.013	32865.63	0	32865.63	190028.6	0	190028.6	BEV	0	6625.013	4	3
2032	0	6549.207	32489.57	17219.47	15270.1	253392.8	134298.2	119094.6	PHEV	3471.079	3078.127	4	8
2032	0	7209.6	36178.71	0	36178.71	221616.1	0	221616.1	BEV	0	7209.6	4	3
2032	0	7132.297	35790.79	18611.21	17179.58	286206	148827.1	137378.9	PHEV	3708.794	3423.502	4	8
2032	0	7945.468	40326.59	0	40326.59	261396.6	0	261396.6	BEV	0	7945.468	4	3
2032	0	7820.978	39694.75	20244.32	19450.43	325277.8	165891.7	159386.1	PHEV	3988.699	3832.279	4	8
2032	0	8138.477	41772.44	0	41772.44	277393.4	0	277393.4	BEV	0	8138.477	4	3
2032	0	8010.963	41117.95	20970.15	20147.8	345201.3	176052.7	169148.6	PHEV	4085.591	3925.372	4	8
2032	0	7113.234	36917.68	0	36917.68	250821	0	250821	BEV	0	7113.234	4	3
2032	0	7001.783	36339.26	18533.02	17806.24	311712	158973.1	152738.9	PHEV	3570.91	3430.874	4	8
2032	0	8.24983	28.165	0	28.165	102.1123	0	102.1123	BEV	0	8.24983	1	3
2032	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2032	0	3037.615	12458.75	0	12458.75	65133.42	0	65133.42	BEV	0	3037.615	1	3
2032	0	3175.032	13022.36	7813.416	5208.944	65255.84	39153.51	26102.34	PHEV	1905.019	1270.013	1	8
2032	0	4186.8	17411.98	0	17411.98	94066.1	0	94066.1	BEV	0	4186.8	1	3
2032	0	5286.151	21983.94	13190.36	8793.575	113919.1	68351.47	45567.64	PHEV	3171.69	2114.46	1	8
2032	0	10753.31	45336.69	0	45336.69	253782.7	0	253782.7	BEV	0	10753.31	1	3
2032	0	5113.486	21558.81	12935.29	8623.525	115746.6	69447.96	46298.64	PHEV	3068.091	2045.394	1	8
2032	0	1959.289	8372.746	0	8372.746	33247.79	0	33247.79	BEV	0	1959.289	3	3
2032	0	178.3097	761.9814	457.1888	304.7926	4310.959	2586.575	1724.384	PHEV	106.9858	71.32387	3	8
2032	0	5.065664	18.45508	0	18.45508	75.34503	0	75.34503	BEV	0	5.065664	1	3
2032	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2032	0	572.0124	2313.332	0	2313.332	11726.23	0	11726.23	BEV	0	572.0124	1	3
2032	0	1202.391	4862.709	2917.626	1945.084	23605.08	14163.05	9442.032	PHEV	721.4345	480.9564	1	8
2032	0	7680.311	32820.73	0	32820.73	189725.7	0	189725.7	BEV	0	7680.311	1	3
2032	0	5523.171	23602.5	14161.5	9440.999	131474.7	78884.84	52589.9	PHEV	3313.902	2209.268	1	8
2032	0	16.31698	56.64113	0	56.64113	211.8564	0	211.8564	BEV	0	16.31698	1	3
2032	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2032	0	628.7771	2506.878	0	2506.878	12338.96	0	12338.96	BEV	0	628.7771	1	3
2032	0	174.7816	696.8384	418.103	278.7353	3260.007	1956.004	1304.003	PHEV	104.8689	69.91263	1	8
2032	0	323.3544	1344.76	0	1344.76	7248.292	0	7248.292	BEV	0	323.3544	2	3
2032	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2032	0	87.38535	363.4164	0	363.4164	1363.565	0	1363.565	BEV	0	87.38535	3	3
2032	0	39.56535	164.5436	98.72616	65.81744	891.257	534.7542	356.5028	PHEV	23.73921	15.82614	3	8
2032	0	6.784077	23.54957	0	23.54957	59.78304	0	59.78304	BEV	0	6.784077	3	3

2032	0	0	0	0	0	0	0	0	PHEV	0	0	3	8
2032	0	30.66906	106.4615	0	106.4615	274.8029	0	274.8029	BEV	0	30.66906	4	3
2032	0	0	0	0	0	0	0	0	PHEV	0	0	4	8
2032	0	90.51701	355.6974	0	355.6974	1706.896	0	1706.896	BEV	0	90.51701	1	3
2032	0	9.649021	37.91699	22.75019	15.16679	170.8669	102.5201	68.34674	PHEV	5.789413	3.859608	1	8
2032	0	126.5782	511.9077	0	511.9077	2574.787	0	2574.787	BEV	0	126.5782	2	3
2032	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2032	0	6.772865	25.06272	0	25.06272	105.9727	0	105.9727	BEV	0	6.772865	1	3
2032	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2032	0	45.46293	173.4429	0	173.4429	764.0126	0	764.0126	BEV	0	45.46293	1	3
2032	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2032	0	42.76414	165.5969	0	165.5969	780.0142	0	780.0142	BEV	0	42.76414	1	3
2032	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2032	0	161.4469	662.1728	0	662.1728	3444.108	0	3444.108	BEV	0	161.4469	2	3
2032	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2032	0	4.172379	14.72262	0	14.72262	56.50099	0	56.50099	BEV	0	4.172379	1	3
2032	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2032	0	13.24226	49.7611	0	49.7611	216.8718	0	216.8718	BEV	0	13.24226	1	3
2032	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2032	0	16.59558	63.31279	0	63.31279	283.3175	0	283.3175	BEV	0	16.59558	2	3
2032	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2032	0	0.592418	2.192219	0	2.192219	7.055907	0	7.055907	BEV	0	0.592418	4	3
2032	0	0	0	0	0	0	0	0	PHEV	0	0	4	8
2032	0	1.994733	5.895812	0	5.895812	16.57149	0	16.57149	BEV	0	1.994733	1	3
2032	0	9.91961	38.412	0	38.412	129.2189	0	129.2189	BEV	0	9.91961	3	3
2032	0	0	0	0	0	0	0	0	PHEV	0	0	3	8
2032	0	6.254268	24.9352	0	24.9352	87.42356	0	87.42356	BEV	0	6.254268	3	3
2032	0	4.329878	17.26283	10.3577	6.905133	89.60758	53.76455	35.84303	PHEV	2.597927	1.731951	3	8
2032	0	1.044556	4.403922	0	4.403922	16.75394	0	16.75394	BEV	0	1.044556	4	3
2032	0	0	0	0	0	0	0	0	PHEV	0	0	4	8
2032	0	1.726614	5.004418	0	5.004418	13.87245	0	13.87245	BEV	0	1.726614	1	3
2032	0	23.22109	77.94671	0	77.94671	267.7651	0	267.7651	BEV	0	23.22109	2	3
2032	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2032	0	8.432819	28.78973	0	28.78973	103.793	0	103.793	BEV	0	8.432819	2	3
2032	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2032	0	3.654572	13.5236	0	13.5236	56.66401	0	56.66401	BEV	0	3.654572	2	3
2032	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2032	0	2.09205	7.861401	0	7.861401	34.13324	0	34.13324	BEV	0	2.09205	2	3
2032	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2032	0	7.220748	27.96112	0	27.96112	130.8338	0	130.8338	BEV	0	7.220748	2	3
2032	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2032	0	6.037225	23.03225	0	23.03225	74.38723	0	74.38723	BEV	0	6.037225	3	3
2032	0	0	0	0	0	0	0	0	PHEV	0	0	3	8
2032	0	5.625951	23.07478	0	23.07478	84.70389	0	84.70389	BEV	0	5.625951	3	3
2032	0	4.302198	17.64542	10.58725	7.058169	93.67603	56.20562	37.47041	PHEV	2.581319	1.720879	3	8
2032	0	1.398655	4.694893	0	4.694893	11.78454	0	11.78454	BEV	0	1.398655	4	3
2032	0	0	0	0	0	0	0	0	PHEV	0	0	4	8

2032	0	4.187418	14.77568	0	14.77568	39.39228	0	39.39228	BEV	0	4.187418	4	3
2032	0	0	0	0	0	0	0	0	PHEV	0	0	4	8
2032	0	0.75949	2.76695	0	2.76695	7.992044	0	7.992044	BEV	0	0.75949	4	3
2032	0	0	0	0	0	0	0	0	PHEV	0	0	4	8
2032	0	29.23246	101.4746	0	101.4746	367.1071	0	367.1071	BEV	0	29.23246	2	3
2032	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2032	0	2.01731	7.233832	0	7.233832	28.27498	0	28.27498	BEV	0	2.01731	2	3
2032	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2032	0	15.2377	50.27571	0	50.27571	167.7353	0	167.7353	BEV	0	15.2377	2	3
2032	0	1.966432	6.037478	0	6.037478	17.87662	0	17.87662	BEV	0	1.966432	1	3
2032	0	0.852037	2.860049	0	2.860049	7.543455	0	7.543455	BEV	0	0.852037	3	3
2032	0	0	0	0	0	0	0	0	PHEV	0	0	3	8
2032	0	0.985658	3.760326	0	3.760326	11.84207	0	11.84207	BEV	0	0.985658	4	3
2032	0	0	0	0	0	0	0	0	PHEV	0	0	4	8
2032	0	2.652147	8.598633	0	8.598633	28.20301	0	28.20301	BEV	0	2.652147	1	3
2032	0	2.062608	6.923596	0	6.923596	24.01428	0	24.01428	BEV	0	2.062608	1	3
2032	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2032	0	4.409558	15.81214	0	15.81214	62.15886	0	62.15886	BEV	0	4.409558	1	3
2032	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2032	0	4.80612	15.58211	0	15.58211	50.23593	0	50.23593	BEV	0	4.80612	2	3
2032	0	0.742387	2.704641	0	2.704641	10.90407	0	10.90407	BEV	0	0.742387	2	3
2032	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2032	0	2.863618	9.120195	0	9.120195	28.84231	0	28.84231	BEV	0	2.863618	1	3
2032	0	3.077254	10.15318	0	10.15318	34.39857	0	34.39857	BEV	0	3.077254	1	3
2032	0	1.374868	3.984916	0	3.984916	11.0606	0	11.0606	BEV	0	1.374868	2	3
2032	0	0.587884	1.737603	0	1.737603	4.896223	0	4.896223	BEV	0	0.587884	2	3
2032	0	0.597441	1.834307	0	1.834307	5.463575	0	5.463575	BEV	0	0.597441	2	3
2032	0	0.663394	1.960788	0	1.960788	3.807202	0	3.807202	BEV	0	0.663394	3	3
2032	0	3.394644	11.20039	0	11.20039	25.70791	0	25.70791	BEV	0	3.394644	3	3
2032	0	0.289282	0.987612	0	0.987612	2.420086	0	2.420086	BEV	0	0.289282	3	3
2032	0	0	0	0	0	0	0	0	PHEV	0	0	3	8
2032	0	6.18815	24.31708	0	24.31708	81.36991	0	81.36991	BEV	0	6.18815	3	3
2032	0	0	0	0	0	0	0	0	PHEV	0	0	3	8
2032	0	16.9163	68.41291	0	68.41291	239.6377	0	239.6377	BEV	0	16.9163	3	3
2032	0	4.337513	17.54177	10.52506	7.016708	95.89045	57.53427	38.35618	PHEV	2.602508	1.735005	3	8
2032	0	0.749048	1.999389	0	1.999389	3.674189	0	3.674189	BEV	0	0.749048	4	3
2032	0	0.789236	2.423169	0	2.423169	4.931136	0	4.931136	BEV	0	0.789236	4	3
2032	0	0.333193	1.137524	0	1.137524	2.92874	0	2.92874	BEV	0	0.333193	4	3
2032	0	0	0	0	0	0	0	0	PHEV	0	0	4	8
2032	0	1.162839	3.103896	0	3.103896	8.566348	0	8.566348	BEV	0	1.162839	1	3
2032	0	0.957346	2.610233	0	2.610233	6.695793	0	6.695793	BEV	0	0.957346	1	3
2032	0	0.905635	2.521124	0	2.521124	6.946108	0	6.946108	BEV	0	0.905635	1	3
2032	0	0.839897	2.386239	0	2.386239	6.406377	0	6.406377	BEV	0	0.839897	1	3
2032	0	0.925556	2.788682	0	2.788682	7.780242	0	7.780242	BEV	0	0.925556	1	3
2032	0	2.115417	6.616092	0	6.616092	20.47011	0	20.47011	BEV	0	2.115417	1	3
2032	0	0.637948	1.922123	0	1.922123	5.558682	0	5.558682	BEV	0	0.637948	2	3
2032	0	0	0	0	0	0	0	0	BEV	0	0	2	3

2032	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2032	0	0	0	0	0	0	0	0	BEV	0	0	2	3
2032	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2032	0	0	0	0	0	0	0	0	BEV	0	0	3	3
2032	0	15.95311	67.25944	40.35566	26.90377	391.3815	234.8289	156.5526	PHEV	9.571867	6.381245	3	8
2032	0	0.215431	0.698457	0	0.698457	1.570648	0	1.570648	BEV	0	0.215431	3	3
2032	0	0.795055	2.167742	0	2.167742	3.98665	0	3.98665	BEV	0	0.795055	4	3
2032	0	2.060794	6.091067	0	6.091067	12.17394	0	12.17394	BEV	0	2.060794	4	3
2032	0	0.480638	1.585831	0	1.585831	3.688169	0	3.688169	BEV	0	0.480638	4	3
2032	0	0.324232	1.218382	0	1.218382	3.645913	0	3.645913	BEV	0	0.324232	3	3
2032	0	0	0	0	0	0	0	0	PHEV	0	0	3	8
2032	0	1.213229	4.76753	0	4.76753	21.05706	0	21.05706	BEV	0	1.213229	2	3
2032	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2032	0	0.653674	2.044405	0	2.044405	6.085261	0	6.085261	BEV	0	0.653674	2	3
2032	0	1.906213	6.071003	0	6.071003	18.54754	0	18.54754	BEV	0	1.906213	2	3
2032	0	0.456504	1.48005	0	1.48005	3.239705	0	3.239705	BEV	0	0.456504	4	3
2032	0	0.888019	3.54045	0	3.54045	17.56789	0	17.56789	BEV	0	0.888019	2	3
2032	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2032	0	0.289442	0.772591	0	0.772591	2.048156	0	2.048156	BEV	0	0.289442	2	3
2032	0	0.188524	0.535616	0	0.535616	1.058558	0	1.058558	BEV	0	0.188524	4	3
2032	0	0.108358	0.29544	0	0.29544	0.777217	0	0.777217	BEV	0	0.108358	2	3
2032	0	0.158396	0.486318	0	0.486318	0.953475	0	0.953475	BEV	0	0.158396	3	3
2032	0	0.170266	0.620309	0	0.620309	1.66649	0	1.66649	BEV	0	0.170266	3	3
2032	0	0	0	0	0	0	0	0	PHEV	0	0	3	8
2032	0	0.356719	1.013478	0	1.013478	2.028332	0	2.028332	BEV	0	0.356719	3	3
2032	0	0.787943	2.46434	0	2.46434	5.307613	0	5.307613	BEV	0	0.787943	4	3
2032	0	0.347554	1.226375	0	1.226375	4.595148	0	4.595148	BEV	0	0.347554	2	3
2032	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2032	0	1.939792	5.622293	0	5.622293	10.66635	0	10.66635	BEV	0	1.939792	4	3
2032	0	0.965845	3.629403	0	3.629403	10.78145	0	10.78145	BEV	0	0.965845	4	3
2032	0	0	0	0	0	0	0	0	PHEV	0	0	4	8
2032	0	0.110236	0.351085	0	0.351085	0.773306	0	0.773306	BEV	0	0.110236	3	3
2032	0	0	0	0	0	0	0	0	BEV	0	0	4	3
2032	0	1.586714	6.50789	3.904734	2.603156	37.83733	22.7024	15.13493	PHEV	0.952028	0.634685	4	8
2032	0	0.178053	0.505869	0	0.505869	1.346717	0	1.346717	BEV	0	0.178053	2	3
2033	0	23111.55	98763.96	0	98763.96	571263.6	0	571263.6	BEV	0	23111.55	1	3
2033	0	20847.4	89088.44	48107.76	40980.68	513677.5	277385.9	236291.7	PHEV	11257.6	9589.803	1	8
2033	0	32545.66	140943.9	0	140943.9	840660.1	0	840660.1	BEV	0	32545.66	1	3
2033	0	21034.1	91091.33	49189.32	41902.01	542389.7	292890.4	249499.3	PHEV	11358.42	9675.687	1	8
2033	0	44681.3	196058.9	0	196058.9	1206372	0	1206372	BEV	0	44681.3	1	3
2033	0	21913.3	96154.26	50961.76	45192.5	590689	313065.1	277623.8	PHEV	11614.05	10299.25	1	8
2033	0	58815.89	261450.1	0	261450.1	1658281	0	1658281	BEV	0	58815.89	1	3
2033	0	22426.82	99692.38	51840.04	47852.34	631690.2	328478.9	303211.3	PHEV	11661.95	10764.87	1	8
2033	0	67107.62	302153.4	0	302153.4	1975386	0	1975386	BEV	0	67107.62	1	3
2033	0	25240.19	113644.5	57958.68	55685.79	742302.4	378574.2	363728.2	PHEV	12872.5	12367.69	1	8
2033	0	75509.55	344309.2	0	344309.2	2318737	0	2318737	BEV	0	75509.55	1	3
2033	0	27981.54	127590.5	63795.24	63795.24	858490.1	429245	429245	PHEV	13990.77	13990.77	1	8

2033	0	83917.76	387456.7	0	387456.7	2686103	0	2686103	BEV	0	83917.76	1	3
2033	0	30928.76	142801.2	69972.57	72828.59	989195.5	484705.8	504489.7	PHEV	15155.09	15773.67	1	8
2033	0	91512.13	427763.4	0	427763.4	3051375	0	3051375	BEV	0	91512.13	1	3
2033	0	33580.56	156968.6	75344.94	81623.68	1118937	537089.8	581847.3	PHEV	16118.67	17461.89	1	8
2033	0	99241.11	469577.2	0	469577.2	3446472	0	3446472	BEV	0	99241.11	1	3
2033	0	35924.66	169984	79892.48	90091.53	1247031	586104.7	660926.6	PHEV	16884.59	19040.07	1	8
2033	0	88634.2	424466.5	0	424466.5	3201234	0	3201234	BEV	0	88634.2	1	3
2033	0	36860.36	176523.2	80141.52	96381.65	1331061	604301.8	726759.5	PHEV	16734.6	20125.76	1	8
2033	0	94161.16	456329.5	0	456329.5	3535129	0	3535129	BEV	0	94161.16	1	3
2033	0	39853.19	193138.9	84594.84	108544.1	1496488	655461.9	841026.5	PHEV	17455.7	22397.49	1	8
2033	0	102105.9	500681.2	0	500681.2	3981878	0	3981878	BEV	0	102105.9	1	3
2033	0	43633.88	213960.9	90291.5	123669.4	1702350	718391.7	983958.4	PHEV	18413.5	25220.38	1	8
2033	0	109099.6	541225.5	0	541225.5	4417200	0	4417200	BEV	0	109099.6	1	3
2033	0	47204.87	234175.8	95075.37	139100.4	1912487	776469.9	1136017	PHEV	19165.18	28039.69	1	8
2033	0	116148	582845.6	0	582845.6	4878487	0	4878487	BEV	0	116148	1	3
2033	0	50878.42	255314.5	99572.66	155741.9	2138679	834085	1304594	PHEV	19842.58	31035.84	1	8
2033	0	119996.8	609034.1	0	609034.1	5219585	0	5219585	BEV	0	119996.8	1	3
2033	0	52564.39	266786.3	104046.7	162739.7	2288135	892372.6	1395762	PHEV	20500.11	32064.28	1	8
2033	0	121921.9	625789.5	0	625789.5	5475955	0	5475955	BEV	0	121921.9	1	3
2033	0	53407.66	274126	106909.1	167216.9	2399784	935915.7	1463868	PHEV	20828.99	32578.67	1	8
2033	0	110455.8	573265.5	0	573265.5	5109691	0	5109691	BEV	0	110455.8	1	3
2033	0	48384.97	251118	97936.01	153182	2238096	872857.4	1365239	PHEV	18870.14	29514.83	1	8
2033	0	1.903568	8.134629	0	8.134629	46.98632	0	46.98632	BEV	0	1.903568	2	3
2033	0	16.51053	70.55546	42.33328	28.22218	415.681	249.4086	166.2724	PHEV	9.906321	6.604214	2	8
2033	0	881.056	3866.021	0	3866.021	23742.9	0	23742.9	BEV	0	881.056	2	3
2033	0	676.5891	2968.832	1764.335	1204.498	18259.81	10851.54	7408.264	PHEV	402.0872	274.5019	2	8
2033	0	1904.499	8465.935	0	8465.935	53325.3	0	53325.3	BEV	0	1904.499	2	3
2033	0	1466.81	6520.309	3837.667	2682.641	40957.42	24106.37	16851.05	PHEV	863.3226	603.4876	2	8
2033	0	2320.581	10448.46	0	10448.46	67567.11	0	67567.11	BEV	0	2320.581	2	3
2033	0	1704.531	7674.686	4473.245	3201.44	49385.9	28784.93	20600.98	PHEV	993.4981	711.033	2	8
2033	0	2991.162	13639.13	0	13639.13	90518.65	0	90518.65	BEV	0	2991.162	2	3
2033	0	1904.115	8682.404	5010.988	3671.417	57215.02	33021.24	24193.78	PHEV	1098.947	805.1688	2	8
2033	0	3439.243	15879.33	0	15879.33	108228	0	108228	BEV	0	3439.243	2	3
2033	0	2159.367	9970.015	5697.152	4272.864	67323.04	38470.31	28852.73	PHEV	1233.924	925.4432	2	8
2033	0	3813.985	17828.05	0	17828.05	124818.8	0	124818.8	BEV	0	3813.985	2	3
2033	0	2485.473	11618.07	6572.507	5045.561	80408.94	45488.49	34920.46	PHEV	1406.067	1079.405	2	8
2033	0	4346.099	20564.35	0	20564.35	147891.5	0	147891.5	BEV	0	4346.099	2	3
2033	0	2648.44	12531.57	7017.68	5513.892	88986.89	49832.66	39154.23	PHEV	1483.127	1165.314	2	8
2033	0	4439.981	21262.93	0	21262.93	156873.1	0	156873.1	BEV	0	4439.981	2	3
2033	0	2799.328	13405.9	7373.245	6032.655	97583.85	53671.12	43912.73	PHEV	1539.631	1259.698	2	8
2033	0	4893.02	23712.85	0	23712.85	179563.4	0	179563.4	BEV	0	4893.02	2	3
2033	0	3469.316	16813.21	9079.131	7734.074	125175.3	67594.67	57580.64	PHEV	1873.43	1595.885	2	8
2033	0	5669.53	27800.82	0	27800.82	215823.9	0	215823.9	BEV	0	5669.53	2	3
2033	0	4020.783	19716.11	10449.54	9266.571	150228.7	79621.2	70607.48	PHEV	2131.015	1889.768	2	8
2033	0	6611.255	32797.38	0	32797.38	260785.8	0	260785.8	BEV	0	6611.255	2	3
2033	0	4399.246	21823.96	11348.46	10475.5	170335.8	88574.61	81761.18	PHEV	2287.608	2111.638	2	8
2033	0	7315.067	36707.96	0	36707.96	299262.9	0	299262.9	BEV	0	7315.067	2	3

2033	0	4973.542	24957.88	12728.52	12229.36	199516.4	101753.4	97763.04	PHEV	2536.506	2437.035	2	8
2033	0	7453.615	37830.22	0	37830.22	316206	0	316206	BEV	0	7453.615	2	3
2033	0	5067.741	25720.91	13117.67	12603.25	210909.4	107563.8	103345.6	PHEV	2584.548	2483.193	2	8
2033	0	7602.317	39020.49	0	39020.49	334251.2	0	334251.2	BEV	0	7602.317	2	3
2033	0	5168.844	26530.18	13530.39	12999.79	223075.4	113768.4	109306.9	PHEV	2636.111	2532.734	2	8
2033	0	6982.478	36239.06	0	36239.06	317970.4	0	317970.4	BEV	0	6982.478	2	3
2033	0	4747.413	24639.07	12565.93	12073.15	212329.9	108288.2	104041.6	PHEV	2421.181	2326.232	2	8
2033	0	616.5045	2669.865	1601.919	1067.946	16046.79	9628.073	6418.715	PHEV	369.9027	246.6018	3	8
2033	0	2323.428	10195.06	0	10195.06	48286.62	0	48286.62	BEV	0	2323.428	3	3
2033	0	2018.035	8855.016	5262.41	3592.606	54408.33	32334.1	22074.24	PHEV	1199.289	818.7456	3	8
2033	0	5151.926	22901.5	0	22901.5	128530.7	0	128530.7	BEV	0	5151.926	3	3
2033	0	3718.048	16527.58	9727.661	6799.918	103874.4	61137.5	42736.9	PHEV	2188.337	1529.711	3	8
2033	0	6236.286	28079	0	28079	151338.2	0	151338.2	BEV	0	6236.286	3	3
2033	0	6006.539	27044.56	15763.12	11281.45	174035.5	101437.8	72597.65	PHEV	3500.954	2505.585	3	8
2033	0	8145.769	37143.16	0	37143.16	205173.5	0	205173.5	BEV	0	8145.769	3	3
2033	0	6495.417	29617.87	17093.74	12524.13	195219.9	112669.8	82550.13	PHEV	3748.784	2746.634	3	8
2033	0	10052.56	46413.69	0	46413.69	263720.4	0	263720.4	BEV	0	10052.56	3	3
2033	0	7189.195	33193.23	18967.56	14225.67	224204	128116.6	96087.42	PHEV	4108.111	3081.084	3	8
2033	0	11346.88	53039.74	0	53039.74	306367.8	0	306367.8	BEV	0	11346.88	3	3
2033	0	7908.873	36969.16	20913.98	16055.18	255955.8	144797.9	111158	PHEV	4474.162	3434.71	3	8
2033	0	12276.82	58090	0	58090	340427.8	0	340427.8	BEV	0	12276.82	3	3
2033	0	9022.963	42693.77	23908.51	18785.26	303275.5	169834.3	133441.2	PHEV	5052.859	3970.104	3	8
2033	0	14333.94	68644.82	0	68644.82	424833.8	0	424833.8	BEV	0	14333.94	3	3
2033	0	8904.488	42643.32	23453.83	19189.5	310532.6	170792.9	139739.7	PHEV	4897.468	4007.019	3	8
2033	0	16076.76	77912.15	0	77912.15	504721.1	0	504721.1	BEV	0	16076.76	3	3
2033	0	9867.074	47818.41	25821.94	21996.47	357072.1	192818.9	164253.2	PHEV	5328.22	4538.854	3	8
2033	0	18440.82	90425.5	0	90425.5	613480.7	0	613480.7	BEV	0	18440.82	3	3
2033	0	10851.05	53208.69	28200.6	25008.08	407450.7	215948.9	191501.8	PHEV	5751.059	5099.995	3	8
2033	0	20769.24	103032.9	0	103032.9	724312.6	0	724312.6	BEV	0	20769.24	3	3
2033	0	11950.86	59286.28	30828.87	28457.42	470701.1	244764.6	225936.5	PHEV	6214.445	5736.411	3	8
2033	0	23005.63	115445.2	0	115445.2	831432.5	0	831432.5	BEV	0	23005.63	3	3
2033	0	13191.93	66198.83	33761.4	32437.43	551985.7	281512.7	270473	PHEV	6727.885	6464.047	3	8
2033	0	23749.27	120537.5	0	120537.5	890058.3	0	890058.3	BEV	0	23749.27	3	3
2033	0	13618.35	69118.85	35250.61	33868.24	591074.6	301448	289626.5	PHEV	6945.359	6672.992	3	8
2033	0	24527.62	125893.2	0	125893.2	952794.2	0	952794.2	BEV	0	24527.62	3	3
2033	0	14064.68	72189.9	36816.85	35373.05	632962.4	322810.8	310151.6	PHEV	7172.984	6891.691	3	8
2033	0	22373.01	116115.9	0	116115.9	900011.3	0	900011.3	BEV	0	22373.01	3	3
2033	0	12829.17	66583.41	33957.54	32625.87	598041.9	305001.4	293040.5	PHEV	6542.878	6286.295	3	8
2033	0	844.4458	3608.621	2165.172	1443.448	19734.6	11840.76	7893.841	PHEV	506.6675	337.7783	4	8
2033	0	1.957715	8.47818	0	8.47818	35.1049	0	35.1049	BEV	0	1.957715	4	3
2033	0	2395.704	10374.96	6224.974	4149.983	59865.04	35919.02	23946.01	PHEV	1437.423	958.2817	4	8
2033	0	1047.103	4594.625	0	4594.625	20426.76	0	20426.76	BEV	0	1047.103	4	3
2033	0	2724.346	11954.27	7104.251	4850.017	74780.55	44441.01	30339.54	PHEV	1619.04	1105.306	4	8
2033	0	2283.895	10152.44	0	10152.44	50352.77	0	50352.77	BEV	0	2283.895	4	3
2033	0	3075.825	13672.75	8047.391	5625.361	85995.88	50614.72	35381.16	PHEV	1810.343	1265.482	4	8
2033	0	3651.934	16442.9	0	16442.9	84258.39	0	84258.39	BEV	0	3651.934	4	3
2033	0	3544.368	15958.59	9301.576	6657.01	100924.9	58824.79	42100.09	PHEV	2065.86	1478.508	4	8

2033	0	3912.949	17842.3	0	17842.3	87129.75	0	87129.75	BEV	0	3912.949	4	3
2033	0	3822.251	17428.74	10058.87	7369.866	113008.8	65222.23	47786.58	PHEV	2205.985	1616.266	4	8
2033	0	4318.157	19937.36	0	19937.36	97014.25	0	97014.25	BEV	0	4318.157	4	3
2033	0	4057.521	18733.98	10705.13	8028.85	124593.1	71196.05	53397.03	PHEV	2318.584	1738.938	4	8
2033	0	4768.528	22289.96	0	22289.96	110025.4	0	110025.4	BEV	0	4768.528	4	3
2033	0	5486.268	25644.95	14507.72	11137.24	174949.5	98971.42	75978.06	PHEV	3103.66	2382.608	4	8
2033	0	5434.631	25714.93	0	25714.93	130278.3	0	130278.3	BEV	0	5434.631	4	3
2033	0	5961.888	28209.74	15797.46	12412.29	197587.8	110649.2	86938.62	PHEV	3338.657	2623.231	4	8
2033	0	5360.313	25670.38	0	25670.38	132601.8	0	132601.8	BEV	0	5360.313	4	3
2033	0	5560.589	26629.49	14646.22	11983.27	191299.2	105214.6	86084.66	PHEV	3058.324	2502.265	4	8
2033	0	5930.907	28742.72	0	28742.72	154322.8	0	154322.8	BEV	0	5930.907	4	3
2033	0	5989.405	29026.21	15674.16	13352.06	213877.2	115493.7	98383.52	PHEV	3234.279	2755.126	4	8
2033	0	6514.396	31943.67	0	31943.67	178902.4	0	178902.4	BEV	0	6514.396	4	3
2033	0	6439.855	31578.15	16736.42	14841.73	238625.1	126471.3	112153.8	PHEV	3413.123	3026.732	4	8
2033	0	7077.488	35110.28	0	35110.28	208403.8	0	208403.8	BEV	0	7077.488	4	3
2033	0	7001.601	34733.82	18061.59	16672.24	269187.8	139977.7	129210.1	PHEV	3640.833	3360.769	4	8
2033	0	7750.193	38891.48	0	38891.48	244390.5	0	244390.5	BEV	0	7750.193	4	3
2033	0	7628.763	38282.12	19523.88	18758.24	304204.6	155144.3	149060.2	PHEV	3890.669	3738.094	4	8
2033	0	8005.546	40631.51	0	40631.51	261675.2	0	261675.2	BEV	0	8005.546	4	3
2033	0	7880.114	39994.89	20397.39	19597.5	325683.6	166098.6	159585	PHEV	4018.858	3861.256	4	8
2033	0	8196.561	42070.57	0	42070.57	277573.1	0	277573.1	BEV	0	8196.561	4	3
2033	0	8068.137	41411.41	21119.82	20291.59	345492.1	176201	169291.1	PHEV	4114.75	3953.387	4	8
2033	0	7158.962	37155.01	0	37155.01	250803.5	0	250803.5	BEV	0	7158.962	4	3
2033	0	7046.795	36572.87	18652.16	17920.7	311755	158995	152759.9	PHEV	3593.865	3452.93	4	8
2033	0	7.437562	24.96581	0	24.96581	87.11129	0	87.11129	BEV	0	7.437562	1	3
2033	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2033	0	2533.846	10247.38	0	10247.38	51555.01	0	51555.01	BEV	0	2533.846	1	3
2033	0	2648.473	10710.96	6426.573	4284.382	51497.89	30898.73	20599.16	PHEV	1589.084	1059.389	1	8
2033	0	3546.363	14545.37	0	14545.37	75640.22	0	75640.22	BEV	0	3546.363	1	3
2033	0	4477.551	18364.63	11018.78	7345.852	91351.47	54810.88	36540.59	PHEV	2686.53	1791.02	1	8
2033	0	9230.94	38389.45	0	38389.45	206980.5	0	206980.5	BEV	0	9230.94	1	3
2033	0	4389.56	18255.21	10953.13	7302.085	94148.59	56489.15	37659.44	PHEV	2633.736	1755.824	1	8
2033	0	1726.09	7277.318	0	7277.318	27836.76	0	27836.76	BEV	0	1726.09	3	3
2033	0	157.0869	662.2894	397.3737	264.9158	3646.94	2188.164	1458.776	PHEV	94.25215	62.83477	3	8
2033	0	4.323184	15.50242	0	15.50242	60.81392	0	60.81392	BEV	0	4.323184	1	3
2033	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2033	0	472.337	1883.165	0	1883.165	9183.436	0	9183.436	BEV	0	472.337	1	3
2033	0	992.8696	3958.482	2375.089	1583.393	18417.99	11050.79	7367.196	PHEV	595.7217	397.1478	1	8
2033	0	6712.898	28302.05	0	28302.05	157642.6	0	157642.6	BEV	0	6712.898	1	3
2033	0	4827.471	20352.96	12211.77	8141.183	108967.7	65380.64	43587.09	PHEV	2896.483	1930.988	1	8
2033	0	14.50286	49.51291	0	49.51291	178.0798	0	178.0798	BEV	0	14.50286	1	3
2033	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2033	0	514.2454	2020.789	0	2020.789	9568.048	0	9568.048	BEV	0	514.2454	1	3
2033	0	142.9451	561.7199	337.032	224.688	2517.601	1510.561	1007.041	PHEV	85.76706	57.17804	1	8
2033	0	293.5177	1203.86	0	1203.86	6246.243	0	6246.243	BEV	0	293.5177	2	3
2033	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2033	0	74.59203	305.9385	0	305.9385	1105.1	0	1105.1	BEV	0	74.59203	3	3

2033	0	33.77294	138.5194	83.11162	55.40775	730.6647	438.3988	292.2659	PHEV	20.26376	13.50917	3	8
2033	0	6.079709	20.75619	0	20.75619	50.64726	0	50.64726	BEV	0	6.079709	3	3
2033	0	0	0	0	0	0	0	0	PHEV	0	0	3	8
2033	0	27.25128	93.03615	0	93.03615	230.92	0	230.92	BEV	0	27.25128	4	3
2033	0	0	0	0	0	0	0	0	PHEV	0	0	4	8
2033	0	74.00944	286.589	0	286.589	1322.657	0	1322.657	BEV	0	74.00944	1	3
2033	0	7.889331	30.55009	18.33006	12.22004	131.6161	78.96963	52.64642	PHEV	4.733599	3.155732	1	8
2033	0	113.2756	451.6195	0	451.6195	2184.833	0	2184.833	BEV	0	113.2756	2	3
2033	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2033	0	5.668978	20.65305	0	20.65305	83.91509	0	83.91509	BEV	0	5.668978	1	3
2033	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2033	0	37.16754	139.6663	0	139.6663	591.1072	0	591.1072	BEV	0	37.16754	1	3
2033	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2033	0	35.072	133.8011	0	133.8011	605.9534	0	605.9534	BEV	0	35.072	1	3
2033	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2033	0	145.314	587.6787	0	587.6787	2940.956	0	2940.956	BEV	0	145.314	2	3
2033	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2033	0	3.628293	12.59489	0	12.59489	46.46771	0	46.46771	BEV	0	3.628293	1	3
2033	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2033	0	10.95251	40.52933	0	40.52933	169.721	0	169.721	BEV	0	10.95251	1	3
2033	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2033	0	14.72557	55.335	0	55.335	237.8539	0	237.8539	BEV	0	14.72557	2	3
2033	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2033	0	0.525779	1.915504	0	1.915504	5.945228	0	5.945228	BEV	0	0.525779	4	3
2033	0	0	0	0	0	0	0	0	PHEV	0	0	4	8
2033	0	1.917355	5.557261	0	5.557261	15.2018	0	15.2018	BEV	0	1.917355	1	3
2033	0	8.695767	33.1747	0	33.1747	107.3592	0	107.3592	BEV	0	8.695767	3	3
2033	0	0	0	0	0	0	0	0	PHEV	0	0	3	8
2033	0	5.479646	21.53293	0	21.53293	72.66762	0	72.66762	BEV	0	5.479646	3	3
2033	0	3.793601	14.90741	8.944446	5.962964	75.25918	45.15551	30.10367	PHEV	2.276161	1.51744	3	8
2033	0	0.936093	3.893003	0	3.893003	14.24683	0	14.24683	BEV	0	0.936093	4	3
2033	0	0	0	0	0	0	0	0	PHEV	0	0	4	8
2033	0	1.648719	4.684191	0	4.684191	12.67838	0	12.67838	BEV	0	1.648719	1	3
2033	0	21.07187	69.52515	0	69.52515	229.8219	0	229.8219	BEV	0	21.07187	2	3
2033	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2033	0	7.655523	25.69745	0	25.69745	89.06885	0	89.06885	BEV	0	7.655523	2	3
2033	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2033	0	3.219696	11.7299	0	11.7299	47.18558	0	47.18558	BEV	0	3.219696	2	3
2033	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2033	0	1.848016	6.838509	0	6.838509	28.5039	0	28.5039	BEV	0	1.848016	2	3
2033	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2033	0	6.388529	24.37249	0	24.37249	109.6387	0	109.6387	BEV	0	6.388529	2	3
2033	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2033	0	5.465377	20.53752	0	20.53752	63.61363	0	63.61363	BEV	0	5.465377	3	3
2033	0	0	0	0	0	0	0	0	PHEV	0	0	3	8
2033	0	4.699497	19.00571	0	19.00571	67.10377	0	67.10377	BEV	0	4.699497	3	3
2033	0	3.593733	14.53378	8.720265	5.81351	75.14558	45.08735	30.05823	PHEV	2.15624	1.437493	3	8

2033	0	1.260283	4.158215	0	4.158215	10.05532	0	10.05532	BEV	0	1.260283	4	3
2033	0	0	0	0	0	0	0	0	PHEV	0	0	4	8
2033	0	3.699096	12.84067	0	12.84067	32.90063	0	32.90063	BEV	0	3.699096	4	3
2033	0	0	0	0	0	0	0	0	PHEV	0	0	4	8
2033	0	0.66629	2.389234	0	2.389234	6.621477	0	6.621477	BEV	0	0.66629	4	3
2033	0	0	0	0	0	0	0	0	PHEV	0	0	4	8
2033	0	26.26319	89.66279	0	89.66279	311.5121	0	311.5121	BEV	0	26.26319	2	3
2033	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2033	0	1.798449	6.345991	0	6.345991	23.80992	0	23.80992	BEV	0	1.798449	2	3
2033	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2033	0	13.88864	45.02891	0	45.02891	144.6781	0	144.6781	BEV	0	13.88864	2	3
2033	0	1.89365	5.70553	0	5.70553	16.3645	0	16.3645	BEV	0	1.89365	1	3
2033	0	0.769614	2.539289	0	2.539289	6.45318	0	6.45318	BEV	0	0.769614	3	3
2033	0	0	0	0	0	0	0	0	PHEV	0	0	3	8
2033	0	0.842295	3.165136	0	3.165136	9.567031	0	9.567031	BEV	0	0.842295	4	3
2033	0	0	0	0	0	0	0	0	PHEV	0	0	4	8
2033	0	2.490506	7.931888	0	7.931888	25.09088	0	25.09088	BEV	0	2.490506	1	3
2033	0	1.893204	6.246493	0	6.246493	20.85256	0	20.85256	BEV	0	1.893204	1	3
2033	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2033	0	3.790379	13.37469	0	13.37469	50.51716	0	50.51716	BEV	0	3.790379	1	3
2033	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2033	0	4.379464	13.94794	0	13.94794	43.34511	0	43.34511	BEV	0	4.379464	2	3
2033	0	0.644048	2.30948	0	2.30948	8.940935	0	8.940935	BEV	0	0.644048	2	3
2033	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2033	0	2.717207	8.498229	0	8.498229	25.94779	0	25.94779	BEV	0	2.717207	1	3
2033	0	2.834343	9.189336	0	9.189336	29.99307	0	29.99307	BEV	0	2.834343	1	3
2033	0	1.237348	3.515441	0	3.515441	9.518164	0	9.518164	BEV	0	1.237348	2	3
2033	0	0.525046	1.521792	0	1.521792	4.175306	0	4.175306	BEV	0	0.525046	2	3
2033	0	0.525953	1.584687	0	1.584687	4.57401	0	4.57401	BEV	0	0.525953	2	3
2033	0	0.626568	1.816046	0	1.816046	3.430109	0	3.430109	BEV	0	0.626568	3	3
2033	0	3.082574	9.994137	0	9.994137	22.07876	0	22.07876	BEV	0	3.082574	3	3
2033	0	0.265912	0.892593	0	0.892593	2.1023	0	2.1023	BEV	0	0.265912	3	3
2033	0	0	0	0	0	0	0	0	PHEV	0	0	3	8
2033	0	5.319211	20.59774	0	20.59774	66.25617	0	66.25617	BEV	0	5.319211	3	3
2033	0	0	0	0	0	0	0	0	PHEV	0	0	3	8
2033	0	13.99626	55.80182	0	55.80182	187.9101	0	187.9101	BEV	0	13.99626	3	3
2033	0	3.588784	14.30816	8.584895	5.723263	76.84604	46.10762	30.73842	PHEV	2.15327	1.435514	3	8
2033	0	0.762856	2.29847	0	2.29847	4.528429	0	4.528429	BEV	0	0.762856	4	3
2033	0	0.296576	0.995522	0	0.995522	2.467544	0	2.467544	BEV	0	0.296576	4	3
2033	0	0	0	0	0	0	0	0	PHEV	0	0	4	8
2033	0	0.926472	2.472976	0	2.472976	6.259796	0	6.259796	BEV	0	0.926472	1	3
2033	0	0.872987	2.380224	0	2.380224	6.451959	0	6.451959	BEV	0	0.872987	1	3
2033	0	0.809151	2.25253	0	2.25253	5.921985	0	5.921985	BEV	0	0.809151	1	3
2033	0	0.881626	2.605813	0	2.605813	7.057585	0	7.057585	BEV	0	0.881626	1	3
2033	0	2.035895	6.250749	0	6.250749	18.70768	0	18.70768	BEV	0	2.035895	1	3
2033	0	0.581912	1.719951	0	1.719951	4.826787	0	4.826787	BEV	0	0.581912	2	3
2033	0	0	0	0	0	0	0	0	BEV	0	0	2	3

2033	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2033	0	0	0	0	0	0	0	0	BEV	0	0	2	3
2033	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2033	0	0	0	0	0	0	0	0	BEV	0	0	3	3
2033	0	13.64443	56.74418	34.04651	22.69767	322.8889	193.7333	129.1556	PHEV	8.186658	5.457772	3	8
2033	0	0.198567	0.632407	0	0.632407	1.370842	0	1.370842	BEV	0	0.198567	3	3
2033	0	0.790884	2.111059	0	2.111059	3.831217	0	3.831217	BEV	0	0.790884	4	3
2033	0	2.017779	5.848331	0	5.848331	11.37857	0	11.37857	BEV	0	2.017779	4	3
2033	0	0.435311	1.411339	0	1.411339	3.162858	0	3.162858	BEV	0	0.435311	4	3
2033	0	0.289344	1.070706	0	1.070706	3.074564	0	3.074564	BEV	0	0.289344	3	3
2033	0	0	0	0	0	0	0	0	PHEV	0	0	3	8
2033	0	1.064846	4.123437	0	4.123437	17.48862	0	17.48862	BEV	0	1.064846	2	3
2033	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2033	0	0.593532	1.822305	0	1.822305	5.241927	0	5.241927	BEV	0	0.593532	2	3
2033	0	1.685432	5.271289	0	5.271289	15.5316	0	15.5316	BEV	0	1.685432	2	3
2033	0	0.419668	1.336581	0	1.336581	2.817958	0	2.817958	BEV	0	0.419668	4	3
2033	0	0.791928	3.111974	0	3.111974	14.86066	0	14.86066	BEV	0	0.791928	2	3
2033	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2033	0	0.189313	0.527014	0	0.527014	1.023462	0	1.023462	BEV	0	0.189313	4	3
2033	0	0.097825	0.261118	0	0.261118	0.678978	0	0.678978	BEV	0	0.097825	2	3
2033	0	0.143718	0.43302	0	0.43302	0.821363	0	0.821363	BEV	0	0.143718	3	3
2033	0	0.149156	0.534856	0	0.534856	1.378303	0	1.378303	BEV	0	0.149156	3	3
2033	0	0	0	0	0	0	0	0	PHEV	0	0	3	8
2033	0	0.338819	0.943211	0	0.943211	1.848325	0	1.848325	BEV	0	0.338819	3	3
2033	0	0.730424	2.242598	0	2.242598	4.669212	0	4.669212	BEV	0	0.730424	4	3
2033	0	0.306313	1.063306	0	1.063306	3.827573	0	3.827573	BEV	0	0.306313	2	3
2033	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2033	0	1.924463	5.46761	0	5.46761	10.11776	0	10.11776	BEV	0	1.924463	4	3
2033	0	0.815494	3.017703	0	3.017703	8.602225	0	8.602225	BEV	0	0.815494	4	3
2033	0	0	0	0	0	0	0	0	PHEV	0	0	4	8
2033	0	0.099263	0.31045	0	0.31045	0.660449	0	0.660449	BEV	0	0.099263	3	3
2033	0	0	0	0	0	0	0	0	BEV	0	0	4	3
2033	0	1.407891	5.693794	3.416276	2.277518	32.31706	19.39024	12.92683	PHEV	0.844735	0.563157	4	8
2033	0	0.159425	0.443811	0	0.443811	1.156353	0	1.156353	BEV	0	0.159425	2	3
2034	0	20275.93	85484.74	0	85484.74	476193.8	0	476193.8	BEV	0	20275.93	1	3
2034	0	18289.58	77110.13	41639.47	35470.66	427885.2	231058	196827.2	PHEV	9876.371	8413.205	1	8
2034	0	28854.95	123307.6	0	123307.6	708694.2	0	708694.2	BEV	0	28854.95	1	3
2034	0	18648.82	79693.1	43034.28	36658.83	457088.9	246828	210260.9	PHEV	10070.36	8578.455	1	8
2034	0	40220.73	174181.9	0	174181.9	1033269	0	1033269	BEV	0	40220.73	1	3
2034	0	19725.68	85425.01	45275.26	40149.76	505731.1	268037.5	237693.6	PHEV	10454.61	9271.069	1	8
2034	0	53289.16	233829.6	0	233829.6	1430568	0	1430568	BEV	0	53289.16	1	3
2034	0	20319.45	89160.52	46363.47	42797.05	544836.4	283314.9	261521.5	PHEV	10566.11	9753.335	1	8
2034	0	61951.5	275388.7	0	275388.7	1737594	0	1737594	BEV	0	61951.5	1	3
2034	0	23300.9	103577.8	52824.7	50753.15	652825.8	332941.1	319884.6	PHEV	11883.46	11417.44	1	8
2034	0	69852.46	314512.1	0	314512.1	2045292	0	2045292	BEV	0	69852.46	1	3
2034	0	25885.19	116548.6	58274.29	58274.29	757108.6	378554.3	378554.3	PHEV	12942.6	12942.6	1	8
2034	0	79017.48	360304.7	0	360304.7	2413269	0	2413269	BEV	0	79017.48	1	3

2034	0	29122.71	132794	65069.07	67724.95	888554.4	435391.7	453162.8	PHEV	14270.13	14852.58	1	8
2034	0	86164.86	397831.8	0	397831.8	2743045	0	2743045	BEV	0	86164.86	1	3
2034	0	31618.37	145985.2	70072.88	75912.28	1005679	482725.9	522953	PHEV	15176.82	16441.55	1	8
2034	0	94776.54	443022.5	0	443022.5	3144194	0	3144194	BEV	0	94776.54	1	3
2034	0	34308.52	160371.4	75374.55	84996.84	1137352	534555.3	602796.4	PHEV	16125	18183.51	1	8
2034	0	84399.77	399352.7	0	399352.7	2913783	0	2913783	BEV	0	84399.77	1	3
2034	0	35099.39	166079.1	75399.9	90679.18	1211151	549862.8	661288.7	PHEV	15935.12	19164.27	1	8
2034	0	90942.09	435518.9	0	435518.9	3264998	0	3264998	BEV	0	90942.09	1	3
2034	0	38490.73	184331	80736.96	103594	1381696	605182.6	776512.9	PHEV	16858.94	21631.79	1	8
2034	0	98162.41	475720.6	0	475720.6	3663502	0	3663502	BEV	0	98162.41	1	3
2034	0	41948.68	203294.2	85790.17	117504.1	1565857	660791.8	905065.6	PHEV	17702.35	24246.34	1	8
2034	0	106128.9	520408.3	0	520408.3	4114354	0	4114354	BEV	0	106128.9	1	3
2034	0	45919.52	225168.7	91418.47	133750.2	1780945	723063.7	1057881	PHEV	18643.32	27276.19	1	8
2034	0	113695.9	564027	0	564027	4576294	0	4576294	BEV	0	113695.9	1	3
2034	0	49804.28	247071.1	96357.71	150713.3	2005905	782302.8	1223602	PHEV	19423.67	30380.61	1	8
2034	0	117118	587713.4	0	587713.4	4890111	0	4890111	BEV	0	117118	1	3
2034	0	51303.34	257446.9	100404.3	157042.6	2143837	836096.5	1307741	PHEV	20008.3	31295.04	1	8
2034	0	120934.3	613792.2	0	613792.2	5229155	0	5229155	BEV	0	120934.3	1	3
2034	0	52975.05	268870.6	104859.5	164011.1	2292402	894036.7	1398365	PHEV	20660.27	32314.78	1	8
2034	0	122789.5	630242.8	0	630242.8	5481944	0	5481944	BEV	0	122789.5	1	3
2034	0	53787.72	276076.8	107669.9	168406.8	2402490	936971.3	1465519	PHEV	20977.21	32810.51	1	8
2034	0	111162.2	576932	0	576932	5111234	0	5111234	BEV	0	111162.2	1	3
2034	0	48694.43	252724.1	98562.39	154161.7	2238854	873153.1	1365701	PHEV	18990.83	29703.6	1	8
2034	0	1.762635	7.431394	0	7.431394	41.37654	0	41.37654	BEV	0	1.762635	2	3
2034	0	15.28816	64.45597	38.67358	25.78239	370.1937	222.1162	148.0775	PHEV	9.172899	6.115266	2	8
2034	0	827.4663	3583.467	0	3583.467	21345.05	0	21345.05	BEV	0	827.4663	2	3
2034	0	635.436	2751.851	1635.386	1116.465	16491.53	9800.678	6690.848	PHEV	377.6305	257.8055	2	8
2034	0	1783.953	7827.878	0	7827.878	47794.46	0	47794.46	BEV	0	1783.953	2	3
2034	0	1373.968	6028.888	3548.431	2480.457	36869.18	21700.14	15169.03	PHEV	808.6782	565.2896	2	8
2034	0	2196.333	9763.205	0	9763.205	61183.28	0	61183.28	BEV	0	2196.333	2	3
2034	0	1613.268	7171.345	4179.87	2991.475	44832.24	26130.79	18701.45	PHEV	940.3045	672.963	2	8
2034	0	2825.439	12721.6	0	12721.6	81810.94	0	81810.94	BEV	0	2825.439	2	3
2034	0	1798.619	8098.319	4673.887	3424.432	51821.64	29908.49	21913.15	PHEV	1038.06	760.559	2	8
2034	0	3282.679	14968.39	0	14968.39	98826.03	0	98826.03	BEV	0	3282.679	2	3
2034	0	2061.067	9398.074	5370.328	4027.746	61585.88	35191.93	26393.95	PHEV	1177.753	883.3144	2	8
2034	0	3638.38	16798.77	0	16798.77	113927.6	0	113927.6	BEV	0	3638.38	2	3
2034	0	2371.036	10947.31	6193.049	4754.26	73511.05	41586.25	31924.8	PHEV	1341.329	1029.707	2	8
2034	0	4212.321	19690.03	0	19690.03	137151	0	137151	BEV	0	4212.321	2	3
2034	0	2566.918	11998.78	6719.316	5279.462	82620.19	46267.31	36352.88	PHEV	1437.474	1129.444	2	8
2034	0	4291.215	20304.66	0	20304.66	145119.2	0	145119.2	BEV	0	4291.215	2	3
2034	0	2705.534	12801.72	7040.947	5760.775	90351.14	49693.13	40658.01	PHEV	1488.044	1217.49	2	8
2034	0	4734.214	22672.01	0	22672.01	166324.8	0	166324.8	BEV	0	4734.214	2	3
2034	0	3356.717	16075.22	8680.618	7394.6	116031.5	62657	53374.48	PHEV	1812.627	1544.09	2	8
2034	0	5490.547	26608.62	0	26608.62	200154.3	0	200154.3	BEV	0	5490.547	2	3
2034	0	3893.849	18870.61	10001.42	8869.185	139383.3	73873.13	65510.13	PHEV	2063.74	1830.109	2	8
2034	0	6492.949	31838.5	0	31838.5	245326.6	0	245326.6	BEV	0	6492.949	2	3
2034	0	4320.523	21185.9	11016.67	10169.23	160251.2	83330.64	76920.59	PHEV	2246.672	2073.851	2	8

2034	0	7241.355	35923.21	0	35923.21	283833.7	0	283833.7	BEV	0	7241.355	2	3
2034	0	4923.425	24424.32	12456.4	11967.92	189184	96483.85	92700.17	PHEV	2510.947	2412.478	2	8
2034	0	7371.771	36992.5	0	36992.5	299741.3	0	299741.3	BEV	0	7371.771	2	3
2034	0	5012.095	25151.34	12827.18	12324.16	199843.4	101920.1	97923.24	PHEV	2556.168	2455.926	2	8
2034	0	7508.436	38108.46	0	38108.46	316585.5	0	316585.5	BEV	0	7508.436	2	3
2034	0	5105.014	25910.09	13214.14	12695.94	211170.2	107696.8	103473.4	PHEV	2603.557	2501.457	2	8
2034	0	7654.567	39288.67	0	39288.67	334488.7	0	334488.7	BEV	0	7654.567	2	3
2034	0	5204.369	26712.52	13623.38	13089.13	223241.4	113853.1	109388.3	PHEV	2654.228	2550.141	2	8
2034	0	7027.136	36470.84	0	36470.84	318040.3	0	318040.3	BEV	0	7027.136	2	3
2034	0	4777.776	24796.66	12646.3	12150.36	212382.6	108315.1	104067.5	PHEV	2436.666	2341.11	2	8
2034	0	549.2106	2346.975	1408.185	938.7899	13732.8	8239.678	5493.119	PHEV	329.5264	219.6843	3	8
2034	0	2109.116	9133.841	0	9133.841	41836.12	0	41836.12	BEV	0	2109.116	3	3
2034	0	1831.892	7933.281	4714.636	3218.646	47413.97	28177.44	19236.52	PHEV	1088.667	743.2246	3	8
2034	0	4706.046	20649.85	0	20649.85	112432.7	0	112432.7	BEV	0	4706.046	3	3
2034	0	3396.265	14902.61	8771.248	6131.358	91040.28	53583.71	37456.57	PHEV	1998.944	1397.32	3	8
2034	0	5817.308	25859.27	0	25859.27	135020.5	0	135020.5	BEV	0	5817.308	3	3
2034	0	5602.996	24906.61	14516.99	10389.61	155690.2	90745.13	64945.04	PHEV	3265.746	2337.25	3	8
2034	0	7585.246	34152.72	0	34152.72	182743.8	0	182743.8	BEV	0	7585.246	3	3
2034	0	6048.457	27233.3	15717.5	11515.8	174275.1	100581.6	73693.48	PHEV	3490.824	2557.633	3	8
2034	0	9532.791	43467.72	0	43467.72	239229.5	0	239229.5	BEV	0	9532.791	3	3
2034	0	6817.474	31086.39	17763.65	13322.74	203758.8	116433.6	87325.21	PHEV	3895.699	2921.775	3	8
2034	0	10788.88	49813.35	0	49813.35	278699.1	0	278699.1	BEV	0	10788.88	3	3
2034	0	7519.945	34720.34	19641.79	15078.55	233216.1	131933.7	101282.4	PHEV	4254.14	3265.805	3	8
2034	0	11885.5	55557.45	0	55557.45	315325.9	0	315325.9	BEV	0	11885.5	3	3
2034	0	8735.353	40832.45	22866.17	17966.28	281263.3	157507.5	123755.9	PHEV	4891.798	3843.555	3	8
2034	0	13940.37	65961.38	0	65961.38	395488.6	0	395488.6	BEV	0	13940.37	3	3
2034	0	8659.995	40976.33	22536.98	18439.35	289303.7	159117	130186.7	PHEV	4762.997	3896.998	3	8
2034	0	15769.29	75518.67	0	75518.67	473977.2	0	473977.2	BEV	0	15769.29	3	3
2034	0	9678.368	46349.41	25028.68	21320.73	335467.5	181152.5	154315.1	PHEV	5226.319	4452.049	3	8
2034	0	18024.88	87353.24	0	87353.24	574270.9	0	574270.9	BEV	0	18024.88	3	3
2034	0	10606.3	51400.89	27242.47	24158.42	381492.4	202191	179301.4	PHEV	5621.339	4984.961	3	8
2034	0	20416.8	100114.8	0	100114.8	682039	0	682039	BEV	0	20416.8	3	3
2034	0	11748.06	57607.2	29955.75	27651.46	443248.8	230489.4	212759.4	PHEV	6108.992	5639.069	3	8
2034	0	22710.35	112662.4	0	112662.4	786490	0	786490	BEV	0	22710.35	3	3
2034	0	13022.61	64603.09	32947.58	31655.52	522091.6	266266.7	255824.9	PHEV	6641.532	6381.08	3	8
2034	0	23189.32	116367	0	116367	832965.8	0	832965.8	BEV	0	23189.32	3	3
2034	0	13297.27	66727.41	34030.98	32696.43	553017.9	282039.1	270978.8	PHEV	6781.606	6515.661	3	8
2034	0	23927.9	121444.1	0	121444.1	891284.2	0	891284.2	BEV	0	23927.9	3	3
2034	0	13720.78	69638.74	35515.76	34122.98	591902.6	301870.3	290032.3	PHEV	6997.6	6723.184	3	8
2034	0	24699.31	126774.4	0	126774.4	953602.6	0	953602.6	BEV	0	24699.31	3	3
2034	0	14163.13	72695.23	37074.57	35620.66	633513.4	323091.8	310421.6	PHEV	7223.195	6939.932	3	8
2034	0	22516.1	116858.6	0	116858.6	900213.2	0	900213.2	BEV	0	22516.1	3	3
2034	0	12911.23	67009.26	34174.72	32834.54	598186.9	305075.3	293111.6	PHEV	6584.725	6326.501	3	8
2034	0	763.2329	3217.844	1930.706	1287.137	17095.77	10257.46	6838.306	PHEV	457.9398	305.2932	4	8
2034	0	1.791477	7.655626	0	7.655626	30.56966	0	30.56966	BEV	0	1.791477	4	3
2034	0	2192.274	9368.377	5621.026	3747.351	52510.66	31506.4	21004.27	PHEV	1315.364	876.9096	4	8
2034	0	968.8928	4195.936	0	4195.936	18009.17	0	18009.17	BEV	0	968.8928	4	3

2034	0	2520.86	10916.96	6487.794	4429.167	66361.79	39437.86	26923.93	PHEV	1498.111	1022.749	4	8
2034	0	2118.811	9297.217	0	9297.217	44599.48	0	44599.48	BEV	0	2118.811	4	3
2034	0	2853.5	12520.99	7369.496	5151.492	76471.85	45009.15	31462.7	PHEV	1679.489	1174.012	4	8
2034	0	3431.838	15255.31	0	15255.31	75637.53	0	75637.53	BEV	0	3431.838	4	3
2034	0	3330.755	14805.97	8629.766	6176.205	90853.46	52954.59	37898.87	PHEV	1941.354	1389.4	4	8
2034	0	3666.794	16509.81	0	16509.81	77937.48	0	77937.48	BEV	0	3666.794	4	3
2034	0	3581.801	16127.13	9307.659	6819.473	101422.6	58535.34	42887.28	PHEV	2067.211	1514.59	4	8
2034	0	4095.046	18672.63	0	18672.63	87828.93	0	87828.93	BEV	0	4095.046	4	3
2034	0	3847.877	17545.59	10026.05	7519.538	113134.4	64648.21	48486.15	PHEV	2198.787	1649.09	4	8
2034	0	4503.688	20793.98	0	20793.98	99249.97	0	99249.97	BEV	0	4503.688	4	3
2034	0	5181.566	23923.81	13534.04	10389.77	158229.5	89512.69	68716.82	PHEV	2931.286	2250.28	4	8
2034	0	5251.491	24547.52	0	24547.52	120305.1	0	120305.1	BEV	0	5251.491	4	3
2034	0	5760.98	26929.07	15080.28	11848.79	182783.1	102358.5	80424.56	PHEV	3226.149	2534.831	4	8
2034	0	5151.006	24372.91	0	24372.91	121843.4	0	121843.4	BEV	0	5151.006	4	3
2034	0	5343.461	25283.55	13905.95	11377.6	176026.3	96814.45	79211.82	PHEV	2938.904	2404.558	4	8
2034	0	5752.43	27548.22	0	27548.22	143205.5	0	143205.5	BEV	0	5752.43	4	3
2034	0	5809.168	27819.93	15022.76	12797.17	198653.4	107272.8	91380.56	PHEV	3136.951	2672.217	4	8
2034	0	6293.404	30499.47	0	30499.47	165462.6	0	165462.6	BEV	0	6293.404	4	3
2034	0	6221.392	30150.49	15979.76	14170.73	220836.2	117043.2	103793	PHEV	3297.338	2924.054	4	8
2034	0	6961.278	34134.97	0	34134.97	196340.6	0	196340.6	BEV	0	6961.278	4	3
2034	0	6886.638	33768.97	17559.87	16209.11	253664.8	131905.7	121759.1	PHEV	3581.052	3305.586	4	8
2034	0	7610.665	37755.29	0	37755.29	229989.2	0	229989.2	BEV	0	7610.665	4	3
2034	0	7491.42	37163.74	18953.51	18210.23	286315.8	146021.1	140294.8	PHEV	3820.624	3670.796	4	8
2034	0	7811.877	39201.02	0	39201.02	244843.1	0	244843.1	BEV	0	7811.877	4	3
2034	0	7689.481	38586.81	19679.27	18907.54	304817.8	155457.1	149360.7	PHEV	3921.635	3767.845	4	8
2034	0	8065.573	40936.17	0	40936.17	262041	0	262041	BEV	0	8065.573	4	3
2034	0	7939.201	40294.78	20550.34	19744.44	326196.9	166360.4	159836.5	PHEV	4048.993	3890.209	4	8
2034	0	8254.198	42366.4	0	42366.4	277832.9	0	277832.9	BEV	0	8254.198	4	3
2034	0	8124.871	41702.61	21268.33	20434.28	345881.8	176399.7	169482.1	PHEV	4143.684	3981.187	4	8
2034	0	7204.749	37392.65	0	37392.65	250876.3	0	250876.3	BEV	0	7204.749	4	3
2034	0	7091.865	36806.78	18771.46	18035.32	311909.3	159073.7	152835.6	PHEV	3616.851	3475.014	4	8
2034	0	6.831135	22.53885	0	22.53885	75.74562	0	75.74562	BEV	0	6.831135	1	3
2034	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2034	0	2090.214	8333.495	0	8333.495	40352.5	0	40352.5	BEV	0	2090.214	1	3
2034	0	2184.772	8710.488	5226.293	3484.195	40167.98	24100.79	16067.19	PHEV	1310.863	873.9086	1	8
2034	0	2957.275	11959.81	0	11959.81	59877.36	0	59877.36	BEV	0	2957.275	1	3
2034	0	3733.783	15100.17	9060.099	6040.066	72092.37	43255.42	28836.95	PHEV	2240.27	1493.513	1	8
2034	0	7825.625	32096.72	0	32096.72	166674.3	0	166674.3	BEV	0	7825.625	1	3
2034	0	3721.295	15262.85	9157.712	6105.141	75591.43	45354.86	30236.57	PHEV	2232.777	1488.518	1	8
2034	0	1500.226	6239.109	0	6239.109	22989.42	0	22989.42	BEV	0	1500.226	3	3
2034	0	136.5316	567.8048	340.6829	227.1219	3047.149	1828.289	1218.86	PHEV	81.91894	54.61263	3	8
2034	0	3.730366	13.16293	0	13.16293	49.62287	0	49.62287	BEV	0	3.730366	1	3
2034	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2034	0	386.1854	1517.562	0	1517.562	7120.719	0	7120.719	BEV	0	386.1854	1	3
2034	0	811.7759	3189.971	1913.983	1275.988	14223.06	8533.833	5689.222	PHEV	487.0655	324.7104	1	8
2034	0	5762.214	23963.78	0	23963.78	128621.4	0	128621.4	BEV	0	5762.214	1	3
2034	0	4143.802	17233.16	10339.9	6893.265	88664.79	53198.88	35465.92	PHEV	2486.281	1657.521	1	8

2034	0	13.13621	44.09457	0	44.09457	152.5516	0	152.5516	BEV	0	13.13621	1	3
2034	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2034	0	419.1892	1623.239	0	1623.239	7393.891	0	7393.891	BEV	0	419.1892	1	3
2034	0	116.5223	451.2127	270.7276	180.4851	1936.306	1161.784	774.5224	PHEV	69.91337	46.60891	1	8
2034	0	264.3482	1069.077	0	1069.077	5339.774	0	5339.774	BEV	0	264.3482	2	3
2034	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2034	0	62.70071	253.5742	0	253.5742	881.8788	0	881.8788	BEV	0	62.70071	3	3
2034	0	28.38892	114.8105	68.88628	45.92419	590.4406	354.2644	236.1762	PHEV	17.03335	11.35557	3	8
2034	0	5.569092	18.69388	0	18.69388	43.87966	0	43.87966	BEV	0	5.569092	3	3
2034	0	0	0	0	0	0	0	0	PHEV	0	0	3	8
2034	0	24.3761	81.82373	0	81.82373	195.4555	0	195.4555	BEV	0	24.3761	4	3
2034	0	0	0	0	0	0	0	0	PHEV	0	0	4	8
2034	0	60.52624	230.91	0	230.91	1024.922	0	1024.922	BEV	0	60.52624	1	3
2034	0	6.452036	24.61478	14.76887	9.84591	101.3441	60.80645	40.53763	PHEV	3.871222	2.580814	1	8
2034	0	100.6524	395.5257	0	395.5257	1840.597	0	1840.597	BEV	0	100.6524	2	3
2034	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2034	0	4.813476	17.26055	0	17.26055	67.41219	0	67.41219	BEV	0	4.813476	1	3
2034	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2034	0	30.65182	113.4258	0	113.4258	461.2548	0	461.2548	BEV	0	30.65182	1	3
2034	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2034	0	28.8677	108.4776	0	108.4776	472.3703	0	472.3703	BEV	0	28.8677	1	3
2034	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2034	0	129.952	518.1069	0	518.1069	2494.783	0	2494.783	BEV	0	129.952	2	3
2034	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2034	0	3.221545	10.99839	0	10.99839	39.03604	0	39.03604	BEV	0	3.221545	1	3
2034	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2034	0	9.152304	33.3434	0	33.3434	134.1791	0	134.1791	BEV	0	9.152304	1	3
2034	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2034	0	13.03299	48.22805	0	48.22805	199.2039	0	199.2039	BEV	0	13.03299	2	3
2034	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2034	0	0.468494	1.679964	0	1.679964	5.031248	0	5.031248	BEV	0	0.468494	4	3
2034	0	0	0	0	0	0	0	0	PHEV	0	0	4	8
2034	0	1.83899	5.224772	0	5.224772	13.95791	0	13.95791	BEV	0	1.83899	1	3
2034	0	7.67818	28.85268	0	28.85268	89.81463	0	89.81463	BEV	0	7.67818	3	3
2034	0	0	0	0	0	0	0	0	PHEV	0	0	3	8
2034	0	4.842662	18.75238	0	18.75238	60.90201	0	60.90201	BEV	0	4.842662	3	3
2034	0	3.352612	12.98242	7.789452	5.192968	63.78155	38.26893	25.51262	PHEV	2.011567	1.341045	3	8
2034	0	0.845782	3.468967	0	3.468967	12.2119	0	12.2119	BEV	0	0.845782	4	3
2034	0	0	0	0	0	0	0	0	PHEV	0	0	4	8
2034	0	1.590388	4.427354	0	4.427354	11.73725	0	11.73725	BEV	0	1.590388	1	3
2034	0	19.16324	62.12989	0	62.12989	197.88	0	197.88	BEV	0	19.16324	2	3
2034	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2034	0	6.926988	22.85511	0	22.85511	76.23221	0	76.23221	BEV	0	6.926988	2	3
2034	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2034	0	2.80496	10.05825	0	10.05825	38.8594	0	38.8594	BEV	0	2.80496	2	3
2034	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2034	0	1.627412	5.92894	0	5.92894	23.72697	0	23.72697	BEV	0	1.627412	2	3

2034	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2034	0	5.640037	21.19385	0	21.19385	91.70179	0	91.70179	BEV	0	5.640037	2	3
2034	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2034	0	4.982079	18.43598	0	18.43598	54.81788	0	54.81788	BEV	0	4.982079	3	3
2034	0	0	0	0	0	0	0	0	PHEV	0	0	3	8
2034	0	3.953024	15.76035	0	15.76035	53.53416	0	53.53416	BEV	0	3.953024	3	3
2034	0	3.022901	12.05203	7.231219	4.820813	60.80925	36.48555	24.3237	PHEV	1.81374	1.20916	3	8
2034	0	1.145708	3.714545	0	3.714545	8.661628	0	8.661628	BEV	0	1.145708	4	3
2034	0	0	0	0	0	0	0	0	PHEV	0	0	4	8
2034	0	3.261042	11.13323	0	11.13323	27.43298	0	27.43298	BEV	0	3.261042	4	3
2034	0	0	0	0	0	0	0	0	PHEV	0	0	4	8
2034	0	0.589213	2.079092	0	2.079092	5.529027	0	5.529027	BEV	0	0.589213	4	3
2034	0	0	0	0	0	0	0	0	PHEV	0	0	4	8
2034	0	23.85862	80.08671	0	80.08671	267.4616	0	267.4616	BEV	0	23.85862	2	3
2034	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2034	0	1.590826	5.522234	0	5.522234	19.90033	0	19.90033	BEV	0	1.590826	2	3
2034	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2034	0	12.67346	40.36308	0	40.36308	125.0931	0	125.0931	BEV	0	12.67346	2	3
2034	0	1.812051	5.355862	0	5.355862	14.91974	0	14.91974	BEV	0	1.812051	1	3
2034	0	0.711734	2.30754	0	2.30754	5.658672	0	5.658672	BEV	0	0.711734	3	3
2034	0	0	0	0	0	0	0	0	PHEV	0	0	3	8
2034	0	0.720767	2.667169	0	2.667169	7.741503	0	7.741503	BEV	0	0.720767	4	3
2034	0	0	0	0	0	0	0	0	PHEV	0	0	4	8
2034	0	2.337408	7.310382	0	7.310382	22.3354	0	22.3354	BEV	0	2.337408	1	3
2034	0	1.735329	5.626181	0	5.626181	18.09721	0	18.09721	BEV	0	1.735329	1	3
2034	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2034	0	3.284577	11.40175	0	11.40175	41.39914	0	41.39914	BEV	0	3.284577	1	3
2034	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2034	0	3.87597	12.12233	0	12.12233	36.37724	0	36.37724	BEV	0	3.87597	2	3
2034	0	0.566771	1.999904	0	1.999904	7.438577	0	7.438577	BEV	0	0.566771	2	3
2034	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2034	0	2.649181	8.133702	0	8.133702	24.02415	0	24.02415	BEV	0	2.649181	1	3
2034	0	2.663512	8.482888	0	8.482888	26.71029	0	26.71029	BEV	0	2.663512	1	3
2034	0	1.129317	3.143817	0	3.143817	8.335443	0	8.335443	BEV	0	1.129317	2	3
2034	0	0.473745	1.345962	0	1.345962	3.607899	0	3.607899	BEV	0	0.473745	2	3
2034	0	0.481294	1.422556	0	1.422556	3.988839	0	3.988839	BEV	0	0.481294	2	3
2034	0	0.607202	1.725126	0	1.725126	3.18022	0	3.18022	BEV	0	0.607202	3	3
2034	0	2.847324	9.068299	0	9.068299	19.3109	0	19.3109	BEV	0	2.847324	3	3
2034	0	0.241765	0.797687	0	0.797687	1.807285	0	1.807285	BEV	0	0.241765	3	3
2034	0	0	0	0	0	0	0	0	PHEV	0	0	3	8
2034	0	4.611395	17.59266	0	17.59266	54.41193	0	54.41193	BEV	0	4.611395	3	3
2034	0	0	0	0	0	0	0	0	PHEV	0	0	3	8
2034	0	11.83996	46.52653	0	46.52653	150.6351	0	150.6351	BEV	0	11.83996	3	3
2034	0	3.035886	11.92988	7.157927	4.771952	63.09138	37.85483	25.23655	PHEV	1.821532	1.214354	3	8
2034	0	0.724631	2.141784	0	2.141784	4.095765	0	4.095765	BEV	0	0.724631	4	3
2034	0	0.266246	0.878461	0	0.878461	2.098091	0	2.098091	BEV	0	0.266246	4	3
2034	0	0	0	0	0	0	0	0	PHEV	0	0	4	8

2034	0	0.845243	2.256156	0	2.256156	6.042641	0	6.042641	BEV	0	0.845243	1	3
2034	0	0.780497	2.128047	0	2.128047	5.500718	0	5.500718	BEV	0	0.780497	1	3
2034	0	0.842774	2.442695	0	2.442695	6.437375	0	6.437375	BEV	0	0.842774	1	3
2034	0	1.956862	5.895988	0	5.895988	17.10726	0	17.10726	BEV	0	1.956862	1	3
2034	0	0.520825	1.50956	0	1.50956	4.12387	0	4.12387	BEV	0	0.520825	2	3
2034	0	0	0	0	0	0	0	0	BEV	0	0	2	3
2034	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2034	0	0	0	0	0	0	0	0	BEV	0	0	2	3
2034	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2034	0	0	0	0	0	0	0	0	BEV	0	0	3	3
2034	0	11.3772	46.66347	27.99808	18.66539	260.1864	156.1119	104.0746	PHEV	6.82632	4.55088	3	8
2034	0	0.178764	0.559095	0	0.559095	1.17026	0	1.17026	BEV	0	0.178764	3	3
2034	0	2.02157	5.743502	0	5.743502	10.91318	0	10.91318	BEV	0	2.02157	4	3
2034	0	0.401227	1.277848	0	1.277848	2.76319	0	2.76319	BEV	0	0.401227	4	3
2034	0	0.256439	0.934251	0	0.934251	2.576045	0	2.576045	BEV	0	0.256439	3	3
2034	0	0	0	0	0	0	0	0	PHEV	0	0	3	8
2034	0	0.931413	3.55338	0	3.55338	14.47871	0	14.47871	BEV	0	0.931413	2	3
2034	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2034	0	0.52419	1.579373	0	1.579373	4.401305	0	4.401305	BEV	0	0.52419	2	3
2034	0	1.531875	4.70327	0	4.70327	13.39309	0	13.39309	BEV	0	1.531875	2	3
2034	0	0.392124	1.22639	0	1.22639	2.495181	0	2.495181	BEV	0	0.392124	4	3
2034	0	0.701201	2.715283	0	2.715283	12.4772	0	12.4772	BEV	0	0.701201	2	3
2034	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2034	0	0.190118	0.518361	0	0.518361	0.99311	0	0.99311	BEV	0	0.190118	4	3
2034	0	0.142066	0.419902	0	0.419902	0.772772	0	0.772772	BEV	0	0.142066	3	3
2034	0	0.12987	0.458259	0	0.458259	1.133561	0	1.133561	BEV	0	0.12987	3	3
2034	0	0	0	0	0	0	0	0	PHEV	0	0	3	8
2034	0	0.321304	0.876046	0	0.876046	1.68851	0	1.68851	BEV	0	0.321304	3	3
2034	0	0.698289	2.10393	0	2.10393	4.244215	0	4.244215	BEV	0	0.698289	4	3
2034	0	0.275328	0.939972	0	0.939972	3.25318	0	3.25318	BEV	0	0.275328	2	3
2034	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2034	0	1.909624	5.31605	0	5.31605	9.631592	0	9.631592	BEV	0	1.909624	4	3
2034	0	0.702784	2.56036	0	2.56036	7.006396	0	7.006396	BEV	0	0.702784	4	3
2034	0	0	0	0	0	0	0	0	PHEV	0	0	4	8
2034	0	0.090806	0.278798	0	0.278798	0.573967	0	0.573967	BEV	0	0.090806	3	3
2034	0	0	0	0	0	0	0	0	BEV	0	0	4	3
2034	0	1.238031	4.935917	2.96155	1.974367	27.39445	16.43667	10.95778	PHEV	0.742818	0.495212	4	8
2034	0	0.14227	0.387903	0	0.387903	0.993022	0	0.993022	BEV	0	0.14227	2	3
2035	0	17465.91	72636.9	0	72636.9	389587.8	0	389587.8	BEV	0	17465.91	1	3
2035	0	15754.85	65520.94	35381.31	30139.63	349759.5	188870.1	160889.4	PHEV	8507.617	7247.23	1	8
2035	0	25320.51	106753	0	106753	590975.6	0	590975.6	BEV	0	25320.51	1	3
2035	0	16364.52	68993.96	37256.74	31737.22	380982.3	205730.5	175251.9	PHEV	8836.841	7527.679	1	8
2035	0	35667.87	152421.6	0	152421.6	871553.4	0	871553.4	BEV	0	35667.87	1	3
2035	0	17492.8	74753.01	39619.1	35133.92	426396.8	225990.3	200406.5	PHEV	9271.182	8221.614	1	8
2035	0	47980.35	207786.1	0	207786.1	1225900	0	1225900	BEV	0	47980.35	1	3
2035	0	18295.17	79229.98	41199.59	38030.39	466781.3	242726.3	224055	PHEV	9513.489	8781.682	1	8
2035	0	56143.08	246352.5	0	246352.5	1499824	0	1499824	BEV	0	56143.08	1	3

2035	0	21116.26	92656.9	47255.02	45401.88	563374.8	287321.2	276053.7	PHEV	10769.29	10346.97	1	8
2035	0	64500.7	286720.4	0	286720.4	1800114	0	1800114	BEV	0	64500.7	1	3
2035	0	23901.99	106249.8	53124.92	53124.92	666220.4	333110.2	333110.2	PHEV	11951	11951	1	8
2035	0	73114.89	329201.3	0	329201.3	2129889	0	2129889	BEV	0	73114.89	1	3
2035	0	26947.25	121330.5	59451.95	61878.56	784049.3	384184.1	399865.1	PHEV	13204.15	13743.1	1	8
2035	0	81152.84	370041.5	0	370041.5	2465833	0	2465833	BEV	0	81152.84	1	3
2035	0	29779.2	135787.5	65177.99	70609.49	903855.5	433850.6	470004.9	PHEV	14294.01	15485.18	1	8
2035	0	89260.74	412125.8	0	412125.8	2828107	0	2828107	BEV	0	89260.74	1	3
2035	0	32311.83	149187	70117.87	79069.09	1022798	480714.9	542082.8	PHEV	15186.56	17125.27	1	8
2035	0	80621.37	376855.7	0	376855.7	2659764	0	2659764	BEV	0	80621.37	1	3
2035	0	33528.06	156723.2	71152.35	85570.89	1105220	501769.8	603450.1	PHEV	15221.74	18306.32	1	8
2035	0	86618.32	409850.2	0	409850.2	2973403	0	2973403	BEV	0	86618.32	1	3
2035	0	36660.72	173466.8	75978.46	97488.35	1257913	550966.1	706947.3	PHEV	16057.4	20603.33	1	8
2035	0	94827.86	454127.8	0	454127.8	3385280	0	3385280	BEV	0	94827.86	1	3
2035	0	40523.7	194066.8	81896.18	112170.6	1446508	610426.6	836081.9	PHEV	17101	23422.7	1	8
2035	0	102056.4	494591.9	0	494591.9	3787462	0	3787462	BEV	0	102056.4	1	3
2035	0	44157.46	213998.5	86883.4	127115.1	1639076	665465	973611.4	PHEV	17927.93	26229.53	1	8
2035	0	110628.6	542472.8	0	542472.8	4264871	0	4264871	BEV	0	110628.6	1	3
2035	0	48460.66	237629.3	92675.41	144953.8	1868993	728907.2	1140086	PHEV	18899.66	29561	1	8
2035	0	114682.8	568923.2	0	568923.2	4590128	0	4590128	BEV	0	114682.8	1	3
2035	0	50236.62	249215.8	97194.18	152021.7	2012022	784688.6	1227333	PHEV	19592.28	30644.34	1	8
2035	0	118088.7	592584.7	0	592584.7	4902998	0	4902998	BEV	0	118088.7	1	3
2035	0	51728.57	259580.7	101236.5	158344.2	2149548	838323.9	1311225	PHEV	20174.14	31554.43	1	8
2035	0	121865.3	618517.6	0	618517.6	5239815	0	5239815	BEV	0	121865.3	1	3
2035	0	53382.88	270940.5	105666.8	165273.7	2297147	895887.3	1401260	PHEV	20819.32	32563.56	1	8
2035	0	123658.7	634704	0	634704	5489517	0	5489517	BEV	0	123658.7	1	3
2035	0	54168.46	278031	108432.1	169598.9	2405891	938297.6	1467594	PHEV	21125.7	33042.76	1	8
2035	0	111868.6	580598.1	0	580598.1	5114265	0	5114265	BEV	0	111868.6	1	3
2035	0	49003.86	254330	99188.71	155141.3	2240262	873702.3	1366560	PHEV	19111.5	29892.35	1	8
2035	0	1.615088	6.716795	0	6.716795	36.04779	0	36.04779	BEV	0	1.615088	2	3
2035	0	14.00841	58.25791	34.95475	23.30317	326.6455	195.9873	130.6582	PHEV	8.405049	5.603366	2	8
2035	0	768.2336	3282.939	0	3282.939	18980.24	0	18980.24	BEV	0	768.2336	2	3
2035	0	589.9494	2521.066	1498.234	1022.833	14743.1	8761.615	5981.487	PHEV	350.5985	239.3509	2	8
2035	0	1675.805	7257.323	0	7257.323	42977.61	0	42977.61	BEV	0	1675.805	2	3
2035	0	1290.674	5589.457	3289.795	2299.662	33321.48	19612.07	13709.41	PHEV	759.6539	531.0202	2	8
2035	0	2057.775	9029.394	0	9029.394	54869.22	0	54869.22	BEV	0	2057.775	2	3
2035	0	1511.493	6632.341	3865.707	2766.634	40325.02	23503.73	16821.29	PHEV	880.9845	630.5085	2	8
2035	0	2674.765	11889.95	0	11889.95	74121.02	0	74121.02	BEV	0	2674.765	2	3
2035	0	1702.703	7568.907	4368.341	3200.566	47069.07	27165.58	19903.49	PHEV	982.7029	720.0002	2	8
2035	0	3101.505	13964.59	0	13964.59	89357.8	0	89357.8	BEV	0	3101.505	2	3
2035	0	1947.315	8767.825	5010.186	3757.639	55811.07	31892.04	23919.03	PHEV	1112.751	834.5636	2	8
2035	0	3473.515	15838.57	0	15838.57	104075	0	104075	BEV	0	3473.515	2	3
2035	0	2263.597	10321.57	5839.062	4482.512	67283.12	38063.02	29220.1	PHEV	1280.549	983.048	2	8
2035	0	4019.366	18557.81	0	18557.81	125255.9	0	125255.9	BEV	0	4019.366	2	3
2035	0	2449.335	11308.82	6332.941	4975.882	75575.92	42322.51	33253.4	PHEV	1371.627	1077.707	2	8
2035	0	4160.005	19445.48	0	19445.48	134653.9	0	134653.9	BEV	0	4160.005	2	3
2035	0	2622.809	12260.03	6743.017	5517.014	83931.93	46162.56	37769.37	PHEV	1442.545	1180.264	2	8

2035	0	4576.647	21655.23	0	21655.23	153943.8	0	153943.8	BEV	0	4576.647	2	3
2035	0	3244.997	15354.29	8291.315	7062.972	107509.1	58054.9	49454.17	PHEV	1752.298	1492.698	2	8
2035	0	5313.555	25446.46	0	25446.46	185505.6	0	185505.6	BEV	0	5313.555	2	3
2035	0	3768.329	18046.41	9564.599	8481.814	129284.3	68520.7	60763.64	PHEV	1997.214	1771.114	2	8
2035	0	6289.391	30480.03	0	30480.03	227649.9	0	227649.9	BEV	0	6289.391	2	3
2035	0	4185.072	20281.95	10546.61	9735.335	148769.8	77360.28	71409.49	PHEV	2176.238	2008.835	2	8
2035	0	7113.401	34880.92	0	34880.92	267159.6	0	267159.6	BEV	0	7113.401	2	3
2035	0	4836.428	23715.67	12094.99	11620.68	178085	90823.34	87261.64	PHEV	2466.578	2369.85	2	8
2035	0	7299.438	36211.35	0	36211.35	284459.2	0	284459.2	BEV	0	7299.438	2	3
2035	0	4962.916	24620.23	12556.32	12063.91	189608.5	96700.34	92908.17	PHEV	2531.087	2431.829	2	8
2035	0	7428.372	37276.54	0	37276.54	300299.5	0	300299.5	BEV	0	7428.372	2	3
2035	0	5050.578	25344.46	12925.67	12418.78	200223.1	102113.8	98109.32	PHEV	2575.795	2474.783	2	8
2035	0	7562.782	38384.3	0	38384.3	317035.1	0	317035.1	BEV	0	7562.782	2	3
2035	0	5141.964	26097.63	13309.79	12787.84	211477.8	107853.7	103624.1	PHEV	2622.402	2519.562	2	8
2035	0	7706.832	39556.93	0	39556.93	334824	0	334824	BEV	0	7706.832	2	3
2035	0	5239.904	26894.91	13716.4	13178.51	223472.5	113971	109501.5	PHEV	2672.351	2567.553	2	8
2035	0	7071.79	36702.59	0	36702.59	318202.9	0	318202.9	BEV	0	7071.79	2	3
2035	0	4808.137	24954.23	12726.66	12227.57	212496.8	108373.4	104123.4	PHEV	2452.15	2355.987	2	8
2035	0	486.7743	2052.274	1231.365	820.9098	11702.62	7021.575	4681.05	PHEV	292.0646	194.7097	3	8
2035	0	1879.327	8031.041	0	8031.041	35585.38	0	35585.38	BEV	0	1879.327	3	3
2035	0	1632.307	6975.434	4145.401	2830.033	40598.64	24127.19	16471.45	PHEV	970.0566	662.2502	3	8
2035	0	4272.932	18504.57	0	18504.57	97813.6	0	97813.6	BEV	0	4272.932	3	3
2035	0	3083.695	13354.4	7860.02	5494.383	79379.68	46720.61	32659.07	PHEV	1814.975	1268.72	3	8
2035	0	5315.043	23322.09	0	23322.09	118028.2	0	118028.2	BEV	0	5315.043	3	3
2035	0	5119.235	22462.9	13092.66	9370.237	136528	79576.31	56951.67	PHEV	2983.783	2135.452	3	8
2035	0	7077.274	31460.11	0	31460.11	163126.9	0	163126.9	BEV	0	7077.274	3	3
2035	0	5643.402	25086.22	14478.33	10607.89	155990.3	90028.67	65961.6	PHEV	3257.049	2386.353	3	8
2035	0	8878.875	39977.31	0	39977.31	213202.5	0	213202.5	BEV	0	8878.875	3	3
2035	0	6349.819	28590.19	16337.25	12252.94	181998.4	103999.1	77999.29	PHEV	3628.468	2721.351	3	8
2035	0	10233.47	46662.66	0	46662.66	252932.2	0	252932.2	BEV	0	10233.47	3	3
2035	0	7132.814	32524.28	18399.45	14124.83	212068	119969.9	92098.1	PHEV	4035.135	3097.679	3	8
2035	0	11303.83	52190.93	0	52190.93	286981.9	0	286981.9	BEV	0	11303.83	3	3
2035	0	8307.855	38358.2	21480.59	16877.61	256423.1	143596.9	112826.1	PHEV	4652.399	3655.456	3	8
2035	0	13498.86	63098.91	0	63098.91	366599.2	0	366599.2	BEV	0	13498.86	3	3
2035	0	8385.717	39198.11	21558.96	17639.15	268449.5	147647.2	120802.3	PHEV	4612.144	3773.573	3	8
2035	0	15339.38	72581.04	0	72581.04	441516.8	0	441516.8	BEV	0	15339.38	3	3
2035	0	9414.51	44546.45	24055.08	20491.37	312699.3	168857.6	143841.7	PHEV	5083.835	4330.674	3	8
2035	0	17684.24	84689.28	0	84689.28	539630.2	0	539630.2	BEV	0	17684.24	3	3
2035	0	10405.86	49833.35	26411.67	23421.67	358611.2	190063.9	168547.3	PHEV	5515.105	4890.754	3	8
2035	0	19961.8	96740.09	0	96740.09	638847.6	0	638847.6	BEV	0	19961.8	3	3
2035	0	11486.25	55665.35	28945.98	26719.37	415273.2	215942.1	199331.1	PHEV	5972.849	5513.399	3	8
2035	0	22331.02	109501.3	0	109501.3	741037.5	0	741037.5	BEV	0	22331.02	3	3
2035	0	12805.1	62790.44	32023.12	30767.32	491943.7	250891.3	241052.4	PHEV	6530.6	6274.498	3	8
2035	0	22898.53	113595.9	0	113595.9	788443	0	788443	BEV	0	22898.53	3	3
2035	0	13130.52	65138.41	33220.59	31917.82	523401.6	266934.8	256466.8	PHEV	6696.565	6433.955	3	8
2035	0	23372.75	117287.5	0	117287.5	834719.7	0	834719.7	BEV	0	23372.75	3	3
2035	0	13402.45	67255.21	34300.16	32955.05	554195.9	282639.9	271556	PHEV	6835.247	6567.198	3	8

2035	0	24105.05	122343.3	0	122343.3	892706.3	0	892706.3	BEV	0	24105.05	3	3
2035	0	13822.37	70154.31	35778.7	34375.61	592861.1	302359.2	290501.9	PHEV	7049.406	6772.959	3	8
2035	0	24871.11	127656.2	0	127656.2	954689.9	0	954689.9	BEV	0	24871.11	3	3
2035	0	14261.64	73200.87	37332.44	35868.42	634249.1	323467.1	310782.1	PHEV	7273.437	6988.204	3	8
2035	0	22659.18	117601.1	0	117601.1	900677.5	0	900677.5	BEV	0	22659.18	3	3
2035	0	12993.27	67435.08	34391.89	33043.19	598505.5	305237.8	293267.7	PHEV	6626.568	6366.703	3	8
2035	0	678.9471	2823.591	1694.155	1129.437	14585.31	8751.188	5834.125	PHEV	407.3682	271.5788	4	8
2035	0	1.619535	6.828071	0	6.828071	26.29143	0	26.29143	BEV	0	1.619535	4	3
2035	0	1981.864	8355.678	5013.407	3342.271	45541.77	27325.06	18216.71	PHEV	1189.119	792.7457	4	8
2035	0	886.8183	3789.694	0	3789.694	15702.96	0	15702.96	BEV	0	886.8183	4	3
2035	0	2307.319	9860.003	5859.659	4000.344	58304.27	34649.39	23654.87	PHEV	1371.206	936.1121	4	8
2035	0	1961.008	8492.438	0	8492.438	39410.67	0	39410.67	BEV	0	1961.008	4	3
2035	0	2640.979	11437.16	6731.583	4705.573	67883.68	39954.39	27929.28	PHEV	1554.405	1086.574	4	8
2035	0	3184.515	13973.46	0	13973.46	67051.11	0	67051.11	BEV	0	3184.515	4	3
2035	0	3090.716	13561.88	7904.637	5657.241	80804.04	47097.21	33706.83	PHEV	1801.446	1289.27	4	8
2035	0	3446.59	15320.89	0	15320.89	69914.1	0	69914.1	BEV	0	3446.59	4	3
2035	0	3366.702	14965.76	8637.384	6328.38	91349.78	52721.88	38627.91	PHEV	1943.068	1423.634	4	8
2035	0	3838.336	17282.19	0	17282.19	78576.64	0	78576.64	BEV	0	3838.336	4	3
2035	0	3606.662	16239.07	9279.467	6959.601	101589.8	58051.3	43538.47	PHEV	2060.95	1545.712	4	8
2035	0	4271.993	19479.48	0	19479.48	89893.36	0	89893.36	BEV	0	4271.993	4	3
2035	0	4914.996	22411.45	12678.48	9732.972	143754.4	81323.93	62430.49	PHEV	2780.484	2134.513	4	8
2035	0	4961.063	22905.72	0	22905.72	108585.4	0	108585.4	BEV	0	4961.063	4	3
2035	0	5442.376	25127.99	14071.68	11056.32	165406	92627.34	72778.62	PHEV	3047.73	2394.645	4	8
2035	0	4978.553	23271.7	0	23271.7	112574.8	0	112574.8	BEV	0	4978.553	4	3
2035	0	5164.565	24141.19	13277.65	10863.53	162923.7	89608.03	73315.66	PHEV	2840.51	2324.054	4	8
2035	0	5529.121	26162.03	0	26162.03	131669	0	131669	BEV	0	5529.121	4	3
2035	0	5583.656	26420.07	14266.84	12153.23	182892.6	98761.98	84130.58	PHEV	3015.174	2568.482	4	8
2035	0	6105.538	29239.24	0	29239.24	153640.4	0	153640.4	BEV	0	6105.538	4	3
2035	0	6035.675	28904.67	15319.47	13585.19	205231.2	108772.5	96458.66	PHEV	3198.908	2836.767	4	8
2035	0	6726.911	32600.36	0	32600.36	181713.4	0	181713.4	BEV	0	6726.911	4	3
2035	0	6654.784	32250.81	16770.42	15480.39	234889.7	122142.7	112747.1	PHEV	3460.488	3194.296	4	8
2035	0	7487.745	36716.53	0	36716.53	216813.2	0	216813.2	BEV	0	7487.745	4	3
2035	0	7370.427	36141.26	18432.04	17709.22	269962.6	137680.9	132281.7	PHEV	3758.918	3611.509	4	8
2035	0	7673.674	38067.87	0	38067.87	230564.4	0	230564.4	BEV	0	7673.674	4	3
2035	0	7553.442	37471.42	19110.42	18361	287073.9	146407.7	140666.2	PHEV	3852.256	3701.187	4	8
2035	0	7873.469	39510.09	0	39510.09	245360.8	0	245360.8	BEV	0	7873.469	4	3
2035	0	7750.107	38891.04	19834.43	19056.61	305511.6	155810.9	149700.7	PHEV	3952.554	3797.552	4	8
2035	0	8125.099	41238.29	0	41238.29	262464.3	0	262464.3	BEV	0	8125.099	4	3
2035	0	7997.795	40592.17	20702.01	19890.16	326781.5	166658.6	160122.9	PHEV	4078.875	3918.919	4	8
2035	0	8311.877	42662.45	0	42662.45	278174	0	278174	BEV	0	8311.877	4	3
2035	0	8181.646	41994.02	21416.95	20577.07	346372	176649.7	169722.3	PHEV	4172.639	4009.007	4	8
2035	0	7250.532	37630.26	0	37630.26	251022.6	0	251022.6	BEV	0	7250.532	4	3
2035	0	7136.93	37040.67	18890.74	18149.93	312154.5	159198.8	152955.7	PHEV	3639.835	3497.096	4	8
2035	0	6.273111	20.3383	0	20.3383	65.9048	0	65.9048	BEV	0	6.273111	1	3
2035	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2035	0	1707.174	6708.544	0	6708.544	31266.48	0	31266.48	BEV	0	1707.174	1	3
2035	0	1784.403	7012.027	4207.216	2804.811	31006.37	18603.82	12402.55	PHEV	1070.642	713.7613	1	8

2035	0	2438.813	9723.329	0	9723.329	46868.38	0	46868.38	BEV	0	2438.813	1	3
2035	0	3079.185	12276.43	7365.861	4910.574	56229.21	33737.53	22491.68	PHEV	1847.511	1231.674	1	8
2035	0	6529.734	26407.55	0	26407.55	132081.2	0	132081.2	BEV	0	6529.734	1	3
2035	0	3105.064	12557.5	7534.5	5023	59708.12	35824.87	23883.25	PHEV	1863.038	1242.026	1	8
2035	0	1273.775	5224.376	0	5224.376	18543.39	0	18543.39	BEV	0	1273.775	3	3
2035	0	115.9229	475.4567	285.274	190.1827	2490.22	1494.132	996.088	PHEV	69.55375	46.36916	3	8
2035	0	3.24704	11.27145	0	11.27145	40.86073	0	40.86073	BEV	0	3.24704	1	3
2035	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2035	0	314.6892	1218.58	0	1218.58	5501.667	0	5501.667	BEV	0	314.6892	1	3
2035	0	661.4882	2561.5	1536.9	1024.6	10937.16	6562.293	4374.862	PHEV	396.8929	264.5953	1	8
2035	0	4884.251	20032.71	0	20032.71	103595.9	0	103595.9	BEV	0	4884.251	1	3
2035	0	3512.43	14406.2	8643.717	5762.478	71197.86	42718.71	28479.14	PHEV	2107.458	1404.972	1	8
2035	0	12.0921	39.89704	0	39.89704	132.9332	0	132.9332	BEV	0	12.0921	1	3
2035	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2035	0	342.1274	1305.23	0	1305.23	5719.651	0	5719.651	BEV	0	342.1274	1	3
2035	0	95.10138	362.8156	217.6893	145.1262	1489.858	893.9146	595.943	PHEV	57.06083	38.04055	1	8
2035	0	236.6453	943.4836	0	943.4836	4536.415	0	4536.415	BEV	0	236.6453	2	3
2035	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2035	0	52.94026	211.0681	0	211.0681	706.8402	0	706.8402	BEV	0	52.94026	3	3
2035	0	23.9697	95.56502	57.33901	38.22601	480.0012	288.0007	192.0005	PHEV	14.38182	9.587878	3	8
2035	0	5.077582	16.75313	0	16.75313	37.86402	0	37.86402	BEV	0	5.077582	3	3
2035	0	0	0	0	0	0	0	0	PHEV	0	0	3	8
2035	0	22.07801	72.84486	0	72.84486	167.6453	0	167.6453	BEV	0	22.07801	4	3
2035	0	0	0	0	0	0	0	0	PHEV	0	0	4	8
2035	0	49.8409	187.2896	0	187.2896	799.5928	0	799.5928	BEV	0	49.8409	1	3
2035	0	5.312989	19.96489	11.97893	7.985954	78.48702	47.09221	31.39481	PHEV	3.187794	2.125196	1	8
2035	0	88.82931	343.9764	0	343.9764	1540.025	0	1540.025	BEV	0	88.82931	2	3
2035	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2035	0	4.147252	14.63395	0	14.63395	54.96527	0	54.96527	BEV	0	4.147252	1	3
2035	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2035	0	25.60151	93.27065	0	93.27065	364.5943	0	364.5943	BEV	0	25.60151	1	3
2035	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2035	0	24.01512	88.867	0	88.867	372.1469	0	372.1469	BEV	0	24.01512	1	3
2035	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2035	0	115.4031	453.4904	0	453.4904	2101.102	0	2101.102	BEV	0	115.4031	2	3
2035	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2035	0	2.912699	9.777114	0	9.777114	33.40499	0	33.40499	BEV	0	2.912699	1	3
2035	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2035	0	7.785567	27.91811	0	27.91811	107.9941	0	107.9941	BEV	0	7.785567	1	3
2035	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2035	0	11.48342	41.83605	0	41.83605	166.0855	0	166.0855	BEV	0	11.48342	2	3
2035	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2035	0	0.418256	1.475853	0	1.475853	4.261153	0	4.261153	BEV	0	0.418256	4	3
2035	0	0	0	0	0	0	0	0	PHEV	0	0	4	8
2035	0	1.766045	4.91635	0	4.91635	12.87297	0	12.87297	BEV	0	1.766045	1	3
2035	0	6.812569	25.20964	0	25.20964	75.48707	0	75.48707	BEV	0	6.812569	3	3
2035	0	0	0	0	0	0	0	0	PHEV	0	0	3	8

2035	0	4.289017	16.36277	0	16.36277	51.15256	0	51.15256	BEV	0	4.289017	3	3
2035	0	2.96932	11.32807	6.796844	4.531229	54.26209	32.55725	21.70484	PHEV	1.781592	1.187728	3	8
2035	0	0.757749	3.06449	0	3.06449	10.38237	0	10.38237	BEV	0	0.757749	4	3
2035	0	0	0	0	0	0	0	0	PHEV	0	0	4	8
2035	0	1.545842	4.214786	0	4.214786	10.98931	0	10.98931	BEV	0	1.545842	1	3
2035	0	17.47064	55.64137	0	55.64137	170.9784	0	170.9784	BEV	0	17.47064	2	3
2035	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2035	0	6.261628	20.30107	0	20.30107	65.24173	0	65.24173	BEV	0	6.261628	2	3
2035	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2035	0	2.48327	8.762443	0	8.762443	32.52999	0	32.52999	BEV	0	2.48327	2	3
2035	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2035	0	1.4131	5.067207	0	5.067207	19.47872	0	19.47872	BEV	0	1.4131	2	3
2035	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2035	0	4.95078	18.32016	0	18.32016	76.22641	0	76.22641	BEV	0	4.95078	2	3
2035	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2035	0	4.497795	16.38623	0	16.38623	46.75821	0	46.75821	BEV	0	4.497795	3	3
2035	0	0	0	0	0	0	0	0	PHEV	0	0	3	8
2035	0	3.391387	13.32686	0	13.32686	43.5412	0	43.5412	BEV	0	3.391387	3	3
2035	0	2.593413	10.19113	6.114677	4.076452	50.2354	30.14124	20.09416	PHEV	1.556048	1.037365	3	8
2035	0	1.064109	3.389027	0	3.389027	7.63196	0	7.63196	BEV	0	1.064109	4	3
2035	0	0	0	0	0	0	0	0	PHEV	0	0	4	8
2035	0	2.910151	9.768563	0	9.768563	23.16523	0	23.16523	BEV	0	2.910151	4	3
2035	0	0	0	0	0	0	0	0	PHEV	0	0	4	8
2035	0	0.53712	1.864505	0	1.864505	4.762836	0	4.762836	BEV	0	0.53712	4	3
2035	0	0	0	0	0	0	0	0	PHEV	0	0	4	8
2035	0	21.58393	71.21467	0	71.21467	228.852	0	228.852	BEV	0	21.58393	2	3
2035	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2035	0	1.433919	4.895413	0	4.895413	16.95644	0	16.95644	BEV	0	1.433919	2	3
2035	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2035	0	11.26029	35.21724	0	35.21724	105.4334	0	105.4334	BEV	0	11.26029	2	3
2035	0	1.735328	5.029675	0	5.029675	13.64792	0	13.64792	BEV	0	1.735328	1	3
2035	0	0.654125	2.083291	0	2.083291	4.935142	0	4.935142	BEV	0	0.654125	3	3
2035	0	0	0	0	0	0	0	0	PHEV	0	0	3	8
2035	0	0.628451	2.289555	0	2.289555	6.382939	0	6.382939	BEV	0	0.628451	4	3
2035	0	0	0	0	0	0	0	0	PHEV	0	0	4	8
2035	0	2.25467	6.922444	0	6.922444	20.46994	0	20.46994	BEV	0	2.25467	1	3
2035	0	1.616875	5.149503	0	5.149503	15.98397	0	15.98397	BEV	0	1.616875	1	3
2035	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2035	0	2.911526	9.939979	0	9.939979	34.71502	0	34.71502	BEV	0	2.911526	1	3
2035	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2035	0	3.52049	10.80886	0	10.80886	31.38182	0	31.38182	BEV	0	3.52049	2	3
2035	0	0.50002	1.735718	0	1.735718	6.206252	0	6.206252	BEV	0	0.50002	2	3
2035	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2035	0	2.574623	7.757289	0	7.757289	22.21519	0	22.21519	BEV	0	2.574623	1	3
2035	0	2.515424	7.867141	0	7.867141	23.9367	0	23.9367	BEV	0	2.515424	1	3
2035	0	1.020774	2.783172	0	2.783172	7.256341	0	7.256341	BEV	0	1.020774	2	3
2035	0	0.429485	1.19561	0	1.19561	3.142905	0	3.142905	BEV	0	0.429485	2	3

2035	0	0.429045	1.243545	0	1.243545	3.397345	0	3.397345	BEV	0	0.429045	2	3
2035	0	0.568373	1.582248	0	1.582248	2.85747	0	2.85747	BEV	0	0.568373	3	3
2035	0	2.569159	8.035199	0	8.035199	16.52172	0	16.52172	BEV	0	2.569159	3	3
2035	0	0.220661	0.715414	0	0.715414	1.561594	0	1.561594	BEV	0	0.220661	3	3
2035	0	0	0	0	0	0	0	0	PHEV	0	0	3	8
2035	0	4.030762	15.1466	0	15.1466	45.04768	0	45.04768	BEV	0	4.030762	3	3
2035	0	0	0	0	0	0	0	0	PHEV	0	0	3	8
2035	0	10.1734	39.39476	0	39.39476	122.6289	0	122.6289	BEV	0	10.1734	3	3
2035	0	2.608564	10.10122	6.060732	4.040488	52.7212	31.63272	21.08848	PHEV	1.565138	1.043425	3	8
2035	0	0.720305	2.087731	0	2.087731	3.88672	0	3.88672	BEV	0	0.720305	4	3
2035	0	0.242375	0.785814	0	0.785814	1.81035	0	1.81035	BEV	0	0.242375	4	3
2035	0	0	0	0	0	0	0	0	PHEV	0	0	4	8
2035	0	0.761401	2.032362	0	2.032362	5.187214	0	5.187214	BEV	0	0.761401	1	3
2035	0	0.805441	2.288347	0	2.288347	5.889332	0	5.889332	BEV	0	0.805441	1	3
2035	0	1.862813	5.505899	0	5.505899	15.5272	0	15.5272	BEV	0	1.862813	1	3
2035	0	0.46572	1.323163	0	1.323163	3.530304	0	3.530304	BEV	0	0.46572	2	3
2035	0	0	0	0	0	0	0	0	BEV	0	0	2	3
2035	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2035	0	0	0	0	0	0	0	0	BEV	0	0	2	3
2035	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2035	0	0	0	0	0	0	0	0	BEV	0	0	3	3
2035	0	9.264961	37.46936	22.48161	14.98774	205.1638	123.0983	82.06553	PHEV	5.558977	3.705984	3	8
2035	0	0.165376	0.507749	0	0.507749	1.028369	0	1.028369	BEV	0	0.165376	3	3
2035	0	2.025735	5.639282	0	5.639282	10.50329	0	10.50329	BEV	0	2.025735	4	3
2035	0	0.376108	1.176302	0	1.176302	2.458442	0	2.458442	BEV	0	0.376108	4	3
2035	0	0.226032	0.810523	0	0.810523	2.146084	0	2.146084	BEV	0	0.226032	3	3
2035	0	0	0	0	0	0	0	0	PHEV	0	0	3	8
2035	0	0.814666	3.061311	0	3.061311	11.9885	0	11.9885	BEV	0	0.814666	2	3
2035	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2035	0	0.477739	1.412048	0	1.412048	3.822066	0	3.822066	BEV	0	0.477739	2	3
2035	0	1.355974	4.085522	0	4.085522	11.26984	0	11.26984	BEV	0	1.355974	2	3
2035	0	0.366015	1.123766	0	1.123766	2.210505	0	2.210505	BEV	0	0.366015	4	3
2035	0	0.618526	2.3597	0	2.3597	10.43489	0	10.43489	BEV	0	0.618526	2	3
2035	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2035	0	0.190949	0.509689	0	0.509689	0.967437	0	0.967437	BEV	0	0.190949	4	3
2035	0	0.136586	0.395879	0	0.395879	0.708921	0	0.708921	BEV	0	0.136586	3	3
2035	0	0.114049	0.395898	0	0.395898	0.94052	0	0.94052	BEV	0	0.114049	3	3
2035	0	0	0	0	0	0	0	0	PHEV	0	0	3	8
2035	0	0.318967	0.851399	0	0.851399	1.620173	0	1.620173	BEV	0	0.318967	3	3
2035	0	0.661341	1.95472	0	1.95472	3.830043	0	3.830043	BEV	0	0.661341	4	3
2035	0	0.249946	0.838998	0	0.838998	2.793899	0	2.793899	BEV	0	0.249946	2	3
2035	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2035	0	1.895219	5.167373	0	5.167373	9.20381	0	9.20381	BEV	0	1.895219	4	3
2035	0	0.600013	2.151576	0	2.151576	5.654323	0	5.654323	BEV	0	0.600013	4	3
2035	0	0	0	0	0	0	0	0	PHEV	0	0	4	8
2035	0	0.083731	0.252281	0	0.252281	0.503689	0	0.503689	BEV	0	0.083731	3	3
2035	0	0	0	0	0	0	0	0	BEV	0	0	4	3

2035	0	1.080684	4.246676	2.548005	1.69867	23.08588	13.85153	9.234351	PHEV	0.64841	0.432273	4	8
2035	0	0.128716	0.343573	0	0.343573	0.867887	0	0.867887	BEV	0	0.128716	2	3
2036	0	14861.48	60954.19	0	60954.19	314649.3	0	314649.3	BEV	0	14861.48	1	3
2036	0	13405.55	54982.75	29690.68	25292.06	282177	152375.6	129801.4	PHEV	7239	6166.555	1	8
2036	0	21816.09	90728.33	0	90728.33	483623.6	0	483623.6	BEV	0	21816.09	1	3
2036	0	14099.63	58637.28	31664.13	26973.15	311594.3	168260.9	143333.4	PHEV	7613.803	6485.832	1	8
2036	0	31305.78	131987.3	0	131987.3	727141	0	727141	BEV	0	31305.78	1	3
2036	0	15353.47	64731.3	34307.59	30423.71	355531	188431.4	167099.6	PHEV	8137.339	7216.131	1	8
2036	0	42558.59	181868.2	0	181868.2	1034470	0	1034470	BEV	0	42558.59	1	3
2036	0	16227.83	69347.34	36060.62	33286.72	393792.4	204772	189020.3	PHEV	8438.469	7789.356	1	8
2036	0	50561.44	218963.9	0	218963.9	1285881	0	1285881	BEV	0	50561.44	1	3
2036	0	19016.92	82355.65	42001.38	40354.27	482895.8	246276.9	236619	PHEV	9698.632	9318.293	1	8
2036	0	58466.67	256548.2	0	256548.2	1554572	0	1554572	BEV	0	58466.67	1	3
2036	0	21665.96	95068.95	47534.48	47534.48	575214.9	287607.5	287607.5	PHEV	10832.98	10832.98	1	8
2036	0	67529.14	300182.5	0	300182.5	1875517	0	1875517	BEV	0	67529.14	1	3
2036	0	24888.56	110635.4	54211.33	56424.04	690254.3	338224.6	352029.7	PHEV	12195.39	12693.17	1	8
2036	0	75108.7	338178.4	0	338178.4	2177382	0	2177382	BEV	0	75108.7	1	3
2036	0	27561.29	124095.2	59565.71	64529.52	797929.8	383006.3	414923.5	PHEV	13229.42	14331.87	1	8
2036	0	84089.18	383430.7	0	383430.7	2543577	0	2543577	BEV	0	84089.18	1	3
2036	0	30439.76	138799.5	65235.78	73563.75	919680.5	432249.9	487430.7	PHEV	14306.69	16133.07	1	8
2036	0	75948.65	350662.5	0	350662.5	2393632	0	2393632	BEV	0	75948.65	1	3
2036	0	31584.81	145830.2	66206.93	79623.32	994383.8	451450.3	542933.6	PHEV	14339.51	17245.31	1	8
2036	0	82760.27	386853.8	0	386853.8	2715428	0	2715428	BEV	0	82760.27	1	3
2036	0	35027.82	163733.7	71715.36	92018.34	1148427	503010.9	645415.8	PHEV	15342.19	19685.64	1	8
2036	0	90341.49	427467	0	427467	3084353	0	3084353	BEV	0	90341.49	1	3
2036	0	38606.5	182673.6	77088.25	105585.3	1317540	556001.7	761537.9	PHEV	16291.94	22314.55	1	8
2036	0	98611.94	472249.6	0	472249.6	3501346	0	3501346	BEV	0	98611.94	1	3
2036	0	42667.11	204331.5	82958.59	121372.9	1514824	615018.7	899805.7	PHEV	17322.85	25344.26	1	8
2036	0	106410.3	515691.8	0	515691.8	3927838	0	3927838	BEV	0	106410.3	1	3
2036	0	46612.83	225897.9	88100.19	137797.7	1720924	671160.2	1049763	PHEV	18179.01	28433.83	1	8
2036	0	111617.2	547320.4	0	547320.4	4279825	0	4279825	BEV	0	111617.2	1	3
2036	0	48893.71	239752.7	93503.57	146249.2	1875577	731474.9	1144102	PHEV	19068.55	29825.16	1	8
2036	0	115670.5	573823	0	573823	4604764	0	4604764	BEV	0	115670.5	1	3
2036	0	50669.28	251362.2	98031.25	153330.9	2018472	787204.2	1231268	PHEV	19761.02	30908.26	1	8
2036	0	119055.6	597436.6	0	597436.6	4916570	0	4916570	BEV	0	119055.6	1	3
2036	0	52152.11	261706.1	102065.4	159640.7	2155540	840660.5	1314879	PHEV	20339.32	31812.79	1	8
2036	0	122809.4	623309.3	0	623309.3	5251962	0	5251962	BEV	0	122809.4	1	3
2036	0	53796.45	273039.6	106485.4	166554.1	2302520	897982.8	1404537	PHEV	20980.61	32815.83	1	8
2036	0	124554.2	639300.6	0	639300.6	5499245	0	5499245	BEV	0	124554.2	1	3
2036	0	54560.75	280044.5	109217.4	170827.2	2410207	939980.9	1470227	PHEV	21278.69	33282.06	1	8
2036	0	112619.9	584497.5	0	584497.5	5120356	0	5120356	BEV	0	112619.9	1	3
2036	0	49332.97	256038.1	99854.87	156183.3	2242983	874763.3	1368219	PHEV	19239.86	30093.11	1	8
2036	0	1.475278	6.050839	0	6.050839	31.29695	0	31.29695	BEV	0	1.475278	2	3
2036	0	12.79578	52.48177	31.48906	20.99271	287.7144	172.6286	115.0857	PHEV	7.677468	5.118312	2	8
2036	0	711.8175	3001.072	0	3001.072	16852.17	0	16852.17	BEV	0	711.8175	2	3
2036	0	546.6258	2304.612	1369.598	935.0142	13170.74	7827.184	5343.558	PHEV	324.8519	221.7739	2	8
2036	0	1556.537	6651.645	0	6651.645	38229.58	0	38229.58	BEV	0	1556.537	2	3

2036	0	1198.817	5122.975	3015.237	2107.738	29814.89	17548.19	12266.7	PHEV	705.5892	493.2274	2	8
2036	0	1933.89	8375.001	0	8375.001	49376.75	0	49376.75	BEV	0	1933.89	2	3
2036	0	1420.496	6151.671	3585.545	2566.126	36413.19	21223.69	15189.5	PHEV	827.9462	592.5497	2	8
2036	0	2507.171	11001.32	0	11001.32	66517.95	0	66517.95	BEV	0	2507.171	2	3
2036	0	1596.016	7003.222	4041.86	2961.363	42366.89	24451.75	17915.14	PHEV	921.1292	674.8867	2	8
2036	0	2937.471	13057.73	0	13057.73	81005.1	0	81005.1	BEV	0	2937.471	2	3
2036	0	1844.324	8198.444	4684.825	3513.619	50728.7	28987.83	21740.87	PHEV	1053.899	790.4245	2	8
2036	0	3283.34	14783.3	0	14783.3	94157.67	0	94157.67	BEV	0	3283.34	2	3
2036	0	2139.665	9633.885	5450.027	4183.859	61017.66	34518.56	26499.1	PHEV	1210.439	929.226	2	8
2036	0	3839.017	17505.19	0	17505.19	114505.8	0	114505.8	BEV	0	3839.017	2	3
2036	0	2339.433	10667.37	5973.728	4693.644	69222.25	38764.46	30457.79	PHEV	1310.083	1029.351	2	8
2036	0	3971.385	18336.28	0	18336.28	123068.4	0	123068.4	BEV	0	3971.385	2	3
2036	0	2503.887	11560.7	6358.383	5202.313	76832.43	42257.84	34574.59	PHEV	1377.138	1126.749	2	8
2036	0	4438.758	20748.48	0	20748.48	142937.5	0	142937.5	BEV	0	4438.758	2	3
2036	0	3147.229	14711.37	7944.142	6767.232	99962.95	53979.99	45982.96	PHEV	1699.503	1447.725	2	8
2036	0	5139.143	24316.78	0	24316.78	171827.7	0	171827.7	BEV	0	5139.143	2	3
2036	0	3644.637	17245.25	9139.985	8105.27	119889.5	63541.41	56348.04	PHEV	1931.657	1712.979	2	8
2036	0	6089.508	29162.47	0	29162.47	211154.3	0	211154.3	BEV	0	6089.508	2	3
2036	0	4052.066	19405.22	10090.72	9314.507	138097.3	71810.59	66286.7	PHEV	2107.074	1944.992	2	8
2036	0	6893.617	33408.26	0	33408.26	248091.6	0	248091.6	BEV	0	6893.617	2	3
2036	0	4686.996	22714.4	11584.34	11130.06	165450.6	84379.83	81070.81	PHEV	2390.368	2296.628	2	8
2036	0	7173.826	35177.21	0	35177.21	267944.1	0	267944.1	BEV	0	7173.826	2	3
2036	0	4877.511	23917.12	12197.73	11719.39	178613.5	91092.86	87520.59	PHEV	2487.531	2389.98	2	8
2036	0	7359.194	36507.79	0	36507.79	285207.8	0	285207.8	BEV	0	7359.194	2	3
2036	0	5003.544	24821.78	12659.11	12162.67	190113.3	96957.77	93155.5	PHEV	2551.807	2451.736	2	8
2036	0	7486.341	37567.43	0	37567.43	300975.7	0	300975.7	BEV	0	7486.341	2	3
2036	0	5089.992	25542.24	13026.54	12515.7	200680.1	102346.9	98333.27	PHEV	2595.896	2494.096	2	8
2036	0	7619.203	38670.65	0	38670.65	317639.7	0	317639.7	BEV	0	7619.203	2	3
2036	0	5180.325	26292.32	13409.08	12883.24	211887.4	108062.6	103824.8	PHEV	2641.966	2538.359	2	8
2036	0	7761.478	39837.42	0	39837.42	335335.1	0	335335.1	BEV	0	7761.478	2	3
2036	0	5277.058	27085.61	13813.66	13271.95	223819.4	114147.9	109671.5	PHEV	2691.3	2585.759	2	8
2036	0	7119.285	36949.09	0	36949.09	318566.8	0	318566.8	BEV	0	7119.285	2	3
2036	0	4840.429	25121.83	12812.13	12309.69	212744.7	108499.8	104244.9	PHEV	2468.619	2371.81	2	8
2036	0	426.2924	1772.856	1063.714	709.1426	9861.957	5917.174	3944.783	PHEV	255.7755	170.517	3	8
2036	0	1666.276	7025.135	0	7025.135	30117.27	0	30117.27	BEV	0	1666.276	3	3
2036	0	1447.259	6101.746	3626.18	2475.565	34617.88	20572.91	14044.97	PHEV	860.0854	587.1737	3	8
2036	0	3808.728	16276.07	0	16276.07	83591.01	0	83591.01	BEV	0	3808.728	3	3
2036	0	2748.688	11746.13	6913.438	4832.695	68010.24	40028.88	27981.35	PHEV	1617.799	1130.889	3	8
2036	0	4827.606	20906.67	0	20906.67	102596.6	0	102596.6	BEV	0	4827.606	3	3
2036	0	4649.755	20136.46	11736.68	8399.781	119113.1	69425.89	49687.16	PHEV	2710.143	1939.612	3	8
2036	0	6468.565	28383.68	0	28383.68	142681.5	0	142681.5	BEV	0	6468.565	3	3
2036	0	5158.019	22633.08	13062.52	9570.558	136874.1	78995.93	57878.21	PHEV	2976.914	2181.105	3	8
2036	0	8287.342	36839.14	0	36839.14	190442	0	190442	BEV	0	8287.342	3	3
2036	0	5926.778	26345.89	15054.8	11291.1	163003.4	93144.77	69858.58	PHEV	3386.73	2540.048	3	8
2036	0	9535.062	42931.81	0	42931.81	225525.8	0	225525.8	BEV	0	9535.062	3	3
2036	0	6646.02	29923.84	16928.34	12995.5	189537.5	107224	82313.41	PHEV	3759.748	2886.271	3	8
2036	0	10726.04	48908.7	0	48908.7	260579.5	0	260579.5	BEV	0	10726.04	3	3

2036	0	7883.199	35945.89	20129.7	15816.19	233317.3	130657.7	102659.6	PHEV	4414.592	3468.608	3	8
2036	0	12843.41	59299.32	0	59299.32	333960.2	0	333960.2	BEV	0	12843.41	3	3
2036	0	7978.546	36837.74	20260.76	16576.98	244899.9	134695	110205	PHEV	4388.2	3590.346	3	8
2036	0	14859.09	69457.17	0	69457.17	409577.3	0	409577.3	BEV	0	14859.09	3	3
2036	0	9119.732	42629.18	23019.76	19609.42	290337.7	156782.4	133555.3	PHEV	4924.655	4195.077	3	8
2036	0	17208.21	81423.74	0	81423.74	503030.3	0	503030.3	BEV	0	17208.21	3	3
2036	0	10125.75	47911.82	25393.26	22518.56	334473.1	177270.7	157202.3	PHEV	5366.649	4759.104	3	8
2036	0	19591.86	93824.82	0	93824.82	600701.9	0	600701.9	BEV	0	19591.86	3	3
2036	0	11273.38	53987.87	28073.69	25914.18	390624.2	203124.6	187499.6	PHEV	5862.156	5411.221	3	8
2036	0	21842.46	105854.3	0	105854.3	694570.9	0	694570.9	BEV	0	21842.46	3	3
2036	0	12524.95	60699.16	30956.57	29742.59	461225.6	235225.1	226000.6	PHEV	6387.724	6137.225	3	8
2036	0	22525.56	110455.2	0	110455.2	743383.6	0	743383.6	BEV	0	22525.56	3	3
2036	0	12916.65	63337.45	32302.1	31035.35	493510.9	251690.6	241820.4	PHEV	6587.492	6329.159	3	8
2036	0	23090.16	114546.6	0	114546.6	790670.7	0	790670.7	BEV	0	23090.16	3	3
2036	0	13240.4	65683.52	33498.6	32184.93	524890.7	267694.2	257196.4	PHEV	6752.605	6487.797	3	8
2036	0	23558.8	118221.1	0	118221.1	836738.1	0	836738.1	BEV	0	23558.8	3	3
2036	0	13509.14	67790.6	34573.21	33217.39	555547	283329	272218	PHEV	6889.659	6619.476	3	8
2036	0	24287.48	123269.1	0	123269.1	894512.5	0	894512.5	BEV	0	24287.48	3	3
2036	0	13926.97	70685.24	36049.47	34635.77	594071.8	302976.6	291095.2	PHEV	7102.756	6824.217	3	8
2036	0	25049.49	128571.8	0	128571.8	956233.4	0	956233.4	BEV	0	25049.49	3	3
2036	0	14363.93	73725.87	37600.19	36125.67	635285.2	323995.4	311289.7	PHEV	7325.602	7038.324	3	8
2036	0	22811.36	118391	0	118391	901710.9	0	901710.9	BEV	0	22811.36	3	3
2036	0	13080.54	67887.98	34622.87	33265.11	599201	305592.5	293608.5	PHEV	6671.073	6409.462	3	8
2036	0	609.3755	2499.348	1499.609	999.739	12567.27	7540.361	5026.907	PHEV	365.6253	243.7502	4	8
2036	0	1.44114	5.993384	0	5.993384	22.24818	0	22.24818	BEV	0	1.44114	4	3
2036	0	1763.558	7334.251	4400.551	2933.7	38904.08	23342.45	15561.63	PHEV	1058.135	705.4233	4	8
2036	0	801.9513	3381.083	0	3381.083	13524.59	0	13524.59	BEV	0	801.9513	4	3
2036	0	2086.512	8796.881	5227.861	3569.02	50658.91	30105.86	20553.04	PHEV	1239.984	846.5278	4	8
2036	0	1795.463	7672.66	0	7672.66	34452.66	0	34452.66	BEV	0	1795.463	4	3
2036	0	2418.033	10333.12	6081.781	4251.342	59659.25	35113.73	24545.52	PHEV	1423.185	994.8477	4	8
2036	0	2948.313	12768.11	0	12768.11	59304.57	0	59304.57	BEV	0	2948.313	4	3
2036	0	2861.472	12392.04	7222.786	5169.249	71737.7	41812.83	29924.87	PHEV	1667.83	1193.643	4	8
2036	0	3199.269	14038.2	0	14038.2	61921.96	0	61921.96	BEV	0	3199.269	4	3
2036	0	3125.114	13712.81	7914.251	5798.56	81289.8	46915.83	34373.97	PHEV	1803.637	1321.477	4	8
2036	0	3609.042	16043.02	0	16043.02	70495.95	0	70495.95	BEV	0	3609.042	4	3
2036	0	3391.207	15074.7	8614.112	6460.584	91549.76	52314.15	39235.61	PHEV	1937.833	1453.375	4	8
2036	0	4005.578	18035.19	0	18035.19	80461.11	0	80461.11	BEV	0	4005.578	4	3
2036	0	4608.481	20749.78	11738.45	9011.332	129155.5	73065.11	56090.39	PHEV	2607.084	2001.397	4	8
2036	0	4707.485	21465.24	0	21465.24	98408.35	0	98408.35	BEV	0	4707.485	4	3
2036	0	5164.196	23547.75	13186.74	10361.01	150355.6	84199.15	66156.47	PHEV	2891.95	2272.246	4	8
2036	0	4704.945	21723.2	0	21723.2	101667.1	0	101667.1	BEV	0	4704.945	4	3
2036	0	4880.734	22534.84	12394.16	10140.68	147516	81133.81	66382.21	PHEV	2684.404	2196.33	4	8
2036	0	5345.903	24988.84	0	24988.84	121736.3	0	121736.3	BEV	0	5345.903	4	3
2036	0	5398.631	25235.31	13627.07	11608.24	169369.2	91459.36	77909.83	PHEV	2915.261	2483.37	4	8
2036	0	5870.627	27777.93	0	27777.93	141361.1	0	141361.1	BEV	0	5870.627	4	3
2036	0	5803.453	27460.08	14553.84	12906.24	189049.2	100196.1	88853.14	PHEV	3075.83	2727.623	4	8
2036	0	6528.533	31264.95	0	31264.95	168852.8	0	168852.8	BEV	0	6528.533	4	3

2036	0	6458.533	30929.72	16083.45	14846.27	218410	113573.2	104836.8	PHEV	3358.437	3100.096	4	8
2036	0	7238.499	35079.65	0	35079.65	200801.4	0	200801.4	BEV	0	7238.499	4	3
2036	0	7125.086	34530.02	17610.31	16919.71	250121.2	127561.8	122559.4	PHEV	3633.794	3491.292	4	8
2036	0	7552.839	37035.72	0	37035.72	217496	0	217496	BEV	0	7552.839	4	3
2036	0	7434.501	36455.45	18592.28	17863.17	270832.6	138124.6	132708	PHEV	3791.595	3642.905	4	8
2036	0	7737.762	38385.8	0	38385.8	231213.8	0	231213.8	BEV	0	7737.762	4	3
2036	0	7616.527	37784.37	19270.03	18514.34	287906.8	146832.4	141074.3	PHEV	3884.429	3732.098	4	8
2036	0	7935.924	39823.5	0	39823.5	245950.4	0	245950.4	BEV	0	7935.924	4	3
2036	0	7811.583	39199.54	19991.77	19207.78	306275.4	156200.4	150074.9	PHEV	3983.908	3827.676	4	8
2036	0	8186.402	41549.43	0	41549.43	262994.4	0	262994.4	BEV	0	8186.402	4	3
2036	0	8058.137	40898.43	20858.2	20040.23	327476.9	167013.2	160463.7	PHEV	4109.65	3948.487	4	8
2036	0	8371.622	42969.11	0	42969.11	278636.5	0	278636.5	BEV	0	8371.622	4	3
2036	0	8240.455	42295.87	21570.89	20724.97	346989	176964.4	170024.6	PHEV	4202.632	4037.823	4	8
2036	0	7299.228	37882.99	0	37882.99	251319.9	0	251319.9	BEV	0	7299.228	4	3
2036	0	7184.863	37289.44	19017.61	18271.83	312564.7	159408	153156.7	PHEV	3664.28	3520.583	4	8
2036	0	5.865875	18.68193	0	18.68193	58.45317	0	58.45317	BEV	0	5.865875	1	3
2036	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2036	0	1390.13	5383.041	0	5383.041	24146.44	0	24146.44	BEV	0	1390.13	1	3
2036	0	1453.017	5626.56	3375.936	2250.624	23841.53	14304.92	9536.61	PHEV	871.81	581.2067	1	8
2036	0	1992.177	7828.499	0	7828.499	36329.03	0	36329.03	BEV	0	1992.177	1	3
2036	0	2515.274	9884.07	5930.442	3953.628	43419.27	26051.56	17367.71	PHEV	1509.164	1006.109	1	8
2036	0	5390.418	21491.11	0	21491.11	103526.5	0	103526.5	BEV	0	5390.418	1	3
2036	0	2563.289	10219.6	6131.761	4087.84	46627.31	27976.38	18650.92	PHEV	1537.973	1025.315	1	8
2036	0	1063.714	4301.87	0	4301.87	14706.63	0	14706.63	BEV	0	1063.714	3	3
2036	0	96.80575	391.5018	234.9011	156.6007	2003.665	1202.199	801.4662	PHEV	58.08345	38.7223	3	8
2036	0	2.895969	9.886869	0	9.886869	34.47892	0	34.47892	BEV	0	2.895969	1	3
2036	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2036	0	256.7934	979.6771	0	979.6771	4255.37	0	4255.37	BEV	0	256.7934	1	3
2036	0	539.7891	2059.317	1235.59	823.7268	8414.613	5048.768	3365.845	PHEV	323.8735	215.9156	1	8
2036	0	4076.433	16485.91	0	16485.91	82137.46	0	82137.46	BEV	0	4076.433	1	3
2036	0	2931.501	11855.58	7113.345	4742.23	56262.29	33757.38	22504.92	PHEV	1758.9	1172.6	1	8
2036	0	11.07201	35.89702	0	35.89702	115.3064	0	115.3064	BEV	0	11.07201	1	3
2036	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2036	0	280.7858	1055.123	0	1055.123	4448.537	0	4448.537	BEV	0	280.7858	1	3
2036	0	78.05021	293.2932	175.9759	117.3173	1151.602	690.9612	460.6408	PHEV	46.83013	31.22009	1	8
2036	0	210.5744	827.4772	0	827.4772	3829.689	0	3829.689	BEV	0	210.5744	2	3
2036	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2036	0	45.60593	179.214	0	179.214	577.7385	0	577.7385	BEV	0	45.60593	3	3
2036	0	20.64894	81.14249	48.68549	32.457	398.5527	239.1316	159.4211	PHEV	12.38936	8.259576	3	8
2036	0	4.671853	15.1468	0	15.1468	33.00247	0	33.00247	BEV	0	4.671853	3	3
2036	0	0	0	0	0	0	0	0	PHEV	0	0	3	8
2036	0	20.2093	65.52138	0	65.52138	145.4553	0	145.4553	BEV	0	20.2093	4	3
2036	0	0	0	0	0	0	0	0	PHEV	0	0	4	8
2036	0	41.42615	153.2958	0	153.2958	629.4808	0	629.4808	BEV	0	41.42615	1	3
2036	0	4.415986	16.34118	9.804707	6.536471	61.29753	36.77852	24.51901	PHEV	2.649591	1.766394	1	8
2036	0	78.368	298.977	0	298.977	1287.952	0	1287.952	BEV	0	78.368	2	3
2036	0	0	0	0	0	0	0	0	PHEV	0	0	2	8

2036	0	3.600554	12.4986	0	12.4986	45.16485	0	45.16485	BEV	0	3.600554	1	3
2036	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2036	0	21.81713	78.23362	0	78.23362	293.992	0	293.992	BEV	0	21.81713	1	3
2036	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2036	0	20.22105	73.66872	0	73.66872	296.6972	0	296.6972	BEV	0	20.22105	1	3
2036	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2036	0	101.9116	394.6352	0	394.6352	1759.365	0	1759.365	BEV	0	101.9116	2	3
2036	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2036	0	2.667236	8.800359	0	8.800359	28.96444	0	28.96444	BEV	0	2.667236	1	3
2036	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2036	0	6.708538	23.67168	0	23.67168	88.06004	0	88.06004	BEV	0	6.708538	1	3
2036	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2036	0	10.07194	36.11675	0	36.11675	137.8492	0	137.8492	BEV	0	10.07194	2	3
2036	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2036	0	0.374618	1.300411	0	1.300411	3.623968	0	3.623968	BEV	0	0.374618	4	3
2036	0	0	0	0	0	0	0	0	PHEV	0	0	4	8
2036	0	1.711344	4.66603	0	4.66603	12.02341	0	12.02341	BEV	0	1.711344	1	3
2036	0	5.994754	21.83991	0	21.83991	62.88169	0	62.88169	BEV	0	5.994754	3	3
2036	0	0	0	0	0	0	0	0	PHEV	0	0	3	8
2036	0	3.813108	14.32871	0	14.32871	43.10933	0	43.10933	BEV	0	3.813108	3	3
2036	0	2.639844	9.919873	5.951924	3.967949	46.27527	27.76516	18.51011	PHEV	1.583906	1.055938	3	8
2036	0	0.672898	2.682783	0	2.682783	8.746321	0	8.746321	BEV	0	0.672898	4	3
2036	0	0	0	0	0	0	0	0	PHEV	0	0	4	8
2036	0	1.502483	4.010487	0	4.010487	10.32779	0	10.32779	BEV	0	1.502483	1	3
2036	0	15.48982	48.44533	0	48.44533	143.8405	0	143.8405	BEV	0	15.48982	2	3
2036	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2036	0	5.685892	18.10871	0	18.10871	56.13651	0	56.13651	BEV	0	5.685892	2	3
2036	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2036	0	2.19946	7.634985	0	7.634985	27.25551	0	27.25551	BEV	0	2.19946	2	3
2036	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2036	0	1.249735	4.409803	0	4.409803	16.29444	0	16.29444	BEV	0	1.249735	2	3
2036	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2036	0	4.319942	15.73828	0	15.73828	62.97617	0	62.97617	BEV	0	4.319942	2	3
2036	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2036	0	4.079261	14.62774	0	14.62774	40.07958	0	40.07958	BEV	0	4.079261	3	3
2036	0	0	0	0	0	0	0	0	PHEV	0	0	3	8
2036	0	2.945994	11.40786	0	11.40786	35.84597	0	35.84597	BEV	0	2.945994	3	3
2036	0	2.252819	8.723659	5.234195	3.489464	42.07972	25.24783	16.83189	PHEV	1.351691	0.901128	3	8
2036	0	1.002544	3.135516	0	3.135516	6.828354	0	6.828354	BEV	0	1.002544	4	3
2036	0	0	0	0	0	0	0	0	PHEV	0	0	4	8
2036	0	2.620584	8.646434	0	8.646434	19.75284	0	19.75284	BEV	0	2.620584	4	3
2036	0	0	0	0	0	0	0	0	PHEV	0	0	4	8
2036	0	0.479613	1.637403	0	1.637403	4.0221	0	4.0221	BEV	0	0.479613	4	3
2036	0	0	0	0	0	0	0	0	PHEV	0	0	4	8
2036	0	19.59111	63.51711	0	63.51711	196.6549	0	196.6549	BEV	0	19.59111	2	3
2036	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2036	0	1.306253	4.384727	0	4.384727	14.60839	0	14.60839	BEV	0	1.306253	2	3

2036	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2036	0	10.23547	31.42565	0	31.42565	91.05971	0	91.05971	BEV	0	10.23547	2	3
2036	0	1.665987	4.733253	0	4.733253	12.54939	0	12.54939	BEV	0	1.665987	1	3
2036	0	0.593298	1.855574	0	1.855574	4.254525	0	4.254525	BEV	0	0.593298	3	3
2036	0	0	0	0	0	0	0	0	PHEV	0	0	3	8
2036	0	0.54861	1.96725	0	1.96725	5.271951	0	5.271951	BEV	0	0.54861	4	3
2036	0	0	0	0	0	0	0	0	PHEV	0	0	4	8
2036	0	2.175936	6.556052	0	6.556052	18.80024	0	18.80024	BEV	0	2.175936	1	3
2036	0	1.508482	4.717868	0	4.717868	14.15565	0	14.15565	BEV	0	1.508482	1	3
2036	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2036	0	2.631626	8.833633	0	8.833633	29.70541	0	29.70541	BEV	0	2.631626	1	3
2036	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2036	0	3.11107	9.373593	0	9.373593	26.38764	0	26.38764	BEV	0	3.11107	2	3
2036	0	0.456072	1.557034	0	1.557034	5.356242	0	5.356242	BEV	0	0.456072	2	3
2036	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2036	0	2.484926	7.34467	0	7.34467	20.44402	0	20.44402	BEV	0	2.484926	1	3
2036	0	2.437962	7.485201	0	7.485201	22.04999	0	22.04999	BEV	0	2.437962	1	3
2036	0	0.934513	2.494439	0	2.494439	6.422598	0	6.422598	BEV	0	0.934513	2	3
2036	0	0.388736	1.059902	0	1.059902	2.743419	0	2.743419	BEV	0	0.388736	2	3
2036	0	0.384243	1.091676	0	1.091676	2.914831	0	2.914831	BEV	0	0.384243	2	3
2036	0	0.533984	1.455923	0	1.455923	2.586649	0	2.586649	BEV	0	0.533984	3	3
2036	0	2.370235	7.277261	0	7.277261	14.47605	0	14.47605	BEV	0	2.370235	3	3
2036	0	0.203718	0.648811	0	0.648811	1.366116	0	1.366116	BEV	0	0.203718	3	3
2036	0	0	0	0	0	0	0	0	PHEV	0	0	3	8
2036	0	3.55884	13.16935	0	13.16935	37.66657	0	37.66657	BEV	0	3.55884	3	3
2036	0	0	0	0	0	0	0	0	PHEV	0	0	3	8
2036	0	8.79446	33.55122	0	33.55122	100.4305	0	100.4305	BEV	0	8.79446	3	3
2036	0	2.25499	8.602876	5.161725	3.44115	44.47216	26.68329	17.78886	PHEV	1.352994	0.901996	3	8
2036	0	0.718668	2.041815	0	2.041815	3.712892	0	3.712892	BEV	0	0.718668	4	3
2036	0	0.224835	0.716066	0	0.716066	1.593158	0	1.593158	BEV	0	0.224835	4	3
2036	0	0	0	0	0	0	0	0	PHEV	0	0	4	8
2036	0	0.773814	2.154158	0	2.154158	5.434496	0	5.434496	BEV	0	0.773814	1	3
2036	0	1.774659	5.143673	0	5.143673	14.13972	0	14.13972	BEV	0	1.774659	1	3
2036	0	0.424465	1.181633	0	1.181633	3.090302	0	3.090302	BEV	0	0.424465	2	3
2036	0	0	0	0	0	0	0	0	BEV	0	0	2	3
2036	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2036	0	0	0	0	0	0	0	0	BEV	0	0	2	3
2036	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2036	0	0	0	0	0	0	0	0	BEV	0	0	3	3
2036	0	7.624923	30.39988	18.23993	12.15995	163.8073	98.28437	65.52291	PHEV	4.574954	3.049969	3	8
2036	0	0.152599	0.459777	0	0.459777	0.902821	0	0.902821	BEV	0	0.152599	3	3
2036	0	2.02386	5.518114	0	5.518114	10.11492	0	10.11492	BEV	0	2.02386	4	3
2036	0	0.353323	1.084798	0	1.084798	2.195535	0	2.195535	BEV	0	0.353323	4	3
2036	0	0.201324	0.71039	0	0.71039	1.807535	0	1.807535	BEV	0	0.201324	3	3
2036	0	0	0	0	0	0	0	0	PHEV	0	0	3	8
2036	0	0.714449	2.64379	0	2.64379	9.953306	0	9.953306	BEV	0	0.714449	2	3
2036	0	0	0	0	0	0	0	0	PHEV	0	0	2	8

2036	0	0.427373	1.238698	0	1.238698	3.265435	0	3.265435	BEV	0	0.427373	2	3
2036	0	1.243628	3.675778	0	3.675778	9.848498	0	9.848498	BEV	0	1.243628	2	3
2036	0	0.354106	1.066914	0	1.066914	2.033694	0	2.033694	BEV	0	0.354106	4	3
2036	0	0.545674	2.050506	0	2.050506	8.72779	0	8.72779	BEV	0	0.545674	2	3
2036	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2036	0	0.128659	0.365534	0	0.365534	0.638925	0	0.638925	BEV	0	0.128659	3	3
2036	0	0.102187	0.348868	0	0.348868	0.796397	0	0.796397	BEV	0	0.102187	3	3
2036	0	0	0	0	0	0	0	0	PHEV	0	0	3	8
2036	0	0.658251	1.907875	0	1.907875	3.641731	0	3.641731	BEV	0	0.658251	4	3
2036	0	0.224658	0.741244	0	0.741244	2.377276	0	2.377276	BEV	0	0.224658	2	3
2036	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2036	0	1.887988	5.039494	0	5.039494	8.86354	0	8.86354	BEV	0	1.887988	4	3
2036	0	0.520728	1.837436	0	1.837436	4.639794	0	4.639794	BEV	0	0.520728	4	3
2036	0	0	0	0	0	0	0	0	PHEV	0	0	4	8
2036	0	0.080469	0.237841	0	0.237841	0.46159	0	0.46159	BEV	0	0.080469	3	3
2036	0	0	0	0	0	0	0	0	BEV	0	0	4	3
2036	0	0.934369	3.618184	2.170911	1.447274	19.30432	11.58259	7.721727	PHEV	0.560621	0.373748	4	8
2037	0	12456.59	50376.94	0	50376.94	250168.3	0	250168.3	BEV	0	12456.59	1	3
2037	0	11236.27	45441.71	24538.52	20903.18	224050.6	120987.3	103063.3	PHEV	6067.584	5168.682	1	8
2037	0	18567.08	76152.7	0	76152.7	390658.3	0	390658.3	BEV	0	18567.08	1	3
2037	0	11999.81	49217.12	26577.24	22639.87	251516.8	135819.1	115697.7	PHEV	6479.9	5519.915	1	8
2037	0	26978.8	112198.9	0	112198.9	595308.4	0	595308.4	BEV	0	26978.8	1	3
2037	0	13231.36	55026.34	29163.96	25862.38	290858.8	154155.2	136703.7	PHEV	7012.623	6218.742	1	8
2037	0	37361.74	157519.7	0	157519.7	863336.8	0	863336.8	BEV	0	37361.74	1	3
2037	0	14246.24	60063.13	31232.83	28830.3	328536.8	170839.1	157697.7	PHEV	7408.042	6838.193	1	8
2037	0	44857.6	191692.7	0	191692.7	1085536	0	1085536	BEV	0	44857.6	1	3
2037	0	16871.62	72098.53	36770.25	35328.28	407552.9	207852	199700.9	PHEV	8604.529	8267.096	1	8
2037	0	52665.42	228075.5	0	228075.5	1333393	0	1333393	BEV	0	52665.42	1	3
2037	0	19516.2	84517.82	42258.91	42258.91	493250.9	246625.4	246625.4	PHEV	9758.099	9758.099	1	8
2037	0	61224.99	268651.6	0	268651.6	1620377	0	1620377	BEV	0	61224.99	1	3
2037	0	22565.1	99014.31	48517.01	50497.3	596200.8	292138.4	304062.4	PHEV	11056.9	11508.2	1	8
2037	0	69385.93	308436.4	0	308436.4	1918156	0	1918156	BEV	0	69385.93	1	3
2037	0	25461.3	113181.4	54327.05	58854.3	702755.4	337322.6	365432.8	PHEV	12221.43	13239.88	1	8
2037	0	77843.59	350492.3	0	350492.3	2246980	0	2246980	BEV	0	77843.59	1	3
2037	0	28178.9	126876	59631.74	67244.3	812226.2	381746.3	430479.9	PHEV	13244.08	14934.81	1	8
2037	0	71564.54	326320.7	0	326320.7	2153766	0	2153766	BEV	0	71564.54	1	3
2037	0	29761.59	135707.2	61611.07	74096.13	894494.7	406100.6	488394.1	PHEV	13511.76	16249.83	1	8
2037	0	77981.68	360049.2	0	360049.2	2444699	0	2444699	BEV	0	77981.68	1	3
2037	0	33005.31	152388.8	66746.31	85642.52	1033683	452753	580929.6	PHEV	14456.33	18548.99	1	8
2037	0	86336.57	403570.8	0	403570.8	2817816	0	2817816	BEV	0	86336.57	1	3
2037	0	36895.03	172461.8	72778.87	99682.91	1203343	507810.9	695532.5	PHEV	15569.7	21325.33	1	8
2037	0	93968.1	444627	0	444627	3191336	0	3191336	BEV	0	93968.1	1	3
2037	0	40657.83	192379.8	78106.21	114273.6	1380328	560413.1	819914.8	PHEV	16507.08	24150.75	1	8
2037	0	102841.5	492504.7	0	492504.7	3632473	0	3632473	BEV	0	102841.5	1	3
2037	0	45049.53	215740.8	84138.92	131601.9	1591099	620528.6	970570.3	PHEV	17569.31	27480.21	1	8
2037	0	107387.2	520426.1	0	520426.1	3943274	0	3943274	BEV	0	107387.2	1	3
2037	0	47040.76	227971.8	88908.99	139062.8	1727713	673808.2	1053905	PHEV	18345.9	28694.87	1	8

2037	0	112605.9	552168.6	0	552168.6	4295292	0	4295292	BEV	0	112605.9	1	3
2037	0	49326.82	241876.5	94331.84	147544.7	1882385	734130.3	1148255	PHEV	19237.46	30089.36	1	8
2037	0	116651.6	578690.1	0	578690.1	4619704	0	4619704	BEV	0	116651.6	1	3
2037	0	51099.04	253494.2	98862.73	154631.5	2025057	789772.2	1235285	PHEV	19928.63	31170.42	1	8
2037	0	120024.9	602300.4	0	602300.4	4930863	0	4930863	BEV	0	120024.9	1	3
2037	0	52576.69	263836.7	102896.3	160940.4	2161848	843120.7	1318727	PHEV	20504.91	32071.78	1	8
2037	0	123753.6	628101.6	0	628101.6	5264798	0	5264798	BEV	0	123753.6	1	3
2037	0	54210.06	275138.8	107304.1	167834.7	2308194	900195.8	1407999	PHEV	21141.92	33068.14	1	8
2037	0	125452.8	643913	0	643913	5509935	0	5509935	BEV	0	125452.8	1	3
2037	0	54954.4	282065	110005.3	172059.6	2414946	941828.8	1473117	PHEV	21432.22	33522.18	1	8
2037	0	113365	588364.6	0	588364.6	5126971	0	5126971	BEV	0	113365	1	3
2037	0	49659.36	257732.1	100515.5	157216.6	2245931	875912.9	1370018	PHEV	19367.15	30292.21	1	8
2037	0	1.337283	5.40824	0	5.40824	26.95421	0	26.95421	BEV	0	1.337283	2	3
2037	0	11.59888	46.90821	28.14492	18.76328	251.8266	151.096	100.7306	PHEV	6.95933	4.639554	2	8
2037	0	652.6305	2714.147	0	2714.147	14814.04	0	14814.04	BEV	0	652.6305	2	3
2037	0	501.1744	2084.274	1238.654	845.6197	11658.83	6928.674	4730.152	PHEV	297.8408	203.3336	2	8
2037	0	1442.511	6081.727	0	6081.727	33942.44	0	33942.44	BEV	0	1442.511	2	3
2037	0	1110.995	4684.035	2756.889	1927.146	26650.5	15685.72	10964.78	PHEV	653.9002	457.0953	2	8
2037	0	1796.612	7677.57	0	7677.57	43942.57	0	43942.57	BEV	0	1796.612	2	3
2037	0	1319.661	5639.388	3286.958	2352.431	32534.26	18962.83	13571.44	PHEV	769.1741	550.4873	2	8
2037	0	2356.695	10206.02	0	10206.02	59881.29	0	59881.29	BEV	0	2356.695	2	3
2037	0	1500.226	6496.953	3749.67	2747.283	38271.6	22088.18	16183.42	PHEV	865.8447	634.3812	2	8
2037	0	2753.975	12084.28	0	12084.28	72712.28	0	72712.28	BEV	0	2753.975	2	3
2037	0	1729.114	7587.249	4335.571	3251.678	45678.76	26102.15	19576.61	PHEV	988.0651	741.0489	2	8
2037	0	3110.326	13826.11	0	13826.11	85375.14	0	85375.14	BEV	0	3110.326	2	3
2037	0	2026.917	9010.111	5097.149	3912.963	55483.04	31387.55	24095.49	PHEV	1146.656	880.261	2	8
2037	0	3629.574	16342.23	0	16342.23	103635.8	0	103635.8	BEV	0	3629.574	2	3
2037	0	2211.802	9958.683	5576.862	4381.82	62801.11	35168.62	27632.49	PHEV	1238.609	973.1929	2	8
2037	0	3793.964	17299.76	0	17299.76	112552.6	0	112552.6	BEV	0	3793.964	2	3
2037	0	2392.027	10907.19	5998.953	4908.234	70401.12	38720.62	31680.51	PHEV	1315.615	1076.412	2	8
2037	0	4238.428	19569.25	0	19569.25	130684.6	0	130684.6	BEV	0	4238.428	2	3
2037	0	3005.188	13875.25	7492.637	6382.617	91572.74	49449.28	42123.46	PHEV	1622.802	1382.386	2	8
2037	0	4985.299	23303.23	0	23303.23	159612	0	159612	BEV	0	4985.299	2	3
2037	0	3535.532	16526.45	8759.02	7767.433	111536	59114.09	52421.92	PHEV	1873.832	1661.7	2	8
2037	0	5890.882	27873.77	0	27873.77	195681.9	0	195681.9	BEV	0	5890.882	2	3
2037	0	3919.897	18547.7	9644.803	8902.895	128124.7	66624.83	61499.84	PHEV	2038.346	1881.551	2	8
2037	0	6675.929	31970.83	0	31970.83	230211.3	0	230211.3	BEV	0	6675.929	2	3
2037	0	4538.99	21737.08	11085.91	10651.17	153654.4	78363.76	75290.68	PHEV	2314.885	2224.105	2	8
2037	0	6953.624	33699.07	0	33699.07	248922.4	0	248922.4	BEV	0	6953.624	2	3
2037	0	4727.795	22912.12	11685.18	11226.94	166009.6	84664.9	81344.71	PHEV	2411.175	2316.62	2	8
2037	0	7234.097	35472.75	0	35472.75	268761.1	0	268761.1	BEV	0	7234.097	2	3
2037	0	4918.49	24118.06	12300.21	11817.85	179163.4	91373.33	87790.06	PHEV	2508.43	2410.06	2	8
2037	0	7418.429	36801.64	0	36801.64	285977.9	0	285977.9	BEV	0	7418.429	2	3
2037	0	5043.818	25021.57	12761	12260.57	190632.4	97222.55	93409.9	PHEV	2572.347	2471.471	2	8
2037	0	7544.304	37858.3	0	37858.3	301696.6	0	301696.6	BEV	0	7544.304	2	3
2037	0	5129.401	25740	13127.4	12612.6	201166.9	102595.1	98571.76	PHEV	2615.994	2513.406	2	8
2037	0	7675.588	38956.83	0	38956.83	318290	0	318290	BEV	0	7675.588	2	3

2037	0	5218.661	26486.9	13508.32	12978.58	212327	108286.8	104040.3	PHEV	2661.517	2557.144	2	8
2037	0	7816.265	40118.62	0	40118.62	335906.5	0	335906.5	BEV	0	7816.265	2	3
2037	0	5314.308	27276.8	13911.17	13365.63	224206.7	114345.4	109861.3	PHEV	2710.297	2604.011	2	8
2037	0	7166.387	37193.55	0	37193.55	318963.5	0	318963.5	BEV	0	7166.387	2	3
2037	0	4872.454	25288.03	12896.9	12391.14	213014.2	108637.3	104377	PHEV	2484.951	2387.502	2	8
2037	0	364.348	1494.37	896.6217	597.7478	8117.706	4870.623	3247.082	PHEV	218.6088	145.7392	3	8
2037	0	1459.604	6070.173	0	6070.173	25182.15	0	25182.15	BEV	0	1459.604	3	3
2037	0	1267.753	5272.305	3133.255	2139.049	29185.34	17344.43	11840.91	PHEV	753.4073	514.3454	3	8
2037	0	3377.707	14240.65	0	14240.65	71103.39	0	71103.39	BEV	0	3377.707	3	3
2037	0	2437.628	10277.21	6048.872	4228.338	58014.64	34145.76	23868.88	PHEV	1434.718	1002.91	3	8
2037	0	4304.039	18392.71	0	18392.71	87568.97	0	87568.97	BEV	0	4304.039	3	3
2037	0	4145.477	17715.12	10325.38	7389.734	102092.2	59505.16	42587.03	PHEV	2416.221	1729.256	3	8
2037	0	5876.559	25449.32	0	25449.32	124072.1	0	124072.1	BEV	0	5876.559	3	3
2037	0	4685.954	20293.23	11712.09	8581.136	119461.5	68946.38	50515.17	PHEV	2704.465	1981.489	3	8
2037	0	7576.121	33243.56	0	33243.56	166646.6	0	166646.6	BEV	0	7576.121	3	3
2037	0	5418.141	23774.48	13585.42	10189.06	143083.7	81762.1	61321.57	PHEV	3096.081	2322.06	3	8
2037	0	8901.682	39570.02	0	39570.02	201498.3	0	201498.3	BEV	0	8901.682	3	3
2037	0	6204.549	27580.65	15602.77	11977.88	169822.9	96071.26	73751.67	PHEV	3510.002	2694.547	3	8
2037	0	9996.128	45007.77	0	45007.77	232399.1	0	232399.1	BEV	0	9996.128	3	3
2037	0	7346.745	33078.87	18524.16	14554.7	208612.6	116823	91789.53	PHEV	4114.177	3232.568	3	8
2037	0	12189.56	55582.07	0	55582.07	303464	0	303464	BEV	0	12189.56	3	3
2037	0	7572.36	34528.52	18990.69	15537.84	222923.2	122607.8	100315.4	PHEV	4164.798	3407.562	3	8
2037	0	14140.76	65289.32	0	65289.32	373340.1	0	373340.1	BEV	0	14140.76	3	3
2037	0	8678.861	40071.17	21638.43	18432.74	264978.5	143088.4	121890.1	PHEV	4686.585	3992.276	3	8
2037	0	16672.75	77934.95	0	77934.95	466890.8	0	466890.8	BEV	0	16672.75	3	3
2037	0	9810.676	45858.93	24305.23	21553.69	310676.8	164658.7	146018.1	PHEV	5199.658	4611.018	3	8
2037	0	19068.19	90224.56	0	90224.56	560199.7	0	560199.7	BEV	0	19068.19	3	3
2037	0	10972.05	51916.24	26996.44	24919.8	364497.1	189538.5	174958.6	PHEV	5705.467	5266.585	3	8
2037	0	21442.29	102686.5	0	102686.5	653355.8	0	653355.8	BEV	0	21442.29	3	3
2037	0	12295.48	58882.67	30030.16	28852.51	434065.4	221373.4	212692	PHEV	6270.693	6024.784	3	8
2037	0	22038.23	106803	0	106803	697082.6	0	697082.6	BEV	0	22038.23	3	3
2037	0	12637.2	61243.18	31234.02	30009.16	462902.1	236080.1	226822.1	PHEV	6444.974	6192.23	3	8
2037	0	22719.69	111407.1	0	111407.1	745818.5	0	745818.5	BEV	0	22719.69	3	3
2037	0	13027.97	63883.3	32580.48	31302.81	495136.8	252519.8	242617	PHEV	6644.264	6383.705	3	8
2037	0	23280.19	115489.3	0	115489.3	792955.9	0	792955.9	BEV	0	23280.19	3	3
2037	0	13349.37	66224.11	33774.29	32449.81	526418.2	268473.3	257944.9	PHEV	6808.181	6541.193	3	8
2037	0	23744.94	119155.2	0	119155.2	838881.3	0	838881.3	BEV	0	23744.94	3	3
2037	0	13615.87	68326.21	34846.37	33479.84	556980.7	284060.2	272920.5	PHEV	6944.094	6671.777	3	8
2037	0	24469.84	124194.7	0	124194.7	896446.2	0	896446.2	BEV	0	24469.84	3	3
2037	0	14031.54	71215.97	36320.14	34895.82	595366.6	303637	291729.6	PHEV	7156.086	6875.455	3	8
2037	0	25228.37	129489.9	0	129489.9	957948.4	0	957948.4	BEV	0	25228.37	3	3
2037	0	14466.5	74252.35	37868.7	36383.65	636435.5	324582.1	311853.4	PHEV	7377.915	7088.585	3	8
2037	0	22962.28	119174.3	0	119174.3	902837.1	0	902837.1	BEV	0	22962.28	3	3
2037	0	13167.08	68337.13	34851.94	33485.19	599957.5	305978.3	293979.2	PHEV	6715.209	6451.868	3	8
2037	0	541.6113	2190.385	1314.231	876.1538	10734.99	6440.993	4293.995	PHEV	324.9668	216.6445	4	8
2037	0	1.29373	5.306221	0	5.306221	18.98606	0	18.98606	BEV	0	1.29373	4	3
2037	0	1583.169	6493.353	3896.012	2597.341	33561.25	20136.75	13424.5	PHEV	949.9015	633.2677	4	8

2037	0	713.764	2968.388	0	2968.388	11460.21	0	11460.21	BEV	0	713.764	4	3
2037	0	1857.067	7723.133	4589.748	3133.385	43353.88	25764.59	17589.29	PHEV	1103.628	753.4386	4	8
2037	0	1623.966	6846.752	0	6846.752	29754.19	0	29754.19	BEV	0	1623.966	4	3
2037	0	2187.069	9220.836	5427.12	3793.715	51841.12	30512.2	21328.92	PHEV	1287.246	899.8226	4	8
2037	0	2699.981	11537.99	0	11537.99	51885.54	0	51885.54	BEV	0	2699.981	4	3
2037	0	2620.455	11198.15	6526.919	4671.227	63038.12	36742.22	26295.9	PHEV	1527.351	1093.104	4	8
2037	0	2962.607	12830.01	0	12830.01	54696.26	0	54696.26	BEV	0	2962.607	4	3
2037	0	2893.937	12532.63	7233.116	5299.511	72196.9	41667.93	30528.98	PHEV	1670.215	1223.722	4	8
2037	0	3350.769	14702.97	0	14702.97	62428	0	62428	BEV	0	3350.769	4	3
2037	0	3148.523	13815.53	7894.589	5920.942	81499.08	46570.9	34928.18	PHEV	1799.156	1349.367	4	8
2037	0	3767.076	16745.52	0	16745.52	72203.41	0	72203.41	BEV	0	3767.076	4	3
2037	0	4334.081	19265.99	10899.04	8366.942	116435.8	65869.38	50566.39	PHEV	2451.851	1882.229	4	8
2037	0	4414.859	19877.99	0	19877.99	88118.19	0	88118.19	BEV	0	4414.859	4	3
2037	0	4843.18	21806.52	12211.65	9594.867	135139.2	75677.94	59461.24	PHEV	2712.181	2130.999	4	8
2037	0	4465.422	20361.48	0	20361.48	92170.96	0	92170.96	BEV	0	4465.422	4	3
2037	0	4632.262	21122.23	11617.23	9505.005	134146.1	73780.38	60365.76	PHEV	2547.744	2084.518	4	8
2037	0	5053.231	23331.27	0	23331.27	109997.8	0	109997.8	BEV	0	5053.231	4	3
2037	0	5103.072	23561.39	12723.15	10838.24	153413.3	82843.21	70570.14	PHEV	2755.659	2347.413	4	8
2037	0	5677.312	26537.97	0	26537.97	130762.9	0	130762.9	BEV	0	5677.312	4	3
2037	0	5612.349	26234.31	13904.18	12330.13	175139.6	92823.97	82315.59	PHEV	2974.545	2637.804	4	8
2037	0	6278.719	29708.89	0	29708.89	155445.2	0	155445.2	BEV	0	6278.719	4	3
2037	0	6211.398	29390.35	15282.98	14107.37	201269	104659.9	96609.11	PHEV	3229.927	2981.471	4	8
2037	0	7026.637	33650.35	0	33650.35	186685.8	0	186685.8	BEV	0	7026.637	4	3
2037	0	6916.543	33123.12	16892.79	16230.33	232667.9	118660.6	114007.3	PHEV	3527.437	3389.106	4	8
2037	0	7303.167	35393.05	0	35393.05	201521.4	0	201521.4	BEV	0	7303.167	4	3
2037	0	7188.741	34838.51	17767.64	17070.87	251032.7	128026.7	123006	PHEV	3666.258	3522.483	4	8
2037	0	7617.793	37354.23	0	37354.23	218205.1	0	218205.1	BEV	0	7617.793	4	3
2037	0	7498.437	36768.96	18752.17	18016.79	271735	138584.9	133150.2	PHEV	3824.203	3674.234	4	8
2037	0	7801.319	38701.1	0	38701.1	231879.9	0	231879.9	BEV	0	7801.319	4	3
2037	0	7679.088	38094.73	19428.31	18666.42	288760.5	147267.8	141492.6	PHEV	3916.335	3762.753	4	8
2037	0	7998.404	40137.03	0	40137.03	246576.7	0	246576.7	BEV	0	7998.404	4	3
2037	0	7873.084	39508.16	20149.16	19359	307084.5	156613.1	150471.4	PHEV	4015.273	3857.811	4	8
2037	0	8247.678	41860.43	0	41860.43	263562.2	0	263562.2	BEV	0	8247.678	4	3
2037	0	8118.453	41204.56	21014.33	20190.23	328218.9	167391.7	160827.3	PHEV	4140.411	3978.042	4	8
2037	0	8431.546	43276.68	0	43276.68	279148.8	0	279148.8	BEV	0	8431.546	4	3
2037	0	8299.441	42598.62	21725.3	20873.32	347667.8	177310.6	170357.2	PHEV	4232.715	4066.726	4	8
2037	0	7347.52	38133.63	0	38133.63	251643	0	251643	BEV	0	7347.52	4	3
2037	0	7232.399	37536.15	19143.44	18392.71	313006	159633.1	153373	PHEV	3688.523	3543.875	4	8
2037	0	5.473212	17.1178	0	17.1178	51.75523	0	51.75523	BEV	0	5.473212	1	3
2037	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2037	0	1133.375	4323.873	0	4323.873	18664.97	0	18664.97	BEV	0	1133.375	1	3
2037	0	1184.647	4519.477	2711.686	1807.791	18340.28	11004.17	7336.113	PHEV	710.7884	473.8589	1	8
2037	0	1621.55	6279.177	0	6279.177	28051.2	0	28051.2	BEV	0	1621.55	1	3
2037	0	2047.329	7927.933	4756.76	3171.173	33378.27	20026.96	13351.31	PHEV	1228.397	818.9316	1	8
2037	0	4405.149	17310.56	0	17310.56	80307.07	0	80307.07	BEV	0	4405.149	1	3
2037	0	2094.767	8231.637	4938.982	3292.655	36027.28	21616.37	14410.91	PHEV	1256.86	837.9066	1	8
2037	0	892.768	3559.386	0	3559.386	11721.09	0	11721.09	BEV	0	892.768	3	3

2037	0	81.24845	323.9303	194.3582	129.5721	1623.256	973.9534	649.3023	PHEV	48.74907	32.49938	3	8
2037	0	2.643463	8.873366	0	8.873366	29.78287	0	29.78287	BEV	0	2.643463	1	3
2037	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2037	0	210.6015	791.3879	0	791.3879	3307.507	0	3307.507	BEV	0	210.6015	1	3
2037	0	442.6921	1663.526	998.1158	665.4105	6499.883	3899.93	2599.953	PHEV	265.6153	177.0768	1	8
2037	0	3364.129	13412.48	0	13412.48	64377.9	0	64377.9	BEV	0	3364.129	1	3
2037	0	2419.258	9645.365	5787.219	3858.146	43929.71	26357.83	17571.88	PHEV	1451.555	967.7033	1	8
2037	0	10.40473	33.13751	0	33.13751	102.7856	0	102.7856	BEV	0	10.40473	1	3
2037	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2037	0	232.4373	860.1249	0	860.1249	3488.847	0	3488.847	BEV	0	232.4373	1	3
2037	0	64.61074	239.0895	143.4537	95.63578	897.5882	538.5529	359.0353	PHEV	38.76644	25.8443	1	8
2037	0	185.9533	720.0724	0	720.0724	3207.838	0	3207.838	BEV	0	185.9533	2	3
2037	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2037	0	39.84459	154.2914	0	154.2914	478.7164	0	478.7164	BEV	0	39.84459	3	3
2037	0	18.04038	69.85831	41.91499	27.94333	336.0098	201.6059	134.4039	PHEV	10.82423	7.216153	3	8
2037	0	4.305877	13.71357	0	13.71357	28.83893	0	28.83893	BEV	0	4.305877	3	3
2037	0	0	0	0	0	0	0	0	PHEV	0	0	3	8
2037	0	18.8319	59.97677	0	59.97677	128.5871	0	128.5871	BEV	0	18.8319	4	3
2037	0	0	0	0	0	0	0	0	PHEV	0	0	4	8
2037	0	34.88525	127.0929	0	127.0929	502.0201	0	502.0201	BEV	0	34.88525	1	3
2037	0	3.718732	13.54797	8.128785	5.41919	48.46632	29.07979	19.38653	PHEV	2.231239	1.487493	1	8
2037	0	69.11968	259.7345	0	259.7345	1076.692	0	1076.692	BEV	0	69.11968	2	3
2037	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2037	0	3.19412	10.90476	0	10.90476	37.92432	0	37.92432	BEV	0	3.19412	1	3
2037	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2037	0	18.77416	66.2463	0	66.2463	239.3761	0	239.3761	BEV	0	18.77416	1	3
2037	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2037	0	17.32883	62.13911	0	62.13911	240.7512	0	240.7512	BEV	0	17.32883	1	3
2037	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2037	0	89.82363	342.6807	0	342.6807	1470.115	0	1470.115	BEV	0	89.82363	2	3
2037	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2037	0	2.453141	7.953428	0	7.953428	25.24686	0	25.24686	BEV	0	2.453141	1	3
2037	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2037	0	5.819935	20.20274	0	20.20274	72.2946	0	72.2946	BEV	0	5.819935	1	3
2037	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2037	0	8.9266	31.49831	0	31.49831	115.6126	0	115.6126	BEV	0	8.9266	2	3
2037	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2037	0	0.335006	1.143713	0	1.143713	3.074338	0	3.074338	BEV	0	0.335006	4	3
2037	0	0	0	0	0	0	0	0	PHEV	0	0	4	8
2037	0	1.666143	4.447335	0	4.447335	11.32355	0	11.32355	BEV	0	1.666143	1	3
2037	0	5.327533	19.1039	0	19.1039	52.86929	0	52.86929	BEV	0	5.327533	3	3
2037	0	0	0	0	0	0	0	0	PHEV	0	0	3	8
2037	0	3.408403	12.61266	0	12.61266	36.52195	0	36.52195	BEV	0	3.408403	3	3
2037	0	2.359664	8.731841	5.239105	3.492737	39.72019	23.83211	15.88808	PHEV	1.415798	0.943866	3	8
2037	0	0.59244	2.328065	0	2.328065	7.302466	0	7.302466	BEV	0	0.59244	4	3
2037	0	0	0	0	0	0	0	0	PHEV	0	0	4	8
2037	0	14.05167	43.14243	0	43.14243	123.9942	0	123.9942	BEV	0	14.05167	2	3

2037	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2037	0	5.028458	15.7268	0	15.7268	47.10934	0	47.10934	BEV	0	5.028458	2	3
2037	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2037	0	2.009399	6.860108	0	6.860108	23.56273	0	23.56273	BEV	0	2.009399	2	3
2037	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2037	0	1.107692	3.84513	0	3.84513	13.66194	0	13.66194	BEV	0	1.107692	2	3
2037	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2037	0	3.732795	13.38535	0	13.38535	51.52781	0	51.52781	BEV	0	3.732795	2	3
2037	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2037	0	3.704759	13.07257	0	13.07257	34.41933	0	34.41933	BEV	0	3.704759	3	3
2037	0	0	0	0	0	0	0	0	PHEV	0	0	3	8
2037	0	2.56544	9.787257	0	9.787257	29.58659	0	29.58659	BEV	0	2.56544	3	3
2037	0	1.961807	7.484373	4.490624	2.993749	35.41837	21.25102	14.16735	PHEV	1.177084	0.784723	3	8
2037	0	0.955288	2.932991	0	2.932991	6.188558	0	6.188558	BEV	0	0.955288	4	3
2037	0	0	0	0	0	0	0	0	PHEV	0	0	4	8
2037	0	2.38065	7.7184	0	7.7184	17.00341	0	17.00341	BEV	0	2.38065	4	3
2037	0	0	0	0	0	0	0	0	PHEV	0	0	4	8
2037	0	0.432848	1.452949	0	1.452949	3.433104	0	3.433104	BEV	0	0.432848	4	3
2037	0	0	0	0	0	0	0	0	PHEV	0	0	4	8
2037	0	17.91382	57.05284	0	57.05284	170.393	0	170.393	BEV	0	17.91382	2	3
2037	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2037	0	1.188907	3.922717	0	3.922717	12.58292	0	12.58292	BEV	0	1.188907	2	3
2037	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2037	0	9.044661	27.25138	0	27.25138	76.58983	0	76.58983	BEV	0	9.044661	2	3
2037	0	1.609663	4.481011	0	4.481011	11.65065	0	11.65065	BEV	0	1.609663	1	3
2037	0	0.555175	1.704539	0	1.704539	3.787306	0	3.787306	BEV	0	0.555175	3	3
2037	0	0	0	0	0	0	0	0	PHEV	0	0	3	8
2037	0	0.480676	1.69611	0	1.69611	4.369706	0	4.369706	BEV	0	0.480676	4	3
2037	0	0	0	0	0	0	0	0	PHEV	0	0	4	8
2037	0	2.090789	6.179725	0	6.179725	17.22912	0	17.22912	BEV	0	2.090789	1	3
2037	0	1.451762	4.457301	0	4.457301	12.95057	0	12.95057	BEV	0	1.451762	1	3
2037	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2037	0	2.415634	7.970215	0	7.970215	25.82535	0	25.82535	BEV	0	2.415634	1	3
2037	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2037	0	2.845936	8.411704	0	8.411704	23.01693	0	23.01693	BEV	0	2.845936	2	3
2037	0	0.420949	1.413008	0	1.413008	4.679139	0	4.679139	BEV	0	0.420949	2	3
2037	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2037	0	2.396205	6.945161	0	6.945161	18.8423	0	18.8423	BEV	0	2.396205	1	3
2037	0	2.357081	7.101837	0	7.101837	20.29534	0	20.29534	BEV	0	2.357081	1	3
2037	0	0.355474	0.948844	0	0.948844	2.42773	0	2.42773	BEV	0	0.355474	2	3
2037	0	0.348079	0.96899	0	0.96899	2.537679	0	2.537679	BEV	0	0.348079	2	3
2037	0	0.510644	1.363032	0	1.363032	2.392025	0	2.392025	BEV	0	0.510644	3	3
2037	0	2.186712	6.588519	0	6.588519	12.707	0	12.707	BEV	0	2.186712	3	3
2037	0	0.18513	0.579004	0	0.579004	1.178058	0	1.178058	BEV	0	0.18513	3	3
2037	0	0	0	0	0	0	0	0	PHEV	0	0	3	8
2037	0	3.144273	11.45512	0	11.45512	31.51074	0	31.51074	BEV	0	3.144273	3	3
2037	0	0	0	0	0	0	0	0	PHEV	0	0	3	8

2037	0	7.690673	28.89963	0	28.89963	83.18802	0	83.18802	BEV	0	7.690673	3	3
2037	0	1.971967	7.410161	4.446097	2.964064	37.80069	22.68041	15.12027	PHEV	1.18318	0.788787	3	8
2037	0	0.717143	1.996396	0	1.996396	3.558686	0	3.558686	BEV	0	0.717143	4	3
2037	0	0.211807	0.66244	0	0.66244	1.425404	0	1.425404	BEV	0	0.211807	4	3
2037	0	0	0	0	0	0	0	0	PHEV	0	0	4	8
2037	0	0.745981	2.033938	0	2.033938	5.048606	0	5.048606	BEV	0	0.745981	1	3
2037	0	1.698272	4.824978	0	4.824978	12.96667	0	12.96667	BEV	0	1.698272	1	3
2037	0	0.381826	1.04106	0	1.04106	2.679155	0	2.679155	BEV	0	0.381826	2	3
2037	0	0	0	0	0	0	0	0	BEV	0	0	2	3
2037	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2037	0	0	0	0	0	0	0	0	BEV	0	0	2	3
2037	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2037	0	0	0	0	0	0	0	0	BEV	0	0	3	3
2037	0	6.401121	25.15397	15.09238	10.06159	133.6754	80.20522	53.47015	PHEV	3.840673	2.560449	3	8
2037	0	0.148545	0.439052	0	0.439052	0.838088	0	0.838088	BEV	0	0.148545	3	3
2037	0	2.022738	5.399174	0	5.399174	9.78056	0	9.78056	BEV	0	2.022738	4	3
2037	0	0.342517	1.031997	0	1.031997	2.026786	0	2.026786	BEV	0	0.342517	4	3
2037	0	0.17506	0.607687	0	0.607687	1.486102	0	1.486102	BEV	0	0.17506	3	3
2037	0	0	0	0	0	0	0	0	PHEV	0	0	3	8
2037	0	0.622617	2.2683	0	2.2683	8.213764	0	8.213764	BEV	0	0.622617	2	3
2037	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2037	0	0.381633	1.08426	0	1.08426	2.792799	0	2.792799	BEV	0	0.381633	2	3
2037	0	1.11223	3.223688	0	3.223688	8.412761	0	8.412761	BEV	0	1.11223	2	3
2037	0	0.337569	0.99775	0	0.99775	1.847942	0	1.847942	BEV	0	0.337569	4	3
2037	0	0.484218	1.791828	0	1.791828	7.341917	0	7.341917	BEV	0	0.484218	2	3
2037	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2037	0	0.119307	0.332129	0	0.332129	0.568679	0	0.568679	BEV	0	0.119307	3	3
2037	0	0.092986	0.312127	0	0.312127	0.685189	0	0.685189	BEV	0	0.092986	3	3
2037	0	0	0	0	0	0	0	0	PHEV	0	0	3	8
2037	0	0.655785	1.863156	0	1.863156	3.47533	0	3.47533	BEV	0	0.655785	4	3
2037	0	0.201533	0.653397	0	0.653397	2.020196	0	2.020196	BEV	0	0.201533	2	3
2037	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2037	0	0.450838	1.564993	0	1.564993	3.799033	0	3.799033	BEV	0	0.450838	4	3
2037	0	0	0	0	0	0	0	0	PHEV	0	0	4	8
2037	0	0.075771	0.219616	0	0.219616	0.415474	0	0.415474	BEV	0	0.075771	3	3
2037	0	0	0	0	0	0	0	0	BEV	0	0	4	3
2037	0	0.803764	3.066391	1.839835	1.226556	16.08546	9.651278	6.434185	PHEV	0.482258	0.321506	4	8
2038	0	10327.45	41174.62	0	41174.62	196585.2	0	196585.2	BEV	0	10327.45	1	3
2038	0	9315.713	37140.91	20056.09	17084.82	175764.4	94912.8	80851.64	PHEV	5030.485	4285.228	1	8
2038	0	15566.17	62952.72	0	62952.72	310630.6	0	310630.6	BEV	0	15566.17	1	3
2038	0	10060.34	40686.03	21970.46	18715.58	199814.3	107899.7	91914.59	PHEV	5432.584	4627.757	1	8
2038	0	22966.5	94196.88	0	94196.88	481089.6	0	481089.6	BEV	0	22966.5	1	3
2038	0	11263.59	46197.51	24484.68	21712.83	234840	124465.2	110374.8	PHEV	5969.704	5293.888	1	8
2038	0	32205.34	133934.9	0	133934.9	707028.8	0	707028.8	BEV	0	32205.34	1	3
2038	0	12280.07	51070.13	26556.47	24513.66	268946.3	139852.1	129094.2	PHEV	6385.639	5894.436	1	8
2038	0	39389.28	166068	0	166068	906341.3	0	906341.3	BEV	0	39389.28	1	3
2038	0	14814.9	62460.68	31854.94	30605.73	340159.1	173481.1	166677.9	PHEV	7555.601	7259.303	1	8

2038	0	46735.29	199716.7	0	199716.7	1126139	0	1126139	BEV	0	46735.29	1	3
2038	0	17318.67	74008.92	37004.46	37004.46	416469.2	208234.6	208234.6	PHEV	8659.336	8659.336	1	8
2038	0	55163.24	238892.7	0	238892.7	1390439	0	1390439	BEV	0	55163.24	1	3
2038	0	20330.98	88046.36	43142.72	44903.65	511451.9	250611.4	260840.4	PHEV	9962.181	10368.8	1	8
2038	0	62923.48	276104.5	0	276104.5	1657931	0	1657931	BEV	0	62923.48	1	3
2038	0	23089.9	101317.1	48632.2	52684.88	607242.2	291476.2	315765.9	PHEV	11083.15	12006.75	1	8
2038	0	71930.03	319745.5	0	319745.5	1980317	0	1980317	BEV	0	71930.03	1	3
2038	0	26038.22	115745.9	54400.57	61345.32	715637.7	336349.7	379288	PHEV	12237.96	13800.26	1	8
2038	0	66265.5	298361.7	0	298361.7	1903477	0	1903477	BEV	0	66265.5	1	3
2038	0	27557.88	124079.9	56332.27	67747.62	790305.8	358798.8	431507	PHEV	12511.28	15046.6	1	8
2038	0	73498.67	335140	0	335140	2200592	0	2200592	BEV	0	73498.67	1	3
2038	0	31107.9	141846.1	62128.6	79717.52	930229.9	407440.7	522789.2	PHEV	13625.26	17482.64	1	8
2038	0	81372.41	375704.6	0	375704.6	2537896	0	2537896	BEV	0	81372.41	1	3
2038	0	34773.65	160553.4	67753.55	92799.88	1083565	457264.3	626300.4	PHEV	14674.48	20099.17	1	8
2038	0	89824.49	419874.7	0	419874.7	2916677	0	2916677	BEV	0	89824.49	1	3
2038	0	38864.98	181670.1	73758.06	107912	1261201	512047.7	749153.6	PHEV	15779.18	23085.8	1	8
2038	0	98023.53	463816	0	463816	3312154	0	3312154	BEV	0	98023.53	1	3
2038	0	42939.04	203173.8	79237.78	123936	1450433	565668.7	884763.9	PHEV	16746.22	26192.81	1	8
2038	0	103811.1	497148.2	0	497148.2	3648224	0	3648224	BEV	0	103811.1	1	3
2038	0	45474.27	217774.9	84932.22	132842.7	1598021	623228.3	974792.9	PHEV	17734.97	27739.31	1	8
2038	0	108367.5	525177.2	0	525177.2	3959222	0	3959222	BEV	0	108367.5	1	3
2038	0	47470.2	230052.9	89720.65	140332.3	1734727	676543.6	1058184	PHEV	18513.38	28956.82	1	8
2038	0	113591.6	557002.3	0	557002.3	4311081	0	4311081	BEV	0	113591.6	1	3
2038	0	49758.62	243993.9	95157.61	148836.3	1889336	736841.2	1152495	PHEV	19405.86	30352.76	1	8
2038	0	117638.7	583587	0	583587	4635364	0	4635364	BEV	0	117638.7	1	3
2038	0	51531.45	255639.3	99699.32	155940	2031958	792463.7	1239495	PHEV	20097.27	31434.18	1	8
2038	0	120998.3	607185.2	0	607185.2	4945842	0	4945842	BEV	0	120998.3	1	3
2038	0	53003.09	265976.4	103730.8	162245.6	2168456	845697.8	1322758	PHEV	20671.21	32331.89	1	8
2038	0	124706	632935.2	0	632935.2	5278586	0	5278586	BEV	0	124706	1	3
2038	0	54627.24	277256.2	108129.9	169126.3	2314287	902572	1411715	PHEV	21304.62	33322.61	1	8
2038	0	126349.8	648517.1	0	648517.1	5521166	0	5521166	BEV	0	126349.8	1	3
2038	0	55347.33	284081.8	110791.9	173289.9	2419920	943768.8	1476151	PHEV	21585.46	33761.87	1	8
2038	0	114105.6	592207.9	0	592207.9	5134036	0	5134036	BEV	0	114105.6	1	3
2038	0	49983.75	259415.6	101172.1	158243.5	2249077	877140	1371937	PHEV	19493.66	30490.09	1	8
2038	0	1.204066	4.800503	0	4.800503	23.049	0	23.049	BEV	0	1.204066	2	3
2038	0	10.44343	41.63702	24.98221	16.65481	219.2713	131.5628	87.70851	PHEV	6.266058	4.177372	2	8
2038	0	596.3875	2446.077	0	2446.077	12987.33	0	12987.33	BEV	0	596.3875	2	3
2038	0	457.9837	1878.416	1116.316	762.1	10302.48	6122.617	4179.863	PHEV	272.1732	185.8105	2	8
2038	0	1322.864	5501.499	0	5501.499	29835.05	0	29835.05	BEV	0	1322.864	2	3
2038	0	1018.845	4237.154	2493.867	1743.286	23605.45	13893.5	9711.958	PHEV	599.6632	419.1821	2	8
2038	0	1665.383	7021.372	0	7021.372	39035.05	0	39035.05	BEV	0	1665.383	2	3
2038	0	1223.27	5157.393	3006.023	2151.37	29031.27	16921.08	12110.19	PHEV	712.9918	510.2784	2	8
2038	0	2189.923	9358.33	0	9358.33	53310.77	0	53310.77	BEV	0	2189.923	2	3
2038	0	1394.062	5957.33	3438.23	2519.099	34208.03	19742.92	14465.11	PHEV	804.573	589.4892	2	8
2038	0	2589.297	11213.34	0	11213.34	65470.55	0	65470.55	BEV	0	2589.297	2	3
2038	0	1625.719	7040.42	4023.097	3017.323	41279.41	23588.23	17691.18	PHEV	928.9823	696.7367	2	8
2038	0	2916.739	12798.48	0	12798.48	76649.6	0	76649.6	BEV	0	2916.739	2	3

2038	0	1900.761	8340.427	4718.298	3622.128	49979.71	28274.24	21705.47	PHEV	1075.288	825.4735	2	8
2038	0	3439.16	15287.86	0	15287.86	94007.28	0	94007.28	BEV	0	3439.16	2	3
2038	0	2095.767	9316.165	5217.053	4099.113	57127.7	31991.51	25136.19	PHEV	1173.629	922.1374	2	8
2038	0	3587.861	16154.42	0	16154.42	101911.3	0	101911.3	BEV	0	3587.861	2	3
2038	0	2262.082	10185.07	5601.789	4583.282	63896.47	35143.06	28753.41	PHEV	1244.145	1017.937	2	8
2038	0	4050.072	18467.56	0	18467.56	119556.5	0	119556.5	BEV	0	4050.072	2	3
2038	0	2871.637	13094.12	7070.825	6023.295	83971.81	45344.78	38627.03	PHEV	1550.684	1320.953	2	8
2038	0	4761.543	21984.52	0	21984.52	145999.3	0	145999.3	BEV	0	4761.543	2	3
2038	0	3376.846	15591.23	8263.354	7327.88	102240.2	54187.28	48052.87	PHEV	1789.728	1587.118	2	8
2038	0	5715.909	26718.39	0	26718.39	181862.9	0	181862.9	BEV	0	5715.909	2	3
2038	0	3803.467	17778.89	9245.022	8533.866	119257.6	62013.95	57243.64	PHEV	1977.803	1825.664	2	8
2038	0	6459.825	30565.83	0	30565.83	213434.7	0	213434.7	BEV	0	6459.825	2	3
2038	0	4392.06	20781.82	10598.73	10183.09	142631.9	72742.25	69889.61	PHEV	2239.95	2152.109	2	8
2038	0	6735.735	32257.23	0	32257.23	231079	0	231079	BEV	0	6735.735	2	3
2038	0	4579.651	21931.81	11185.22	10746.59	154237.7	78661.23	75576.48	PHEV	2335.622	2244.029	2	8
2038	0	7013.799	33990.69	0	33990.69	249785.8	0	249785.8	BEV	0	7013.799	2	3
2038	0	4768.708	23110.4	11786.3	11324.1	166590.1	84960.93	81629.13	PHEV	2432.041	2336.667	2	8
2038	0	7294.182	35767.39	0	35767.39	269600.7	0	269600.7	BEV	0	7294.182	2	3
2038	0	4959.342	24318.38	12402.37	11916.01	179728.5	91661.53	88066.96	PHEV	2529.264	2430.078	2	8
2038	0	7477.999	37097.16	0	37097.16	286793.1	0	286793.1	BEV	0	7477.999	2	3
2038	0	5084.32	25222.5	12863.47	12359.02	191181.6	97502.64	93679	PHEV	2593.003	2491.317	2	8
2038	0	7602.577	38150.72	0	38150.72	302463.3	0	302463.3	BEV	0	7602.577	2	3
2038	0	5169.02	25938.82	13228.8	12710.02	201683.9	102858.8	98825.1	PHEV	2636.2	2532.82	2	8
2038	0	7732.474	39245.55	0	39245.55	318999.9	0	318999.9	BEV	0	7732.474	2	3
2038	0	5257.338	26683.2	13608.43	13074.77	212806.7	108531.4	104275.3	PHEV	2681.243	2576.096	2	8
2038	0	7870.994	40399.53	0	40399.53	336513.8	0	336513.8	BEV	0	7870.994	2	3
2038	0	5351.519	27467.79	14008.57	13459.22	224617.5	114554.9	110062.6	PHEV	2729.275	2622.244	2	8
2038	0	7213.199	37436.5	0	37436.5	319388	0	319388	BEV	0	7213.199	2	3
2038	0	4904.281	25453.22	12981.14	12472.08	213302.4	108784.2	104518.2	PHEV	2501.183	2403.098	2	8
2038	0	306.2142	1238.392	743.035	495.3567	6575.142	3945.085	2630.057	PHEV	183.7285	122.4857	3	8
2038	0	1247.852	5118.051	0	5118.051	20548.17	0	20548.17	BEV	0	1247.852	3	3
2038	0	1083.833	4445.33	2641.796	1803.534	24033.54	14282.79	9750.75	PHEV	644.1065	439.7265	3	8
2038	0	2959.6	12308.33	0	12308.33	59785.03	0	59785.03	BEV	0	2959.6	3	3
2038	0	2135.888	8882.687	5228.096	3654.591	48931.67	28799.78	20131.89	PHEV	1257.123	878.7653	3	8
2038	0	3817.959	16096.78	0	16096.78	74381.05	0	74381.05	BEV	0	3817.959	3	3
2038	0	3677.304	15503.77	9036.483	6467.287	87123.28	50780.43	36342.86	PHEV	2143.343	1533.961	3	8
2038	0	5240.51	22394.59	0	22394.59	105938	0	105938	BEV	0	5240.51	3	3
2038	0	4178.771	17857.39	10306.27	7551.126	102431.4	59117.57	43313.87	PHEV	2411.748	1767.023	3	8
2038	0	6884.427	29814.05	0	29814.05	144977.5	0	144977.5	BEV	0	6884.427	3	3
2038	0	4923.469	21321.82	12183.9	9137.924	124930.7	71388.99	53541.74	PHEV	2813.411	2110.058	3	8
2038	0	8139.717	35716.59	0	35716.59	176359.3	0	176359.3	BEV	0	8139.717	3	3
2038	0	5673.453	24894.77	14083.33	10811.44	149129.3	84364.58	64764.73	PHEV	3209.553	2463.9	3	8
2038	0	9334.432	41493.7	0	41493.7	207682.4	0	207682.4	BEV	0	9334.432	3	3
2038	0	6860.425	30496.17	17077.85	13418.31	186989.6	104714.2	82275.42	PHEV	3841.838	3018.587	3	8
2038	0	11362.89	51161.64	0	51161.64	270870.1	0	270870.1	BEV	0	11362.89	3	3
2038	0	7058.819	31782.47	17480.36	14302.11	199400.5	109670.3	89730.21	PHEV	3882.35	3176.469	3	8
2038	0	13424.28	61212.15	0	61212.15	339468.4	0	339468.4	BEV	0	13424.28	3	3

2038	0	8239.12	37568.82	20287.16	17281.66	241300	130302	110998	PHEV	4449.125	3789.995	3	8
2038	0	15870.91	73277.59	0	73277.59	425847.1	0	425847.1	BEV	0	15870.91	3	3
2038	0	9338.852	43118.41	22852.76	20265.65	283661.5	150340.6	133320.9	PHEV	4949.592	4389.26	3	8
2038	0	18479.29	86379.39	0	86379.39	520188.4	0	520188.4	BEV	0	18479.29	3	3
2038	0	10633.19	49703.69	25845.92	23857.77	338731.2	176140.2	162591	PHEV	5529.26	5103.932	3	8
2038	0	20874.04	98769.27	0	98769.27	609529.4	0	609529.4	BEV	0	20874.04	3	3
2038	0	11969.63	56636.47	28884.6	27751.87	405248.8	206676.9	198571.9	PHEV	6104.512	5865.12	3	8
2038	0	21639.96	103633.1	0	103633.1	655993.9	0	655993.9	BEV	0	21639.96	3	3
2038	0	12408.83	59425.52	30307.01	29118.5	435825.4	222270.9	213554.4	PHEV	6328.504	6080.327	3	8
2038	0	22234.54	107754.4	0	107754.4	699684.5	0	699684.5	BEV	0	22234.54	3	3
2038	0	12749.77	61788.71	31512.24	30276.47	464638.1	236965.5	227672.7	PHEV	6502.384	6247.389	3	8
2038	0	22913.22	112356.1	0	112356.1	748314.3	0	748314.3	BEV	0	22913.22	3	3
2038	0	13138.94	64427.45	32858	31569.45	496803.3	253369.7	243433.6	PHEV	6700.86	6438.081	3	8
2038	0	23471.33	116437.5	0	116437.5	795367.1	0	795367.1	BEV	0	23471.33	3	3
2038	0	13458.98	66767.83	34051.59	32716.24	528029.1	269294.9	258734.3	PHEV	6864.078	6594.899	3	8
2038	0	23932.07	120094.2	0	120094.2	841150.9	0	841150.9	BEV	0	23932.07	3	3
2038	0	13723.17	68864.67	35120.98	33743.69	558498	284834	273664	PHEV	6998.819	6724.355	3	8
2038	0	24653.8	125128.4	0	125128.4	898547.6	0	898547.6	BEV	0	24653.8	3	3
2038	0	14137.03	71751.35	36593.19	35158.16	596773.2	304354.4	292418.9	PHEV	7209.884	6927.143	3	8
2038	0	25407.02	130406.9	0	130406.9	959764	0	959764	BEV	0	25407.02	3	3
2038	0	14568.94	74778.17	38136.86	36641.3	637651.7	325202.4	312449.4	PHEV	7430.161	7138.783	3	8
2038	0	23112.28	119952.7	0	119952.7	904041.7	0	904041.7	BEV	0	23112.28	3	3
2038	0	13253.09	68783.52	35079.6	33703.93	600766.4	306390.9	294375.5	PHEV	6759.074	6494.013	3	8
2038	0	478.3262	1907.044	1144.226	762.8175	9121.367	5472.82	3648.547	PHEV	286.9957	191.3305	4	8
2038	0	1.150123	4.651328	0	4.651328	16.03787	0	16.03787	BEV	0	1.150123	4	3
2038	0	1407.434	5691.944	3415.166	2276.777	28705.36	17223.22	11482.15	PHEV	844.4603	562.9735	4	8
2038	0	640.9081	2628.678	0	2628.678	9794.384	0	9794.384	BEV	0	640.9081	4	3
2038	0	1667.511	6839.28	4064.486	2774.794	37475.16	22270.95	15204.21	PHEV	990.978	676.533	4	8
2038	0	1445.737	6012.503	0	6012.503	25289.45	0	25289.45	BEV	0	1445.737	4	3
2038	0	1947.041	8097.314	4765.847	3331.466	44369.44	26114.58	18254.86	PHEV	1145.972	801.0681	4	8
2038	0	2442.663	10298.44	0	10298.44	44849.46	0	44849.46	BEV	0	2442.663	4	3
2038	0	2370.715	9995.102	5825.716	4169.385	54765.39	31920.4	22844.99	PHEV	1381.788	988.927	4	8
2038	0	2713.729	11596.74	0	11596.74	47776.72	0	47776.72	BEV	0	2713.729	4	3
2038	0	2650.828	11327.94	6537.84	4790.101	63466.15	36629.03	26837.11	PHEV	1529.906	1120.921	4	8
2038	0	3103.673	13440.92	0	13440.92	55130.85	0	55130.85	BEV	0	3103.673	4	3
2038	0	2916.341	12629.65	7216.945	5412.709	72411.3	41377.88	31033.41	PHEV	1666.481	1249.861	4	8
2038	0	3498.356	15350.58	0	15350.58	63953.66	0	63953.66	BEV	0	3498.356	4	3
2038	0	4024.914	17661.08	9991.126	7669.956	103693.6	58660.94	45032.64	PHEV	2276.951	1747.963	4	8
2038	0	4153.004	18461.06	0	18461.06	79106.35	0	79106.35	BEV	0	4153.004	4	3
2038	0	4555.92	20252.11	11341.18	8910.929	121877.7	68251.51	53626.19	PHEV	2551.315	2004.605	4	8
2038	0	4188.9	18860.61	0	18860.61	82561.53	0	82561.53	BEV	0	4188.9	4	3
2038	0	4345.408	19565.29	10760.91	8804.379	120618.2	66340.03	54278.21	PHEV	2389.975	1955.434	4	8
2038	0	4797.19	21874.28	0	21874.28	99776.69	0	99776.69	BEV	0	4797.19	4	3
2038	0	4844.506	22090.03	11928.62	10161.41	139564.8	75364.97	64199.79	PHEV	2616.033	2228.473	4	8
2038	0	5367.888	24784.07	0	24784.07	118220.3	0	118220.3	BEV	0	5367.888	4	3
2038	0	5306.466	24500.48	12985.26	11515.23	158704.7	84113.5	74591.22	PHEV	2812.427	2494.039	4	8
2038	0	6073.496	28389.89	0	28389.89	143878.8	0	143878.8	BEV	0	6073.496	4	3

2038	0	6008.375	28085.49	14604.45	13481.03	186535	96998.18	89536.78	PHEV	3124.355	2884.02	4	8
2038	0	6759.496	31983.77	0	31983.77	171958.7	0	171958.7	BEV	0	6759.496	4	3
2038	0	6653.588	31482.65	16056.15	15426.5	214494.9	109392.4	105102.5	PHEV	3393.33	3260.258	4	8
2038	0	7091.297	33960.01	0	33960.01	187435.7	0	187435.7	BEV	0	7091.297	4	3
2038	0	6980.191	33427.92	17048.24	16379.68	233613	119142.6	114470.4	PHEV	3559.897	3420.293	4	8
2038	0	7368.007	35707.28	0	35707.28	202267.5	0	202267.5	BEV	0	7368.007	4	3
2038	0	7252.565	35147.81	17925.39	17222.43	251976.8	128508.2	123468.6	PHEV	3698.808	3553.757	4	8
2038	0	7682.545	37671.74	0	37671.74	218931.9	0	218931.9	BEV	0	7682.545	4	3
2038	0	7562.174	37081.5	18911.56	18169.93	272659.5	139056.4	133603.2	PHEV	3856.709	3705.465	4	8
2038	0	7865.244	39018.22	0	39018.22	232583	0	232583	BEV	0	7865.244	4	3
2038	0	7742.011	38406.88	19587.51	18819.37	289659.9	147726.6	141933.4	PHEV	3948.426	3793.585	4	8
2038	0	8061.209	40452.2	0	40452.2	247240.4	0	247240.4	BEV	0	8061.209	4	3
2038	0	7934.906	39818.39	20307.38	19511.01	307940	157049.4	150890.6	PHEV	4046.802	3888.104	4	8
2038	0	8309.492	42174.16	0	42174.16	264179.1	0	264179.1	BEV	0	8309.492	4	3
2038	0	8179.299	41513.38	21171.82	20341.55	329022	167801.2	161220.8	PHEV	4171.442	4007.856	4	8
2038	0	8491.385	43583.82	0	43583.82	279690.2	0	279690.2	BEV	0	8491.385	4	3
2038	0	8358.342	42900.95	21879.48	21021.46	348381.7	177674.7	170707	PHEV	4262.754	4095.588	4	8
2038	0	7395.515	38382.72	0	38382.72	251988	0	251988	BEV	0	7395.515	4	3
2038	0	7279.642	37781.34	19268.48	18512.86	313474.7	159872.1	153602.6	PHEV	3712.617	3567.025	4	8
2038	0	5.275277	16.19652	0	16.19652	47.42046	0	47.42046	BEV	0	5.275277	1	3
2038	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2038	0	929.0371	3491.089	0	3491.089	14502.36	0	14502.36	BEV	0	929.0371	1	3
2038	0	971.0651	3649.02	2189.412	1459.608	14169.63	8501.779	5667.853	PHEV	582.639	388.426	1	8
2038	0	1321.712	5042.384	0	5042.384	21680.05	0	21680.05	BEV	0	1321.712	1	3
2038	0	1668.761	6366.389	3819.834	2546.556	25670.35	15402.21	10268.14	PHEV	1001.256	667.5043	1	8
2038	0	3587.084	13890.37	0	13890.37	62048.78	0	62048.78	BEV	0	3587.084	1	3
2038	0	1705.755	6605.245	3963.147	2642.098	27711.41	16626.84	11084.56	PHEV	1023.453	682.3019	1	8
2038	0	765.3692	3007.61	0	3007.61	9535.901	0	9535.901	BEV	0	765.3692	3	3
2038	0	69.65422	273.7146	164.2288	109.4858	1344.634	806.7803	537.8535	PHEV	41.79253	27.86169	3	8
2038	0	2.448852	8.079815	0	8.079815	26.12215	0	26.12215	BEV	0	2.448852	1	3
2038	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2038	0	174.217	644.6832	0	644.6832	2592.095	0	2592.095	BEV	0	174.217	1	3
2038	0	366.2106	1355.148	813.0886	542.059	5062.278	3037.367	2024.911	PHEV	219.7263	146.4842	1	8
2038	0	2749.047	10802.71	0	10802.71	49942.47	0	49942.47	BEV	0	2749.047	1	3
2038	0	1976.932	7768.593	4661.156	3107.437	33940.54	20364.32	13576.22	PHEV	1186.159	790.7729	1	8
2038	0	9.736973	30.45297	0	30.45297	91.35177	0	91.35177	BEV	0	9.736973	1	3
2038	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2038	0	194.6845	709.2688	0	709.2688	2767.96	0	2767.96	BEV	0	194.6845	1	3
2038	0	54.11658	197.1559	118.2935	78.86236	707.0626	424.2375	282.825	PHEV	32.46995	21.64663	1	8
2038	0	163.8982	625.2783	0	625.2783	2681.037	0	2681.037	BEV	0	163.8982	2	3
2038	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2038	0	34.85888	132.988	0	132.988	397.1665	0	397.1665	BEV	0	34.85888	3	3
2038	0	15.78301	60.21282	36.12769	24.08513	284.2738	170.5643	113.7095	PHEV	9.469807	6.313204	3	8
2038	0	3.89096	12.16921	0	12.16921	24.74051	0	24.74051	BEV	0	3.89096	3	3
2038	0	0	0	0	0	0	0	0	PHEV	0	0	3	8
2038	0	17.89832	55.97808	0	55.97808	116.0762	0	116.0762	BEV	0	17.89832	4	3
2038	0	0	0	0	0	0	0	0	PHEV	0	0	4	8

2038	0	29.81276	106.905	0	106.905	406.2485	0	406.2485	BEV	0	29.81276	1	3
2038	0	3.17801	11.39596	6.837577	4.558385	38.84669	23.30802	15.53868	PHEV	1.906806	1.271204	1	8
2038	0	60.8854	225.304	0	225.304	898.6554	0	898.6554	BEV	0	60.8854	2	3
2038	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2038	0	2.88992	9.700652	0	9.700652	32.48976	0	32.48976	BEV	0	2.88992	1	3
2038	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2038	0	16.30272	56.59163	0	56.59163	196.6558	0	196.6558	BEV	0	16.30272	1	3
2038	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2038	0	14.98283	52.86827	0	52.86827	197.0733	0	197.0733	BEV	0	14.98283	1	3
2038	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2038	0	79.22943	297.7244	0	297.7244	1229.015	0	1229.015	BEV	0	79.22943	2	3
2038	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2038	0	2.289822	7.292739	0	7.292739	22.36146	0	22.36146	BEV	0	2.289822	1	3
2038	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2038	0	5.161972	17.62302	0	17.62302	60.69608	0	60.69608	BEV	0	5.161972	1	3
2038	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2038	0	7.886721	27.37718	0	27.37718	96.66552	0	96.66552	BEV	0	7.886721	2	3
2038	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2038	0	0.309655	1.039425	0	1.039425	2.697852	0	2.697852	BEV	0	0.309655	4	3
2038	0	0	0	0	0	0	0	0	PHEV	0	0	4	8
2038	0	4.714598	16.63588	0	16.63588	44.2539	0	44.2539	BEV	0	4.714598	3	3
2038	0	0	0	0	0	0	0	0	PHEV	0	0	3	8
2038	0	3.013896	10.98014	0	10.98014	30.59932	0	30.59932	BEV	0	3.013896	3	3
2038	0	2.086543	7.601632	4.560979	3.040653	33.78307	20.26984	13.51323	PHEV	1.251926	0.834617	3	8
2038	0	0.518625	2.008286	0	2.008286	6.060525	0	6.060525	BEV	0	0.518625	4	3
2038	0	0	0	0	0	0	0	0	PHEV	0	0	4	8
2038	0	12.36873	37.26674	0	37.26674	103.8872	0	103.8872	BEV	0	12.36873	2	3
2038	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2038	0	4.568583	14.02678	0	14.02678	40.67078	0	40.67078	BEV	0	4.568583	2	3
2038	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2038	0	1.855479	6.228323	0	6.228323	20.59857	0	20.59857	BEV	0	1.855479	2	3
2038	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2038	0	1.016976	3.471965	0	3.471965	11.87116	0	11.87116	BEV	0	1.016976	2	3
2038	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2038	0	3.269517	11.53679	0	11.53679	42.72455	0	42.72455	BEV	0	3.269517	2	3
2038	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2038	0	3.310492	11.49171	0	11.49171	29.07817	0	29.07817	BEV	0	3.310492	3	3
2038	0	0	0	0	0	0	0	0	PHEV	0	0	3	8
2038	0	2.25936	8.490112	0	8.490112	24.68405	0	24.68405	BEV	0	2.25936	3	3
2038	0	1.727746	6.492438	3.895463	2.596975	30.11248	18.06749	12.04499	PHEV	1.036648	0.691098	3	8
2038	0	0.943335	2.842248	0	2.842248	5.821774	0	5.821774	BEV	0	0.943335	4	3
2038	0	0	0	0	0	0	0	0	PHEV	0	0	4	8
2038	0	2.206445	7.027196	0	7.027196	14.94721	0	14.94721	BEV	0	2.206445	4	3
2038	0	0	0	0	0	0	0	0	PHEV	0	0	4	8
2038	0	0.397091	1.310173	0	1.310173	2.980957	0	2.980957	BEV	0	0.397091	4	3
2038	0	0	0	0	0	0	0	0	PHEV	0	0	4	8
2038	0	15.89822	49.72265	0	49.72265	143.4828	0	143.4828	BEV	0	15.89822	2	3

2038	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2038	0	1.072274	3.476463	0	3.476463	10.74635	0	10.74635	BEV	0	1.072274	2	3
2038	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2038	0	8.232041	24.33136	0	24.33136	66.48625	0	66.48625	BEV	0	8.232041	2	3
2038	0	1.560778	4.255509	0	4.255509	10.89227	0	10.89227	BEV	0	1.560778	1	3
2038	0	0.503516	1.517085	0	1.517085	3.270427	0	3.270427	BEV	0	0.503516	3	3
2038	0	0	0	0	0	0	0	0	PHEV	0	0	3	8
2038	0	0.429149	1.489704	0	1.489704	3.692593	0	3.692593	BEV	0	0.429149	4	3
2038	0	0	0	0	0	0	0	0	PHEV	0	0	4	8
2038	0	2.012779	5.833839	0	5.833839	15.85533	0	15.85533	BEV	0	2.012779	1	3
2038	0	1.393615	4.198935	0	4.198935	11.83841	0	11.83841	BEV	0	1.393615	1	3
2038	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2038	0	2.214356	7.179254	0	7.179254	22.43532	0	22.43532	BEV	0	2.214356	1	3
2038	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2038	0	2.549416	7.389228	0	7.389228	19.70885	0	19.70885	BEV	0	2.549416	2	3
2038	0	0.388306	1.281187	0	1.281187	4.087838	0	4.087838	BEV	0	0.388306	2	3
2038	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2038	0	2.322532	6.598568	0	6.598568	17.50199	0	17.50199	BEV	0	2.322532	1	3
2038	0	2.268285	6.704347	0	6.704347	18.63182	0	18.63182	BEV	0	2.268285	1	3
2038	0	0.313197	0.85394	0	0.85394	2.201808	0	2.201808	BEV	0	0.313197	2	3
2038	0	2.12046	6.267423	0	6.267423	11.74778	0	11.74778	BEV	0	2.12046	3	3
2038	0	0.171919	0.527838	0	0.527838	1.039704	0	1.039704	BEV	0	0.171919	3	3
2038	0	0	0	0	0	0	0	0	PHEV	0	0	3	8
2038	0	2.807267	10.06652	0	10.06652	26.63581	0	26.63581	BEV	0	2.807267	3	3
2038	0	0	0	0	0	0	0	0	PHEV	0	0	3	8
2038	0	6.798062	25.15596	0	25.15596	69.6393	0	69.6393	BEV	0	6.798062	3	3
2038	0	1.743093	6.450245	3.870147	2.580098	32.52128	19.51277	13.00851	PHEV	1.045856	0.697237	3	8
2038	0	0.715783	1.951605	0	1.951605	3.423489	0	3.423489	BEV	0	0.715783	4	3
2038	0	0.201617	0.619019	0	0.619019	1.290516	0	1.290516	BEV	0	0.201617	4	3
2038	0	0	0	0	0	0	0	0	PHEV	0	0	4	8
2038	0	0.72244	1.928366	0	1.928366	4.731303	0	4.731303	BEV	0	0.72244	1	3
2038	0	1.630013	4.537664	0	4.537664	11.96166	0	11.96166	BEV	0	1.630013	1	3
2038	0	0.348314	0.929734	0	0.929734	2.364744	0	2.364744	BEV	0	0.348314	2	3
2038	0	0	0	0	0	0	0	0	BEV	0	0	2	3
2038	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2038	0	0	0	0	0	0	0	0	BEV	0	0	2	3
2038	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2038	0	0	0	0	0	0	0	0	BEV	0	0	3	3
2038	0	5.455967	21.1273	12.67638	8.450921	111.0042	66.60254	44.40169	PHEV	3.27358	2.182387	3	8
2038	0	0.140859	0.408264	0	0.408264	0.759555	0	0.759555	BEV	0	0.140859	3	3
2038	0	0.325361	0.961668	0	0.961668	1.836416	0	1.836416	BEV	0	0.325361	4	3
2038	0	0.156209	0.5333	0	0.5333	1.255057	0	1.255057	BEV	0	0.156209	3	3
2038	0	0	0	0	0	0	0	0	PHEV	0	0	3	8
2038	0	0.539594	1.934918	0	1.934918	6.741214	0	6.741214	BEV	0	0.539594	2	3
2038	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2038	0	0.345564	0.961988	0	0.961988	2.429796	0	2.429796	BEV	0	0.345564	2	3
2038	0	0.993174	2.821717	0	2.821717	7.195034	0	7.195034	BEV	0	0.993174	2	3

2038	0	0.336491	0.975285	0	0.975285	1.760087	0	1.760087	BEV	0	0.336491	4	3
2038	0	0.41756	1.521244	0	1.521244	6.001355	0	6.001355	BEV	0	0.41756	2	3
2038	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2038	0	0.113657	0.309889	0	0.309889	0.522005	0	0.522005	BEV	0	0.113657	3	3
2038	0	0.084023	0.277229	0	0.277229	0.585987	0	0.585987	BEV	0	0.084023	3	3
2038	0	0	0	0	0	0	0	0	PHEV	0	0	3	8
2038	0	0.653504	1.819239	0	1.819239	3.327469	0	3.327469	BEV	0	0.653504	4	3
2038	0	0.182302	0.580606	0	0.580606	1.73277	0	1.73277	BEV	0	0.182302	2	3
2038	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2038	0	0.393842	1.344579	0	1.344579	3.139536	0	3.139536	BEV	0	0.393842	4	3
2038	0	0	0	0	0	0	0	0	PHEV	0	0	4	8
2038	0	0.073327	0.20833	0	0.20833	0.385347	0	0.385347	BEV	0	0.073327	3	3
2038	0	0	0	0	0	0	0	0	BEV	0	0	4	3
2038	0	0.680984	2.558969	1.535382	1.023588	13.15995	7.895967	5.263978	PHEV	0.408591	0.272394	4	8
2039	0	8484.481	33340.79	0	33340.79	152961.9	0	152961.9	BEV	0	8484.481	1	3
2039	0	7653.29	30074.52	16240.24	13834.28	136489.4	73704.26	62785.11	PHEV	4132.777	3520.513	1	8
2039	0	12907.99	51463	0	51463	244095.8	0	244095.8	BEV	0	12907.99	1	3
2039	0	8342.371	33260.28	17960.55	15299.73	156838.6	84692.82	72145.74	PHEV	4504.881	3837.491	1	8
2039	0	19258.19	77883.98	0	77883.98	382698.6	0	382698.6	BEV	0	19258.19	1	3
2039	0	9444.905	38197.08	20244.45	17952.63	186600.4	98898.23	87702.21	PHEV	5005.8	4439.105	1	8
2039	0	27421.24	112468	0	112468	571526.7	0	571526.7	BEV	0	27421.24	1	3
2039	0	10455.87	42884.65	22300.02	20584.63	217295.4	112993.6	104301.8	PHEV	5437.053	5018.818	1	8
2039	0	33959.64	141230.7	0	141230.7	742551.7	0	742551.7	BEV	0	33959.64	1	3
2039	0	12772.74	53119	27090.69	26028.31	278572.3	142071.9	136500.4	PHEV	6514.095	6258.64	1	8
2039	0	41045.96	173052.6	0	173052.6	940639.3	0	940639.3	BEV	0	41045.96	1	3
2039	0	15210.38	64128.03	32064.01	32064.01	347743.7	173871.9	173871.9	PHEV	7605.19	7605.19	1	8
2039	0	48961.29	209229.2	0	209229.2	1174803	0	1174803	BEV	0	48961.29	1	3
2039	0	18045.19	77113.58	37785.66	39327.93	431999.4	211679.7	220319.7	PHEV	8842.142	9203.046	1	8
2039	0	56704.66	245568	0	245568	1423250	0	1423250	BEV	0	56704.66	1	3
2039	0	20807.89	90111.67	43253.6	46858.07	521120.5	250137.8	270982.7	PHEV	9987.785	10820.1	1	8
2039	0	65243.33	286283.8	0	286283.8	1712347	0	1712347	BEV	0	65243.33	1	3
2039	0	23617.68	103633	48707.49	54925.47	618606.5	290745.1	327861.5	PHEV	11100.31	12517.37	1	8
2039	0	61243.73	272242.4	0	272242.4	1678292	0	1678292	BEV	0	61243.73	1	3
2039	0	25469.47	113217.6	51400.81	61816.83	696590.4	316252	380338.3	PHEV	11563.14	13906.33	1	8
2039	0	68070.07	306486.9	0	306486.9	1945575	0	1945575	BEV	0	68070.07	1	3
2039	0	28810.28	129718.9	56816.86	72902	822193.5	360120.8	462072.8	PHEV	12618.9	16191.38	1	8
2039	0	76710.19	349783.9	0	349783.9	2285327	0	2285327	BEV	0	76710.19	1	3
2039	0	32781.3	149476.5	63079.08	86397.41	975497.6	411660	563837.6	PHEV	13833.71	18947.59	1	8
2039	0	84677.62	390965	0	390965	2627925	0	2627925	BEV	0	84677.62	1	3
2039	0	36638.05	169161.6	68679.59	100482	1136109	461260.2	674848.7	PHEV	14875.05	21763	1	8
2039	0	93719.76	438082.7	0	438082.7	3028184	0	3028184	BEV	0	93719.76	1	3
2039	0	41053.78	191901.4	74841.54	117059.8	1325760	517046.6	808713.9	PHEV	16010.97	25042.81	1	8
2039	0	98968.35	468286.6	0	468286.6	3327813	0	3327813	BEV	0	98968.35	1	3
2039	0	43352.92	205132.1	80001.53	125130.6	1457310	568350.7	888958.9	PHEV	16907.64	26445.28	1	8
2039	0	104779.6	501786.2	0	501786.2	3664365	0	3664365	BEV	0	104779.6	1	3
2039	0	45898.51	219806.6	85724.56	134082	1605114	625994.5	979119.6	PHEV	17900.42	27998.09	1	8
2039	0	109340.3	529891.3	0	529891.3	3975374	0	3975374	BEV	0	109340.3	1	3

2039	0	47896.31	232118	90526.01	141592	1741831	679314.3	1062517	PHEV	18679.56	29216.75	1	8
2039	0	114578.3	561840.2	0	561840.2	4327440	0	4327440	BEV	0	114578.3	1	3
2039	0	50190.81	246113.1	95984.12	150129	1896538	739649.7	1156888	PHEV	19574.41	30616.39	1	8
2039	0	118624.8	588478.6	0	588478.6	4651554	0	4651554	BEV	0	118624.8	1	3
2039	0	51963.39	257782	100535	157247	2039091	795245.6	1243846	PHEV	20265.72	31697.67	1	8
2039	0	121974.3	612082.7	0	612082.7	4961584	0	4961584	BEV	0	121974.3	1	3
2039	0	53430.61	268121.8	104567.5	163554.3	2175400	848406	1326994	PHEV	20837.94	32592.67	1	8
2039	0	125650.1	637727.2	0	637727.2	5292719	0	5292719	BEV	0	125650.1	1	3
2039	0	55040.83	279355.3	108948.6	170406.7	2320530	905006.6	1415523	PHEV	21465.92	33574.9	1	8
2039	0	127235.6	653063.6	0	653063.6	5532733	0	5532733	BEV	0	127235.6	1	3
2039	0	55735.35	286073.4	111568.6	174504.8	2425043	945766.8	1479276	PHEV	21736.79	33998.56	1	8
2039	0	114843.5	596037.6	0	596037.6	5141785	0	5141785	BEV	0	114843.5	1	3
2039	0	50306.99	261093.3	101826.4	159266.9	2252522	878483.5	1374038	PHEV	19619.72	30687.26	1	8
2039	0	1.076085	4.228605	0	4.228605	19.5564	0	19.5564	BEV	0	1.076085	2	3
2039	0	9.33339	36.67668	22.00601	14.67067	189.8119	113.8871	75.92475	PHEV	5.600034	3.733356	2	8
2039	0	540.8095	2187.142	0	2187.142	11306.18	0	11306.18	BEV	0	540.8095	2	3
2039	0	415.3037	1679.571	998.1451	681.426	9049.181	5377.799	3671.382	PHEV	246.809	168.4946	2	8
2039	0	1209.068	4958.98	0	4958.98	26151.79	0	26151.79	BEV	0	1209.068	2	3
2039	0	931.202	3819.316	2247.94	1571.376	20872.03	12284.68	8587.348	PHEV	548.0789	383.1231	2	8
2039	0	1527.504	6352.552	0	6352.552	34329.96	0	34329.96	BEV	0	1527.504	2	3
2039	0	1121.994	4666.126	2719.685	1946.441	25661.48	14956.98	10704.5	PHEV	653.9622	468.0318	2	8
2039	0	2030.318	8559.961	0	8559.961	47372.7	0	47372.7	BEV	0	2030.318	2	3
2039	0	1292.46	5449.103	3144.911	2304.192	30535.63	17623.42	12912.21	PHEV	745.9343	546.5261	2	8
2039	0	2406.494	10283.81	0	10283.81	58294.81	0	58294.81	BEV	0	2406.494	2	3
2039	0	1510.944	6456.809	3689.605	2767.204	36909.8	21091.32	15818.49	PHEV	863.3967	647.5475	2	8
2039	0	2742.813	11878.16	0	11878.16	69024.01	0	69024.01	BEV	0	2742.813	2	3
2039	0	1787.418	7740.682	4379.014	3361.667	45182.43	25560.35	19622.08	PHEV	1011.168	776.2501	2	8
2039	0	3225.697	14154.16	0	14154.16	84430.91	0	84430.91	BEV	0	3225.697	2	3
2039	0	1965.686	8625.312	4830.175	3795.137	51480.24	28828.94	22651.31	PHEV	1100.784	864.9018	2	8
2039	0	3400.269	15114.98	0	15114.98	92479.72	0	92479.72	BEV	0	3400.269	2	3
2039	0	2143.809	9529.722	5241.347	4288.375	58145.84	31980.21	26165.63	PHEV	1179.095	964.7139	2	8
2039	0	3830.768	17248.11	0	17248.11	108281.8	0	108281.8	BEV	0	3830.768	2	3
2039	0	2716.144	12229.49	6603.925	5625.566	76276.43	41189.27	35087.16	PHEV	1466.717	1249.426	2	8
2039	0	4550.783	20750.71	0	20750.71	133625.6	0	133625.6	BEV	0	4550.783	2	3
2039	0	3227.377	14716.23	7799.6	6916.626	93814.02	49721.43	44092.59	PHEV	1710.51	1516.867	2	8
2039	0	5460.454	25211.46	0	25211.46	166442.4	0	166442.4	BEV	0	5460.454	2	3
2039	0	3633.483	16776.15	8723.6	8052.554	109376.9	56875.99	52500.91	PHEV	1889.411	1744.072	2	8
2039	0	6269.087	29304.16	0	29304.16	198439.1	0	198439.1	BEV	0	6269.087	2	3
2039	0	4262.376	19924.01	10161.24	9762.763	132827.2	67741.88	65085.33	PHEV	2173.812	2088.564	2	8
2039	0	6518.966	30845.66	0	30845.66	214323.2	0	214323.2	BEV	0	6518.966	2	3
2039	0	4432.27	20972.08	10695.76	10276.32	143229.1	73046.82	70182.24	PHEV	2260.458	2171.812	2	8
2039	0	6795.32	32542.59	0	32542.59	231970.6	0	231970.6	BEV	0	6795.32	2	3
2039	0	4620.164	22125.83	11284.17	10841.65	154836.9	78966.79	75870.06	PHEV	2356.284	2263.88	2	8
2039	0	7073.395	34279.51	0	34279.51	250663.4	0	250663.4	BEV	0	7073.395	2	3
2039	0	4809.228	23306.77	11886.45	11420.32	167180.1	85261.87	81918.27	PHEV	2452.706	2356.522	2	8
2039	0	7354.186	36061.62	0	36061.62	270475.6	0	270475.6	BEV	0	7354.186	2	3
2039	0	5000.139	24518.43	12504.4	12014.03	180317.1	91961.71	88355.37	PHEV	2550.071	2450.068	2	8

2039	0	7537.456	37392.11	0	37392.11	287643.9	0	287643.9	BEV	0	7537.456	2	3
2039	0	5124.744	25423.04	12965.75	12457.29	191754.4	97794.73	93959.64	PHEV	2613.62	2511.125	2	8
2039	0	7660.912	38443.45	0	38443.45	303278.1	0	303278.1	BEV	0	7660.912	2	3
2039	0	5208.683	26137.85	13330.3	12807.54	202233.2	103138.9	99094.27	PHEV	2656.428	2552.255	2	8
2039	0	7788.85	39531.68	0	39531.68	319734.3	0	319734.3	BEV	0	7788.85	2	3
2039	0	5295.668	26877.74	13707.65	13170.09	213302.3	108784.2	104518.1	PHEV	2700.791	2594.877	2	8
2039	0	7924.96	40676.52	0	40676.52	337141.2	0	337141.2	BEV	0	7924.96	2	3
2039	0	5388.21	27656.12	14104.62	13551.5	225042	114771.4	110270.6	PHEV	2747.987	2640.223	2	8
2039	0	7259.846	37678.6	0	37678.6	319855.1	0	319855.1	BEV	0	7259.846	2	3
2039	0	4935.997	25617.82	13065.09	12552.73	213618.9	108945.6	104673.2	PHEV	2517.358	2418.638	2	8
2039	0	259.2851	1033.746	620.2478	413.4985	5372.068	3223.241	2148.827	PHEV	155.5711	103.714	3	8
2039	0	1048.992	4242.332	0	4242.332	16486.67	0	16486.67	BEV	0	1048.992	3	3
2039	0	911.1113	3684.716	2189.774	1494.942	19474.49	11573.41	7901.078	PHEV	541.4604	369.6509	3	8
2039	0	2530.787	10380	0	10380	49083.66	0	49083.66	BEV	0	2530.787	3	3
2039	0	1826.422	7491.05	4409.018	3082.032	40310.2	23725.43	16584.77	PHEV	1074.98	751.4421	3	8
2039	0	3346.12	13915.78	0	13915.78	62440.25	0	62440.25	BEV	0	3346.12	3	3
2039	0	3222.848	13403.12	7812.102	5591.014	73513.07	42847.62	30665.45	PHEV	1878.46	1344.388	3	8
2039	0	4649.618	19603.11	0	19603.11	90015.6	0	90015.6	BEV	0	4649.618	3	3
2039	0	3707.594	15631.48	9021.596	6609.882	87446.48	50469.11	36977.37	PHEV	2139.812	1567.783	3	8
2039	0	6140.44	26240.31	0	26240.31	123841.9	0	123841.9	BEV	0	6140.44	3	3
2039	0	4391.399	18766.03	10723.45	8042.584	107160.5	61234.59	45925.94	PHEV	2509.371	1882.028	3	8
2039	0	7397.943	32037.9	0	32037.9	153451.3	0	153451.3	BEV	0	7397.943	3	3
2039	0	5156.43	22330.69	12632.79	9697.901	130257.6	73688.58	56569.01	PHEV	2917.066	2239.364	3	8
2039	0	8537.009	37459.88	0	37459.88	181797.2	0	181797.2	BEV	0	8537.009	3	3
2039	0	6274.352	27531.48	15417.63	12113.85	164265.2	91988.49	72276.67	PHEV	3513.637	2760.715	3	8
2039	0	10612.73	47176.04	0	47176.04	242274.9	0	242274.9	BEV	0	10612.73	3	3
2039	0	6592.81	29306.56	16118.61	13187.95	178799.8	98339.92	80459.93	PHEV	3626.045	2966.764	3	8
2039	0	12516.26	56354.72	0	56354.72	303209.6	0	303209.6	BEV	0	12516.26	3	3
2039	0	7681.827	34587.58	18677.29	15910.29	215920.3	116597	99323.33	PHEV	4148.187	3533.64	3	8
2039	0	15069.71	68715.02	0	68715.02	387453.4	0	387453.4	BEV	0	15069.71	3	3
2039	0	8867.405	40433.68	21429.85	19003.83	258413.4	136959.1	121454.3	PHEV	4699.724	4167.68	3	8
2039	0	17594.14	81233.9	0	81233.9	474680.9	0	474680.9	BEV	0	17594.14	3	3
2039	0	10123.87	46742.91	24306.31	22436.6	309438.4	160907.9	148530.4	PHEV	5264.412	4859.457	3	8
2039	0	20233.03	94577.08	0	94577.08	566184	0	566184	BEV	0	20233.03	3	3
2039	0	11602.06	54232.57	27658.61	26573.96	376813.5	192174.9	184638.6	PHEV	5917.053	5685.011	3	8
2039	0	21070.16	99697.25	0	99697.25	612217.5	0	612217.5	BEV	0	21070.16	3	3
2039	0	12082.09	57168.59	29155.98	28012.61	407042	207591.4	199450.6	PHEV	6161.867	5920.225	3	8
2039	0	21836.99	104576.7	0	104576.7	658699.9	0	658699.9	BEV	0	21836.99	3	3
2039	0	12521.81	59966.56	30582.94	29383.61	437630.1	223191.4	214438.8	PHEV	6386.121	6135.685	3	8
2039	0	22429.03	108696.9	0	108696.9	702325	0	702325	BEV	0	22429.03	3	3
2039	0	12861.3	62329.19	31787.89	30541.3	466400.1	237864	228536	PHEV	6559.261	6302.035	3	8
2039	0	23106.58	113304.3	0	113304.3	750909.7	0	750909.7	BEV	0	23106.58	3	3
2039	0	13249.82	64971.15	33135.29	31835.87	498535.8	254253.3	244282.5	PHEV	6757.408	6492.412	3	8
2039	0	23662.15	117384.2	0	117384.2	797876.8	0	797876.8	BEV	0	23662.15	3	3
2039	0	13568.4	67310.65	34328.43	32982.22	529705.1	270149.6	259555.5	PHEV	6919.883	6648.515	3	8
2039	0	24119.42	121034.4	0	121034.4	843554.3	0	843554.3	BEV	0	24119.42	3	3
2039	0	13830.6	69403.77	35395.92	34007.85	560104.4	285653.2	274451.2	PHEV	7053.608	6776.996	3	8

2039	0	24836.12	126053.7	0	126053.7	900716.4	0	900716.4	BEV	0	24836.12	3	3
2039	0	14241.57	72281.97	36863.8	35418.16	598223.8	305094.2	293129.7	PHEV	7263.203	6978.371	3	8
2039	0	25583.26	131311.4	0	131311.4	961638	0	961638	BEV	0	25583.26	3	3
2039	0	14670	75296.86	38401.4	36895.46	638907.3	325842.7	313064.6	PHEV	7481.701	7188.3	3	8
2039	0	23261.74	120728.4	0	120728.4	905367.1	0	905367.1	BEV	0	23261.74	3	3
2039	0	13338.79	69228.34	35306.45	33921.88	601655.3	306844.2	294811.1	PHEV	6802.784	6536.009	3	8
2039	0	417.1138	1639.099	983.4593	655.6395	7661.971	4597.183	3064.788	PHEV	250.2683	166.8455	4	8
2039	0	1.01591	4.05034	0	4.05034	13.45776	0	13.45776	BEV	0	1.01591	4	3
2039	0	1243.194	4956.501	2973.9	1982.6	24423.96	14654.38	9769.583	PHEV	745.9161	497.2774	4	8
2039	0	569.8615	2304.634	0	2304.634	8286.687	0	8286.687	BEV	0	569.8615	4	3
2039	0	1482.662	5996.183	3563.446	2432.737	32123.47	19090.52	13032.95	PHEV	881.1251	601.5373	4	8
2039	0	1298.402	5325.384	0	5325.384	21687.28	0	21687.28	BEV	0	1298.402	4	3
2039	0	1748.618	7171.939	4221.198	2950.741	38353.96	22574.05	15779.92	PHEV	1029.187	719.4314	4	8
2039	0	2174.991	9045.309	0	9045.309	38156.18	0	38156.18	BEV	0	2174.991	4	3
2039	0	2110.928	8778.884	5116.835	3662.049	46857.32	27311.12	19546.2	PHEV	1230.369	880.5584	4	8
2039	0	2455.54	10352.73	0	10352.73	41216.02	0	41216.02	BEV	0	2455.54	4	3
2039	0	2398.623	10112.76	5836.509	4276.254	55156.69	31833.29	23323.4	PHEV	1384.348	1014.275	4	8
2039	0	2843.472	12151.18	0	12151.18	48138.64	0	48138.64	BEV	0	2843.472	4	3
2039	0	2671.846	11417.76	6524.434	4893.325	63677.47	36387.12	27290.34	PHEV	1526.769	1145.077	4	8
2039	0	3240.999	14035.63	0	14035.63	56487.18	0	56487.18	BEV	0	3240.999	4	3
2039	0	3728.821	16148.22	9135.279	7012.941	92164.73	52138.91	40025.83	PHEV	2109.447	1619.374	4	8
2039	0	3857.485	16926.41	0	16926.41	70094.05	0	70094.05	BEV	0	3857.485	4	3
2039	0	4231.73	18568.58	10398.4	8170.174	108579.5	60804.52	47774.98	PHEV	2369.769	1861.961	4	8
2039	0	3941.185	17519.47	0	17519.47	74139.7	0	74139.7	BEV	0	3941.185	4	3
2039	0	4088.438	18174.05	9995.726	8178.321	108821.2	59851.65	48969.53	PHEV	2248.641	1839.797	4	8
2039	0	4500.999	20265.84	0	20265.84	89421.74	0	89421.74	BEV	0	4500.999	4	3
2039	0	4545.393	20465.72	11051.49	9414.233	125536.9	67789.93	57746.98	PHEV	2454.512	2090.881	4	8
2039	0	5096.898	23240.89	0	23240.89	107294.2	0	107294.2	BEV	0	5096.898	4	3
2039	0	5038.577	22974.95	12176.73	10798.23	144432.1	76549.03	67883.1	PHEV	2670.446	2368.131	4	8
2039	0	5743.637	26518.95	0	26518.95	130168	0	130168	BEV	0	5743.637	4	3
2039	0	5682.052	26234.6	13641.99	12592.61	169094.9	87929.33	81165.54	PHEV	2954.667	2727.385	4	8
2039	0	6539.83	30569.71	0	30569.71	159254.8	0	159254.8	BEV	0	6539.83	4	3
2039	0	6437.363	30090.75	15346.28	14744.47	198866.8	101422	97444.71	PHEV	3283.055	3154.308	4	8
2039	0	6823.049	32284.48	0	32284.48	172717.1	0	172717.1	BEV	0	6823.049	4	3
2039	0	6716.145	31778.65	16207.11	15571.54	215447.4	109878.2	105569.3	PHEV	3425.234	3290.911	4	8
2039	0	7155.736	34268.6	0	34268.6	188205.1	0	188205.1	BEV	0	7155.736	4	3
2039	0	7043.62	33731.68	17203.16	16528.52	234582.4	119637	114945.4	PHEV	3592.246	3451.374	4	8
2039	0	7432.244	36018.59	0	36018.59	203024.6	0	203024.6	BEV	0	7432.244	4	3
2039	0	7315.795	35454.25	18081.67	17372.58	252934.7	128996.7	123938	PHEV	3731.056	3584.74	4	8
2039	0	7747.241	37988.98	0	37988.98	219688	0	219688	BEV	0	7747.241	4	3
2039	0	7625.857	37393.77	19070.82	18322.95	273620.2	139546.3	134073.9	PHEV	3889.187	3736.67	4	8
2039	0	7929.057	39334.78	0	39334.78	233315	0	233315	BEV	0	7929.057	4	3
2039	0	7804.824	38718.48	19746.43	18972.06	290595.3	148203.6	142391.7	PHEV	3980.46	3824.364	4	8
2039	0	8124.09	40767.74	0	40767.74	247943.1	0	247943.1	BEV	0	8124.09	4	3
2039	0	7996.801	40128.99	20465.78	19663.2	308844.2	157510.5	151333.7	PHEV	4078.369	3918.433	4	8
2039	0	8370.747	42485.06	0	42485.06	264815.9	0	264815.9	BEV	0	8370.747	4	3
2039	0	8239.594	41819.4	21327.89	20491.51	329848.9	168223	161626	PHEV	4202.193	4037.401	4	8

2039	0	8550.42	43886.83	0	43886.83	280248.8	0	280248.8	BEV	0	8550.42	4	3
2039	0	8416.452	43199.21	22031.6	21167.61	349117.3	178049.8	171067.5	PHEV	4292.391	4124.062	4	8
2039	0	7443.341	38630.94	0	38630.94	252366.7	0	252366.7	BEV	0	7443.341	4	3
2039	0	7326.719	38025.67	19393.09	18632.58	313985.2	160132.5	153852.7	PHEV	3736.626	3590.092	4	8
2039	0	5.063982	15.25768	0	15.25768	43.34663	0	43.34663	BEV	0	5.063982	1	3
2039	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2039	0	768.2421	2842.849	0	2842.849	11363.53	0	11363.53	BEV	0	768.2421	1	3
2039	0	802.9961	2971.455	1782.873	1188.582	11038.85	6623.312	4415.541	PHEV	481.7976	321.1984	1	8
2039	0	1083.202	4070.401	0	4070.401	16844.39	0	16844.39	BEV	0	1083.202	1	3
2039	0	1367.624	5139.187	3083.512	2055.675	19831.12	11898.67	7932.45	PHEV	820.5741	547.0494	1	8
2039	0	2924.135	11155.69	0	11155.69	47975.45	0	47975.45	BEV	0	2924.135	1	3
2039	0	1390.505	5304.832	3182.899	2121.933	21320.21	12792.12	8528.083	PHEV	834.3029	556.202	1	8
2039	0	665.718	2577.88	0	2577.88	7867.296	0	7867.296	BEV	0	665.718	3	3
2039	0	60.58523	234.606	140.7636	93.84241	1131.62	678.9718	452.6479	PHEV	36.35114	24.23409	3	8
2039	0	2.252197	7.301939	0	7.301939	22.76402	0	22.76402	BEV	0	2.252197	1	3
2039	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2039	0	145.8684	531.4235	0	531.4235	2055.831	0	2055.831	BEV	0	145.8684	1	3
2039	0	306.6208	1117.072	670.2429	446.8286	3986.108	2391.665	1594.443	PHEV	183.9725	122.6483	1	8
2039	0	2237.325	8663.662	0	8663.662	38574.22	0	38574.22	BEV	0	2237.325	1	3
2039	0	1608.936	6230.332	3738.199	2492.133	26092.48	15655.49	10436.99	PHEV	965.3617	643.5744	1	8
2039	0	9.399565	28.8592	0	28.8592	83.82922	0	83.82922	BEV	0	9.399565	1	3
2039	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2039	0	166.3524	596.5197	0	596.5197	2239.697	0	2239.697	BEV	0	166.3524	1	3
2039	0	46.24108	165.815	99.48898	66.32599	567.3974	340.4384	226.959	PHEV	27.74465	18.49643	1	8
2039	0	144.6406	543.5232	0	543.5232	2243.08	0	2243.08	BEV	0	144.6406	2	3
2039	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2039	0	30.77656	115.6506	0	115.6506	332.3415	0	332.3415	BEV	0	30.77656	3	3
2039	0	13.93466	52.36299	31.41779	20.94519	242.2363	145.3418	96.89451	PHEV	8.360799	5.573866	3	8
2039	0	3.610082	11.08393	0	11.08393	21.82086	0	21.82086	BEV	0	3.610082	3	3
2039	0	0	0	0	0	0	0	0	PHEV	0	0	3	8
2039	0	17.02022	52.25668	0	52.25668	104.9768	0	104.9768	BEV	0	17.02022	4	3
2039	0	0	0	0	0	0	0	0	PHEV	0	0	4	8
2039	0	25.79882	91.03347	0	91.03347	332.8417	0	332.8417	BEV	0	25.79882	1	3
2039	0	2.750128	9.704076	5.822446	3.88163	31.50037	18.90022	12.60015	PHEV	1.650077	1.100051	1	8
2039	0	53.38502	194.4907	0	194.4907	746.5493	0	746.5493	BEV	0	53.38502	2	3
2039	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2039	0	2.658193	8.770522	0	8.770522	28.31449	0	28.31449	BEV	0	2.658193	1	3
2039	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2039	0	14.42106	49.23363	0	49.23363	164.6659	0	164.6659	BEV	0	14.42106	1	3
2039	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2039	0	13.02711	45.22102	0	45.22102	162.2353	0	162.2353	BEV	0	13.02711	1	3
2039	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2039	0	69.78311	258.2296	0	258.2296	1025.684	0	1025.684	BEV	0	69.78311	2	3
2039	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2039	0	2.14058	6.694794	0	6.694794	19.85405	0	19.85405	BEV	0	2.14058	1	3
2039	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2039	0	4.684933	15.72601	0	15.72601	52.16693	0	52.16693	BEV	0	4.684933	1	3

2039	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2039	0	7.125125	24.32525	0	24.32525	82.66447	0	82.66447	BEV	0	7.125125	2	3
2039	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2039	0	0.289553	0.95536	0	0.95536	2.398297	0	2.398297	BEV	0	0.289553	4	3
2039	0	0	0	0	0	0	0	0	PHEV	0	0	4	8
2039	0	4.15571	14.42572	0	14.42572	36.91911	0	36.91911	BEV	0	4.15571	3	3
2039	0	0	0	0	0	0	0	0	PHEV	0	0	3	8
2039	0	2.6803	9.611233	0	9.611233	25.78265	0	25.78265	BEV	0	2.6803	3	3
2039	0	1.855592	6.653931	3.992358	2.661572	28.928	17.3568	11.5712	PHEV	1.113355	0.742237	3	8
2039	0	0.450027	1.716871	0	1.716871	4.984915	0	4.984915	BEV	0	0.450027	4	3
2039	0	0	0	0	0	0	0	0	PHEV	0	0	4	8
2039	0	11.28367	33.35104	0	33.35104	90.40129	0	90.40129	BEV	0	11.28367	2	3
2039	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2039	0	4.033087	12.15161	0	12.15161	34.17217	0	34.17217	BEV	0	4.033087	2	3
2039	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2039	0	1.714993	5.658498	0	5.658498	18.03519	0	18.03519	BEV	0	1.714993	2	3
2039	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2039	0	0.943636	3.167521	0	3.167521	10.42803	0	10.42803	BEV	0	0.943636	2	3
2039	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2039	0	2.872521	9.971381	0	9.971381	35.54338	0	35.54338	BEV	0	2.872521	2	3
2039	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2039	0	2.975891	10.15972	0	10.15972	24.71944	0	24.71944	BEV	0	2.975891	3	3
2039	0	0	0	0	0	0	0	0	PHEV	0	0	3	8
2039	0	2.000995	7.404601	0	7.404601	20.70882	0	20.70882	BEV	0	2.000995	3	3
2039	0	1.530172	5.662342	3.397405	2.264937	25.78995	15.47397	10.31598	PHEV	0.918103	0.612069	3	8
2039	0	0.910813	2.692081	0	2.692081	5.364401	0	5.364401	BEV	0	0.910813	4	3
2039	0	0	0	0	0	0	0	0	PHEV	0	0	4	8
2039	0	2.083196	6.515322	0	6.515322	13.40038	0	13.40038	BEV	0	2.083196	4	3
2039	0	0	0	0	0	0	0	0	PHEV	0	0	4	8
2039	0	0.375414	1.217144	0	1.217144	2.668957	0	2.668957	BEV	0	0.375414	4	3
2039	0	0	0	0	0	0	0	0	PHEV	0	0	4	8
2039	0	14.50164	44.52395	0	44.52395	124.3656	0	124.3656	BEV	0	14.50164	2	3
2039	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2039	0	0.97487	3.104814	0	3.104814	9.261021	0	9.261021	BEV	0	0.97487	2	3
2039	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2039	0	7.38176	21.39529	0	21.39529	56.9876	0	56.9876	BEV	0	7.38176	2	3
2039	0	1.518409	4.052998	0	4.052998	10.25585	0	10.25585	BEV	0	1.518409	1	3
2039	0	0.499058	1.47506	0	1.47506	3.095728	0	3.095728	BEV	0	0.499058	3	3
2039	0	0	0	0	0	0	0	0	PHEV	0	0	3	8
2039	0	0.381873	1.303719	0	1.303719	3.110451	0	3.110451	BEV	0	0.381873	4	3
2039	0	0	0	0	0	0	0	0	PHEV	0	0	4	8
2039	0	1.937284	5.504038	0	5.504038	14.62539	0	14.62539	BEV	0	1.937284	1	3
2039	0	1.327948	3.925002	0	3.925002	10.76269	0	10.76269	BEV	0	1.327948	1	3
2039	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2039	0	2.068489	6.587827	0	6.587827	19.88249	0	19.88249	BEV	0	2.068489	1	3
2039	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2039	0	2.287001	6.497621	0	6.497621	16.94637	0	16.94637	BEV	0	2.287001	2	3

2039	0	0.359297	1.164893	0	1.164893	3.584633	0	3.584633	BEV	0	0.359297	2	3
2039	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2039	0	2.256651	6.282111	0	6.282111	16.34689	0	16.34689	BEV	0	2.256651	1	3
2039	0	2.183397	6.328359	0	6.328359	17.1495	0	17.1495	BEV	0	2.183397	1	3
2039	0	0.28501	0.760761	0	0.760761	1.939498	0	1.939498	BEV	0	0.28501	2	3
2039	0	2.008757	5.822182	0	5.822182	10.63571	0	10.63571	BEV	0	2.008757	3	3
2039	0	0.157498	0.474537	0	0.474537	0.906605	0	0.906605	BEV	0	0.157498	3	3
2039	0	0	0	0	0	0	0	0	PHEV	0	0	3	8
2039	0	2.502333	8.829708	0	8.829708	22.47864	0	22.47864	BEV	0	2.502333	3	3
2039	0	0	0	0	0	0	0	0	PHEV	0	0	3	8
2039	0	6.020403	21.93335	0	21.93335	58.40059	0	58.40059	BEV	0	6.020403	3	3
2039	0	1.543693	5.623936	3.374362	2.249574	28.06851	16.8411	11.2274	PHEV	0.926216	0.617477	3	8
2039	0	0.714529	1.90725	0	1.90725	3.306615	0	3.306615	BEV	0	0.714529	4	3
2039	0	0.198728	0.598763	0	0.598763	1.21167	0	1.21167	BEV	0	0.198728	4	3
2039	0	0	0	0	0	0	0	0	PHEV	0	0	4	8
2039	0	1.571421	4.284527	0	4.284527	11.12152	0	11.12152	BEV	0	1.571421	1	3
2039	0	0	0	0	0	0	0	0	BEV	0	0	2	3
2039	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2039	0	0	0	0	0	0	0	0	BEV	0	0	2	3
2039	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2039	0	0	0	0	0	0	0	0	BEV	0	0	3	3
2039	0	4.699244	17.9278	10.75668	7.171121	93.38992	56.03395	37.35597	PHEV	2.819546	1.879697	3	8
2039	0	0.135348	0.384537	0	0.384537	0.699272	0	0.699272	BEV	0	0.135348	3	3
2039	0	0.322305	0.934167	0	0.934167	1.739073	0	1.739073	BEV	0	0.322305	4	3
2039	0	0.140524	0.471701	0	0.471701	1.068377	0	1.068377	BEV	0	0.140524	3	3
2039	0	0	0	0	0	0	0	0	PHEV	0	0	3	8
2039	0	0.474213	1.673305	0	1.673305	5.61032	0	5.61032	BEV	0	0.474213	2	3
2039	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2039	0	0.310101	0.845499	0	0.845499	2.102089	0	2.102089	BEV	0	0.310101	2	3
2039	0	0.900987	2.508185	0	2.508185	6.271419	0	6.271419	BEV	0	0.900987	2	3
2039	0	0.33566	0.953646	0	0.953646	1.682251	0	1.682251	BEV	0	0.33566	4	3
2039	0	0.35714	1.28066	0	1.28066	4.864992	0	4.864992	BEV	0	0.35714	2	3
2039	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2039	0	0.106647	0.284667	0	0.284667	0.473698	0	0.473698	BEV	0	0.106647	3	3
2039	0	0.076722	0.248745	0	0.248745	0.506732	0	0.506732	BEV	0	0.076722	3	3
2039	0	0	0	0	0	0	0	0	PHEV	0	0	3	8
2039	0	0.651338	1.775891	0	1.775891	3.197452	0	3.197452	BEV	0	0.651338	4	3
2039	0	0.161158	0.504032	0	0.504032	1.454385	0	1.454385	BEV	0	0.161158	2	3
2039	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2039	0	0.352046	1.18172	0	1.18172	2.656013	0	2.656013	BEV	0	0.352046	4	3
2039	0	0	0	0	0	0	0	0	PHEV	0	0	4	8
2039	0	0.068615	0.191011	0	0.191011	0.346666	0	0.346666	BEV	0	0.068615	3	3
2039	0	0	0	0	0	0	0	0	BEV	0	0	4	3
2039	0	0.57699	2.135128	1.281077	0.854051	10.76881	6.461284	4.307523	PHEV	0.346194	0.230796	4	8
2040	0	6941.333	26879.13	0	26879.13	118428.8	0	118428.8	BEV	0	6941.333	1	3
2040	0	6261.317	24245.89	13092.78	11153.11	105423.1	56928.46	48494.62	PHEV	3381.111	2880.206	1	8
2040	0	10606.66	41680.16	0	41680.16	189907.1	0	189907.1	BEV	0	10606.66	1	3

2040	0	6855.035	26937.68	14546.35	12391.33	121858.4	65803.52	56054.85	PHEV	3701.719	3153.316	1	8
2040	0	15972.87	63682.41	0	63682.41	300846.4	0	300846.4	BEV	0	15972.87	1	3
2040	0	7833.666	31232.12	16553.03	14679.1	146480.4	77634.62	68845.79	PHEV	4151.843	3681.823	1	8
2040	0	22998.42	93010.21	0	93010.21	454723.1	0	454723.1	BEV	0	22998.42	1	3
2040	0	8769.424	35465.3	18441.96	17023.35	172781.5	89846.38	82935.12	PHEV	4560.1	4209.323	1	8
2040	0	28921.25	118620.2	0	118620.2	600472.1	0	600472.1	BEV	0	28921.25	1	3
2040	0	10877.72	44614.87	22753.58	21861.29	225157.2	114830.2	110327	PHEV	5547.638	5330.084	1	8
2040	0	35395.46	147201.9	0	147201.9	770954.9	0	770954.9	BEV	0	35395.46	1	3
2040	0	13116.48	54548.55	27274.27	27274.27	284892.9	142446.4	142446.4	PHEV	6558.239	6558.239	1	8
2040	0	43010	181333.2	0	181333.2	981661.3	0	981661.3	BEV	0	43010	1	3
2040	0	15851.78	66832.21	32747.78	34084.43	360831.8	176807.6	184024.2	PHEV	7767.372	8084.408	1	8
2040	0	50340.01	215121	0	215121	1202975	0	1202975	BEV	0	50340.01	1	3
2040	0	18472.36	78939.06	37890.75	41048.31	440314.4	211350.9	228963.5	PHEV	8866.735	9605.63	1	8
2040	0	58807.75	254675.8	0	254675.8	1470503	0	1470503	BEV	0	58807.75	1	3
2040	0	21288.04	92191.05	43329.79	48861.26	531052.9	249594.9	281458	PHEV	10005.38	11282.66	1	8
2040	0	55562.23	243803.7	0	243803.7	1451750	0	1451750	BEV	0	55562.23	1	3
2040	0	23106.7	101390.8	46031.43	55359.39	602345.3	273464.8	328880.5	PHEV	10490.44	12616.26	1	8
2040	0	62925.21	279717	0	279717	1715970	0	1715970	BEV	0	62925.21	1	3
2040	0	26632.75	118388.7	51854.24	66534.44	724945.7	317526.2	407419.5	PHEV	11665.14	14967.6	1	8
2040	0	71059.88	319948.5	0	319948.5	2021146	0	2021146	BEV	0	71059.88	1	3
2040	0	30366.7	136726.7	57698.65	79028.01	862500.9	363975.4	498525.5	PHEV	12814.75	17551.95	1	8
2040	0	79843.83	364072.7	0	364072.7	2367182	0	2367182	BEV	0	79843.83	1	3
2040	0	34546.58	157525.9	63955.5	93570.36	1023159	415402.4	607756.2	PHEV	14025.91	20520.67	1	8
2040	0	88369.96	408012.9	0	408012.9	2729314	0	2729314	BEV	0	88369.96	1	3
2040	0	38710.31	178729.4	69704.45	109024.9	1194688	465928.4	728759.8	PHEV	15097.02	23613.29	1	8
2040	0	94643.66	442401.4	0	442401.4	3043545	0	3043545	BEV	0	94643.66	1	3
2040	0	41458.49	193793.2	75579.33	118213.8	1332503	519676	812826.6	PHEV	16168.81	25289.68	1	8
2040	0	99914.28	472762.4	0	472762.4	3343713	0	3343713	BEV	0	99914.28	1	3
2040	0	43767.28	207092.7	80766.17	126326.6	1464292	571073.8	893218	PHEV	17069.24	26698.04	1	8
2040	0	105743	506400.2	0	506400.2	3680567	0	3680567	BEV	0	105743	1	3
2040	0	46320.55	221827.7	86512.81	135314.9	1612235	628771.5	983463.1	PHEV	18065.01	28255.53	1	8
2040	0	110316.4	534621.8	0	534621.8	3991913	0	3991913	BEV	0	110316.4	1	3
2040	0	48323.9	234190.2	91334.17	142856	1749106	682151.3	1066955	PHEV	18846.32	29477.58	1	8
2040	0	115566.5	566686	0	566686	4344141	0	4344141	BEV	0	115566.5	1	3
2040	0	50623.7	248235.8	96811.98	151423.9	1903888	742516.4	1161372	PHEV	19743.24	30880.46	1	8
2040	0	119616.2	593396.7	0	593396.7	4668297	0	4668297	BEV	0	119616.2	1	3
2040	0	52397.66	259936.4	101375.2	158561.2	2046468	798122.4	1248345	PHEV	20435.09	31962.57	1	8
2040	0	122945.3	616955.6	0	616955.6	4977467	0	4977467	BEV	0	122945.3	1	3
2040	0	53855.98	270256.3	105400	164856.4	2182404	851137.6	1331266	PHEV	21003.83	32852.15	1	8
2040	0	126587.4	642484.3	0	642484.3	5306999	0	5306999	BEV	0	126587.4	1	3
2040	0	55451.39	281439.1	109761.3	171677.9	2326839	907467.1	1419372	PHEV	21626.04	33825.35	1	8
2040	0	128122.5	657615.9	0	657615.9	5544825	0	5544825	BEV	0	128122.5	1	3
2040	0	56123.86	288067.5	112346.3	175721.2	2430396	947854.3	1482541	PHEV	21888.31	34235.56	1	8
2040	0	115577.5	599847	0	599847	5149871	0	5149871	BEV	0	115577.5	1	3
2040	0	50628.5	262761.9	102477.2	160284.8	2256115	879884.9	1376230	PHEV	19745.12	30883.39	1	8
2040	0	0.955913	3.70161	0	3.70161	16.48697	0	16.48697	BEV	0	0.955913	2	3
2040	0	8.29108	32.1058	19.26348	12.84232	163.6474	98.18841	65.45894	PHEV	4.974648	3.316432	2	8

2040	0	487.1031	1942.036	0	1942.036	9783.485	0	9783.485	BEV	0	487.1031	2	3
2040	0	374.061	1491.347	886.2865	605.061	7909.399	4700.443	3208.956	PHEV	222.2991	151.7619	2	8
2040	0	1096.609	4434.906	0	4434.906	22760.19	0	22760.19	BEV	0	1096.609	2	3
2040	0	844.5882	3415.683	2010.374	1405.31	18343.81	10796.64	7547.166	PHEV	497.1005	347.4877	2	8
2040	0	1396.392	5727.289	0	5727.289	30109.45	0	30109.45	BEV	0	1396.392	2	3
2040	0	1025.689	4206.853	2451.994	1754.858	22634.97	13192.95	9442.016	PHEV	597.8301	427.8588	2	8
2040	0	1862.597	7746.13	0	7746.13	41674.35	0	41674.35	BEV	0	1862.597	2	3
2040	0	1185.693	4931.035	2845.911	2085.123	26999.53	15582.58	11416.94	PHEV	684.314	501.3786	2	8
2040	0	2231.564	9408.431	0	9408.431	51804.76	0	51804.76	BEV	0	2231.564	2	3
2040	0	1401.113	5907.189	3375.537	2531.653	32957.77	18833.01	14124.76	PHEV	800.6358	600.4769	2	8
2040	0	2549.71	10895.83	0	10895.83	61461.49	0	61461.49	BEV	0	2549.71	2	3
2040	0	1661.578	7100.522	4016.867	3083.655	40412.73	22862.06	17550.67	PHEV	939.9786	721.5997	2	8
2040	0	3033.982	13139.11	0	13139.11	76055.97	0	76055.97	BEV	0	3033.982	2	3
2040	0	1848.858	8006.758	4483.785	3522.974	46553.97	26070.22	20483.75	PHEV	1035.361	813.4977	2	8
2040	0	3189.909	13997.13	0	13997.13	83088.85	0	83088.85	BEV	0	3189.909	2	3
2040	0	2011.181	8824.94	4853.717	3971.223	52415.15	28828.33	23586.82	PHEV	1106.149	905.0313	2	8
2040	0	3631.269	16141.83	0	16141.83	98280.58	0	98280.58	BEV	0	3631.269	2	3
2040	0	2574.692	11445.1	6180.353	5264.745	69472.44	37515.12	31957.32	PHEV	1390.334	1184.358	2	8
2040	0	4305.306	19384.72	0	19384.72	121074.3	0	121074.3	BEV	0	4305.306	2	3
2040	0	3053.286	13747.48	7286.166	6461.317	85273.96	45195.2	40078.76	PHEV	1618.242	1435.045	2	8
2040	0	5219.894	23801.73	0	23801.73	152414.7	0	152414.7	BEV	0	5219.894	2	3
2040	0	3473.41	15838.09	8235.806	7602.283	100414	52215.27	48198.71	PHEV	1806.173	1667.237	2	8
2040	0	5990.302	27657.82	0	27657.82	181681.7	0	181681.7	BEV	0	5990.302	2	3
2040	0	4072.829	18804.66	9590.376	9214.283	121887.3	62162.54	59724.79	PHEV	2077.143	1995.686	2	8
2040	0	6327.824	29578.72	0	29578.72	199332.7	0	199332.7	BEV	0	6327.824	2	3
2040	0	4302.311	20110.68	10256.45	9854.234	133428	68048.26	65379.7	PHEV	2194.179	2108.133	2	8
2040	0	6578.123	31125.57	0	31125.57	215226.7	0	215226.7	BEV	0	6578.123	2	3
2040	0	4472.49	21162.39	10792.82	10369.57	143836.1	73356.4	70479.68	PHEV	2280.97	2191.52	2	8
2040	0	6854.582	32826.39	0	32826.39	232867.6	0	232867.6	BEV	0	6854.582	2	3
2040	0	4660.456	22318.79	11382.58	10936.2	155439.7	79274.23	76165.44	PHEV	2376.833	2283.624	2	8
2040	0	7133.159	34569.14	0	34569.14	251565.3	0	251565.3	BEV	0	7133.159	2	3
2040	0	4849.861	23503.69	11986.88	11516.81	167786.4	85571.07	82215.34	PHEV	2473.429	2376.432	2	8
2040	0	7414.331	36356.54	0	36356.54	271374.9	0	271374.9	BEV	0	7414.331	2	3
2040	0	5041.031	24718.95	12606.66	12112.28	180921.7	92270.08	88651.64	PHEV	2570.926	2470.105	2	8
2040	0	7597.229	37688.64	0	37688.64	288530.6	0	288530.6	BEV	0	7597.229	2	3
2040	0	5165.384	25624.64	13068.57	12556.08	192351.2	98099.13	94252.1	PHEV	2634.346	2531.038	2	8
2040	0	7719.003	38734.96	0	38734.96	304105.8	0	304105.8	BEV	0	7719.003	2	3
2040	0	5248.179	26336.05	13431.38	12904.66	202790.7	103423.3	99367.44	PHEV	2676.571	2571.608	2	8
2040	0	7844.748	39815.39	0	39815.39	320477.7	0	320477.7	BEV	0	7844.748	2	3
2040	0	5333.674	27070.64	13806.02	13264.61	213804.1	109040.1	104764	PHEV	2720.174	2613.5	2	8
2040	0	7979.02	40953.99	0	40953.99	337802.8	0	337802.8	BEV	0	7979.02	2	3
2040	0	5424.966	27844.77	14200.84	13643.94	225489.1	114999.4	110489.7	PHEV	2766.732	2658.233	2	8
2040	0	7306.245	37919.41	0	37919.41	320342.9	0	320342.9	BEV	0	7306.245	2	3
2040	0	4967.543	25781.55	13148.59	12632.96	213949	109114	104835	PHEV	2533.447	2434.096	2	8
2040	0	223.1453	876.8764	526.1258	350.7506	4465.246	2679.148	1786.098	PHEV	133.8872	89.25813	3	8
2040	0	888.4582	3542.203	0	3542.203	13328.04	0	13328.04	BEV	0	888.4582	3	3
2040	0	771.6785	3076.613	1828.387	1248.226	15916.86	9459.16	6457.696	PHEV	458.5975	313.081	3	8

2040	0	2128.043	8606.233	0	8606.233	39642.66	0	39642.66	BEV	0	2128.043	3	3
2040	0	1535.769	6210.957	3655.592	2555.365	32675.42	19231.82	13443.6	PHEV	903.9097	631.8592	3	8
2040	0	2862.038	11738.62	0	11738.62	51167.69	0	51167.69	BEV	0	2862.038	3	3
2040	0	2756.599	11306.17	6589.879	4716.286	60582.04	35310.68	25271.37	PHEV	1606.704	1149.896	3	8
2040	0	4076.081	16951.52	0	16951.52	75590.3	0	75590.3	BEV	0	4076.081	3	3
2040	0	3250.257	13517.1	7801.3	5715.804	73813.06	42600.68	31212.38	PHEV	1875.863	1374.394	3	8
2040	0	5449.378	22974.96	0	22974.96	105272.8	0	105272.8	BEV	0	5449.378	3	3
2040	0	3897.179	16430.78	9389.016	7041.762	91515.29	52294.45	39220.84	PHEV	2226.959	1670.219	3	8
2040	0	6599.921	28203.84	0	28203.84	131091.4	0	131091.4	BEV	0	6599.921	3	3
2040	0	4600.202	19658.32	11120.99	8537.327	111766.5	63227.9	48538.59	PHEV	2602.4	1997.802	3	8
2040	0	7760.738	33609.04	0	33609.04	158192.2	0	158192.2	BEV	0	7760.738	3	3
2040	0	5703.824	24701.27	13832.71	10868.56	143525.5	80374.28	63151.22	PHEV	3194.142	2509.683	3	8
2040	0	9708.241	42599.18	0	42599.18	212274.2	0	212274.2	BEV	0	9708.241	3	3
2040	0	6030.923	26463.33	14554.83	11908.5	157122.9	86417.61	70705.31	PHEV	3317.008	2713.916	3	8
2040	0	11692.57	51976.17	0	51976.17	271384.8	0	271384.8	BEV	0	11692.57	3	3
2040	0	7176.289	31900.25	17226.14	14674.12	193678.4	104586.3	89092.05	PHEV	3875.196	3301.093	3	8
2040	0	14053.54	63276.36	0	63276.36	346287.4	0	346287.4	BEV	0	14053.54	3	3
2040	0	8269.466	37233.44	19733.72	17499.71	231312.6	122595.7	108716.9	PHEV	4382.817	3886.649	3	8
2040	0	16709.76	76193.35	0	76193.35	432070.8	0	432070.8	BEV	0	16709.76	3	3
2040	0	9614.988	43842.52	22798.11	21044.41	282037.6	146659.5	135378	PHEV	4999.794	4615.194	3	8
2040	0	19268.44	88964.29	0	88964.29	516808.6	0	516808.6	BEV	0	19268.44	3	3
2040	0	11048.94	51014.08	26017.18	24996.9	344441.3	175665	168776.2	PHEV	5634.961	5413.983	3	8
2040	0	20427.49	95486.04	0	95486.04	568872.7	0	568872.7	BEV	0	20427.49	3	3
2040	0	11713.57	54753.79	27924.43	26829.36	378607.4	193089.8	185517.6	PHEV	5973.921	5739.649	3	8
2040	0	21266.39	100625.7	0	100625.7	614947.4	0	614947.4	BEV	0	21266.39	3	3
2040	0	12194.61	57701	29427.51	28273.49	408862.6	208519.9	200342.7	PHEV	6219.252	5975.36	3	8
2040	0	22032.98	105515.3	0	105515.3	661418.6	0	661418.6	BEV	0	22032.98	3	3
2040	0	12634.2	60504.79	30857.44	29647.35	439443.6	224116.3	215327.4	PHEV	6443.44	6190.756	3	8
2040	0	22624.18	109642.6	0	109642.6	705034.6	0	705034.6	BEV	0	22624.18	3	3
2040	0	12973.2	62871.5	32064.47	30807.04	468207.8	238786	229421.8	PHEV	6616.332	6356.868	3	8
2040	0	23300.45	114254.9	0	114254.9	753571.7	0	753571.7	BEV	0	23300.45	3	3
2040	0	13360.99	65516.28	33413.3	32102.98	500312.1	255159.2	245152.9	PHEV	6814.105	6546.885	3	8
2040	0	23854.02	118336	0	118336	800485.2	0	800485.2	BEV	0	23854.02	3	3
2040	0	13678.42	67856.45	34606.79	33249.66	531447	271038	260409	PHEV	6975.994	6702.426	3	8
2040	0	24306.01	121970.7	0	121970.7	845990.9	0	845990.9	BEV	0	24306.01	3	3
2040	0	13937.6	69940.69	35669.75	34270.94	561732.1	286483.4	275248.7	PHEV	7108.176	6829.424	3	8
2040	0	25016.97	126971.6	0	126971.6	902910.6	0	902910.6	BEV	0	25016.97	3	3
2040	0	14345.28	72808.32	37132.24	35676.08	599691.6	305842.7	293848.9	PHEV	7316.093	7029.187	3	8
2040	0	25759.83	132217.7	0	132217.7	963609	0	963609	BEV	0	25759.83	3	3
2040	0	14771.25	75816.55	38666.44	37150.11	640226.8	326515.7	313711.2	PHEV	7533.338	7237.913	3	8
2040	0	23410.41	121500	0	121500	906750.9	0	906750.9	BEV	0	23410.41	3	3
2040	0	13424.04	69670.78	35532.1	34138.68	602582.8	307317.2	295265.6	PHEV	6846.262	6577.781	3	8
2040	0	361.6476	1400.419	840.2512	560.1675	6405.357	3843.214	2562.143	PHEV	216.9885	144.659	4	8
2040	0	0.886078	3.48195	0	3.48195	11.14472	0	11.14472	BEV	0	0.886078	4	3
2040	0	1084.315	4260.947	2556.568	1704.379	20545.7	12327.42	8218.281	PHEV	650.5892	433.7261	4	8
2040	0	503.4656	2007.272	0	2007.272	6965.214	0	6965.214	BEV	0	503.4656	4	3
2040	0	1309.914	5222.509	3103.662	2118.846	27396.58	16281.4	11115.18	PHEV	778.4631	531.4508	4	8

2040	0	1154.705	4669.856	0	4669.856	18419.26	0	18419.26	BEV	0	1154.705	4	3
2040	0	1555.094	6289.109	3701.59	2587.519	32874.78	19349.16	13525.62	PHEV	915.2836	639.8099	4	8
2040	0	1953.761	8013.333	0	8013.333	32754.92	0	32754.92	BEV	0	1953.761	4	3
2040	0	1896.214	7777.304	4533.057	3244.247	40485.57	23597.3	16888.27	PHEV	1105.222	790.9923	4	8
2040	0	2186.943	9095.015	0	9095.015	34982.95	0	34982.95	BEV	0	2186.943	4	3
2040	0	2136.252	8884.202	5127.454	3756.748	47207.29	27245.35	19961.94	PHEV	1232.923	903.3294	4	8
2040	0	2573.488	10850.01	0	10850.01	41506.05	0	41506.05	BEV	0	2573.488	4	3
2040	0	2418.158	10195.12	5825.784	4369.338	55357.67	31632.96	23724.72	PHEV	1381.804	1036.353	4	8
2040	0	2969.938	12691.61	0	12691.61	49326.63	0	49326.63	BEV	0	2969.938	4	3
2040	0	3416.961	14601.9	8260.505	6341.398	81074.27	45864.87	35209.4	PHEV	1933.023	1483.937	4	8
2040	0	3574.518	15479.99	0	15479.99	61931.4	0	61931.4	BEV	0	3574.518	4	3
2040	0	3921.31	16981.82	9509.821	7472.002	96539.07	54061.88	42477.19	PHEV	2195.934	1725.377	4	8
2040	0	3661.556	16066.69	0	16066.69	65709.01	0	65709.01	BEV	0	3661.556	4	3
2040	0	3798.362	16666.98	9166.841	7500.142	96979.13	53338.52	43640.61	PHEV	2089.099	1709.263	4	8
2040	0	4235.762	18828.94	0	18828.94	80341.33	0	80341.33	BEV	0	4235.762	4	3
2040	0	4277.541	19014.65	10267.91	8746.74	113295.4	61179.52	52115.89	PHEV	2309.872	1967.669	4	8
2040	0	4783.289	21536.86	0	21536.86	96211.89	0	96211.89	BEV	0	4783.289	4	3
2040	0	4728.557	21290.42	11283.92	10006.5	129958.2	68877.83	61080.34	PHEV	2506.135	2222.422	4	8
2040	0	5454.921	24873.41	0	24873.41	118220.7	0	118220.7	BEV	0	5454.921	4	3
2040	0	5396.433	24606.71	12795.49	11811.22	153939.1	80048.34	73890.78	PHEV	2806.145	2590.288	4	8
2040	0	6186.093	28561.81	0	28561.81	144171.2	0	144171.2	BEV	0	6186.093	4	3
2040	0	6089.17	28114.3	14338.3	13776.01	180335.1	91970.92	88364.21	PHEV	3105.476	2983.693	4	8
2040	0	6602.814	30864.13	0	30864.13	160013	0	160013	BEV	0	6602.814	4	3
2040	0	6499.361	30380.55	15494.08	14886.47	199816.7	101906.5	97910.19	PHEV	3314.674	3184.687	4	8
2040	0	6886.633	32585.34	0	32585.34	173487.3	0	173487.3	BEV	0	6886.633	4	3
2040	0	6778.733	32074.79	16358.14	15716.65	216414.7	110371.5	106043.2	PHEV	3457.154	3321.579	4	8
2040	0	7219.842	34575.61	0	34575.61	188978.1	0	188978.1	BEV	0	7219.842	4	3
2040	0	7106.722	34033.88	17357.28	16676.6	235556.1	120133.6	115422.5	PHEV	3624.428	3482.294	4	8
2040	0	7496.695	36330.93	0	36330.93	203801.8	0	203801.8	BEV	0	7496.695	4	3
2040	0	7379.237	35761.7	18238.47	17523.23	253917.3	129497.8	124419.5	PHEV	3763.411	3615.826	4	8
2040	0	7812.1	38307.02	0	38307.02	220463.5	0	220463.5	BEV	0	7812.1	4	3
2040	0	7689.7	37706.83	19230.48	18476.35	274605.1	140048.6	134556.5	PHEV	3921.747	3767.953	4	8
2040	0	7993.219	39653.08	0	39653.08	234075.6	0	234075.6	BEV	0	7993.219	4	3
2040	0	7867.981	39031.79	19906.21	19125.58	291566.3	148698.8	142867.5	PHEV	4012.67	3855.31	4	8
2040	0	8186.709	41081.97	0	41081.97	248655.8	0	248655.8	BEV	0	8186.709	4	3
2040	0	8058.439	40438.29	20623.53	19814.76	309759.8	157977.5	151782.3	PHEV	4109.804	3948.635	4	8
2040	0	8431.506	42793.43	0	42793.43	265460	0	265460	BEV	0	8431.506	4	3
2040	0	8299.401	42122.94	21482.7	20640.24	330685.2	168649.5	162035.8	PHEV	4232.694	4066.706	4	8
2040	0	8609.57	44190.43	0	44190.43	280835.6	0	280835.6	BEV	0	8609.57	4	3
2040	0	8474.675	43498.05	22184	21314.04	349887.8	178442.8	171445	PHEV	4322.084	4152.591	4	8
2040	0	7490.912	38877.83	0	38877.83	252761.7	0	252761.7	BEV	0	7490.912	4	3
2040	0	7373.544	38268.7	19517.03	18751.66	314515.7	160403	154112.7	PHEV	3760.508	3613.037	4	8
2040	0	4.837548	14.29829	0	14.29829	39.51445	0	39.51445	BEV	0	4.837548	1	3
2040	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2040	0	642.8461	2341.998	0	2341.998	9008.713	0	9008.713	BEV	0	642.8461	1	3
2040	0	671.9274	2447.946	1468.767	979.1782	8691.787	5215.072	3476.715	PHEV	403.1564	268.7709	1	8
2040	0	895.4601	3313.614	0	3313.614	13196.7	0	13196.7	BEV	0	895.4601	1	3

2040	0	1130.586	4183.688	2510.213	1673.475	15446.12	9267.669	6178.446	PHEV	678.3515	452.2343	1	8
2040	0	2396.672	9006.095	0	9006.095	37286.44	0	37286.44	BEV	0	2396.672	1	3
2040	0	1139.682	4282.64	2569.584	1713.056	16476.02	9885.611	6590.407	PHEV	683.8092	455.8728	1	8
2040	0	580.2623	2213.724	0	2213.724	6504.091	0	6504.091	BEV	0	580.2623	3	3
2040	0	52.80813	201.4651	120.8791	80.58605	956.8296	574.0978	382.7319	PHEV	31.68488	21.12325	3	8
2040	0	2.124259	6.765448	0	6.765448	20.36687	0	20.36687	BEV	0	2.124259	1	3
2040	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2040	0	124.54	446.5853	0	446.5853	1662.17	0	1662.17	BEV	0	124.54	1	3
2040	0	261.7875	938.7387	563.2432	375.4955	3196.322	1917.793	1278.529	PHEV	157.0725	104.715	1	8
2040	0	1823.238	6955.726	0	6955.726	29821.17	0	29821.17	BEV	0	1823.238	1	3
2040	0	1311.152	5002.097	3001.258	2000.839	20067.74	12040.64	8027.097	PHEV	786.6912	524.4608	1	8
2040	0	9.020166	27.17758	0	27.17758	76.5909	0	76.5909	BEV	0	9.020166	1	3
2040	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2040	0	143.511	506.3915	0	506.3915	1829.835	0	1829.835	BEV	0	143.511	1	3
2040	0	39.89184	140.762	84.45717	56.30478	459.5149	275.709	183.806	PHEV	23.9351	15.95674	1	8
2040	0	127.3417	471.2227	0	471.2227	1871.64	0	1871.64	BEV	0	127.3417	2	3
2040	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2040	0	27.38109	101.3226	0	101.3226	280.2136	0	280.2136	BEV	0	27.38109	3	3
2040	0	12.3973	45.87571	27.52543	18.35028	208.2536	124.9521	83.30143	PHEV	7.438379	4.95892	3	8
2040	0	3.316796	9.99344	0	9.99344	19.08902	0	19.08902	BEV	0	3.316796	3	3
2040	0	0	0	0	0	0	0	0	PHEV	0	0	3	8
2040	0	16.78755	50.58054	0	50.58054	98.62026	0	98.62026	BEV	0	16.78755	4	3
2040	0	0	0	0	0	0	0	0	PHEV	0	0	4	8
2040	0	22.39345	77.73438	0	77.73438	273.5395	0	273.5395	BEV	0	22.39345	1	3
2040	0	2.387119	8.286405	4.971843	3.314562	25.60381	15.36229	10.24152	PHEV	1.432271	0.954848	1	8
2040	0	46.48577	166.6924	0	166.6924	615.8722	0	615.8722	BEV	0	46.48577	2	3
2040	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2040	0	2.435141	7.895069	0	7.895069	24.59033	0	24.59033	BEV	0	2.435141	1	3
2040	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2040	0	13.04104	43.77512	0	43.77512	141.0821	0	141.0821	BEV	0	13.04104	1	3
2040	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2040	0	11.59628	39.58981	0	39.58981	136.7598	0	136.7598	BEV	0	11.59628	1	3
2040	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2040	0	61.18631	222.9121	0	222.9121	852.0353	0	852.0353	BEV	0	61.18631	2	3
2040	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2040	0	2.066279	6.344033	0	6.344033	18.23193	0	18.23193	BEV	0	2.066279	1	3
2040	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2040	0	4.286931	14.14443	0	14.14443	45.21555	0	45.21555	BEV	0	4.286931	1	3
2040	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2040	0	6.501898	21.82505	0	21.82505	71.41773	0	71.41773	BEV	0	6.501898	2	3
2040	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2040	0	0.272446	0.883307	0	0.883307	2.145353	0	2.145353	BEV	0	0.272446	4	3
2040	0	0	0	0	0	0	0	0	PHEV	0	0	4	8
2040	0	3.722735	12.70946	0	12.70946	31.30854	0	31.30854	BEV	0	3.722735	3	3
2040	0	0	0	0	0	0	0	0	PHEV	0	0	3	8
2040	0	2.373553	8.375294	0	8.375294	21.63341	0	21.63341	BEV	0	2.373553	3	3
2040	0	1.643229	5.79828	3.478968	2.319312	24.71866	14.83119	9.887462	PHEV	0.985937	0.657291	3	8

2040	0	0.385556	1.448824	0	1.448824	4.04706	0	4.04706	BEV	0	0.385556	4	3
2040	0	0	0	0	0	0	0	0	PHEV	0	0	4	8
2040	0	10.09099	29.24773	0	29.24773	77.29272	0	77.29272	BEV	0	10.09099	2	3
2040	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2040	0	3.672872	10.85587	0	10.85587	29.67788	0	29.67788	BEV	0	3.672872	2	3
2040	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2040	0	1.585633	5.140843	0	5.140843	15.80758	0	15.80758	BEV	0	1.585633	2	3
2040	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2040	0	0.877673	2.89582	0	2.89582	9.19056	0	9.19056	BEV	0	0.877673	2	3
2040	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2040	0	2.603609	8.888748	0	8.888748	30.51323	0	30.51323	BEV	0	2.603609	2	3
2040	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2040	0	2.748185	9.224888	0	9.224888	21.59896	0	21.59896	BEV	0	2.748185	3	3
2040	0	0	0	0	0	0	0	0	PHEV	0	0	3	8
2040	0	1.773706	6.461913	0	6.461913	17.38874	0	17.38874	BEV	0	1.773706	3	3
2040	0	1.356364	4.941463	2.964878	1.976585	22.14104	13.28463	8.856417	PHEV	0.813818	0.542545	3	8
2040	0	0.908896	2.634345	0	2.634345	5.121048	0	5.121048	BEV	0	0.908896	4	3
2040	0	0	0	0	0	0	0	0	PHEV	0	0	4	8
2040	0	1.967509	6.040784	0	6.040784	12.03638	0	12.03638	BEV	0	1.967509	4	3
2040	0	0	0	0	0	0	0	0	PHEV	0	0	4	8
2040	0	0.350564	1.116493	0	1.116493	2.363791	0	2.363791	BEV	0	0.350564	4	3
2040	0	0	0	0	0	0	0	0	PHEV	0	0	4	8
2040	0	12.87876	38.80346	0	38.80346	105.1317	0	105.1317	BEV	0	12.87876	2	3
2040	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2040	0	0.860123	2.690085	0	2.690085	7.755106	0	7.755106	BEV	0	0.860123	2	3
2040	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2040	0	6.627055	18.82819	0	18.82819	49.03422	0	49.03422	BEV	0	6.627055	2	3
2040	0	0.476634	1.381476	0	1.381476	2.828658	0	2.828658	BEV	0	0.476634	3	3
2040	0	0	0	0	0	0	0	0	PHEV	0	0	3	8
2040	0	0.341429	1.146081	0	1.146081	2.632315	0	2.632315	BEV	0	0.341429	4	3
2040	0	0	0	0	0	0	0	0	PHEV	0	0	4	8
2040	0	1.873253	5.214798	0	5.214798	13.59494	0	13.59494	BEV	0	1.873253	1	3
2040	0	1.268283	3.675991	0	3.675991	9.831755	0	9.831755	BEV	0	1.268283	1	3
2040	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2040	0	1.927003	6.026818	0	6.026818	17.59033	0	17.59033	BEV	0	1.927003	1	3
2040	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2040	0	2.07547	5.777736	0	5.777736	14.78479	0	14.78479	BEV	0	2.07547	2	3
2040	0	0.331133	1.054609	0	1.054609	3.133946	0	3.133946	BEV	0	0.331133	2	3
2040	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2040	0	2.202915	6.006313	0	6.006313	15.39191	0	15.39191	BEV	0	2.202915	1	3
2040	0	2.109011	5.991932	0	5.991932	15.88125	0	15.88125	BEV	0	2.109011	1	3
2040	0	1.944347	5.524103	0	5.524103	9.866049	0	9.866049	BEV	0	1.944347	3	3
2040	0	0.154242	0.455891	0	0.455891	0.847102	0	0.847102	BEV	0	0.154242	3	3
2040	0	0	0	0	0	0	0	0	PHEV	0	0	3	8
2040	0	2.216194	7.693074	0	7.693074	18.8523	0	18.8523	BEV	0	2.216194	3	3
2040	0	0	0	0	0	0	0	0	PHEV	0	0	3	8
2040	0	5.388714	19.32328	0	19.32328	49.49497	0	49.49497	BEV	0	5.388714	3	3

2040	0	1.381721	4.954687	2.972812	1.981875	24.51334	14.70801	9.805338	PHEV	0.829033	0.552689	3	8
2040	0	0.189642	0.560523	0	0.560523	1.103502	0	1.103502	BEV	0	0.189642	4	3
2040	0	0	0	0	0	0	0	0	PHEV	0	0	4	8
2040	0	1.522123	4.062913	0	4.062913	10.42756	0	10.42756	BEV	0	1.522123	1	3
2040	0	0	0	0	0	0	0	0	BEV	0	0	2	3
2040	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2040	0	0	0	0	0	0	0	0	BEV	0	0	2	3
2040	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2040	0	0	0	0	0	0	0	0	BEV	0	0	3	3
2040	0	4.083874	15.34618	9.207705	6.13847	78.87899	47.3274	31.5516	PHEV	2.450324	1.633549	3	8
2040	0	0.12869	0.358249	0	0.358249	0.639269	0	0.639269	BEV	0	0.12869	3	3
2040	0	0.321689	0.913952	0	0.913952	1.664346	0	1.664346	BEV	0	0.321689	4	3
2040	0	0.126937	0.418821	0	0.418821	0.914102	0	0.914102	BEV	0	0.126937	3	3
2040	0	0	0	0	0	0	0	0	PHEV	0	0	3	8
2040	0	0.414825	1.439981	0	1.439981	4.647598	0	4.647598	BEV	0	0.414825	2	3
2040	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2040	0	0.281473	0.751319	0	0.751319	1.846575	0	1.846575	BEV	0	0.281473	2	3
2040	0	0.808347	2.203983	0	2.203983	5.424916	0	5.424916	BEV	0	0.808347	2	3
2040	0	0.334867	0.932209	0	0.932209	1.613095	0	1.613095	BEV	0	0.334867	4	3
2040	0	0.309984	1.093805	0	1.093805	4.002197	0	4.002197	BEV	0	0.309984	2	3
2040	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2040	0	0.070238	0.223697	0	0.223697	0.439689	0	0.439689	BEV	0	0.070238	3	3
2040	0	0	0	0	0	0	0	0	PHEV	0	0	3	8
2040	0	0.649307	1.733157	0	1.733157	3.084659	0	3.084659	BEV	0	0.649307	4	3
2040	0	0.145051	0.445347	0	0.445347	1.244483	0	1.244483	BEV	0	0.145051	2	3
2040	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2040	0	0.313149	1.033212	0	1.033212	2.237373	0	2.237373	BEV	0	0.313149	4	3
2040	0	0	0	0	0	0	0	0	PHEV	0	0	4	8
2040	0	0.063722	0.173741	0	0.173741	0.31051	0	0.31051	BEV	0	0.063722	3	3
2040	0	0	0	0	0	0	0	0	BEV	0	0	4	3
2040	0	0.497902	1.813941	1.088365	0.725576	8.976104	5.385663	3.590442	PHEV	0.298741	0.199161	4	8
2041	0	5688.159	21700.55	0	21700.55	91755.83	0	91755.83	BEV	0	5688.159	1	3
2041	0	5130.912	19574.64	10570.3	9004.332	81457.38	43986.99	37470.39	PHEV	2770.693	2360.22	1	8
2041	0	8679.335	33609.25	0	33609.25	146993.7	0	146993.7	BEV	0	8679.335	1	3
2041	0	5609.412	21721.49	11729.61	9991.887	94171.37	50852.54	43318.83	PHEV	3029.082	2580.329	1	8
2041	0	13127.9	51587.67	0	51587.67	234139.2	0	234139.2	BEV	0	13127.9	1	3
2041	0	6438.392	25300.43	13409.23	11891.2	113808.5	60318.5	53489.99	PHEV	3412.348	3026.044	1	8
2041	0	19079.2	76067.04	0	76067.04	357495	0	357495	BEV	0	19079.2	1	3
2041	0	7275.003	29004.78	15082.49	13922.29	135734.2	70581.8	65152.43	PHEV	3783.001	3492.001	1	8
2041	0	24261.77	98119.46	0	98119.46	477906.5	0	477906.5	BEV	0	24261.77	1	3
2041	0	9125.22	36904.22	18821.15	18083.07	179088.8	91335.3	87753.52	PHEV	4653.862	4471.358	1	8
2041	0	30150.93	123663.7	0	123663.7	623659.6	0	623659.6	BEV	0	30150.93	1	3
2041	0	11173.02	45826.01	22913.01	22913.01	230344.7	115172.4	115172.4	PHEV	5586.508	5586.508	1	8
2041	0	37097.33	154279.6	0	154279.6	804844.2	0	804844.2	BEV	0	37097.33	1	3
2041	0	13672.6	56861.35	27862.06	28999.29	295697.4	144891.7	150805.7	PHEV	6699.575	6973.027	1	8
2041	0	44230.82	186480.2	0	186480.2	1005525	0	1005525	BEV	0	44230.82	1	3
2041	0	16230.59	68429.29	32846.06	35583.23	367877.9	176581.4	191296.5	PHEV	7790.682	8439.905	1	8

2041	0	52218.49	223148.4	0	223148.4	1243294	0	1243294	BEV	0	52218.49	1	3
2041	0	18902.77	80778.33	37965.82	42812.52	448830.6	210950.4	237880.2	PHEV	8884.301	10018.47	1	8
2041	0	50092.68	216933.9	0	216933.9	1247123	0	1247123	BEV	0	50092.68	1	3
2041	0	20832.08	90216.43	40958.26	49258.17	517236.6	234825.4	282411.2	PHEV	9457.762	11374.31	1	8
2041	0	57100.28	250552.6	0	250552.6	1484723	0	1484723	BEV	0	57100.28	1	3
2041	0	24167.38	106045	46447.71	59597.29	627037.1	274642.2	352394.8	PHEV	10585.31	13582.07	1	8
2041	0	65703.75	292068.3	0	292068.3	1783084	0	1783084	BEV	0	65703.75	1	3
2041	0	28077.81	124812.3	52670.8	72141.53	760698.9	321014.9	439683.9	PHEV	11848.84	16228.97	1	8
2041	0	73979.29	333093.2	0	333093.2	2094085	0	2094085	BEV	0	73979.29	1	3
2041	0	32009.13	144121.8	58513.43	85608.32	904895.1	367387.4	537507.7	PHEV	12995.71	19013.42	1	8
2041	0	83344.45	380034.9	0	380034.9	2459167	0	2459167	BEV	0	83344.45	1	3
2041	0	36508.89	166473.6	64924.71	101548.9	1076221	419726.2	656494.8	PHEV	14238.47	22270.43	1	8
2041	0	89261.96	412131.4	0	412131.4	2743955	0	2743955	BEV	0	89261.96	1	3
2041	0	39101.05	180533.5	70408.05	110125.4	1201111	468433.5	732678	PHEV	15249.41	23851.64	1	8
2041	0	95569.34	446728.3	0	446728.3	3058936	0	3058936	BEV	0	95569.34	1	3
2041	0	41863.98	195688.6	76318.55	119370	1339258	522310.5	816947.3	PHEV	16326.95	25537.03	1	8
2041	0	100856.1	477218.7	0	477218.7	3359455	0	3359455	BEV	0	100856.1	1	3
2041	0	44179.83	209044.8	81527.48	127517.3	1471206	573770.3	897435.6	PHEV	17230.13	26949.7	1	8
2041	0	106710.4	511032.7	0	511032.7	3696892	0	3696892	BEV	0	106710.4	1	3
2041	0	46744.29	223857	87304.23	136552.8	1619410	631569.9	987840.1	PHEV	18230.27	28514.02	1	8
2041	0	111294.6	539362.5	0	539362.5	4008510	0	4008510	BEV	0	111294.6	1	3
2041	0	48752.4	236266.8	92144.05	144122.7	1756405	684997.8	1071407	PHEV	19013.44	29738.96	1	8
2041	0	116560.4	571559.6	0	571559.6	4361076	0	4361076	BEV	0	116560.4	1	3
2041	0	51059.07	250370.7	97644.57	152726.1	1911343	745423.6	1165919	PHEV	19913.04	31146.03	1	8
2041	0	120603.2	598293	0	598293	4684865	0	4684865	BEV	0	120603.2	1	3
2041	0	52830	262081.2	102211.7	159869.5	2053766	800968.8	1252797	PHEV	20603.7	32226.3	1	8
2041	0	123910.3	621797.9	0	621797.9	4993164	0	4993164	BEV	0	123910.3	1	3
2041	0	54278.69	272377.5	106227.2	166150.3	2189329	853838.3	1335491	PHEV	21168.69	33110	1	8
2041	0	127526.1	647248.5	0	647248.5	5321411	0	5321411	BEV	0	127526.1	1	3
2041	0	55862.59	283526.1	110575.2	172950.9	2333205	909949.9	1423255	PHEV	21786.41	34076.18	1	8
2041	0	129005.7	662148.7	0	662148.7	5556877	0	5556877	BEV	0	129005.7	1	3
2041	0	56510.71	290053.1	113120.7	176932.4	2435731	949935.1	1485796	PHEV	22039.18	34471.54	1	8
2041	0	116305.5	603625.6	0	603625.6	5157841	0	5157841	BEV	0	116305.5	1	3
2041	0	50947.43	264417.2	103122.7	161294.5	2259657	881266.2	1378391	PHEV	19869.5	31077.93	1	8
2041	0	0.847584	3.233569	0	3.233569	13.86818	0	13.86818	BEV	0	0.847584	2	3
2041	0	7.351498	28.04626	16.82775	11.2185	141.0681	84.64088	56.42725	PHEV	4.410899	2.940599	2	8
2041	0	435.4921	1711.319	0	1711.319	8409.23	0	8409.23	BEV	0	435.4921	2	3
2041	0	334.4273	1314.172	780.9939	533.1785	6874.841	4085.62	2789.221	PHEV	198.7454	135.682	2	8
2041	0	987.8952	3938.649	0	3938.649	19686.49	0	19686.49	BEV	0	987.8952	2	3
2041	0	760.8588	3033.476	1785.417	1248.059	16042.2	9441.978	6600.218	PHEV	447.8198	313.0391	2	8
2041	0	1266.76	5123.029	0	5123.029	26220.58	0	26220.58	BEV	0	1266.76	2	3
2041	0	930.47	3763.007	2193.295	1569.711	19836.31	11561.73	8274.574	PHEV	542.3311	388.1389	2	8
2041	0	1703.076	6985.15	0	6985.15	36558.93	0	36558.93	BEV	0	1703.076	2	3
2041	0	1084.145	4446.61	2566.329	1880.281	23821.12	13748.19	10072.93	PHEV	625.7065	458.4384	2	8
2041	0	2047.63	8515.641	0	8515.641	45571.23	0	45571.23	BEV	0	2047.63	2	3
2041	0	1285.627	5346.641	3055.223	2291.418	29148.24	16656.14	12492.1	PHEV	734.6441	550.9831	2	8
2041	0	2364.86	9970.414	0	9970.414	54615.15	0	54615.15	BEV	0	2364.86	2	3

2041	0	1541.116	6497.454	3675.703	2821.751	36094.69	20419.28	15675.41	PHEV	871.8315	669.2848	2	8
2041	0	2820.98	12055.06	0	12055.06	67740.72	0	67740.72	BEV	0	2820.98	2	3
2041	0	1719.058	7346.155	4113.847	3232.308	41650.24	23324.13	18326.1	PHEV	962.6726	756.3856	2	8
2041	0	3000.955	12996.09	0	12996.09	74868.78	0	74868.78	BEV	0	3000.955	2	3
2041	0	1892.048	8193.799	4506.59	3687.21	47411.68	26076.42	21335.26	PHEV	1040.627	851.4218	2	8
2041	0	3407.359	14951.29	0	14951.29	88309.68	0	88309.68	BEV	0	3407.359	2	3
2041	0	2415.932	10600.96	5724.521	4876.444	62682.6	33848.6	28833.99	PHEV	1304.603	1111.329	2	8
2041	0	4081.991	18145.39	0	18145.39	109930.8	0	109930.8	BEV	0	4081.991	2	3
2041	0	2894.913	12868.56	6820.334	6048.221	77719.29	41191.22	36528.07	PHEV	1534.304	1360.609	2	8
2041	0	4939.406	22239.78	0	22239.78	138166.7	0	138166.7	BEV	0	4939.406	2	3
2041	0	3286.768	14798.74	7695.345	7103.395	91317.86	47485.29	43832.57	PHEV	1709.12	1577.649	2	8
2041	0	5727.654	26117.02	0	26117.02	166419.2	0	166419.2	BEV	0	5727.654	2	3
2041	0	3894.254	17757.06	9056.099	8700.958	111953.8	57096.45	54857.38	PHEV	1986.069	1908.184	2	8
2041	0	6047.842	27923.49	0	27923.49	182553.6	0	182553.6	BEV	0	6047.842	2	3
2041	0	4111.95	18985.29	9682.496	9302.79	122474.1	62461.77	60012.29	PHEV	2097.095	2014.856	2	8
2041	0	6386.607	29853.49	0	29853.49	200227.7	0	200227.7	BEV	0	6386.607	2	3
2041	0	4342.278	20297.5	10351.73	9945.776	134029.5	68355.06	65674.47	PHEV	2214.562	2127.716	2	8
2041	0	6636.996	31404.14	0	31404.14	216121.5	0	216121.5	BEV	0	6636.996	2	3
2041	0	4512.518	21351.79	10889.41	10462.38	144437.5	73663.11	70774.36	PHEV	2301.384	2211.134	2	8
2041	0	6914.039	33111.12	0	33111.12	233772.5	0	233772.5	BEV	0	6914.039	2	3
2041	0	4700.881	22512.38	11481.31	11031.07	156047.8	79584.36	76463.4	PHEV	2397.449	2303.432	2	8
2041	0	7193.087	34859.57	0	34859.57	252473.9	0	252473.9	BEV	0	7193.087	2	3
2041	0	4890.607	23701.15	12087.59	11613.57	168397	85882.45	82514.51	PHEV	2494.21	2396.398	2	8
2041	0	7474.814	36653.12	0	36653.12	272290.6	0	272290.6	BEV	0	7474.814	2	3
2041	0	5082.154	24920.6	12709.5	12211.09	181537.6	92584.17	88953.42	PHEV	2591.898	2490.255	2	8
2041	0	7656.79	37984.11	0	37984.11	289410.9	0	289410.9	BEV	0	7656.79	2	3
2041	0	5205.881	25825.54	13171.03	12654.51	192943.5	98401.18	94542.31	PHEV	2654.999	2550.881	2	8
2041	0	7776.658	39024.28	0	39024.28	304922.2	0	304922.2	BEV	0	7776.658	2	3
2041	0	5287.379	26532.76	13531.71	13001.05	203341	103703.9	99637.09	PHEV	2696.563	2590.816	2	8
2041	0	7900.772	40099.74	0	40099.74	321232	0	321232	BEV	0	7900.772	2	3
2041	0	5371.765	27263.96	13904.62	13359.34	214313.1	109299.7	105013.4	PHEV	2739.6	2632.165	2	8
2041	0	8032.827	41230.17	0	41230.17	338462.4	0	338462.4	BEV	0	8032.827	2	3
2041	0	5461.549	28032.55	14296.6	13735.95	225934.9	115226.8	110708.1	PHEV	2785.39	2676.159	2	8
2041	0	7352.269	38158.28	0	38158.28	320823.8	0	320823.8	BEV	0	7352.269	2	3
2041	0	4998.835	25943.96	13231.42	12712.54	214274.9	109280.2	104994.7	PHEV	2549.406	2449.429	2	8
2041	0	194.3517	752.5939	451.5563	301.0375	3760.081	2256.049	1504.032	PHEV	116.611	77.74067	3	8
2041	0	764.8101	3005.413	0	3005.413	10948.19	0	10948.19	BEV	0	764.8101	3	3
2041	0	664.2828	2610.379	1551.311	1059.068	13233.75	7864.627	5369.12	PHEV	394.7738	269.509	3	8
2041	0	1802.854	7187.818	0	7187.818	32281.45	0	32281.45	BEV	0	1802.854	3	3
2041	0	1301.086	5187.313	3053.104	2134.209	26714.3	15723.27	10991.03	PHEV	765.7821	535.304	3	8
2041	0	2407.24	9735.359	0	9735.359	41239.91	0	41239.91	BEV	0	2407.24	3	3
2041	0	2318.556	9376.705	5465.28	3911.426	49123.02	28631.7	20491.32	PHEV	1351.387	967.1692	3	8
2041	0	3487.307	14303.15	0	14303.15	61959.98	0	61959.98	BEV	0	3487.307	3	3
2041	0	2780.77	11405.3	6582.489	4822.814	60847.48	35117.69	25729.79	PHEV	1604.902	1175.869	3	8
2041	0	4778.479	19872.64	0	19872.64	88437.4	0	88437.4	BEV	0	4778.479	3	3
2041	0	3417.378	14212.13	8121.214	6090.911	77271.61	44155.2	33116.4	PHEV	1952.788	1464.591	3	8
2041	0	5858.568	24700.13	0	24700.13	111436.4	0	111436.4	BEV	0	5858.568	3	3

2041	0	4083.472	17216.21	9739.453	7476.752	95476.06	54012.17	41463.89	PHEV	2310.079	1773.394	3	8
2041	0	6925.14	29593.62	0	29593.62	135135.9	0	135135.9	BEV	0	6925.14	3	3
2041	0	5089.694	21750.1	12180.05	9570.043	123184.2	68983.12	54201.03	PHEV	2850.229	2239.466	3	8
2041	0	8827.445	38228.58	0	38228.58	184889.2	0	184889.2	BEV	0	8827.445	3	3
2041	0	5483.758	23748.24	13061.53	10686.71	137322.2	75527.22	61795	PHEV	3016.067	2467.691	3	8
2041	0	10698.43	46944.06	0	46944.06	237939.8	0	237939.8	BEV	0	10698.43	3	3
2041	0	6566.136	28811.81	15558.38	13253.43	170243.9	91931.7	78312.19	PHEV	3545.714	3020.423	3	8
2041	0	13131.65	58373.22	0	58373.22	310134.2	0	310134.2	BEV	0	13131.65	3	3
2041	0	7727.002	34348.3	18204.6	16143.7	207542.6	109997.6	97545.04	PHEV	4095.311	3631.691	3	8
2041	0	15586.54	70178.71	0	70178.71	386311.4	0	386311.4	BEV	0	15586.54	3	3
2041	0	8968.673	40381.63	20998.45	19383.18	252578	131340.5	121237.4	PHEV	4663.71	4304.963	3	8
2041	0	18304.14	83463.41	0	83463.41	470518.6	0	470518.6	BEV	0	18304.14	3	3
2041	0	10496	47859.75	24408.47	23451.28	314131.9	160207.3	153924.6	PHEV	5352.958	5143.038	3	8
2041	0	19458.28	89840.82	0	89840.82	519418.8	0	519418.8	BEV	0	19458.28	3	3
2041	0	11157.8	51516.7	26273.52	25243.18	346183.7	176553.7	169630	PHEV	5690.48	5467.324	3	8
2041	0	20622.17	96396.09	0	96396.09	571566.8	0	571566.8	BEV	0	20622.17	3	3
2041	0	11825.21	55275.63	28190.57	27085.06	380404.6	194006.3	186398.2	PHEV	6030.856	5794.352	3	8
2041	0	21461.74	101550.1	0	101550.1	617652.7	0	617652.7	BEV	0	21461.74	3	3
2041	0	12306.63	58231.05	29697.84	28533.21	410667.2	209440.3	201226.9	PHEV	6276.383	6030.25	3	8
2041	0	22229.78	106457.7	0	106457.7	664163.7	0	664163.7	BEV	0	22229.78	3	3
2041	0	12747.04	61045.21	31133.06	29912.15	441274.6	225050	216224.5	PHEV	6500.992	6246.051	3	8
2041	0	22819.97	110591.5	0	110591.5	707764.7	0	707764.7	BEV	0	22819.97	3	3
2041	0	13085.47	63415.6	32341.96	31073.64	470028.8	239714.7	230314.1	PHEV	6673.591	6411.881	3	8
2041	0	23495.47	115211.2	0	115211.2	756281	0	756281	BEV	0	23495.47	3	3
2041	0	13472.82	66064.65	33692.97	32371.68	502120.3	256081.4	246039	PHEV	6871.138	6601.682	3	8
2041	0	24045.26	119284.7	0	119284.7	803075.4	0	803075.4	BEV	0	24045.26	3	3
2041	0	13788.08	68400.44	34884.23	33516.22	533176.1	271919.8	261256.3	PHEV	7031.919	6756.158	3	8
2041	0	24491.33	122900.7	0	122900.7	848399	0	848399	BEV	0	24491.33	3	3
2041	0	14043.86	70473.94	35941.71	34532.23	563341.5	287304.1	276037.3	PHEV	7162.371	6881.493	3	8
2041	0	25198.28	127891.9	0	127891.9	905137.2	0	905137.2	BEV	0	25198.28	3	3
2041	0	14449.25	73336	37401.36	35934.64	601180.9	306602.3	294578.6	PHEV	7369.117	7080.132	3	8
2041	0	25935.61	133120	0	133120	965574.5	0	965574.5	BEV	0	25935.61	3	3
2041	0	14872.05	76333.91	38930.29	37403.62	641543	327186.9	314356	PHEV	7584.744	7287.304	3	8
2041	0	23557.88	122265.4	0	122265.4	908115.4	0	908115.4	BEV	0	23557.88	3	3
2041	0	13508.61	70109.66	35755.93	34353.73	603498	307784	295714	PHEV	6889.389	6619.216	3	8
2041	0	311.2431	1187.405	712.443	474.962	5323.498	3194.099	2129.399	PHEV	186.7459	124.4972	4	8
2041	0	0.768408	2.975529	0	2.975529	9.171764	0	9.171764	BEV	0	0.768408	4	3
2041	0	940.3196	3641.228	2184.737	1456.491	17201.33	10320.8	6880.532	PHEV	564.1918	376.1278	4	8
2041	0	439.2127	1725.939	0	1725.939	5778.248	0	5778.248	BEV	0	439.2127	4	3
2041	0	1142.741	4490.537	2668.662	1821.875	23104.46	13730.65	9373.81	PHEV	679.1146	463.6263	4	8
2041	0	1020.382	4068.173	0	4068.173	15547	0	15547	BEV	0	1020.382	4	3
2041	0	1374.196	5478.795	3224.662	2254.133	28033.61	16499.78	11533.83	PHEV	808.8124	565.3834	4	8
2041	0	1737.893	7028.388	0	7028.388	27849.62	0	27849.62	BEV	0	1737.893	4	3
2041	0	1686.705	6821.371	3975.885	2845.486	34678.72	20212.74	14465.98	PHEV	983.1078	703.5968	4	8
2041	0	1964.933	8059.153	0	8059.153	29946.11	0	29946.11	BEV	0	1964.933	4	3
2041	0	1919.388	7872.351	4543.471	3328.88	40798.44	23546.53	17251.91	PHEV	1107.761	811.627	4	8
2041	0	2292.509	9534.039	0	9534.039	35204.54	0	35204.54	BEV	0	2292.509	4	3

2041	0	2154.137	8958.583	5119.19	3839.393	47391.71	27080.98	20310.73	PHEV	1230.936	923.2017	4	8
2041	0	2688.53	11335.03	0	11335.03	42529	0	42529	BEV	0	2688.53	4	3
2041	0	3093.197	13041.14	7377.557	5663.579	70499.37	39882.5	30616.87	PHEV	1749.866	1343.331	4	8
2041	0	3276.295	14000.79	0	14000.79	54095.07	0	54095.07	BEV	0	3276.295	4	3
2041	0	3594.155	15359.12	8601.106	6758.011	84944.32	47568.82	37375.5	PHEV	2012.727	1581.428	4	8
2041	0	3393.744	14697.12	0	14697.12	58066.77	0	58066.77	BEV	0	3393.744	4	3
2041	0	3520.543	15246.24	8385.432	6860.808	86248.2	47436.51	38811.69	PHEV	1936.299	1584.244	4	8
2041	0	3936.126	17271.49	0	17271.49	71239.91	0	71239.91	BEV	0	3936.126	4	3
2041	0	3974.949	17441.84	9418.593	8023.246	100993.2	54536.33	46456.88	PHEV	2146.473	1828.477	4	8
2041	0	4502.426	20014.32	0	20014.32	86487.38	0	86487.38	BEV	0	4502.426	4	3
2041	0	4450.907	19785.31	10486.21	9299.094	117316.4	62177.68	55138.7	PHEV	2358.981	2091.926	4	8
2041	0	5120.466	23055	0	23055	106087.2	0	106087.2	BEV	0	5120.466	4	3
2041	0	5065.563	22807.8	11860.06	10947.74	138550	72045.98	66503.98	PHEV	2634.093	2431.47	4	8
2041	0	5876.497	26795.71	0	26795.71	131021.3	0	131021.3	BEV	0	5876.497	4	3
2041	0	5784.424	26375.87	13451.7	12924.18	164216.6	83750.48	80466.15	PHEV	2950.056	2834.368	4	8
2041	0	6247.155	28843.74	0	28843.74	144900.5	0	144900.5	BEV	0	6247.155	4	3
2041	0	6149.275	28391.82	14479.83	13911.99	181247.3	92436.11	88811.17	PHEV	3136.13	3013.145	4	8
2041	0	6665.873	31158.89	0	31158.89	160772.8	0	160772.8	BEV	0	6665.873	4	3
2041	0	6561.431	30670.69	15642.05	15028.64	200768.5	102392	98376.58	PHEV	3346.33	3215.101	4	8
2041	0	6949.939	32884.89	0	32884.89	174250.4	0	174250.4	BEV	0	6949.939	4	3
2041	0	6841.047	32369.65	16508.52	15861.13	217373.1	110860.3	106512.8	PHEV	3488.934	3352.113	4	8
2041	0	7284.207	34883.85	0	34883.85	189758.5	0	189758.5	BEV	0	7284.207	4	3
2041	0	7170.078	34337.29	17512.02	16825.27	236539.1	120634.9	115904.1	PHEV	3656.74	3513.338	4	8
2041	0	7561.349	36644.26	0	36644.26	204584.8	0	204584.8	BEV	0	7561.349	4	3
2041	0	7442.878	36070.12	18395.76	17674.36	254907	130002.6	124904.4	PHEV	3795.868	3647.01	4	8
2041	0	7877.345	38626.96	0	38626.96	221252.6	0	221252.6	BEV	0	7877.345	4	3
2041	0	7753.923	38021.75	19391.09	18630.66	275606.8	140559.5	135047.3	PHEV	3954.501	3799.422	4	8
2041	0	8057.167	39970.32	0	39970.32	234831	0	234831	BEV	0	8057.167	4	3
2041	0	7930.927	39344.06	20065.47	19278.59	292529.9	149190.2	143339.6	PHEV	4044.773	3886.154	4	8
2041	0	8248.893	41394.02	0	41394.02	249359.8	0	249359.8	BEV	0	8248.893	4	3
2041	0	8119.649	40745.45	20780.18	19965.27	310664.8	158439	152225.7	PHEV	4141.021	3978.628	4	8
2041	0	8492.412	43102.56	0	43102.56	266113.5	0	266113.5	BEV	0	8492.412	4	3
2041	0	8359.353	42427.22	21637.88	20789.34	331532.9	169081.8	162451.1	PHEV	4263.27	4096.083	4	8
2041	0	8668.455	44492.66	0	44492.66	281420.6	0	281420.6	BEV	0	8668.455	4	3
2041	0	8532.637	43795.55	22335.73	21459.82	350655.8	178834.5	171821.4	PHEV	4351.645	4180.992	4	8
2041	0	7538.1	39122.74	0	39122.74	253151	0	253151	BEV	0	7538.1	4	3
2041	0	7419.993	38509.76	19639.98	18869.78	315039	160669.9	154369.1	PHEV	3784.196	3635.796	4	8
2041	0	4.613554	13.37192	0	13.37192	36.04314	0	36.04314	BEV	0	4.613554	1	3
2041	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2041	0	548.6998	1967.572	0	1967.572	7281.949	0	7281.949	BEV	0	548.6998	1	3
2041	0	573.522	2056.581	1233.949	822.6325	6970.492	4182.295	2788.197	PHEV	344.1132	229.4088	1	8
2041	0	749.5452	2730.721	0	2730.721	10465.95	0	10465.95	BEV	0	749.5452	1	3
2041	0	946.3573	3447.741	2068.644	1379.096	12166.12	7299.673	4866.449	PHEV	567.8144	378.5429	1	8
2041	0	1981.46	7332.313	0	7332.313	29217.51	0	29217.51	BEV	0	1981.46	1	3
2041	0	942.2373	3486.712	2092.027	1394.685	12834.58	7700.75	5133.833	PHEV	565.3424	376.8949	1	8
2041	0	511.2725	1921.234	0	1921.234	5431.768	0	5431.768	BEV	0	511.2725	3	3
2041	0	46.52955	174.8464	104.9079	69.93857	815.679	489.4074	326.2716	PHEV	27.91773	18.61182	3	8

2041	0	2.000387	6.256329	0	6.256329	18.21137	0	18.21137	BEV	0	2.000387	1	3
2041	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2041	0	107.4243	379.0563	0	379.0563	1357.65	0	1357.65	BEV	0	107.4243	1	3
2041	0	225.8098	796.7901	478.0741	318.716	2587.349	1552.41	1034.94	PHEV	135.4859	90.32391	1	8
2041	0	1493.962	5613.937	0	5613.937	23171.86	0	23171.86	BEV	0	1493.962	1	3
2041	0	1074.359	4037.172	2422.303	1614.869	15501.31	9300.784	6200.523	PHEV	644.6153	429.7435	1	8
2041	0	8.654024	25.57861	0	25.57861	70.13674	0	70.13674	BEV	0	8.654024	1	3
2041	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2041	0	124.3057	431.5024	0	431.5024	1500.553	0	1500.553	BEV	0	124.3057	1	3
2041	0	34.55334	119.945	71.967	47.978	373.1364	223.8818	149.2546	PHEV	20.732	13.82133	1	8
2041	0	111.5573	406.4222	0	406.4222	1553.606	0	1553.606	BEV	0	111.5573	2	3
2041	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2041	0	24.30011	88.52943	0	88.52943	235.6122	0	235.6122	BEV	0	24.30011	3	3
2041	0	11.00233	40.08336	24.05002	16.03334	178.8304	107.2983	71.53218	PHEV	6.601398	4.400932	3	8
2041	0	3.240544	9.578044	0	9.578044	17.79103	0	17.79103	BEV	0	3.240544	3	3
2041	0	0	0	0	0	0	0	0	PHEV	0	0	3	8
2041	0	16.20632	47.90085	0	47.90085	90.86004	0	90.86004	BEV	0	16.20632	4	3
2041	0	0	0	0	0	0	0	0	PHEV	0	0	4	8
2041	0	19.86594	67.82251	0	67.82251	229.794	0	229.794	BEV	0	19.86594	1	3
2041	0	2.117689	7.229811	4.337886	2.891924	21.25913	12.75548	8.503651	PHEV	1.270613	0.847075	1	8
2041	0	41.01818	144.7363	0	144.7363	514.765	0	514.765	BEV	0	41.01818	2	3
2041	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2041	0	2.277361	7.253054	0	7.253054	21.82106	0	21.82106	BEV	0	2.277361	1	3
2041	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2041	0	11.94545	39.41318	0	39.41318	122.3988	0	122.3988	BEV	0	11.94545	1	3
2041	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2041	0	10.55684	35.43634	0	35.43634	117.9369	0	117.9369	BEV	0	10.55684	1	3
2041	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2041	0	53.33236	191.2434	0	191.2434	703.4841	0	703.4841	BEV	0	53.33236	2	3
2041	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2041	0	1.9947	6.009991	0	6.009991	16.77028	0	16.77028	BEV	0	1.9947	1	3
2041	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2041	0	3.936847	12.76381	0	12.76381	39.36271	0	39.36271	BEV	0	3.936847	1	3
2041	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2041	0	5.925867	19.55198	0	19.55198	61.66644	0	61.66644	BEV	0	5.925867	2	3
2041	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2041	0	0.264621	0.842778	0	0.842778	1.982829	0	1.982829	BEV	0	0.264621	4	3
2041	0	0	0	0	0	0	0	0	PHEV	0	0	4	8
2041	0	3.408152	11.44021	0	11.44021	27.16563	0	27.16563	BEV	0	3.408152	3	3
2041	0	0	0	0	0	0	0	0	PHEV	0	0	3	8
2041	0	2.095968	7.275735	0	7.275735	18.09514	0	18.09514	BEV	0	2.095968	3	3
2041	0	1.451055	5.037047	3.022228	2.014819	21.03745	12.62247	8.414979	PHEV	0.870633	0.580422	3	8
2041	0	0.334014	1.236007	0	1.236007	3.32246	0	3.32246	BEV	0	0.334014	4	3
2041	0	0	0	0	0	0	0	0	PHEV	0	0	4	8
2041	0	9.060966	25.7432	0	25.7432	66.53323	0	66.53323	BEV	0	9.060966	2	3
2041	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2041	0	3.293537	9.545986	0	9.545986	25.4462	0	25.4462	BEV	0	3.293537	2	3

2041	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2041	0	1.466748	4.671372	0	4.671372	13.87331	0	13.87331	BEV	0	1.466748	2	3
2041	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2041	0	0.816844	2.648322	0	2.648322	8.110299	0	8.110299	BEV	0	0.816844	2	3
2041	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2041	0	2.391248	8.026751	0	8.026751	26.55475	0	26.55475	BEV	0	2.391248	2	3
2041	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2041	0	2.490062	8.215786	0	8.215786	18.52779	0	18.52779	BEV	0	2.490062	3	3
2041	0	0	0	0	0	0	0	0	PHEV	0	0	3	8
2041	0	1.578305	5.659614	0	5.659614	14.65178	0	14.65178	BEV	0	1.578305	3	3
2041	0	1.206939	4.32794	2.596764	1.731176	19.11438	11.46863	7.645752	PHEV	0.724164	0.482776	3	8
2041	0	0.908513	2.581186	0	2.581186	4.909936	0	4.909936	BEV	0	0.908513	4	3
2041	0	0	0	0	0	0	0	0	PHEV	0	0	4	8
2041	0	1.937575	5.837876	0	5.837876	11.29252	0	11.29252	BEV	0	1.937575	4	3
2041	0	0	0	0	0	0	0	0	PHEV	0	0	4	8
2041	0	0.333271	1.042325	0	1.042325	2.133772	0	2.133772	BEV	0	0.333271	4	3
2041	0	0	0	0	0	0	0	0	PHEV	0	0	4	8
2041	0	11.81338	34.9167	0	34.9167	91.96943	0	91.96943	BEV	0	11.81338	2	3
2041	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2041	0	0.7823	2.401874	0	2.401874	6.703843	0	6.703843	BEV	0	0.7823	2	3
2041	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2041	0	6.013517	16.74055	0	16.74055	42.78026	0	42.78026	BEV	0	6.013517	2	3
2041	0	0.460684	1.308854	0	1.308854	2.625217	0	2.625217	BEV	0	0.460684	3	3
2041	0	0	0	0	0	0	0	0	PHEV	0	0	3	8
2041	0	0.308989	1.019486	0	1.019486	2.256998	0	2.256998	BEV	0	0.308989	4	3
2041	0	0	0	0	0	0	0	0	PHEV	0	0	4	8
2041	0	1.818817	4.95906	0	4.95906	12.731	0	12.731	BEV	0	1.818817	1	3
2041	0	1.213558	3.447853	0	3.447853	9.019137	0	9.019137	BEV	0	1.213558	1	3
2041	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2041	0	1.859512	5.709203	0	5.709203	16.14458	0	16.14458	BEV	0	1.859512	1	3
2041	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2041	0	1.87091	5.101092	0	5.101092	12.85642	0	12.85642	BEV	0	1.87091	2	3
2041	0	0.296237	0.9265	0	0.9265	2.662616	0	2.662616	BEV	0	0.296237	2	3
2041	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2041	0	2.157558	5.75904	0	5.75904	14.59487	0	14.59487	BEV	0	2.157558	1	3
2041	0	2.04342	5.688514	0	5.688514	14.79516	0	14.79516	BEV	0	2.04342	1	3
2041	0	1.827077	5.086252	0	5.086252	8.911682	0	8.911682	BEV	0	1.827077	3	3
2041	0	0.146592	0.424883	0	0.424883	0.769818	0	0.769818	BEV	0	0.146592	3	3
2041	0	0	0	0	0	0	0	0	PHEV	0	0	3	8
2041	0	2.005389	6.846419	0	6.846419	16.15554	0	16.15554	BEV	0	2.005389	3	3
2041	0	0	0	0	0	0	0	0	PHEV	0	0	3	8
2041	0	4.828487	17.03775	0	17.03775	41.98849	0	41.98849	BEV	0	4.828487	3	3
2041	0	1.238074	4.368654	2.621192	1.747462	21.46264	12.87759	8.585058	PHEV	0.742844	0.495229	3	8
2041	0	0.188068	0.545095	0	0.545095	1.046717	0	1.046717	BEV	0	0.188068	4	3
2041	0	0	0	0	0	0	0	0	PHEV	0	0	4	8
2041	0	0	0	0	0	0	0	0	BEV	0	0	2	3
2041	0	0	0	0	0	0	0	0	PHEV	0	0	2	8

2041	0	0	0	0	0	0	0	0	BEV	0	0	2	3
2041	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2041	0	0	0	0	0	0	0	0	BEV	0	0	3	3
2041	0	3.598903	13.3176	7.990558	5.327039	67.58385	40.55031	27.03354	PHEV	2.159342	1.439561	3	8
2041	0	0.121784	0.332047	0	0.332047	0.583623	0	0.583623	BEV	0	0.121784	3	3
2041	0	0.321143	0.894004	0	0.894004	1.5979	0	1.5979	BEV	0	0.321143	4	3
2041	0	0.115966	0.375978	0	0.375978	0.79159	0	0.79159	BEV	0	0.115966	3	3
2041	0	0	0	0	0	0	0	0	PHEV	0	0	3	8
2041	0	0.371064	1.266817	0	1.266817	3.937187	0	3.937187	BEV	0	0.371064	2	3
2041	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2041	0	0.734648	1.960952	0	1.960952	4.771155	0	4.771155	BEV	0	0.734648	2	3
2041	0	0.334155	0.911084	0	0.911084	1.552263	0	1.552263	BEV	0	0.334155	4	3
2041	0	0.269307	0.934845	0	0.934845	3.294699	0	3.294699	BEV	0	0.269307	2	3
2041	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2041	0	0.063162	0.197541	0	0.197541	0.37518	0	0.37518	BEV	0	0.063162	3	3
2041	0	0	0	0	0	0	0	0	PHEV	0	0	3	8
2041	0	0.127311	0.383585	0	0.383585	1.040067	0	1.040067	BEV	0	0.127311	2	3
2041	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2041	0	0.282864	0.917084	0	0.917084	1.915109	0	1.915109	BEV	0	0.282864	4	3
2041	0	0	0	0	0	0	0	0	PHEV	0	0	4	8
2041	0	0.061202	0.163362	0	0.163362	0.28869	0	0.28869	BEV	0	0.061202	3	3
2041	0	0	0	0	0	0	0	0	BEV	0	0	4	3
2041	0	0.439058	1.57441	0.944646	0.629764	7.646298	4.587779	3.058519	PHEV	0.263435	0.175623	4	8
2042	0	4678.874	17582.04	0	17582.04	71289.87	0	71289.87	BEV	0	4678.874	1	3
2042	0	4220.503	15859.59	8564.181	7295.414	63082.89	34064.76	29018.13	PHEV	2279.072	1941.431	1	8
2042	0	7113.618	27138.74	0	27138.74	113853.8	0	113853.8	BEV	0	7113.618	1	3
2042	0	4597.497	17539.63	9471.402	8068.232	72807.49	39316.04	33491.44	PHEV	2482.648	2114.849	1	8
2042	0	10744.29	41605.45	0	41605.45	181303	0	181303	BEV	0	10744.29	1	3
2042	0	5269.385	20404.8	10814.54	9590.255	87947.63	46612.24	41335.39	PHEV	2792.774	2476.611	1	8
2042	0	15683.71	61631.04	0	61631.04	278250.1	0	278250.1	BEV	0	15683.71	1	3
2042	0	5980.287	23500.25	12220.13	11280.12	105551.8	54886.95	50664.87	PHEV	3109.749	2870.538	1	8
2042	0	20130.92	80260.16	0	80260.16	375863.3	0	375863.3	BEV	0	20130.92	1	3
2042	0	7571.544	30187.06	15395.4	14791.66	140741.2	71777.99	68963.17	PHEV	3861.487	3710.056	1	8
2042	0	25297.92	102309.9	0	102309.9	496559.7	0	496559.7	BEV	0	25297.92	1	3
2042	0	9374.639	37912.91	18956.46	18956.46	183287	91643.5	91643.5	PHEV	4687.319	4687.319	1	8
2042	0	31606.7	129634.5	0	129634.5	651333.4	0	651333.4	BEV	0	31606.7	1	3
2042	0	11648.97	47778.15	23411.29	24366.86	239159.8	117188.3	121971.5	PHEV	5707.997	5940.977	1	8
2042	0	38157.38	158688.2	0	158688.2	824724	0	824724	BEV	0	38157.38	1	3
2042	0	14001.93	58230.93	27950.85	30280.09	301569.6	144753.4	156816.2	PHEV	6720.925	7281.002	1	8
2042	0	45889.73	193474.3	0	193474.3	1039602	0	1039602	BEV	0	45889.73	1	3
2042	0	16611.8	70036.5	32917.15	37119.34	375114	176303.6	198810.4	PHEV	7807.545	8804.252	1	8
2042	0	44488.08	190113.6	0	190113.6	1054831	0	1054831	BEV	0	44488.08	1	3
2042	0	18501.29	79062.66	35894.45	43168.21	437295.5	198532.1	238763.3	PHEV	8399.585	10101.7	1	8
2042	0	51488.91	222980.4	0	222980.4	1275836	0	1275836	BEV	0	51488.91	1	3
2042	0	21792.39	94375.23	41336.35	53038.88	538615.4	235913.6	302701.9	PHEV	9545.068	12247.33	1	8
2042	0	59632.64	261664.5	0	261664.5	1543257	0	1543257	BEV	0	59632.64	1	3
2042	0	25483.39	111819.6	47187.86	64631.72	658175.7	277750.2	380425.6	PHEV	10753.99	14729.4	1	8

2042	0	68416.11	304125.3	0	304125.3	1848006	0	1848006	BEV	0	68416.11	1	3
2042	0	29602.07	131588	53424.73	78163.28	798353.6	324131.6	474222	PHEV	12018.44	17583.63	1	8
2042	0	77237.54	347763.6	0	347763.6	2176137	0	2176137	BEV	0	77237.54	1	3
2042	0	33833.77	152337.2	59411.52	92925.71	952140.9	371334.9	580805.9	PHEV	13195.17	20638.6	1	8
2042	0	84202.19	383946	0	383946	2473195	0	2473195	BEV	0	84202.19	1	3
2042	0	36884.62	168186.9	65592.88	102594	1082372	422125.2	660247.2	PHEV	14385	22499.62	1	8
2042	0	90153.09	416245.9	0	416245.9	2758776	0	2758776	BEV	0	90153.09	1	3
2042	0	39491.41	182335.8	71110.95	111224.8	1207613	470969.1	736644	PHEV	15401.65	24089.76	1	8
2042	0	96488.34	451024.1	0	451024.1	3074354	0	3074354	BEV	0	96488.34	1	3
2042	0	42266.55	197570.3	77052.44	120517.9	1346026	524950	821075.6	PHEV	16483.96	25782.6	1	8
2042	0	101798.8	481679.3	0	481679.3	3375501	0	3375501	BEV	0	101798.8	1	3
2042	0	44592.79	210998.8	82289.53	128709.3	1478254	576518.9	901734.7	PHEV	17391.19	27201.6	1	8
2042	0	107676.7	515660.5	0	515660.5	3713479	0	3713479	BEV	0	107676.7	1	3
2042	0	47167.59	225884.2	88094.84	137789.4	1626699	634412.7	992286.5	PHEV	18395.36	28772.23	1	8
2042	0	112275.1	544114.5	0	544114.5	4025549	0	4025549	BEV	0	112275.1	1	3
2042	0	49181.93	238348.4	92955.89	145392.5	1763899	687920.5	1075978	PHEV	19180.95	30000.98	1	8
2042	0	117546.7	576396.1	0	576396.1	4378093	0	4378093	BEV	0	117546.7	1	3
2042	0	51491.13	252489.3	98470.84	154018.5	1918831	748344.3	1170487	PHEV	20081.54	31409.59	1	8
2042	0	121580.9	603143.4	0	603143.4	4701527	0	4701527	BEV	0	121580.9	1	3
2042	0	53258.31	264205.9	103040.3	161165.6	2061108	803831.9	1257276	PHEV	20770.74	32487.57	1	8
2042	0	124873.2	626630.2	0	626630.2	5009268	0	5009268	BEV	0	124873.2	1	3
2042	0	54700.51	274494.3	107052.8	167441.5	2196432	856608.3	1339823	PHEV	21333.2	33367.31	1	8
2042	0	128457.3	651974.8	0	651974.8	5336084	0	5336084	BEV	0	128457.3	1	3
2042	0	56270.5	285596.4	111382.6	174213.8	2339686	912477.7	1427209	PHEV	21945.49	34325	1	8
2042	0	129878.2	666627.1	0	666627.1	5569134	0	5569134	BEV	0	129878.2	1	3
2042	0	56892.92	292014.8	113885.8	178129.1	2441156	952050.8	1489105	PHEV	22188.24	34704.68	1	8
2042	0	117028.5	607378	0	607378	5166256	0	5166256	BEV	0	117028.5	1	3
2042	0	51264.14	266060.9	103763.7	162297.1	2263393	882723.2	1380670	PHEV	19993.02	31271.13	1	8
2042	0	0.75189	2.825416	0	2.825416	11.66785	0	11.66785	BEV	0	0.75189	2	3
2042	0	6.521498	24.50616	14.7037	9.802464	121.2926	72.77554	48.51702	PHEV	3.912899	2.608599	2	8
2042	0	386.9784	1498.508	0	1498.508	7191.98	0	7191.98	BEV	0	386.9784	2	3
2042	0	297.1722	1150.749	683.8736	466.8752	5954.123	3538.45	2415.673	PHEV	176.6052	120.567	2	8
2042	0	883.3523	3471.239	0	3471.239	16913.49	0	16913.49	BEV	0	883.3523	2	3
2042	0	680.3418	2673.485	1573.537	1099.948	13952.74	8212.181	5740.554	PHEV	400.4298	279.9121	2	8
2042	0	1141.347	4550.45	0	4550.45	22697.35	0	22697.35	BEV	0	1141.347	2	3
2042	0	838.3514	3342.432	1948.16	1394.271	17291.48	10078.46	7213.017	PHEV	488.6391	349.7123	2	8
2042	0	1545.214	6249.153	0	6249.153	31845.14	0	31845.14	BEV	0	1545.214	2	3
2042	0	983.6527	3978.088	2295.925	1682.163	20881.81	12051.79	8830.022	PHEV	567.7081	415.9446	2	8
2042	0	1872.572	7680.334	0	7680.334	39976.42	0	39976.42	BEV	0	1872.572	2	3
2042	0	1175.715	4822.184	2755.534	2066.65	25724.59	14699.77	11024.83	PHEV	671.8372	503.8779	2	8
2042	0	2170.281	9025.719	0	9025.719	48040.16	0	48040.16	BEV	0	2170.281	2	3
2042	0	1414.314	5881.821	3327.43	2554.391	31931.94	18064.36	13867.59	PHEV	800.0977	614.2164	2	8
2042	0	2616.892	11033	0	11033	60213.27	0	60213.27	BEV	0	2616.892	2	3
2042	0	1594.691	6723.327	3765.063	2958.264	37211.21	20838.28	16372.93	PHEV	893.0268	701.6639	2	8
2042	0	2790.744	11925.86	0	11925.86	66706.4	0	66706.4	BEV	0	2790.744	2	3
2042	0	1759.514	7519.038	4135.471	3383.567	42430.74	23336.91	19093.83	PHEV	967.7329	791.7815	2	8
2042	0	3206.059	13884.32	0	13884.32	79581.73	0	79581.73	BEV	0	3206.059	2	3

2042	0	2273.204	9844.449	5316.003	4528.447	56759.45	30650.1	26109.35	PHEV	1227.53	1045.674	2	8
2042	0	3830.951	16809.98	0	16809.98	98819.19	0	98819.19	BEV	0	3830.951	2	3
2042	0	2716.878	11921.5	6318.394	5603.104	70178.97	37194.85	32984.11	PHEV	1439.945	1276.933	2	8
2042	0	4684.023	20821.56	0	20821.56	125523	0	125523	BEV	0	4684.023	2	3
2042	0	3116.832	13855.03	7204.618	6650.416	83276.11	43303.58	39972.53	PHEV	1620.752	1496.079	2	8
2042	0	5420.832	24407.41	0	24407.41	150915.1	0	150915.1	BEV	0	5420.832	2	3
2042	0	3685.644	16594.69	8463.29	8131.397	101872.6	51955.05	49917.59	PHEV	1879.679	1805.966	2	8
2042	0	5783.681	26372.48	0	26372.48	167273	0	167273	BEV	0	5783.681	2	3
2042	0	3932.346	17930.75	9144.683	8786.068	112529.1	57389.86	55139.28	PHEV	2005.497	1926.85	2	8
2042	0	6105.175	28188.21	0	28188.21	183436.7	0	183436.7	BEV	0	6105.175	2	3
2042	0	4150.932	19165.27	9774.286	9390.981	123068.2	62764.77	60303.4	PHEV	2116.975	2033.957	2	8
2042	0	6444.848	30125.74	0	30125.74	201125.5	0	201125.5	BEV	0	6444.848	2	3
2042	0	4381.877	20482.6	10446.13	10036.47	134633.1	68662.88	65970.22	PHEV	2234.757	2147.12	2	8
2042	0	6695.787	31682.32	0	31682.32	217035.5	0	217035.5	BEV	0	6695.787	2	3
2042	0	4552.491	21540.93	10985.87	10555.06	145051.7	73976.35	71075.31	PHEV	2321.77	2230.72	2	8
2042	0	6973.371	33395.26	0	33395.26	234696.2	0	234696.2	BEV	0	6973.371	2	3
2042	0	4741.221	22705.57	11579.84	11125.73	156668.3	79900.84	76767.47	PHEV	2418.023	2323.198	2	8
2042	0	7253.048	35150.16	0	35150.16	253411.4	0	253411.4	BEV	0	7253.048	2	3
2042	0	4931.375	23898.72	12188.35	11710.38	169027.1	86203.82	82823.28	PHEV	2515.001	2416.374	2	8
2042	0	7534.784	36947.19	0	36947.19	273215.1	0	273215.1	BEV	0	7534.784	2	3
2042	0	5122.928	25120.53	12811.47	12309.06	182158.9	92901.06	89257.88	PHEV	2612.693	2510.235	2	8
2042	0	7715.614	38275.92	0	38275.92	290296.6	0	290296.6	BEV	0	7715.614	2	3
2042	0	5245.875	26023.95	13272.21	12751.73	193539.5	98705.17	94834.38	PHEV	2675.396	2570.479	2	8
2042	0	7834.133	39312.7	0	39312.7	305766.2	0	305766.2	BEV	0	7834.133	2	3
2042	0	5326.457	26728.85	13631.71	13097.14	203909.6	103993.9	99915.72	PHEV	2716.493	2609.964	2	8
2042	0	7956.232	40381.22	0	40381.22	322002.6	0	322002.6	BEV	0	7956.232	2	3
2042	0	5409.472	27455.34	14002.23	13453.12	214833	109564.8	105268.2	PHEV	2758.831	2650.641	2	8
2042	0	8085.92	41502.68	0	41502.68	339135.1	0	339135.1	BEV	0	8085.92	2	3
2042	0	5497.647	28217.83	14391.09	13826.74	226389.7	115458.7	110930.9	PHEV	2803.8	2693.847	2	8
2042	0	7397.974	38395.48	0	38395.48	321332.9	0	321332.9	BEV	0	7397.974	2	3
2042	0	5029.91	26105.23	13313.67	12791.56	214619.6	109456	105163.6	PHEV	2565.254	2464.656	2	8
2042	0	170.2245	649.4134	389.648	259.7653	3190.856	1914.513	1276.342	PHEV	102.1347	68.08981	3	8
2042	0	666.2552	2579.96	0	2579.96	9099.929	0	9099.929	BEV	0	666.2552	3	3
2042	0	578.6821	2240.848	1331.704	909.144	11147.33	6624.7	4522.632	PHEV	343.9025	234.7796	3	8
2042	0	1552.267	6099.82	0	6099.82	26732.05	0	26732.05	BEV	0	1552.267	3	3
2042	0	1120.242	4402.126	2590.965	1811.16	22218.22	13077.01	9141.211	PHEV	659.3425	460.8996	3	8
2042	0	2039.853	8132.709	0	8132.709	33505.2	0	33505.2	BEV	0	2039.853	3	3
2042	0	1964.704	7833.097	4565.577	3267.521	40175.25	23416.43	16758.82	PHEV	1145.142	819.5622	3	8
2042	0	2933.842	11865.04	0	11865.04	49953.99	0	49953.99	BEV	0	2933.842	3	3
2042	0	2339.438	9461.157	5460.439	4000.718	49355.82	28485.36	20870.46	PHEV	1350.19	989.2483	3	8
2042	0	4089.15	16771.61	0	16771.61	72522.11	0	72522.11	BEV	0	4089.15	3	3
2042	0	2924.398	11994.39	6853.937	5140.453	63720.5	36411.72	27308.79	PHEV	1671.085	1253.313	3	8
2042	0	5138.468	21369.76	0	21369.76	93620.38	0	93620.38	BEV	0	5138.468	3	3
2042	0	3581.557	14894.91	8426.261	6468.645	80644.81	45621.92	35022.89	PHEV	2026.138	1555.419	3	8
2042	0	6148.492	25922.47	0	25922.47	114872.6	0	114872.6	BEV	0	6148.492	3	3
2042	0	4518.89	19051.95	10669.09	8382.86	105264.6	58948.15	46316.4	PHEV	2530.578	1988.311	3	8
2042	0	7878.438	33667.4	0	33667.4	158116.4	0	158116.4	BEV	0	7878.438	3	3

2042	0	4894.219	20914.76	11503.12	9411.641	117897.4	64843.59	53053.84	PHEV	2691.82	2202.398	3	8
2042	0	9729.554	42135.29	0	42135.29	207406.3	0	207406.3	BEV	0	9729.554	3	3
2042	0	5971.492	25860.44	13964.64	11895.8	148836.9	80371.92	68464.97	PHEV	3224.605	2746.886	3	8
2042	0	12017.31	52731.24	0	52731.24	272110.6	0	272110.6	BEV	0	12017.31	3	3
2042	0	7071.294	31028.41	16445.06	14583.35	182488.8	96719.04	85769.72	PHEV	3747.786	3323.508	3	8
2042	0	14566.75	64752.54	0	64752.54	346132.5	0	346132.5	BEV	0	14566.75	3	3
2042	0	8381.872	37259.35	19374.86	17884.49	226748.2	117909.1	108839.2	PHEV	4358.574	4023.299	3	8
2042	0	17076.88	76889.01	0	76889.01	420787.7	0	420787.7	BEV	0	17076.88	3	3
2042	0	9792.26	44089.85	22485.82	21604.03	281522.9	143576.7	137946.2	PHEV	4994.053	4798.207	3	8
2042	0	18487.96	84301.61	0	84301.61	473054.6	0	473054.6	BEV	0	18487.96	3	3
2042	0	10601.4	48340.39	24653.6	23686.79	315826.3	161071.4	154754.9	PHEV	5406.716	5194.688	3	8
2042	0	19647.56	90714.77	0	90714.77	522059.8	0	522059.8	BEV	0	19647.56	3	3
2042	0	11266.34	52017.84	26529.1	25488.74	347946.6	177452.7	170493.8	PHEV	5745.836	5520.509	3	8
2042	0	20815.17	97298.24	0	97298.24	574266.5	0	574266.5	BEV	0	20815.17	3	3
2042	0	11935.88	55792.95	28454.4	27338.54	382205.9	194925	187280.9	PHEV	6087.298	5848.58	3	8
2042	0	21657.01	102474	0	102474	620413.6	0	620413.6	BEV	0	21657.01	3	3
2042	0	12418.6	58760.85	29968.03	28792.82	412508.8	210379.5	202129.3	PHEV	6333.487	6085.115	3	8
2042	0	22426.32	107399	0	107399	666961.4	0	666961.4	BEV	0	22426.32	3	3
2042	0	12859.74	61584.92	31408.31	30176.61	443140.2	226001.5	217138.7	PHEV	6558.468	6301.274	3	8
2042	0	23015.99	111541.4	0	111541.4	710575	0	710575	BEV	0	23015.99	3	3
2042	0	13197.87	63960.32	32619.76	31340.55	471903.6	240670.8	231232.8	PHEV	6730.914	6466.957	3	8
2042	0	23688.95	116160	0	116160	759011.7	0	759011.7	BEV	0	23688.95	3	3
2042	0	13583.76	66608.67	33970.42	32638.25	503942.1	257010.5	246931.7	PHEV	6927.72	6656.044	3	8
2042	0	24234.31	120222.5	0	120222.5	805680.9	0	805680.9	BEV	0	24234.31	3	3
2042	0	13896.48	68938.23	35158.5	33779.73	534916	272807.1	262108.8	PHEV	7087.206	6809.276	3	8
2042	0	24676.18	123828.3	0	123828.3	850883.5	0	850883.5	BEV	0	24676.18	3	3
2042	0	14149.86	71005.85	36212.98	34792.87	565001.4	288150.7	276850.7	PHEV	7216.43	6933.432	3	8
2042	0	25377.85	128803.2	0	128803.2	907408.5	0	907408.5	BEV	0	25377.85	3	3
2042	0	14552.22	73858.61	37667.89	36190.72	602699.9	307376.9	295322.9	PHEV	7421.63	7130.586	3	8
2042	0	26109.15	134010.7	0	134010.7	967577.7	0	967577.7	BEV	0	26109.15	3	3
2042	0	14971.56	76844.67	39190.78	37653.89	642884.4	327871	315013.4	PHEV	7635.495	7336.064	3	8
2042	0	23704.33	123025.5	0	123025.5	909559.7	0	909559.7	BEV	0	23704.33	3	3
2042	0	13592.58	70545.49	35978.2	34567.29	604466.1	308277.7	296188.4	PHEV	6932.216	6660.365	3	8
2042	0	266.3937	1001.041	600.6247	400.4164	4393.222	2635.933	1757.289	PHEV	159.8362	106.5575	4	8
2042	0	0.661416	2.523327	0	2.523327	7.490086	0	7.490086	BEV	0	0.661416	4	3
2042	0	809.3906	3087.858	1852.715	1235.143	14319.42	8591.652	5727.768	PHEV	485.6344	323.7563	4	8
2042	0	380.9471	1475.153	0	1475.153	4764.459	0	4764.459	BEV	0	380.9471	4	3
2042	0	991.146	3838.044	2280.895	1557.149	19396.92	11527.31	7869.607	PHEV	589.0239	402.1221	4	8
2042	0	890.3019	3498.548	0	3498.548	12959.09	0	12959.09	BEV	0	890.3019	4	3
2042	0	1199.01	4711.655	2773.146	1938.51	23638.97	13913.23	9725.75	PHEV	705.7033	493.3071	4	8
2042	0	1535.99	6123.854	0	6123.854	23537.16	0	23537.16	BEV	0	1535.99	4	3
2042	0	1490.748	5943.479	3464.199	2479.28	29550.32	17223.61	12326.7	PHEV	868.8933	621.855	4	8
2042	0	1748.117	7069.735	0	7069.735	25377.46	0	25377.46	BEV	0	1748.117	4	3
2042	0	1707.598	6905.867	3985.672	2920.195	34956.84	20175.09	14781.75	PHEV	985.5278	722.0699	4	8
2042	0	2060.149	8449.681	0	8449.681	30111.59	0	30111.59	BEV	0	2060.149	4	3
2042	0	1935.803	7939.675	4536.957	3402.718	40970.28	23411.59	17558.69	PHEV	1106.173	829.6297	4	8
2042	0	2395.429	9962.062	0	9962.062	36071.64	0	36071.64	BEV	0	2395.429	4	3

2042	0	2755.979	11461.51	6483.941	4977.571	60373.17	34153.96	26219.2	PHEV	1559.097	1196.882	4	8
2042	0	2966.377	12506.45	0	12506.45	46654.36	0	46654.36	BEV	0	2966.377	4	3
2042	0	3254.169	13719.8	7683.09	6036.714	73886.86	41376.64	32510.22	PHEV	1822.335	1431.834	4	8
2042	0	3111.165	13295.13	0	13295.13	50728.88	0	50728.88	BEV	0	3111.165	4	3
2042	0	3227.407	13791.87	7585.529	6206.342	75912.77	41752.02	34160.75	PHEV	1775.074	1452.333	4	8
2042	0	3648.915	15802.17	0	15802.17	62989.86	0	62989.86	BEV	0	3648.915	4	3
2042	0	3684.905	15958.04	8617.339	7340.696	89846.42	48517.07	41329.35	PHEV	1989.849	1695.056	4	8
2042	0	4184.693	18362.18	0	18362.18	76736.98	0	76736.98	BEV	0	4184.693	4	3
2042	0	4136.81	18152.08	9620.6	8531.476	104610.2	55443.42	49166.8	PHEV	2192.509	1944.301	4	8
2042	0	4820.674	21429.01	0	21429.01	95447.9	0	95447.9	BEV	0	4820.674	4	3
2042	0	4768.986	21199.24	11023.6	10175.63	125111.2	65057.84	60053.39	PHEV	2479.873	2289.113	4	8
2042	0	5517.23	24841.44	0	24841.44	117664.2	0	117664.2	BEV	0	5517.23	4	3
2042	0	5430.786	24452.22	12470.63	11981.59	147847.2	75402.08	72445.13	PHEV	2769.701	2661.085	4	8
2042	0	5935.619	27065.29	0	27065.29	131728.3	0	131728.3	BEV	0	5935.619	4	3
2042	0	5842.619	26641.23	13587.03	13054.21	165100.1	84201.06	80899.06	PHEV	2979.736	2862.884	4	8
2042	0	6308.04	29124.85	0	29124.85	145638.5	0	145638.5	BEV	0	6308.04	4	3
2042	0	6209.205	28668.52	14620.95	14047.58	182170.3	92906.85	89263.45	PHEV	3166.695	3042.51	4	8
2042	0	6728.397	31451.15	0	31451.15	161534.1	0	161534.1	BEV	0	6728.397	4	3
2042	0	6622.976	30958.37	15788.77	15169.6	201722.3	102878.4	98843.91	PHEV	3377.718	3245.258	4	8
2042	0	7013.222	33184.32	0	33184.32	175029.4	0	175029.4	BEV	0	7013.222	4	3
2042	0	6903.338	32664.39	16658.84	16005.55	218351.1	111359.1	106992	PHEV	3520.702	3382.636	4	8
2042	0	7348.481	35191.65	0	35191.65	190553.9	0	190553.9	BEV	0	7348.481	4	3
2042	0	7233.344	34640.27	17666.54	16973.73	237540.5	121145.7	116394.9	PHEV	3689.006	3544.339	4	8
2042	0	7626.078	36957.95	0	36957.95	205390.8	0	205390.8	BEV	0	7626.078	4	3
2042	0	7506.592	36378.9	18553.24	17825.66	255925.4	130522	125403.4	PHEV	3828.362	3678.23	4	8
2042	0	7942.069	38944.33	0	38944.33	222048.2	0	222048.2	BEV	0	7942.069	4	3
2042	0	7817.633	38334.15	19550.42	18783.73	276615.9	141074.1	135541.8	PHEV	3986.993	3830.64	4	8
2042	0	8120.383	40283.92	0	40283.92	235590.7	0	235590.7	BEV	0	8120.383	4	3
2042	0	7993.152	39652.75	20222.9	19429.85	293499.2	149684.6	143814.6	PHEV	4076.508	3916.645	4	8
2042	0	8310.917	41705.26	0	41705.26	250086.2	0	250086.2	BEV	0	8310.917	4	3
2042	0	8180.701	41051.82	20936.43	20115.39	311597.7	158914.8	152682.9	PHEV	4172.157	4008.543	4	8
2042	0	8552.727	43408.68	0	43408.68	266780	0	266780	BEV	0	8552.727	4	3
2042	0	8418.723	42728.55	21791.56	20936.99	332396.7	169522.3	162874.4	PHEV	4293.549	4125.174	4	8
2042	0	8726.598	44791.09	0	44791.09	282016.6	0	282016.6	BEV	0	8726.598	4	3
2042	0	8589.869	44089.31	22485.55	21603.76	351437.4	179233.1	172204.3	PHEV	4380.833	4209.036	4	8
2042	0	7584.96	39365.94	0	39365.94	253562.4	0	253562.4	BEV	0	7584.96	4	3
2042	0	7466.119	38749.16	19762.07	18987.09	315588.9	160950.3	154638.5	PHEV	3807.721	3658.398	4	8
2042	0	4.406671	12.51984	0	12.51984	33.00124	0	33.00124	BEV	0	4.406671	1	3
2042	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2042	0	473.1331	1669.493	0	1669.493	5947.009	0	5947.009	BEV	0	473.1331	1	3
2042	0	494.5369	1745.018	1047.011	698.0071	5644.993	3386.996	2257.997	PHEV	296.7221	197.8147	1	8
2042	0	639.5549	2293.367	0	2293.367	8458.604	0	8458.604	BEV	0	639.5549	1	3
2042	0	807.4863	2895.549	1737.329	1158.22	9755.34	5853.204	3902.136	PHEV	484.4918	322.9945	1	8
2042	0	1658.627	6042.661	0	6042.661	23177.83	0	23177.83	BEV	0	1658.627	1	3
2042	0	788.7218	2873.447	1724.068	1149.379	10111.64	6066.987	4044.658	PHEV	473.2331	315.4887	1	8
2042	0	454.0918	1680.348	0	1680.348	4572.27	0	4572.27	BEV	0	454.0918	3	3
2042	0	41.32569	152.9241	91.75444	61.16962	701.914	421.1484	280.7656	PHEV	24.79541	16.53028	3	8

2042	0	1.935876	5.943661	0	5.943661	16.75972	0	16.75972	BEV	0	1.935876	1	3
2042	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2042	0	93.10082	323.1809	0	323.1809	1113.965	0	1113.965	BEV	0	93.10082	1	3
2042	0	195.7013	679.338	407.6028	271.7352	2101.774	1261.064	840.7094	PHEV	117.4208	78.28053	1	8
2042	0	1234.791	4569.296	0	4569.296	18155.2	0	18155.2	BEV	0	1234.791	1	3
2042	0	887.98	3285.935	1971.561	1314.374	12071.56	7242.937	4828.625	PHEV	532.788	355.192	1	8
2042	0	8.306556	24.07572	0	24.07572	64.40905	0	64.40905	BEV	0	8.306556	1	3
2042	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2042	0	110.2064	376.2457	0	376.2457	1260.09	0	1260.09	BEV	0	110.2064	1	3
2042	0	30.63414	104.5853	62.75116	41.83411	309.977	185.9862	123.9908	PHEV	18.38048	12.25366	1	8
2042	0	97.20528	348.5665	0	348.5665	1282.659	0	1282.659	BEV	0	97.20528	2	3
2042	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2042	0	21.72688	77.91	0	77.91	199.5142	0	199.5142	BEV	0	21.72688	3	3
2042	0	9.837254	35.27521	21.16513	14.11009	154.9428	92.9657	61.97713	PHEV	5.902352	3.934902	3	8
2042	0	3.082819	8.935241	0	8.935241	16.18752	0	16.18752	BEV	0	3.082819	3	3
2042	0	0	0	0	0	0	0	0	PHEV	0	0	3	8
2042	0	16.13535	46.76669	0	46.76669	86.51282	0	86.51282	BEV	0	16.13535	4	3
2042	0	0	0	0	0	0	0	0	PHEV	0	0	4	8
2042	0	18.10573	60.77587	0	60.77587	198.4583	0	198.4583	BEV	0	18.10573	1	3
2042	0	1.930053	6.478646	3.887188	2.591458	18.11259	10.86755	7.245036	PHEV	1.158032	0.772021	1	8
2042	0	36.0765	125.2324	0	125.2324	428.9211	0	428.9211	BEV	0	36.0765	2	3
2042	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2042	0	2.118762	6.626554	0	6.626554	19.28179	0	19.28179	BEV	0	2.118762	1	3
2042	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2042	0	10.95683	35.52356	0	35.52356	106.4622	0	106.4622	BEV	0	10.95683	1	3
2042	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2042	0	9.745174	32.15352	0	32.15352	103.1661	0	103.1661	BEV	0	9.745174	1	3
2042	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2042	0	47.0691	166.0876	0	166.0876	588.099	0	588.099	BEV	0	47.0691	2	3
2042	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2042	0	1.905992	5.633521	0	5.633521	15.29897	0	15.29897	BEV	0	1.905992	1	3
2042	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2042	0	3.679727	11.71938	0	11.71938	34.91615	0	34.91615	BEV	0	3.679727	1	3
2042	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2042	0	5.367549	17.40235	0	17.40235	52.93182	0	52.93182	BEV	0	5.367549	2	3
2042	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2042	0	0.258864	0.809613	0	0.809613	1.84717	0	1.84717	BEV	0	0.258864	4	3
2042	0	0	0	0	0	0	0	0	PHEV	0	0	4	8
2042	0	3.112862	10.27067	0	10.27067	23.49189	0	23.49189	BEV	0	3.112862	3	3
2042	0	0	0	0	0	0	0	0	PHEV	0	0	3	8
2042	0	1.877768	6.41072	0	6.41072	15.35256	0	15.35256	BEV	0	1.877768	3	3
2042	0	1.299993	4.438191	2.662914	1.775276	18.17128	10.90277	7.268512	PHEV	0.779996	0.519997	3	8
2042	0	0.293473	1.069171	0	1.069171	2.765	0	2.765	BEV	0	0.293473	4	3
2042	0	0	0	0	0	0	0	0	PHEV	0	0	4	8
2042	0	8.212323	22.86163	0	22.86163	57.98399	0	57.98399	BEV	0	8.212323	2	3
2042	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2042	0	2.94881	8.377895	0	8.377895	21.84264	0	21.84264	BEV	0	2.94881	2	3

2042	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2042	0	1.314892	4.112403	0	4.112403	11.81248	0	11.81248	BEV	0	1.314892	2	3
2042	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2042	0	0.757641	2.412975	0	2.412975	7.139378	0	7.139378	BEV	0	0.757641	2	3
2042	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2042	0	2.190257	7.2266	0	7.2266	23.05394	0	23.05394	BEV	0	2.190257	2	3
2042	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2042	0	2.313037	7.499191	0	7.499191	16.31153	0	16.31153	BEV	0	2.313037	3	3
2042	0	0	0	0	0	0	0	0	PHEV	0	0	3	8
2042	0	1.406151	4.96173	0	4.96173	12.3626	0	12.3626	BEV	0	1.406151	3	3
2042	0	1.075292	3.794264	2.276558	1.517706	16.55434	9.932601	6.621734	PHEV	0.645175	0.430117	3	8
2042	0	0.908504	2.52911	0	2.52911	4.723197	0	4.723197	BEV	0	0.908504	4	3
2042	0	0	0	0	0	0	0	0	PHEV	0	0	4	8
2042	0	1.86263	5.505357	0	5.505357	10.36118	0	10.36118	BEV	0	1.86263	4	3
2042	0	0	0	0	0	0	0	0	PHEV	0	0	4	8
2042	0	0.315913	0.96994	0	0.96994	1.923463	0	1.923463	BEV	0	0.315913	4	3
2042	0	0	0	0	0	0	0	0	PHEV	0	0	4	8
2042	0	10.57222	30.64252	0	30.64252	78.70662	0	78.70662	BEV	0	10.57222	2	3
2042	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2042	0	0.694176	2.091538	0	2.091538	5.664329	0	5.664329	BEV	0	0.694176	2	3
2042	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2042	0	5.423105	14.78626	0	14.78626	37.21171	0	37.21171	BEV	0	5.423105	2	3
2042	0	0.43442	1.209346	0	1.209346	2.380635	0	2.380635	BEV	0	0.43442	3	3
2042	0	0	0	0	0	0	0	0	PHEV	0	0	3	8
2042	0	0.283316	0.91855	0	0.91855	1.961432	0	1.961432	BEV	0	0.283316	4	3
2042	0	0	0	0	0	0	0	0	PHEV	0	0	4	8
2042	0	1.775834	4.740127	0	4.740127	12.03403	0	12.03403	BEV	0	1.775834	1	3
2042	0	1.166143	3.246332	0	3.246332	8.334252	0	8.334252	BEV	0	1.166143	1	3
2042	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2042	0	1.789764	5.392522	0	5.392522	14.80494	0	14.80494	BEV	0	1.789764	1	3
2042	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2042	0	1.704542	4.549833	0	4.549833	11.34186	0	11.34186	BEV	0	1.704542	2	3
2042	0	0.269605	0.82776	0	0.82776	2.304098	0	2.304098	BEV	0	0.269605	2	3
2042	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2042	0	1.99054	5.427267	0	5.427267	13.90542	0	13.90542	BEV	0	1.99054	1	3
2042	0	1.713196	4.671079	0	4.671079	8.059965	0	8.059965	BEV	0	1.713196	3	3
2042	0	0.142774	0.405635	0	0.405635	0.718861	0	0.718861	BEV	0	0.142774	3	3
2042	0	0	0	0	0	0	0	0	PHEV	0	0	3	8
2042	0	1.835016	6.159635	0	6.159635	14.0059	0	14.0059	BEV	0	1.835016	3	3
2042	0	0	0	0	0	0	0	0	PHEV	0	0	3	8
2042	0	4.280588	14.85921	0	14.85921	35.24797	0	35.24797	BEV	0	4.280588	3	3
2042	0	1.097587	3.810053	2.286032	1.524021	18.58939	11.15363	7.435755	PHEV	0.658552	0.439035	3	8
2042	0	0.188332	0.535073	0	0.535073	1.005015	0	1.005015	BEV	0	0.188332	4	3
2042	0	0	0	0	0	0	0	0	PHEV	0	0	4	8
2042	0	0	0	0	0	0	0	0	BEV	0	0	2	3
2042	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2042	0	0	0	0	0	0	0	0	BEV	0	0	2	3

2042	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2042	0	0	0	0	0	0	0	0	BEV	0	0	3	3
2042	0	3.180125	11.58573	6.951441	4.634294	58.09431	34.85658	23.23772	PHEV	1.908075	1.27205	3	8
2042	0	0.116606	0.311249	0	0.311249	0.540929	0	0.540929	BEV	0	0.116606	3	3
2042	0	0.320632	0.874212	0	0.874212	1.539566	0	1.539566	BEV	0	0.320632	4	3
2042	0	0.105697	0.33663	0	0.33663	0.684508	0	0.684508	BEV	0	0.105697	3	3
2042	0	0	0	0	0	0	0	0	PHEV	0	0	3	8
2042	0	0.336491	1.129506	0	1.129506	3.382431	0	3.382431	BEV	0	0.336491	2	3
2042	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2042	0	0.333459	0.890083	0	0.890083	1.499616	0	1.499616	BEV	0	0.333459	4	3
2042	0	0.237193	0.809779	0	0.809779	2.750135	0	2.750135	BEV	0	0.237193	2	3
2042	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2042	0	0.058833	0.180634	0	0.180634	0.332074	0	0.332074	BEV	0	0.058833	3	3
2042	0	0	0	0	0	0	0	0	PHEV	0	0	3	8
2042	0	0.116003	0.34287	0	0.34287	0.904363	0	0.904363	BEV	0	0.116003	2	3
2042	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2042	0	0.260606	0.829992	0	0.829992	1.673797	0	1.673797	BEV	0	0.260606	4	3
2042	0	0	0	0	0	0	0	0	PHEV	0	0	4	8
2042	0	0	0	0	0	0	0	0	BEV	0	0	4	3
2042	0	0.388802	1.371923	0.823154	0.548769	6.541638	3.924983	2.616655	PHEV	0.233281	0.155521	4	8
2043	0	3879.756	14356.88	0	14356.88	55811.92	0	55811.92	BEV	0	3879.756	1	3
2043	0	3499.671	12950.39	6993.213	5957.181	49232.92	26585.77	22647.14	PHEV	1889.822	1609.849	1	8
2043	0	5852.294	21991.46	0	21991.46	88415.06	0	88415.06	BEV	0	5852.294	1	3
2043	0	3782.309	14212.97	7675.004	6537.967	56416.62	30464.97	25951.64	PHEV	2042.447	1739.862	1	8
2043	0	8807.579	33601.26	0	33601.26	140476.7	0	140476.7	BEV	0	8807.579	1	3
2043	0	4319.551	16479.26	8734.007	7745.252	67985.91	36032.53	31953.38	PHEV	2289.362	2030.189	1	8
2043	0	12838.24	49713.9	0	49713.9	215453	0	215453	BEV	0	12838.24	1	3
2043	0	4895.291	18956.18	9857.215	9098.968	81642.51	42454.11	39188.4	PHEV	2545.551	2349.74	1	8
2043	0	16551.17	65039.81	0	65039.81	292639	0	292639	BEV	0	16551.17	1	3
2043	0	6225.146	24462.46	12475.85	11986.6	109479	55834.31	53644.73	PHEV	3174.825	3050.322	1	8
2043	0	20994.46	83703.04	0	83703.04	390671.3	0	390671.3	BEV	0	20994.46	1	3
2043	0	7779.908	31017.79	15508.9	15508.9	144090.6	72045.3	72045.3	PHEV	3889.954	3889.954	1	8
2043	0	26524.16	107269	0	107269	518768.5	0	518768.5	BEV	0	26524.16	1	3
2043	0	9775.753	39535.1	19372.2	20162.9	190349.8	93271.41	97078.41	PHEV	4790.119	4985.634	1	8
2043	0	32516.09	133364.4	0	133364.4	667645.3	0	667645.3	BEV	0	32516.09	1	3
2043	0	11931.84	48938.34	23490.4	25447.94	243974.5	117107.7	126866.7	PHEV	5727.286	6204.559	1	8
2043	0	39595.82	164670.3	0	164670.3	852934.9	0	852934.9	BEV	0	39595.82	1	3
2043	0	14333.44	59609.62	28016.52	31593.1	307581.6	144563.4	163018.2	PHEV	6736.717	7596.723	1	8
2043	0	39103.39	164862.6	0	164862.6	882308.5	0	882308.5	BEV	0	39103.39	1	3
2043	0	16261.95	68561.52	31126.93	37434.59	365568	165967.9	199600.1	PHEV	7382.926	8879.025	1	8
2043	0	45736.48	195448.4	0	195448.4	1079373	0	1079373	BEV	0	45736.48	1	3
2043	0	19357.71	82722.46	36232.44	46490.02	455488.9	199504.1	255984.8	PHEV	8478.677	10879.03	1	8
2043	0	53782.4	232912.8	0	232912.8	1326449	0	1326449	BEV	0	53782.4	1	3
2043	0	22983.35	99532.84	42002.86	57529.98	565511.7	238645.9	326865.8	PHEV	9698.973	13284.38	1	8
2043	0	62105.87	272516.8	0	272516.8	1599829	0	1599829	BEV	0	62105.87	1	3
2043	0	26871.78	117911.8	47872.17	70039.58	690936.5	280520.2	410416.3	PHEV	10909.94	15961.84	1	8
2043	0	71442.92	317580.2	0	317580.2	1920890	0	1920890	BEV	0	71442.92	1	3

2043	0	31295.45	139115.5	54255.03	84860.44	840262.1	327702.2	512559.9	PHEV	12205.23	19090.22	1	8
2043	0	78047.33	351409.7	0	351409.7	2189142	0	2189142	BEV	0	78047.33	1	3
2043	0	34188.5	153934.4	60034.41	93899.98	957841.2	373558.1	584283.1	PHEV	13333.51	20854.98	1	8
2043	0	85059.43	387854.9	0	387854.9	2487237	0	2487237	BEV	0	85059.43	1	3
2043	0	37260.14	169899.2	66260.67	103638.5	1088530	424526.6	664003.2	PHEV	14531.45	22728.68	1	8
2043	0	91038.3	420332.9	0	420332.9	2773457	0	2773457	BEV	0	91038.3	1	3
2043	0	39879.17	184126.1	71809.19	112316.9	1214054	473481.1	740572.9	PHEV	15552.88	24326.29	1	8
2043	0	97408.62	455325.9	0	455325.9	3089867	0	3089867	BEV	0	97408.62	1	3
2043	0	42669.68	199454.7	77787.34	121667.4	1352836	527605.9	825229.7	PHEV	16641.17	26028.5	1	8
2043	0	102741	486137.3	0	486137.3	3391583	0	3391583	BEV	0	102741	1	3
2043	0	45005.5	212951.6	83051.13	129900.5	1485316	579273.4	906043	PHEV	17552.14	27453.35	1	8
2043	0	108645.8	520301.4	0	520301.4	3730255	0	3730255	BEV	0	108645.8	1	3
2043	0	47592.1	227917.1	88887.68	139029.4	1634072	637288.2	996784	PHEV	18560.92	29031.18	1	8
2043	0	113249	548833.9	0	548833.9	4042423	0	4042423	BEV	0	113249	1	3
2043	0	49608.51	240415.7	93762.14	146653.6	1771319	690814.5	1080505	PHEV	19347.32	30261.19	1	8
2043	0	118524.7	581192	0	581192	4394938	0	4394938	BEV	0	118524.7	1	3
2043	0	51919.56	254590.1	99290.16	155300	1926247	751236.5	1175011	PHEV	20248.63	31670.93	1	8
2043	0	122557.6	607988.7	0	607988.7	4718291	0	4718291	BEV	0	122557.6	1	3
2043	0	53686.15	266328.4	103868.1	162460.3	2068494	806712.5	1261781	PHEV	20937.6	32748.55	1	8
2043	0	125830.5	631433.7	0	631433.7	5025318	0	5025318	BEV	0	125830.5	1	3
2043	0	55119.82	276598.4	107873.4	168725	2203512	859369.5	1344142	PHEV	21496.73	33623.09	1	8
2043	0	129380.5	656660.6	0	656660.6	5350634	0	5350634	BEV	0	129380.5	1	3
2043	0	56674.92	287649	112183.1	175465.9	2346114	914984.5	1431130	PHEV	22103.22	34571.7	1	8
2043	0	130747.5	671089.1	0	671089.1	5581490	0	5581490	BEV	0	130747.5	1	3
2043	0	57273.73	293969.4	114648.1	179321.4	2446624	954183.4	1492441	PHEV	22336.75	34936.97	1	8
2043	0	117749.1	611117.8	0	611117.8	5174835	0	5174835	BEV	0	117749.1	1	3
2043	0	51579.79	267699.1	104402.7	163296.5	2267201	884208.5	1382993	PHEV	20116.12	31463.67	1	8
2043	0	0.665176	2.461458	0	2.461458	9.786615	0	9.786615	BEV	0	0.665176	2	3
2043	0	5.769387	21.34938	12.80963	8.539754	104.034	62.42042	41.61361	PHEV	3.461632	2.307755	2	8
2043	0	343.221	1309.402	0	1309.402	6144.834	0	6144.834	BEV	0	343.221	2	3
2043	0	263.5696	1005.529	597.5713	407.9573	5158.193	3065.44	2092.753	PHEV	156.6357	106.934	2	8
2043	0	785.0631	3040.024	0	3040.024	14456.19	0	14456.19	BEV	0	785.0631	2	3
2043	0	604.6413	2341.371	1378.064	963.3067	12091.37	7116.634	4974.735	PHEV	355.8746	248.7667	2	8
2043	0	1020.729	4011.077	0	4011.077	19517.43	0	19517.43	BEV	0	1020.729	2	3
2043	0	749.7537	2946.247	1717.241	1229.006	14983.35	8733.152	6250.197	PHEV	436.9993	312.7544	2	8
2043	0	1392.459	5551.61	0	5551.61	27571.02	0	27571.02	BEV	0	1392.459	2	3
2043	0	886.4123	3534.046	2039.65	1494.397	18206.78	10507.91	7698.865	PHEV	511.5865	374.8258	2	8
2043	0	1699.284	6872.243	0	6872.243	34817.04	0	34817.04	BEV	0	1699.284	2	3
2043	0	1066.914	4314.815	2465.609	1849.206	22555.44	12888.83	9666.619	PHEV	609.6653	457.249	2	8
2043	0	1985.09	8141.826	0	8141.826	42134.89	0	42134.89	BEV	0	1985.09	2	3
2043	0	1293.63	5305.812	3001.573	2304.238	28187.98	15946.34	12241.64	PHEV	731.8251	561.8052	2	8
2043	0	2401.985	9989.326	0	9989.326	52976.62	0	52976.62	BEV	0	2401.985	2	3
2043	0	1463.73	6087.329	3408.905	2678.425	32927.25	18439.26	14487.99	PHEV	819.6886	644.041	2	8
2043	0	2589.302	10916.68	0	10916.68	59310.47	0	59310.47	BEV	0	2589.302	2	3
2043	0	1632.509	6882.772	3785.524	3097.247	37917.58	20854.67	17062.91	PHEV	897.8799	734.629	2	8
2043	0	2982.023	12743.26	0	12743.26	70905.58	0	70905.58	BEV	0	2982.023	2	3
2043	0	2114.355	9035.4	4879.116	4156.284	50853.92	27461.12	23392.8	PHEV	1141.752	972.6033	2	8

2043	0	3605.274	15613.18	0	15613.18	89084.21	0	89084.21	BEV	0	3605.274	2	3
2043	0	2556.83	11072.73	5868.549	5204.185	63598.2	33707.05	29891.15	PHEV	1355.12	1201.71	2	8
2043	0	4396.776	19292.79	0	19292.79	112898.6	0	112898.6	BEV	0	4396.776	2	3
2043	0	2925.692	12837.76	6675.637	6162.126	75238.97	39124.26	36114.7	PHEV	1521.36	1404.332	2	8
2043	0	5141.529	22855.28	0	22855.28	137144.7	0	137144.7	BEV	0	5141.529	2	3
2043	0	3495.745	15539.39	7925.09	7614.302	92954.97	47407.03	45547.94	PHEV	1782.83	1712.915	2	8
2043	0	5474.89	24650.8	0	24650.8	151729.8	0	151729.8	BEV	0	5474.89	2	3
2043	0	3722.398	16760.17	8547.688	8212.485	102422.7	52235.56	50187.11	PHEV	1898.423	1823.975	2	8
2043	0	5839.605	26627.49	0	26627.49	168127	0	168127	BEV	0	5839.605	2	3
2043	0	3970.37	18104.13	9233.107	8871.024	113104.4	57683.26	55421.17	PHEV	2024.889	1945.481	2	8
2043	0	6162.095	28451.01	0	28451.01	184311.2	0	184311.2	BEV	0	6162.095	2	3
2043	0	4189.631	19343.95	9865.413	9478.534	123656.6	63064.89	60591.76	PHEV	2136.712	2052.919	2	8
2043	0	6503.121	30398.12	0	30398.12	202029	0	202029	BEV	0	6503.121	2	3
2043	0	4421.496	20667.8	10540.58	10127.22	135240.5	68972.66	66267.85	PHEV	2254.963	2166.533	2	8
2043	0	6754.573	31960.48	0	31960.48	217953.9	0	217953.9	BEV	0	6754.573	2	3
2043	0	4592.459	21730.05	11082.32	10647.72	145668.7	74291.01	71377.64	PHEV	2342.154	2250.305	2	8
2043	0	7032.853	33680.12	0	33680.12	235632.8	0	235632.8	BEV	0	7032.853	2	3
2043	0	4781.663	22899.24	11678.61	11220.63	157297.6	80221.79	77075.84	PHEV	2438.648	2343.015	2	8
2043	0	7312.636	35438.93	0	35438.93	254341.8	0	254341.8	BEV	0	7312.636	2	3
2043	0	4971.889	24095.06	12288.48	11806.58	169652.1	86522.58	83129.54	PHEV	2535.663	2436.225	2	8
2043	0	7594.158	37238.33	0	37238.33	274128.1	0	274128.1	BEV	0	7594.158	2	3
2043	0	5163.296	25318.48	12912.43	12406.06	182772.9	93214.2	89558.74	PHEV	2633.281	2530.015	2	8
2043	0	7774.396	38567.54	0	38567.54	291190.9	0	291190.9	BEV	0	7774.396	2	3
2043	0	5285.841	26222.21	13373.33	12848.88	194141.3	99012.06	95129.23	PHEV	2695.779	2590.062	2	8
2043	0	7891.196	39599.05	0	39599.05	306607.1	0	306607.1	BEV	0	7891.196	2	3
2043	0	5365.254	26923.54	13731.01	13192.54	204476.1	104282.8	100193.3	PHEV	2736.279	2628.974	2	8
2043	0	8011.156	40659.98	0	40659.98	322766.2	0	322766.2	BEV	0	8011.156	2	3
2043	0	5446.815	27644.87	14098.89	13545.99	215348.5	109827.7	105520.7	PHEV	2777.876	2668.939	2	8
2043	0	8138.834	41774.27	0	41774.27	339816.2	0	339816.2	BEV	0	8138.834	2	3
2043	0	5533.624	28402.49	14485.27	13917.22	226850	115693.5	111156.5	PHEV	2822.148	2711.476	2	8
2043	0	7443.526	38631.9	0	38631.9	321851.8	0	321851.8	BEV	0	7443.526	2	3
2043	0	5060.881	26265.97	13395.65	12870.33	214970.8	109635.1	105335.7	PHEV	2581.049	2479.832	2	8
2043	0	150.2051	564.4333	338.66	225.7733	2719.802	1631.881	1087.921	PHEV	90.12307	60.08205	3	8
2043	0	583.6469	2226.636	0	2226.636	7608.692	0	7608.692	BEV	0	583.6469	3	3
2043	0	506.9318	1933.965	1149.328	784.6373	9461.851	5623.043	3838.808	PHEV	301.2623	205.6695	3	8
2043	0	1352.508	5237.357	0	5237.357	22416.92	0	22416.92	BEV	0	1352.508	3	3
2043	0	976.0796	3779.703	2224.625	1555.078	18719.88	11017.99	7701.893	PHEV	574.4926	401.5871	3	8
2043	0	1756.69	6903.123	0	6903.123	27672.19	0	27672.19	BEV	0	1756.69	3	3
2043	0	1691.973	6648.81	3875.306	2773.504	33422.14	19480.33	13941.81	PHEV	986.1784	705.7944	3	8
2043	0	2486.664	9914.106	0	9914.106	40594.4	0	40594.4	BEV	0	2486.664	3	3
2043	0	1982.86	7905.485	4562.594	3342.891	40376.94	23303.26	17073.68	PHEV	1144.394	838.4666	3	8
2043	0	3440.993	13916.06	0	13916.06	58492	0	58492	BEV	0	3440.993	3	3
2043	0	2460.862	9952.217	5686.981	4265.236	51701.12	29543.5	22157.62	PHEV	1406.207	1054.655	3	8
2043	0	4398.203	18039.19	0	18039.19	76767.8	0	76767.8	BEV	0	4398.203	3	3
2043	0	3065.585	12573.47	7112.99	5460.477	66520.61	37631.66	28888.95	PHEV	1734.245	1331.34	3	8
2043	0	5394.03	22432.58	0	22432.58	96498.07	0	96498.07	BEV	0	5394.03	3	3
2043	0	3964.391	16487.03	9232.737	7254.293	88938.73	49805.69	39133.04	PHEV	2220.059	1744.332	3	8

2043	0	6996.336	29497.04	0	29497.04	134562	0	134562	BEV	0	6996.336	3	3
2043	0	4346.242	18324.06	10078.23	8245.828	100773.8	55425.58	45348.2	PHEV	2390.433	1955.809	3	8
2043	0	8685.213	37115.04	0	37115.04	177512.3	0	177512.3	BEV	0	8685.213	3	3
2043	0	5330.53	22779.27	12300.81	10478.47	127815.4	69020.29	58795.06	PHEV	2878.486	2452.044	3	8
2043	0	10931.05	47338.55	0	47338.55	237363.5	0	237363.5	BEV	0	10931.05	3	3
2043	0	6432.11	27855.22	14763.27	13091.95	159582.2	84578.57	75003.64	PHEV	3409.018	3023.092	3	8
2043	0	13333.12	58504.92	0	58504.92	303813.6	0	303813.6	BEV	0	13333.12	3	3
2043	0	7672.027	33664.4	17505.49	16158.91	199480.7	103730	95750.75	PHEV	3989.454	3682.573	3	8
2043	0	15962.63	70957.56	0	70957.56	377079.4	0	377079.4	BEV	0	15962.63	3	3
2043	0	9153.322	40688.62	20751.2	19937.42	252918.3	128988.3	123930	PHEV	4668.194	4485.128	3	8
2043	0	17251.7	77676.1	0	77676.1	423168.6	0	423168.6	BEV	0	17251.7	3	3
2043	0	9892.501	44541.18	22716	21825.18	283115.6	144388.9	138726.6	PHEV	5045.175	4847.325	3	8
2043	0	18671.47	85138.37	0	85138.37	475589.5	0	475589.5	BEV	0	18671.47	3	3
2043	0	10706.63	48820.21	24898.31	23921.9	317519.8	161935.1	155584.7	PHEV	5460.383	5246.25	3	8
2043	0	19835.48	91582.41	0	91582.41	524673.8	0	524673.8	BEV	0	19835.48	3	3
2043	0	11374.1	52515.36	26782.84	25732.53	349691.7	178342.8	171348.9	PHEV	5800.792	5573.31	3	8
2043	0	21008.34	98201.19	0	98201.19	576982.9	0	576982.9	BEV	0	21008.34	3	3
2043	0	12046.65	56310.72	28718.47	27592.25	384018.1	195849.2	188168.9	PHEV	6143.789	5902.856	3	8
2043	0	21852.27	103398	0	103398	623185.5	0	623185.5	BEV	0	21852.27	3	3
2043	0	12530.57	59290.66	30238.24	29052.42	414357.4	211322.3	203035.1	PHEV	6390.592	6139.98	3	8
2043	0	22623.33	108342.4	0	108342.4	669793.6	0	669793.6	BEV	0	22623.33	3	3
2043	0	12972.71	62125.94	31684.23	30441.71	445029.2	226964.9	218064.3	PHEV	6616.084	6356.63	3	8
2043	0	23210.78	112485.5	0	112485.5	713361.6	0	713361.6	BEV	0	23210.78	3	3
2043	0	13309.57	64501.63	32895.83	31605.8	473762	241618.6	232143.4	PHEV	6787.88	6521.689	3	8
2043	0	23880.6	117099.7	0	117099.7	761710.7	0	761710.7	BEV	0	23880.6	3	3
2043	0	13693.66	67147.56	34245.25	32902.3	505743.3	257929.1	247814.2	PHEV	6983.768	6709.894	3	8
2043	0	24423.25	121159.9	0	121159.9	808309.7	0	808309.7	BEV	0	24423.25	3	3
2043	0	14004.83	69475.72	35432.62	34043.1	536671	273702.2	262968.8	PHEV	7142.463	6862.367	3	8
2043	0	24859.72	124749.3	0	124749.3	853357.2	0	853357.2	BEV	0	24859.72	3	3
2043	0	14255.11	71533.98	36482.33	35051.65	566654.1	288993.6	277660.5	PHEV	7270.105	6985.003	3	8
2043	0	25555.72	129706	0	129706	909660	0	909660	BEV	0	25555.72	3	3
2043	0	14654.21	74376.28	37931.9	36444.38	604206	308145	296060.9	PHEV	7473.648	7180.563	3	8
2043	0	26282.08	134898.3	0	134898.3	969602.7	0	969602.7	BEV	0	26282.08	3	3
2043	0	15070.72	77353.63	39450.35	37903.28	644240.2	328562.5	315677.7	PHEV	7686.067	7384.653	3	8
2043	0	23850.28	123783	0	123783	911031.7	0	911031.7	BEV	0	23850.28	3	3
2043	0	13676.27	70979.86	36199.73	34780.13	605452.7	308780.9	296671.8	PHEV	6974.9	6701.375	3	8
2043	0	227.4768	841.7688	505.0613	336.7075	3619.594	2171.757	1447.838	PHEV	136.4861	90.99072	4	8
2043	0	0.566195	2.127618	0	2.127618	6.080466	0	6.080466	BEV	0	0.566195	4	3
2043	0	692.8661	2603.618	1562.171	1041.447	11834.31	7100.586	4733.724	PHEV	415.7197	277.1465	4	8
2043	0	327.9578	1251.172	0	1251.172	3898.69	0	3898.69	BEV	0	327.9578	4	3
2043	0	853.2787	3255.292	1934.574	1320.719	16194.56	9624.195	6570.364	PHEV	507.0913	346.1874	4	8
2043	0	772.3238	2990.693	0	2990.693	10740.49	0	10740.49	BEV	0	772.3238	4	3
2043	0	1040.124	4027.703	2370.591	1657.112	19842.05	11678.46	8163.586	PHEV	612.1872	427.9367	4	8
2043	0	1340.401	5267.267	0	5267.267	19646.74	0	19646.74	BEV	0	1340.401	4	3
2043	0	1300.92	5112.122	2979.637	2132.485	24894.26	14509.8	10384.46	PHEV	758.2506	542.6696	4	8
2043	0	1545.297	6160.96	0	6160.96	21365.93	0	21365.93	BEV	0	1545.297	4	3
2043	0	1509.479	6018.155	3473.335	2544.82	29794.14	17195.47	12598.66	PHEV	871.1848	638.2938	4	8

2043	0	1833.138	7413.576	0	7413.576	25490.63	0	25490.63	BEV	0	1833.138	4	3
2043	0	1722.493	6966.108	3980.633	2985.475	35111.92	20063.95	15047.96	PHEV	984.2819	738.2114	4	8
2043	0	2153.035	8830.65	0	8830.65	30849.05	0	30849.05	BEV	0	2153.035	4	3
2043	0	2477.101	10159.8	5747.546	4412.258	52205.22	29533.24	22671.98	PHEV	1401.331	1075.769	4	8
2043	0	2643.487	10993.68	0	10993.68	39580.15	0	39580.15	BEV	0	2643.487	4	3
2043	0	2899.953	12060.27	6753.749	5306.517	63289.51	35442.12	27847.38	PHEV	1623.974	1275.979	4	8
2043	0	2817.378	11878.26	0	11878.26	43755.17	0	43755.17	BEV	0	2817.378	4	3
2043	0	2922.643	12322.07	6777.136	5544.93	66046.53	36325.59	29720.94	PHEV	1607.453	1315.189	4	8
2043	0	3345.716	14297.45	0	14297.45	55058.79	0	55058.79	BEV	0	3345.716	4	3
2043	0	3378.716	14438.47	7796.774	6641.696	79098.94	42713.43	36385.51	PHEV	1824.507	1554.209	4	8
2043	0	3880.098	16803.35	0	16803.35	67890.96	0	67890.96	BEV	0	3880.098	4	3
2043	0	3835.7	16611.07	8803.87	7807.205	93087.51	49336.38	43751.13	PHEV	2032.921	1802.779	4	8
2043	0	4481.337	19663.84	0	19663.84	84764.59	0	84764.59	BEV	0	4481.337	4	3
2043	0	4433.287	19453	10115.56	9337.439	111588.4	58025.99	53562.45	PHEV	2305.309	2127.978	4	8
2043	0	5195.186	23093.8	0	23093.8	105948.3	0	105948.3	BEV	0	5195.186	4	3
2043	0	5113.788	22731.96	11593.3	11138.66	133539.5	68105.16	65434.37	PHEV	2608.032	2505.756	4	8
2043	0	5573.827	25096.27	0	25096.27	118331.3	0	118331.3	BEV	0	5573.827	4	3
2043	0	5486.496	24703.06	12598.56	12104.5	148680.5	75827.06	72853.45	PHEV	2798.113	2688.383	4	8
2043	0	5994.639	27334.41	0	27334.41	132435.2	0	132435.2	BEV	0	5994.639	4	3
2043	0	5900.715	26906.14	13722.13	13184.01	165983.4	84651.52	81331.86	PHEV	3009.364	2891.35	4	8
2043	0	6368.49	29403.96	0	29403.96	146368.9	0	146368.9	BEV	0	6368.49	4	3
2043	0	6268.709	28943.25	14761.06	14182.19	183083.8	93372.76	89711.08	PHEV	3197.041	3071.667	4	8
2043	0	6790.979	31743.68	0	31743.68	162300.3	0	162300.3	BEV	0	6790.979	4	3
2043	0	6684.578	31246.32	15935.62	15310.7	202682	103367.8	99314.17	PHEV	3409.135	3275.443	4	8
2043	0	7076.498	33483.72	0	33483.72	175811.4	0	175811.4	BEV	0	7076.498	4	3
2043	0	6965.623	32959.1	16809.14	16149.96	219332.8	111859.7	107473.1	PHEV	3552.468	3413.155	4	8
2043	0	7412.913	35500.22	0	35500.22	191359	0	191359	BEV	0	7412.913	4	3
2043	0	7296.767	34944	17821.44	17122.56	238554.2	121662.7	116891.6	PHEV	3721.351	3575.416	4	8
2043	0	7690.394	37269.65	0	37269.65	206190.1	0	206190.1	BEV	0	7690.394	4	3
2043	0	7569.901	36685.71	18709.71	17976	256934.8	131036.8	125898.1	PHEV	3860.65	3709.251	4	8
2043	0	8006.18	39258.71	0	39258.71	222834.3	0	222834.3	BEV	0	8006.18	4	3
2043	0	7880.739	38643.6	19708.24	18935.36	277613.5	141582.9	136030.6	PHEV	4019.177	3861.562	4	8
2043	0	8183.562	40597.34	0	40597.34	236357.3	0	236357.3	BEV	0	8183.562	4	3
2043	0	8055.341	39961.26	20380.24	19581.02	294477	150183.3	144293.7	PHEV	4108.224	3947.117	4	8
2043	0	8372.496	42014.27	0	42014.27	250809.4	0	250809.4	BEV	0	8372.496	4	3
2043	0	8241.316	41355.99	21091.56	20264.44	312526.3	159388.4	153137.9	PHEV	4203.071	4038.245	4	8
2043	0	8612.468	43711.89	0	43711.89	267440.6	0	267440.6	BEV	0	8612.468	4	3
2043	0	8477.528	43027.01	21943.78	21083.24	333253.1	169959.1	163294	PHEV	4323.539	4153.989	4	8
2043	0	8784.531	45088.45	0	45088.45	282618.3	0	282618.3	BEV	0	8784.531	4	3
2043	0	8646.895	44382	22634.82	21747.18	352225.5	179635	172590.5	PHEV	4409.916	4236.979	4	8
2043	0	7631.663	39608.33	0	39608.33	253981.3	0	253981.3	BEV	0	7631.663	4	3
2043	0	7512.09	38987.75	19883.75	19104	316148.1	161235.6	154912.6	PHEV	3831.166	3680.924	4	8
2043	0	4.240194	11.80394	0	11.80394	30.52919	0	30.52919	BEV	0	4.240194	1	3
2043	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2043	0	409.5726	1421.749	0	1421.749	4874.336	0	4874.336	BEV	0	409.5726	1	3
2043	0	428.1009	1486.067	891.64	594.4267	4582.981	2749.789	1833.192	PHEV	256.8605	171.2404	1	8
2043	0	551.365	1945.541	0	1945.541	6907.354	0	6907.354	BEV	0	551.365	1	3

2043	0	696.1398	2456.392	1473.835	982.5568	7899.182	4739.509	3159.673	PHEV	417.6839	278.4559	1	8
2043	0	1415.839	5077.03	0	5077.03	18743.07	0	18743.07	BEV	0	1415.839	1	3
2043	0	673.2696	2414.264	1448.558	965.7057	8113.404	4868.043	3245.362	PHEV	403.9618	269.3079	1	8
2043	0	402.9928	1468.171	0	1468.171	3844.877	0	3844.877	BEV	0	402.9928	3	3
2043	0	36.6753	133.6144	80.16862	53.44575	604.3642	362.6185	241.7457	PHEV	22.00518	14.67012	3	8
2043	0	1.868999	5.631255	0	5.631255	15.41138	0	15.41138	BEV	0	1.868999	1	3
2043	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2043	0	82.62256	282.0743	0	282.0743	936.409	0	936.409	BEV	0	82.62256	1	3
2043	0	173.6756	592.9304	355.7582	237.1722	1747.121	1048.273	698.8484	PHEV	104.2054	69.47026	1	8
2043	0	1033.267	3764.367	0	3764.367	14399.18	0	14399.18	BEV	0	1033.267	1	3
2043	0	743.0571	2707.083	1624.25	1082.833	9506.252	5703.751	3802.501	PHEV	445.8343	297.2229	1	8
2043	0	7.984437	22.68466	0	22.68466	59.38341	0	59.38341	BEV	0	7.984437	1	3
2043	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2043	0	99.7773	334.9245	0	334.9245	1081.094	0	1081.094	BEV	0	99.7773	1	3
2043	0	27.73516	93.09916	55.8595	37.23967	262.626	157.5756	105.0504	PHEV	16.6411	11.09406	1	8
2043	0	85.66436	302.2744	0	302.2744	1070.898	0	1070.898	BEV	0	85.66436	2	3
2043	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2043	0	19.42323	68.53661	0	68.53661	168.9424	0	168.9424	BEV	0	19.42323	3	3
2043	0	8.794231	31.03124	18.61874	12.41249	134.4389	80.66333	53.77556	PHEV	5.276539	3.517692	3	8
2043	0	2.962677	8.417291	0	8.417291	14.91669	0	14.91669	BEV	0	2.962677	3	3
2043	0	0	0	0	0	0	0	0	PHEV	0	0	3	8
2043	0	16.14135	45.85934	0	45.85934	82.994	0	82.994	BEV	0	16.14135	4	3
2043	0	0	0	0	0	0	0	0	PHEV	0	0	4	8
2043	0	16.7114	55.13811	0	55.13811	173.595	0	173.595	BEV	0	16.7114	1	3
2043	0	1.781419	5.877667	3.5266	2.351067	15.64832	9.388994	6.25933	PHEV	1.068851	0.712568	1	8
2043	0	32.49764	110.9473	0	110.9473	366.0921	0	366.0921	BEV	0	32.49764	2	3
2043	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2043	0	2.04219	6.270074	0	6.270074	17.68597	0	17.68597	BEV	0	2.04219	1	3
2043	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2043	0	10.20962	32.51611	0	32.51611	94.21834	0	94.21834	BEV	0	10.20962	1	3
2043	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2043	0	8.994542	29.16156	0	29.16156	90.30072	0	90.30072	BEV	0	8.994542	1	3
2043	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2043	0	41.38772	143.6692	0	143.6692	489.8382	0	489.8382	BEV	0	41.38772	2	3
2043	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2043	0	1.823257	5.284529	0	5.284529	14.00248	0	14.00248	BEV	0	1.823257	1	3
2043	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2043	0	3.453038	10.79958	0	10.79958	31.12454	0	31.12454	BEV	0	3.453038	1	3
2043	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2043	0	4.869776	15.50951	0	15.50951	45.54576	0	45.54576	BEV	0	4.869776	2	3
2043	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2043	0	0.253057	0.776954	0	0.776954	1.721718	0	1.721718	BEV	0	0.253057	4	3
2043	0	0	0	0	0	0	0	0	PHEV	0	0	4	8
2043	0	2.859724	9.271626	0	9.271626	20.46653	0	20.46653	BEV	0	2.859724	3	3
2043	0	0	0	0	0	0	0	0	PHEV	0	0	3	8
2043	0	1.733079	5.81746	0	5.81746	13.4263	0	13.4263	BEV	0	1.733079	3	3
2043	0	1.199824	4.027472	2.416483	1.610989	16.13803	9.682815	6.45521	PHEV	0.719894	0.479929	3	8

2043	0	0.258082	0.92545	0	0.92545	2.301965	0	2.301965	BEV	0	0.258082	4	3
2043	0	0	0	0	0	0	0	0	PHEV	0	0	4	8
2043	0	7.407295	20.19621	0	20.19621	50.45928	0	50.45928	BEV	0	7.407295	2	3
2043	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2043	0	2.671493	7.436955	0	7.436955	19.02469	0	19.02469	BEV	0	2.671493	2	3
2043	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2043	0	1.20022	3.684999	0	3.684999	10.25254	0	10.25254	BEV	0	1.20022	2	3
2043	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2043	0	0.680955	2.129727	0	2.129727	6.09644	0	6.09644	BEV	0	0.680955	2	3
2043	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2043	0	2.017289	6.540333	0	6.540333	20.13869	0	20.13869	BEV	0	2.017289	2	3
2043	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2043	0	2.157136	6.870156	0	6.870156	14.42503	0	14.42503	BEV	0	2.157136	3	3
2043	0	0	0	0	0	0	0	0	PHEV	0	0	3	8
2043	0	1.240264	4.305329	0	4.305329	10.32635	0	10.32635	BEV	0	1.240264	3	3
2043	0	0.948437	3.292311	1.975386	1.316924	14.18325	8.509952	5.673301	PHEV	0.569062	0.379375	3	8
2043	0	0.908671	2.477518	0	2.477518	4.559459	0	4.559459	BEV	0	0.908671	4	3
2043	0	0	0	0	0	0	0	0	PHEV	0	0	4	8
2043	0	1.861968	5.396727	0	5.396727	9.907556	0	9.907556	BEV	0	1.861968	4	3
2043	0	0	0	0	0	0	0	0	PHEV	0	0	4	8
2043	0	0.315913	0.951841	0	0.951841	1.832271	0	1.832271	BEV	0	0.315913	4	3
2043	0	0	0	0	0	0	0	0	PHEV	0	0	4	8
2043	0	9.449326	26.84658	0	26.84658	67.44633	0	67.44633	BEV	0	9.449326	2	3
2043	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2043	0	0.635353	1.877906	0	1.877906	4.946179	0	4.946179	BEV	0	0.635353	2	3
2043	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2043	0	4.940717	13.18796	0	13.18796	32.82287	0	32.82287	BEV	0	4.940717	2	3
2043	0	0.417	1.136962	0	1.136962	2.206462	0	2.206462	BEV	0	0.417	3	3
2043	0	0	0	0	0	0	0	0	PHEV	0	0	3	8
2043	0	0.262533	0.836127	0	0.836127	1.723984	0	1.723984	BEV	0	0.262533	4	3
2043	0	0	0	0	0	0	0	0	PHEV	0	0	4	8
2043	0	1.125835	3.069623	0	3.069623	7.763401	0	7.763401	BEV	0	1.125835	1	3
2043	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2043	0	1.707903	5.048031	0	5.048031	13.48557	0	13.48557	BEV	0	1.707903	1	3
2043	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2043	0	0.238187	0.717653	0	0.717653	1.938202	0	1.938202	BEV	0	0.238187	2	3
2043	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2043	0	1.947347	5.197937	0	5.197937	13.17477	0	13.17477	BEV	0	1.947347	1	3
2043	0	1.642659	4.38465	0	4.38465	7.481899	0	7.481899	BEV	0	1.642659	3	3
2043	0	0.13421	0.373616	0	0.373616	0.649841	0	0.649841	BEV	0	0.13421	3	3
2043	0	0	0	0	0	0	0	0	PHEV	0	0	3	8
2043	0	1.689984	5.575982	0	5.575982	12.22655	0	12.22655	BEV	0	1.689984	3	3
2043	0	0	0	0	0	0	0	0	PHEV	0	0	3	8
2043	0	3.866319	13.19965	0	13.19965	30.15666	0	30.15666	BEV	0	3.866319	3	3
2043	0	0.991364	3.384526	2.030716	1.35381	16.34264	9.805586	6.537058	PHEV	0.594818	0.396546	3	8
2043	0	0.188619	0.525081	0	0.525081	0.968005	0	0.968005	BEV	0	0.188619	4	3
2043	0	0	0	0	0	0	0	0	PHEV	0	0	4	8

2043	0	0	0	0	0	0	0	0	BEV	0	0	2	3
2043	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2043	0	0	0	0	0	0	0	0	BEV	0	0	2	3
2043	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2043	0	0	0	0	0	0	0	0	BEV	0	0	3	3
2043	0	2.852099	10.22729	6.136372	4.090914	50.74137	30.44482	20.29655	PHEV	1.71126	1.14084	3	8
2043	0	0.320196	0.85468	0	0.85468	1.489092	0	1.489092	BEV	0	0.320196	4	3
2043	0	0.094881	0.296745	0	0.296745	0.583539	0	0.583539	BEV	0	0.094881	3	3
2043	0	0	0	0	0	0	0	0	PHEV	0	0	3	8
2043	0	0.303389	1.00101	0	1.00101	2.890941	0	2.890941	BEV	0	0.303389	2	3
2043	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2043	0	0.214244	0.719156	0	0.719156	2.354887	0	2.354887	BEV	0	0.214244	2	3
2043	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2043	0	0.053382	0.16084	0	0.16084	0.286826	0	0.286826	BEV	0	0.053382	3	3
2043	0	0	0	0	0	0	0	0	PHEV	0	0	3	8
2043	0	0.102902	0.298251	0	0.298251	0.767329	0	0.767329	BEV	0	0.102902	2	3
2043	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2043	0	0.244255	0.763923	0	0.763923	1.489816	0	1.489816	BEV	0	0.244255	4	3
2043	0	0	0	0	0	0	0	0	PHEV	0	0	4	8
2043	0	0	0	0	0	0	0	0	BEV	0	0	4	3
2043	0	0.34422	1.194891	0.716935	0.477957	5.596282	3.357769	2.238513	PHEV	0.206532	0.137688	4	8
2044	0	3259.385	11874.49	0	11874.49	44231.05	0	44231.05	BEV	0	3259.385	1	3
2044	0	2940.075	10711.19	5784.045	4927.149	38876.36	20993.24	17883.13	PHEV	1587.641	1352.435	1	8
2044	0	4853.628	17960.66	0	17960.66	69192.12	0	69192.12	BEV	0	4853.628	1	3
2044	0	3136.876	11607.88	6268.257	5339.627	44058.37	23791.52	20266.85	PHEV	1693.913	1442.963	1	8
2044	0	7247.154	27232.99	0	27232.99	109135.5	0	109135.5	BEV	0	7247.154	1	3
2044	0	3554.263	13356.03	7078.696	6277.334	52671.64	27915.97	24755.67	PHEV	1883.759	1670.503	1	8
2044	0	10526.1	40157.48	0	40157.48	166938	0	166938	BEV	0	10526.1	1	3
2044	0	4013.659	15312.27	7962.38	7349.889	63180.92	32854.08	30326.84	PHEV	2087.103	1926.556	1	8
2044	0	13550.91	52473.6	0	52473.6	226685	0	226685	BEV	0	13550.91	1	3
2044	0	5096.703	19736.11	10065.42	9670.696	84713.16	43203.71	41509.45	PHEV	2599.318	2497.384	1	8
2044	0	17264.54	67843.1	0	67843.1	304300.3	0	304300.3	BEV	0	17264.54	1	3
2044	0	6397.714	25140.58	12570.29	12570.29	112133	56066.51	56066.51	PHEV	3198.857	3198.857	1	8
2044	0	22016.53	87777.93	0	87777.93	408318.4	0	408318.4	BEV	0	22016.53	1	3
2044	0	8114.42	32351.46	15852.22	16499.25	149691.8	73348.98	76342.81	PHEV	3976.066	4138.354	1	8
2044	0	27292.81	110377.6	0	110377.6	531978.4	0	531978.4	BEV	0	27292.81	1	3
2044	0	10015.15	40503.27	19441.57	21061.7	194245.4	93237.8	101007.6	PHEV	4807.273	5207.879	1	8
2044	0	33749.01	138421.2	0	138421.2	690754.8	0	690754.8	BEV	0	33749.01	1	3
2044	0	12216.93	50107.63	23550.59	26557.04	248922.4	116993.5	131928.9	PHEV	5741.958	6474.974	1	8
2044	0	33747.16	140347	0	140347	724187.9	0	724187.9	BEV	0	33747.16	1	3
2044	0	14034.45	58366.2	26498.26	31867.95	299853.5	136133.5	163720	PHEV	6371.642	7662.812	1	8
2044	0	40208.84	169523.3	0	169523.3	903105.6	0	903105.6	BEV	0	40208.84	1	3
2044	0	17018.17	71749.79	31426.41	40323.38	380902.2	166835.2	214067.1	PHEV	7453.958	9564.21	1	8
2044	0	47783.47	204196	0	204196	1122530	0	1122530	BEV	0	47783.47	1	3
2044	0	20419.77	87261.01	36824.15	50436.87	478392.1	201881.5	276510.6	PHEV	8617.141	11802.62	1	8
2044	0	56024.56	242622.8	0	242622.8	1375494	0	1375494	BEV	0	56024.56	1	3
2044	0	24240.53	104977.3	42620.77	62356.5	593857.1	241106	352751.1	PHEV	9841.657	14398.88	1	8

2044	0	64866.86	284631.9	0	284631.9	1663434	0	1663434	BEV	0	64866.86	1	3
2044	0	28414.81	124682.5	48626.17	76056.32	727446.7	283704.2	443742.5	PHEV	11081.78	17333.04	1	8
2044	0	72207.17	320977.5	0	320977.5	1933021	0	1933021	BEV	0	72207.17	1	3
2044	0	31630.23	140603.6	54835.42	85768.21	845576.7	329774.9	515801.8	PHEV	12335.79	19294.44	1	8
2044	0	78858.56	355062.2	0	355062.2	2202314	0	2202314	BEV	0	78858.56	1	3
2044	0	34543.85	155534.4	60658.41	94875.98	963614.3	375809.6	587804.7	PHEV	13472.1	21071.75	1	8
2044	0	85913.16	391747.7	0	391747.7	2501327	0	2501327	BEV	0	85913.16	1	3
2044	0	37634.11	171604.4	66925.71	104678.7	1094708	426936.3	667772.1	PHEV	14677.3	22956.81	1	8
2044	0	91926.97	424436	0	424436	2788417	0	2788417	BEV	0	91926.97	1	3
2044	0	40268.45	185923.5	72510.15	113413.3	1220618	476040.9	744576.8	PHEV	15704.7	24563.75	1	8
2044	0	98330.67	459635.9	0	459635.9	3105624	0	3105624	BEV	0	98330.67	1	3
2044	0	43073.58	201342.7	78523.66	122819.1	1359752	530303.1	829448.4	PHEV	16798.7	26274.88	1	8
2044	0	103688.2	490619.2	0	490619.2	3408067	0	3408067	BEV	0	103688.2	1	3
2044	0	45420.42	214914.9	83816.8	131098.1	1492556	582097	910459.5	PHEV	17713.96	27706.45	1	8
2044	0	109610.8	524923.1	0	524923.1	3747127	0	3747127	BEV	0	109610.8	1	3
2044	0	48014.84	229941.6	89677.24	140264.4	1641487	640179.9	1001307	PHEV	18725.79	29289.05	1	8
2044	0	114217.4	553527.4	0	553527.4	4059409	0	4059409	BEV	0	114217.4	1	3
2044	0	50032.76	242471.7	94563.98	147907.8	1778791	693728.6	1085063	PHEV	19512.77	30519.98	1	8
2044	0	119504.4	585995.8	0	585995.8	4412168	0	4412168	BEV	0	119504.4	1	3
2044	0	52348.7	256694.5	100110.8	156583.6	1933831	754194.3	1179637	PHEV	20415.99	31932.71	1	8
2044	0	123531.5	612819.8	0	612819.8	4735312	0	4735312	BEV	0	123531.5	1	3
2044	0	54112.74	268444.7	104693.4	163751.2	2075993	809637.2	1266356	PHEV	21103.97	33008.77	1	8
2044	0	126782.6	636211.7	0	636211.7	5041571	0	5041571	BEV	0	126782.6	1	3
2044	0	55536.91	278691.4	108689.7	170001.8	2210680	862165.3	1348515	PHEV	21659.39	33877.51	1	8
2044	0	130302.7	661340.7	0	661340.7	5365580	0	5365580	BEV	0	130302.7	1	3
2044	0	57078.86	289699.2	112982.7	176716.5	2352715	917558.7	1435156	PHEV	22260.75	34818.1	1	8
2044	0	131616.8	675550.9	0	675550.9	5594341	0	5594341	BEV	0	131616.8	1	3
2044	0	57654.51	295923.9	115410.3	180513.6	2452310	956400.8	1495909	PHEV	22485.26	35169.25	1	8
2044	0	118466.6	614841.7	0	614841.7	5183766	0	5183766	BEV	0	118466.6	1	3
2044	0	51894.09	269330.3	105038.8	164291.5	2271165	885754.2	1385410	PHEV	20238.7	31655.4	1	8
2044	0	0.585636	2.13357	0	2.13357	8.166974	0	8.166974	BEV	0	0.585636	2	3
2044	0	5.079493	18.50546	11.10327	7.402183	88.90765	53.34459	35.56306	PHEV	3.047696	2.031797	2	8
2044	0	304.5616	1144.466	0	1144.466	5242.28	0	5242.28	BEV	0	304.5616	2	3
2044	0	233.8819	878.8697	522.2997	356.57	4455.093	2647.598	1807.495	PHEV	138.9927	94.88923	2	8
2044	0	696.406	2656.817	0	2656.817	12343.41	0	12343.41	BEV	0	696.406	2	3
2044	0	536.3592	2046.232	1204.354	841.8782	10482.34	6169.608	4312.736	PHEV	315.6857	220.6735	2	8
2044	0	907.3028	3513.376	0	3513.376	16700.94	0	16700.94	BEV	0	907.3028	2	3
2044	0	666.4391	2580.672	1504.163	1076.509	12930.13	7536.42	5393.712	PHEV	388.4388	278.0003	2	8
2044	0	1245.523	4894.432	0	4894.432	23713.86	0	23713.86	BEV	0	1245.523	2	3
2044	0	792.8754	3115.699	1798.204	1317.496	15780.85	9107.803	6673.044	PHEV	457.6024	335.273	2	8
2044	0	1531.571	6106.236	0	6106.236	30140.21	0	30140.21	BEV	0	1531.571	2	3
2044	0	961.6142	3833.869	2190.782	1643.087	19671.54	11240.88	8430.659	PHEV	549.4938	412.1204	2	8
2044	0	1801.721	7286.522	0	7286.522	36690.68	0	36690.68	BEV	0	1801.721	2	3
2044	0	1174.134	4748.433	2686.256	2062.176	24722.49	13985.86	10736.62	PHEV	664.2244	509.9096	2	8
2044	0	2197.45	9012.821	0	9012.821	46478.68	0	46478.68	BEV	0	2197.45	2	3
2044	0	1339.09	5492.263	3075.667	2416.596	29075.34	16282.19	12793.15	PHEV	749.8903	589.1995	2	8
2044	0	2377.106	9885.861	0	9885.861	52200.12	0	52200.12	BEV	0	2377.106	2	3

2044	0	1498.723	6232.859	3428.072	2804.786	33562.19	18459.2	15102.98	PHEV	824.2976	674.4253	2	8
2044	0	2767.31	11667.17	0	11667.17	63044.5	0	63044.5	BEV	0	2767.31	2	3
2044	0	1962.116	8272.417	4467.105	3805.312	45505.13	24572.77	20932.36	PHEV	1059.542	902.5732	2	8
2044	0	3354.007	14332.88	0	14332.88	79406.23	0	79406.23	BEV	0	3354.007	2	3
2044	0	2378.634	10164.76	5387.322	4777.436	57035.48	30228.81	26806.68	PHEV	1260.676	1117.958	2	8
2044	0	4138.579	17922.74	0	17922.74	101844	0	101844	BEV	0	4138.579	2	3
2044	0	2753.884	11926.11	6201.576	5724.531	68229.32	35479.25	32750.07	PHEV	1432.02	1321.864	2	8
2044	0	4827.207	21181.5	0	21181.5	123394.9	0	123394.9	BEV	0	4827.207	2	3
2044	0	3282.036	14401.38	7344.703	7056.675	84042.08	42861.46	41180.62	PHEV	1673.839	1608.198	2	8
2044	0	5193.872	23087.96	0	23087.96	137930.3	0	137930.3	BEV	0	5193.872	2	3
2044	0	3531.333	15697.59	8005.77	7691.819	93486.72	47678.23	45808.49	PHEV	1800.98	1730.353	2	8
2044	0	5528.964	24894.27	0	24894.27	152554.6	0	152554.6	BEV	0	5528.964	2	3
2044	0	3759.163	16925.71	8632.111	8293.597	102979.4	52519.47	50459.89	PHEV	1917.173	1841.99	2	8
2044	0	5895.255	26881.24	0	26881.24	168984	0	168984	BEV	0	5895.255	2	3
2044	0	4008.206	18276.66	9321.095	8955.562	113681.9	57977.77	55704.13	PHEV	2044.185	1964.021	2	8
2044	0	6219.174	28714.55	0	28714.55	185203	0	185203	BEV	0	6219.174	2	3
2044	0	4228.44	19523.13	9956.797	9566.334	124256.7	63370.91	60885.78	PHEV	2156.504	2071.936	2	8
2044	0	6561.522	30671.11	0	30671.11	202949.7	0	202949.7	BEV	0	6561.522	2	3
2044	0	4461.204	20853.41	10635.24	10218.17	135859.2	69288.19	66571	PHEV	2275.214	2185.99	2	8
2044	0	6813.64	32239.97	0	32239.97	218898	0	218898	BEV	0	6813.64	2	3
2044	0	4632.62	21920.07	11179.24	10740.84	146303.1	74614.56	71688.5	PHEV	2362.636	2269.984	2	8
2044	0	7092.115	33963.92	0	33963.92	236577.5	0	236577.5	BEV	0	7092.115	2	3
2044	0	4821.955	23092.2	11777.02	11315.18	157932.1	80545.36	77386.72	PHEV	2459.197	2362.758	2	8
2044	0	7371.793	35725.63	0	35725.63	255277.6	0	255277.6	BEV	0	7371.793	2	3
2044	0	5012.11	24289.99	12387.89	11902.09	170280.9	86843.28	83437.66	PHEV	2556.176	2455.934	2	8
2044	0	7653.645	37530.03	0	37530.03	275066.5	0	275066.5	BEV	0	7653.645	2	3
2044	0	5203.742	25516.81	13013.57	12503.24	183403.7	93535.86	89867.79	PHEV	2653.908	2549.834	2	8
2044	0	7832.923	38857.88	0	38857.88	292099.9	0	292099.9	BEV	0	7832.923	2	3
2044	0	5325.634	26419.62	13474	12945.61	194752.9	99323.98	95428.92	PHEV	2716.073	2609.56	2	8
2044	0	7947.883	39883.51	0	39883.51	307459.8	0	307459.8	BEV	0	7947.883	2	3
2044	0	5403.795	27116.95	13829.64	13287.3	205050.7	104575.8	100474.8	PHEV	2755.936	2647.86	2	8
2044	0	8066.044	40938.56	0	40938.56	323556.4	0	323556.4	BEV	0	8066.044	2	3
2044	0	5484.134	27834.28	14195.48	13638.8	215881.5	110099.5	105781.9	PHEV	2796.908	2687.225	2	8
2044	0	8191.736	42045.81	0	42045.81	340527.1	0	340527.1	BEV	0	8191.736	2	3
2044	0	5569.592	28587.1	14579.42	14007.68	227330.2	115938.4	111391.8	PHEV	2840.492	2729.1	2	8
2044	0	7488.883	38867.3	0	38867.3	322392.5	0	322392.5	BEV	0	7488.883	2	3
2044	0	5091.719	26426.02	13477.27	12948.75	215336.7	109821.7	105515	PHEV	2596.777	2494.943	2	8
2044	0	133.4831	493.9489	296.3693	197.5796	2336.468	1401.881	934.5872	PHEV	80.08987	53.39324	3	8
2044	0	515.1092	1935.651	0	1935.651	6401.642	0	6401.642	BEV	0	515.1092	3	3
2044	0	447.4028	1681.228	999.1296	682.0981	8067.555	4794.433	3273.122	PHEV	265.8851	181.5177	3	8
2044	0	1185.046	4520.998	0	4520.998	18933.78	0	18933.78	BEV	0	1185.046	3	3
2044	0	855.2255	3262.719	1920.343	1342.376	15894.21	9354.876	6539.331	PHEV	503.3613	351.8642	3	8
2044	0	1530.965	5928.401	0	5928.401	23139.33	0	23139.33	BEV	0	1530.965	3	3
2044	0	1474.564	5709.997	3328.112	2381.884	28168.83	16418.4	11750.43	PHEV	859.4599	615.1037	3	8
2044	0	2141.973	8417.138	0	8417.138	33536.7	0	33536.7	BEV	0	2141.973	3	3
2044	0	1708.004	6711.807	3873.671	2838.135	33601.13	19392.65	14208.48	PHEV	985.7623	722.2417	3	8
2044	0	2917.259	11630.85	0	11630.85	47554.82	0	47554.82	BEV	0	2917.259	3	3

2044	0	2086.308	8317.922	4753.098	3564.824	42310.71	24177.55	18133.16	PHEV	1192.176	894.132	3	8
2044	0	3702.026	14971.73	0	14971.73	61916.43	0	61916.43	BEV	0	3702.026	3	3
2044	0	2580.344	10435.43	5903.47	4531.957	53992.69	30544.44	23448.25	PHEV	1459.737	1120.607	3	8
2044	0	4618.089	18941.04	0	18941.04	79121.52	0	79121.52	BEV	0	4618.089	3	3
2044	0	3394.106	13920.89	7795.699	6125.192	73387.74	41097.13	32290.6	PHEV	1900.699	1493.407	3	8
2044	0	6139.414	25532.47	0	25532.47	113189.9	0	113189.9	BEV	0	6139.414	3	3
2044	0	3813.908	15861.2	8723.663	7137.542	85175.55	46846.55	38329	PHEV	2097.649	1716.259	3	8
2044	0	7714.536	32525.02	0	32525.02	151210.1	0	151210.1	BEV	0	7714.536	3	3
2044	0	4734.779	19962.16	10779.57	9182.593	109288	59015.54	50272.5	PHEV	2556.781	2177.998	3	8
2044	0	9759.783	41707.06	0	41707.06	203326.3	0	203326.3	BEV	0	9759.783	3	3
2044	0	5742.907	24541.51	13007	11534.51	137086.9	72656.08	64430.86	PHEV	3043.741	2699.166	3	8
2044	0	12130.43	52532.63	0	52532.63	265143.9	0	265143.9	BEV	0	12130.43	3	3
2044	0	6979.985	30227.87	15718.49	14509.38	174553	90767.58	83785.46	PHEV	3629.592	3350.393	3	8
2044	0	14613.8	64124.48	0	64124.48	331038.9	0	331038.9	BEV	0	14613.8	3	3
2044	0	8379.873	36770.38	18752.89	18017.49	222700.2	113577.1	109123.1	PHEV	4273.735	4106.138	3	8
2044	0	16129.42	71698.99	0	71698.99	379338.9	0	379338.9	BEV	0	16129.42	3	3
2044	0	9248.964	41113.77	20968.02	20145.75	254432.1	129760.4	124671.8	PHEV	4716.972	4531.992	3	8
2044	0	17426.6	78463.63	0	78463.63	425578.2	0	425578.2	BEV	0	17426.6	3	3
2044	0	9992.796	44992.76	22946.31	22046.45	284727.2	145210.9	139516.3	PHEV	5096.326	4896.47	3	8
2044	0	18854.11	85971.14	0	85971.14	478132.9	0	478132.9	BEV	0	18854.11	3	3
2044	0	10811.36	49297.74	25141.85	24155.89	319219.1	162801.8	156417.4	PHEV	5513.793	5297.565	3	8
2044	0	20024.02	92452.92	0	92452.92	527339.4	0	527339.4	BEV	0	20024.02	3	3
2044	0	11482.22	53014.54	27037.41	25977.12	351471.1	179250.2	172220.8	PHEV	5855.93	5626.285	3	8
2044	0	21201.99	99106.35	0	99106.35	579748.7	0	579748.7	BEV	0	21201.99	3	3
2044	0	12157.68	56829.76	28983.18	27846.58	385863.1	196790.2	189072.9	PHEV	6200.419	5957.265	3	8
2044	0	22048.49	104326.4	0	104326.4	626031.8	0	626031.8	BEV	0	22048.49	3	3
2044	0	12643.09	59823.04	30509.75	29313.29	416255.8	212290.5	203965.3	PHEV	6447.974	6195.113	3	8
2044	0	22819.65	109282.6	0	109282.6	672648.2	0	672648.2	BEV	0	22819.65	3	3
2044	0	13085.29	62665.04	31959.17	30705.87	446932.5	227935.6	218996.9	PHEV	6673.496	6411.79	3	8
2044	0	23404.31	113423.4	0	113423.4	716165.9	0	716165.9	BEV	0	23404.31	3	3
2044	0	13420.54	65039.44	33170.12	31869.33	475632.5	242572.6	233059.9	PHEV	6844.477	6576.066	3	8
2044	0	24072.68	118041.6	0	118041.6	764481.5	0	764481.5	BEV	0	24072.68	3	3
2044	0	13803.8	67687.65	34520.7	33166.95	507592	258871.9	248720.1	PHEV	7039.94	6763.864	3	8
2044	0	24611.42	122093.3	0	122093.3	810979.5	0	810979.5	BEV	0	24611.42	3	3
2044	0	14112.73	70010.98	35705.6	34305.38	538453.4	274611.2	263842.1	PHEV	7197.49	6915.236	3	8
2044	0	25042.12	125664.6	0	125664.6	855865.6	0	855865.6	BEV	0	25042.12	3	3
2044	0	14359.7	72058.86	36750.02	35308.84	568330.1	289848.4	278481.8	PHEV	7323.449	7036.255	3	8
2044	0	25733.44	130608	0	130608	911984.7	0	911984.7	BEV	0	25733.44	3	3
2044	0	14756.12	74893.52	38195.69	36697.82	605760.5	308937.9	296822.6	PHEV	7525.622	7230.5	3	8
2044	0	26454.98	135785.8	0	135785.8	971713	0	971713	BEV	0	26454.98	3	3
2044	0	15169.87	77862.53	39709.89	38152.64	645652.7	329282.9	316369.8	PHEV	7736.633	7433.235	3	8
2044	0	23995.61	124537.2	0	124537.2	912565.5	0	912565.5	BEV	0	23995.61	3	3
2044	0	13759.61	71412.38	36420.31	34992.07	606480.5	309305.1	297175.5	PHEV	7017.401	6742.209	3	8
2044	0	198.8155	724.3186	434.5911	289.7274	3047.829	1828.697	1219.132	PHEV	119.2893	79.52619	4	8
2044	0	0.483565	1.789412	0	1.789412	4.923645	0	4.923645	BEV	0	0.483565	4	3
2044	0	591.75	2189.747	1313.848	875.899	9765.718	5859.431	3906.287	PHEV	355.05	236.7	4	8
2044	0	280.7918	1055.146	0	1055.146	3171.148	0	3171.148	BEV	0	280.7918	4	3

2044	0	730.5626	2745.271	1631.476	1113.796	13421.17	7976.008	5445.159	PHEV	434.1629	296.3997	4	8
2044	0	665.016	2537.062	0	2537.062	8840.004	0	8840.004	BEV	0	665.016	4	3
2044	0	895.6075	3416.778	2011.018	1405.76	16564.2	9749.215	6814.985	PHEV	527.129	368.4785	4	8
2044	0	1162.995	4503.5	0	4503.5	16310.3	0	16310.3	BEV	0	1162.995	4	3
2044	0	1128.739	4370.852	2547.582	1823.27	20874.66	12166.94	8707.715	PHEV	657.8939	470.8456	4	8
2044	0	1348.773	5300.165	0	5300.165	17756.9	0	17756.9	BEV	0	1348.773	4	3
2044	0	1317.51	5177.313	2988.049	2189.264	25106.92	14490.28	10616.64	PHEV	760.3913	557.1184	4	8
2044	0	1620.769	6461.86	0	6461.86	21436.87	0	21436.87	BEV	0	1620.769	4	3
2044	0	1522.943	6071.835	3469.62	2602.215	29935.23	17105.84	12829.38	PHEV	870.2529	652.6897	4	8
2044	0	1916.15	7749.296	0	7749.296	26111.32	0	26111.32	BEV	0	1916.15	4	3
2044	0	2204.562	8915.688	5043.732	3871.956	44753.44	25317.66	19435.78	PHEV	1247.152	957.4096	4	8
2044	0	2376.476	9747.092	0	9747.092	33859.83	0	33859.83	BEV	0	2376.476	4	3
2044	0	2607.037	10692.74	5987.932	4704.804	54743.81	30656.53	24087.27	PHEV	1459.941	1147.096	4	8
2044	0	2511.231	10443.66	0	10443.66	37126.09	0	37126.09	BEV	0	2511.231	4	3
2044	0	2605.057	10833.86	5958.624	4875.237	56591.34	31125.24	25466.1	PHEV	1432.782	1172.276	4	8
2044	0	3030.387	12776.32	0	12776.32	47519.75	0	47519.75	BEV	0	3030.387	4	3
2044	0	3060.276	12902.34	6967.263	5935.076	68839.47	37173.31	31666.15	PHEV	1652.549	1407.727	4	8
2044	0	3558.423	15206.42	0	15206.42	59385.2	0	59385.2	BEV	0	3558.423	4	3
2044	0	3517.706	15032.42	7967.184	7065.239	81977.72	43448.19	38529.53	PHEV	1864.384	1653.322	4	8
2044	0	4156.034	17998.33	0	17998.33	75075.07	0	75075.07	BEV	0	4156.034	4	3
2044	0	4111.472	17805.35	9258.781	8546.567	99328.64	51650.89	47677.75	PHEV	2137.966	1973.507	4	8
2044	0	4830.498	21195.94	0	21195.94	94180.89	0	94180.89	BEV	0	4830.498	4	3
2044	0	4754.814	20863.84	10640.56	10223.28	119143.3	60763.06	58380.2	PHEV	2424.955	2329.859	4	8
2044	0	5249.566	23335.53	0	23335.53	106584.2	0	106584.2	BEV	0	5249.566	4	3
2044	0	5167.315	22969.9	11714.65	11255.25	134334.3	68510.48	65823.8	PHEV	2635.331	2531.984	4	8
2044	0	5630.453	25351.23	0	25351.23	119006.5	0	119006.5	BEV	0	5630.453	4	3
2044	0	5542.235	24954.02	12726.55	12227.47	149524	76257.22	73266.74	PHEV	2826.54	2715.695	4	8
2044	0	6053.379	27602.26	0	27602.26	133144.4	0	133144.4	BEV	0	6053.379	4	3
2044	0	5958.535	27169.79	13856.59	13313.2	166869.5	85103.42	81766.03	PHEV	3038.853	2919.682	4	8
2044	0	6429.139	29683.98	0	29683.98	147113.8	0	147113.8	BEV	0	6429.139	4	3
2044	0	6328.407	29218.89	14901.63	14317.26	184015.5	93847.89	90167.58	PHEV	3227.488	3100.92	4	8
2044	0	6853.705	32036.89	0	32036.89	163080.3	0	163080.3	BEV	0	6853.705	4	3
2044	0	6746.32	31534.93	16082.82	15452.12	203658.9	103866	99792.85	PHEV	3440.623	3305.697	4	8
2044	0	7140.08	33784.57	0	33784.57	176614.2	0	176614.2	BEV	0	7140.08	4	3
2044	0	7028.209	33255.23	16960.17	16295.06	220340.6	112373.7	107966.9	PHEV	3584.386	3443.822	4	8
2044	0	7477.104	35807.63	0	35807.63	192170.7	0	192170.7	BEV	0	7477.104	4	3
2044	0	7359.952	35246.59	17975.76	17270.83	239575.5	122183.5	117392	PHEV	3753.576	3606.377	4	8
2044	0	7754.287	37579.29	0	37579.29	206994.4	0	206994.4	BEV	0	7754.287	4	3
2044	0	7632.792	36990.5	18865.15	18125.34	257950.9	131554.9	126395.9	PHEV	3892.724	3740.068	4	8
2044	0	8070.427	39573.74	0	39573.74	223641.5	0	223641.5	BEV	0	8070.427	4	3
2044	0	7943.979	38953.7	19866.39	19087.31	278637.3	142105	136532.3	PHEV	4051.429	3892.55	4	8
2044	0	8246.472	40909.43	0	40909.43	237135.8	0	237135.8	BEV	0	8246.472	4	3
2044	0	8117.265	40268.46	20536.91	19731.54	295469.6	150689.5	144780.1	PHEV	4139.805	3977.46	4	8
2044	0	8433.688	42321.34	0	42321.34	251542.8	0	251542.8	BEV	0	8433.688	4	3
2044	0	8301.549	41658.25	21245.71	20412.54	313467.8	159868.6	153599.2	PHEV	4233.79	4067.759	4	8
2044	0	8672.155	44014.83	0	44014.83	268122.5	0	268122.5	BEV	0	8672.155	4	3
2044	0	8536.28	43325.2	22095.85	21229.35	334135.5	170409.1	163726.4	PHEV	4353.503	4182.777	4	8

2044	0	8842.457	45385.77	0	45385.77	283245	0	283245	BEV	0	8842.457	4	3
2044	0	8703.913	44674.66	22784.08	21890.59	353044.7	180052.8	172991.9	PHEV	4438.996	4264.918	4	8
2044	0	7678.167	39849.68	0	39849.68	254417.5	0	254417.5	BEV	0	7678.167	4	3
2044	0	7557.865	39225.32	20004.91	19220.41	316729.3	161531.9	155197.4	PHEV	3854.511	3703.354	4	8
2044	0	4.102002	11.18423	0	11.18423	28.50607	0	28.50607	BEV	0	4.102002	1	3
2044	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2044	0	362.8036	1238.615	0	1238.615	4090.258	0	4090.258	BEV	0	362.8036	1	3
2044	0	379.2161	1294.648	776.7886	517.8591	3805.18	2283.108	1522.072	PHEV	227.5297	151.6865	1	8
2044	0	477.0925	1656.131	0	1656.131	5659.744	0	5659.744	BEV	0	477.0925	1	3
2044	0	602.3652	2090.99	1254.594	836.3961	6411.198	3846.719	2564.479	PHEV	361.4191	240.9461	1	8
2044	0	1220.337	4306.069	0	4306.069	15305.47	0	15305.47	BEV	0	1220.337	1	3
2044	0	580.303	2047.651	1228.591	819.0605	6569.751	3941.851	2627.901	PHEV	348.1818	232.1212	1	8
2044	0	360.8374	1293.92	0	1293.92	3261.011	0	3261.011	BEV	0	360.8374	3	3
2044	0	32.83885	117.7562	70.65372	47.10248	525.8186	315.4911	210.3274	PHEV	19.70331	13.13554	3	8
2044	0	1.799445	5.318601	0	5.318601	14.16147	0	14.16147	BEV	0	1.799445	1	3
2044	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2044	0	75.00025	251.7548	0	251.7548	805.6326	0	805.6326	BEV	0	75.00025	1	3
2044	0	157.6533	529.1979	317.5187	211.6791	1483.365	890.0187	593.3458	PHEV	94.59196	63.06131	1	8
2044	0	881.793	3162.004	0	3162.004	11642.73	0	11642.73	BEV	0	881.793	1	3
2044	0	634.1271	2273.904	1364.342	909.5615	7625.265	4575.159	3050.106	PHEV	380.4763	253.6508	1	8
2044	0	7.695169	21.42196	0	21.42196	55.01774	0	55.01774	BEV	0	7.695169	1	3
2044	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2044	0	91.39484	301.5509	0	301.5509	938.4703	0	938.4703	BEV	0	91.39484	1	3
2044	0	25.40508	83.82229	50.29337	33.52892	225.0065	135.0039	90.00259	PHEV	15.24305	10.16203	1	8
2044	0	75.27057	261.2867	0	261.2867	891.4721	0	891.4721	BEV	0	75.27057	2	3
2044	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2044	0	17.22734	59.80127	0	59.80127	141.9344	0	141.9344	BEV	0	17.22734	3	3
2044	0	7.800001	27.07614	16.24569	10.83046	115.6905	69.4143	46.2762	PHEV	4.680001	3.12	3	8
2044	0	2.812704	7.830061	0	7.830061	13.62063	0	13.62063	BEV	0	2.812704	3	3
2044	0	0	0	0	0	0	0	0	PHEV	0	0	3	8
2044	0	16.15269	44.96619	0	44.96619	79.88204	0	79.88204	BEV	0	16.15269	4	3
2044	0	0	0	0	0	0	0	0	PHEV	0	0	4	8
2044	0	15.29184	49.57827	0	49.57827	150.6265	0	150.6265	BEV	0	15.29184	1	3
2044	0	1.630094	5.284993	3.170996	2.113997	13.39641	8.037845	5.358563	PHEV	0.978056	0.652038	1	8
2044	0	29.63632	99.48081	0	99.48081	316.3815	0	316.3815	BEV	0	29.63632	2	3
2044	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2044	0	1.963872	5.917106	0	5.917106	16.20874	0	16.20874	BEV	0	1.963872	1	3
2044	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2044	0	9.53872	29.83292	0	29.83292	83.64164	0	83.64164	BEV	0	9.53872	1	3
2044	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2044	0	8.447108	26.90277	0	26.90277	80.49344	0	80.49344	BEV	0	8.447108	1	3
2044	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2044	0	37.23602	127.1241	0	127.1241	417.5302	0	417.5302	BEV	0	37.23602	2	3
2044	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2044	0	1.748298	4.967106	0	4.967106	12.88028	0	12.88028	BEV	0	1.748298	1	3
2044	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2044	0	3.330482	10.22548	0	10.22548	28.55633	0	28.55633	BEV	0	3.330482	1	3

2044	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2044	0	4.30172	13.45389	0	13.45389	38.20071	0	38.20071	BEV	0	4.30172	2	3
2044	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2044	0	0.249976	0.753174	0	0.753174	1.623568	0	1.623568	BEV	0	0.249976	4	3
2044	0	0	0	0	0	0	0	0	PHEV	0	0	4	8
2044	0	2.631234	8.380084	0	8.380084	17.87041	0	17.87041	BEV	0	2.631234	3	3
2044	0	0	0	0	0	0	0	0	PHEV	0	0	3	8
2044	0	1.570159	5.180628	0	5.180628	11.52681	0	11.52681	BEV	0	1.570159	3	3
2044	0	1.087033	3.586589	2.151953	1.434636	14.11591	8.469545	5.646364	PHEV	0.65222	0.434813	3	8
2044	0	0.228484	0.806225	0	0.806225	1.929642	0	1.929642	BEV	0	0.228484	4	3
2044	0	0	0	0	0	0	0	0	PHEV	0	0	4	8
2044	0	6.751303	18.02085	0	18.02085	44.53628	0	44.53628	BEV	0	6.751303	2	3
2044	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2044	0	2.405257	6.558005	0	6.558005	16.52748	0	16.52748	BEV	0	2.405257	2	3
2044	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2044	0	1.068257	3.218636	0	3.218636	8.69177	0	8.69177	BEV	0	1.068257	2	3
2044	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2044	0	0.620923	1.906402	0	1.906402	5.28759	0	5.28759	BEV	0	0.620923	2	3
2044	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2044	0	1.844414	5.874183	0	5.874183	17.48195	0	17.48195	BEV	0	1.844414	2	3
2044	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2044	0	1.916403	5.993665	0	5.993665	12.16186	0	12.16186	BEV	0	1.916403	3	3
2044	0	0	0	0	0	0	0	0	PHEV	0	0	3	8
2044	0	1.113615	3.801893	0	3.801893	8.787158	0	8.787158	BEV	0	1.113615	3	3
2044	0	0.851588	2.90733	1.744398	1.162932	12.30756	7.384538	4.923025	PHEV	0.510953	0.340635	3	8
2044	0	0.908925	2.42614	0	2.42614	4.418514	0	4.418514	BEV	0	0.908925	4	3
2044	0	0	0	0	0	0	0	0	PHEV	0	0	4	8
2044	0	1.862058	5.290312	0	5.290312	9.502877	0	9.502877	BEV	0	1.862058	4	3
2044	0	0	0	0	0	0	0	0	PHEV	0	0	4	8
2044	0	0.315913	0.933742	0	0.933742	1.748671	0	1.748671	BEV	0	0.315913	4	3
2044	0	0	0	0	0	0	0	0	PHEV	0	0	4	8
2044	0	8.575711	23.87324	0	23.87324	58.85715	0	58.85715	BEV	0	8.575711	2	3
2044	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2044	0	0.568818	1.648662	0	1.648662	4.234761	0	4.234761	BEV	0	0.568818	2	3
2044	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2044	0	0.393212	1.049578	0	1.049578	2.015332	0	2.015332	BEV	0	0.393212	3	3
2044	0	0	0	0	0	0	0	0	PHEV	0	0	3	8
2044	0	0.249051	0.778921	0	0.778921	1.553418	0	1.553418	BEV	0	0.249051	4	3
2044	0	0	0	0	0	0	0	0	PHEV	0	0	4	8
2044	0	1.09457	2.921671	0	2.921671	7.310026	0	7.310026	BEV	0	1.09457	1	3
2044	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2044	0	1.63066	4.726306	0	4.726306	12.31893	0	12.31893	BEV	0	1.63066	1	3
2044	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2044	0	0.21639	0.639582	0	0.639582	1.680477	0	1.680477	BEV	0	0.21639	2	3
2044	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2044	0	0.127039	0.346375	0	0.346375	0.59362	0	0.59362	BEV	0	0.127039	3	3
2044	0	0	0	0	0	0	0	0	PHEV	0	0	3	8

2044	0	1.545919	5.012087	0	5.012087	10.6084	0	10.6084	BEV	0	1.545919	3	3
2044	0	0	0	0	0	0	0	0	PHEV	0	0	3	8
2044	0	3.545399	11.90091	0	11.90091	26.19698	0	26.19698	BEV	0	3.545399	3	3
2044	0	0.909077	3.051516	1.83091	1.220606	14.56145	8.736871	5.82458	PHEV	0.545446	0.363631	3	8
2044	0	0.188927	0.515114	0	0.515114	0.935673	0	0.935673	BEV	0	0.188927	4	3
2044	0	0	0	0	0	0	0	0	PHEV	0	0	4	8
2044	0	0	0	0	0	0	0	0	BEV	0	0	2	3
2044	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2044	0	0	0	0	0	0	0	0	BEV	0	0	2	3
2044	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2044	0	0	0	0	0	0	0	0	BEV	0	0	3	3
2044	0	2.562646	9.042528	5.425517	3.617011	44.41551	26.64931	17.76621	PHEV	1.537588	1.025059	3	8
2044	0	0.087597	0.268946	0	0.268946	0.512385	0	0.512385	BEV	0	0.087597	3	3
2044	0	0	0	0	0	0	0	0	PHEV	0	0	3	8
2044	0	0.274889	0.89123	0	0.89123	2.484013	0	2.484013	BEV	0	0.274889	2	3
2044	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2044	0	0.192274	0.634394	0	0.634394	2.004788	0	2.004788	BEV	0	0.192274	2	3
2044	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2044	0	0.052778	0.155996	0	0.155996	0.270474	0	0.270474	BEV	0	0.052778	3	3
2044	0	0	0	0	0	0	0	0	PHEV	0	0	3	8
2044	0	0.091483	0.259913	0	0.259913	0.654246	0	0.654246	BEV	0	0.091483	2	3
2044	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2044	0	0.22778	0.699346	0	0.699346	1.321237	0	1.321237	BEV	0	0.22778	4	3
2044	0	0	0	0	0	0	0	0	PHEV	0	0	4	8
2044	0	0	0	0	0	0	0	0	BEV	0	0	4	3
2044	0	0.30245	1.032568	0.619541	0.413027	4.752107	2.851264	1.900843	PHEV	0.18147	0.12098	4	8
2045	0	2776.977	9957.906	0	9957.906	35501.55	0	35501.55	BEV	0	2776.977	1	3
2045	0	2504.927	8982.369	4850.479	4131.89	31063.28	16774.17	14289.11	PHEV	1352.661	1152.267	1	8
2045	0	4078.129	14857.32	0	14857.32	54805.94	0	54805.94	BEV	0	4078.129	1	3
2045	0	2635.675	9602.213	5185.195	4417.018	34813.2	18799.13	16014.07	PHEV	1423.265	1212.411	1	8
2045	0	6011.361	22244.8	0	22244.8	85440.98	0	85440.98	BEV	0	6011.361	1	3
2045	0	2948.186	10909.64	5782.111	5127.533	41127.04	21797.33	19329.71	PHEV	1562.538	1385.647	1	8
2045	0	8662.474	32551.41	0	32551.41	129680.4	0	129680.4	BEV	0	8662.474	1	3
2045	0	3303.049	12412.03	6454.257	5957.775	49007.89	25484.1	23523.79	PHEV	1717.585	1585.463	1	8
2045	0	11112.25	42393.68	0	42393.68	175708.8	0	175708.8	BEV	0	11112.25	1	3
2045	0	4179.485	15944.9	8131.901	7813.003	65581.91	33446.78	32135.14	PHEV	2131.537	2047.948	1	8
2045	0	14137.29	54744.26	0	54744.26	235819.1	0	235819.1	BEV	0	14137.29	1	3
2045	0	5238.849	20286.55	10143.28	10143.28	86803.92	43401.96	43401.96	PHEV	2619.424	2619.424	1	8
2045	0	18108.07	71157.85	0	71157.85	318177.2	0	318177.2	BEV	0	18108.07	1	3
2045	0	6673.918	26225.96	12850.72	13375.24	116526.3	57097.89	59428.42	PHEV	3270.22	3403.698	1	8
2045	0	22658.49	90337.37	0	90337.37	418885.2	0	418885.2	BEV	0	22658.49	1	3
2045	0	8314.579	33149.48	15911.75	17237.73	152801.5	73344.7	79456.76	PHEV	3990.998	4323.581	1	8
2045	0	28332.58	114582.6	0	114582.6	550595.8	0	550595.8	BEV	0	28332.58	1	3
2045	0	10256.22	41478.19	19494.75	21983.44	198245	93175.14	105069.8	PHEV	4820.422	5435.795	1	8
2045	0	28769.26	117996.8	0	117996.8	586734.5	0	586734.5	BEV	0	28769.26	1	3
2045	0	11964.29	49071.42	22278.42	26792.99	242744.5	110206	132538.5	PHEV	5431.788	6532.503	1	8
2045	0	34707.31	144340.1	0	144340.1	741458.6	0	741458.6	BEV	0	34707.31	1	3

2045	0	14689.68	61091.14	26757.92	34333.22	312527.2	136886.9	175640.3	PHEV	6434.079	8255.599	1	8
2045	0	42015.74	177141.3	0	177141.3	939464.7	0	939464.7	BEV	0	42015.74	1	3
2045	0	17954.99	75699.49	31945.18	43754.3	400176.9	168874.7	231302.3	PHEV	7577.005	10377.98	1	8
2045	0	49784.21	212745.8	0	212745.8	1164359	0	1164359	BEV	0	49784.21	1	3
2045	0	21540.48	92050.22	37372.39	54677.83	502524.8	204025.1	298499.7	PHEV	8745.434	12795.04	1	8
2045	0	58525.55	253453.7	0	253453.7	1430582	0	1430582	BEV	0	58525.55	1	3
2045	0	25637.02	111025	43299.73	67725.22	625430.3	243917.8	381512.5	PHEV	9998.437	15638.58	1	8
2045	0	65572.29	287727.3	0	287727.3	1674455	0	1674455	BEV	0	65572.29	1	3
2045	0	28723.83	126038.4	49154.99	76883.45	732272.8	285586.4	446686.4	PHEV	11202.29	17521.54	1	8
2045	0	72970.84	324372.2	0	324372.2	1945261	0	1945261	BEV	0	72970.84	1	3
2045	0	31964.75	142090.7	55415.36	86675.3	850939.1	331866.2	519072.8	PHEV	12466.25	19498.5	1	8
2045	0	79664.4	358690.6	0	358690.6	2215484	0	2215484	BEV	0	79664.4	1	3
2045	0	34896.85	157123.8	61278.28	95845.51	969387.2	378061	591326.2	PHEV	13609.77	21287.08	1	8
2045	0	86767.88	395645	0	395645	2515620	0	2515620	BEV	0	86767.88	1	3
2045	0	38008.52	173311.6	67591.53	105720.1	1100977	429381	671595.9	PHEV	14823.32	23185.2	1	8
2045	0	92814.78	428535.1	0	428535.1	2803540	0	2803540	BEV	0	92814.78	1	3
2045	0	40657.35	187719.1	73210.44	114508.6	1227253	478628.5	748624	PHEV	15856.37	24800.99	1	8
2045	0	99254.87	463956	0	463956	3121688	0	3121688	BEV	0	99254.87	1	3
2045	0	43478.43	203235.1	79261.7	123973.4	1366803	533053.2	833749.9	PHEV	16956.59	26521.84	1	8
2045	0	104628.7	495069.4	0	495069.4	3424571	0	3424571	BEV	0	104628.7	1	3
2045	0	45832.41	216864.3	84577.07	132287.2	1499804	584923.7	914880.7	PHEV	17874.64	27957.77	1	8
2045	0	110567.8	529505.8	0	529505.8	3764030	0	3764030	BEV	0	110567.8	1	3
2045	0	48434.03	231949.1	90460.15	141489	1648917	643077.5	1005839	PHEV	18889.27	29544.76	1	8
2045	0	115184.4	558213.6	0	558213.6	4076669	0	4076669	BEV	0	115184.4	1	3
2045	0	50456.33	244524.5	95364.55	149159.9	1786383	696689.2	1089693	PHEV	19677.97	30778.36	1	8
2045	0	120478.1	590770.3	0	590770.3	4429550	0	4429550	BEV	0	120478.1	1	3
2045	0	52775.22	258785.9	100926.5	157859.4	1941483	757178.4	1184305	PHEV	20582.34	32192.88	1	8
2045	0	124497	617609.6	0	617609.6	4752427	0	4752427	BEV	0	124497	1	3
2045	0	54535.68	270542.8	105511.7	165031.1	2083534	812578.1	1270955	PHEV	21268.92	33266.77	1	8
2045	0	127730	640965.6	0	640965.6	5058080	0	5058080	BEV	0	127730	1	3
2045	0	55951.89	280773.9	109501.8	171272.1	2217961	865004.8	1352956	PHEV	21821.24	34130.65	1	8
2045	0	131221.3	666003	0	666003	5380896	0	5380896	BEV	0	131221.3	1	3
2045	0	57481.24	291741.5	113779.2	177962.3	2359478	920196.5	1439282	PHEV	22417.69	35063.56	1	8
2045	0	132478.9	679975.7	0	679975.7	5607472	0	5607472	BEV	0	132478.9	1	3
2045	0	58032.15	297862.2	116166.3	181695.9	2458119	958666.4	1499453	PHEV	22632.54	35399.61	1	8
2045	0	119181.6	618552.4	0	618552.4	5193158	0	5193158	BEV	0	119181.6	1	3
2045	0	52207.29	270955.8	105672.8	165283.1	2275328	887378.1	1387950	PHEV	20360.84	31846.45	1	8
2045	0	0.511995	1.835953	0	1.835953	6.767243	0	6.767243	BEV	0	0.511995	2	3
2045	0	4.440773	15.92408	9.554447	6.369631	75.50501	45.30301	30.202	PHEV	2.664464	1.776309	2	8
2045	0	269.5095	997.3092	0	997.3092	4460.396	0	4460.396	BEV	0	269.5095	2	3
2045	0	206.9644	765.8634	455.1416	310.7217	3839.161	2281.559	1557.603	PHEV	122.996	83.9684	2	8
2045	0	618.0392	2322.437	0	2322.437	10524.41	0	10524.41	BEV	0	618.0392	2	3
2045	0	476.0025	1788.698	1052.777	735.9216	9059.186	5331.978	3727.208	PHEV	280.1615	195.841	2	8
2045	0	804.9428	3070.889	0	3070.889	14279.63	0	14279.63	BEV	0	804.9428	2	3
2045	0	591.2528	2255.653	1314.724	940.9296	11156.82	6502.832	4653.988	PHEV	344.6159	246.6369	2	8
2045	0	1107.258	4287.67	0	4287.67	20295.68	0	20295.68	BEV	0	1107.258	2	3
2045	0	704.859	2729.447	1575.281	1154.166	13621.62	7861.623	5760.001	PHEV	406.8043	298.0547	2	8

2045	0	1370.146	5384.154	0	5384.154	25918.47	0	25918.47	BEV	0	1370.146	2	3
2045	0	860.2616	3380.501	1931.715	1448.786	17054.75	9745.569	7309.177	PHEV	491.5781	368.6836	2	8
2045	0	1624.128	6475.251	0	6475.251	31753.99	0	31753.99	BEV	0	1624.128	2	3
2045	0	1058.401	4219.749	2387.172	1832.577	21567.03	12200.78	9366.254	PHEV	598.7525	459.6484	2	8
2045	0	1994.759	8067.204	0	8067.204	40483.99	0	40483.99	BEV	0	1994.759	2	3
2045	0	1215.573	4916.02	2752.971	2163.049	25507.48	14284.19	11223.29	PHEV	680.7209	534.8521	2	8
2045	0	2175.033	8920.878	0	8920.878	45812.48	0	45812.48	BEV	0	2175.033	2	3
2045	0	1371.32	5624.454	3093.45	2531.004	29644.22	16304.32	13339.9	PHEV	754.2258	617.0938	2	8
2045	0	2540.904	10567.06	0	10567.06	55481.74	0	55481.74	BEV	0	2540.904	2	3
2045	0	1801.587	7492.402	4045.897	3446.505	40336.28	21781.59	18554.69	PHEV	972.8567	828.7298	2	8
2045	0	3112.993	13124.6	0	13124.6	70631.4	0	70631.4	BEV	0	3112.993	2	3
2045	0	2207.709	9307.854	4933.162	4374.691	51088.54	27076.93	24011.61	PHEV	1170.086	1037.623	2	8
2045	0	3850.762	16455.69	0	16455.69	90842.62	0	90842.62	BEV	0	3850.762	2	3
2045	0	2562.365	10949.91	5693.952	5255.956	61231.78	31840.53	29391.26	PHEV	1332.43	1229.935	2	8
2045	0	4544.454	19680.44	0	19680.44	111348.3	0	111348.3	BEV	0	4544.454	2	3
2045	0	3089.791	13380.81	6824.211	6556.595	76267.46	38896.4	37371.05	PHEV	1575.794	1513.998	2	8
2045	0	4877.155	21400.66	0	21400.66	124139.1	0	124139.1	BEV	0	4877.155	2	3
2045	0	3315.996	14550.39	7420.7	7129.692	84547.46	43119.2	41428.25	PHEV	1691.158	1624.838	2	8
2045	0	5246.047	23319.89	0	23319.89	138722.3	0	138722.3	BEV	0	5246.047	2	3
2045	0	3566.807	15855.28	8086.192	7769.087	94022.63	47951.54	46071.09	PHEV	1819.072	1747.736	2	8
2045	0	5582.581	25135.68	0	25135.68	153379	0	153379	BEV	0	5582.581	2	3
2045	0	3795.618	17089.85	8715.821	8374.024	103536	52803.34	50732.62	PHEV	1935.765	1859.853	2	8
2045	0	5950.851	27134.75	0	27134.75	169853.5	0	169853.5	BEV	0	5950.851	2	3
2045	0	4046.006	18449.02	9408.999	9040.018	114267.7	58276.54	55991.19	PHEV	2063.463	1982.543	2	8
2045	0	6276.156	28977.64	0	28977.64	186106.7	0	186106.7	BEV	0	6276.156	2	3
2045	0	4267.182	19702.01	10048.02	9653.983	124864.6	63680.92	61183.63	PHEV	2176.263	2090.919	2	8
2045	0	6619.961	30944.28	0	30944.28	203890.1	0	203890.1	BEV	0	6619.961	2	3
2045	0	4500.936	21039.13	10729.96	10309.17	136491.4	69610.6	66880.77	PHEV	2295.477	2205.459	2	8
2045	0	6872.252	32517.3	0	32517.3	219845.2	0	219845.2	BEV	0	6872.252	2	3
2045	0	4672.47	22108.63	11275.4	10833.23	146939.2	74939.02	72000.23	PHEV	2382.96	2289.51	2	8
2045	0	7150.71	34244.54	0	34244.54	237522.5	0	237522.5	BEV	0	7150.71	2	3
2045	0	4861.795	23282.99	11874.32	11408.66	158567	80869.15	77697.81	PHEV	2479.515	2382.279	2	8
2045	0	7430.8	36011.59	0	36011.59	256231.8	0	256231.8	BEV	0	7430.8	2	3
2045	0	5052.229	24484.41	12487.05	11997.36	170922	87170.2	83751.76	PHEV	2576.637	2475.592	2	8
2045	0	7712.607	37819.15	0	37819.15	276013.1	0	276013.1	BEV	0	7712.607	2	3
2045	0	5243.83	25713.38	13113.83	12599.56	184040	93860.4	90179.6	PHEV	2674.353	2569.477	2	8
2045	0	7890.8	39145	0	39145	293014.5	0	293014.5	BEV	0	7890.8	2	3
2045	0	5364.985	26614.83	13573.56	13041.27	195368.3	99637.84	95730.47	PHEV	2736.142	2628.843	2	8
2045	0	8004.246	40166.35	0	40166.35	308331.3	0	308331.3	BEV	0	8004.246	2	3
2045	0	5442.117	27309.25	13927.72	13381.53	205637.7	104875.2	100762.5	PHEV	2775.48	2666.637	2	8
2045	0	8120.638	41215.65	0	41215.65	324368.4	0	324368.4	BEV	0	8120.638	2	3
2045	0	5521.253	28022.68	14291.56	13731.11	216429.1	110378.9	106050.3	PHEV	2815.839	2705.414	2	8
2045	0	8244.14	42314.78	0	42314.78	341254.8	0	341254.8	BEV	0	8244.14	2	3
2045	0	5605.222	28769.98	14672.69	14097.29	227821.8	116189.1	111632.7	PHEV	2858.663	2746.559	2	8
2045	0	7534.08	39101.88	0	39101.88	322962.4	0	322962.4	BEV	0	7534.08	2	3
2045	0	5122.45	26585.51	13558.61	13026.9	215721.8	110018.1	105703.7	PHEV	2612.449	2510	2	8
2045	0	118.4001	431.3515	258.8109	172.5406	2005.761	1203.457	802.3045	PHEV	71.04003	47.36002	3	8

2045	0	457.8215	1694.15	0	1694.15	5424.34	0	5424.34	BEV	0	457.8215	3	3
2045	0	397.645	1471.47	874.4733	596.9962	6932.248	4119.736	2812.512	PHEV	236.3148	161.3303	3	8
2045	0	1046.052	3930.801	0	3930.801	16074.64	0	16074.64	BEV	0	1046.052	3	3
2045	0	754.916	2836.786	1669.651	1167.135	13555.88	7978.606	5577.278	PHEV	444.322	310.594	3	8
2045	0	1341.621	5118.336	0	5118.336	19479.99	0	19479.99	BEV	0	1341.621	3	3
2045	0	1292.195	4929.775	2873.355	2056.421	23923.41	13943.93	9979.479	PHEV	753.165	539.0299	3	8
2045	0	1867.084	7229.967	0	7229.967	28049.9	0	28049.9	BEV	0	1867.084	3	3
2045	0	1488.809	5765.159	3327.32	2437.839	28328.07	16349.34	11978.73	PHEV	859.2554	629.5534	3	8
2045	0	2513.365	9876.569	0	9876.569	39303.58	0	39303.58	BEV	0	2513.365	3	3
2045	0	1797.459	7063.33	4036.189	3027.141	35221.14	20126.36	15094.77	PHEV	1027.119	770.3395	3	8
2045	0	3139.243	12515.88	0	12515.88	50335.36	0	50335.36	BEV	0	3139.243	3	3
2045	0	2188.08	8723.677	4935.108	3788.568	44200.68	25004.95	19195.72	PHEV	1237.828	950.2517	3	8
2045	0	3887.981	15723.77	0	15723.77	63806.98	0	63806.98	BEV	0	3887.981	3	3
2045	0	2857.507	11556.33	6471.544	5084.784	59586.67	33368.53	26218.13	PHEV	1600.204	1257.303	3	8
2045	0	5257.353	21562.98	0	21562.98	92938.08	0	92938.08	BEV	0	5257.353	3	3
2045	0	3265.956	13395.29	7367.408	6027.879	70305.45	38668	31637.45	PHEV	1796.276	1469.68	3	8
2045	0	6771.132	28159.65	0	28159.65	127321	0	127321	BEV	0	6771.132	3	3
2045	0	4155.767	17282.92	9332.777	7950.144	92403.2	49897.73	42505.47	PHEV	2244.114	1911.653	3	8
2045	0	8670.651	36556.07	0	36556.07	173357.6	0	173357.6	BEV	0	8670.651	3	3
2045	0	5102.034	21510.53	11400.58	10109.95	117252.1	62143.63	55108.5	PHEV	2704.078	2397.956	3	8
2045	0	10832.5	46291.16	0	46291.16	227228.8	0	227228.8	BEV	0	10832.5	3	3
2045	0	6233.142	26636.46	13850.96	12785.5	150047.2	78024.56	72022.67	PHEV	3241.234	2991.908	3	8
2045	0	13297.84	57588.28	0	57588.28	288942.2	0	288942.2	BEV	0	13297.84	3	3
2045	0	7625.272	33022.39	16841.42	16180.97	195056.4	99478.78	95577.65	PHEV	3888.889	3736.383	3	8
2045	0	14768.99	64805.43	0	64805.43	333122.9	0	333122.9	BEV	0	14768.99	3	3
2045	0	8468.861	37160.85	18952.04	18208.82	224099.2	114290.6	109808.6	PHEV	4319.119	4149.742	3	8
2045	0	16295.74	72438.33	0	72438.33	381615.6	0	381615.6	BEV	0	16295.74	3	3
2045	0	9344.337	41537.73	21184.24	20353.49	255957.4	130538.3	125419.1	PHEV	4765.612	4578.725	3	8
2045	0	17600.09	79244.74	0	79244.74	427986	0	427986	BEV	0	17600.09	3	3
2045	0	10092.28	45440.67	23174.74	22265.93	286338	146032.4	140305.6	PHEV	5147.06	4945.215	3	8
2045	0	19036.68	86803.66	0	86803.66	480713	0	480713	BEV	0	19036.68	3	3
2045	0	10916.05	49775.12	25385.31	24389.81	320943	163680.9	157262.1	PHEV	5567.187	5348.865	3	8
2045	0	20212.31	93322.27	0	93322.27	530038.6	0	530038.6	BEV	0	20212.31	3	3
2045	0	11590.18	53513.04	27291.65	26221.39	353272.7	180169.1	173103.6	PHEV	5910.994	5679.19	3	8
2045	0	21395.8	100012.3	0	100012.3	582571.1	0	582571.1	BEV	0	21395.8	3	3
2045	0	12268.82	57349.25	29248.12	28101.13	387746.1	197750.5	189995.6	PHEV	6257.098	6011.722	3	8
2045	0	22243.24	105247.9	0	105247.9	628885.3	0	628885.3	BEV	0	22243.24	3	3
2045	0	12754.76	60351.46	30779.25	29572.22	418158.5	213260.8	204897.6	PHEV	6504.93	6249.835	3	8
2045	0	23013.93	110213	0	110213	675505	0	675505	BEV	0	23013.93	3	3
2045	0	13196.69	63198.55	32231.26	30967.29	448837.7	228907.2	219930.5	PHEV	6730.312	6466.378	3	8
2045	0	23597.46	114359.4	0	114359.4	719022.5	0	719022.5	BEV	0	23597.46	3	3
2045	0	13531.3	65576.2	33443.86	32132.34	477537.7	243544.2	233993.5	PHEV	6900.963	6630.337	3	8
2045	0	24263.15	118975.6	0	118975.6	767274.7	0	767274.7	BEV	0	24263.15	3	3
2045	0	13913.02	68223.2	34793.83	33429.37	509455.7	259822.4	249633.3	PHEV	7095.641	6817.381	3	8
2045	0	24797.63	123017.1	0	123017.1	813665.6	0	813665.6	BEV	0	24797.63	3	3
2045	0	14219.5	70540.68	35975.75	34564.93	540246.8	275525.9	264720.9	PHEV	7251.947	6967.557	3	8
2045	0	25223.5	126574.8	0	126574.8	858423.7	0	858423.7	BEV	0	25223.5	3	3

2045	0	14463.71	72580.76	37016.19	35564.57	570039.1	290719.9	279319.2	PHEV	7376.49	7087.216	3	8
2045	0	25910.28	131505.6	0	131505.6	914371.5	0	914371.5	BEV	0	25910.28	3	3
2045	0	14857.52	75408.18	38458.17	36950.01	607356.5	309751.8	297604.7	PHEV	7577.338	7280.187	3	8
2045	0	26626.33	136665.2	0	136665.2	973872.1	0	973872.1	BEV	0	26626.33	3	3
2045	0	15268.12	78366.84	39967.09	38399.75	647098	330020	317078	PHEV	7786.742	7481.38	3	8
2045	0	24140.43	125288.8	0	125288.8	914181.8	0	914181.8	BEV	0	24140.43	3	3
2045	0	13842.65	71843.37	36640.12	35203.25	607562.8	309857	297705.8	PHEV	7059.754	6782.9	3	8
2045	0	174.6154	626.1499	375.69	250.46	2577.486	1546.491	1030.994	PHEV	104.7692	69.84617	4	8
2045	0	0.4227	1.539967	0	1.539967	4.079214	0	4.079214	BEV	0	0.4227	4	3
2045	0	517.2681	1884.496	1130.697	753.7983	8235.071	4941.043	3294.028	PHEV	310.3609	206.9072	4	8
2045	0	239.8455	887.5388	0	887.5388	2572.976	0	2572.976	BEV	0	239.8455	4	3
2045	0	624.0287	2309.193	1372.321	936.8727	11106.8	6600.614	4506.188	PHEV	370.8513	253.1774	4	8
2045	0	569.4516	2139.857	0	2139.857	7229.556	0	7229.556	BEV	0	569.4516	4	3
2045	0	766.9066	2881.843	1696.171	1185.673	13726.26	8078.885	5647.376	PHEV	451.3793	315.5273	4	8
2045	0	1001.552	3820.961	0	3820.961	13449.58	0	13449.58	BEV	0	1001.552	4	3
2045	0	972.0517	3708.416	2161.477	1546.939	17405.27	10144.79	7260.484	PHEV	566.5673	405.4844	4	8
2045	0	1170.433	4532.301	0	4532.301	14669.31	0	14669.31	BEV	0	1170.433	4	3
2045	0	1143.303	4427.247	2555.154	1872.093	21058.56	12153.8	8904.761	PHEV	659.8493	483.4539	4	8
2045	0	1414.856	5559.847	0	5559.847	17791.52	0	17791.52	BEV	0	1414.856	4	3
2045	0	1329.458	5224.266	2985.295	2238.971	25232.46	14418.55	10813.91	PHEV	759.6904	569.7678	4	8
2045	0	1694.432	6755.55	0	6755.55	21954.35	0	21954.35	BEV	0	1694.432	4	3
2045	0	1949.472	7772.368	4396.939	3375.428	38165.7	21590.88	16574.82	PHEV	1102.844	846.6277	4	8
2045	0	2115.33	8554.818	0	8554.818	28667.08	0	28667.08	BEV	0	2115.33	4	3
2045	0	2320.555	9384.789	5255.482	4129.307	46942.22	26287.64	20654.58	PHEV	1299.511	1021.044	4	8
2045	0	2257.957	9260.988	0	9260.988	31763.35	0	31763.35	BEV	0	2257.957	4	3
2045	0	2342.32	9607.003	5283.852	4323.151	48963.88	26930.14	22033.75	PHEV	1288.276	1054.044	4	8
2045	0	2701.56	11235.19	0	11235.19	40346.5	0	40346.5	BEV	0	2701.56	4	3
2045	0	2728.206	11346.01	6126.844	5219.164	59001.38	31860.74	27140.63	PHEV	1473.231	1254.975	4	8
2045	0	3223.572	13590.81	0	13590.81	51291.93	0	51291.93	BEV	0	3223.572	4	3
2045	0	3186.687	13435.3	7120.706	6314.589	71364.76	37823.33	33541.44	PHEV	1688.944	1497.743	4	8
2045	0	3812.129	16290.6	0	16290.6	65747.58	0	65747.58	BEV	0	3812.129	4	3
2045	0	3771.254	16115.93	8380.282	7735.645	87498.94	45499.45	41999.49	PHEV	1961.052	1810.202	4	8
2045	0	4480.642	19404.09	0	19404.09	83503.02	0	83503.02	BEV	0	4480.642	4	3
2045	0	4410.439	19100.07	9741.035	9359.033	106084.6	54103.14	51981.45	PHEV	2249.324	2161.115	4	8
2045	0	4881.905	21421.51	0	21421.51	94775.35	0	94775.35	BEV	0	4881.905	4	3
2045	0	4805.415	21085.87	10753.8	10332.08	119887.2	61142.46	58744.72	PHEV	2450.762	2354.654	4	8
2045	0	5303.798	23576.6	0	23576.6	107225.1	0	107225.1	BEV	0	5303.798	4	3
2045	0	5220.698	23207.2	11835.67	11371.53	135135.3	68919.02	66216.32	PHEV	2662.556	2558.142	4	8
2045	0	5686.63	25604.16	0	25604.16	119681.2	0	119681.2	BEV	0	5686.63	4	3
2045	0	5597.531	25203	12853.53	12349.47	150366.7	76687.04	73679.7	PHEV	2854.741	2742.79	4	8
2045	0	6112.11	27870.06	0	27870.06	133863.9	0	133863.9	BEV	0	6112.11	4	3
2045	0	6016.345	27433.39	13991.03	13442.36	167768.5	85561.95	82206.58	PHEV	3068.336	2948.009	4	8
2045	0	6489.709	29963.64	0	29963.64	147868.1	0	147868.1	BEV	0	6489.709	4	3
2045	0	6388.028	29494.16	15042.02	14452.14	184958.7	94328.93	90629.76	PHEV	3257.894	3130.134	4	8
2045	0	6916.495	32330.39	0	32330.39	163876.1	0	163876.1	BEV	0	6916.495	4	3
2045	0	6808.127	31823.84	16230.16	15593.68	204655.6	104374.4	100281.3	PHEV	3472.145	3335.982	4	8
2045	0	7203.188	34083.18	0	34083.18	177419.1	0	177419.1	BEV	0	7203.188	4	3

2045	0	7090.329	33549.17	17110.07	16439.09	221350.6	112888.8	108461.8	PHEV	3616.068	3474.261	4	8
2045	0	7540.635	36111.87	0	36111.87	192982.9	0	192982.9	BEV	0	7540.635	4	3
2045	0	7422.488	35546.07	18128.5	17417.58	240597.9	122704.9	117893	PHEV	3785.469	3637.019	4	8
2045	0	7818.052	37888.31	0	37888.31	207813.8	0	207813.8	BEV	0	7818.052	4	3
2045	0	7695.558	37294.68	19020.28	18274.39	258985.7	132082.7	126903	PHEV	3924.735	3770.824	4	8
2045	0	8134.134	39886.13	0	39886.13	224455.1	0	224455.1	BEV	0	8134.134	4	3
2045	0	8006.688	39261.19	20023.21	19237.99	279669.3	142631.3	137037.9	PHEV	4083.411	3923.277	4	8
2045	0	8308.725	41218.26	0	41218.26	237918.9	0	237918.9	BEV	0	8308.725	4	3
2045	0	8178.544	40572.45	20691.95	19880.5	296468.2	151198.8	145269.4	PHEV	4171.057	4007.486	4	8
2045	0	8494.53	42626.66	0	42626.66	252290.5	0	252290.5	BEV	0	8494.53	4	3
2045	0	8361.438	41958.78	21398.98	20559.8	314426.8	160357.7	154069.1	PHEV	4264.333	4097.104	4	8
2045	0	8731.539	44316.23	0	44316.23	268822.6	0	268822.6	BEV	0	8731.539	4	3
2045	0	8594.733	43621.88	22247.16	21374.72	335040.7	170870.8	164170	PHEV	4383.314	4211.419	4	8
2045	0	8899.869	45680.45	0	45680.45	283886	0	283886	BEV	0	8899.869	4	3
2045	0	8760.425	44964.72	22932.01	22032.71	353882.1	180479.9	173402.2	PHEV	4467.817	4292.608	4	8
2045	0	7724.507	40090.19	0	40090.19	254876.8	0	254876.8	BEV	0	7724.507	4	3
2045	0	7603.479	39462.05	20125.65	19336.41	317338.6	161842.7	155495.9	PHEV	3877.774	3725.705	4	8
2045	0	3.985196	10.63744	0	10.63744	26.82838	0	26.82838	BEV	0	3.985196	1	3
2045	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2045	0	328.5275	1102.775	0	1102.775	3510.858	0	3510.858	BEV	0	328.5275	1	3
2045	0	343.3895	1152.662	691.5974	461.065	3226.536	1935.921	1290.614	PHEV	206.0337	137.3558	1	8
2045	0	422.2153	1441.447	0	1441.447	4745.488	0	4745.488	BEV	0	422.2153	1	3
2045	0	533.0786	1819.936	1091.961	727.9743	5319.921	3191.953	2127.969	PHEV	319.8472	213.2314	1	8
2045	0	1054.93	3661.979	0	3661.979	12532.78	0	12532.78	BEV	0	1054.93	1	3
2045	0	501.6476	1741.369	1044.822	696.5477	5329.777	3197.866	2131.911	PHEV	300.9885	200.659	1	8
2045	0	323.1707	1140.337	0	1140.337	2766.967	0	2766.967	BEV	0	323.1707	3	3
2045	0	29.41091	103.7791	62.26743	41.51162	458.3496	275.0097	183.3398	PHEV	17.64655	11.76436	3	8
2045	0	1.735294	5.029575	0	5.029575	13.06471	0	13.06471	BEV	0	1.735294	1	3
2045	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2045	0	68.78563	226.9534	0	226.9534	700.2738	0	700.2738	BEV	0	68.78563	1	3
2045	0	144.5899	477.0643	286.2386	190.8257	1271.839	763.1037	508.7358	PHEV	86.75394	57.83596	1	8
2045	0	759.7565	2680.869	0	2680.869	9505.651	0	9505.651	BEV	0	759.7565	1	3
2045	0	546.3665	1927.903	1156.742	771.1614	6171.795	3703.077	2468.718	PHEV	327.8199	218.5466	1	8
2045	0	7.458856	20.3368	0	20.3368	51.47616	0	51.47616	BEV	0	7.458856	1	3
2045	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2045	0	83.88458	271.9656	0	271.9656	817.0747	0	817.0747	BEV	0	83.88458	1	3
2045	0	23.31745	75.59844	45.35906	30.23938	193.1137	115.8682	77.24547	PHEV	13.99047	9.32698	1	8
2045	0	67.64885	230.9538	0	230.9538	759.2214	0	759.2214	BEV	0	67.64885	2	3
2045	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2045	0	15.4882	52.87687	0	52.87687	120.9321	0	120.9321	BEV	0	15.4882	3	3
2045	0	7.012573	23.94099	14.3646	9.576397	100.4459	60.26754	40.17836	PHEV	4.207544	2.805029	3	8
2045	0	2.665089	7.266445	0	7.266445	12.45228	0	12.45228	BEV	0	2.665089	3	3
2045	0	0	0	0	0	0	0	0	PHEV	0	0	3	8
2045	0	16.16586	44.07669	0	44.07669	77.15867	0	77.15867	BEV	0	16.16586	4	3
2045	0	0	0	0	0	0	0	0	PHEV	0	0	4	8
2045	0	14.38847	45.82512	0	45.82512	134.5802	0	134.5802	BEV	0	14.38847	1	3
2045	0	1.533796	4.884911	2.930947	1.953964	11.79339	7.076033	4.717356	PHEV	0.920278	0.613519	1	8

2045	0	26.91933	88.81843	0	88.81843	272.5209	0	272.5209	BEV	0	26.91933	2	3
2045	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2045	0	1.877139	5.54824	0	5.54824	14.79473	0	14.79473	BEV	0	1.877139	1	3
2045	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2045	0	9.194331	28.22908	0	28.22908	76.71779	0	76.71779	BEV	0	9.194331	1	3
2045	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2045	0	7.938708	24.82879	0	24.82879	71.87867	0	71.87867	BEV	0	7.938708	1	3
2045	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2045	0	33.9132	113.8371	0	113.8371	360.3852	0	360.3852	BEV	0	33.9132	2	3
2045	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2045	0	1.682259	4.683107	0	4.683107	11.92351	0	11.92351	BEV	0	1.682259	1	3
2045	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2045	0	3.208821	9.668113	0	9.668113	26.21806	0	26.21806	BEV	0	3.208821	1	3
2045	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2045	0	3.900384	11.97523	0	11.97523	32.93979	0	32.93979	BEV	0	3.900384	2	3
2045	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2045	0	0.246311	0.72802	0	0.72802	1.530179	0	1.530179	BEV	0	0.246311	4	3
2045	0	0	0	0	0	0	0	0	PHEV	0	0	4	8
2045	0	2.381883	7.44948	0	7.44948	15.37433	0	15.37433	BEV	0	2.381883	3	3
2045	0	0	0	0	0	0	0	0	PHEV	0	0	3	8
2045	0	1.447944	4.694438	0	4.694438	10.08586	0	10.08586	BEV	0	1.447944	3	3
2045	0	1.002423	3.249996	1.949997	1.299998	12.5484	7.52904	5.01936	PHEV	0.601454	0.400969	3	8
2045	0	0.206437	0.716606	0	0.716606	1.651544	0	1.651544	BEV	0	0.206437	4	3
2045	0	0	0	0	0	0	0	0	PHEV	0	0	4	8
2045	0	2.189291	5.843742	0	5.843742	14.56712	0	14.56712	BEV	0	2.189291	2	3
2045	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2045	0	0.973689	2.877922	0	2.877922	7.560625	0	7.560625	BEV	0	0.973689	2	3
2045	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2045	0	0.551687	1.662221	0	1.662221	4.476863	0	4.476863	BEV	0	0.551687	2	3
2045	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2045	0	1.643575	5.140379	0	5.140379	14.8026	0	14.8026	BEV	0	1.643575	2	3
2045	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2045	0	1.756589	5.393202	0	5.393202	10.60032	0	10.60032	BEV	0	1.756589	3	3
2045	0	0	0	0	0	0	0	0	PHEV	0	0	3	8
2045	0	1.016878	3.413376	0	3.413376	7.602202	0	7.602202	BEV	0	1.016878	3	3
2045	0	0.777613	2.610228	1.566137	1.044091	10.85474	6.512842	4.341894	PHEV	0.466568	0.311045	3	8
2045	0	1.862465	5.184768	0	5.184768	9.143683	0	9.143683	BEV	0	1.862465	4	3
2045	0	0	0	0	0	0	0	0	PHEV	0	0	4	8
2045	0	0.315913	0.915644	0	0.915644	1.672976	0	1.672976	BEV	0	0.315913	4	3
2045	0	0	0	0	0	0	0	0	PHEV	0	0	4	8
2045	0	7.701753	20.99906	0	20.99906	51.00972	0	51.00972	BEV	0	7.701753	2	3
2045	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2045	0	0.506295	1.43844	0	1.43844	3.614536	0	3.614536	BEV	0	0.506295	2	3
2045	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2045	0	0.233929	0.718224	0	0.718224	1.387623	0	1.387623	BEV	0	0.233929	4	3
2045	0	0	0	0	0	0	0	0	PHEV	0	0	4	8
2045	0	1.559707	4.4313	0	4.4313	11.30082	0	11.30082	BEV	0	1.559707	1	3

2045	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2045	0	0.194587	0.56399	0	0.56399	1.445241	0	1.445241	BEV	0	0.194587	2	3
2045	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2045	0	0.121071	0.323168	0	0.323168	0.54781	0	0.54781	BEV	0	0.121071	3	3
2045	0	0	0	0	0	0	0	0	PHEV	0	0	3	8
2045	0	1.432274	4.561578	0	4.561578	9.329953	0	9.329953	BEV	0	1.432274	3	3
2045	0	0	0	0	0	0	0	0	PHEV	0	0	3	8
2045	0	3.254063	10.73655	0	10.73655	22.79418	0	22.79418	BEV	0	3.254063	3	3
2045	0	0.834375	2.752962	1.651777	1.101185	13.01183	7.807101	5.204734	PHEV	0.500625	0.33375	3	8
2045	0	0.189299	0.505285	0	0.505285	0.907936	0	0.907936	BEV	0	0.189299	4	3
2045	0	0	0	0	0	0	0	0	PHEV	0	0	4	8
2045	0	0	0	0	0	0	0	0	BEV	0	0	2	3
2045	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2045	0	0	0	0	0	0	0	0	BEV	0	0	2	3
2045	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2045	0	0	0	0	0	0	0	0	BEV	0	0	3	3
2045	0	2.273793	7.893016	4.73581	3.157206	38.3338	23.00028	15.33352	PHEV	1.364276	0.909517	3	8
2045	0	0.079949	0.240884	0	0.240884	0.445512	0	0.445512	BEV	0	0.079949	3	3
2045	0	0	0	0	0	0	0	0	PHEV	0	0	3	8
2045	0	0.24839	0.791086	0	0.791086	2.132026	0	2.132026	BEV	0	0.24839	2	3
2045	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2045	0	0.172033	0.557755	0	0.557755	1.702379	0	1.702379	BEV	0	0.172033	2	3
2045	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2045	0	0.050748	0.147089	0	0.147089	0.248608	0	0.248608	BEV	0	0.050748	3	3
2045	0	0	0	0	0	0	0	0	PHEV	0	0	3	8
2045	0	0.082169	0.228743	0	0.228743	0.565218	0	0.565218	BEV	0	0.082169	2	3
2045	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2045	0	0.219031	0.659937	0	0.659937	1.210374	0	1.210374	BEV	0	0.219031	4	3
2045	0	0	0	0	0	0	0	0	PHEV	0	0	4	8
2045	0	0	0	0	0	0	0	0	BEV	0	0	4	3
2045	0	0.269667	0.905198	0.543119	0.362079	4.094909	2.456945	1.637963	PHEV	0.1618	0.107867	4	8
2046	0	2401.25	8473.025	0	8473.025	28914.49	0	28914.49	BEV	0	2401.25	1	3
2046	0	2166.009	7642.956	4127.196	3515.76	25187.56	13601.28	11586.28	PHEV	1169.645	996.364	1	8
2046	0	3475.135	12461.42	0	12461.42	43956.53	0	43956.53	BEV	0	3475.135	1	3
2046	0	2245.963	8053.752	4349.026	3704.726	27836.82	15031.88	12804.94	PHEV	1212.82	1033.143	1	8
2046	0	5051.779	18404.49	0	18404.49	67702.62	0	67702.62	BEV	0	5051.779	1	3
2046	0	2477.573	9026.218	4783.896	4242.322	32488.5	17218.9	15269.59	PHEV	1313.113	1164.459	1	8
2046	0	7186.636	26593.86	0	26593.86	101517.3	0	101517.3	BEV	0	7186.636	1	3
2046	0	2740.304	10140.38	5273	4867.384	38309.6	19920.99	18388.61	PHEV	1424.958	1315.346	1	8
2046	0	9146.481	34370.19	0	34370.19	136544.4	0	136544.4	BEV	0	9146.481	1	3
2046	0	3440.13	12927.15	6592.846	6334.303	50888.49	25953.13	24935.36	PHEV	1754.466	1685.664	1	8
2046	0	11595.38	44236.84	0	44236.84	182868.3	0	182868.3	BEV	0	11595.38	1	3
2046	0	4296.895	16392.82	8196.412	8196.412	67229.6	33614.8	33614.8	PHEV	2148.447	2148.447	1	8
2046	0	14830.93	57430.27	0	57430.27	246676.5	0	246676.5	BEV	0	14830.93	1	3
2046	0	5466.094	21166.52	10371.59	10794.92	90229.87	44212.63	46017.23	PHEV	2678.386	2787.708	1	8
2046	0	18639.82	73247.39	0	73247.39	326542.4	0	326542.4	BEV	0	18639.82	1	3
2046	0	6839.917	26878.27	12901.57	13976.7	118980.4	57110.59	61869.81	PHEV	3283.16	3556.757	1	8

2046	0	23526.57	93798.31	0	93798.31	433706	0	433706	BEV	0	23526.57	1	3
2046	0	8516.471	33954.4	15958.57	17995.83	155992.6	73316.5	82676.05	PHEV	4002.741	4513.73	1	8
2046	0	24157.02	97695.8	0	97695.8	467877.9	0	467877.9	BEV	0	24157.02	1	3
2046	0	10046.19	40628.82	18445.48	22183.33	193380.8	87794.87	105585.9	PHEV	4560.972	5485.222	1	8
2046	0	29594.2	121380.3	0	121380.3	600881.8	0	600881.8	BEV	0	29594.2	1	3
2046	0	12525.58	51373.55	22501.62	28871.94	253080.6	110849.3	142231.3	PHEV	5486.205	7039.377	1	8
2046	0	36274.59	150858	0	150858	771502.2	0	771502.2	BEV	0	36274.59	1	3
2046	0	15501.57	64467.61	27205.33	37262.28	328438.5	138601.1	189837.5	PHEV	6541.662	8959.906	1	8
2046	0	43784.07	184596.7	0	184596.7	974720.9	0	974720.9	BEV	0	43784.07	1	3
2046	0	18944.36	79870.73	32427.52	47443.22	420486.6	170717.5	249769	PHEV	7691.409	11252.95	1	8
2046	0	52017.47	222289.4	0	222289.4	1211313	0	1211313	BEV	0	52017.47	1	3
2046	0	22786.16	97373.47	37975.65	59397.82	529398.1	206465.2	322932.8	PHEV	8886.603	13899.56	1	8
2046	0	59174.53	256264.2	0	256264.2	1440489	0	1440489	BEV	0	59174.53	1	3
2046	0	25921.3	112256.1	43779.87	68476.21	629766.5	245608.9	384157.6	PHEV	10109.31	15811.99	1	8
2046	0	66279.69	290831.3	0	290831.3	1685558	0	1685558	BEV	0	66279.69	1	3
2046	0	29033.7	127398.2	49685.28	77712.87	737134.4	287482.4	449652	PHEV	11323.14	17710.56	1	8
2046	0	73732.32	327757.1	0	327757.1	1957485	0	1957485	BEV	0	73732.32	1	3
2046	0	32298.32	143573.4	55993.64	87579.8	856294.6	333954.9	522339.7	PHEV	12596.34	19701.97	1	8
2046	0	80474.25	362336.9	0	362336.9	2228820	0	2228820	BEV	0	80474.25	1	3
2046	0	35251.61	158721.1	61901.21	96819.85	975232.8	380340.8	594892	PHEV	13748.13	21503.48	1	8
2046	0	87625.07	399553.7	0	399553.7	2530042	0	2530042	BEV	0	87625.07	1	3
2046	0	38384.01	175023.8	68259.28	106764.5	1107301	431847.4	675453.6	PHEV	14969.76	23414.25	1	8
2046	0	93708.14	432659.9	0	432659.9	2818922	0	2818922	BEV	0	93708.14	1	3
2046	0	41048.69	189525.9	73915.1	115610.8	1234001	481260.5	752740.8	PHEV	16008.99	25039.7	1	8
2046	0	100176.3	468263.3	0	468263.3	3137748	0	3137748	BEV	0	100176.3	1	3
2046	0	43882.08	205121.9	79997.56	125124.4	1373852	535802.4	838049.9	PHEV	17114.01	26768.07	1	8
2046	0	105565.3	499501.3	0	499501.3	3441082	0	3441082	BEV	0	105565.3	1	3
2046	0	46242.7	218805.7	85334.21	133471.5	1507057	587752.2	919304.8	PHEV	18034.65	28208.05	1	8
2046	0	111527.2	534100.4	0	534100.4	3781163	0	3781163	BEV	0	111527.2	1	3
2046	0	48854.3	233961.8	91245.09	142716.7	1656447	646014.2	1010433	PHEV	19053.18	29801.12	1	8
2046	0	116149.7	562891.7	0	562891.7	4094046	0	4094046	BEV	0	116149.7	1	3
2046	0	50879.18	246573.8	96163.76	150410	1794026	699670	1094356	PHEV	19842.88	31036.3	1	8
2046	0	121447.8	595525.4	0	595525.4	4446992	0	4446992	BEV	0	121447.8	1	3
2046	0	53200	260868.9	101738.9	159130	1949160	760172.6	1188988	PHEV	20748	32452	1	8
2046	0	125461.9	622396.5	0	622396.5	4769747	0	4769747	BEV	0	125461.9	1	3
2046	0	54958.37	272639.7	106329.5	166310.2	2091164	815553.9	1275610	PHEV	21433.77	33524.61	1	8
2046	0	128678.7	645726.5	0	645726.5	5074910	0	5074910	BEV	0	128678.7	1	3
2046	0	56367.48	282859.4	110315.2	172544.2	2225383	867899.5	1357484	PHEV	21983.32	34384.16	1	8
2046	0	132138.3	670657.2	0	670657.2	5396447	0	5396447	BEV	0	132138.3	1	3
2046	0	57882.94	293780.2	114574.3	179205.9	2366346	922874.8	1443471	PHEV	22574.35	35308.59	1	8
2046	0	133344.4	684418.1	0	684418.1	5621035	0	5621035	BEV	0	133344.4	1	3
2046	0	58411.28	299808.2	116925.2	182883	2464116	961005.2	1503111	PHEV	22780.4	35630.88	1	8
2046	0	119897.1	622266	0	622266	5202884	0	5202884	BEV	0	119897.1	1	3
2046	0	52520.72	272582.5	106307.2	166275.3	2279642	889060.2	1390581	PHEV	20483.08	32037.64	1	8
2046	0	0.452708	1.597422	0	1.597422	5.67053	0	5.67053	BEV	0	0.452708	2	3
2046	0	3.926552	13.85519	8.313115	5.542076	64.8959	38.93754	25.95836	PHEV	2.355931	1.570621	2	8
2046	0	237.3374	864.6605	0	864.6605	3778.882	0	3778.882	BEV	0	237.3374	2	3

2046	0	182.2584	663.9985	394.6048	269.3937	3297.197	1959.477	1337.72	PHEV	108.3136	73.94485	2	8
2046	0	546.9962	2024.137	0	2024.137	8949.153	0	8949.153	BEV	0	546.9962	2	3
2046	0	421.2864	1558.954	917.5555	641.3981	7811.492	4597.621	3213.871	PHEV	247.9572	173.3293	2	8
2046	0	714.4801	2684.837	0	2684.837	12191.69	0	12191.69	BEV	0	714.4801	2	3
2046	0	524.8055	1972.088	1149.445	822.6423	9601.788	5596.47	4005.317	PHEV	305.8866	218.9188	2	8
2046	0	982.5086	3748.31	0	3748.31	17356.12	0	17356.12	BEV	0	982.5086	2	3
2046	0	625.4457	2386.1	1377.121	1008.98	11756.07	6784.934	4971.14	PHEV	360.9715	264.4742	2	8
2046	0	1218.259	4717.5	0	4717.5	22176.33	0	22176.33	BEV	0	1218.259	2	3
2046	0	764.8974	2961.935	1692.534	1269.401	14724.52	8414.012	6310.509	PHEV	437.0842	327.8132	2	8
2046	0	1453.218	5710.594	0	5710.594	27297.2	0	27297.2	BEV	0	1453.218	2	3
2046	0	947.0235	3721.443	2105.273	1616.169	18702.54	10580.29	8122.246	PHEV	535.7447	411.2788	2	8
2046	0	1798.477	7170.366	0	7170.366	35045.5	0	35045.5	BEV	0	1798.477	2	3
2046	0	1095.962	4369.502	2446.921	1922.581	22257.21	12464.04	9793.173	PHEV	613.7387	482.2233	2	8
2046	0	1974.796	7986.471	0	7986.471	39916.01	0	39916.01	BEV	0	1974.796	2	3
2046	0	1245.074	5035.327	2769.43	2265.897	26013.05	14307.18	11705.87	PHEV	684.7906	560.2832	2	8
2046	0	2325.388	9537.554	0	9537.554	48684.47	0	48684.47	BEV	0	2325.388	2	3
2046	0	1648.778	6762.447	3651.721	3110.725	35684.83	19269.81	16415.02	PHEV	890.3401	758.4379	2	8
2046	0	2858.875	11889.43	0	11889.43	62182.79	0	62182.79	BEV	0	2858.875	2	3
2046	0	2027.49	8431.884	4468.898	3962.985	45335.26	24027.69	21307.57	PHEV	1074.57	952.9202	2	8
2046	0	3574.786	15071.55	0	15071.55	80862.69	0	80862.69	BEV	0	3574.786	2	3
2046	0	2378.726	10028.87	5215.015	4813.86	54888.25	28541.89	26346.36	PHEV	1236.937	1141.788	2	8
2046	0	4229.305	18073.34	0	18073.34	99351.06	0	99351.06	BEV	0	4229.305	2	3
2046	0	2875.521	12288.13	6266.948	6021.186	68499.02	34934.5	33564.52	PHEV	1466.515	1409.005	2	8
2046	0	4592.441	19888.25	0	19888.25	112051.5	0	112051.5	BEV	0	4592.441	2	3
2046	0	3122.418	13522.1	6896.27	6625.828	76746.76	39140.85	37605.91	PHEV	1592.433	1529.985	2	8
2046	0	4927.214	21620.32	0	21620.32	124888	0	124888	BEV	0	4927.214	2	3
2046	0	3350.031	14699.74	7496.865	7202.87	85055.82	43378.47	41677.35	PHEV	1708.516	1641.515	2	8
2046	0	5298.082	23551.19	0	23551.19	139512.8	0	139512.8	BEV	0	5298.082	2	3
2046	0	3602.186	16012.54	8166.398	7846.147	94557.66	48224.41	46333.25	PHEV	1837.115	1765.071	2	8
2046	0	5636.462	25378.28	0	25378.28	154213.6	0	154213.6	BEV	0	5636.462	2	3
2046	0	3832.251	17254.79	8799.942	8454.847	104099.3	53090.65	51008.67	PHEV	1954.448	1877.803	2	8
2046	0	6006.686	27389.35	0	27389.35	170732.6	0	170732.6	BEV	0	6006.686	2	3
2046	0	4083.968	18622.12	9497.281	9124.839	114859.8	58578.51	56281.31	PHEV	2082.824	2001.144	2	8
2046	0	6333.525	29242.52	0	29242.52	187027.1	0	187027.1	BEV	0	6333.525	2	3
2046	0	4306.188	19882.1	10139.87	9742.228	125483.8	63996.75	61487.08	PHEV	2196.156	2110.032	2	8
2046	0	6678.325	31217.1	0	31217.1	204831.8	0	204831.8	BEV	0	6678.325	2	3
2046	0	4540.618	21224.62	10824.56	10400.06	137124.1	69933.28	67190.79	PHEV	2315.715	2224.903	2	8
2046	0	6930.6	32793.38	0	32793.38	220791.1	0	220791.1	BEV	0	6930.6	2	3
2046	0	4712.141	22296.34	11371.13	10925.21	147574.7	75263.1	72311.6	PHEV	2403.192	2308.949	2	8
2046	0	7209.552	34526.33	0	34526.33	238482.9	0	238482.9	BEV	0	7209.552	2	3
2046	0	4901.801	23474.58	11972.04	11502.54	159211.9	81198.07	78013.84	PHEV	2499.919	2401.883	2	8
2046	0	7489.698	36297.02	0	36297.02	257191.6	0	257191.6	BEV	0	7489.698	2	3
2046	0	5092.274	24678.48	12586.03	12092.46	171566.8	87499.07	84067.74	PHEV	2597.06	2495.214	2	8
2046	0	7771.345	38107.18	0	38107.18	276962.7	0	276962.7	BEV	0	7771.345	2	3
2046	0	5283.767	25909.21	13213.7	12695.51	184678.4	94185.98	90492.41	PHEV	2694.721	2589.046	2	8
2046	0	7948.773	39432.59	0	39432.59	293944.2	0	293944.2	BEV	0	7948.773	2	3
2046	0	5404.401	26810.37	13673.29	13137.08	195993.7	99956.81	96036.93	PHEV	2756.244	2648.156	2	8

2046	0	8060.747	40449.88	0	40449.88	309221	0	309221	BEV	0	8060.747	2	3
2046	0	5480.532	27502.02	14026.03	13475.99	206236.8	105180.8	101056.1	PHEV	2795.071	2685.461	2	8
2046	0	8175.178	41492.46	0	41492.46	325193.8	0	325193.8	BEV	0	8175.178	2	3
2046	0	5558.335	28210.88	14387.55	13823.33	216985.9	110662.8	106323.1	PHEV	2834.751	2723.584	2	8
2046	0	8296.816	42585.15	0	42585.15	342009.9	0	342009.9	BEV	0	8296.816	2	3
2046	0	5641.037	28953.81	14766.44	14187.36	228331.4	116449	111882.4	PHEV	2876.929	2764.108	2	8
2046	0	7579.312	39336.63	0	39336.63	323552.1	0	323552.1	BEV	0	7579.312	2	3
2046	0	5153.202	26745.12	13640.01	13105.11	216120.7	110221.6	105899.1	PHEV	2628.133	2525.069	2	8
2046	0	105.8374	379.5201	227.7121	151.808	1737.644	1042.586	695.0576	PHEV	63.50242	42.33495	3	8
2046	0	406.1559	1479.695	0	1479.695	4588.268	0	4588.268	BEV	0	406.1559	3	3
2046	0	352.7705	1285.203	763.7776	521.4251	5952.369	3537.408	2414.961	PHEV	209.6464	143.124	3	8
2046	0	929.881	3440.987	0	3440.987	13750.61	0	13750.61	BEV	0	929.881	3	3
2046	0	671.0777	2483.296	1461.597	1021.699	11650.94	6857.413	4793.532	PHEV	394.9771	276.1005	3	8
2046	0	1184.511	4451.094	0	4451.094	16491.12	0	16491.12	BEV	0	1184.511	3	3
2046	0	1140.873	4287.115	2498.775	1788.339	20409.26	11895.68	8513.576	PHEV	664.9659	475.9069	3	8
2046	0	1636.515	6243.369	0	6243.369	23618.5	0	23618.5	BEV	0	1636.515	3	3
2046	0	1304.953	4978.448	2873.275	2105.172	24064.8	13888.83	10175.97	PHEV	753.1442	551.8087	3	8
2046	0	2191.327	8485.543	0	8485.543	32886.7	0	32886.7	BEV	0	2191.327	3	3
2046	0	1567.15	6068.523	3467.728	2600.796	29702.13	16972.65	12729.49	PHEV	895.5145	671.6359	3	8
2046	0	2705.271	10630.69	0	10630.69	41595.32	0	41595.32	BEV	0	2705.271	3	3
2046	0	1885.597	7409.68	4191.762	3217.918	36805.08	20821.16	15983.92	PHEV	1066.709	818.8879	3	8
2046	0	3297.812	13148.08	0	13148.08	51862.25	0	51862.25	BEV	0	3297.812	3	3
2046	0	2423.757	9663.3	5411.448	4251.852	48795.57	27325.52	21470.05	PHEV	1357.304	1066.453	3	8
2046	0	4427.395	17905.27	0	17905.27	75060.74	0	75060.74	BEV	0	4427.395	3	3
2046	0	2750.373	11123.06	6117.681	5005.376	57102.53	31406.39	25696.14	PHEV	1512.705	1237.668	3	8
2046	0	5799.813	23787.88	0	23787.88	104649.7	0	104649.7	BEV	0	5799.813	3	3
2046	0	3559.622	14599.75	7883.867	6715.887	76295.03	41199.31	35095.71	PHEV	1922.196	1637.426	3	8
2046	0	7612.369	31658.17	0	31658.17	146113.8	0	146113.8	BEV	0	7612.369	3	3
2046	0	4479.314	18628.48	9873.095	8755.386	99169.06	52559.6	46609.46	PHEV	2374.036	2105.277	3	8
2046	0	9625.963	40583.73	0	40583.73	193830.7	0	193830.7	BEV	0	9625.963	3	3
2046	0	5538.889	23352.34	12143.22	11209.12	128429.7	66783.43	61646.24	PHEV	2880.222	2658.667	3	8
2046	0	11877.63	50757.41	0	50757.41	247645.6	0	247645.6	BEV	0	11877.63	3	3
2046	0	6810.896	29105.41	14843.76	14261.65	167846.8	85601.85	82244.91	PHEV	3473.557	3337.339	3	8
2046	0	13442.01	58212.65	0	58212.65	290845.4	0	290845.4	BEV	0	13442.01	3	3
2046	0	7707.944	33380.41	17024.01	16356.4	196337.1	100131.9	96205.17	PHEV	3931.052	3776.893	3	8
2046	0	14924.55	65488.03	0	65488.03	335219.5	0	335219.5	BEV	0	14924.55	3	3
2046	0	8558.064	37552.27	19151.66	18400.61	225506.4	115008.3	110498.2	PHEV	4364.613	4193.451	3	8
2046	0	16461.63	73175.72	0	73175.72	383887.9	0	383887.9	BEV	0	16461.63	3	3
2046	0	9439.458	41960.56	21399.89	20560.68	257479.7	131314.6	126165	PHEV	4814.124	4625.334	3	8
2046	0	17774.49	80030.01	0	80030.01	430423.7	0	430423.7	BEV	0	17774.49	3	3
2046	0	10192.28	45890.96	23404.39	22486.57	287968.5	146863.9	141104.6	PHEV	5198.065	4994.219	3	8
2046	0	19220.07	87639.85	0	87639.85	483320.3	0	483320.3	BEV	0	19220.07	3	3
2046	0	11021.21	50254.61	25629.85	24624.76	322684.6	164569.1	158115.4	PHEV	5620.816	5400.392	3	8
2046	0	20401.88	94197.53	0	94197.53	532785.8	0	532785.8	BEV	0	20401.88	3	3
2046	0	11698.89	54014.93	27547.61	26467.31	355106.5	181104.3	174002.2	PHEV	5966.432	5732.454	3	8
2046	0	21589.36	100917.1	0	100917.1	585395.8	0	585395.8	BEV	0	21589.36	3	3
2046	0	12379.81	57868.08	29512.72	28355.36	389630	198711.3	190918.7	PHEV	6313.705	6066.109	3	8

2046	0	22437.22	106165.8	0	106165.8	631736.4	0	631736.4	BEV	0	22437.22	3	3
2046	0	12866	60877.78	31047.67	29830.11	420059.9	214230.5	205829.3	PHEV	6561.658	6304.338	3	8
2046	0	23209.07	111147.5	0	111147.5	678406.4	0	678406.4	BEV	0	23209.07	3	3
2046	0	13308.59	63734.43	32504.56	31229.87	450772.1	229893.8	220878.4	PHEV	6787.38	6521.208	3	8
2046	0	23790.28	115293.9	0	115293.9	721894.9	0	721894.9	BEV	0	23790.28	3	3
2046	0	13641.87	66112.04	33717.14	32394.9	479453.4	244521.2	234932.2	PHEV	6957.352	6684.515	3	8
2046	0	24452.97	119906.4	0	119906.4	770077.4	0	770077.4	BEV	0	24452.97	3	3
2046	0	14021.87	68756.93	35066.04	33690.9	511325.7	260776.1	250549.6	PHEV	7151.153	6870.716	3	8
2046	0	24984.07	123942	0	123942	816391.5	0	816391.5	BEV	0	24984.07	3	3
2046	0	14326.41	71071.05	36246.24	34824.82	542066.5	276453.9	265612.6	PHEV	7306.472	7019.943	3	8
2046	0	25405.33	127487.3	0	127487.3	861033.4	0	861033.4	BEV	0	25405.33	3	3
2046	0	14567.97	73103.99	37283.03	35820.95	571782.4	291609	280173.4	PHEV	7429.667	7138.307	3	8
2046	0	26086.96	132402.3	0	132402.3	916796.9	0	916796.9	BEV	0	26086.96	3	3
2046	0	14958.84	75922.38	38720.42	37201.97	608978.3	310578.9	298399.4	PHEV	7629.007	7329.83	3	8
2046	0	26798.54	137549.1	0	137549.1	976108.7	0	976108.7	BEV	0	26798.54	3	3
2046	0	15366.87	78873.68	40225.58	38648.1	648594.3	330783.1	317811.2	PHEV	7837.103	7529.766	3	8
2046	0	24285.36	126041	0	126041	915854.6	0	915854.6	BEV	0	24285.36	3	3
2046	0	13925.76	72274.69	36860.09	35414.6	608683.4	310428.5	298254.9	PHEV	7102.137	6823.622	3	8
2046	0	153.5842	541.9358	325.1615	216.7743	2186.718	1312.031	874.6874	PHEV	92.15054	61.43369	4	8
2046	0	0.371335	1.331561	0	1.331561	3.396228	0	3.396228	BEV	0	0.371335	4	3
2046	0	454.4112	1629.464	977.6784	651.7856	6974.079	4184.447	2789.632	PHEV	272.6467	181.7645	4	8
2046	0	209.6988	763.9684	0	763.9684	2135.583	0	2135.583	BEV	0	209.6988	4	3
2046	0	545.5931	1987.689	1181.255	806.4336	9390.748	5580.787	3809.961	PHEV	324.2382	221.3549	4	8
2046	0	486.5018	1800.281	0	1800.281	5899.663	0	5899.663	BEV	0	486.5018	4	3
2046	0	655.1943	2424.52	1427.003	997.5169	11358.27	6685.151	4673.115	PHEV	385.6287	269.5657	4	8
2046	0	857.7857	3223.344	0	3223.344	11019.28	0	11019.28	BEV	0	857.7857	4	3
2046	0	832.52	3128.402	1823.412	1304.991	14407.09	8397.273	6009.813	PHEV	485.2403	347.2798	4	8
2046	0	1008.155	3846.15	0	3846.15	12028.68	0	12028.68	BEV	0	1008.155	4	3
2046	0	984.7867	3757.001	2168.326	1588.675	17562.93	10136.32	7426.61	PHEV	568.3626	416.4241	4	8
2046	0	1228.022	4755.306	0	4755.306	14675.26	0	14675.26	BEV	0	1228.022	4	3
2046	0	1153.901	4468.286	2553.306	1914.98	21169.12	12096.64	9072.481	PHEV	659.372	494.529	4	8
2046	0	1479.454	5813.691	0	5813.691	18215.71	0	18215.71	BEV	0	1479.454	4	3
2046	0	1702.135	6688.744	3783.918	2904.826	32177.93	18203.52	13974.42	PHEV	962.9222	739.213	4	8
2046	0	1870.955	7459.329	0	7459.329	24109.2	0	24109.2	BEV	0	1870.955	4	3
2046	0	2052.471	8183.018	4582.49	3600.528	40042.65	22423.89	17618.77	PHEV	1149.384	903.0874	4	8
2046	0	2010.241	8129.818	0	8129.818	26892.99	0	26892.99	BEV	0	2010.241	4	3
2046	0	2085.349	8433.569	4638.463	3795.106	41996.61	23098.14	18898.48	PHEV	1146.942	938.4071	4	8
2046	0	2429.617	9965.051	0	9965.051	34542.09	0	34542.09	BEV	0	2429.617	4	3
2046	0	2453.581	10063.34	5434.203	4629.136	51062.77	27573.9	23488.88	PHEV	1324.934	1128.647	4	8
2046	0	2874.42	11954.08	0	11954.08	43584.03	0	43584.03	BEV	0	2874.42	4	3
2046	0	2841.53	11817.3	6263.168	5554.13	61182.5	32426.72	28755.77	PHEV	1506.011	1335.519	4	8
2046	0	3454.14	14562.89	0	14562.89	56862.56	0	56862.56	BEV	0	3454.14	4	3
2046	0	3417.104	14406.75	7491.509	6915.239	76191.42	39619.54	36571.88	PHEV	1776.894	1640.21	4	8
2046	0	4110.777	17566.83	0	17566.83	73214.04	0	73214.04	BEV	0	4110.777	4	3
2046	0	4046.369	17291.59	8818.712	8472.88	93475.76	47672.64	45803.12	PHEV	2063.648	1982.721	4	8
2046	0	4529.35	19615.03	0	19615.03	84055.38	0	84055.38	BEV	0	4529.35	4	3
2046	0	4458.384	19307.7	9846.928	9460.774	106777	54456.28	52320.74	PHEV	2273.776	2184.608	4	8

2046	0	4933.434	21647.61	0	21647.61	95373.59	0	95373.59	BEV	0	4933.434	4	3
2046	0	4856.137	21308.44	10867.3	10441.13	120635.7	61524.2	59111.48	PHEV	2476.63	2379.507	4	8
2046	0	5357.888	23817.04	0	23817.04	107864.8	0	107864.8	BEV	0	5357.888	4	3
2046	0	5273.94	23443.88	11956.38	11487.5	135934.6	69326.67	66607.97	PHEV	2689.71	2584.231	4	8
2046	0	5743.101	25858.43	0	25858.43	120364.4	0	120364.4	BEV	0	5743.101	4	3
2046	0	5653.118	25453.28	12981.17	12472.11	151220.1	77122.25	74097.85	PHEV	2883.09	2770.028	4	8
2046	0	6171.09	28139	0	28139	134591.1	0	134591.1	BEV	0	6171.09	4	3
2046	0	6074.401	27698.11	14126.04	13572.08	168676.8	86025.18	82651.65	PHEV	3097.945	2976.456	4	8
2046	0	6550.685	30245.17	0	30245.17	148635.7	0	148635.7	BEV	0	6550.685	4	3
2046	0	6448.048	29771.28	15183.36	14587.93	185918.6	94818.49	91100.12	PHEV	3288.505	3159.544	4	8
2046	0	6979.193	32623.47	0	32623.47	164672.8	0	164672.8	BEV	0	6979.193	4	3
2046	0	6869.843	32112.32	16377.29	15735.04	205653	104883	100770	PHEV	3503.62	3366.223	4	8
2046	0	7266.04	34380.57	0	34380.57	178223.4	0	178223.4	BEV	0	7266.04	4	3
2046	0	7152.195	33841.9	17259.37	16582.53	222360.1	113403.7	108956.5	PHEV	3647.619	3504.576	4	8
2046	0	7604.435	36417.41	0	36417.41	193807.9	0	193807.9	BEV	0	7604.435	4	3
2046	0	7485.288	35846.82	18281.88	17564.94	241636.2	123234.4	118401.7	PHEV	3817.497	3667.791	4	8
2046	0	7881.696	38196.75	0	38196.75	208637.6	0	208637.6	BEV	0	7881.696	4	3
2046	0	7758.205	37598.28	19175.12	18423.16	260026.2	132613.3	127412.8	PHEV	3956.684	3801.52	4	8
2046	0	8197.613	40197.4	0	40197.4	225271.5	0	225271.5	BEV	0	8197.613	4	3
2046	0	8069.172	39567.59	20179.47	19388.12	280704.8	143159.4	137545.3	PHEV	4115.278	3953.894	4	8
2046	0	8371.051	41527.44	0	41527.44	238713.6	0	238713.6	BEV	0	8371.051	4	3
2046	0	8239.893	40876.79	20847.16	20029.63	297480.8	151715.2	145765.6	PHEV	4202.345	4037.547	4	8
2046	0	8555.517	42932.7	0	42932.7	253053.4	0	253053.4	BEV	0	8555.517	4	3
2046	0	8421.469	42260.03	21552.61	20707.41	315404.9	160856.5	154548.4	PHEV	4294.949	4126.52	4	8
2046	0	8790.864	44617.33	0	44617.33	269534	0	269534	BEV	0	8790.864	4	3
2046	0	8653.129	43918.26	22398.31	21519.95	335960.5	171339.9	164620.7	PHEV	4413.096	4240.033	4	8
2046	0	8957.558	45976.55	0	45976.55	284549.6	0	284549.6	BEV	0	8957.558	4	3
2046	0	8817.21	45256.18	23080.65	22175.53	354747.4	180921.2	173826.2	PHEV	4496.777	4320.433	4	8
2046	0	7770.881	40330.87	0	40330.87	255351.8	0	255351.8	BEV	0	7770.881	4	3
2046	0	7649.127	39698.97	20246.47	19452.49	317969	162164.2	155804.8	PHEV	3901.055	3748.072	4	8
2046	0	300.6487	991.9694	0	991.9694	3045.211	0	3045.211	BEV	0	300.6487	1	3
2046	0	314.2495	1036.844	622.1066	414.7377	2763.477	1658.086	1105.391	PHEV	188.5497	125.6998	1	8
2046	0	381.9125	1281.973	0	1281.973	4068.89	0	4068.89	BEV	0	381.9125	1	3
2046	0	482.1933	1618.588	971.1527	647.4351	4507.203	2704.322	1802.881	PHEV	289.316	192.8773	1	8
2046	0	933.7745	3187.915	0	3187.915	10511.55	0	10511.55	BEV	0	933.7745	1	3
2046	0	444.0348	1515.939	909.5636	606.3757	4423.975	2654.385	1769.59	PHEV	266.4209	177.6139	1	8
2046	0	286.6463	995.0353	0	995.0353	2324.927	0	2324.927	BEV	0	286.6463	3	3
2046	0	26.08692	90.55552	54.33331	36.22221	395.4749	237.2849	158.19	PHEV	15.65215	10.43477	3	8
2046	0	1.675545	4.760406	0	4.760406	12.09641	0	12.09641	BEV	0	1.675545	1	3
2046	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2046	0	63.22061	204.9701	0	204.9701	610.5324	0	610.5324	BEV	0	63.22061	1	3
2046	0	132.892	430.8546	258.5128	172.3418	1092.197	655.3181	436.8787	PHEV	79.73522	53.15682	1	8
2046	0	656.8029	2279.96	0	2279.96	7784.974	0	7784.974	BEV	0	656.8029	1	3
2046	0	472.3291	1639.596	983.7577	655.8384	5006.349	3003.81	2002.54	PHEV	283.3975	188.9316	1	8
2046	0	7.275666	19.4205	0	19.4205	48.64352	0	48.64352	BEV	0	7.275666	1	3
2046	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2046	0	78.35666	249.5542	0	249.5542	724.9264	0	724.9264	BEV	0	78.35666	1	3

2046	0	21.78085	69.36874	41.62125	27.7475	168.5804	101.1482	67.43214	PHEV	13.06851	8.71234	1	8
2046	0	61.5764	206.6947	0	206.6947	654.9796	0	654.9796	BEV	0	61.5764	2	3
2046	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2046	0	14.25143	47.83807	0	47.83807	105.4528	0	105.4528	BEV	0	14.25143	3	3
2046	0	6.452603	21.65958	12.99575	8.663832	89.10715	53.46429	35.64286	PHEV	3.871562	2.581041	3	8
2046	0	2.554278	6.81798	0	6.81798	11.56107	0	11.56107	BEV	0	2.554278	3	3
2046	0	0	0	0	0	0	0	0	PHEV	0	0	3	8
2046	0	16.18214	43.19401	0	43.19401	74.81641	0	74.81641	BEV	0	16.18214	4	3
2046	0	0	0	0	0	0	0	0	PHEV	0	0	4	8
2046	0	13.45889	42.09348	0	42.09348	119.6061	0	119.6061	BEV	0	13.45889	1	3
2046	0	1.434704	4.487122	2.692273	1.794849	10.30845	6.18507	4.12338	PHEV	0.860822	0.573881	1	8
2046	0	24.50065	79.43454	0	79.43454	235.2804	0	235.2804	BEV	0	24.50065	2	3
2046	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2046	0	1.79476	5.201932	0	5.201932	13.53772	0	13.53772	BEV	0	1.79476	1	3
2046	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2046	0	8.826503	26.59408	0	26.59408	70.18701	0	70.18701	BEV	0	8.826503	1	3
2046	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2046	0	7.700902	23.64385	0	23.64385	66.35586	0	66.35586	BEV	0	7.700902	1	3
2046	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2046	0	30.74074	101.4269	0	101.4269	309.7361	0	309.7361	BEV	0	30.74074	2	3
2046	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2046	0	1.626923	4.435854	0	4.435854	11.1321	0	11.1321	BEV	0	1.626923	1	3
2046	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2046	0	3.071611	9.078731	0	9.078731	23.96119	0	23.96119	BEV	0	3.071611	1	3
2046	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2046	0	3.439324	10.36261	0	10.36261	27.66741	0	27.66741	BEV	0	3.439324	2	3
2046	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2046	0	0.246102	0.713301	0	0.713301	1.464136	0	1.464136	BEV	0	0.246102	4	3
2046	0	0	0	0	0	0	0	0	PHEV	0	0	4	8
2046	0	2.208326	6.780156	0	6.780156	13.57113	0	13.57113	BEV	0	2.208326	3	3
2046	0	0	0	0	0	0	0	0	PHEV	0	0	3	8
2046	0	1.337089	4.258429	0	4.258429	8.843206	0	8.843206	BEV	0	1.337089	3	3
2046	0	0.925677	2.948143	1.768886	1.179257	11.20321	6.721926	4.481284	PHEV	0.555406	0.370271	3	8
2046	0	0.183499	0.626467	0	0.626467	1.390489	0	1.390489	BEV	0	0.183499	4	3
2046	0	0	0	0	0	0	0	0	PHEV	0	0	4	8
2046	0	0.874741	2.535348	0	2.535348	6.497805	0	6.497805	BEV	0	0.874741	2	3
2046	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2046	0	0.501039	1.480915	0	1.480915	3.881668	0	3.881668	BEV	0	0.501039	2	3
2046	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2046	0	1.492246	4.581598	0	4.581598	12.7891	0	12.7891	BEV	0	1.492246	2	3
2046	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2046	0	1.550265	4.670917	0	4.670917	8.903869	0	8.903869	BEV	0	1.550265	3	3
2046	0	0	0	0	0	0	0	0	PHEV	0	0	3	8
2046	0	0.927324	3.05964	0	3.05964	6.573629	0	6.573629	BEV	0	0.927324	3	3
2046	0	0.70913	2.339725	1.403835	0.93589	9.572982	5.743789	3.829193	PHEV	0.425478	0.283652	3	8
2046	0	1.863281	5.080291	0	5.080291	8.829625	0	8.829625	BEV	0	1.863281	4	3
2046	0	0	0	0	0	0	0	0	PHEV	0	0	4	8

2046	0	0.315913	0.897545	0	0.897545	1.604905	0	1.604905	BEV	0	0.315913	4	3
2046	0	0	0	0	0	0	0	0	PHEV	0	0	4	8
2046	0	7.005868	18.70034	0	18.70034	44.93616	0	44.93616	BEV	0	7.005868	2	3
2046	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2046	0	0.459296	1.278598	0	1.278598	3.153649	0	3.153649	BEV	0	0.459296	2	3
2046	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2046	0	0.230585	0.694749	0	0.694749	1.303437	0	1.303437	BEV	0	0.230585	4	3
2046	0	0	0	0	0	0	0	0	PHEV	0	0	4	8
2046	0	1.498788	4.172357	0	4.172357	10.44712	0	10.44712	BEV	0	1.498788	1	3
2046	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2046	0	0.17564	0.499014	0	0.499014	1.251309	0	1.251309	BEV	0	0.17564	2	3
2046	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2046	0	1.298442	4.060955	0	4.060955	8.038632	0	8.038632	BEV	0	1.298442	3	3
2046	0	0	0	0	0	0	0	0	PHEV	0	0	3	8
2046	0	2.984042	9.674681	0	9.674681	19.82265	0	19.82265	BEV	0	2.984042	3	3
2046	0	0.765139	2.480687	1.488412	0.992275	11.58939	6.953637	4.635758	PHEV	0.459083	0.306056	3	8
2046	0	0	0	0	0	0	0	0	BEV	0	0	2	3
2046	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2046	0	0	0	0	0	0	0	0	BEV	0	0	2	3
2046	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2046	0	0	0	0	0	0	0	0	BEV	0	0	3	3
2046	0	2.06595	7.053173	4.231904	2.821269	33.82944	20.29766	13.53178	PHEV	1.23957	0.82638	3	8
2046	0	0.07932	0.234446	0	0.234446	0.422168	0	0.422168	BEV	0	0.07932	3	3
2046	0	0	0	0	0	0	0	0	PHEV	0	0	3	8
2046	0	0.220012	0.688101	0	0.688101	1.794427	0	1.794427	BEV	0	0.220012	2	3
2046	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2046	0	0.154243	0.491241	0	0.491241	1.449638	0	1.449638	BEV	0	0.154243	2	3
2046	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2046	0	0.047915	0.136133	0	0.136133	0.225057	0	0.225057	BEV	0	0.047915	3	3
2046	0	0	0	0	0	0	0	0	PHEV	0	0	3	8
2046	0	0.073226	0.199652	0	0.199652	0.486181	0	0.486181	BEV	0	0.073226	2	3
2046	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2046	0	0.20866	0.616734	0	0.616734	1.100542	0	1.100542	BEV	0	0.20866	4	3
2046	0	0	0	0	0	0	0	0	PHEV	0	0	4	8
2046	0	0	0	0	0	0	0	0	BEV	0	0	4	3
2046	0	0.240732	0.794278	0.476567	0.317711	3.534002	2.120401	1.413601	PHEV	0.144439	0.096293	4	8
2047	0	2084.518	7235.988	0	7235.988	23615.87	0	23615.87	BEV	0	2084.518	1	3
2047	0	1880.306	6527.106	3524.637	3002.469	20464.55	11050.86	9413.692	PHEV	1015.365	864.9408	1	8
2047	0	3005.343	10604.62	0	10604.62	35774.07	0	35774.07	BEV	0	3005.343	1	3
2047	0	1942.338	6853.716	3701.007	3152.709	22587.36	12197.17	10390.18	PHEV	1048.863	893.4757	1	8
2047	0	4305.31	15438.33	0	15438.33	54320.51	0	54320.51	BEV	0	4305.31	1	3
2047	0	2111.478	7571.505	4012.898	3558.607	25966.49	13762.24	12204.25	PHEV	1119.083	992.3945	1	8
2047	0	6040.18	22005.4	0	22005.4	80427.21	0	80427.21	BEV	0	6040.18	1	3
2047	0	2303.154	8390.781	4363.206	4027.575	30300.17	15756.09	14544.08	PHEV	1197.64	1105.514	1	8
2047	0	7589.123	28083.24	0	28083.24	106926.9	0	106926.9	BEV	0	7589.123	1	3
2047	0	2854.384	10562.53	5386.892	5175.642	39792.3	20294.07	19498.23	PHEV	1455.736	1398.648	1	8
2047	0	9545.309	35868.89	0	35868.89	142166.6	0	142166.6	BEV	0	9545.309	1	3

2047	0	3537.201	13291.92	6645.958	6645.958	52188.41	26094.2	26094.2	PHEV	1768.6	1768.6	1	8
2047	0	12165.99	46413.73	0	46413.73	191365.1	0	191365.1	BEV	0	12165.99	1	3
2047	0	4483.9	17106.26	8382.067	8724.192	69900.02	34251.01	35649.01	PHEV	2197.111	2286.789	1	8
2047	0	15268.55	59124.86	0	59124.86	253259.6	0	253259.6	BEV	0	15268.55	1	3
2047	0	5602.825	21695.99	10414.07	11281.91	92152.53	44233.21	47919.32	PHEV	2689.356	2913.469	1	8
2047	0	19356.67	76064.34	0	76064.34	338211.9	0	338211.9	BEV	0	19356.67	1	3
2047	0	7006.993	27534.82	12941.36	14593.45	121495	57102.66	64392.36	PHEV	3293.287	3713.706	1	8
2047	0	20062.25	79986.37	0	79986.37	368700.5	0	368700.5	BEV	0	20062.25	1	3
2047	0	8343.3	33263.99	15101.85	18162.14	152203.5	69100.4	83103.12	PHEV	3787.858	4555.442	1	8
2047	0	24853.34	100511.9	0	100511.9	479255.1	0	479255.1	BEV	0	24853.34	1	3
2047	0	10519.04	42541.1	18633	23908.1	201666.2	88329.8	113336.4	PHEV	4607.339	5911.7	1	8
2047	0	30935.42	126881.3	0	126881.3	625360.8	0	625360.8	BEV	0	30935.42	1	3
2047	0	13219.93	54221.42	22881.44	31339.98	266035.9	112267.1	153768.7	PHEV	5578.811	7641.12	1	8
2047	0	37806.91	157230.6	0	157230.6	800626.6	0	800626.6	BEV	0	37806.91	1	3
2047	0	16358.18	68030.07	27620.21	40409.86	345196.3	140149.7	205046.6	PHEV	6641.421	9716.758	1	8
2047	0	45754.88	192905.8	0	192905.8	1014247	0	1014247	BEV	0	45754.88	1	3
2047	0	20042.85	84502.04	32955.8	51546.25	443085.9	172803.5	270282.4	PHEV	7816.71	12226.14	1	8
2047	0	52602.02	224787.4	0	224787.4	1220017	0	1220017	BEV	0	52602.02	1	3
2047	0	23042.22	98467.71	38402.41	60065.31	533206	207950.3	325255.7	PHEV	8986.467	14055.76	1	8
2047	0	59821.85	259067.5	0	259067.5	1450418	0	1450418	BEV	0	59821.85	1	3
2047	0	26204.86	113484.1	44258.79	69225.29	634112.1	247303.7	386808.4	PHEV	10219.9	15984.96	1	8
2047	0	66981.28	293909.8	0	293909.8	1696589	0	1696589	BEV	0	66981.28	1	3
2047	0	29341.03	128746.7	50211.21	78535.48	741965	289366.4	452598.7	PHEV	11443	17898.03	1	8
2047	0	74493.28	331139.8	0	331139.8	1969789	0	1969789	BEV	0	74493.28	1	3
2047	0	32631.65	145055.2	56571.53	88483.67	861685.6	336057.4	525628.2	PHEV	12726.34	19905.31	1	8
2047	0	81281.72	365972.6	0	365972.6	2242191	0	2242191	BEV	0	81281.72	1	3
2047	0	35605.32	160313.7	62522.33	97791.33	981093.6	382626.5	598467.1	PHEV	13886.07	21719.24	1	8
2047	0	88482.49	403463.3	0	403463.3	2544609	0	2544609	BEV	0	88482.49	1	3
2047	0	38759.6	176736.4	68927.2	107809.2	1113689	434338.9	679350.6	PHEV	15116.24	23643.36	1	8
2047	0	94593.55	436747.9	0	436747.9	2834200	0	2834200	BEV	0	94593.55	1	3
2047	0	41436.54	191316.7	74613.5	116703.2	1240704	483874.5	756829.3	PHEV	16160.25	25276.29	1	8
2047	0	101088.5	472527	0	472527	3153704	0	3153704	BEV	0	101088.5	1	3
2047	0	44281.63	206989.6	80725.95	126263.7	1380857	538534.3	842322.9	PHEV	17269.84	27011.8	1	8
2047	0	106498.4	503916.5	0	503916.5	3457678	0	3457678	BEV	0	106498.4	1	3
2047	0	46651.46	220739.8	86088.51	134651.3	1514347	590595.3	923751.7	PHEV	18194.07	28457.39	1	8
2047	0	112479	538658.4	0	538658.4	3798267	0	3798267	BEV	0	112479	1	3
2047	0	49271.22	235958.4	92023.77	143934.6	1663965	648946.2	1015018	PHEV	19215.78	30055.44	1	8
2047	0	117105	567521.2	0	567521.2	4111328	0	4111328	BEV	0	117105	1	3
2047	0	51297.63	248601.7	96954.65	151647	1801627	702634.5	1098992	PHEV	20006.08	31291.56	1	8
2047	0	122410.5	600245.9	0	600245.9	4464459	0	4464459	BEV	0	122410.5	1	3
2047	0	53621.7	262936.7	102545.3	160391.4	1956849	763171	1193678	PHEV	20912.46	32709.23	1	8
2047	0	126421.9	627158.8	0	627158.8	4787198	0	4787198	BEV	0	126421.9	1	3
2047	0	55378.89	274725.8	107143.1	167582.8	2098852	818552.1	1280299	PHEV	21597.77	33781.13	1	8
2047	0	129619.5	650447.3	0	650447.3	5091782	0	5091782	BEV	0	129619.5	1	3
2047	0	56779.58	284927.3	111121.7	173805.7	2232824	870801.5	1362023	PHEV	22144.04	34635.54	1	8
2047	0	133050.9	675289.2	0	675289.2	5412208	0	5412208	BEV	0	133050.9	1	3
2047	0	58282.72	295809.3	115365.6	180443.7	2373304	925588.5	1447715	PHEV	22730.26	35552.46	1	8

2047	0	134202.8	688824	0	688824	5634807	0	5634807	BEV	0	134202.8	1	3
2047	0	58787.3	301738.2	117677.9	184060.3	2470208	963381.2	1506827	PHEV	22927.05	35860.26	1	8
2047	0	120612.3	625977.8	0	625977.8	5213073	0	5213073	BEV	0	120612.3	1	3
2047	0	52834.01	274208.5	106941.3	167267.2	2284157	890821.3	1393336	PHEV	20605.26	32228.74	1	8
2047	0	0.399166	1.385626	0	1.385626	4.738619	0	4.738619	BEV	0	0.399166	2	3
2047	0	3.462156	12.01818	7.21091	4.807273	55.53895	33.32337	22.21558	PHEV	2.077294	1.384862	2	8
2047	0	207.535	744.1956	0	744.1956	3180.212	0	3180.212	BEV	0	207.535	2	3
2047	0	159.3723	571.4899	339.6283	231.8616	2814.445	1672.585	1141.861	PHEV	94.71267	64.65961	2	8
2047	0	481.7349	1755.042	0	1755.042	7576.256	0	7576.256	BEV	0	481.7349	2	3
2047	0	371.0234	1351.701	795.5728	556.1286	6712.699	3950.903	2761.796	PHEV	218.3738	152.6496	2	8
2047	0	632.4108	2340.211	0	2340.211	10382.22	0	10382.22	BEV	0	632.4108	2	3
2047	0	464.5233	1718.95	1001.902	717.0477	8243.112	4804.557	3438.555	PHEV	270.7507	193.7726	2	8
2047	0	872.1768	3277.422	0	3277.422	14820.51	0	14820.51	BEV	0	872.1768	2	3
2047	0	555.2107	2086.343	1204.118	882.225	10119.49	5840.393	4279.1	PHEV	320.4359	234.7748	2	8
2047	0	1081.116	4124.499	0	4124.499	18957.58	0	18957.58	BEV	0	1081.116	2	3
2047	0	678.7905	2589.613	1479.779	1109.834	12710.34	7263.052	5447.289	PHEV	387.8803	290.9102	2	8
2047	0	1292.257	5004.045	0	5004.045	23345.67	0	23345.67	BEV	0	1292.257	2	3
2047	0	842.1294	3261.003	1844.796	1416.207	16150.29	9136.452	7013.842	PHEV	476.4046	365.7248	2	8
2047	0	1609.408	6324.361	0	6324.361	30132.98	0	30132.98	BEV	0	1609.408	2	3
2047	0	980.7464	3853.96	2158.218	1695.743	19305.02	10810.81	8494.21	PHEV	549.218	431.5284	2	8
2047	0	1780.689	7099.447	0	7099.447	34563.25	0	34563.25	BEV	0	1780.689	2	3
2047	0	1122.693	4476.075	2461.841	2014.234	22703.12	12486.72	10216.4	PHEV	617.481	505.2117	2	8
2047	0	2111.569	8539.607	0	8539.607	42405.64	0	42405.64	BEV	0	2111.569	2	3
2047	0	1497.173	6054.869	3269.629	2785.24	31368.44	16938.96	14429.48	PHEV	808.4737	688.6998	2	8
2047	0	2616.738	10732.52	0	10732.52	54584.38	0	54584.38	BEV	0	2616.738	2	3
2047	0	1855.768	7611.415	4034.05	3577.365	40155.07	21282.19	18872.88	PHEV	983.5572	872.2111	2	8
2047	0	3283.381	13654.86	0	13654.86	71242.68	0	71242.68	BEV	0	3283.381	2	3
2047	0	2184.819	9086.183	4724.815	4361.368	48744.53	25347.16	23397.38	PHEV	1136.106	1048.713	2	8
2047	0	3926.715	16555.31	0	16555.31	88459.92	0	88459.92	BEV	0	3926.715	2	3
2047	0	2669.788	11256.01	5740.567	5515.447	61452.53	31340.79	30111.74	PHEV	1361.592	1308.196	2	8
2047	0	4274.546	18266.68	0	18266.68	100003.1	0	100003.1	BEV	0	4274.546	2	3
2047	0	2906.28	12419.58	6333.987	6085.595	68945.64	35162.28	33783.36	PHEV	1482.203	1424.077	2	8
2047	0	4640.196	20095.06	0	20095.06	112755.1	0	112755.1	BEV	0	4640.196	2	3
2047	0	3154.886	13662.71	6967.982	6694.727	77226.29	39385.41	37840.88	PHEV	1608.992	1545.894	2	8
2047	0	4976.779	21837.81	0	21837.81	125631.6	0	125631.6	BEV	0	4976.779	2	3
2047	0	3383.731	14847.61	7572.28	7275.327	85560.66	43635.93	41924.72	PHEV	1725.703	1658.028	2	8
2047	0	5349.978	23781.88	0	23781.88	140308.1	0	140308.1	BEV	0	5349.978	2	3
2047	0	3637.47	16169.39	8246.39	7923.002	95095.82	48498.87	46596.95	PHEV	1855.11	1782.36	2	8
2047	0	5690.151	25620.02	0	25620.02	155051.7	0	155051.7	BEV	0	5690.151	2	3
2047	0	3868.755	17419.15	8883.765	8535.382	104664.9	53379.12	51285.82	PHEV	1973.065	1895.69	2	8
2047	0	6062.447	27643.61	0	27643.61	171621.3	0	171621.3	BEV	0	6062.447	2	3
2047	0	4121.881	18794.99	9585.446	9209.547	115458.6	58883.89	56574.72	PHEV	2102.159	2019.722	2	8
2047	0	6390.349	29504.88	0	29504.88	187942.2	0	187942.2	BEV	0	6390.349	2	3
2047	0	4344.822	20060.48	10230.84	9829.634	126099.3	64310.64	61788.65	PHEV	2215.859	2128.963	2	8
2047	0	6735.938	31486.4	0	31486.4	205765.3	0	205765.3	BEV	0	6735.938	2	3
2047	0	4579.789	21407.72	10917.94	10489.78	137751.5	70253.26	67498.23	PHEV	2335.693	2244.097	2	8
2047	0	6988.677	33068.18	0	33068.18	221743.7	0	221743.7	BEV	0	6988.677	2	3

2047	0	4751.628	22483.18	11466.42	11016.76	148214.6	75589.42	72625.13	PHEV	2423.33	2328.298	2	8
2047	0	7267.757	34805.07	0	34805.07	239440.3	0	239440.3	BEV	0	7267.757	2	3
2047	0	4941.375	23664.1	12068.69	11595.41	159855	81526.06	78328.96	PHEV	2520.101	2421.274	2	8
2047	0	7547.83	36578.74	0	36578.74	258145.3	0	258145.3	BEV	0	7547.83	2	3
2047	0	5131.798	24870.03	12683.71	12186.31	172207.6	87825.89	84381.74	PHEV	2617.217	2514.581	2	8
2047	0	7829.607	38392.87	0	38392.87	277916.9	0	277916.9	BEV	0	7829.607	2	3
2047	0	5323.379	26103.46	13312.76	12790.69	185319.8	94513.1	90806.7	PHEV	2714.924	2608.456	2	8
2047	0	8006.312	39718.03	0	39718.03	294881.1	0	294881.1	BEV	0	8006.312	2	3
2047	0	5443.522	27004.44	13772.26	13232.18	196624	100278.2	96345.77	PHEV	2776.196	2667.326	2	8
2047	0	8116.625	40730.28	0	40730.28	310112.9	0	310112.9	BEV	0	8116.625	2	3
2047	0	5518.524	27692.67	14123.26	13569.41	206837.7	105487.2	101350.5	PHEV	2814.447	2704.077	2	8
2047	0	8229.403	41767.68	0	41767.68	326033.9	0	326033.9	BEV	0	8229.403	2	3
2047	0	5595.202	28398	14482.98	13915.02	217552.2	110951.6	106600.6	PHEV	2853.553	2741.649	2	8
2047	0	8348.939	42852.68	0	42852.68	342775.2	0	342775.2	BEV	0	8348.939	2	3
2047	0	5676.475	29135.7	14859.21	14276.49	228848.4	116712.7	112135.7	PHEV	2895.002	2781.473	2	8
2047	0	7624.523	39571.27	0	39571.27	324171.1	0	324171.1	BEV	0	7624.523	2	3
2047	0	5183.942	26904.66	13721.38	13183.28	216539.1	110434.9	106104.2	PHEV	2643.81	2540.131	2	8
2047	0	94.47424	333.3609	200.0165	133.3443	1505.041	903.0245	602.0164	PHEV	56.68454	37.7897	3	8
2047	0	363.0889	1301.993	0	1301.993	3911.09	0	3911.09	BEV	0	363.0889	3	3
2047	0	315.3642	1130.858	672.0528	458.8053	5157.617	3065.098	2092.519	PHEV	187.4164	127.9478	3	8
2047	0	825.0229	3005.699	0	3005.699	11750.49	0	11750.49	BEV	0	825.0229	3	3
2047	0	595.4036	2169.156	1276.703	892.4529	10006.04	5889.268	4116.77	PHEV	350.4375	244.966	3	8
2047	0	1053.08	3896.881	0	3896.881	14063.86	0	14063.86	BEV	0	1053.08	3	3
2047	0	1014.284	3753.318	2187.648	1565.67	17544.85	10226.14	7318.708	PHEV	591.1828	423.1014	3	8
2047	0	1445.078	5430.242	0	5430.242	19998.18	0	19998.18	BEV	0	1445.078	3	3
2047	0	1152.302	4330.062	2499.064	1830.998	20534.76	11851.49	8683.268	PHEV	665.0428	487.2591	3	8
2047	0	1920.991	7328.657	0	7328.657	27701.37	0	27701.37	BEV	0	1920.991	3	3
2047	0	1373.817	5241.165	2994.951	2246.214	25237.81	14421.6	10816.2	PHEV	785.038	588.7785	3	8
2047	0	2359.038	9134.973	0	9134.973	34796.01	0	34796.01	BEV	0	2359.038	3	3
2047	0	1644.27	6367.155	3601.99	2765.164	31045.64	17562.96	13482.68	PHEV	930.1868	714.0828	3	8
2047	0	2842.419	11169.62	0	11169.62	42844.07	0	42844.07	BEV	0	2842.419	3	3
2047	0	2089.061	8209.217	4597.161	3612.055	40641.74	22759.37	17882.36	PHEV	1169.874	919.1869	3	8
2047	0	3756.099	14975.23	0	14975.23	61105.25	0	61105.25	BEV	0	3756.099	3	3
2047	0	2333.352	9302.865	5116.576	4186.289	46774.7	25726.09	21048.62	PHEV	1283.344	1050.008	3	8
2047	0	4885.219	19756.8	0	19756.8	84610.43	0	84610.43	BEV	0	4885.219	3	3
2047	0	2998.292	12125.69	6547.874	5577.818	61985.38	33472.1	28513.27	PHEV	1619.078	1379.214	3	8
2047	0	6521.599	26748.27	0	26748.27	120217.5	0	120217.5	BEV	0	6521.599	3	3
2047	0	3837.476	15739.37	8341.866	7397.504	81904.21	43409.23	38494.98	PHEV	2033.862	1803.614	3	8
2047	0	8452.746	35153.11	0	35153.11	163449.1	0	163449.1	BEV	0	8452.746	3	3
2047	0	4863.806	20227.5	10518.3	9709.2	108705.9	56527.08	52178.84	PHEV	2529.179	2334.627	3	8
2047	0	10556.46	44506.75	0	44506.75	211253.7	0	211253.7	BEV	0	10556.46	3	3
2047	0	6053.303	25521.15	13015.79	12505.36	143826.5	73351.51	70474.98	PHEV	3087.185	2966.118	3	8
2047	0	12008.19	51315.31	0	51315.31	249340.3	0	249340.3	BEV	0	12008.19	3	3
2047	0	6885.759	29425.33	15006.92	14418.41	168990.3	86185.07	82805.27	PHEV	3511.737	3374.022	3	8
2047	0	13585.57	58834.34	0	58834.34	292750.1	0	292750.1	BEV	0	13585.57	3	3
2047	0	7790.262	33736.9	17205.82	16531.08	197618.6	100785.5	96833.1	PHEV	3973.034	3817.229	3	8
2047	0	15078.64	66164.16	0	66164.16	337301.1	0	337301.1	BEV	0	15078.64	3	3

2047	0	8646.422	37939.98	19349.39	18590.59	226903.7	115720.9	111182.8	PHEV	4409.675	4236.747	3	8
2047	0	16627.2	73911.72	0	73911.72	386174.4	0	386174.4	BEV	0	16627.2	3	3
2047	0	9534.401	42382.6	21615.13	20767.48	259011.4	132095.8	126915.6	PHEV	4862.544	4671.856	3	8
2047	0	17948.37	80812.89	0	80812.89	432871.2	0	432871.2	BEV	0	17948.37	3	3
2047	0	10291.99	46339.88	23633.34	22706.54	289605.3	147698.7	141906.6	PHEV	5248.914	5043.074	3	8
2047	0	19403.28	88475.26	0	88475.26	485954.9	0	485954.9	BEV	0	19403.28	3	3
2047	0	11126.27	50733.66	25874.16	24859.49	324444.8	165466.8	158977.9	PHEV	5674.395	5451.87	3	8
2047	0	20589.72	95064.81	0	95064.81	535516.6	0	535516.6	BEV	0	20589.72	3	3
2047	0	11806.6	54512.25	27801.25	26711	356928.9	182033.7	174895.2	PHEV	6021.365	5785.233	3	8
2047	0	21780.6	101811	0	101811	588198.1	0	588198.1	BEV	0	21780.6	3	3
2047	0	12489.48	58380.68	29774.15	28606.53	391499.3	199664.7	191834.7	PHEV	6369.633	6119.843	3	8
2047	0	22630.42	107079.9	0	107079.9	634607.2	0	634607.2	BEV	0	22630.42	3	3
2047	0	12976.78	61401.97	31315.01	30086.97	421974.2	215206.8	206767.3	PHEV	6618.158	6358.623	3	8
2047	0	23402.22	112072.5	0	112072.5	681298.7	0	681298.7	BEV	0	23402.22	3	3
2047	0	13419.35	64264.84	32775.07	31489.77	452700.8	230877.4	221823.4	PHEV	6843.866	6575.479	3	8
2047	0	23980.78	116217.1	0	116217.1	724750.9	0	724750.9	BEV	0	23980.78	3	3
2047	0	13751.11	66641.44	33987.13	32654.3	481358.3	245492.7	235865.6	PHEV	7013.064	6738.042	3	8
2047	0	24641.28	120829.8	0	120829.8	772890	0	772890	BEV	0	24641.28	3	3
2047	0	14129.85	69286.43	35336.08	33950.35	513202.4	261733.2	251469.2	PHEV	7206.224	6923.627	3	8
2047	0	25169.24	124860.6	0	124860.6	819137.7	0	819137.7	BEV	0	25169.24	3	3
2047	0	14432.59	71597.78	36514.87	35082.91	543899.8	277388.9	266510.9	PHEV	7360.622	7071.97	3	8
2047	0	25585.28	128390.3	0	128390.3	863650.2	0	863650.2	BEV	0	25585.28	3	3
2047	0	14671.16	73621.8	37547.12	36074.68	573530.6	292500.6	281030	PHEV	7482.293	7188.87	3	8
2047	0	26262.67	133294.1	0	133294.1	919263.5	0	919263.5	BEV	0	26262.67	3	3
2047	0	15059.59	76433.75	38981.21	37452.54	610627	311419.8	299207.2	PHEV	7680.392	7379.2	3	8
2047	0	26969.02	138424.2	0	138424.2	978375.9	0	978375.9	BEV	0	26969.02	3	3
2047	0	15464.63	79375.45	40481.48	38893.97	650111.9	331557.1	318554.8	PHEV	7886.96	7577.668	3	8
2047	0	24430.23	126792.9	0	126792.9	917610	0	917610	BEV	0	24430.23	3	3
2047	0	14008.83	72705.81	37079.97	35625.85	609859.1	311028.1	298830.9	PHEV	7144.502	6864.325	3	8
2047	0	135.7541	471.2431	282.7459	188.4973	1859.45	1115.67	743.7799	PHEV	81.45245	54.30163	4	8
2047	0	0.326651	1.152618	0	1.152618	2.831063	0	2.831063	BEV	0	0.326651	4	3
2047	0	399.7308	1410.486	846.2918	564.1945	5925.444	3555.267	2370.178	PHEV	239.8385	159.8923	4	8
2047	0	184.2463	660.6852	0	660.6852	1781.08	0	1781.08	BEV	0	184.2463	4	3
2047	0	479.371	1718.967	1021.557	697.4094	7973.021	4738.253	3234.769	PHEV	284.8833	194.4877	4	8
2047	0	425.4062	1549.827	0	1549.827	4923.171	0	4923.171	BEV	0	425.4062	4	3
2047	0	572.9141	2087.223	1228.48	858.7433	9603.039	5652.074	3950.965	PHEV	337.2008	235.7132	4	8
2047	0	732.9182	2712.134	0	2712.134	9009.76	0	9009.76	BEV	0	732.9182	4	3
2047	0	711.3304	2632.25	1534.226	1098.024	11906.98	6940.07	4966.913	PHEV	414.604	296.7264	4	8
2047	0	863.5383	3244.961	0	3244.961	9802.766	0	9802.766	BEV	0	863.5383	4	3
2047	0	843.5224	3169.746	1829.396	1340.35	14540.72	8392.073	6148.648	PHEV	486.8329	356.6895	4	8
2047	0	1057.89	4035.893	0	4035.893	12011.98	0	12011.98	BEV	0	1057.89	4	3
2047	0	994.038	3792.295	2167.026	1625.269	17658.97	10090.84	7568.129	PHEV	568.0217	426.0163	4	8
2047	0	1284.252	4973.046	0	4973.046	15019.56	0	15019.56	BEV	0	1284.252	4	3
2047	0	1477.552	5721.569	3236.773	2484.796	27002.03	15275.43	11726.6	PHEV	835.8723	641.6797	4	8
2047	0	1633.785	6420.156	0	6420.156	20007.55	0	20007.55	BEV	0	1633.785	4	3
2047	0	1792.292	7043.026	3944.095	3098.932	33767.75	18909.94	14857.81	PHEV	1003.684	788.6085	4	8
2047	0	1778.249	7089.718	0	7089.718	22616.7	0	22616.7	BEV	0	1778.249	4	3

2047	0	1844.689	7354.608	4045.035	3309.574	35832.12	19707.66	16124.45	PHEV	1014.579	830.11	4	8
2047	0	2163.348	8749.011	0	8749.011	29265.76	0	29265.76	BEV	0	2163.348	4	3
2047	0	2184.686	8835.305	4771.065	4064.24	43806.5	23655.51	20150.99	PHEV	1179.73	1004.955	4	8
2047	0	2585.449	10604.19	0	10604.19	37344.92	0	37344.92	BEV	0	2585.449	4	3
2047	0	2555.866	10482.86	5555.914	4926.943	52962.92	28070.35	24892.57	PHEV	1354.609	1201.257	4	8
2047	0	3080.473	12811.01	0	12811.01	48387.38	0	48387.38	BEV	0	3080.473	4	3
2047	0	3047.443	12673.65	6590.296	6083.35	65336.21	33974.83	31361.38	PHEV	1584.67	1462.773	4	8
2047	0	3725.263	15705.97	0	15705.97	63401.13	0	63401.13	BEV	0	3725.263	4	3
2047	0	3666.896	15459.89	7884.543	7575.345	81414.77	41521.53	39893.24	PHEV	1870.117	1796.779	4	8
2047	0	4156.071	17760.39	0	17760.39	73717.32	0	73717.32	BEV	0	4156.071	4	3
2047	0	4090.953	17482.12	8915.879	8566.237	94108.38	47995.28	46113.11	PHEV	2086.386	2004.567	4	8
2047	0	4577.855	19825.09	0	19825.09	84608.36	0	84608.36	BEV	0	4577.855	4	3
2047	0	4506.129	19514.47	9952.379	9562.09	107470.2	54809.8	52660.39	PHEV	2298.126	2208.003	4	8
2047	0	4984.484	21871.62	0	21871.62	95967.56	0	95967.56	BEV	0	4984.484	4	3
2047	0	4906.387	21528.93	10979.75	10549.18	121378.7	61903.16	59475.58	PHEV	2502.257	2404.129	4	8
2047	0	5411.88	24057.05	0	24057.05	108508.6	0	108508.6	BEV	0	5411.88	4	3
2047	0	5327.086	23680.12	12076.86	11603.26	136739.1	69736.96	67002.17	PHEV	2716.814	2610.272	4	8
2047	0	5799.401	26111.92	0	26111.92	121050.4	0	121050.4	BEV	0	5799.401	4	3
2047	0	5708.536	25702.8	13108.43	12594.37	152076.7	77559.11	74517.58	PHEV	2911.353	2797.183	4	8
2047	0	6230.019	28407.71	0	28407.71	135325.8	0	135325.8	BEV	0	6230.019	4	3
2047	0	6132.407	27962.61	14260.93	13701.68	169594.7	86493.31	83101.42	PHEV	3127.528	3004.88	4	8
2047	0	6611.106	30524.14	0	30524.14	149398.8	0	149398.8	BEV	0	6611.106	4	3
2047	0	6507.523	30045.88	15323.4	14722.48	186872.7	95305.07	91567.62	PHEV	3318.837	3188.686	4	8
2047	0	7041.151	32913.09	0	32913.09	165463.2	0	165463.2	BEV	0	7041.151	4	3
2047	0	6930.83	32397.4	16522.68	15874.73	206642.9	105387.9	101255	PHEV	3534.723	3396.107	4	8
2047	0	7328.64	34676.78	0	34676.78	179033.3	0	179033.3	BEV	0	7328.64	4	3
2047	0	7213.814	34133.46	17408.07	16725.4	223376.5	113922	109454.5	PHEV	3679.045	3534.769	4	8
2047	0	7667.582	36719.82	0	36719.82	194630.1	0	194630.1	BEV	0	7667.582	4	3
2047	0	7547.446	36144.49	18433.69	17710.8	242671	123762.2	118908.8	PHEV	3849.198	3698.249	4	8
2047	0	7944.567	38501.44	0	38501.44	209456.6	0	209456.6	BEV	0	7944.567	4	3
2047	0	7820.092	37898.2	19328.08	18570.12	261060.7	133140.9	127919.7	PHEV	3988.247	3831.845	4	8
2047	0	8260.584	40506.19	0	40506.19	226090.6	0	226090.6	BEV	0	8260.584	4	3
2047	0	8131.157	39871.53	20334.48	19537.05	281743.3	143689.1	138054.2	PHEV	4146.89	3984.267	4	8
2047	0	8432.945	41834.49	0	41834.49	239514.2	0	239514.2	BEV	0	8432.945	4	3
2047	0	8300.818	41179.03	21001.3	20177.72	298500.9	152235.5	146265.4	PHEV	4233.417	4067.401	4	8
2047	0	8615.87	43235.55	0	43235.55	253818.3	0	253818.3	BEV	0	8615.87	4	3
2047	0	8480.876	42558.14	21704.65	20853.49	316385.8	161356.7	155029	PHEV	4325.247	4155.629	4	8
2047	0	8849.856	44916.74	0	44916.74	270257.5	0	270257.5	BEV	0	8849.856	4	3
2047	0	8711.196	44212.98	22548.62	21664.36	336894.9	171816.4	165078.5	PHEV	4442.71	4268.486	4	8
2047	0	9014.682	46269.75	0	46269.75	285222.1	0	285222.1	BEV	0	9014.682	4	3
2047	0	8873.439	45544.79	23227.84	22316.95	355625.1	181368.8	174256.3	PHEV	4525.454	4347.985	4	8
2047	0	7817.235	40571.45	0	40571.45	255849.7	0	255849.7	BEV	0	7817.235	4	3
2047	0	7694.754	39935.77	20367.25	19568.53	318627.5	162500	156127.5	PHEV	3924.325	3770.43	4	8
2047	0	276.0419	894.9665	0	894.9665	2652.607	0	2652.607	BEV	0	276.0419	1	3
2047	0	288.5295	935.4532	561.2719	374.1813	2373.417	1424.05	949.3667	PHEV	173.1177	115.4118	1	8
2047	0	349.079	1151.762	0	1151.762	3525.441	0	3525.441	BEV	0	349.079	1	3
2047	0	440.7385	1454.186	872.5115	581.6743	3857.254	2314.352	1542.902	PHEV	264.4431	176.2954	1	8

2047	0	845.5257	2838.193	0	2838.193	9023.218	0	9023.218	BEV	0	845.5257	1	3
2047	0	402.0702	1349.637	809.7822	539.8548	3752.203	2251.322	1500.881	PHEV	241.2421	160.8281	1	8
2047	0	257.9802	880.7471	0	880.7471	1983.246	0	1983.246	BEV	0	257.9802	3	3
2047	0	23.4781	80.15446	48.09268	32.06178	344.5942	206.7565	137.8377	PHEV	14.08686	9.391239	3	8
2047	0	1.621689	4.514491	0	4.514491	11.26044	0	11.26044	BEV	0	1.621689	1	3
2047	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2047	0	59.17159	188.4526	0	188.4526	542.8162	0	542.8162	BEV	0	59.17159	1	3
2047	0	124.3808	396.1343	237.6806	158.4537	954.1554	572.4932	381.6622	PHEV	74.62851	49.75234	1	8
2047	0	581.0888	1983.843	0	1983.843	6527.329	0	6527.329	BEV	0	581.0888	1	3
2047	0	417.8806	1426.648	855.9891	570.6594	4153.155	2491.893	1661.262	PHEV	250.7283	167.1522	1	8
2047	0	73.30034	229.2512	0	229.2512	644.5313	0	644.5313	BEV	0	73.30034	1	3
2047	0	20.37534	63.72511	38.23506	25.49004	147.071	88.24262	58.82841	PHEV	12.22521	8.150137	1	8
2047	0	55.73738	183.9016	0	183.9016	562.2333	0	562.2333	BEV	0	55.73738	2	3
2047	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2047	0	13.02637	42.97959	0	42.97959	91.39593	0	91.39593	BEV	0	13.02637	3	3
2047	0	5.897932	19.45981	11.67589	7.783925	78.70834	47.225	31.48334	PHEV	3.538759	2.359173	3	8
2047	0	13.02464	39.98916	0	39.98916	110.1554	0	110.1554	BEV	0	13.02464	1	3
2047	0	1.388413	4.262804	2.557682	1.705121	9.325842	5.595505	3.730337	PHEV	0.833048	0.555365	1	8
2047	0	22.28854	70.98564	0	70.98564	203.2616	0	203.2616	BEV	0	22.28854	2	3
2047	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2047	0	1.72041	4.887875	0	4.887875	12.45009	0	12.45009	BEV	0	1.72041	1	3
2047	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2047	0	8.434723	24.93043	0	24.93043	64.05432	0	64.05432	BEV	0	8.434723	1	3
2047	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2047	0	7.462229	22.48355	0	22.48355	61.29527	0	61.29527	BEV	0	7.462229	1	3
2047	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2047	0	27.93032	90.554	0	90.554	266.9757	0	266.9757	BEV	0	27.93032	2	3
2047	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2047	0	1.582094	4.222988	0	4.222988	10.49003	0	10.49003	BEV	0	1.582094	1	3
2047	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2047	0	2.938469	8.516859	0	8.516859	21.93362	0	21.93362	BEV	0	2.938469	1	3
2047	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2047	0	3.127399	9.243623	0	9.243623	24.0134	0	24.0134	BEV	0	3.127399	2	3
2047	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2047	0	0.24595	0.69877	0	0.69877	1.40569	0	1.40569	BEV	0	0.24595	4	3
2047	0	0	0	0	0	0	0	0	PHEV	0	0	4	8
2047	0	2.009962	6.055977	0	6.055977	11.77314	0	11.77314	BEV	0	2.009962	3	3
2047	0	0	0	0	0	0	0	0	PHEV	0	0	3	8
2047	0	1.207181	3.77553	0	3.77553	7.582738	0	7.582738	BEV	0	1.207181	3	3
2047	0	0.83574	2.613828	1.568297	1.045531	9.757098	5.854259	3.902839	PHEV	0.501444	0.334296	3	8
2047	0	0.165072	0.554099	0	0.554099	1.185085	0	1.185085	BEV	0	0.165072	4	3
2047	0	0	0	0	0	0	0	0	PHEV	0	0	4	8
2047	0	0.78608	2.233338	0	2.233338	5.600389	0	5.600389	BEV	0	0.78608	2	3
2047	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2047	0	0.450594	1.306002	0	1.306002	3.340344	0	3.340344	BEV	0	0.450594	2	3
2047	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2047	0	1.310179	3.947544	0	3.947544	10.69858	0	10.69858	BEV	0	1.310179	2	3

2047	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2047	0	1.499339	4.431582	0	4.431582	8.21582	0	8.21582	BEV	0	1.499339	3	3
2047	0	0	0	0	0	0	0	0	PHEV	0	0	3	8
2047	0	0.850925	2.758817	0	2.758817	5.719892	0	5.719892	BEV	0	0.850925	3	3
2047	0	0.650707	2.109684	1.26581	0.843873	8.483881	5.090329	3.393553	PHEV	0.390424	0.260283	3	8
2047	0	1.864322	4.976324	0	4.976324	8.558937	0	8.558937	BEV	0	1.864322	4	3
2047	0	0	0	0	0	0	0	0	PHEV	0	0	4	8
2047	0	0.315913	0.879446	0	0.879446	1.543969	0	1.543969	BEV	0	0.315913	4	3
2047	0	0	0	0	0	0	0	0	PHEV	0	0	4	8
2047	0	0.411545	1.12209	0	1.12209	2.727266	0	2.727266	BEV	0	0.411545	2	3
2047	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2047	0	0.223403	0.66031	0	0.66031	1.205337	0	1.205337	BEV	0	0.223403	4	3
2047	0	0	0	0	0	0	0	0	PHEV	0	0	4	8
2047	0	1.446586	3.944159	0	3.944159	9.733671	0	9.733671	BEV	0	1.446586	1	3
2047	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2047	0	0.16021	0.445996	0	0.445996	1.09797	0	1.09797	BEV	0	0.16021	2	3
2047	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2047	0	1.200308	3.685268	0	3.685268	7.072467	0	7.072467	BEV	0	1.200308	3	3
2047	0	0	0	0	0	0	0	0	PHEV	0	0	3	8
2047	0	2.765906	8.808995	0	8.808995	17.44395	0	17.44395	BEV	0	2.765906	3	3
2047	0	0.709207	2.258717	1.35523	0.903487	10.45788	6.274729	4.183153	PHEV	0.425524	0.283683	3	8
2047	0	0	0	0	0	0	0	0	BEV	0	0	2	3
2047	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2047	0	0	0	0	0	0	0	0	BEV	0	0	2	3
2047	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2047	0	0	0	0	0	0	0	0	BEV	0	0	3	3
2047	0	1.886813	6.333502	3.800101	2.533401	30.01154	18.00693	12.00462	PHEV	1.132088	0.754725	3	8
2047	0	0.07624	0.220973	0	0.220973	0.388359	0	0.388359	BEV	0	0.07624	3	3
2047	0	0	0	0	0	0	0	0	PHEV	0	0	3	8
2047	0	0.200334	0.615078	0	0.615078	1.554826	0	1.554826	BEV	0	0.200334	2	3
2047	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2047	0	0.137559	0.430223	0	0.430223	1.229312	0	1.229312	BEV	0	0.137559	2	3
2047	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2047	0	0.044537	0.123982	0	0.123982	0.201141	0	0.201141	BEV	0	0.044537	3	3
2047	0	0	0	0	0	0	0	0	PHEV	0	0	3	8
2047	0	0.066145	0.176558	0	0.176558	0.425491	0	0.425491	BEV	0	0.066145	2	3
2047	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2047	0	0.208104	0.603169	0	0.603169	1.050177	0	1.050177	BEV	0	0.208104	4	3
2047	0	0	0	0	0	0	0	0	PHEV	0	0	4	8
2047	0	0	0	0	0	0	0	0	BEV	0	0	4	3
2047	0	0.217992	0.706761	0.424057	0.282705	3.09407	1.856442	1.237628	PHEV	0.130795	0.087197	4	8
2048	0	1855.591	6335.007	0	6335.007	19771.41	0	19771.41	BEV	0	1855.591	1	3
2048	0	1673.806	5714.391	3085.771	2628.62	17038.81	9200.96	7837.855	PHEV	903.8554	769.9509	1	8
2048	0	2609.209	9057.349	0	9057.349	29191.27	0	29191.27	BEV	0	2609.209	1	3
2048	0	1686.319	5853.72	3161.009	2692.711	18366.09	9917.687	8448.4	PHEV	910.6124	775.7069	1	8
2048	0	3723.811	13139.8	0	13139.8	44226.96	0	44226.96	BEV	0	3723.811	1	3
2048	0	1826.29	6444.228	3415.441	3028.787	21061.93	11162.82	9899.105	PHEV	967.9335	858.3562	1	8

2048	0	5148.288	18461.14	0	18461.14	64512.43	0	64512.43	BEV	0	5148.288	1	3
2048	0	1963.071	7039.335	3660.454	3378.881	24253.93	12612.04	11641.89	PHEV	1020.797	942.2739	1	8
2048	0	6379.285	23240.82	0	23240.82	84744.42	0	84744.42	BEV	0	6379.285	1	3
2048	0	2399.346	8741.224	4458.024	4283.2	31483.76	16056.72	15427.04	PHEV	1223.666	1175.679	1	8
2048	0	7921.084	29311.66	0	29311.66	111378	0	111378	BEV	0	7921.084	1	3
2048	0	2935.312	10862.01	5431.003	5431.003	40825.78	20412.89	20412.89	PHEV	1467.656	1467.656	1	8
2048	0	10016.34	37638.89	0	37638.89	148837.4	0	148837.4	BEV	0	10016.34	1	3
2048	0	3691.624	13872.2	6797.378	7074.822	54274.68	26594.59	27680.09	PHEV	1808.896	1882.728	1	8
2048	0	12526.81	47790.27	0	47790.27	196556	0	196556	BEV	0	12526.81	1	3
2048	0	4596.737	17536.74	8417.633	9119.103	71408.33	34276	37132.33	PHEV	2206.434	2390.303	1	8
2048	0	15858.07	61407.67	0	61407.67	262409.8	0	262409.8	BEV	0	15858.07	1	3
2048	0	5740.522	22229.19	10447.72	11781.47	94124.89	44238.7	49886.19	PHEV	2698.045	3042.476	1	8
2048	0	16508.84	64873.47	0	64873.47	287649.2	0	287649.2	BEV	0	16508.84	1	3
2048	0	6865.542	26978.97	12248.45	14730.52	118575.4	53833.21	64742.14	PHEV	3116.956	3748.586	1	8
2048	0	20643.75	82304.77	0	82304.77	377743.3	0	377743.3	BEV	0	20643.75	1	3
2048	0	8737.352	34835.04	15257.75	19577.29	158767.8	69540.3	89227.51	PHEV	3826.96	4910.392	1	8
2048	0	25983.73	105083.4	0	105083.4	498881.9	0	498881.9	BEV	0	25983.73	1	3
2048	0	11103.88	44906.29	18950.46	25955.84	212047.4	89484.01	122563.4	PHEV	4685.835	6418.04	1	8
2048	0	32247.53	132262.9	0	132262.9	649117.6	0	649117.6	BEV	0	32247.53	1	3
2048	0	13952.76	57227.11	23234.21	33992.91	279688.9	113553.7	166135.2	PHEV	5664.821	8287.941	1	8
2048	0	39514.92	164333.8	0	164333.8	833284.8	0	833284.8	BEV	0	39514.92	1	3
2048	0	17309.44	71986.16	28074.6	43911.56	363849.5	141901.3	221948.2	PHEV	6750.682	10558.76	1	8
2048	0	46276.25	195103.9	0	195103.9	1021815	0	1021815	BEV	0	46276.25	1	3
2048	0	20271.23	85464.94	33331.33	52133.61	446394.8	174094	272300.8	PHEV	7905.781	12365.45	1	8
2048	0	53185.72	227281.7	0	227281.7	1228764	0	1228764	BEV	0	53185.72	1	3
2048	0	23297.91	99560.36	38828.54	60731.82	537032.7	209442.8	327590	PHEV	9086.186	14211.73	1	8
2048	0	60464.63	261851.2	0	261851.2	1460314	0	1460314	BEV	0	60464.63	1	3
2048	0	26486.43	114703.4	44734.34	69969.1	638443.6	248993	389450.6	PHEV	10329.71	16156.72	1	8
2048	0	67683.18	296989.7	0	296989.7	1707723	0	1707723	BEV	0	67683.18	1	3
2048	0	29648.5	130095.8	50737.38	79358.46	746841.1	291268	455573.1	PHEV	11562.92	18085.59	1	8
2048	0	75252.88	334516.4	0	334516.4	1982161	0	1982161	BEV	0	75252.88	1	3
2048	0	32964.39	146534.3	57148.38	89385.93	867106	338171.4	528934.7	PHEV	12856.11	20108.28	1	8
2048	0	82090.32	369613.3	0	369613.3	2255733	0	2255733	BEV	0	82090.32	1	3
2048	0	35959.52	161908.5	63144.31	98764.17	987029.7	384941.6	602088.1	PHEV	14024.21	21935.31	1	8
2048	0	89333.33	407343	0	407343	2559128	0	2559128	BEV	0	89333.33	1	3
2048	0	39132.31	178435.9	69590	108845.9	1120056	436821.8	683234.1	PHEV	15261.6	23870.71	1	8
2048	0	95471.21	440800.1	0	440800.1	2849435	0	2849435	BEV	0	95471.21	1	3
2048	0	41821	193091.7	75305.78	117786	1247389	486481.7	760907.2	PHEV	16310.19	25510.81	1	8
2048	0	101998.3	476779.6	0	476779.6	3169793	0	3169793	BEV	0	101998.3	1	3
2048	0	44680.16	208852.5	81452.48	127400	1387920	541288.8	846631.2	PHEV	17425.26	27254.9	1	8
2048	0	107425.3	508302.1	0	508302.1	3474307	0	3474307	BEV	0	107425.3	1	3
2048	0	47057.46	222660.9	86837.73	135823.1	1521651	593444	928207.3	PHEV	18352.41	28705.05	1	8
2048	0	113421.9	543174.2	0	543174.2	3815344	0	3815344	BEV	0	113421.9	1	3
2048	0	49684.28	237936.5	92795.24	145141.3	1671470	651873.5	1019597	PHEV	19376.87	30307.41	1	8
2048	0	118054.3	572121.8	0	572121.8	4128696	0	4128696	BEV	0	118054.3	1	3
2048	0	51713.48	250617	97740.62	152876.4	1809266	705613.7	1103652	PHEV	20168.26	31545.22	1	8
2048	0	123369.2	604947.2	0	604947.2	4482117	0	4482117	BEV	0	123369.2	1	3

2048	0	54041.68	264996.1	103348.5	161647.6	1964621	766202.2	1198419	PHEV	21076.25	32965.42	1	8
2048	0	127374.9	631886.7	0	631886.7	4804758	0	4804758	BEV	0	127374.9	1	3
2048	0	55796.37	276796.9	107950.8	168846.1	2106588	821569.4	1285019	PHEV	21760.59	34035.79	1	8
2048	0	130556.8	655151.2	0	655151.2	5108917	0	5108917	BEV	0	130556.8	1	3
2048	0	57190.2	286987.8	111925.3	175062.6	2240379	873748	1366631	PHEV	22304.18	34886.02	1	8
2048	0	133959	679898	0	679898	5428267	0	5428267	BEV	0	133959	1	3
2048	0	58680.49	297828.1	116153	181675.2	2380396	928354.4	1452041	PHEV	22885.39	35795.1	1	8
2048	0	135062.7	693237.5	0	693237.5	5649109	0	5649109	BEV	0	135062.7	1	3
2048	0	59163.97	303671.5	118431.9	185239.6	2476531	965847.2	1510684	PHEV	23073.95	36090.02	1	8
2048	0	121328.5	629695.1	0	629695.1	5223770	0	5223770	BEV	0	121328.5	1	3
2048	0	53147.76	275836.9	107576.4	168260.5	2288895	892669.2	1396226	PHEV	20727.63	32420.13	1	8
2048	0	0.359636	1.2278	0	1.2278	4.046812	0	4.046812	BEV	0	0.359636	2	3
2048	0	3.119289	10.64928	6.389571	4.259714	48.4906	29.09436	19.39624	PHEV	1.871574	1.247716	2	8
2048	0	183.5301	647.6025	0	647.6025	2707.743	0	2707.743	BEV	0	183.5301	2	3
2048	0	140.9382	497.3132	295.5461	201.7671	2431.808	1445.188	986.6191	PHEV	83.75757	57.18065	2	8
2048	0	421.2758	1510.644	0	1510.644	6371.156	0	6371.156	BEV	0	421.2758	2	3
2048	0	324.4589	1163.471	684.7856	478.6851	5733.338	3374.479	2358.859	PHEV	190.9672	133.4917	2	8
2048	0	557.0042	2029.261	0	2029.261	8804.476	0	8804.476	BEV	0	557.0042	2	3
2048	0	409.135	1490.549	868.7768	621.7717	7050.115	4109.21	2940.905	PHEV	238.4673	170.6678	2	8
2048	0	772.0734	2857.027	0	2857.027	12622.81	0	12622.81	BEV	0	772.0734	2	3
2048	0	491.4868	1818.727	1049.665	769.0618	8689.343	5014.992	3674.351	PHEV	283.6581	207.8287	2	8
2048	0	959.814	3606.741	0	3606.741	16183.51	0	16183.51	BEV	0	959.814	2	3
2048	0	602.63	2264.533	1294.019	970.5141	10943.2	6253.257	4689.942	PHEV	344.36	258.27	2	8
2048	0	1146.913	4375.52	0	4375.52	19947.47	0	19947.47	BEV	0	1146.913	2	3
2048	0	747.4129	2851.41	1613.083	1238.327	13943.93	7888.278	6055.648	PHEV	422.8221	324.5907	2	8
2048	0	1431.31	5542.504	0	5542.504	25776.31	0	25776.31	BEV	0	1431.31	2	3
2048	0	872.2165	3377.51	1891.406	1486.104	16674.01	9337.445	7336.564	PHEV	488.4412	383.7753	2	8
2048	0	1593.691	6262.601	0	6262.601	29726.95	0	29726.95	BEV	0	1593.691	2	3
2048	0	1004.794	3948.458	2171.652	1776.806	19696.12	10832.87	8863.255	PHEV	552.6366	452.1572	2	8
2048	0	1904.261	7592.117	0	7592.117	36704.39	0	36704.39	BEV	0	1904.261	2	3
2048	0	1350.185	5383.066	2906.856	2476.211	27430.91	14812.69	12618.22	PHEV	729.1	621.0851	2	8
2048	0	2376.446	9610.824	0	9610.824	47561.78	0	47561.78	BEV	0	2376.446	2	3
2048	0	1685.356	6815.915	3612.435	3203.48	35344.35	18732.51	16611.84	PHEV	893.2385	792.1171	2	8
2048	0	3005.722	12327.94	0	12327.94	62588.39	0	62588.39	BEV	0	3005.722	2	3
2048	0	2000.061	8203.229	4265.679	3937.55	43212.19	22470.34	20741.85	PHEV	1040.032	960.0291	2	8
2048	0	3607.111	15001.18	0	15001.18	77956.98	0	77956.98	BEV	0	3607.111	2	3
2048	0	2452.489	10199.36	5201.674	4997.687	54622.86	27857.66	26765.2	PHEV	1250.769	1201.719	2	8
2048	0	3969.284	16734.78	0	16734.78	89063.21	0	89063.21	BEV	0	3969.284	2	3
2048	0	2698.731	11378.04	5802.799	5575.239	61868.04	31552.7	30315.34	PHEV	1376.353	1322.378	2	8
2048	0	4319.63	18459.33	0	18459.33	100657.3	0	100657.3	BEV	0	4319.63	2	3
2048	0	2936.932	12550.57	6400.79	6149.779	69393.58	35390.72	34002.85	PHEV	1497.836	1439.097	2	8
2048	0	4687.55	20300.14	0	20300.14	113455.8	0	113455.8	BEV	0	4687.55	2	3
2048	0	3187.083	13802.14	7039.092	6763.049	77703.85	39628.96	38074.89	PHEV	1625.412	1561.671	2	8
2048	0	5026.288	22055.05	0	22055.05	126381.4	0	126381.4	BEV	0	5026.288	2	3
2048	0	3417.392	14995.31	7647.609	7347.702	86069.68	43895.54	42174.14	PHEV	1742.87	1674.522	2	8
2048	0	5401.771	24012.11	0	24012.11	141108.8	0	141108.8	BEV	0	5401.771	2	3
2048	0	3672.684	16325.93	8326.223	7999.704	95637.49	48775.12	46862.37	PHEV	1873.069	1799.615	2	8

2048	0	5743.855	25861.82	0	25861.82	155901	0	155901	BEV	0	5743.855	2	3
2048	0	3905.269	17583.55	8967.611	8615.94	105238.3	53671.51	51566.75	PHEV	1991.687	1913.582	2	8
2048	0	6117.775	27895.89	0	27895.89	172507.8	0	172507.8	BEV	0	6117.775	2	3
2048	0	4159.498	18966.52	9672.925	9293.595	116055.5	59188.33	56867.22	PHEV	2121.344	2038.154	2	8
2048	0	6446.553	29764.38	0	29764.38	188852.7	0	188852.7	BEV	0	6446.553	2	3
2048	0	4383.036	20236.91	10320.83	9916.088	126711.8	64623.01	62088.78	PHEV	2235.348	2147.688	2	8
2048	0	6793.387	31754.94	0	31754.94	206708	0	206708	BEV	0	6793.387	2	3
2048	0	4618.85	21590.3	11011.06	10579.25	138384.9	70576.31	67808.61	PHEV	2355.613	2263.236	2	8
2048	0	7046.239	33340.55	0	33340.55	222696.6	0	222696.6	BEV	0	7046.239	2	3
2048	0	4790.765	22668.37	11560.87	11107.5	148854.7	75915.89	72938.79	PHEV	2443.29	2347.475	2	8
2048	0	7325.325	35080.76	0	35080.76	240395.2	0	240395.2	BEV	0	7325.325	2	3
2048	0	4980.516	23851.54	12164.29	11687.26	160496.4	81853.19	78643.26	PHEV	2540.063	2440.453	2	8
2048	0	7605.608	36858.75	0	36858.75	259106.6	0	259106.6	BEV	0	7605.608	2	3
2048	0	5171.081	25060.4	12780.81	12279.6	172853.5	88155.27	84698.2	PHEV	2637.251	2533.83	2	8
2048	0	7887.556	38677.03	0	38677.03	278881.5	0	278881.5	BEV	0	7887.556	2	3
2048	0	5362.779	26296.66	13411.29	12885.36	185968.1	94843.73	91124.37	PHEV	2735.017	2627.762	2	8
2048	0	8063.351	40000.99	0	40000.99	295823.8	0	295823.8	BEV	0	8063.351	2	3
2048	0	5482.302	27196.83	13870.38	13326.44	197258.3	100601.7	96656.55	PHEV	2795.974	2686.328	2	8
2048	0	8172.312	41009.72	0	41009.72	311022.6	0	311022.6	BEV	0	8172.312	2	3
2048	0	5556.386	27882.67	14220.16	13662.51	207450	105799.5	101650.5	PHEV	2833.757	2722.629	2	8
2048	0	8283.217	42040.8	0	42040.8	326887.6	0	326887.6	BEV	0	8283.217	2	3
2048	0	5631.79	28583.7	14577.69	14006.01	218128	111245.3	106882.7	PHEV	2872.213	2759.577	2	8
2048	0	8401.182	43120.83	0	43120.83	343574.4	0	343574.4	BEV	0	8401.182	2	3
2048	0	5711.995	29318.01	14952.19	14365.83	229388	116987.9	112400.1	PHEV	2913.117	2798.878	2	8
2048	0	7669.8	39806.26	0	39806.26	324822	0	324822	BEV	0	7669.8	2	3
2048	0	5214.726	27064.43	13802.86	13261.57	216979.1	110659.4	106319.8	PHEV	2659.51	2555.216	2	8
2048	0	83.76611	290.7773	174.4664	116.3109	1293.1	775.86	517.24	PHEV	50.25966	33.50644	3	8
2048	0	324.1249	1143.704	0	1143.704	3330.304	0	3330.304	BEV	0	324.1249	3	3
2048	0	281.5217	993.3746	590.3483	403.0263	4468.02	2655.281	1812.74	PHEV	167.3043	114.2174	3	8
2048	0	737.6004	2644.946	0	2644.946	10129.3	0	10129.3	BEV	0	737.6004	3	3
2048	0	532.3124	1908.808	1123.47	785.3382	8671.791	5103.969	3567.823	PHEV	313.3038	219.0085	3	8
2048	0	934.4239	3404.265	0	3404.265	11979.18	0	11979.18	BEV	0	934.4239	3	3
2048	0	899.9994	3278.851	1911.102	1367.749	15071.11	8784.305	6286.806	PHEV	524.5711	375.4283	3	8
2048	0	1284.884	4754.663	0	4754.663	17057.56	0	17057.56	BEV	0	1284.884	3	3
2048	0	1024.564	3791.357	2188.155	1603.202	17656.77	10190.48	7466.29	PHEV	591.3197	433.2441	3	8
2048	0	1696.527	6375.124	0	6375.124	23464.22	0	23464.22	BEV	0	1696.527	3	3
2048	0	1213.289	4559.235	2605.277	1953.958	21541.3	12309.32	9231.987	PHEV	693.3078	519.9809	3	8
2048	0	2068.317	7890.714	0	7890.714	29300.88	0	29300.88	BEV	0	2068.317	3	3
2048	0	1441.635	5499.895	3111.369	2388.526	26385.99	14926.93	11459.06	PHEV	815.5535	626.0815	3	8
2048	0	2479.059	9599.736	0	9599.736	35828.17	0	35828.17	BEV	0	2479.059	3	3
2048	0	1822.007	7055.413	3951.031	3104.382	34291.29	19203.12	15088.17	PHEV	1020.324	801.6831	3	8
2048	0	3238.008	12724.14	0	12724.14	50565.57	0	50565.57	BEV	0	3238.008	3	3
2048	0	2011.505	7904.452	4347.448	3557.003	38969.59	21433.28	17536.32	PHEV	1106.328	905.1774	3	8
2048	0	4145.358	16527.17	0	16527.17	68960.21	0	68960.21	BEV	0	4145.358	3	3
2048	0	2544.204	10143.51	5477.497	4666.016	50790	27426.6	23363.4	PHEV	1373.87	1170.334	3	8
2048	0	5494.342	22220.22	0	22220.22	97303.74	0	97303.74	BEV	0	5494.342	3	3
2048	0	3233.012	13074.95	6929.721	6145.225	66563.25	35278.53	31284.73	PHEV	1713.496	1519.516	3	8

2048	0	7242.97	29706.97	0	29706.97	134547.8	0	134547.8	BEV	0	7242.97	3	3
2048	0	4167.687	17093.73	8888.739	8204.99	89855.32	46724.77	43130.55	PHEV	2167.197	2000.49	3	8
2048	0	9271.737	38559.11	0	38559.11	178148.5	0	178148.5	BEV	0	9271.737	3	3
2048	0	5316.617	22110.64	11276.43	10834.21	121892.9	62165.4	59727.54	PHEV	2711.475	2605.142	3	8
2048	0	10674.36	45003.87	0	45003.87	212760.8	0	212760.8	BEV	0	10674.36	3	3
2048	0	6120.915	25806.2	13161.16	12645.04	144846.8	73871.89	70974.95	PHEV	3121.666	2999.248	3	8
2048	0	12138.33	51871.47	0	51871.47	251041.1	0	251041.1	BEV	0	12138.33	3	3
2048	0	6960.386	29744.24	15169.56	14574.68	170137.9	86770.34	83367.59	PHEV	3549.797	3410.589	3	8
2048	0	13727.94	59450.92	0	59450.92	294647.3	0	294647.3	BEV	0	13727.94	3	3
2048	0	7871.904	34090.46	17386.14	16704.33	198895.1	101436.5	97458.6	PHEV	4014.671	3857.233	3	8
2048	0	15232.63	66839.88	0	66839.88	339401.7	0	339401.7	BEV	0	15232.63	3	3
2048	0	8734.727	38327.46	19547	18780.45	228313.6	116439.9	111873.7	PHEV	4454.711	4280.016	3	8
2048	0	16792.48	74646.43	0	74646.43	388476.7	0	388476.7	BEV	0	16792.48	3	3
2048	0	9629.176	42803.9	21829.99	20973.91	260553.5	132882.3	127671.2	PHEV	4910.88	4718.296	3	8
2048	0	18122.31	81596.07	0	81596.07	435351.1	0	435351.1	BEV	0	18122.31	3	3
2048	0	10391.73	46788.98	23862.38	22926.6	291264.1	148544.7	142719.4	PHEV	5299.783	5091.948	3	8
2048	0	19585.09	89304.28	0	89304.28	488583	0	488583	BEV	0	19585.09	3	3
2048	0	11230.52	51209.03	26116.61	25092.43	326200.1	166362	159838	PHEV	5727.565	5502.954	3	8
2048	0	20775.64	95923.19	0	95923.19	538236.6	0	538236.6	BEV	0	20775.64	3	3
2048	0	11913.21	55004.46	28052.27	26952.19	358744.4	182959.6	175784.7	PHEV	6075.735	5837.471	3	8
2048	0	21971.37	102702.8	0	102702.8	591028.7	0	591028.7	BEV	0	21971.37	3	3
2048	0	12598.87	58892.02	30034.93	28857.09	393387.3	200627.5	192759.8	PHEV	6425.422	6173.445	3	8
2048	0	22821.96	107986.2	0	107986.2	637479.8	0	637479.8	BEV	0	22821.96	3	3
2048	0	13086.62	61921.68	31580.05	30341.62	423889.8	216183.8	207706	PHEV	6674.174	6412.441	3	8
2048	0	23593.39	112988	0	112988	684186.3	0	684186.3	BEV	0	23593.39	3	3
2048	0	13528.97	64789.81	33042.8	31747.01	454626.4	231859.4	222766.9	PHEV	6899.773	6629.193	3	8
2048	0	24170.1	117134.6	0	117134.6	727626.8	0	727626.8	BEV	0	24170.1	3	3
2048	0	13859.67	67167.54	34255.45	32912.1	483276.3	246470.9	236805.4	PHEV	7068.43	6791.236	3	8
2048	0	24828.65	121748.6	0	121748.6	775733.3	0	775733.3	BEV	0	24828.65	3	3
2048	0	14237.3	69813.29	35604.78	34208.51	515099.4	262700.7	252398.7	PHEV	7261.021	6976.275	3	8
2048	0	25352.88	125771.6	0	125771.6	821902.4	0	821902.4	BEV	0	25352.88	3	3
2048	0	14537.9	72120.19	36781.3	35338.89	545745.5	278330.2	267415.3	PHEV	7414.328	7123.57	3	8
2048	0	25764.65	129290.4	0	129290.4	866316.9	0	866316.9	BEV	0	25764.65	3	3
2048	0	14774.02	74137.93	37810.34	36327.59	575311.5	293408.9	281902.6	PHEV	7534.748	7239.267	3	8
2048	0	26437.11	134179.4	0	134179.4	921770.3	0	921770.3	BEV	0	26437.11	3	3
2048	0	15159.62	76941.43	39240.13	37701.3	612303.3	312274.7	300028.6	PHEV	7731.405	7428.213	3	8
2048	0	27139.89	139301.2	0	139301.2	980740.1	0	980740.1	BEV	0	27139.89	3	3
2048	0	15562.61	79878.36	40737.96	39140.4	651693.9	332363.9	319330	PHEV	7936.93	7625.678	3	8
2048	0	24575.3	127545.8	0	127545.8	919456.1	0	919456.1	BEV	0	24575.3	3	3
2048	0	14092.02	73137.57	37300.16	35837.41	611095.4	311658.7	299436.8	PHEV	7186.929	6905.088	3	8
2048	0	120.2228	410.442	246.2652	164.1768	1585.264	951.1585	634.1056	PHEV	72.13371	48.08914	4	8
2048	0	0.288774	1.002421	0	1.002421	2.371928	0	2.371928	BEV	0	0.288774	4	3
2048	0	353.3799	1226.688	736.0126	490.675	5045.134	3027.08	2018.054	PHEV	212.0279	141.352	4	8
2048	0	162.0974	571.9753	0	571.9753	1487.489	0	1487.489	BEV	0	162.0974	4	3
2048	0	421.7441	1488.162	884.3933	603.7685	6792.83	4036.882	2755.948	PHEV	250.6365	171.1076	4	8
2048	0	373.8355	1340.529	0	1340.529	4127.612	0	4127.612	BEV	0	373.8355	4	3
2048	0	503.4614	1805.352	1062.579	742.7735	8153.865	4799.132	3354.733	PHEV	296.323	207.1384	4	8

2048	0	640.9642	2335.141	0	2335.141	7533.509	0	7533.509	BEV	0	640.9642	4	3
2048	0	622.0849	2266.361	1320.965	945.3963	10055.42	5860.871	4194.545	PHEV	362.5866	259.4983	4	8
2048	0	737.9232	2730.655	0	2730.655	7969.442	0	7969.442	BEV	0	737.9232	4	3
2048	0	720.8189	2667.362	1539.449	1127.913	12020.25	6937.402	5082.849	PHEV	416.0155	304.8034	4	8
2048	0	906.2497	3405.46	0	3405.46	9772.862	0	9772.862	BEV	0	906.2497	4	3
2048	0	851.5503	3199.913	1828.522	1371.391	14623.6	8356.345	6267.259	PHEV	486.6002	364.9501	4	8
2048	0	1106.476	4221.251	0	4221.251	12288.6	0	12288.6	BEV	0	1106.476	4	3
2048	0	1273.019	4856.617	2747.458	2109.159	22529.93	12745.5	9784.427	PHEV	720.1648	552.8538	4	8
2048	0	1418.413	5492.562	0	5492.562	16500.48	0	16500.48	BEV	0	1418.413	4	3
2048	0	1556.024	6025.439	3374.246	2651.193	28342.77	15871.95	12470.82	PHEV	871.3735	684.6506	4	8
2048	0	1553.039	6102.855	0	6102.855	18768.03	0	18768.03	BEV	0	1553.039	4	3
2048	0	1611.065	6330.874	3481.98	2848.893	30224.07	16623.24	13600.83	PHEV	886.0858	724.9793	4	8
2048	0	1913.964	7630.801	0	7630.801	24630.85	0	24630.85	BEV	0	1913.964	4	3
2048	0	1932.842	7706.065	4161.275	3544.79	37385.42	20188.13	17197.29	PHEV	1043.734	889.1071	4	8
2048	0	2302.419	9311.444	0	9311.444	31669.64	0	31669.64	BEV	0	2302.419	4	3
2048	0	2276.074	9204.899	4878.596	4326.302	45447.36	24087.1	21360.26	PHEV	1206.319	1069.755	4	8
2048	0	2771.21	11366.09	0	11366.09	41528.87	0	41528.87	BEV	0	2771.21	4	3
2048	0	2741.497	11244.22	5846.995	5397.227	56572.81	29417.86	27154.95	PHEV	1425.578	1315.919	4	8
2048	0	3322.791	13818.76	0	13818.76	54029.82	0	54029.82	BEV	0	3322.791	4	3
2048	0	3270.729	13602.24	6937.144	6665.1	69833.27	35614.97	34218.3	PHEV	1668.072	1602.657	4	8
2048	0	3766.871	15881.39	0	15881.39	63854.04	0	63854.04	BEV	0	3766.871	4	3
2048	0	3707.851	15632.56	7972.605	7659.954	81986.12	41812.92	40173.2	PHEV	1891.004	1816.847	4	8
2048	0	4201.228	17953.36	0	17953.36	74222.57	0	74222.57	BEV	0	4201.228	4	3
2048	0	4135.403	17672.07	9012.754	8659.313	94743.4	48319.14	46424.27	PHEV	2109.056	2026.348	4	8
2048	0	4625.972	20033.46	0	20033.46	85159.15	0	85159.15	BEV	0	4625.972	4	3
2048	0	4553.492	19719.58	10056.99	9662.594	108160.5	55161.84	52998.64	PHEV	2322.281	2231.211	4	8
2048	0	5035.505	22095.5	0	22095.5	96567.04	0	96567.04	BEV	0	5035.505	4	3
2048	0	4956.609	21749.3	11092.14	10657.16	122128.7	62285.63	59843.05	PHEV	2527.871	2428.738	4	8
2048	0	5465.776	24296.63	0	24296.63	109156.8	0	109156.8	BEV	0	5465.776	4	3
2048	0	5380.138	23915.95	12197.13	11718.82	137548.9	70149.96	67398.98	PHEV	2743.87	2636.268	4	8
2048	0	5855.727	26365.53	0	26365.53	121745.3	0	121745.3	BEV	0	5855.727	4	3
2048	0	5763.979	25952.43	13235.74	12716.69	152944.7	78001.8	74942.9	PHEV	2939.629	2824.35	4	8
2048	0	6288.499	28674.36	0	28674.36	136058.8	0	136058.8	BEV	0	6288.499	4	3
2048	0	6189.97	28225.09	14394.8	13830.29	170510.2	86960.23	83550.02	PHEV	3156.885	3033.085	4	8
2048	0	6670.913	30800.27	0	30800.27	150159	0	150159	BEV	0	6670.913	4	3
2048	0	6566.393	30317.69	15462.02	14855.67	187823.2	95789.84	92033.37	PHEV	3348.86	3217.533	4	8
2048	0	7102.956	33201.99	0	33201.99	166261.6	0	166261.6	BEV	0	7102.956	4	3
2048	0	6991.667	32681.78	16667.71	16014.07	207642.6	105897.7	101744.9	PHEV	3565.75	3425.917	4	8
2048	0	7390.702	34970.44	0	34970.44	179843.6	0	179843.6	BEV	0	7390.702	4	3
2048	0	7274.904	34422.52	17555.48	16867.03	224393.5	114440.7	109952.8	PHEV	3710.201	3564.703	4	8
2048	0	7730.076	37019.1	0	37019.1	195451	0	195451	BEV	0	7730.076	4	3
2048	0	7608.961	36439.08	18583.93	17855.15	243704.3	124289.2	119415.1	PHEV	3880.57	3728.391	4	8
2048	0	8007.042	38804.21	0	38804.21	210281.3	0	210281.3	BEV	0	8007.042	4	3
2048	0	7881.588	38196.22	19480.07	18716.15	262102	133672	128430	PHEV	4019.61	3861.978	4	8
2048	0	8323.238	40813.42	0	40813.42	226918.7	0	226918.7	BEV	0	8323.238	4	3
2048	0	8192.83	40173.95	20488.71	19685.24	282793.2	144224.5	138568.7	PHEV	4178.343	4014.487	4	8
2048	0	8494.332	42139.02	0	42139.02	240320.2	0	240320.2	BEV	0	8494.332	4	3

2048	0	8361.242	41478.79	21154.18	20324.6	299528.1	152759.3	146768.8	PHEV	4264.234	4097.009	4	8
2048	0	8676.018	43537.38	0	43537.38	254597.9	0	254597.9	BEV	0	8676.018	4	3
2048	0	8540.081	42855.24	21856.17	20999.07	317384.6	161866.1	155518.5	PHEV	4355.442	4184.64	4	8
2048	0	8908.421	45213.98	0	45213.98	270992.8	0	270992.8	BEV	0	8908.421	4	3
2048	0	8768.843	44505.56	22697.84	21807.73	337845.4	172301.2	165544.2	PHEV	4472.11	4296.733	4	8
2048	0	9071.931	46563.59	0	46563.59	285922.7	0	285922.7	BEV	0	9071.931	4	3
2048	0	8929.792	45834.03	23375.36	22458.68	356537.6	181834.2	174703.4	PHEV	4554.194	4375.598	4	8
2048	0	7863.657	40812.38	0	40812.38	256372.7	0	256372.7	BEV	0	7863.657	4	3
2048	0	7740.449	40172.93	20488.19	19684.74	319317.4	162851.9	156465.5	PHEV	3947.629	3792.82	4	8
2048	0	257.6766	820.6613	0	820.6613	2352.353	0	2352.353	BEV	0	257.6766	1	3
2048	0	269.3334	857.7866	514.672	343.1146	2071.172	1242.703	828.4688	PHEV	161.6001	107.7334	1	8
2048	0	320.3798	1038.716	0	1038.716	3070.08	0	3070.08	BEV	0	320.3798	1	3
2048	0	404.5037	1311.458	786.8745	524.583	3312.711	1987.627	1325.085	PHEV	242.7022	161.8015	1	8
2048	0	772.4686	2548.706	0	2548.706	7816.025	0	7816.025	BEV	0	772.4686	1	3
2048	0	367.3295	1211.978	727.1869	484.7912	3210.303	1926.182	1284.121	PHEV	220.3977	146.9318	1	8
2048	0	236.8818	795.1457	0	795.1457	1725.974	0	1725.974	BEV	0	236.8818	3	3
2048	0	21.55798	72.3641	43.41846	28.94564	305.8755	183.5253	122.3502	PHEV	12.93479	8.623192	3	8
2048	0	1.576657	4.298803	0	4.298803	10.56508	0	10.56508	BEV	0	1.576657	1	3
2048	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2048	0	55.47286	173.4947	0	173.4947	483.6897	0	483.6897	BEV	0	55.47286	1	3
2048	0	116.606	364.6922	218.8153	145.8769	833.0616	499.837	333.2247	PHEV	69.96359	46.64239	1	8
2048	0	526.1797	1766.238	0	1766.238	5603.536	0	5603.536	BEV	0	526.1797	1	3
2048	0	378.3936	1270.161	762.0968	508.0645	3521.64	2112.984	1408.656	PHEV	227.0362	151.3574	1	8
2048	0	70.79894	217.3719	0	217.3719	592.5102	0	592.5102	BEV	0	70.79894	1	3
2048	0	19.68003	60.42299	36.2538	24.1692	132.4825	79.48948	52.99298	PHEV	11.80802	7.87201	1	8
2048	0	50.58693	164.0099	0	164.0099	484.1613	0	484.1613	BEV	0	50.58693	2	3
2048	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2048	0	12.02657	38.99183	0	38.99183	80.04903	0	80.04903	BEV	0	12.02657	3	3
2048	0	5.445255	17.65428	10.59257	7.061712	70.07111	42.04267	28.02845	PHEV	3.267153	2.178102	3	8
2048	0	12.56486	37.85768	0	37.85768	101.3129	0	101.3129	BEV	0	12.56486	1	3
2048	0	1.339402	4.03559	2.421354	1.614236	8.409082	5.045449	3.363633	PHEV	0.803641	0.535761	1	8
2048	0	19.79361	61.9057	0	61.9057	171.5669	0	171.5669	BEV	0	19.79361	2	3
2048	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2048	0	1.653652	4.603469	0	4.603469	11.51452	0	11.51452	BEV	0	1.653652	1	3
2048	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2048	0	8.072395	23.39703	0	23.39703	58.66258	0	58.66258	BEV	0	8.072395	1	3
2048	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2048	0	7.146496	21.12283	0	21.12283	56.06111	0	56.06111	BEV	0	7.146496	1	3
2048	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2048	0	25.38361	80.84299	0	80.84299	230.4194	0	230.4194	BEV	0	25.38361	2	3
2048	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2048	0	2.830043	8.040463	0	8.040463	20.26889	0	20.26889	BEV	0	2.830043	1	3
2048	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2048	0	2.806732	8.135033	0	8.135033	20.62326	0	20.62326	BEV	0	2.806732	2	3
2048	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2048	0	0.245814	0.684301	0	0.684301	1.354403	0	1.354403	BEV	0	0.245814	4	3
2048	0	0	0	0	0	0	0	0	PHEV	0	0	4	8

2048	0	1.971173	5.826176	0	5.826176	11.0349	0	11.0349	BEV	0	1.971173	3	3
2048	0	0	0	0	0	0	0	0	PHEV	0	0	3	8
2048	0	1.121177	3.442316	0	3.442316	6.699335	0	6.699335	BEV	0	1.121177	3	3
2048	0	0.7762	2.383142	1.429885	0.953257	8.739251	5.24355	3.4957	PHEV	0.46572	0.31048	3	8
2048	0	0.150233	0.495685	0	0.495685	1.022606	0	1.022606	BEV	0	0.150233	4	3
2048	0	0	0	0	0	0	0	0	PHEV	0	0	4	8
2048	0	0.717866	1.99841	0	1.99841	4.921082	0	4.921082	BEV	0	0.717866	2	3
2048	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2048	0	0.405907	1.153226	0	1.153226	2.887212	0	2.887212	BEV	0	0.405907	2	3
2048	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2048	0	1.185309	3.503405	0	3.503405	9.249285	0	9.249285	BEV	0	1.185309	2	3
2048	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2048	0	1.419163	4.113303	0	4.113303	7.43913	0	7.43913	BEV	0	1.419163	3	3
2048	0	0	0	0	0	0	0	0	PHEV	0	0	3	8
2048	0	0.784067	2.497136	0	2.497136	5.005107	0	5.005107	BEV	0	0.784067	3	3
2048	0	0.599581	1.909574	1.145745	0.76383	7.565083	4.53905	3.026033	PHEV	0.359748	0.239832	3	8
2048	0	0.315913	0.861347	0	0.861347	1.490547	0	1.490547	BEV	0	0.315913	4	3
2048	0	0	0	0	0	0	0	0	PHEV	0	0	4	8
2048	0	0.374815	1.000471	0	1.000471	2.406057	0	2.406057	BEV	0	0.374815	2	3
2048	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2048	0	0.223187	0.646885	0	0.646885	1.152086	0	1.152086	BEV	0	0.223187	4	3
2048	0	0	0	0	0	0	0	0	PHEV	0	0	4	8
2048	0	1.405805	3.75243	0	3.75243	9.165334	0	9.165334	BEV	0	1.405805	1	3
2048	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2048	0	0.145221	0.39595	0	0.39595	0.960941	0	0.960941	BEV	0	0.145221	2	3
2048	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2048	0	1.10161	3.319129	0	3.319129	6.186557	0	6.186557	BEV	0	1.10161	3	3
2048	0	0	0	0	0	0	0	0	PHEV	0	0	3	8
2048	0	2.503341	7.829348	0	7.829348	15.00514	0	15.00514	BEV	0	2.503341	3	3
2048	0	0.641882	2.007525	1.204515	0.80301	9.211508	5.526905	3.684603	PHEV	0.385129	0.256753	3	8
2048	0	0	0	0	0	0	0	0	BEV	0	0	2	3
2048	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2048	0	0	0	0	0	0	0	0	BEV	0	0	2	3
2048	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2048	0	0	0	0	0	0	0	0	BEV	0	0	3	3
2048	0	1.745613	5.759527	3.455716	2.303811	26.99794	16.19877	10.79918	PHEV	1.047368	0.698245	3	8
2048	0	0.072536	0.206082	0	0.206082	0.354626	0	0.354626	BEV	0	0.072536	3	3
2048	0	0	0	0	0	0	0	0	PHEV	0	0	3	8
2048	0	0.176565	0.531986	0	0.531986	1.30661	0	1.30661	BEV	0	0.176565	2	3
2048	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2048	0	0.123484	0.379131	0	0.379131	1.050727	0	1.050727	BEV	0	0.123484	2	3
2048	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2048	0	0.042537	0.115978	0	0.115978	0.185345	0	0.185345	BEV	0	0.042537	3	3
2048	0	0	0	0	0	0	0	0	PHEV	0	0	3	8
2048	0	0.207738	0.590206	0	0.590206	1.005637	0	1.005637	BEV	0	0.207738	4	3
2048	0	0	0	0	0	0	0	0	PHEV	0	0	4	8
2048	0	0	0	0	0	0	0	0	BEV	0	0	4	3

2048	0	0.201803	0.642713	0.385628	0.257085	2.76965	1.66179	1.10786	PHEV	0.121082	0.080721	4	8
2049	0	1684.673	5654.975	0	5654.975	16865.86	0	16865.86	BEV	0	1684.673	1	3
2049	0	1519.632	5100.979	2754.529	2346.451	14444.1	7799.811	6644.284	PHEV	820.6013	699.0308	1	8
2049	0	2322.987	7930.7	0	7930.7	24414.92	0	24414.92	BEV	0	2322.987	1	3
2049	0	1501.335	5125.572	2767.809	2357.763	15303.84	8264.072	7039.765	PHEV	810.7209	690.6141	1	8
2049	0	3233.363	11223.97	0	11223.97	36102.27	0	36102.27	BEV	0	3233.363	1	3
2049	0	1585.757	5504.637	2917.458	2587.179	17116.38	9071.682	8044.699	PHEV	840.451	745.3056	1	8
2049	0	4453.615	15714.98	0	15714.98	52512.6	0	52512.6	BEV	0	4453.615	1	3
2049	0	1698.188	5992.208	3115.948	2876.26	19701.27	10244.66	9456.612	PHEV	883.0577	815.1301	1	8
2049	0	5438.057	19500.22	0	19500.22	67999.97	0	67999.97	BEV	0	5438.057	1	3
2049	0	2045.336	7334.328	3740.507	3593.821	25209.76	12856.98	12352.78	PHEV	1043.121	1002.214	1	8
2049	0	6659.275	24260.87	0	24260.87	88310.39	0	88310.39	BEV	0	6659.275	1	3
2049	0	2467.724	8990.339	4495.169	4495.169	32314.79	16157.4	16157.4	PHEV	1233.862	1233.862	1	8
2049	0	8313.167	30762.54	0	30762.54	116652.1	0	116652.1	BEV	0	8313.167	1	3
2049	0	3063.903	11337.85	5555.547	5782.304	42467.14	20808.9	21658.24	PHEV	1501.313	1562.591	1	8
2049	0	10314.89	38760.76	0	38760.76	152938.2	0	152938.2	BEV	0	10314.89	1	3
2049	0	3785.068	14223.34	6827.202	7396.136	55458.02	26619.85	28838.17	PHEV	1816.832	1968.235	1	8
2049	0	13012.56	49643.45	0	49643.45	203733.1	0	203733.1	BEV	0	13012.56	1	3
2049	0	4710.467	17970.62	8446.191	9524.428	72954.16	34288.46	38665.71	PHEV	2213.919	2496.547	1	8
2049	0	13527.15	52381.57	0	52381.57	223282.4	0	223282.4	BEV	0	13527.15	1	3
2049	0	5625.543	21783.96	9889.917	11894.04	91884.91	41715.75	50169.16	PHEV	2553.996	3071.546	1	8
2049	0	16990.15	66764.82	0	66764.82	294752.1	0	294752.1	BEV	0	16990.15	1	3
2049	0	7190.985	28257.84	12376.93	15880.9	123719.2	54188.99	69530.17	PHEV	3149.651	4041.333	1	8
2049	0	21586.35	86062.85	0	86062.85	393278	0	393278	BEV	0	21586.35	1	3
2049	0	9224.703	36778.06	15520.34	21257.72	166982.2	70466.49	96515.72	PHEV	3892.825	5331.878	1	8
2049	0	27090.41	109559	0	109559	517929.8	0	517929.8	BEV	0	27090.41	1	3
2049	0	11721.4	47403.67	19245.89	28157.78	222985.3	90532.05	132453.3	PHEV	4758.887	6962.509	1	8
2049	0	33710.47	138263.2	0	138263.2	675734.3	0	675734.3	BEV	0	33710.47	1	3
2049	0	14766.81	60565.94	23620.72	36945.22	294879.1	115002.8	179876.2	PHEV	5759.057	9007.756	1	8
2049	0	39972.12	166235.3	0	166235.3	839716.1	0	839716.1	BEV	0	39972.12	1	3
2049	0	17509.72	72819.07	28399.44	44419.63	366659.6	142997.2	223662.4	PHEV	6828.79	10680.93	1	8
2049	0	46797.76	197302.6	0	197302.6	1029400	0	1029400	BEV	0	46797.76	1	3
2049	0	20499.68	86428.07	33706.95	52721.12	449711.1	175387.3	274323.8	PHEV	7994.874	12504.8	1	8
2049	0	53766.4	229763.2	0	229763.2	1237461	0	1237461	BEV	0	53766.4	1	3
2049	0	23552.28	100647.4	39252.47	61394.9	540837.5	210926.6	329910.9	PHEV	9185.389	14366.89	1	8
2049	0	61108.9	264641.3	0	264641.3	1470273	0	1470273	BEV	0	61108.9	1	3
2049	0	26768.65	115925.7	45211.01	70714.65	642802.8	250693.1	392109.7	PHEV	10439.77	16328.88	1	8
2049	0	68385.15	300069.9	0	300069.9	1718884	0	1718884	BEV	0	68385.15	1	3
2049	0	29956	131445.1	51263.59	80181.52	751728.8	293174.2	458554.6	PHEV	11682.84	18273.16	1	8
2049	0	76014.98	337904.1	0	337904.1	1994649	0	1994649	BEV	0	76014.98	1	3
2049	0	33298.23	148018.3	57727.14	90291.16	872577.6	340305.2	532272.3	PHEV	12986.31	20311.92	1	8
2049	0	82894.38	373233.6	0	373233.6	2269191	0	2269191	BEV	0	82894.38	1	3
2049	0	36311.74	163494.3	63762.79	99731.54	992928.4	387242.1	605686.3	PHEV	14161.58	22150.16	1	8
2049	0	90178.65	411197.5	0	411197.5	2573564	0	2573564	BEV	0	90178.65	1	3
2049	0	39502.6	180124.4	70248.5	109875.9	1126388	439291.2	687096.5	PHEV	15406.01	24096.59	1	8
2049	0	96348.52	444850.7	0	444850.7	2864740	0	2864740	BEV	0	96348.52	1	3
2049	0	42205.3	194866.1	75997.78	118868.3	1254105	489100.9	765003.9	PHEV	16460.07	25745.23	1	8

2049	0	102904	481013.6	0	481013.6	3185856	0	3185856	BEV	0	102904	1	3
2049	0	45076.93	210707.2	82175.8	128531.4	1394972	544039	850932.9	PHEV	17580	27496.93	1	8
2049	0	108345.8	512657.8	0	512657.8	3490850	0	3490850	BEV	0	108345.8	1	3
2049	0	47460.71	224568.9	87581.86	136987	1528918	596277.9	932639.9	PHEV	18509.68	28951.03	1	8
2049	0	114361.3	547672.9	0	547672.9	3832433	0	3832433	BEV	0	114361.3	1	3
2049	0	50095.77	239907.2	93563.79	146343.4	1678982	654802.9	1024179	PHEV	19537.35	30558.42	1	8
2049	0	119002.2	576715.8	0	576715.8	4146169	0	4146169	BEV	0	119002.2	1	3
2049	0	52128.73	252629.4	98525.46	154103.9	1816951	708611	1108340	PHEV	20330.2	31798.53	1	8
2049	0	124323.7	609627.5	0	609627.5	4499801	0	4499801	BEV	0	124323.7	1	3
2049	0	54459.79	267046.3	104148.1	162898.2	1972405	769238.1	1203167	PHEV	21239.32	33220.47	1	8
2049	0	128327.3	636611.2	0	636611.2	4822486	0	4822486	BEV	0	128327.3	1	3
2049	0	56213.55	278866.4	108757.9	170108.5	2114397	824614.7	1289782	PHEV	21923.28	34290.27	1	8
2049	0	131492.8	659848	0	659848	5126259	0	5126259	BEV	0	131492.8	1	3
2049	0	57600.2	289045.3	112727.7	176317.6	2248028	876731.1	1371297	PHEV	22464.08	35136.12	1	8
2049	0	134871	684526.8	0	684526.8	5444733	0	5444733	BEV	0	134871	1	3
2049	0	59079.99	299855.8	116943.7	182912	2387665	931189.5	1456476	PHEV	23041.2	36038.79	1	8
2049	0	135927.1	697674.2	0	697674.2	5663899	0	5663899	BEV	0	135927.1	1	3
2049	0	59542.62	305615	119189.8	186425.1	2483069	968397	1514672	PHEV	23221.62	36321	1	8
2049	0	122043.5	633405.7	0	633405.7	5234709	0	5234709	BEV	0	122043.5	1	3
2049	0	53460.94	277462.3	108210.3	169252	2293740	894558.7	1399181	PHEV	20849.77	32611.17	1	8
2049	0	0.328053	1.101181	0	1.101181	3.499833	0	3.499833	BEV	0	0.328053	2	3
2049	0	2.845355	9.55106	5.730636	3.820424	42.86227	25.71736	17.14491	PHEV	1.707213	1.138142	2	8
2049	0	161.856	561.8506	0	561.8506	2296.8	0	2296.8	BEV	0	161.856	2	3
2049	0	124.294	431.4618	256.4116	175.0502	2091.903	1243.188	848.7148	PHEV	73.86615	50.42786	2	8
2049	0	372.5801	1314.682	0	1314.682	5420.181	0	5420.181	BEV	0	372.5801	2	3
2049	0	286.9544	1012.544	595.9546	416.5897	4956.787	2917.423	2039.364	PHEV	168.8931	118.0612	2	8
2049	0	487.1403	1746.827	0	1746.827	7418.056	0	7418.056	BEV	0	487.1403	2	3
2049	0	357.8181	1283.093	747.8597	535.233	5991.58	3492.235	2499.345	PHEV	208.5568	149.2613	2	8
2049	0	680.0759	2477.632	0	2477.632	10705.7	0	10705.7	BEV	0	680.0759	2	3
2049	0	432.923	1577.212	910.2767	666.9354	7432.964	4289.882	3143.082	PHEV	249.8584	183.0646	2	8
2049	0	849.7487	3144.461	0	3144.461	13779.32	0	13779.32	BEV	0	849.7487	2	3
2049	0	533.5243	1974.285	1128.163	846.1222	9398.331	5370.475	4027.856	PHEV	304.871	228.6533	2	8
2049	0	1018.35	3826.704	0	3826.704	17021.22	0	17021.22	BEV	0	1018.35	2	3
2049	0	663.6315	2493.761	1410.756	1083.005	12007.49	6792.81	5214.683	PHEV	375.4258	288.2057	2	8
2049	0	1270.484	4846.947	0	4846.947	22028.25	0	22028.25	BEV	0	1270.484	2	3
2049	0	774.2118	2953.649	1654.043	1299.606	14398.68	8063.259	6335.418	PHEV	433.5586	340.6532	2	8
2049	0	1417.51	5489.068	0	5489.068	25435.58	0	25435.58	BEV	0	1417.51	2	3
2049	0	893.7149	3460.759	1903.417	1557.342	17014.92	9358.205	7656.713	PHEV	491.5432	402.1717	2	8
2049	0	1704.52	6698.117	0	6698.117	31551.11	0	31551.11	BEV	0	1704.52	2	3
2049	0	1208.562	4749.19	2564.563	2184.627	23849.22	12878.58	10970.64	PHEV	652.6235	555.9386	2	8
2049	0	2143.431	8545.668	0	8545.668	41180.42	0	41180.42	BEV	0	2143.431	2	3
2049	0	1520.103	6060.516	3212.073	2848.442	30951.69	16404.4	14547.29	PHEV	805.6548	714.4486	2	8
2049	0	2730.105	11041.09	0	11041.09	54581.86	0	54581.86	BEV	0	2730.105	2	3
2049	0	1816.66	7346.938	3820.408	3526.53	38069.79	19796.29	18273.5	PHEV	944.6634	871.997	2	8
2049	0	3302.593	13545.55	0	13545.55	68503.82	0	68503.82	BEV	0	3302.593	2	3
2049	0	2245.445	9209.672	4696.933	4512.739	48470.08	24719.74	23750.34	PHEV	1145.177	1100.268	2	8
2049	0	3646.755	15166.05	0	15166.05	78506.24	0	78506.24	BEV	0	3646.755	2	3

2049	0	2479.442	10311.46	5258.842	5052.613	55003.64	28051.86	26951.78	PHEV	1264.516	1214.927	2	8
2049	0	4011.764	16913.88	0	16913.88	89666.58	0	89666.58	BEV	0	4011.764	2	3
2049	0	2727.613	11499.81	5864.903	5634.906	62283.51	31764.59	30518.92	PHEV	1391.083	1336.531	2	8
2049	0	4364.406	18650.68	0	18650.68	101306.9	0	101306.9	BEV	0	4364.406	2	3
2049	0	2967.376	12680.67	6467.139	6213.526	69838.39	35617.58	34220.81	PHEV	1513.362	1454.014	2	8
2049	0	4734.926	20505.31	0	20505.31	114160	0	114160	BEV	0	4734.926	2	3
2049	0	3219.294	13941.64	7110.235	6831.402	78183.75	39873.71	38310.04	PHEV	1641.84	1577.454	2	8
2049	0	5075.778	22272.21	0	22272.21	127133.7	0	127133.7	BEV	0	5075.778	2	3
2049	0	3451.04	15142.96	7722.909	7420.049	86580.26	44155.93	42424.33	PHEV	1760.031	1691.01	2	8
2049	0	5453.664	24242.79	0	24242.79	141917.1	0	141917.1	BEV	0	5453.664	2	3
2049	0	3707.967	16482.77	8406.211	8076.555	96184.48	49054.09	47130.4	PHEV	1891.063	1816.904	2	8
2049	0	5797.236	26102.17	0	26102.17	156745.3	0	156745.3	BEV	0	5797.236	2	3
2049	0	3941.563	17746.96	9050.952	8696.013	105807.9	53962.05	51845.89	PHEV	2010.197	1931.366	2	8
2049	0	6172.61	28145.93	0	28145.93	173386.9	0	173386.9	BEV	0	6172.61	2	3
2049	0	4196.781	19136.52	9759.626	9376.896	116647.7	59490.35	57157.39	PHEV	2140.358	2056.422	2	8
2049	0	6502.706	30023.64	0	30023.64	189768.3	0	189768.3	BEV	0	6502.706	2	3
2049	0	4421.214	20413.19	10410.73	10002.46	127327.6	64937.08	62390.53	PHEV	2254.819	2166.395	2	8
2049	0	6850.445	32021.65	0	32021.65	207647.4	0	207647.4	BEV	0	6850.445	2	3
2049	0	4657.643	21771.64	11103.54	10668.1	139016.2	70898.28	68117.95	PHEV	2375.398	2282.245	2	8
2049	0	7103.298	33610.54	0	33610.54	223643.3	0	223643.3	BEV	0	7103.298	2	3
2049	0	4829.559	22851.93	11654.48	11197.45	149490.7	76240.27	73250.45	PHEV	2463.075	2366.484	2	8
2049	0	7382.666	35355.37	0	35355.37	241352.9	0	241352.9	BEV	0	7382.666	2	3
2049	0	5019.503	24038.25	12259.51	11778.74	161139.8	82181.31	78958.51	PHEV	2559.946	2459.556	2	8
2049	0	7663.203	37137.87	0	37137.87	260073.1	0	260073.1	BEV	0	7663.203	2	3
2049	0	5210.241	25250.18	12877.59	12372.59	173502.8	88486.43	85016.37	PHEV	2657.223	2553.018	2	8
2049	0	7945.139	38959.39	0	38959.39	279846.8	0	279846.8	BEV	0	7945.139	2	3
2049	0	5401.93	26488.64	13509.2	12979.43	186617.1	95174.72	91442.38	PHEV	2754.984	2646.946	2	8
2049	0	8120.331	40283.66	0	40283.66	296778.5	0	296778.5	BEV	0	8120.331	2	3
2049	0	5521.043	27389.01	13968.4	13420.62	197900.3	100929.2	96971.16	PHEV	2815.732	2705.311	2	8
2049	0	8227.723	41287.78	0	41287.78	311940.1	0	311940.1	BEV	0	8227.723	2	3
2049	0	5594.06	28071.72	14316.58	13755.14	208068.1	106114.8	101953.4	PHEV	2852.97	2741.089	2	8
2049	0	8337.283	42315.21	0	42315.21	327768.4	0	327768.4	BEV	0	8337.283	2	3
2049	0	5668.55	28770.27	14672.84	14097.43	218722.1	111548.3	107173.8	PHEV	2890.96	2777.589	2	8
2049	0	8453.656	43390.17	0	43390.17	344403.2	0	344403.2	BEV	0	8453.656	2	3
2049	0	5747.673	29501.14	15045.58	14455.56	229947.7	117273.3	112674.4	PHEV	2931.313	2816.36	2	8
2049	0	7714.996	40040.83	0	40040.83	325487.5	0	325487.5	BEV	0	7714.996	2	3
2049	0	5245.455	27223.91	13884.19	13339.72	217428.9	110888.7	106540.2	PHEV	2675.182	2570.273	2	8
2049	0	75.54008	257.8946	154.7367	103.1578	1128.675	677.2048	451.4699	PHEV	45.32405	30.21603	3	8
2049	0	287.4156	997.7056	0	997.7056	2815.736	0	2815.736	BEV	0	287.4156	3	3
2049	0	249.6374	866.5664	514.988	351.5784	3839.525	2281.775	1557.75	PHEV	148.356	101.2815	3	8
2049	0	658.4872	2323.532	0	2323.532	8727.858	0	8727.858	BEV	0	658.4872	3	3
2049	0	475.2179	1676.849	986.9455	689.9036	7513.396	4422.17	3091.226	PHEV	279.6997	195.5182	3	8
2049	0	835.4795	2995.929	0	2995.929	10289.36	0	10289.36	BEV	0	835.4795	3	3
2049	0	804.7002	2885.558	1681.868	1203.69	13063.56	7614.191	5449.372	PHEV	469.0252	335.6749	3	8
2049	0	1140.232	4154.057	0	4154.057	14530.71	0	14530.71	BEV	0	1140.232	3	3
2049	0	909.218	3312.436	1911.749	1400.687	15169.97	8755.241	6414.731	PHEV	524.7487	384.4693	3	8
2049	0	1508.642	5582.671	0	5582.671	20020.3	0	20020.3	BEV	0	1508.642	3	3

2049	0	1078.921	3992.505	2281.431	1711.073	18525.77	10586.15	7939.614	PHEV	616.5264	462.3948	3	8
2049	0	1826.919	6865.106	0	6865.106	24812.48	0	24812.48	BEV	0	1826.919	3	3
2049	0	1273.379	4785.038	2706.964	2078.074	22526.34	12743.47	9782.869	PHEV	720.3684	553.0101	3	8
2049	0	2173.887	8293.465	0	8293.465	30155.36	0	30155.36	BEV	0	2173.887	3	3
2049	0	1597.718	6095.357	3413.4	2681.957	29150.76	16324.42	12826.33	PHEV	894.7219	702.9958	3	8
2049	0	2824.586	10937.73	0	10937.73	42361.06	0	42361.06	BEV	0	2824.586	3	3
2049	0	1754.681	6794.704	3737.087	3057.617	32888.25	18088.54	14799.71	PHEV	965.0745	789.6064	3	8
2049	0	3574.252	14045.45	0	14045.45	57134.06	0	57134.06	BEV	0	3574.252	3	3
2049	0	2193.689	8620.364	4654.997	3965.367	42325.4	22855.72	19469.68	PHEV	1184.592	1009.097	3	8
2049	0	4663.228	18591.87	0	18591.87	79396.09	0	79396.09	BEV	0	4663.228	3	3
2049	0	2743.963	10939.93	5798.165	5141.769	54556.04	28914.7	25641.34	PHEV	1454.3	1289.663	3	8
2049	0	6103.426	24683.48	0	24683.48	108955.7	0	108955.7	BEV	0	6103.426	3	3
2049	0	3511.981	14203.15	7385.64	6817.514	73088.49	38006.01	35082.48	PHEV	1826.23	1685.751	3	8
2049	0	7946.376	32591.98	0	32591.98	146641.1	0	146641.1	BEV	0	7946.376	3	3
2049	0	4556.626	18688.96	9531.368	9157.589	100891.1	51454.47	49436.65	PHEV	2323.879	2232.747	3	8
2049	0	9377.322	38998.22	0	38998.22	179471.6	0	179471.6	BEV	0	9377.322	3	3
2049	0	5377.162	22362.44	11404.84	10957.59	122792	62623.94	60168.1	PHEV	2742.353	2634.81	3	8
2049	0	10792.05	45500.06	0	45500.06	214268.2	0	214268.2	BEV	0	10792.05	3	3
2049	0	6188.401	26090.73	13306.27	12784.46	145867.2	74392.26	71474.92	PHEV	3156.084	3032.316	3	8
2049	0	12267.59	52423.82	0	52423.82	252729.7	0	252729.7	BEV	0	12267.59	3	3
2049	0	7034.504	30060.97	15331.09	14729.87	171277.3	87351.41	83925.86	PHEV	3587.597	3446.907	3	8
2049	0	13870.44	60068.01	0	60068.01	296554.6	0	296554.6	BEV	0	13870.44	3	3
2049	0	7953.613	34444.32	17566.6	16877.71	200178.3	102090.9	98087.37	PHEV	4056.343	3897.271	3	8
2049	0	15386.58	67515.4	0	67515.4	341508.6	0	341508.6	BEV	0	15386.58	3	3
2049	0	8823.004	38714.81	19744.55	18970.26	229727.6	117161.1	112566.5	PHEV	4499.732	4323.272	3	8
2049	0	16958.07	75382.53	0	75382.53	390799.9	0	390799.9	BEV	0	16958.07	3	3
2049	0	9724.131	43226	22045.26	21180.74	262109.8	133676	128433.8	PHEV	4959.307	4764.824	3	8
2049	0	18295.21	82374.55	0	82374.55	437815.7	0	437815.7	BEV	0	18295.21	3	3
2049	0	10490.87	47235.37	24090.04	23145.33	292912.1	149385.2	143527	PHEV	5350.346	5140.529	3	8
2049	0	19765.37	90126.33	0	90126.33	491191.3	0	491191.3	BEV	0	19765.37	3	3
2049	0	11333.9	51680.42	26357.01	25323.4	327942.5	167250.7	160691.8	PHEV	5780.287	5553.61	3	8
2049	0	20961.42	96780.96	0	96780.96	540971.6	0	540971.6	BEV	0	20961.42	3	3
2049	0	12019.74	55496.33	28303.13	27193.2	360569.7	183890.6	176679.2	PHEV	6130.066	5889.671	3	8
2049	0	22160.86	103588.5	0	103588.5	593849.1	0	593849.1	BEV	0	22160.86	3	3
2049	0	12707.52	59399.92	30293.96	29105.96	395268.6	201587	193681.6	PHEV	6480.837	6226.686	3	8
2049	0	23011.91	108885	0	108885	640335.3	0	640335.3	BEV	0	23011.91	3	3
2049	0	13195.54	62437.05	31842.9	30594.16	425794.2	217155	208639.1	PHEV	6729.723	6465.813	3	8
2049	0	23783.73	113899.6	0	113899.6	687079	0	687079	BEV	0	23783.73	3	3
2049	0	13638.11	65312.51	33309.38	32003.13	456555.4	232843.2	223712.1	PHEV	6955.437	6682.675	3	8
2049	0	24358.87	118049.4	0	118049.4	730517.7	0	730517.7	BEV	0	24358.87	3	3
2049	0	13967.91	67692.12	34522.98	33169.14	485204.5	247454.3	237750.2	PHEV	7123.633	6844.275	3	8
2049	0	25014.91	122661.9	0	122661.9	778579.8	0	778579.8	BEV	0	25014.91	3	3
2049	0	14344.1	70337.01	35871.87	34465.13	516998.8	263669.4	253329.4	PHEV	7315.491	7028.609	3	8
2049	0	25536.33	126681.7	0	126681.7	824699.9	0	824699.9	BEV	0	25536.33	3	3
2049	0	14643.09	72642.04	37047.44	35594.6	547612.7	279282.5	268330.2	PHEV	7467.977	7175.115	3	8
2049	0	25943.16	130186.2	0	130186.2	869006.8	0	869006.8	BEV	0	25943.16	3	3
2049	0	14876.38	74651.61	38072.32	36579.29	577108.7	294325.5	282783.3	PHEV	7586.953	7289.426	3	8

2049	0	26612.33	135068.8	0	135068.8	924353.2	0	924353.2	BEV	0	26612.33	3	3
2049	0	15260.09	77451.39	39500.21	37951.18	614030.4	313155.5	300874.9	PHEV	7782.648	7477.446	3	8
2049	0	27311.53	140182.2	0	140182.2	983189.9	0	983189.9	BEV	0	27311.53	3	3
2049	0	15661.03	80383.54	40995.6	39387.93	653333.5	333200.1	320133.4	PHEV	7987.126	7673.906	3	8
2049	0	24720.12	128297.4	0	128297.4	921343.6	0	921343.6	BEV	0	24720.12	3	3
2049	0	14175.06	73568.55	37519.96	36048.59	612359.2	312303.2	300056	PHEV	7229.279	6945.778	3	8
2049	0	107.7644	361.7349	217.0409	144.694	1370.021	822.0124	548.0083	PHEV	64.65864	43.10576	4	8
2049	0	0.255776	0.873223	0	0.873223	1.991754	0	1.991754	BEV	0	0.255776	4	3
2049	0	312.9998	1068.585	641.1507	427.4338	4306.617	2583.97	1722.647	PHEV	187.7999	125.1999	4	8
2049	0	143.3246	497.5227	0	497.5227	1248.124	0	1248.124	BEV	0	143.3246	4	3
2049	0	372.9011	1294.452	769.274	525.1775	5797.172	3445.177	2351.996	PHEV	221.6098	151.2913	4	8
2049	0	328.9421	1160.702	0	1160.702	3467.361	0	3467.361	BEV	0	328.9421	4	3
2049	0	443.0014	1563.17	920.0374	643.1329	6946.987	4088.798	2858.189	PHEV	260.738	182.2634	4	8
2049	0	563.3631	2020.152	0	2020.152	6329.117	0	6329.117	BEV	0	563.3631	4	3
2049	0	546.7695	1960.65	1142.779	817.8711	8528.475	4970.882	3557.592	PHEV	318.6885	228.081	4	8
2049	0	645.4338	2351.425	0	2351.425	6627.474	0	6627.474	BEV	0	645.4338	4	3
2049	0	630.4733	2296.921	1325.652	971.2696	10153.27	5859.885	4293.381	PHEV	363.8732	266.6001	4	8
2049	0	774.5221	2866.088	0	2866.088	7930.71	0	7930.71	BEV	0	774.5221	4	3
2049	0	727.7735	2693.097	1538.912	1154.184	12091.27	6909.298	5181.974	PHEV	415.8706	311.9029	4	8
2049	0	947.9951	3562.329	0	3562.329	9993.74	0	9993.74	BEV	0	947.9951	4	3
2049	0	1090.684	4098.516	2318.589	1779.927	18661.11	10556.86	8104.252	PHEV	617.0153	473.6683	4	8
2049	0	1222.239	4662.891	0	4662.891	13502.62	0	13502.62	BEV	0	1222.239	4	3
2049	0	1340.818	5115.275	2864.554	2250.721	23653.48	13245.95	10407.53	PHEV	750.8582	589.96	4	8
2049	0	1348.505	5221.858	0	5221.858	15476.61	0	15476.61	BEV	0	1348.505	4	3
2049	0	1398.889	5416.96	2979.328	2437.632	25373.66	13955.51	11418.15	PHEV	769.389	629.5001	4	8
2049	0	1671.807	6569.564	0	6569.564	20455.38	0	20455.38	BEV	0	1671.807	4	3
2049	0	1688.296	6634.362	3582.555	3051.806	31540.76	17032.01	14508.75	PHEV	911.6799	776.6162	4	8
2049	0	2037.319	8122.608	0	8122.608	26680.09	0	26680.09	BEV	0	2037.319	4	3
2049	0	2014.007	8029.666	4255.723	3773.943	38794.19	20560.92	18233.27	PHEV	1067.424	946.5834	4	8
2049	0	2468.21	9981.934	0	9981.934	35282.18	0	35282.18	BEV	0	2468.21	4	3
2049	0	2441.745	9874.905	5134.951	4739.955	48555.19	25248.7	23306.49	PHEV	1269.707	1172.038	4	8
2049	0	2989.69	12262.18	0	12262.18	46446.33	0	46446.33	BEV	0	2989.69	4	3
2049	0	2942.847	12070.06	6155.73	5914.329	60480.34	30844.98	29635.37	PHEV	1500.852	1441.995	4	8
2049	0	3360.469	13975.45	0	13975.45	54429.4	0	54429.4	BEV	0	3360.469	4	3
2049	0	3307.817	13756.48	7015.807	6740.677	70339.59	35873.19	34466.4	PHEV	1686.987	1620.831	4	8
2049	0	3808.406	16056.51	0	16056.51	64307.22	0	64307.22	BEV	0	3808.406	4	3
2049	0	3748.736	15804.93	8060.516	7744.417	82557.72	42104.44	40453.28	PHEV	1911.855	1836.881	4	8
2049	0	4246.087	18145.06	0	18145.06	74724.24	0	74724.24	BEV	0	4246.087	4	3
2049	0	4179.559	17860.76	9108.987	8751.772	95373.79	48640.63	46733.16	PHEV	2131.575	2047.984	4	8
2049	0	4674.129	20242.02	0	20242.02	85713.01	0	85713.01	BEV	0	4674.129	4	3
2049	0	4600.895	19924.87	10161.68	9763.184	108854.6	55515.85	53338.76	PHEV	2346.456	2254.439	4	8
2049	0	5086.508	22319.29	0	22319.29	97168.35	0	97168.35	BEV	0	5086.508	4	3
2049	0	5006.813	21969.59	11204.49	10765.1	122880.7	62669.16	60211.54	PHEV	2553.475	2453.338	4	8
2049	0	5519.775	24536.67	0	24536.67	109810.8	0	109810.8	BEV	0	5519.775	4	3
2049	0	5433.291	24152.23	12317.64	11834.59	138366.2	70566.76	67799.44	PHEV	2770.978	2662.312	4	8
2049	0	5911.712	26617.6	0	26617.6	122436.2	0	122436.2	BEV	0	5911.712	4	3
2049	0	5819.087	26200.56	13362.28	12838.27	153807.3	78441.73	75365.59	PHEV	2967.735	2851.353	4	8

2049	0	6346.489	28938.78	0	28938.78	136786.3	0	136786.3	BEV	0	6346.489	4	3
2049	0	6247.052	28485.37	14527.54	13957.83	171419	87423.7	83995.32	PHEV	3185.997	3061.056	4	8
2049	0	6730.675	31076.2	0	31076.2	150923.4	0	150923.4	BEV	0	6730.675	4	3
2049	0	6625.219	30589.3	15600.54	14988.76	188778.9	96277.25	92501.67	PHEV	3378.862	3246.357	4	8
2049	0	7164.344	33488.94	0	33488.94	167057	0	167057	BEV	0	7164.344	4	3
2049	0	7052.093	32964.23	16811.76	16152.47	208638.6	106405.7	102232.9	PHEV	3596.567	3455.526	4	8
2049	0	7452.242	35261.63	0	35261.63	180649	0	180649	BEV	0	7452.242	4	3
2049	0	7335.48	34709.14	17701.66	17007.48	225404.4	114956.3	110448.2	PHEV	3741.095	3594.385	4	8
2049	0	7792.292	37317.05	0	37317.05	196273.1	0	196273.1	BEV	0	7792.292	4	3
2049	0	7670.202	36732.37	18733.51	17998.86	244738.9	124816.9	119922.1	PHEV	3911.803	3758.399	4	8
2049	0	8069.328	39106.06	0	39106.06	211110.2	0	211110.2	BEV	0	8069.328	4	3
2049	0	7942.898	38493.35	19631.61	18861.74	263148.7	134205.8	128942.9	PHEV	4050.878	3892.02	4	8
2049	0	8385.517	41118.8	0	41118.8	227747.7	0	227747.7	BEV	0	8385.517	4	3
2049	0	8254.133	40474.55	20642.02	19832.53	283844.5	144760.7	139083.8	PHEV	4209.608	4044.525	4	8
2049	0	8555.646	42443.19	0	42443.19	241135.8	0	241135.8	BEV	0	8555.646	4	3
2049	0	8421.596	41778.19	21306.88	20471.31	300566.8	153289.1	147277.7	PHEV	4295.014	4126.582	4	8
2049	0	8735.881	43837.78	0	43837.78	255384.2	0	255384.2	BEV	0	8735.881	4	3
2049	0	8599.006	43150.93	22006.98	21143.96	318393.1	162380.5	156012.6	PHEV	4385.493	4213.513	4	8
2049	0	8967.245	45512.54	0	45512.54	271750.2	0	271750.2	BEV	0	8967.245	4	3
2049	0	8826.746	44799.44	22847.72	21951.73	338823.1	172799.8	166023.3	PHEV	4501.641	4325.106	4	8
2049	0	9129.441	46858.77	0	46858.77	286648.2	0	286648.2	BEV	0	9129.441	4	3
2049	0	8986.401	46124.59	23523.54	22601.05	357481.4	182315.5	175165.9	PHEV	4583.064	4403.336	4	8
2049	0	7909.995	41052.87	0	41052.87	256907.4	0	256907.4	BEV	0	7909.995	4	3
2049	0	7786.061	40409.66	20608.92	19800.73	320022.8	163211.6	156811.2	PHEV	3970.891	3815.17	4	8
2049	0	241.0145	753.7872	0	753.7872	2091.452	0	2091.452	BEV	0	241.0145	1	3
2049	0	251.9175	787.8872	472.7323	315.1549	1807.209	1084.326	722.8838	PHEV	151.1505	100.767	1	8
2049	0	298.6145	951.0423	0	951.0423	2718.552	0	2718.552	BEV	0	298.6145	1	3
2049	0	377.0233	1200.763	720.4575	480.305	2888.02	1732.812	1155.208	PHEV	226.214	150.8093	1	8
2049	0	709.3212	2299.719	0	2299.719	6810.236	0	6810.236	BEV	0	709.3212	1	3
2049	0	337.3013	1093.578	656.1467	437.4312	2758.462	1655.077	1103.385	PHEV	202.3808	134.9205	1	8
2049	0	216.8813	715.5846	0	715.5846	1498.661	0	1498.661	BEV	0	216.8813	3	3
2049	0	19.73779	65.12346	39.07407	26.04938	271.297	162.7782	108.5188	PHEV	11.84267	7.895116	3	8
2049	0	1.542626	4.117638	0	4.117638	10.01263	0	10.01263	BEV	0	1.542626	1	3
2049	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2049	0	53.66432	164.764	0	164.764	445.3781	0	445.3781	BEV	0	53.66432	1	3
2049	0	112.8044	346.3399	207.8039	138.5359	750.6769	450.4062	300.2708	PHEV	67.68262	45.12175	1	8
2049	0	480.4737	1585.289	0	1585.289	4851.988	0	4851.988	BEV	0	480.4737	1	3
2049	0	345.5249	1140.035	684.0211	456.014	3011.844	1807.106	1204.737	PHEV	207.3149	138.2099	1	8
2049	0	68.09869	205.18	0	205.18	543.3612	0	543.3612	BEV	0	68.09869	1	3
2049	0	18.92944	57.03401	34.22041	22.81361	118.6605	71.19631	47.46421	PHEV	11.35766	7.571775	1	8
2049	0	45.89421	146.1662	0	146.1662	417.1847	0	417.1847	BEV	0	45.89421	2	3
2049	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2049	0	11.10558	35.3696	0	35.3696	70.19105	0	70.19105	BEV	0	11.10558	3	3
2049	0	5.028259	16.01425	9.608551	6.4057	62.54154	37.52493	25.01662	PHEV	3.016955	2.011304	3	8
2049	0	12.06091	35.6483	0	35.6483	92.8807	0	92.8807	BEV	0	12.06091	1	3
2049	0	1.28568	3.800073	2.280044	1.520029	7.552229	4.531338	3.020892	PHEV	0.771408	0.514272	1	8
2049	0	18.0094	55.29372	0	55.29372	148.558	0	148.558	BEV	0	18.0094	2	3

2049	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2049	0	1.602362	4.368887	0	4.368887	10.7737	0	10.7737	BEV	0	1.602362	1	3
2049	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2049	0	7.753412	22.0283	0	22.0283	54.06062	0	54.06062	BEV	0	7.753412	1	3
2049	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2049	0	6.861113	19.88625	0	19.88625	51.51954	0	51.51954	BEV	0	6.861113	1	3
2049	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2049	0	22.51931	70.4305	0	70.4305	194.2958	0	194.2958	BEV	0	22.51931	2	3
2049	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2049	0	2.725327	7.58682	0	7.58682	18.78076	0	18.78076	BEV	0	2.725327	1	3
2049	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2049	0	2.513825	7.142052	0	7.142052	17.71962	0	17.71962	BEV	0	2.513825	2	3
2049	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2049	0	0.245687	0.669874	0	0.669874	1.308381	0	1.308381	BEV	0	0.245687	4	3
2049	0	0	0	0	0	0	0	0	PHEV	0	0	4	8
2049	0	1.883027	5.457766	0	5.457766	10.0906	0	10.0906	BEV	0	1.883027	3	3
2049	0	0	0	0	0	0	0	0	PHEV	0	0	3	8
2049	0	1.012973	3.052067	0	3.052067	5.76381	0	5.76381	BEV	0	1.012973	3	3
2049	0	0.701289	2.11297	1.267782	0.845188	7.640475	4.584285	3.05619	PHEV	0.420773	0.280516	3	8
2049	0	0.140241	0.454682	0	0.454682	0.905782	0	0.905782	BEV	0	0.140241	4	3
2049	0	0	0	0	0	0	0	0	PHEV	0	0	4	8
2049	0	0.647933	1.766608	0	1.766608	4.288052	0	4.288052	BEV	0	0.647933	2	3
2049	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2049	0	0.371161	1.033246	0	1.033246	2.54164	0	2.54164	BEV	0	0.371161	2	3
2049	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2049	0	1.067274	3.093387	0	3.093387	7.972139	0	7.972139	BEV	0	1.067274	2	3
2049	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2049	0	1.326565	3.768917	0	3.768917	6.670851	0	6.670851	BEV	0	1.326565	3	3
2049	0	0	0	0	0	0	0	0	PHEV	0	0	3	8
2049	0	0.707195	2.211794	0	2.211794	4.291839	0	4.291839	BEV	0	0.707195	3	3
2049	0	0.540796	1.691372	1.014823	0.676549	6.603466	3.96208	2.641387	PHEV	0.324478	0.216318	3	8
2049	0	0.315913	0.843249	0	0.843249	1.445	0	1.445	BEV	0	0.315913	4	3
2049	0	0	0	0	0	0	0	0	PHEV	0	0	4	8
2049	0	0.223049	0.633707	0	0.633707	1.104371	0	1.104371	BEV	0	0.223049	4	3
2049	0	0	0	0	0	0	0	0	PHEV	0	0	4	8
2049	0	0.133001	0.35501	0	0.35501	0.852751	0	0.852751	BEV	0	0.133001	2	3
2049	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2049	0	1.071416	3.166774	0	3.166774	5.747611	0	5.747611	BEV	0	1.071416	3	3
2049	0	0	0	0	0	0	0	0	PHEV	0	0	3	8
2049	0	2.320004	7.12304	0	7.12304	13.23225	0	13.23225	BEV	0	2.320004	3	3
2049	0	0.594873	1.82642	1.095852	0.730568	8.29708	4.978248	3.318832	PHEV	0.356924	0.237949	3	8
2049	0	0	0	0	0	0	0	0	BEV	0	0	2	3
2049	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2049	0	0	0	0	0	0	0	0	BEV	0	0	2	3
2049	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2049	0	0	0	0	0	0	0	0	BEV	0	0	3	3
2049	0	1.59226	5.162328	3.097397	2.064931	23.9394	14.36364	9.575759	PHEV	0.955356	0.636904	3	8

2049	0	0.068926	0.191878	0	0.191878	0.324307	0	0.324307	BEV	0	0.068926	3	3
2049	0	0	0	0	0	0	0	0	PHEV	0	0	3	8
2049	0	0.160275	0.473723	0	0.473723	1.133244	0	1.133244	BEV	0	0.160275	2	3
2049	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2049	0	0.109345	0.329454	0	0.329454	0.887361	0	0.887361	BEV	0	0.109345	2	3
2049	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2049	0	0.040012	0.106803	0	0.106803	0.168809	0	0.168809	BEV	0	0.040012	3	3
2049	0	0	0	0	0	0	0	0	PHEV	0	0	3	8
2049	0	0.207407	0.577384	0	0.577384	0.966002	0	0.966002	BEV	0	0.207407	4	3
2049	0	0	0	0	0	0	0	0	PHEV	0	0	4	8
2049	0	0	0	0	0	0	0	0	BEV	0	0	4	3
2049	0	0.189666	0.593193	0.355916	0.237277	2.517533	1.51052	1.007013	PHEV	0.1138	0.075867	4	8
2050	0	1549.795	5113.44	0	5113.44	14591.66	0	14591.66	BEV	0	1549.795	1	3
2050	0	1397.968	4612.496	2490.748	2121.748	12428.17	6711.21	5716.957	PHEV	754.9025	643.0651	1	8
2050	0	2109.336	7080.451	0	7080.451	20803.44	0	20803.44	BEV	0	2109.336	1	3
2050	0	1363.254	4576.061	2471.073	2104.988	12984.95	7011.873	5973.077	PHEV	736.157	627.0967	1	8
2050	0	2878.951	9828.767	0	9828.767	30206.19	0	30206.19	BEV	0	2878.951	1	3
2050	0	1411.94	4820.378	2554.8	2265.578	14254.04	7554.643	6699.401	PHEV	748.3283	663.6119	1	8
2050	0	3867.343	13424.71	0	13424.71	42849.14	0	42849.14	BEV	0	3867.343	1	3
2050	0	1474.639	5118.914	2661.835	2457.079	16036.03	8338.737	7697.296	PHEV	766.8123	707.8267	1	8
2050	0	4704.797	16601.3	0	16601.3	55371.18	0	55371.18	BEV	0	4704.797	1	3
2050	0	1769.545	6244	3184.44	3059.56	20484.07	10446.87	10037.19	PHEV	902.4682	867.0773	1	8
2050	0	5677.247	20357.93	0	20357.93	70892.01	0	70892.01	BEV	0	5677.247	1	3
2050	0	2103.815	7544.027	3772.014	3772.014	25885.92	12942.96	12942.96	PHEV	1051.907	1051.907	1	8
2050	0	6989.583	25464.24	0	25464.24	92528.98	0	92528.98	BEV	0	6989.583	1	3
2050	0	2576.083	9385.107	4598.703	4786.405	33619.83	16473.72	17146.11	PHEV	1262.281	1313.802	1	8
2050	0	8561.811	31682.64	0	31682.64	119911.2	0	119911.2	BEV	0	8561.811	1	3
2050	0	3141.773	11626.01	5580.483	6045.524	43400.91	20832.44	22568.48	PHEV	1508.051	1633.722	1	8
2050	0	10715.93	40267.8	0	40267.8	158577	0	158577	BEV	0	10715.93	1	3
2050	0	3879.101	14576.69	6851.046	7725.647	56668.94	26634.4	30034.54	PHEV	1823.178	2055.924	1	8
2050	0	11101.18	42351.43	0	42351.43	173433.8	0	173433.8	BEV	0	11101.18	1	3
2050	0	4616.654	17612.72	7996.174	9616.544	71232.39	32339.5	38892.88	PHEV	2095.961	2520.693	1	8
2050	0	13923.12	53914.92	0	53914.92	228820.7	0	228820.7	BEV	0	13923.12	1	3
2050	0	5892.884	22819.19	9994.805	12824.39	95890.19	41999.9	53890.29	PHEV	2581.083	3311.801	1	8
2050	0	17768.03	69821.59	0	69821.59	306906.8	0	306906.8	BEV	0	17768.03	1	3
2050	0	7592.981	29837.53	12591.44	17246.09	130146.7	54921.92	75224.81	PHEV	3204.238	4388.743	1	8
2050	0	22508.54	89739.52	0	89739.52	408347.5	0	408347.5	BEV	0	22508.54	1	3
2050	0	9738.925	38828.22	15764.26	23063.96	175632.7	71306.86	104325.8	PHEV	3954.004	5784.922	1	8
2050	0	28322.91	114543.5	0	114543.5	539245.9	0	539245.9	BEV	0	28322.91	1	3
2050	0	12406.8	50175.58	19568.48	30607.1	235146.1	91706.98	143439.1	PHEV	4838.652	7568.148	1	8
2050	0	34105.09	139881.7	0	139881.7	681103.3	0	681103.3	BEV	0	34105.09	1	3
2050	0	14939.68	61274.93	23897.22	37377.71	297223.2	115917.1	181306.2	PHEV	5826.474	9113.203	1	8
2050	0	40427.7	168129.9	0	168129.9	846134	0	846134	BEV	0	40427.7	1	3
2050	0	17709.28	73649.01	28723.11	44925.9	369463.8	144090.9	225372.9	PHEV	6906.62	10802.66	1	8
2050	0	47314.56	199481.5	0	199481.5	1036909	0	1036909	BEV	0	47314.56	1	3
2050	0	20726.06	87382.52	34079.18	53303.34	452994.2	176667.7	276326.5	PHEV	8083.163	12642.9	1	8
2050	0	54346.08	232240.4	0	232240.4	1246171	0	1246171	BEV	0	54346.08	1	3

2050	0	23806.21	101732.5	39675.67	62056.82	544648.6	212413	332235.7	PHEV	9284.42	14521.79	1	8
2050	0	61750.53	267419.9	0	267419.9	1480207	0	1480207	BEV	0	61750.53	1	3
2050	0	27049.71	117142.8	45685.71	71457.13	647151.3	252389	394762.3	PHEV	10549.39	16500.33	1	8
2050	0	69086.37	303146.9	0	303146.9	1730091	0	1730091	BEV	0	69086.37	1	3
2050	0	30263.17	132793	51789.25	81003.7	756636.8	295088.3	461548.4	PHEV	11802.63	18460.53	1	8
2050	0	76769.51	341258.1	0	341258.1	2006998	0	2006998	BEV	0	76769.51	1	3
2050	0	33628.75	149487.5	58300.14	91187.4	877987.9	342415.3	535572.6	PHEV	13115.21	20513.54	1	8
2050	0	83689.72	376814.6	0	376814.6	2282504	0	2282504	BEV	0	83689.72	1	3
2050	0	36660.14	165063	64374.57	100688.4	998765.3	389518.5	609246.8	PHEV	14297.45	22362.68	1	8
2050	0	91019.69	415032.5	0	415032.5	2587982	0	2587982	BEV	0	91019.69	1	3
2050	0	39871.02	181804.3	70903.66	110900.6	1132712	441757.6	690954.1	PHEV	15549.7	24321.32	1	8
2050	0	97217.86	448864.6	0	448864.6	2879932	0	2879932	BEV	0	97217.86	1	3
2050	0	42586.12	196624.4	76683.5	119940.9	1260771	491700.7	769070.3	PHEV	16608.59	25977.53	1	8
2050	0	103799.3	485198.4	0	485198.4	3201740	0	3201740	BEV	0	103799.3	1	3
2050	0	45469.1	212540.3	82890.72	129649.6	1401946	546758.8	855186.8	PHEV	17732.95	27736.15	1	8
2050	0	109258.2	516975	0	516975	3507294	0	3507294	BEV	0	109258.2	1	3
2050	0	47860.38	226460	88319.4	138140.6	1536141	599095.2	937046.3	PHEV	18665.55	29194.83	1	8
2050	0	115294.5	552141.7	0	552141.7	3849501	0	3849501	BEV	0	115294.5	1	3
2050	0	50504.54	241864.7	94327.25	147537.5	1686484	657728.8	1028755	PHEV	19696.77	30807.77	1	8
2050	0	119941	581265.5	0	581265.5	4163539	0	4163539	BEV	0	119941	1	3
2050	0	52539.97	254622.3	99302.71	155319.6	1824592	711590.9	1113001	PHEV	20490.59	32049.38	1	8
2050	0	125272.3	614278.8	0	614278.8	4517502	0	4517502	BEV	0	125272.3	1	3
2050	0	54875.3	269083.8	104942.7	164141.1	1980196	772276.6	1207920	PHEV	21401.37	33473.93	1	8
2050	0	129272.9	641302.2	0	641302.2	4840258	0	4840258	BEV	0	129272.9	1	3
2050	0	56627.77	280921.3	109559.3	171362	2122228	827669	1294559	PHEV	22084.83	34542.94	1	8
2050	0	132427.3	664537.2	0	664537.2	5143822	0	5143822	BEV	0	132427.3	1	3
2050	0	58009.53	291099.4	113528.8	177570.6	2255774	879752	1376022	PHEV	22623.72	35385.81	1	8
2050	0	135782.5	689153.1	0	689153.1	5461511	0	5461511	BEV	0	135782.5	1	3
2050	0	59479.28	301882.3	117734.1	184148.2	2395072	934078.1	1460994	PHEV	23196.92	36282.36	1	8
2050	0	136785.2	702078.6	0	702078.6	5678773	0	5678773	BEV	0	136785.2	1	3
2050	0	59918.51	307544.3	119942.3	187602	2489645	970961.7	1518684	PHEV	23368.22	36550.29	1	8
2050	0	122759.7	637123	0	637123	5246035	0	5246035	BEV	0	122759.7	1	3
2050	0	53774.68	279090.6	108845.3	170245.3	2298754	896514.2	1402240	PHEV	20972.13	32802.56	1	8
2050	0	0.297743	0.982383	0	0.982383	3.013259	0	3.013259	BEV	0	0.297743	2	3
2050	0	2.582467	8.52067	5.112402	3.408268	37.70154	22.62093	15.08062	PHEV	1.54948	1.032987	2	8
2050	0	145.8531	497.9441	0	497.9441	1988.586	0	1988.586	BEV	0	145.8531	2	3
2050	0	112.005	382.3861	227.2466	155.1395	1835.267	1090.673	744.594	PHEV	66.56295	45.44201	2	8
2050	0	328.6034	1140.681	0	1140.681	4593.965	0	4593.965	BEV	0	328.6034	2	3
2050	0	253.0843	878.5315	517.0785	361.453	4266.27	2511.005	1755.265	PHEV	148.9582	104.1261	2	8
2050	0	430.8541	1520.307	0	1520.307	6324.015	0	6324.015	BEV	0	430.8541	2	3
2050	0	316.4743	1116.708	650.8812	465.8268	5153.033	3003.482	2149.551	PHEV	184.4593	132.015	2	8
2050	0	594.8075	2132.908	0	2132.908	9020.476	0	9020.476	BEV	0	594.8075	2	3
2050	0	378.6428	1357.768	783.6258	574.1417	6317.714	3646.224	2671.491	PHEV	218.531	160.1118	2	8
2050	0	748.5394	2727.056	0	2727.056	11681.83	0	11681.83	BEV	0	748.5394	2	3
2050	0	469.9789	1712.213	978.4075	733.8056	8040.445	4594.54	3445.905	PHEV	268.5594	201.4195	2	8
2050	0	901.6453	3336.502	0	3336.502	14485.56	0	14485.56	BEV	0	901.6453	2	3
2050	0	587.5783	2174.31	1230.038	944.2717	10313.88	5834.707	4479.169	PHEV	332.4014	255.1769	2	8

2050	0	1128.166	4239.365	0	4239.365	18799.53	0	18799.53	BEV	0	1128.166	2	3
2050	0	687.4855	2583.399	1446.703	1136.695	12400.94	6944.529	5456.416	PHEV	384.9919	302.4936	2	8
2050	0	1258.35	4800.655	0	4800.655	21742.01	0	21742.01	BEV	0	1258.35	2	3
2050	0	793.3671	3026.727	1664.7	1362.027	14695.19	8082.356	6612.837	PHEV	436.3519	357.0152	2	8
2050	0	1516.226	5871.329	0	5871.329	26975.97	0	26975.97	BEV	0	1516.226	2	3
2050	0	1075.056	4162.97	2248.004	1914.966	20651.96	11152.06	9499.899	PHEV	580.53	494.5255	2	8
2050	0	1918.804	7540.169	0	7540.169	35407.91	0	35407.91	BEV	0	1918.804	2	3
2050	0	1360.799	5347.424	2834.135	2513.289	26951.37	14284.23	12667.15	PHEV	721.2237	639.5757	2	8
2050	0	2462.674	9818.46	0	9818.46	47299.35	0	47299.35	BEV	0	2462.674	2	3
2050	0	1638.707	6533.377	3397.356	3136.021	33370.28	17352.54	16017.73	PHEV	852.1276	786.5793	2	8
2050	0	3000.088	12132.96	0	12132.96	59751.67	0	59751.67	BEV	0	3000.088	2	3
2050	0	2039.771	8249.243	4207.114	4042.129	42744.9	21799.9	20945	PHEV	1040.283	999.4879	2	8
2050	0	3339.3	13696.1	0	13696.1	69000.16	0	69000.16	BEV	0	3339.3	2	3
2050	0	2270.402	9312.033	4749.137	4562.896	48816.75	24896.54	23920.21	PHEV	1157.905	1112.497	2	8
2050	0	3686.202	15330.1	0	15330.1	79053.07	0	79053.07	BEV	0	3686.202	2	3
2050	0	2506.263	10422.99	5315.727	5107.267	55382.59	28245.12	27137.47	PHEV	1278.194	1228.069	2	8
2050	0	4053.833	17091.24	0	17091.24	90263.03	0	90263.03	BEV	0	4053.833	2	3
2050	0	2756.216	11620.4	5926.405	5693.997	62694.19	31974.04	30720.15	PHEV	1405.67	1350.546	2	8
2050	0	4409.065	18841.52	0	18841.52	101956.5	0	101956.5	BEV	0	4409.065	2	3
2050	0	2997.74	12810.42	6533.315	6277.107	70283.12	35844.39	34438.73	PHEV	1528.847	1468.893	2	8
2050	0	4782.133	20709.75	0	20709.75	114862.9	0	114862.9	BEV	0	4782.133	2	3
2050	0	3251.39	14080.63	7181.123	6899.511	78662.58	40117.91	38544.66	PHEV	1658.209	1593.181	2	8
2050	0	5125.202	22489.08	0	22489.08	127889	0	127889	BEV	0	5125.202	2	3
2050	0	3484.644	15290.41	7798.108	7492.3	87092.97	44417.41	42675.55	PHEV	1777.168	1707.475	2	8
2050	0	5505.074	24471.32	0	24471.32	142716.3	0	142716.3	BEV	0	5505.074	2	3
2050	0	3742.921	16638.14	8485.453	8152.69	96725.06	49329.78	47395.28	PHEV	1908.89	1834.031	2	8
2050	0	5849.967	26339.59	0	26339.59	157578.1	0	157578.1	BEV	0	5849.967	2	3
2050	0	3977.415	17908.39	9133.279	8775.111	106370	54248.71	52121.3	PHEV	2028.482	1948.933	2	8
2050	0	6227.197	28394.84	0	28394.84	174265.2	0	174265.2	BEV	0	6227.197	2	3
2050	0	4233.895	19305.76	9845.935	9459.82	117239.3	59792.04	57447.26	PHEV	2159.286	2074.608	2	8
2050	0	6558.271	30280.19	0	30280.19	190674.8	0	190674.8	BEV	0	6558.271	2	3
2050	0	4458.993	20587.62	10499.68	10087.93	127937.4	65248.08	62689.33	PHEV	2274.086	2184.907	2	8
2050	0	6906.79	32285.03	0	32285.03	208574.4	0	208574.4	BEV	0	6906.79	2	3
2050	0	4695.952	21950.71	11194.86	10755.85	139639.3	71216.02	68423.24	PHEV	2394.936	2301.017	2	8
2050	0	7159.902	33878.37	0	33878.37	224585.5	0	224585.5	BEV	0	7159.902	2	3
2050	0	4868.044	23034.03	11747.35	11286.67	150123.7	76563.09	73560.62	PHEV	2482.703	2385.342	2	8
2050	0	7439.589	35627.97	0	35627.97	242307.8	0	242307.8	BEV	0	7439.589	2	3
2050	0	5058.204	24223.59	12354.03	11869.56	161781.2	82508.43	79272.81	PHEV	2579.684	2478.52	2	8
2050	0	7720.192	37414.06	0	37414.06	261032	0	261032	BEV	0	7720.192	2	3
2050	0	5248.988	25437.96	12973.36	12464.6	174147.2	88815.07	85332.13	PHEV	2676.984	2572.004	2	8
2050	0	8002.405	39240.19	0	39240.19	280814.4	0	280814.4	BEV	0	8002.405	2	3
2050	0	5440.865	26679.56	13606.57	13072.98	187267.4	95506.37	91761.02	PHEV	2774.841	2666.024	2	8
2050	0	8176.765	40563.62	0	40563.62	297730.9	0	297730.9	BEV	0	8176.765	2	3
2050	0	5559.413	27579.36	14065.47	13513.89	198541.3	101256.1	97285.25	PHEV	2835.301	2724.113	2	8
2050	0	8283.114	41565.74	0	41565.74	312873.2	0	312873.2	BEV	0	8283.114	2	3
2050	0	5631.72	28260.7	14412.96	13847.75	208696.8	106435.4	102261.4	PHEV	2872.177	2759.543	2	8
2050	0	8391.314	42589.44	0	42589.44	328667.1	0	328667.1	BEV	0	8391.314	2	3

2050	0	5705.286	28956.72	14767.93	14188.79	219328.3	111857.4	107470.9	PHEV	2909.696	2795.59	2	8
2050	0	8505.772	43657.66	0	43657.66	345236.7	0	345236.7	BEV	0	8505.772	2	3
2050	0	5783.107	29683.01	15138.33	14544.67	230510.5	117560.4	112950.2	PHEV	2949.384	2833.722	2	8
2050	0	7760.273	40275.82	0	40275.82	326177.6	0	326177.6	BEV	0	7760.273	2	3
2050	0	5276.239	27383.68	13965.68	13418	217895.4	111126.6	106768.7	PHEV	2690.882	2585.357	2	8
2050	0	69.3105	232.6559	139.5936	93.06237	1000.608	600.3649	400.2433	PHEV	41.5863	27.7242	3	8
2050	0	259.2062	884.9324	0	884.9324	2420.855	0	2420.855	BEV	0	259.2062	3	3
2050	0	225.1359	768.6161	456.7776	311.8385	3351.74	1991.891	1359.849	PHEV	133.795	91.34084	3	8
2050	0	583.9539	2027.079	0	2027.079	7463.26	0	7463.26	BEV	0	583.9539	3	3
2050	0	421.4285	1462.905	861.024	601.8809	6457.517	3800.71	2656.807	PHEV	248.0408	173.3877	3	8
2050	0	745.8954	2631.959	0	2631.959	8832.114	0	8832.114	BEV	0	745.8954	3	3
2050	0	718.4164	2534.997	1477.541	1057.456	11319.76	6597.802	4721.957	PHEV	418.7341	299.6823	3	8
2050	0	1019.556	3656.004	0	3656.004	12481.66	0	12481.66	BEV	0	1019.556	3	3
2050	0	812.9912	2915.289	1682.538	1232.751	13150.99	7589.999	5560.989	PHEV	469.2121	343.7792	3	8
2050	0	1338.909	4877.872	0	4877.872	17059.45	0	17059.45	BEV	0	1338.909	3	3
2050	0	957.5343	3488.46	1993.406	1495.054	15918.99	9096.563	6822.422	PHEV	547.1625	410.3719	3	8
2050	0	1624.75	6012.323	0	6012.323	21163.29	0	21163.29	BEV	0	1624.75	3	3
2050	0	1132.465	4190.641	2370.705	1819.935	19376.05	10961.31	8414.741	PHEV	640.6515	491.8133	3	8
2050	0	1920.413	7216.431	0	7216.431	25525.14	0	25525.14	BEV	0	1920.413	3	3
2050	0	1411.425	5303.781	2970.117	2333.664	24891.54	13939.26	10952.28	PHEV	790.3978	621.0269	3	8
2050	0	2477.198	9450.61	0	9450.61	35722.79	0	35722.79	BEV	0	2477.198	3	3
2050	0	1538.877	5870.879	3228.983	2641.895	27963.24	15379.78	12583.46	PHEV	846.3825	692.4948	3	8
2050	0	3118.373	12075.37	0	12075.37	47923.58	0	47923.58	BEV	0	3118.373	3	3
2050	0	1913.894	7411.23	4002.064	3409.166	35727.81	19293.02	16434.79	PHEV	1033.503	880.3913	3	8
2050	0	4021.419	15802.65	0	15802.65	65857.04	0	65857.04	BEV	0	4021.419	3	3
2050	0	2366.306	9298.684	4928.302	4370.381	45473.74	24101.08	21372.66	PHEV	1254.142	1112.164	3	8
2050	0	5181.131	20656.7	0	20656.7	88944.13	0	88944.13	BEV	0	5181.131	3	3
2050	0	2981.282	11886.1	6180.773	5705.329	59958.57	31178.46	28780.11	PHEV	1550.267	1431.015	3	8
2050	0	6697.437	27085.77	0	27085.77	118735.4	0	118735.4	BEV	0	6697.437	3	3
2050	0	3840.457	15531.58	7921.104	7610.473	82182.24	41912.94	40269.3	PHEV	1958.633	1881.824	3	8
2050	0	8038.268	32968.88	0	32968.88	147766.6	0	147766.6	BEV	0	8038.268	3	3
2050	0	4609.32	18905.08	9641.59	9263.488	101659.1	51846.14	49812.95	PHEV	2350.753	2258.567	3	8
2050	0	9482.45	39435.42	0	39435.42	180789.8	0	180789.8	BEV	0	9482.45	3	3
2050	0	5437.445	22613.14	11532.7	11080.44	123687.6	63080.67	60606.91	PHEV	2773.097	2664.348	3	8
2050	0	10908.64	45991.57	0	45991.57	215758.7	0	215758.7	BEV	0	10908.64	3	3
2050	0	6255.251	26372.58	13450.01	12922.56	146876.1	74906.81	71969.29	PHEV	3190.178	3065.073	3	8
2050	0	12396.59	52975.08	0	52975.08	254419.6	0	254419.6	BEV	0	12396.59	3	3
2050	0	7108.476	30377.08	15492.31	14884.77	172417.3	87932.83	84484.48	PHEV	3625.323	3483.153	3	8
2050	0	14012.47	60683.11	0	60683.11	298458.6	0	298458.6	BEV	0	14012.47	3	3
2050	0	8035.059	34797.03	17746.48	17050.54	201459	102744.1	98714.91	PHEV	4097.88	3937.179	3	8
2050	0	15540.36	68190.15	0	68190.15	343623.8	0	343623.8	BEV	0	15540.36	3	3
2050	0	8911.181	39101.73	19941.88	19159.85	231147.2	117885.1	113262.1	PHEV	4544.702	4366.479	3	8
2050	0	17122.17	76111.97	0	76111.97	393097.3	0	393097.3	BEV	0	17122.17	3	3
2050	0	9818.226	43644.27	22258.58	21385.69	263648.4	134460.7	129187.7	PHEV	5007.296	4810.931	3	8
2050	0	18466.13	83144.14	0	83144.14	440249.7	0	440249.7	BEV	0	18466.13	3	3
2050	0	10588.89	47676.67	24315.1	23361.57	294540	150215.4	144324.6	PHEV	5400.332	5188.554	3	8
2050	0	19944.93	90945.08	0	90945.08	493798.5	0	493798.5	BEV	0	19944.93	3	3

2050	0	11436.86	52149.9	26596.45	25553.45	329683.9	168138.8	161545.1	PHEV	5832.798	5604.061	3	8
2050	0	21145.33	97630.09	0	97630.09	543680.6	0	543680.6	BEV	0	21145.33	3	3
2050	0	12125.19	55983.23	28551.45	27431.78	362377.8	184812.7	177565.1	PHEV	6183.849	5941.345	3	8
2050	0	22348.11	104463.8	0	104463.8	596635.2	0	596635.2	BEV	0	22348.11	3	3
2050	0	12814.9	59901.83	30549.94	29351.9	397127.2	202534.9	194592.3	PHEV	6535.598	6279.3	3	8
2050	0	23200.34	109776.6	0	109776.6	643175.6	0	643175.6	BEV	0	23200.34	3	3
2050	0	13303.58	62948.29	32103.63	30844.66	427688.4	218121.1	209567.3	PHEV	6784.826	6518.755	3	8
2050	0	23972.79	114805	0	114805	689964.3	0	689964.3	BEV	0	23972.79	3	3
2050	0	13746.52	65831.69	33574.16	32257.53	458479.4	233824.5	224654.9	PHEV	7010.727	6735.797	3	8
2050	0	24545.79	118955.3	0	118955.3	733389	0	733389	BEV	0	24545.79	3	3
2050	0	14075.1	68211.58	34787.9	33423.67	487119.7	248431.1	238688.7	PHEV	7178.299	6896.797	3	8
2050	0	25200.2	123570.5	0	123570.5	781432.8	0	781432.8	BEV	0	25200.2	3	3
2050	0	14450.35	70858.01	36137.58	34720.42	518902.1	264640.1	254262	PHEV	7369.678	7080.671	3	8
2050	0	25718.13	127583.5	0	127583.5	827492.8	0	827492.8	BEV	0	25718.13	3	3
2050	0	14747.34	73159.2	37311.19	35848.01	549477.7	280233.6	269244.1	PHEV	7521.144	7226.197	3	8
2050	0	26121.64	131081.8	0	131081.8	871740.2	0	871740.2	BEV	0	26121.64	3	3
2050	0	14978.72	75165.16	38334.23	36830.93	578935	295256.9	283678.2	PHEV	7639.147	7339.572	3	8
2050	0	26787.51	135957.9	0	135957.9	926988.3	0	926988.3	BEV	0	26787.51	3	3
2050	0	15360.54	77961.22	39760.22	38201	615792.6	314054.2	301738.4	PHEV	7833.878	7526.667	3	8
2050	0	27482.07	141057.5	0	141057.5	985654.7	0	985654.7	BEV	0	27482.07	3	3
2050	0	15758.82	80885.45	41251.58	39633.87	654983	334041.3	320941.7	PHEV	8036.998	7721.822	3	8
2050	0	24865.19	129050.3	0	129050.3	923300.8	0	923300.8	BEV	0	24865.19	3	3
2050	0	14258.25	74000.3	37740.15	36260.15	613669.9	312971.7	300698.3	PHEV	7271.705	6986.541	3	8
2050	0	97.31183	321.0736	192.6441	128.4294	1190.454	714.2723	476.1816	PHEV	58.3871	38.92473	4	8
2050	0	0.229288	0.769656	0	0.769656	1.693019	0	1.693019	BEV	0	0.229288	4	3
2050	0	280.5855	941.847	565.1082	376.7388	3726.51	2235.906	1490.604	PHEV	168.3513	112.2342	4	8
2050	0	126.9639	433.456	0	433.456	1049.601	0	1049.601	BEV	0	126.9639	4	3
2050	0	330.3339	1127.763	670.2135	457.5496	4960.002	2947.659	2012.344	PHEV	196.3127	134.0212	4	8
2050	0	290.8862	1009.753	0	1009.753	2923.745	0	2923.745	BEV	0	290.8862	4	3
2050	0	391.7498	1359.881	800.3872	559.494	5929.327	3489.833	2439.495	PHEV	230.5727	161.1771	4	8
2050	0	495.7672	1749.359	0	1749.359	5328.698	0	5328.698	BEV	0	495.7672	4	3
2050	0	481.1646	1697.833	989.5939	708.2388	7256.468	4229.484	3026.984	PHEV	280.4502	200.7144	4	8
2050	0	567.3784	2034.551	0	2034.551	5538.332	0	5538.332	BEV	0	567.3784	4	3
2050	0	554.2272	1987.392	1147.009	840.383	8613.41	4971.168	3642.242	PHEV	319.8683	234.3589	4	8
2050	0	677.5238	2468.334	0	2468.334	6584.139	0	6584.139	BEV	0	677.5238	4	3
2050	0	636.6298	2319.351	1325.343	994.0074	10215.13	5837.215	4377.911	PHEV	363.7885	272.8413	4	8
2050	0	810.2821	2998.416	0	2998.416	8106.028	0	8106.028	BEV	0	810.2821	4	3
2050	0	932.2425	3449.726	1951.559	1498.167	15432.3	8730.273	6702.028	PHEV	527.3829	404.8596	4	8
2050	0	1047.284	3935.433	0	3935.433	10982.55	0	10982.55	BEV	0	1047.284	4	3
2050	0	1148.89	4317.241	2417.655	1899.586	19595.07	10973.24	8621.832	PHEV	643.3783	505.5115	4	8
2050	0	1162.131	4433.576	0	4433.576	12662.57	0	12662.57	BEV	0	1162.131	4	3
2050	0	1205.551	4599.226	2529.574	2069.652	21179.26	11648.59	9530.668	PHEV	663.0532	542.498	4	8
2050	0	1451.797	5621.838	0	5621.838	16881.48	0	16881.48	BEV	0	1451.797	4	3
2050	0	1466.117	5677.288	3065.735	2611.552	26483.66	14301.18	12182.48	PHEV	791.7031	674.4137	4	8
2050	0	1779.757	6993.769	0	6993.769	22180.09	0	22180.09	BEV	0	1779.757	4	3
2050	0	1759.392	6913.744	3664.284	3249.46	32734.97	17349.53	15385.44	PHEV	932.478	826.9145	4	8
2050	0	2184.293	8708.579	0	8708.579	29783.19	0	29783.19	BEV	0	2184.293	4	3

2050	0	2160.872	8615.204	4479.906	4135.298	41454.71	21556.45	19898.26	PHEV	1123.654	1037.219	4	8
2050	0	2663.114	10770.17	0	10770.17	39530.83	0	39530.83	BEV	0	2663.114	4	3
2050	0	2621.388	10601.42	5406.724	5194.695	51918.17	26478.27	25439.9	PHEV	1336.908	1284.48	4	8
2050	0	3023.993	12402.88	0	12402.88	46799.83	0	46799.83	BEV	0	3023.993	4	3
2050	0	2976.612	12208.55	6226.359	5982.188	60930.66	31074.64	29856.03	PHEV	1518.072	1458.54	4	8
2050	0	3397.99	14131.49	0	14131.49	54827.67	0	54827.67	BEV	0	3397.99	4	3
2050	0	3344.75	13910.08	7094.14	6815.939	70844.08	36130.48	34713.6	PHEV	1705.822	1638.927	4	8
2050	0	3849.561	16230.02	0	16230.02	64755.45	0	64755.45	BEV	0	3849.561	4	3
2050	0	3789.246	15975.73	8147.621	7828.107	83122.85	42392.65	40730.2	PHEV	1932.516	1856.731	4	8
2050	0	4290.863	18336.4	0	18336.4	75226.49	0	75226.49	BEV	0	4290.863	4	3
2050	0	4223.634	18049.11	9205.045	8844.063	96004.78	48962.44	47042.34	PHEV	2154.053	2069.58	4	8
2050	0	4722.135	20449.92	0	20449.92	86266.01	0	86266.01	BEV	0	4722.135	4	3
2050	0	4648.149	20129.51	10266.05	9863.458	109547.3	55869.14	53678.19	PHEV	2370.556	2277.593	4	8
2050	0	5137.459	22542.86	0	22542.86	97771.99	0	97771.99	BEV	0	5137.459	4	3
2050	0	5056.965	22189.66	11316.73	10872.93	123635.8	63054.24	60581.53	PHEV	2579.052	2477.913	4	8
2050	0	5573.289	24774.55	0	24774.55	110457.9	0	110457.9	BEV	0	5573.289	4	3
2050	0	5485.966	24386.38	12437.06	11949.33	139174.4	70978.95	68195.47	PHEV	2797.843	2688.124	4	8
2050	0	5967.066	26866.83	0	26866.83	123118.5	0	123118.5	BEV	0	5967.066	4	3
2050	0	5873.574	26445.88	13487.4	12958.48	154659.3	78876.24	75783.06	PHEV	2995.523	2878.051	4	8
2050	0	6404.249	29202.16	0	29202.16	137513.6	0	137513.6	BEV	0	6404.249	4	3
2050	0	6303.907	28744.62	14659.76	14084.86	172327.4	87886.98	84440.43	PHEV	3214.993	3088.914	4	8
2050	0	6789.838	31349.36	0	31349.36	151680.5	0	151680.5	BEV	0	6789.838	4	3
2050	0	6683.455	30858.18	15737.67	15120.51	189725.5	96759.98	92965.48	PHEV	3408.562	3274.893	4	8
2050	0	7225.011	33772.52	0	33772.52	167842.7	0	167842.7	BEV	0	7225.011	4	3
2050	0	7111.81	33243.37	16954.12	16289.25	209622.7	106907.6	102715.1	PHEV	3627.023	3484.787	4	8
2050	0	7513.286	35550.46	0	35550.46	181450	0	181450	BEV	0	7513.286	4	3
2050	0	7395.567	34993.46	17846.66	17146.79	226409.7	115468.9	110940.8	PHEV	3771.739	3623.828	4	8
2050	0	7854.088	37612.99	0	37612.99	197093.2	0	197093.2	BEV	0	7854.088	4	3
2050	0	7731.03	37023.67	18882.07	18141.6	245771.1	125343.3	120427.8	PHEV	3942.825	3788.204	4	8
2050	0	8131.006	39404.97	0	39404.97	211933.5	0	211933.5	BEV	0	8131.006	4	3
2050	0	8003.609	38787.57	19781.66	19005.91	264188.6	134736.2	129452.4	PHEV	4081.841	3921.768	4	8
2050	0	8447.467	41422.58	0	41422.58	228578.6	0	228578.6	BEV	0	8447.467	4	3
2050	0	8315.112	40773.57	20794.52	19979.05	284897.8	145297.9	139599.9	PHEV	4240.707	4074.405	4	8
2050	0	8616.412	42744.64	0	42744.64	241949.9	0	241949.9	BEV	0	8616.412	4	3
2050	0	8481.41	42074.92	21458.21	20616.71	301605	153818.6	147786.5	PHEV	4325.519	4155.891	4	8
2050	0	8795.726	44138.1	0	44138.1	256183	0	256183	BEV	0	8795.726	4	3
2050	0	8657.914	43446.54	22157.73	21288.8	319417	162902.7	156514.3	PHEV	4415.536	4242.378	4	8
2050	0	9026.052	45811	0	45811	272522.6	0	272522.6	BEV	0	9026.052	4	3
2050	0	8884.631	45093.24	22997.55	22095.69	339820	173308.2	166511.8	PHEV	4531.162	4353.469	4	8
2050	0	9186.584	47152.07	0	47152.07	287378.4	0	287378.4	BEV	0	9186.584	4	3
2050	0	9042.648	46413.29	23670.78	22742.51	358432	182800.3	175631.7	PHEV	4611.75	4430.897	4	8
2050	0	7956.416	41293.8	0	41293.8	257461.3	0	257461.3	BEV	0	7956.416	4	3
2050	0	7831.755	40646.81	20729.87	19916.94	320752.1	163583.6	157168.5	PHEV	3994.195	3837.56	4	8
2050	0	232.7143	714.4957	0	714.4957	1922.265	0	1922.265	BEV	0	232.7143	1	3
2050	0	243.2419	746.8182	448.0909	298.7273	1628.073	976.8436	651.2291	PHEV	145.9451	97.29675	1	8
2050	0	279.1479	873.0519	0	873.0519	2415.975	0	2415.975	BEV	0	279.1479	1	3
2050	0	352.4453	1102.294	661.3763	440.9175	2520.662	1512.397	1008.265	PHEV	211.4672	140.9781	1	8

2050	0	662.0213	2108.439	0	2108.439	6038.922	0	6038.922	BEV	0	662.0213	1	3
2050	0	314.8089	1002.619	601.5715	401.0477	2407.914	1444.748	963.1655	PHEV	188.8854	125.9236	1	8
2050	0	199.8622	647.9812	0	647.9812	1310.161	0	1310.161	BEV	0	199.8622	3	3
2050	0	18.18893	58.97105	35.38263	23.58842	241.6317	144.979	96.65267	PHEV	10.91336	7.275571	3	8
2050	0	51.66978	155.68	0	155.68	408.8666	0	408.8666	BEV	0	51.66978	1	3
2050	0	108.6118	327.2451	196.347	130.898	672.0234	403.214	268.8094	PHEV	65.16706	43.44471	1	8
2050	0	441.3362	1430.874	0	1430.874	4229.31	0	4229.31	BEV	0	441.3362	1	3
2050	0	317.3798	1028.99	617.3938	411.5959	2588.671	1553.202	1035.468	PHEV	190.4279	126.9519	1	8
2050	0	65.1505	192.5647	0	192.5647	496.5663	0	496.5663	BEV	0	65.1505	1	3
2050	0	18.10993	53.52732	32.11639	21.41093	105.7168	63.43008	42.28672	PHEV	10.86596	7.24397	1	8
2050	0	40.65254	127.1433	0	127.1433	351.2853	0	351.2853	BEV	0	40.65254	2	3
2050	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2050	0	10.05591	31.45045	0	31.45045	60.42263	0	60.42263	BEV	0	10.05591	3	3
2050	0	4.553001	14.23978	8.543869	5.695913	54.68801	32.8128	21.8752	PHEV	2.7318	1.8212	3	8
2050	0	11.60423	33.63369	0	33.63369	85.54989	0	85.54989	BEV	0	11.60423	1	3
2050	0	1.236999	3.585318	2.151191	1.434127	6.803402	4.082041	2.721361	PHEV	0.742199	0.4948	1	8
2050	0	15.90695	47.92733	0	47.92733	125.1123	0	125.1123	BEV	0	15.90695	2	3
2050	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2050	0	1.558223	4.159272	0	4.159272	10.15341	0	10.15341	BEV	0	1.558223	1	3
2050	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2050	0	7.450727	20.74148	0	20.74148	49.99765	0	49.99765	BEV	0	7.450727	1	3
2050	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2050	0	6.595682	18.73906	0	18.73906	47.52396	0	47.52396	BEV	0	6.595682	1	3
2050	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2050	0	20.49109	62.91317	0	62.91317	168.2669	0	168.2669	BEV	0	20.49109	2	3
2050	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2050	0	2.648747	7.221887	0	7.221887	17.62443	0	17.62443	BEV	0	2.648747	1	3
2050	0	0	0	0	0	0	0	0	PHEV	0	0	1	8
2050	0	2.279693	6.346255	0	6.346255	15.46295	0	15.46295	BEV	0	2.279693	2	3
2050	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2050	0	0.245564	0.65547	0	0.65547	1.269631	0	1.269631	BEV	0	0.245564	4	3
2050	0	0	0	0	0	0	0	0	PHEV	0	0	4	8
2050	0	1.810425	5.143616	0	5.143616	9.315454	0	9.315454	BEV	0	1.810425	3	3
2050	0	0	0	0	0	0	0	0	PHEV	0	0	3	8
2050	0	0.995735	2.943084	0	2.943084	5.408725	0	5.408725	BEV	0	0.995735	3	3
2050	0	0.689355	2.03752	1.222512	0.815008	7.241149	4.344689	2.89646	PHEV	0.413613	0.275742	3	8
2050	0	0.130703	0.416269	0	0.416269	0.801114	0	0.801114	BEV	0	0.130703	4	3
2050	0	0	0	0	0	0	0	0	PHEV	0	0	4	8
2050	0	0.592571	1.581714	0	1.581714	3.799825	0	3.799825	BEV	0	0.592571	2	3
2050	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2050	0	0.335758	0.915454	0	0.915454	2.220082	0	2.220082	BEV	0	0.335758	2	3
2050	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2050	0	0.96525	2.742381	0	2.742381	6.92234	0	6.92234	BEV	0	0.96525	2	3
2050	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2050	0	1.245593	3.467507	0	3.467507	6.02666	0	6.02666	BEV	0	1.245593	3	3
2050	0	0	0	0	0	0	0	0	PHEV	0	0	3	8
2050	0	0.655958	2.013969	0	2.013969	3.788132	0	3.788132	BEV	0	0.655958	3	3

2050	0	0.501615	1.540094	0.924057	0.616038	5.923049	3.553829	2.36922	PHEV	0.300969	0.200646	3	8
2050	0	0.222916	0.620558	0	0.620558	1.061931	0	1.061931	BEV	0	0.222916	4	3
2050	0	0	0	0	0	0	0	0	PHEV	0	0	4	8
2050	0	1.020118	2.956711	0	2.956711	5.239603	0	5.239603	BEV	0	1.020118	3	3
2050	0	0	0	0	0	0	0	0	PHEV	0	0	3	8
2050	0	2.146382	6.467005	0	6.467005	11.66918	0	11.66918	BEV	0	2.146382	3	3
2050	0	0.550354	1.658206	0.994924	0.663283	7.476773	4.486064	2.990709	PHEV	0.330213	0.220142	3	8
2050	0	0	0	0	0	0	0	0	BEV	0	0	2	3
2050	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2050	0	0	0	0	0	0	0	0	BEV	0	0	2	3
2050	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2050	0	0	0	0	0	0	0	0	BEV	0	0	3	3
2050	0	1.479552	4.712151	2.82729	1.88486	21.61782	12.97069	8.64713	PHEV	0.887731	0.591821	3	8
2050	0	0.065385	0.178275	0	0.178275	0.297066	0	0.297066	BEV	0	0.065385	3	3
2050	0	0	0	0	0	0	0	0	PHEV	0	0	3	8
2050	0	0.144551	0.418968	0	0.418968	0.977682	0	0.977682	BEV	0	0.144551	2	3
2050	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2050	0	0.097327	0.287668	0	0.287668	0.754892	0	0.754892	BEV	0	0.097327	2	3
2050	0	0	0	0	0	0	0	0	PHEV	0	0	2	8
2050	0	0.207088	0.564631	0	0.564631	0.931123	0	0.931123	BEV	0	0.207088	4	3
2050	0	0	0	0	0	0	0	0	PHEV	0	0	4	8
2050	0	0	0	0	0	0	0	0	BEV	0	0	4	3
2050	0	0.183049	0.56201	0.337206	0.224804	2.349913	1.409948	0.939965	PHEV	0.109829	0.07322	4	8

Referenced for EV Calculations- Not in Report

Electric Vehicle Fleet Penetration

Year	Scenario	Fleet Type	Size Metric	Mobile Source EV Percent[2]	Fleet Passenger Vehicle Percent from EMFAC2021[3]	Percent of eVMT
2024	Reference	Passenger	%	5.0%	92.9%	4.7%
2025		Passenger	%	5.6%	92.8%	5.2%
2026		Passenger	%	6.0%	92.7%	5.6%
2027		Passenger	%	6.4%	92.6%	5.9%
2024	MSS	Passenger	%	8.9%	92.9%	8.3%
2025		Passenger	%	11.4%	92.8%	10.6%
2026		Passenger	%	14.1%	92.7%	13.1%
2027		Passenger	%	17.1%	92.6%	15.8%

Table 18
Trip Rates and VMT for Existing Conditions and Project Operations
Willow Village
Menlo Park, California

Project Area[1]	Land Use	Fleet Type[2]	Total Weekday Daily VMT[3]	Total Weekday Daily Trips[3]	Total Average Daily VMT[4]	Total Average Daily Trips[4]	Total Annual VMT[5]	Total Annual Trips[5]
			VMT/day	trips/day	VMT/day	trips/day	VMT/year	trips/year
Existing Conditions	Campus District	Cars	110,860	9,221	84,225	7,006	30,742,244	2,557,040
		Trucks	2,640	220	2,005	167	731,958	60,882
		Shuttles	21,088	659	15,063	470	3,916,358	122,319
		On-Demand	7,919	659	5,656	470	1,470,590	122,319
Year 4	Campus District	Cars	5,480	493	4,079	367	1,488,677	133,874
		Trucks	124	11	93	8.3	33,776	3,037
		Shuttles	646	22	462	15	120,048	3,996
		On-Demand	373	34	266	24	69,267	6,229
	Residential	San Mateo	0	0	0	0	0	0
	Retail	San Mateo	3,563	510	3,442	492	1,256,238	179,684
	Park	San Mateo	987	147	3,652	545	1,332,917	198,943
	Hotel	San Mateo	0	0	0	0	0	0
Year 5	Campus District	Cars	104,523	9,400	77,797	6,996	28,395,923	2,553,590
		Trucks	2,371	213	1,765	159	644,259	57,937
		Shuttles	12,330	410	8,807	293	2,289,859	76,227
		On-Demand	7,114	640	5,082	457	1,321,238	118,816
	Residential	San Mateo	11,209	1,180	10,956	1,153	3,999,096	420,957
	Retail	San Mateo	20,794	2,974	20,085	2,873	7,331,178	1,048,602
	Park	San Mateo	1,080	161	3,993	596	1,457,557	217,546
	Hotel	San Mateo	6,049	527	5,816	507	2,122,939	184,925
Year 6	Campus District	Cars	169,737	15,264	126,336	11,361	46,112,784	4,146,833
		Trucks	3,851	346	2,866	258	1,046,226	94,085
		Shuttles	20,023	667	14,302	476	3,718,554	123,787
		On-Demand	11,553	1,039	8,252	742	2,145,589	192,949
	Residential	San Mateo	45,534	4,793	44,507	4,685	16,244,920	1,709,992
	Retail	San Mateo	34,307	4,907	33,137	4,740	12,095,154	1,730,009
	Park	San Mateo	1,147	171	4,243	633	1,548,641	231,140
	Hotel	San Mateo	14,814	1,290	14,244	1,241	5,199,035	452,878
Full Buildout	Campus District	Cars	178,766	16,076	133,057	11,966	48,565,689	4,367,418
		Trucks	4,056	365	3,019	271	1,101,879	99,090
		Shuttles	21,088	702	15,063	501	3,916,358	130,371
		On-Demand	12,168	1,094	8,691	782	2,259,721	203,212
	Residential	San Mateo	71,524	7,529	69,910	7,359	25,517,254	2,686,027
	Retail	San Mateo	35,055	5,014	33,860	4,843	12,358,799	1,767,718
	Park	San Mateo	1,147	171	4,243	633	1,548,641	231,140
	Hotel	San Mateo	14,814	1,290	14,244	1,241	5,199,035	452,878

Notes:

1. Partial years are scaled from the full buildout based on the portion of each land use that becomes operational for each year of construction. See Table 16 for more details.
2. The fleet type for each land use was provided by the Transportation Engineer. The Campus District will have various fleets for specific uses. Town Square and the Residential/Shopping District land uses (Residential, Retail, Park, and Hotel) are analyzed assuming a default San Mateo fleet. Hamilton Avenue Parcels North and South are combined with retail land uses. See Table 19 for more information.
3. Daily VMT and trip rates were provided by the Transportation Engineer on October 5, 2021. Total trip rates are calculated using land uses in Table 1.
4. Weekday VMT and trip rates provided by the Transportation Engineer were scaled to average trip rates using the ratio between CalEEMod® weekday and weekend one-way trip rates.
5. Annual trips and VMT are calculated by multiplying daily values by 365 for all fleets with the exception of shuttles and on-demand, which are multiplied by 260 days/year.

Abbreviations:

VMT - vehicle miles traveled

References:

California Air Pollution Control Officers Association (CAPCOA). California Emissions Estimator Model (CalEEMod®), Version 2020.4.0. Available online at http://www.caleemod.com/

Table 20
Mobile CAP Emission Factors
Willow Village
Menlo Park, California

Fleet Type[2]	Calendar Year[3]	CAPs Emission Factors[1]																		
		ROG						NO_x			PM_{10}					$PM_{2.5}$				
		RUNEX	RUNLOSS	STREX	IDLEX	DIURN	HOTSOAK	RUNEX	STREX	IDLEX	RUNEX	PMTW	PMBW	STREX	IDLEX	RUNEX	PMTW	PMBW	STREX	IDLEX
		g/mile		g/trip				g/mile	g/trip		g/mile			g/trip		g/mile			g/trip	
San Mateo Fleet	2019	0.031	0.038	0.46	0.0057	0.29	0.12	0.23	0.41	0.088	0.0041	0.0083	0.011	0.0023	4.7E-04	0.0039	0.0021	0.0039	0.0022	4.5E-04
	2024	0.016	0.033	0.30	0.0046	0.23	0.10	0.10	0.32	0.050	0.0020	0.0083	0.012	0.0018	1.4E-04	0.0019	0.0021	0.0041	0.0017	1.4E-04
	2025	0.015	0.033	0.28	0.0045	0.22	0.094	0.092	0.30	0.048	0.0019	0.0083	0.012	0.0017	1.3E-04	0.0018	0.0021	0.0041	0.0016	1.3E-04
	2026	0.014	0.033	0.26	0.0044	0.21	0.091	0.085	0.29	0.046	0.0018	0.0084	0.012	0.0017	1.3E-04	0.0017	0.0021	0.0041	0.0015	1.2E-04
Cars	2019	0.024	0.039	0.50	0	0.33	0.14	0.090	0.36	0	0.0017	0.0080	0.0072	0.0027	0	0.0016	0.0020	0.0025	0.0025	0
	2024	0.014	0.037	0.34	0	0.27	0.12	0.048	0.26	0	0.0013	0.0080	0.0072	0.0021	0	0.0012	0.0020	0.0025	0.0020	0
	2025	0.014	0.037	0.32	0	0.26	0.12	0.044	0.25	0	0.0013	0.0080	0.0072	0.0021	0	0.0012	0.0020	0.0025	0.0019	0
	2026	0.013	0.037	0.30	0	0.25	0.12	0.041	0.24	0	0.0012	0.0080	0.0073	0.0020	0	0.0011	0.0020	0.0025	0.0018	0
Trucks	2019	0.15	0.050	0.12	0.045	0.10	0.030	2.3	0.62	0.72	0.046	0.014	0.074	2.8E-04	0.0040	0.044	0.0034	0.026	2.6E-04	0.0038
	2024	0.057	0.035	0.083	0.034	0.070	0.019	0.84	0.66	0.37	0.013	0.013	0.075	1.5E-04	0.0011	0.012	0.0033	0.026	1.4E-04	0.0011
	2025	0.053	0.034	0.078	0.032	0.065	0.017	0.76	0.64	0.35	0.012	0.013	0.075	1.4E-04	0.0010	0.011	0.0033	0.026	1.3E-04	0.0010
	2026	0.049	0.033	0.073	0.031	0.061	0.016	0.69	0.62	0.33	0.011	0.013	0.075	1.3E-04	0.0010	0.011	0.0033	0.026	1.2E-04	9.3E-04
Shuttles	2019	0.0056	0	0	0.021	0	0	0.36	1.5	0.48	0.0029	0.012	0.048	0	1.4E-04	0.0028	0.0030	0.017	0	1.3E-04
	2024	0.0072	0	0	0.024	0	0	0.47	1.5	0.51	0.0040	0.012	0.049	0	1.5E-04	0.0038	0.0030	0.017	0	1.4E-04
	2025	0.0073	0	0	0.025	0	0	0.47	1.5	0.48	0.0041	0.012	0.049	0	1.6E-04	0.0039	0.0030	0.017	0	1.5E-04
	2026	0.0075	0	0	0.026	0	0	0.47	1.5	0.46	0.0043	0.012	0.049	0	1.6E-04	0.0041	0.0030	0.017	0	1.5E-04
On Demand	2019	0.015	0.033	0.45	0	0.31	0.10	0.069	0.32	0	0.0016	0.0080	0.0068	0.0027	0	0.0015	0.0020	0.0024	0.0024	0
	2024	0.0078	0.032	0.32	0	0.27	0.083	0.038	0.25	0	0.0013	0.0080	0.0067	0.0021	0	0.0012	0.0020	0.0023	0.0020	0
	2025	0.0070	0.032	0.30	0	0.27	0.081	0.035	0.24	0	0.0012	0.0080	0.0067	0.0021	0	0.0011	0.0020	0.0023	0.0019	0
	2026	0.0063	0.032	0.28	0	0.26	0.077	0.032	0.23	0	0.0012	0.0080	0.0067	0.0020	0	0.0011	0.0020	0.0023	0.0018	0

Notes:

1. Emission factors for each fleet type were developed by creating weighted emission factors based on the vehicle classes in each fleet type. EMFAC emissions were summed across each year for each vehicle class within a fleet type, then a vehicle class emission factor based on VMT and trip counts for the vehicle class was calculated. Emission factors for each vehicle class within a fleet type were weighted based on total VMTs and trips to create a fleet-wide emission factor for each year.
2. Emission factors for the Project fleets (all except the San Mateo Fleet) were calculated without electric vehicles because electric vehicle reductions are calculated separately.
3. The existing conditions for this analysis used emission factors from 2019. Partial buildout years 4, 5, and 6 used emission factors from years 2024, 2025, and 2026, respectively. Full buildout emissions used emission factors from 2026 to conservatively estimate emissions.

Abbreviations:

ROG - Reactive organic gases
NO_x - Nitrogen oxides
PM_{10} - Particulate matter less than 10 microns in diameter
$PM_{2.5}$ - Particulate matter less than 2.5 microns in diameter
RUNEX - Running exhaust emissions
RUNLOSS - Evaporative losses
STREX - Start exhaust tailpipe emissions
IDLEX - Idle exhaust emissions
DIURN - Diurnal Evaporative Hydrocarbon Emissions
HOTSOAK - Hot soak evaporative hydrocarbon emissions

References

California Air Resources Board. EMFAC2021. Available at: https://arb.ca.gov/emfac/

Table 35
Unmitigated Architectural Coating Emissions from Existing Conditions and Project Operations
Willow Village
Menlo Park, California

Land Use	Floor Area	Building Surface Area[1]	Application Rate[2]	Indoor Paint VOC EF[3]	Outdoor Paint VOC EF[3]	Architectural Coating VOC Emissions[4]
	(sqft)	(sqft)		(g/L)	(g/L)	(lb/yr)
Existing Conditions (2019)						
Office	251,530	503,060	10%	100	150	262
Commercial	123,870	247,740	10%	100	150	129
Industrial - Warehouse	500,780	1,001,560	10%	100	150	522
Industrial - Manufacturing	23,570	47,140	10%	100	150	25
Recreational	24,060	48,120	10%	100	150	25
Light Industrial	80,100	160,200	10%	100	150	84
Parking	920,000	55,200	10%	0	150	9.6
					Total Existing Conditions Emissions	**1,057**
Full Buildout						
Office	1,600,000	3,200,000	10%	100	150	1,669
Retail	207,690	415,380	10%	100	150	217
Residential	1,695,976	4,579,135	10%	100	150	2,388
Hotel	172,000	344,000	10%	100	150	179
Parking	1,869,240	112,154	10%	0	150	19
Park	403,837	0	10%	0	0	0
					Total Full Buildout Emissions	**4,473**
Partial Buildout[5]						
					Total Year 4 Emissions[5]	83
					Total Year 5 Emissions[5]	1,567
					Total Year 6 Emissions[5]	3,515

Notes:

1. Consistent with CalEEMod Appendix A, residential building surface area was assumed to be 2.7 times the floor area, and non-residential 2 times the floor area. Also consistent with CalEEMod Appendix E, the parking painted area was assumed to be 6% of the total surface area for surface lots.
2. Consistent with CalEEMod Appendix A, 10% of all surfaces were assumed to be coated each year.
3. Consistent with CalEEMod Appendix D Table 6.1, which is based on BAAQMD Regulation 8 Rule 3 paint VOC regulations, use VOC EF of 100 g/L for flat paints, generally used indoors, and 150 g/L for all other architectural coatings.
4. Uses CalEEMod Appendix A assumption that 1 gallon of paint covers 180 square feet. Building surface area is assumed to be 75% indoors and 25% outdoors, consistent with CalEEMod Appendix A. Parking garages are assumed to have no indoor surfaces.
5. Partial buildout emissions were calculated from full buildout using scaling factors by land use type and year, as shown in Table 16.

Abbreviations:

BAAQMD - Bay Area Air Quality Management District
CalEEMod - California Emissions Estimator Model
EF - emission factor
g - grams
L - liters
lb - pound
sqft - square feet
VOC - volatile organic compound
yr - year

References:

BAAQMD. 2009. Regulation 8 Rule 3 Architectural Coatings. Accessed November 2020. Available at: https://www.baaqmd.gov/~/media/dotgov/files/rules/reg-8-rule-3-architectural-coatings/documents/rg0803_0709.pdf?la=en.

California Air Pollution Control Officers Association (CAPCOA). California Emissions Estimator Model (CalEEMod®), Version 2020.4.0. Available online at http://www.caleemod.com/

Table 38
Consumer Product Emissions from Existing Conditions and Project Operations
Willow Village
Menlo Park, California

Land Use	Building Area (sqft)	Consumer Products VOC EF[1,2] (lb/sqft/day)	Days per Year	Consumer Products VOC emissions (lb/yr)
Existing Conditions (2019)				
Office	251,530	1.8E-05	365	1,670
Commercial	123,870	1.8E-05	365	822
Industrial - Warehouse	500,780	1.8E-05	365	3,324
Industrial - Manufacturing	23,570	1.8E-05	365	156
Recreational	24,060	1.8E-05	365	160
Light Industrial	80,100	1.8E-05	365	532
Parking	920,000	#REF!	365	#REF!
Existing Conditions Emissions				**#REF!**
Full Buildout				
Office	1,600,000	1.8E-05	365	10,621
Retail	207,690	1.8E-05	365	1,379
Residential	1,695,976	1.8E-05	365	11,258
Hotel	172,000	1.8E-05	365	1,142
Parking	1,869,240	3.5E-07	365	242
Park	403,837	5.2E-08	365	7.6
Total Full Buildout Emissions				**24,649**
Partial Buildout[3]				
Total Year 4 Emissions[3]				599
Total Year 5 Emissions[3]				9,447
Total Year 6 Emissions[3]				19,982

Notes:

1. The consumer products VOC EF for office, retail, and residential land uses was derived using methodology consistent with CalEEMod with adjusted parameters for San Mateo County, as described in Table 37. The default emissions factor assumes 2020 consumer products VOC inventory for San Mateo County. The default building square footage used is from 2010, which was updated to 2020 using population growth of San Mateo County, as shown in Table 37.
2. Consumer product VOC EFs for parking and open space were taken from CalEEMod 2020.4.0. These defaults take into account pesticide and fertilizer use in city parks and degreaser use in parking areas.
3. Partial buildout emissions were calculated from full buildout using scaling factors by land use type and year, as shown in Table 16.

Abbreviations:

ARB - Air Resources Board
CalEEMod - California Emissions Estimator Model
EF - emission factor
lb - pound
sqft - square feet
VOC - volatile organic compound
yr - year

References:

California Air Pollution Control Officers Association (CAPCOA). California Emissions Estimator Model (CalEEMod®), Version 2020.4.0. Available online at http://www.caleemod.com/

Table 29
Energy Usage Emission Factors
Willow Village
Menlo Park, California

Historical Electricity Intensity - PG&E

Annual Electricity Data	2016	2017	2018	Average[1]	Units
CO_2 Intensity Factor per Total Energy Delivered[2]	294	210	206	237	lbs CO_2/MWh delivered
CO2e Intensity Factor per Total Energy Delivered	296	213	209	239	lbs CO_2e/MWh delivered
% of Total Energy From RPS-Eligible Renewables[3]	33%	33%	39%	35%	-
CO_2 Intensity Factor per Total Non-RPS-Eligible Energy[4]	437	314	338	364	lbs CO_2/MWh delivered
CO_2e Intensity Factor per Total Non-RPS-Eligible Energy[4]	441	318	342	368	lbs CO_2e/MWh delivered

Estimated Intensity Factor for Total Energy Delivered by PG&E[5]

Year	2016	2017	2018	Average[5]	Units
2019 (35%)	294	210	206	237	lbs CO_2/MWh delivered
	296	213	209	239	lbs CO_2e/MWh delivered
2024 (44%)	240	173	186	200	lbs CO_2/MWh delivered
	242	175	188	202	lbs CO_2e/MWh delivered
2025 (47%)	229	165	177	191	lbs CO_2/MWh delivered
	231	167	179	193	lbs CO_2e/MWh delivered
2026 (50%)	219	157	169	181	lbs CO_2/MWh delivered
	220	159	171	183	lbs CO_2e/MWh delivered
2030 (60%)	175	126	135	145	lbs CO_2/MWh delivered
	176	127	137	147	lbs CO_2e/MWh delivered

Estimated Intensity Factor for Total Energy Delivered by PCE[6]

Model Year	2016	2017	2018	Average[1]	Units
86% Renewable (2019 - 2030)	59	42	45	49	lbs CO_2/MWh delivered
	62	45	48	51	lbs CO_2e/MWh delivered
100% Renewable (Campus District)	0	0	0	0	lbs CO_2/MWh delivered
	0	0	0	0	lbs CO_2e/MWh delivered

Greenhouse Gas Energy Emission Factors

Greenhouse Gas	CO_2	CH_4	N_2O	CO_2e	Units
Global Warming Potential[7]	1	25	298	-	-
2019 - 2030 Electricity Use Emission Factor[8]	49	0.029	0.0062	51	lb/MWh
	2.2E-02	1.3E-05	2.8E-06	2.3E-02	MT/MWh
Natural Gas Use Emission Factor[9]	118	0.0023	0.0022	118	lb/MMBTU
	0.0053	0.0000	0.0000	0.0054	MT/therm

Criteria Air Pollutant Energy Emission Factors[9]

Land Use Type	ROG	NOx	PM_{10}	$PM_{2.5}$	Units
Residential	0.011	0.092	0.0075	0.0075	lb/MMBtu
Nonresidential	0.011	0.10	0.0075	0.0075	lb/MMBtu

Notes:

1. This average uses the most recent three years of data.

Table 29
Energy Usage Emission Factors
Willow Village
Menlo Park, California

2. Total CO_2 intensity factors from The Climate Registry. Available at: https://www.theclimateregistry.org/our-members/cris-public-reports/. Accessed: April
3. Percent of total energy from eligible renewables is from the PG&E 2017, 2018, and 2019 Corporate Responsibility Report.
4. The emissions metric presented here was calculated based on the total CO2 intensity factor divided by the percent of energy delivered from non-RPS-eligible sources. This CO2 intensity factor includes both fossil fuel and carbon-free sources of energy, such as largescale hydro and nuclear. Diablo Canyon Nuclear Plant, which accounts for a portion of the carbon-free energy in this CO2 intensity factor, is planned to be closed by 2024-2025 (https://www.pge.com/en_US/safety/how-the-system-works/diablo-canyon-power-plant/diablo-canyon-power-plant/engagement-panel.page). According to SB 1090 (approved 9/2018), "The [California Public Utilities] commission shall ensure that integrated resource plans are designed to avoid any increase in emissions of greenhouse gases as a result of the retirement of the Diablo Canyon Units 1 and 2 powerplant." This was incorporated into CPUC section 712.7(2)(b). Based on this information, the total Non-RPS-Eligible energy CO2 intensity factor was assumed to remain constant.
5. The RPS of 44% by 2024, 52% by 2027, and 60% for 2030 are consistent with SB 100. The RPS for 2026 and 2027 were estimated by assuming a linear increase between 2024 and 2027. Available at: https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=201720180SB100. The average percentage of energy from renewables for 2016-2018 is greater than the 2020 RPS of 33% as required by SB100. Thus, it is assumed that the 2016-2018 average CO2 and CO2e intensity factors remain constant through 2020, at which point the carbon intensity then decreases each year to comply with the future RPS requirements.
6. The intensity factor for total energy delivered was estimated by multiplying the percentage of energy delivered from non-RPS-eligible renewable energy by the CO_2 emissions per total non-RPS-eligible energy metric calculated above.

Table 29
Energy Usage Emission Factors
Willow Village
Menlo Park, California

7. Global Warming Potentials (GWP) are based on the IPCC Fourth Assessment Report. CH4 and N2O emission factors are from the CalEEMod® version 2020.4.0 defaults for PGE, and are conservatively assumed not to change from these estimates. As more renewable energy is integrated into the electricity grid, these intensity factors will also decrease.
8. Peninsula Clean Energy comes from 51% renewable sources, 35% hydro electric and 14% unspecified sources. The 14% unspecified sources were assumed to come from the same mix as the non-renewable PG&E mix of power. This is assumed to remain constant until 2030, after which the renewable percentage of the power mix is assumed to linearly increase to 100% in 2045, conistent with SB 100. Available at: https://www.peninsulacleanenergy.com/energy-
9. Natural Gas Use emission factors from Table 8.2 of CalEEMod User's Guide Appendix D.

Abbreviations:

CalEEMod - California Emissions Estimator Model
CH_4 - methane
CO_2 - carbon dioxide
CO_2e - carbon dioxide equivalents
CPUC - California Public Utilities Commission
GWP - global warming potential
lb - pound(s)
MMBtu - million British Thermal Units
MT - metric ton(s)
MWh - megawatt-hour
N_2O - nitrous oxide
NO_x - nitrogen oxides
PCE - Peninsula Clean Energy
PG&E - Pacific Gas & Electric
PM - particulate matter
$PM_{2.5}$ - PM less than 2.5 microns in diameter
PM_{10} - PM less than 10 microns in diameter
ROG - reactive organic gases
RPS - Renewable Portolio Standard
SB - Senate Bill

References:

California Air Pollution Control Officers Association (CAPCOA). California Emissions Estimator Model (CalEEMod), Version 2020.4.0. Available online at http://www.caleemod.com/

IPCC. 2007. AR4 Climate Change 2007: The Physical Science Basis. Available online at: https://www.ipcc.ch/report/ar4/wg1/

PG&E 2017 Corporate Resonsibility Report. Available at: https://www.pgecorp.com/corp_responsibility/reports/2017/assets/PGE_CRSR_2017.pdf. Accessed: July 2021.

PG&E 2018 Corporate Responsibility Report. Available at: https://www.pgecorp.com/corp_responsibility/reports/2018/assets/PGE_CRSR_2018.pdf. Accessed: July 2021

PG&E 2019 Corporate Responsibility Report. Available at: https://www.pgecorp.com/corp_responsibility/reports/2019/assets/PGE_CRSR_2019.pdf. Accessed: July 2021

The Climate Registry. Available at: https://www.theclimateregistry.org/our-members/cris-public-reports/. Accessed: July 2021.

Peninsula Clean Energy. Energy Sources. Available at: https://www.peninsulacleanenergy.com/energy-sources/ Accessed: April 2021

SB-100 California Renewables Portfolio Standard Program. Available at: https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=201720180SB100.

Table 30
Energy Usage Emissions from Existing Conditions and Project Operations
Willow Village
Menlo Park, California

Location	Natural Gas Emissions[1,2]					Electricity Emissions[1,2]
	ROG	NOx	PM_{10}	$PM_{2.5}$	CO_2e	
	(tons/yr)				(MT/yr)	
Existing Conditions (2019)						
All	0.16	1.5	0.11	0.11	1,613	0
Total Existing Emissions	**0.16**	**1.5**	**0.11**	**0.11**	**1,613**	**0**
Full Buildout						
Retail	0.012	0.11	8.2E-03	8.2E-03	118	0
Total Full Buildout Emissions	**0.012**	**0.11**	**8.2E-03**	**8.2E-03**	**118**	**0**
Partial Buildout[3]						
Total Year 4 Emissions	0.0012	0.011	8.3E-04	8.3E-04	12	0
Total Year 5 Emissions	0.0070	0.064	4.9E-03	4.9E-03	70	0
Total Year 6 Emissions	0.012	0.11	8.0E-03	8.0E-03	115	0

Notes:

1. CAP emissions result from the combustion of natural gas. As a result, CAP emissions were only calculated for natural gas usage. In compliance with the City of Menlo Park Municipal Code, natural gas usage for the Project will be offset; however, since the carbon intensity of the offset production is not known at this time, GHG emissions from natural gas were conservatively included alongside electricity GHG emissions.

2. Emissions were calculated based on energy use, shown in Table 28, and energy emission factors, shown in Table 29. Existing electricity is sourced from PCE. Project electricity will be sourced from 100% renewable sources; as such, emissions from Project electricity use are expected to be zero. Project natural gas will only be used in retail land uses for commercial cooking equipment.

3. Partial buildout emissions were calculated from full buildout using scaling factors by land use type and year, as shown in Table 16.

Abbreviations:

CAP - Criteria Air Pollutants
CO_2e - carbon dioxide equivalents
GHG - Greenhouse Gas
MT - metric ton(s)
NOx - nitrogen oxides
PM - particulate matter
$PM_{2.5}$ - PM less than 2.5 microns in diameter
PM_{10} - PM less than 10 microns in diameter
ROG - reactive organic gases
yr - year

References:

California Air Pollution Control Officers Association (CAPCOA). California Emissions Estimator Model (CalEEMod), Version 2020.4.0. Available online at http://www.caleemod.com

Table 28
Energy Usage for Existing Conditions and Project Operations
Willow Village
Menlo Park, California

Land Use	Floor Area (sqft) (DU - Residential)	Annual Electricity Use (MWh/yr)	Annual Natural Gas Use (MMBtu/yr)
Existing Conditions (2019)[1]			
All	1,923,910	12,050	30,039
Total Existing Energy Usage		**12,050**	**30,039**
Full Buildout[2,3]			
Office	1,600,000	23,828	0
Retail	207,690	4,517	2,195
Residential	1,730	16,855	0
Hotel	172,000	2,528	0
Parking	1,869,240	32,082	0
Park	403,837	38	0
Total Full Buildout Energy Usage		**79,849**	**2,195**

Notes:

1. Energy use rates for existing conditions were provided for 2019 by the Project Applicant via email on August 10, 2021.
2. Electricity and natural gas usage rates for the retail, residential, and parking land uses were provided by PAE in the June 14, 2021 memorandum. Electricity usage rates for Office, Hotel, and Park were provided by Hines on June 21, 2021. The hotel and office do not use natural gas. The electricity usage includes 27,986 MWh/year of electricity use associated with the Campus District EV charging stations, which is summarized in the parking land use category. Electricity and energy use rates for the Willow Road Retail were calculated based on the CalEEMod defaults the retail land use type in Climate Zone 5.
3. Natural gas for the project is only used for the Willow Road Retail and the supermarket and restaurant land uses, which are summarized in the retail category.

Abbreviations:

CalEEMod - California Emissions Estimator Model
DU - dwelling unit
kBTU - thousand British Thermal Units
kWh - kilowatt-hour
MMBTU - million British Thermal Units
MWh - Megawatt-hour
sqft - square feet
yr - year

References:

California Air Pollution Control Officers Association (CAPCOA). California Emissions Estimator Model (CalEEMod), Version 2020.4.0. Available online at http://www.caleemod.com

SOURCE GROUP	POLLUTANT	CAS	EMISSIONS_G_S	YEAR	PHASE	CONTROLSCEN	DETAIL	AVE
B40EG1	DPM	9901	7.70548E-05	2019	Operations	UNMIT		PERIOD
B40EG1	DPM	9901	7.70548E-05	2019	Operations	MIT		PERIOD
B40EG1	PM25	88101	7.70548E-05	2019	Operations	UNMIT		PERIOD
B40EG1	PM25	88101	7.70548E-05	2019	Operations	MIT		PERIOD

SOURCE GROUP	ENGINE CONTROL	SIZE (kW)	SIZE (HP)	Building
B40EG1	Tier 3	242	324	
GEN_RS7	Tier 3	150	324	RS7
GEN_RS6	Tier 3	250	464	RS6
GEN_RS4	Tier 2	500	755	RS4
GEN_RS5	Tier 2	500	755	RS5
GEN_TS1	Tier 2	600	900	TS1
GEN_NG_1	Tier 4	750	1,220	NG_1
GEN_NG_2	Tier 4	750	1,220	NG_2
GEN_RS3	Tier 4	750	1,220	RS3
GEN_RS2	Tier 4	1,000	1,490	RS2
GEN_SG_1	Tier 4	1,750	2,900	SG_1
GEN_SG_2	Tier 4	1,750	2,900	SG_2

907185 g/ton
365 days/year
24 hours/day
3600 seconds/hc

Table 26
Generator Emission Factors for Diesel Engines
Willow Village
Menlo Park, California

Fuel	Engine Tier	Generator Size Range (hp)		Engine Emission Factors[1] (g/bhp-hr)				
		Minimum	Maximum	ROG	NO_x	PM_{10}	$PM_{2.5}$	CO_2e
Diesel	Tier 2	750	1,200	0.26	4.6	0.15	0.15	523
Diesel	Tier 3	300	600	0.16	2.9	0.15	0.15	523
Diesel	Tier 4	1,200	--	0.15	0.50	0.020	0.020	523

Notes:

1. Engine emission factors for PM_{10} and $PM_{2.5}$ (assumed all engines are diesel fueled and that all PM_{10} is diesel particulate matter) based on ARB standards for diesel generator engines. Emission factors for TOG and ROG were converted from NMHC values provided in the Tier standards using EPA hydrocarbon conversion factors. When an emission factor was specified as a combined NMHC+NOx factor, the NMHC/NOx ratio of 5%/95% were taken from BAAQMD guidance. The emission factors for CO_2e are based on diesel emergency generator CO_2 and CH_4 emission factors from CalEEMod User's Guide Appendix D, Table 12.1, along with a GWP of 25 for CH_4.

Abbreviations:

ARB - [California] Air Resources Board

BAAQMD - Bay Area Air Quality Management District

CalEEMod - CALifornia Emissions Estimator MODel

CEIDERS - California Emission Inventory Data and Reporting System

CO_2e - carbon dioxide equivalents

EPA - US Environmental Protection Agency

g/bhp-hr - Grams per Brake Horsepower Hour

GWP - global warming potential

References:

CalEEMod Version 2020.4.0. Available online at: http://www.caleemod.com

Californi Air Resources Board. Non-road Diesel Engine Certification Tier Chart. Available online at: https://ww2.arb.ca.gov/resources/documents/non-road-diesel-engine-certification-tier-chart

USEPA. 2010. Conversion Factors for Hydrocarbon Emission Components, NR-002d. EPA-420-R-10-015. July. Available online at: https://nepis.epa.gov/Exe/ZyPDF.cgi/P10081RP.PDF?Dockey=P10081RP.PDF

BAAQMD. 2004. CARB Emission Factors for CI Diesel Engines - Percent HC in Relation to NMHC + NOx. Available at: https://www.baaqmd.gov/~/media/files/engineering/policy_and_procedures/engines/emissionfactorsfordieselengines.pdf

Table 42
Summary of Operational GHG Emissions
Willow Village
Menlo Park, California

Emissions Source	GHG Emissions[1] (MT/yr) CO_2e	
	Existing Conditions (2019)[2]	Full Buildout Conditions[3]
Landscaping	0.063	22
Electricity Use	0	0
Natural Gas Use[4]	1613	118
Water Use	492	217
Waste Disposed	397	698
Emergency Generators	8.5	399
Total Emissions	**2,509**	**1,453**
	Net Emissions[5]	**-1,056**

Notes:

1. Emissions estimated using methods consistent with CalEEMod® version 2020.4.0.
2. Operational emissions from existing conditions were calculated using CalEEMod® default data and emission factors based on the existing land use type and energy use rates provided by the Project Applicant.
3. Full buildout operational emissions are based on electricity, natural gas, and water usage rates provided by the Project Applicant alongside CalEEMod® defaults for architectural coating, consumer product, landscaping, and waste emissions.
4. Natural gas usage for the project would be used exclusively for supermarket and dining operations.
5. Net emissions were calculated as the difference between partial buildout emissions for each year and existing condition emissions.

Abbreviations:

CalEEMod® - California Emissions Estimator Model
CO_2e - carbon dioxide equivalent
GHG - greenhouse gas
MT - metric ton
yr - year

References:

CalEEMod® Version 2020.4.0 Available Online at: http://www.caleemod.com

Table 39
Landscaping Emissions from Existing Conditions and Project Operations
Willow Village
Menlo Park, California

Year[2]	Emissions from Landscaping Equipment[1]						
	ROG	TOG	NOx	PM_{10}	$PM_{2.5}$	DPM	CO_2e
	(tons/yr)						(MT/yr)
Existing Conditions	2.9E-03	0.0E+00	2.8E-04	1.1E-04	1.1E-04	0.0E+00	0.063
Year 4	0.33	0.00	0.13	0.061	0.061	0.000	19
Year 5	0.37	0.00	0.14	0.067	0.067	0.000	20
Year 6	0.39	0.00	0.15	0.071	0.071	0.000	22
Full Buildout	0.39	0.00	0.15	0.071	0.071	0.000	22

Notes:

1. Landscape emissions calculated using CalEEMod 2020.4.0 based on information regarding building square footage and acreage, shown in Appendix D.
2. Emissions in partial years were calculated by scaling full buildout emissions by the maximum percentage of land uses operational during that year.

Abbreviations:

CalEEMod - California Emissions Estimator Model
CO_2e - carbon dioxide equivalents
MT - metric ton(s)
NO_x - nitrogen oxides
PM - particulate matter
$PM_{2.5}$ - PM less than 2.5 microns in diameter
PM_{10} - PM less than 10 microns in diameter
ROG - reactive organic gases
yr - year

References:

California Air Pollution Control Officers Association (CAPCOA). California Emissions Estimator Model (CalEEMod®), Version 2020.4.0. Available online at http://www.caleemod.com

Table 36
Mitigated Architectural Coating Emissions from Existing Conditions and Project Operations
Willow Village
Menlo Park, California

Land Use	Floor Area	Building Surface Area[1]	Application Rate[2]	Indoor Paint VOC EF[3]	Outdoor Paint VOC EF[3]	Architectural Coating VOC Emissions[4]
	(sqft)	(sqft)		(g/L)	(g/L)	(lb/yr)
Full Buildout						
Office	1,600,000	3,200,000	10%	10	150	668
Retail	207,690	415,380	10%	10	150	87
Residential	1,695,976	4,579,135	10%	10	150	955
Hotel	172,000	344,000	10%	10	150	72
Parking	1,869,240	112,154	10%	0	150	19
Park	403,837	0	10%	0	0	0
					Total Full Buildout Emissions	**1,801**
Partial Buildout[5]						
					Total Year 4 Emissions[5]	40
					Total Year 5 Emissions[5]	635
					Total Year 6 Emissions[5]	1,417

Notes:

1. Consistent with CalEEMod Appendix A, residential building surface area was assumed to be 2.7 times the floor area, and non-residential 2 times the floor area. Also consistent with CalEEMod Appendix E, the parking painted area was assumed to be 6% of the total surface area for surface lots.
2. Consistent with CalEEMod Appendix A, 10% of all surfaces were assumed to be coated each year.
3. Paint VOC content is consistent with or more stringent than BAAQMD Regulation 8 Rule 3 (Architectural Coatings). Emissions were estimated assuming that indoor painting will utilize "super-compliant" VOC architectural coatings that meet the more stringent limits in South Coast Air Quality Management District Rule 1113. For outdoor paint, assumed use of coatings with VOC content of 150 g/L, consistent with BAAQMD requirements. VOC was assumed to be equivalent to ROG for these purposes.
4. Uses CalEEMod Appendix A assumption that 1 gallon of paint covers 180 square feet. Building surface area is assumed to be 75% indoors and 25% outdoors, consistent with CalEEMod Appendix A. Parking garages are assumed to have no indoor surfaces.
5. Partial buildout emissions were calculated from full buildout using scaling factors by land use type and year, as shown in Table 16.

Abbreviations:

BAAQMD - Bay Area Air Quality Management District
CalEEMod - California Emissions Estimator Model
EF - emission factor
g - grams
L - liters
lb - pound
sqft - square feet
VOC - volatile organic compound
yr - year

References:

BAAQMD. 2009. Regulation 8 Rule 3 Architectural Coatings. Accessed November 2020. Available at: https://www.baaqmd.gov/~/media/dotgov/files/rules/reg-8-rule-3-architectural-coatings/documents/rg0803_0709.pdf?la=en.

California Air Pollution Control Officers Association (CAPCOA). California Emissions Estimator Model (CalEEMod®), Version 2020.4.0. Available online at http://www.caleemod.com/

South Coast Air Quality Management District. Super Compliant Architectural Coatings per Rule 1113. Accessed July 2021. Available at: http://www.aqmd.gov/home/programs/business/business-detail?title=super-compliant-coatings&parent=other-low-voc-products.

Table 44
Mitigated Construction and Net New Operational CAP Emissions by Year
Willow Village
Menlo Park, California

Year	Average Daily CAP Emissions[1,2] (lb/day)											
	Construction Emissions Only[3]				Net Operational Emissions Only[3]				Construction and Net Operational Emissions[3]			
	ROG	NO_x	PM_{10}	$PM_{2.5}$	ROG	NO_x	PM_{10}	$PM_{2.5}$	ROG	NO_x	PM_{10}	$PM_{2.5}$
Year 1	0.064	1.9	0.019	0.019	#REF!	-52	-23	-5.2	#REF!	-50	-23	-5.2
Year 2	2.7	45	0.49	0.48	#REF!	-52	-23	-5.2	#REF!	-7.6	-22	-4.7
Year 3	10	46	0.75	0.74	#REF!	-52	-23	-5.2	#REF!	-6.3	-22	-4.5
Year 4	24	29	0.38	0.37	#REF!	-46	-20	-4.3	#REF!	-17	-19	-3.9
Year 5	28	22	0.26	0.25	#REF!	-16	5.5	0.76	#REF!	6.3	5.8	1.0
Year 6	13	4.8	0.060	0.058	#REF!	10.8	29	5.5	#REF!	16	29	5.6
Full Buildout	--	--	--	--	#REF!	20.5	37	7.0	#REF!	21	37	7.0
BAAQMD Significance Threshold									54	54	82	54

Notes:

1. Emissions estimated using methods consistent with CalEEMod® version 2020.4.0.
2. Net new operational emissions are scaled for partial years of phased operations by the percent that each parcel is operational for each year relative to full buildout, as shown in Table 16.
3. Mitigated construction emissions can be found in Table 14. Net mitigated operational emissions were calculated by subtracting the emissions from the existing conditions from the project emissions, as reported in Table 43.

Abbreviations:

CalEEMod - California Emissions Estimator Model
CAP - Criteria Air Pollutant
lb - pounds
NO_x - nitrogen oxides
PM - particulate matter
$PM_{2.5}$ - PM less than 2.5 microns in diameter
PM_{10} - PM less than 10 microns in diameter
ROG - reactive organic gases
yr - year

References:

CalEEMod Version 2020.4.0 Available Online at: http://www.caleemod.com

Table 41
Summary of Mitigated Operational CAP Emissions
Willow Village
Menlo Park, California

Emissions Source	CAP Emissions[1]							
	(ton/year)				(lb/day)[2]			
	ROG	NO_x	PM_{10}	$PM_{2.5}$	ROG	NO_x	PM_{10}	$PM_{2.5}$
Existing Conditions (2019)[3]								
Architectural Coating	0.53	--	--	--	2.9	--	--	--
Consumer Products	#REF!	--	--	--	#REF!	--	--	--
Landscaping	2.9E-03	2.8E-04	1.1E-04	1.1E-04	0.016	1.5E-03	6.0E-04	6.0E-04
Natural Gas Use	0.16	1.5	0.11	0.11	0.89	8.1	0.61	0.61
Mobile	5.0	8.0	4.0	0.84	27	44	22	4.6
Emergency Generators	2.9E-03	0.051	2.7E-03	2.7E-03	0.016	0.28	0.015	0.015
Total Emissions	**#REF!**	**9.5**	**4.1**	**0.95**	**#REF!**	**52**	**23**	**5.2**
Full Buildout Conditions[4]								
Architectural Coating	0.90	--	--	--	4.9	--	--	--
Consumer Products	12	--	--	--	68	--	--	--
Landscaping	0.39	0.15	0.071	0.071	2.1	0.81	0.39	0.39
Natural Gas Use[5]	0.012	0.11	8.2E-03	8.2E-03	0.065	0.59	0.045	0.045
Mobile	10	12	11	2.1	55	64	58	11
Emergency Generators	0.15	1.3	0.047	0.047	0.79	7.0	0.26	0.26
Total Emissions	**24**	**13**	**11**	**2.2**	**130**	**73**	**59**	**12**
Partial Buildout Emissions[6]								
Total Year 4 Emissions	1.3	1.1	0.53	0.16	6.9	5.9	2.9	0.90
Total Year 5 Emissions	10.5	6.7	5.1	1.1	57	37	28	6.0
Total Year 6 Emissions	20	11.5	9.5	2.0	110	63	52	11
Net Emissions[7]								
Net Year 4 Emissions	#REF!	-8.5	-3.6	-0.79	#REF!	-46	-20	-4.3
Net Year 5 Emissions	#REF!	-2.8	1.0	0.14	#REF!	-16	5.5	0.76
Net Year 6 Emissions	#REF!	2.0	5.3	1.0	#REF!	10.8	29	5.5
Net Full Buildout Emissions	**#REF!**	**3.7**	**6.7**	**1.3**	**#REF!**	**21**	**37**	**7.0**

Notes:

1. Emissions estimated using methods consistent with CalEEMod® version 2020.4.0. The mitigated scenario for the Project is equivalent to the unmitigated scenario for all sources except Architectural Coating, as shown in Table 36.
2. Operational emissions shown represent activity and emissions across 365 days per year.
3. Operational emissions from existing conditions were calculated using CalEEMod® default data and emission factors based on the existing land use type and energy use rates provided by the Project Applicant.
4. Full buildout operational emissions are based on electricity, natural gas, and water usage rates provided by the Project Applicant alongside CalEEMod® defaults for architectural coating, consumer product, landscaping, and waste emissions.
5. Natural gas usage for the project would be used exclusively for supermarket and dining operations.
6. Partial buildout emissions were calculated from full buildout using scaling factors by land use type and year, as shown in Table 16.
7. Net emissions were calculated as the difference between partial buildout emissions for each year and existing condition emissions.

Abbreviations:

BAAQMD - Bay Area Air Quality Management District
CalEEMod® - California Emissions Estimator Model
CAP - Criteria Air Pollutant
CO_2e - carbon dioxide equivalent
GHG - greenhouse gas
lb - pounds
MT - metric ton
NOx - nitrogen oxides
PM - particulate matter
$PM_{2.5}$ - PM less than 2.5 microns in diameter
PM_{10} - PM less than 10 microns in diameter
PM - particulate matter
ROG - reactive organic gases
yr - year

References:

CalEEMod Version 2020.4.0 Available Online at: http://www.caleemod.com

Land Use Overview

Input	Land Use Category					
	Office	**Retail**	**Residential SQFT**	**Hotel**	**Parking**	**Park**
Phase 1a Amount	622,517	195,000	742,089	172,000	1,303,518	403,837
Phase 1b Amount	957,020	0	286,564	0	483,186	0
Phase 2 Amount	--	5,000	700,875	--	82,536	0
Alternate 1 Amount	--	7,690	--	--	--	--
Full Buildout Amount	**1,579,537**	**207,690**	**1,729,528**	**172,000**	**1,869,240**	**403,837**
Units	**ft^2**	**ft^2**	**ft^2**	**ft^2**	**ft^2**	**ft^2**

Land Use Category	Phase 1a				Phase 1b			Phase 2
	Office	**Parcel 2**	**Parcel 3**	**Other**	**Office**	**Parcel 6**	**Parcel 7**	**Parcels 4 + 5**
Office	622,517	--	--	--	957,020	--	--	--
Retail	100,000	40,000	55,000	--	--	0	0	5,000
Residental (DU)	--	327	419	--	--	178	120	686
Residential	--	327,251	414,838	--	--	203,500	83,064	700,875
Hotel	172,000	--	--	--	--	--	--	--
Parking	840,056	216,862	233,000	13,600	446,830	26,809	9,547	82,536
Park	--	--	--	403,837	--	0	0	0

Land Use Breakdown - *used to calculate mass emissions*

	Land Use	Land Use Type	Land Use Subtype	Amount (ft^2)
ksf	Facebook Office	Office	General Office Building	1,600,000
ksf	Non-Facebook Office (Office + Townsquare Retail)	Retail	Regional Shopping Center	100,000
ksf	Hamilton Avenue Parcels	Retail	Regional Shopping Center	7,690
DU	Residential (DU)	Residential	Apartments Mid Rise	1,730
DU	Residential (SF)	Residential	Apartments Mid Rise	1,695,976
ksf	Generic Retail (Mixed Use)	Retail	Regional Shopping Center	100,000
Ro	Hotel	Hotel	Hotel	172,000
	Hotel (Rooms)	Hotel	Hotel	193
Act	Town Square	Park	City Park	56,254
Act	Misc Open Space	Park	City Park	109,342
Act	Public Park	Park	City Park	154,883
Act	Elevated Park	Park	City Park	83,358
Sp	Parking Structure	Parking	Enclosed Parking with Elevator	1,855,640
Sp	Parking Lot	Parking	Parking Lot	13,600

Phase	Subphase	Construction by Phase						
		Office	Retail	Residential	Hotel	Parking	Park	
		ft^2	ft^2	ft^2	ft^2	ft^2	ft^2	
Phase 1a	North Garage	--	--	--	--	840,056	--	Phase 1a
	Office Building 4	167,761	100,000	--	--	--	--	Phase 1a
	Meeting, Collaboration, Park	448,749	--	--	--	--	--	Phase 1a
	Hotel Construction	--	--	--	172,000	--	--	Phase 1a
	Town Square	--	--	--	--	--	56,254	Phase 1a
	Parcel 2	--	40,000	327	--	216,862	--	Phase 1a
	Parcel 3	--	55,000	419	--	233,000	--	Phase 1a
	Other	6,007	--	--	--	13,600	347,583	Phase 1a
Phase 1b	South Garage	--	--	--	--	446,830	--	Phase 1b
	Office Building 3	210,083	--	--	--	--	--	Phase 1b
	Office Building 1	132,520	--	--	--	--	--	Phase 1b
	Office Building 2	161,980	--	--	--	--	--	Phase 1b
	Office Building 5	233,298	--	--	--	--	--	Phase 1b
	Office Building 6	219,139	--	--	--	--	--	Phase 1b
	Parcel 6	--	--	178	--	26,809	--	Phase 1b
	Parcel 7	--	--	120	--	9,547	--	Phase 1b
Phase 2	Parcels 4 + 5	--	5000	686	--	82,536	--	Phase 2
Alternate 1	Hamilton Avenue Parcels	--	7,690	--	--	--	--	Alternate 1

Phase	Subphase	Percent of Year Phase Operates					
		2023	2024	2025	2026	2027	
Phase 1a	North Garage	0%	100%	100%	100.0000%	100%	Phase 1a
	Office Building 4	0%	21%	100%	100.0000%	100%	Phase 1a
	Meeting, Collaboration, Park	0%	0%	0%	82.2222%	100%	Phase 1a
	Hotel Construction	0%	0%	41%	100.0000%	100%	Phase 1a
	Town Square	0%	0%	58%	100.0000%	100%	Phase 1a
	Parcel 2	0%	0%	34%	100.0000%	100%	Phase 1a
	Parcel 3	0%	0%	10%	100.0000%	100%	Phase 1a
	Other	0%	100%	100%	100.0000%	100%	Phase 1a
Phase 1b	South Garage	0%	29%	100%	100.0000%	100%	Phase 1b
	Office Building 3	0%	0%	76%	100.0000%	100%	Phase 1b
	Office Building 1	0%	5%	100%	100.0000%	100%	Phase 1b
	Office Building 2	0%	0%	98%	100.0000%	100%	Phase 1b
	Office Building 5	0%	0%	78%	100.0000%	100%	Phase 1b
	Office Building 6	0%	0%	53%	100.0000%	100%	Phase 1b
	Parcel 6	0%	0%	0%	88.3333%	100%	Phase 1b
	Parcel 7	0%	0%	99%	100.0000%	100%	Phase 1b
Phase 2	Parcels 4 + 5	0%	0%	0%	11.3889%	100%	Phase 2
West Retail	West Retail	0%	0%	54%	100.0000%	100%	Alternate 1

Land Use Phasing Plan

Year	Operational Capacity					
	Office	Retail	Residential	Hotel	Parking	Park
2023	0%	0%	0%	0%	0%	0%
2024	3%	10%	0%	0%	53%	86%
2025	58%	59%	16%	41%	75%	94%
2026	95%	98%	64%	100%	96%	100%
2027	100%	100%	100%	100%	100%	100%

Notes

NG becomes operational

O1, O4, and SG become operational

Hotel, TS, RS23, O2, O3, O5, O6, RS7 becom

MCP, RS6, and RS45 become operational

Office Building Breakdown

Office	Size (SF)	
Office Building 1	132,520	phase 1b
Office Building 2	161,980	phase 1b
Office Building 3	210,083	phase 1b
Office Building 4	167,761	phase 1a
Office Building 5	233,298	phase 1b
Office Building 6	219,139	phase 1b
Office CP	1,829	phase 1a
Office SP1	1,678	phase 1a
Office SP 2	2,500	phase 1a
MCP	448,749	phase 1a
TOTAL	1,579,538	

References

https://www.menlopark.org/DocumentCenter/View/27129/Willow-Village-Masterplan-Entire-Site

Proposed Project Phasing Schedule
Willow Village
Menlo Park, CA

Construction

Phase	Subphase	Construction Schedule		Operational Year	2023				2024				2025				2026				2027			
		Start	End		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Phase 1a Office	North Garage	11/03/22	12/27/23	2023																				
	Office Building 4	01/26/23	10/15/24	2024																				
	Meeting, Collaboration, Park	11/03/22	03/05/26	2026																				
	Hotel Construction	05/01/24	08/04/25	2025																				
	Town Square	02/01/23	06/03/25	2025																				
Phase 1a Mixed Use	Parcel 2 Landscaping	06/09/25	08/28/25	2025																				
	Parcel 3 Landscaping	09/07/25	11/26/25	2025																				
Phase 1b Office	South Garage	03/23/23	09/18/24	2024																				
	Office Building 3	04/27/23	03/27/25	2025																				
	Office Building 1	04/25/23	12/12/24	2024																				
	Office Building 2	05/25/23	01/09/25	2025																				
	Office Building 5	03/23/23	03/20/25	2025																				
	Office Building 6	06/23/23	06/19/25	2025																				
Phase 1b Mixed Use	Parcel 7 Landscaping	10/16/24	01/05/25	2025																				
	Parcel 6 Landscaping	11/25/25	02/13/26	2026																				
Phase 2 Mixed Use	Landscaping	09/01/26	11/20/26	2026																				

SOURCE GROUP	POLLUTANT	CAS	EMISSIONS_G_S	YEAR	PHASE	CONTROLSCEN	DETAIL	AVE
RS7	DPM	9901	7.71E-05		2027 Operations	UNMIT		PERIOD
RS6	DPM	9901	1.10E-04		2027 Operations	UNMIT		PERIOD
RS4	DPM	9901	1.80E-04		2027 Operations	UNMIT		PERIOD
RS5	DPM	9901	1.80E-04		2027 Operations	UNMIT		PERIOD
TS1	DPM	9901	2.14E-04		2027 Operations	UNMIT		PERIOD
NGA	DPM	9901	3.87E-05		2027 Operations	UNMIT		PERIOD
NGB	DPM	9901	3.87E-05		2027 Operations	UNMIT		PERIOD
RS3	DPM	9901	3.87E-05		2027 Operations	UNMIT		PERIOD
RS2	DPM	9901	4.72E-05		2027 Operations	UNMIT		PERIOD
SGA	DPM	9901	9.20E-05		2027 Operations	UNMIT		PERIOD
SGB	DPM	9901	9.20E-05		2027 Operations	UNMIT		PERIOD
OSG	DPM	9901	7.71E-05		2027 Operations	UNMIT		PERIOD
PMP	DPM	9901	1.80E-04		2027 Operations	UNMIT		PERIOD
RS7	PM25	88101	7.71E-05		2027 Operations	UNMIT		PERIOD
RS6	PM25	88101	1.10E-04		2027 Operations	UNMIT		PERIOD
RS4	PM25	88101	1.80E-04		2027 Operations	UNMIT		PERIOD
RS5	PM25	88101	1.80E-04		2027 Operations	UNMIT		PERIOD
TS1	PM25	88101	2.14E-04		2027 Operations	UNMIT		PERIOD
NGA	PM25	88101	3.87E-05		2027 Operations	UNMIT		PERIOD
NGB	PM25	88101	3.87E-05		2027 Operations	UNMIT		PERIOD
RS3	PM25	88101	3.87E-05		2027 Operations	UNMIT		PERIOD
RS2	PM25	88101	4.72E-05		2027 Operations	UNMIT		PERIOD
SGA	PM25	88101	9.20E-05		2027 Operations	UNMIT		PERIOD
SGB	PM25	88101	9.20E-05		2027 Operations	UNMIT		PERIOD
OSG	PM25	88101	7.71E-05		2027 Operations	UNMIT		PERIOD
PMP	PM25	88101	1.80E-04		2027 Operations	UNMIT		PERIOD
RS7	DPM	9901	7.71E-05		2027 Operations	MIT		PERIOD
RS6	DPM	9901	1.10E-04		2027 Operations	MIT		PERIOD
RS4	DPM	9901	1.80E-04		2027 Operations	MIT		PERIOD
RS5	DPM	9901	1.80E-04		2027 Operations	MIT		PERIOD
TS1	DPM	9901	2.14E-04		2027 Operations	MIT		PERIOD
NGA	DPM	9901	3.87E-05		2027 Operations	MIT		PERIOD
NGB	DPM	9901	3.87E-05		2027 Operations	MIT		PERIOD
RS3	DPM	9901	3.87E-05		2027 Operations	MIT		PERIOD
RS2	DPM	9901	4.72E-05		2027 Operations	MIT		PERIOD
SGA	DPM	9901	9.20E-05		2027 Operations	MIT		PERIOD
SGB	DPM	9901	9.20E-05		2027 Operations	MIT		PERIOD
OSG	DPM	9901	7.71E-05		2027 Operations	MIT		PERIOD
PMP	DPM	9901	1.80E-04		2027 Operations	MIT		PERIOD
RS7	PM25	88101	7.71E-05		2027 Operations	MIT		PERIOD
RS6	PM25	88101	1.10E-04		2027 Operations	MIT		PERIOD
RS4	PM25	88101	1.80E-04		2027 Operations	MIT		PERIOD
RS5	PM25	88101	1.80E-04		2027 Operations	MIT		PERIOD
TS1	PM25	88101	2.14E-04		2027 Operations	MIT		PERIOD
NGA	PM25	88101	3.87E-05		2027 Operations	MIT		PERIOD
NGB	PM25	88101	3.87E-05		2027 Operations	MIT		PERIOD
RS3	PM25	88101	3.87E-05		2027 Operations	MIT		PERIOD
RS2	PM25	88101	4.72E-05		2027 Operations	MIT		PERIOD
SGA	PM25	88101	9.20E-05		2027 Operations	MIT		PERIOD
SGB	PM25	88101	9.20E-05		2027 Operations	MIT		PERIOD
OSG	PM25	88101	7.71E-05		2027 Operations	MIT		PERIOD
PMP	PM25	88101	1.80E-04		2027 Operations	MIT		PERIOD

SOURCE GROUP	ENGINE CONTROL	SIZE (kW)	SIZE (HP)	Building
B40EG1	Tier 3	242	324	40
OSG	Tier 3	150	324	HAM
RS7	Tier 3	150	324	RS7
RS6	Tier 3	250	464	RS6
RS4	Tier 2	500	755	RS4
RS5	Tier 2	500	755	RS5
TS1	Tier 2	600	900	TS1
NGA	Tier 4	750	1,220	NGA
NGB	Tier 4	750	1,220	NGB
RS3	Tier 4	750	1,220	RS3
RS2	Tier 4	1,000	1,490	RS2
SGA	Tier 4	1,750	2,900	SGA
PMP	Tier 2	500	755	PMP
SGB	Tier 4	1,750	2,900	SGB

907185 g/ton
365 days/year
24 hours/day
3600 seconds/hc

Modeled Emission Rates

Generator	Pollutant	Emissions (g/s)
RS7	DPM	0.00008
RS6	DPM	0.00011
RS4	DPM	0.00018
RS5	DPM	0.00018
TS1	DPM	0.00021
NGA	DPM	0.00029
NGB	DPM	0.00029
RS3	DPM	0.00029
RS2	DPM	0.00035
SGA	DPM	0.00009
SGB	DPM	0.00009

Table 37
Consumer Product Emission Factor Refinement
Willow Village
Menlo Park, California

Year[1]	Consumer Products VOC inventory (tons/day)[2]	San Mateo County Population[3]	Total Building Square Footage[4]	Consumer Products VOC Emission Factor (lb/square foot/day)
2010	4.93	718,451	537,446,060	1.83E-05
2020	5.20	764,442	571,850,190	1.82E-05

Notes:

1. 2010 data are used because total building square footage was available only for 2010. Building square footage for 2020 was estimated by multiplying 2010 building square footage with the ratio of population in 2020 to that in 2010.
2. VOC inventory obtained from California Air Resources Board's emission inventory for Consumer Products under Solvent Evaporation for the respective years.
3. Population estimates obtained from US Census Bureau's QuickFacts for San Mateo County for the respective years.
4. Total building square footage for 2010 obtained from FEMA HAZUS-MH software.

Abbreviations:

lb - pound

VOC - Volatile Organic Compound

References:

California Air Resources Board. Almanac Emission Projection Data. Available online at https://www.arb.ca.gov/app/emsinv/emssumcat.php. Accessed November 2021.

US Census Bureau QuickFacts. Available online at https://www.census.gov/quickfacts/fact/table/US/PST045219. Accessed November 2021.

US Federal Emergency Management Agency's Hazus software (HAZUS-MH), Version 5.1. Available online at https://msc.fema.gov/portal/resources/hazus.

NOT A REPORT TABLE
Building Operational Capacity For Emissions Scaling
Willow Village
Menlo Park, California

Phase[1]	Subphase[1]	Percent of Year Phase Operates[2]	Percent of Building Constructed by Land Use Type					
			Office	Retail	Residential	Hotel	Parking	Park
2024[3]								
Phase 1	North Garage	100%	--	--	--	--	45%	--
	Office Building 4	21%	2.2%	10%	--	--	--	--
	Meeting, Collaboration, Park	0%	0%	--	--	--	--	--
	Hotel Construction	0%	--	--	--	0%	--	--
	Town Square	0%	--	--	--	--	--	0%
	Parcel 2	0%	--	0%	0%	--	0%	--
	Parcel 3	0%	--	0%	0%	--	0%	--
	Other	100%	0.38%	--	--	--	0.73%	89%
	South Garage	29%	--	--	--	--	6.8%	--
	Office Building 3	0%	0%	--	--	--	--	--
	Office Building 1	5%	0.44%	--	--	--	--	--
	Office Building 2	0%	0%	--	--	--	--	--
	Office Building 5	0%	0%	--	--	--	--	--
	Office Building 6	0%	0%	--	--	--	--	--
	Parcel 6	0%	--	--	0%	--	0%	--
	Parcel 7	0%	--	--	0%	--	0%	--
Phase 2	Parcels 4 + 5	0%	--	0%	0%	--	0%	--
Willow Road Retail	Hamilton Avenue Parcels	0%	--	0%	--	--	--	--
		Total	3.1%	10%	0%	0%	53%	89%
2025[3]								
Phase 1	North Garage	100%	--	--	--	--	45%	--
	Office Building 4	100%	11%	48%	--	--	--	--
	Meeting, Collaboration, Park	0%	0%	--	--	--	--	--
	Hotel Construction	41%	--	--	--	41%	--	--
	Town Square	58%	--	--	--	--	--	6%
	Parcel 2	34%	--	6.6%	6.5%	--	4.0%	--
	Parcel 3	10%	--	2.6%	2.4%	--	1.2%	--
	Other	100%	0.38%	--	--	--	0.73%	89%
	South Garage	100%	--	--	--	--	24%	--
	Office Building 3	76%	10%	--	--	--	--	--
	Office Building 1	100%	8.4%	--	--	--	--	--
	Office Building 2	98%	10%	--	--	--	--	--
	Office Building 5	78%	12%	--	--	--	--	--
	Office Building 6	53%	7.4%	--	--	--	--	--
	Parcel 6	0%	--	--	0%	--	0%	--
	Parcel 7	99%	--	--	6.9%	--	0.51%	--
Phase 2	Parcels 4 + 5	0%	--	0%	0%	--	0%	--
Willow Road Retail	Hamilton Avenue Parcels	54%	--	2.0%	--	--	--	--
		Total	58%	59%	16%	41%	75%	95%

NOT A REPORT TABLE
Building Operational Capacity For Emissions Scaling
Willow Village
Menlo Park, California

Phase[1]	Subphase[1]	Percent of Year Phase Operates[2]	Percent of Building Constructed by Land Use Type					
			Office	Retail	Residential	Hotel	Parking	Park
2026[3]								
Phase 1	North Garage	100%	--	--	--	--	45%	--
	Office Building 4	100%	11%	48%	--	--	--	--
	Meeting, Collaboration, Park	82%	23%	--	--	--	--	--
	Hotel Construction	100%	--	--	--	100%	--	--
	Town Square	100%	--	--	--	--	--	11%
	Parcel 2	100%	--	19%	19%	--	12%	--
	Parcel 3	100%	--	26%	24%	--	12%	--
	Other	100%	0.38%	--	--	--	0.73%	89%
	South Garage	100%	--	--	--	--	24%	--
	Office Building 3	100%	13%	--	--	--	--	--
	Office Building 1	100%	8.4%	--	--	--	--	--
	Office Building 2	100%	10%	--	--	--	--	--
	Office Building 5	100%	15%	--	--	--	--	--
	Office Building 6	100%	14%	--	--	--	--	--
	Parcel 6	88%	--	--	9.0%	--	1.3%	--
	Parcel 7	100%	--	--	6.9%	--	0.51%	--
Phase 2	Parcels 4 + 5	11%	--	0.27%	4.5%	--	0.50%	--
Willow Road Retail	Hamilton Avenue Parcels	100%	--	3.7%	--	--	--	--
		Total	95%	98%	64%	100%	96%	100%
Full Buildout (2027)[1]								
Phase 1	North Garage	100%	--	--	--	--	840,056	--
	Office Building 4	100%	167,761	100,000	--	--	--	--
	Meeting, Collaboration, Park	100%	448,749	--	--	--	--	--
	Hotel Construction	100%	--	--	--	172,000	--	--
	Town Square	100%	--	--	--	--	--	56,254
	Parcel 2	100%	--	40,000	327	--	216,862	--
	Parcel 3	100%	--	55,000	419	--	233,000	--
	Other	100%	6,007	--	--	--	13,600	448,448
	South Garage	100%	--	--	--	--	446,830	--
	Office Building 3	100%	210,083	--	--	--	--	--
	Office Building 1	100%	132,520	--	--	--	--	--
	Office Building 2	100%	161,980	--	--	--	--	--
	Office Building 5	100%	233,298	--	--	--	--	--
Phase 1	Office Building 6	100%	219,139	--	--	--	--	--
	Parcel 6	100%	--	--	176	--	26,809	--
	Parcel 7	100%	--	--	120	--	9,547	--
Phase 2	Parcels 4 + 5	100%	--	5,000	688	--	82,536	--
Willow Road Retail	Hamilton Avenue Parcels	100%	--	7,690	--	--	--	--

NOT A REPORT TABLE
Building Operational Capacity For Emissions Scaling
Willow Village
Menlo Park, California

Phase[1]	Subphase[1]	Percent of Year Phase Operates[2]	Percent of Building Constructed by Land Use Type					
			Office	Retail	Residential	Hotel	Parking	Park

Notes:

1. Construction phasing/subphasing information and full buildout square footage by building provided by Project Applicant.

2. The percentage of year that each building is operational is calculated using the last day of construction for each building. For each partial year of construction, the building is assumed to be operational during the fraction of the year between the last day of construction and the end of that year. The building is assumed to be 0% operational for each full year of construction and 100% operational for each year full year after the end of construction.

3. Partial buildout for years 2024, 2025 and 2026 were calculated based on the portion of building area that becomes operational each year over the total building area for each land use type.

Abbreviations:

sqft - square foot % - percent

Table 43
Unmitigated Construction and Net New Operational CAP Emissions by Year
Willow Village
Menlo Park, California

Year	Average Daily CAP Emissions[1,2] (lb/day)											
	Construction Emissions Only				Net Operational Emissions[3]				Construction and Net Operational Emissions[3]			
	ROG	NO_x	PM_{10}	$PM_{2.5}$	ROG	NO_x	PM_{10}	$PM_{2.5}$	ROG	NO_x	PM_{10}	$PM_{2.5}$
Year 1	0.12	2.4	0.053	0.050	#REF!	-52	-23	-5.2	#REF!	-50	-23	-5.2
Year 2	4.5	64	1.4	1.3	#REF!	-52	-23	-5.2	#REF!	11	-21	-3.9
Year 3	18	114	5.1	4.7	#REF!	-52	-23	-5.2	#REF!	62	-18	-0.52
Year 4	52	53	2.3	2.1	#REF!	-46	-20	-4.3	#REF!	7.2	-17	-2.2
Year 5	63	45	2.1	2.0	#REF!	-16	5.5	0.76	#REF!	29	7.7	2.7
Year 6	31	11	0.60	0.55	#REF!	11	29	5.5	#REF!	21	30	6.1
Full Buildout	--	--	--	--	#REF!	21	37	7.0	#REF!	21	37	7.0
BAAQMD Significance Threshold									54	54	82	54

Notes:

1. Emissions estimated using methods consistent with CalEEMod® version 2020.4.0.
2. Net new operational emissions are scaled for partial years of phased operations by the percent that each parcel is operational for each year relative to full buildout, as shown in Table 16.
3. Unmitigated construction emissions can be found in Table 13. Net unmitigated operational emissions were calculated by subtracting the emissions from the existing conditions from the project emissions, as reported in Table 42.

Abbreviations:

CalEEMod - California Emissions Estimator Model
CAP - Criteria Air Pollutant
lb - pounds
NO_x - nitrogen oxides
PM - particulate matter
$PM_{2.5}$ - PM less than 2.5 microns in diameter
PM_{10} - PM less than 10 microns in diameter
ROG - reactive organic gases
yr - year

References:

CalEEMod Version 2020.4.0 Available Online at: http://www.caleemod.com

Table 40
Summary of Unmitigated Operational CAP Emissions
Willow Village
Menlo Park, California

Emissions Source	CAP Emissions[1] (ton/year)				CAP Emissions[1] (lb/day)[2]			
	ROG	NO_x	PM_{10}	$PM_{2.5}$	ROG	NO_x	PM_{10}	$PM_{2.5}$
Existing Conditions (2019)[3]								
Architectural Coating	0.53	--	--	--	2.9	--	--	--
Consumer Products	#REF!	--	--	--	#REF!	--	--	--
Landscaping	2.9E-03	2.8E-04	1.1E-04	1.1E-04	0.016	1.5E-03	6.0E-04	6.0E-04
Natural Gas Use	0.16	1.5	0.11	0.11	0.89	8.1	0.61	0.61
Mobile	5.0	8.0	4.0	0.84	27	44	22	4.6
Emergency Generators	2.9E-03	0.051	2.7E-03	2.7E-03	0.016	0.28	0.015	0.015
Total Emissions	**#REF!**	**10**	**4.1**	**0.95**	**#REF!**	**52**	**23**	**5.2**
Full Buildout Conditions[4]								
Architectural Coating	2.2	--	--	--	12	--	--	--
Consumer Products	12	--	--	--	68	--	--	--
Landscaping	0.39	0.15	0.071	0.071	2.1	0.81	0.39	0.39
Natural Gas Use[5]	0.012	0.11	8.2E-03	8.2E-03	0.065	0.59	0.045	0.045
Mobile	10	12	11	2.1	55	64	58	11
Emergency Generators	0.15	1.3	0.047	0.047	0.79	7.0	0.26	0.26
Total Emissions	**25**	**13**	**11**	**2.2**	**137**	**73**	**59**	**12**
Partial Buildout Emissions[6]								
Total Year 4 Emissions	1.3	1.1	0.53	0.16	7.0	5.9	2.9	0.90
Total Year 5 Emissions	11	6.7	5.1	1.1	60	37	28	6.0
Total Year 6 Emissions	21	11	9.5	2.0	116	63	52	11
Net Emissions[7]								
Net Year 4 Emissions	#REF!	-8.5	-3.6	-0.79	#REF!	-46	-20	-4.3
Net Year 5 Emissions	#REF!	-2.8	1.0	0.14	#REF!	-16	5.5	0.76
Net Year 6 Emissions	#REF!	2.0	5.3	1.0	#REF!	11	29	5.5
Net Full Buildout Emissions	**#REF!**	**3.7**	**6.7**	**1.3**	**#REF!**	**21**	**37**	**7.0**

Notes:

1. Emissions estimated using methods consistent with CalEEMod® version 2020.4.0.
2. Operational emissions shown represent activity and emissions across 365 days per year.
3. Operational emissions from existing conditions were calculated using CalEEMod® default data and emission factors based on the existing land use type and energy use rates provided by the Project Applicant.
4. Full buildout operational emissions are based on electricity, natural gas, and water usage rates provided by the Project Applicant alongside CalEEMod® defaults for architectural coating, consumer product, landscaping, and waste emissions. Net emissions were calculated as the difference between full buildout emissions and existing condition emissions.
5. Natural gas usage for the project would be used exclusively for supermarket and dining operations.
6. Partial buildout emissions were calculated from full buildout using scaling factors by land use type and year, as shown in Table 16.
7. Net emissions were calculated as the difference between partial buildout emissions for each year and existing condition emissions.

Abbreviations:

BAAQMD - Bay Area Air Quality Management District
CalEEMod® - California Emissions Estimator Model
CAP - Criteria Air Pollutant
CO_2e - carbon dioxide equivalent
GHG - greenhouse gas
lb - pounds
MT - metric ton
NOx - nitrogen oxides
PM - particulate matter
$PM_{2.5}$ - PM less than 2.5 microns in diameter
PM_{10} - PM less than 10 microns in diameter
PM - particulate matter
ROG - reactive organic gases
yr - year

References:

CalEEMod® Version 2020.4.0 Available Online at: http://www.caleemod.com

Table 27
Generator Emissions from Existing Conditions and Project Operations
Willow Village
Menlo Park, California

Generator Information[1]

Scenario	Number of Generators	Engine Control[2]	Size	Fuel Type	Annual Operation[3]
			HP		hr/yr
Existing Conditions	1	Tier 3	324	Diesel	50
Full Buildout	2	Tier 3	324	Diesel	50
	1	Tier 3	464	Diesel	50
	3	Tier 2	755	Diesel	50
	1	Tier 2	900	Diesel	50
	3	Tier 4	1,220	Diesel	50
	1	Tier 4	1,490	Diesel	50
	2	Tier 4	2,900	Diesel	50

Generator Emissions

Size (hp)	Quantity	Annual Emissions (ton/yr)				(MT/yr)
		ROG	NO_x	PM_{10}	$PM_{2.5}$	CO_2e
Existing Conditions Generator Emissions[3]						
324	1	0.0029	0.051	2.7E-03	2.7E-03	8.5
Total Emissions		**0.0029**	**0.051**	**0.0027**	**0.0027**	**8.5**
Full Buildout Conditions Generator Emissions[3]						
324	2	5.7E-03	1.0E-01	5.4E-03	5.4E-03	17
464	1	4.1E-03	7.3E-02	3.8E-03	3.8E-03	12
755	3	3.2E-02	5.7E-01	1.9E-02	1.9E-02	59
900	1	1.3E-02	2.3E-01	7.4E-03	7.4E-03	24
1,220	3	3.0E-02	1.0E-01	4.0E-03	4.0E-03	96
1,490	1	1.2E-02	4.1E-02	1.6E-03	1.6E-03	39
2,900	2	4.8E-02	1.6E-01	6.4E-03	6.4E-03	152
Total Emissions		**0.15**	**1.3**	**0.047**	**0.047**	**399**

Notes:

1. Number, size, and fuel of emergency generators were provided by the Project Applicant.
2. All generators over 1,000 HP were assumed to be Tier 4, consistent with BAAQMD BACT guidelines.
3. Operation for routine maintenance and testing was conservatively assumed to be 50 hours per year, the maximum allowable by the Airborne Toxics Control Measure (ATCM) for Stationary Compression Ignition Engines (17 CCR 93115).

Abbreviations:

BACT - Best Available Control Technology
CO_2 - carbon dioxide
CO_2e - carbon dioxide equivalents
g - grams
hp - horsepower
hr - hour
MT - metric tons
NOx - oxides of nitrogen
PM - particulate matter
PM_{10} - PM less than 10 microns in diameter
$PM_{2.5}$ - PM matter less than 2.5 microns in diameter
ROG - reactive organic gases
yr - year

Table 27
Generator Emissions from Existing Conditions and Project Operations
Willow Village
Menlo Park, California

References:

BAAQMD. Best Available Constrol Technology (BACT) Guideline. Available online at: https://www.baaqmd.gov/~/media/files/engineering/bact-tbact-workshop/combustion/96-1-5.pdf?la=en.

Table 34
Solid Waste Emissions from Existing Conditions and Project Operations
Willow Village
Menlo Park, California

Solid Waste Emissions[1]

Location	CalEEMod® Land Use Subtype	CO_2 (MT/year)	CH_4 (MT/year)	CO_2e (MT/year)
Existing Conditions (2019)				
Office	General Office Building	8.5	0.51	21
Commercial	Research and Development	2.0	0.12	5.0
Industrial - Warehouse	Unrefrigerated Warehouse-No Rail	96	5.6	237
Industrial - Manufacturing	Manufacturing	5.9	0.35	15
Recreational	Health Club	28	1.6	69
Light Industrial	General Light Industry	20	1.2	50
Parking	Enclosed Parking with Elevator	0	0	0
Total Existing Emissions		**160**	**9.5**	**397**
Full Buildout Conditions				
Office		54	3.2	135
Retail		44	2.6	110
Residential		162	9.5	400
Hotel		22	1.3	53
Parking		0	0	0
Park		0.17	0.010	0.42
Total Full Buildout Emissions		**282**	**17**	**698**
Partial Buildout[2]				
Total Year 4 Emissions[2]		6.3	0.37	16
Total Year 5 Emissions[2]		92	5.5	229
Total Year 6 Emissions[2]		220	13	544

Notes:

1. Emissions shown in this table were calculated using default values and methods from CalEEMod Version 2020.4.0. These calculations were performed using default waste use rates by land use type and an 82% diversion rate for office land use types provided by the Project Applicant, shown in Table 33, and default solid waste landfill gas emission factors from Table 10.2 of CalEEMod User's Guide Appendix D.
2. Partial buildout emissions were calculated from full buildout using scaling factors by land use type and year, as shown in Table 16.

Abbreviations:

CalEEMod - California Emissions Estimator Model
CH_4 - methane
CO_2 - carbon dioxide
CO_2e - carbon dioxide equivalents
LFG - Landfill Gas
MT - metric ton

References:

California Air Pollution Control Officers Association (CAPCOA). California Emissions Estimator Model (CalEEMod®), Version 2020.4.0. Available online at http://www.caleemod.com

Table 33
Solid Waste Generation for Existing Conditions and Project Operations
Willow Village
Menlo Park, California

Solid Waste Generation[1]

Land Use	Size	Units	Solid Waste Disposal Rate (ton/year)
Existing Conditions (2019)			
Office	251,530	sqft	42
Commercial	123,870	sqft	10
Industrial - Warehouse	500,780	sqft	471
Industrial - Manufacturing	23,570	sqft	29
Recreational	24,060	sqft	137
Light Industrial	80,100	sqft	99
Parking	920,000	sqft	0
Full Buildout Conditions			
Office	1,600,000	sqft	268
Retail	207,690	sqft	218
Residential	1,730	DU	796
Hotel	0,193	sqft	106
Parking	1,869,240	sqft	0
Park	403,837	sqft	0.83

Notes:

1. Solid Waste Generation Rates are from Table 10.1 of Appendix D of the CalEEMod User's Guide. An 82% diversion rate, provided by the Project Applicant via email communication dated August 2, 2021, is applied to default solid waste generation rates for the existing and project office land use to account for recycling and composting. The diversion rate is generated using data from Recology with the assumption that all bins are at 100% capacity and 0% contamination.

Abbreviations:

CalEEMod - California Emissions Estimator Model

DU - dwelling unit

sqft - square feet

References

California Air Pollution Control Officers Association (CAPCOA). California Emissions Estimator Model (CalEEMod®), Version 2020.4.0. Available online at http://www.caleemod.com

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Willow Village
Menlo Park, California

Wastewater Electricity Intensity[1]

County	Electricity to Treat Wastewater (kWh/million gal)
San Mateo	1,911

Wastewater Treatment Types[2]

County	Septic Tank	Aerobic	Anaerobic, Facultative Lagoons	Anaerobic, Combustion of Gas	Anaerobic, Cogeneration of Gas
San Mateo	10%	87%	2.2%	100%	0%

Wastewater Treatment Direct Emission Factors[3]

Wastewater Treatment Type	CO_2 Biogenic (ton/gal)	CO_2 Non-Biogenic (ton/gal)	CH_4 (ton/gal)	N_2O (ton/gal)
Septic	0	0	2.5E-07	8.5E-10
Aerobic	3.9E-07	0	1.3E-09	8.5E-10
Anaerobic Facultative	3.9E-07	0	4.0E-07	8.5E-10
Digester Burn	0	0	0	0
Digester Cogen	0	0	0	0

Notes:

1. Water Electricity Intensity from Table 9.2 of Appendix D of the CalEEMod® User's Guide.
2. Water Treatment Types from Table 9.3 of Appendix D of the CalEEMod® User's Guide.
3. Wastewater Treatment Direct Emission Factors from Table 9.4 of Appendix D of the CalEEMod® User's Guide.

Abbreviations:

CalEEMod® - California Emissions Estimator Model
CH_4 - methane
CO_2 - carbon dioxide
gal - gallon
kwh - kilowatt
N_2O - nitrous oxide

References:

California Air Pollution Control Officers Association (CAPCOA). California Emissions Estimator Model (CalEEMod®), Version 2020.4.0. Available online at http://www.caleemod.com

Table 32
Water Usage and Wastewater Emissions from Existing Conditions and Project Operations
Willow Village
Menlo Park, California

Land Use	Electricity Indirect Emissions[1,2] (MT CO_2e/yr)	Septic Tank Direct Emissions[1,2] (MT CO_2e/yr)	Aerobic Direct Emissions[1,2] (MT CO_2e/yr)	Facultative Lagoon Direct Emissions[1,2] (MT CO_2e/yr)	Total Emissions (MT CO2e/yr)
Existing Conditions (2019)					
Office	37	27	24	10	98
Commercial	36	37	33	13.1	119
Industrial - Warehouse	68	71	62	25	226
Industrial - Manufacturing	3.2	3.3	2.9	1.2	10.6
Recreational	1.2	0.87	0.76	0.30	3.1
Light Industrial	11	11.3	9.9	4.0	36
Parking	0	0	0	0	0
Total Existing Emissions	**156**	**151**	**132**	**53**	**492**
Full Buildout					
Office	19	21	19	7.5	67
Retail	2.0	2.6	2.3	0.91	7.8
Residential	32	41	36	14	123
Hotel	4.1	4.6	4.1	1.6	14
Parking	0.42	0	0	0	0.42
Park	4.2	0	0	0	4.2
Total Full Buildout Emissions	**62**	**70**	**61**	**24**	**217**
Partial Buildout[3]					
Total Year 4 Emissions[3]	5.0	0.92	0.81	0.32	7.1
Total Year 5 Emissions[3]	24	22	20	7.9	74
Total Year 6 Emissions[3]	49	54	47	19	168

Notes:

1. Emissions shown in this table were calculated using default values and methods from CalEEMod Version 2020.4.0. The Water Electricity Intensity, Water Treatment Types, and Wastewater Treatment Direct Emission Factors used in the calculation can be found in Tables 9.2, 9.3 and 9.4 of Appendix D of the CalEEMod user guide, respectively. These calculations were performed using water use rates, shown in Table 31, and energy emission factors, shown in Table 29.
2. Consistent with CalEEMod, indoor water use was assumed to be processed as wastewater and outdoor water use was assumed to not be processed as wastewater.
3. Partial buildout direct emissions from Septic Tank, Aerobic, and Facultative Lagoon wastewater treatment were calculated from full buildout using scaling factors by land use type and year, as shown in Table 1. For partial buildout indirect electricity emissions from water usage and wastewater treatment, usage rates rather than emission were scaled to account for year specific energy emission factors from PG&E, as shown in Table 29.

Abbreviations:

CalEEMod - California Emissions Estimator Model
CO_2e - carbon dioxide equivalents
MT - metric ton
yr - year

References:

California Air Pollution Control Officers Association (CAPCOA). California Emissions Estimator Model (CalEEMod®), Version 2020.4.0. Available online at http://www.caleemod.com

Table 31
Water Usage for Existing Conditions and Project Operations
Willow Village
Menlo Park, California

Water Usage

Land Use	CalEEMod® Land Use Subtype	Size	Size Metric	Indoor Water (million gal/year)	Outdoor Water (million gal/year)
Existing Conditions (2019)[1]					
Office	General Office Building	251,530	sqft	45	27
Commercial	Research and Development	123,870	sqft	61	0
Industrial - Warehouse	Unrefrigerated Warehouse-No Rail	500,780	sqft	116	0
Industrial - Manufacturing	Manufacturing	23,570	sqft	5.5	0
Recreational	Health Club	24,060	sqft	1.4	0.87
Light Industrial	General Light Industry	80,100	sqft	19	0
Parking	Enclosed Parking with Elevator	920,000	sqft	0	0
Full Buildout[2]					
Office		1,600,000	sqft	35	10
Retail		207,690	sqft	4.2	0.36
Residential		1,695,976	sqft	67	6.3
Hotel		172,000	sqft	7.6	2.5
Parking		1,869,240	sqft	0	1.4
Park		403,837	sqft	0	14
Partial Buildout[3]					
			Total Year 4 Usage[3]	1.5	13
			Total Year 5 Usage[3]	37	23
			Total Year 6 Usage[3]	88	32

Notes:

1. Existing water use was calculated using the CalEEMod default water consumption profile for each land use.
2. Project indoor water use rates and outdoor water use for all parcels except Willow Road Retail were provided by the Project Applicant on June 14, 2021. Indoor and outdoor water use rates for Willow Road Retail were calculated using the CalEEMod default water consumption profile for the retail land use type.
3. Partial buildout usage rates were calculated from full buildout using scaling factors by land use type and year, as shown in Table 16.

Abbreviations:

CalEEMod - California Emissions Estimator Model
gal - gallon
kWh - kilowatt-hours
ksf - thousand square feet
sqft - square feet

References:

California Air Pollution Control Officers Association (CAPCOA). California Emissions Estimator Model (CalEEMod®), Version 2020.4.0. Available online at http://www.caleemod.com

	1,3-Butadi	Acetaldeh	Acrolein	Benzene	Ethylbenze	Formaldeh	Hexane	Methanol	Methyl Eth	Naphthale	Propylene	Styrene	Toluene	Xylenes	DPM	PM2.5
ALL	7%	0%	0%	7%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	85%	0%
CARS	40%	0%	0%	39%	1%	4%	0%	0%	0%	1%	0%	0%	0%	0%	14%	0%
ON-DEMAND	33%	0%	0%	37%	1%	3%	0%	0%	0%	1%	0%	0%	0%	0%	24%	0%
TRUCKS	2%	0%	0%	2%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	95%	0%

SRCID	LENGTH (m)
ADAMS_CT	222.850118
ADAMSD01	57.225656
ADAMSD02	160.100490
ADAMSD03	76.047328
ADAMSD04	82.515599
ADAMSD05	146.547088
ADAMSD06	81.229082
BAY_EAST	1185.196733
BAY_EFB	717.849945
BAY_M01	109.914457
BAY_M02	135.031306
BAY_M03	116.524822
BAY_M04	142.743258
BAY_M05	349.556914
BAY_WFB1	419.251490
BAY_WFB2	210.073287
BAY_WFB3	124.007844
BAY_WFB4	328.324433
BAY_WFB5	112.584415
BAY_WFB6	542.175493
BAY_WFB7	135.756456
OBRIEN01	320.023359
OBRIEN02	138.265113
OBRIEN03	35.372925
OBRIEN04	29.083881
OBRIEN05	28.273786
OBRIEN06	51.997130
OBRIEN07	43.074767
OBRIEN08	20.344436
OBRIEN09	19.851066
OBRIEN10	20.827631
OBRIEN11	44.070473
OBRIEN12	101.616444
OBRIEN13	31.716090
OBRIEN14	112.117185
OBRIEN15	241.615303
OBRIEN16	47.827355
OBRIEN17	53.898940
UNIV_01	110.008736
UNIV_02	90.820266
UNIV_03	222.366082
UNIV_04	121.454612
UNIV_05	80.332629
UNIV_06	69.047583
UNIV_07	257.795681
UNIV_08	184.684600

UNIV_09	141.673170
UNIV_10	309.638334
UNIV_11	114.954130
UNIV_12	63.363466
UNIV_13	127.810050
UNIV_14	201.001126
UNIV_15	647.107168
WILLOW01	96.601672
WILLOW02	173.793349
WILLOW03	44.507825
WILLOW04	184.777450
WILLOW05	201.326325
WILLOW06	110.348593
WILLOW07	281.194186
WILLOW08	92.987830
WILLOW09	38.725127
WILLOW10	31.031861
WILLOW11	180.180942
WILLOW12	255.926472
WILLOW13	215.875969

Fleet Mix	Total PM10 RUNEX/IDLEX Emissions	Diesel PM10 RUNEX/IDLEX Emissions	Ratio
Cars	0.017247791	0.00026751	0.01551
On-Deman	0.009178843	0.000156722	0.017074
Trucks	0.014141859	0.013313824	0.941448
ALL	0.036591627	0.014968857	0.409079

nee

YEAR	FLEET	POL	EF_g_mi
2025	ALL	TOG_EVAP	0.03275683
2026	ALL	TOG_EVAP	0.03275683
2027	ALL	TOG_EVAP	0.03275683
2028	ALL	TOG_EVAP	0.03275683
2029	ALL	TOG_EVAP	0.03275683
2030	ALL	TOG_EVAP	0.03275683
2031	ALL	TOG_EVAP	0.03275683
2032	ALL	TOG_EVAP	0.03275683
2033	ALL	TOG_EVAP	0.03275683
2034	ALL	TOG_EVAP	0.03275683
2035	ALL	TOG_EVAP	0.03275683
2036	ALL	TOG_EVAP	0.03275683
2037	ALL	TOG_EVAP	0.03275683
2038	ALL	TOG_EVAP	0.03275683
2039	ALL	TOG_EVAP	0.03275683
2040	ALL	TOG_EVAP	0.03275683
2041	ALL	TOG_EVAP	0.03275683
2042	ALL	TOG_EVAP	0.03275683
2043	ALL	TOG_EVAP	0.03275683
2044	ALL	TOG_EVAP	0.03275683
2045	ALL	TOG_EVAP	0.03275683
2046	ALL	TOG_EVAP	0.03275683
2047	ALL	TOG_EVAP	0.03275683
2048	ALL	TOG_EVAP	0.03275683
2049	ALL	TOG_EVAP	0.03275683
2050	ALL	TOG_EVAP	0.03275683
2051	ALL	TOG_EVAP	0.03275683
2052	ALL	TOG_EVAP	0.03275683
2053	ALL	TOG_EVAP	0.03275683
2054	ALL	TOG_EVAP	0.03275683
2055	ALL	TOG_EVAP	0.03275683
2056	ALL	TOG_EVAP	0.03275683
2025	ALL	TOG_EX	0.021078382
2026	ALL	TOG_EX	0.021078382
2027	ALL	TOG_EX	0.021078382
2028	ALL	TOG_EX	0.021078382
2029	ALL	TOG_EX	0.021078382
2030	ALL	TOG_EX	0.021078382
2031	ALL	TOG_EX	0.021078382
2032	ALL	TOG_EX	0.021078382
2033	ALL	TOG_EX	0.021078382
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2035	ALL	TOG_EX	0.021078382
2036	ALL	TOG_EX	0.021078382
2037	ALL	TOG_EX	0.021078382
2038	ALL	TOG_EX	0.021078382

2039	ALL	TOG_EX	0.021078382
2040	ALL	TOG_EX	0.021078382
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2047	ALL	TOG_EX	0.021078382
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2049	ALL	TOG_EX	0.021078382
2050	ALL	TOG_EX	0.021078382
2051	ALL	TOG_EX	0.021078382
2052	ALL	TOG_EX	0.021078382
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2056	ALL	TOG_EX	0.021078382
2025	ALL	DPM	0.001805083
2026	ALL	DPM	0.001805083
2027	ALL	DPM	0.001805083
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2050	ALL	DPM	0.001805083
2051	ALL	DPM	0.001805083
2052	ALL	DPM	0.001805083
2053	ALL	DPM	0.001805083

2054	ALL	DPM	0.001805083
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2056	ALL	DPM	0.001805083
2025	ALL	PM2.5	0.019105559
2026	ALL	PM2.5	0.019105559
2027	ALL	PM2.5	0.019105559
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2030	ALL	PM2.5	0.019105559
2031	ALL	PM2.5	0.019105559
2032	ALL	PM2.5	0.019105559
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2034	ALL	PM2.5	0.019105559
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2043	ALL	PM2.5	0.019105559
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2046	ALL	PM2.5	0.019105559
2047	ALL	PM2.5	0.019105559
2048	ALL	PM2.5	0.019105559
2049	ALL	PM2.5	0.019105559
2050	ALL	PM2.5	0.019105559
2051	ALL	PM2.5	0.019105559
2052	ALL	PM2.5	0.019105559
2053	ALL	PM2.5	0.019105559
2054	ALL	PM2.5	0.019105559
2055	ALL	PM2.5	0.019105559
2056	ALL	PM2.5	0.019105559
2025	CARS	TOG_EVAP	0.037310031
2026	CARS	TOG_EVAP	0.037310031
2027	CARS	TOG_EVAP	0.037310031
2028	CARS	TOG_EVAP	0.037310031
2029	CARS	TOG_EVAP	0.037310031
2030	CARS	TOG_EVAP	0.037310031
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2032	CARS	TOG_EVAP	0.037310031
2033	CARS	TOG_EVAP	0.037310031
2034	CARS	TOG_EVAP	0.037310031
2035	CARS	TOG_EVAP	0.037310031
2036	CARS	TOG_EVAP	0.037310031

2037	CARS	TOG_EVAP	0.037310031
2038	CARS	TOG_EVAP	0.037310031
2039	CARS	TOG_EVAP	0.037310031
2040	CARS	TOG_EVAP	0.037310031
2041	CARS	TOG_EVAP	0.037310031
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2043	CARS	TOG_EVAP	0.037310031
2044	CARS	TOG_EVAP	0.037310031
2045	CARS	TOG_EVAP	0.037310031
2046	CARS	TOG_EVAP	0.037310031
2047	CARS	TOG_EVAP	0.037310031
2048	CARS	TOG_EVAP	0.037310031
2049	CARS	TOG_EVAP	0.037310031
2050	CARS	TOG_EVAP	0.037310031
2051	CARS	TOG_EVAP	0.037310031
2052	CARS	TOG_EVAP	0.037310031
2053	CARS	TOG_EVAP	0.037310031
2054	CARS	TOG_EVAP	0.037310031
2055	CARS	TOG_EVAP	0.037310031
2056	CARS	TOG_EVAP	0.037310031
2025	CARS	TOG_EX	0.017224018
2026	CARS	TOG_EX	0.017224018
2027	CARS	TOG_EX	0.017224018
2028	CARS	TOG_EX	0.017224018
2029	CARS	TOG_EX	0.017224018
2030	CARS	TOG_EX	0.017224018
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2033	CARS	TOG_EX	0.017224018
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2047	CARS	TOG_EX	0.017224018
2048	CARS	TOG_EX	0.017224018
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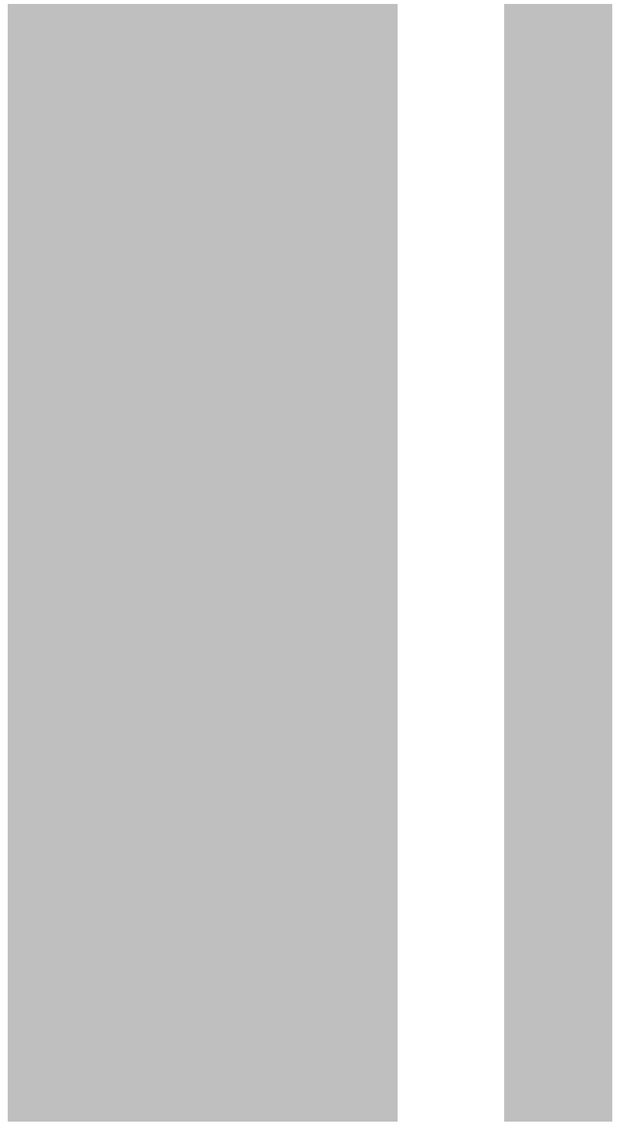

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2053	CARS	TOG_EX	0.017224018
2054	CARS	TOG_EX	0.017224018
2055	CARS	TOG_EX	0.017224018
2056	CARS	TOG_EX	0.017224018
2025	CARS	DPM	0.001202968
2026	CARS	DPM	0.001202968
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2037	CARS	DPM	0.001202968
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2043	CARS	DPM	0.001202968
2044	CARS	DPM	0.001202968
2045	CARS	DPM	0.001202968
2046	CARS	DPM	0.001202968
2047	CARS	DPM	0.001202968
2048	CARS	DPM	0.001202968
2049	CARS	DPM	0.001202968
2050	CARS	DPM	0.001202968
2051	CARS	DPM	0.001202968
2052	CARS	DPM	0.001202968
2053	CARS	DPM	0.001202968
2054	CARS	DPM	0.001202968
2055	CARS	DPM	0.001202968
2056	CARS	DPM	0.001202968
2025	CARS	PM2.5	0.016846914
2026	CARS	PM2.5	0.016846914
2027	CARS	PM2.5	0.016846914
2028	CARS	PM2.5	0.016846914
2029	CARS	PM2.5	0.016846914
2030	CARS	PM2.5	0.016846914
2031	CARS	PM2.5	0.016846914
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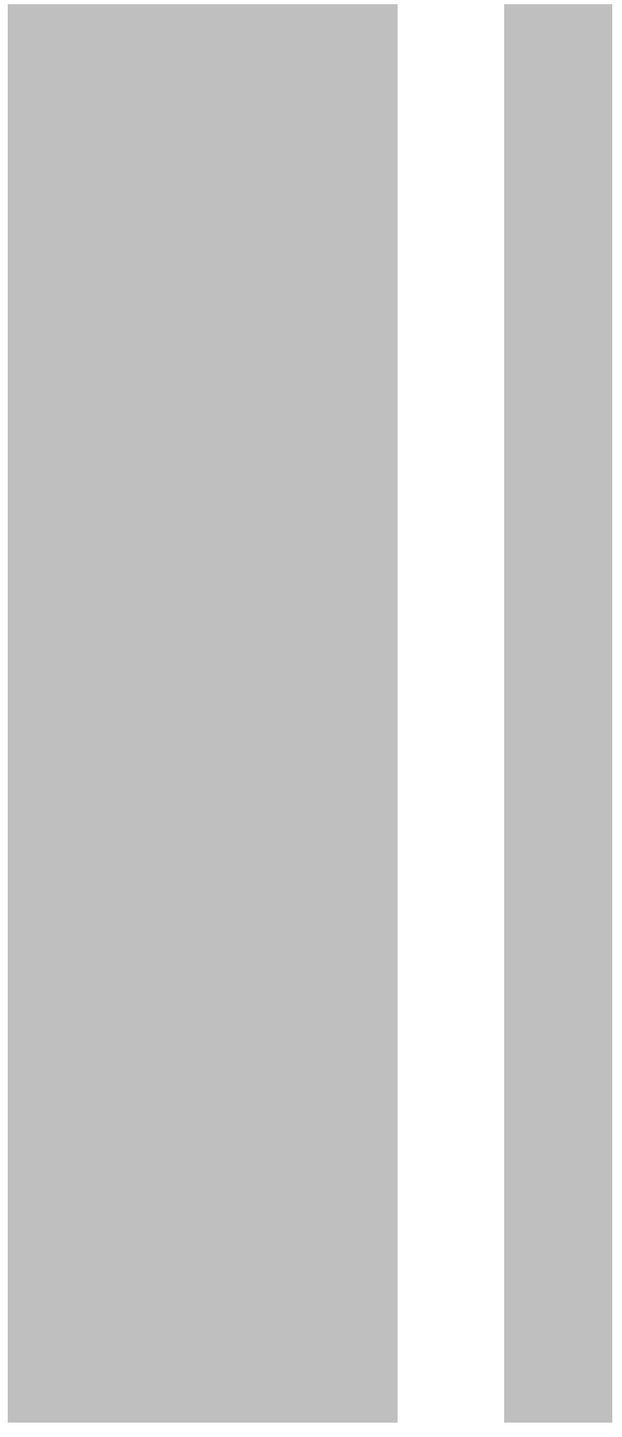
2033	CARS	PM2.5	0.016846914
2034	CARS	PM2.5	0.016846914



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2037	CARS	PM2.5	0.016846914
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2039	CARS	PM2.5	0.016846914
2040	CARS	PM2.5	0.016846914
2041	CARS	PM2.5	0.016846914
2042	CARS	PM2.5	0.016846914
2043	CARS	PM2.5	0.016846914
2044	CARS	PM2.5	0.016846914
2045	CARS	PM2.5	0.016846914
2046	CARS	PM2.5	0.016846914
2047	CARS	PM2.5	0.016846914
2048	CARS	PM2.5	0.016846914
2049	CARS	PM2.5	0.016846914
2050	CARS	PM2.5	0.016846914
2051	CARS	PM2.5	0.016846914
2052	CARS	PM2.5	0.016846914
2053	CARS	PM2.5	0.016846914
2054	CARS	PM2.5	0.016846914
2055	CARS	PM2.5	0.016846914
2056	CARS	PM2.5	0.016846914
2025	TRUCKS	TOG_EVAP	0.032695656
2026	TRUCKS	TOG_EVAP	0.032695656
2027	TRUCKS	TOG_EVAP	0.032695656
2028	TRUCKS	TOG_EVAP	0.032695656
2029	TRUCKS	TOG_EVAP	0.032695656
2030	TRUCKS	TOG_EVAP	0.032695656
2031	TRUCKS	TOG_EVAP	0.032695656
2032	TRUCKS	TOG_EVAP	0.032695656
2033	TRUCKS	TOG_EVAP	0.032695656
2034	TRUCKS	TOG_EVAP	0.032695656
2035	TRUCKS	TOG_EVAP	0.032695656
2036	TRUCKS	TOG_EVAP	0.032695656
2037	TRUCKS	TOG_EVAP	0.032695656
2038	TRUCKS	TOG_EVAP	0.032695656
2039	TRUCKS	TOG_EVAP	0.032695656
2040	TRUCKS	TOG_EVAP	0.032695656
2041	TRUCKS	TOG_EVAP	0.032695656
2042	TRUCKS	TOG_EVAP	0.032695656
2043	TRUCKS	TOG_EVAP	0.032695656
2044	TRUCKS	TOG_EVAP	0.032695656
2045	TRUCKS	TOG_EVAP	0.032695656
2046	TRUCKS	TOG_EVAP	0.032695656
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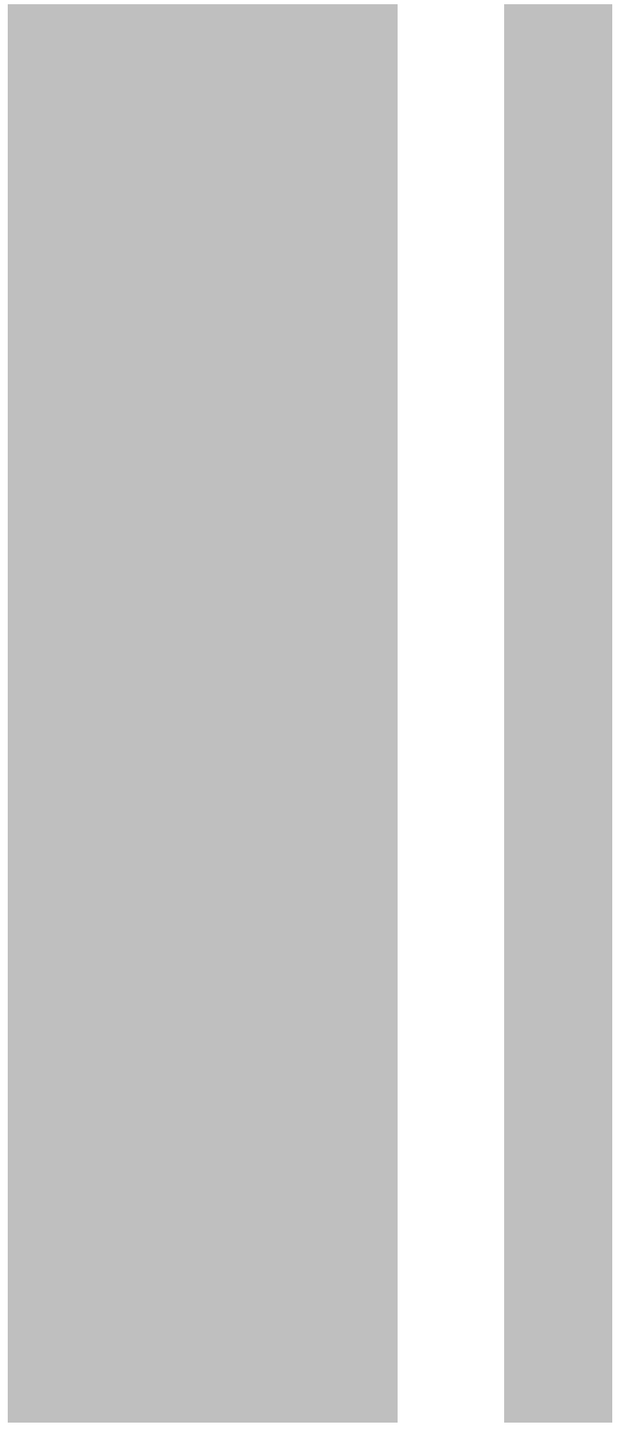
2048	TRUCKS	TOG_EVAP	0.032695656
2049	TRUCKS	TOG_EVAP	0.032695656



2050	TRUCKS	TOG_EVAP	0.032695656
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2053	TRUCKS	TOG_EVAP	0.032695656
2054	TRUCKS	TOG_EVAP	0.032695656
2055	TRUCKS	TOG_EVAP	0.032695656
2056	TRUCKS	TOG_EVAP	0.032695656
2025	TRUCKS	TOG_EX	0.089025413
2026	TRUCKS	TOG_EX	0.089025413
2027	TRUCKS	TOG_EX	0.089025413
2028	TRUCKS	TOG_EX	0.089025413
2029	TRUCKS	TOG_EX	0.089025413
2030	TRUCKS	TOG_EX	0.089025413
2031	TRUCKS	TOG_EX	0.089025413
2032	TRUCKS	TOG_EX	0.089025413
2033	TRUCKS	TOG_EX	0.089025413
2034	TRUCKS	TOG_EX	0.089025413
2035	TRUCKS	TOG_EX	0.089025413
2036	TRUCKS	TOG_EX	0.089025413
2037	TRUCKS	TOG_EX	0.089025413
2038	TRUCKS	TOG_EX	0.089025413
2039	TRUCKS	TOG_EX	0.089025413
2040	TRUCKS	TOG_EX	0.089025413
2041	TRUCKS	TOG_EX	0.089025413
2042	TRUCKS	TOG_EX	0.089025413
2043	TRUCKS	TOG_EX	0.089025413
2044	TRUCKS	TOG_EX	0.089025413
2045	TRUCKS	TOG_EX	0.089025413
2046	TRUCKS	TOG_EX	0.089025413
2047	TRUCKS	TOG_EX	0.089025413
2048	TRUCKS	TOG_EX	0.089025413
2049	TRUCKS	TOG_EX	0.089025413
2050	TRUCKS	TOG_EX	0.089025413
2051	TRUCKS	TOG_EX	0.089025413
2052	TRUCKS	TOG_EX	0.089025413
2053	TRUCKS	TOG_EX	0.089025413
2054	TRUCKS	TOG_EX	0.089025413
2055	TRUCKS	TOG_EX	0.089025413
2056	TRUCKS	TOG_EX	0.089025413
2025	TRUCKS	DPM	0.011163109
2026	TRUCKS	DPM	0.011163109
2027	TRUCKS	DPM	0.011163109
2028	TRUCKS	DPM	0.011163109
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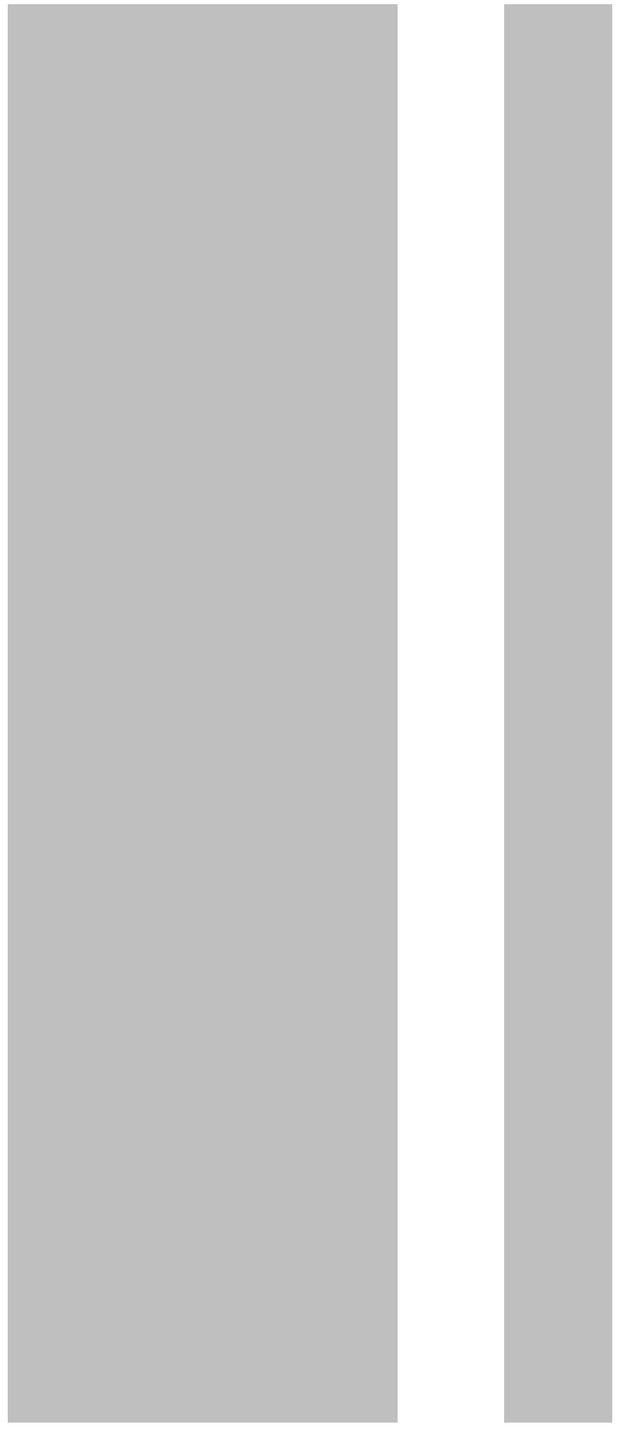

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2041	TRUCKS	DPM	0.011163109
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2045	TRUCKS	DPM	0.011163109
2046	TRUCKS	DPM	0.011163109
2047	TRUCKS	DPM	0.011163109
2048	TRUCKS	DPM	0.011163109
2049	TRUCKS	DPM	0.011163109
2050	TRUCKS	DPM	0.011163109
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2052	TRUCKS	DPM	0.011163109
2053	TRUCKS	DPM	0.011163109
2054	TRUCKS	DPM	0.011163109
2055	TRUCKS	DPM	0.011163109
2056	TRUCKS	DPM	0.011163109
2025	TRUCKS	PM2.5	0.051351445
2026	TRUCKS	PM2.5	0.051351445
2027	TRUCKS	PM2.5	0.051351445
2028	TRUCKS	PM2.5	0.051351445
2029	TRUCKS	PM2.5	0.051351445
2030	TRUCKS	PM2.5	0.051351445
2031	TRUCKS	PM2.5	0.051351445
2032	TRUCKS	PM2.5	0.051351445
2033	TRUCKS	PM2.5	0.051351445
2034	TRUCKS	PM2.5	0.051351445
2035	TRUCKS	PM2.5	0.051351445
2036	TRUCKS	PM2.5	0.051351445
2037	TRUCKS	PM2.5	0.051351445
2038	TRUCKS	PM2.5	0.051351445
2039	TRUCKS	PM2.5	0.051351445
2040	TRUCKS	PM2.5	0.051351445
2041	TRUCKS	PM2.5	0.051351445
2042	TRUCKS	PM2.5	0.051351445
2043	TRUCKS	PM2.5	0.051351445
2044	TRUCKS	PM2.5	0.051351445
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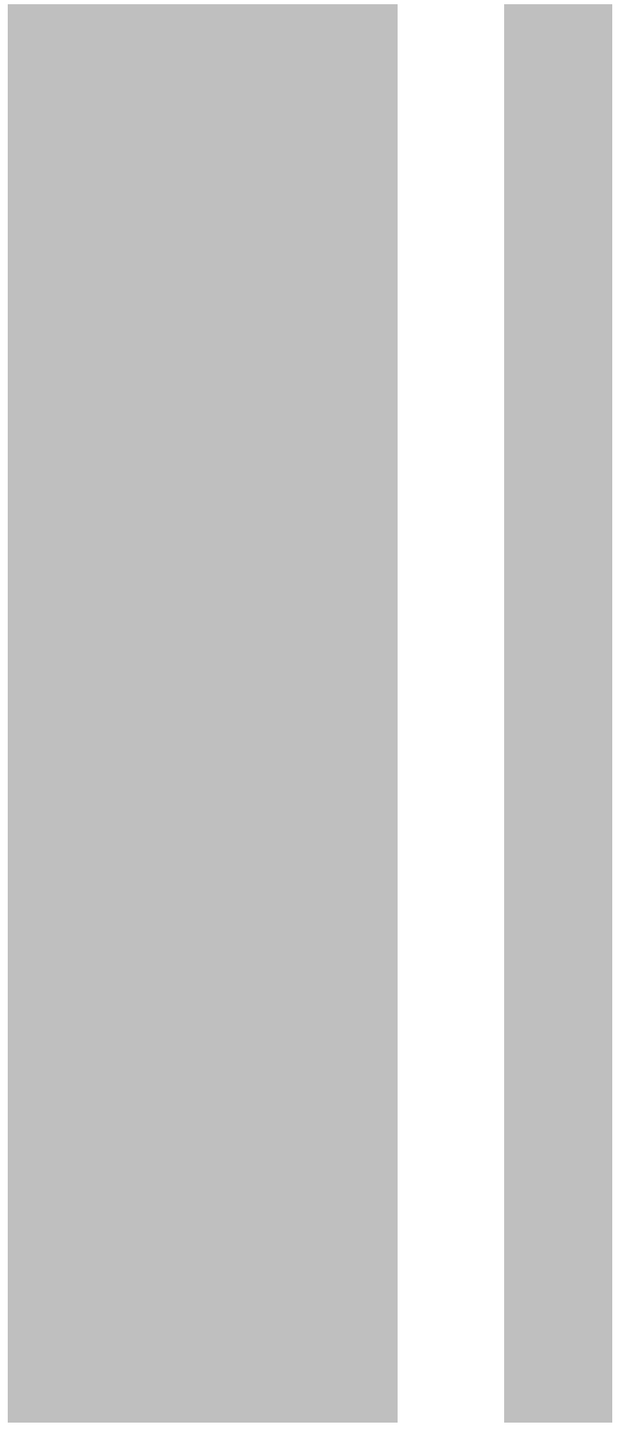

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2052	TRUCKS	PM2.5	0.051351445
2053	TRUCKS	PM2.5	0.051351445
2054	TRUCKS	PM2.5	0.051351445
2055	TRUCKS	PM2.5	0.051351445
2056	TRUCKS	PM2.5	0.051351445
2025	SHUTTLES	TOG_EVAP	0
2026	SHUTTLES	TOG_EVAP	0
2027	SHUTTLES	TOG_EVAP	0
2028	SHUTTLES	TOG_EVAP	0
2029	SHUTTLES	TOG_EVAP	0
2030	SHUTTLES	TOG_EVAP	0
2031	SHUTTLES	TOG_EVAP	0
2032	SHUTTLES	TOG_EVAP	0
2033	SHUTTLES	TOG_EVAP	0
2034	SHUTTLES	TOG_EVAP	0
2035	SHUTTLES	TOG_EVAP	0
2036	SHUTTLES	TOG_EVAP	0
2037	SHUTTLES	TOG_EVAP	0
2038	SHUTTLES	TOG_EVAP	0
2039	SHUTTLES	TOG_EVAP	0
2040	SHUTTLES	TOG_EVAP	0
2041	SHUTTLES	TOG_EVAP	0
2042	SHUTTLES	TOG_EVAP	0
2043	SHUTTLES	TOG_EVAP	0
2044	SHUTTLES	TOG_EVAP	0
2045	SHUTTLES	TOG_EVAP	0
2046	SHUTTLES	TOG_EVAP	0
2047	SHUTTLES	TOG_EVAP	0
2048	SHUTTLES	TOG_EVAP	0
2049	SHUTTLES	TOG_EVAP	0
2050	SHUTTLES	TOG_EVAP	0
2051	SHUTTLES	TOG_EVAP	0
2052	SHUTTLES	TOG_EVAP	0
2053	SHUTTLES	TOG_EVAP	0
2054	SHUTTLES	TOG_EVAP	0
2055	SHUTTLES	TOG_EVAP	0
2056	SHUTTLES	TOG_EVAP	0
2025	SHUTTLES	TOG_EX	0.008504764
2026	SHUTTLES	TOG_EX	0.008504764
2027	SHUTTLES	TOG_EX	0.008504764
2028	SHUTTLES	TOG_EX	0.008504764
2029	SHUTTLES	TOG_EX	0.008504764
2030	SHUTTLES	TOG_EX	0.008504764

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2045	SHUTTLES	TOG_EX	0.008504764
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2055	SHUTTLES	TOG_EX	0.008504764
2056	SHUTTLES	TOG_EX	0.008504764
2025	SHUTTLES	DPM	0.004285104
2026	SHUTTLES	DPM	0.004285104
2027	SHUTTLES	DPM	0.004285104
2028	SHUTTLES	DPM	0.004285104
2029	SHUTTLES	DPM	0.004285104
2030	SHUTTLES	DPM	0.004285104
2031	SHUTTLES	DPM	0.004285104
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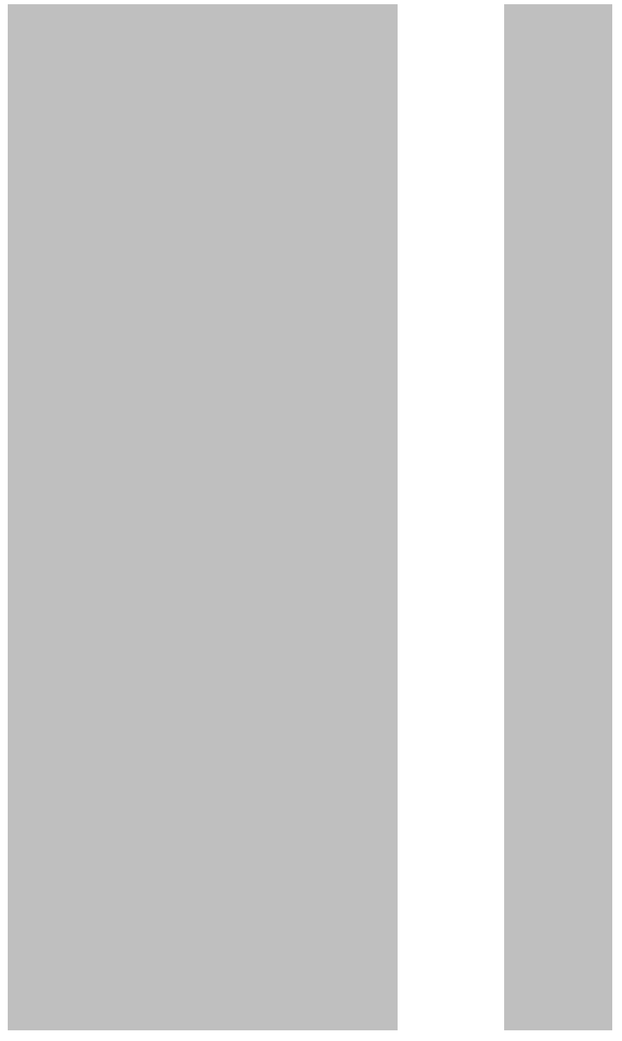
2041	SHUTTLES	DPM	0.004285104
2042	SHUTTLES	DPM	0.004285104
2043	SHUTTLES	DPM	0.004285104
2044	SHUTTLES	DPM	0.004285104
2045	SHUTTLES	DPM	0.004285104



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2051	SHUTTLES	DPM	0.004285104
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2056	SHUTTLES	DPM	0.004285104
2025	SHUTTLES	PM2.5	0.035535034
2026	SHUTTLES	PM2.5	0.035535034
2027	SHUTTLES	PM2.5	0.035535034
2028	SHUTTLES	PM2.5	0.035535034
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2030	SHUTTLES	PM2.5	0.035535034
2031	SHUTTLES	PM2.5	0.035535034
2032	SHUTTLES	PM2.5	0.035535034
2033	SHUTTLES	PM2.5	0.035535034
2034	SHUTTLES	PM2.5	0.035535034
2035	SHUTTLES	PM2.5	0.035535034
2036	SHUTTLES	PM2.5	0.035535034
2037	SHUTTLES	PM2.5	0.035535034
2038	SHUTTLES	PM2.5	0.035535034
2039	SHUTTLES	PM2.5	0.035535034
2040	SHUTTLES	PM2.5	0.035535034
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2045	SHUTTLES	PM2.5	0.035535034
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2047	SHUTTLES	PM2.5	0.035535034
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2056	SHUTTLES	PM2.5	0.035535034
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2026	TRAMS	TOG_EVAP	0.025473831
2027	TRAMS	TOG_EVAP	0.025473831
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2044	TRAMS	TOG_EVAP	0.025473831
2045	TRAMS	TOG_EVAP	0.025473831
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2056	TRAMS	TOG_EVAP	0.025473831
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2026	TRAMS	TOG_EX	0.011479308
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2051	TRAMS	PM2.5	0.017055233
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2025	ON-DEMAI	TOG_EVAP	0.032317109
2026	ON-DEMAI	TOG_EVAP	0.032317109
2027	ON-DEMAI	TOG_EVAP	0.032317109
2028	ON-DEMAI	TOG_EVAP	0.032317109
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2035	ON-DEMAI	TOG_EVAP	0.032317109
2036	ON-DEMAI	TOG_EVAP	0.032317109
2037	ON-DEMAI	TOG_EVAP	0.032317109
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2025	ON-DEMAI	PM2.5	0.016634411
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2027	ON-DEMAI	PM2.5	0.016634411
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2032	ON-DEMAI	PM2.5	0.016634411
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2035	ON-DEMAI	PM2.5	0.016634411
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2037	ON-DEMAI	PM2.5	0.016634411
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2039	ON-DEMAI	PM2.5	0.016634411

2040	ON-DEMAN	PM2.5	0.016634411
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2055	ON-DEMAN	PM2.5	0.016634411
2056	ON-DEMAN	PM2.5	0.016634411

								CPF	0.6	0.01	0	0.1
								aREL	660	470	2.5	27
								cREL	2	140	0.35	3
								TOG_EVAP	0	0	0	0.0036
								TOG_EX	0.0055	0.0028	0.0013	0.0247
								DPM	0	0	0	0
								PM2.5	0	0	0	0
			86400									
								CAS	**106990**	**75070**	**107028**	**71432**
Source	Fleet	YEAR	VMT/second	TOG_EVAP	TOG_EX	DPM	PM2.5		**1,3-Butadiene**	**Acetaldehyde**	**Acrolein**	**Benzene**
ADAMS_CT	ALL	2025	0.00014001	4.58629E-06	2.95119E-06	2.5273E-07	2.67497E-06		1.62315E-08	8.26333E-09	3.83654E-09	8.9405E-08
ADAMSD01	ALL	2025	3.30575E-05	1.08286E-06	6.96798E-07	5.96715E-08	6.31582E-07		3.83239E-09	1.95104E-09	9.05838E-10	2.11092E-08
ADAMSD02	ALL	2025	9.24851E-05	3.02952E-06	1.94944E-06	1.66943E-07	1.76698E-06		1.07219E-08	5.45842E-09	2.53427E-09	5.90573E-08
ADAMSD03	ALL	2025	4.10308E-06	1.34404E-07	8.64862E-08	7.40639E-09	7.83915E-08		4.75674E-10	2.42161E-10	1.12432E-10	2.62006E-09
ADAMSD04	ALL	2025	4.45207E-06	1.45836E-07	9.38423E-08	8.03635E-09	8.50592E-08		5.16133E-10	2.62759E-10	1.21995E-10	2.84291E-09
ADAMSD05	ALL	2025	7.90684E-06	2.59003E-07	1.66663E-07	1.42725E-08	1.51065E-07		9.16648E-10	4.66657E-10	2.16662E-10	5.04899E-09
ADAMSD06	ALL	2025	4.38265E-06	1.43562E-07	9.23792E-08	7.91105E-09	8.3733E-08		5.08086E-10	2.58662E-10	1.20093E-10	2.79859E-09
BAY_EAST	ALL	2025	0.013091265	0.000428828	0.000275943	2.36308E-05	0.000250116		1.51768E-06	7.7264E-07	3.58725E-07	8.35957E-06
BAY_EFB	ALL	2025	0.00808281	0.000264767	0.000170373	1.45901E-05	0.000154427		9.37049E-07	4.77043E-07	2.21484E-07	5.16136E-06
BAY_M01	ALL	2025	0.001231062	4.03257E-05	2.59488E-05	2.22217E-06	2.35201E-05		1.42718E-07	7.26566E-08	3.37334E-08	7.86108E-07
BAY_M02	ALL	2025	0.001512375	4.95406E-05	3.18784E-05	2.72996E-06	2.88948E-05		1.75331E-07	8.92596E-08	4.14419E-08	9.65743E-07
BAY_M03	ALL	2025	0.001305099	4.27509E-05	2.75094E-05	2.35581E-06	2.49346E-05		1.51302E-07	7.70263E-08	3.57622E-08	8.33385E-07
BAY_M04	ALL	2025	0.00159875	5.237E-05	3.36991E-05	2.88588E-06	3.0545E-05		1.85345E-07	9.43574E-08	4.38088E-08	1.0209E-06
BAY_M05	ALL	2025	0.003915101	0.000128246	8.2524E-05	7.06708E-06	7.48002E-05		4.53882E-07	2.31067E-07	1.07281E-07	2.50003E-06
BAY_WFB1	ALL	2025	0.00387116	0.000126807	8.15978E-05	6.98776E-06	7.39607E-05		4.48788E-07	2.28474E-07	1.06077E-07	2.47197E-06
BAY_WFB2	ALL	2025	0.001939712	6.35388E-05	4.0886E-05	3.50134E-06	3.70593E-05		2.24873E-07	1.14481E-07	5.31518E-08	1.23862E-06
BAY_WFB3	ALL	2025	0.001145027	3.75074E-05	2.41353E-05	2.06687E-06	2.18764E-05		1.32744E-07	6.75789E-08	3.13759E-08	7.31169E-07
BAY_WFB4	ALL	2025	0.003031584	9.93051E-05	6.39009E-05	5.47226E-06	5.79201E-05		3.51455E-07	1.78923E-07	8.30712E-08	1.93585E-06
BAY_WFB5	ALL	2025	0.001267672	4.15249E-05	2.67205E-05	2.28825E-06	2.42196E-05		1.46963E-07	7.48173E-08	3.47366E-08	8.09486E-07
BAY_WFB6	ALL	2025	0.00610476	0.000199973	0.000128678	1.10196E-05	0.000116635		7.07732E-07	3.603E-07	1.67282E-07	3.89826E-06
BAY_WFB7	ALL	2025	0.001528584	5.00716E-05	3.22201E-05	2.75922E-06	2.92044E-05		1.7721E-07	9.02162E-08	4.18861E-08	9.76093E-07
OBRIEN01	ALL	2025	0.002281539	7.4736E-05	4.80911E-05	4.11837E-06	4.35901E-05		2.64501E-07	1.34655E-07	6.25185E-08	1.4569E-06
OBRIEN02	ALL	2025	0.000985732	3.22894E-05	2.07776E-05	1.77933E-06	1.8833E-05		1.14277E-07	5.81774E-08	2.70109E-08	6.29449E-07
OBRIEN03	ALL	2025	0.000252184	8.26074E-06	5.31563E-06	4.55212E-07	4.81811E-06		2.92359E-08	1.48838E-08	6.91031E-09	1.61035E-07
OBRIEN04	ALL	2025	0.000207347	6.79204E-06	4.37055E-06	3.74279E-07	3.96149E-06		2.4038E-08	1.22375E-08	5.68171E-09	1.32404E-07
OBRIEN05	ALL	2025	0.000201572	6.60286E-06	4.24881E-06	3.63854E-07	3.85114E-06		2.33685E-08	1.18967E-08	5.52345E-09	1.28716E-07
OBRIEN06	ALL	2025	0.000370702	1.2143E-05	7.81381E-06	6.69149E-07	7.08248E-06		4.29759E-08	2.18787E-08	1.0158E-08	2.36716E-07
OBRIEN07	ALL	2025	0.000742959	2.4337E-05	1.56604E-05	1.3411E-06	1.41946E-05		8.6132E-08	4.3849E-08	2.03585E-08	4.74424E-07
OBRIEN08	ALL	2025	0.000350903	1.14945E-05	7.39647E-06	6.33409E-07	6.7042E-06		4.06806E-08	2.07101E-08	9.61542E-09	2.24073E-07
OBRIEN09	ALL	2025	0.000342394	1.12157E-05	7.2171E-06	6.18049E-07	6.54162E-06		3.96941E-08	2.02079E-08	9.38223E-09	2.18639E-07
OBRIEN10	ALL	2025	0.000359238	1.17675E-05	7.57215E-06	6.48453E-07	6.86343E-06		4.16468E-08	2.1202E-08	9.84379E-09	2.29395E-07
OBRIEN11	ALL	2025	0.000760133	2.48995E-05	1.60224E-05	1.3721E-06	1.45228E-05		8.8123E-08	4.48626E-08	2.08291E-08	4.85391E-07
OBRIEN12	ALL	2025	0.001752693	5.74127E-05	3.69439E-05	3.16376E-06	3.34862E-05		2.03192E-07	1.03443E-07	4.80271E-08	1.1192E-06
OBRIEN13	ALL	2025	0.000547043	1.79194E-05	1.15308E-05	9.87458E-07	1.04516E-05		6.34193E-08	3.22862E-08	1.499E-08	3.4932E-07
OBRIEN14	ALL	2025	0.001933811	6.33455E-05	4.07616E-05	3.49069E-06	3.69465E-05		2.24189E-07	1.14132E-07	5.29901E-08	1.23486E-06
OBRIEN15	ALL	2025	0.004039705	0.000132328	8.51504E-05	7.292E-06	7.71808E-05		4.68327E-07	2.38421E-07	1.10696E-07	2.5796E-06
OBRIEN16	ALL	2025	0.000799653	2.61941E-05	1.68554E-05	1.44344E-06	1.52778E-05		9.27047E-08	4.71951E-08	2.1912E-08	5.10627E-07
OBRIEN17	ALL	2025	0.000901167	2.95194E-05	1.89951E-05	1.62668E-06	1.72173E-05		1.04473E-07	5.31864E-08	2.46937E-08	5.7545E-07
UNIV_01	ALL	2025	0.000244151	7.9976E-06	5.1463E-06	4.40712E-07	4.66463E-06		2.83046E-08	1.44096E-08	6.69019E-09	1.55905E-07
UNIV_02	ALL	2025	0.000201564	6.6026E-06	4.24865E-06	3.6384E-07	3.851E-06		2.33676E-08	1.18962E-08	5.52324E-09	1.28711E-07
UNIV_03	ALL	2025	0.000493514	1.61659E-05	1.04025E-05	8.90833E-07	9.42885E-06		5.72136E-08	2.91269E-08	1.35232E-08	3.15138E-07
UNIV_04	ALL	2025	0.000269553	8.82971E-06	5.68175E-06	4.86566E-07	5.14997E-06		3.12496E-08	1.59089E-08	7.38627E-09	1.72126E-07
UNIV_05	ALL	2025	0.000178288	5.84016E-06	3.75803E-06	3.21825E-07	3.4063E-06		2.06691E-08	1.05225E-08	4.88543E-09	1.13848E-07
UNIV_06	ALL	2025	0.000153242	5.01974E-06	3.2301E-06	2.76615E-07	2.92778E-06		1.77656E-08	9.04429E-09	4.19913E-09	9.78546E-08
UNIV_07	ALL	2025	0.000572145	1.87417E-05	1.20599E-05	1.03277E-06	1.09312E-05		6.63294E-08	3.37677E-08	1.56779E-08	3.65349E-07
UNIV_08	ALL	2025	0.000685017	2.2439E-05	1.44391E-05	1.23651E-06	1.30876E-05		7.94148E-08	4.04294E-08	1.87708E-08	4.37425E-07
UNIV_09	ALL	2025	0.001739134	5.69685E-05	3.66581E-05	3.13928E-06	3.32271E-05		2.0162E-07	1.02643E-07	4.76556E-08	1.11054E-06
UNIV_10	ALL	2025	0.003868763	0.000126728	8.15473E-05	6.98344E-06	7.39149E-05		4.4851E-07	2.28332E-07	1.06011E-07	2.47044E-06
UNIV_11	ALL	2025	0.00143629	4.70483E-05	3.02747E-05	2.59262E-06	2.74411E-05		1.66511E-07	8.47691E-08	3.93571E-08	9.17158E-07
UNIV_12	ALL	2025	0.000791692	2.59333E-05	1.66876E-05	1.42907E-06	1.51257E-05		9.17818E-08	4.67253E-08	2.16939E-08	5.05543E-07
UNIV_13	ALL	2025	0.001596917	5.231E-05	3.36604E-05	2.88257E-06	3.051E-05		1.85132E-07	9.42492E-08	4.37586E-08	1.01973E-06
UNIV_14	ALL	2025	0.0025114	8.22655E-05	5.29363E-05	4.53328E-06	4.79817E-05		2.91149E-07	1.48222E-07	6.88171E-08	1.60368E-06
UNIV_15	ALL	2025	0.008085254	0.000264847	0.000170424	1.45946E-05	0.000154473		9.37332E-07	4.77187E-07	2.21551E-07	5.16292E-06
WILLOW01	ALL	2025	0.002067753	6.7733E-05	4.35849E-05	3.73246E-06	3.95056E-05		2.39717E-07	1.22038E-07	5.66603E-08	1.32039E-06
WILLOW02	ALL	2025	0.003720036	0.000121857	7.84123E-05	6.71497E-06	7.10734E-05		4.31268E-07	2.19555E-07	1.01936E-07	2.37547E-06
WILLOW03	ALL	2025	0	0	0	0	0		0	0	0	0
WILLOW04	ALL	2025	0	0	0	0	0		0	0	0	0
WILLOW05	ALL	2025	0.009210882	0.000301719	0.00019415	1.66264E-05	0.000175979		1.06783E-06	5.43621E-07	2.52396E-07	5.88171E-06
WILLOW06	ALL	2025	0.005048559	0.000165375	0.000106415	9.11307E-06	9.64555E-05		5.85285E-07	2.97963E-07	1.3834E-07	3.22381E-06
WILLOW07	ALL	2025	0.013904216	0.000455458	0.000293078	2.50983E-05	0.000265648		1.61193E-06	8.20619E-07	3.81002E-07	8.87868E-06
WILLOW08	ALL	2025	0.004597972	0.000150615	9.69178E-05	8.29972E-06	8.78468E-05		5.33048E-07	2.7137E-07	1.25993E-07	2.93608E-06

WILLOW09	ALL	2025	0.001914842	6.27242E-05	4.03618E-05	3.45645E-06	3.65841E-05	2.2199E-07	1.13013E-07	5.24703E-08	1.22274E-06
WILLOW10	ALL	2025	0.001534433	5.02632E-05	3.23434E-05	2.76978E-06	2.93162E-05	1.77889E-07	9.05614E-08	4.20464E-08	9.79829E-07
WILLOW11	ALL	2025	0.008909412	0.000291844	0.000187796	1.60822E-05	0.000170219	1.03288E-06	5.25829E-07	2.44135E-07	5.6892E-06
WILLOW12	ALL	2025	0.012654803	0.000414531	0.000266743	2.2843E-05	0.000241777	1.46709E-06	7.4688E-07	3.46766E-07	8.08086E-06
WILLOW13	ALL	2025	0.010674424	0.00034966	0.000225	1.92682E-05	0.000203941	1.2375E-06	6.29999E-07	2.92499E-07	6.81627E-06
ADAMS_CT	CARS	2025	9.90812E-05	3.69672E-06	1.70658E-06	1.19192E-07	1.66921E-06	9.38617E-09	4.77841E-09	2.21855E-09	5.54606E-08
ADAMSD01	CARS	2025	0	0	0	0	0	0	0	0	0
ADAMSD02	CARS	2025	0	0	0	0	0	0	0	0	0
ADAMSD03	CARS	2025	3.6299E-05	1.35432E-06	6.25215E-07	4.36666E-08	6.11526E-07	3.43868E-09	1.7506E-09	8.12779E-10	2.03183E-08
ADAMSD04	CARS	2025	3.93865E-05	1.46951E-06	6.78393E-07	4.73807E-08	6.6354E-07	3.73116E-09	1.8995E-09	8.81911E-10	2.20465E-08
ADAMSD05	CARS	2025	6.995E-05	2.60984E-06	1.20482E-06	8.41477E-08	1.17844E-06	6.62652E-09	3.3735E-09	1.56627E-09	3.91545E-08
ADAMSD06	CARS	2025	3.87724E-05	1.4466E-06	6.67816E-07	4.66419E-08	6.53195E-07	3.67299E-09	1.86988E-09	8.68161E-10	2.17028E-08
BAY_EAST	CARS	2025	0.005596387	0.000208801	9.63923E-05	6.73228E-06	9.42819E-05	5.30158E-07	2.69898E-07	1.2531E-07	3.13257E-06
BAY_EFB	CARS	2025	0	0	0	0	0	0	0	0	0
BAY_M01	CARS	2025	0.000415313	1.54953E-05	7.15335E-06	4.99608E-07	6.99674E-06	3.93434E-08	2.00294E-08	9.29936E-09	2.32471E-07
BAY_M02	CARS	2025	0.000510217	1.90362E-05	8.78798E-06	6.13775E-07	8.59558E-06	4.83339E-08	2.46064E-08	1.14244E-08	2.85594E-07
BAY_M03	CARS	2025	0.00044029	1.64272E-05	7.58356E-06	5.29655E-07	7.41753E-06	4.17096E-08	2.1234E-08	9.85863E-09	2.46452E-07
BAY_M04	CARS	2025	0.000539356	2.01234E-05	9.28989E-06	6.48829E-07	9.08649E-06	5.10944E-08	2.60117E-08	1.20769E-08	3.01904E-07
BAY_M05	CARS	2025	0.001320803	4.92792E-05	2.27495E-05	1.58888E-06	2.22515E-05	1.25122E-07	6.36987E-08	2.95744E-08	7.39319E-07
BAY_WFB1	CARS	2025	0	0	0	0	0	0	0	0	0
BAY_WFB2	CARS	2025	0	0	0	0	0	0	0	0	0
BAY_WFB3	CARS	2025	0	0	0	0	0	0	0	0	0
BAY_WFB4	CARS	2025	0	0	0	0	0	0	0	0	0
BAY_WFB5	CARS	2025	0	0	0	0	0	0	0	0	0
BAY_WFB6	CARS	2025	0	0	0	0	0	0	0	0	0
BAY_WFB7	CARS	2025	0	0	0	0	0	0	0	0	0
OBRIEN01	CARS	2025	0.003405664	0.000127065	5.86592E-05	4.09691E-06	5.73749E-05	3.22626E-07	1.64246E-07	7.6257E-08	1.90632E-06
OBRIEN02	CARS	2025	0.001471407	5.48982E-05	2.53435E-05	1.77006E-06	2.47887E-05	1.39389E-07	7.09619E-08	3.29466E-08	8.23619E-07
OBRIEN03	CARS	2025	0.000376436	1.40448E-05	6.48374E-06	4.52841E-07	6.34178E-06	3.56606E-08	1.81545E-08	8.42886E-09	2.1071E-07
OBRIEN04	CARS	2025	0.000309508	1.15478E-05	5.33098E-06	3.72329E-07	5.21426E-06	2.93204E-08	1.49267E-08	6.93027E-09	1.73247E-07
OBRIEN05	CARS	2025	0.000300887	1.12261E-05	5.18249E-06	3.61958E-07	5.06903E-06	2.85037E-08	1.4511E-08	6.73724E-09	1.68422E-07
OBRIEN06	CARS	2025	0.000553349	2.06455E-05	9.5309E-06	6.65662E-07	9.32223E-06	5.242E-08	2.66865E-08	1.23902E-08	3.09737E-07
OBRIEN07	CARS	2025	0.001190175	4.44055E-05	2.04996E-05	1.43174E-06	2.00508E-05	1.12748E-07	5.73989E-08	2.66495E-08	6.662E-07
OBRIEN08	CARS	2025	0.000562126	2.09729E-05	9.68207E-06	6.7622E-07	9.47009E-06	5.32514E-08	2.71098E-08	1.25867E-08	3.1465E-07
OBRIEN09	CARS	2025	0.000548494	2.04643E-05	9.44727E-06	6.59821E-07	9.24043E-06	5.196E-08	2.64524E-08	1.22814E-08	3.07019E-07
OBRIEN10	CARS	2025	0.000575477	2.14711E-05	9.91202E-06	6.9228E-07	9.69501E-06	5.45161E-08	2.77537E-08	1.28856E-08	3.22123E-07
OBRIEN11	CARS	2025	0.001217687	4.54319E-05	2.09735E-05	1.46484E-06	2.05143E-05	1.15354E-07	5.87257E-08	2.72655E-08	6.816E-07
OBRIEN12	CARS	2025	0.002807708	0.000104756	4.836E-05	3.37758E-06	4.73012E-05	2.6598E-07	1.35408E-07	6.2868E-08	1.57161E-06
OBRIEN13	CARS	2025	0.00087633	3.26959E-05	1.50939E-05	1.0542E-06	1.47635E-05	8.30166E-08	4.2263E-08	1.96221E-08	4.90525E-07
OBRIEN14	CARS	2025	0.003097848	0.000115581	5.33574E-05	3.72661E-06	5.21892E-05	2.93466E-07	1.49401E-07	6.93646E-08	1.73402E-06
OBRIEN15	CARS	2025	0.006724346	0.000250886	0.00011582	8.08917E-06	0.000113284	6.37011E-07	3.24297E-07	1.50566E-07	3.76395E-06
OBRIEN16	CARS	2025	0.001331073	4.96624E-05	2.29264E-05	1.60124E-06	2.24245E-05	1.26095E-07	6.4194E-08	2.98044E-08	7.45067E-07
OBRIEN17	CARS	2025	0.00150005	5.59669E-05	2.58369E-05	1.80451E-06	2.52712E-05	1.42103E-07	7.23433E-08	3.3588E-08	8.39652E-07
UNIV_01	CARS	2025	0.00026852	1.00185E-05	4.62499E-06	3.23021E-07	4.52373E-06	2.54375E-08	1.295E-08	6.01249E-09	1.50304E-07
UNIV_02	CARS	2025	0.000221683	8.27099E-06	3.81827E-06	2.66677E-07	3.73467E-06	2.10005E-08	1.06912E-08	4.96375E-09	1.24087E-07
UNIV_03	CARS	2025	0.000542773	2.02509E-05	9.34873E-06	6.52938E-07	9.14404E-06	5.1418E-08	2.61764E-08	1.21533E-08	3.03817E-07
UNIV_04	CARS	2025	0.000296458	1.10609E-05	5.1062E-06	3.5663E-07	4.9944E-06	2.80841E-08	1.42974E-08	6.63806E-09	1.65942E-07
UNIV_05	CARS	2025	0.000196084	7.31589E-06	3.37735E-06	2.35882E-07	3.3034E-06	1.85754E-08	9.45657E-09	4.39055E-09	1.09758E-07
UNIV_06	CARS	2025	0.000168538	6.28816E-06	2.9029E-06	2.02746E-07	2.83935E-06	1.5966E-08	8.12812E-09	3.77377E-09	9.4339E-08
UNIV_07	CARS	2025	0.000629253	2.34774E-05	1.08383E-05	7.56971E-07	1.0601E-05	5.96104E-08	3.03471E-08	1.40897E-08	3.52224E-07
UNIV_08	CARS	2025	0.000544303	2.0308E-05	9.37508E-06	6.54779E-07	9.16982E-06	5.1563E-08	2.62502E-08	1.21876E-08	3.04673E-07
UNIV_09	CARS	2025	0.003316672	0.000123745	5.71264E-05	3.98985E-06	5.58757E-05	3.14195E-07	1.59954E-07	7.42643E-08	1.8565E-06
UNIV_10	CARS	2025	0.007221705	0.000269442	0.000124387	8.68748E-06	0.000121663	6.84127E-07	3.48283E-07	1.61703E-07	4.04234E-06
UNIV_11	CARS	2025	0.002681079	0.000100031	4.6179E-05	3.22525E-06	4.51679E-05	2.53984E-07	1.29301E-07	6.00326E-08	1.50073E-06
UNIV_12	CARS	2025	0.001477828	5.51378E-05	2.54541E-05	1.77778E-06	2.48968E-05	1.39998E-07	7.12716E-08	3.30904E-08	8.27213E-07
UNIV_13	CARS	2025	0.002980918	0.000111218	5.13434E-05	3.58595E-06	5.02193E-05	2.82389E-07	1.43761E-07	6.67464E-08	1.66857E-06
UNIV_14	CARS	2025	0.004687956	0.000174908	8.07454E-05	5.63946E-06	7.89776E-05	4.441E-07	2.26087E-07	1.04969E-07	2.62408E-06
UNIV_15	CARS	2025	0.015092502	0.000563102	0.000259954	1.81558E-05	0.000254262	1.42974E-06	7.2787E-07	3.3794E-07	8.44802E-06
WILLOW01	CARS	2025	6.1554E-05	2.29658E-06	1.06021E-06	7.40475E-08	1.03699E-06	5.83114E-09	2.96858E-09	1.37827E-09	3.44548E-08
WILLOW02	CARS	2025	0.00011074	4.13172E-06	1.90739E-06	1.33217E-07	1.86563E-06	1.04906E-08	5.34069E-09	2.47961E-09	6.19867E-08
WILLOW03	CARS	2025	0	0	0	0	0	0	0	0	0
WILLOW04	CARS	2025	0	0	0	0	0	0	0	0	0
WILLOW05	CARS	2025	0	0	0	0	0	0	0	0	0
WILLOW06	CARS	2025	0	0	0	0	0	0	0	0	0
WILLOW07	CARS	2025	0.001172356	4.37406E-05	2.01927E-05	1.41031E-06	1.97506E-05	1.1106E-07	5.65395E-08	2.62505E-08	6.56226E-07
WILLOW08	CARS	2025	0.000387685	1.44645E-05	6.6775E-06	4.66373E-07	6.5313E-06	3.67262E-08	1.8697E-08	8.68075E-09	2.17007E-07
WILLOW09	CARS	2025	0.000161453	6.02382E-06	2.78087E-06	1.94223E-07	2.71998E-06	1.52948E-08	7.78643E-09	3.61513E-09	9.03732E-08
WILLOW10	CARS	2025	0.000129378	4.8271E-06	2.22841E-06	1.55638E-07	2.17962E-06	1.22563E-08	6.23955E-09	2.89694E-09	7.24194E-08
WILLOW11	CARS	2025	0.000751211	2.80277E-05	1.29389E-05	9.03683E-07	1.26556E-05	7.11638E-08	3.62289E-08	1.68205E-08	4.2049E-07
WILLOW12	CARS	2025	0.00106701	3.98102E-05	1.83782E-05	1.28358E-06	1.79758E-05	1.0108E-07	5.1459E-08	2.38917E-08	5.97258E-07
WILLOW13	CARS	2025	0.000900031	3.35802E-05	1.55022E-05	1.08271E-06	1.51627E-05	8.52618E-08	4.3406E-08	2.01528E-08	5.03792E-07
ADAMS_CT	ON-DEMAND	2025	6.74399E-06	2.17946E-07	6.16264E-08	7.92041E-09	1.12182E-07	3.38945E-10	1.72554E-10	8.01144E-11	2.30678E-09

ADAMSD01	ON-DEMAND	2025	0	0	0	0	0	0	0	0	0
ADAMSD02	ON-DEMAND	2025	0	0	0	0	0	0	0	0	0
ADAMSD03	ON-DEMAND	2025	2.4707E-06	7.98459E-08	2.25772E-08	2.90169E-09	4.10987E-08	1.24175E-10	6.32162E-11	2.93504E-11	8.45103E-10
ADAMSD04	ON-DEMAND	2025	2.68085E-06	8.66373E-08	2.44975E-08	3.1485E-09	4.45944E-08	1.34737E-10	6.85931E-11	3.18468E-11	9.16984E-10
ADAMSD05	ON-DEMAND	2025	4.76117E-06	1.53867E-07	4.35075E-08	5.59171E-09	7.91992E-08	2.39291E-10	1.21821E-10	5.65597E-11	1.62856E-09
ADAMSD06	ON-DEMAND	2025	2.63905E-06	8.52865E-08	2.41156E-08	3.09941E-09	4.38991E-08	1.32636E-10	6.75237E-11	3.13503E-11	9.02687E-10
BAY_EAST	ON-DEMAND	2025	0.00038092	1.23102E-05	3.48084E-06	4.47367E-07	6.33637E-06	1.91446E-08	9.74634E-09	4.52509E-09	1.30293E-07
BAY_EFB	ON-DEMAND	2025	0	0	0	0	0	0	0	0	0
BAY_M01	ON-DEMAND	2025	2.82684E-05	9.13552E-07	2.58316E-07	3.31995E-08	4.70228E-07	1.42074E-09	7.23284E-10	3.3581E-10	9.66918E-09
BAY_M02	ON-DEMAND	2025	3.4728E-05	1.12231E-06	3.17344E-07	4.0786E-08	5.77681E-07	1.74539E-09	8.88564E-10	4.12547E-10	1.18787E-08
BAY_M03	ON-DEMAND	2025	2.99685E-05	9.68494E-07	2.73851E-07	3.51962E-08	4.98508E-07	1.50618E-09	7.66783E-10	3.56006E-10	1.02507E-08
BAY_M04	ON-DEMAND	2025	3.67114E-05	1.18641E-06	3.35468E-07	4.31154E-08	6.10673E-07	1.84508E-09	9.39312E-10	4.36109E-10	1.25571E-08
BAY_M05	ON-DEMAND	2025	8.99008E-05	2.90534E-06	8.21512E-07	1.05583E-07	1.49545E-06	4.51832E-09	2.30023E-09	1.06797E-09	3.07506E-08
BAY_WFB1	ON-DEMAND	2025	0	0	0	0	0	0	0	0	0
BAY_WFB2	ON-DEMAND	2025	0	0	0	0	0	0	0	0	0
BAY_WFB3	ON-DEMAND	2025	0	0	0	0	0	0	0	0	0
BAY_WFB4	ON-DEMAND	2025	0	0	0	0	0	0	0	0	0
BAY_WFB5	ON-DEMAND	2025	0	0	0	0	0	0	0	0	0
BAY_WFB6	ON-DEMAND	2025	0	0	0	0	0	0	0	0	0
BAY_WFB7	ON-DEMAND	2025	0	0	0	0	0	0	0	0	0
OBRIEN01	ON-DEMAND	2025	0.000231807	7.49135E-06	2.11825E-06	2.72244E-07	3.85598E-06	1.16504E-08	5.9311E-09	2.75373E-09	7.92897E-08
OBRIEN02	ON-DEMAND	2025	0.000100152	3.23661E-06	9.15184E-07	1.17622E-07	1.66596E-06	5.03351E-09	2.56252E-09	1.18974E-09	3.42569E-08
OBRIEN03	ON-DEMAND	2025	2.56222E-05	8.28036E-07	2.34135E-07	3.00918E-08	4.2621E-07	1.28774E-09	6.55579E-10	3.04376E-10	8.76407E-09
OBRIEN04	ON-DEMAND	2025	2.10668E-05	6.80817E-07	1.92508E-07	2.47417E-08	3.50433E-07	1.05879E-09	5.39022E-10	2.5026E-10	7.20588E-09
OBRIEN05	ON-DEMAND	2025	2.048E-05	6.61854E-07	1.87146E-07	2.40525E-08	3.40673E-07	1.0293E-09	5.24008E-10	2.43289E-10	7.00517E-09
OBRIEN06	ON-DEMAND	2025	3.76639E-05	1.21719E-06	3.44172E-07	4.4234E-08	6.26517E-07	1.89294E-09	9.63681E-10	4.47423E-10	1.28829E-08
OBRIEN07	ON-DEMAND	2025	8.10096E-05	2.618E-06	7.40264E-07	9.51409E-08	1.34755E-06	4.07145E-09	2.07274E-09	9.62343E-10	2.77093E-08
OBRIEN08	ON-DEMAND	2025	3.82613E-05	1.23649E-06	3.49631E-07	4.49356E-08	6.36453E-07	1.92297E-09	9.78966E-10	4.5452E-10	1.30872E-08
OBRIEN09	ON-DEMAND	2025	3.73334E-05	1.20651E-06	3.41152E-07	4.38458E-08	6.21019E-07	1.87633E-09	9.55225E-10	4.43497E-10	1.27699E-08
OBRIEN10	ON-DEMAND	2025	3.917E-05	1.26586E-06	3.57935E-07	4.60028E-08	6.5157E-07	1.96864E-09	1.00222E-09	4.65315E-10	1.33981E-08
OBRIEN11	ON-DEMAND	2025	8.28822E-05	2.67851E-06	7.57376E-07	9.73402E-08	1.3787E-06	4.16557E-09	2.12065E-09	9.84589E-10	2.83498E-08
OBRIEN12	ON-DEMAND	2025	0.000191107	6.17604E-06	1.74634E-06	2.24444E-07	3.17896E-06	9.60485E-09	4.88974E-09	2.27024E-09	6.53682E-08
OBRIEN13	ON-DEMAND	2025	5.96476E-05	1.92764E-06	5.45059E-07	7.00526E-08	9.92203E-07	2.99782E-09	1.52616E-09	7.08576E-10	2.04025E-08
OBRIEN14	ON-DEMAND	2025	0.000210856	6.81425E-06	1.9268E-06	2.47638E-07	3.50746E-06	1.05974E-08	5.39503E-09	2.50484E-09	7.21232E-08
OBRIEN15	ON-DEMAND	2025	0.000457694	1.47914E-05	4.1824E-06	5.37535E-07	7.61348E-06	2.30032E-08	1.17107E-08	5.43712E-09	1.56554E-07
OBRIEN16	ON-DEMAND	2025	9.05999E-05	2.92793E-06	8.279E-07	1.06404E-07	1.50708E-06	4.55345E-09	2.31812E-09	1.07627E-09	3.09897E-08
OBRIEN17	ON-DEMAND	2025	0.000102101	3.29962E-06	9.33E-07	1.19912E-07	1.6984E-06	5.1315E-09	2.6124E-09	1.2129E-09	3.49237E-08
UNIV_01	ON-DEMAND	2025	1.82769E-05	5.90656E-07	1.67014E-07	2.14651E-08	3.04025E-07	9.18576E-10	4.67639E-10	2.17118E-10	6.2516E-09
UNIV_02	ON-DEMAND	2025	1.50889E-05	4.8763E-07	1.37882E-07	1.7721E-08	2.50995E-07	7.58352E-10	3.8607E-10	1.79247E-10	5.16115E-09
UNIV_03	ON-DEMAND	2025	3.6944E-05	1.19392E-06	3.37593E-07	4.33885E-08	6.14541E-07	1.85676E-09	9.45261E-10	4.38871E-10	1.26367E-08
UNIV_04	ON-DEMAND	2025	2.01785E-05	6.52111E-07	1.84391E-07	2.36984E-08	3.35658E-07	1.01415E-09	5.16294E-10	2.39708E-10	6.90205E-09
UNIV_05	ON-DEMAND	2025	1.33465E-05	4.3132E-07	1.2196E-07	1.56747E-08	2.22011E-07	6.7078E-10	3.41488E-10	1.58548E-10	4.56516E-09
UNIV_06	ON-DEMAND	2025	1.14716E-05	3.70728E-07	1.04827E-07	1.34727E-08	1.90823E-07	5.76549E-10	2.93516E-10	1.36275E-10	3.92385E-09
UNIV_07	ON-DEMAND	2025	4.28302E-05	1.38415E-06	3.91382E-07	5.03016E-08	7.12456E-07	2.1526E-09	1.09587E-09	5.08796E-10	1.46501E-08
UNIV_08	ON-DEMAND	2025	3.70481E-05	1.19729E-06	3.38545E-07	4.35108E-08	6.16274E-07	1.862E-09	9.47926E-10	4.40109E-10	1.26723E-08
UNIV_09	ON-DEMAND	2025	0.00022575	7.29559E-06	2.0629E-06	2.6513E-07	3.75522E-06	1.1346E-08	5.77612E-09	2.68177E-09	7.72178E-08
UNIV_10	ON-DEMAND	2025	0.000491547	1.58854E-05	4.49175E-06	5.77293E-07	8.1766E-06	2.47046E-08	1.25769E-08	5.83927E-09	1.68134E-07
UNIV_11	ON-DEMAND	2025	0.000182488	5.8975E-06	1.66757E-06	2.14322E-07	3.03559E-06	9.17166E-09	4.66921E-09	2.16785E-09	6.24201E-08
UNIV_12	ON-DEMAND	2025	0.000100589	3.25074E-06	9.19178E-07	1.18136E-07	1.67324E-06	5.05548E-09	2.5737E-09	1.19493E-09	3.44064E-08
UNIV_13	ON-DEMAND	2025	0.000202897	6.55704E-06	1.85407E-06	2.3829E-07	3.37507E-06	1.01974E-08	5.19139E-09	2.41029E-09	6.94009E-08
UNIV_14	ON-DEMAND	2025	0.000319087	1.0312E-05	2.91581E-06	3.74749E-07	5.30782E-06	1.6037E-08	8.16427E-09	3.79055E-09	1.09144E-07
UNIV_15	ON-DEMAND	2025	0.001027275	3.31986E-05	9.38722E-06	1.20647E-06	1.70881E-05	5.16297E-08	2.62842E-08	1.22034E-08	3.51379E-07
WILLOW01	ON-DEMAND	2025	4.18969E-06	1.35399E-07	3.82853E-08	4.92054E-09	6.9693E-08	2.10569E-10	1.07199E-10	4.97709E-11	1.43308E-09
WILLOW02	ON-DEMAND	2025	7.53755E-06	2.43592E-07	6.8878E-08	8.85241E-09	1.25383E-07	3.78829E-10	1.92858E-10	8.95414E-11	2.57822E-09
WILLOW03	ON-DEMAND	2025	0	0	0	0	0	0	0	0	0
WILLOW04	ON-DEMAND	2025	0	0	0	0	0	0	0	0	0
WILLOW05	ON-DEMAND	2025	0	0	0	0	0	0	0	0	0
WILLOW06	ON-DEMAND	2025	0	0	0	0	0	0	0	0	0
WILLOW07	ON-DEMAND	2025	7.97967E-05	2.5788E-06	7.29181E-07	9.37165E-08	1.32737E-06	4.01049E-09	2.04171E-09	9.47935E-10	2.72944E-08
WILLOW08	ON-DEMAND	2025	2.63879E-05	8.52781E-07	2.41132E-07	3.0991E-08	4.38947E-07	1.32623E-09	6.7517E-10	3.13472E-10	9.02597E-09
WILLOW09	ON-DEMAND	2025	1.09893E-05	3.55144E-07	1.0042E-07	1.29063E-08	1.82801E-07	5.52312E-10	2.81177E-10	1.30546E-10	3.7589E-09
WILLOW10	ON-DEMAND	2025	8.80616E-06	2.8459E-07	8.04705E-08	1.03423E-08	1.46485E-07	4.42588E-10	2.25317E-10	1.04612E-10	3.01214E-09
WILLOW11	ON-DEMAND	2025	5.11314E-05	1.65242E-06	4.67238E-07	6.00508E-08	8.50541E-07	2.56981E-09	1.30827E-09	6.07409E-10	1.74895E-08
WILLOW12	ON-DEMAND	2025	7.26263E-05	2.34707E-06	6.63658E-07	8.52953E-08	1.2081E-06	3.65012E-09	1.85824E-09	8.62755E-10	2.48418E-08
WILLOW13	ON-DEMAND	2025	6.12609E-05	1.97977E-06	5.598E-07	7.19472E-08	1.01904E-06	3.0789E-09	1.56744E-09	7.27741E-10	2.09543E-08
ADAMS_CT	TRUCKS	2025	2.248E-06	7.34997E-08	2.00129E-07	2.50946E-08	1.15438E-07	1.10071E-09	5.60361E-10	2.60167E-10	5.20778E-09
ADAMSD01	TRUCKS	2025	0	0	0	0	0	0	0	0	0
ADAMSD02	TRUCKS	2025	0	0	0	0	0	0	0	0	0
ADAMSD03	TRUCKS	2025	8.23567E-07	2.69271E-08	7.33184E-08	9.19357E-09	4.22914E-08	4.03251E-10	2.05292E-10	9.53139E-11	1.9079E-09
ADAMSD04	TRUCKS	2025	8.93617E-07	2.92174E-08	7.95546E-08	9.97554E-09	4.58885E-08	4.3755E-10	2.22753E-10	1.03421E-10	2.07018E-09
ADAMSD05	TRUCKS	2025	1.58706E-06	5.18898E-08	1.41288E-07	1.77165E-08	8.14976E-08	7.77086E-10	3.95607E-10	1.83675E-10	3.67663E-09
ADAMSD06	TRUCKS	2025	8.79684E-07	2.87618E-08	7.83142E-08	9.82001E-09	4.5173E-08	4.30728E-10	2.1928E-10	1.01808E-10	2.0379E-09

BAY_EAST	TRUCKS	2025	0.000126973	4.15147E-06	1.13038E-05	1.41742E-06	6.52026E-06	6.21711E-08	3.16508E-08	1.4695E-08	2.9415E-07
BAY_EFB	TRUCKS	2025	0	0	0	0	0	0	0	0	0
BAY_M01	TRUCKS	2025	9.42279E-06	3.08084E-07	8.38868E-07	1.05188E-07	4.83874E-07	4.61377E-09	2.34883E-09	1.09053E-09	2.18291E-08
BAY_M02	TRUCKS	2025	1.1576E-05	3.78485E-07	1.03056E-06	1.29224E-07	5.94445E-07	5.66808E-09	2.88557E-09	1.33973E-09	2.68174E-08
BAY_M03	TRUCKS	2025	9.98948E-06	3.26613E-07	8.89318E-07	1.11514E-07	5.12974E-07	4.89125E-09	2.49009E-09	1.15611E-09	2.3142E-08
BAY_M04	TRUCKS	2025	1.22371E-05	4.00102E-07	1.08942E-06	1.36605E-07	6.28395E-07	5.99179E-09	3.05037E-09	1.41624E-09	2.8349E-08
BAY_M05	TRUCKS	2025	2.99669E-05	9.79789E-07	2.66782E-06	3.34524E-07	1.53885E-06	1.4673E-08	7.4699E-09	3.46817E-09	6.94224E-08
BAY_WFB1	TRUCKS	2025	0	0	0	0	0	0	0	0	0
BAY_WFB2	TRUCKS	2025	0	0	0	0	0	0	0	0	0
BAY_WFB3	TRUCKS	2025	0	0	0	0	0	0	0	0	0
BAY_WFB4	TRUCKS	2025	0	0	0	0	0	0	0	0	0
BAY_WFB5	TRUCKS	2025	0	0	0	0	0	0	0	0	0
BAY_WFB6	TRUCKS	2025	0	0	0	0	0	0	0	0	0
BAY_WFB7	TRUCKS	2025	0	0	0	0	0	0	0	0	0
OBRIEN01	TRUCKS	2025	7.72692E-05	2.52637E-06	6.87892E-06	8.62564E-07	3.96788E-06	3.7834E-08	1.9261E-08	8.94259E-09	1.79004E-07
OBRIEN02	TRUCKS	2025	3.33839E-05	1.09151E-06	2.97202E-06	3.72668E-07	1.71431E-06	1.63461E-08	8.32164E-09	3.86362E-09	7.73382E-08
OBRIEN03	TRUCKS	2025	8.54074E-06	2.79245E-07	7.60343E-07	9.53412E-08	4.38579E-07	4.18189E-09	2.12896E-09	9.88446E-10	1.97857E-08
OBRIEN04	TRUCKS	2025	7.02226E-06	2.29597E-07	6.25159E-07	7.83902E-08	3.60603E-07	3.43838E-09	1.75045E-09	8.12707E-10	1.6268E-08
OBRIEN05	TRUCKS	2025	6.82666E-06	2.23202E-07	6.07746E-07	7.62068E-08	3.50559E-07	3.34261E-09	1.70169E-09	7.9007E-10	1.58149E-08
OBRIEN06	TRUCKS	2025	1.25546E-05	4.10482E-07	1.11768E-06	1.40149E-07	6.44698E-07	6.14724E-09	3.12951E-09	1.45299E-09	2.90845E-08
OBRIEN07	TRUCKS	2025	2.70032E-05	8.82887E-07	2.40397E-06	3.0144E-07	1.38665E-06	1.32218E-08	6.73112E-09	3.12516E-09	6.25565E-08
OBRIEN08	TRUCKS	2025	1.27538E-05	4.16992E-07	1.13541E-06	1.42372E-07	6.54924E-07	6.24474E-09	3.17914E-09	1.47603E-09	2.95457E-08
OBRIEN09	TRUCKS	2025	1.24445E-05	4.0688E-07	1.10787E-06	1.38919E-07	6.39041E-07	6.0933E-09	3.10205E-09	1.44024E-09	2.88292E-08
OBRIEN10	TRUCKS	2025	1.30567E-05	4.26896E-07	1.16237E-06	1.45753E-07	6.70478E-07	6.39306E-09	3.25465E-09	1.51109E-09	3.02475E-08
OBRIEN11	TRUCKS	2025	2.76274E-05	9.03296E-07	2.45954E-06	3.08408E-07	1.41871E-06	1.35275E-08	6.88671E-09	3.1974E-09	6.40025E-08
OBRIEN12	TRUCKS	2025	6.37025E-05	2.08279E-06	5.67114E-06	7.11118E-07	3.27121E-06	3.11913E-08	1.58792E-08	7.37248E-09	1.47575E-07
OBRIEN13	TRUCKS	2025	1.98825E-05	6.50073E-07	1.77005E-06	2.21951E-07	1.021E-06	9.73528E-09	4.95614E-09	2.30107E-09	4.60605E-08
OBRIEN14	TRUCKS	2025	7.02853E-05	2.29802E-06	6.25718E-06	7.84602E-07	3.60925E-06	3.44145E-08	1.75201E-08	8.13433E-09	1.62825E-07
OBRIEN15	TRUCKS	2025	0.000152565	4.98821E-06	1.35821E-05	1.7031E-06	7.83442E-06	7.47018E-08	3.803E-08	1.76568E-08	3.53437E-07
OBRIEN16	TRUCKS	2025	3.02E-05	9.87407E-07	2.68856E-06	3.37125E-07	1.55081E-06	1.47871E-08	7.52798E-09	3.49513E-09	6.99622E-08
OBRIEN17	TRUCKS	2025	3.40338E-05	1.11276E-06	3.02987E-06	3.79923E-07	1.74768E-06	1.66643E-08	8.48364E-09	3.93883E-09	7.88437E-08
UNIV_01	TRUCKS	2025	6.09229E-06	1.99192E-07	5.42369E-07	6.80089E-08	3.12848E-07	2.98303E-09	1.51863E-09	7.0508E-10	1.41136E-08
UNIV_02	TRUCKS	2025	5.02963E-06	1.64447E-07	4.47765E-07	5.61464E-08	2.58279E-07	2.46271E-09	1.25374E-09	5.82095E-10	1.16518E-08
UNIV_03	TRUCKS	2025	1.23147E-05	4.02636E-07	1.09632E-06	1.3747E-07	6.32375E-07	6.02974E-09	3.06969E-09	1.42521E-09	2.85285E-08
UNIV_04	TRUCKS	2025	6.72617E-06	2.19916E-07	5.988E-07	7.50849E-08	3.45398E-07	3.2934E-09	1.67664E-09	7.7844E-10	1.55821E-08
UNIV_05	TRUCKS	2025	4.44883E-06	1.45457E-07	3.96059E-07	4.96628E-08	2.28454E-07	2.17832E-09	1.10896E-09	5.14876E-10	1.03063E-08
UNIV_06	TRUCKS	2025	3.82386E-06	1.25024E-07	3.40421E-07	4.26862E-08	1.96361E-07	1.87231E-09	9.53178E-10	4.42547E-10	8.85848E-09
UNIV_07	TRUCKS	2025	1.42767E-05	4.66788E-07	1.27099E-06	1.59373E-07	7.33132E-07	6.99046E-09	3.55878E-09	1.65229E-09	3.3074E-08
UNIV_08	TRUCKS	2025	1.23494E-05	4.03771E-07	1.09941E-06	1.37857E-07	6.34158E-07	6.04675E-09	3.07834E-09	1.42923E-09	2.8609E-08
UNIV_09	TRUCKS	2025	7.52501E-05	2.46035E-06	6.69917E-06	8.40025E-07	3.8642E-06	3.68454E-08	1.87577E-08	8.70892E-09	1.74327E-07
UNIV_10	TRUCKS	2025	0.000163849	5.35715E-06	1.45867E-05	1.82907E-06	8.41389E-06	8.0227E-08	4.08429E-08	1.89628E-08	3.79578E-07
UNIV_11	TRUCKS	2025	6.08295E-05	1.98886E-06	5.41537E-06	6.79046E-07	3.12368E-06	2.97845E-08	1.5163E-08	7.03998E-09	1.40919E-07
UNIV_12	TRUCKS	2025	3.35296E-05	1.09627E-06	2.98499E-06	3.74295E-07	1.72179E-06	1.64174E-08	8.35796E-09	3.88048E-09	7.76757E-08
UNIV_13	TRUCKS	2025	6.76323E-05	2.21128E-06	6.021E-06	7.54987E-07	3.47302E-06	3.31155E-08	1.68588E-08	7.82729E-09	1.56679E-07
UNIV_14	TRUCKS	2025	0.000106362	3.47759E-06	9.46895E-06	1.18733E-06	5.46186E-06	5.20792E-08	2.65131E-08	1.23096E-08	2.46402E-07
UNIV_15	TRUCKS	2025	0.000342425	1.11958E-05	3.04845E-05	3.82253E-06	1.7584E-05	1.67665E-07	8.53567E-08	3.96299E-08	7.93273E-07
WILLOW01	TRUCKS	2025	1.39656E-06	4.56615E-08	1.2433E-07	1.559E-08	7.17155E-08	6.83813E-10	3.48123E-10	1.61628E-10	3.23532E-09
WILLOW02	TRUCKS	2025	2.51252E-06	8.21484E-08	2.23678E-07	2.80475E-08	1.29021E-07	1.23023E-09	6.26298E-10	2.90781E-10	5.82058E-09
WILLOW03	TRUCKS	2025	0	0	0	0	0	0	0	0	0
WILLOW04	TRUCKS	2025	0	0	0	0	0	0	0	0	0
WILLOW05	TRUCKS	2025	0	0	0	0	0	0	0	0	0
WILLOW06	TRUCKS	2025	0	0	0	0	0	0	0	0	0
WILLOW07	TRUCKS	2025	2.65989E-05	8.69669E-07	2.36798E-06	2.96927E-07	1.36589E-06	1.30239E-08	6.63034E-09	3.07837E-09	6.16199E-08
WILLOW08	TRUCKS	2025	8.79597E-06	2.8759E-07	7.83065E-07	9.81903E-08	4.51686E-07	4.30686E-09	2.19258E-09	1.01798E-09	2.0377E-08
WILLOW09	TRUCKS	2025	3.66311E-06	1.19768E-07	3.2611E-07	4.08917E-08	1.88106E-07	1.79361E-09	9.13109E-10	4.23943E-10	8.48609E-09
WILLOW10	TRUCKS	2025	2.93539E-06	9.59744E-08	2.61324E-07	3.2768E-08	1.50736E-07	1.43728E-09	7.31707E-10	3.39721E-10	6.80021E-09
WILLOW11	TRUCKS	2025	1.70438E-05	5.57258E-07	1.51733E-06	1.90262E-07	8.75224E-07	8.34532E-09	4.24853E-09	1.97253E-09	3.94842E-08
WILLOW12	TRUCKS	2025	2.42088E-05	7.91522E-07	2.1552E-06	2.70245E-07	1.24316E-06	1.18536E-08	6.03455E-09	2.80175E-09	5.60828E-08
WILLOW13	TRUCKS	2025	2.04203E-05	6.67655E-07	1.81792E-06	2.27954E-07	1.04861E-06	9.99858E-09	5.09019E-09	2.3633E-09	4.73063E-08

0.0087	0.021	0	0	0	0.12	0	0	0	0	1.1	0
0	55	0	28000	13000	0	0	21000	5000	22000	0	0
2000	9	7000	4000	0	9	3000	900	420	700	5	0

0.0012	0	0.0154	0	0	0	0	0	0.017	0.0058	0	0
0.0105	0.0158	0.016	0.0012	0.0002	0.0005	0.0306	0.0012	0.0576	0.048	0	0
0	0	0	0	0	0	0	0	0	0	1	0
0	0	0	0	0	0	0	0	0	0	0	1

100414	50000	110543	67561	78933	91203	115071	100425	108883	1330207	9901	88101	
Ethylbenzene	Formaldehyde	Hexane	Methanol	Methyl Ethyl Ketone	Naphthalene	Propylene	Styrene	Toluene	Xylenes	DPM	PM2.5	% Diesel
3.6491E-08	4.66288E-08	1.17848E-07	3.54143E-09	5.90238E-10	1.47559E-09	9.03063E-08	3.54143E-09	2.47955E-07	1.68257E-07	1.03E-07	2.675E-06	0.409078738
8.61581E-09	1.10094E-08	2.78248E-08	8.36158E-10	1.3936E-10	3.48399E-10	2.1322E-08	8.36158E-10	5.85442E-08	3.97269E-08	2.44E-08	6.3158E-07	0.409078738
2.41045E-08	3.08011E-08	7.78455E-08	2.33932E-09	3.89887E-10	9.74718E-10	5.96527E-08	2.33932E-09	1.63789E-07	1.11144E-07	6.83E-08	1.767E-06	0.409078738
1.06939E-09	1.36648E-09	3.4536E-09	1.03783E-10	1.72972E-11	4.32431E-11	2.64648E-09	1.03783E-10	7.26647E-09	4.93088E-09	3.03E-09	7.8392E-08	0.409078738
1.16035E-09	1.48271E-09	3.74735E-09	1.12611E-10	1.87685E-11	4.69212E-11	2.87158E-09	1.12611E-10	7.88452E-09	5.35028E-09	3.29E-09	8.5059E-08	0.409078738
2.06077E-09	2.63328E-09	6.65526E-09	1.99996E-10	3.33327E-11	8.33316E-11	5.0999E-09	1.99996E-10	1.40029E-08	9.50205E-09	5.84E-09	1.5106E-07	0.409078738
1.14226E-09	1.45959E-09	3.68892E-09	1.10855E-10	1.84758E-11	4.61896E-11	2.8268E-09	1.10855E-10	7.76159E-09	5.26686E-09	3.24E-09	8.3733E-08	0.409078738
3.41199E-06	4.35989E-06	1.1019E-05	3.31131E-07	5.51885E-08	1.37971E-07	8.44385E-06	3.31131E-07	2.31844E-05	1.57325E-05	9.67E-06	0.00025012	0.409078738
2.10663E-06	2.69189E-06	6.80338E-06	2.04447E-07	3.40745E-08	8.51863E-08	5.2134E-06	2.04447E-07	1.43145E-05	9.71353E-06	5.97E-06	0.00015443	0.409078738
3.20853E-07	4.09991E-07	1.0362E-06	3.11385E-08	5.18976E-09	1.29744E-08	7.94033E-07	3.11385E-08	2.18019E-06	1.47943E-06	9.09E-07	2.352E-05	0.409078738
3.94172E-07	5.03679E-07	1.27298E-06	3.82541E-08	6.37568E-09	1.59392E-08	9.7548E-07	3.82541E-08	2.67839E-06	1.8175E-06	1.12E-06	2.8895E-05	0.409078738
3.4015E-07	4.34648E-07	1.09851E-06	3.30113E-08	5.50188E-09	1.37547E-08	8.41787E-07	3.30113E-08	2.31131E-06	1.56841E-06	9.64E-07	2.4935E-05	0.409078738
4.16684E-07	5.32445E-07	1.34568E-06	4.04389E-08	6.73981E-09	1.68495E-08	1.03119E-06	4.04389E-08	2.83136E-06	1.9213E-06	1.18E-06	3.0545E-05	0.409078738
1.0204E-06	1.30388E-06	3.29538E-06	9.90288E-08	1.65048E-08	4.1262E-08	2.52523E-06	9.90288E-08	6.93357E-06	4.70498E-06	2.89E-06	7.48E-05	0.409078738
1.00895E-06	1.28924E-06	3.25839E-06	9.79173E-08	1.63196E-08	4.07989E-08	2.49689E-06	9.79173E-08	6.85575E-06	4.65217E-06	2.86E-06	7.3961E-05	0.409078738
5.0555E-07	6.45999E-07	1.63267E-06	4.90632E-08	8.1772E-09	2.0443E-08	1.25111E-06	4.90632E-08	3.43519E-06	2.33105E-06	1.43E-06	3.7059E-05	0.409078738
2.9843E-07	3.81338E-07	9.6378E-07	2.89624E-08	4.82706E-09	1.20677E-08	7.38541E-07	2.89624E-08	2.02782E-06	1.37604E-06	8.46E-07	2.1876E-05	0.409078738
7.90126E-07	1.00963E-06	2.55171E-06	7.66811E-08	1.27802E-08	3.19504E-08	1.95537E-06	7.66811E-08	5.36888E-06	3.64321E-06	2.24E-06	5.792E-05	0.409078738
3.30395E-07	4.22184E-07	1.06701E-06	3.20646E-08	5.3441E-09	1.33602E-08	8.17647E-07	3.20646E-08	2.24502E-06	1.52343E-06	9.36E-07	2.422E-05	0.409078738
1.59109E-06	2.03312E-06	5.13843E-06	1.54414E-07	2.57357E-08	6.43392E-08	3.93756E-06	1.54414E-07	1.08114E-05	7.33641E-06	4.51E-06	0.00011663	0.409078738
3.98397E-07	5.09077E-07	1.28662E-06	3.86641E-08	6.44401E-09	1.611E-08	9.85934E-07	3.86641E-08	2.70709E-06	1.83698E-06	1.13E-06	2.9204E-05	0.409078738
5.9464E-07	7.5984E-07	1.92039E-06	5.77094E-08	9.61823E-09	2.40456E-08	1.47159E-06	5.77094E-08	4.04056E-06	2.74184E-06	1.68E-06	4.359E-05	0.409078738
2.56912E-07	3.28287E-07	8.297E-07	2.49332E-08	4.15553E-09	1.03888E-08	6.35795E-07	2.49332E-08	1.74571E-06	1.18461E-06	7.28E-07	1.8833E-05	0.409078738
6.5727E-08	8.39869E-08	2.12265E-07	6.37875E-09	1.06313E-09	2.65781E-09	1.62658E-07	6.37875E-09	4.46613E-07	3.03062E-07	1.86E-07	4.8181E-06	0.409078738
5.40412E-08	6.90546E-08	1.74526E-07	5.24466E-09	8.74109E-10	2.18527E-09	1.33739E-07	5.24466E-09	3.67208E-07	2.4918E-07	1.53E-07	3.9615E-06	0.409078738
5.25359E-08	6.71312E-08	1.69665E-07	5.09857E-09	8.49762E-10	2.12441E-09	1.30014E-07	5.09857E-09	3.5698E-07	2.42239E-07	1.49E-07	3.8511E-06	0.409078738
9.66166E-08	1.23458E-07	3.12024E-07	9.37657E-09	1.56276E-09	3.9069E-09	2.39103E-07	9.37657E-09	6.56507E-07	4.45492E-07	2.74E-07	7.0825E-06	0.409078738
1.93638E-07	2.47434E-07	6.25355E-07	1.87924E-08	3.13207E-09	7.83019E-09	4.79207E-07	1.87924E-08	1.31577E-06	8.92852E-07	5.49E-07	1.4195E-05	0.409078738
9.14564E-08	1.16864E-07	2.95359E-07	8.87577E-09	1.47929E-09	3.69824E-09	2.26332E-07	8.87577E-09	6.21443E-07	4.21699E-07	2.59E-07	6.7042E-06	0.409078738
8.92385E-08	1.1403E-07	2.88196E-07	8.66052E-09	1.44342E-09	3.60855E-09	2.20843E-07	8.66052E-09	6.06373E-07	4.11472E-07	2.53E-07	6.5416E-06	0.409078738
9.36285E-08	1.1964E-07	3.02374E-07	9.08658E-09	1.51443E-09	3.78607E-09	2.31708E-07	9.08658E-09	6.36203E-07	4.31714E-07	2.65E-07	6.8634E-06	0.409078738
1.98114E-07	2.53153E-07	6.39811E-07	1.92268E-08	3.20447E-09	8.01119E-09	4.90285E-07	1.92268E-08	1.34618E-06	9.13491E-07	5.61E-07	1.4523E-05	0.409078738
4.56806E-07	5.83714E-07	1.47526E-06	4.43327E-08	7.38879E-09	1.8472E-08	1.13048E-06	4.43327E-08	3.10399E-06	2.1063E-06	1.29E-06	3.3486E-05	0.409078738
1.42576E-07	1.82186E-07	4.60451E-07	1.38369E-08	2.30616E-09	5.76539E-09	3.52842E-07	1.38369E-08	9.68803E-07	6.5741E-07	4.04E-07	1.0452E-05	0.409078738
5.04011E-07	6.44033E-07	1.62771E-06	4.89139E-08	8.15232E-09	2.03808E-08	1.24731E-06	4.89139E-08	3.42474E-06	2.32396E-06	1.43E-06	3.6947E-05	0.409078738
1.05287E-06	1.34538E-06	3.40026E-06	1.02181E-07	1.70301E-08	4.25752E-08	2.6056E-06	1.02181E-07	7.15424E-06	4.85472E-06	2.98E-06	7.7181E-05	0.409078738
2.08415E-07	2.66315E-07	6.73075E-07	2.02265E-08	3.37108E-09	8.4277E-09	5.15775E-07	2.02265E-08	1.41617E-06	9.60985E-07	5.9E-07	1.5278E-05	0.409078738
2.34872E-07	3.00123E-07	7.58521E-07	2.27942E-08	3.79903E-09	9.49757E-09	5.81252E-07	2.27942E-08	1.59595E-06	1.08298E-06	6.65E-07	1.7217E-05	0.409078738
6.36333E-08	8.13115E-08	2.05504E-07	6.17556E-09	1.02926E-09	2.57315E-09	1.57477E-07	6.17556E-09	4.32386E-07	2.93408E-07	1.8E-07	4.6646E-06	0.409078738
5.25339E-08	6.71286E-08	1.69658E-07	5.09838E-09	8.49729E-10	2.12432E-09	1.30009E-07	5.09838E-09	3.56966E-07	2.4223E-07	1.49E-07	3.851E-06	0.409078738
1.28625E-07	1.64359E-07	4.15395E-07	1.2483E-08	2.08049E-09	5.20123E-09	3.18316E-07	1.2483E-08	8.74003E-07	5.93081E-07	3.64E-07	9.4289E-06	0.409078738
7.0254E-08	8.97716E-08	2.26885E-07	6.8181E-09	1.13635E-09	2.84087E-09	1.73861E-07	6.8181E-09	4.77374E-07	3.23936E-07	1.99E-07	5.15E-06	0.409078738
4.64675E-08	5.93768E-08	1.50067E-07	4.50963E-09	7.51605E-10	1.87901E-09	1.14996E-07	4.50963E-09	3.15745E-07	2.14258E-07	1.32E-07	3.4063E-06	0.409078738
3.99398E-08	5.10356E-08	1.28986E-07	3.87612E-09	6.46021E-10	1.61505E-09	9.88411E-08	3.87612E-09	2.71389E-07	1.84159E-07	1.13E-07	2.9278E-06	0.409078738
1.49119E-07	1.90546E-07	4.8158E-07	1.44719E-08	2.41198E-09	6.02995E-09	3.69033E-07	1.44719E-08	1.01326E-06	6.87577E-07	4.22E-07	1.0931E-05	0.409078738
1.78537E-07	2.28137E-07	5.76585E-07	1.73269E-08	2.88781E-09	7.21953E-09	4.41835E-07	1.73269E-08	1.21315E-06	8.23221E-07	5.06E-07	1.3088E-05	0.409078738
4.53273E-07	5.79199E-07	1.46385E-06	4.39898E-08	7.33163E-09	1.83291E-08	1.12174E-06	4.39898E-08	3.07997E-06	2.09001E-06	1.28E-06	3.3227E-05	0.409078738
1.00832E-06	1.28845E-06	3.25637E-06	9.78567E-08	1.63095E-08	4.07736E-08	2.49535E-06	9.78567E-08	6.85151E-06	4.64929E-06	2.86E-06	7.3915E-05	0.409078738
3.74342E-07	4.7834E-07	1.20894E-06	3.63296E-08	6.05493E-09	1.51373E-08	9.26405E-07	3.63296E-08	2.54364E-06	1.72606E-06	1.06E-06	2.7441E-05	0.409078738
2.0634E-07	2.63664E-07	6.66375E-07	2.00251E-08	3.33752E-09	8.3438E-09	5.1064E-07	2.00251E-08	1.40207E-06	9.51418E-07	5.85E-07	1.5126E-05	0.409078738
4.16207E-07	5.31835E-07	1.34414E-06	4.03925E-08	6.73209E-09	1.68302E-08	1.03001E-06	4.03925E-08	2.82811E-06	1.9191E-06	1.18E-06	3.051E-05	0.409078738
6.54549E-07	8.36393E-07	2.11387E-06	6.35235E-08	1.05873E-08	2.64681E-08	1.61985E-06	6.35235E-08	4.44764E-06	3.01808E-06	1.85E-06	4.7982E-05	0.409078738
2.10727E-06	2.6927E-06	6.80543E-06	2.04509E-07	3.40848E-08	8.5212E-08	5.21498E-06	2.04509E-07	1.43188E-05	9.71647E-06	5.97E-06	0.00015447	0.409078738
5.38921E-07	6.88641E-07	1.74045E-06	5.23019E-08	8.71698E-09	2.17924E-08	1.3337E-06	5.23019E-08	3.66195E-06	2.48493E-06	1.53E-06	3.9506E-05	0.409078738
9.69557E-07	1.23891E-06	3.13119E-06	9.40948E-08	1.56825E-08	3.92062E-08	2.39942E-06	9.40948E-08	6.58811E-06	4.47056E-06	2.75E-06	7.1073E-05	0.409078738
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2.40064E-06	3.06758E-06	7.75288E-06	2.32981E-07	3.88301E-08	9.70752E-08	5.941E-06	2.32981E-07	1.63123E-05	1.10692E-05	6.8E-06	0.00017598	0.409078738
1.31581E-06	1.68136E-06	4.24942E-06	1.27699E-07	2.12831E-08	5.32077E-08	3.25631E-06	1.27699E-07	8.9409E-06	6.06712E-06	3.73E-06	9.6456E-05	0.409078738
3.62387E-06	4.63064E-06	1.17033E-05	3.51694E-07	5.86157E-08	1.46539E-07	8.9682E-06	3.51694E-07	2.46241E-05	1.67094E-05	1.03E-05	0.00026565	0.409078738
1.19837E-06	1.5313E-06	3.87016E-06	1.16301E-07	1.93836E-08	4.84589E-08	2.96568E-06	1.16301E-07	8.14292E-06	5.52562E-06	3.4E-06	8.7847E-05	0.409078738

4.99068E-07	6.37716E-07	1.61174E-06	4.84341E-08	8.07236E-09	2.01809E-08	1.23507E-06	4.84341E-08	3.39115E-06	2.30117E-06	1.41E-06	3.6584E-05	0.409078738
3.99921E-07	5.11025E-07	1.29155E-06	3.8812E-08	6.46867E-09	1.61717E-08	9.89707E-07	3.8812E-08	2.71745E-06	1.84401E-06	1.13E-06	2.9316E-05	0.409078738
2.32207E-06	2.96718E-06	7.49913E-06	2.25355E-07	3.75592E-08	9.3898E-08	5.74656E-06	2.25355E-07	1.57784E-05	1.07069E-05	6.58E-06	0.00017022	0.409078738
3.29824E-06	4.21454E-06	1.06517E-05	3.20091E-07	5.33486E-08	1.33371E-07	8.16233E-06	3.20091E-07	2.24114E-05	1.52079E-05	9.34E-06	0.00024178	0.409078738
2.78209E-06	3.55499E-06	8.98476E-06	2.7E-07	4.49999E-08	1.125E-07	6.88499E-06	2.7E-07	1.89042E-05	1.2828E-05	7.88E-06	0.00020394	0.409078738
2.23551E-08	2.69639E-08	8.42347E-08	2.04789E-09	3.41315E-10	8.53288E-10	5.22212E-08	2.04789E-09	1.61143E-07	1.03357E-07	1.85E-09	1.6692E-06	0.015509812
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8.18994E-09	9.87839E-09	3.08599E-08	7.50258E-10	1.25043E-10	3.12607E-10	1.91316E-08	7.50258E-10	5.90358E-08	3.78654E-08	6.77E-10	6.1153E-07	0.015509812
8.88654E-09	1.07186E-08	3.34847E-08	8.14072E-10	1.35679E-10	3.39197E-10	2.07588E-08	8.14072E-10	6.40571E-08	4.1086E-08	7.35E-10	6.6354E-07	0.015509812
1.57824E-08	1.90362E-08	5.94686E-08	1.44579E-09	2.40964E-10	6.0241E-10	3.68675E-08	1.44579E-09	1.13765E-07	7.29685E-08	1.31E-09	1.1784E-06	0.015509812
8.74799E-09	1.05515E-08	3.29627E-08	8.01379E-10	1.33563E-10	3.33908E-10	2.04352E-08	8.01379E-10	6.30584E-08	4.04454E-08	7.23E-10	6.5319E-07	0.015509812
1.26268E-06	1.523E-06	4.75782E-06	1.15671E-07	1.92785E-08	4.81961E-08	2.9496E-06	1.15671E-07	9.10182E-06	5.83788E-06	1.04E-07	9.4282E-05	0.015509812
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9.37046E-08	1.13023E-07	3.53082E-07	8.58402E-09	1.43067E-09	3.57668E-09	2.18893E-07	8.58402E-09	6.75454E-07	4.33234E-07	7.75E-09	6.9967E-06	0.015509812
1.15117E-07	1.3885E-07	4.33765E-07	1.05456E-08	1.7576E-09	4.39399E-09	2.68912E-07	1.05456E-08	8.29803E-07	5.32233E-07	9.52E-09	8.5956E-06	0.015509812
9.93401E-08	1.1982E-07	3.74316E-07	9.10027E-09	1.51671E-09	3.79178E-09	2.32057E-07	9.10027E-09	7.16076E-07	4.59289E-07	8.21E-09	7.4175E-06	0.015509812
1.21692E-07	1.4678E-07	4.58539E-07	1.11479E-08	1.85798E-09	4.64494E-09	2.84271E-07	1.11479E-08	8.77195E-07	5.6263E-07	1.01E-08	9.0865E-06	0.015509812
2.98005E-07	3.59443E-07	1.12289E-06	2.72995E-08	4.54991E-09	1.13748E-08	6.96136E-07	2.72995E-08	2.14812E-06	1.3778E-06	2.46E-08	2.2251E-05	0.015509812
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7.684E-07	9.26816E-07	2.89536E-06	7.03911E-08	1.17318E-08	2.93296E-08	1.79497E-06	7.03911E-08	5.53888E-06	3.55262E-06	6.35E-08	5.7375E-05	0.015509812
3.31985E-07	4.00428E-07	1.25093E-06	3.04122E-08	5.06871E-09	1.26718E-08	7.75512E-07	3.04122E-08	2.39306E-06	1.5349E-06	2.75E-08	2.4789E-05	0.015509812
8.49331E-08	1.02443E-07	3.2003E-07	7.78049E-09	1.29675E-09	3.24187E-09	1.98402E-07	7.78049E-09	6.12226E-07	3.9268E-07	7.02E-09	6.3418E-06	0.015509812
6.98326E-08	8.42295E-08	2.63131E-07	6.39718E-09	1.0662E-09	2.66549E-09	1.63128E-07	6.39718E-09	5.03376E-07	3.22864E-07	5.77E-09	5.2143E-06	0.015509812
6.78875E-08	8.18834E-08	2.55802E-07	6.21899E-09	1.0365E-09	2.59125E-09	1.58584E-07	6.21899E-09	4.89356E-07	3.13871E-07	5.61E-09	5.069E-06	0.015509812
1.24849E-07	1.50588E-07	4.70435E-07	1.14371E-08	1.90618E-09	4.76545E-09	2.91646E-07	1.14371E-08	8.99953E-07	5.77227E-07	1.03E-08	9.3222E-06	0.015509812
2.68532E-07	3.23894E-07	1.01184E-06	2.45995E-08	4.09992E-09	1.02498E-08	6.27288E-07	2.45995E-08	1.93567E-06	1.24153E-06	2.22E-08	2.0051E-05	0.015509812
1.26829E-07	1.52977E-07	4.77896E-07	1.16185E-08	1.93641E-09	4.84103E-09	2.96271E-07	1.16185E-08	9.14227E-07	5.86382E-07	1.05E-08	9.4701E-06	0.015509812
1.23754E-07	1.49267E-07	4.66307E-07	1.13367E-08	1.88945E-09	4.72363E-09	2.89086E-07	1.13367E-08	8.92056E-07	5.72162E-07	1.02E-08	9.2404E-06	0.015509812
1.29842E-07	1.5661E-07	4.89247E-07	1.18944E-08	1.9824E-09	4.95601E-09	3.03308E-07	1.18944E-08	9.35941E-07	6.00309E-07	1.07E-08	9.695E-06	0.015509812
2.7474E-07	3.31381E-07	1.03523E-06	2.51682E-08	4.19469E-09	1.04867E-08	6.41788E-07	2.51682E-08	1.98041E-06	1.27023E-06	2.27E-08	2.0514E-05	0.015509812
6.33487E-07	7.64088E-07	2.387E-06	5.8032E-08	9.672E-09	2.418E-08	1.47982E-06	5.8032E-08	4.56638E-06	2.92886E-06	5.24E-08	4.7301E-05	0.015509812
1.97721E-07	2.38484E-07	7.4502E-07	1.81127E-08	3.01878E-09	7.54696E-09	4.61874E-07	1.81127E-08	1.42524E-06	9.14144E-07	1.64E-08	1.4763E-05	0.015509812
6.9895E-07	8.43047E-07	2.63366E-06	6.40289E-08	1.06715E-08	2.66787E-08	1.63274E-06	6.40289E-08	5.03826E-06	3.23152E-06	5.78E-08	5.2189E-05	0.015509812
1.51718E-06	1.82996E-06	5.71676E-06	1.38984E-07	2.31641E-08	5.79101E-08	3.5441E-06	1.38984E-07	1.09363E-05	7.01451E-06	1.25E-07	0.00011328	0.015509812
3.00322E-07	3.62238E-07	1.13162E-06	2.75117E-08	4.58529E-09	1.14632E-08	7.01549E-07	2.75117E-08	2.16482E-06	1.38851E-06	2.48E-08	2.2424E-05	0.015509812
3.38448E-07	4.08223E-07	1.27528E-06	3.10043E-08	5.16738E-09	1.29184E-08	7.90609E-07	3.10043E-08	2.43964E-06	1.56478E-06	2.8E-08	2.5271E-05	0.015509812
6.05846E-08	7.30749E-08	2.28285E-07	5.54999E-09	9.24998E-10	2.3125E-09	1.41525E-07	5.54999E-09	4.36714E-07	2.80107E-07	5.01E-09	4.5237E-06	0.015509812
5.0017E-08	6.03287E-08	1.88466E-07	4.58192E-09	7.63654E-10	1.90913E-09	1.16839E-07	4.58192E-09	3.60539E-07	2.31249E-07	4.14E-09	3.7347E-06	0.015509812
1.22463E-07	1.4771E-07	4.61443E-07	1.12185E-08	1.86975E-09	4.67436E-09	2.86071E-07	1.12185E-08	8.82751E-07	5.66194E-07	1.01E-08	9.144E-06	0.015509812
6.68881E-08	8.0678E-08	2.52036E-07	6.12744E-09	1.02124E-09	2.5531E-09	1.5625E-07	6.12744E-09	4.82152E-07	3.09251E-07	5.53E-09	4.9944E-06	0.015509812
4.42412E-08	5.33621E-08	1.66702E-07	4.05282E-09	6.7547E-10	1.68867E-09	1.03347E-07	4.05282E-09	3.18905E-07	2.04545E-07	3.66E-09	3.3034E-06	0.015509812
3.80263E-08	4.58658E-08	1.43284E-07	3.48348E-09	5.8058E-10	1.45145E-09	8.88288E-08	3.48348E-09	2.74106E-07	1.75811E-07	3.14E-09	2.8393E-06	0.015509812
1.41975E-07	1.71244E-07	5.34965E-07	1.30059E-08	2.16765E-09	5.41913E-09	3.31651E-07	1.30059E-08	1.0234E-06	6.56405E-07	1.17E-08	1.0601E-05	0.015509812
1.22808E-07	1.48126E-07	4.62744E-07	1.12501E-08	1.87502E-09	4.68754E-09	2.86878E-07	1.12501E-08	8.8524E-07	5.6779E-07	1.02E-08	9.1698E-06	0.015509812
7.48321E-07	9.02597E-07	2.8197E-06	6.85517E-08	1.14253E-08	2.85632E-08	1.74807E-06	6.85517E-08	5.39415E-06	3.45979E-06	6.19E-08	5.5876E-05	0.015509812
1.62939E-06	1.96531E-06	6.1396E-06	1.49264E-07	2.48774E-08	6.21934E-08	3.80624E-06	1.49264E-07	1.17452E-05	7.53333E-06	1.35E-07	0.00012166	0.015509812
6.04916E-07	7.29627E-07	2.27934E-06	5.54147E-08	9.23579E-09	2.30895E-08	1.41308E-06	5.54147E-08	4.36044E-06	2.79677E-06	5E-08	4.5168E-05	0.015509812
3.33434E-07	4.02175E-07	1.25639E-06	3.0545E-08	5.09083E-09	1.27271E-08	7.78897E-07	3.0545E-08	2.4035E-06	1.5416E-06	2.76E-08	2.4897E-05	0.015509812
6.72567E-07	8.11226E-07	2.53425E-06	6.16121E-08	1.02687E-08	2.56717E-08	1.57111E-06	6.16121E-08	4.84809E-06	3.10955E-06	5.56E-08	5.0219E-05	0.015509812
1.05772E-06	1.27578E-06	3.98551E-06	9.68945E-08	1.61491E-08	4.03727E-08	2.47081E-06	9.68945E-08	7.62437E-06	4.89025E-06	8.75E-08	7.8978E-05	0.015509812
3.40523E-06	4.10727E-06	1.2831E-05	3.11944E-07	5.19907E-08	1.29977E-07	7.95458E-06	3.11944E-07	2.45461E-05	1.57438E-05	2.82E-07	0.00025426	0.015509812
1.38881E-08	1.67513E-08	5.23307E-08	1.27225E-09	2.12041E-10	5.30104E-10	3.24423E-08	1.27225E-09	1.0011E-07	6.42101E-08	1.15E-09	1.037E-06	0.015509812
2.49856E-08	3.01367E-08	9.41466E-08	2.28887E-09	3.81478E-10	9.53694E-10	5.83661E-08	2.28887E-09	1.80105E-07	1.15519E-07	2.07E-09	1.8656E-06	0.015509812
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2.64512E-07	3.19044E-07	9.96689E-07	2.42312E-08	4.03854E-09	1.00963E-08	6.17896E-07	2.42312E-08	1.90669E-06	1.22294E-06	2.19E-08	1.9751E-05	0.015509812
8.74712E-08	1.05504E-07	3.29594E-07	8.013E-09	1.3355E-09	3.33875E-09	2.04331E-07	8.013E-09	6.30521E-07	4.04414E-07	7.23E-09	6.5313E-06	0.015509812
3.64277E-08	4.39377E-08	1.37261E-07	3.33704E-09	5.56174E-10	1.39043E-09	8.50946E-08	3.33704E-09	2.62583E-07	1.6842E-07	3.01E-09	2.72E-06	0.015509812
2.91909E-08	3.52089E-08	1.09992E-07	2.67409E-09	4.45682E-10	1.11421E-09	6.81894E-08	2.67409E-09	2.10417E-07	1.34961E-07	2.41E-09	2.1796E-06	0.015509812
1.69491E-07	2.04434E-07	6.38649E-07	1.55267E-08	2.58778E-09	6.46944E-09	3.9593E-07	1.55267E-08	1.22175E-06	7.83627E-07	1.4E-08	1.2656E-05	0.015509812
2.40743E-07	2.90376E-07	9.07128E-07	2.20538E-08	3.67564E-09	9.1891E-09	5.62373E-07	2.20538E-08	1.73536E-06	1.11305E-06	1.99E-08	1.7976E-05	0.015509812
2.03069E-07	2.44934E-07	7.65169E-07	1.86026E-08	3.10043E-09	7.75108E-09	4.74366E-07	1.86026E-08	1.46379E-06	9.38868E-07	1.68E-08	1.5163E-05	0.015509812
9.08613E-10	9.73698E-10	4.34239E-09	7.39517E-11	1.23253E-11	3.08132E-11	1.88577E-09	7.39517E-11	7.25477E-09	4.22216E-09	1.35E-10	1.1218E-07	0.017074277

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3.61189E-10	3.87061E-10	1.72618E-09	2.93971E-11	4.89951E-12	1.22488E-11	7.49625E-10	2.93971E-11	2.88389E-09	1.67838E-09	5.38E-11	4.4594E-08	0.017074277
6.41469E-10	6.87418E-10	3.06567E-09	5.2209E-11	8.70149E-12	2.17537E-11	1.33133E-09	5.2209E-11	5.12177E-09	2.98079E-09	9.55E-11	7.9199E-08	0.017074277
3.55558E-10	3.81027E-10	1.69926E-09	2.89387E-11	4.82312E-12	1.20578E-11	7.37937E-10	2.89387E-11	2.83893E-09	1.65221E-09	5.29E-11	4.3899E-08	0.017074277
5.1321E-08	5.49972E-08	2.45271E-07	4.177E-09	6.96167E-10	1.74042E-09	1.06514E-07	4.177E-09	4.0977E-07	2.38479E-07	7.64E-09	6.3364E-06	0.017074277
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4.67889E-09	5.01404E-09	2.23611E-08	3.80813E-10	6.34688E-11	1.58672E-10	9.71073E-09	3.80813E-10	3.73583E-08	2.17419E-08	6.96E-10	5.7768E-07	0.017074277
4.03763E-09	4.32685E-09	1.92964E-08	3.28621E-10	5.47702E-11	1.36926E-10	8.37984E-09	3.28621E-10	3.22382E-08	1.87621E-08	6.01E-10	4.9851E-07	0.017074277
4.94611E-09	5.3004E-09	2.36382E-08	4.02562E-10	6.70937E-11	1.67734E-10	1.02653E-08	4.02562E-10	3.94919E-08	2.29836E-08	7.36E-10	6.1067E-07	0.017074277
1.21123E-08	1.29799E-08	5.78864E-08	9.85814E-10	1.64302E-10	4.10756E-10	2.51383E-08	9.85814E-10	9.67098E-08	5.62835E-08	1.8E-09	1.4954E-06	0.017074277
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1.34934E-08	1.44599E-08	6.44868E-08	1.09822E-09	1.83037E-10	4.57592E-10	2.80046E-08	1.09822E-09	1.07737E-07	6.27012E-08	2.01E-09	1.666E-06	0.017074277
3.45206E-09	3.69934E-09	1.64979E-08	2.80962E-10	4.68271E-11	1.17068E-10	7.16454E-09	2.80962E-10	2.75628E-08	1.60411E-08	5.14E-10	4.2621E-07	0.017074277
2.83831E-09	3.04162E-09	1.35647E-08	2.31009E-10	3.85016E-11	9.62539E-11	5.89074E-09	2.31009E-10	2.26623E-08	1.31891E-08	4.22E-10	3.5043E-07	0.017074277
2.75925E-09	2.9569E-09	1.31869E-08	2.24575E-10	3.74291E-11	9.35729E-11	5.72666E-09	2.24575E-10	2.20311E-08	1.28217E-08	4.11E-10	3.4067E-07	0.017074277
5.07443E-09	5.43791E-09	2.42514E-08	4.13006E-10	6.88344E-11	1.72086E-10	1.05317E-08	4.13006E-10	4.05165E-08	2.35799E-08	7.55E-10	6.2652E-07	0.017074277
1.09144E-08	1.16962E-08	5.21614E-08	8.88317E-10	1.48053E-10	3.70132E-10	2.26521E-08	8.88317E-10	8.71451E-08	5.07171E-08	1.62E-09	1.3475E-06	0.017074277
5.15491E-09	5.52416E-09	2.46361E-08	4.19557E-10	6.99261E-11	1.74815E-10	1.06987E-08	4.19557E-10	4.11591E-08	2.39539E-08	7.67E-10	6.3645E-07	0.017074277
5.0299E-09	5.3902E-09	2.40386E-08	4.09382E-10	6.82303E-11	1.70576E-10	1.04392E-08	4.09382E-10	4.0161E-08	2.3373E-08	7.49E-10	6.2102E-07	0.017074277
5.27735E-09	5.65537E-09	2.52212E-08	4.29521E-10	7.15869E-11	1.78967E-10	1.09528E-08	4.29521E-10	4.21367E-08	2.45228E-08	7.85E-10	6.5157E-07	0.017074277
1.11667E-08	1.19665E-08	5.33671E-08	9.08851E-10	1.51475E-10	3.78688E-10	2.31757E-08	9.08851E-10	8.91596E-08	5.18894E-08	1.66E-09	1.3787E-06	0.017074277
2.57478E-08	2.75921E-08	1.23052E-07	2.0956E-09	3.49267E-10	8.73168E-10	5.34379E-08	2.0956E-09	2.05582E-07	1.19645E-07	3.83E-09	3.179E-06	0.017074277
8.03628E-09	8.61193E-09	3.84066E-08	6.54071E-10	1.09012E-10	2.72529E-10	1.66788E-08	6.54071E-10	6.41652E-08	3.73431E-08	1.2E-09	9.922E-07	0.017074277
2.84085E-08	3.04434E-08	1.35768E-07	2.31216E-09	3.85359E-10	9.63398E-10	5.896E-08	2.31216E-09	2.26826E-07	1.32009E-07	4.23E-09	3.5075E-06	0.017074277
6.16649E-08	6.6082E-08	2.94705E-07	5.01888E-09	8.3648E-10	2.0912E-09	1.27982E-07	5.01888E-09	4.92359E-07	2.86545E-07	9.18E-09	7.6135E-06	0.017074277
1.22065E-08	1.30808E-08	5.83365E-08	9.9348E-10	1.6558E-10	4.1395E-10	2.53337E-08	9.9348E-10	9.74618E-08	5.67212E-08	1.82E-09	1.5071E-06	0.017074277
1.3756E-08	1.47414E-08	6.57421E-08	1.1196E-09	1.866E-10	4.665E-10	2.85498E-08	1.1196E-09	1.09834E-07	6.39218E-08	2.05E-09	1.6984E-06	0.017074277
2.46243E-09	2.63882E-09	1.17683E-08	2.00417E-10	3.34028E-11	8.35069E-11	5.11062E-09	2.00417E-10	1.96611E-08	1.14425E-08	3.67E-10	3.0403E-07	0.017074277
2.03292E-09	2.17854E-09	9.71561E-09	1.65459E-10	2.75764E-11	6.8941E-11	4.21919E-09	1.65459E-10	1.62317E-08	9.44659E-09	3.03E-10	2.51E-07	0.017074277
4.97743E-09	5.33397E-09	2.37879E-08	4.05112E-10	6.75186E-11	1.68797E-10	1.03304E-08	4.05112E-10	3.9742E-08	2.31292E-08	7.41E-10	6.1454E-07	0.017074277
2.71864E-09	2.91337E-09	1.29928E-08	2.21269E-10	3.68781E-11	9.21954E-11	5.64236E-09	2.21269E-10	2.17068E-08	1.2633E-08	4.05E-10	3.3566E-07	0.017074277
1.79816E-09	1.92697E-09	8.59368E-09	1.46352E-10	2.4392E-11	6.098E-11	3.73197E-09	1.46352E-10	1.43573E-08	8.35573E-09	2.68E-10	2.2201E-07	0.017074277
1.54556E-09	1.65627E-09	7.38645E-09	1.25793E-10	2.09654E-11	5.24136E-11	3.20771E-09	1.25793E-10	1.23404E-08	7.18193E-09	2.3E-10	1.9082E-07	0.017074277
5.77049E-09	6.18383E-09	2.7578E-08	4.69658E-10	7.82764E-11	1.95691E-10	1.19763E-08	4.69658E-10	4.60741E-08	2.68144E-08	8.59E-10	7.1246E-07	0.017074277
4.99147E-09	5.34901E-09	2.3855E-08	4.06254E-10	6.7709E-11	1.69273E-10	1.03595E-08	4.06254E-10	3.98541E-08	2.31944E-08	7.43E-10	6.1627E-07	0.017074277
3.04152E-08	3.25938E-08	1.45359E-07	2.47548E-09	4.1258E-10	1.03145E-09	6.31247E-08	2.47548E-09	2.42848E-07	1.41334E-07	4.53E-09	3.7552E-06	0.017074277
6.62258E-08	7.09696E-08	3.16503E-07	5.3901E-09	8.9835E-10	2.24587E-09	1.37448E-07	5.3901E-09	5.28776E-07	3.07739E-07	9.86E-09	8.1766E-06	0.017074277
2.45865E-08	2.63477E-08	1.17503E-07	2.00109E-09	3.33515E-10	8.33787E-10	5.10278E-08	2.00109E-09	1.9631E-07	1.14249E-07	3.66E-09	3.0356E-06	0.017074277
1.35523E-08	1.4523E-08	6.47682E-08	1.10301E-09	1.83836E-10	4.59589E-10	2.81269E-08	1.10301E-09	1.08207E-07	6.29748E-08	2.02E-09	1.6732E-06	0.017074277
2.73362E-08	2.92943E-08	1.30644E-07	2.22488E-09	3.70814E-10	9.27034E-10	5.67345E-08	2.22488E-09	2.18264E-07	1.27026E-07	4.07E-09	3.3751E-06	0.017074277
4.29904E-08	4.60698E-08	2.05457E-07	3.49897E-09	5.83162E-10	1.45791E-09	8.92238E-08	3.49897E-09	3.43254E-07	1.99768E-07	6.4E-09	5.3078E-06	0.017074277
1.38404E-07	1.48318E-07	6.61453E-07	1.12647E-08	1.87744E-09	4.69361E-09	2.87249E-07	1.12647E-08	1.10508E-06	6.43138E-07	2.06E-08	1.7088E-05	0.017074277
5.64474E-10	6.04908E-10	2.6977E-09	4.59424E-11	7.65706E-12	1.91426E-11	1.17153E-09	4.59424E-11	4.50701E-09	2.62301E-09	8.4E-11	6.9693E-08	0.017074277
1.01553E-09	1.08827E-09	4.85336E-09	8.26536E-11	1.37756E-11	3.4439E-11	2.10767E-09	8.26536E-11	8.10843E-09	4.71898E-09	1.51E-10	1.2538E-07	0.017074277
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3.55522E-09	3.80989E-09	1.69909E-08	2.89359E-10	4.82264E-11	1.20566E-10	7.37864E-09	2.89359E-10	2.83865E-08	1.65205E-08	5.29E-10	4.3895E-07	0.017074277
1.48059E-09	1.58664E-09	7.07594E-09	1.20504E-10	2.00841E-11	5.02102E-11	3.07286E-09	1.20504E-10	1.18217E-08	6.88001E-09	2.2E-10	1.828E-07	0.017074277
1.18645E-09	1.27143E-09	5.67021E-09	9.65646E-11	1.60941E-11	4.02353E-11	2.4624E-09	9.65646E-11	9.47313E-09	5.5132E-09	1.77E-10	1.4649E-07	0.017074277
6.8889E-09	7.38235E-09	3.29231E-08	5.60685E-10	9.34475E-11	2.33619E-10	1.42975E-08	5.60685E-10	5.5004E-08	3.20114E-08	1.03E-09	8.5054E-07	0.017074277
9.78489E-09	1.04858E-08	4.67634E-08	7.96389E-10	1.32732E-10	3.31829E-10	2.03079E-08	7.96389E-10	7.81269E-08	4.54686E-08	1.46E-09	1.2081E-06	0.017074277
8.25363E-09	8.84485E-09	3.94453E-08	6.71761E-10	1.1196E-10	2.799E-10	1.71299E-08	6.71761E-10	6.59007E-08	3.83531E-08	1.23E-09	1.019E-06	0.017074277
2.18955E-09	3.16203E-09	4.33396E-09	2.40155E-10	4.00258E-11	1.00064E-10	6.12394E-09	2.40155E-10	1.27769E-08	1.00325E-08	2.36E-08	1.1544E-07	0.941447993
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8.70384E-10	1.25696E-09	1.72282E-09	9.54655E-11	1.59109E-11	3.97773E-11	2.43437E-09	9.54655E-11	5.07904E-09	3.98808E-09	9.39E-09	4.5889E-08	0.941447993
1.5458E-09	2.23236E-09	3.05972E-09	1.69546E-10	2.82577E-11	7.06442E-11	4.32342E-09	1.69546E-10	9.02034E-09	7.0828E-09	1.67E-08	8.1498E-08	0.941447993
8.56814E-10	1.23736E-09	1.69596E-09	9.39771E-11	1.56628E-11	3.91571E-11	2.39642E-09	9.39771E-11	4.99985E-09	3.9259E-09	9.25E-09	4.5173E-08	0.941447993

1.23672E-07	1.78601E-07	2.44794E-07	1.35646E-08	2.26077E-09	5.65192E-09	3.45898E-07	1.35646E-08	7.21676E-07	5.66663E-07	1.33E-06	6.5203E-06	0.941447993
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9.17781E-09	1.32541E-08	1.81664E-08	1.00664E-09	1.67774E-10	4.19434E-10	2.56693E-08	1.00664E-09	5.35562E-08	4.20525E-08	9.9E-08	4.8387E-07	0.941447993
1.12751E-08	1.62828E-08	2.23176E-08	1.23667E-09	2.06112E-10	5.1528E-10	3.15351E-08	1.23667E-09	6.57945E-08	5.16621E-08	1.22E-07	5.9445E-07	0.941447993
9.72977E-09	1.40512E-08	1.92589E-08	1.06718E-09	1.77864E-10	4.44659E-10	2.72131E-08	1.06718E-09	5.67771E-08	4.45816E-08	1.05E-07	5.1297E-07	0.941447993
1.1919E-08	1.72128E-08	2.35922E-08	1.3073E-09	2.17883E-10	5.44709E-10	3.33362E-08	1.3073E-09	6.95522E-08	5.46126E-08	1.29E-07	6.284E-07	0.941447993
2.91879E-08	4.21516E-08	5.77739E-08	3.20138E-09	5.33564E-10	1.33391E-09	8.16353E-08	3.20138E-09	1.70323E-07	1.33738E-07	3.15E-07	1.5388E-06	0.941447993
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7.52603E-08	1.08687E-07	1.48969E-07	8.2547E-09	1.37578E-09	3.43946E-09	2.10495E-07	8.2547E-09	4.39174E-07	3.44841E-07	8.12E-07	3.9679E-06	0.941447993
3.2516E-08	4.69578E-08	6.43615E-08	3.56642E-09	5.94403E-10	1.48601E-09	9.09437E-08	3.56642E-09	1.89744E-07	1.48987E-07	3.51E-07	1.7143E-06	0.941447993
8.31869E-09	1.20134E-08	1.64659E-08	9.12411E-10	1.52069E-10	3.80171E-10	2.32665E-08	9.12411E-10	4.85429E-08	3.81161E-08	8.98E-08	4.3858E-07	0.941447993
6.83969E-09	9.87752E-09	1.35384E-08	7.50191E-10	1.25032E-10	3.1258E-10	1.91299E-08	7.50191E-10	3.99123E-08	3.13393E-08	7.38E-08	3.606E-07	0.941447993
6.64918E-09	9.60239E-09	1.31613E-08	7.29296E-10	1.21549E-10	3.03873E-10	1.8597E-08	7.29296E-10	3.88006E-08	3.04664E-08	7.17E-08	3.5056E-07	0.941447993
1.22282E-08	1.76594E-08	2.42043E-08	1.34122E-09	2.23536E-10	5.5884E-10	3.4201E-08	1.34122E-09	7.13566E-08	5.60295E-08	1.32E-07	6.447E-07	0.941447993
2.63012E-08	3.79827E-08	5.206E-08	2.88477E-09	4.80794E-10	1.20199E-09	7.35615E-08	2.88477E-09	1.53478E-07	1.20511E-07	2.84E-07	1.3867E-06	0.941447993
1.24222E-08	1.79394E-08	2.45882E-08	1.36249E-09	2.27082E-10	5.67704E-10	3.47435E-08	1.36249E-09	7.24884E-08	5.69181E-08	1.34E-07	6.5492E-07	0.941447993
1.21209E-08	1.75044E-08	2.39919E-08	1.32945E-09	2.21575E-10	5.53937E-10	3.39009E-08	1.32945E-09	7.07305E-08	5.55378E-08	1.31E-07	6.3904E-07	0.941447993
1.27172E-08	1.83655E-08	2.51722E-08	1.39485E-09	2.32475E-10	5.81187E-10	3.55687E-08	1.39485E-09	7.421E-08	5.827E-08	1.37E-07	6.7048E-07	0.941447993
2.69091E-08	3.88607E-08	5.32634E-08	2.95145E-09	4.91908E-10	1.22977E-09	7.52619E-08	2.95145E-09	1.57026E-07	1.23297E-07	2.9E-07	1.4187E-06	0.941447993
6.20463E-08	8.9604E-08	1.22813E-07	6.80537E-09	1.13423E-09	2.83557E-09	1.73537E-07	6.80537E-09	3.62065E-07	2.84295E-07	6.69E-07	3.2712E-06	0.941447993
1.93656E-08	2.79668E-08	3.83319E-08	2.12406E-09	3.5401E-10	8.85026E-10	5.41636E-08	2.12406E-09	1.13006E-07	8.87329E-08	2.09E-07	1.021E-06	0.941447993
6.8458E-08	9.88634E-08	1.35504E-07	7.50861E-09	1.25144E-09	3.12859E-09	1.9147E-07	7.50861E-09	3.9948E-07	3.13673E-07	7.39E-07	3.6093E-06	0.941447993
1.48598E-07	2.14598E-07	2.94133E-07	1.62986E-08	2.71643E-09	6.79107E-09	4.15614E-07	1.62986E-08	8.67131E-07	6.80875E-07	1.6E-06	7.8344E-06	0.941447993
2.94148E-08	4.24793E-08	5.82231E-08	3.22628E-09	5.37713E-10	1.34428E-09	8.227E-08	3.22628E-09	1.71647E-07	1.34778E-07	3.17E-07	1.5508E-06	0.941447993
3.3149E-08	4.7872E-08	6.56144E-08	3.63585E-09	6.05974E-10	1.51494E-09	9.27141E-08	3.63585E-09	1.93437E-07	1.51888E-07	3.58E-07	1.7477E-06	0.941447993
5.9339E-09	8.56943E-09	1.17455E-08	6.50843E-10	1.08474E-10	2.71184E-10	1.65965E-08	6.50843E-10	3.46267E-08	2.7189E-08	6.4E-08	3.1285E-07	0.941447993
4.89887E-09	7.07469E-09	9.69673E-09	5.37318E-10	8.95531E-11	2.23883E-10	1.37016E-08	5.37318E-10	2.85869E-08	2.24465E-08	5.29E-08	2.5828E-07	0.941447993
1.19945E-08	1.73218E-08	2.37417E-08	1.31558E-09	2.19263E-10	5.48159E-10	3.35473E-08	1.31558E-09	6.99927E-08	5.49585E-08	1.29E-07	6.3238E-07	0.941447993
6.5513E-09	9.46104E-09	1.29675E-08	7.1856E-10	1.1976E-10	2.994E-10	1.83233E-08	7.1856E-10	3.82295E-08	3.00179E-08	7.07E-08	3.454E-07	0.941447993
4.33317E-09	6.25773E-09	8.57698E-09	4.75271E-10	7.92118E-11	1.98029E-10	1.21194E-08	4.75271E-10	2.52858E-08	1.98545E-08	4.68E-08	2.2845E-07	0.941447993
3.72445E-09	5.37865E-09	7.3721E-09	4.08505E-10	6.80842E-11	1.7021E-10	1.04169E-08	4.08505E-10	2.17336E-08	1.70653E-08	4.02E-08	1.9636E-07	0.941447993
1.39056E-08	2.00817E-08	2.75244E-08	1.52519E-09	2.54199E-10	6.35497E-10	3.88924E-08	1.52519E-09	8.11446E-08	6.37151E-08	1.5E-07	7.3313E-07	0.941447993
1.20283E-08	1.73706E-08	2.38086E-08	1.31929E-09	2.19882E-10	5.49704E-10	3.36419E-08	1.31929E-09	7.019E-08	5.51135E-08	1.3E-07	6.3416E-07	0.941447993
7.32937E-08	1.05847E-07	1.45076E-07	8.039E-09	1.33983E-09	3.34958E-09	2.04995E-07	8.039E-09	4.27698E-07	3.3583E-07	7.91E-07	3.8642E-06	0.941447993
1.59589E-07	2.3047E-07	3.15888E-07	1.75041E-08	2.91735E-09	7.29337E-09	4.46354E-07	1.75041E-08	9.31267E-07	7.31235E-07	1.72E-06	8.4139E-06	0.941447993
5.9248E-08	8.55628E-08	1.17274E-07	6.49844E-09	1.08307E-09	2.70768E-09	1.6571E-07	6.49844E-09	3.45736E-07	2.71473E-07	6.39E-07	3.1237E-06	0.941447993
3.26579E-08	4.71628E-08	6.46424E-08	3.58198E-09	5.96997E-10	1.49249E-09	9.13406E-08	3.58198E-09	1.90572E-07	1.49638E-07	3.52E-07	1.7218E-06	0.941447993
6.5874E-08	9.51317E-08	1.3039E-07	7.2252E-09	1.2042E-09	3.0105E-09	1.84242E-07	7.2252E-09	3.84401E-07	3.01833E-07	7.11E-07	3.473E-06	0.941447993
1.03597E-07	1.49609E-07	2.05058E-07	1.13627E-08	1.89379E-09	4.73448E-09	2.8975E-07	1.13627E-08	6.0453E-07	4.7468E-07	1.12E-06	5.4619E-06	0.941447993
3.33523E-07	4.81656E-07	6.60168E-07	3.65814E-08	6.09691E-09	1.52423E-08	9.32827E-07	3.65814E-08	1.94624E-06	1.52819E-06	3.6E-06	1.7584E-05	0.941447993
1.36025E-09	1.96441E-09	2.69246E-09	1.49196E-10	2.48659E-11	6.21648E-11	3.80449E-09	1.49196E-10	7.93763E-09	6.23266E-09	1.47E-08	7.1716E-08	0.941447993
2.4472E-09	3.53411E-09	4.84393E-09	2.68413E-10	4.47356E-11	1.11839E-10	6.84454E-09	2.68413E-10	1.42804E-08	1.1213E-08	2.64E-08	1.2902E-07	0.941447993
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0	0	0	0	0	0	0	0	0	0	0	0	0.941447993
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0	0	0	0	0	0	0	0	0	0	0	0	0.941447993
2.59074E-08	3.74141E-08	5.12806E-08	2.84157E-09	4.73596E-10	1.18399E-09	7.24602E-08	2.84157E-09	1.5118E-07	1.18707E-07	2.8E-07	1.3659E-06	0.941447993
8.56729E-09	1.23724E-08	1.69579E-08	9.39678E-10	1.56613E-10	3.91532E-10	2.39618E-08	9.39678E-10	4.99936E-08	3.92551E-08	9.24E-08	4.5169E-07	0.941447993
3.56788E-09	5.15254E-09	7.06219E-09	3.91332E-10	6.5222E-11	1.63055E-10	9.97897E-09	3.91332E-10	2.082E-08	1.63479E-08	3.85E-08	1.8811E-07	0.941447993
2.85907E-09	4.12892E-09	5.65919E-09	3.13589E-10	5.22648E-11	1.30662E-10	7.99652E-09	3.13589E-10	1.66838E-08	1.31002E-08	3.08E-08	1.5074E-07	0.941447993
1.66007E-08	2.39738E-08	3.28591E-08	1.8208E-09	3.03466E-10	7.58666E-10	4.64303E-08	1.8208E-09	9.68717E-08	7.6064E-08	1.79E-07	8.7522E-07	0.941447993
2.35794E-08	3.40521E-08	4.66726E-08	2.58623E-09	4.31039E-10	1.0776E-09	6.5949E-08	2.58623E-09	1.37595E-07	1.0804E-07	2.54E-07	1.2432E-06	0.941447993
1.98894E-08	2.87232E-08	3.93687E-08	2.18151E-09	3.63585E-10	9.08962E-10	5.56285E-08	2.18151E-09	1.16063E-07	9.11328E-08	2.15E-07	1.0486E-06	0.941447993

MOBILE-CANCER	MOBILE-CHRONIC	MOBILE-ACUTE	PM2.5	Lookup
1.33961E-07	7.5861E-08	5.79346E-09	2.67497E-06	ADAMS_CT_2025
3.16292E-08	1.79114E-08	1.36788E-09	6.31582E-07	ADAMSD01_2025
8.84892E-08	5.01107E-08	3.82693E-09	1.76698E-06	ADAMSD02_2025
3.9258E-09	2.22315E-09	1.69781E-10	7.83915E-08	ADAMSD03_2025
4.25971E-09	2.41224E-09	1.84221E-10	8.50592E-08	ADAMSD04_2025
7.56521E-09	4.28412E-09	3.27176E-10	1.51065E-07	ADAMSD05_2025
4.1933E-09	2.37463E-09	1.81349E-10	8.3733E-08	ADAMSD06_2025
1.25256E-05	7.09317E-06	5.41702E-07	0.000250116	BAY_EAST_2025
7.73358E-06	4.37947E-06	3.34458E-07	0.000154427	BAY_EFB_2025
1.17787E-06	6.6702E-07	5.094E-08	2.35201E-05	BAY_M01_2025
1.44703E-06	8.19442E-07	6.25804E-08	2.88948E-05	BAY_M02_2025
1.24871E-06	7.07135E-07	5.40035E-08	2.49346E-05	BAY_M03_2025
1.52967E-06	8.66242E-07	6.61545E-08	3.0545E-05	BAY_M04_2025
3.74594E-06	2.1213E-06	1.62002E-07	7.48002E-05	BAY_M05_2025
3.7039E-06	2.09749E-06	1.60184E-07	7.39607E-05	BAY_WFB1_2025
1.8559E-06	1.05098E-06	8.02631E-08	3.70593E-05	BAY_WFB2_2025
1.09555E-06	6.20404E-07	4.73799E-08	2.18764E-05	BAY_WFB3_2025
2.9006E-06	1.64259E-06	1.25444E-07	5.79201E-05	BAY_WFB4_2025
1.2129E-06	6.86856E-07	5.24549E-08	2.42196E-05	BAY_WFB5_2025
5.841E-06	3.30771E-06	2.52608E-07	0.000116635	BAY_WFB6_2025
1.46254E-06	8.28224E-07	6.32511E-08	2.92044E-05	BAY_WFB7_2025
2.18296E-06	1.23619E-06	9.44075E-08	4.35901E-05	OBRIEN01_2025
9.43142E-07	5.34094E-07	4.07885E-08	1.8833E-05	OBRIEN02_2025
2.41288E-07	1.36639E-07	1.04351E-08	4.81811E-06	OBRIEN03_2025
1.98389E-07	1.12346E-07	8.5798E-09	3.96149E-06	OBRIEN04_2025
1.92863E-07	1.09217E-07	8.34082E-09	3.85114E-06	OBRIEN05_2025
3.54686E-07	2.00856E-07	1.53393E-08	7.08248E-06	OBRIEN06_2025
7.10859E-07	4.02553E-07	3.07428E-08	1.41946E-05	OBRIEN07_2025
3.35742E-07	1.90128E-07	1.452E-08	6.7042E-06	OBRIEN08_2025
3.276E-07	1.85517E-07	1.41679E-08	6.54162E-06	OBRIEN09_2025
3.43716E-07	1.94644E-07	1.48648E-08	6.86343E-06	OBRIEN10_2025
7.27291E-07	4.11859E-07	3.14534E-08	1.45228E-05	OBRIEN11_2025
1.67697E-06	9.49652E-07	7.25245E-08	3.34862E-05	OBRIEN12_2025
5.23407E-07	2.96401E-07	2.2636E-08	1.04516E-05	OBRIEN13_2025
1.85026E-06	1.04779E-06	8.00189E-08	3.69465E-05	OBRIEN14_2025
3.86517E-06	2.18881E-06	1.67158E-07	7.71808E-05	OBRIEN15_2025
7.65103E-07	4.33272E-07	3.30887E-08	1.52778E-05	OBRIEN16_2025
8.62231E-07	4.88275E-07	3.72893E-08	1.72173E-05	OBRIEN17_2025
2.33602E-07	1.32287E-07	1.01027E-08	4.66463E-06	UNIV_01_2025
1.92855E-07	1.09212E-07	8.3405E-09	3.851E-06	UNIV_02_2025
4.72191E-07	2.67398E-07	2.0421E-08	9.42885E-06	UNIV_03_2025
2.57907E-07	1.46051E-07	1.11538E-08	5.14997E-06	UNIV_04_2025
1.70585E-07	9.66009E-08	7.37737E-09	3.4063E-06	UNIV_05_2025
1.46621E-07	8.30305E-08	6.341E-09	2.92778E-06	UNIV_06_2025
5.47425E-07	3.10002E-07	2.36747E-08	1.09312E-05	UNIV_07_2025
6.5542E-07	3.71159E-07	2.83452E-08	1.30876E-05	UNIV_08_2025
1.66399E-06	9.42306E-07	7.19634E-08	3.32271E-05	UNIV_09_2025
3.70161E-06	2.09619E-06	1.60085E-07	7.39149E-05	UNIV_10_2025
1.37423E-06	7.78217E-07	5.94321E-08	2.74411E-05	UNIV_11_2025
7.57486E-07	4.28958E-07	3.27593E-08	1.51257E-05	UNIV_12_2025
1.52792E-06	8.65249E-07	6.60786E-08	3.051E-05	UNIV_13_2025
2.40289E-06	1.36074E-06	1.03919E-07	4.79817E-05	UNIV_14_2025
7.73592E-06	4.38079E-06	3.34559E-07	0.000154473	UNIV_15_2025
1.97841E-06	1.12036E-06	8.55613E-08	3.95056E-05	WILLOW01_2025
3.55931E-06	2.01561E-06	1.53931E-07	7.10734E-05	WILLOW02_2025
0	0	0	0	WILLOW03_2025
0	0	0	0	WILLOW04_2025
8.81292E-06	4.99068E-06	3.81136E-07	0.000175979	WILLOW05_2025
4.83043E-06	2.73543E-06	2.08904E-07	9.64555E-05	WILLOW06_2025
1.33035E-05	7.53365E-06	5.75341E-07	0.000265648	WILLOW07_2025
4.39931E-06	2.49129E-06	1.90259E-07	8.78468E-05	WILLOW08_2025

1.83211E-06	1.03751E-06	7.9234E-08	3.65841E-05	WILLOW09_2025
1.46814E-06	8.31394E-07	6.34931E-08	2.93162E-05	WILLOW10_2025
8.52447E-06	4.82734E-06	3.68661E-07	0.000170219	WILLOW11_2025
1.2108E-05	6.85668E-06	5.23642E-07	0.000241777	WILLOW12_2025
1.02132E-05	5.78367E-06	4.41696E-07	0.000203941	WILLOW13_2025
1.41222E-08	3.35881E-08	3.49328E-09	1.66921E-06	ADAMS_CT_2025
0	0	0	0	ADAMSD01_2025
0	0	0	0	ADAMSD02_2025
5.17375E-09	1.23052E-08	1.27979E-09	6.11526E-07	ADAMSD03_2025
5.61381E-09	1.33518E-08	1.38864E-09	6.6354E-07	ADAMSD04_2025
9.97008E-09	2.37127E-08	2.46621E-09	1.17844E-06	ADAMSD05_2025
5.52628E-09	1.31437E-08	1.36699E-09	6.53195E-07	ADAMSD06_2025
7.97661E-07	1.89715E-06	1.9731E-07	9.42819E-05	BAY_EAST_2025
0	0	0	0	BAY_EFB_2025
5.91951E-08	1.40789E-07	1.46426E-08	6.99674E-06	BAY_M01_2025
7.27219E-08	1.72961E-07	1.79886E-08	8.59558E-06	BAY_M02_2025
6.27551E-08	1.49256E-07	1.55232E-08	7.41753E-06	BAY_M03_2025
7.68752E-08	1.82839E-07	1.9016E-08	9.08649E-06	BAY_M04_2025
1.88256E-07	4.47746E-07	4.65673E-08	2.22515E-05	BAY_M05_2025
0	0	0	0	BAY_WFB1_2025
0	0	0	0	BAY_WFB2_2025
0	0	0	0	BAY_WFB3_2025
0	0	0	0	BAY_WFB4_2025
0	0	0	0	BAY_WFB5_2025
0	0	0	0	BAY_WFB6_2025
0	0	0	0	BAY_WFB7_2025
4.85414E-07	1.1545E-06	1.20073E-07	5.73749E-05	OBRIEN01_2025
2.09722E-07	4.988E-07	5.1877E-08	2.47887E-05	OBRIEN02_2025
5.36539E-08	1.2761E-07	1.32719E-08	6.34178E-06	OBRIEN03_2025
4.41147E-08	1.04922E-07	1.09123E-08	5.21426E-06	OBRIEN04_2025
4.28859E-08	1.01999E-07	1.06083E-08	5.06903E-06	OBRIEN05_2025
7.88697E-08	1.87583E-07	1.95093E-08	9.32223E-06	OBRIEN06_2025
1.69637E-07	4.03464E-07	4.19617E-08	2.00508E-05	OBRIEN07_2025
8.01206E-08	1.90558E-07	1.98187E-08	9.47009E-06	OBRIEN08_2025
7.81776E-08	1.85937E-07	1.93381E-08	9.24043E-06	OBRIEN09_2025
8.20235E-08	1.95084E-07	2.02894E-08	9.69501E-06	OBRIEN10_2025
1.73559E-07	4.1279E-07	4.29317E-08	2.05143E-05	OBRIEN11_2025
4.00186E-07	9.518E-07	9.89907E-08	4.73012E-05	OBRIEN12_2025
1.24904E-07	2.97072E-07	3.08966E-08	1.47635E-05	OBRIEN13_2025
4.41541E-07	1.05016E-06	1.0922E-07	5.21892E-05	OBRIEN14_2025
9.5843E-07	2.27952E-06	2.37079E-07	0.000113284	OBRIEN15_2025
1.8972E-07	4.51228E-07	4.69293E-08	2.24245E-05	OBRIEN16_2025
2.13804E-07	5.0851E-07	5.28869E-08	2.52712E-05	OBRIEN17_2025
3.82725E-08	9.1027E-08	9.46714E-09	4.52373E-06	UNIV_01_2025
3.15968E-08	7.51495E-08	7.81582E-09	3.73467E-06	UNIV_02_2025
7.73621E-08	1.83997E-07	1.91364E-08	9.14404E-06	UNIV_03_2025
4.22546E-08	1.00498E-07	1.04522E-08	4.9944E-06	UNIV_04_2025
2.79481E-08	6.64714E-08	6.91327E-09	3.3034E-06	UNIV_05_2025
2.4022E-08	5.71336E-08	5.9421E-09	2.83935E-06	UNIV_06_2025
8.96882E-08	2.13314E-07	2.21854E-08	1.0601E-05	UNIV_07_2025
7.75802E-08	1.84516E-07	1.91904E-08	9.16982E-06	UNIV_08_2025
4.7273E-07	1.12434E-06	1.16935E-07	5.58757E-05	UNIV_09_2025
1.02932E-06	2.44812E-06	2.54614E-07	0.000121663	UNIV_10_2025
3.82138E-07	9.08873E-07	9.45262E-08	4.51679E-05	UNIV_11_2025
2.10637E-07	5.00977E-07	5.21034E-08	2.48968E-05	UNIV_12_2025
4.24874E-07	1.01052E-06	1.05098E-07	5.02193E-05	UNIV_13_2025
6.68181E-07	1.5892E-06	1.65282E-07	7.89776E-05	UNIV_14_2025
2.15115E-06	5.11629E-06	5.32113E-07	0.000254262	UNIV_15_2025
8.77337E-09	2.08665E-08	2.17019E-09	1.03699E-06	WILLOW01_2025
1.57839E-08	3.75404E-08	3.90434E-09	1.86563E-06	WILLOW02_2025
0	0	0	0	WILLOW03_2025
0	0	0	0	WILLOW04_2025
0	0	0	0	WILLOW05_2025
0	0	0	0	WILLOW06_2025
1.67098E-07	3.97423E-07	4.13335E-08	1.97506E-05	WILLOW07_2025
5.52573E-08	1.31424E-07	1.36685E-08	6.5313E-06	WILLOW08_2025
2.30121E-08	5.47318E-08	5.69231E-09	2.71998E-06	WILLOW09_2025
1.84404E-08	4.38586E-08	4.56146E-09	2.17962E-06	WILLOW10_2025
1.07071E-07	2.54657E-07	2.64853E-08	1.26556E-05	WILLOW11_2025
1.52082E-07	3.61711E-07	3.76193E-08	1.79758E-05	WILLOW12_2025
1.28283E-07	3.05106E-07	3.17322E-08	1.51627E-05	WILLOW13_2025
6.1658E-10	1.3323E-09	1.37716E-10	1.12182E-07	ADAMS_CT_2025

0	0	0	0	ADAMSD01_2025
0	0	0	0	ADAMSD02_2025
2.25888E-10	4.88096E-10	5.04532E-11	4.10987E-08	ADAMSD03_2025
2.45101E-10	5.29611E-10	5.47445E-11	4.45944E-08	ADAMSD04_2025
4.35297E-10	9.40585E-10	9.72259E-11	7.91992E-08	ADAMSD05_2025
2.41279E-10	5.21354E-10	5.3891E-11	4.38991E-08	ADAMSD06_2025
3.48262E-08	7.5252E-08	7.77861E-09	6.33637E-06	BAY_EAST_2025
0	0	0	0	BAY_EFB_2025
2.58448E-09	5.58451E-09	5.77257E-10	4.70228E-07	BAY_M01_2025
3.17507E-09	6.86064E-09	7.09167E-10	5.77681E-07	BAY_M02_2025
2.73991E-09	5.92037E-09	6.11974E-10	4.98508E-07	BAY_M03_2025
3.3564E-09	7.25247E-09	7.4967E-10	6.10673E-07	BAY_M04_2025
8.21932E-09	1.77602E-08	1.83583E-09	1.49545E-06	BAY_M05_2025
0	0	0	0	BAY_WFB1_2025
0	0	0	0	BAY_WFB2_2025
0	0	0	0	BAY_WFB3_2025
0	0	0	0	BAY_WFB4_2025
0	0	0	0	BAY_WFB5_2025
0	0	0	0	BAY_WFB6_2025
0	0	0	0	BAY_WFB7_2025
2.11934E-08	4.57944E-08	4.73365E-09	3.85598E-06	OBRIEN01_2025
9.15653E-09	1.97853E-08	2.04516E-09	1.66596E-06	OBRIEN02_2025
2.34255E-09	5.06176E-09	5.23221E-10	4.2621E-07	OBRIEN03_2025
1.92606E-09	4.16181E-09	4.30196E-10	3.50433E-07	OBRIEN04_2025
1.87241E-09	4.04589E-09	4.18214E-10	3.40673E-07	OBRIEN05_2025
3.44348E-09	7.44063E-09	7.69119E-10	6.26517E-07	OBRIEN06_2025
7.40643E-09	1.60037E-08	1.65426E-09	1.34755E-06	OBRIEN07_2025
3.49809E-09	7.55864E-09	7.81318E-10	6.36453E-07	OBRIEN08_2025
3.41326E-09	7.37534E-09	7.6237E-10	6.21019E-07	OBRIEN09_2025
3.58118E-09	7.73816E-09	7.99874E-10	6.5157E-07	OBRIEN10_2025
7.57763E-09	1.63737E-08	1.6925E-09	1.3787E-06	OBRIEN11_2025
1.74723E-08	3.77539E-08	3.90253E-09	3.17896E-06	OBRIEN12_2025
5.45338E-09	1.17836E-08	1.21804E-09	9.92203E-07	OBRIEN13_2025
1.92778E-08	4.16553E-08	4.3058E-09	3.50746E-06	OBRIEN14_2025
4.18454E-08	9.04191E-08	9.34639E-09	7.61348E-06	OBRIEN15_2025
8.28323E-09	1.78983E-08	1.8501E-09	1.50708E-06	OBRIEN16_2025
9.33477E-09	2.01705E-08	2.08497E-09	1.6984E-06	OBRIEN17_2025
1.67099E-09	3.61066E-09	3.73225E-10	3.04025E-07	UNIV_01_2025
1.37953E-09	2.98086E-09	3.08124E-10	2.50995E-07	UNIV_02_2025
3.37766E-09	7.29841E-09	7.54418E-10	6.14541E-07	UNIV_03_2025
1.84485E-09	3.98633E-09	4.12057E-10	3.35658E-07	UNIV_04_2025
1.22022E-09	2.63664E-09	2.72543E-10	2.22011E-07	UNIV_05_2025
1.04881E-09	2.26625E-09	2.34257E-10	1.90823E-07	UNIV_06_2025
3.91582E-09	8.46126E-09	8.74619E-10	7.12456E-07	UNIV_07_2025
3.38718E-09	7.31898E-09	7.56545E-10	6.16274E-07	UNIV_08_2025
2.06396E-08	4.45977E-08	4.60995E-09	3.75522E-06	UNIV_09_2025
4.49405E-08	9.71068E-08	1.00377E-08	8.1766E-06	UNIV_10_2025
1.66843E-08	3.60512E-08	3.72652E-09	3.03559E-06	UNIV_11_2025
9.19649E-09	1.98717E-08	2.05408E-09	1.67324E-06	UNIV_12_2025
1.85502E-08	4.0083E-08	4.14328E-09	3.37507E-06	UNIV_13_2025
2.9173E-08	6.30367E-08	6.51595E-09	5.30782E-06	UNIV_14_2025
9.39202E-08	2.02942E-07	2.09776E-08	1.70881E-05	UNIV_15_2025
3.83049E-10	8.27687E-10	8.5556E-11	6.9693E-08	WILLOW01_2025
6.89132E-10	1.48907E-09	1.53921E-10	1.25383E-07	WILLOW02_2025
0	0	0	0	WILLOW03_2025
0	0	0	0	WILLOW04_2025
0	0	0	0	WILLOW05_2025
0	0	0	0	WILLOW06_2025
7.29554E-09	1.57641E-08	1.6295E-09	1.32737E-06	WILLOW07_2025
2.41256E-09	5.21302E-09	5.38857E-10	4.38947E-07	WILLOW08_2025
1.00472E-09	2.17098E-09	2.24409E-10	1.82801E-07	WILLOW09_2025
8.05117E-10	1.73969E-09	1.79827E-10	1.46485E-07	WILLOW10_2025
4.67477E-09	1.01012E-08	1.04413E-09	8.50541E-07	WILLOW11_2025
6.63997E-09	1.43476E-08	1.48307E-09	1.2081E-06	WILLOW12_2025
5.60087E-09	1.21023E-08	1.25098E-09	1.01904E-06	WILLOW13_2025
2.72721E-08	8.16997E-09	3.60334E-10	1.15438E-07	ADAMS_CT_2025
0	0	0	0	ADAMSD01_2025
0	0	0	0	ADAMSD02_2025
9.9913E-09	2.99312E-09	1.3201E-10	4.22914E-08	ADAMSD03_2025
1.08411E-08	3.2477E-09	1.43239E-10	4.58885E-08	ADAMSD04_2025
1.92537E-08	5.76789E-09	2.54391E-10	8.14976E-08	ADAMSD05_2025
1.06721E-08	3.19706E-09	1.41006E-10	4.5173E-08	ADAMSD06_2025

1.5404E-06	4.61463E-07	2.03527E-08	6.52026E-06	BAY_EAST_2025
0	0	0	0	BAY_EFB_2025
1.14315E-07	3.42456E-08	1.51039E-09	4.83874E-07	BAY_M01_2025
1.40437E-07	4.20711E-08	1.85553E-09	5.94445E-07	BAY_M02_2025
1.2119E-07	3.63051E-08	1.60123E-09	5.12974E-07	BAY_M03_2025
1.48458E-07	4.44739E-08	1.96151E-09	6.28395E-07	BAY_M04_2025
3.63551E-07	1.0891E-07	4.80343E-09	1.53885E-06	BAY_M05_2025
0	0	0	0	BAY_WFB1_2025
0	0	0	0	BAY_WFB2_2025
0	0	0	0	BAY_WFB3_2025
0	0	0	0	BAY_WFB4_2025
0	0	0	0	BAY_WFB5_2025
0	0	0	0	BAY_WFB6_2025
0	0	0	0	BAY_WFB7_2025
9.37408E-07	2.80822E-07	1.23856E-08	3.96788E-06	OBRIEN01_2025
4.05004E-07	1.21328E-07	5.35114E-09	1.71431E-06	OBRIEN02_2025
1.03614E-07	3.10399E-08	1.369E-09	4.38579E-07	OBRIEN03_2025
8.51921E-08	2.55212E-08	1.12561E-09	3.60603E-07	OBRIEN04_2025
8.28192E-08	2.48104E-08	1.09425E-09	3.50559E-07	OBRIEN05_2025
1.52309E-07	4.56277E-08	2.01239E-09	6.44698E-07	OBRIEN06_2025
3.27595E-07	9.81386E-08	4.32837E-09	1.38665E-06	OBRIEN07_2025
1.54725E-07	4.63514E-08	2.04431E-09	6.54924E-07	OBRIEN08_2025
1.50973E-07	4.52273E-08	1.99474E-09	6.39041E-07	OBRIEN09_2025
1.584E-07	4.74523E-08	2.09287E-09	6.70478E-07	OBRIEN10_2025
3.35168E-07	1.00407E-07	4.42843E-09	1.41871E-06	OBRIEN11_2025
7.72821E-07	2.31516E-07	1.02109E-08	3.27121E-06	OBRIEN12_2025
2.4121E-07	7.22598E-08	3.18699E-09	1.021E-06	OBRIEN13_2025
8.52682E-07	2.5544E-07	1.12661E-08	3.60925E-06	OBRIEN14_2025
1.85087E-06	5.54471E-07	2.44548E-08	7.83442E-06	OBRIEN15_2025
3.66378E-07	1.09757E-07	4.84078E-09	1.55081E-06	OBRIEN16_2025
4.12889E-07	1.2369E-07	5.45531E-09	1.74768E-06	OBRIEN17_2025
7.39101E-08	2.21414E-08	9.7654E-10	3.12848E-07	UNIV_01_2025
6.10182E-08	1.82794E-08	8.06206E-10	2.58279E-07	UNIV_02_2025
1.49398E-07	4.47556E-08	1.97393E-09	6.32375E-07	UNIV_03_2025
8.16E-08	2.44451E-08	1.07814E-09	3.45398E-07	UNIV_04_2025
5.3972E-08	1.61685E-08	7.13108E-10	2.28454E-07	UNIV_05_2025
4.63901E-08	1.38972E-08	6.12931E-10	1.96361E-07	UNIV_06_2025
1.73202E-07	5.18865E-08	2.28844E-09	7.33132E-07	UNIV_07_2025
1.49819E-07	4.48817E-08	1.97949E-09	6.34158E-07	UNIV_08_2025
9.12913E-07	2.73484E-07	1.20619E-08	3.8642E-06	UNIV_09_2025
1.98777E-06	5.95482E-07	2.62636E-08	8.41389E-06	UNIV_10_2025
7.37966E-07	2.21075E-07	9.75042E-09	3.12368E-06	UNIV_11_2025
4.06772E-07	1.21858E-07	5.37449E-09	1.72179E-06	UNIV_12_2025
8.20497E-07	2.45798E-07	1.08409E-08	3.47302E-06	UNIV_13_2025
1.29036E-06	3.86556E-07	1.70489E-08	5.46186E-06	UNIV_14_2025
4.15421E-06	1.24449E-06	5.48877E-08	1.7584E-05	UNIV_15_2025
1.69427E-08	5.07558E-09	2.23857E-10	7.17155E-08	WILLOW01_2025
3.04812E-08	9.13133E-09	4.02734E-10	1.29021E-07	WILLOW02_2025
0	0	0	0	WILLOW03_2025
0	0	0	0	WILLOW04_2025
0	0	0	0	WILLOW05_2025
0	0	0	0	WILLOW06_2025
3.22691E-07	9.66693E-08	4.26357E-09	1.36589E-06	WILLOW07_2025
1.0671E-07	3.19675E-08	1.40992E-09	4.51686E-07	WILLOW08_2025
4.44399E-08	1.3313E-08	5.87164E-10	1.88106E-07	WILLOW09_2025
3.56113E-08	1.06682E-08	4.70516E-10	1.50736E-07	WILLOW10_2025
2.06771E-07	6.19428E-08	2.73197E-09	8.75224E-07	WILLOW11_2025
2.93694E-07	8.79827E-08	3.88045E-09	1.24316E-06	WILLOW12_2025
2.47733E-07	7.42141E-08	3.27319E-09	1.04861E-06	WILLOW13_2025

SOURCE GROUP	POLLUTANT	CAS	EMISSIONS_G_S	YEAR	PHASE	CONTROLSCEN	DETAIL	AVE
ADAMS_CT	MOBILE-CANCER	9999	1.75972E-07	2025	Traffic	ALL	Traffic	PERIOD
ADAMSD01	MOBILE-CANCER	9999	3.16292E-08	2025	Traffic	ALL	Traffic	PERIOD
ADAMSD02	MOBILE-CANCER	9999	8.84892E-08	2025	Traffic	ALL	Traffic	PERIOD
ADAMSD03	MOBILE-CANCER	9999	1.93167E-08	2025	Traffic	ALL	Traffic	PERIOD
ADAMSD04	MOBILE-CANCER	9999	2.09597E-08	2025	Traffic	ALL	Traffic	PERIOD
ADAMSD05	MOBILE-CANCER	9999	3.72243E-08	2025	Traffic	ALL	Traffic	PERIOD
ADAMSD06	MOBILE-CANCER	9999	2.06329E-08	2025	Traffic	ALL	Traffic	PERIOD
BAY_EAST	MOBILE-CANCER	9999	1.48985E-05	2025	Traffic	ALL	Traffic	PERIOD
BAY_EFB	MOBILE-CANCER	9999	7.73358E-06	2025	Traffic	ALL	Traffic	PERIOD
BAY_M01	MOBILE-CANCER	9999	1.35397E-06	2025	Traffic	ALL	Traffic	PERIOD
BAY_M02	MOBILE-CANCER	9999	1.66337E-06	2025	Traffic	ALL	Traffic	PERIOD
BAY_M03	MOBILE-CANCER	9999	1.4354E-06	2025	Traffic	ALL	Traffic	PERIOD
BAY_M04	MOBILE-CANCER	9999	1.75836E-06	2025	Traffic	ALL	Traffic	PERIOD
BAY_M05	MOBILE-CANCER	9999	4.30597E-06	2025	Traffic	ALL	Traffic	PERIOD
BAY_WFB1	MOBILE-CANCER	9999	3.7039E-06	2025	Traffic	ALL	Traffic	PERIOD
BAY_WFB2	MOBILE-CANCER	9999	1.8559E-06	2025	Traffic	ALL	Traffic	PERIOD
BAY_WFB3	MOBILE-CANCER	9999	1.09555E-06	2025	Traffic	ALL	Traffic	PERIOD
BAY_WFB4	MOBILE-CANCER	9999	2.9006E-06	2025	Traffic	ALL	Traffic	PERIOD
BAY_WFB5	MOBILE-CANCER	9999	1.2129E-06	2025	Traffic	ALL	Traffic	PERIOD
BAY_WFB6	MOBILE-CANCER	9999	5.841E-06	2025	Traffic	ALL	Traffic	PERIOD
BAY_WFB7	MOBILE-CANCER	9999	1.46254E-06	2025	Traffic	ALL	Traffic	PERIOD
OBRIEN01	MOBILE-CANCER	9999	3.62698E-06	2025	Traffic	ALL	Traffic	PERIOD
OBRIEN02	MOBILE-CANCER	9999	1.56702E-06	2025	Traffic	ALL	Traffic	PERIOD
OBRIEN03	MOBILE-CANCER	9999	4.00898E-07	2025	Traffic	ALL	Traffic	PERIOD
OBRIEN04	MOBILE-CANCER	9999	3.29622E-07	2025	Traffic	ALL	Traffic	PERIOD
OBRIEN05	MOBILE-CANCER	9999	3.2044E-07	2025	Traffic	ALL	Traffic	PERIOD
OBRIEN06	MOBILE-CANCER	9999	5.89308E-07	2025	Traffic	ALL	Traffic	PERIOD
OBRIEN07	MOBILE-CANCER	9999	1.2155E-06	2025	Traffic	ALL	Traffic	PERIOD
OBRIEN08	MOBILE-CANCER	9999	5.74086E-07	2025	Traffic	ALL	Traffic	PERIOD
OBRIEN09	MOBILE-CANCER	9999	5.60164E-07	2025	Traffic	ALL	Traffic	PERIOD
OBRIEN10	MOBILE-CANCER	9999	5.87721E-07	2025	Traffic	ALL	Traffic	PERIOD
OBRIEN11	MOBILE-CANCER	9999	1.24359E-06	2025	Traffic	ALL	Traffic	PERIOD
OBRIEN12	MOBILE-CANCER	9999	2.86745E-06	2025	Traffic	ALL	Traffic	PERIOD
OBRIEN13	MOBILE-CANCER	9999	8.94975E-07	2025	Traffic	ALL	Traffic	PERIOD
OBRIEN14	MOBILE-CANCER	9999	3.16376E-06	2025	Traffic	ALL	Traffic	PERIOD
OBRIEN15	MOBILE-CANCER	9999	6.71632E-06	2025	Traffic	ALL	Traffic	PERIOD
OBRIEN16	MOBILE-CANCER	9999	1.32948E-06	2025	Traffic	ALL	Traffic	PERIOD
OBRIEN17	MOBILE-CANCER	9999	1.49826E-06	2025	Traffic	ALL	Traffic	PERIOD
UNIV_01	MOBILE-CANCER	9999	3.47455E-07	2025	Traffic	ALL	Traffic	PERIOD
UNIV_02	MOBILE-CANCER	9999	2.8685E-07	2025	Traffic	ALL	Traffic	PERIOD
UNIV_03	MOBILE-CANCER	9999	7.02329E-07	2025	Traffic	ALL	Traffic	PERIOD
UNIV_04	MOBILE-CANCER	9999	3.83606E-07	2025	Traffic	ALL	Traffic	PERIOD
UNIV_05	MOBILE-CANCER	9999	2.53725E-07	2025	Traffic	ALL	Traffic	PERIOD
UNIV_06	MOBILE-CANCER	9999	2.18082E-07	2025	Traffic	ALL	Traffic	PERIOD
UNIV_07	MOBILE-CANCER	9999	8.14231E-07	2025	Traffic	ALL	Traffic	PERIOD
UNIV_08	MOBILE-CANCER	9999	8.86207E-07	2025	Traffic	ALL	Traffic	PERIOD

UNIV_09	MOBILE-CANCER	9999	3.07028E-06	2025	Traffic	ALL	Traffic	PERIOD
UNIV_10	MOBILE-CANCER	9999	6.76364E-06	2025	Traffic	ALL	Traffic	PERIOD
UNIV_11	MOBILE-CANCER	9999	2.51102E-06	2025	Traffic	ALL	Traffic	PERIOD
UNIV_12	MOBILE-CANCER	9999	1.38409E-06	2025	Traffic	ALL	Traffic	PERIOD
UNIV_13	MOBILE-CANCER	9999	2.79184E-06	2025	Traffic	ALL	Traffic	PERIOD
UNIV_14	MOBILE-CANCER	9999	4.39061E-06	2025	Traffic	ALL	Traffic	PERIOD
UNIV_15	MOBILE-CANCER	9999	1.41352E-05	2025	Traffic	ALL	Traffic	PERIOD
WILLOW01	MOBILE-CANCER	9999	2.00451E-06	2025	Traffic	ALL	Traffic	PERIOD
WILLOW02	MOBILE-CANCER	9999	3.60626E-06	2025	Traffic	ALL	Traffic	PERIOD
WILLOW03	MOBILE-CANCER	9999	0	2025	Traffic	ALL	Traffic	PERIOD
WILLOW04	MOBILE-CANCER	9999	0	2025	Traffic	ALL	Traffic	PERIOD
WILLOW05	MOBILE-CANCER	9999	8.81292E-06	2025	Traffic	ALL	Traffic	PERIOD
WILLOW06	MOBILE-CANCER	9999	4.83043E-06	2025	Traffic	ALL	Traffic	PERIOD
WILLOW07	MOBILE-CANCER	9999	1.38006E-05	2025	Traffic	ALL	Traffic	PERIOD
WILLOW08	MOBILE-CANCER	9999	4.56369E-06	2025	Traffic	ALL	Traffic	PERIOD
WILLOW09	MOBILE-CANCER	9999	1.90057E-06	2025	Traffic	ALL	Traffic	PERIOD
WILLOW10	MOBILE-CANCER	9999	1.52299E-06	2025	Traffic	ALL	Traffic	PERIOD
WILLOW11	MOBILE-CANCER	9999	8.84299E-06	2025	Traffic	ALL	Traffic	PERIOD
WILLOW12	MOBILE-CANCER	9999	1.25605E-05	2025	Traffic	ALL	Traffic	PERIOD
WILLOW13	MOBILE-CANCER	9999	1.05948E-05	2025	Traffic	ALL	Traffic	PERIOD
ADAMS_CT	MOBILE-CHRONIC	99999	1.18951E-07	2025	Traffic	ALL	Traffic	PERIOD
ADAMSD01	MOBILE-CHRONIC	99999	1.79114E-08	2025	Traffic	ALL	Traffic	PERIOD
ADAMSD02	MOBILE-CHRONIC	99999	5.01107E-08	2025	Traffic	ALL	Traffic	PERIOD
ADAMSD03	MOBILE-CHRONIC	99999	1.80096E-08	2025	Traffic	ALL	Traffic	PERIOD
ADAMSD04	MOBILE-CHRONIC	99999	1.95414E-08	2025	Traffic	ALL	Traffic	PERIOD
ADAMSD05	MOBILE-CHRONIC	99999	3.47053E-08	2025	Traffic	ALL	Traffic	PERIOD
ADAMSD06	MOBILE-CHRONIC	99999	1.92367E-08	2025	Traffic	ALL	Traffic	PERIOD
BAY_EAST	MOBILE-CHRONIC	99999	9.52703E-06	2025	Traffic	ALL	Traffic	PERIOD
BAY_EFB	MOBILE-CHRONIC	99999	4.37947E-06	2025	Traffic	ALL	Traffic	PERIOD
BAY_M01	MOBILE-CHRONIC	99999	8.47639E-07	2025	Traffic	ALL	Traffic	PERIOD
BAY_M02	MOBILE-CHRONIC	99999	1.04133E-06	2025	Traffic	ALL	Traffic	PERIOD
BAY_M03	MOBILE-CHRONIC	99999	8.98617E-07	2025	Traffic	ALL	Traffic	PERIOD
BAY_M04	MOBILE-CHRONIC	99999	1.10081E-06	2025	Traffic	ALL	Traffic	PERIOD
BAY_M05	MOBILE-CHRONIC	99999	2.69571E-06	2025	Traffic	ALL	Traffic	PERIOD
BAY_WFB1	MOBILE-CHRONIC	99999	2.09749E-06	2025	Traffic	ALL	Traffic	PERIOD
BAY_WFB2	MOBILE-CHRONIC	99999	1.05098E-06	2025	Traffic	ALL	Traffic	PERIOD
BAY_WFB3	MOBILE-CHRONIC	99999	6.20404E-07	2025	Traffic	ALL	Traffic	PERIOD
BAY_WFB4	MOBILE-CHRONIC	99999	1.64259E-06	2025	Traffic	ALL	Traffic	PERIOD
BAY_WFB5	MOBILE-CHRONIC	99999	6.86856E-07	2025	Traffic	ALL	Traffic	PERIOD
BAY_WFB6	MOBILE-CHRONIC	99999	3.30771E-06	2025	Traffic	ALL	Traffic	PERIOD
BAY_WFB7	MOBILE-CHRONIC	99999	8.28224E-07	2025	Traffic	ALL	Traffic	PERIOD
OBRIEN01	MOBILE-CHRONIC	99999	2.71731E-06	2025	Traffic	ALL	Traffic	PERIOD
OBRIEN02	MOBILE-CHRONIC	99999	1.17401E-06	2025	Traffic	ALL	Traffic	PERIOD
OBRIEN03	MOBILE-CHRONIC	99999	3.00351E-07	2025	Traffic	ALL	Traffic	PERIOD
OBRIEN04	MOBILE-CHRONIC	99999	2.46951E-07	2025	Traffic	ALL	Traffic	PERIOD
OBRIEN05	MOBILE-CHRONIC	99999	2.40072E-07	2025	Traffic	ALL	Traffic	PERIOD
OBRIEN06	MOBILE-CHRONIC	99999	4.41507E-07	2025	Traffic	ALL	Traffic	PERIOD

OBRIEN07	MOBILE-CHRONIC	99999	9.2016E-07	2025	Traffic	ALL	Traffic	PERIOD
OBRIEN08	MOBILE-CHRONIC	99999	4.34596E-07	2025	Traffic	ALL	Traffic	PERIOD
OBRIEN09	MOBILE-CHRONIC	99999	4.24057E-07	2025	Traffic	ALL	Traffic	PERIOD
OBRIEN10	MOBILE-CHRONIC	99999	4.44918E-07	2025	Traffic	ALL	Traffic	PERIOD
OBRIEN11	MOBILE-CHRONIC	99999	9.4143E-07	2025	Traffic	ALL	Traffic	PERIOD
OBRIEN12	MOBILE-CHRONIC	99999	2.17072E-06	2025	Traffic	ALL	Traffic	PERIOD
OBRIEN13	MOBILE-CHRONIC	99999	6.77517E-07	2025	Traffic	ALL	Traffic	PERIOD
OBRIEN14	MOBILE-CHRONIC	99999	2.39504E-06	2025	Traffic	ALL	Traffic	PERIOD
OBRIEN15	MOBILE-CHRONIC	99999	5.11322E-06	2025	Traffic	ALL	Traffic	PERIOD
OBRIEN16	MOBILE-CHRONIC	99999	1.01215E-06	2025	Traffic	ALL	Traffic	PERIOD
OBRIEN17	MOBILE-CHRONIC	99999	1.14065E-06	2025	Traffic	ALL	Traffic	PERIOD
UNIV_01	MOBILE-CHRONIC	99999	2.49066E-07	2025	Traffic	ALL	Traffic	PERIOD
UNIV_02	MOBILE-CHRONIC	99999	2.05622E-07	2025	Traffic	ALL	Traffic	PERIOD
UNIV_03	MOBILE-CHRONIC	99999	5.03449E-07	2025	Traffic	ALL	Traffic	PERIOD
UNIV_04	MOBILE-CHRONIC	99999	2.7498E-07	2025	Traffic	ALL	Traffic	PERIOD
UNIV_05	MOBILE-CHRONIC	99999	1.81878E-07	2025	Traffic	ALL	Traffic	PERIOD
UNIV_06	MOBILE-CHRONIC	99999	1.56328E-07	2025	Traffic	ALL	Traffic	PERIOD
UNIV_07	MOBILE-CHRONIC	99999	5.83664E-07	2025	Traffic	ALL	Traffic	PERIOD
UNIV_08	MOBILE-CHRONIC	99999	6.07876E-07	2025	Traffic	ALL	Traffic	PERIOD
UNIV_09	MOBILE-CHRONIC	99999	2.38472E-06	2025	Traffic	ALL	Traffic	PERIOD
UNIV_10	MOBILE-CHRONIC	99999	5.23691E-06	2025	Traffic	ALL	Traffic	PERIOD
UNIV_11	MOBILE-CHRONIC	99999	1.94422E-06	2025	Traffic	ALL	Traffic	PERIOD
UNIV_12	MOBILE-CHRONIC	99999	1.07166E-06	2025	Traffic	ALL	Traffic	PERIOD
UNIV_13	MOBILE-CHRONIC	99999	2.16165E-06	2025	Traffic	ALL	Traffic	PERIOD
UNIV_14	MOBILE-CHRONIC	99999	3.39953E-06	2025	Traffic	ALL	Traffic	PERIOD
UNIV_15	MOBILE-CHRONIC	99999	1.09445E-05	2025	Traffic	ALL	Traffic	PERIOD
WILLOW01	MOBILE-CHRONIC	99999	1.14713E-06	2025	Traffic	ALL	Traffic	PERIOD
WILLOW02	MOBILE-CHRONIC	99999	2.06377E-06	2025	Traffic	ALL	Traffic	PERIOD
WILLOW03	MOBILE-CHRONIC	99999	0	2025	Traffic	ALL	Traffic	PERIOD
WILLOW04	MOBILE-CHRONIC	99999	0	2025	Traffic	ALL	Traffic	PERIOD
WILLOW05	MOBILE-CHRONIC	99999	4.99068E-06	2025	Traffic	ALL	Traffic	PERIOD
WILLOW06	MOBILE-CHRONIC	99999	2.73543E-06	2025	Traffic	ALL	Traffic	PERIOD
WILLOW07	MOBILE-CHRONIC	99999	8.0435E-06	2025	Traffic	ALL	Traffic	PERIOD
WILLOW08	MOBILE-CHRONIC	99999	2.6599E-06	2025	Traffic	ALL	Traffic	PERIOD
WILLOW09	MOBILE-CHRONIC	99999	1.10772E-06	2025	Traffic	ALL	Traffic	PERIOD
WILLOW10	MOBILE-CHRONIC	99999	8.8766E-07	2025	Traffic	ALL	Traffic	PERIOD
WILLOW11	MOBILE-CHRONIC	99999	5.15404E-06	2025	Traffic	ALL	Traffic	PERIOD
WILLOW12	MOBILE-CHRONIC	99999	7.32073E-06	2025	Traffic	ALL	Traffic	PERIOD
WILLOW13	MOBILE-CHRONIC	99999	6.17509E-06	2025	Traffic	ALL	Traffic	PERIOD
ADAMS_CT	MOBILE-ACUTE	999999	9.7848E-09	2025	Traffic	ALL	Traffic	PERIOD
ADAMSD01	MOBILE-ACUTE	999999	1.36788E-09	2025	Traffic	ALL	Traffic	PERIOD
ADAMSD02	MOBILE-ACUTE	999999	3.82693E-09	2025	Traffic	ALL	Traffic	PERIOD
ADAMSD03	MOBILE-ACUTE	999999	1.63203E-09	2025	Traffic	ALL	Traffic	PERIOD
ADAMSD04	MOBILE-ACUTE	999999	1.77084E-09	2025	Traffic	ALL	Traffic	PERIOD
ADAMSD05	MOBILE-ACUTE	999999	3.14501E-09	2025	Traffic	ALL	Traffic	PERIOD
ADAMSD06	MOBILE-ACUTE	999999	1.74323E-09	2025	Traffic	ALL	Traffic	PERIOD
BAY_EAST	MOBILE-ACUTE	999999	7.67144E-07	2025	Traffic	ALL	Traffic	PERIOD

BAY_EFB	MOBILE-ACUTE	999999	3.34458E-07	2025	Traffic	ALL	Traffic	PERIOD
BAY_M01	MOBILE-ACUTE	999999	6.76702E-08	2025	Traffic	ALL	Traffic	PERIOD
BAY_M02	MOBILE-ACUTE	999999	8.31337E-08	2025	Traffic	ALL	Traffic	PERIOD
BAY_M03	MOBILE-ACUTE	999999	7.17399E-08	2025	Traffic	ALL	Traffic	PERIOD
BAY_M04	MOBILE-ACUTE	999999	8.78816E-08	2025	Traffic	ALL	Traffic	PERIOD
BAY_M05	MOBILE-ACUTE	999999	2.15209E-07	2025	Traffic	ALL	Traffic	PERIOD
BAY_WFB1	MOBILE-ACUTE	999999	1.60184E-07	2025	Traffic	ALL	Traffic	PERIOD
BAY_WFB2	MOBILE-ACUTE	999999	8.02631E-08	2025	Traffic	ALL	Traffic	PERIOD
BAY_WFB3	MOBILE-ACUTE	999999	4.73799E-08	2025	Traffic	ALL	Traffic	PERIOD
BAY_WFB4	MOBILE-ACUTE	999999	1.25444E-07	2025	Traffic	ALL	Traffic	PERIOD
BAY_WFB5	MOBILE-ACUTE	999999	5.24549E-08	2025	Traffic	ALL	Traffic	PERIOD
BAY_WFB6	MOBILE-ACUTE	999999	2.52608E-07	2025	Traffic	ALL	Traffic	PERIOD
BAY_WFB7	MOBILE-ACUTE	999999	6.32511E-08	2025	Traffic	ALL	Traffic	PERIOD
OBRIEN01	MOBILE-ACUTE	999999	2.31599E-07	2025	Traffic	ALL	Traffic	PERIOD
OBRIEN02	MOBILE-ACUTE	999999	1.00062E-07	2025	Traffic	ALL	Traffic	PERIOD
OBRIEN03	MOBILE-ACUTE	999999	2.55992E-08	2025	Traffic	ALL	Traffic	PERIOD
OBRIEN04	MOBILE-ACUTE	999999	2.10479E-08	2025	Traffic	ALL	Traffic	PERIOD
OBRIEN05	MOBILE-ACUTE	999999	2.04616E-08	2025	Traffic	ALL	Traffic	PERIOD
OBRIEN06	MOBILE-ACUTE	999999	3.76301E-08	2025	Traffic	ALL	Traffic	PERIOD
OBRIEN07	MOBILE-ACUTE	999999	7.86872E-08	2025	Traffic	ALL	Traffic	PERIOD
OBRIEN08	MOBILE-ACUTE	999999	3.71644E-08	2025	Traffic	ALL	Traffic	PERIOD
OBRIEN09	MOBILE-ACUTE	999999	3.62631E-08	2025	Traffic	ALL	Traffic	PERIOD
OBRIEN10	MOBILE-ACUTE	999999	3.8047E-08	2025	Traffic	ALL	Traffic	PERIOD
OBRIEN11	MOBILE-ACUTE	999999	8.05061E-08	2025	Traffic	ALL	Traffic	PERIOD
OBRIEN12	MOBILE-ACUTE	999999	1.85629E-07	2025	Traffic	ALL	Traffic	PERIOD
OBRIEN13	MOBILE-ACUTE	999999	5.79376E-08	2025	Traffic	ALL	Traffic	PERIOD
OBRIEN14	MOBILE-ACUTE	999999	2.04811E-07	2025	Traffic	ALL	Traffic	PERIOD
OBRIEN15	MOBILE-ACUTE	999999	4.38038E-07	2025	Traffic	ALL	Traffic	PERIOD
OBRIEN16	MOBILE-ACUTE	999999	8.6709E-08	2025	Traffic	ALL	Traffic	PERIOD
OBRIEN17	MOBILE-ACUTE	999999	9.77165E-08	2025	Traffic	ALL	Traffic	PERIOD
UNIV_01	MOBILE-ACUTE	999999	2.09196E-08	2025	Traffic	ALL	Traffic	PERIOD
UNIV_02	MOBILE-ACUTE	999999	1.72706E-08	2025	Traffic	ALL	Traffic	PERIOD
UNIV_03	MOBILE-ACUTE	999999	4.22858E-08	2025	Traffic	ALL	Traffic	PERIOD
UNIV_04	MOBILE-ACUTE	999999	2.30962E-08	2025	Traffic	ALL	Traffic	PERIOD
UNIV_05	MOBILE-ACUTE	999999	1.52763E-08	2025	Traffic	ALL	Traffic	PERIOD
UNIV_06	MOBILE-ACUTE	999999	1.31303E-08	2025	Traffic	ALL	Traffic	PERIOD
UNIV_07	MOBILE-ACUTE	999999	4.90232E-08	2025	Traffic	ALL	Traffic	PERIOD
UNIV_08	MOBILE-ACUTE	999999	5.02716E-08	2025	Traffic	ALL	Traffic	PERIOD
UNIV_09	MOBILE-ACUTE	999999	2.0557E-07	2025	Traffic	ALL	Traffic	PERIOD
UNIV_10	MOBILE-ACUTE	999999	4.51E-07	2025	Traffic	ALL	Traffic	PERIOD
UNIV_11	MOBILE-ACUTE	999999	1.67435E-07	2025	Traffic	ALL	Traffic	PERIOD
UNIV_12	MOBILE-ACUTE	999999	9.22913E-08	2025	Traffic	ALL	Traffic	PERIOD
UNIV_13	MOBILE-ACUTE	999999	1.8616E-07	2025	Traffic	ALL	Traffic	PERIOD
UNIV_14	MOBILE-ACUTE	999999	2.92766E-07	2025	Traffic	ALL	Traffic	PERIOD
UNIV_15	MOBILE-ACUTE	999999	9.42537E-07	2025	Traffic	ALL	Traffic	PERIOD
WILLOW01	MOBILE-ACUTE	999999	8.80409E-08	2025	Traffic	ALL	Traffic	PERIOD
WILLOW02	MOBILE-ACUTE	999999	1.58392E-07	2025	Traffic	ALL	Traffic	PERIOD

WILLOW03	MOBILE-ACUTE	999999	0	2025	Traffic	ALL	Traffic	PERIOD
WILLOW04	MOBILE-ACUTE	999999	0	2025	Traffic	ALL	Traffic	PERIOD
WILLOW05	MOBILE-ACUTE	999999	3.81136E-07	2025	Traffic	ALL	Traffic	PERIOD
WILLOW06	MOBILE-ACUTE	999999	2.08904E-07	2025	Traffic	ALL	Traffic	PERIOD
WILLOW07	MOBILE-ACUTE	999999	6.22567E-07	2025	Traffic	ALL	Traffic	PERIOD
WILLOW08	MOBILE-ACUTE	999999	2.05876E-07	2025	Traffic	ALL	Traffic	PERIOD
WILLOW09	MOBILE-ACUTE	999999	8.57379E-08	2025	Traffic	ALL	Traffic	PERIOD
WILLOW10	MOBILE-ACUTE	999999	6.87049E-08	2025	Traffic	ALL	Traffic	PERIOD
WILLOW11	MOBILE-ACUTE	999999	3.98923E-07	2025	Traffic	ALL	Traffic	PERIOD
WILLOW12	MOBILE-ACUTE	999999	5.66624E-07	2025	Traffic	ALL	Traffic	PERIOD
WILLOW13	MOBILE-ACUTE	999999	4.77952E-07	2025	Traffic	ALL	Traffic	PERIOD
ADAMS_CT	PM2.5	88101	4.5718E-06	2025	Traffic	ALL	Traffic	PERIOD
ADAMSD01	PM2.5	88101	6.31582E-07	2025	Traffic	ALL	Traffic	PERIOD
ADAMSD02	PM2.5	88101	1.76698E-06	2025	Traffic	ALL	Traffic	PERIOD
ADAMSD03	PM2.5	88101	7.73308E-07	2025	Traffic	ALL	Traffic	PERIOD
ADAMSD04	PM2.5	88101	8.39082E-07	2025	Traffic	ALL	Traffic	PERIOD
ADAMSD05	PM2.5	88101	1.4902E-06	2025	Traffic	ALL	Traffic	PERIOD
ADAMSD06	PM2.5	88101	8.26E-07	2025	Traffic	ALL	Traffic	PERIOD
BAY_EAST	PM2.5	88101	0.000357254	2025	Traffic	ALL	Traffic	PERIOD
BAY_EFB	PM2.5	88101	0.000154427	2025	Traffic	ALL	Traffic	PERIOD
BAY_M01	PM2.5	88101	3.1471E-05	2025	Traffic	ALL	Traffic	PERIOD
BAY_M02	PM2.5	88101	3.86625E-05	2025	Traffic	ALL	Traffic	PERIOD
BAY_M03	PM2.5	88101	3.33637E-05	2025	Traffic	ALL	Traffic	PERIOD
BAY_M04	PM2.5	88101	4.08706E-05	2025	Traffic	ALL	Traffic	PERIOD
BAY_M05	PM2.5	88101	0.000100086	2025	Traffic	ALL	Traffic	PERIOD
BAY_WFB1	PM2.5	88101	7.39607E-05	2025	Traffic	ALL	Traffic	PERIOD
BAY_WFB2	PM2.5	88101	3.70593E-05	2025	Traffic	ALL	Traffic	PERIOD
BAY_WFB3	PM2.5	88101	2.18764E-05	2025	Traffic	ALL	Traffic	PERIOD
BAY_WFB4	PM2.5	88101	5.79201E-05	2025	Traffic	ALL	Traffic	PERIOD
BAY_WFB5	PM2.5	88101	2.42196E-05	2025	Traffic	ALL	Traffic	PERIOD
BAY_WFB6	PM2.5	88101	0.000116635	2025	Traffic	ALL	Traffic	PERIOD
BAY_WFB7	PM2.5	88101	2.92044E-05	2025	Traffic	ALL	Traffic	PERIOD
OBRIEN01	PM2.5	88101	0.000108789	2025	Traffic	ALL	Traffic	PERIOD
OBRIEN02	PM2.5	88101	4.70019E-05	2025	Traffic	ALL	Traffic	PERIOD
OBRIEN03	PM2.5	88101	1.20247E-05	2025	Traffic	ALL	Traffic	PERIOD
OBRIEN04	PM2.5	88101	9.88679E-06	2025	Traffic	ALL	Traffic	PERIOD
OBRIEN05	PM2.5	88101	9.6114E-06	2025	Traffic	ALL	Traffic	PERIOD
OBRIEN06	PM2.5	88101	1.76759E-05	2025	Traffic	ALL	Traffic	PERIOD
OBRIEN07	PM2.5	88101	3.69796E-05	2025	Traffic	ALL	Traffic	PERIOD
OBRIEN08	PM2.5	88101	1.74657E-05	2025	Traffic	ALL	Traffic	PERIOD
OBRIEN09	PM2.5	88101	1.70421E-05	2025	Traffic	ALL	Traffic	PERIOD
OBRIEN10	PM2.5	88101	1.78805E-05	2025	Traffic	ALL	Traffic	PERIOD
OBRIEN11	PM2.5	88101	3.78344E-05	2025	Traffic	ALL	Traffic	PERIOD
OBRIEN12	PM2.5	88101	8.72376E-05	2025	Traffic	ALL	Traffic	PERIOD
OBRIEN13	PM2.5	88101	2.72282E-05	2025	Traffic	ALL	Traffic	PERIOD
OBRIEN14	PM2.5	88101	9.62524E-05	2025	Traffic	ALL	Traffic	PERIOD
OBRIEN15	PM2.5	88101	0.000205913	2025	Traffic	ALL	Traffic	PERIOD

OBRIEN16	PM2.5	88101	4.07602E-05	2025	Traffic	ALL	Traffic	PERIOD
OBRIEN17	PM2.5	88101	4.59346E-05	2025	Traffic	ALL	Traffic	PERIOD
UNIV_01	PM2.5	88101	9.80524E-06	2025	Traffic	ALL	Traffic	PERIOD
UNIV_02	PM2.5	88101	8.09494E-06	2025	Traffic	ALL	Traffic	PERIOD
UNIV_03	PM2.5	88101	1.98198E-05	2025	Traffic	ALL	Traffic	PERIOD
UNIV_04	PM2.5	88101	1.08254E-05	2025	Traffic	ALL	Traffic	PERIOD
UNIV_05	PM2.5	88101	7.16016E-06	2025	Traffic	ALL	Traffic	PERIOD
UNIV_06	PM2.5	88101	6.15431E-06	2025	Traffic	ALL	Traffic	PERIOD
UNIV_07	PM2.5	88101	2.29777E-05	2025	Traffic	ALL	Traffic	PERIOD
UNIV_08	PM2.5	88101	2.35079E-05	2025	Traffic	ALL	Traffic	PERIOD
UNIV_09	PM2.5	88101	9.67222E-05	2025	Traffic	ALL	Traffic	PERIOD
UNIV_10	PM2.5	88101	0.000212169	2025	Traffic	ALL	Traffic	PERIOD
UNIV_11	PM2.5	88101	7.87683E-05	2025	Traffic	ALL	Traffic	PERIOD
UNIV_12	PM2.5	88101	4.34176E-05	2025	Traffic	ALL	Traffic	PERIOD
UNIV_13	PM2.5	88101	8.75774E-05	2025	Traffic	ALL	Traffic	PERIOD
UNIV_14	PM2.5	88101	0.000137729	2025	Traffic	ALL	Traffic	PERIOD
UNIV_15	PM2.5	88101	0.000443408	2025	Traffic	ALL	Traffic	PERIOD
WILLOW01	PM2.5	88101	4.0684E-05	2025	Traffic	ALL	Traffic	PERIOD
WILLOW02	PM2.5	88101	7.31934E-05	2025	Traffic	ALL	Traffic	PERIOD
WILLOW03	PM2.5	88101	0	2025	Traffic	ALL	Traffic	PERIOD
WILLOW04	PM2.5	88101	0	2025	Traffic	ALL	Traffic	PERIOD
WILLOW05	PM2.5	88101	0.000175979	2025	Traffic	ALL	Traffic	PERIOD
WILLOW06	PM2.5	88101	9.64555E-05	2025	Traffic	ALL	Traffic	PERIOD
WILLOW07	PM2.5	88101	0.000288092	2025	Traffic	ALL	Traffic	PERIOD
WILLOW08	PM2.5	88101	9.52688E-05	2025	Traffic	ALL	Traffic	PERIOD
WILLOW09	PM2.5	88101	3.9675E-05	2025	Traffic	ALL	Traffic	PERIOD
WILLOW10	PM2.5	88101	3.1793E-05	2025	Traffic	ALL	Traffic	PERIOD
WILLOW11	PM2.5	88101	0.000184601	2025	Traffic	ALL	Traffic	PERIOD
WILLOW12	PM2.5	88101	0.000262204	2025	Traffic	ALL	Traffic	PERIOD
WILLOW13	PM2.5	88101	0.000221171	2025	Traffic	ALL	Traffic	PERIOD

TEMP NAME	FB Net New Traffic (vehicle/day)	NON-FB Net New Traffic (vehicle/day)
WILLOW1	101	2,976
WILLOW2	0	0
WILLOW3	0	6,362
WILLOW4	658	6,875
BAYFRONT1	0	1,284
BAYFRONT2	0	1,566
BAYFRONT3	596	1,557
BAYFRONT4	745	1,536
UNIV1	385	309
UNIV2	465	516
UNIV3	3,693	1,707
UNIV4	3,679	1,737
OBRIEN1	1,679	991
OBRIEN2	4,358	2,398
OBRIEN3	4,390	2,325
ADAMS1	75	7.5
ADAMS2	0	80
ADAMS3	70	87

	Cars	On-Demand	Trucks	Shuttles
% in Fleet	0.881507	0.06	0.02	0.038493

Data Received 9/23

Roadway VMT by Fleet Type

		Fleet Type							
Source ID	Distance (m)	Cars	Cars	On-Demand	On-Demand	Trucks	Trucks	All	All
		Volume (vehicles/day)	VMT (mi/day)	Volume (vehicles/day)	VMT (mi/day)	Volume (vehicles/day)	VMT (mi/day)	Volume (vehicles/day)	VMT (mi/day)
ADAMS_CT	223	62	8.56	4	0.58	1	0.19	87	12.10
ADAMSD01	57	0	0.00	0	0.00	0	0.00	80	2.86
ADAMSD02	160	0	0.00	0	0.00	0	0.00	80	7.99
ADAMSD03	76	66	3.14	5	0.21	2	0.07	8	0.35
ADAMSD04	83	66	3.40	5	0.23	2	0.08	8	0.38
ADAMSD05	147	66	6.04	5	0.41	2	0.14	8	0.68
ADAMSD06	81	66	3.35	5	0.23	2	0.08	8	0.38
BAY_EAST	1185	657	483.53	45	32.91	15	10.97	1,536	1,131.09
BAY_EFB	718	0	0.00	0	0.00	0	0.00	1,566	698.35
BAY_M01	110	525	35.88	36	2.44	12	0.81	1,557	106.36
BAY_M02	135	525	44.08	36	3.00	12	1.00	1,557	130.67
BAY_M03	117	525	38.04	36	2.59	12	0.86	1,557	112.76
BAY_M04	143	525	46.60	36	3.17	12	1.06	1,557	138.13
BAY_M05	350	525	114.12	36	7.77	12	2.59	1,557	338.26
BAY_WFB1	419	0	0.00	0	0.00	0	0.00	1,284	334.47
BAY_WFB2	210	0	0.00	0	0.00	0	0.00	1,284	167.59
BAY_WFB3	124	0	0.00	0	0.00	0	0.00	1,284	98.93
BAY_WFB4	328	0	0.00	0	0.00	0	0.00	1,284	261.93
BAY_WFB5	113	0	0.00	0	0.00	0	0.00	1,566	109.53
BAY_WFB6	542	0	0.00	0	0.00	0	0.00	1,566	527.45
BAY_WFB7	136	0	0.00	0	0.00	0	0.00	1,566	132.07
OBRIEN01	320	1,480	294.25	101	20.03	34	6.68	991	197.12
OBRIEN02	138	1,480	127.13	101	8.65	34	2.88	991	85.17
OBRIEN03	35	1,480	32.52	101	2.21	34	0.74	991	21.79
OBRIEN04	29	1,480	26.74	101	1.82	34	0.61	991	17.91
OBRIEN05	28	1,480	26.00	101	1.77	34	0.59	991	17.42
OBRIEN06	52	1,480	47.81	101	3.25	34	1.08	991	32.03
OBRIEN07	43	3,842	102.83	262	7.00	87	2.33	2,398	64.19
OBRIEN08	20	3,842	48.57	262	3.31	87	1.10	2,398	30.32
OBRIEN09	20	3,842	47.39	262	3.23	87	1.08	2,398	29.58
OBRIEN10	21	3,842	49.72	262	3.38	87	1.13	2,398	31.04
OBRIEN11	44	3,842	105.21	262	7.16	87	2.39	2,398	65.68
OBRIEN12	102	3,842	242.59	262	16.51	87	5.50	2,398	151.43
OBRIEN13	32	3,842	75.71	262	5.15	87	1.72	2,398	47.26
OBRIEN14	112	3,842	267.65	262	18.22	87	6.07	2,398	167.08
OBRIEN15	242	3,870	580.98	263	39.54	88	13.18	2,325	349.03
OBRIEN16	48	3,870	115.00	263	7.83	88	2.61	2,325	69.09
OBRIEN17	54	3,870	129.60	263	8.82	88	2.94	2,325	77.86
UNIV_01	110	339	23.20	23	1.58	8	0.53	309	21.09
UNIV_02	91	339	19.15	23	1.30	8	0.43	309	17.42
UNIV_03	222	339	46.90	23	3.19	8	1.06	309	42.64

UNIV_04	121	339	25.61	23	1.74	8	0.58	309	23.29
UNIV_05	80	339	16.94	23	1.15	8	0.38	309	15.40
UNIV_06	69	339	14.56	23	0.99	8	0.33	309	13.24
UNIV_07	258	339	54.37	23	3.70	8	1.23	309	49.43
UNIV_08	185	410	47.03	28	3.20	9	1.07	516	59.19
UNIV_09	142	3,255	286.56	222	19.50	74	6.50	1,707	150.26
UNIV_10	310	3,243	623.96	221	42.47	74	14.16	1,737	334.26
UNIV_11	115	3,243	231.65	221	15.77	74	5.26	1,737	124.10
UNIV_12	63	3,243	127.68	221	8.69	74	2.90	1,737	68.40
UNIV_13	128	3,243	257.55	221	17.53	74	5.84	1,737	137.97
UNIV_14	201	3,243	405.04	221	27.57	74	9.19	1,737	216.98
UNIV_15	647	3,243	1303.99	221	88.76	74	29.59	1,737	698.57
WILLOW01	97	89	5.32	6	0.36	2	0.12	2,976	178.65
WILLOW02	174	89	9.57	6	0.65	2	0.22	2,976	321.41
WILLOW03	45	0	0.00	0	0.00	0	0.00	0	0.00
WILLOW04	185	0	0.00	0	0.00	0	0.00	0	0.00
WILLOW05	201	0	0.00	0	0.00	0	0.00	6,362	795.82
WILLOW06	110	0	0.00	0	0.00	0	0.00	6,362	436.20
WILLOW07	281	580	101.29	39	6.89	13	2.30	6,875	1,201.32
WILLOW08	93	580	33.50	39	2.28	13	0.76	6,875	397.26
WILLOW09	39	580	13.95	39	0.95	13	0.32	6,875	165.44
WILLOW10	31	580	11.18	39	0.76	13	0.25	6,875	132.58
WILLOW11	180	580	64.90	39	4.42	13	1.47	6,875	769.77
WILLOW12	256	580	92.19	39	6.27	13	2.09	6,875	1,093.37
WILLOW13	216	580	77.76	39	5.29	13	1.76	6,875	922.27

INPUTS TABLE

Vehicles/day

Ramboll Source IDs	Cars	On-Demand	Trucks	All
ADAMS_CT	62	4	1	87
ADAMSD01	0	0	0	80
ADAMSD02	0	0	0	80
ADAMSD03	66	5	2	8
ADAMSD04	66	5	2	8
ADAMSD05	66	5	2	8
ADAMSD06	66	5	2	8
BAY_EAST	657	45	15	1,536
BAY_EFB	0	0	0	1,566
BAY_M01	525	36	12	1,557
BAY_M02	525	36	12	1,557
BAY_M03	525	36	12	1,557
BAY_M04	525	36	12	1,557
BAY_M05	525	36	12	1,557
BAY_WFB1	0	0	0	1,284
BAY_WFB2	0	0	0	1,284
BAY_WFB3	0	0	0	1,284
BAY_WFB4	0	0	0	1,284
BAY_WFB5	0	0	0	1,566
BAY_WFB6	0	0	0	1,566
BAY_WFB7	0	0	0	1,566
OBRIEN01	1,480	101	34	991
OBRIEN02	1,480	101	34	991
OBRIEN03	1,480	101	34	991
OBRIEN04	1,480	101	34	991
OBRIEN05	1,480	101	34	991
OBRIEN06	1,480	101	34	991
OBRIEN07	3,842	262	87	2,398
OBRIEN08	3,842	262	87	2,398
OBRIEN09	3,842	262	87	2,398
OBRIEN10	3,842	262	87	2,398
OBRIEN11	3,842	262	87	2,398
OBRIEN12	3,842	262	87	2,398
OBRIEN13	3,842	262	87	2,398
OBRIEN14	3,842	262	87	2,398
OBRIEN15	3,870	263	88	2,325
OBRIEN16	3,870	263	88	2,325
OBRIEN17	3,870	263	88	2,325
UNIV_01	339	23	8	309
UNIV_02	339	23	8	309
UNIV_03	339	23	8	309

UNIV_04	339	23	8	309
UNIV_05	339	23	8	309
UNIV_06	339	23	8	309
UNIV_07	339	23	8	309
UNIV_08	410	28	9	516
UNIV_09	3,255	222	74	1,707
UNIV_10	3,243	221	74	1,737
UNIV_11	3,243	221	74	1,737
UNIV_12	3,243	221	74	1,737
UNIV_13	3,243	221	74	1,737
UNIV_14	3,243	221	74	1,737
UNIV_15	3,243	221	74	1,737
WILLOW01	89	6	2	2,976
WILLOW02	89	6	2	2,976
WILLOW03	0	0	0	0
WILLOW04	0	0	0	0
WILLOW05	0	0	0	6,362
WILLOW06	0	0	0	6,362
WILLOW07	580	39	13	6,875
WILLOW08	580	39	13	6,875
WILLOW09	580	39	13	6,875
WILLOW10	580	39	13	6,875
WILLOW11	580	39	13	6,875
WILLOW12	580	39	13	6,875
WILLOW13	580	39	13	6,875

POLLUTANT	CAS	POL	Quantity
Ethylbenzene	100414	TOG_EVAP	0.0012
Toluene	108883	TOG_EVAP	0.017
Hexane	110543	TOG_EVAP	0.0154
Xylenes	1330207	TOG_EVAP	0.0058
Benzene	71432	TOG_EVAP	0.0036
Ethylbenzene	100414	TOG_EX	0.0105
Styrene	100425	TOG_EX	0.0012
Xylenes	1330207	TOG_EX	0.048
1,3-Butadiene	106990	TOG_EX	0.0055
Acrolein	107028	TOG_EX	0.0013
Toluene	108883	TOG_EX	0.0576
Hexane	110543	TOG_EX	0.016
Propylene	115071	TOG_EX	0.0306
Formaldehyde	50000	TOG_EX	0.0158
Methanol	67561	TOG_EX	0.0012
Benzene	71432	TOG_EX	0.0247
Acetaldehyde	75070	TOG_EX	0.0028
Methyl Ethyl Ketone	78933	TOG_EX	0.0002
Naphthalene	91203	TOG_EX	0.0005
DPM	9901	DPM	1
PM2.5	88101	PM2.5	1

POLLUTANT	CAS	CPF	aREL	cREL
DPM	9901	1.1	0	5
1,3-butadiene	106990	0.6	660	2
acetaldehyde	75070	0.01	470	140
Acrolein	107028	0	2.5	0.35
benzene	71432	0.1	27	3
ethylbenzene	100414	0.0087	0	2000
formaldehyde	50000	0.021	55	9
methanol	67561	0	28000	4000
methyl ethyl ketone (mek) (2-butan	78933	0	13000	0
naphthalene	91203	0.12	0	9
n-hexane	110543	0	0	7000
propene	115071	0	0	3000
styrene	100425	0	21000	900
toluene	108883	0	5000	420
Xylenes	1330207	0	22000	700
PM2.5	88101	0	0	0
MOBILE-CANCER	9999	1	0	0
MOBILE-ACUTE	999999	0	1	0
MOBILE-CHRONIC	99999	0	0	1

Weighted Toxicity Values	DPM	TOG_EX	TOG_EVAP
Toxicity Weighted Cancer Slope Factor (mg/kg-day)-1	1.1	6.28E-03	3.70E-04
Toxicity Weighted Chronic REL (ug/m3)-1	0.2	1.68E-02	1.25E-03

Chemical	CAS	CPF	aREL	cREL
Diesel PM	PM10	1.1		5
1,3-butadiene	106990	0.6	660	2
acetaldehyde	75070	0.01	470	140
Acrolein	107028		2.5	0.35
benzene	71432	0.1	27	3
ethylbenzene	100414	0.0087		2000
formaldehyde	50000	0.021	55	9
methanol	67561		28000	4000
methyl ethyl ketone (mek) (2-butanone)	78933		13000	
naphthalene	91203	0.12		9
n-hexane	110543			7000
propene	115071			3000
styrene	100425		21000	900
toluene	108883		5000	420
Xylenes	1330207		22000	700

Confirmed against OEHHA Chemical Lookup
https://oehha.ca.gov/chemicals

Chemical	CAS	Fuel	Emission Type	spec_profile	Quantity	Source Type	Weighted CPF average	Weighted Chronic average
Ethylbenzene	100414	Gas	Evaporative	TOG_EVAP	1.18E-03	roadway	0.000010266	0.00000059
Toluene	108883	Gas	Evaporative	TOG_EVAP	1.70E-02	roadway	0	4.04762E-05
Hexane	110543	Gas	Evaporative	TOG_EVAP	1.54E-02	roadway	0	0.0000022
Xylenes	1330207	Gas	Evaporative	TOG_EVAP	5.78E-03	roadway	0	8.25714E-06
Benzene	71432	Gas	Evaporative	TOG_EVAP	3.60E-03	roadway	0.00036	0.0012
Ethylbenzene	100414	Gas	Exhaust	TOG_EX	0.0105	roadway	0.00009135	0.00000525
Styrene	100425	Gas	Exhaust	TOG_EX	0.0012	roadway	0	1.33333E-06
Xylenes	1330207	Gas	Exhaust	TOG_EX	0.048	roadway	0	6.85714E-05
1,3-Butadiene	106990	Gas	Exhaust	TOG_EX	0.0055	roadway	0.0033	0.00275
Acrolein	107028	Gas	Exhaust	TOG_EX	0.0013	roadway	0	0.003714286
Toluene	108883	Gas	Exhaust	TOG_EX	0.0576	roadway	0	0.000137143
Hexane	110543	Gas	Exhaust	TOG_EX	0.016	roadway	0	2.28571E-06
Propylene	115071	Gas	Exhaust	TOG_EX	0.0306	roadway	0	0.0000102
Formaldehyde	50000	Gas	Exhaust	TOG_EX	0.0158	roadway	0.0003318	0.001755556
Methanol	67561	Gas	Exhaust	TOG_EX	0.0012	roadway	0	0.0000003
Benzene	71432	Gas	Exhaust	TOG_EX	0.0247	roadway	0.00247	0.008233333
Acetaldehyde	75070	Gas	Exhaust	TOG_EX	0.0028	roadway	0.000028	0.00002
Methyl Ethyl Ketone	78933	Gas	Exhaust	TOG_EX	0.0002	roadway		
Naphthalene	91203	Gas	Exhaust	TOG_EX	0.0005	roadway	0.00006	5.55556E-05
DPM	9901							
PM2.5	88101							

Table 14. Toxic Speciation of TOG due to Tailpipe Emissions

Toxic Compounds	EMFAC Gasoline TOG Speciation (% TOG)	Unit Factor	(HARP) Residential Cancer Risk Factors ($ug/m^3)^{-1}$	Unit Cancer Risk Weighted Factor ($ug/m^3)^{-1}$	Chronic Noncancer Reference Dose (ug/m^3)	Unit Chronic Noncancer Risk Weighted Factor (ug/m^3)	Acute Noncancer Reference Dose (ug/m^3)	Unit ACUTE Noncancer Risk Weighted Factor (ug/m^3)
Acetaldehyde	0.28%	0.0028	0.0000027	7.537E-09	140	0.39	470	1.31
Acrolein	0.13%	0.0013	0	0	0.35	0.00046	2.5	0.0033
Benzene	2.47%	0.0247	0.000029	7.169E-07	60	1.48	1300	32.14
1,3-Butadiene	0.55%	0.0055	0.000174	9.487E-07	20	0.11	0	0
Ethylbenzene	1.05%	0.0105	2.52E-06	2.643E-08	2000	20.97	0	0
Formaldehyde	1.58%	0.0158	6.08E-06	9.602E-08	9	0.14	55	0.87
Hexane	1.60%	0.0160	0	0	7000	111.92	0	0
Methanol	0.12%	0.0012	0	0	4000	4.89	28000	34.22
Methyl Ethyl Ketone	0.02%	0.0002	0	0	0	0	13000	2.37
Naphthalene	0.05%	0.0005	0.000035	1.641E-08	9	0.0042	0	0
Propylene	3.06%	0.0306	0	0	3000	91.86	0	0
Styrene	0.12%	0.0012	0	0	900	1.11	21000	25.79
Toluene	5.76%	0.0576	0	0	300	17.27	37000	2129.65
Xylenes	4.80%	0.0480	0	0	700	33.61	22000	1056.22
Toxicity Weighted Factor				**1.81E-06**		**283.77**		**3282.58**

Table 15. Toxic Speciation of TOG due to Evaporative Losses

Toxic Compounds	EMFAC Gasoline TOG Speciation (% TOG)	Unit Factor	(HARP) Residential Cancer Risk Factors ($ug/m^3)^{-1}$	Unit Cancer Risk Weighted Factor ($ug/m^3)^{-1}$	Chronic Noncancer Reference Dose (ug/m^3)	Unit Chronic Noncancer Risk Weighted Factor (ug/m^3)	Acute Noncancer Reference Dose (ug/m^3)	Unit ACUTE Noncancer Risk Weighted Factor (ug/m^3)
Benzene	0.36%	3.60E-03	2.90E-05	1.04E-07	6.00E+01	2.16E-01	1.30E+03	4.68E+00
Ethylbenzene	0.12%	1.18E-03	2.52E-06	2.97E-09	2000	2.36E+00	0	0
Hexane	1.54%	1.54E-02	0	0	7000	1.08E+02	0	0
Toluene	1.70%	1.70E-02	0	0	300	5.11E+00	3.70E+04	6.30E+02
Xylenes	0.58%	5.78E-03	0	0	700	4.05E+00	2.20E+04	1.27E+02
Toxicity Weighted Factor				**1.07E-07**		**120**		**762**

POLLUTANT	CAS	CPF	aREL	cREL
PM2.5	88101			
MOBILE-CANCER	9999	1		
MOBILE-ACUTE	999999		1	
MOBILE-CHRONIC	99999			1

Source Group	Project VMT (full buildout	Fleet
ADAMS_CT	8.560615247	CARS
ADAMSD01	0	CARS
ADAMSD02	0	CARS
ADAMSD03	3.136234519	CARS
ADAMSD04	3.402989649	CARS
ADAMSD05	6.043684219	CARS
ADAMSD06	3.349932965	CARS
BAY_EAST	483.5278431	CARS
BAY_EFB	0	CARS
BAY_M01	35.88300812	CARS
BAY_M02	44.08273108	CARS
BAY_M03	38.041048	CARS
BAY_M04	46.6003984	CARS
BAY_M05	114.1174139	CARS
BAY_WFB1	0	CARS
BAY_WFB2	0	CARS
BAY_WFB3	0	CARS
BAY_WFB4	0	CARS
BAY_WFB5	0	CARS
BAY_WFB6	0	CARS
BAY_WFB7	0	CARS
OBRIEN01	294.249389	CARS
OBRIEN02	127.1295481	CARS
OBRIEN03	32.52406824	CARS
OBRIEN04	26.74152987	CARS
OBRIEN05	25.99667812	CARS
OBRIEN06	47.80939672	CARS
OBRIEN07	102.8311383	CARS
OBRIEN08	48.56768026	CARS
OBRIEN09	47.38987241	CARS
OBRIEN10	49.72119763	CARS
OBRIEN11	105.2081582	CARS
OBRIEN12	242.5859808	CARS
OBRIEN13	75.71489907	CARS
OBRIEN14	267.6540944	CARS
OBRIEN15	580.9834933	CARS
OBRIEN16	115.0047346	CARS
OBRIEN17	129.6043506	CARS
UNIV_01	23.20012279	CARS
UNIV_02	19.15339999	CARS
UNIV_03	46.89555207	CARS
UNIV_04	25.61398317	CARS
UNIV_05	16.94162595	CARS
UNIV_06	14.56168358	CARS
UNIV_07	54.36742273	CARS
UNIV_08	47.02777211	CARS

UNIV_09	286.5604315	CARS
UNIV_10	623.955326	CARS
UNIV_11	231.6452253	CARS
UNIV_12	127.6843586	CARS
UNIV_13	257.5513192	CARS
UNIV_14	405.0393938	CARS
UNIV_15	1303.992173	CARS
WILLOW01	5.318265219	CARS
WILLOW02	9.56794126	CARS
WILLOW03	0	CARS
WILLOW04	0	CARS
WILLOW05	0	CARS
WILLOW06	0	CARS
WILLOW07	101.2915646	CARS
WILLOW08	33.4960083	CARS
WILLOW09	13.949537	CARS
WILLOW10	11.17827434	CARS
WILLOW11	64.90464751	CARS
WILLOW12	92.18964708	CARS
WILLOW13	77.7626841	CARS
ADAMS_CT	0.582680586	ON-DEMAND
ADAMSD01	0	ON-DEMAND
ADAMSD02	0	ON-DEMAND
ADAMSD03	0.213468649	ON-DEMAND
ADAMSD04	0.231625409	ON-DEMAND
ADAMSD05	0.411364997	ON-DEMAND
ADAMSD06	0.228014091	ON-DEMAND
BAY_EAST	32.9114531	ON-DEMAND
BAY_EFB	0	ON-DEMAND
BAY_M01	2.442386629	ON-DEMAND
BAY_M02	3.000502985	ON-DEMAND
BAY_M03	2.589274196	ON-DEMAND
BAY_M04	3.17186869	ON-DEMAND
BAY_M05	7.767432568	ON-DEMAND
BAY_WFB1	0	ON-DEMAND
BAY_WFB2	0	ON-DEMAND
BAY_WFB3	0	ON-DEMAND
BAY_WFB4	0	ON-DEMAND
BAY_WFB5	0	ON-DEMAND
BAY_WFB6	0	ON-DEMAND
BAY_WFB7	0	ON-DEMAND
OBRIEN01	20.02816405	ON-DEMAND
OBRIEN02	8.653106993	ON-DEMAND
OBRIEN03	2.21375948	ON-DEMAND
OBRIEN04	1.820169445	ON-DEMAND
OBRIEN05	1.76947091	ON-DEMAND
OBRIEN06	3.254159487	ON-DEMAND

OBRIEN07	6.99922917	ON-DEMAND
OBRIEN08	3.305772261	ON-DEMAND
OBRIEN09	3.225604452	ON-DEMAND
OBRIEN10	3.384286732	ON-DEMAND
OBRIEN11	7.161021675	ON-DEMAND
OBRIEN12	16.51168024	ON-DEMAND
OBRIEN13	5.153555033	ON-DEMAND
OBRIEN14	18.21794815	ON-DEMAND
OBRIEN15	39.54479823	ON-DEMAND
OBRIEN16	7.827828286	ON-DEMAND
OBRIEN17	8.821555094	ON-DEMAND
UNIV_01	1.579122617	ON-DEMAND
UNIV_02	1.303681338	ON-DEMAND
UNIV_03	3.191958404	ON-DEMAND
UNIV_04	1.743422675	ON-DEMAND
UNIV_05	1.153136342	ON-DEMAND
UNIV_06	0.991144921	ON-DEMAND
UNIV_07	3.700533297	ON-DEMAND
UNIV_08	3.200957997	ON-DEMAND
UNIV_09	19.50481309	ON-DEMAND
UNIV_10	42.46968761	ON-DEMAND
UNIV_11	15.76699476	ON-DEMAND
UNIV_12	8.69087032	ON-DEMAND
UNIV_13	17.53030003	ON-DEMAND
UNIV_14	27.56911562	ON-DEMAND
UNIV_15	88.75657907	ON-DEMAND
WILLOW01	0.361989157	ON-DEMAND
WILLOW02	0.651244503	ON-DEMAND
WILLOW03	0	ON-DEMAND
WILLOW04	0	ON-DEMAND
WILLOW05	0	ON-DEMAND
WILLOW06	0	ON-DEMAND
WILLOW07	6.894437673	ON-DEMAND
WILLOW08	2.279914842	ON-DEMAND
WILLOW09	0.949479	ON-DEMAND
WILLOW10	0.760852259	ON-DEMAND
WILLOW11	4.417752345	ON-DEMAND
WILLOW12	6.274913202	ON-DEMAND
WILLOW13	5.292938074	ON-DEMAND
ADAMS_CT	0.194226862	TRUCKS
ADAMSD01	0	TRUCKS
ADAMSD02	0	TRUCKS
ADAMSD03	0.071156216	TRUCKS
ADAMSD04	0.07720847	TRUCKS
ADAMSD05	0.137121666	TRUCKS
ADAMSD06	0.076004697	TRUCKS
BAY_EAST	10.97048437	TRUCKS

BAY_EFB	0	TRUCKS
BAY_M01	0.814128876	TRUCKS
BAY_M02	1.000167662	TRUCKS
BAY_M03	0.863091399	TRUCKS
BAY_M04	1.057289563	TRUCKS
BAY_M05	2.589144189	TRUCKS
BAY_WFB1	0	TRUCKS
BAY_WFB2	0	TRUCKS
BAY_WFB3	0	TRUCKS
BAY_WFB4	0	TRUCKS
BAY_WFB5	0	TRUCKS
BAY_WFB6	0	TRUCKS
BAY_WFB7	0	TRUCKS
OBRIEN01	6.676054684	TRUCKS
OBRIEN02	2.884368998	TRUCKS
OBRIEN03	0.737919827	TRUCKS
OBRIEN04	0.606723148	TRUCKS
OBRIEN05	0.589823637	TRUCKS
OBRIEN06	1.084719829	TRUCKS
OBRIEN07	2.33307639	TRUCKS
OBRIEN08	1.101924087	TRUCKS
OBRIEN09	1.075201484	TRUCKS
OBRIEN10	1.128095577	TRUCKS
OBRIEN11	2.387007225	TRUCKS
OBRIEN12	5.503893412	TRUCKS
OBRIEN13	1.717851678	TRUCKS
OBRIEN14	6.072649383	TRUCKS
OBRIEN15	13.18159941	TRUCKS
OBRIEN16	2.609276095	TRUCKS
OBRIEN17	2.940518365	TRUCKS
UNIV_01	0.526374206	TRUCKS
UNIV_02	0.434560446	TRUCKS
UNIV_03	1.063986135	TRUCKS
UNIV_04	0.581140892	TRUCKS
UNIV_05	0.384378781	TRUCKS
UNIV_06	0.33038164	TRUCKS
UNIV_07	1.233511099	TRUCKS
UNIV_08	1.066985999	TRUCKS
UNIV_09	6.501604362	TRUCKS
UNIV_10	14.15656254	TRUCKS
UNIV_11	5.255664921	TRUCKS
UNIV_12	2.896956773	TRUCKS
UNIV_13	5.843433344	TRUCKS
UNIV_14	9.189705206	TRUCKS
UNIV_15	29.58552636	TRUCKS
WILLOW01	0.120663052	TRUCKS
WILLOW02	0.217081501	TRUCKS

WILLOW03	0	TRUCKS
WILLOW04	0	TRUCKS
WILLOW05	0	TRUCKS
WILLOW06	0	TRUCKS
WILLOW07	2.298145891	TRUCKS
WILLOW08	0.759971614	TRUCKS
WILLOW09	0.316493	TRUCKS
WILLOW10	0.25361742	TRUCKS
WILLOW11	1.472584115	TRUCKS
WILLOW12	2.091637734	TRUCKS
WILLOW13	1.764312691	TRUCKS
ADAMS_CT	12.09687744	ALL
ADAMSD01	2.856166518	ALL
ADAMSD02	7.990710653	ALL
ADAMSD03	0.354505684	ALL
ADAMSD04	0.38465847	ALL
ADAMSD05	0.683150573	ALL
ADAMSD06	0.378661184	ALL
BAY_EAST	1131.085298	ALL
BAY_EFB	698.3547925	ALL
BAY_M01	106.3637396	ALL
BAY_M02	130.6692046	ALL
BAY_M03	112.7605609	ALL
BAY_M04	138.1320268	ALL
BAY_M05	338.2646978	ALL
BAY_WFB1	334.4681935	ALL
BAY_WFB2	167.5911344	ALL
BAY_WFB3	98.93030925	ALL
BAY_WFB4	261.9288961	ALL
BAY_WFB5	109.5268814	ALL
BAY_WFB6	527.4512543	ALL
BAY_WFB7	132.0696231	ALL
OBRIEN01	197.1249275	ALL
OBRIEN02	85.16722175	ALL
OBRIEN03	21.78867599	ALL
OBRIEN04	17.91481082	ALL
OBRIEN05	17.41581625	ALL
OBRIEN06	32.02869476	ALL
OBRIEN07	64.19164583	ALL
OBRIEN08	30.31804746	ALL
OBRIEN09	29.58280884	ALL
OBRIEN10	31.03812291	ALL
OBRIEN11	65.67548454	ALL
OBRIEN12	151.4326655	ALL
OBRIEN13	47.26451605	ALL
OBRIEN14	167.0812666	ALL
OBRIEN15	349.0305045	ALL

OBRIEN16	69.09001888	ALL
OBRIEN17	77.86085562	ALL
UNIV_01	21.09461055	ALL
UNIV_02	17.41514548	ALL
UNIV_03	42.63957637	ALL
UNIV_04	23.28940258	ALL
UNIV_05	15.40409958	ALL
UNIV_06	13.24014734	ALL
UNIV_07	49.43334221	ALL
UNIV_08	59.18548931	ALL
UNIV_09	150.2612078	ALL
UNIV_10	334.2611549	ALL
UNIV_11	124.0954237	ALL
UNIV_12	68.4022067	ALL
UNIV_13	137.9736623	ALL
UNIV_14	216.9849826	ALL
UNIV_15	698.5659254	ALL
WILLOW01	178.6538371	ALL
WILLOW02	321.4110897	ALL
WILLOW03	0	ALL
WILLOW04	0	ALL
WILLOW05	795.8201641	ALL
WILLOW06	436.195492	ALL
WILLOW07	1201.324254	ALL
WILLOW08	397.2647412	ALL
WILLOW09	165.4423762	ALL
WILLOW10	132.5750287	ALL
WILLOW11	769.7731551	ALL
WILLOW12	1093.374947	ALL
WILLOW13	922.2702686	ALL

BAY_WFB3	1
BAY_WFB3	2
BAY_WFB3	3
BAY_WFB3	4
BAY_WFB3	5
BAY_WFB3	6
BAY_WFB3	7
BAY_WFB3	8
BAY_WFB3	9
BAY_WFB3	10
BAY_WFB3	11
BAY_WFB3	12
BAY_WFB3	13
BAY_WFB3	14
BAY_WFB3	15
BAY_WFB3	16
BAY_WFB3	17
BAY_WFB3	18
BAY_WFB3	19
BAY_WFB3	20
BAY_WFB3	21
BAY_WFB3	22
BAY_WFB3	23
BAY_WFB3	24
BAY_WFB3	25
BAY_WFB3	26
BAY_WFB3	27

BAY_WFB3	28
BAY_WFB3	29
BAY_WFB3	30
BAY_WFB3	31
BAY_WFB4	2025
BAY_WFB4	2026
BAY_WFB4	2027
BAY_WFB4	2028
BAY_WFB4	2029
BAY_WFB4	2030
BAY_WFB4	2031
BAY_WFB4	2032
BAY_WFB4	2033
BAY_WFB4	2034
BAY_WFB4	2035
BAY_WFB4	2036
BAY_WFB4	2037
BAY_WFB4	2038
BAY_WFB4	2039
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BAY_WFB4	2042
BAY_WFB4	2043
BAY_WFB4	2044
BAY_WFB4	2045
BAY_WFB4	2046
BAY_WFB4	2047
BAY_WFB4	2048
BAY_WFB4	2049
BAY_WFB4	2050
BAY_WFB4	2051
BAY_WFB4	2052
BAY_WFB4	2053
BAY_WFB4	2054
BAY_WFB4	2055
BAY_WFB4	2056

Source Group	Project (full buildout)	Fleet
ADAMS_CT	8.560615247	CARS
ADAMSD01	0	CARS
ADAMSD02	0	CARS
ADAMSD03	3.136234519	CARS
ADAMSD04	3.402989649	CARS
ADAMSD05	6.043684219	CARS
ADAMSD06	3.349932965	CARS
BAY_EAST	483.5278431	CARS
BAY_EFB	0	CARS
BAY_M01	35.88300812	CARS
BAY_M02	44.08273108	CARS
BAY_M03	38.041048	CARS
BAY_M04	46.6003984	CARS
BAY_M05	114.1174139	CARS
BAY_WFB1	0	CARS
BAY_WFB2	0	CARS
BAY_WFB3	0	CARS
BAY_WFB4	0	CARS
BAY_WFB5	0	CARS
BAY_WFB6	0	CARS
BAY_WFB7	0	CARS
OBRIEN01	294.249389	CARS
OBRIEN02	127.1295481	CARS
OBRIEN03	32.52406824	CARS
OBRIEN04	26.74152987	CARS
OBRIEN05	25.99667812	CARS
OBRIEN06	47.80939672	CARS
OBRIEN07	102.8311383	CARS
OBRIEN08	48.56768026	CARS
OBRIEN09	47.38987241	CARS
OBRIEN10	49.72119763	CARS
OBRIEN11	105.2081582	CARS
OBRIEN12	242.5859808	CARS
OBRIEN13	75.71489907	CARS
OBRIEN14	267.6540944	CARS
OBRIEN15	580.9834933	CARS
OBRIEN16	115.0047346	CARS
OBRIEN17	129.6043506	CARS
UNIV_01	23.20012279	CARS
UNIV_02	19.15339999	CARS
UNIV_03	46.89555207	CARS
UNIV_04	25.61398317	CARS
UNIV_05	16.94162595	CARS
UNIV_06	14.56168358	CARS
UNIV_07	54.36742273	CARS
UNIV_08	47.02777211	CARS

This tab is updated with the "VMT by source" tab

UNIV_09	286.5604315	CARS
UNIV_10	623.955326	CARS
UNIV_11	231.6452253	CARS
UNIV_12	127.6843586	CARS
UNIV_13	257.5513192	CARS
UNIV_14	405.0393938	CARS
UNIV_15	1303.992173	CARS
WILLOW01	5.318265219	CARS
WILLOW02	9.56794126	CARS
WILLOW03	0	CARS
WILLOW04	0	CARS
WILLOW05	0	CARS
WILLOW06	0	CARS
WILLOW07	101.2915646	CARS
WILLOW08	33.4960083	CARS
WILLOW09	13.949537	CARS
WILLOW10	11.17827434	CARS
WILLOW11	64.90464751	CARS
WILLOW12	92.18964708	CARS
WILLOW13	77.7626841	CARS
ADAMS_CT	0.582680586	ON-DEMAND
ADAMSD01	0	ON-DEMAND
ADAMSD02	0	ON-DEMAND
ADAMSD03	0.213468649	ON-DEMAND
ADAMSD04	0.231625409	ON-DEMAND
ADAMSD05	0.411364997	ON-DEMAND
ADAMSD06	0.228014091	ON-DEMAND
BAY_EAST	32.9114531	ON-DEMAND
BAY_EFB	0	ON-DEMAND
BAY_M01	2.442386629	ON-DEMAND
BAY_M02	3.000502985	ON-DEMAND
BAY_M03	2.589274196	ON-DEMAND
BAY_M04	3.17186869	ON-DEMAND
BAY_M05	7.767432568	ON-DEMAND
BAY_WFB1	0	ON-DEMAND
BAY_WFB2	0	ON-DEMAND
BAY_WFB3	0	ON-DEMAND
BAY_WFB4	0	ON-DEMAND
BAY_WFB5	0	ON-DEMAND
BAY_WFB6	0	ON-DEMAND
BAY_WFB7	0	ON-DEMAND
OBRIEN01	20.02816405	ON-DEMAND
OBRIEN02	8.653106993	ON-DEMAND
OBRIEN03	2.21375948	ON-DEMAND
OBRIEN04	1.820169445	ON-DEMAND
OBRIEN05	1.76947091	ON-DEMAND
OBRIEN06	3.254159487	ON-DEMAND

OBRIEN07	6.99922917	ON-DEMAND
OBRIEN08	3.305772261	ON-DEMAND
OBRIEN09	3.225604452	ON-DEMAND
OBRIEN10	3.384286732	ON-DEMAND
OBRIEN11	7.161021675	ON-DEMAND
OBRIEN12	16.51168024	ON-DEMAND
OBRIEN13	5.153555033	ON-DEMAND
OBRIEN14	18.21794815	ON-DEMAND
OBRIEN15	39.54479823	ON-DEMAND
OBRIEN16	7.827828286	ON-DEMAND
OBRIEN17	8.821555094	ON-DEMAND
UNIV_01	1.579122617	ON-DEMAND
UNIV_02	1.303681338	ON-DEMAND
UNIV_03	3.191958404	ON-DEMAND
UNIV_04	1.743422675	ON-DEMAND
UNIV_05	1.153136342	ON-DEMAND
UNIV_06	0.991144921	ON-DEMAND
UNIV_07	3.700533297	ON-DEMAND
UNIV_08	3.200957997	ON-DEMAND
UNIV_09	19.50481309	ON-DEMAND
UNIV_10	42.46968761	ON-DEMAND
UNIV_11	15.76699476	ON-DEMAND
UNIV_12	8.69087032	ON-DEMAND
UNIV_13	17.53030003	ON-DEMAND
UNIV_14	27.56911562	ON-DEMAND
UNIV_15	88.75657907	ON-DEMAND
WILLOW01	0.361989157	ON-DEMAND
WILLOW02	0.651244503	ON-DEMAND
WILLOW03	0	ON-DEMAND
WILLOW04	0	ON-DEMAND
WILLOW05	0	ON-DEMAND
WILLOW06	0	ON-DEMAND
WILLOW07	6.894437673	ON-DEMAND
WILLOW08	2.279914842	ON-DEMAND
WILLOW09	0.949479	ON-DEMAND
WILLOW10	0.760852259	ON-DEMAND
WILLOW11	4.417752345	ON-DEMAND
WILLOW12	6.274913202	ON-DEMAND
WILLOW13	5.292938074	ON-DEMAND
ADAMS_CT	0.194226862	TRUCKS
ADAMSD01	0	TRUCKS
ADAMSD02	0	TRUCKS
ADAMSD03	0.071156216	TRUCKS
ADAMSD04	0.07720847	TRUCKS
ADAMSD05	0.137121666	TRUCKS
ADAMSD06	0.076004697	TRUCKS
BAY_EAST	10.97048437	TRUCKS

BAY_EFB	0	TRUCKS
BAY_M01	0.814128876	TRUCKS
BAY_M02	1.000167662	TRUCKS
BAY_M03	0.863091399	TRUCKS
BAY_M04	1.057289563	TRUCKS
BAY_M05	2.589144189	TRUCKS
BAY_WFB1	0	TRUCKS
BAY_WFB2	0	TRUCKS
BAY_WFB3	0	TRUCKS
BAY_WFB4	0	TRUCKS
BAY_WFB5	0	TRUCKS
BAY_WFB6	0	TRUCKS
BAY_WFB7	0	TRUCKS
OBRIEN01	6.676054684	TRUCKS
OBRIEN02	2.884368998	TRUCKS
OBRIEN03	0.737919827	TRUCKS
OBRIEN04	0.606723148	TRUCKS
OBRIEN05	0.589823637	TRUCKS
OBRIEN06	1.084719829	TRUCKS
OBRIEN07	2.33307639	TRUCKS
OBRIEN08	1.101924087	TRUCKS
OBRIEN09	1.075201484	TRUCKS
OBRIEN10	1.128095577	TRUCKS
OBRIEN11	2.387007225	TRUCKS
OBRIEN12	5.503893412	TRUCKS
OBRIEN13	1.717851678	TRUCKS
OBRIEN14	6.072649383	TRUCKS
OBRIEN15	13.18159941	TRUCKS
OBRIEN16	2.609276095	TRUCKS
OBRIEN17	2.940518365	TRUCKS
UNIV_01	0.526374206	TRUCKS
UNIV_02	0.434560446	TRUCKS
UNIV_03	1.063986135	TRUCKS
UNIV_04	0.581140892	TRUCKS
UNIV_05	0.384378781	TRUCKS
UNIV_06	0.33038164	TRUCKS
UNIV_07	1.233511099	TRUCKS
UNIV_08	1.066985999	TRUCKS
UNIV_09	6.501604362	TRUCKS
UNIV_10	14.15656254	TRUCKS
UNIV_11	5.255664921	TRUCKS
UNIV_12	2.896956773	TRUCKS
UNIV_13	5.843433344	TRUCKS
UNIV_14	9.189705206	TRUCKS
UNIV_15	29.58552636	TRUCKS
WILLOW01	0.120663052	TRUCKS
WILLOW02	0.217081501	TRUCKS

WILLOW03	0	TRUCKS
WILLOW04	0	TRUCKS
WILLOW05	0	TRUCKS
WILLOW06	0	TRUCKS
WILLOW07	2.298145891	TRUCKS
WILLOW08	0.759971614	TRUCKS
WILLOW09	0.316493	TRUCKS
WILLOW10	0.25361742	TRUCKS
WILLOW11	1.472584115	TRUCKS
WILLOW12	2.091637734	TRUCKS
WILLOW13	1.764312691	TRUCKS
ADAMS_CT	12.09687744	ALL
ADAMSD01	2.856166518	ALL
ADAMSD02	7.990710653	ALL
ADAMSD03	0.354505684	ALL
ADAMSD04	0.38465847	ALL
ADAMSD05	0.683150573	ALL
ADAMSD06	0.378661184	ALL
BAY_EAST	1131.085298	ALL
BAY_EFB	698.3547925	ALL
BAY_M01	106.3637396	ALL
BAY_M02	130.6692046	ALL
BAY_M03	112.7605609	ALL
BAY_M04	138.1320268	ALL
BAY_M05	338.2646978	ALL
BAY_WFB1	334.4681935	ALL
BAY_WFB2	167.5911344	ALL
BAY_WFB3	98.93030925	ALL
BAY_WFB4	261.9288961	ALL
BAY_WFB5	109.5268814	ALL
BAY_WFB6	527.4512543	ALL
BAY_WFB7	132.0696231	ALL
OBRIEN01	197.1249275	ALL
OBRIEN02	85.16722175	ALL
OBRIEN03	21.78867599	ALL
OBRIEN04	17.91481082	ALL
OBRIEN05	17.41581625	ALL
OBRIEN06	32.02869476	ALL
OBRIEN07	64.19164583	ALL
OBRIEN08	30.31804746	ALL
OBRIEN09	29.58280884	ALL
OBRIEN10	31.03812291	ALL
OBRIEN11	65.67548454	ALL
OBRIEN12	151.4326655	ALL
OBRIEN13	47.26451605	ALL
OBRIEN14	167.0812666	ALL
OBRIEN15	349.0305045	ALL

OBRIEN16	69.09001888	ALL
OBRIEN17	77.86085562	ALL
UNIV_01	21.09461055	ALL
UNIV_02	17.41514548	ALL
UNIV_03	42.63957637	ALL
UNIV_04	23.28940258	ALL
UNIV_05	15.40409958	ALL
UNIV_06	13.24014734	ALL
UNIV_07	49.43334221	ALL
UNIV_08	59.18548931	ALL
UNIV_09	150.2612078	ALL
UNIV_10	334.2611549	ALL
UNIV_11	124.0954237	ALL
UNIV_12	68.4022067	ALL
UNIV_13	137.9736623	ALL
UNIV_14	216.9849826	ALL
UNIV_15	698.5659254	ALL
WILLOW01	178.6538371	ALL
WILLOW02	321.4110897	ALL
WILLOW03	0	ALL
WILLOW04	0	ALL
WILLOW05	795.8201641	ALL
WILLOW06	436.195492	ALL
WILLOW07	1201.324254	ALL
WILLOW08	397.2647412	ALL
WILLOW09	165.4423762	ALL
WILLOW10	132.5750287	ALL
WILLOW11	769.7731551	ALL
WILLOW12	1093.374947	ALL
WILLOW13	922.2702686	ALL

Source: EMFAC2021 (v1.0.1) Emissions Inventory
Region Type: County
Region: San Mateo
Calendar Year: 2021, 2022, 2023, 2024, 2025, 2026
Season: Annual
Vehicle Classification: EMFAC2007 Categories
Units: miles/day for CVMT and EVMT, trips/day for Trips, kWh/day for Energy Consumption, tons/day for Emissions, 1000 gallons/day for Fuel Consumption

Region	Calendar Year	Vehicle Category	Model Year	Speed	Fuel	Population	Total VMT	CVMT	EVMT	Trips	Energy Consun	*NOx_g/mi* NOx_RUNEX	*NOx_g/trip* NOx_IDLEX	*NOx_g/trip* NOx_STREX
San Mateo	2021	HHDT	Aggregate	Aggregate	Diesel	1273.437	118103.1	118103.1	0	13607.24486	0	0.485975748	0.071431199	0.035727361
San Mateo	2022	HHDT	Aggregate	Aggregate	Diesel	1289.917	118758.5	118758.5	0	13886.58645	0	0.440831018	0.071292219	0.039306253
San Mateo	2023	HHDT	Aggregate	Aggregate	Diesel	1295.72	119079.6	119079.6	0	14027.6605	0	0.379331068	0.067169587	0.044483639
San Mateo	2024	HHDT	Aggregate	Aggregate	Diesel	1314.625	119489.1	119489.1	0	14359.45506	0	0.363336571	0.067642168	0.046666765
San Mateo	2025	HHDT	Aggregate	Aggregate	Diesel	1328.41	119560.7	119560.7	0	14621.90863	0	0.346882671	0.067867722	0.048360621
San Mateo	2026	HHDT	Aggregate	Aggregate	Diesel	1339.121	119591.7	119591.7	0	14836.48598	0	0.331323619	0.067963589	0.049761315

Region	Calendar Year	Vehicle Category	Model Year	Speed	Fuel	Population	Total VMT	CVMT	EVMT	Trips	Energy Consun	*NOx_g/mi* NOx_RUNEX	*NOx_g/trip* NOx_IDLEX	*NOx_g/trip* NOx_STREX
San Mateo	2021	HHDT	Aggregate	Aggregate	Diesel	1273.437	118103.1	118103.1	0	13607.24486	0	0.485975748	0.071431199	0.035727361
San Mateo	2021	MHDT	Aggregate	Aggregate	Diesel	4141.708	172846.2	172846.2	0	49761.70349	0	0.392754525	0.076935824	0.076231677
San Mateo	2022	HHDT	Aggregate	Aggregate	Diesel	1289.917	118758.5	118758.5	0	13886.58645	0	0.440831018	0.071292219	0.039306253
San Mateo	2022	MHDT	Aggregate	Aggregate	Diesel	4156.051	174304	174304	0	49995.68892	0	0.356094321	0.072828326	0.079145567
San Mateo	2023	HHDT	Aggregate	Aggregate	Diesel	1295.72	119079.6	119079.6	0	14027.6605	0	0.379331068	0.067169587	0.044483639
San Mateo	2023	MHDT	Aggregate	Aggregate	Diesel	4189.443	175901.2	175901.2	0	50462.4899	0	0.276591385	0.065090544	0.08822477
San Mateo	2024	HHDT	Aggregate	Aggregate	Diesel	1314.625	119489.1	119489.1	0	14359.45506	0	0.363336571	0.067642168	0.046666765
San Mateo	2024	MHDT	Aggregate	Aggregate	Diesel	4233.233	177028	177028	0	51051.03747	0	0.255103282	0.063443635	0.090469371
San Mateo	2025	HHDT	Aggregate	Aggregate	Diesel	1328.41	119560.7	119560.7	0	14621.90863	0	0.346882671	0.067867722	0.048360621
San Mateo	2025	MHDT	Aggregate	Aggregate	Diesel	4294.917	177557.8	177557.8	0	51845.94907	0	0.232703868	0.062148364	0.092284554
San Mateo	2026	HHDT	Aggregate	Aggregate	Diesel	1339.121	119591.7	119591.7	0	14836.48598	0	0.331323619	0.067963589	0.049761315
San Mateo	2026	MHDT	Aggregate	Aggregate	Diesel	4345.03	177809.3	177809.3	0	52490.37491	0	0.21159172	0.060909768	0.09345826

		PM25_g/trip	*PM25_g/trip*						*PM10_g/trip*	*PM10_g/trip*					
	PM25_g/mi							*PM10_g/mi*							*CO2_g/mi*
	PM25_g/mi	*PM25_g/trip*	*PM25_g/trip*					*PM10_g/mi*	*PM10_g/trip*	*PM10_g/trip*					*CO2_g/mi*
NOx_TOTEX	PM2.5_RUNEX	PM2.5_IDLEX	PM2.5_STREX	PM2.5_TOTEX	PM2.5_PMTW	PM2.5_PMBW	PM2.5_TOTAL	PM10_RUNEX	PM10_IDLEX	PM10_STREX	PM10_TOTEX	PM10_PMTW	PM10_PMBW	PM10_TOTAL	CO2_RUNE
0.593134308	0.0044412	7.95E-05	0	0.004520723	0.001121102	0.004161992	0.009803817	0.004642012	8.31E-05	0	0.00472513	0.004484408	0.011891406	0.021100943	246.178
0.55142949	0.003494898	5.84E-05	0	0.003553273	0.00112712	0.004125534	0.008805927	0.003652922	6.10E-05	0	0.003713936	0.004508482	0.011787239	0.020009657	244.6292
0.490984295	0.003338332	5.41E-05	0	0.003392405	0.001129979	0.004061708	0.008584092	0.003489277	5.65E-05	0	0.003545794	0.004519918	0.011604879	0.019670591	242.0187
0.477645504	0.003294944	5.11E-05	0	0.003346059	0.001133709	0.0040391	0.008518868	0.003443927	5.34E-05	0	0.003497353	0.004534836	0.011540286	0.019572475	239.1763
0.463111013	0.003243491	4.86E-05	0	0.003292046	0.001134294	0.004006102	0.008432442	0.003390148	5.08E-05	0	0.003440898	0.004537176	0.011446007	0.01942408	235.1103
0.449048523	0.003207838	4.57E-05	0	0.00325358	0.001134588	0.003990695	0.008378862	0.003352882	4.78E-05	0	0.003400692	0.00453835	0.011401985	0.019341027	231.0921

		PM25_g/trip	*PM25_g/trip*						*PM10_g/trip*	*PM10_g/trip*					
	PM25_g/mi							*PM10_g/mi*							*CO2_g/mi*
	PM25_g/mi	*PM25_g/trip*	*PM25_g/trip*					*PM10_g/mi*	*PM10_g/trip*	*PM10_g/trip*					*CO2_g/mi*
NOx_TOTEX	PM2.5_RUNEX	PM2.5_IDLEX	PM2.5_STREX	PM2.5_TOTEX	PM2.5_PMTW	PM2.5_PMBW	PM2.5_TOTAL	PM10_RUNEX	PM10_IDLEX	PM10_STREX	PM10_TOTEX	PM10_PMTW	PM10_PMBW	PM10_TOTAL	CO2_RUNE
0.593134308	0.0044412	7.95E-05	0	0.004520723	0.001121102	0.004161992	0.009803817	0.004642012	8.31E-05	0	0.00472513	0.004484408	0.011891406	0.021100943	246.178
0.545922026	0.005347512	0.000260997	0	0.00560851	0.000571591	0.003045305	0.009225405	0.005589303	0.000272799	0	0.005862101	0.002286364	0.008700871	0.016849336	222.3203
0.55142949	0.003494898	5.84E-05	0	0.003553273	0.00112712	0.004125534	0.008805927	0.003652922	6.10E-05	0	0.003713936	0.004508482	0.011787239	0.020009657	244.6292
0.508068213	0.004454112	0.000219844	0	0.004673956	0.000576412	0.003070941	0.008321309	0.004655507	0.000229785	0	0.004885292	0.002305647	0.008774117	0.015965055	223.6045
0.490984295	0.003338332	5.41E-05	0	0.003392405	0.001129979	0.004061708	0.008584092	0.003489277	5.65E-05	0	0.003545794	0.004519918	0.011604879	0.019670591	242.0187
0.429906699	0.00364176	0.000184776	0	0.003826536	0.000581694	0.003099037	0.007507266	0.003806424	0.00019313	0	0.003999555	0.002326775	0.008854391	0.01518072	224.1302
0.477645504	0.003294944	5.11E-05	0	0.003346059	0.001133709	0.0040391	0.008518868	0.003443927	5.34E-05	0	0.003497353	0.004534836	0.011540286	0.019572475	239.1763
0.409016288	0.003172798	0.000156372	0	0.003329171	0.00058542	0.003118831	0.007033421	0.003316258	0.000163443	0	0.003479701	0.00234168	0.008910945	0.014732326	224.6732
0.463111013	0.003243491	4.86E-05	0	0.003292046	0.001134294	0.004006102	0.008432442	0.003390148	5.08E-05	0	0.003440898	0.004537176	0.011446007	0.01942408	235.1103
0.387136786	0.002729259	0.000131024	0	0.002860283	0.000587172	0.003128149	0.006575604	0.002852664	0.000136948	0	0.002989612	0.002348688	0.008937569	0.014275869	224.1275
0.449048523	0.003207838	4.57E-05	0	0.00325358	0.001134588	0.003990695	0.008378862	0.003352882	4.78E-05	0	0.003400692	0.00453835	0.011401985	0.019341027	231.0921
0.365959749	0.002348506	0.000108825	0	0.002457331	0.000588004	0.003132579	0.006177914	0.002454695	0.000113746	0	0.002568441	0.002352014	0.008950226	0.013870681	223.1582

CO2_g/trip CO2_IDLEX	*CO2_g/trip* CO2_STREX	CO2_TOTEX	*CH4_g/mi* *CH4_g/trip* CH4_RUNEX	*CH4_g/trip* CH4_IDLEX	*CH4_g/trip* CH4_STREX	CH4_TOTEX	*N2O_g/mi* *N2O_g/trip* N2O_RUNEX	*N2O_g/trip* N2O_IDLEX	*N2O_g/trip* N2O_STREX	N2O_TOTEX	*ROG_g/mi* *ROG_g/trip* ROG_RUNEX	*ROG_g/trip* ROG_IDLEX	*ROG_g/trip* ROG_STREX	ROG_TOTEX	ROG_DIURN
11.91679707	0	258.0948357	0.000332799	0.000215778	0	0.000548577	0.03878545	0.001877496	0	0.040662946	0.007165072	0.00464564	0	0.011810712	0
12.11821966	0	256.7474207	0.000254289	0.000220541	0	0.00047483	0.03854143	0.00190923	0	0.040450661	0.005474763	0.004748192	0	0.010222955	0
11.8428035	0	253.8615221	0.000173532	0.000223123	0	0.000396655	0.038130148	0.001865839	0	0.039995986	0.003736089	0.004803779	0	0.008539868	0
11.91013206	0	251.0864764	0.000166434	0.000227865	0	0.000394299	0.03768233	0.001876446	0	0.039558777	0.00358327	0.004905875	0	0.008489145	0
11.90953418	0	247.0197869	0.000159587	0.000231583	0	0.00039117	0.037041716	0.001876352	0	0.038918068	0.003435873	0.004985909	0	0.008421782	0
11.87527886	0	242.9673906	0.000152858	0.000234588	0	0.000387447	0.036408656	0.001870955	0	0.038279611	0.003290993	0.005050624	0	0.008341617	0

CO2_g/trip CO2_IDLEX	*CO2_g/trip* CO2_STREX	CO2_TOTEX	*CH4_g/mi* *CH4_g/trip* CH4_RUNEX	*CH4_g/trip* CH4_IDLEX	*CH4_g/trip* CH4_STREX	CH4_TOTEX	*N2O_g/mi* *N2O_g/trip* N2O_RUNEX	*N2O_g/trip* N2O_IDLEX	*N2O_g/trip* N2O_STREX	N2O_TOTEX	*ROG_g/mi* *ROG_g/trip* ROG_RUNEX	*ROG_g/trip* ROG_IDLEX	*ROG_g/trip* ROG_STREX	ROG_TOTEX	ROG_DIURN
11.91679707	0	258.0948357	0.000332799	0.000215778	0	0.000548577	0.03878545	0.001877496	0	0.040662946	0.007165072	0.00464564	0	0.011810712	0
10.70198386	0	233.0223157	0.000631749	6.88E-05	0	0.000700564	0.035026659	0.001686102	0	0.036712761	0.01360138	0.001481574	0	0.015082955	0
12.11821966	0	256.7474207	0.000254289	0.000220541	0	0.00047483	0.03854143	0.00190923	0	0.040450661	0.005474763	0.004748192	0	0.010222955	0
10.66403618	0	234.2685348	0.000540419	6.41E-05	0	0.000604554	0.03522898	0.001680123	0	0.036909103	0.011635077	0.001380811	0	0.013015888	0
11.8428035	0	253.8615221	0.000173532	0.000223123	0	0.000396655	0.038130148	0.001865839	0	0.039995986	0.003736089	0.004803779	0	0.008539868	0
10.45692956	0	234.5871445	0.000389492	5.90E-05	0	0.000448505	0.035311807	0.001647494	0	0.0369593	0.008385667	0.00127053	0	0.009656196	0
11.91013206	0	251.0864764	0.000166434	0.000227865	0	0.000394299	0.03768233	0.001876446	0	0.039558777	0.00358327	0.004905875	0	0.008489145	0
10.49222267	0	235.1653979	0.000341119	5.59E-05	0	0.000397047	0.03539735	0.001653054	0	0.037050404	0.007344188	0.001204117	0	0.008548305	0
11.90953418	0	247.0197869	0.000159587	0.000231583	0	0.00039117	0.037041716	0.001876352	0	0.038918068	0.003435873	0.004985909	0	0.008421782	0
10.55139778	0	234.6789334	0.000294681	5.34E-05	0	0.000348066	0.035311385	0.001662377	0	0.036973762	0.006344409	0.001149358	0	0.007493767	0
11.87527886	0	242.9673906	0.000152858	0.000234588	0	0.000387447	0.036408656	0.001870955	0	0.038279611	0.003290993	0.005050624	0	0.008341617	0
10.58093718	0	233.7391441	0.000253568	5.11E-05	0	0.000304697	0.035158666	0.001667031	0	0.036825697	0.005459251	0.001100798	0	0.006560049	0

ROG_HOTSOAI	ROG_RUNLOSS	ROG_TOTAL	TOG_RUNEX	TOG_IDLEX	TOG_STREX	TOG_TOTEX	TOG_DIURN	TOG_HOTSOAI	TOG_RUNLOSS	TOG_TOTA	CO_RUNEX	CO_IDLEX	CO_STREX	CO_TOTEX	SOx_RUNEX	SOx_IDLEX
0	0	0.011810712	0.008156889	0.005288707	0	0.013445596	0	0	0	0.013446	0.027403	0.058681	0	0.086084117	0.002331159	0.000112845
0	0	0.010222955	0.006232601	0.005405455	0	0.011638056	0	0	0	0.011638	0.020815	0.062311	0	0.083126272	0.002316492	0.000114752
0	0	0.008539868	0.004253253	0.005468737	0	0.00972199	0	0	0	0.009722	0.016259	0.06653	0	0.082789111	0.002291773	0.000112144
0	0	0.008489145	0.00407928	0.005584966	0	0.009664245	0	0	0	0.009664	0.015598	0.068398	0	0.08399662	0.002264857	0.000112782
0	0	0.008421782	0.00391148	0.005676077	0	0.009587557	0	0	0	0.009588	0.014937	0.069927	0	0.084863709	0.002226353	0.000112776
0	0	0.008341617	0.003746545	0.005749751	0	0.009496297	0	0	0	0.009496	0.014291	0.071225	0	0.085516265	0.002188304	0.000112452

ROG_HOTSOAI	ROG_RUNLOSS	ROG_TOTAL	TOG_RUNEX	TOG_IDLEX	TOG_STREX	TOG_TOTEX	TOG_DIURN	TOG_HOTSOAI	TOG_RUNLOSS	TOG_TOTA	CO_RUNEX	CO_IDLEX	CO_STREX	CO_TOTEX	SOx_RUNEX	SOx_IDLEX
0	0	0.011810712	0.008156889	0.005288707	0	0.013445596	0	0	0	0.013446	0.027403	0.058681	0	0.086084117	0.002331159	0.000112845
0	0	0.015082955	0.015484136	0.00168666	0	0.017170796	0	0	0	0.017171	0.041535	0.033197	0	0.074731921	0.002105241	0.000101341
0	0	0.010222955	0.006232601	0.005405455	0	0.011638056	0	0	0	0.011638	0.020815	0.062311	0	0.083126272	0.002316492	0.000114752
0	0	0.013015888	0.013245649	0.001571948	0	0.014817598	0	0	0	0.014818	0.03658	0.033284	0	0.069863932	0.002117401	0.000100982
0	0	0.008539868	0.004253253	0.005468737	0	0.00972199	0	0	0	0.009722	0.016259	0.06653	0	0.082789111	0.002291773	0.000112144
0	0	0.009656196	0.009546443	0.001446401	0	0.010992844	0	0	0	0.010993	0.028839	0.035001	0	0.06384042	0.002122379	9.90E-05
0	0	0.008489145	0.00407928	0.005584966	0	0.009664245	0	0	0	0.009664	0.015598	0.068398	0	0.08399662	0.002264857	0.000112782
0	0	0.008548305	0.008360799	0.001370795	0	0.009731595	0	0	0	0.009732	0.026235	0.03522	0	0.061454272	0.002127521	9.94E-05
0	0	0.008421782	0.00391148	0.005676077	0	0.009587557	0	0	0	0.009588	0.014937	0.069927	0	0.084863709	0.002226353	0.000112776
0	0	0.007493767	0.007222626	0.001308457	0	0.008531083	0	0	0	0.008531	0.023647	0.035616	0	0.059263193	0.002122354	9.99E-05
0	0	0.008341617	0.003746545	0.005749751	0	0.009496297	0	0	0	0.009496	0.014291	0.071225	0	0.085516265	0.002188304	0.000112452
0	0	0.006560049	0.006214941	0.001253175	0	0.007468116	0	0	0	0.007468	0.021319	0.035947	0	0.057266443	0.002113175	0.000100195

				Mass Emissions	
SOx_STREX	SOx_TOTEX	NH3_RUNE	Fuel Consumption	**NOx_g/mi**	**NOx_g/trip**
0	0.002444	0.023429	23.05551	3.732922669	7.14418028
0	0.002431	0.024452	22.93515	3.367465874	7.225191477
0	0.002404	0.025956	22.67735	2.889860994	7.220740964
0	0.002378	0.026263	22.42946	2.758521782	7.221675142
0	0.002339	0.026496	22.06618	2.632024635	7.211136507
0	0.002301	0.026702	21.70418	2.51331516	7.198351184

				Mass Emissions				
SOx_STREX	SOx_TOTEX	NH3_RUNE	Fuel Consumption	**NOx_g/mi**	**NOx_g/trip**	**Year**	**NOx_g/mi**	**NOx_g/trip**
0	0.002444	0.023429	23.05551	3.732922669	7.14418028	2021	2.897149206	4.968256366
0	0.002207	0.035985	20.81579	2.061375742	2.792332453	2022	2.610399613	4.991398587
0	0.002431	0.024452	22.93515	3.367465874	7.225191477	2023	2.158170173	4.988476413
0	0.002218	0.037199	20.92712	1.853333351	2.757605697	2024	2.032902537	4.978366394
0	0.002404	0.025956	22.67735	2.889860994	7.220740964	2025	1.910481772	4.956678505
0	0.002221	0.040121	20.95558	1.426479352	2.756211862	2026	1.79642905	4.933137481
0	0.002378	0.026263	22.42946	2.758521782	7.221675142			
0	0.002227	0.04073	21.00723	1.307283292	2.735057645			
0	0.002339	0.026496	22.06618	2.632024635	7.211136507			
0	0.002222	0.041174	20.96378	1.188938909	2.702220503			
0	0.002301	0.026702	21.70418	2.51331516	7.198351184			
0	0.002213	0.041518	20.87983	1.079542939	2.667923778			

Note to reviewer: Please see Technical Report Table 51 ("Summary of Construction Source Groups") footnote 6 for a description of methodology.

HAULING TRIPS

Equipment Information							Information (mass emissions)			Mass Emissions
PHASE	SUBPHASE	YEAR	DAYS	HAULTRIP_TOTAL	Fleet Mix	Fuel Type	Trip Length (mi)	EF (g/mi)	EF (g/trip)	(lb/year)
Phase 1a	Demolition	2021	13	2505	HHDT	Diesel	22.9	3.732922669	7.14E+00	511.54611
Phase 1a	Demolition	2022	84	16183	HHDT	Diesel	22.9	3.367465874	7.23E+00	3009.03829
Phase 1a	Grading and Utilities	2022	143	32640	HHDT	Diesel	8.2	3.367465874	7.23E+00	2506.93317
Phase 1b	Demolition	2022	48	18688	HHDT	Diesel	22.9	3.367465874	7.23E+00	3474.81354
Phase 1b	Grading and Utilities	2022	65	16320	HHDT	Diesel	8.2	3.367465874	7.23E+00	1253.46658
Phase 1b	Grading and Utilities	2023	65	16320	HHDT	Diesel	8.2	2.889860994	7.22E+00	1112.39801
Phase 2 Mixed Use	Grading and Utilities	2023	22	2464	HHDT	Diesel	8.2	2.889860994	7.22E+00	167.95029
Alternate 1	Demolition	2024	22	422	HHDT	Diesel	22.9	2.758521782	7.22E+00	65.48909
Alternate 1	Grading and Utilities	2024	1	18.50434783	HHDT	Diesel	8.2	2.758521782	7.22E+00	1.21739
Alternate 1	Grading and Utilities	2025	22	407.0956522	HHDT	Diesel	8.2	2.632024635	7.21E+00	25.84216

453.5924 g/lb

VENDOR TRIPS

Equipment Information							Information (mass emissions)			Mass Emissions
PHASE	SUBPHASE	YEAR	DAYS	VENDORTRIP_DAY	Fleet Mix	Fuel Type	Trip Length (mi)	EF (g/mi)	EF (g/trip)	(lb/year)
Phase 2 Mixed Use	Tunnel Construction	2023	175	8	50% MHDT / 50% HHDT	Diesel	40	2.158170173	4.99E+00	2.82E+02
Phase 2 Mixed Use	Tunnel Construction	2024	87	8	50% MHDT / 50% HHDT	Diesel	40	2.032902537	4.98E+00	1.32E+02
Phase 2 Mixed Use	Foundations	2024	24	10	50% MHDT / 50% HHDT	Diesel	40	2.032902537	4.98E+00	4.57E+01
Phase 2 Mixed Use	Foundations	2025	99	10	50% MHDT / 50% HHDT	Diesel	40	1.910481772	4.96E+00	1.78E+02
Phase 2 Mixed Use	Core and Shell	2025	139	12	50% MHDT / 50% HHDT	Diesel	40	1.910481772	4.96E+00	2.99E+02
Phase 2 Mixed Use	Tenant Improvements	2025	25	12	50% MHDT / 50% HHDT	Diesel	40	1.910481772	4.96E+00	5.38E+01
Phase 2 Mixed Use	Tenant Improvements	2026	174	12	50% MHDT / 50% HHDT	Diesel	40	1.79642905	4.93E+00	3.53E+02
Phase 2 Mixed Use	Landscaping	2026	59	6.508474576	50% MHDT / 50% HHDT	Diesel	40	1.79642905	4.93E+00	6.50E+01
Alternate 1	Foundations	2025	22	12.43636364	50% MHDT / 50% HHDT	Diesel	40	1.910481772	4.96E+00	4.91E+01
Alternate 1	Core and Shell	2025	43	5.693023256	50% MHDT / 50% HHDT	Diesel	40	1.910481772	4.96E+00	4.39E+01
Alternate 1	Tenant Improvements	2025	33	9.272727273	50% MHDT / 50% HHDT	Diesel	40	1.910481772	4.96E+00	5.49E+01
Phase 1a Office	Foundations + Core and Shell	2022	42	11	50% MHDT / 50% HHDT	Diesel	40	2.610399613	4.99E+00	1.11E+02
Phase 1a Office	Foundations + Core and Shell	2023	260	11	50% MHDT / 50% HHDT	Diesel	40	2.158170173	4.99E+00	5.76E+02
Phase 1a Office	Foundations + Core and Shell	2024	262	11	50% MHDT / 50% HHDT	Diesel	40	2.032902537	4.98E+00	5.48E+02
Phase 1a Office	Foundations + Core and Shell	2025	261	11	50% MHDT / 50% HHDT	Diesel	40	1.910481772	4.96E+00	5.15E+02
Phase 1a Office	Tenant Improvements	2024	195	6	50% MHDT / 50% HHDT	Diesel	40	2.032902537	4.98E+00	2.23E+02
Phase 1a Office	Tenant Improvements	2025	261	6	50% MHDT / 50% HHDT	Diesel	40	1.910481772	4.96E+00	2.81E+02
Phase 1a Office	Tenant Improvements	2026	46	6	50% MHDT / 50% HHDT	Diesel	40	1.79642905	4.93E+00	4.67E+01
Phase 1a Mixed Use	Foundations	2023	224	2	50% MHDT / 50% HHDT	Diesel	40	2.158170173	4.99E+00	9.02E+01
Phase 1a Mixed Use	Foundations	2024	1	2	50% MHDT / 50% HHDT	Diesel	40	2.032902537	4.98E+00	3.80E-01
Phase 1a Mixed Use	Core and Shell	2023	64	2	50% MHDT / 50% HHDT	Diesel	40	2.158170173	4.99E+00	2.58E+01
Phase 1a Mixed Use	Core and Shell	2024	180	2	50% MHDT / 50% HHDT	Diesel	40	2.032902537	4.98E+00	6.85E+01
Phase 1a Mixed Use	Tenant Improvements	2024	147	2	50% MHDT / 50% HHDT	Diesel	40	2.032902537	4.98E+00	5.59E+01
Phase 1a Mixed Use	Tenant Improvements	2025	178	2	50% MHDT / 50% HHDT	Diesel	40	1.910481772	4.96E+00	6.39E+01
Phase 1a Mixed Use	Landscaping	2025	123	2	50% MHDT / 50% HHDT	Diesel	40	1.910481772	4.96E+00	4.41E+01
Phase 1b Office	Foundations + Core and Shell	2023	202	11	50% MHDT / 50% HHDT	Diesel	40	2.158170173	4.99E+00	4.47E+02
Phase 1b Office	Foundations + Core and Shell	2024	232	11	50% MHDT / 50% HHDT	Diesel	40	2.032902537	4.98E+00	4.86E+02
Phase 1b Office	Tenant Improvements	2024	154	14	50% MHDT / 50% HHDT	Diesel	40	2.032902537	4.98E+00	4.10E+02
Phase 1b Office	Tenant Improvements	2025	122	14	50% MHDT / 50% HHDT	Diesel	40	1.910481772	4.96E+00	3.06E+02
Phase 1b Mixed Use	Foundations	2024	180	2	50% MHDT / 50% HHDT	Diesel	40	2.032902537	4.98E+00	6.85E+01
Phase 1b Mixed Use	Core and Shell	2024	145	3	50% MHDT / 50% HHDT	Diesel	40	2.032902537	4.98E+00	8.28E+01
Phase 1b Mixed Use	Core and Shell	2025	48	3	50% MHDT / 50% HHDT	Diesel	40	1.910481772	4.96E+00	2.58E+01
Phase 1b Mixed Use	Tenant Improvements	2024	17	3	50% MHDT / 50% HHDT	Diesel	40	2.032902537	4.98E+00	9.70E+00
Phase 1b Mixed Use	Tenant Improvements	2025	235	3	50% MHDT / 50% HHDT	Diesel	40	1.910481772	4.96E+00	1.26E+02
Phase 1b Mixed Use	Landscaping	2025	91	2	50% MHDT / 50% HHDT	Diesel	40	1.910481772	4.96E+00	3.27E+01
Phase 1b Mixed Use	Landscaping	2026	32	2	50% MHDT / 50% HHDT	Diesel	40	1.79642905	4.93E+00	1.08E+01

Equipment Information									Emissions (lb/yr)					
PHASE	SUBPHASE	EQUIPMENT	CALEEMOD_EQUIPMENT	FUEL	NUMBER	HP	DAILYHRS	UTILIZATION	2021	2022	2023	2024	2025	2026
Phase 1a	Demolition	Excavator	Excavators	Diesel	4	131	8	0.9	18.71611	120.9349	0	0	0	0
Phase 1a	Demolition	Generator	Generator Sets	Diesel	2	25	6	0.5	4.644369	30.308	0	0	0	0
Phase 1a	Demolition	Tire Wash	Other Construction Equipment	Diesel	2	100	4	0.9	4.199093	27.1326	0	0	0	0
Phase 1a	Demolition	Concrete Crusher	Crushing/Proc. Equipment	Diesel	2	200	2	0	0	0	0	0	0	0
Phase 1a	Demolition	Bob Cat	Tractors/Loaders/Backhoes	Diesel	6	150	8	0.8	27.82226	179.7746	0	0	0	0
Phase 1a	Demolition	Pressure Washer	Pressure Washers	Diesel	2	25	8	1	9.781168	63.20139	0	0	0	0
Phase 1a	Demolition	Air Compressor	Air Compressors	Diesel	1	140	6	0.7	3.68457	23.80799	0	0	0	0
Phase 1a	Grading and Utilities	Blade	Graders	Diesel	2	359	8	0.15	0	48.61232	0	0	0	0
Phase 1a	Grading and Utilities	Scraper	Scrapers	Diesel	2	52	8	0.15	0	53.64425	0	0	0	0
Phase 1a	Grading and Utilities	Loader	Tractors/Loaders/Backhoes	Diesel	4	100	4	0.9	0	81.38241	0	0	0	0
Phase 1a	Grading and Utilities	Tire Wash	Other Construction Equipment	Diesel	2	100	4	0.9	0	46.19002	0	0	0	0
Phase 1a	Grading and Utilities	Excavator	Excavators	Diesel	4	359	8	0.6	0	360.4426	0	0	0	0
Phase 1a	Grading and Utilities	Backhoe	Tractors/Loaders/Backhoes	Diesel	4	350	8	0.6	0	342.1589	0	0	0	0
Phase 1a	Grading and Utilities	Gradall	Forklifts	Diesel	4	350	4	0.6	0	92.47537	0	0	0	0
Phase 1a	Grading and Utilities	Compactor	Other Construction Equipment	Diesel	4	250	0.5	0.2	0	6.018049	0	0	0	0
Phase 1a	Grading and Utilities	Paver	Pavers	Diesel	2	250	8	0.01	0	2.40722	0	0	0	0
Phase 1a	Grading and Utilities	Generator	Generator Sets	Diesel	1	600	2	0.1	0	12.21996	0	0	0	0
Phase 1a Office	North Garage 2022	Air Compressor	Air Compressors	Diesel	1	150	0.47	1	0	1.422927	0	0	0	0
Phase 1a Office	North Garage 2022	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	0	1	0	0	0	0	0	0
Phase 1a Office	North Garage 2022	Blade	Graders	Diesel	1	450	0	1	0	0	0	0	0	0
Phase 1a Office	North Garage 2022	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	0	1	0	0	0	0	0	0
Phase 1a Office	North Garage 2022	Boom Lift	Aerial Lifts	Diesel	1	40	0	1	0	0	0	0	0	0
Phase 1a Office	North Garage 2022	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0	0	0	0	0	0
Phase 1a Office	North Garage 2022	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0	0	0	0	0	0
Phase 1a Office	North Garage 2022	Concrete Pump	Pumps	Diesel	1	450	0.33	1	0	4.441485	0	0	0	0
Phase 1a Office	North Garage 2022	Excavator	Excavators	Diesel	1	500	11.71429	1	0	89.95794	0	0	0	0
Phase 1a Office	North Garage 2022	Generator	Generator Sets	Diesel	1	25	4.714286	1	0	11.90671	0	0	0	0
Phase 1a Office	North Garage 2022	Gradall	Forklifts	Diesel	1	350	2.928571	1	0	8.285599	0	0	0	0
Phase 1a Office	North Garage 2022	Hydro/Crawler Crane	Cranes	Diesel	1	550	2.928571	1	0	18.87933	0	0	0	0
Phase 1a Office	North Garage 2022	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	5.857143	1	0	9.722258	0	0	0	0
Phase 1a Office	North Garage 2022	Paver	Pavers	Diesel	1	250	0	1	0	0	0	0	0	0
Phase 1a Office	North Garage 2022	Pile Rig	Bore/Drill Rigs	Diesel	1	600	4.142857	1	0	50.23325	0	0	0	0
Phase 1a Office	North Garage 2022	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0	0	0	0	0	0
Phase 1a Office	North Garage 2022	Scraper	Scrapers	Diesel	1	600	0	1	0	0	0	0	0	0
Phase 1a Office	North Garage 2022	Tire Wash	Other Construction Equipment	Diesel	1	100	1.178571	1	0	2.220674	0	0	0	0
Phase 1a Office	North Garage 2023	Air Compressor	Air Compressors	Diesel	1	150	0.48186	1	0	0	8.988731	0	0	0
Phase 1a Office	North Garage 2023	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	0.03907	1	0	0	1.256178	0	0	0
Phase 1a Office	North Garage 2023	Blade	Graders	Diesel	1	450	0	1	0	0	0	0	0	0
Phase 1a Office	North Garage 2023	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	0.03907	1	0	0	0.747416	0	0	0
Phase 1a Office	North Garage 2023	Boom Lift	Aerial Lifts	Diesel	1	40	1.335814	1	0	0	26.79498	0	0	0
Phase 1a Office	North Garage 2023	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0	0	0	0	0	0
Phase 1a Office	North Garage 2023	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0	0	0	0	0	0
Phase 1a Office	North Garage 2023	Concrete Pump	Pumps	Diesel	1	450	0.57907	1	0	0	47.87575	0	0	0
Phase 1a Office	North Garage 2023	Excavator	Excavators	Diesel	1	500	0.465116	1	0	0	21.94096	0	0	0
Phase 1a Office	North Garage 2023	Generator	Generator Sets	Diesel	1	25	1.767442	1	0	0	27.67353	0	0	0
Phase 1a Office	North Garage 2023	Gradall	Forklifts	Diesel	1	350	3.011628	1	0	0	52.34074	0	0	0
Phase 1a Office	North Garage 2023	Hydro/Crawler Crane	Cranes	Diesel	1	550	5.02907	1	0	0	199.1539	0	0	0
Phase 1a Office	North Garage 2023	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	0.232558	1	0	0	2.371282	0	0	0
Phase 1a Office	North Garage 2023	Paver	Pavers	Diesel	1	250	0	1	0	0	0	0	0	0
Phase 1a Office	North Garage 2023	Pile Rig	Bore/Drill Rigs	Diesel	1	600	0	1	0	0	0	0	0	0
Phase 1a Office	North Garage 2023	Pressure Washer	Pressure Washers	Diesel	1	25	0.122791	1	0	0	1.489747	0	0	0
Phase 1a Office	North Garage 2023	Scraper	Scrapers	Diesel	1	600	0	1	0	0	0	0	0	0
Phase 1a Office	North Garage 2023	Tire Wash	Other Construction Equipment	Diesel	1	100	1.505814	1	0	0	17.42893	0	0	0
Phase 1a Office	Office Building 4 2023	Air Compressor	Air Compressors	Diesel	1	150	0.049091	1	0	0	0.858962	0	0	0

Before on-site residents

% UNMIT	5%
% MIT	95%

After on-site residents

% UNMIT	2%
% MIT	98%

Phase 1a Office	Office Building 4 2023	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	1.264463	1	0	0	38.13397	0	0	0
Phase 1a Office	Office Building 4 2023	Blade	Graders	Diesel	1	450	0	1	0	0	0	0	0	0
Phase 1a Office	Office Building 4 2023	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	1.264463	1	0	0	22.68943	0	0	0
Phase 1a Office	Office Building 4 2023	Boom Lift	Aerial Lifts	Diesel	1	40	7.438017	1	0	0	139.9459	0	0	0
Phase 1a Office	Office Building 4 2023	Compactor	Other Construction Equipment	Diesel	1	250	0.101157	1	0	0	2.575557	0	0	0
Phase 1a Office	Office Building 4 2023	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0	0	0	0	0	0
Phase 1a Office	Office Building 4 2023	Concrete Pump	Pumps	Diesel	1	450	0.075372	1	0	0	5.845072	0	0	0
Phase 1a Office	Office Building 4 2023	Excavator	Excavators	Diesel	1	500	0.063223	1	0	0	2.797472	0	0	0
Phase 1a Office	Office Building 4 2023	Generator	Generator Sets	Diesel	1	25	2.900826	1	0	0	42.60267	0	0	0
Phase 1a Office	Office Building 4 2023	Gradall	Forklifts	Diesel	1	350	0.48	1	0	0	7.824839	0	0	0
Phase 1a Office	Office Building 4 2023	Hydro/Crawler Crane	Cranes	Diesel	1	550	1.809917	1	0	0	67.22883	0	0	0
Phase 1a Office	Office Building 4 2023	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	0.719008	1	0	0	6.876719	0	0	0
Phase 1a Office	Office Building 4 2023	Paver	Pavers	Diesel	1	250	0	1	0	0	0	0	0	0
Phase 1a Office	Office Building 4 2023	Pile Rig	Bore/Drill Rigs	Diesel	1	600	0.719008	1	0	0	50.23325	0	0	0
Phase 1a Office	Office Building 4 2023	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0	0	0	0	0	0
Phase 1a Office	Office Building 4 2023	Scraper	Scrapers	Diesel	1	600	0	1	0	0	0	0	0	0
Phase 1a Office	Office Building 4 2023	Tire Wash	Other Construction Equipment	Diesel	1	100	1.5	1	0	0	16.28494	0	0	0
Phase 1a Office	Office Building 4 2024	Air Compressor	Air Compressors	Diesel	1	150	0	1	0	0	0	0	0	0
Phase 1a Office	Office Building 4 2024	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	0	1	0	0	0	0	0	0
Phase 1a Office	Office Building 4 2024	Blade	Graders	Diesel	1	450	0	1	0	0	0	0	0	0
Phase 1a Office	Office Building 4 2024	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	0	1	0	0	0	0	0	0
Phase 1a Office	Office Building 4 2024	Boom Lift	Aerial Lifts	Diesel	1	40	1.405797	1	0	0	0	22.62459	0	0
Phase 1a Office	Office Building 4 2024	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0	0	0	0	0	0
Phase 1a Office	Office Building 4 2024	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0	0	0	0	0	0
Phase 1a Office	Office Building 4 2024	Concrete Pump	Pumps	Diesel	1	450	0	1	0	0	0	0	0	0
Phase 1a Office	Office Building 4 2024	Excavator	Excavators	Diesel	1	500	0	1	0	0	0	0	0	0
Phase 1a Office	Office Building 4 2024	Generator	Generator Sets	Diesel	1	25	0	1	0	0	0	0	0	0
Phase 1a Office	Office Building 4 2024	Gradall	Forklifts	Diesel	1	350	0.48	1	0	0	0	6.693148	0	0
Phase 1a Office	Office Building 4 2024	Hydro/Crawler Crane	Cranes	Diesel	1	550	0	1	0	0	0	0	0	0
Phase 1a Office	Office Building 4 2024	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	0	1	0	0	0	0	0	0
Phase 1a Office	Office Building 4 2024	Paver	Pavers	Diesel	1	250	0	1	0	0	0	0	0	0
Phase 1a Office	Office Building 4 2024	Pile Rig	Bore/Drill Rigs	Diesel	1	600	0	1	0	0	0	0	0	0
Phase 1a Office	Office Building 4 2024	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0	0	0	0	0	0
Phase 1a Office	Office Building 4 2024	Scraper	Scrapers	Diesel	1	600	0	1	0	0	0	0	0	0
Phase 1a Office	Office Building 4 2024	Tire Wash	Other Construction Equipment	Diesel	1	100	1.5	1	0	0	0	13.92968	0	0
Phase 1a Office	Meeting, Collaboration, Park 2022	Air Compressor	Air Compressors	Diesel	1	150	0	1	0	0	0	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2022	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	5.857143	1	0	30.65672	0	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2022	Blade	Graders	Diesel	1	450	0	1	0	0	0	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2022	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	5.857143	1	0	18.24052	0	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2022	Boom Lift	Aerial Lifts	Diesel	1	40	0	1	0	0	0	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2022	Compactor	Other Construction Equipment	Diesel	1	250	0.314286	1	0	1.388781	0	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2022	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0	0	0	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2022	Concrete Pump	Pumps	Diesel	1	450	0	1	0	0	0	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2022	Excavator	Excavators	Diesel	1	500	23.42857	1	0	179.9159	0	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2022	Generator	Generator Sets	Diesel	1	25	5.857143	1	0	14.79319	0	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2022	Gradall	Forklifts	Diesel	1	350	8.785714	1	0	24.8568	0	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2022	Hydro/Crawler Crane	Cranes	Diesel	1	550	1.571429	1	0	10.13037	0	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2022	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	4.392857	1	0	7.291693	0	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2022	Paver	Pavers	Diesel	1	250	0	1	0	0	0	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2022	Pile Rig	Bore/Drill Rigs	Diesel	1	600	3.142857	1	0	38.10798	0	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2022	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0	0	0	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2022	Scraper	Scrapers	Diesel	1	600	0	1	0	0	0	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2022	Tire Wash	Other Construction Equipment	Diesel	1	100	1.464286	1	0	2.759019	0	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2023	Air Compressor	Air Compressors	Diesel	1	150	0.304615	1	0	0	5.726412	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2023	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	3.276923	1	0	0	106.1769	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2023	Blade	Graders	Diesel	1	450	0	1	0	0	0	0	0	0

Phase 1a Office	Meeting, Collaboration, Park 2023	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	3.276923	1	0	0	63.17449	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2023	Boom Lift	Aerial Lifts	Diesel	1	40	0.888462	1	0	0	17.95973	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2023	Compactor	Other Construction Equipment	Diesel	1	250	0.152308	1	0	0	4.166342	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2023	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0	0	0	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2023	Concrete Pump	Pumps	Diesel	1	450	0.304615	1	0	0	25.37992	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2023	Excavator	Excavators	Diesel	1	500	5.492308	1	0	0	261.0974	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2023	Generator	Generator Sets	Diesel	1	25	6.715385	1	0	0	105.9605	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2023	Gradall	Forklifts	Diesel	1	350	7.661538	1	0	0	134.1863	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2023	Hydro/Crawler Crane	Cranes	Diesel	1	550	7.246154	1	0	0	289.1761	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2023	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	1.828846	1	0	0	18.79241	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2023	Paver	Pavers	Diesel	1	250	0	1	0	0	0	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2023	Pile Rig	Bore/Drill Rigs	Diesel	1	600	2.007692	1	0	0	150.6998	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2023	Pressure Washer	Pressure Washers	Diesel	1	25	0.152308	1	0	0	1.862184	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2023	Scraper	Scrapers	Diesel	1	600	0	1	0	0	0	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2023	Tire Wash	Other Construction Equipment	Diesel	1	100	0.819231	1	0	0	9.555627	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2024	Air Compressor	Air Compressors	Diesel	1	150	0	1	0	0	0	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2024	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	0	1	0	0	0	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2024	Blade	Graders	Diesel	1	450	0	1	0	0	0	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2024	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	0	1	0	0	0	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2024	Boom Lift	Aerial Lifts	Diesel	1	40	19.30534	1	0	0	0	393.2481	0	0
Phase 1a Office	Meeting, Collaboration, Park 2024	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0	0	0	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2024	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0	0	0	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2024	Concrete Pump	Pumps	Diesel	1	450	0	1	0	0	0	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2024	Excavator	Excavators	Diesel	1	500	0	1	0	0	0	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2024	Generator	Generator Sets	Diesel	1	25	0	1	0	0	0	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2024	Gradall	Forklifts	Diesel	1	350	10.25954	1	0	0	0	181.0707	0	0
Phase 1a Office	Meeting, Collaboration, Park 2024	Hydro/Crawler Crane	Cranes	Diesel	1	550	0.503817	1	0	0	0	20.26074	0	0
Phase 1a Office	Meeting, Collaboration, Park 2024	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	0	1	0	0	0	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2024	Paver	Pavers	Diesel	1	250	0	1	0	0	0	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2024	Pile Rig	Bore/Drill Rigs	Diesel	1	600	0	1	0	0	0	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2024	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0	0	0	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2024	Scraper	Scrapers	Diesel	1	600	0	1	0	0	0	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2024	Tire Wash	Other Construction Equipment	Diesel	1	100	0	1	0	0	0	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2025	Air Compressor	Air Compressors	Diesel	1	150	0	1	0	0	0	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2025	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	0	1	0	0	0	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2025	Blade	Graders	Diesel	1	450	0	1	0	0	0	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2025	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	0	1	0	0	0	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2025	Boom Lift	Aerial Lifts	Diesel	1	40	9.425287	1	0	0	0	0	187.4665	0
Phase 1a Office	Meeting, Collaboration, Park 2025	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0	0	0	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2025	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0	0	0	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2025	Concrete Pump	Pumps	Diesel	1	450	0	1	0	0	0	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2025	Excavator	Excavators	Diesel	1	500	0	1	0	0	0	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2025	Generator	Generator Sets	Diesel	1	25	0	1	0	0	0	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2025	Gradall	Forklifts	Diesel	1	350	11.77011	1	0	0	0	0	156.7323	0
Phase 1a Office	Meeting, Collaboration, Park 2025	Hydro/Crawler Crane	Cranes	Diesel	1	550	0.770115	1	0	0	0	0	23.36663	0
Phase 1a Office	Meeting, Collaboration, Park 2025	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	0	1	0	0	0	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2025	Paver	Pavers	Diesel	1	250	0	1	0	0	0	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2025	Pile Rig	Bore/Drill Rigs	Diesel	1	600	0	1	0	0	0	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2025	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0	0	0	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2025	Scraper	Scrapers	Diesel	1	600	0	1	0	0	0	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2025	Tire Wash	Other Construction Equipment	Diesel	1	100	0	1	0	0	0	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2026	Air Compressor	Air Compressors	Diesel	1	150	0	1	0	0	0	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2026	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	0	1	0	0	0	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2026	Blade	Graders	Diesel	1	450	0	1	0	0	0	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2026	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	0	1	0	0	0	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2026	Boom Lift	Aerial Lifts	Diesel	1	40	0	1	0	0	0	0	0	0

Phase 1a Office	Meeting, Collaboration, Park 2026	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0	0	0	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2026	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0	0	0	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2026	Concrete Pump	Pumps	Diesel	1	450	0	1	0	0	0	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2026	Excavator	Excavators	Diesel	1	500	0	1	0	0	0	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2026	Generator	Generator Sets	Diesel	1	25	0	1	0	0	0	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2026	Gradall	Forklifts	Diesel	1	350	11.73913	1	0	0	0	0	0	27.55061
Phase 1a Office	Meeting, Collaboration, Park 2026	Hydro/Crawler Crane	Cranes	Diesel	1	550	5.869565	1	0	0	0	0	0	31.38801
Phase 1a Office	Meeting, Collaboration, Park 2026	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	0	1	0	0	0	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2026	Paver	Pavers	Diesel	1	250	0	1	0	0	0	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2026	Pile Rig	Bore/Drill Rigs	Diesel	1	600	0	1	0	0	0	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2026	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0	0	0	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2026	Scraper	Scrapers	Diesel	1	600	0	1	0	0	0	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2026	Tire Wash	Other Construction Equipment	Diesel	1	100	0	1	0	0	0	0	0	0
Phase 1a Office	Hotel Excavation 2022	Air Compressor	Air Compressors	Diesel	1	150	2.642857	1	0	8.025653	0	0	0	0
Phase 1a Office	Hotel Excavation 2022	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	2.642857	1	0	13.83291	0	0	0	0
Phase 1a Office	Hotel Excavation 2022	Blade	Graders	Diesel	1	450	0	1	0	0	0	0	0	0
Phase 1a Office	Hotel Excavation 2022	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	2.928571	1	0	9.120261	0	0	0	0
Phase 1a Office	Hotel Excavation 2022	Boom Lift	Aerial Lifts	Diesel	1	40	1.464286	1	0	4.781486	0	0	0	0
Phase 1a Office	Hotel Excavation 2022	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0	0	0	0	0	0
Phase 1a Office	Hotel Excavation 2022	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0	0	0	0	0	0
Phase 1a Office	Hotel Excavation 2022	Concrete Pump	Pumps	Diesel	1	450	0.422857	1	0	5.691254	0	0	0	0
Phase 1a Office	Hotel Excavation 2022	Excavator	Excavators	Diesel	1	500	11.71429	1	0	89.95794	0	0	0	0
Phase 1a Office	Hotel Excavation 2022	Generator	Generator Sets	Diesel	1	25	5.857143	1	0	14.79319	0	0	0	0
Phase 1a Office	Hotel Excavation 2022	Gradall	Forklifts	Diesel	1	350	5.857143	1	0	16.5712	0	0	0	0
Phase 1a Office	Hotel Excavation 2022	Hydro/Crawler Crane	Cranes	Diesel	1	550	2.642857	1	0	17.03744	0	0	0	0
Phase 1a Office	Hotel Excavation 2022	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	11.71429	1	0	19.44452	0	0	0	0
Phase 1a Office	Hotel Excavation 2022	Paver	Pavers	Diesel	1	250	0	1	0	0	0	0	0	0
Phase 1a Office	Hotel Excavation 2022	Pile Rig	Bore/Drill Rigs	Diesel	1	600	10.57143	1	0	128.1814	0	0	0	0
Phase 1a Office	Hotel Excavation 2022	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0	0	0	0	0	0
Phase 1a Office	Hotel Excavation 2022	Scraper	Scrapers	Diesel	1	600	0	1	0	0	0	0	0	0
Phase 1a Office	Hotel Excavation 2022	Tire Wash	Other Construction Equipment	Diesel	1	100	2.928571	1	0	5.518038	0	0	0	0
Phase 1a Office	Hotel Excavation 2023	Air Compressor	Air Compressors	Diesel	1	150	2.311284	1	0	0	42.94809	0	0	0
Phase 1a Office	Hotel Excavation 2023	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	0	1	0	0	0	0	0	0
Phase 1a Office	Hotel Excavation 2023	Blade	Graders	Diesel	1	450	0	1	0	0	0	0	0	0
Phase 1a Office	Hotel Excavation 2023	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	0.700389	1	0	0	13.34672	0	0	0
Phase 1a Office	Hotel Excavation 2023	Boom Lift	Aerial Lifts	Diesel	1	40	0.350195	1	0	0	6.997297	0	0	0
Phase 1a Office	Hotel Excavation 2023	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0	0	0	0	0	0
Phase 1a Office	Hotel Excavation 2023	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0	0	0	0	0	0
Phase 1a Office	Hotel Excavation 2023	Concrete Pump	Pumps	Diesel	1	450	2.311284	1	0	0	190.3494	0	0	0
Phase 1a Office	Hotel Excavation 2023	Excavator	Excavators	Diesel	1	500	2.801556	1	0	0	131.6458	0	0	0
Phase 1a Office	Hotel Excavation 2023	Generator	Generator Sets	Diesel	1	25	10.64591	1	0	0	166.0412	0	0	0
Phase 1a Office	Hotel Excavation 2023	Gradall	Forklifts	Diesel	1	350	10.64591	1	0	0	184.3041	0	0	0
Phase 1a Office	Hotel Excavation 2023	Hydro/Crawler Crane	Cranes	Diesel	1	550	9.245136	1	0	0	364.6934	0	0	0
Phase 1a Office	Hotel Excavation 2023	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	2.801556	1	0	0	28.45539	0	0	0
Phase 1a Office	Hotel Excavation 2023	Paver	Pavers	Diesel	1	250	0	1	0	0	0	0	0	0
Phase 1a Office	Hotel Excavation 2023	Pile Rig	Bore/Drill Rigs	Diesel	1	600	0	1	0	0	0	0	0	0
Phase 1a Office	Hotel Excavation 2023	Pressure Washer	Pressure Washers	Diesel	1	25	0.046226	1	0	0	0.558655	0	0	0
Phase 1a Office	Hotel Excavation 2023	Scraper	Scrapers	Diesel	1	600	0	1	0	0	0	0	0	0
Phase 1a Office	Hotel Excavation 2023	Tire Wash	Other Construction Equipment	Diesel	1	100	1.856031	1	0	0	21.39922	0	0	0
Phase 1a Office	Hotel Construction 2024	Air Compressor	Air Compressors	Diesel	1	150	3	1	0	0	0	37.95917	0	0
Phase 1a Office	Hotel Construction 2024	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	0	1	0	0	0	0	0	0
Phase 1a Office	Hotel Construction 2024	Blade	Graders	Diesel	1	450	0	1	0	0	0	0	0	0
Phase 1a Office	Hotel Construction 2024	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	0	1	0	0	0	0	0	0
Phase 1a Office	Hotel Construction 2024	Boom Lift	Aerial Lifts	Diesel	1	40	20.91429	1	0	0	0	284.5567	0	0
Phase 1a Office	Hotel Construction 2024	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0	0	0	0	0	0
Phase 1a Office	Hotel Construction 2024	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0	0	0	0	0	0

Phase 1a Office	Hotel Construction 2024	Concrete Pump	Pumps	Diesel	1	450	3	1	0	0	0	168.2381	0	0
Phase 1a Office	Hotel Construction 2024	Excavator	Excavators	Diesel	1	500	0	1	0	0	0	0	0	0
Phase 1a Office	Hotel Construction 2024	Generator	Generator Sets	Diesel	1	25	0	1	0	0	0	0	0	0
Phase 1a Office	Hotel Construction 2024	Gradall	Forklifts	Diesel	1	350	12	1	0	0	0	141.4615	0	0
Phase 1a Office	Hotel Construction 2024	Hydro/Crawler Crane	Cranes	Diesel	1	550	0	1	0	0	0	0	0	0
Phase 1a Office	Hotel Construction 2024	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	0	1	0	0	0	0	0	0
Phase 1a Office	Hotel Construction 2024	Paver	Pavers	Diesel	1	250	0	1	0	0	0	0	0	0
Phase 1a Office	Hotel Construction 2024	Pile Rig	Bore/Drill Rigs	Diesel	1	600	0	1	0	0	0	0	0	0
Phase 1a Office	Hotel Construction 2024	Pressure Washer	Pressure Washers	Diesel	1	25	0.06	1	0	0	0	0.493761	0	0
Phase 1a Office	Hotel Construction 2024	Scraper	Scrapers	Diesel	1	600	0	1	0	0	0	0	0	0
Phase 1a Office	Hotel Construction 2024	Tire Wash	Other Construction Equipment	Diesel	1	100	1.5	1	0	0	0	11.7763	0	0
Phase 1a Office	Hotel Construction 2025	Air Compressor	Air Compressors	Diesel	1	150	0.837662	1	0	0	0	0	6.9252	0
Phase 1a Office	Hotel Construction 2025	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	0	1	0	0	0	0	0	0
Phase 1a Office	Hotel Construction 2025	Blade	Graders	Diesel	1	450	0	1	0	0	0	0	0	0
Phase 1a Office	Hotel Construction 2025	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	0	1	0	0	0	0	0	0
Phase 1a Office	Hotel Construction 2025	Boom Lift	Aerial Lifts	Diesel	1	40	20.18182	1	0	0	0	0	236.848	0
Phase 1a Office	Hotel Construction 2025	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0	0	0	0	0	0
Phase 1a Office	Hotel Construction 2025	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0	0	0	0	0	0
Phase 1a Office	Hotel Construction 2025	Concrete Pump	Pumps	Diesel	1	450	0.837662	1	0	0	0	0	31.3093	0
Phase 1a Office	Hotel Construction 2025	Excavator	Excavators	Diesel	1	500	0	1	0	0	0	0	0	0
Phase 1a Office	Hotel Construction 2025	Generator	Generator Sets	Diesel	1	25	0	1	0	0	0	0	0	0
Phase 1a Office	Hotel Construction 2025	Gradall	Forklifts	Diesel	1	350	12.07792	1	0	0	0	0	94.89654	0
Phase 1a Office	Hotel Construction 2025	Hydro/Crawler Crane	Cranes	Diesel	1	550	0	1	0	0	0	0	0	0
Phase 1a Office	Hotel Construction 2025	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	0	1	0	0	0	0	0	0
Phase 1a Office	Hotel Construction 2025	Paver	Pavers	Diesel	1	250	0	1	0	0	0	0	0	0
Phase 1a Office	Hotel Construction 2025	Pile Rig	Bore/Drill Rigs	Diesel	1	600	0	1	0	0	0	0	0	0
Phase 1a Office	Hotel Construction 2025	Pressure Washer	Pressure Washers	Diesel	1	25	0.016753	1	0	0	0	0	0.118918	0
Phase 1a Office	Hotel Construction 2025	Scraper	Scrapers	Diesel	1	600	0	1	0	0	0	0	0	0
Phase 1a Office	Hotel Construction 2025	Tire Wash	Other Construction Equipment	Diesel	1	100	1.50974	1	0	0	0	0	7.530583	0
Phase 1a Office	Town Square 2023	Air Compressor	Air Compressors	Diesel	1	150	0	1	0	0	0	0	0	0
Phase 1a Office	Town Square 2023	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	0	1	0	0	0	0	0	0
Phase 1a Office	Town Square 2023	Blade	Graders	Diesel	1	450	0	1	0	0	0	0	0	0
Phase 1a Office	Town Square 2023	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	3	1	0	0	52.942	0	0	0
Phase 1a Office	Town Square 2023	Boom Lift	Aerial Lifts	Diesel	1	40	1.5	1	0	0	27.75595	0	0	0
Phase 1a Office	Town Square 2023	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0	0	0	0	0	0
Phase 1a Office	Town Square 2023	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0	0	0	0	0	0
Phase 1a Office	Town Square 2023	Concrete Pump	Pumps	Diesel	1	450	0	1	0	0	0	0	0	0
Phase 1a Office	Town Square 2023	Excavator	Excavators	Diesel	1	500	12	1	0	0	522.1948	0	0	0
Phase 1a Office	Town Square 2023	Generator	Generator Sets	Diesel	1	25	6	1	0	0	86.66184	0	0	0
Phase 1a Office	Town Square 2023	Gradall	Forklifts	Diesel	1	350	6	1	0	0	96.19379	0	0	0
Phase 1a Office	Town Square 2023	Hydro/Crawler Crane	Cranes	Diesel	1	550	0	1	0	0	0	0	0	0
Phase 1a Office	Town Square 2023	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	12	1	0	0	112.873	0	0	0
Phase 1a Office	Town Square 2023	Paver	Pavers	Diesel	1	250	0	1	0	0	0	0	0	0
Phase 1a Office	Town Square 2023	Pile Rig	Bore/Drill Rigs	Diesel	1	600	0	1	0	0	0	0	0	0
Phase 1a Office	Town Square 2023	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0	0	0	0	0	0
Phase 1a Office	Town Square 2023	Scraper	Scrapers	Diesel	1	600	0	1	0	0	0	0	0	0
Phase 1a Office	Town Square 2023	Tire Wash	Other Construction Equipment	Diesel	1	100	3	1	0	0	32.03154	0	0	0
Phase 1a Office	Town Square 2024	Air Compressor	Air Compressors	Diesel	1	150	0	1	0	0	0	0	0	0
Phase 1a Office	Town Square 2024	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	0	1	0	0	0	0	0	0
Phase 1a Office	Town Square 2024	Blade	Graders	Diesel	1	450	0	1	0	0	0	0	0	0
Phase 1a Office	Town Square 2024	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	0.996183	1	0	0	0	19.35275	0	0
Phase 1a Office	Town Square 2024	Boom Lift	Aerial Lifts	Diesel	1	40	1.872137	1	0	0	0	38.13527	0	0
Phase 1a Office	Town Square 2024	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0	0	0	0	0	0
Phase 1a Office	Town Square 2024	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0	0	0	0	0	0
Phase 1a Office	Town Square 2024	Concrete Pump	Pumps	Diesel	1	450	0.020382	1	0	0	0	1.711222	0	0
Phase 1a Office	Town Square 2024	Excavator	Excavators	Diesel	1	500	3.984733	1	0	0	0	190.8864	0	0

Phase 1a Office	Town Square 2024	Generator	Generator Sets	Diesel	1	25	0.549618	1	0	0	0	8.819458	0	0
Phase 1a Office	Town Square 2024	Gradall	Forklifts	Diesel	1	350	5.267176	1	0	0	0	92.96038	0	0
Phase 1a Office	Town Square 2024	Hydro/Crawler Crane	Cranes	Diesel	1	550	1.03145	1	0	0	0	41.47927	0	0
Phase 1a Office	Town Square 2024	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	3.984733	1	0	0	0	41.26031	0	0
Phase 1a Office	Town Square 2024	Paver	Pavers	Diesel	1	250	0	1	0	0	0	0	0	0
Phase 1a Office	Town Square 2024	Pile Rig	Bore/Drill Rigs	Diesel	1	600	0	1	0	0	0	0	0	0
Phase 1a Office	Town Square 2024	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0	0	0	0	0	0
Phase 1a Office	Town Square 2024	Scraper	Scrapers	Diesel	1	600	0	1	0	0	0	0	0	0
Phase 1a Office	Town Square 2024	Tire Wash	Other Construction Equipment	Diesel	1	100	0.996183	1	0	0	0	11.70901	0	0
Phase 1a Office	Town Square 2025	Air Compressor	Air Compressors	Diesel	1	150	0	1	0	0	0	0	0	0
Phase 1a Office	Town Square 2025	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	0	1	0	0	0	0	0	0
Phase 1a Office	Town Square 2025	Blade	Graders	Diesel	1	450	0	1	0	0	0	0	0	0
Phase 1a Office	Town Square 2025	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	0	1	0	0	0	0	0	0
Phase 1a Office	Town Square 2025	Boom Lift	Aerial Lifts	Diesel	1	40	0	1	0	0	0	0	0	0
Phase 1a Office	Town Square 2025	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0	0	0	0	0	0
Phase 1a Office	Town Square 2025	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0	0	0	0	0	0
Phase 1a Office	Town Square 2025	Concrete Pump	Pumps	Diesel	1	450	0	1	0	0	0	0	0	0
Phase 1a Office	Town Square 2025	Excavator	Excavators	Diesel	1	500	0	1	0	0	0	0	0	0
Phase 1a Office	Town Square 2025	Generator	Generator Sets	Diesel	1	25	0	1	0	0	0	0	0	0
Phase 1a Office	Town Square 2025	Gradall	Forklifts	Diesel	1	350	18	1	0	0	0	0	101.0189	0
Phase 1a Office	Town Square 2025	Hydro/Crawler Crane	Cranes	Diesel	1	550	0.18	1	0	0	0	0	2.301788	0
Phase 1a Office	Town Square 2025	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	0	1	0	0	0	0	0	0
Phase 1a Office	Town Square 2025	Paver	Pavers	Diesel	1	250	0	1	0	0	0	0	0	0
Phase 1a Office	Town Square 2025	Pile Rig	Bore/Drill Rigs	Diesel	1	600	0	1	0	0	0	0	0	0
Phase 1a Office	Town Square 2025	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0	0	0	0	0	0
Phase 1a Office	Town Square 2025	Scraper	Scrapers	Diesel	1	600	0	1	0	0	0	0	0	0
Phase 1a Office	Town Square 2025	Tire Wash	Other Construction Equipment	Diesel	1	100	0	1	0	0	0	0	0	0
Phase 1a Mixed Use	Parcel 2 Foundations	Pile Rig	Bore/Drill Rigs	Diesel	0	600	8	0.4	0	0	0	0	0	0
Phase 1a Mixed Use	Parcel 2 Foundations	Generator	Generator Sets	Diesel	0	25	6	1	0	0	0	0	0	0
Phase 1a Mixed Use	Parcel 2 Foundations	Tire Wash	Other Construction Equipment	Diesel	1	100	4	0.9	0	0	26.00207	0	0	0
Phase 1a Mixed Use	Parcel 2 Foundations	Excavator	Excavators	Diesel	1	131	8	0.6	0	0	38.63198	0	0	0
Phase 1a Mixed Use	Parcel 2 Foundations	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	90	8	0.6	0	0	27.48791	0	0	0
Phase 1a Mixed Use	Parcel 2 Foundations	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	70	8	0.8	0	0	167.1233	0	0	0
Phase 1a Mixed Use	Parcel 2 Foundations	Gradall	Forklifts	Diesel	1	74	4	0.8	0	0	47.74951	0	0	0
Phase 1a Mixed Use	Parcel 2 Foundations	Crane	Cranes	Diesel	1	215	4	0.5	0	0	20.11698	0	0	0
Phase 1a Mixed Use	Parcel 2 Foundations	Concrete Pump	Pumps	Diesel	1	450	8	0.15	0	0	61.91161	0	0	0
Phase 1a Mixed Use	Parcel 2 Core and Shell	Generator	Generator Sets	Diesel	0	25	6	1	0	0	0	0	0	0
Phase 1a Mixed Use	Parcel 2 Core and Shell	Tire Wash	Other Construction Equipment	Diesel	1	100	4	0.9	0	0	10.33623	18.73441	0	0
Phase 1a Mixed Use	Parcel 2 Core and Shell	Crane	Cranes	Diesel	1	600	8	0.2	0	0	17.14628	31.07764	0	0
Phase 1a Mixed Use	Parcel 2 Core and Shell	Gradall	Forklifts	Diesel	1	74	4	0.8	0	0	18.98117	34.40337	0	0
Phase 1a Mixed Use	Parcel 2 Core and Shell	Concrete Pump	Pumps	Diesel	0	450	6	0.225	0	0	0	0	0	0
Phase 1a Mixed Use	Parcel 2 Core and Shell	Air Compressor	Air Compressors	Diesel	0	140	2	0.4	0	0	0	0	0	0
Phase 1a Mixed Use	Parcel 2 Core and Shell	Boom Lift	Aerial Lifts	Diesel	0	50	6	0.2	0	0	0	0	0	0
Phase 1a Mixed Use	Parcel 2 Tenant Improvements	Generator	Generator Sets	Diesel	0	25	6	0.85	0	0	0	0	0	0
Phase 1a Mixed Use	Parcel 2 Tenant Improvements	Tire Wash	Other Construction Equipment	Diesel	1	100	4	0.9	0	0	0	23.74102	13.29269	0
Phase 1a Mixed Use	Parcel 2 Tenant Improvements	Gradall	Forklifts	Diesel	1	74	4	0.8	0	0	0	43.59738	33.09246	0
Phase 1a Mixed Use	Parcel 2 Landscaping	Excavator	Excavators	Diesel	1	25	8	0.9	0	0	0	0	24.80134	0
Phase 1a Mixed Use	Parcel 2 Landscaping	Generator	Generator Sets	Diesel	0	25	6	0.5	0	0	0	0	0	0
Phase 1a Mixed Use	Parcel 2 Landscaping	Tire Wash	Other Construction Equipment	Diesel	1	100	4	0.9	0	0	0	0	6.879552	0
Phase 1a Mixed Use	Parcel 2 Landscaping	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	90	8	1	0	0	0	0	12.12111	0
Phase 1a Mixed Use	Parcel 2 Landscaping	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	70	8	0.8	0	0	0	0	59.94381	0
Phase 1a Mixed Use	Parcel 3 Foundations	Pile Rig	Bore/Drill Rigs	Diesel	0	600	8	0.4	0	0	0	0	0	0
Phase 1a Mixed Use	Parcel 3 Foundations	Generator	Generator Sets	Diesel	0	25	6	1	0	0	0	0	0	0
Phase 1a Mixed Use	Parcel 3 Foundations	Tire Wash	Other Construction Equipment	Diesel	1	100	4	0.9	0	0	25.84057	0.161504	0	0
Phase 1a Mixed Use	Parcel 3 Foundations	Excavator	Excavators	Diesel	1	131	8	0.6	0	0	38.39203	0.23995	0	0
Phase 1a Mixed Use	Parcel 3 Foundations	Backhoe	Tractors/Loaders/Backhoes	Diesel	2	90	8	0.6	0	0	54.63435	0.341465	0	0

Phase 1a Mixed Use	Parcel 3 Foundations	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	70	8	0.8	0	0	166.0852	1.038033	0	0
Phase 1a Mixed Use	Parcel 3 Foundations	Gradall	Forklifts	Diesel	1	74	4	0.8	0	0	47.45293	0.296581	0	0
Phase 1a Mixed Use	Parcel 3 Foundations	Crane	Cranes	Diesel	1	215	4	0.5	0	0	19.99203	0.12495	0	0
Phase 1a Mixed Use	Parcel 3 Foundations	Concrete Pump	Pumps	Diesel	1	450	8	0.15	0	0	61.52707	0.384544	0	0
Phase 1a Mixed Use	Parcel 3 Core and Shell	Generator	Generator Sets	Diesel	0	25	6	1	0	0	0	0	0	0
Phase 1a Mixed Use	Parcel 3 Core and Shell	Tire Wash	Other Construction Equipment	Diesel	1	100	4	0.9	0	0	0	29.07064	0	0
Phase 1a Mixed Use	Parcel 3 Core and Shell	Crane	Cranes	Diesel	1	600	8	0.2	0	0	0	48.22392	0	0
Phase 1a Mixed Use	Parcel 3 Core and Shell	Gradall	Forklifts	Diesel	2	74	4	0.8	0	0	0	106.7691	0	0
Phase 1a Mixed Use	Parcel 3 Core and Shell	Concrete Pump	Pumps	Diesel	0	450	6	0.225	0	0	0	0	0	0
Phase 1a Mixed Use	Parcel 3 Core and Shell	Air Compressor	Air Compressors	Diesel	0	140	2	0.4	0	0	0	0	0	0
Phase 1a Mixed Use	Parcel 3 Core and Shell	Boom Lift	Aerial Lifts	Diesel	0	50	6	0.2	0	0	0	0	0	0
Phase 1a Mixed Use	Parcel 3 Tenant Improvements	Generator	Generator Sets	Diesel	0	25	6	0.85	0	0	0	0	0	0
Phase 1a Mixed Use	Parcel 3 Tenant Improvements	Tire Wash	Other Construction Equipment	Diesel	1	100	4	0.9	0	0	0	13.24329	20.75526	0
Phase 1a Mixed Use	Parcel 3 Tenant Improvements	Gradall	Forklifts	Diesel	1	74	4	0.8	0	0	0	24.31962	51.67069	0
Phase 1a Mixed Use	Parcel 3 Landscaping	Excavator	Excavators	Diesel	1	25	8	0.9	0	0	0	0	24.38098	0
Phase 1a Mixed Use	Parcel 3 Landscaping	Generator	Generator Sets	Diesel	0	25	6	0.5	0	0	0	0	0	0
Phase 1a Mixed Use	Parcel 3 Landscaping	Tire Wash	Other Construction Equipment	Diesel	0	100	4	0.9	0	0	0	0	0	0
Phase 1a Mixed Use	Parcel 3 Landscaping	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	90	8	1	0	0	0	0	11.91567	0
Phase 1a Mixed Use	Parcel 3 Landscaping	Bob Cat	Tractors/Loaders/Backhoes	Diesel	2	70	8	0.8	0	0	0	0	117.8556	0
Phase 1b	Demolition	Excavator	Excavators	Diesel	4	131	8	0.9	0	69.10565	0	0	0	0
Phase 1b	Demolition	Generator	Generator Sets	Diesel	2	25	6	0.5	0	17.31885	0	0	0	0
Phase 1b	Demolition	Tire Wash	Other Construction Equipment	Diesel	2	100	4	0.9	0	15.50434	0	0	0	0
Phase 1b	Demolition	Concrete Crusher	Crushing/Proc. Equipment	Diesel	2	200	2	0	0	0	0	0	0	0
Phase 1b	Demolition	Bob Cat	Tractors/Loaders/Backhoes	Diesel	6	150	8	0.8	0	102.7284	0	0	0	0
Phase 1b	Demolition	Pressure Washer	Pressure Washers	Diesel	2	25	8	1	0	36.11508	0	0	0	0
Phase 1b	Demolition	Air Compressor	Air Compressors	Diesel	1	140	6	0.7	0	13.60457	0	0	0	0
Phase 1b	Grading and Utilities	Blade	Graders	Diesel	2	359	8	0.15	0	22.09651	22.09651	0	0	0
Phase 1b	Grading and Utilities	Scraper	Scrapers	Diesel	2	52	8	0.15	0	24.38375	24.38375	0	0	0
Phase 1b	Grading and Utilities	Loader	Tractors/Loaders/Backhoes	Diesel	4	100	4	0.9	0	36.99201	36.99201	0	0	0
Phase 1b	Grading and Utilities	Tire Wash	Other Construction Equipment	Diesel	2	100	4	0.9	0	20.99546	20.99546	0	0	0
Phase 1b	Grading and Utilities	Excavator	Excavators	Diesel	4	359	8	0.6	0	163.8375	163.8375	0	0	0
Phase 1b	Grading and Utilities	Backhoe	Tractors/Loaders/Backhoes	Diesel	4	350	8	0.6	0	155.5268	155.5268	0	0	0
Phase 1b	Grading and Utilities	Gradall	Forklifts	Diesel	4	350	4	0.6	0	42.03426	42.03426	0	0	0
Phase 1b	Grading and Utilities	Compactor	Other Construction Equipment	Diesel	4	250	0.5	0.2	0	2.735477	2.735477	0	0	0
Phase 1b	Grading and Utilities	Paver	Pavers	Diesel	2	250	8	0.01	0	1.094191	1.094191	0	0	0
Phase 1b	Grading and Utilities	Generator	Generator Sets	Diesel	1	600	2	0.1	0	5.554527	5.554527	0	0	0
Phase 1b Office	South Garage 2023	Air Compressor	Air Compressors	Diesel	1	150	0.48	1	0	0	7.010516	0	0	0
Phase 1b Office	South Garage 2023	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	0.054653	1	0	0	1.375814	0	0	0
Phase 1b Office	South Garage 2023	Blade	Graders	Diesel	1	450	0	1	0	0	0	0	0	0
Phase 1b Office	South Garage 2023	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	0.054653	1	0	0	0.818599	0	0	0
Phase 1b Office	South Garage 2023	Boom Lift	Aerial Lifts	Diesel	1	40	0	1	0	0	0	0	0	0
Phase 1b Office	South Garage 2023	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0	0	0	0	0	0
Phase 1b Office	South Garage 2023	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0	0	0	0	0	0
Phase 1b Office	South Garage 2023	Concrete Pump	Pumps	Diesel	1	450	0.451485	1	0	0	29.22536	0	0	0
Phase 1b Office	South Garage 2023	Excavator	Excavators	Diesel	1	500	2.970297	1	0	0	109.7048	0	0	0
Phase 1b Office	South Garage 2023	Generator	Generator Sets	Diesel	1	25	3.237624	1	0	0	39.68966	0	0	0
Phase 1b Office	South Garage 2023	Gradall	Forklifts	Diesel	1	350	3	1	0	0	40.82173	0	0	0
Phase 1b Office	South Garage 2023	Hydro/Crawler Crane	Cranes	Diesel	1	550	4.923267	1	0	0	152.6463	0	0	0
Phase 1b Office	South Garage 2023	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	1.485149	1	0	0	11.85641	0	0	0
Phase 1b Office	South Garage 2023	Paver	Pavers	Diesel	1	250	0	1	0	0	0	0	0	0
Phase 1b Office	South Garage 2023	Pile Rig	Bore/Drill Rigs	Diesel	1	600	0.861386	1	0	0	50.23325	0	0	0
Phase 1b Office	South Garage 2023	Pressure Washer	Pressure Washers	Diesel	1	25	0.156832	1	0	0	1.489747	0	0	0
Phase 1b Office	South Garage 2023	Scraper	Scrapers	Diesel	1	600	0	1	0	0	0	0	0	0
Phase 1b Office	South Garage 2023	Tire Wash	Other Construction Equipment	Diesel	1	100	1.44802	1	0	0	13.12216	0	0	0
Phase 1b Office	South Garage 2024	Air Compressor	Air Compressors	Diesel	1	150	0.48	1	0	0	0	6.524639	0	0
Phase 1b Office	South Garage 2024	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	0	1	0	0	0	0	0	0

Phase 1b Office	South Garage 2024	Blade	Graders	Diesel	1	450	0	1	0	0	0	0	0	0	0
Phase 1b Office	South Garage 2024	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	0	1	0	0	0	0	0	0	0
Phase 1b Office	South Garage 2024	Boom Lift	Aerial Lifts	Diesel	1	40	4.737447	1	0	0	0	69.24525	0	0	0
Phase 1b Office	South Garage 2024	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0	0	0	0	0	0	0
Phase 1b Office	South Garage 2024	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0	0	0	0	0	0	0
Phase 1b Office	South Garage 2024	Concrete Pump	Pumps	Diesel	1	450	0.6	1	0	0	0	36.14715	0	0	0
Phase 1b Office	South Garage 2024	Excavator	Excavators	Diesel	1	500	0	1	0	0	0	0	0	0	0
Phase 1b Office	South Garage 2024	Generator	Generator Sets	Diesel	1	25	0	1	0	0	0	0	0	0	0
Phase 1b Office	South Garage 2024	Gradall	Forklifts	Diesel	1	350	3	1	0	0	0	37.9925	0	0	0
Phase 1b Office	South Garage 2024	Hydro/Crawler Crane	Cranes	Diesel	1	550	3.68617	1	0	0	0	106.3689	0	0	0
Phase 1b Office	South Garage 2024	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	0	1	0	0	0	0	0	0	0
Phase 1b Office	South Garage 2024	Paver	Pavers	Diesel	1	250	0	1	0	0	0	0	0	0	0
Phase 1b Office	South Garage 2024	Pile Rig	Bore/Drill Rigs	Diesel	1	600	0	1	0	0	0	0	0	0	0
Phase 1b Office	South Garage 2024	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0	0	0	0	0	0	0
Phase 1b Office	South Garage 2024	Scraper	Scrapers	Diesel	1	600	0	1	0	0	0	0	0	0	0
Phase 1b Office	South Garage 2024	Tire Wash	Other Construction Equipment	Diesel	1	100	1.5	1	0	0	0	12.65111	0	0	0
Phase 1b Office	Office Building 3 2023	Air Compressor	Air Compressors	Diesel	1	150	0.067119	1	0	0	0.858962	0	0	0	0
Phase 1b Office	Office Building 3 2023	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	2.576271	1	0	0	56.82709	0	0	0	0
Phase 1b Office	Office Building 3 2023	Blade	Graders	Diesel	1	450	0	1	0	0	0	0	0	0	0
Phase 1b Office	Office Building 3 2023	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	2.576271	1	0	0	33.8117	0	0	0	0
Phase 1b Office	Office Building 3 2023	Boom Lift	Aerial Lifts	Diesel	1	40	1.694915	1	0	0	23.32432	0	0	0	0
Phase 1b Office	Office Building 3 2023	Compactor	Other Construction Equipment	Diesel	1	250	0.206102	1	0	0	3.838085	0	0	0	0
Phase 1b Office	Office Building 3 2023	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0	0	0	0	0	0	0
Phase 1b Office	Office Building 3 2023	Concrete Pump	Pumps	Diesel	1	450	0.121356	1	0	0	6.883341	0	0	0	0
Phase 1b Office	Office Building 3 2023	Excavator	Excavators	Diesel	1	500	0.128814	1	0	0	4.168782	0	0	0	0
Phase 1b Office	Office Building 3 2023	Generator	Generator Sets	Diesel	1	25	4.813559	1	0	0	51.7058	0	0	0	0
Phase 1b Office	Office Building 3 2023	Gradall	Forklifts	Diesel	1	350	0.48	1	0	0	5.723126	0	0	0	0
Phase 1b Office	Office Building 3 2023	Hydro/Crawler Crane	Cranes	Diesel	1	550	3.322034	1	0	0	90.25241	0	0	0	0
Phase 1b Office	Office Building 3 2023	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	1.864407	1	0	0	13.04205	0	0	0	0
Phase 1b Office	Office Building 3 2023	Paver	Pavers	Diesel	1	250	0	1	0	0	0	0	0	0	0
Phase 1b Office	Office Building 3 2023	Pile Rig	Bore/Drill Rigs	Diesel	1	600	1.864407	1	0	0	95.26996	0	0	0	0
Phase 1b Office	Office Building 3 2023	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0	0	0	0	0	0	0
Phase 1b Office	Office Building 3 2023	Scraper	Scrapers	Diesel	1	600	0	1	0	0	0	0	0	0	0
Phase 1b Office	Office Building 3 2023	Tire Wash	Other Construction Equipment	Diesel	1	100	1.5	1	0	0	11.91089	0	0	0	0
Phase 1b Office	Office Building 3 2024	Air Compressor	Air Compressors	Diesel	1	150	0	1	0	0	0	0	0	0	0
Phase 1b Office	Office Building 3 2024	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	0	1	0	0	0	0	0	0	0
Phase 1b Office	Office Building 3 2024	Blade	Graders	Diesel	1	450	0	1	0	0	0	0	0	0	0
Phase 1b Office	Office Building 3 2024	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	0	1	0	0	0	0	0	0	0
Phase 1b Office	Office Building 3 2024	Boom Lift	Aerial Lifts	Diesel	1	40	6.858779	1	0	0	0	139.7127	0	0	0
Phase 1b Office	Office Building 3 2024	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0	0	0	0	0	0	0
Phase 1b Office	Office Building 3 2024	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0	0	0	0	0	0	0
Phase 1b Office	Office Building 3 2024	Concrete Pump	Pumps	Diesel	1	450	0.005038	1	0	0	0	0.422999	0	0	0
Phase 1b Office	Office Building 3 2024	Excavator	Excavators	Diesel	1	500	0	1	0	0	0	0	0	0	0
Phase 1b Office	Office Building 3 2024	Generator	Generator Sets	Diesel	1	25	0	1	0	0	0	0	0	0	0
Phase 1b Office	Office Building 3 2024	Gradall	Forklifts	Diesel	1	350	0.48	1	0	0	0	8.47152	0	0	0
Phase 1b Office	Office Building 3 2024	Hydro/Crawler Crane	Cranes	Diesel	1	550	0	1	0	0	0	0	0	0	0
Phase 1b Office	Office Building 3 2024	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	0	1	0	0	0	0	0	0	0
Phase 1b Office	Office Building 3 2024	Paver	Pavers	Diesel	1	250	0	1	0	0	0	0	0	0	0
Phase 1b Office	Office Building 3 2024	Pile Rig	Bore/Drill Rigs	Diesel	1	600	0	1	0	0	0	0	0	0	0
Phase 1b Office	Office Building 3 2024	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0	0	0	0	0	0	0
Phase 1b Office	Office Building 3 2024	Scraper	Scrapers	Diesel	1	600	0	1	0	0	0	0	0	0	0
Phase 1b Office	Office Building 3 2024	Tire Wash	Other Construction Equipment	Diesel	1	100	1.5	1	0	0	0	17.63081	0	0	0
Phase 1b Office	Office Building 3 2025	Air Compressor	Air Compressors	Diesel	1	150	0	1	0	0	0	0	0	0	0
Phase 1b Office	Office Building 3 2025	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	0	1	0	0	0	0	0	0	0
Phase 1b Office	Office Building 3 2025	Blade	Graders	Diesel	1	450	0	1	0	0	0	0	0	0	0
Phase 1b Office	Office Building 3 2025	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	0	1	0	0	0	0	0	0	0

Phase 1b Office	Office Building 3 2025	Boom Lift	Aerial Lifts	Diesel	1	40	0	1	0	0	0	0	0	0
Phase 1b Office	Office Building 3 2025	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0	0	0	0	0	0
Phase 1b Office	Office Building 3 2025	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0	0	0	0	0	0
Phase 1b Office	Office Building 3 2025	Concrete Pump	Pumps	Diesel	1	450	0	1	0	0	0	0	0	0
Phase 1b Office	Office Building 3 2025	Excavator	Excavators	Diesel	1	500	0	1	0	0	0	0	0	0
Phase 1b Office	Office Building 3 2025	Generator	Generator Sets	Diesel	1	25	0	1	0	0	0	0	0	0
Phase 1b Office	Office Building 3 2025	Gradall	Forklifts	Diesel	1	350	0.48	1	0	0	0	0	1.518345	0
Phase 1b Office	Office Building 3 2025	Hydro/Crawler Crane	Cranes	Diesel	1	550	0	1	0	0	0	0	0	0
Phase 1b Office	Office Building 3 2025	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	0	1	0	0	0	0	0	0
Phase 1b Office	Office Building 3 2025	Paver	Pavers	Diesel	1	250	0	1	0	0	0	0	0	0
Phase 1b Office	Office Building 3 2025	Pile Rig	Bore/Drill Rigs	Diesel	1	600	0	1	0	0	0	0	0	0
Phase 1b Office	Office Building 3 2025	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0	0	0	0	0	0
Phase 1b Office	Office Building 3 2025	Scraper	Scrapers	Diesel	1	600	0	1	0	0	0	0	0	0
Phase 1b Office	Office Building 3 2025	Tire Wash	Other Construction Equipment	Diesel	1	100	1.5	1	0	0	0	0	3.012233	0
Phase 1b Office	Office Building 1 2023	Air Compressor	Air Compressors	Diesel	1	150	0.065363	1	0	0	0.845947	0	0	0
Phase 1b Office	Office Building 1 2023	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	2.24581	1	0	0	50.09756	0	0	0
Phase 1b Office	Office Building 1 2023	Blade	Graders	Diesel	1	450	0	1	0	0	0	0	0	0
Phase 1b Office	Office Building 1 2023	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	2.24581	1	0	0	29.80768	0	0	0
Phase 1b Office	Office Building 1 2023	Boom Lift	Aerial Lifts	Diesel	1	40	2.480447	1	0	0	34.52	0	0	0
Phase 1b Office	Office Building 1 2023	Compactor	Other Construction Equipment	Diesel	1	250	0.179665	1	0	0	3.383575	0	0	0
Phase 1b Office	Office Building 1 2023	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0	0	0	0	0	0
Phase 1b Office	Office Building 1 2023	Concrete Pump	Pumps	Diesel	1	450	0.109274	1	0	0	6.26807	0	0	0
Phase 1b Office	Office Building 1 2023	Excavator	Excavators	Diesel	1	500	0.112291	1	0	0	3.675111	0	0	0
Phase 1b Office	Office Building 1 2023	Generator	Generator Sets	Diesel	1	25	4.424581	1	0	0	48.06455	0	0	0
Phase 1b Office	Office Building 1 2023	Gradall	Forklifts	Diesel	1	350	0.48	1	0	0	5.787794	0	0	0
Phase 1b Office	Office Building 1 2023	Hydro/Crawler Crane	Cranes	Diesel	1	550	2.916201	1	0	0	80.12203	0	0	0
Phase 1b Office	Office Building 1 2023	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	1.47486	1	0	0	10.43364	0	0	0
Phase 1b Office	Office Building 1 2023	Paver	Pavers	Diesel	1	250	0	1	0	0	0	0	0	0
Phase 1b Office	Office Building 1 2023	Pile Rig	Bore/Drill Rigs	Diesel	1	600	1.47486	1	0	0	76.21597	0	0	0
Phase 1b Office	Office Building 1 2023	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0	0	0	0	0	0
Phase 1b Office	Office Building 1 2023	Scraper	Scrapers	Diesel	1	600	0	1	0	0	0	0	0	0
Phase 1b Office	Office Building 1 2023	Tire Wash	Other Construction Equipment	Diesel	1	100	1.5	1	0	0	12.04547	0	0	0
Phase 1b Office	Office Building 1 2024	Air Compressor	Air Compressors	Diesel	1	150	0	1	0	0	0	0	0	0
Phase 1b Office	Office Building 1 2024	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	0	1	0	0	0	0	0	0
Phase 1b Office	Office Building 1 2024	Blade	Graders	Diesel	1	450	0	1	0	0	0	0	0	0
Phase 1b Office	Office Building 1 2024	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	0	1	0	0	0	0	0	0
Phase 1b Office	Office Building 1 2024	Boom Lift	Aerial Lifts	Diesel	1	40	6.554217	1	0	0	0	126.8843	0	0
Phase 1b Office	Office Building 1 2024	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0	0	0	0	0	0
Phase 1b Office	Office Building 1 2024	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0	0	0	0	0	0
Phase 1b Office	Office Building 1 2024	Concrete Pump	Pumps	Diesel	1	450	0.005301	1	0	0	0	0.422999	0	0
Phase 1b Office	Office Building 1 2024	Excavator	Excavators	Diesel	1	500	0	1	0	0	0	0	0	0
Phase 1b Office	Office Building 1 2024	Generator	Generator Sets	Diesel	1	25	0	1	0	0	0	0	0	0
Phase 1b Office	Office Building 1 2024	Gradall	Forklifts	Diesel	1	350	0.478072	1	0	0	0	8.018843	0	0
Phase 1b Office	Office Building 1 2024	Hydro/Crawler Crane	Cranes	Diesel	1	550	0	1	0	0	0	0	0	0
Phase 1b Office	Office Building 1 2024	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	0	1	0	0	0	0	0	0
Phase 1b Office	Office Building 1 2024	Paver	Pavers	Diesel	1	250	0	1	0	0	0	0	0	0
Phase 1b Office	Office Building 1 2024	Pile Rig	Bore/Drill Rigs	Diesel	1	600	0	1	0	0	0	0	0	0
Phase 1b Office	Office Building 1 2024	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0	0	0	0	0	0
Phase 1b Office	Office Building 1 2024	Scraper	Scrapers	Diesel	1	600	0	1	0	0	0	0	0	0
Phase 1b Office	Office Building 1 2024	Tire Wash	Other Construction Equipment	Diesel	1	100	1.5	1	0	0	0	16.75599	0	0
Phase 1b Office	Office Building 2 2023	Air Compressor	Air Compressors	Diesel	1	150	0.075669	1	0	0	0.858962	0	0	0
Phase 1b Office	Office Building 2 2023	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	2.484076	1	0	0	48.60211	0	0	0
Phase 1b Office	Office Building 2 2023	Blade	Graders	Diesel	1	450	0	1	0	0	0	0	0	0
Phase 1b Office	Office Building 2 2023	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	2.484076	1	0	0	28.9179	0	0	0
Phase 1b Office	Office Building 2 2023	Boom Lift	Aerial Lifts	Diesel	1	40	1.22293	1	0	0	14.92757	0	0	0
Phase 1b Office	Office Building 2 2023	Compactor	Other Construction Equipment	Diesel	1	250	0.198726	1	0	0	3.282572	0	0	0

Phase 1b Office	Office Building 2 2023	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0	0	0	0	0	0
Phase 1b Office	Office Building 2 2023	Concrete Pump	Pumps	Diesel	1	450	0.124204	1	0	0	6.248843	0	0	0
Phase 1b Office	Office Building 2 2023	Excavator	Excavators	Diesel	1	500	0.124204	1	0	0	3.565406	0	0	0
Phase 1b Office	Office Building 2 2023	Generator	Generator Sets	Diesel	1	25	5.006369	1	0	0	47.70042	0	0	0
Phase 1b Office	Office Building 2 2023	Gradall	Forklifts	Diesel	1	350	0.48	1	0	0	5.076445	0	0	0
Phase 1b Office	Office Building 2 2023	Hydro/Crawler Crane	Cranes	Diesel	1	550	3.324841	1	0	0	80.12203	0	0	0
Phase 1b Office	Office Building 2 2023	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	1.681529	1	0	0	10.43364	0	0	0
Phase 1b Office	Office Building 2 2023	Paver	Pavers	Diesel	1	250	0	1	0	0	0	0	0	0
Phase 1b Office	Office Building 2 2023	Pile Rig	Bore/Drill Rigs	Diesel	1	600	1.681529	1	0	0	76.21597	0	0	0
Phase 1b Office	Office Building 2 2023	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0	0	0	0	0	0
Phase 1b Office	Office Building 2 2023	Scraper	Scrapers	Diesel	1	600	0	1	0	0	0	0	0	0
Phase 1b Office	Office Building 2 2023	Tire Wash	Other Construction Equipment	Diesel	1	100	1.5	1	0	0	10.56502	0	0	0
Phase 1b Office	Office Building 2 2024	Air Compressor	Air Compressors	Diesel	1	150	0	1	0	0	0	0	0	0
Phase 1b Office	Office Building 2 2024	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	0	1	0	0	0	0	0	0
Phase 1b Office	Office Building 2 2024	Blade	Graders	Diesel	1	450	0	1	0	0	0	0	0	0
Phase 1b Office	Office Building 2 2024	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	0	1	0	0	0	0	0	0
Phase 1b Office	Office Building 2 2024	Boom Lift	Aerial Lifts	Diesel	1	40	7.270992	1	0	0	0	148.1095	0	0
Phase 1b Office	Office Building 2 2024	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0	0	0	0	0	0
Phase 1b Office	Office Building 2 2024	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0	0	0	0	0	0
Phase 1b Office	Office Building 2 2024	Concrete Pump	Pumps	Diesel	1	450	0.005038	1	0	0	0	0.422999	0	0
Phase 1b Office	Office Building 2 2024	Excavator	Excavators	Diesel	1	500	0	1	0	0	0	0	0	0
Phase 1b Office	Office Building 2 2024	Generator	Generator Sets	Diesel	1	25	0	1	0	0	0	0	0	0
Phase 1b Office	Office Building 2 2024	Gradall	Forklifts	Diesel	1	350	0.48	1	0	0	0	8.47152	0	0
Phase 1b Office	Office Building 2 2024	Hydro/Crawler Crane	Cranes	Diesel	1	550	0	1	0	0	0	0	0	0
Phase 1b Office	Office Building 2 2024	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	0	1	0	0	0	0	0	0
Phase 1b Office	Office Building 2 2024	Paver	Pavers	Diesel	1	250	0	1	0	0	0	0	0	0
Phase 1b Office	Office Building 2 2024	Pile Rig	Bore/Drill Rigs	Diesel	1	600	0	1	0	0	0	0	0	0
Phase 1b Office	Office Building 2 2024	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0	0	0	0	0	0
Phase 1b Office	Office Building 2 2024	Scraper	Scrapers	Diesel	1	600	0	1	0	0	0	0	0	0
Phase 1b Office	Office Building 2 2024	Tire Wash	Other Construction Equipment	Diesel	1	100	1.5	1	0	0	0	17.63081	0	0
Phase 1b Office	Office Building 2 2025	Air Compressor	Air Compressors	Diesel	1	150	0	1	0	0	0	0	0	0
Phase 1b Office	Office Building 2 2025	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	0	1	0	0	0	0	0	0
Phase 1b Office	Office Building 2 2025	Blade	Graders	Diesel	1	450	0	1	0	0	0	0	0	0
Phase 1b Office	Office Building 2 2025	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	0	1	0	0	0	0	0	0
Phase 1b Office	Office Building 2 2025	Boom Lift	Aerial Lifts	Diesel	1	40	0	1	0	0	0	0	0	0
Phase 1b Office	Office Building 2 2025	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0	0	0	0	0	0
Phase 1b Office	Office Building 2 2025	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0	0	0	0	0	0
Phase 1b Office	Office Building 2 2025	Concrete Pump	Pumps	Diesel	1	450	0	1	0	0	0	0	0	0
Phase 1b Office	Office Building 2 2025	Excavator	Excavators	Diesel	1	500	0	1	0	0	0	0	0	0
Phase 1b Office	Office Building 2 2025	Generator	Generator Sets	Diesel	1	25	0	1	0	0	0	0	0	0
Phase 1b Office	Office Building 2 2025	Gradall	Forklifts	Diesel	1	350	0.48	1	0	0	0	0	0.171426	0
Phase 1b Office	Office Building 2 2025	Hydro/Crawler Crane	Cranes	Diesel	1	550	0	1	0	0	0	0	0	0
Phase 1b Office	Office Building 2 2025	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	0	1	0	0	0	0	0	0
Phase 1b Office	Office Building 2 2025	Paver	Pavers	Diesel	1	250	0	1	0	0	0	0	0	0
Phase 1b Office	Office Building 2 2025	Pile Rig	Bore/Drill Rigs	Diesel	1	600	0	1	0	0	0	0	0	0
Phase 1b Office	Office Building 2 2025	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0	0	0	0	0	0
Phase 1b Office	Office Building 2 2025	Scraper	Scrapers	Diesel	1	600	0	1	0	0	0	0	0	0
Phase 1b Office	Office Building 2 2025	Tire Wash	Other Construction Equipment	Diesel	1	100	1.5	1	0	0	0	0	0.340091	0
Phase 1b Office	Office Building 5 2023	Air Compressor	Air Compressors	Diesel	1	150	0.058812	1	0	0	0.858962	0	0	0
Phase 1b Office	Office Building 5 2023	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	2.643564	1	0	0	66.54751	0	0	0
Phase 1b Office	Office Building 5 2023	Blade	Graders	Diesel	1	450	0	1	0	0	0	0	0	0
Phase 1b Office	Office Building 5 2023	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	2.643564	1	0	0	39.59528	0	0	0
Phase 1b Office	Office Building 5 2023	Boom Lift	Aerial Lifts	Diesel	1	40	2.19802	1	0	0	34.52	0	0	0
Phase 1b Office	Office Building 5 2023	Compactor	Other Construction Equipment	Diesel	1	250	0.211485	1	0	0	4.494599	0	0	0
Phase 1b Office	Office Building 5 2023	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0	0	0	0	0	0
Phase 1b Office	Office Building 5 2023	Concrete Pump	Pumps	Diesel	1	450	0.117327	1	0	0	7.594748	0	0	0

Phase 1b Office	Office Building 5 2023	Excavator	Excavators	Diesel	1	500	0.132178	1	0	0	4.881864	0	0	0
Phase 1b Office	Office Building 5 2023	Generator	Generator Sets	Diesel	1	25	4.60396	1	0	0	56.43943	0	0	0
Phase 1b Office	Office Building 5 2023	Gradall	Forklifts	Diesel	1	350	0.48	1	0	0	6.531477	0	0	0
Phase 1b Office	Office Building 5 2023	Hydro/Crawler Crane	Cranes	Diesel	1	550	3.267327	1	0	0	101.3037	0	0	0
Phase 1b Office	Office Building 5 2023	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	1.960396	1	0	0	15.65046	0	0	0
Phase 1b Office	Office Building 5 2023	Paver	Pavers	Diesel	1	250	0	1	0	0	0	0	0	0
Phase 1b Office	Office Building 5 2023	Pile Rig	Bore/Drill Rigs	Diesel	1	600	1.960396	1	0	0	114.3239	0	0	0
Phase 1b Office	Office Building 5 2023	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0	0	0	0	0	0
Phase 1b Office	Office Building 5 2023	Scraper	Scrapers	Diesel	1	600	0	1	0	0	0	0	0	0
Phase 1b Office	Office Building 5 2023	Tire Wash	Other Construction Equipment	Diesel	1	100	1.5	1	0	0	13.59322	0	0	0
Phase 1b Office	Office Building 5 2024	Air Compressor	Air Compressors	Diesel	1	150	0	1	0	0	0	0	0	0
Phase 1b Office	Office Building 5 2024	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	0	1	0	0	0	0	0	0
Phase 1b Office	Office Building 5 2024	Blade	Graders	Diesel	1	450	0	1	0	0	0	0	0	0
Phase 1b Office	Office Building 5 2024	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	0	1	0	0	0	0	0	0
Phase 1b Office	Office Building 5 2024	Boom Lift	Aerial Lifts	Diesel	1	40	6.194656	1	0	0	0	126.1846	0	0
Phase 1b Office	Office Building 5 2024	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0	0	0	0	0	0
Phase 1b Office	Office Building 5 2024	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0	0	0	0	0	0
Phase 1b Office	Office Building 5 2024	Concrete Pump	Pumps	Diesel	1	450	0.004809	1	0	0	0	0.403771	0	0
Phase 1b Office	Office Building 5 2024	Excavator	Excavators	Diesel	1	500	0	1	0	0	0	0	0	0
Phase 1b Office	Office Building 5 2024	Generator	Generator Sets	Diesel	1	25	0	1	0	0	0	0	0	0
Phase 1b Office	Office Building 5 2024	Gradall	Forklifts	Diesel	1	350	0.48	1	0	0	0	8.47152	0	0
Phase 1b Office	Office Building 5 2024	Hydro/Crawler Crane	Cranes	Diesel	1	550	0	1	0	0	0	0	0	0
Phase 1b Office	Office Building 5 2024	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	0	1	0	0	0	0	0	0
Phase 1b Office	Office Building 5 2024	Paver	Pavers	Diesel	1	250	0	1	0	0	0	0	0	0
Phase 1b Office	Office Building 5 2024	Pile Rig	Bore/Drill Rigs	Diesel	1	600	0	1	0	0	0	0	0	0
Phase 1b Office	Office Building 5 2024	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0	0	0	0	0	0
Phase 1b Office	Office Building 5 2024	Scraper	Scrapers	Diesel	1	600	0	1	0	0	0	0	0	0
Phase 1b Office	Office Building 5 2024	Tire Wash	Other Construction Equipment	Diesel	1	100	1.5	1	0	0	0	17.63081	0	0
Phase 1b Office	Office Building 5 2025	Air Compressor	Air Compressors	Diesel	1	150	0	1	0	0	0	0	0	0
Phase 1b Office	Office Building 5 2025	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	0	1	0	0	0	0	0	0
Phase 1b Office	Office Building 5 2025	Blade	Graders	Diesel	1	450	0	1	0	0	0	0	0	0
Phase 1b Office	Office Building 5 2025	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	0	1	0	0	0	0	0	0
Phase 1b Office	Office Building 5 2025	Boom Lift	Aerial Lifts	Diesel	1	40	0	1	0	0	0	0	0	0
Phase 1b Office	Office Building 5 2025	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0	0	0	0	0	0
Phase 1b Office	Office Building 5 2025	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0	0	0	0	0	0
Phase 1b Office	Office Building 5 2025	Concrete Pump	Pumps	Diesel	1	450	0	1	0	0	0	0	0	0
Phase 1b Office	Office Building 5 2025	Excavator	Excavators	Diesel	1	500	0	1	0	0	0	0	0	0
Phase 1b Office	Office Building 5 2025	Generator	Generator Sets	Diesel	1	25	0	1	0	0	0	0	0	0
Phase 1b Office	Office Building 5 2025	Gradall	Forklifts	Diesel	1	350	0.48	1	0	0	0	0	1.395897	0
Phase 1b Office	Office Building 5 2025	Hydro/Crawler Crane	Cranes	Diesel	1	550	0	1	0	0	0	0	0	0
Phase 1b Office	Office Building 5 2025	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	0	1	0	0	0	0	0	0
Phase 1b Office	Office Building 5 2025	Paver	Pavers	Diesel	1	250	0	1	0	0	0	0	0	0
Phase 1b Office	Office Building 5 2025	Pile Rig	Bore/Drill Rigs	Diesel	1	600	0	1	0	0	0	0	0	0
Phase 1b Office	Office Building 5 2025	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0	0	0	0	0	0
Phase 1b Office	Office Building 5 2025	Scraper	Scrapers	Diesel	1	600	0	1	0	0	0	0	0	0
Phase 1b Office	Office Building 5 2025	Tire Wash	Other Construction Equipment	Diesel	1	100	1.5	1	0	0	0	0	2.769311	0
Phase 1b Office	Office Building 6 2023	Air Compressor	Air Compressors	Diesel	1	150	0.062206	1	0	0	0.611685	0	0	0
Phase 1b Office	Office Building 6 2023	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	3.926471	1	0	0	66.54751	0	0	0
Phase 1b Office	Office Building 6 2023	Blade	Graders	Diesel	1	450	0	1	0	0	0	0	0	0
Phase 1b Office	Office Building 6 2023	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	3.926471	1	0	0	39.59528	0	0	0
Phase 1b Office	Office Building 6 2023	Boom Lift	Aerial Lifts	Diesel	1	40	0	1	0	0	0	0	0	0
Phase 1b Office	Office Building 6 2023	Compactor	Other Construction Equipment	Diesel	1	250	0.314118	1	0	0	4.494599	0	0	0
Phase 1b Office	Office Building 6 2023	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0	0	0	0	0	0
Phase 1b Office	Office Building 6 2023	Concrete Pump	Pumps	Diesel	1	450	0.157941	1	0	0	6.883341	0	0	0
Phase 1b Office	Office Building 6 2023	Excavator	Excavators	Diesel	1	500	0.196324	1	0	0	4.881864	0	0	0
Phase 1b Office	Office Building 6 2023	Generator	Generator Sets	Diesel	1	25	6	1	0	0	49.52105	0	0	0

Phase 1b Office	Office Building 6 2023	Gradall	Forklifts	Diesel	1	350	0.48	1	0	0	4.39743	0	0	0
Phase 1b Office	Office Building 6 2023	Hydro/Crawler Crane	Cranes	Diesel	1	550	4.897059	1	0	0	102.2247	0	0	0
Phase 1b Office	Office Building 6 2023	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	3	1	0	0	16.12472	0	0	0
Phase 1b Office	Office Building 6 2023	Paver	Pavers	Diesel	1	250	0	1	0	0	0	0	0	0
Phase 1b Office	Office Building 6 2023	Pile Rig	Bore/Drill Rigs	Diesel	1	600	3	1	0	0	117.7883	0	0	0
Phase 1b Office	Office Building 6 2023	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0	0	0	0	0	0
Phase 1b Office	Office Building 6 2023	Scraper	Scrapers	Diesel	1	600	0	1	0	0	0	0	0	0
Phase 1b Office	Office Building 6 2023	Tire Wash	Other Construction Equipment	Diesel	1	100	1.5	1	0	0	9.151868	0	0	0
Phase 1b Office	Office Building 6 2024	Air Compressor	Air Compressors	Diesel	1	150	0.013053	1	0	0	0	0.247277	0	0
Phase 1b Office	Office Building 6 2024	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	0	1	0	0	0	0	0	0
Phase 1b Office	Office Building 6 2024	Blade	Graders	Diesel	1	450	0	1	0	0	0	0	0	0
Phase 1b Office	Office Building 6 2024	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	0	1	0	0	0	0	0	0
Phase 1b Office	Office Building 6 2024	Boom Lift	Aerial Lifts	Diesel	1	40	8.003817	1	0	0	0	163.037	0	0
Phase 1b Office	Office Building 6 2024	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0	0	0	0	0	0
Phase 1b Office	Office Building 6 2024	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0	0	0	0	0	0
Phase 1b Office	Office Building 6 2024	Concrete Pump	Pumps	Diesel	1	450	0.013969	1	0	0	0	1.17286	0	0
Phase 1b Office	Office Building 6 2024	Excavator	Excavators	Diesel	1	500	0	1	0	0	0	0	0	0
Phase 1b Office	Office Building 6 2024	Generator	Generator Sets	Diesel	1	25	0.435115	1	0	0	0	6.982071	0	0
Phase 1b Office	Office Building 6 2024	Gradall	Forklifts	Diesel	1	350	0.48	1	0	0	0	8.47152	0	0
Phase 1b Office	Office Building 6 2024	Hydro/Crawler Crane	Cranes	Diesel	1	550	0	1	0	0	0	0	0	0
Phase 1b Office	Office Building 6 2024	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	0	1	0	0	0	0	0	0
Phase 1b Office	Office Building 6 2024	Paver	Pavers	Diesel	1	250	0	1	0	0	0	0	0	0
Phase 1b Office	Office Building 6 2024	Pile Rig	Bore/Drill Rigs	Diesel	1	600	0	1	0	0	0	0	0	0
Phase 1b Office	Office Building 6 2024	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0	0	0	0	0	0
Phase 1b Office	Office Building 6 2024	Scraper	Scrapers	Diesel	1	600	0	1	0	0	0	0	0	0
Phase 1b Office	Office Building 6 2024	Tire Wash	Other Construction Equipment	Diesel	1	100	1.5	1	0	0	0	17.63081	0	0
Phase 1b Office	Office Building 6 2025	Air Compressor	Air Compressors	Diesel	1	150	0	1	0	0	0	0	0	0
Phase 1b Office	Office Building 6 2025	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	0	1	0	0	0	0	0	0
Phase 1b Office	Office Building 6 2025	Blade	Graders	Diesel	1	450	0	1	0	0	0	0	0	0
Phase 1b Office	Office Building 6 2025	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	0	1	0	0	0	0	0	0
Phase 1b Office	Office Building 6 2025	Boom Lift	Aerial Lifts	Diesel	1	40	0	1	0	0	0	0	0	0
Phase 1b Office	Office Building 6 2025	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0	0	0	0	0	0
Phase 1b Office	Office Building 6 2025	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0	0	0	0	0	0
Phase 1b Office	Office Building 6 2025	Concrete Pump	Pumps	Diesel	1	450	0	1	0	0	0	0	0	0
Phase 1b Office	Office Building 6 2025	Excavator	Excavators	Diesel	1	500	0	1	0	0	0	0	0	0
Phase 1b Office	Office Building 6 2025	Generator	Generator Sets	Diesel	1	25	0	1	0	0	0	0	0	0
Phase 1b Office	Office Building 6 2025	Gradall	Forklifts	Diesel	1	350	0.48	1	0	0	0	0	2.98771	0
Phase 1b Office	Office Building 6 2025	Hydro/Crawler Crane	Cranes	Diesel	1	550	0	1	0	0	0	0	0	0
Phase 1b Office	Office Building 6 2025	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	0	1	0	0	0	0	0	0
Phase 1b Office	Office Building 6 2025	Paver	Pavers	Diesel	1	250	0	1	0	0	0	0	0	0
Phase 1b Office	Office Building 6 2025	Pile Rig	Bore/Drill Rigs	Diesel	1	600	0	1	0	0	0	0	0	0
Phase 1b Office	Office Building 6 2025	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0	0	0	0	0	0
Phase 1b Office	Office Building 6 2025	Scraper	Scrapers	Diesel	1	600	0	1	0	0	0	0	0	0
Phase 1b Office	Office Building 6 2025	Tire Wash	Other Construction Equipment	Diesel	1	100	1.5	1	0	0	0	0	5.927297	0
Phase 1b Mixed Use	Parcel 7 Foundations	Pile Rig	Bore/Drill Rigs	Diesel	0	600	8	0.4	0	0	0	0	0	0
Phase 1b Mixed Use	Parcel 7 Foundations	Generator	Generator Sets	Diesel	0	25	6	1	0	0	0	0	0	0
Phase 1b Mixed Use	Parcel 7 Foundations	Tire Wash	Other Construction Equipment	Diesel	1	100	4	0.9	0	0	0	18.73441	0	0
Phase 1b Mixed Use	Parcel 7 Foundations	Excavator	Excavators	Diesel	1	131	8	0.6	0	0	0	27.83422	0	0
Phase 1b Mixed Use	Parcel 7 Foundations	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	90	8	0.6	0	0	0	19.80495	0	0
Phase 1b Mixed Use	Parcel 7 Foundations	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	70	8	0.8	0	0	0	120.4118	0	0
Phase 1b Mixed Use	Parcel 7 Foundations	Gradall	Forklifts	Diesel	1	74	4	0.8	0	0	0	34.40337	0	0
Phase 1b Mixed Use	Parcel 7 Foundations	Crane	Cranes	Diesel	1	215	4	0.5	0	0	0	14.49422	0	0
Phase 1b Mixed Use	Parcel 7 Foundations	Concrete Pump	Pumps	Diesel	1	450	0.25	0.5	0	0	0	4.646576	0	0
Phase 1b Mixed Use	Parcel 7 Core and Shell	Generator	Generator Sets	Diesel	0	25	6	1	0	0	0	0	0	0
Phase 1b Mixed Use	Parcel 7 Core and Shell	Tire Wash	Other Construction Equipment	Diesel	1	100	4	0.9	0	0	0	20.83396	0	0
Phase 1b Mixed Use	Parcel 7 Core and Shell	Crane	Cranes	Diesel	1	600	8	0.2	0	0	0	34.56048	0	0

Phase 1b Mixed Use	Parcel 7 Core and Shell	Gradall	Forklifts	Diesel	1	74	4	0.8	0	0	0	38.25892	0	0
Phase 1b Mixed Use	Parcel 7 Core and Shell	Concrete Pump	Pumps	Diesel	0	450	6	0.225	0	0	0	0	0	0
Phase 1b Mixed Use	Parcel 7 Core and Shell	Air Compressor	Air Compressors	Diesel	0	140	2	0.4	0	0	0	0	0	0
Phase 1b Mixed Use	Parcel 7 Core and Shell	Boom Lift	Aerial Lifts	Diesel	0	50	6	0.2	0	0	0	0	0	0
Phase 1b Mixed Use	Parcel 7 Tenant Improvements	Generator	Generator Sets	Diesel	0	25	6	0.85	0	0	0	0	0	0
Phase 1b Mixed Use	Parcel 7 Tenant Improvements	Tire Wash	Other Construction Equipment	Diesel	1	100	4	0.9	0	0	0	2.745561	19.93904	0
Phase 1b Mixed Use	Parcel 7 Tenant Improvements	Gradall	Forklifts	Diesel	1	74	4	0.8	0	0	0	5.041873	49.6387	0
Phase 1b Mixed Use	Parcel 7 Landscaping	Excavator	Excavators	Diesel	1	25	8	0.9	0	0	0	0	24.38098	0
Phase 1b Mixed Use	Parcel 7 Landscaping	Generator	Generator Sets	Diesel	0	25	6	0.5	0	0	0	0	0	0
Phase 1b Mixed Use	Parcel 7 Landscaping	Tire Wash	Other Construction Equipment	Diesel	1	100	4	0.9	0	0	0	0	6.762949	0
Phase 1b Mixed Use	Parcel 7 Landscaping	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	90	8	0.6	0	0	0	0	7.149403	0
Phase 1b Mixed Use	Parcel 7 Landscaping	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	70	8	0.8	0	0	0	0	58.92781	0
Phase 1b Mixed Use	Parcel 6 Foundations	Pile Rig	Bore/Drill Rigs	Diesel	0	600	8	0.4	0	0	0	0	0	0
Phase 1b Mixed Use	Parcel 6 Foundations	Generator	Generator Sets	Diesel	0	25	6	1	0	0	0	0	0	0
Phase 1b Mixed Use	Parcel 6 Foundations	Tire Wash	Other Construction Equipment	Diesel	1	100	4	0.9	0	0	0	18.73441	0	0
Phase 1b Mixed Use	Parcel 6 Foundations	Excavator	Excavators	Diesel	1	131	8	0.6	0	0	0	27.83422	0	0
Phase 1b Mixed Use	Parcel 6 Foundations	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	90	8	0.6	0	0	0	19.80495	0	0
Phase 1b Mixed Use	Parcel 6 Foundations	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	70	8	0.8	0	0	0	120.4118	0	0
Phase 1b Mixed Use	Parcel 6 Foundations	Gradall	Forklifts	Diesel	1	74	4	0.8	0	0	0	34.40337	0	0
Phase 1b Mixed Use	Parcel 6 Foundations	Crane	Cranes	Diesel	1	215	4	0.5	0	0	0	14.49422	0	0
Phase 1b Mixed Use	Parcel 6 Foundations	Concrete Pump	Pumps	Diesel	1	450	0.5	0.5	0	0	0	9.293151	0	0
Phase 1b Mixed Use	Parcel 6 Core and Shell	Generator	Generator Sets	Diesel	0	25	6	1	0	0	0	0	0	0
Phase 1b Mixed Use	Parcel 6 Core and Shell	Tire Wash	Other Construction Equipment	Diesel	1	100	4	0.9	0	0	0	13.08179	5.596923	0
Phase 1b Mixed Use	Parcel 6 Core and Shell	Crane	Cranes	Diesel	1	600	8	0.2	0	0	0	21.70076	9.739796	0
Phase 1b Mixed Use	Parcel 6 Core and Shell	Gradall	Forklifts	Diesel	2	74	4	0.8	0	0	0	48.04609	27.86734	0
Phase 1b Mixed Use	Parcel 6 Core and Shell	Concrete Pump	Pumps	Diesel	0	450	6	0.225	0	0	0	0	0	0
Phase 1b Mixed Use	Parcel 6 Core and Shell	Air Compressor	Air Compressors	Diesel	0	140	2	0.4	0	0	0	0	0	0
Phase 1b Mixed Use	Parcel 6 Core and Shell	Boom Lift	Aerial Lifts	Diesel	0	50	6	0.2	0	0	0	0	0	0
Phase 1b Mixed Use	Parcel 6 Tenant Improvements	Generator	Generator Sets	Diesel	0	25	6	0.85	0	0	0	0	0	0
Phase 1b Mixed Use	Parcel 6 Tenant Improvements	Tire Wash	Other Construction Equipment	Diesel	1	100	4	0.9	0	0	0	0	21.80468	0
Phase 1b Mixed Use	Parcel 6 Tenant Improvements	Gradall	Forklifts	Diesel	1	74	4	0.8	0	0	0	0	54.28325	0
Phase 1b Mixed Use	Parcel 6 Landscaping	Excavator	Excavators	Diesel	1	25	8	0.9	0	0	0	0	11.34976	13.45157
Phase 1b Mixed Use	Parcel 6 Landscaping	Generator	Generator Sets	Diesel	0	25	6	0.5	0	0	0	0	0	0
Phase 1b Mixed Use	Parcel 6 Landscaping	Tire Wash	Other Construction Equipment	Diesel	0	100	4	0.9	0	0	0	0	0	0
Phase 1b Mixed Use	Parcel 6 Landscaping	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	90	8	0.6	0	0	0	0	3.328171	3.944498
Phase 1b Mixed Use	Parcel 6 Landscaping	Bob Cat	Tractors/Loaders/Backhoes	Diesel	2	70	8	0.8	0	0	0	0	54.86382	65.02379
Phase 2 Mixed Use	Grading and Utilities	Blade	Graders	Diesel	1	359	8	0.15	0	0	3.739409	0	0	0
Phase 2 Mixed Use	Grading and Utilities	Scraper	Scrapers	Diesel	1	52	8	0.15	0	0	4.126481	0	0	0
Phase 2 Mixed Use	Grading and Utilities	Loader	Tractors/Loaders/Backhoes	Diesel	2	100	4	0.9	0	0	6.260186	0	0	0
Phase 2 Mixed Use	Grading and Utilities	Tire Wash	Other Construction Equipment	Diesel	1	100	4	0.9	0	0	3.553078	0	0	0
Phase 2 Mixed Use	Grading and Utilities	Excavator	Excavators	Diesel	2	359	8	0.6	0	0	27.72635	0	0	0
Phase 2 Mixed Use	Grading and Utilities	Backhoe	Tractors/Loaders/Backhoes	Diesel	2	350	8	0.6	0	0	26.31991	0	0	0
Phase 2 Mixed Use	Grading and Utilities	Gradall	Forklifts	Diesel	2	350	4	0.6	0	0	7.11349	0	0	0
Phase 2 Mixed Use	Grading and Utilities	Compactor	Other Construction Equipment	Diesel	2	250	0.5	0.2	0	0	0.462927	0	0	0
Phase 2 Mixed Use	Grading and Utilities	Paver	Pavers	Diesel	1	250	8	0.01	0	0	0.185171	0	0	0
Phase 2 Mixed Use	Grading and Utilities	Generator	Generator Sets	Diesel	1	600	2	0.1	0	0	1.879994	0	0	0
Phase 2 Mixed Use	Tunnel Construction	Crane	Cranes	Diesel	1	290	6	0.35	0	0	30.96876	15.3959	0	0
Phase 2 Mixed Use	Tunnel Construction	Excavator	Excavators	Diesel	2	170	6	0.45	0	0	61.30406	30.47688	0	0
Phase 2 Mixed Use	Tunnel Construction	Loader	Tractors/Loaders/Backhoes	Diesel	1	250	6	0.45	0	0	43.79393	21.77184	0	0
Phase 2 Mixed Use	Tunnel Construction	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	103	6	0.4	0	0	17.09695	8.499625	0	0
Phase 2 Mixed Use	Tunnel Construction	Gradall	Forklifts	Diesel	1	130	6	0.35	0	0	9.595235	4.770202	0	0
Phase 2 Mixed Use	Tunnel Construction	Compressor	Air Compressors	Diesel	2	50	6	0.3	0	0	70.15616	37.30244	0	0
Phase 2 Mixed Use	Foundations	Pile Rig	Bore/Drill Rigs	Diesel	0	600	8	0.4	0	0	0	0	0	0
Phase 2 Mixed Use	Foundations	Generator	Generator Sets	Diesel	2	25	6	1	0	0	0	17.63892	68.66595	0
Phase 2 Mixed Use	Foundations	Tire Wash	Other Construction Equipment	Diesel	2	100	4	0.9	0	0	0	7.752171	23.08731	0
Phase 2 Mixed Use	Foundations	Excavator	Excavators	Diesel	2	131	8	0.6	0	0	0	11.51761	35.27536	0

Phase 2 Mixed Use	Foundations	Backhoe	Tractors/Loaders/Backhoes	Diesel	2	90	8	0.6	0	0	0	8.195152	24.40658	0
Phase 2 Mixed Use	Foundations	Bob Cat	Tractors/Loaders/Backhoes	Diesel	2	70	8	0.8	0	0	0	49.82557	201.1674	0
Phase 2 Mixed Use	Foundations	Gradall	Forklifts	Diesel	2	74	4	0.8	0	0	0	14.23588	57.47639	0
Phase 2 Mixed Use	Foundations	Crane	Cranes	Diesel	2	215	4	0.5	0	0	0	5.997608	18.38772	0
Phase 2 Mixed Use	Foundations	Concrete Pump	Pumps	Diesel	3	450	0.5	0.5	0	0	0	5.768163	18.02105	0
Phase 2 Mixed Use	Core and Shell	Generator	Generator Sets	Diesel	2	25	6	1	0	0	0	0	96.40977	0
Phase 2 Mixed Use	Core and Shell	Tire Wash	Other Construction Equipment	Diesel	2	100	4	0.9	0	0	0	0	32.41551	0
Phase 2 Mixed Use	Core and Shell	Crane	Cranes	Diesel	2	600	8	0.2	0	0	0	0	56.40965	0
Phase 2 Mixed Use	Core and Shell	Gradall	Forklifts	Diesel	3	74	4	0.8	0	0	0	0	121.0488	0
Phase 2 Mixed Use	Core and Shell	Concrete Pump	Pumps	Diesel	0	450	6	0.45	0	0	0	0	0	0
Phase 2 Mixed Use	Core and Shell	Air Compressor	Air Compressors	Diesel	0	140	2	0.8	0	0	0	0	0	0
Phase 2 Mixed Use	Core and Shell	Boom Lift	Aerial Lifts	Diesel	0	50	6	0.4	0	0	0	0	0	0
Phase 2 Mixed Use	Tenant Improvements	Generator	Generator Sets	Diesel	2	25	6	0.85	0	0	0	0	14.7389	103.628
Phase 2 Mixed Use	Tenant Improvements	Tire Wash	Other Construction Equipment	Diesel	2	100	4	0.9	0	0	0	0	5.830129	40.57769
Phase 2 Mixed Use	Tenant Improvements	Gradall	Forklifts	Diesel	1	74	4	0.8	0	0	0	0	7.257119	50.50955
Phase 2 Mixed Use	Landscaping	Excavator	Excavators	Diesel	1	25	8	0.9	0	0	0	0	0	24.80134
Phase 2 Mixed Use	Landscaping	Generator	Generator Sets	Diesel	0	25	6	0.5	0	0	0	0	0	0
Phase 2 Mixed Use	Landscaping	Tire Wash	Other Construction Equipment	Diesel	1	100	4	0.9	0	0	0	0	0	6.879552
Phase 2 Mixed Use	Landscaping	Backhoe	Tractors/Loaders/Backhoes	Diesel	2	90	8	0.6	0	0	0	0	0	14.54534
Phase 2 Mixed Use	Landscaping	Bob Cat	Tractors/Loaders/Backhoes	Diesel	3	70	8	0.8	0	0	0	0	0	179.8314
Alternate 1	Demolition	Excavator	Excavators	Diesel	1	131	8	0.9	0	0	0	7.918355	0	0
Alternate 1	Demolition	Generator	Generator Sets	Diesel	1	25	6	0.5	0	0	0	4.042251	0	0
Alternate 1	Demolition	Tire Wash	Other Construction Equipment	Diesel	2	100	4	0.9	0	0	0	7.106157	0	0
Alternate 1	Demolition	Bob Cat	Tractors/Loaders/Backhoes	Diesel	2	70	8	0.8	0	0	0	45.67344	0	0
Alternate 1	Demolition	Pressure Washer	Pressure Washers	Diesel	2	25	8	1	0	0	0	16.55275	0	0
Alternate 1	Demolition	Air Compressor	Air Compressors	Diesel	1	140	6	0.7	0	0	0	6.235426	0	0
Alternate 1	Grading and Utilities	Loader	Tractors/Loaders/Backhoes	Diesel	2	100	4	0.9	0	0	0	0.284554	4.519738	0
Alternate 1	Grading and Utilities	Tire Wash	Other Construction Equipment	Diesel	1	100	4	0.9	0	0	0	0.161504	2.565257	0
Alternate 1	Grading and Utilities	Excavator	Excavators	Diesel	1	359	8	0.6	0	0	0	0.630144	10.49981	0
Alternate 1	Grading and Utilities	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	90	8	0.6	0	0	0	0.170732	2.711843	0
Alternate 1	Grading and Utilities	Gradall	Forklifts	Diesel	1	74	4	0.6	0	0	0	0.222436	4.789699	0
Alternate 1	Grading and Utilities	Compactor	Other Construction Equipment	Diesel	1	250	0.5	0.2	0	0	0	0.010521	0.172032	0
Alternate 1	Grading and Utilities	Paver	Pavers	Diesel	1	250	8	0.01	0	0	0	0.008417	0.137625	0
Alternate 1	Grading and Utilities	Generator	Generator Sets	Diesel	1	600	2	0.1	0	0	0	0.085454	1.423885	0
Alternate 1	Foundations	Generator	Generator Sets	Diesel	1	25	6	1	0	0	0	0	7.62955	0
Alternate 1	Foundations	Tire Wash	Other Construction Equipment	Diesel	1	100	4	0.9	0	0	0	0	2.565257	0
Alternate 1	Foundations	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	90	8	0.6	0	0	0	0	2.711843	0
Alternate 1	Foundations	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	70	8	0.8	0	0	0	0	22.35193	0
Alternate 1	Foundations	Gradall	Forklifts	Diesel	1	74	4	0.8	0	0	0	0	6.386265	0
Alternate 1	Foundations	Concrete Pump	Pumps	Diesel	1	450	6	0.3	0	0	0	0	9.611226	0
Alternate 1	Core and Shell	Generator	Generator Sets	Diesel	1	25	6	1	0	0	0	0	14.9123	0
Alternate 1	Core and Shell	Tire Wash	Other Construction Equipment	Diesel	1	100	4	0.9	0	0	0	0	5.013911	0
Alternate 1	Core and Shell	Gradall	Forklifts	Diesel	1	74	4	0.8	0	0	0	0	12.48225	0
Alternate 1	Core and Shell	Concrete Pump	Pumps	Diesel	1	450	6	0.45	0	0	0	0	28.17837	0
Alternate 1	Tenant Improvements	Generator	Generator Sets	Diesel	1	25	6	0.85	0	0	0	0	9.727676	0
Alternate 1	Tenant Improvements	Tire Wash	Other Construction Equipment	Diesel	2	100	4	0.9	0	0	0	0	7.69577	0
Alternate 1	Tenant Improvements	Gradall	Forklifts	Diesel	1	74	4	0.8	0	0	0	0	9.579398	0

Equipment Information										EF		
PHASE	SUBPHASE	EQUIPMENT	CALEEMOD_EQUIPMENT	FUEL	NUMBER	HP	DAILYHRS	UTILIZATION	LF	Tier 2	2021	2022
Phase 1a	Demolition	Excavator	Excavators	Diesel	4	131	8	0.9	0.38	4.17	13	84
Phase 1a	Demolition	Generator	Generator Sets	Diesel	2	25	6	0.5	0.74	4.63	13	84
Phase 1a	Demolition	Tire Wash	Other Construction Equipment	Diesel	2	100	4	0.9	0.42	4.75	13	84
Phase 1a	Demolition	Concrete Crusher	Crushing/Proc. Equipment	Diesel	2	200	2	0	0.78	4.15	13	84
Phase 1a	Demolition	Bob Cat	Tractors/Loaders/Backhoes	Diesel	6	150	8	0.8	0.37	4.17	13	84
Phase 1a	Demolition	Pressure Washer	Pressure Washers	Diesel	2	25	8	1	0.3	4.63	13	84
Phase 1a	Demolition	Air Compressor	Air Compressors	Diesel	1	140	6	0.7	0.48	4.17	13	84
Phase 1a	Grading and Utilities	Blade	Graders	Diesel	2	359	8	0.15	0.41	3.79	0	143
Phase 1a	Grading and Utilities	Scraper	Scrapers	Diesel	2	52	8	0.15	0.48	4.75	0	143
Phase 1a	Grading and Utilities	Loader	Tractors/Loaders/Backhoes	Diesel	4	100	4	0.9	0.37	4.75	0	143
Phase 1a	Grading and Utilities	Tire Wash	Other Construction Equipment	Diesel	2	100	4	0.9	0.42	4.75	0	143
Phase 1a	Grading and Utilities	Excavator	Excavators	Diesel	4	359	8	0.6	0.38	3.79	0	143
Phase 1a	Grading and Utilities	Backhoe	Tractors/Loaders/Backhoes	Diesel	4	350	8	0.6	0.37	3.79	0	143
Phase 1a	Grading and Utilities	Gradall	Forklifts	Diesel	4	350	4	0.6	0.2	3.79	0	143
Phase 1a	Grading and Utilities	Compactor	Other Construction Equipment	Diesel	4	250	0.5	0.2	0.42	4.15	0	143
Phase 1a	Grading and Utilities	Paver	Pavers	Diesel	2	250	8	0.01	0.42	4.15	0	143
Phase 1a	Grading and Utilities	Generator	Generator Sets	Diesel	1	600	2	0.1	0.74	3.79	0	143
Phase 1a Office	North Garage 2022	Air Compressor	Air Compressors	Diesel	1	150	0.47	1	0.48	4.17	0	42
Phase 1a Office	North Garage 2022	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	0	1	0.37	3.79	0	42
Phase 1a Office	North Garage 2022	Blade	Graders	Diesel	1	450	0	1	0.41	3.79	0	42
Phase 1a Office	North Garage 2022	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	0	1	0.37	4.15	0	42
Phase 1a Office	North Garage 2022	Boom Lift	Aerial Lifts	Diesel	1	40	0	1	0.31	4.63	0	42
Phase 1a Office	North Garage 2022	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0.42	4.15	0	42
Phase 1a Office	North Garage 2022	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.78	3.79	0	42
Phase 1a Office	North Garage 2022	Concrete Pump	Pumps	Diesel	1	450	0.33	1	0.74	3.79	0	42
Phase 1a Office	North Garage 2022	Excavator	Excavators	Diesel	1	500	11.71429	1	0.38	3.79	0	42
Phase 1a Office	North Garage 2022	Generator	Generator Sets	Diesel	1	25	4.714286	1	0.74	4.63	0	42
Phase 1a Office	North Garage 2022	Gradall	Forklifts	Diesel	1	350	2.928571	1	0.2	3.79	0	42
Phase 1a Office	North Garage 2022	Hydro/Crawler Crane	Cranes	Diesel	1	550	2.928571	1	0.29	3.79	0	42
Phase 1a Office	North Garage 2022	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	5.857143	1	0.37	4.75	0	42
Phase 1a Office	North Garage 2022	Paver	Pavers	Diesel	1	250	0	1	0.42	4.15	0	42
Phase 1a Office	North Garage 2022	Pile Rig	Bore/Drill Rigs	Diesel	1	600	4.142857	1	0.5	3.79	0	42
Phase 1a Office	North Garage 2022	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0.3	4.63	0	42
Phase 1a Office	North Garage 2022	Scraper	Scrapers	Diesel	1	600	0	1	0.48	3.79	0	42
Phase 1a Office	North Garage 2022	Tire Wash	Other Construction Equipment	Diesel	1	100	1.178571	1	0.42	4.75	0	42
Phase 1a Office	North Garage 2023	Air Compressor	Air Compressors	Diesel	1	150	0.48186	1	0.48	4.17	0	0
Phase 1a Office	North Garage 2023	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	0.03907	1	0.37	3.79	0	0
Phase 1a Office	North Garage 2023	Blade	Graders	Diesel	1	450	0	1	0.41	3.79	0	0
Phase 1a Office	North Garage 2023	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	0.03907	1	0.37	4.15	0	0
Phase 1a Office	North Garage 2023	Boom Lift	Aerial Lifts	Diesel	1	40	1.335814	1	0.31	4.63	0	0
Phase 1a Office	North Garage 2023	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0.42	4.15	0	0
Phase 1a Office	North Garage 2023	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.78	3.79	0	0
Phase 1a Office	North Garage 2023	Concrete Pump	Pumps	Diesel	1	450	0.57907	1	0.74	3.79	0	0
Phase 1a Office	North Garage 2023	Excavator	Excavators	Diesel	1	500	0.465116	1	0.38	3.79	0	0
Phase 1a Office	North Garage 2023	Generator	Generator Sets	Diesel	1	25	1.767442	1	0.74	4.63	0	0

Phase 1a Office	North Garage 2023	Gradall	Forklifts	Diesel	1	350	3.011628	1	0.2	3.79	0	0
Phase 1a Office	North Garage 2023	Hydro/Crawler Crane	Cranes	Diesel	1	550	5.02907	1	0.29	3.79	0	0
Phase 1a Office	North Garage 2023	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	0.232558	1	0.37	4.75	0	0
Phase 1a Office	North Garage 2023	Paver	Pavers	Diesel	1	250	0	1	0.42	4.15	0	0
Phase 1a Office	North Garage 2023	Pile Rig	Bore/Drill Rigs	Diesel	1	600	0	1	0.5	3.79	0	0
Phase 1a Office	North Garage 2023	Pressure Washer	Pressure Washers	Diesel	1	25	0.122791	1	0.3	4.63	0	0
Phase 1a Office	North Garage 2023	Scraper	Scrapers	Diesel	1	600	0	1	0.48	3.79	0	0
Phase 1a Office	North Garage 2023	Tire Wash	Other Construction Equipment	Diesel	1	100	1.505814	1	0.42	4.75	0	0
Phase 1a Office	Office Building 4 2023	Air Compressor	Air Compressors	Diesel	1	150	0.049091	1	0.48	4.17	0	0
Phase 1a Office	Office Building 4 2023	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	1.264463	1	0.37	3.79	0	0
Phase 1a Office	Office Building 4 2023	Blade	Graders	Diesel	1	450	0	1	0.41	3.79	0	0
Phase 1a Office	Office Building 4 2023	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	1.264463	1	0.37	4.15	0	0
Phase 1a Office	Office Building 4 2023	Boom Lift	Aerial Lifts	Diesel	1	40	7.438017	1	0.31	4.63	0	0
Phase 1a Office	Office Building 4 2023	Compactor	Other Construction Equipment	Diesel	1	250	0.101157	1	0.42	4.15	0	0
Phase 1a Office	Office Building 4 2023	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.78	3.79	0	0
Phase 1a Office	Office Building 4 2023	Concrete Pump	Pumps	Diesel	1	450	0.075372	1	0.74	3.79	0	0
Phase 1a Office	Office Building 4 2023	Excavator	Excavators	Diesel	1	500	0.063223	1	0.38	3.79	0	0
Phase 1a Office	Office Building 4 2023	Generator	Generator Sets	Diesel	1	25	2.900826	1	0.74	4.63	0	0
Phase 1a Office	Office Building 4 2023	Gradall	Forklifts	Diesel	1	350	0.48	1	0.2	3.79	0	0
Phase 1a Office	Office Building 4 2023	Hydro/Crawler Crane	Cranes	Diesel	1	550	1.809917	1	0.29	3.79	0	0
Phase 1a Office	Office Building 4 2023	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	0.719008	1	0.37	4.75	0	0
Phase 1a Office	Office Building 4 2023	Paver	Pavers	Diesel	1	250	0	1	0.42	4.15	0	0
Phase 1a Office	Office Building 4 2023	Pile Rig	Bore/Drill Rigs	Diesel	1	600	0.719008	1	0.5	3.79	0	0
Phase 1a Office	Office Building 4 2023	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0.3	4.63	0	0
Phase 1a Office	Office Building 4 2023	Scraper	Scrapers	Diesel	1	600	0	1	0.48	3.79	0	0
Phase 1a Office	Office Building 4 2023	Tire Wash	Other Construction Equipment	Diesel	1	100	1.5	1	0.42	4.75	0	0
Phase 1a Office	Office Building 4 2024	Air Compressor	Air Compressors	Diesel	1	150	0	1	0.48	4.17	0	0
Phase 1a Office	Office Building 4 2024	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	0	1	0.37	3.79	0	0
Phase 1a Office	Office Building 4 2024	Blade	Graders	Diesel	1	450	0	1	0.41	3.79	0	0
Phase 1a Office	Office Building 4 2024	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	0	1	0.37	4.15	0	0
Phase 1a Office	Office Building 4 2024	Boom Lift	Aerial Lifts	Diesel	1	40	1.405797	1	0.31	4.63	0	0
Phase 1a Office	Office Building 4 2024	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0.42	4.15	0	0
Phase 1a Office	Office Building 4 2024	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.78	3.79	0	0
Phase 1a Office	Office Building 4 2024	Concrete Pump	Pumps	Diesel	1	450	0	1	0.74	3.79	0	0
Phase 1a Office	Office Building 4 2024	Excavator	Excavators	Diesel	1	500	0	1	0.38	3.79	0	0
Phase 1a Office	Office Building 4 2024	Generator	Generator Sets	Diesel	1	25	0	1	0.74	4.63	0	0
Phase 1a Office	Office Building 4 2024	Gradall	Forklifts	Diesel	1	350	0.48	1	0.2	3.79	0	0
Phase 1a Office	Office Building 4 2024	Hydro/Crawler Crane	Cranes	Diesel	1	550	0	1	0.29	3.79	0	0
Phase 1a Office	Office Building 4 2024	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	0	1	0.37	4.75	0	0
Phase 1a Office	Office Building 4 2024	Paver	Pavers	Diesel	1	250	0	1	0.42	4.15	0	0
Phase 1a Office	Office Building 4 2024	Pile Rig	Bore/Drill Rigs	Diesel	1	600	0	1	0.5	3.79	0	0
Phase 1a Office	Office Building 4 2024	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0.3	4.63	0	0
Phase 1a Office	Office Building 4 2024	Scraper	Scrapers	Diesel	1	600	0	1	0.48	3.79	0	0
Phase 1a Office	Office Building 4 2024	Tire Wash	Other Construction Equipment	Diesel	1	100	1.5	1	0.42	4.75	0	0
Phase 1a Office	Meeting, Collaboration, Park 2022	Air Compressor	Air Compressors	Diesel	1	150	0	1	0.48	4.17	0	42
Phase 1a Office	Meeting, Collaboration, Park 2022	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	5.857143	1	0.37	3.79	0	42
Phase 1a Office	Meeting, Collaboration, Park 2022	Blade	Graders	Diesel	1	450	0	1	0.41	3.79	0	42

Phase 1a Office	Meeting, Collaboration, Park 2022	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	5.857143	1	0.37	4.15	0	42
Phase 1a Office	Meeting, Collaboration, Park 2022	Boom Lift	Aerial Lifts	Diesel	1	40	0	1	0.31	4.63	0	42
Phase 1a Office	Meeting, Collaboration, Park 2022	Compactor	Other Construction Equipment	Diesel	1	250	0.314286	1	0.42	4.15	0	42
Phase 1a Office	Meeting, Collaboration, Park 2022	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.78	3.79	0	42
Phase 1a Office	Meeting, Collaboration, Park 2022	Concrete Pump	Pumps	Diesel	1	450	0	1	0.74	3.79	0	42
Phase 1a Office	Meeting, Collaboration, Park 2022	Excavator	Excavators	Diesel	1	500	23.42857	1	0.38	3.79	0	42
Phase 1a Office	Meeting, Collaboration, Park 2022	Generator	Generator Sets	Diesel	1	25	5.857143	1	0.74	4.63	0	42
Phase 1a Office	Meeting, Collaboration, Park 2022	Gradall	Forklifts	Diesel	1	350	8.785714	1	0.2	3.79	0	42
Phase 1a Office	Meeting, Collaboration, Park 2022	Hydro/Crawler Crane	Cranes	Diesel	1	550	1.571429	1	0.29	3.79	0	42
Phase 1a Office	Meeting, Collaboration, Park 2022	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	4.392857	1	0.37	4.75	0	42
Phase 1a Office	Meeting, Collaboration, Park 2022	Paver	Pavers	Diesel	1	250	0	1	0.42	4.15	0	42
Phase 1a Office	Meeting, Collaboration, Park 2022	Pile Rig	Bore/Drill Rigs	Diesel	1	600	3.142857	1	0.5	3.79	0	42
Phase 1a Office	Meeting, Collaboration, Park 2022	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0.3	4.63	0	42
Phase 1a Office	Meeting, Collaboration, Park 2022	Scraper	Scrapers	Diesel	1	600	0	1	0.48	3.79	0	42
Phase 1a Office	Meeting, Collaboration, Park 2022	Tire Wash	Other Construction Equipment	Diesel	1	100	1.464286	1	0.42	4.75	0	42
Phase 1a Office	Meeting, Collaboration, Park 2023	Air Compressor	Air Compressors	Diesel	1	150	0.304615	1	0.48	4.17	0	0
Phase 1a Office	Meeting, Collaboration, Park 2023	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	3.276923	1	0.37	3.79	0	0
Phase 1a Office	Meeting, Collaboration, Park 2023	Blade	Graders	Diesel	1	450	0	1	0.41	3.79	0	0
Phase 1a Office	Meeting, Collaboration, Park 2023	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	3.276923	1	0.37	4.15	0	0
Phase 1a Office	Meeting, Collaboration, Park 2023	Boom Lift	Aerial Lifts	Diesel	1	40	0.888462	1	0.31	4.63	0	0
Phase 1a Office	Meeting, Collaboration, Park 2023	Compactor	Other Construction Equipment	Diesel	1	250	0.152308	1	0.42	4.15	0	0
Phase 1a Office	Meeting, Collaboration, Park 2023	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.78	3.79	0	0
Phase 1a Office	Meeting, Collaboration, Park 2023	Concrete Pump	Pumps	Diesel	1	450	0.304615	1	0.74	3.79	0	0
Phase 1a Office	Meeting, Collaboration, Park 2023	Excavator	Excavators	Diesel	1	500	5.492308	1	0.38	3.79	0	0
Phase 1a Office	Meeting, Collaboration, Park 2023	Generator	Generator Sets	Diesel	1	25	6.715385	1	0.74	4.63	0	0
Phase 1a Office	Meeting, Collaboration, Park 2023	Gradall	Forklifts	Diesel	1	350	7.661538	1	0.2	3.79	0	0
Phase 1a Office	Meeting, Collaboration, Park 2023	Hydro/Crawler Crane	Cranes	Diesel	1	550	7.246154	1	0.29	3.79	0	0
Phase 1a Office	Meeting, Collaboration, Park 2023	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	1.828846	1	0.37	4.75	0	0
Phase 1a Office	Meeting, Collaboration, Park 2023	Paver	Pavers	Diesel	1	250	0	1	0.42	4.15	0	0
Phase 1a Office	Meeting, Collaboration, Park 2023	Pile Rig	Bore/Drill Rigs	Diesel	1	600	2.007692	1	0.5	3.79	0	0
Phase 1a Office	Meeting, Collaboration, Park 2023	Pressure Washer	Pressure Washers	Diesel	1	25	0.152308	1	0.3	4.63	0	0
Phase 1a Office	Meeting, Collaboration, Park 2023	Scraper	Scrapers	Diesel	1	600	0	1	0.48	3.79	0	0
Phase 1a Office	Meeting, Collaboration, Park 2023	Tire Wash	Other Construction Equipment	Diesel	1	100	0.819231	1	0.42	4.75	0	0
Phase 1a Office	Meeting, Collaboration, Park 2024	Air Compressor	Air Compressors	Diesel	1	150	0	1	0.48	4.17	0	0
Phase 1a Office	Meeting, Collaboration, Park 2024	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	0	1	0.37	3.79	0	0
Phase 1a Office	Meeting, Collaboration, Park 2024	Blade	Graders	Diesel	1	450	0	1	0.41	3.79	0	0
Phase 1a Office	Meeting, Collaboration, Park 2024	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	0	1	0.37	4.15	0	0
Phase 1a Office	Meeting, Collaboration, Park 2024	Boom Lift	Aerial Lifts	Diesel	1	40	19.30534	1	0.31	4.63	0	0
Phase 1a Office	Meeting, Collaboration, Park 2024	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0.42	4.15	0	0
Phase 1a Office	Meeting, Collaboration, Park 2024	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.78	3.79	0	0
Phase 1a Office	Meeting, Collaboration, Park 2024	Concrete Pump	Pumps	Diesel	1	450	0	1	0.74	3.79	0	0
Phase 1a Office	Meeting, Collaboration, Park 2024	Excavator	Excavators	Diesel	1	500	0	1	0.38	3.79	0	0
Phase 1a Office	Meeting, Collaboration, Park 2024	Generator	Generator Sets	Diesel	1	25	0	1	0.74	4.63	0	0
Phase 1a Office	Meeting, Collaboration, Park 2024	Gradall	Forklifts	Diesel	1	350	10.25954	1	0.2	3.79	0	0
Phase 1a Office	Meeting, Collaboration, Park 2024	Hydro/Crawler Crane	Cranes	Diesel	1	550	0.503817	1	0.29	3.79	0	0
Phase 1a Office	Meeting, Collaboration, Park 2024	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	0	1	0.37	4.75	0	0
Phase 1a Office	Meeting, Collaboration, Park 2024	Paver	Pavers	Diesel	1	250	0	1	0.42	4.15	0	0

Phase 1a Office	Meeting, Collaboration, Park 2024	Pile Rig	Bore/Drill Rigs	Diesel	1	600	0	1	0.5	3.79	0	0
Phase 1a Office	Meeting, Collaboration, Park 2024	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0.3	4.63	0	0
Phase 1a Office	Meeting, Collaboration, Park 2024	Scraper	Scrapers	Diesel	1	600	0	1	0.48	3.79	0	0
Phase 1a Office	Meeting, Collaboration, Park 2024	Tire Wash	Other Construction Equipment	Diesel	1	100	0	1	0.42	4.75	0	0
Phase 1a Office	Meeting, Collaboration, Park 2025	Air Compressor	Air Compressors	Diesel	1	150	0	1	0.48	4.17	0	0
Phase 1a Office	Meeting, Collaboration, Park 2025	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	0	1	0.37	3.79	0	0
Phase 1a Office	Meeting, Collaboration, Park 2025	Blade	Graders	Diesel	1	450	0	1	0.41	3.79	0	0
Phase 1a Office	Meeting, Collaboration, Park 2025	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	0	1	0.37	4.15	0	0
Phase 1a Office	Meeting, Collaboration, Park 2025	Boom Lift	Aerial Lifts	Diesel	1	40	9.425287	1	0.31	4.63	0	0
Phase 1a Office	Meeting, Collaboration, Park 2025	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0.42	4.15	0	0
Phase 1a Office	Meeting, Collaboration, Park 2025	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.78	3.79	0	0
Phase 1a Office	Meeting, Collaboration, Park 2025	Concrete Pump	Pumps	Diesel	1	450	0	1	0.74	3.79	0	0
Phase 1a Office	Meeting, Collaboration, Park 2025	Excavator	Excavators	Diesel	1	500	0	1	0.38	3.79	0	0
Phase 1a Office	Meeting, Collaboration, Park 2025	Generator	Generator Sets	Diesel	1	25	0	1	0.74	4.63	0	0
Phase 1a Office	Meeting, Collaboration, Park 2025	Gradall	Forklifts	Diesel	1	350	11.77011	1	0.2	3.79	0	0
Phase 1a Office	Meeting, Collaboration, Park 2025	Hydro/Crawler Crane	Cranes	Diesel	1	550	0.770115	1	0.29	3.79	0	0
Phase 1a Office	Meeting, Collaboration, Park 2025	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	0	1	0.37	4.75	0	0
Phase 1a Office	Meeting, Collaboration, Park 2025	Paver	Pavers	Diesel	1	250	0	1	0.42	4.15	0	0
Phase 1a Office	Meeting, Collaboration, Park 2025	Pile Rig	Bore/Drill Rigs	Diesel	1	600	0	1	0.5	3.79	0	0
Phase 1a Office	Meeting, Collaboration, Park 2025	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0.3	4.63	0	0
Phase 1a Office	Meeting, Collaboration, Park 2025	Scraper	Scrapers	Diesel	1	600	0	1	0.48	3.79	0	0
Phase 1a Office	Meeting, Collaboration, Park 2025	Tire Wash	Other Construction Equipment	Diesel	1	100	0	1	0.42	4.75	0	0
Phase 1a Office	Meeting, Collaboration, Park 2026	Air Compressor	Air Compressors	Diesel	1	150	0	1	0.48	4.17	0	0
Phase 1a Office	Meeting, Collaboration, Park 2026	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	0	1	0.37	3.79	0	0
Phase 1a Office	Meeting, Collaboration, Park 2026	Blade	Graders	Diesel	1	450	0	1	0.41	3.79	0	0
Phase 1a Office	Meeting, Collaboration, Park 2026	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	0	1	0.37	4.15	0	0
Phase 1a Office	Meeting, Collaboration, Park 2026	Boom Lift	Aerial Lifts	Diesel	1	40	0	1	0.31	4.63	0	0
Phase 1a Office	Meeting, Collaboration, Park 2026	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0.42	4.15	0	0
Phase 1a Office	Meeting, Collaboration, Park 2026	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.78	3.79	0	0
Phase 1a Office	Meeting, Collaboration, Park 2026	Concrete Pump	Pumps	Diesel	1	450	0	1	0.74	3.79	0	0
Phase 1a Office	Meeting, Collaboration, Park 2026	Excavator	Excavators	Diesel	1	500	0	1	0.38	3.79	0	0
Phase 1a Office	Meeting, Collaboration, Park 2026	Generator	Generator Sets	Diesel	1	25	0	1	0.74	4.63	0	0
Phase 1a Office	Meeting, Collaboration, Park 2026	Gradall	Forklifts	Diesel	1	350	11.73913	1	0.2	3.79	0	0
Phase 1a Office	Meeting, Collaboration, Park 2026	Hydro/Crawler Crane	Cranes	Diesel	1	550	5.869565	1	0.29	3.79	0	0
Phase 1a Office	Meeting, Collaboration, Park 2026	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	0	1	0.37	4.75	0	0
Phase 1a Office	Meeting, Collaboration, Park 2026	Paver	Pavers	Diesel	1	250	0	1	0.42	4.15	0	0
Phase 1a Office	Meeting, Collaboration, Park 2026	Pile Rig	Bore/Drill Rigs	Diesel	1	600	0	1	0.5	3.79	0	0
Phase 1a Office	Meeting, Collaboration, Park 2026	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0.3	4.63	0	0
Phase 1a Office	Meeting, Collaboration, Park 2026	Scraper	Scrapers	Diesel	1	600	0	1	0.48	3.79	0	0
Phase 1a Office	Meeting, Collaboration, Park 2026	Tire Wash	Other Construction Equipment	Diesel	1	100	0	1	0.42	4.75	0	0
Phase 1a Office	Hotel Excavation 2022	Air Compressor	Air Compressors	Diesel	1	150	2.642857	1	0.48	4.17	0	42
Phase 1a Office	Hotel Excavation 2022	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	2.642857	1	0.37	3.79	0	42
Phase 1a Office	Hotel Excavation 2022	Blade	Graders	Diesel	1	450	0	1	0.41	3.79	0	42
Phase 1a Office	Hotel Excavation 2022	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	2.928571	1	0.37	4.15	0	42
Phase 1a Office	Hotel Excavation 2022	Boom Lift	Aerial Lifts	Diesel	1	40	1.464286	1	0.31	4.63	0	42
Phase 1a Office	Hotel Excavation 2022	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0.42	4.15	0	42
Phase 1a Office	Hotel Excavation 2022	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.78	3.79	0	42

Phase 1a Office	Hotel Excavation 2022	Concrete Pump	Pumps	Diesel	1	450	0.422857	1	0.74	3.79	0	42
Phase 1a Office	Hotel Excavation 2022	Excavator	Excavators	Diesel	1	500	11.71429	1	0.38	3.79	0	42
Phase 1a Office	Hotel Excavation 2022	Generator	Generator Sets	Diesel	1	25	5.857143	1	0.74	4.63	0	42
Phase 1a Office	Hotel Excavation 2022	Gradall	Forklifts	Diesel	1	350	5.857143	1	0.2	3.79	0	42
Phase 1a Office	Hotel Excavation 2022	Hydro/Crawler Crane	Cranes	Diesel	1	550	2.642857	1	0.29	3.79	0	42
Phase 1a Office	Hotel Excavation 2022	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	11.71429	1	0.37	4.75	0	42
Phase 1a Office	Hotel Excavation 2022	Paver	Pavers	Diesel	1	250	0	1	0.42	4.15	0	42
Phase 1a Office	Hotel Excavation 2022	Pile Rig	Bore/Drill Rigs	Diesel	1	600	10.57143	1	0.5	3.79	0	42
Phase 1a Office	Hotel Excavation 2022	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0.3	4.63	0	42
Phase 1a Office	Hotel Excavation 2022	Scraper	Scrapers	Diesel	1	600	0	1	0.48	3.79	0	42
Phase 1a Office	Hotel Excavation 2022	Tire Wash	Other Construction Equipment	Diesel	1	100	2.928571	1	0.42	4.75	0	42
Phase 1a Office	Hotel Excavation 2023	Air Compressor	Air Compressors	Diesel	1	150	2.311284	1	0.48	4.17	0	0
Phase 1a Office	Hotel Excavation 2023	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	0	1	0.37	3.79	0	0
Phase 1a Office	Hotel Excavation 2023	Blade	Graders	Diesel	1	450	0	1	0.41	3.79	0	0
Phase 1a Office	Hotel Excavation 2023	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	0.700389	1	0.37	4.15	0	0
Phase 1a Office	Hotel Excavation 2023	Boom Lift	Aerial Lifts	Diesel	1	40	0.350195	1	0.31	4.63	0	0
Phase 1a Office	Hotel Excavation 2023	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0.42	4.15	0	0
Phase 1a Office	Hotel Excavation 2023	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.78	3.79	0	0
Phase 1a Office	Hotel Excavation 2023	Concrete Pump	Pumps	Diesel	1	450	2.311284	1	0.74	3.79	0	0
Phase 1a Office	Hotel Excavation 2023	Excavator	Excavators	Diesel	1	500	2.801556	1	0.38	3.79	0	0
Phase 1a Office	Hotel Excavation 2023	Generator	Generator Sets	Diesel	1	25	10.64591	1	0.74	4.63	0	0
Phase 1a Office	Hotel Excavation 2023	Gradall	Forklifts	Diesel	1	350	10.64591	1	0.2	3.79	0	0
Phase 1a Office	Hotel Excavation 2023	Hydro/Crawler Crane	Cranes	Diesel	1	550	9.245136	1	0.29	3.79	0	0
Phase 1a Office	Hotel Excavation 2023	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	2.801556	1	0.37	4.75	0	0
Phase 1a Office	Hotel Excavation 2023	Paver	Pavers	Diesel	1	250	0	1	0.42	4.15	0	0
Phase 1a Office	Hotel Excavation 2023	Pile Rig	Bore/Drill Rigs	Diesel	1	600	0	1	0.5	3.79	0	0
Phase 1a Office	Hotel Excavation 2023	Pressure Washer	Pressure Washers	Diesel	1	25	0.046226	1	0.3	4.63	0	0
Phase 1a Office	Hotel Excavation 2023	Scraper	Scrapers	Diesel	1	600	0	1	0.48	3.79	0	0
Phase 1a Office	Hotel Excavation 2023	Tire Wash	Other Construction Equipment	Diesel	1	100	1.856031	1	0.42	4.75	0	0
Phase 1a Office	Hotel Construction 2024	Air Compressor	Air Compressors	Diesel	1	150	3	1	0.48	4.17	0	0
Phase 1a Office	Hotel Construction 2024	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	0	1	0.37	3.79	0	0
Phase 1a Office	Hotel Construction 2024	Blade	Graders	Diesel	1	450	0	1	0.41	3.79	0	0
Phase 1a Office	Hotel Construction 2024	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	0	1	0.37	4.15	0	0
Phase 1a Office	Hotel Construction 2024	Boom Lift	Aerial Lifts	Diesel	1	40	20.91429	1	0.31	4.63	0	0
Phase 1a Office	Hotel Construction 2024	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0.42	4.15	0	0
Phase 1a Office	Hotel Construction 2024	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.78	3.79	0	0
Phase 1a Office	Hotel Construction 2024	Concrete Pump	Pumps	Diesel	1	450	3	1	0.74	3.79	0	0
Phase 1a Office	Hotel Construction 2024	Excavator	Excavators	Diesel	1	500	0	1	0.38	3.79	0	0
Phase 1a Office	Hotel Construction 2024	Generator	Generator Sets	Diesel	1	25	0	1	0.74	4.63	0	0
Phase 1a Office	Hotel Construction 2024	Gradall	Forklifts	Diesel	1	350	12	1	0.2	3.79	0	0
Phase 1a Office	Hotel Construction 2024	Hydro/Crawler Crane	Cranes	Diesel	1	550	0	1	0.29	3.79	0	0
Phase 1a Office	Hotel Construction 2024	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	0	1	0.37	4.75	0	0
Phase 1a Office	Hotel Construction 2024	Paver	Pavers	Diesel	1	250	0	1	0.42	4.15	0	0
Phase 1a Office	Hotel Construction 2024	Pile Rig	Bore/Drill Rigs	Diesel	1	600	0	1	0.5	3.79	0	0
Phase 1a Office	Hotel Construction 2024	Pressure Washer	Pressure Washers	Diesel	1	25	0.06	1	0.3	4.63	0	0
Phase 1a Office	Hotel Construction 2024	Scraper	Scrapers	Diesel	1	600	0	1	0.48	3.79	0	0
Phase 1a Office	Hotel Construction 2024	Tire Wash	Other Construction Equipment	Diesel	1	100	1.5	1	0.42	4.75	0	0

Phase 1a Office	Hotel Construction 2025	Air Compressor	Air Compressors	Diesel	1	150	0.837662	1	0.48	4.17	0	0
Phase 1a Office	Hotel Construction 2025	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	0	1	0.37	3.79	0	0
Phase 1a Office	Hotel Construction 2025	Blade	Graders	Diesel	1	450	0	1	0.41	3.79	0	0
Phase 1a Office	Hotel Construction 2025	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	0	1	0.37	4.15	0	0
Phase 1a Office	Hotel Construction 2025	Boom Lift	Aerial Lifts	Diesel	1	40	20.18182	1	0.31	4.63	0	0
Phase 1a Office	Hotel Construction 2025	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0.42	4.15	0	0
Phase 1a Office	Hotel Construction 2025	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.78	3.79	0	0
Phase 1a Office	Hotel Construction 2025	Concrete Pump	Pumps	Diesel	1	450	0.837662	1	0.74	3.79	0	0
Phase 1a Office	Hotel Construction 2025	Excavator	Excavators	Diesel	1	500	0	1	0.38	3.79	0	0
Phase 1a Office	Hotel Construction 2025	Generator	Generator Sets	Diesel	1	25	0	1	0.74	4.63	0	0
Phase 1a Office	Hotel Construction 2025	Gradall	Forklifts	Diesel	1	350	12.07792	1	0.2	3.79	0	0
Phase 1a Office	Hotel Construction 2025	Hydro/Crawler Crane	Cranes	Diesel	1	550	0	1	0.29	3.79	0	0
Phase 1a Office	Hotel Construction 2025	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	0	1	0.37	4.75	0	0
Phase 1a Office	Hotel Construction 2025	Paver	Pavers	Diesel	1	250	0	1	0.42	4.15	0	0
Phase 1a Office	Hotel Construction 2025	Pile Rig	Bore/Drill Rigs	Diesel	1	600	0	1	0.5	3.79	0	0
Phase 1a Office	Hotel Construction 2025	Pressure Washer	Pressure Washers	Diesel	1	25	0.016753	1	0.3	4.63	0	0
Phase 1a Office	Hotel Construction 2025	Scraper	Scrapers	Diesel	1	600	0	1	0.48	3.79	0	0
Phase 1a Office	Hotel Construction 2025	Tire Wash	Other Construction Equipment	Diesel	1	100	1.50974	1	0.42	4.75	0	0
Phase 1a Office	Town Square 2023	Air Compressor	Air Compressors	Diesel	1	150	0	1	0.48	4.17	0	0
Phase 1a Office	Town Square 2023	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	0	1	0.37	3.79	0	0
Phase 1a Office	Town Square 2023	Blade	Graders	Diesel	1	450	0	1	0.41	3.79	0	0
Phase 1a Office	Town Square 2023	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	3	1	0.37	4.15	0	0
Phase 1a Office	Town Square 2023	Boom Lift	Aerial Lifts	Diesel	1	40	1.5	1	0.31	4.63	0	0
Phase 1a Office	Town Square 2023	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0.42	4.15	0	0
Phase 1a Office	Town Square 2023	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.78	3.79	0	0
Phase 1a Office	Town Square 2023	Concrete Pump	Pumps	Diesel	1	450	0	1	0.74	3.79	0	0
Phase 1a Office	Town Square 2023	Excavator	Excavators	Diesel	1	500	12	1	0.38	3.79	0	0
Phase 1a Office	Town Square 2023	Generator	Generator Sets	Diesel	1	25	6	1	0.74	4.63	0	0
Phase 1a Office	Town Square 2023	Gradall	Forklifts	Diesel	1	350	6	1	0.2	3.79	0	0
Phase 1a Office	Town Square 2023	Hydro/Crawler Crane	Cranes	Diesel	1	550	0	1	0.29	3.79	0	0
Phase 1a Office	Town Square 2023	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	12	1	0.37	4.75	0	0
Phase 1a Office	Town Square 2023	Paver	Pavers	Diesel	1	250	0	1	0.42	4.15	0	0
Phase 1a Office	Town Square 2023	Pile Rig	Bore/Drill Rigs	Diesel	1	600	0	1	0.5	3.79	0	0
Phase 1a Office	Town Square 2023	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0.3	4.63	0	0
Phase 1a Office	Town Square 2023	Scraper	Scrapers	Diesel	1	600	0	1	0.48	3.79	0	0
Phase 1a Office	Town Square 2023	Tire Wash	Other Construction Equipment	Diesel	1	100	3	1	0.42	4.75	0	0
Phase 1a Office	Town Square 2024	Air Compressor	Air Compressors	Diesel	1	150	0	1	0.48	4.17	0	0
Phase 1a Office	Town Square 2024	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	0	1	0.37	3.79	0	0
Phase 1a Office	Town Square 2024	Blade	Graders	Diesel	1	450	0	1	0.41	3.79	0	0
Phase 1a Office	Town Square 2024	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	0.996183	1	0.37	4.15	0	0
Phase 1a Office	Town Square 2024	Boom Lift	Aerial Lifts	Diesel	1	40	1.872137	1	0.31	4.63	0	0
Phase 1a Office	Town Square 2024	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0.42	4.15	0	0
Phase 1a Office	Town Square 2024	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.78	3.79	0	0
Phase 1a Office	Town Square 2024	Concrete Pump	Pumps	Diesel	1	450	0.020382	1	0.74	3.79	0	0
Phase 1a Office	Town Square 2024	Excavator	Excavators	Diesel	1	500	3.984733	1	0.38	3.79	0	0
Phase 1a Office	Town Square 2024	Generator	Generator Sets	Diesel	1	25	0.549618	1	0.74	4.63	0	0
Phase 1a Office	Town Square 2024	Gradall	Forklifts	Diesel	1	350	5.267176	1	0.2	3.79	0	0

Phase 1a Office	Town Square 2024	Hydro/Crawler Crane	Cranes	Diesel	1	550	1.03145	1	0.29	3.79	0	0
Phase 1a Office	Town Square 2024	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	3.984733	1	0.37	4.75	0	0
Phase 1a Office	Town Square 2024	Paver	Pavers	Diesel	1	250	0	1	0.42	4.15	0	0
Phase 1a Office	Town Square 2024	Pile Rig	Bore/Drill Rigs	Diesel	1	600	0	1	0.5	3.79	0	0
Phase 1a Office	Town Square 2024	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0.3	4.63	0	0
Phase 1a Office	Town Square 2024	Scraper	Scrapers	Diesel	1	600	0	1	0.48	3.79	0	0
Phase 1a Office	Town Square 2024	Tire Wash	Other Construction Equipment	Diesel	1	100	0.996183	1	0.42	4.75	0	0
Phase 1a Office	Town Square 2025	Air Compressor	Air Compressors	Diesel	1	150	0	1	0.48	4.17	0	0
Phase 1a Office	Town Square 2025	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	0	1	0.37	3.79	0	0
Phase 1a Office	Town Square 2025	Blade	Graders	Diesel	1	450	0	1	0.41	3.79	0	0
Phase 1a Office	Town Square 2025	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	0	1	0.37	4.15	0	0
Phase 1a Office	Town Square 2025	Boom Lift	Aerial Lifts	Diesel	1	40	0	1	0.31	4.63	0	0
Phase 1a Office	Town Square 2025	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0.42	4.15	0	0
Phase 1a Office	Town Square 2025	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.78	3.79	0	0
Phase 1a Office	Town Square 2025	Concrete Pump	Pumps	Diesel	1	450	0	1	0.74	3.79	0	0
Phase 1a Office	Town Square 2025	Excavator	Excavators	Diesel	1	500	0	1	0.38	3.79	0	0
Phase 1a Office	Town Square 2025	Generator	Generator Sets	Diesel	1	25	0	1	0.74	4.63	0	0
Phase 1a Office	Town Square 2025	Gradall	Forklifts	Diesel	1	350	18	1	0.2	3.79	0	0
Phase 1a Office	Town Square 2025	Hydro/Crawler Crane	Cranes	Diesel	1	550	0.18	1	0.29	3.79	0	0
Phase 1a Office	Town Square 2025	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	0	1	0.37	4.75	0	0
Phase 1a Office	Town Square 2025	Paver	Pavers	Diesel	1	250	0	1	0.42	4.15	0	0
Phase 1a Office	Town Square 2025	Pile Rig	Bore/Drill Rigs	Diesel	1	600	0	1	0.5	3.79	0	0
Phase 1a Office	Town Square 2025	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0.3	4.63	0	0
Phase 1a Office	Town Square 2025	Scraper	Scrapers	Diesel	1	600	0	1	0.48	3.79	0	0
Phase 1a Office	Town Square 2025	Tire Wash	Other Construction Equipment	Diesel	1	100	0	1	0.42	4.75	0	0
Phase 1a Mixed Use	Parcel 2 Foundations	Pile Rig	Bore/Drill Rigs	Diesel	0	600	8	0.4	0.5	3.79	0	0
Phase 1a Mixed Use	Parcel 2 Foundations	Generator	Generator Sets	Diesel	0	25	6	1	0.74	4.63	0	0
Phase 1a Mixed Use	Parcel 2 Foundations	Tire Wash	Other Construction Equipment	Diesel	1	100	4	0.9	0.42	4.75	0	0
Phase 1a Mixed Use	Parcel 2 Foundations	Excavator	Excavators	Diesel	1	131	8	0.6	0.38	4.17	0	0
Phase 1a Mixed Use	Parcel 2 Foundations	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	90	8	0.6	0.37	4.75	0	0
Phase 1a Mixed Use	Parcel 2 Foundations	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	70	8	0.8	0.37	4.75	0	0
Phase 1a Mixed Use	Parcel 2 Foundations	Gradall	Forklifts	Diesel	1	74	4	0.8	0.2	4.75	0	0
Phase 1a Mixed Use	Parcel 2 Foundations	Crane	Cranes	Diesel	1	215	4	0.5	0.29	4.15	0	0
Phase 1a Mixed Use	Parcel 2 Foundations	Concrete Pump	Pumps	Diesel	1	450	8	0.15	0.74	3.79	0	0
Phase 1a Mixed Use	Parcel 2 Core and Shell	Generator	Generator Sets	Diesel	0	25	6	1	0.74	4.63	0	0
Phase 1a Mixed Use	Parcel 2 Core and Shell	Tire Wash	Other Construction Equipment	Diesel	1	100	4	0.9	0.42	4.75	0	0
Phase 1a Mixed Use	Parcel 2 Core and Shell	Crane	Cranes	Diesel	1	600	8	0.2	0.29	3.79	0	0
Phase 1a Mixed Use	Parcel 2 Core and Shell	Gradall	Forklifts	Diesel	1	74	4	0.8	0.2	4.75	0	0
Phase 1a Mixed Use	Parcel 2 Core and Shell	Concrete Pump	Pumps	Diesel	0	450	6	0.225	0.74	3.79	0	0
Phase 1a Mixed Use	Parcel 2 Core and Shell	Air Compressor	Air Compressors	Diesel	0	140	2	0.4	0.48	4.17	0	0
Phase 1a Mixed Use	Parcel 2 Core and Shell	Boom Lift	Aerial Lifts	Diesel	0	50	6	0.2	0.31	4.75	0	0
Phase 1a Mixed Use	Parcel 2 Tenant Improvements	Generator	Generator Sets	Diesel	0	25	6	0.85	0.74	4.63	0	0
Phase 1a Mixed Use	Parcel 2 Tenant Improvements	Tire Wash	Other Construction Equipment	Diesel	1	100	4	0.9	0.42	4.75	0	0
Phase 1a Mixed Use	Parcel 2 Tenant Improvements	Gradall	Forklifts	Diesel	1	74	4	0.8	0.2	4.75	0	0
Phase 1a Mixed Use	Parcel 2 Landscaping	Excavator	Excavators	Diesel	1	25	8	0.9	0.38	4.63	0	0
Phase 1a Mixed Use	Parcel 2 Landscaping	Generator	Generator Sets	Diesel	0	25	6	0.5	0.74	4.63	0	0
Phase 1a Mixed Use	Parcel 2 Landscaping	Tire Wash	Other Construction Equipment	Diesel	1	100	4	0.9	0.42	4.75	0	0

Phase 1a Mixed Use	Parcel 2 Landscaping	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	90	8	1	0.37	4.75	0	0
Phase 1a Mixed Use	Parcel 2 Landscaping	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	70	8	0.8	0.37	4.75	0	0
Phase 1a Mixed Use	Parcel 3 Foundations	Pile Rig	Bore/Drill Rigs	Diesel	0	600	8	0.4	0.5	3.79	0	0
Phase 1a Mixed Use	Parcel 3 Foundations	Generator	Generator Sets	Diesel	0	25	6	1	0.74	4.63	0	0
Phase 1a Mixed Use	Parcel 3 Foundations	Tire Wash	Other Construction Equipment	Diesel	1	100	4	0.9	0.42	4.75	0	0
Phase 1a Mixed Use	Parcel 3 Foundations	Excavator	Excavators	Diesel	1	131	8	0.6	0.38	4.17	0	0
Phase 1a Mixed Use	Parcel 3 Foundations	Backhoe	Tractors/Loaders/Backhoes	Diesel	2	90	8	0.6	0.37	4.75	0	0
Phase 1a Mixed Use	Parcel 3 Foundations	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	70	8	0.8	0.37	4.75	0	0
Phase 1a Mixed Use	Parcel 3 Foundations	Gradall	Forklifts	Diesel	1	74	4	0.8	0.2	4.75	0	0
Phase 1a Mixed Use	Parcel 3 Foundations	Crane	Cranes	Diesel	1	215	4	0.5	0.29	4.15	0	0
Phase 1a Mixed Use	Parcel 3 Foundations	Concrete Pump	Pumps	Diesel	1	450	8	0.15	0.74	3.79	0	0
Phase 1a Mixed Use	Parcel 3 Core and Shell	Generator	Generator Sets	Diesel	0	25	6	1	0.74	4.63	0	0
Phase 1a Mixed Use	Parcel 3 Core and Shell	Tire Wash	Other Construction Equipment	Diesel	1	100	4	0.9	0.42	4.75	0	0
Phase 1a Mixed Use	Parcel 3 Core and Shell	Crane	Cranes	Diesel	1	600	8	0.2	0.29	3.79	0	0
Phase 1a Mixed Use	Parcel 3 Core and Shell	Gradall	Forklifts	Diesel	2	74	4	0.8	0.2	4.75	0	0
Phase 1a Mixed Use	Parcel 3 Core and Shell	Concrete Pump	Pumps	Diesel	0	450	6	0.225	0.74	3.79	0	0
Phase 1a Mixed Use	Parcel 3 Core and Shell	Air Compressor	Air Compressors	Diesel	0	140	2	0.4	0.48	4.17	0	0
Phase 1a Mixed Use	Parcel 3 Core and Shell	Boom Lift	Aerial Lifts	Diesel	0	50	6	0.2	0.31	4.75	0	0
Phase 1a Mixed Use	Parcel 3 Tenant Improvements	Generator	Generator Sets	Diesel	0	25	6	0.85	0.74	4.63	0	0
Phase 1a Mixed Use	Parcel 3 Tenant Improvements	Tire Wash	Other Construction Equipment	Diesel	1	100	4	0.9	0.42	4.75	0	0
Phase 1a Mixed Use	Parcel 3 Tenant Improvements	Gradall	Forklifts	Diesel	1	74	4	0.8	0.2	4.75	0	0
Phase 1a Mixed Use	Parcel 3 Landscaping	Excavator	Excavators	Diesel	1	25	8	0.9	0.38	4.63	0	0
Phase 1a Mixed Use	Parcel 3 Landscaping	Generator	Generator Sets	Diesel	0	25	6	0.5	0.74	4.63	0	0
Phase 1a Mixed Use	Parcel 3 Landscaping	Tire Wash	Other Construction Equipment	Diesel	0	100	4	0.9	0.42	4.75	0	0
Phase 1a Mixed Use	Parcel 3 Landscaping	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	90	8	1	0.37	4.75	0	0
Phase 1a Mixed Use	Parcel 3 Landscaping	Bob Cat	Tractors/Loaders/Backhoes	Diesel	2	70	8	0.8	0.37	4.75	0	0
Phase 1b	Demolition	Excavator	Excavators	Diesel	4	131	8	0.9	0.38	4.17	0	48
Phase 1b	Demolition	Generator	Generator Sets	Diesel	2	25	6	0.5	0.74	4.63	0	48
Phase 1b	Demolition	Tire Wash	Other Construction Equipment	Diesel	2	100	4	0.9	0.42	4.75	0	48
Phase 1b	Demolition	Concrete Crusher	Crushing/Proc. Equipment	Diesel	2	200	2	0	0.78	4.15	0	48
Phase 1b	Demolition	Bob Cat	Tractors/Loaders/Backhoes	Diesel	6	150	8	0.8	0.37	4.17	0	48
Phase 1b	Demolition	Pressure Washer	Pressure Washers	Diesel	2	25	8	1	0.3	4.63	0	48
Phase 1b	Demolition	Air Compressor	Air Compressors	Diesel	1	140	6	0.7	0.48	4.17	0	48
Phase 1b	Grading and Utilities	Blade	Graders	Diesel	2	359	8	0.15	0.41	3.79	0	65
Phase 1b	Grading and Utilities	Scraper	Scrapers	Diesel	2	52	8	0.15	0.48	4.75	0	65
Phase 1b	Grading and Utilities	Loader	Tractors/Loaders/Backhoes	Diesel	4	100	4	0.9	0.37	4.75	0	65
Phase 1b	Grading and Utilities	Tire Wash	Other Construction Equipment	Diesel	2	100	4	0.9	0.42	4.75	0	65
Phase 1b	Grading and Utilities	Excavator	Excavators	Diesel	4	359	8	0.6	0.38	3.79	0	65
Phase 1b	Grading and Utilities	Backhoe	Tractors/Loaders/Backhoes	Diesel	4	350	8	0.6	0.37	3.79	0	65
Phase 1b	Grading and Utilities	Gradall	Forklifts	Diesel	4	350	4	0.6	0.2	3.79	0	65
Phase 1b	Grading and Utilities	Compactor	Other Construction Equipment	Diesel	4	250	0.5	0.2	0.42	4.15	0	65
Phase 1b	Grading and Utilities	Paver	Pavers	Diesel	2	250	8	0.01	0.42	4.15	0	65
Phase 1b	Grading and Utilities	Generator	Generator Sets	Diesel	1	600	2	0.1	0.74	3.79	0	65
Phase 1b Office	South Garage 2023	Air Compressor	Air Compressors	Diesel	1	150	0.48	1	0.48	4.17	0	0
Phase 1b Office	South Garage 2023	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	0.054653	1	0.37	3.79	0	0
Phase 1b Office	South Garage 2023	Blade	Graders	Diesel	1	450	0	1	0.41	3.79	0	0
Phase 1b Office	South Garage 2023	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	0.054653	1	0.37	4.15	0	0

Phase 1b Office	South Garage 2023	Boom Lift	Aerial Lifts	Diesel	1	40	0	1	0.31	4.63	0	0
Phase 1b Office	South Garage 2023	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0.42	4.15	0	0
Phase 1b Office	South Garage 2023	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.78	3.79	0	0
Phase 1b Office	South Garage 2023	Concrete Pump	Pumps	Diesel	1	450	0.451485	1	0.74	3.79	0	0
Phase 1b Office	South Garage 2023	Excavator	Excavators	Diesel	1	500	2.970297	1	0.38	3.79	0	0
Phase 1b Office	South Garage 2023	Generator	Generator Sets	Diesel	1	25	3.237624	1	0.74	4.63	0	0
Phase 1b Office	South Garage 2023	Gradall	Forklifts	Diesel	1	350	3	1	0.2	3.79	0	0
Phase 1b Office	South Garage 2023	Hydro/Crawler Crane	Cranes	Diesel	1	550	4.923267	1	0.29	3.79	0	0
Phase 1b Office	South Garage 2023	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	1.485149	1	0.37	4.75	0	0
Phase 1b Office	South Garage 2023	Paver	Pavers	Diesel	1	250	0	1	0.42	4.15	0	0
Phase 1b Office	South Garage 2023	Pile Rig	Bore/Drill Rigs	Diesel	1	600	0.861386	1	0.5	3.79	0	0
Phase 1b Office	South Garage 2023	Pressure Washer	Pressure Washers	Diesel	1	25	0.156832	1	0.3	4.63	0	0
Phase 1b Office	South Garage 2023	Scraper	Scrapers	Diesel	1	600	0	1	0.48	3.79	0	0
Phase 1b Office	South Garage 2023	Tire Wash	Other Construction Equipment	Diesel	1	100	1.44802	1	0.42	4.75	0	0
Phase 1b Office	South Garage 2024	Air Compressor	Air Compressors	Diesel	1	150	0.48	1	0.48	4.17	0	0
Phase 1b Office	South Garage 2024	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	0	1	0.37	3.79	0	0
Phase 1b Office	South Garage 2024	Blade	Graders	Diesel	1	450	0	1	0.41	3.79	0	0
Phase 1b Office	South Garage 2024	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	0	1	0.37	4.15	0	0
Phase 1b Office	South Garage 2024	Boom Lift	Aerial Lifts	Diesel	1	40	4.737447	1	0.31	4.63	0	0
Phase 1b Office	South Garage 2024	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0.42	4.15	0	0
Phase 1b Office	South Garage 2024	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.78	3.79	0	0
Phase 1b Office	South Garage 2024	Concrete Pump	Pumps	Diesel	1	450	0.6	1	0.74	3.79	0	0
Phase 1b Office	South Garage 2024	Excavator	Excavators	Diesel	1	500	0	1	0.38	3.79	0	0
Phase 1b Office	South Garage 2024	Generator	Generator Sets	Diesel	1	25	0	1	0.74	4.63	0	0
Phase 1b Office	South Garage 2024	Gradall	Forklifts	Diesel	1	350	3	1	0.2	3.79	0	0
Phase 1b Office	South Garage 2024	Hydro/Crawler Crane	Cranes	Diesel	1	550	3.68617	1	0.29	3.79	0	0
Phase 1b Office	South Garage 2024	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	0	1	0.37	4.75	0	0
Phase 1b Office	South Garage 2024	Paver	Pavers	Diesel	1	250	0	1	0.42	4.15	0	0
Phase 1b Office	South Garage 2024	Pile Rig	Bore/Drill Rigs	Diesel	1	600	0	1	0.5	3.79	0	0
Phase 1b Office	South Garage 2024	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0.3	4.63	0	0
Phase 1b Office	South Garage 2024	Scraper	Scrapers	Diesel	1	600	0	1	0.48	3.79	0	0
Phase 1b Office	South Garage 2024	Tire Wash	Other Construction Equipment	Diesel	1	100	1.5	1	0.42	4.75	0	0
Phase 1b Office	Office Building 3 2023	Air Compressor	Air Compressors	Diesel	1	150	0.067119	1	0.48	4.17	0	0
Phase 1b Office	Office Building 3 2023	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	2.576271	1	0.37	3.79	0	0
Phase 1b Office	Office Building 3 2023	Blade	Graders	Diesel	1	450	0	1	0.41	3.79	0	0
Phase 1b Office	Office Building 3 2023	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	2.576271	1	0.37	4.15	0	0
Phase 1b Office	Office Building 3 2023	Boom Lift	Aerial Lifts	Diesel	1	40	1.694915	1	0.31	4.63	0	0
Phase 1b Office	Office Building 3 2023	Compactor	Other Construction Equipment	Diesel	1	250	0.206102	1	0.42	4.15	0	0
Phase 1b Office	Office Building 3 2023	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.78	3.79	0	0
Phase 1b Office	Office Building 3 2023	Concrete Pump	Pumps	Diesel	1	450	0.121356	1	0.74	3.79	0	0
Phase 1b Office	Office Building 3 2023	Excavator	Excavators	Diesel	1	500	0.128814	1	0.38	3.79	0	0
Phase 1b Office	Office Building 3 2023	Generator	Generator Sets	Diesel	1	25	4.813559	1	0.74	4.63	0	0
Phase 1b Office	Office Building 3 2023	Gradall	Forklifts	Diesel	1	350	0.48	1	0.2	3.79	0	0
Phase 1b Office	Office Building 3 2023	Hydro/Crawler Crane	Cranes	Diesel	1	550	3.322034	1	0.29	3.79	0	0
Phase 1b Office	Office Building 3 2023	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	1.864407	1	0.37	4.75	0	0
Phase 1b Office	Office Building 3 2023	Paver	Pavers	Diesel	1	250	0	1	0.42	4.15	0	0
Phase 1b Office	Office Building 3 2023	Pile Rig	Bore/Drill Rigs	Diesel	1	600	1.864407	1	0.5	3.79	0	0

Phase 1b Office	Office Building 3 2023	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0.3	4.63	0	0
Phase 1b Office	Office Building 3 2023	Scraper	Scrapers	Diesel	1	600	0	1	0.48	3.79	0	0
Phase 1b Office	Office Building 3 2023	Tire Wash	Other Construction Equipment	Diesel	1	100	1.5	1	0.42	4.75	0	0
Phase 1b Office	Office Building 3 2024	Air Compressor	Air Compressors	Diesel	1	150	0	1	0.48	4.17	0	0
Phase 1b Office	Office Building 3 2024	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	0	1	0.37	3.79	0	0
Phase 1b Office	Office Building 3 2024	Blade	Graders	Diesel	1	450	0	1	0.41	3.79	0	0
Phase 1b Office	Office Building 3 2024	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	0	1	0.37	4.15	0	0
Phase 1b Office	Office Building 3 2024	Boom Lift	Aerial Lifts	Diesel	1	40	6.858779	1	0.31	4.63	0	0
Phase 1b Office	Office Building 3 2024	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0.42	4.15	0	0
Phase 1b Office	Office Building 3 2024	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.78	3.79	0	0
Phase 1b Office	Office Building 3 2024	Concrete Pump	Pumps	Diesel	1	450	0.005038	1	0.74	3.79	0	0
Phase 1b Office	Office Building 3 2024	Excavator	Excavators	Diesel	1	500	0	1	0.38	3.79	0	0
Phase 1b Office	Office Building 3 2024	Generator	Generator Sets	Diesel	1	25	0	1	0.74	4.63	0	0
Phase 1b Office	Office Building 3 2024	Gradall	Forklifts	Diesel	1	350	0.48	1	0.2	3.79	0	0
Phase 1b Office	Office Building 3 2024	Hydro/Crawler Crane	Cranes	Diesel	1	550	0	1	0.29	3.79	0	0
Phase 1b Office	Office Building 3 2024	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	0	1	0.37	4.75	0	0
Phase 1b Office	Office Building 3 2024	Paver	Pavers	Diesel	1	250	0	1	0.42	4.15	0	0
Phase 1b Office	Office Building 3 2024	Pile Rig	Bore/Drill Rigs	Diesel	1	600	0	1	0.5	3.79	0	0
Phase 1b Office	Office Building 3 2024	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0.3	4.63	0	0
Phase 1b Office	Office Building 3 2024	Scraper	Scrapers	Diesel	1	600	0	1	0.48	3.79	0	0
Phase 1b Office	Office Building 3 2024	Tire Wash	Other Construction Equipment	Diesel	1	100	1.5	1	0.42	4.75	0	0
Phase 1b Office	Office Building 3 2025	Air Compressor	Air Compressors	Diesel	1	150	0	1	0.48	4.17	0	0
Phase 1b Office	Office Building 3 2025	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	0	1	0.37	3.79	0	0
Phase 1b Office	Office Building 3 2025	Blade	Graders	Diesel	1	450	0	1	0.41	3.79	0	0
Phase 1b Office	Office Building 3 2025	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	0	1	0.37	4.15	0	0
Phase 1b Office	Office Building 3 2025	Boom Lift	Aerial Lifts	Diesel	1	40	0	1	0.31	4.63	0	0
Phase 1b Office	Office Building 3 2025	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0.42	4.15	0	0
Phase 1b Office	Office Building 3 2025	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.78	3.79	0	0
Phase 1b Office	Office Building 3 2025	Concrete Pump	Pumps	Diesel	1	450	0	1	0.74	3.79	0	0
Phase 1b Office	Office Building 3 2025	Excavator	Excavators	Diesel	1	500	0	1	0.38	3.79	0	0
Phase 1b Office	Office Building 3 2025	Generator	Generator Sets	Diesel	1	25	0	1	0.74	4.63	0	0
Phase 1b Office	Office Building 3 2025	Gradall	Forklifts	Diesel	1	350	0.48	1	0.2	3.79	0	0
Phase 1b Office	Office Building 3 2025	Hydro/Crawler Crane	Cranes	Diesel	1	550	0	1	0.29	3.79	0	0
Phase 1b Office	Office Building 3 2025	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	0	1	0.37	4.75	0	0
Phase 1b Office	Office Building 3 2025	Paver	Pavers	Diesel	1	250	0	1	0.42	4.15	0	0
Phase 1b Office	Office Building 3 2025	Pile Rig	Bore/Drill Rigs	Diesel	1	600	0	1	0.5	3.79	0	0
Phase 1b Office	Office Building 3 2025	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0.3	4.63	0	0
Phase 1b Office	Office Building 3 2025	Scraper	Scrapers	Diesel	1	600	0	1	0.48	3.79	0	0
Phase 1b Office	Office Building 3 2025	Tire Wash	Other Construction Equipment	Diesel	1	100	1.5	1	0.42	4.75	0	0
Phase 1b Office	Office Building 1 2023	Air Compressor	Air Compressors	Diesel	1	150	0.065363	1	0.48	4.17	0	0
Phase 1b Office	Office Building 1 2023	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	2.24581	1	0.37	3.79	0	0
Phase 1b Office	Office Building 1 2023	Blade	Graders	Diesel	1	450	0	1	0.41	3.79	0	0
Phase 1b Office	Office Building 1 2023	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	2.24581	1	0.37	4.15	0	0
Phase 1b Office	Office Building 1 2023	Boom Lift	Aerial Lifts	Diesel	1	40	2.480447	1	0.31	4.63	0	0
Phase 1b Office	Office Building 1 2023	Compactor	Other Construction Equipment	Diesel	1	250	0.179665	1	0.42	4.15	0	0
Phase 1b Office	Office Building 1 2023	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.78	3.79	0	0
Phase 1b Office	Office Building 1 2023	Concrete Pump	Pumps	Diesel	1	450	0.109274	1	0.74	3.79	0	0

Phase 1b Office	Office Building 1 2023	Excavator	Excavators	Diesel	1	500	0.112291	1	0.38	3.79	0	0
Phase 1b Office	Office Building 1 2023	Generator	Generator Sets	Diesel	1	25	4.424581	1	0.74	4.63	0	0
Phase 1b Office	Office Building 1 2023	Gradall	Forklifts	Diesel	1	350	0.48	1	0.2	3.79	0	0
Phase 1b Office	Office Building 1 2023	Hydro/Crawler Crane	Cranes	Diesel	1	550	2.916201	1	0.29	3.79	0	0
Phase 1b Office	Office Building 1 2023	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	1.47486	1	0.37	4.75	0	0
Phase 1b Office	Office Building 1 2023	Paver	Pavers	Diesel	1	250	0	1	0.42	4.15	0	0
Phase 1b Office	Office Building 1 2023	Pile Rig	Bore/Drill Rigs	Diesel	1	600	1.47486	1	0.5	3.79	0	0
Phase 1b Office	Office Building 1 2023	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0.3	4.63	0	0
Phase 1b Office	Office Building 1 2023	Scraper	Scrapers	Diesel	1	600	0	1	0.48	3.79	0	0
Phase 1b Office	Office Building 1 2023	Tire Wash	Other Construction Equipment	Diesel	1	100	1.5	1	0.42	4.75	0	0
Phase 1b Office	Office Building 1 2024	Air Compressor	Air Compressors	Diesel	1	150	0	1	0.48	4.17	0	0
Phase 1b Office	Office Building 1 2024	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	0	1	0.37	3.79	0	0
Phase 1b Office	Office Building 1 2024	Blade	Graders	Diesel	1	450	0	1	0.41	3.79	0	0
Phase 1b Office	Office Building 1 2024	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	0	1	0.37	4.15	0	0
Phase 1b Office	Office Building 1 2024	Boom Lift	Aerial Lifts	Diesel	1	40	6.554217	1	0.31	4.63	0	0
Phase 1b Office	Office Building 1 2024	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0.42	4.15	0	0
Phase 1b Office	Office Building 1 2024	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.78	3.79	0	0
Phase 1b Office	Office Building 1 2024	Concrete Pump	Pumps	Diesel	1	450	0.005301	1	0.74	3.79	0	0
Phase 1b Office	Office Building 1 2024	Excavator	Excavators	Diesel	1	500	0	1	0.38	3.79	0	0
Phase 1b Office	Office Building 1 2024	Generator	Generator Sets	Diesel	1	25	0	1	0.74	4.63	0	0
Phase 1b Office	Office Building 1 2024	Gradall	Forklifts	Diesel	1	350	0.478072	1	0.2	3.79	0	0
Phase 1b Office	Office Building 1 2024	Hydro/Crawler Crane	Cranes	Diesel	1	550	0	1	0.29	3.79	0	0
Phase 1b Office	Office Building 1 2024	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	0	1	0.37	4.75	0	0
Phase 1b Office	Office Building 1 2024	Paver	Pavers	Diesel	1	250	0	1	0.42	4.15	0	0
Phase 1b Office	Office Building 1 2024	Pile Rig	Bore/Drill Rigs	Diesel	1	600	0	1	0.5	3.79	0	0
Phase 1b Office	Office Building 1 2024	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0.3	4.63	0	0
Phase 1b Office	Office Building 1 2024	Scraper	Scrapers	Diesel	1	600	0	1	0.48	3.79	0	0
Phase 1b Office	Office Building 1 2024	Tire Wash	Other Construction Equipment	Diesel	1	100	1.5	1	0.42	4.75	0	0
Phase 1b Office	Office Building 2 2023	Air Compressor	Air Compressors	Diesel	1	150	0.075669	1	0.48	4.17	0	0
Phase 1b Office	Office Building 2 2023	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	2.484076	1	0.37	3.79	0	0
Phase 1b Office	Office Building 2 2023	Blade	Graders	Diesel	1	450	0	1	0.41	3.79	0	0
Phase 1b Office	Office Building 2 2023	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	2.484076	1	0.37	4.15	0	0
Phase 1b Office	Office Building 2 2023	Boom Lift	Aerial Lifts	Diesel	1	40	1.22293	1	0.31	4.63	0	0
Phase 1b Office	Office Building 2 2023	Compactor	Other Construction Equipment	Diesel	1	250	0.198726	1	0.42	4.15	0	0
Phase 1b Office	Office Building 2 2023	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.78	3.79	0	0
Phase 1b Office	Office Building 2 2023	Concrete Pump	Pumps	Diesel	1	450	0.124204	1	0.74	3.79	0	0
Phase 1b Office	Office Building 2 2023	Excavator	Excavators	Diesel	1	500	0.124204	1	0.38	3.79	0	0
Phase 1b Office	Office Building 2 2023	Generator	Generator Sets	Diesel	1	25	5.006369	1	0.74	4.63	0	0
Phase 1b Office	Office Building 2 2023	Gradall	Forklifts	Diesel	1	350	0.48	1	0.2	3.79	0	0
Phase 1b Office	Office Building 2 2023	Hydro/Crawler Crane	Cranes	Diesel	1	550	3.324841	1	0.29	3.79	0	0
Phase 1b Office	Office Building 2 2023	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	1.681529	1	0.37	4.75	0	0
Phase 1b Office	Office Building 2 2023	Paver	Pavers	Diesel	1	250	0	1	0.42	4.15	0	0
Phase 1b Office	Office Building 2 2023	Pile Rig	Bore/Drill Rigs	Diesel	1	600	1.681529	1	0.5	3.79	0	0
Phase 1b Office	Office Building 2 2023	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0.3	4.63	0	0
Phase 1b Office	Office Building 2 2023	Scraper	Scrapers	Diesel	1	600	0	1	0.48	3.79	0	0
Phase 1b Office	Office Building 2 2023	Tire Wash	Other Construction Equipment	Diesel	1	100	1.5	1	0.42	4.75	0	0
Phase 1b Office	Office Building 2 2024	Air Compressor	Air Compressors	Diesel	1	150	0	1	0.48	4.17	0	0

Phase 1b Office	Office Building 2 2024	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	0	1	0.37	3.79	0	0
Phase 1b Office	Office Building 2 2024	Blade	Graders	Diesel	1	450	0	1	0.41	3.79	0	0
Phase 1b Office	Office Building 2 2024	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	0	1	0.37	4.15	0	0
Phase 1b Office	Office Building 2 2024	Boom Lift	Aerial Lifts	Diesel	1	40	7.270992	1	0.31	4.63	0	0
Phase 1b Office	Office Building 2 2024	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0.42	4.15	0	0
Phase 1b Office	Office Building 2 2024	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.78	3.79	0	0
Phase 1b Office	Office Building 2 2024	Concrete Pump	Pumps	Diesel	1	450	0.005038	1	0.74	3.79	0	0
Phase 1b Office	Office Building 2 2024	Excavator	Excavators	Diesel	1	500	0	1	0.38	3.79	0	0
Phase 1b Office	Office Building 2 2024	Generator	Generator Sets	Diesel	1	25	0	1	0.74	4.63	0	0
Phase 1b Office	Office Building 2 2024	Gradall	Forklifts	Diesel	1	350	0.48	1	0.2	3.79	0	0
Phase 1b Office	Office Building 2 2024	Hydro/Crawler Crane	Cranes	Diesel	1	550	0	1	0.29	3.79	0	0
Phase 1b Office	Office Building 2 2024	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	0	1	0.37	4.75	0	0
Phase 1b Office	Office Building 2 2024	Paver	Pavers	Diesel	1	250	0	1	0.42	4.15	0	0
Phase 1b Office	Office Building 2 2024	Pile Rig	Bore/Drill Rigs	Diesel	1	600	0	1	0.5	3.79	0	0
Phase 1b Office	Office Building 2 2024	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0.3	4.63	0	0
Phase 1b Office	Office Building 2 2024	Scraper	Scrapers	Diesel	1	600	0	1	0.48	3.79	0	0
Phase 1b Office	Office Building 2 2024	Tire Wash	Other Construction Equipment	Diesel	1	100	1.5	1	0.42	4.75	0	0
Phase 1b Office	Office Building 2 2025	Air Compressor	Air Compressors	Diesel	1	150	0	1	0.48	4.17	0	0
Phase 1b Office	Office Building 2 2025	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	0	1	0.37	3.79	0	0
Phase 1b Office	Office Building 2 2025	Blade	Graders	Diesel	1	450	0	1	0.41	3.79	0	0
Phase 1b Office	Office Building 2 2025	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	0	1	0.37	4.15	0	0
Phase 1b Office	Office Building 2 2025	Boom Lift	Aerial Lifts	Diesel	1	40	0	1	0.31	4.63	0	0
Phase 1b Office	Office Building 2 2025	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0.42	4.15	0	0
Phase 1b Office	Office Building 2 2025	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.78	3.79	0	0
Phase 1b Office	Office Building 2 2025	Concrete Pump	Pumps	Diesel	1	450	0	1	0.74	3.79	0	0
Phase 1b Office	Office Building 2 2025	Excavator	Excavators	Diesel	1	500	0	1	0.38	3.79	0	0
Phase 1b Office	Office Building 2 2025	Generator	Generator Sets	Diesel	1	25	0	1	0.74	4.63	0	0
Phase 1b Office	Office Building 2 2025	Gradall	Forklifts	Diesel	1	350	0.48	1	0.2	3.79	0	0
Phase 1b Office	Office Building 2 2025	Hydro/Crawler Crane	Cranes	Diesel	1	550	0	1	0.29	3.79	0	0
Phase 1b Office	Office Building 2 2025	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	0	1	0.37	4.75	0	0
Phase 1b Office	Office Building 2 2025	Paver	Pavers	Diesel	1	250	0	1	0.42	4.15	0	0
Phase 1b Office	Office Building 2 2025	Pile Rig	Bore/Drill Rigs	Diesel	1	600	0	1	0.5	3.79	0	0
Phase 1b Office	Office Building 2 2025	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0.3	4.63	0	0
Phase 1b Office	Office Building 2 2025	Scraper	Scrapers	Diesel	1	600	0	1	0.48	3.79	0	0
Phase 1b Office	Office Building 2 2025	Tire Wash	Other Construction Equipment	Diesel	1	100	1.5	1	0.42	4.75	0	0
Phase 1b Office	Office Building 5 2023	Air Compressor	Air Compressors	Diesel	1	150	0.058812	1	0.48	4.17	0	0
Phase 1b Office	Office Building 5 2023	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	2.643564	1	0.37	3.79	0	0
Phase 1b Office	Office Building 5 2023	Blade	Graders	Diesel	1	450	0	1	0.41	3.79	0	0
Phase 1b Office	Office Building 5 2023	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	2.643564	1	0.37	4.15	0	0
Phase 1b Office	Office Building 5 2023	Boom Lift	Aerial Lifts	Diesel	1	40	2.19802	1	0.31	4.63	0	0
Phase 1b Office	Office Building 5 2023	Compactor	Other Construction Equipment	Diesel	1	250	0.211485	1	0.42	4.15	0	0
Phase 1b Office	Office Building 5 2023	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.78	3.79	0	0
Phase 1b Office	Office Building 5 2023	Concrete Pump	Pumps	Diesel	1	450	0.117327	1	0.74	3.79	0	0
Phase 1b Office	Office Building 5 2023	Excavator	Excavators	Diesel	1	500	0.132178	1	0.38	3.79	0	0
Phase 1b Office	Office Building 5 2023	Generator	Generator Sets	Diesel	1	25	4.60396	1	0.74	4.63	0	0
Phase 1b Office	Office Building 5 2023	Gradall	Forklifts	Diesel	1	350	0.48	1	0.2	3.79	0	0
Phase 1b Office	Office Building 5 2023	Hydro/Crawler Crane	Cranes	Diesel	1	550	3.267327	1	0.29	3.79	0	0

Phase 1b Office	Office Building 5 2023	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	1.960396	1	0.37	4.75	0	0
Phase 1b Office	Office Building 5 2023	Paver	Pavers	Diesel	1	250	0	1	0.42	4.15	0	0
Phase 1b Office	Office Building 5 2023	Pile Rig	Bore/Drill Rigs	Diesel	1	600	1.960396	1	0.5	3.79	0	0
Phase 1b Office	Office Building 5 2023	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0.3	4.63	0	0
Phase 1b Office	Office Building 5 2023	Scraper	Scrapers	Diesel	1	600	0	1	0.48	3.79	0	0
Phase 1b Office	Office Building 5 2023	Tire Wash	Other Construction Equipment	Diesel	1	100	1.5	1	0.42	4.75	0	0
Phase 1b Office	Office Building 5 2024	Air Compressor	Air Compressors	Diesel	1	150	0	1	0.48	4.17	0	0
Phase 1b Office	Office Building 5 2024	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	0	1	0.37	3.79	0	0
Phase 1b Office	Office Building 5 2024	Blade	Graders	Diesel	1	450	0	1	0.41	3.79	0	0
Phase 1b Office	Office Building 5 2024	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	0	1	0.37	4.15	0	0
Phase 1b Office	Office Building 5 2024	Boom Lift	Aerial Lifts	Diesel	1	40	6.194656	1	0.31	4.63	0	0
Phase 1b Office	Office Building 5 2024	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0.42	4.15	0	0
Phase 1b Office	Office Building 5 2024	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.78	3.79	0	0
Phase 1b Office	Office Building 5 2024	Concrete Pump	Pumps	Diesel	1	450	0.004809	1	0.74	3.79	0	0
Phase 1b Office	Office Building 5 2024	Excavator	Excavators	Diesel	1	500	0	1	0.38	3.79	0	0
Phase 1b Office	Office Building 5 2024	Generator	Generator Sets	Diesel	1	25	0	1	0.74	4.63	0	0
Phase 1b Office	Office Building 5 2024	Gradall	Forklifts	Diesel	1	350	0.48	1	0.2	3.79	0	0
Phase 1b Office	Office Building 5 2024	Hydro/Crawler Crane	Cranes	Diesel	1	550	0	1	0.29	3.79	0	0
Phase 1b Office	Office Building 5 2024	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	0	1	0.37	4.75	0	0
Phase 1b Office	Office Building 5 2024	Paver	Pavers	Diesel	1	250	0	1	0.42	4.15	0	0
Phase 1b Office	Office Building 5 2024	Pile Rig	Bore/Drill Rigs	Diesel	1	600	0	1	0.5	3.79	0	0
Phase 1b Office	Office Building 5 2024	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0.3	4.63	0	0
Phase 1b Office	Office Building 5 2024	Scraper	Scrapers	Diesel	1	600	0	1	0.48	3.79	0	0
Phase 1b Office	Office Building 5 2024	Tire Wash	Other Construction Equipment	Diesel	1	100	1.5	1	0.42	4.75	0	0
Phase 1b Office	Office Building 5 2025	Air Compressor	Air Compressors	Diesel	1	150	0	1	0.48	4.17	0	0
Phase 1b Office	Office Building 5 2025	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	0	1	0.37	3.79	0	0
Phase 1b Office	Office Building 5 2025	Blade	Graders	Diesel	1	450	0	1	0.41	3.79	0	0
Phase 1b Office	Office Building 5 2025	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	0	1	0.37	4.15	0	0
Phase 1b Office	Office Building 5 2025	Boom Lift	Aerial Lifts	Diesel	1	40	0	1	0.31	4.63	0	0
Phase 1b Office	Office Building 5 2025	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0.42	4.15	0	0
Phase 1b Office	Office Building 5 2025	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.78	3.79	0	0
Phase 1b Office	Office Building 5 2025	Concrete Pump	Pumps	Diesel	1	450	0	1	0.74	3.79	0	0
Phase 1b Office	Office Building 5 2025	Excavator	Excavators	Diesel	1	500	0	1	0.38	3.79	0	0
Phase 1b Office	Office Building 5 2025	Generator	Generator Sets	Diesel	1	25	0	1	0.74	4.63	0	0
Phase 1b Office	Office Building 5 2025	Gradall	Forklifts	Diesel	1	350	0.48	1	0.2	3.79	0	0
Phase 1b Office	Office Building 5 2025	Hydro/Crawler Crane	Cranes	Diesel	1	550	0	1	0.29	3.79	0	0
Phase 1b Office	Office Building 5 2025	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	0	1	0.37	4.75	0	0
Phase 1b Office	Office Building 5 2025	Paver	Pavers	Diesel	1	250	0	1	0.42	4.15	0	0
Phase 1b Office	Office Building 5 2025	Pile Rig	Bore/Drill Rigs	Diesel	1	600	0	1	0.5	3.79	0	0
Phase 1b Office	Office Building 5 2025	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0.3	4.63	0	0
Phase 1b Office	Office Building 5 2025	Scraper	Scrapers	Diesel	1	600	0	1	0.48	3.79	0	0
Phase 1b Office	Office Building 5 2025	Tire Wash	Other Construction Equipment	Diesel	1	100	1.5	1	0.42	4.75	0	0
Phase 1b Office	Office Building 6 2023	Air Compressor	Air Compressors	Diesel	1	150	0.062206	1	0.48	4.17	0	0
Phase 1b Office	Office Building 6 2023	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	3.926471	1	0.37	3.79	0	0
Phase 1b Office	Office Building 6 2023	Blade	Graders	Diesel	1	450	0	1	0.41	3.79	0	0
Phase 1b Office	Office Building 6 2023	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	3.926471	1	0.37	4.15	0	0
Phase 1b Office	Office Building 6 2023	Boom Lift	Aerial Lifts	Diesel	1	40	0	1	0.31	4.63	0	0

Phase 1b Office	Office Building 6 2023	Compactor	Other Construction Equipment	Diesel	1	250	0.314118	1	0.42	4.15	0	0
Phase 1b Office	Office Building 6 2023	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.78	3.79	0	0
Phase 1b Office	Office Building 6 2023	Concrete Pump	Pumps	Diesel	1	450	0.157941	1	0.74	3.79	0	0
Phase 1b Office	Office Building 6 2023	Excavator	Excavators	Diesel	1	500	0.196324	1	0.38	3.79	0	0
Phase 1b Office	Office Building 6 2023	Generator	Generator Sets	Diesel	1	25	6	1	0.74	4.63	0	0
Phase 1b Office	Office Building 6 2023	Gradall	Forklifts	Diesel	1	350	0.48	1	0.2	3.79	0	0
Phase 1b Office	Office Building 6 2023	Hydro/Crawler Crane	Cranes	Diesel	1	550	4.897059	1	0.29	3.79	0	0
Phase 1b Office	Office Building 6 2023	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	3	1	0.37	4.75	0	0
Phase 1b Office	Office Building 6 2023	Paver	Pavers	Diesel	1	250	0	1	0.42	4.15	0	0
Phase 1b Office	Office Building 6 2023	Pile Rig	Bore/Drill Rigs	Diesel	1	600	3	1	0.5	3.79	0	0
Phase 1b Office	Office Building 6 2023	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0.3	4.63	0	0
Phase 1b Office	Office Building 6 2023	Scraper	Scrapers	Diesel	1	600	0	1	0.48	3.79	0	0
Phase 1b Office	Office Building 6 2023	Tire Wash	Other Construction Equipment	Diesel	1	100	1.5	1	0.42	4.75	0	0
Phase 1b Office	Office Building 6 2024	Air Compressor	Air Compressors	Diesel	1	150	0.013053	1	0.48	4.17	0	0
Phase 1b Office	Office Building 6 2024	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	0	1	0.37	3.79	0	0
Phase 1b Office	Office Building 6 2024	Blade	Graders	Diesel	1	450	0	1	0.41	3.79	0	0
Phase 1b Office	Office Building 6 2024	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	0	1	0.37	4.15	0	0
Phase 1b Office	Office Building 6 2024	Boom Lift	Aerial Lifts	Diesel	1	40	8.003817	1	0.31	4.63	0	0
Phase 1b Office	Office Building 6 2024	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0.42	4.15	0	0
Phase 1b Office	Office Building 6 2024	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.78	3.79	0	0
Phase 1b Office	Office Building 6 2024	Concrete Pump	Pumps	Diesel	1	450	0.013969	1	0.74	3.79	0	0
Phase 1b Office	Office Building 6 2024	Excavator	Excavators	Diesel	1	500	0	1	0.38	3.79	0	0
Phase 1b Office	Office Building 6 2024	Generator	Generator Sets	Diesel	1	25	0.435115	1	0.74	4.63	0	0
Phase 1b Office	Office Building 6 2024	Gradall	Forklifts	Diesel	1	350	0.48	1	0.2	3.79	0	0
Phase 1b Office	Office Building 6 2024	Hydro/Crawler Crane	Cranes	Diesel	1	550	0	1	0.29	3.79	0	0
Phase 1b Office	Office Building 6 2024	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	0	1	0.37	4.75	0	0
Phase 1b Office	Office Building 6 2024	Paver	Pavers	Diesel	1	250	0	1	0.42	4.15	0	0
Phase 1b Office	Office Building 6 2024	Pile Rig	Bore/Drill Rigs	Diesel	1	600	0	1	0.5	3.79	0	0
Phase 1b Office	Office Building 6 2024	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0.3	4.63	0	0
Phase 1b Office	Office Building 6 2024	Scraper	Scrapers	Diesel	1	600	0	1	0.48	3.79	0	0
Phase 1b Office	Office Building 6 2024	Tire Wash	Other Construction Equipment	Diesel	1	100	1.5	1	0.42	4.75	0	0
Phase 1b Office	Office Building 6 2025	Air Compressor	Air Compressors	Diesel	1	150	0	1	0.48	4.17	0	0
Phase 1b Office	Office Building 6 2025	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	0	1	0.37	3.79	0	0
Phase 1b Office	Office Building 6 2025	Blade	Graders	Diesel	1	450	0	1	0.41	3.79	0	0
Phase 1b Office	Office Building 6 2025	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	0	1	0.37	4.15	0	0
Phase 1b Office	Office Building 6 2025	Boom Lift	Aerial Lifts	Diesel	1	40	0	1	0.31	4.63	0	0
Phase 1b Office	Office Building 6 2025	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0.42	4.15	0	0
Phase 1b Office	Office Building 6 2025	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.78	3.79	0	0
Phase 1b Office	Office Building 6 2025	Concrete Pump	Pumps	Diesel	1	450	0	1	0.74	3.79	0	0
Phase 1b Office	Office Building 6 2025	Excavator	Excavators	Diesel	1	500	0	1	0.38	3.79	0	0
Phase 1b Office	Office Building 6 2025	Generator	Generator Sets	Diesel	1	25	0	1	0.74	4.63	0	0
Phase 1b Office	Office Building 6 2025	Gradall	Forklifts	Diesel	1	350	0.48	1	0.2	3.79	0	0
Phase 1b Office	Office Building 6 2025	Hydro/Crawler Crane	Cranes	Diesel	1	550	0	1	0.29	3.79	0	0
Phase 1b Office	Office Building 6 2025	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	0	1	0.37	4.75	0	0
Phase 1b Office	Office Building 6 2025	Paver	Pavers	Diesel	1	250	0	1	0.42	4.15	0	0
Phase 1b Office	Office Building 6 2025	Pile Rig	Bore/Drill Rigs	Diesel	1	600	0	1	0.5	3.79	0	0
Phase 1b Office	Office Building 6 2025	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0.3	4.63	0	0

Phase 1b Office	Office Building 6 2025	Scraper	Scrapers	Diesel	1	600	0	1	0.48	3.79	0	0
Phase 1b Office	Office Building 6 2025	Tire Wash	Other Construction Equipment	Diesel	1	100	1.5	1	0.42	4.75	0	0
Phase 1b Mixed Use	Parcel 7 Foundations	Pile Rig	Bore/Drill Rigs	Diesel	0	600	8	0.4	0.5	3.79	0	0
Phase 1b Mixed Use	Parcel 7 Foundations	Generator	Generator Sets	Diesel	0	25	6	1	0.74	4.63	0	0
Phase 1b Mixed Use	Parcel 7 Foundations	Tire Wash	Other Construction Equipment	Diesel	1	100	4	0.9	0.42	4.75	0	0
Phase 1b Mixed Use	Parcel 7 Foundations	Excavator	Excavators	Diesel	1	131	8	0.6	0.38	4.17	0	0
Phase 1b Mixed Use	Parcel 7 Foundations	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	90	8	0.6	0.37	4.75	0	0
Phase 1b Mixed Use	Parcel 7 Foundations	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	70	8	0.8	0.37	4.75	0	0
Phase 1b Mixed Use	Parcel 7 Foundations	Gradall	Forklifts	Diesel	1	74	4	0.8	0.2	4.75	0	0
Phase 1b Mixed Use	Parcel 7 Foundations	Crane	Cranes	Diesel	1	215	4	0.5	0.29	4.15	0	0
Phase 1b Mixed Use	Parcel 7 Foundations	Concrete Pump	Pumps	Diesel	1	450	0.25	0.5	0.74	3.79	0	0
Phase 1b Mixed Use	Parcel 7 Core and Shell	Generator	Generator Sets	Diesel	0	25	6	1	0.74	4.63	0	0
Phase 1b Mixed Use	Parcel 7 Core and Shell	Tire Wash	Other Construction Equipment	Diesel	1	100	4	0.9	0.42	4.75	0	0
Phase 1b Mixed Use	Parcel 7 Core and Shell	Crane	Cranes	Diesel	1	600	8	0.2	0.29	3.79	0	0
Phase 1b Mixed Use	Parcel 7 Core and Shell	Gradall	Forklifts	Diesel	1	74	4	0.8	0.2	4.75	0	0
Phase 1b Mixed Use	Parcel 7 Core and Shell	Concrete Pump	Pumps	Diesel	0	450	6	0.225	0.74	3.79	0	0
Phase 1b Mixed Use	Parcel 7 Core and Shell	Air Compressor	Air Compressors	Diesel	0	140	2	0.4	0.48	4.17	0	0
Phase 1b Mixed Use	Parcel 7 Core and Shell	Boom Lift	Aerial Lifts	Diesel	0	50	6	0.2	0.31	4.75	0	0
Phase 1b Mixed Use	Parcel 7 Tenant Improvements	Generator	Generator Sets	Diesel	0	25	6	0.85	0.74	4.63	0	0
Phase 1b Mixed Use	Parcel 7 Tenant Improvements	Tire Wash	Other Construction Equipment	Diesel	1	100	4	0.9	0.42	4.75	0	0
Phase 1b Mixed Use	Parcel 7 Tenant Improvements	Gradall	Forklifts	Diesel	1	74	4	0.8	0.2	4.75	0	0
Phase 1b Mixed Use	Parcel 7 Landscaping	Excavator	Excavators	Diesel	1	25	8	0.9	0.38	4.63	0	0
Phase 1b Mixed Use	Parcel 7 Landscaping	Generator	Generator Sets	Diesel	0	25	6	0.5	0.74	4.63	0	0
Phase 1b Mixed Use	Parcel 7 Landscaping	Tire Wash	Other Construction Equipment	Diesel	1	100	4	0.9	0.42	4.75	0	0
Phase 1b Mixed Use	Parcel 7 Landscaping	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	90	8	0.6	0.37	4.75	0	0
Phase 1b Mixed Use	Parcel 7 Landscaping	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	70	8	0.8	0.37	4.75	0	0
Phase 1b Mixed Use	Parcel 6 Foundations	Pile Rig	Bore/Drill Rigs	Diesel	0	600	8	0.4	0.5	3.79	0	0
Phase 1b Mixed Use	Parcel 6 Foundations	Generator	Generator Sets	Diesel	0	25	6	1	0.74	4.63	0	0
Phase 1b Mixed Use	Parcel 6 Foundations	Tire Wash	Other Construction Equipment	Diesel	1	100	4	0.9	0.42	4.75	0	0
Phase 1b Mixed Use	Parcel 6 Foundations	Excavator	Excavators	Diesel	1	131	8	0.6	0.38	4.17	0	0
Phase 1b Mixed Use	Parcel 6 Foundations	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	90	8	0.6	0.37	4.75	0	0
Phase 1b Mixed Use	Parcel 6 Foundations	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	70	8	0.8	0.37	4.75	0	0
Phase 1b Mixed Use	Parcel 6 Foundations	Gradall	Forklifts	Diesel	1	74	4	0.8	0.2	4.75	0	0
Phase 1b Mixed Use	Parcel 6 Foundations	Crane	Cranes	Diesel	1	215	4	0.5	0.29	4.15	0	0
Phase 1b Mixed Use	Parcel 6 Foundations	Concrete Pump	Pumps	Diesel	1	450	0.5	0.5	0.74	3.79	0	0
Phase 1b Mixed Use	Parcel 6 Core and Shell	Generator	Generator Sets	Diesel	0	25	6	1	0.74	4.63	0	0
Phase 1b Mixed Use	Parcel 6 Core and Shell	Tire Wash	Other Construction Equipment	Diesel	1	100	4	0.9	0.42	4.75	0	0
Phase 1b Mixed Use	Parcel 6 Core and Shell	Crane	Cranes	Diesel	1	600	8	0.2	0.29	3.79	0	0
Phase 1b Mixed Use	Parcel 6 Core and Shell	Gradall	Forklifts	Diesel	2	74	4	0.8	0.2	4.75	0	0
Phase 1b Mixed Use	Parcel 6 Core and Shell	Concrete Pump	Pumps	Diesel	0	450	6	0.225	0.74	3.79	0	0
Phase 1b Mixed Use	Parcel 6 Core and Shell	Air Compressor	Air Compressors	Diesel	0	140	2	0.4	0.48	4.17	0	0
Phase 1b Mixed Use	Parcel 6 Core and Shell	Boom Lift	Aerial Lifts	Diesel	0	50	6	0.2	0.31	4.75	0	0
Phase 1b Mixed Use	Parcel 6 Tenant Improvements	Generator	Generator Sets	Diesel	0	25	6	0.85	0.74	4.63	0	0
Phase 1b Mixed Use	Parcel 6 Tenant Improvements	Tire Wash	Other Construction Equipment	Diesel	1	100	4	0.9	0.42	4.75	0	0
Phase 1b Mixed Use	Parcel 6 Tenant Improvements	Gradall	Forklifts	Diesel	1	74	4	0.8	0.2	4.75	0	0
Phase 1b Mixed Use	Parcel 6 Landscaping	Excavator	Excavators	Diesel	1	25	8	0.9	0.38	4.63	0	0
Phase 1b Mixed Use	Parcel 6 Landscaping	Generator	Generator Sets	Diesel	0	25	6	0.5	0.74	4.63	0	0

Phase 1b Mixed Use	Parcel 6 Landscaping	Tire Wash	Other Construction Equipment	Diesel	0	100	4	0.9	0.42	4.75	0	0
Phase 1b Mixed Use	Parcel 6 Landscaping	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	90	8	0.6	0.37	4.75	0	0
Phase 1b Mixed Use	Parcel 6 Landscaping	Bob Cat	Tractors/Loaders/Backhoes	Diesel	2	70	8	0.8	0.37	4.75	0	0
Phase 2 Mixed Use	Grading and Utilities	Blade	Graders	Diesel	1	359	8	0.15	0.41	3.79	0	0
Phase 2 Mixed Use	Grading and Utilities	Scraper	Scrapers	Diesel	1	52	8	0.15	0.48	4.75	0	0
Phase 2 Mixed Use	Grading and Utilities	Loader	Tractors/Loaders/Backhoes	Diesel	2	100	4	0.9	0.37	4.75	0	0
Phase 2 Mixed Use	Grading and Utilities	Tire Wash	Other Construction Equipment	Diesel	1	100	4	0.9	0.42	4.75	0	0
Phase 2 Mixed Use	Grading and Utilities	Excavator	Excavators	Diesel	2	359	8	0.6	0.38	3.79	0	0
Phase 2 Mixed Use	Grading and Utilities	Backhoe	Tractors/Loaders/Backhoes	Diesel	2	350	8	0.6	0.37	3.79	0	0
Phase 2 Mixed Use	Grading and Utilities	Gradall	Forklifts	Diesel	2	350	4	0.6	0.2	3.79	0	0
Phase 2 Mixed Use	Grading and Utilities	Compactor	Other Construction Equipment	Diesel	2	250	0.5	0.2	0.42	4.15	0	0
Phase 2 Mixed Use	Grading and Utilities	Paver	Pavers	Diesel	1	250	8	0.01	0.42	4.15	0	0
Phase 2 Mixed Use	Grading and Utilities	Generator	Generator Sets	Diesel	1	600	2	0.1	0.74	3.79	0	0
Phase 2 Mixed Use	Tunnel Construction	Crane	Cranes	Diesel	1	290	6	0.35	0.29	4.15	0	0
Phase 2 Mixed Use	Tunnel Construction	Excavator	Excavators	Diesel	2	170	6	0.45	0.38	4.17	0	0
Phase 2 Mixed Use	Tunnel Construction	Loader	Tractors/Loaders/Backhoes	Diesel	1	250	6	0.45	0.37	4.15	0	0
Phase 2 Mixed Use	Tunnel Construction	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	103	6	0.4	0.37	4.75	0	0
Phase 2 Mixed Use	Tunnel Construction	Gradall	Forklifts	Diesel	1	130	6	0.35	0.2	4.17	0	0
Phase 2 Mixed Use	Tunnel Construction	Compressor	Air Compressors	Diesel	2	50	6	0.3	0.48	4.75	0	0
Phase 2 Mixed Use	Foundations	Pile Rig	Bore/Drill Rigs	Diesel	0	600	8	0.4	0.5	3.79	0	0
Phase 2 Mixed Use	Foundations	Generator	Generator Sets	Diesel	2	25	6	1	0.74	4.63	0	0
Phase 2 Mixed Use	Foundations	Tire Wash	Other Construction Equipment	Diesel	2	100	4	0.9	0.42	4.75	0	0
Phase 2 Mixed Use	Foundations	Excavator	Excavators	Diesel	2	131	8	0.6	0.38	4.17	0	0
Phase 2 Mixed Use	Foundations	Backhoe	Tractors/Loaders/Backhoes	Diesel	2	90	8	0.6	0.37	4.75	0	0
Phase 2 Mixed Use	Foundations	Bob Cat	Tractors/Loaders/Backhoes	Diesel	2	70	8	0.8	0.37	4.75	0	0
Phase 2 Mixed Use	Foundations	Gradall	Forklifts	Diesel	2	74	4	0.8	0.2	4.75	0	0
Phase 2 Mixed Use	Foundations	Crane	Cranes	Diesel	2	215	4	0.5	0.29	4.15	0	0
Phase 2 Mixed Use	Foundations	Concrete Pump	Pumps	Diesel	3	450	0.5	0.5	0.74	3.79	0	0
Phase 2 Mixed Use	Core and Shell	Generator	Generator Sets	Diesel	2	25	6	1	0.74	4.63	0	0
Phase 2 Mixed Use	Core and Shell	Tire Wash	Other Construction Equipment	Diesel	2	100	4	0.9	0.42	4.75	0	0
Phase 2 Mixed Use	Core and Shell	Crane	Cranes	Diesel	2	600	8	0.2	0.29	3.79	0	0
Phase 2 Mixed Use	Core and Shell	Gradall	Forklifts	Diesel	3	74	4	0.8	0.2	4.75	0	0
Phase 2 Mixed Use	Core and Shell	Concrete Pump	Pumps	Diesel	0	450	6	0.45	0.74	3.79	0	0
Phase 2 Mixed Use	Core and Shell	Air Compressor	Air Compressors	Diesel	0	140	2	0.8	0.48	4.17	0	0
Phase 2 Mixed Use	Core and Shell	Boom Lift	Aerial Lifts	Diesel	0	50	6	0.4	0.31	4.75	0	0
Phase 2 Mixed Use	Tenant Improvements	Generator	Generator Sets	Diesel	2	25	6	0.85	0.74	4.63	0	0
Phase 2 Mixed Use	Tenant Improvements	Tire Wash	Other Construction Equipment	Diesel	2	100	4	0.9	0.42	4.75	0	0
Phase 2 Mixed Use	Tenant Improvements	Gradall	Forklifts	Diesel	1	74	4	0.8	0.2	4.75	0	0
Phase 2 Mixed Use	Landscaping	Excavator	Excavators	Diesel	1	25	8	0.9	0.38	4.63	0	0
Phase 2 Mixed Use	Landscaping	Generator	Generator Sets	Diesel	0	25	6	0.5	0.74	4.63	0	0
Phase 2 Mixed Use	Landscaping	Tire Wash	Other Construction Equipment	Diesel	1	100	4	0.9	0.42	4.75	0	0
Phase 2 Mixed Use	Landscaping	Backhoe	Tractors/Loaders/Backhoes	Diesel	2	90	8	0.6	0.37	4.75	0	0
Phase 2 Mixed Use	Landscaping	Bob Cat	Tractors/Loaders/Backhoes	Diesel	3	70	8	0.8	0.37	4.75	0	0
Alternate 1	Demolition	Excavator	Excavators	Diesel	1	131	8	0.9	0.38	4.17	0	0
Alternate 1	Demolition	Generator	Generator Sets	Diesel	1	25	6	0.5	0.74	4.63	0	0
Alternate 1	Demolition	Tire Wash	Other Construction Equipment	Diesel	2	100	4	0.9	0.42	4.75	0	0
Alternate 1	Demolition	Bob Cat	Tractors/Loaders/Backhoes	Diesel	2	70	8	0.8	0.37	4.75	0	0

Alternate 1	Demolition	Pressure Washer	Pressure Washers	Diesel	2	25	8	1	0.3	4.63	0	0
Alternate 1	Demolition	Air Compressor	Air Compressors	Diesel	1	140	6	0.7	0.48	4.17	0	0
Alternate 1	Grading and Utilities	Loader	Tractors/Loaders/Backhoes	Diesel	2	100	4	0.9	0.37	4.75	0	0
Alternate 1	Grading and Utilities	Tire Wash	Other Construction Equipment	Diesel	1	100	4	0.9	0.42	4.75	0	0
Alternate 1	Grading and Utilities	Excavator	Excavators	Diesel	1	359	8	0.6	0.38	3.79	0	0
Alternate 1	Grading and Utilities	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	90	8	0.6	0.37	4.75	0	0
Alternate 1	Grading and Utilities	Gradall	Forklifts	Diesel	1	74	4	0.6	0.2	4.75	0	0
Alternate 1	Grading and Utilities	Compactor	Other Construction Equipment	Diesel	1	250	0.5	0.2	0.42	4.15	0	0
Alternate 1	Grading and Utilities	Paver	Pavers	Diesel	1	250	8	0.01	0.42	4.15	0	0
Alternate 1	Grading and Utilities	Generator	Generator Sets	Diesel	1	600	2	0.1	0.74	3.79	0	0
Alternate 1	Foundations	Generator	Generator Sets	Diesel	1	25	6	1	0.74	4.63	0	0
Alternate 1	Foundations	Tire Wash	Other Construction Equipment	Diesel	1	100	4	0.9	0.42	4.75	0	0
Alternate 1	Foundations	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	90	8	0.6	0.37	4.75	0	0
Alternate 1	Foundations	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	70	8	0.8	0.37	4.75	0	0
Alternate 1	Foundations	Gradall	Forklifts	Diesel	1	74	4	0.8	0.2	4.75	0	0
Alternate 1	Foundations	Concrete Pump	Pumps	Diesel	1	450	6	0.3	0.74	3.79	0	0
Alternate 1	Core and Shell	Generator	Generator Sets	Diesel	1	25	6	1	0.74	4.63	0	0
Alternate 1	Core and Shell	Tire Wash	Other Construction Equipment	Diesel	1	100	4	0.9	0.42	4.75	0	0
Alternate 1	Core and Shell	Gradall	Forklifts	Diesel	1	74	4	0.8	0.2	4.75	0	0
Alternate 1	Core and Shell	Concrete Pump	Pumps	Diesel	1	450	6	0.45	0.74	3.79	0	0
Alternate 1	Tenant Improvements	Generator	Generator Sets	Diesel	1	25	6	0.85	0.74	4.63	0	0
Alternate 1	Tenant Improvements	Tire Wash	Other Construction Equipment	Diesel	2	100	4	0.9	0.42	4.75	0	0
Alternate 1	Tenant Improvements	Gradall	Forklifts	Diesel	1	74	4	0.8	0.2	4.75	0	0

Days in each year				Emissions (lb/yr)					
2023	2024	2025	2026	2021	2022	2023	2024	2025	2026
0	0	0	0	171.3417964	1107.131608	0	0	0	0
0	0	0	0	14.72935911	95.17432042	0	0	0	0
0	0	0	0	41.16757424	266.0058643	0	0	0	0
0	0	0	0	0	0	0	0	0	0
0	0	0	0	254.7065676	1645.796283	0	0	0	0
0	0	0	0	15.92363147	102.8911572	0	0	0	0
0	0	0	0	33.7314103	217.956805	0	0	0	0
0	0	0	0	0	422.086365	0	0	0	0
0	0	0	0	0	89.70610463	0	0	0	0
0	0	0	0	0	797.866796	0	0	0	0
0	0	0	0	0	452.8433167	0	0	0	0
0	0	0	0	0	3129.615975	0	0	0	0
0	0	0	0	0	2970.864014	0	0	0	0
0	0	0	0	0	802.9362199	0	0	0	0
0	0	0	0	0	54.9502855	0	0	0	0
0	0	0	0	0	21.9801142	0	0	0	0
0	0	0	0	0	106.1022862	0	0	0	0
0	0	0	0	0	13.0265729	0	0	0	0
0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	38.56410018	0	0	0	0
0	0	0	0	0	781.0780661	0	0	0	0
0	0	0	0	0	37.38991159	0	0	0	0
0	0	0	0	0	71.94140082	0	0	0	0
0	0	0	0	0	163.9236205	0	0	0	0
0	0	0	0	0	95.31625477	0	0	0	0
0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	436.1604092	0	0	0	0
0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	21.7713133	0	0	0	0
258	0	0	0	0	0	82.28981415	0	0	0
258	0	0	0	0	0	10.90701823	0	0	0
258	0	0	0	0	0	0	0	0	0
258	0	0	0	0	0	6.824594898	0	0	0
258	0	0	0	0	0	43.62193099	0	0	0
258	0	0	0	0	0	0	0	0	0
258	0	0	0	0	0	0	0	0	0
258	0	0	0	0	0	415.69095	0	0	0
258	0	0	0	0	0	190.5068454	0	0	0
258	0	0	0	0	0	86.11009943	0	0	0

453.59

453.59 g/lb

258	0	0	0	0	0	454.459093	0	0	0
258	0	0	0	0	0	1729.194289	0	0	0
258	0	0	0	0	0	23.24786702	0	0	0
258	0	0	0	0	0	0	0	0	0
258	0	0	0	0	0	0	0	0	0
258	0	0	0	0	0	2.425291563	0	0	0
258	0	0	0	0	0	0	0	0	0
258	0	0	0	0	0	170.8718226	0	0	0
242	0	0	0	0	0	7.863601931	0	0	0
242	0	0	0	0	0	331.1059106	0	0	0
242	0	0	0	0	0	0	0	0	0
242	0	0	0	0	0	207.1752023	0	0	0
242	0	0	0	0	0	227.8304195	0	0	0
242	0	0	0	0	0	23.51718512	0	0	0
242	0	0	0	0	0	0	0	0	0
242	0	0	0	0	0	50.75102361	0	0	0
242	0	0	0	0	0	24.28962279	0	0	0
242	0	0	0	0	0	132.564232	0	0	0
242	0	0	0	0	0	67.94075707	0	0	0
242	0	0	0	0	0	583.7280143	0	0	0
242	0	0	0	0	0	67.41881435	0	0	0
242	0	0	0	0	0	0	0	0	0
242	0	0	0	0	0	436.1604092	0	0	0
242	0	0	0	0	0	0	0	0	0
242	0	0	0	0	0	0	0	0	0
242	0	0	0	0	0	0	0	0	0
242	0	0	0	0	0	159.6562975	0	0	0
0	207	0	0	0	0	0	0	0	0
0	207	0	0	0	0	0	0	0	0
0	207	0	0	0	0	0	0	0	0
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0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	266.1831831	0	0	0	0
0	0	0	0	0	0	0	0	0	0

0	0	0	0	0	166.5526136	0	0	0	0
0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	12.68083512	0	0	0	0
0	0	0	0	0	0	0	0	0	0
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0	0	0	0	0	1562.156132	0	0	0	0
0	0	0	0	0	46.45413259	0	0	0	0
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0	0	0	0	0	87.95901585	0	0	0	0
0	0	0	0	0	71.48719108	0	0	0	0
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0	0	0	0	0	330.8803104	0	0	0	0
0	0	0	0	0	0	0	0	0	0
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0	0	0	0	0	27.04920743	0	0	0	0
260	0	0	0	0	0	52.42401288	0	0	0
260	0	0	0	0	0	921.9027315	0	0	0
260	0	0	0	0	0	0	0	0	0
260	0	0	0	0	0	576.8407593	0	0	0
260	0	0	0	0	0	29.23823717	0	0	0
260	0	0	0	0	0	38.04250535	0	0	0
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260	0	0	0	0	0	220.3662867	0	0	0
260	0	0	0	0	0	2267.03146	0	0	0
260	0	0	0	0	0	329.7110386	0	0	0
260	0	0	0	0	0	1165.09976	0	0	0
260	0	0	0	0	0	2510.830089	0	0	0
260	0	0	0	0	0	184.2393461	0	0	0
260	0	0	0	0	0	0	0	0	0
260	0	0	0	0	0	1308.481228	0	0	0
260	0	0	0	0	0	3.031614454	0	0	0
260	0	0	0	0	0	0	0	0	0
260	0	0	0	0	0	93.68262087	0	0	0
0	262	0	0	0	0	0	0	0	0
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0	262	0	0	0	0	0	640.2034789	0	0
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0	262	0	0	0	0	0	175.9180317	0	0
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0	262	0	0	0	0	0	0	0	0
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0	0	261	0	0	0	0	0	0	0
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0	0	261	0	0	0	0	0	0	0
0	0	261	0	0	0	0	0	311.36824	0
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0	0	261	0	0	0	0	0	0	0
0	0	261	0	0	0	0	0	0	0
0	0	261	0	0	0	0	0	1796.780352	0
0	0	261	0	0	0	0	0	267.8751846	0
0	0	261	0	0	0	0	0	0	0
0	0	261	0	0	0	0	0	0	0
0	0	261	0	0	0	0	0	0	0
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157	0	0	0	0	0	30.95736238	0	0	0
157	0	0	0	0	0	148.4266188	0	0	0
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157	0	0	0	0	0	695.6758526	0	0	0
157	0	0	0	0	0	102.2906149	0	0	0
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0	116	0	0	0	0	0	201.3575255	0	0
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0	116	0	0	0	0	0	254.8160049	0	0
0	116	0	0	0	0	0	194.1661853	0	0
0	116	0	0	0	0	0	201.3575255	0	0
0	116	0	0	0	0	0	57.53072158	0	0
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0	81	48	0	0	0	0	0	0	0
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22	0	0	0	0	0	34.83410128	0	0	0
22	0	0	0	0	0	240.7396904	0	0	0
22	0	0	0	0	0	228.5280011	0	0	0
22	0	0	0	0	0	61.76432461	0	0	0
22	0	0	0	0	0	4.226945038	0	0	0
22	0	0	0	0	0	1.690778015	0	0	0
22	0	0	0	0	0	16.32342865	0	0	0
175	87	0	0	0	0	282.7730164	140.5785853	0	0
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175	87	0	0	0	0	158.336824	78.71602108	0	0
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0	24	99	0	0	0	0	76.00167552	313.5069115	0
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0	24	99	0	0	0	0	83.32035539	343.696466	0
0	24	99	0	0	0	0	23.80581582	98.19899028	0
0	24	99	0	0	0	0	54.76364117	225.9000198	0
0	24	99	0	0	0	0	50.08324699	206.5933938	0
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0	0	139	0	0	0	0	0	0	0
0	0	139	0	0	0	0	0	0	0
0	0	25	174	0	0	0	0	48.15367402	335.1495712
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0	0	33	0	0	0	0	0	104.5023038	0
0	0	33	0	0	0	0	0	16.36649838	0

Equipment Information												E
PHASE	SUBPHASE	EQUIPMENT	CALEEMOD_EQUIPMENT	FUEL	NUMBER	HP	DAILYHRS	UTILIZATION	LF	2021	2022	2023
Phase 1a	Demolition	Excavator	Excavators	Diesel	4	131	8	0.9	0.38	0.26	0.26	0
Phase 1a	Demolition	Generator	Generator Sets	Diesel	2	25	6	0.5	0.74	1.293055411	1.308326849	0
Phase 1a	Demolition	Tire Wash	Other Construction Equipment	Diesel	2	100	4	0.9	0.42	0.26	0.26	0
Phase 1a	Demolition	Concrete Crusher	Crushing/Proc. Equipment	Diesel	2	200	2	0	0.78	0.26	0.26	0
Phase 1a	Demolition	Bob Cat	Tractors/Loaders/Backhoes	Diesel	6	150	8	0.8	0.37	0.26	0.26	0
Phase 1a	Demolition	Pressure Washer	Pressure Washers	Diesel	2	25	8	1	0.3	2.75	2.75	0
Phase 1a	Demolition	Air Compressor	Air Compressors	Diesel	1	140	6	0.7	0.48	0.26	0.26	0
Phase 1a	Grading and Utilities	Blade	Graders	Diesel	2	359	8	0.15	0.41	0	0.26	0
Phase 1a	Grading and Utilities	Scraper	Scrapers	Diesel	2	52	8	0.15	0.48	0	2.74	0
Phase 1a	Grading and Utilities	Loader	Tractors/Loaders/Backhoes	Diesel	4	100	4	0.9	0.37	0	0.26	0
Phase 1a	Grading and Utilities	Tire Wash	Other Construction Equipment	Diesel	2	100	4	0.9	0.42	0	0.26	0
Phase 1a	Grading and Utilities	Excavator	Excavators	Diesel	4	359	8	0.6	0.38	0	0.26	0
Phase 1a	Grading and Utilities	Backhoe	Tractors/Loaders/Backhoes	Diesel	4	350	8	0.6	0.37	0	0.26	0
Phase 1a	Grading and Utilities	Gradall	Forklifts	Diesel	4	350	4	0.6	0.2	0	0.26	0
Phase 1a	Grading and Utilities	Compactor	Other Construction Equipment	Diesel	4	250	0.5	0.2	0.42	0	0.26	0
Phase 1a	Grading and Utilities	Paver	Pavers	Diesel	2	250	8	0.01	0.42	0	0.26	0
Phase 1a	Grading and Utilities	Generator	Generator Sets	Diesel	1	600	2	0.1	0.74	0	0.26	0
Phase 1a Office	North Garage 2022	Air Compressor	Air Compressors	Diesel	1	150	0.47	1	0.48	0	0.26	0
Phase 1a Office	North Garage 2022	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	0	1	0.37	0	0.26	0
Phase 1a Office	North Garage 2022	Blade	Graders	Diesel	1	450	0	1	0.41	0	0.26	0
Phase 1a Office	North Garage 2022	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	0	1	0.37	0	0.26	0
Phase 1a Office	North Garage 2022	Boom Lift	Aerial Lifts	Diesel	1	40	0	1	0.31	0	2.75	0
Phase 1a Office	North Garage 2022	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0.42	0	0.26	0
Phase 1a Office	North Garage 2022	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.78	0	0.26	0
Phase 1a Office	North Garage 2022	Concrete Pump	Pumps	Diesel	1	450	0.33	1	0.74	0	0.26	0
Phase 1a Office	North Garage 2022	Excavator	Excavators	Diesel	1	500	11.71429	1	0.38	0	0.26	0
Phase 1a Office	North Garage 2022	Generator	Generator Sets	Diesel	1	25	4.714286	1	0.74	0	1.308326849	0
Phase 1a Office	North Garage 2022	Gradall	Forklifts	Diesel	1	350	2.928571	1	0.2	0	0.26	0
Phase 1a Office	North Garage 2022	Hydro/Crawler Crane	Cranes	Diesel	1	550	2.928571	1	0.29	0	0.26	0
Phase 1a Office	North Garage 2022	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	5.857143	1	0.37	0	0.26	0
Phase 1a Office	North Garage 2022	Paver	Pavers	Diesel	1	250	0	1	0.42	0	0.26	0
Phase 1a Office	North Garage 2022	Pile Rig	Bore/Drill Rigs	Diesel	1	600	4.142857	1	0.5	0	0.26	0
Phase 1a Office	North Garage 2022	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0.3	0	2.75	0
Phase 1a Office	North Garage 2022	Scraper	Scrapers	Diesel	1	600	0	1	0.48	0	0.26	0
Phase 1a Office	North Garage 2022	Tire Wash	Other Construction Equipment	Diesel	1	100	1.178571	1	0.42	0	0.26	0
Phase 1a Office	North Garage 2023	Air Compressor	Air Compressors	Diesel	1	150	0.48186	1	0.48	0	0	0.26
Phase 1a Office	North Garage 2023	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	0.03907	1	0.37	0	0	0.26
Phase 1a Office	North Garage 2023	Blade	Graders	Diesel	1	450	0	1	0.41	0	0	0.26
Phase 1a Office	North Garage 2023	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	0.03907	1	0.37	0	0	0.26
Phase 1a Office	North Garage 2023	Boom Lift	Aerial Lifts	Diesel	1	40	1.335814	1	0.31	0	0	2.75
Phase 1a Office	North Garage 2023	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0.42	0	0	0.26
Phase 1a Office	North Garage 2023	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.78	0	0	0.26
Phase 1a Office	North Garage 2023	Concrete Pump	Pumps	Diesel	1	450	0.57907	1	0.74	0	0	0.26
Phase 1a Office	North Garage 2023	Excavator	Excavators	Diesel	1	500	0.465116	1	0.38	0	0	0.26
Phase 1a Office	North Garage 2023	Generator	Generator Sets	Diesel	1	25	1.767442	1	0.74	0	0	1.322590075
Phase 1a Office	North Garage 2023	Gradall	Forklifts	Diesel	1	350	3.011628	1	0.2	0	0	0.26
Phase 1a Office	North Garage 2023	Hydro/Crawler Crane	Cranes	Diesel	1	550	5.02907	1	0.29	0	0	0.26
Phase 1a Office	North Garage 2023	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	0.232558	1	0.37	0	0	0.26
Phase 1a Office	North Garage 2023	Paver	Pavers	Diesel	1	250	0	1	0.42	0	0	0.26
Phase 1a Office	North Garage 2023	Pile Rig	Bore/Drill Rigs	Diesel	1	600	0	1	0.5	0	0	0.26
Phase 1a Office	North Garage 2023	Pressure Washer	Pressure Washers	Diesel	1	25	0.122791	1	0.3	0	0	2.75
Phase 1a Office	North Garage 2023	Scraper	Scrapers	Diesel	1	600	0	1	0.48	0	0	0.26
Phase 1a Office	North Garage 2023	Tire Wash	Other Construction Equipment	Diesel	1	100	1.505814	1	0.42	0	0	0.26

Phase 1a Office	Office Building 4 2023	Air Compressor	Air Compressors	Diesel	1	150	0.049091	1	0.48	0	0	0.26
Phase 1a Office	Office Building 4 2023	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	1.264463	1	0.37	0	0	0.26
Phase 1a Office	Office Building 4 2023	Blade	Graders	Diesel	1	450	0	1	0.41	0	0	0.26
Phase 1a Office	Office Building 4 2023	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	1.264463	1	0.37	0	0	0.26
Phase 1a Office	Office Building 4 2023	Boom Lift	Aerial Lifts	Diesel	1	40	7.438017	1	0.31	0	0	2.75
Phase 1a Office	Office Building 4 2023	Compactor	Other Construction Equipment	Diesel	1	250	0.101157	1	0.42	0	0	0.26
Phase 1a Office	Office Building 4 2023	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.78	0	0	0.26
Phase 1a Office	Office Building 4 2023	Concrete Pump	Pumps	Diesel	1	450	0.075372	1	0.74	0	0	0.26
Phase 1a Office	Office Building 4 2023	Excavator	Excavators	Diesel	1	500	0.063223	1	0.38	0	0	0.26
Phase 1a Office	Office Building 4 2023	Generator	Generator Sets	Diesel	1	25	2.900826	1	0.74	0	0	1.322590075
Phase 1a Office	Office Building 4 2023	Gradall	Forklifts	Diesel	1	350	0.48	1	0.2	0	0	0.26
Phase 1a Office	Office Building 4 2023	Hydro/Crawler Crane	Cranes	Diesel	1	550	1.809917	1	0.29	0	0	0.26
Phase 1a Office	Office Building 4 2023	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	0.719008	1	0.37	0	0	0.26
Phase 1a Office	Office Building 4 2023	Paver	Pavers	Diesel	1	250	0	1	0.42	0	0	0.26
Phase 1a Office	Office Building 4 2023	Pile Rig	Bore/Drill Rigs	Diesel	1	600	0.719008	1	0.5	0	0	0.26
Phase 1a Office	Office Building 4 2023	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0.3	0	0	2.75
Phase 1a Office	Office Building 4 2023	Scraper	Scrapers	Diesel	1	600	0	1	0.48	0	0	0.26
Phase 1a Office	Office Building 4 2023	Tire Wash	Other Construction Equipment	Diesel	1	100	1.5	1	0.42	0	0	0.26
Phase 1a Office	Office Building 4 2024	Air Compressor	Air Compressors	Diesel	1	150	0	1	0.48	0	0	0
Phase 1a Office	Office Building 4 2024	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	0	1	0.37	0	0	0
Phase 1a Office	Office Building 4 2024	Blade	Graders	Diesel	1	450	0	1	0.41	0	0	0
Phase 1a Office	Office Building 4 2024	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	0	1	0.37	0	0	0
Phase 1a Office	Office Building 4 2024	Boom Lift	Aerial Lifts	Diesel	1	40	1.405797	1	0.31	0	0	0
Phase 1a Office	Office Building 4 2024	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0.42	0	0	0
Phase 1a Office	Office Building 4 2024	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.78	0	0	0
Phase 1a Office	Office Building 4 2024	Concrete Pump	Pumps	Diesel	1	450	0	1	0.74	0	0	0
Phase 1a Office	Office Building 4 2024	Excavator	Excavators	Diesel	1	500	0	1	0.38	0	0	0
Phase 1a Office	Office Building 4 2024	Generator	Generator Sets	Diesel	1	25	0	1	0.74	0	0	0
Phase 1a Office	Office Building 4 2024	Gradall	Forklifts	Diesel	1	350	0.48	1	0.2	0	0	0
Phase 1a Office	Office Building 4 2024	Hydro/Crawler Crane	Cranes	Diesel	1	550	0	1	0.29	0	0	0
Phase 1a Office	Office Building 4 2024	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	0	1	0.37	0	0	0
Phase 1a Office	Office Building 4 2024	Paver	Pavers	Diesel	1	250	0	1	0.42	0	0	0
Phase 1a Office	Office Building 4 2024	Pile Rig	Bore/Drill Rigs	Diesel	1	600	0	1	0.5	0	0	0
Phase 1a Office	Office Building 4 2024	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0.3	0	0	0
Phase 1a Office	Office Building 4 2024	Scraper	Scrapers	Diesel	1	600	0	1	0.48	0	0	0
Phase 1a Office	Office Building 4 2024	Tire Wash	Other Construction Equipment	Diesel	1	100	1.5	1	0.42	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2022	Air Compressor	Air Compressors	Diesel	1	150	0	1	0.48	0	0.26	0
Phase 1a Office	Meeting, Collaboration, Park 2022	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	5.857143	1	0.37	0	0.26	0
Phase 1a Office	Meeting, Collaboration, Park 2022	Blade	Graders	Diesel	1	450	0	1	0.41	0	0.26	0
Phase 1a Office	Meeting, Collaboration, Park 2022	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	5.857143	1	0.37	0	0.26	0
Phase 1a Office	Meeting, Collaboration, Park 2022	Boom Lift	Aerial Lifts	Diesel	1	40	0	1	0.31	0	2.75	0
Phase 1a Office	Meeting, Collaboration, Park 2022	Compactor	Other Construction Equipment	Diesel	1	250	0.314286	1	0.42	0	0.26	0
Phase 1a Office	Meeting, Collaboration, Park 2022	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.78	0	0.26	0
Phase 1a Office	Meeting, Collaboration, Park 2022	Concrete Pump	Pumps	Diesel	1	450	0	1	0.74	0	0.26	0
Phase 1a Office	Meeting, Collaboration, Park 2022	Excavator	Excavators	Diesel	1	500	23.42857	1	0.38	0	0.26	0
Phase 1a Office	Meeting, Collaboration, Park 2022	Generator	Generator Sets	Diesel	1	25	5.857143	1	0.74	0	1.308326849	0
Phase 1a Office	Meeting, Collaboration, Park 2022	Gradall	Forklifts	Diesel	1	350	8.785714	1	0.2	0	0.26	0
Phase 1a Office	Meeting, Collaboration, Park 2022	Hydro/Crawler Crane	Cranes	Diesel	1	550	1.571429	1	0.29	0	0.26	0
Phase 1a Office	Meeting, Collaboration, Park 2022	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	4.392857	1	0.37	0	0.26	0
Phase 1a Office	Meeting, Collaboration, Park 2022	Paver	Pavers	Diesel	1	250	0	1	0.42	0	0.26	0
Phase 1a Office	Meeting, Collaboration, Park 2022	Pile Rig	Bore/Drill Rigs	Diesel	1	600	3.142857	1	0.5	0	0.26	0
Phase 1a Office	Meeting, Collaboration, Park 2022	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0.3	0	2.75	0
Phase 1a Office	Meeting, Collaboration, Park 2022	Scraper	Scrapers	Diesel	1	600	0	1	0.48	0	0.26	0
Phase 1a Office	Meeting, Collaboration, Park 2022	Tire Wash	Other Construction Equipment	Diesel	1	100	1.464286	1	0.42	0	0.26	0
Phase 1a Office	Meeting, Collaboration, Park 2023	Air Compressor	Air Compressors	Diesel	1	150	0.304615	1	0.48	0	0	0.26

Phase 1a Office	Meeting, Collaboration, Park 2023	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	3.276923	1	0.37	0	0	0.26
Phase 1a Office	Meeting, Collaboration, Park 2023	Blade	Graders	Diesel	1	450	0	1	0.41	0	0	0.26
Phase 1a Office	Meeting, Collaboration, Park 2023	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	3.276923	1	0.37	0	0	0.26
Phase 1a Office	Meeting, Collaboration, Park 2023	Boom Lift	Aerial Lifts	Diesel	1	40	0.888462	1	0.31	0	0	2.75
Phase 1a Office	Meeting, Collaboration, Park 2023	Compactor	Other Construction Equipment	Diesel	1	250	0.152308	1	0.42	0	0	0.26
Phase 1a Office	Meeting, Collaboration, Park 2023	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.78	0	0	0.26
Phase 1a Office	Meeting, Collaboration, Park 2023	Concrete Pump	Pumps	Diesel	1	450	0.304615	1	0.74	0	0	0.26
Phase 1a Office	Meeting, Collaboration, Park 2023	Excavator	Excavators	Diesel	1	500	5.492308	1	0.38	0	0	0.26
Phase 1a Office	Meeting, Collaboration, Park 2023	Generator	Generator Sets	Diesel	1	25	6.715385	1	0.74	0	0	1.322590075
Phase 1a Office	Meeting, Collaboration, Park 2023	Gradall	Forklifts	Diesel	1	350	7.661538	1	0.2	0	0	0.26
Phase 1a Office	Meeting, Collaboration, Park 2023	Hydro/Crawler Crane	Cranes	Diesel	1	550	7.246154	1	0.29	0	0	0.26
Phase 1a Office	Meeting, Collaboration, Park 2023	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	1.828846	1	0.37	0	0	0.26
Phase 1a Office	Meeting, Collaboration, Park 2023	Paver	Pavers	Diesel	1	250	0	1	0.42	0	0	0.26
Phase 1a Office	Meeting, Collaboration, Park 2023	Pile Rig	Bore/Drill Rigs	Diesel	1	600	2.007692	1	0.5	0	0	0.26
Phase 1a Office	Meeting, Collaboration, Park 2023	Pressure Washer	Pressure Washers	Diesel	1	25	0.152308	1	0.3	0	0	2.75
Phase 1a Office	Meeting, Collaboration, Park 2023	Scraper	Scrapers	Diesel	1	600	0	1	0.48	0	0	0.26
Phase 1a Office	Meeting, Collaboration, Park 2023	Tire Wash	Other Construction Equipment	Diesel	1	100	0.819231	1	0.42	0	0	0.26
Phase 1a Office	Meeting, Collaboration, Park 2024	Air Compressor	Air Compressors	Diesel	1	150	0	1	0.48	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2024	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	0	1	0.37	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2024	Blade	Graders	Diesel	1	450	0	1	0.41	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2024	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	0	1	0.37	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2024	Boom Lift	Aerial Lifts	Diesel	1	40	19.30534	1	0.31	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2024	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0.42	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2024	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.78	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2024	Concrete Pump	Pumps	Diesel	1	450	0	1	0.74	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2024	Excavator	Excavators	Diesel	1	500	0	1	0.38	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2024	Generator	Generator Sets	Diesel	1	25	0	1	0.74	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2024	Gradall	Forklifts	Diesel	1	350	10.25954	1	0.2	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2024	Hydro/Crawler Crane	Cranes	Diesel	1	550	0.503817	1	0.29	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2024	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	0	1	0.37	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2024	Paver	Pavers	Diesel	1	250	0	1	0.42	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2024	Pile Rig	Bore/Drill Rigs	Diesel	1	600	0	1	0.5	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2024	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0.3	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2024	Scraper	Scrapers	Diesel	1	600	0	1	0.48	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2024	Tire Wash	Other Construction Equipment	Diesel	1	100	0	1	0.42	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2025	Air Compressor	Air Compressors	Diesel	1	150	0	1	0.48	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2025	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	0	1	0.37	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2025	Blade	Graders	Diesel	1	450	0	1	0.41	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2025	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	0	1	0.37	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2025	Boom Lift	Aerial Lifts	Diesel	1	40	9.425287	1	0.31	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2025	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0.42	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2025	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.78	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2025	Concrete Pump	Pumps	Diesel	1	450	0	1	0.74	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2025	Excavator	Excavators	Diesel	1	500	0	1	0.38	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2025	Generator	Generator Sets	Diesel	1	25	0	1	0.74	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2025	Gradall	Forklifts	Diesel	1	350	11.77011	1	0.2	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2025	Hydro/Crawler Crane	Cranes	Diesel	1	550	0.770115	1	0.29	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2025	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	0	1	0.37	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2025	Paver	Pavers	Diesel	1	250	0	1	0.42	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2025	Pile Rig	Bore/Drill Rigs	Diesel	1	600	0	1	0.5	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2025	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0.3	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2025	Scraper	Scrapers	Diesel	1	600	0	1	0.48	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2025	Tire Wash	Other Construction Equipment	Diesel	1	100	0	1	0.42	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2026	Air Compressor	Air Compressors	Diesel	1	150	0	1	0.48	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2026	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	0	1	0.37	0	0	0

Phase 1a Office	Meeting, Collaboration, Park 2026	Blade	Graders	Diesel	1	450	0	1	0.41	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2026	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	0	1	0.37	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2026	Boom Lift	Aerial Lifts	Diesel	1	40	0	1	0.31	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2026	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0.42	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2026	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.78	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2026	Concrete Pump	Pumps	Diesel	1	450	0	1	0.74	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2026	Excavator	Excavators	Diesel	1	500	0	1	0.38	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2026	Generator	Generator Sets	Diesel	1	25	0	1	0.74	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2026	Gradall	Forklifts	Diesel	1	350	11.73913	1	0.2	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2026	Hydro/Crawler Crane	Cranes	Diesel	1	550	5.869565	1	0.29	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2026	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	0	1	0.37	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2026	Paver	Pavers	Diesel	1	250	0	1	0.42	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2026	Pile Rig	Bore/Drill Rigs	Diesel	1	600	0	1	0.5	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2026	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0.3	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2026	Scraper	Scrapers	Diesel	1	600	0	1	0.48	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2026	Tire Wash	Other Construction Equipment	Diesel	1	100	0	1	0.42	0	0	0
Phase 1a Office	Hotel Excavation 2022	Air Compressor	Air Compressors	Diesel	1	150	2.642857	1	0.48	0	0.26	0
Phase 1a Office	Hotel Excavation 2022	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	2.642857	1	0.37	0	0.26	0
Phase 1a Office	Hotel Excavation 2022	Blade	Graders	Diesel	1	450	0	1	0.41	0	0.26	0
Phase 1a Office	Hotel Excavation 2022	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	2.928571	1	0.37	0	0.26	0
Phase 1a Office	Hotel Excavation 2022	Boom Lift	Aerial Lifts	Diesel	1	40	1.464286	1	0.31	0	2.75	0
Phase 1a Office	Hotel Excavation 2022	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0.42	0	0.26	0
Phase 1a Office	Hotel Excavation 2022	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.78	0	0.26	0
Phase 1a Office	Hotel Excavation 2022	Concrete Pump	Pumps	Diesel	1	450	0.422857	1	0.74	0	0.26	0
Phase 1a Office	Hotel Excavation 2022	Excavator	Excavators	Diesel	1	500	11.71429	1	0.38	0	0.26	0
Phase 1a Office	Hotel Excavation 2022	Generator	Generator Sets	Diesel	1	25	5.857143	1	0.74	0	1.308326849	0
Phase 1a Office	Hotel Excavation 2022	Gradall	Forklifts	Diesel	1	350	5.857143	1	0.2	0	0.26	0
Phase 1a Office	Hotel Excavation 2022	Hydro/Crawler Crane	Cranes	Diesel	1	550	2.642857	1	0.29	0	0.26	0
Phase 1a Office	Hotel Excavation 2022	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	11.71429	1	0.37	0	0.26	0
Phase 1a Office	Hotel Excavation 2022	Paver	Pavers	Diesel	1	250	0	1	0.42	0	0.26	0
Phase 1a Office	Hotel Excavation 2022	Pile Rig	Bore/Drill Rigs	Diesel	1	600	10.57143	1	0.5	0	0.26	0
Phase 1a Office	Hotel Excavation 2022	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0.3	0	2.75	0
Phase 1a Office	Hotel Excavation 2022	Scraper	Scrapers	Diesel	1	600	0	1	0.48	0	0.26	0
Phase 1a Office	Hotel Excavation 2022	Tire Wash	Other Construction Equipment	Diesel	1	100	2.928571	1	0.42	0	0.26	0
Phase 1a Office	Hotel Excavation 2023	Air Compressor	Air Compressors	Diesel	1	150	2.311284	1	0.48	0	0	0.26
Phase 1a Office	Hotel Excavation 2023	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	0	1	0.37	0	0	0.26
Phase 1a Office	Hotel Excavation 2023	Blade	Graders	Diesel	1	450	0	1	0.41	0	0	0.26
Phase 1a Office	Hotel Excavation 2023	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	0.700389	1	0.37	0	0	0.26
Phase 1a Office	Hotel Excavation 2023	Boom Lift	Aerial Lifts	Diesel	1	40	0.350195	1	0.31	0	0	2.75
Phase 1a Office	Hotel Excavation 2023	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0.42	0	0	0.26
Phase 1a Office	Hotel Excavation 2023	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.78	0	0	0.26
Phase 1a Office	Hotel Excavation 2023	Concrete Pump	Pumps	Diesel	1	450	2.311284	1	0.74	0	0	0.26
Phase 1a Office	Hotel Excavation 2023	Excavator	Excavators	Diesel	1	500	2.801556	1	0.38	0	0	0.26
Phase 1a Office	Hotel Excavation 2023	Generator	Generator Sets	Diesel	1	25	10.64591	1	0.74	0	0	1.322590075
Phase 1a Office	Hotel Excavation 2023	Gradall	Forklifts	Diesel	1	350	10.64591	1	0.2	0	0	0.26
Phase 1a Office	Hotel Excavation 2023	Hydro/Crawler Crane	Cranes	Diesel	1	550	9.245136	1	0.29	0	0	0.26
Phase 1a Office	Hotel Excavation 2023	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	2.801556	1	0.37	0	0	0.26
Phase 1a Office	Hotel Excavation 2023	Paver	Pavers	Diesel	1	250	0	1	0.42	0	0	0.26
Phase 1a Office	Hotel Excavation 2023	Pile Rig	Bore/Drill Rigs	Diesel	1	600	0	1	0.5	0	0	0.26
Phase 1a Office	Hotel Excavation 2023	Pressure Washer	Pressure Washers	Diesel	1	25	0.046226	1	0.3	0	0	2.75
Phase 1a Office	Hotel Excavation 2023	Scraper	Scrapers	Diesel	1	600	0	1	0.48	0	0	0.26
Phase 1a Office	Hotel Excavation 2023	Tire Wash	Other Construction Equipment	Diesel	1	100	1.856031	1	0.42	0	0	0.26
Phase 1a Office	Hotel Construction 2024	Air Compressor	Air Compressors	Diesel	1	150	3	1	0.48	0	0	0
Phase 1a Office	Hotel Construction 2024	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	0	1	0.37	0	0	0
Phase 1a Office	Hotel Construction 2024	Blade	Graders	Diesel	1	450	0	1	0.41	0	0	0

Phase 1a Office	Hotel Construction 2024	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	0	1	0.37	0	0	0
Phase 1a Office	Hotel Construction 2024	Boom Lift	Aerial Lifts	Diesel	1	40	20.91429	1	0.31	0	0	0
Phase 1a Office	Hotel Construction 2024	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0.42	0	0	0
Phase 1a Office	Hotel Construction 2024	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.78	0	0	0
Phase 1a Office	Hotel Construction 2024	Concrete Pump	Pumps	Diesel	1	450	3	1	0.74	0	0	0
Phase 1a Office	Hotel Construction 2024	Excavator	Excavators	Diesel	1	500	0	1	0.38	0	0	0
Phase 1a Office	Hotel Construction 2024	Generator	Generator Sets	Diesel	1	25	0	1	0.74	0	0	0
Phase 1a Office	Hotel Construction 2024	Gradall	Forklifts	Diesel	1	350	12	1	0.2	0	0	0
Phase 1a Office	Hotel Construction 2024	Hydro/Crawler Crane	Cranes	Diesel	1	550	0	1	0.29	0	0	0
Phase 1a Office	Hotel Construction 2024	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	0	1	0.37	0	0	0
Phase 1a Office	Hotel Construction 2024	Paver	Pavers	Diesel	1	250	0	1	0.42	0	0	0
Phase 1a Office	Hotel Construction 2024	Pile Rig	Bore/Drill Rigs	Diesel	1	600	0	1	0.5	0	0	0
Phase 1a Office	Hotel Construction 2024	Pressure Washer	Pressure Washers	Diesel	1	25	0.06	1	0.3	0	0	0
Phase 1a Office	Hotel Construction 2024	Scraper	Scrapers	Diesel	1	600	0	1	0.48	0	0	0
Phase 1a Office	Hotel Construction 2024	Tire Wash	Other Construction Equipment	Diesel	1	100	1.5	1	0.42	0	0	0
Phase 1a Office	Hotel Construction 2025	Air Compressor	Air Compressors	Diesel	1	150	0.837662	1	0.48	0	0	0
Phase 1a Office	Hotel Construction 2025	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	0	1	0.37	0	0	0
Phase 1a Office	Hotel Construction 2025	Blade	Graders	Diesel	1	450	0	1	0.41	0	0	0
Phase 1a Office	Hotel Construction 2025	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	0	1	0.37	0	0	0
Phase 1a Office	Hotel Construction 2025	Boom Lift	Aerial Lifts	Diesel	1	40	20.18182	1	0.31	0	0	0
Phase 1a Office	Hotel Construction 2025	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0.42	0	0	0
Phase 1a Office	Hotel Construction 2025	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.78	0	0	0
Phase 1a Office	Hotel Construction 2025	Concrete Pump	Pumps	Diesel	1	450	0.837662	1	0.74	0	0	0
Phase 1a Office	Hotel Construction 2025	Excavator	Excavators	Diesel	1	500	0	1	0.38	0	0	0
Phase 1a Office	Hotel Construction 2025	Generator	Generator Sets	Diesel	1	25	0	1	0.74	0	0	0
Phase 1a Office	Hotel Construction 2025	Gradall	Forklifts	Diesel	1	350	12.07792	1	0.2	0	0	0
Phase 1a Office	Hotel Construction 2025	Hydro/Crawler Crane	Cranes	Diesel	1	550	0	1	0.29	0	0	0
Phase 1a Office	Hotel Construction 2025	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	0	1	0.37	0	0	0
Phase 1a Office	Hotel Construction 2025	Paver	Pavers	Diesel	1	250	0	1	0.42	0	0	0
Phase 1a Office	Hotel Construction 2025	Pile Rig	Bore/Drill Rigs	Diesel	1	600	0	1	0.5	0	0	0
Phase 1a Office	Hotel Construction 2025	Pressure Washer	Pressure Washers	Diesel	1	25	0.016753	1	0.3	0	0	0
Phase 1a Office	Hotel Construction 2025	Scraper	Scrapers	Diesel	1	600	0	1	0.48	0	0	0
Phase 1a Office	Hotel Construction 2025	Tire Wash	Other Construction Equipment	Diesel	1	100	1.50974	1	0.42	0	0	0
Phase 1a Office	Town Square 2023	Air Compressor	Air Compressors	Diesel	1	150	0	1	0.48	0	0	0.26
Phase 1a Office	Town Square 2023	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	0	1	0.37	0	0	0.26
Phase 1a Office	Town Square 2023	Blade	Graders	Diesel	1	450	0	1	0.41	0	0	0.26
Phase 1a Office	Town Square 2023	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	3	1	0.37	0	0	0.26
Phase 1a Office	Town Square 2023	Boom Lift	Aerial Lifts	Diesel	1	40	1.5	1	0.31	0	0	2.75
Phase 1a Office	Town Square 2023	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0.42	0	0	0.26
Phase 1a Office	Town Square 2023	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.78	0	0	0.26
Phase 1a Office	Town Square 2023	Concrete Pump	Pumps	Diesel	1	450	0	1	0.74	0	0	0.26
Phase 1a Office	Town Square 2023	Excavator	Excavators	Diesel	1	500	12	1	0.38	0	0	0.26
Phase 1a Office	Town Square 2023	Generator	Generator Sets	Diesel	1	25	6	1	0.74	0	0	1.322590075
Phase 1a Office	Town Square 2023	Gradall	Forklifts	Diesel	1	350	6	1	0.2	0	0	0.26
Phase 1a Office	Town Square 2023	Hydro/Crawler Crane	Cranes	Diesel	1	550	0	1	0.29	0	0	0.26
Phase 1a Office	Town Square 2023	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	12	1	0.37	0	0	0.26
Phase 1a Office	Town Square 2023	Paver	Pavers	Diesel	1	250	0	1	0.42	0	0	0.26
Phase 1a Office	Town Square 2023	Pile Rig	Bore/Drill Rigs	Diesel	1	600	0	1	0.5	0	0	0.26
Phase 1a Office	Town Square 2023	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0.3	0	0	2.75
Phase 1a Office	Town Square 2023	Scraper	Scrapers	Diesel	1	600	0	1	0.48	0	0	0.26
Phase 1a Office	Town Square 2023	Tire Wash	Other Construction Equipment	Diesel	1	100	3	1	0.42	0	0	0.26
Phase 1a Office	Town Square 2024	Air Compressor	Air Compressors	Diesel	1	150	0	1	0.48	0	0	0
Phase 1a Office	Town Square 2024	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	0	1	0.37	0	0	0
Phase 1a Office	Town Square 2024	Blade	Graders	Diesel	1	450	0	1	0.41	0	0	0
Phase 1a Office	Town Square 2024	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	0.996183	1	0.37	0	0	0

Phase 1a Office	Town Square 2024	Boom Lift	Aerial Lifts	Diesel	1	40	1.872137	1	0.31	0	0	0
Phase 1a Office	Town Square 2024	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0.42	0	0	0
Phase 1a Office	Town Square 2024	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.78	0	0	0
Phase 1a Office	Town Square 2024	Concrete Pump	Pumps	Diesel	1	450	0.020382	1	0.74	0	0	0
Phase 1a Office	Town Square 2024	Excavator	Excavators	Diesel	1	500	3.984733	1	0.38	0	0	0
Phase 1a Office	Town Square 2024	Generator	Generator Sets	Diesel	1	25	0.549618	1	0.74	0	0	0
Phase 1a Office	Town Square 2024	Gradall	Forklifts	Diesel	1	350	5.267176	1	0.2	0	0	0
Phase 1a Office	Town Square 2024	Hydro/Crawler Crane	Cranes	Diesel	1	550	1.03145	1	0.29	0	0	0
Phase 1a Office	Town Square 2024	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	3.984733	1	0.37	0	0	0
Phase 1a Office	Town Square 2024	Paver	Pavers	Diesel	1	250	0	1	0.42	0	0	0
Phase 1a Office	Town Square 2024	Pile Rig	Bore/Drill Rigs	Diesel	1	600	0	1	0.5	0	0	0
Phase 1a Office	Town Square 2024	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0.3	0	0	0
Phase 1a Office	Town Square 2024	Scraper	Scrapers	Diesel	1	600	0	1	0.48	0	0	0
Phase 1a Office	Town Square 2024	Tire Wash	Other Construction Equipment	Diesel	1	100	0.996183	1	0.42	0	0	0
Phase 1a Office	Town Square 2025	Air Compressor	Air Compressors	Diesel	1	150	0	1	0.48	0	0	0
Phase 1a Office	Town Square 2025	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	0	1	0.37	0	0	0
Phase 1a Office	Town Square 2025	Blade	Graders	Diesel	1	450	0	1	0.41	0	0	0
Phase 1a Office	Town Square 2025	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	0	1	0.37	0	0	0
Phase 1a Office	Town Square 2025	Boom Lift	Aerial Lifts	Diesel	1	40	0	1	0.31	0	0	0
Phase 1a Office	Town Square 2025	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0.42	0	0	0
Phase 1a Office	Town Square 2025	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.78	0	0	0
Phase 1a Office	Town Square 2025	Concrete Pump	Pumps	Diesel	1	450	0	1	0.74	0	0	0
Phase 1a Office	Town Square 2025	Excavator	Excavators	Diesel	1	500	0	1	0.38	0	0	0
Phase 1a Office	Town Square 2025	Generator	Generator Sets	Diesel	1	25	0	1	0.74	0	0	0
Phase 1a Office	Town Square 2025	Gradall	Forklifts	Diesel	1	350	18	1	0.2	0	0	0
Phase 1a Office	Town Square 2025	Hydro/Crawler Crane	Cranes	Diesel	1	550	0.18	1	0.29	0	0	0
Phase 1a Office	Town Square 2025	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	0	1	0.37	0	0	0
Phase 1a Office	Town Square 2025	Paver	Pavers	Diesel	1	250	0	1	0.42	0	0	0
Phase 1a Office	Town Square 2025	Pile Rig	Bore/Drill Rigs	Diesel	1	600	0	1	0.5	0	0	0
Phase 1a Office	Town Square 2025	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0.3	0	0	0
Phase 1a Office	Town Square 2025	Scraper	Scrapers	Diesel	1	600	0	1	0.48	0	0	0
Phase 1a Office	Town Square 2025	Tire Wash	Other Construction Equipment	Diesel	1	100	0	1	0.42	0	0	0
Phase 1a Mixed Use	Parcel 2 Foundations	Pile Rig	Bore/Drill Rigs	Diesel	0	600	8	0.4	0.5	0	0	0.26
Phase 1a Mixed Use	Parcel 2 Foundations	Generator	Generator Sets	Diesel	0	25	6	1	0.74	0	0	1.322590075
Phase 1a Mixed Use	Parcel 2 Foundations	Tire Wash	Other Construction Equipment	Diesel	1	100	4	0.9	0.42	0	0	0.26
Phase 1a Mixed Use	Parcel 2 Foundations	Excavator	Excavators	Diesel	1	131	8	0.6	0.38	0	0	0.26
Phase 1a Mixed Use	Parcel 2 Foundations	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	90	8	0.6	0.37	0	0	0.26
Phase 1a Mixed Use	Parcel 2 Foundations	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	70	8	0.8	0.37	0	0	2.74
Phase 1a Mixed Use	Parcel 2 Foundations	Gradall	Forklifts	Diesel	1	74	4	0.8	0.2	0	0	2.74
Phase 1a Mixed Use	Parcel 2 Foundations	Crane	Cranes	Diesel	1	215	4	0.5	0.29	0	0	0.26
Phase 1a Mixed Use	Parcel 2 Foundations	Concrete Pump	Pumps	Diesel	1	450	8	0.15	0.74	0	0	0.26
Phase 1a Mixed Use	Parcel 2 Core and Shell	Generator	Generator Sets	Diesel	0	25	6	1	0.74	0	0	1.322590075
Phase 1a Mixed Use	Parcel 2 Core and Shell	Tire Wash	Other Construction Equipment	Diesel	1	100	4	0.9	0.42	0	0	0.26
Phase 1a Mixed Use	Parcel 2 Core and Shell	Crane	Cranes	Diesel	1	600	8	0.2	0.29	0	0	0.26
Phase 1a Mixed Use	Parcel 2 Core and Shell	Gradall	Forklifts	Diesel	1	74	4	0.8	0.2	0	0	2.74
Phase 1a Mixed Use	Parcel 2 Core and Shell	Concrete Pump	Pumps	Diesel	0	450	6	0.225	0.74	0	0	0.26
Phase 1a Mixed Use	Parcel 2 Core and Shell	Air Compressor	Air Compressors	Diesel	0	140	2	0.4	0.48	0	0	0.26
Phase 1a Mixed Use	Parcel 2 Core and Shell	Boom Lift	Aerial Lifts	Diesel	0	50	6	0.2	0.31	0	0	2.74
Phase 1a Mixed Use	Parcel 2 Tenant Improvements	Generator	Generator Sets	Diesel	0	25	6	0.85	0.74	0	0	0
Phase 1a Mixed Use	Parcel 2 Tenant Improvements	Tire Wash	Other Construction Equipment	Diesel	1	100	4	0.9	0.42	0	0	0
Phase 1a Mixed Use	Parcel 2 Tenant Improvements	Gradall	Forklifts	Diesel	1	74	4	0.8	0.2	0	0	0
Phase 1a Mixed Use	Parcel 2 Landscaping	Excavator	Excavators	Diesel	1	25	8	0.9	0.38	0	0	0
Phase 1a Mixed Use	Parcel 2 Landscaping	Generator	Generator Sets	Diesel	0	25	6	0.5	0.74	0	0	0
Phase 1a Mixed Use	Parcel 2 Landscaping	Tire Wash	Other Construction Equipment	Diesel	1	100	4	0.9	0.42	0	0	0
Phase 1a Mixed Use	Parcel 2 Landscaping	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	90	8	1	0.37	0	0	0

Phase 1a Mixed Use	Parcel 2 Landscaping	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	70	8	0.8	0.37	0	0	0
Phase 1a Mixed Use	Parcel 3 Foundations	Pile Rig	Bore/Drill Rigs	Diesel	0	600	8	0.4	0.5	0	0	0.26
Phase 1a Mixed Use	Parcel 3 Foundations	Generator	Generator Sets	Diesel	0	25	6	1	0.74	0	0	1.322590075
Phase 1a Mixed Use	Parcel 3 Foundations	Tire Wash	Other Construction Equipment	Diesel	1	100	4	0.9	0.42	0	0	0.26
Phase 1a Mixed Use	Parcel 3 Foundations	Excavator	Excavators	Diesel	1	131	8	0.6	0.38	0	0	0.26
Phase 1a Mixed Use	Parcel 3 Foundations	Backhoe	Tractors/Loaders/Backhoes	Diesel	2	90	8	0.6	0.37	0	0	0.26
Phase 1a Mixed Use	Parcel 3 Foundations	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	70	8	0.8	0.37	0	0	2.74
Phase 1a Mixed Use	Parcel 3 Foundations	Gradall	Forklifts	Diesel	1	74	4	0.8	0.2	0	0	2.74
Phase 1a Mixed Use	Parcel 3 Foundations	Crane	Cranes	Diesel	1	215	4	0.5	0.29	0	0	0.26
Phase 1a Mixed Use	Parcel 3 Foundations	Concrete Pump	Pumps	Diesel	1	450	8	0.15	0.74	0	0	0.26
Phase 1a Mixed Use	Parcel 3 Core and Shell	Generator	Generator Sets	Diesel	0	25	6	1	0.74	0	0	0
Phase 1a Mixed Use	Parcel 3 Core and Shell	Tire Wash	Other Construction Equipment	Diesel	1	100	4	0.9	0.42	0	0	0
Phase 1a Mixed Use	Parcel 3 Core and Shell	Crane	Cranes	Diesel	1	600	8	0.2	0.29	0	0	0
Phase 1a Mixed Use	Parcel 3 Core and Shell	Gradall	Forklifts	Diesel	2	74	4	0.8	0.2	0	0	0
Phase 1a Mixed Use	Parcel 3 Core and Shell	Concrete Pump	Pumps	Diesel	0	450	6	0.225	0.74	0	0	0
Phase 1a Mixed Use	Parcel 3 Core and Shell	Air Compressor	Air Compressors	Diesel	0	140	2	0.4	0.48	0	0	0
Phase 1a Mixed Use	Parcel 3 Core and Shell	Boom Lift	Aerial Lifts	Diesel	0	50	6	0.2	0.31	0	0	0
Phase 1a Mixed Use	Parcel 3 Tenant Improvements	Generator	Generator Sets	Diesel	0	25	6	0.85	0.74	0	0	0
Phase 1a Mixed Use	Parcel 3 Tenant Improvements	Tire Wash	Other Construction Equipment	Diesel	1	100	4	0.9	0.42	0	0	0
Phase 1a Mixed Use	Parcel 3 Tenant Improvements	Gradall	Forklifts	Diesel	1	74	4	0.8	0.2	0	0	0
Phase 1a Mixed Use	Parcel 3 Landscaping	Excavator	Excavators	Diesel	1	25	8	0.9	0.38	0	0	0
Phase 1a Mixed Use	Parcel 3 Landscaping	Generator	Generator Sets	Diesel	0	25	6	0.5	0.74	0	0	0
Phase 1a Mixed Use	Parcel 3 Landscaping	Tire Wash	Other Construction Equipment	Diesel	0	100	4	0.9	0.42	0	0	0
Phase 1a Mixed Use	Parcel 3 Landscaping	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	90	8	1	0.37	0	0	0
Phase 1a Mixed Use	Parcel 3 Landscaping	Bob Cat	Tractors/Loaders/Backhoes	Diesel	2	70	8	0.8	0.37	0	0	0
Phase 1b	Demolition	Excavator	Excavators	Diesel	4	131	8	0.9	0.38	0	0.26	0
Phase 1b	Demolition	Generator	Generator Sets	Diesel	2	25	6	0.5	0.74	0	1.308326849	0
Phase 1b	Demolition	Tire Wash	Other Construction Equipment	Diesel	2	100	4	0.9	0.42	0	0.26	0
Phase 1b	Demolition	Concrete Crusher	Crushing/Proc. Equipment	Diesel	2	200	2	0	0.78	0	0.26	0
Phase 1b	Demolition	Bob Cat	Tractors/Loaders/Backhoes	Diesel	6	150	8	0.8	0.37	0	0.26	0
Phase 1b	Demolition	Pressure Washer	Pressure Washers	Diesel	2	25	8	1	0.3	0	2.75	0
Phase 1b	Demolition	Air Compressor	Air Compressors	Diesel	1	140	6	0.7	0.48	0	0.26	0
Phase 1b	Grading and Utilities	Blade	Graders	Diesel	2	359	8	0.15	0.41	0	0.26	0.26
Phase 1b	Grading and Utilities	Scraper	Scrapers	Diesel	2	52	8	0.15	0.48	0	2.74	2.74
Phase 1b	Grading and Utilities	Loader	Tractors/Loaders/Backhoes	Diesel	4	100	4	0.9	0.37	0	0.26	0.26
Phase 1b	Grading and Utilities	Tire Wash	Other Construction Equipment	Diesel	2	100	4	0.9	0.42	0	0.26	0.26
Phase 1b	Grading and Utilities	Excavator	Excavators	Diesel	4	359	8	0.6	0.38	0	0.26	0.26
Phase 1b	Grading and Utilities	Backhoe	Tractors/Loaders/Backhoes	Diesel	4	350	8	0.6	0.37	0	0.26	0.26
Phase 1b	Grading and Utilities	Gradall	Forklifts	Diesel	4	350	4	0.6	0.2	0	0.26	0.26
Phase 1b	Grading and Utilities	Compactor	Other Construction Equipment	Diesel	4	250	0.5	0.2	0.42	0	0.26	0.26
Phase 1b	Grading and Utilities	Paver	Pavers	Diesel	2	250	8	0.01	0.42	0	0.26	0.26
Phase 1b	Grading and Utilities	Generator	Generator Sets	Diesel	1	600	2	0.1	0.74	0	0.26	0.26
Phase 1b Office	South Garage 2023	Air Compressor	Air Compressors	Diesel	1	150	0.48	1	0.48	0	0	0.26
Phase 1b Office	South Garage 2023	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	0.054653	1	0.37	0	0	0.26
Phase 1b Office	South Garage 2023	Blade	Graders	Diesel	1	450	0	1	0.41	0	0	0.26
Phase 1b Office	South Garage 2023	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	0.054653	1	0.37	0	0	0.26
Phase 1b Office	South Garage 2023	Boom Lift	Aerial Lifts	Diesel	1	40	0	1	0.31	0	0	2.75
Phase 1b Office	South Garage 2023	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0.42	0	0	0.26
Phase 1b Office	South Garage 2023	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.78	0	0	0.26
Phase 1b Office	South Garage 2023	Concrete Pump	Pumps	Diesel	1	450	0.451485	1	0.74	0	0	0.26
Phase 1b Office	South Garage 2023	Excavator	Excavators	Diesel	1	500	2.970297	1	0.38	0	0	0.26
Phase 1b Office	South Garage 2023	Generator	Generator Sets	Diesel	1	25	3.237624	1	0.74	0	0	1.322590075
Phase 1b Office	South Garage 2023	Gradall	Forklifts	Diesel	1	350	3	1	0.2	0	0	0.26
Phase 1b Office	South Garage 2023	Hydro/Crawler Crane	Cranes	Diesel	1	550	4.923267	1	0.29	0	0	0.26
Phase 1b Office	South Garage 2023	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	1.485149	1	0.37	0	0	0.26

Phase 1b Office	South Garage 2023	Paver	Pavers	Diesel	1	250	0	1	0.42	0	0	0.26
Phase 1b Office	South Garage 2023	Pile Rig	Bore/Drill Rigs	Diesel	1	600	0.861386	1	0.5	0	0	0.26
Phase 1b Office	South Garage 2023	Pressure Washer	Pressure Washers	Diesel	1	25	0.156832	1	0.3	0	0	2.75
Phase 1b Office	South Garage 2023	Scraper	Scrapers	Diesel	1	600	0	1	0.48	0	0	0.26
Phase 1b Office	South Garage 2023	Tire Wash	Other Construction Equipment	Diesel	1	100	1.44802	1	0.42	0	0	0.26
Phase 1b Office	South Garage 2024	Air Compressor	Air Compressors	Diesel	1	150	0.48	1	0.48	0	0	0
Phase 1b Office	South Garage 2024	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	0	1	0.37	0	0	0
Phase 1b Office	South Garage 2024	Blade	Graders	Diesel	1	450	0	1	0.41	0	0	0
Phase 1b Office	South Garage 2024	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	0	1	0.37	0	0	0
Phase 1b Office	South Garage 2024	Boom Lift	Aerial Lifts	Diesel	1	40	4.737447	1	0.31	0	0	0
Phase 1b Office	South Garage 2024	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0.42	0	0	0
Phase 1b Office	South Garage 2024	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.78	0	0	0
Phase 1b Office	South Garage 2024	Concrete Pump	Pumps	Diesel	1	450	0.6	1	0.74	0	0	0
Phase 1b Office	South Garage 2024	Excavator	Excavators	Diesel	1	500	0	1	0.38	0	0	0
Phase 1b Office	South Garage 2024	Generator	Generator Sets	Diesel	1	25	0	1	0.74	0	0	0
Phase 1b Office	South Garage 2024	Gradall	Forklifts	Diesel	1	350	3	1	0.2	0	0	0
Phase 1b Office	South Garage 2024	Hydro/Crawler Crane	Cranes	Diesel	1	550	3.68617	1	0.29	0	0	0
Phase 1b Office	South Garage 2024	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	0	1	0.37	0	0	0
Phase 1b Office	South Garage 2024	Paver	Pavers	Diesel	1	250	0	1	0.42	0	0	0
Phase 1b Office	South Garage 2024	Pile Rig	Bore/Drill Rigs	Diesel	1	600	0	1	0.5	0	0	0
Phase 1b Office	South Garage 2024	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0.3	0	0	0
Phase 1b Office	South Garage 2024	Scraper	Scrapers	Diesel	1	600	0	1	0.48	0	0	0
Phase 1b Office	South Garage 2024	Tire Wash	Other Construction Equipment	Diesel	1	100	1.5	1	0.42	0	0	0
Phase 1b Office	Office Building 3 2023	Air Compressor	Air Compressors	Diesel	1	150	0.067119	1	0.48	0	0	0.26
Phase 1b Office	Office Building 3 2023	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	2.576271	1	0.37	0	0	0.26
Phase 1b Office	Office Building 3 2023	Blade	Graders	Diesel	1	450	0	1	0.41	0	0	0.26
Phase 1b Office	Office Building 3 2023	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	2.576271	1	0.37	0	0	0.26
Phase 1b Office	Office Building 3 2023	Boom Lift	Aerial Lifts	Diesel	1	40	1.694915	1	0.31	0	0	2.75
Phase 1b Office	Office Building 3 2023	Compactor	Other Construction Equipment	Diesel	1	250	0.206102	1	0.42	0	0	0.26
Phase 1b Office	Office Building 3 2023	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.78	0	0	0.26
Phase 1b Office	Office Building 3 2023	Concrete Pump	Pumps	Diesel	1	450	0.121356	1	0.74	0	0	0.26
Phase 1b Office	Office Building 3 2023	Excavator	Excavators	Diesel	1	500	0.128814	1	0.38	0	0	0.26
Phase 1b Office	Office Building 3 2023	Generator	Generator Sets	Diesel	1	25	4.813559	1	0.74	0	0	1.322590075
Phase 1b Office	Office Building 3 2023	Gradall	Forklifts	Diesel	1	350	0.48	1	0.2	0	0	0.26
Phase 1b Office	Office Building 3 2023	Hydro/Crawler Crane	Cranes	Diesel	1	550	3.322034	1	0.29	0	0	0.26
Phase 1b Office	Office Building 3 2023	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	1.864407	1	0.37	0	0	0.26
Phase 1b Office	Office Building 3 2023	Paver	Pavers	Diesel	1	250	0	1	0.42	0	0	0.26
Phase 1b Office	Office Building 3 2023	Pile Rig	Bore/Drill Rigs	Diesel	1	600	1.864407	1	0.5	0	0	0.26
Phase 1b Office	Office Building 3 2023	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0.3	0	0	2.75
Phase 1b Office	Office Building 3 2023	Scraper	Scrapers	Diesel	1	600	0	1	0.48	0	0	0.26
Phase 1b Office	Office Building 3 2023	Tire Wash	Other Construction Equipment	Diesel	1	100	1.5	1	0.42	0	0	0.26
Phase 1b Office	Office Building 3 2024	Air Compressor	Air Compressors	Diesel	1	150	0	1	0.48	0	0	0
Phase 1b Office	Office Building 3 2024	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	0	1	0.37	0	0	0
Phase 1b Office	Office Building 3 2024	Blade	Graders	Diesel	1	450	0	1	0.41	0	0	0
Phase 1b Office	Office Building 3 2024	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	0	1	0.37	0	0	0
Phase 1b Office	Office Building 3 2024	Boom Lift	Aerial Lifts	Diesel	1	40	6.858779	1	0.31	0	0	0
Phase 1b Office	Office Building 3 2024	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0.42	0	0	0
Phase 1b Office	Office Building 3 2024	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.78	0	0	0
Phase 1b Office	Office Building 3 2024	Concrete Pump	Pumps	Diesel	1	450	0.005038	1	0.74	0	0	0
Phase 1b Office	Office Building 3 2024	Excavator	Excavators	Diesel	1	500	0	1	0.38	0	0	0
Phase 1b Office	Office Building 3 2024	Generator	Generator Sets	Diesel	1	25	0	1	0.74	0	0	0
Phase 1b Office	Office Building 3 2024	Gradall	Forklifts	Diesel	1	350	0.48	1	0.2	0	0	0
Phase 1b Office	Office Building 3 2024	Hydro/Crawler Crane	Cranes	Diesel	1	550	0	1	0.29	0	0	0
Phase 1b Office	Office Building 3 2024	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	0	1	0.37	0	0	0
Phase 1b Office	Office Building 3 2024	Paver	Pavers	Diesel	1	250	0	1	0.42	0	0	0

Phase 1b Office	Office Building 3 2024	Pile Rig	Bore/Drill Rigs	Diesel	1	600	0	1	0.5	0	0	0
Phase 1b Office	Office Building 3 2024	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0.3	0	0	0
Phase 1b Office	Office Building 3 2024	Scraper	Scrapers	Diesel	1	600	0	1	0.48	0	0	0
Phase 1b Office	Office Building 3 2024	Tire Wash	Other Construction Equipment	Diesel	1	100	1.5	1	0.42	0	0	0
Phase 1b Office	Office Building 3 2025	Air Compressor	Air Compressors	Diesel	1	150	0	1	0.48	0	0	0
Phase 1b Office	Office Building 3 2025	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	0	1	0.37	0	0	0
Phase 1b Office	Office Building 3 2025	Blade	Graders	Diesel	1	450	0	1	0.41	0	0	0
Phase 1b Office	Office Building 3 2025	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	0	1	0.37	0	0	0
Phase 1b Office	Office Building 3 2025	Boom Lift	Aerial Lifts	Diesel	1	40	0	1	0.31	0	0	0
Phase 1b Office	Office Building 3 2025	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0.42	0	0	0
Phase 1b Office	Office Building 3 2025	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.78	0	0	0
Phase 1b Office	Office Building 3 2025	Concrete Pump	Pumps	Diesel	1	450	0	1	0.74	0	0	0
Phase 1b Office	Office Building 3 2025	Excavator	Excavators	Diesel	1	500	0	1	0.38	0	0	0
Phase 1b Office	Office Building 3 2025	Generator	Generator Sets	Diesel	1	25	0	1	0.74	0	0	0
Phase 1b Office	Office Building 3 2025	Gradall	Forklifts	Diesel	1	350	0.48	1	0.2	0	0	0
Phase 1b Office	Office Building 3 2025	Hydro/Crawler Crane	Cranes	Diesel	1	550	0	1	0.29	0	0	0
Phase 1b Office	Office Building 3 2025	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	0	1	0.37	0	0	0
Phase 1b Office	Office Building 3 2025	Paver	Pavers	Diesel	1	250	0	1	0.42	0	0	0
Phase 1b Office	Office Building 3 2025	Pile Rig	Bore/Drill Rigs	Diesel	1	600	0	1	0.5	0	0	0
Phase 1b Office	Office Building 3 2025	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0.3	0	0	0
Phase 1b Office	Office Building 3 2025	Scraper	Scrapers	Diesel	1	600	0	1	0.48	0	0	0
Phase 1b Office	Office Building 3 2025	Tire Wash	Other Construction Equipment	Diesel	1	100	1.5	1	0.42	0	0	0
Phase 1b Office	Office Building 1 2023	Air Compressor	Air Compressors	Diesel	1	150	0.065363	1	0.48	0	0	0.26
Phase 1b Office	Office Building 1 2023	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	2.24581	1	0.37	0	0	0.26
Phase 1b Office	Office Building 1 2023	Blade	Graders	Diesel	1	450	0	1	0.41	0	0	0.26
Phase 1b Office	Office Building 1 2023	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	2.24581	1	0.37	0	0	0.26
Phase 1b Office	Office Building 1 2023	Boom Lift	Aerial Lifts	Diesel	1	40	2.480447	1	0.31	0	0	2.75
Phase 1b Office	Office Building 1 2023	Compactor	Other Construction Equipment	Diesel	1	250	0.179665	1	0.42	0	0	0.26
Phase 1b Office	Office Building 1 2023	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.78	0	0	0.26
Phase 1b Office	Office Building 1 2023	Concrete Pump	Pumps	Diesel	1	450	0.109274	1	0.74	0	0	0.26
Phase 1b Office	Office Building 1 2023	Excavator	Excavators	Diesel	1	500	0.112291	1	0.38	0	0	0.26
Phase 1b Office	Office Building 1 2023	Generator	Generator Sets	Diesel	1	25	4.424581	1	0.74	0	0	1.322590075
Phase 1b Office	Office Building 1 2023	Gradall	Forklifts	Diesel	1	350	0.48	1	0.2	0	0	0.26
Phase 1b Office	Office Building 1 2023	Hydro/Crawler Crane	Cranes	Diesel	1	550	2.916201	1	0.29	0	0	0.26
Phase 1b Office	Office Building 1 2023	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	1.47486	1	0.37	0	0	0.26
Phase 1b Office	Office Building 1 2023	Paver	Pavers	Diesel	1	250	0	1	0.42	0	0	0.26
Phase 1b Office	Office Building 1 2023	Pile Rig	Bore/Drill Rigs	Diesel	1	600	1.47486	1	0.5	0	0	0.26
Phase 1b Office	Office Building 1 2023	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0.3	0	0	2.75
Phase 1b Office	Office Building 1 2023	Scraper	Scrapers	Diesel	1	600	0	1	0.48	0	0	0.26
Phase 1b Office	Office Building 1 2023	Tire Wash	Other Construction Equipment	Diesel	1	100	1.5	1	0.42	0	0	0.26
Phase 1b Office	Office Building 1 2024	Air Compressor	Air Compressors	Diesel	1	150	0	1	0.48	0	0	0
Phase 1b Office	Office Building 1 2024	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	0	1	0.37	0	0	0
Phase 1b Office	Office Building 1 2024	Blade	Graders	Diesel	1	450	0	1	0.41	0	0	0
Phase 1b Office	Office Building 1 2024	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	0	1	0.37	0	0	0
Phase 1b Office	Office Building 1 2024	Boom Lift	Aerial Lifts	Diesel	1	40	6.554217	1	0.31	0	0	0
Phase 1b Office	Office Building 1 2024	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0.42	0	0	0
Phase 1b Office	Office Building 1 2024	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.78	0	0	0
Phase 1b Office	Office Building 1 2024	Concrete Pump	Pumps	Diesel	1	450	0.005301	1	0.74	0	0	0
Phase 1b Office	Office Building 1 2024	Excavator	Excavators	Diesel	1	500	0	1	0.38	0	0	0
Phase 1b Office	Office Building 1 2024	Generator	Generator Sets	Diesel	1	25	0	1	0.74	0	0	0
Phase 1b Office	Office Building 1 2024	Gradall	Forklifts	Diesel	1	350	0.478072	1	0.2	0	0	0
Phase 1b Office	Office Building 1 2024	Hydro/Crawler Crane	Cranes	Diesel	1	550	0	1	0.29	0	0	0
Phase 1b Office	Office Building 1 2024	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	0	1	0.37	0	0	0
Phase 1b Office	Office Building 1 2024	Paver	Pavers	Diesel	1	250	0	1	0.42	0	0	0
Phase 1b Office	Office Building 1 2024	Pile Rig	Bore/Drill Rigs	Diesel	1	600	0	1	0.5	0	0	0

Phase 1b Office	Office Building 1 2024	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0.3	0	0	0
Phase 1b Office	Office Building 1 2024	Scraper	Scrapers	Diesel	1	600	0	1	0.48	0	0	0
Phase 1b Office	Office Building 1 2024	Tire Wash	Other Construction Equipment	Diesel	1	100	1.5	1	0.42	0	0	0
Phase 1b Office	Office Building 2 2023	Air Compressor	Air Compressors	Diesel	1	150	0.075669	1	0.48	0	0	0.26
Phase 1b Office	Office Building 2 2023	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	2.484076	1	0.37	0	0	0.26
Phase 1b Office	Office Building 2 2023	Blade	Graders	Diesel	1	450	0	1	0.41	0	0	0.26
Phase 1b Office	Office Building 2 2023	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	2.484076	1	0.37	0	0	0.26
Phase 1b Office	Office Building 2 2023	Boom Lift	Aerial Lifts	Diesel	1	40	1.22293	1	0.31	0	0	2.75
Phase 1b Office	Office Building 2 2023	Compactor	Other Construction Equipment	Diesel	1	250	0.198726	1	0.42	0	0	0.26
Phase 1b Office	Office Building 2 2023	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.78	0	0	0.26
Phase 1b Office	Office Building 2 2023	Concrete Pump	Pumps	Diesel	1	450	0.124204	1	0.74	0	0	0.26
Phase 1b Office	Office Building 2 2023	Excavator	Excavators	Diesel	1	500	0.124204	1	0.38	0	0	0.26
Phase 1b Office	Office Building 2 2023	Generator	Generator Sets	Diesel	1	25	5.006369	1	0.74	0	0	1.322590075
Phase 1b Office	Office Building 2 2023	Gradall	Forklifts	Diesel	1	350	0.48	1	0.2	0	0	0.26
Phase 1b Office	Office Building 2 2023	Hydro/Crawler Crane	Cranes	Diesel	1	550	3.324841	1	0.29	0	0	0.26
Phase 1b Office	Office Building 2 2023	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	1.681529	1	0.37	0	0	0.26
Phase 1b Office	Office Building 2 2023	Paver	Pavers	Diesel	1	250	0	1	0.42	0	0	0.26
Phase 1b Office	Office Building 2 2023	Pile Rig	Bore/Drill Rigs	Diesel	1	600	1.681529	1	0.5	0	0	0.26
Phase 1b Office	Office Building 2 2023	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0.3	0	0	2.75
Phase 1b Office	Office Building 2 2023	Scraper	Scrapers	Diesel	1	600	0	1	0.48	0	0	0.26
Phase 1b Office	Office Building 2 2023	Tire Wash	Other Construction Equipment	Diesel	1	100	1.5	1	0.42	0	0	0.26
Phase 1b Office	Office Building 2 2024	Air Compressor	Air Compressors	Diesel	1	150	0	1	0.48	0	0	0
Phase 1b Office	Office Building 2 2024	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	0	1	0.37	0	0	0
Phase 1b Office	Office Building 2 2024	Blade	Graders	Diesel	1	450	0	1	0.41	0	0	0
Phase 1b Office	Office Building 2 2024	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	0	1	0.37	0	0	0
Phase 1b Office	Office Building 2 2024	Boom Lift	Aerial Lifts	Diesel	1	40	7.270992	1	0.31	0	0	0
Phase 1b Office	Office Building 2 2024	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0.42	0	0	0
Phase 1b Office	Office Building 2 2024	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.78	0	0	0
Phase 1b Office	Office Building 2 2024	Concrete Pump	Pumps	Diesel	1	450	0.005038	1	0.74	0	0	0
Phase 1b Office	Office Building 2 2024	Excavator	Excavators	Diesel	1	500	0	1	0.38	0	0	0
Phase 1b Office	Office Building 2 2024	Generator	Generator Sets	Diesel	1	25	0	1	0.74	0	0	0
Phase 1b Office	Office Building 2 2024	Gradall	Forklifts	Diesel	1	350	0.48	1	0.2	0	0	0
Phase 1b Office	Office Building 2 2024	Hydro/Crawler Crane	Cranes	Diesel	1	550	0	1	0.29	0	0	0
Phase 1b Office	Office Building 2 2024	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	0	1	0.37	0	0	0
Phase 1b Office	Office Building 2 2024	Paver	Pavers	Diesel	1	250	0	1	0.42	0	0	0
Phase 1b Office	Office Building 2 2024	Pile Rig	Bore/Drill Rigs	Diesel	1	600	0	1	0.5	0	0	0
Phase 1b Office	Office Building 2 2024	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0.3	0	0	0
Phase 1b Office	Office Building 2 2024	Scraper	Scrapers	Diesel	1	600	0	1	0.48	0	0	0
Phase 1b Office	Office Building 2 2024	Tire Wash	Other Construction Equipment	Diesel	1	100	1.5	1	0.42	0	0	0
Phase 1b Office	Office Building 2 2025	Air Compressor	Air Compressors	Diesel	1	150	0	1	0.48	0	0	0
Phase 1b Office	Office Building 2 2025	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	0	1	0.37	0	0	0
Phase 1b Office	Office Building 2 2025	Blade	Graders	Diesel	1	450	0	1	0.41	0	0	0
Phase 1b Office	Office Building 2 2025	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	0	1	0.37	0	0	0
Phase 1b Office	Office Building 2 2025	Boom Lift	Aerial Lifts	Diesel	1	40	0	1	0.31	0	0	0
Phase 1b Office	Office Building 2 2025	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0.42	0	0	0
Phase 1b Office	Office Building 2 2025	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.78	0	0	0
Phase 1b Office	Office Building 2 2025	Concrete Pump	Pumps	Diesel	1	450	0	1	0.74	0	0	0
Phase 1b Office	Office Building 2 2025	Excavator	Excavators	Diesel	1	500	0	1	0.38	0	0	0
Phase 1b Office	Office Building 2 2025	Generator	Generator Sets	Diesel	1	25	0	1	0.74	0	0	0
Phase 1b Office	Office Building 2 2025	Gradall	Forklifts	Diesel	1	350	0.48	1	0.2	0	0	0
Phase 1b Office	Office Building 2 2025	Hydro/Crawler Crane	Cranes	Diesel	1	550	0	1	0.29	0	0	0
Phase 1b Office	Office Building 2 2025	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	0	1	0.37	0	0	0
Phase 1b Office	Office Building 2 2025	Paver	Pavers	Diesel	1	250	0	1	0.42	0	0	0
Phase 1b Office	Office Building 2 2025	Pile Rig	Bore/Drill Rigs	Diesel	1	600	0	1	0.5	0	0	0
Phase 1b Office	Office Building 2 2025	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0.3	0	0	0

Phase 1b Office	Office Building 2 2025	Scraper	Scrapers	Diesel	1	600	0	1	0.48	0	0	0
Phase 1b Office	Office Building 2 2025	Tire Wash	Other Construction Equipment	Diesel	1	100	1.5	1	0.42	0	0	0
Phase 1b Office	Office Building 5 2023	Air Compressor	Air Compressors	Diesel	1	150	0.058812	1	0.48	0	0	0.26
Phase 1b Office	Office Building 5 2023	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	2.643564	1	0.37	0	0	0.26
Phase 1b Office	Office Building 5 2023	Blade	Graders	Diesel	1	450	0	1	0.41	0	0	0.26
Phase 1b Office	Office Building 5 2023	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	2.643564	1	0.37	0	0	0.26
Phase 1b Office	Office Building 5 2023	Boom Lift	Aerial Lifts	Diesel	1	40	2.19802	1	0.31	0	0	2.75
Phase 1b Office	Office Building 5 2023	Compactor	Other Construction Equipment	Diesel	1	250	0.211485	1	0.42	0	0	0.26
Phase 1b Office	Office Building 5 2023	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.78	0	0	0.26
Phase 1b Office	Office Building 5 2023	Concrete Pump	Pumps	Diesel	1	450	0.117327	1	0.74	0	0	0.26
Phase 1b Office	Office Building 5 2023	Excavator	Excavators	Diesel	1	500	0.132178	1	0.38	0	0	0.26
Phase 1b Office	Office Building 5 2023	Generator	Generator Sets	Diesel	1	25	4.60396	1	0.74	0	0	1.322590075
Phase 1b Office	Office Building 5 2023	Gradall	Forklifts	Diesel	1	350	0.48	1	0.2	0	0	0.26
Phase 1b Office	Office Building 5 2023	Hydro/Crawler Crane	Cranes	Diesel	1	550	3.267327	1	0.29	0	0	0.26
Phase 1b Office	Office Building 5 2023	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	1.960396	1	0.37	0	0	0.26
Phase 1b Office	Office Building 5 2023	Paver	Pavers	Diesel	1	250	0	1	0.42	0	0	0.26
Phase 1b Office	Office Building 5 2023	Pile Rig	Bore/Drill Rigs	Diesel	1	600	1.960396	1	0.5	0	0	0.26
Phase 1b Office	Office Building 5 2023	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0.3	0	0	2.75
Phase 1b Office	Office Building 5 2023	Scraper	Scrapers	Diesel	1	600	0	1	0.48	0	0	0.26
Phase 1b Office	Office Building 5 2023	Tire Wash	Other Construction Equipment	Diesel	1	100	1.5	1	0.42	0	0	0.26
Phase 1b Office	Office Building 5 2024	Air Compressor	Air Compressors	Diesel	1	150	0	1	0.48	0	0	0
Phase 1b Office	Office Building 5 2024	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	0	1	0.37	0	0	0
Phase 1b Office	Office Building 5 2024	Blade	Graders	Diesel	1	450	0	1	0.41	0	0	0
Phase 1b Office	Office Building 5 2024	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	0	1	0.37	0	0	0
Phase 1b Office	Office Building 5 2024	Boom Lift	Aerial Lifts	Diesel	1	40	6.194656	1	0.31	0	0	0
Phase 1b Office	Office Building 5 2024	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0.42	0	0	0
Phase 1b Office	Office Building 5 2024	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.78	0	0	0
Phase 1b Office	Office Building 5 2024	Concrete Pump	Pumps	Diesel	1	450	0.004809	1	0.74	0	0	0
Phase 1b Office	Office Building 5 2024	Excavator	Excavators	Diesel	1	500	0	1	0.38	0	0	0
Phase 1b Office	Office Building 5 2024	Generator	Generator Sets	Diesel	1	25	0	1	0.74	0	0	0
Phase 1b Office	Office Building 5 2024	Gradall	Forklifts	Diesel	1	350	0.48	1	0.2	0	0	0
Phase 1b Office	Office Building 5 2024	Hydro/Crawler Crane	Cranes	Diesel	1	550	0	1	0.29	0	0	0
Phase 1b Office	Office Building 5 2024	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	0	1	0.37	0	0	0
Phase 1b Office	Office Building 5 2024	Paver	Pavers	Diesel	1	250	0	1	0.42	0	0	0
Phase 1b Office	Office Building 5 2024	Pile Rig	Bore/Drill Rigs	Diesel	1	600	0	1	0.5	0	0	0
Phase 1b Office	Office Building 5 2024	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0.3	0	0	0
Phase 1b Office	Office Building 5 2024	Scraper	Scrapers	Diesel	1	600	0	1	0.48	0	0	0
Phase 1b Office	Office Building 5 2024	Tire Wash	Other Construction Equipment	Diesel	1	100	1.5	1	0.42	0	0	0
Phase 1b Office	Office Building 5 2025	Air Compressor	Air Compressors	Diesel	1	150	0	1	0.48	0	0	0
Phase 1b Office	Office Building 5 2025	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	0	1	0.37	0	0	0
Phase 1b Office	Office Building 5 2025	Blade	Graders	Diesel	1	450	0	1	0.41	0	0	0
Phase 1b Office	Office Building 5 2025	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	0	1	0.37	0	0	0
Phase 1b Office	Office Building 5 2025	Boom Lift	Aerial Lifts	Diesel	1	40	0	1	0.31	0	0	0
Phase 1b Office	Office Building 5 2025	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0.42	0	0	0
Phase 1b Office	Office Building 5 2025	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.78	0	0	0
Phase 1b Office	Office Building 5 2025	Concrete Pump	Pumps	Diesel	1	450	0	1	0.74	0	0	0
Phase 1b Office	Office Building 5 2025	Excavator	Excavators	Diesel	1	500	0	1	0.38	0	0	0
Phase 1b Office	Office Building 5 2025	Generator	Generator Sets	Diesel	1	25	0	1	0.74	0	0	0
Phase 1b Office	Office Building 5 2025	Gradall	Forklifts	Diesel	1	350	0.48	1	0.2	0	0	0
Phase 1b Office	Office Building 5 2025	Hydro/Crawler Crane	Cranes	Diesel	1	550	0	1	0.29	0	0	0
Phase 1b Office	Office Building 5 2025	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	0	1	0.37	0	0	0
Phase 1b Office	Office Building 5 2025	Paver	Pavers	Diesel	1	250	0	1	0.42	0	0	0
Phase 1b Office	Office Building 5 2025	Pile Rig	Bore/Drill Rigs	Diesel	1	600	0	1	0.5	0	0	0
Phase 1b Office	Office Building 5 2025	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0.3	0	0	0
Phase 1b Office	Office Building 5 2025	Scraper	Scrapers	Diesel	1	600	0	1	0.48	0	0	0

Phase 1b Office	Office Building 5 2025	Tire Wash	Other Construction Equipment	Diesel	1	100	1.5	1	0.42	0	0	0
Phase 1b Office	Office Building 6 2023	Air Compressor	Air Compressors	Diesel	1	150	0.062206	1	0.48	0	0	0.26
Phase 1b Office	Office Building 6 2023	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	3.926471	1	0.37	0	0	0.26
Phase 1b Office	Office Building 6 2023	Blade	Graders	Diesel	1	450	0	1	0.41	0	0	0.26
Phase 1b Office	Office Building 6 2023	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	3.926471	1	0.37	0	0	0.26
Phase 1b Office	Office Building 6 2023	Boom Lift	Aerial Lifts	Diesel	1	40	0	1	0.31	0	0	2.75
Phase 1b Office	Office Building 6 2023	Compactor	Other Construction Equipment	Diesel	1	250	0.314118	1	0.42	0	0	0.26
Phase 1b Office	Office Building 6 2023	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.78	0	0	0.26
Phase 1b Office	Office Building 6 2023	Concrete Pump	Pumps	Diesel	1	450	0.157941	1	0.74	0	0	0.26
Phase 1b Office	Office Building 6 2023	Excavator	Excavators	Diesel	1	500	0.196324	1	0.38	0	0	0.26
Phase 1b Office	Office Building 6 2023	Generator	Generator Sets	Diesel	1	25	6	1	0.74	0	0	1.322590075
Phase 1b Office	Office Building 6 2023	Gradall	Forklifts	Diesel	1	350	0.48	1	0.2	0	0	0.26
Phase 1b Office	Office Building 6 2023	Hydro/Crawler Crane	Cranes	Diesel	1	550	4.897059	1	0.29	0	0	0.26
Phase 1b Office	Office Building 6 2023	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	3	1	0.37	0	0	0.26
Phase 1b Office	Office Building 6 2023	Paver	Pavers	Diesel	1	250	0	1	0.42	0	0	0.26
Phase 1b Office	Office Building 6 2023	Pile Rig	Bore/Drill Rigs	Diesel	1	600	3	1	0.5	0	0	0.26
Phase 1b Office	Office Building 6 2023	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0.3	0	0	2.75
Phase 1b Office	Office Building 6 2023	Scraper	Scrapers	Diesel	1	600	0	1	0.48	0	0	0.26
Phase 1b Office	Office Building 6 2023	Tire Wash	Other Construction Equipment	Diesel	1	100	1.5	1	0.42	0	0	0.26
Phase 1b Office	Office Building 6 2024	Air Compressor	Air Compressors	Diesel	1	150	0.013053	1	0.48	0	0	0
Phase 1b Office	Office Building 6 2024	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	0	1	0.37	0	0	0
Phase 1b Office	Office Building 6 2024	Blade	Graders	Diesel	1	450	0	1	0.41	0	0	0
Phase 1b Office	Office Building 6 2024	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	0	1	0.37	0	0	0
Phase 1b Office	Office Building 6 2024	Boom Lift	Aerial Lifts	Diesel	1	40	8.003817	1	0.31	0	0	0
Phase 1b Office	Office Building 6 2024	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0.42	0	0	0
Phase 1b Office	Office Building 6 2024	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.78	0	0	0
Phase 1b Office	Office Building 6 2024	Concrete Pump	Pumps	Diesel	1	450	0.013969	1	0.74	0	0	0
Phase 1b Office	Office Building 6 2024	Excavator	Excavators	Diesel	1	500	0	1	0.38	0	0	0
Phase 1b Office	Office Building 6 2024	Generator	Generator Sets	Diesel	1	25	0.435115	1	0.74	0	0	0
Phase 1b Office	Office Building 6 2024	Gradall	Forklifts	Diesel	1	350	0.48	1	0.2	0	0	0
Phase 1b Office	Office Building 6 2024	Hydro/Crawler Crane	Cranes	Diesel	1	550	0	1	0.29	0	0	0
Phase 1b Office	Office Building 6 2024	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	0	1	0.37	0	0	0
Phase 1b Office	Office Building 6 2024	Paver	Pavers	Diesel	1	250	0	1	0.42	0	0	0
Phase 1b Office	Office Building 6 2024	Pile Rig	Bore/Drill Rigs	Diesel	1	600	0	1	0.5	0	0	0
Phase 1b Office	Office Building 6 2024	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0.3	0	0	0
Phase 1b Office	Office Building 6 2024	Scraper	Scrapers	Diesel	1	600	0	1	0.48	0	0	0
Phase 1b Office	Office Building 6 2024	Tire Wash	Other Construction Equipment	Diesel	1	100	1.5	1	0.42	0	0	0
Phase 1b Office	Office Building 6 2025	Air Compressor	Air Compressors	Diesel	1	150	0	1	0.48	0	0	0
Phase 1b Office	Office Building 6 2025	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	0	1	0.37	0	0	0
Phase 1b Office	Office Building 6 2025	Blade	Graders	Diesel	1	450	0	1	0.41	0	0	0
Phase 1b Office	Office Building 6 2025	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	0	1	0.37	0	0	0
Phase 1b Office	Office Building 6 2025	Boom Lift	Aerial Lifts	Diesel	1	40	0	1	0.31	0	0	0
Phase 1b Office	Office Building 6 2025	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0.42	0	0	0
Phase 1b Office	Office Building 6 2025	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.78	0	0	0
Phase 1b Office	Office Building 6 2025	Concrete Pump	Pumps	Diesel	1	450	0	1	0.74	0	0	0
Phase 1b Office	Office Building 6 2025	Excavator	Excavators	Diesel	1	500	0	1	0.38	0	0	0
Phase 1b Office	Office Building 6 2025	Generator	Generator Sets	Diesel	1	25	0	1	0.74	0	0	0
Phase 1b Office	Office Building 6 2025	Gradall	Forklifts	Diesel	1	350	0.48	1	0.2	0	0	0
Phase 1b Office	Office Building 6 2025	Hydro/Crawler Crane	Cranes	Diesel	1	550	0	1	0.29	0	0	0
Phase 1b Office	Office Building 6 2025	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	0	1	0.37	0	0	0
Phase 1b Office	Office Building 6 2025	Paver	Pavers	Diesel	1	250	0	1	0.42	0	0	0
Phase 1b Office	Office Building 6 2025	Pile Rig	Bore/Drill Rigs	Diesel	1	600	0	1	0.5	0	0	0
Phase 1b Office	Office Building 6 2025	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0.3	0	0	0
Phase 1b Office	Office Building 6 2025	Scraper	Scrapers	Diesel	1	600	0	1	0.48	0	0	0
Phase 1b Office	Office Building 6 2025	Tire Wash	Other Construction Equipment	Diesel	1	100	1.5	1	0.42	0	0	0

Phase 1b Mixed Use	Parcel 7 Foundations	Pile Rig	Bore/Drill Rigs	Diesel	0	600	8	0.4	0.5	0	0	0
Phase 1b Mixed Use	Parcel 7 Foundations	Generator	Generator Sets	Diesel	0	25	6	1	0.74	0	0	0
Phase 1b Mixed Use	Parcel 7 Foundations	Tire Wash	Other Construction Equipment	Diesel	1	100	4	0.9	0.42	0	0	0
Phase 1b Mixed Use	Parcel 7 Foundations	Excavator	Excavators	Diesel	1	131	8	0.6	0.38	0	0	0
Phase 1b Mixed Use	Parcel 7 Foundations	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	90	8	0.6	0.37	0	0	0
Phase 1b Mixed Use	Parcel 7 Foundations	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	70	8	0.8	0.37	0	0	0
Phase 1b Mixed Use	Parcel 7 Foundations	Gradall	Forklifts	Diesel	1	74	4	0.8	0.2	0	0	0
Phase 1b Mixed Use	Parcel 7 Foundations	Crane	Cranes	Diesel	1	215	4	0.5	0.29	0	0	0
Phase 1b Mixed Use	Parcel 7 Foundations	Concrete Pump	Pumps	Diesel	1	450	0.25	0.5	0.74	0	0	0
Phase 1b Mixed Use	Parcel 7 Core and Shell	Generator	Generator Sets	Diesel	0	25	6	1	0.74	0	0	0
Phase 1b Mixed Use	Parcel 7 Core and Shell	Tire Wash	Other Construction Equipment	Diesel	1	100	4	0.9	0.42	0	0	0
Phase 1b Mixed Use	Parcel 7 Core and Shell	Crane	Cranes	Diesel	1	600	8	0.2	0.29	0	0	0
Phase 1b Mixed Use	Parcel 7 Core and Shell	Gradall	Forklifts	Diesel	1	74	4	0.8	0.2	0	0	0
Phase 1b Mixed Use	Parcel 7 Core and Shell	Concrete Pump	Pumps	Diesel	0	450	6	0.225	0.74	0	0	0
Phase 1b Mixed Use	Parcel 7 Core and Shell	Air Compressor	Air Compressors	Diesel	0	140	2	0.4	0.48	0	0	0
Phase 1b Mixed Use	Parcel 7 Core and Shell	Boom Lift	Aerial Lifts	Diesel	0	50	6	0.2	0.31	0	0	0
Phase 1b Mixed Use	Parcel 7 Tenant Improvements	Generator	Generator Sets	Diesel	0	25	6	0.85	0.74	0	0	0
Phase 1b Mixed Use	Parcel 7 Tenant Improvements	Tire Wash	Other Construction Equipment	Diesel	1	100	4	0.9	0.42	0	0	0
Phase 1b Mixed Use	Parcel 7 Tenant Improvements	Gradall	Forklifts	Diesel	1	74	4	0.8	0.2	0	0	0
Phase 1b Mixed Use	Parcel 7 Landscaping	Excavator	Excavators	Diesel	1	25	8	0.9	0.38	0	0	0
Phase 1b Mixed Use	Parcel 7 Landscaping	Generator	Generator Sets	Diesel	0	25	6	0.5	0.74	0	0	0
Phase 1b Mixed Use	Parcel 7 Landscaping	Tire Wash	Other Construction Equipment	Diesel	1	100	4	0.9	0.42	0	0	0
Phase 1b Mixed Use	Parcel 7 Landscaping	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	90	8	0.6	0.37	0	0	0
Phase 1b Mixed Use	Parcel 7 Landscaping	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	70	8	0.8	0.37	0	0	0
Phase 1b Mixed Use	Parcel 6 Foundations	Pile Rig	Bore/Drill Rigs	Diesel	0	600	8	0.4	0.5	0	0	0
Phase 1b Mixed Use	Parcel 6 Foundations	Generator	Generator Sets	Diesel	0	25	6	1	0.74	0	0	0
Phase 1b Mixed Use	Parcel 6 Foundations	Tire Wash	Other Construction Equipment	Diesel	1	100	4	0.9	0.42	0	0	0
Phase 1b Mixed Use	Parcel 6 Foundations	Excavator	Excavators	Diesel	1	131	8	0.6	0.38	0	0	0
Phase 1b Mixed Use	Parcel 6 Foundations	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	90	8	0.6	0.37	0	0	0
Phase 1b Mixed Use	Parcel 6 Foundations	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	70	8	0.8	0.37	0	0	0
Phase 1b Mixed Use	Parcel 6 Foundations	Gradall	Forklifts	Diesel	1	74	4	0.8	0.2	0	0	0
Phase 1b Mixed Use	Parcel 6 Foundations	Crane	Cranes	Diesel	1	215	4	0.5	0.29	0	0	0
Phase 1b Mixed Use	Parcel 6 Foundations	Concrete Pump	Pumps	Diesel	1	450	0.5	0.5	0.74	0	0	0
Phase 1b Mixed Use	Parcel 6 Core and Shell	Generator	Generator Sets	Diesel	0	25	6	1	0.74	0	0	0
Phase 1b Mixed Use	Parcel 6 Core and Shell	Tire Wash	Other Construction Equipment	Diesel	1	100	4	0.9	0.42	0	0	0
Phase 1b Mixed Use	Parcel 6 Core and Shell	Crane	Cranes	Diesel	1	600	8	0.2	0.29	0	0	0
Phase 1b Mixed Use	Parcel 6 Core and Shell	Gradall	Forklifts	Diesel	2	74	4	0.8	0.2	0	0	0
Phase 1b Mixed Use	Parcel 6 Core and Shell	Concrete Pump	Pumps	Diesel	0	450	6	0.225	0.74	0	0	0
Phase 1b Mixed Use	Parcel 6 Core and Shell	Air Compressor	Air Compressors	Diesel	0	140	2	0.4	0.48	0	0	0
Phase 1b Mixed Use	Parcel 6 Core and Shell	Boom Lift	Aerial Lifts	Diesel	0	50	6	0.2	0.31	0	0	0
Phase 1b Mixed Use	Parcel 6 Tenant Improvements	Generator	Generator Sets	Diesel	0	25	6	0.85	0.74	0	0	0
Phase 1b Mixed Use	Parcel 6 Tenant Improvements	Tire Wash	Other Construction Equipment	Diesel	1	100	4	0.9	0.42	0	0	0
Phase 1b Mixed Use	Parcel 6 Tenant Improvements	Gradall	Forklifts	Diesel	1	74	4	0.8	0.2	0	0	0
Phase 1b Mixed Use	Parcel 6 Landscaping	Excavator	Excavators	Diesel	1	25	8	0.9	0.38	0	0	0
Phase 1b Mixed Use	Parcel 6 Landscaping	Generator	Generator Sets	Diesel	0	25	6	0.5	0.74	0	0	0
Phase 1b Mixed Use	Parcel 6 Landscaping	Tire Wash	Other Construction Equipment	Diesel	0	100	4	0.9	0.42	0	0	0
Phase 1b Mixed Use	Parcel 6 Landscaping	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	90	8	0.6	0.37	0	0	0
Phase 1b Mixed Use	Parcel 6 Landscaping	Bob Cat	Tractors/Loaders/Backhoes	Diesel	2	70	8	0.8	0.37	0	0	0
Phase 2 Mixed Use	Grading and Utilities	Blade	Graders	Diesel	1	359	8	0.15	0.41	0	0	0.26
Phase 2 Mixed Use	Grading and Utilities	Scraper	Scrapers	Diesel	1	52	8	0.15	0.48	0	0	2.74
Phase 2 Mixed Use	Grading and Utilities	Loader	Tractors/Loaders/Backhoes	Diesel	2	100	4	0.9	0.37	0	0	0.26
Phase 2 Mixed Use	Grading and Utilities	Tire Wash	Other Construction Equipment	Diesel	1	100	4	0.9	0.42	0	0	0.26
Phase 2 Mixed Use	Grading and Utilities	Excavator	Excavators	Diesel	2	359	8	0.6	0.38	0	0	0.26
Phase 2 Mixed Use	Grading and Utilities	Backhoe	Tractors/Loaders/Backhoes	Diesel	2	350	8	0.6	0.37	0	0	0.26
Phase 2 Mixed Use	Grading and Utilities	Gradall	Forklifts	Diesel	2	350	4	0.6	0.2	0	0	0.26

Phase 2 Mixed Use	Grading and Utilities	Compactor	Other Construction Equipment	Diesel	2	250	0.5	0.2	0.42	0	0	0.26
Phase 2 Mixed Use	Grading and Utilities	Paver	Pavers	Diesel	1	250	8	0.01	0.42	0	0	0.26
Phase 2 Mixed Use	Grading and Utilities	Generator	Generator Sets	Diesel	1	600	2	0.1	0.74	0	0	0.26
Phase 2 Mixed Use	Tunnel Construction	Crane	Cranes	Diesel	1	290	6	0.35	0.29	0	0	0.26
Phase 2 Mixed Use	Tunnel Construction	Excavator	Excavators	Diesel	2	170	6	0.45	0.38	0	0	0.26
Phase 2 Mixed Use	Tunnel Construction	Loader	Tractors/Loaders/Backhoes	Diesel	1	250	6	0.45	0.37	0	0	0.26
Phase 2 Mixed Use	Tunnel Construction	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	103	6	0.4	0.37	0	0	0.26
Phase 2 Mixed Use	Tunnel Construction	Gradall	Forklifts	Diesel	1	130	6	0.35	0.2	0	0	0.26
Phase 2 Mixed Use	Tunnel Construction	Compressor	Air Compressors	Diesel	2	50	6	0.3	0.48	0	0	1.965408832
Phase 2 Mixed Use	Foundations	Pile Rig	Bore/Drill Rigs	Diesel	0	600	8	0.4	0.5	0	0	0
Phase 2 Mixed Use	Foundations	Generator	Generator Sets	Diesel	2	25	6	1	0.74	0	0	0
Phase 2 Mixed Use	Foundations	Tire Wash	Other Construction Equipment	Diesel	2	100	4	0.9	0.42	0	0	0
Phase 2 Mixed Use	Foundations	Excavator	Excavators	Diesel	2	131	8	0.6	0.38	0	0	0
Phase 2 Mixed Use	Foundations	Backhoe	Tractors/Loaders/Backhoes	Diesel	2	90	8	0.6	0.37	0	0	0
Phase 2 Mixed Use	Foundations	Bob Cat	Tractors/Loaders/Backhoes	Diesel	2	70	8	0.8	0.37	0	0	0
Phase 2 Mixed Use	Foundations	Gradall	Forklifts	Diesel	2	74	4	0.8	0.2	0	0	0
Phase 2 Mixed Use	Foundations	Crane	Cranes	Diesel	2	215	4	0.5	0.29	0	0	0
Phase 2 Mixed Use	Foundations	Concrete Pump	Pumps	Diesel	3	450	0.5	0.5	0.74	0	0	0
Phase 2 Mixed Use	Core and Shell	Generator	Generator Sets	Diesel	2	25	6	1	0.74	0	0	0
Phase 2 Mixed Use	Core and Shell	Tire Wash	Other Construction Equipment	Diesel	2	100	4	0.9	0.42	0	0	0
Phase 2 Mixed Use	Core and Shell	Crane	Cranes	Diesel	2	600	8	0.2	0.29	0	0	0
Phase 2 Mixed Use	Core and Shell	Gradall	Forklifts	Diesel	3	74	4	0.8	0.2	0	0	0
Phase 2 Mixed Use	Core and Shell	Concrete Pump	Pumps	Diesel	0	450	6	0.45	0.74	0	0	0
Phase 2 Mixed Use	Core and Shell	Air Compressor	Air Compressors	Diesel	0	140	2	0.8	0.48	0	0	0
Phase 2 Mixed Use	Core and Shell	Boom Lift	Aerial Lifts	Diesel	0	50	6	0.4	0.31	0	0	0
Phase 2 Mixed Use	Tenant Improvements	Generator	Generator Sets	Diesel	2	25	6	0.85	0.74	0	0	0
Phase 2 Mixed Use	Tenant Improvements	Tire Wash	Other Construction Equipment	Diesel	2	100	4	0.9	0.42	0	0	0
Phase 2 Mixed Use	Tenant Improvements	Gradall	Forklifts	Diesel	1	74	4	0.8	0.2	0	0	0
Phase 2 Mixed Use	Landscaping	Excavator	Excavators	Diesel	1	25	8	0.9	0.38	0	0	0
Phase 2 Mixed Use	Tenant Improvements	Gradall	Forklifts	Diesel	1	74	4	0.8	0.2	0	0	0
Phase 2 Mixed Use	Landscaping	Excavator	Excavators	Diesel	1	25	8	0.9	0.38	0	0	0
Phase 2 Mixed Use	Landscaping	Generator	Generator Sets	Diesel	0	25	6	0.5	0.74	0	0	0
Phase 2 Mixed Use	Landscaping	Tire Wash	Other Construction Equipment	Diesel	1	100	4	0.9	0.42	0	0	0
Phase 2 Mixed Use	Landscaping	Backhoe	Tractors/Loaders/Backhoes	Diesel	2	90	8	0.6	0.37	0	0	0
Phase 2 Mixed Use	Landscaping	Bob Cat	Tractors/Loaders/Backhoes	Diesel	3	70	8	0.8	0.37	0	0	0
Alternate 1	Demolition	Excavator	Excavators	Diesel	1	131	8	0.9	0.38	0	0	0
Alternate 1	Demolition	Generator	Generator Sets	Diesel	1	25	6	0.5	0.74	0	0	0
Alternate 1	Demolition	Tire Wash	Other Construction Equipment	Diesel	2	100	4	0.9	0.42	0	0	0
Alternate 1	Demolition	Bob Cat	Tractors/Loaders/Backhoes	Diesel	2	70	8	0.8	0.37	0	0	0
Alternate 1	Demolition	Pressure Washer	Pressure Washers	Diesel	2	25	8	1	0.3	0	0	0
Alternate 1	Demolition	Air Compressor	Air Compressors	Diesel	1	140	6	0.7	0.48	0	0	0
Alternate 1	Grading and Utilities	Loader	Tractors/Loaders/Backhoes	Diesel	2	100	4	0.9	0.37	0	0	0
Alternate 1	Grading and Utilities	Tire Wash	Other Construction Equipment	Diesel	1	100	4	0.9	0.42	0	0	0
Alternate 1	Grading and Utilities	Excavator	Excavators	Diesel	1	359	8	0.6	0.38	0	0	0
Alternate 1	Grading and Utilities	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	90	8	0.6	0.37	0	0	0
Alternate 1	Grading and Utilities	Gradall	Forklifts	Diesel	1	74	4	0.6	0.2	0	0	0
Alternate 1	Grading and Utilities	Compactor	Other Construction Equipment	Diesel	1	250	0.5	0.2	0.42	0	0	0
Alternate 1	Grading and Utilities	Paver	Pavers	Diesel	1	250	8	0.01	0.42	0	0	0
Alternate 1	Grading and Utilities	Generator	Generator Sets	Diesel	1	600	2	0.1	0.74	0	0	0
Alternate 1	Foundations	Generator	Generator Sets	Diesel	1	25	6	1	0.74	0	0	0
Alternate 1	Foundations	Tire Wash	Other Construction Equipment	Diesel	1	100	4	0.9	0.42	0	0	0
Alternate 1	Foundations	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	90	8	0.6	0.37	0	0	0
Alternate 1	Foundations	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	70	8	0.8	0.37	0	0	0
Alternate 1	Foundations	Gradall	Forklifts	Diesel	1	74	4	0.8	0.2	0	0	0
Alternate 1	Foundations	Concrete Pump	Pumps	Diesel	1	450	6	0.3	0.74	0	0	0
Alternate 1	Core and Shell	Generator	Generator Sets	Diesel	1	25	6	1	0.74	0	0	0
Alternate 1	Core and Shell	Tire Wash	Other Construction Equipment	Diesel	1	100	4	0.9	0.42	0	0	0

Alternate 1	Core and Shell	Gradall	Forklifts	Diesel	1	74	4	0.8	0.2	0	0	0
Alternate 1	Core and Shell	Concrete Pump	Pumps	Diesel	1	450	6	0.45	0.74	0	0	0
Alternate 1	Tenant Improvements	Generator	Generator Sets	Diesel	1	25	6	0.85	0.74	0	0	0
Alternate 1	Tenant Improvements	Tire Wash	Other Construction Equipment	Diesel	2	100	4	0.9	0.42	0	0	0
Alternate 1	Tenant Improvements	Gradall	Forklifts	Diesel	1	74	4	0.8	0.2	0	0	0

F			Days in each year						Emissions (lb/yr)						
2024	2025	2026	2021	2022	2023	2024	2025	2026	2021	2022	2023	2024	2025	2026	
0	0	0	13	84	0	0	0	0	10.68318155	69.02979	0	0	0	0	453.59
0	0	0	13	84	0	0	0	0	4.113580454	26.89398	0	0	0	0	
0	0	0	13	84	0	0	0	0	2.253383011	14.56032	0	0	0	0	
0	0	0	13	84	0	0	0	0	0	0	0	0	0	0	453.59 g/lb
0	0	0	13	84	0	0	0	0	15.88098503	102.6156	0	0	0	0	
0	0	0	13	84	0	0	0	0	9.457880465	61.11246	0	0	0	0	
0	0	0	13	84	0	0	0	0	2.103157477	13.58963	0	0	0	0	
0	0	0	0	143	0	0	0	0	0	28.95579	0	0	0	0	
0	0	0	0	143	0	0	0	0	0	51.74626	0	0	0	0	
0	0	0	0	143	0	0	0	0	0	43.67271	0	0	0	0	
0	0	0	0	143	0	0	0	0	0	24.78721	0	0	0	0	
0	0	0	0	143	0	0	0	0	0	214.6966	0	0	0	0	
0	0	0	0	143	0	0	0	0	0	203.806	0	0	0	0	
0	0	0	0	143	0	0	0	0	0	55.0827	0	0	0	0	
0	0	0	0	143	0	0	0	0	0	3.442668	0	0	0	0	
0	0	0	0	143	0	0	0	0	0	1.377067	0	0	0	0	
0	0	0	0	143	0	0	0	0	0	7.278785	0	0	0	0	
0	0	0	0	42	0	0	0	0	0	0.812208	0	0	0	0	
0	0	0	0	42	0	0	0	0	0	0	0	0	0	0	
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0	0	0	0	42	0	0	0	0	0	0	0	0	0	0	
0	0	0	0	42	0	0	0	0	0	0	0	0	0	0	
0	0	0	0	42	0	0	0	0	0	0	0	0	0	0	
0	0	0	0	42	0	0	0	0	0	2.645558	0	0	0	0	
0	0	0	0	42	0	0	0	0	0	53.58319	0	0	0	0	
0	0	0	0	42	0	0	0	0	0	10.56549	0	0	0	0	
0	0	0	0	42	0	0	0	0	0	53.58319	0	0	0	0	
0	0	0	0	42	0	0	0	0	0	10.56549	0	0	0	0	
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0	0	0	0	42	0	0	0	0	0	29.92129	0	0	0	0	
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0	2.75	0	0	0	0	0	261	0	0	0	0	0	0	0
0	0.26	0	0	0	0	0	261	0	0	0	0	0	0	0
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0	0	0.26	0	0	0	0	0	46	0	0	0	0	0	0
0	0	0.26	0	0	0	0	0	46	0	0	0	0	0	0

0	0	0.26	0	0	0	0	0	46	0	0	0	0	0	0
0	0	0.26	0	0	0	0	0	46	0	0	0	0	0	0
0	0	2.75	0	0	0	0	0	46	0	0	0	0	0	0
0	0	0.26	0	0	0	0	0	46	0	0	0	0	0	0
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0	0	0.26	0	0	0	0	0	46	0	0	0	0	0	0
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0	0	1.366319529	0	0	0	0	0	46	0	0	0	0	0	0
0	0	0.26	0	0	0	0	0	46	0	0	0	0	0	21.66714
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0	0	2.75	0	0	0	0	0	46	0	0	0	0	0	0
0	0	0.26	0	0	0	0	0	46	0	0	0	0	0	0
0	0	0.26	0	0	0	0	0	46	0	0	0	0	0	0
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0	0	0	0	42	0	0	0	0	0	0	0	0	0	0
0	0	0	0	42	0	0	0	0	0	5.217311	0	0	0	0
0	0	0	0	42	0	0	0	0	0	4.623448	0	0	0	0
0	0	0	0	42	0	0	0	0	0	0	0	0	0	0
0	0	0	0	42	0	0	0	0	0	0	0	0	0	0
0	0	0	0	42	0	0	0	0	0	3.389979	0	0	0	0
0	0	0	0	42	0	0	0	0	0	53.58319	0	0	0	0
0	0	0	0	42	0	0	0	0	0	13.12682	0	0	0	0
0	0	0	0	42	0	0	0	0	0	9.870588	0	0	0	0
0	0	0	0	42	0	0	0	0	0	10.14831	0	0	0	0
0	0	0	0	42	0	0	0	0	0	10.43462	0	0	0	0
0	0	0	0	42	0	0	0	0	0	0	0	0	0	0
0	0	0	0	42	0	0	0	0	0	76.35089	0	0	0	0
0	0	0	0	42	0	0	0	0	0	0	0	0	0	0
0	0	0	0	42	0	0	0	0	0	0	0	0	0	0
0	0	0	0	42	0	0	0	0	0	2.961176	0	0	0	0
0	0	0	0	0	257	0	0	0	0	0	24.51483	0	0	0
0	0	0	0	0	257	0	0	0	0	0	0	0	0	0
0	0	0	0	0	257	0	0	0	0	0	0	0	0	0
0	0	0	0	0	257	0	0	0	0	0	7.635089	0	0	0
0	0	0	0	0	257	0	0	0	0	0	6.766022	0	0	0
0	0	0	0	0	257	0	0	0	0	0	0	0	0	0
0	0	0	0	0	257	0	0	0	0	0	0	0	0	0
0	0	0	0	0	257	0	0	0	0	0	113.3811	0	0	0
0	0	0	0	0	257	0	0	0	0	0	78.41443	0	0	0
0	0	0	0	0	257	0	0	0	0	0	147.5875	0	0	0
0	0	0	0	0	257	0	0	0	0	0	109.7802	0	0	0
0	0	0	0	0	257	0	0	0	0	0	217.2286	0	0	0
0	0	0	0	0	257	0	0	0	0	0	15.27018	0	0	0
0	0	0	0	0	257	0	0	0	0	0	0	0	0	0
0	0	0	0	0	257	0	0	0	0	0	0	0	0	0
0	0	0	0	0	257	0	0	0	0	0	0.54019	0	0	0
0	0	0	0	0	257	0	0	0	0	0	0	0	0	0
0	0	0	0	0	257	0	0	0	0	0	11.48359	0	0	0
0.26	0	0	0	0	0	175	0	0	0	0	0	21.66714	0	0
0.26	0	0	0	0	0	175	0	0	0	0	0	0	0	0
0.26	0	0	0	0	0	175	0	0	0	0	0	0	0	0

0.26	0	0	0	0	0	175	0	0	0	0	0	0	0	0
2.75	0	0	0	0	0	175	0	0	0	0	0	275.1516	0	0
0.26	0	0	0	0	0	175	0	0	0	0	0	0	0	0
0.26	0	0	0	0	0	175	0	0	0	0	0	0	0	0
0.26	0	0	0	0	0	175	0	0	0	0	0	100.2105	0	0
0.26	0	0	0	0	0	175	0	0	0	0	0	0	0	0
1.337008797	0	0	0	0	0	175	0	0	0	0	0	0	0	0
0.26	0	0	0	0	0	175	0	0	0	0	0	84.26112	0	0
0.26	0	0	0	0	0	175	0	0	0	0	0	0	0	0
0.26	0	0	0	0	0	175	0	0	0	0	0	0	0	0
0.26	0	0	0	0	0	175	0	0	0	0	0	0	0	0
0.26	0	0	0	0	0	175	0	0	0	0	0	0	0	0
2.75	0	0	0	0	0	175	0	0	0	0	0	0.477441	0	0
0.26	0	0	0	0	0	175	0	0	0	0	0	0	0	0
0.26	0	0	0	0	0	175	0	0	0	0	0	6.319584	0	0
0	0.26	0	0	0	0	0	154	0	0	0	0	0	5.323927	0
0	0.26	0	0	0	0	0	154	0	0	0	0	0	0	0
0	0.26	0	0	0	0	0	154	0	0	0	0	0	0	0
0	0.26	0	0	0	0	0	154	0	0	0	0	0	0	0
0	2.75	0	0	0	0	0	154	0	0	0	0	0	233.6533	0
0	0.26	0	0	0	0	0	154	0	0	0	0	0	0	0
0	0.26	0	0	0	0	0	154	0	0	0	0	0	0	0
0	0.26	0	0	0	0	0	154	0	0	0	0	0	24.62316	0
0	0.26	0	0	0	0	0	154	0	0	0	0	0	0	0
0	1.351584711	0	0	0	0	0	154	0	0	0	0	0	0	0
0	0.26	0	0	0	0	0	154	0	0	0	0	0	74.63127	0
0	0.26	0	0	0	0	0	154	0	0	0	0	0	0	0
0	0.26	0	0	0	0	0	154	0	0	0	0	0	0	0
0	0.26	0	0	0	0	0	154	0	0	0	0	0	0	0
0	0.26	0	0	0	0	0	154	0	0	0	0	0	0	0
0	0.26	0	0	0	0	0	154	0	0	0	0	0	0	0
0	2.75	0	0	0	0	0	154	0	0	0	0	0.117314	0	0
0	0.26	0	0	0	0	0	154	0	0	0	0	0	0	0
0	0.26	0	0	0	0	0	154	0	0	0	0	5.597346	0	0
0	0	0	0	0	238	0	0	0	0	0	0	0	0	0
0	0	0	0	0	238	0	0	0	0	0	0	0	0	0
0	0	0	0	0	238	0	0	0	0	0	0	0	0	0
0	0	0	0	0	238	0	0	0	0	0	30.28585	0	0	0
0	0	0	0	0	238	0	0	0	0	0	26.83855	0	0	0
0	0	0	0	0	238	0	0	0	0	0	0	0	0	0
0	0	0	0	0	238	0	0	0	0	0	0	0	0	0
0	0	0	0	0	238	0	0	0	0	0	0	0	0	0
0	0	0	0	0	238	0	0	0	0	0	311.0439	0	0	0
0	0	0	0	0	238	0	0	0	0	0	77.03032	0	0	0
0	0	0	0	0	238	0	0	0	0	0	57.29756	0	0	0
0	0	0	0	0	238	0	0	0	0	0	0	0	0	0
0	0	0	0	0	238	0	0	0	0	0	60.57171	0	0	0
0	0	0	0	0	238	0	0	0	0	0	0	0	0	0
0	0	0	0	0	238	0	0	0	0	0	0	0	0	0
0	0	0	0	0	238	0	0	0	0	0	0	0	0	0
0	0	0	0	0	238	0	0	0	0	0	0	0	0	0
0	0	0	0	0	238	0	0	0	0	0	17.18927	0	0	0
0.26	0	0	0	0	0	262	0	0	0	0	0	0	0	0
0.26	0	0	0	0	0	262	0	0	0	0	0	0	0	0
0.26	0	0	0	0	0	262	0	0	0	0	0	0	0	0
0.26	0	0	0	0	0	262	0	0	0	0	0	11.07088	0	0

2.75	0	0	0	0	0	262	0	0	0	0	0	36.87482	0	0
0.26	0	0	0	0	0	262	0	0	0	0	0	0	0	0
0.26	0	0	0	0	0	262	0	0	0	0	0	0	0	0
0.26	0	0	0	0	0	262	0	0	0	0	0	1.019284	0	0
0.26	0	0	0	0	0	262	0	0	0	0	0	113.7009	0	0
1.337008797	0	0	0	0	0	262	0	0	0	0	0	7.852447	0	0
0.26	0	0	0	0	0	262	0	0	0	0	0	55.37159	0	0
0.26	0	0	0	0	0	262	0	0	0	0	0	24.70701	0	0
0.26	0	0	0	0	0	262	0	0	0	0	0	22.14176	0	0
0.26	0	0	0	0	0	262	0	0	0	0	0	0	0	0
0.26	0	0	0	0	0	262	0	0	0	0	0	0	0	0
2.75	0	0	0	0	0	262	0	0	0	0	0	0	0	0
0.26	0	0	0	0	0	262	0	0	0	0	0	0	0	0
0.26	0	0	0	0	0	262	0	0	0	0	0	6.283472	0	0
0	0.26	0	0	0	0	0	110	0	0	0	0	0	0	0
0	0.26	0	0	0	0	0	110	0	0	0	0	0	0	0
0	0.26	0	0	0	0	0	110	0	0	0	0	0	0	0
0	0.26	0	0	0	0	0	110	0	0	0	0	0	0	0
0	2.75	0	0	0	0	0	110	0	0	0	0	0	0	0
0	0.26	0	0	0	0	0	110	0	0	0	0	0	0	0
0	0.26	0	0	0	0	0	110	0	0	0	0	0	0	0
0	0.26	0	0	0	0	0	110	0	0	0	0	0	0	0
0	0.26	0	0	0	0	0	110	0	0	0	0	0	0	0
0	1.351584711	0	0	0	0	0	110	0	0	0	0	0	0	0
0	0.26	0	0	0	0	0	110	0	0	0	0	0	79.4462	0
0	0.26	0	0	0	0	0	110	0	0	0	0	0	1.810238	0
0	0.26	0	0	0	0	0	110	0	0	0	0	0	0	0
0	0.26	0	0	0	0	0	110	0	0	0	0	0	0	0
0	0.26	0	0	0	0	0	110	0	0	0	0	0	0	0
0	0.26	0	0	0	0	0	110	0	0	0	0	0	0	0
0	2.75	0	0	0	0	0	110	0	0	0	0	0	0	0
0	0.26	0	0	0	0	0	110	0	0	0	0	0	0	0
0	0	0	0	0	161	0	0	0	0	0	0	0	0	0
0	0	0	0	0	161	0	0	0	0	0	0	0	0	0
0	0	0	0	0	161	0	0	0	0	0	13.95364	0	0	0
0	0	0	0	0	161	0	0	0	0	0	22.05118	0	0	0
0	0	0	0	0	161	0	0	0	0	0	14.75099	0	0	0
0	0	0	0	0	161	0	0	0	0	0	161.2103	0	0	0
0	0	0	0	0	161	0	0	0	0	0	46.06008	0	0	0
0	0	0	0	0	161	0	0	0	0	0	11.50806	0	0	0
0	0	0	0	0	161	0	0	0	0	0	36.87748	0	0	0
1.337008797	0	0	0	0	64	116	0	0	0	0	0	0	0	0
0.26	0	0	0	0	64	116	0	0	0	0	5.546789	10.05355	0	0
0.26	0	0	0	0	64	116	0	0	0	0	10.21314	18.51131	0	0
2.74	0	0	0	0	64	116	0	0	0	0	18.3096	33.18614	0	0
0.26	0	0	0	0	64	116	0	0	0	0	0	0	0	0
0.26	0	0	0	0	64	116	0	0	0	0	0	0	0	0
2.74	0	0	0	0	64	116	0	0	0	0	0	0	0	0
1.337008797	1.351584711	0	0	0	0	147	114	0	0	0	0	0	0	0
0.26	0.26	0	0	0	0	147	114	0	0	0	0	12.74028	9.880218	0
2.74	2.74	0	0	0	0	147	114	0	0	0	0	42.05485	32.61397	0
0	2.75	0	0	0	0	0	59	0	0	0	0	0	24.46681	0
0	1.351584711	0	0	0	0	0	59	0	0	0	0	0	0	0
0	0.26	0	0	0	0	0	59	0	0	0	0	0	5.113446	0
0	0.26	0	0	0	0	0	59	0	0	0	0	0	9.009405	0

0	2.74	0	0	0	0	0	59	0	0	0	0	0	59.07706	0
0.26	0	0	0	0	160	1	0	0	0	0	0	0	0	0
1.337008797	0	0	0	0	160	1	0	0	0	0	0	0	0	0
0.26	0	0	0	0	160	1	0	0	0	0	13.86697	0.086669	0	0
0.26	0	0	0	0	160	1	0	0	0	0	21.91422	0.136964	0	0
0.26	0	0	0	0	160	1	0	0	0	0	29.31874	0.183242	0	0
2.74	0	0	0	0	160	1	0	0	0	0	160.209	1.001306	0	0
2.74	0	0	0	0	160	1	0	0	0	0	45.77399	0.286087	0	0
0.26	0	0	0	0	160	1	0	0	0	0	11.43658	0.071479	0	0
0.26	0	0	0	0	160	1	0	0	0	0	36.64843	0.229053	0	0
1.337008797	0	0	0	0	0	180	0	0	0	0	0	0	0	0
0.26	0	0	0	0	0	180	0	0	0	0	0	15.60034	0	0
0.26	0	0	0	0	0	180	0	0	0	0	0	28.72444	0	0
2.74	0	0	0	0	0	180	0	0	0	0	0	102.9915	0	0
0.26	0	0	0	0	0	180	0	0	0	0	0	0	0	0
0.26	0	0	0	0	0	180	0	0	0	0	0	0	0	0
2.74	0	0	0	0	0	180	0	0	0	0	0	0	0	0
1.337008797	1.351584711	0	0	0	0	82	178	0	0	0	0	0	0	0
0.26	0.26	0	0	0	0	82	178	0	0	0	0	7.106823	15.42701	0
2.74	2.74	0	0	0	0	82	178	0	0	0	0	23.45917	50.92356	0
0	2.75	0	0	0	0	0	58	0	0	0	0	0	24.05212	0
0	1.351584711	0	0	0	0	0	58	0	0	0	0	0	0	0
0	0.26	0	0	0	0	0	58	0	0	0	0	0	0	0
0	0.26	0	0	0	0	0	58	0	0	0	0	0	8.856703	0
0	2.74	0	0	0	0	0	58	0	0	0	0	0	116.1515	0
0	0	0	0	48	0	0	0	0	0	39.44559	0	0	0	0
0	0	0	0	48	0	0	0	0	0	15.36799	0	0	0	0
0	0	0	0	48	0	0	0	0	0	8.320183	0	0	0	0
0	0	0	0	48	0	0	0	0	0	0	0	0	0	0
0	0	0	0	48	0	0	0	0	0	58.63748	0	0	0	0
0	0	0	0	48	0	0	0	0	0	34.9214	0	0	0	0
0	0	0	0	48	0	0	0	0	0	7.765505	0	0	0	0
0	0	0	0	65	65	0	0	0	0	13.16172	13.16172	0	0	0
0	0	0	0	65	65	0	0	0	0	23.52103	23.52103	0	0	0
0	0	0	0	65	65	0	0	0	0	19.85123	19.85123	0	0	0
0	0	0	0	65	65	0	0	0	0	11.26692	11.26692	0	0	0
0	0	0	0	65	65	0	0	0	0	97.58937	97.58937	0	0	0
0	0	0	0	65	65	0	0	0	0	92.63908	92.63908	0	0	0
0	0	0	0	65	65	0	0	0	0	25.03759	25.03759	0	0	0
0	0	0	0	65	65	0	0	0	0	1.564849	1.564849	0	0	0
0	0	0	0	65	65	0	0	0	0	0.62594	0.62594	0	0	0
0	0	0	0	65	65	0	0	0	0	3.308539	3.308539	0	0	0
0	0	0	0	0	202	0	0	0	0	0	4.001612	0	0	0
0	0	0	0	0	202	0	0	0	0	0	0.8195	0	0	0
0	0	0	0	0	202	0	0	0	0	0	0	0	0	0
0	0	0	0	0	202	0	0	0	0	0	0.468285	0	0	0
0	0	0	0	0	202	0	0	0	0	0	0	0	0	0
0	0	0	0	0	202	0	0	0	0	0	0	0	0	0
0	0	0	0	0	202	0	0	0	0	0	0	0	0	0
0	0	0	0	0	202	0	0	0	0	0	17.408	0	0	0
0	0	0	0	0	202	0	0	0	0	0	65.34536	0	0	0
0	0	0	0	0	202	0	0	0	0	0	35.27859	0	0	0
0	0	0	0	0	202	0	0	0	0	0	24.31535	0	0	0
0	0	0	0	0	202	0	0	0	0	0	90.92333	0	0	0
0	0	0	0	0	202	0	0	0	0	0	6.362574	0	0	0

0	0	0	0	0	202	0	0	0	0	0	0	0	0	0
0	0	0	0	0	202	0	0	0	0	0	29.92129	0	0	0
0	0	0	0	0	202	0	0	0	0	0	1.440508	0	0	0
0	0	0	0	0	202	0	0	0	0	0	0	0	0	0
0	0	0	0	0	202	0	0	0	0	0	7.041822	0	0	0
0.26	0	0	0	0	0	188	0	0	0	0	0	3.724273	0	0
0.26	0	0	0	0	0	188	0	0	0	0	0	0	0	0
0.26	0	0	0	0	0	188	0	0	0	0	0	0	0	0
0.26	0	0	0	0	0	188	0	0	0	0	0	0	0	0
2.75	0	0	0	0	0	188	0	0	0	0	0	66.95656	0	0
0.26	0	0	0	0	0	188	0	0	0	0	0	0	0	0
0.26	0	0	0	0	0	188	0	0	0	0	0	0	0	0
0.26	0	0	0	0	0	188	0	0	0	0	0	21.53095	0	0
0.26	0	0	0	0	0	188	0	0	0	0	0	0	0	0
1.337008797	0	0	0	0	0	188	0	0	0	0	0	0	0	0
0.26	0	0	0	0	0	188	0	0	0	0	0	22.63013	0	0
0.26	0	0	0	0	0	188	0	0	0	0	0	63.35834	0	0
0.26	0	0	0	0	0	188	0	0	0	0	0	0	0	0
0.26	0	0	0	0	0	188	0	0	0	0	0	0	0	0
0.26	0	0	0	0	0	188	0	0	0	0	0	0	0	0
2.75	0	0	0	0	0	188	0	0	0	0	0	0	0	0
0.26	0	0	0	0	0	188	0	0	0	0	0	0	0	0
0.26	0	0	0	0	0	188	0	0	0	0	0	6.789039	0	0
0	0	0	0	0	177	0	0	0	0	0	0.490297	0	0	0
0	0	0	0	0	177	0	0	0	0	0	33.84889	0	0	0
0	0	0	0	0	177	0	0	0	0	0	0	0	0	0
0	0	0	0	0	177	0	0	0	0	0	19.34223	0	0	0
0	0	0	0	0	177	0	0	0	0	0	22.55341	0	0	0
0	0	0	0	0	177	0	0	0	0	0	2.195604	0	0	0
0	0	0	0	0	177	0	0	0	0	0	0	0	0	0
0	0	0	0	0	177	0	0	0	0	0	4.100043	0	0	0
0	0	0	0	0	177	0	0	0	0	0	2.483124	0	0	0
0	0	0	0	0	177	0	0	0	0	0	45.95927	0	0	0
0	0	0	0	0	177	0	0	0	0	0	3.408964	0	0	0
0	0	0	0	0	177	0	0	0	0	0	53.75859	0	0	0
0	0	0	0	0	177	0	0	0	0	0	6.998832	0	0	0
0	0	0	0	0	177	0	0	0	0	0	0	0	0	0
0	0	0	0	0	177	0	0	0	0	0	56.74728	0	0	0
0	0	0	0	0	177	0	0	0	0	0	0	0	0	0
0	0	0	0	0	177	0	0	0	0	0	0	0	0	0
0	0	0	0	0	177	0	0	0	0	0	6.391808	0	0	0
0.26	0	0	0	0	0	262	0	0	0	0	0	0	0	0
0.26	0	0	0	0	0	262	0	0	0	0	0	0	0	0
0.26	0	0	0	0	0	262	0	0	0	0	0	0	0	0
0.26	0	0	0	0	0	262	0	0	0	0	0	0	0	0
2.75	0	0	0	0	0	262	0	0	0	0	0	135.0949	0	0
0.26	0	0	0	0	0	262	0	0	0	0	0	0	0	0
0.26	0	0	0	0	0	262	0	0	0	0	0	0	0	0
0.26	0	0	0	0	0	262	0	0	0	0	0	0.251958	0	0
0.26	0	0	0	0	0	262	0	0	0	0	0	0	0	0
1.337008797	0	0	0	0	0	262	0	0	0	0	0	0	0	0
0.26	0	0	0	0	0	262	0	0	0	0	0	5.046037	0	0
0.26	0	0	0	0	0	262	0	0	0	0	0	0	0	0
0.26	0	0	0	0	0	262	0	0	0	0	0	0	0	0
0.26	0	0	0	0	0	262	0	0	0	0	0	0	0	0

0.26	0	0	0	0	0	262	0	0	0	0	0	0	0	0
2.75	0	0	0	0	0	262	0	0	0	0	0	0	0	0
0.26	0	0	0	0	0	262	0	0	0	0	0	0	0	0
0.26	0	0	0	0	0	262	0	0	0	0	0	9.46132	0	0
0	0.26	0	0	0	0	0	62	0	0	0	0	0	0	0
0	0.26	0	0	0	0	0	62	0	0	0	0	0	0	0
0	0.26	0	0	0	0	0	62	0	0	0	0	0	0	0
0	0.26	0	0	0	0	0	62	0	0	0	0	0	0	0
0	2.75	0	0	0	0	0	62	0	0	0	0	0	0	0
0	0.26	0	0	0	0	0	62	0	0	0	0	0	0	0
0	0.26	0	0	0	0	0	62	0	0	0	0	0	0	0
0	0.26	0	0	0	0	0	62	0	0	0	0	0	0	0
0	0.26	0	0	0	0	0	62	0	0	0	0	0	0	0
0	1.351584711	0	0	0	0	0	62	0	0	0	0	0	0	0
0	0.26	0	0	0	0	0	62	0	0	0	0	0	1.1941	0
0	0.26	0	0	0	0	0	62	0	0	0	0	0	0	0
0	0.26	0	0	0	0	0	62	0	0	0	0	0	0	0
0	0.26	0	0	0	0	0	62	0	0	0	0	0	0	0
0	0.26	0	0	0	0	0	62	0	0	0	0	0	0	0
0	2.75	0	0	0	0	0	62	0	0	0	0	0	0	0
0	0.26	0	0	0	0	0	62	0	0	0	0	0	0	0
0	0.26	0	0	0	0	0	62	0	0	0	0	0	2.238938	0
0	0	0	0	0	179	0	0	0	0	0	0.482868	0	0	0
0	0	0	0	0	179	0	0	0	0	0	29.84047	0	0	0
0	0	0	0	0	179	0	0	0	0	0	0	0	0	0
0	0	0	0	0	179	0	0	0	0	0	17.0517	0	0	0
0	0	0	0	0	179	0	0	0	0	0	33.37904	0	0	0
0	0	0	0	0	179	0	0	0	0	0	1.935598	0	0	0
0	0	0	0	0	179	0	0	0	0	0	0	0	0	0
0	0	0	0	0	179	0	0	0	0	0	1.935598	0	0	0
0	0	0	0	0	179	0	0	0	0	0	0	0	0	0
0	0	0	0	0	179	0	0	0	0	0	3.733558	0	0	0
0	0	0	0	0	179	0	0	0	0	0	2.189069	0	0	0
0	0	0	0	0	179	0	0	0	0	0	42.7227	0	0	0
0	0	0	0	0	179	0	0	0	0	0	3.447483	0	0	0
0	0	0	0	0	179	0	0	0	0	0	47.72446	0	0	0
0	0	0	0	0	179	0	0	0	0	0	5.599065	0	0	0
0	0	0	0	0	179	0	0	0	0	0	0	0	0	0
0	0	0	0	0	179	0	0	0	0	0	45.39783	0	0	0
0	0	0	0	0	179	0	0	0	0	0	0	0	0	0
0	0	0	0	0	179	0	0	0	0	0	0	0	0	0
0	0	0	0	0	179	0	0	0	0	0	6.464031	0	0	0
0.26	0	0	0	0	0	249	0	0	0	0	0	0	0	0
0.26	0	0	0	0	0	249	0	0	0	0	0	0	0	0
0.26	0	0	0	0	0	249	0	0	0	0	0	0	0	0
0.26	0	0	0	0	0	249	0	0	0	0	0	0	0	0
2.75	0	0	0	0	0	249	0	0	0	0	0	122.6905	0	0
0.26	0	0	0	0	0	249	0	0	0	0	0	0	0	0
0.26	0	0	0	0	0	249	0	0	0	0	0	0	0	0
0.26	0	0	0	0	0	249	0	0	0	0	0	0.251958	0	0
0.26	0	0	0	0	0	249	0	0	0	0	0	0	0	0
1.337008797	0	0	0	0	0	249	0	0	0	0	0	0	0	0
0.26	0	0	0	0	0	249	0	0	0	0	0	4.776402	0	0
0.26	0	0	0	0	0	249	0	0	0	0	0	0	0	0
0.26	0	0	0	0	0	249	0	0	0	0	0	0	0	0
0.26	0	0	0	0	0	249	0	0	0	0	0	0	0	0
0.26	0	0	0	0	0	249	0	0	0	0	0	0	0	0

2.75	0	0	0	0	0	249	0	0	0	0	0	0	0	0
0.26	0	0	0	0	0	249	0	0	0	0	0	0	0	0
0.26	0	0	0	0	0	249	0	0	0	0	0	8.991865	0	0
0	0	0	0	0	157	0	0	0	0	0	0.490297	0	0	0
0	0	0	0	0	157	0	0	0	0	0	28.94971	0	0	0
0	0	0	0	0	157	0	0	0	0	0	0	0	0	0
0	0	0	0	0	157	0	0	0	0	0	16.54269	0	0	0
0	0	0	0	0	157	0	0	0	0	0	14.43418	0	0	0
0	0	0	0	0	157	0	0	0	0	0	1.877819	0	0	0
0	0	0	0	0	157	0	0	0	0	0	0	0	0	0
0	0	0	0	0	157	0	0	0	0	0	3.722106	0	0	0
0	0	0	0	0	157	0	0	0	0	0	2.123724	0	0	0
0	0	0	0	0	157	0	0	0	0	0	42.39904	0	0	0
0	0	0	0	0	157	0	0	0	0	0	3.02377	0	0	0
0	0	0	0	0	157	0	0	0	0	0	47.72446	0	0	0
0	0	0	0	0	157	0	0	0	0	0	5.599065	0	0	0
0	0	0	0	0	157	0	0	0	0	0	0	0	0	0
0	0	0	0	0	157	0	0	0	0	0	45.39783	0	0	0
0	0	0	0	0	157	0	0	0	0	0	0	0	0	0
0	0	0	0	0	157	0	0	0	0	0	0	0	0	0
0	0	0	0	0	157	0	0	0	0	0	5.669569	0	0	0
0.26	0	0	0	0	0	262	0	0	0	0	0	0	0	0
0.26	0	0	0	0	0	262	0	0	0	0	0	0	0	0
0.26	0	0	0	0	0	262	0	0	0	0	0	0	0	0
0.26	0	0	0	0	0	262	0	0	0	0	0	0	0	0
2.75	0	0	0	0	0	262	0	0	0	0	0	143.2141	0	0
0.26	0	0	0	0	0	262	0	0	0	0	0	0	0	0
0.26	0	0	0	0	0	262	0	0	0	0	0	0	0	0
0.26	0	0	0	0	0	262	0	0	0	0	0	0.251958	0	0
0.26	0	0	0	0	0	262	0	0	0	0	0	0	0	0
0.26	0	0	0	0	0	262	0	0	0	0	0	0	0	0
1.337008797	0	0	0	0	0	262	0	0	0	0	0	0	0	0
0.26	0	0	0	0	0	262	0	0	0	0	0	5.046037	0	0
0.26	0	0	0	0	0	262	0	0	0	0	0	0	0	0
0.26	0	0	0	0	0	262	0	0	0	0	0	0	0	0
0.26	0	0	0	0	0	262	0	0	0	0	0	0	0	0
0.26	0	0	0	0	0	262	0	0	0	0	0	0	0	0
2.75	0	0	0	0	0	262	0	0	0	0	0	0	0	0
0.26	0	0	0	0	0	262	0	0	0	0	0	0	0	0
0.26	0	0	0	0	0	262	0	0	0	0	0	9.46132	0	0
0	0.26	0	0	0	0	0	7	0	0	0	0	0	0	0
0	0.26	0	0	0	0	0	7	0	0	0	0	0	0	0
0	0.26	0	0	0	0	0	7	0	0	0	0	0	0	0
0	0.26	0	0	0	0	0	7	0	0	0	0	0	0	0
0	2.75	0	0	0	0	0	7	0	0	0	0	0	0	0
0	0.26	0	0	0	0	0	7	0	0	0	0	0	0	0
0	0.26	0	0	0	0	0	7	0	0	0	0	0	0	0
0	0.26	0	0	0	0	0	7	0	0	0	0	0	0	0
0	0.26	0	0	0	0	0	7	0	0	0	0	0	0	0
0	1.351584711	0	0	0	0	0	7	0	0	0	0	0	0	0
0	0.26	0	0	0	0	0	7	0	0	0	0	0	0.134818	0
0	0.26	0	0	0	0	0	7	0	0	0	0	0	0	0
0	0.26	0	0	0	0	0	7	0	0	0	0	0	0	0
0	0.26	0	0	0	0	0	7	0	0	0	0	0	0	0
0	0.26	0	0	0	0	0	7	0	0	0	0	0	0	0
0	2.75	0	0	0	0	0	7	0	0	0	0	0	0	0

0	0.26	0	0	0	0	0	7	0	0	0	0	0	0	0
0	0.26	0	0	0	0	0	7	0	0	0	0	0	0.252783	0
0	0	0	0	0	202	0	0	0	0	0	0.490297	0	0	0
0	0	0	0	0	202	0	0	0	0	0	39.63884	0	0	0
0	0	0	0	0	202	0	0	0	0	0	0	0	0	0
0	0	0	0	0	202	0	0	0	0	0	22.65076	0	0	0
0	0	0	0	0	202	0	0	0	0	0	33.37904	0	0	0
0	0	0	0	0	202	0	0	0	0	0	2.571168	0	0	0
0	0	0	0	0	202	0	0	0	0	0	0	0	0	0
0	0	0	0	0	202	0	0	0	0	0	4.52379	0	0	0
0	0	0	0	0	202	0	0	0	0	0	2.907868	0	0	0
0	0	0	0	0	202	0	0	0	0	0	50.16681	0	0	0
0	0	0	0	0	202	0	0	0	0	0	3.890456	0	0	0
0	0	0	0	0	202	0	0	0	0	0	60.34128	0	0	0
0	0	0	0	0	202	0	0	0	0	0	8.398598	0	0	0
0	0	0	0	0	202	0	0	0	0	0	0	0	0	0
0	0	0	0	0	202	0	0	0	0	0	68.09674	0	0	0
0	0	0	0	0	202	0	0	0	0	0	0	0	0	0
0	0	0	0	0	202	0	0	0	0	0	0	0	0	0
0	0	0	0	0	202	0	0	0	0	0	7.294605	0	0	0
0.26	0	0	0	0	0	262	0	0	0	0	0	0	0	0
0.26	0	0	0	0	0	262	0	0	0	0	0	0	0	0
0.26	0	0	0	0	0	262	0	0	0	0	0	0	0	0
0.26	0	0	0	0	0	262	0	0	0	0	0	0	0	0
2.75	0	0	0	0	0	262	0	0	0	0	0	122.0139	0	0
0.26	0	0	0	0	0	262	0	0	0	0	0	0	0	0
0.26	0	0	0	0	0	262	0	0	0	0	0	0	0	0
0.26	0	0	0	0	0	262	0	0	0	0	0	0.240505	0	0
0.26	0	0	0	0	0	262	0	0	0	0	0	0	0	0
0.26	0	0	0	0	0	262	0	0	0	0	0	0.240505	0	0
0.26	0	0	0	0	0	262	0	0	0	0	0	0	0	0
1.337008797	0	0	0	0	0	262	0	0	0	0	0	0	0	0
0.26	0	0	0	0	0	262	0	0	0	0	0	5.046037	0	0
0.26	0	0	0	0	0	262	0	0	0	0	0	0	0	0
0.26	0	0	0	0	0	262	0	0	0	0	0	0	0	0
0.26	0	0	0	0	0	262	0	0	0	0	0	0	0	0
0.26	0	0	0	0	0	262	0	0	0	0	0	0	0	0
2.75	0	0	0	0	0	262	0	0	0	0	0	0	0	0
0.26	0	0	0	0	0	262	0	0	0	0	0	0	0	0
0.26	0	0	0	0	0	262	0	0	0	0	0	9.46132	0	0
0	0.26	0	0	0	0	0	57	0	0	0	0	0	0	0
0	0.26	0	0	0	0	0	57	0	0	0	0	0	0	0
0	0.26	0	0	0	0	0	57	0	0	0	0	0	0	0
0	0.26	0	0	0	0	0	57	0	0	0	0	0	0	0
0	2.75	0	0	0	0	0	57	0	0	0	0	0	0	0
0	0.26	0	0	0	0	0	57	0	0	0	0	0	0	0
0	0.26	0	0	0	0	0	57	0	0	0	0	0	0	0
0	0.26	0	0	0	0	0	57	0	0	0	0	0	0	0
0	0.26	0	0	0	0	0	57	0	0	0	0	0	0	0
0	1.351584711	0	0	0	0	0	57	0	0	0	0	0	0	0
0	0.26	0	0	0	0	0	57	0	0	0	0	0	1.097802	0
0	0.26	0	0	0	0	0	57	0	0	0	0	0	0	0
0	0.26	0	0	0	0	0	57	0	0	0	0	0	0	0
0	0.26	0	0	0	0	0	57	0	0	0	0	0	0	0
0	0.26	0	0	0	0	0	57	0	0	0	0	0	0	0
0	2.75	0	0	0	0	0	57	0	0	0	0	0	0	0
0	0.26	0	0	0	0	0	57	0	0	0	0	0	0	0

0	0.26	0	0	0	0	0	57	0	0	0	0	0	2.058379	0
0	0	0	0	0	136	0	0	0	0	0	0.349151	0	0	0
0	0	0	0	0	136	0	0	0	0	0	39.63884	0	0	0
0	0	0	0	0	136	0	0	0	0	0	0	0	0	0
0	0	0	0	0	136	0	0	0	0	0	22.65076	0	0	0
0	0	0	0	0	136	0	0	0	0	0	0	0	0	0
0	0	0	0	0	136	0	0	0	0	0	2.571168	0	0	0
0	0	0	0	0	136	0	0	0	0	0	0	0	0	0
0	0	0	0	0	136	0	0	0	0	0	4.100043	0	0	0
0	0	0	0	0	136	0	0	0	0	0	2.907868	0	0	0
0	0	0	0	0	136	0	0	0	0	0	44.01733	0	0	0
0	0	0	0	0	136	0	0	0	0	0	2.619317	0	0	0
0	0	0	0	0	136	0	0	0	0	0	60.88983	0	0	0
0	0	0	0	0	136	0	0	0	0	0	8.653101	0	0	0
0	0	0	0	0	136	0	0	0	0	0	0	0	0	0
0	0	0	0	0	136	0	0	0	0	0	70.16028	0	0	0
0	0	0	0	0	136	0	0	0	0	0	0	0	0	0
0	0	0	0	0	136	0	0	0	0	0	0	0	0	0
0	0	0	0	0	136	0	0	0	0	0	4.911219	0	0	0
0.26	0	0	0	0	0	262	0	0	0	0	0	0.141146	0	0
0.26	0	0	0	0	0	262	0	0	0	0	0	0	0	0
0.26	0	0	0	0	0	262	0	0	0	0	0	0	0	0
0.26	0	0	0	0	0	262	0	0	0	0	0	0	0	0
2.75	0	0	0	0	0	262	0	0	0	0	0	157.6483	0	0
0.26	0	0	0	0	0	262	0	0	0	0	0	0	0	0
0.26	0	0	0	0	0	262	0	0	0	0	0	0	0	0
0.26	0	0	0	0	0	262	0	0	0	0	0	0.698611	0	0
0.26	0	0	0	0	0	262	0	0	0	0	0	0	0	0
1.337008797	0	0	0	0	0	262	0	0	0	0	0	6.216521	0	0
0.26	0	0	0	0	0	262	0	0	0	0	0	0	0	0
0.26	0	0	0	0	0	262	0	0	0	0	0	5.046037	0	0
0.26	0	0	0	0	0	262	0	0	0	0	0	0	0	0
0.26	0	0	0	0	0	262	0	0	0	0	0	0	0	0
0.26	0	0	0	0	0	262	0	0	0	0	0	0	0	0
0.26	0	0	0	0	0	262	0	0	0	0	0	0	0	0
2.75	0	0	0	0	0	262	0	0	0	0	0	0	0	0
0.26	0	0	0	0	0	262	0	0	0	0	0	0	0	0
0.26	0	0	0	0	0	262	0	0	0	0	0	9.46132	0	0
0	0.26	0	0	0	0	0	122	0	0	0	0	0	0	0
0	0.26	0	0	0	0	0	122	0	0	0	0	0	0	0
0	0.26	0	0	0	0	0	122	0	0	0	0	0	0	0
0	0.26	0	0	0	0	0	122	0	0	0	0	0	0	0
0	2.75	0	0	0	0	0	122	0	0	0	0	0	0	0
0	0.26	0	0	0	0	0	122	0	0	0	0	0	0	0
0	0.26	0	0	0	0	0	122	0	0	0	0	0	0	0
0	0.26	0	0	0	0	0	122	0	0	0	0	0	0	0
0	0.26	0	0	0	0	0	122	0	0	0	0	0	0	0
0	1.351584711	0	0	0	0	0	122	0	0	0	0	0	0	0
0	0.26	0	0	0	0	0	122	0	0	0	0	0	2.349681	0
0	0.26	0	0	0	0	0	122	0	0	0	0	0	0	0
0	0.26	0	0	0	0	0	122	0	0	0	0	0	0	0
0	0.26	0	0	0	0	0	122	0	0	0	0	0	0	0
0	0.26	0	0	0	0	0	122	0	0	0	0	0	0	0
0	2.75	0	0	0	0	0	122	0	0	0	0	0	0	0
0	0.26	0	0	0	0	0	122	0	0	0	0	0	0	0
0	0.26	0	0	0	0	0	122	0	0	0	0	0	4.405653	0

0.26	0	0	0	0	0	116	0	0	0	0	0	0	0	0
1.337008797	0	0	0	0	0	116	0	0	0	0	0	0	0	0
0.26	0	0	0	0	0	116	0	0	0	0	0	10.05355	0	0
0.26	0	0	0	0	0	116	0	0	0	0	0	15.88781	0	0
0.26	0	0	0	0	0	116	0	0	0	0	0	10.62804	0	0
2.74	0	0	0	0	0	116	0	0	0	0	0	116.1515	0	0
2.74	0	0	0	0	0	116	0	0	0	0	0	33.18614	0	0
0.26	0	0	0	0	0	116	0	0	0	0	0	8.291523	0	0
0.26	0	0	0	0	0	116	0	0	0	0	0	2.76772	0	0
1.337008797	0	0	0	0	0	129	0	0	0	0	0	0	0	0
0.26	0	0	0	0	0	129	0	0	0	0	0	11.18025	0	0
0.26	0	0	0	0	0	129	0	0	0	0	0	20.58585	0	0
2.74	0	0	0	0	0	129	0	0	0	0	0	36.90528	0	0
0.26	0	0	0	0	0	129	0	0	0	0	0	0	0	0
0.26	0	0	0	0	0	129	0	0	0	0	0	0	0	0
2.74	0	0	0	0	0	129	0	0	0	0	0	0	0	0
1.337008797	1.351584711	0	0	0	0	17	171	0	0	0	0	0	0	0
0.26	0.26	0	0	0	0	17	171	0	0	0	0	1.473366	14.82033	0
2.74	2.74	0	0	0	0	17	171	0	0	0	0	4.863486	48.92095	0
0	2.75	0	0	0	0	0	58	0	0	0	0	0	24.05212	0
0	1.351584711	0	0	0	0	0	58	0	0	0	0	0	0	0
0	0.26	0	0	0	0	0	58	0	0	0	0	0	5.026777	0
0	0.26	0	0	0	0	0	58	0	0	0	0	0	5.314022	0
0	2.74	0	0	0	0	0	58	0	0	0	0	0	58.07575	0
0.26	0	0	0	0	0	116	0	0	0	0	0	0	0	0
1.337008797	0	0	0	0	0	116	0	0	0	0	0	0	0	0
0.26	0	0	0	0	0	116	0	0	0	0	0	10.05355	0	0
0.26	0	0	0	0	0	116	0	0	0	0	0	15.88781	0	0
0.26	0	0	0	0	0	116	0	0	0	0	0	10.62804	0	0
0.26	0	0	0	0	0	116	0	0	0	0	0	15.88781	0	0
0.26	0	0	0	0	0	116	0	0	0	0	0	10.62804	0	0
2.74	0	0	0	0	0	116	0	0	0	0	0	116.1515	0	0
2.74	0	0	0	0	0	116	0	0	0	0	0	33.18614	0	0
0.26	0	0	0	0	0	116	0	0	0	0	0	8.291523	0	0
0.26	0	0	0	0	0	116	0	0	0	0	0	5.535439	0	0
1.337008797	1.351584711	0	0	0	0	81	48	0	0	0	0	0	0	0
0.26	0.26	0	0	0	0	81	48	0	0	0	0	7.020155	4.160092	0
0.26	0.26	0	0	0	0	81	48	0	0	0	0	12.926	7.659851	0
2.74	2.74	0	0	0	0	81	48	0	0	0	0	46.34616	27.46439	0
0.26	0.26	0	0	0	0	81	48	0	0	0	0	0	0	0
0.26	0.26	0	0	0	0	81	48	0	0	0	0	0	0	0
2.74	2.74	0	0	0	0	81	48	0	0	0	0	0	0	0
0	1.351584711	0	0	0	0	0	187	0	0	0	0	0	0	0
0	0.26	0	0	0	0	0	187	0	0	0	0	0	16.20702	0
0	2.74	0	0	0	0	0	187	0	0	0	0	0	53.49835	0
0	2.75	2.75	0	0	0	0	27	32	0	0	0	0	11.19668	13.27013
0	1.351584711	1.366319529	0	0	0	0	27	32	0	0	0	0	0	0
0	0.26	0.26	0	0	0	0	27	32	0	0	0	0	0	0
0	0.26	0.26	0	0	0	0	27	32	0	0	0	0	2.473769	2.931874
0	2.74	2.74	0	0	0	0	27	32	0	0	0	0	54.07053	64.08359
0	0	0	0	0	22	0	0	0	0	0	2.227369	0	0	0
0	0	0	0	0	22	0	0	0	0	0	3.980481	0	0	0
0	0	0	0	0	22	0	0	0	0	0	3.359439	0	0	0
0	0	0	0	0	22	0	0	0	0	0	1.906709	0	0	0
0	0	0	0	0	22	0	0	0	0	0	16.51512	0	0	0
0	0	0	0	0	22	0	0	0	0	0	15.67738	0	0	0
0	0	0	0	0	22	0	0	0	0	0	4.23713	0	0	0

0	0	0	0	0	22	0	0	0	0	0	0.264821	0	0	0
0	0	0	0	0	22	0	0	0	0	0	0.105928	0	0	0
0	0	0	0	0	22	0	0	0	0	0	1.119813	0	0	0
0.26	0	0	0	0	175	87	0	0	0	0	17.7159	8.807333	0	0
0.26	0	0	0	0	175	87	0	0	0	0	34.99244	17.39624	0	0
0.26	0	0	0	0	175	87	0	0	0	0	25.05264	12.45474	0	0
0.26	0	0	0	0	175	87	0	0	0	0	9.174832	4.561202	0	0
0.26	0	0	0	0	175	87	0	0	0	0	5.476973	2.722838	0	0
2.119431285	0	0	0	0	175	87	0	0	0	0	65.51507	35.12278	0	0
0.26	0.26	0	0	0	0	24	99	0	0	0	0	0	0	0
1.337008797	1.351584711	0	0	0	0	24	99	0	0	0	0	15.70489	65.48894	0
0.26	0.26	0	0	0	0	24	99	0	0	0	0	4.160092	17.16038	0
0.26	0.26	0	0	0	0	24	99	0	0	0	0	6.574266	27.11885	0
0.26	0.26	0	0	0	0	24	99	0	0	0	0	4.397811	18.14097	0
2.74	2.74	0	0	0	0	24	99	0	0	0	0	48.06269	198.2586	0
2.74	2.74	0	0	0	0	24	99	0	0	0	0	13.7322	56.64531	0
0.26	0.26	0	0	0	0	24	99	0	0	0	0	3.430975	14.15277	0
0.26	0.26	0	0	0	0	24	99	0	0	0	0	3.43579	14.17263	0
0	1.351584711	0	0	0	0	0	139	0	0	0	0	0	91.94912	0
0	0.26	0	0	0	0	0	139	0	0	0	0	0	24.09386	0
0	0.26	0	0	0	0	0	139	0	0	0	0	0	44.36331	0
0	2.74	0	0	0	0	0	139	0	0	0	0	0	119.2985	0
0	0.26	0	0	0	0	0	139	0	0	0	0	0	0	0
0	0.26	0	0	0	0	0	139	0	0	0	0	0	0	0
0	2.74	0	0	0	0	0	139	0	0	0	0	0	0	0
0	1.351584711	1.366319529	0	0	0	0	25	174	0	0	0	0	14.05697	98.90311
0	0.26	0.26	0	0	0	0	25	174	0	0	0	0	4.333429	30.16066
0	2.74	2.74	0	0	0	0	25	174	0	0	0	0	7.152186	49.77921
0	0	2.75	0	0	0	0	0	59	0	0	0	0	0	24.46681
0	2.74	2.74	0	0	0	0	25	174	0	0	0	0	7.152186	49.77921
0	0	2.75	0	0	0	0	0	59	0	0	0	0	0	24.46681
0	0	1.366319529	0	0	0	0	0	59	0	0	0	0	0	0
0	0	0.26	0	0	0	0	0	59	0	0	0	0	0	5.113446
0	0	0.26	0	0	0	0	0	59	0	0	0	0	0	10.81129
0	0	2.74	0	0	0	0	0	59	0	0	0	0	0	177.2312
0.26	0	0	0	0	0	22	0	0	0	0	0	4.519808	0	0
1.337008797	0	0	0	0	0	22	0	0	0	0	0	3.599038	0	0
0.26	0	0	0	0	0	22	0	0	0	0	0	3.813417	0	0
2.74	0	0	0	0	0	22	0	0	0	0	0	44.05747	0	0
2.75	0	0	0	0	0	22	0	0	0	0	0	16.00564	0	0
0.26	0	0	0	0	0	22	0	0	0	0	0	3.55919	0	0
0.26	0.26	0	0	0	0	1	22	0	0	0	0	0.152702	3.359439	0
0.26	0.26	0	0	0	0	1	22	0	0	0	0	0.086669	1.906709	0
0.26	0.26	0	0	0	0	1	22	0	0	0	0	0.375344	8.257562	0
0.26	0.26	0	0	0	0	1	22	0	0	0	0	0.091621	2.015663	0
2.74	2.74	0	0	0	0	1	22	0	0	0	0	0.214566	4.720443	0
0.26	0.26	0	0	0	0	1	22	0	0	0	0	0.006019	0.13241	0
0.26	0.26	0	0	0	0	1	22	0	0	0	0	0.004815	0.105928	0
0.26	0.26	0	0	0	0	1	22	0	0	0	0	0.050901	1.119813	0
0	1.351584711	0	0	0	0	0	22	0	0	0	0	0	7.276549	0
0	0.26	0	0	0	0	0	22	0	0	0	0	0	1.906709	0
0	0.26	0	0	0	0	0	22	0	0	0	0	0	2.015663	0
0	2.74	0	0	0	0	0	22	0	0	0	0	0	22.02873	0
0	2.74	0	0	0	0	0	22	0	0	0	0	0	6.293924	0
0	0.26	0	0	0	0	0	22	0	0	0	0	0	7.558738	0
0	1.351584711	0	0	0	0	0	43	0	0	0	0	0	14.22235	0
0	0.26	0	0	0	0	0	43	0	0	0	0	0	3.726749	0

0	2.74	0	0	0	0	0	43	0	0	0	0	0	12.30176	0
0	0.26	0	0	0	0	0	43	0	0	0	0	0	22.16085	0
0	1.351584711	0	0	0	0	0	33	0	0	0	0	0	9.2776	0
0	0.26	0	0	0	0	0	33	0	0	0	0	0	5.720126	0
0	2.74	0	0	0	0	0	33	0	0	0	0	0	9.440885	0

Source: EMFAC2021 (v1.0.1) Emissions Inventory
Region Type: County
Region: San Mateo
Calendar Year: 2021, 2022, 2023, 2024, 2025, 2026
Season: Annual
Vehicle Classification: EMFAC2007 Categories
Units: miles/day for CVMT and EVMT, trips/day for Trips, kWh/day for Energy Consumption, tons/day for Emissions, 1000 gallons/day for Fuel Consumption

Region	Calendar Year	Vehicle Category	Model Year	Speed	Fuel	Population	Total VMT	CVMT	EVMT	Trips	Energy Consun	*PM10_g/mi* **PM10_RUNEX**	*PM10_g/trip* **PM10_IDLEX**	*PM10_g/trip* **PM10_STREX**
San Mateo	2021	HHDT	Aggregate	Aggregate	Diesel	1273.437	118103.1	118103.1	0	13607.24486	0	0.004642012	8.31E-05	0
San Mateo	2022	HHDT	Aggregate	Aggregate	Diesel	1289.917	118758.5	118758.5	0	13886.58645	0	0.003652922	6.10E-05	0
San Mateo	2023	HHDT	Aggregate	Aggregate	Diesel	1295.72	119079.6	119079.6	0	14027.6605	0	0.003489277	5.65E-05	0
San Mateo	2024	HHDT	Aggregate	Aggregate	Diesel	1314.625	119489.1	119489.1	0	14359.45506	0	0.003443927	5.34E-05	0
San Mateo	2025	HHDT	Aggregate	Aggregate	Diesel	1328.41	119560.7	119560.7	0	14621.90863	0	0.003390148	5.08E-05	0
San Mateo	2026	HHDT	Aggregate	Aggregate	Diesel	1339.121	119591.7	119591.7	0	14836.48598	0	0.003352882	4.78E-05	0

Region	Calendar Year	Vehicle Category	Model Year	Speed	Fuel	Population	Total VMT	CVMT	EVMT	Trips	Energy Consun	*PM10_g/mi* **PM10_RUNEX**	*PM10_g/trip* **PM10_IDLEX**	*PM10_g/trip* **PM10_STREX**
San Mateo	2021	HHDT	Aggregate	Aggregate	Diesel	1273.437	118103.1	118103.1	0	13607.24486	0	0.004642012	8.31E-05	0
San Mateo	2021	MHDT	Aggregate	Aggregate	Diesel	4141.708	172846.2	172846.2	0	49761.70349	0	0.005589303	0.000272799	0
San Mateo	2022	HHDT	Aggregate	Aggregate	Diesel	1289.917	118758.5	118758.5	0	13886.58645	0	0.003652922	6.10E-05	0
San Mateo	2022	MHDT	Aggregate	Aggregate	Diesel	4156.051	174304	174304	0	49995.68892	0	0.004655507	0.000229785	0
San Mateo	2023	HHDT	Aggregate	Aggregate	Diesel	1295.72	119079.6	119079.6	0	14027.6605	0	0.003489277	5.65E-05	0
San Mateo	2023	MHDT	Aggregate	Aggregate	Diesel	4189.443	175901.2	175901.2	0	50462.4899	0	0.003806424	0.00019313	0
San Mateo	2024	HHDT	Aggregate	Aggregate	Diesel	1314.625	119489.1	119489.1	0	14359.45506	0	0.003443927	5.34E-05	0
San Mateo	2024	MHDT	Aggregate	Aggregate	Diesel	4233.233	177028	177028	0	51051.03747	0	0.003316258	0.000163443	0
San Mateo	2025	HHDT	Aggregate	Aggregate	Diesel	1328.41	119560.7	119560.7	0	14621.90863	0	0.003390148	5.08E-05	0
San Mateo	2025	MHDT	Aggregate	Aggregate	Diesel	4294.917	177557.8	177557.8	0	51845.94907	0	0.002852664	0.000136948	0
San Mateo	2026	HHDT	Aggregate	Aggregate	Diesel	1339.121	119591.7	119591.7	0	14836.48598	0	0.003352882	4.78E-05	0
San Mateo	2026	MHDT	Aggregate	Aggregate	Diesel	4345.03	177809.3	177809.3	0	52490.37491	0	0.002454695	0.000113746	0

PM10_TOTEX	PM10_PMTW	PM10_PMBW	PM10_TOTAL	Mass Emissions PM10_g/mi	Mass Emissions PM10_g/trip	TRUCKS Emission Rate PM10_g/mi	TRUCKS Emission Rate PM10_g/trip	Off-Road SRCGRP Emission Rate PM10_g/mi	Off-Road SRCGRP Emission Rate PM10_g/trip
0.00472513	0.004484408	0.011891406	0.021100943	0.03565666	0.005541421	0.03565666	0	0	0.005541421
0.003713936	0.004508482	0.011787239	0.020009657	0.027904321	0.003985924	0.027904321	0	0	0.003985924
0.003545794	0.004519918	0.011604879	0.019670591	0.026582388	0.003655044	0.026582388	0	0	0.003655044
0.003497353	0.004534836	0.011540286	0.019572475	0.026146962	0.003375323	0.026146962	0	0	0.003375323
0.003440898	0.004537176	0.011446007	0.01942408	0.02572326	0.003148687	0.02572326	0	0	0.003148687
0.003400692	0.00453835	0.011401985	0.019341027	0.025433892	0.002923355	0.025433892	0	0	0.002923355

PM10_TOTEX	PM10_PMTW	PM10_PMBW	PM10_TOTAL	Mass Emissions PM10_g/mi	Mass Emissions PM10_g/trip	Year	PM10_g/mi	PM10_g/trip	PM10_g/mi	PM10_g/trip
0.00472513	0.004484408	0.011891406	0.021100943	0.03565666	0.005541421	2021	0.032496084	0.005257353	0.03565666	0
0.005862101	0.002286364	0.008700871	0.016849336	0.029335508	0.004973284	2022	0.026067218	0.004077716	0.029335508	0
0.003713936	0.004508482	0.011787239	0.020009657	0.027904321	0.003985924	2023	0.02310673	0.003563511	0.027904321	0
0.004885292	0.002305647	0.008774117	0.015965055	0.024230115	0.004169508	2024	0.021570606	0.003139865	0.024230115	0
0.003545794	0.004519918	0.011604879	0.019670591	0.026582388	0.003655044	2025	0.020149096	0.002772481	0.026582388	0
0.003999555	0.002326775	0.008854391	0.01518072	0.019631071	0.003471977	2026	0.018978884	0.002444607	0.019631071	0
0.003497353	0.004534836	0.011540286	0.019572475	0.026146962	0.003375323				0.026146962	0
0.003479701	0.00234168	0.008910945	0.014732326	0.016994249	0.002904407				0.016994249	0
0.003440898	0.004537176	0.011446007	0.01942408	0.02572326	0.003148687				0.02572326	0
0.002989612	0.002348688	0.008937569	0.014275869	0.014574933	0.002396275				0.014574933	0
0.003400692	0.00453835	0.011401985	0.019341027	0.025433892	0.002923355				0.025433892	0
0.002568441	0.002352014	0.008950226	0.013870681	0.012523877	0.001965858				0.012523877	0

TRUCKS Emission Rate

Year	PM10_g/mi	PM10_g/trip
2021	0.032496084	0
2022	0.026067218	0
2023	0.02310673	0
2024	0.021570606	0
2025	0.020149096	0
2026	0.018978884	0

Off-Road SRCGRP Emission Rate

PM10_g/mi	PM10_g/trip
0	0.005541421
0	0.004973284
0	0.003985924
0	0.004169508
0	0.003655044
0	0.003471977
0	0.003375323
0	0.002904407
0	0.003148687
0	0.002396275
0	0.002923355
0	0.001965858

Year	PM10_g/mi	PM10_g/trip
2021	0	0.005257353
2022	0	0.004077716
2023	0	0.003563511
2024	0	0.003139865
2025	0	0.002772481
2026	0	0.002444607

Note to reviewer: Please see Technical Report Table 51 ("Summary of Construction Source Groups") footnote 6 for a description of methodology.

HAULING TRIPS

Equipment Information							Information (mass emissions)			Mass Emissions	Information (emission rate)			Emission Rate (g/s)	Source Group	
PHASE	SUBPHASE	YEAR	DAYS	HAULTRIP_TOTAL	Fleet Mix	Fuel Type	Trip Length (mi)	EF (g/mi)	EF (g/trip)	(lb/year)	Modeled Trip Length (mi)	EF (g/mi)	EF (g/trip)			
Phase 1a	Demolition	2021	13	2505	HHDT	Diesel	22.9	0.03565666	5.54E-03	4.54000	0.8351229	0.03565666	0.00E+00	5.16E-06	TRUCKS	453.5924 g/lb
Phase 1a	Demolition	2022	84	16183	HHDT	Diesel	22.9	0.027904321	3.99E-03	22.94039	0.8351229	0.027904321	0.00E+00	2.60911E-05	TRUCKS	11 hr/day
Phase 1a	Grading and Utilities	2022	143	32640	HHDT	Diesel	8.2	0.027904321	3.99E-03	16.75213	0.8351229	0.027904321	0.00E+00	5.2624E-05	TRUCKS	365 days/yr
Phase 1b	Demolition	2022	48	18688	HHDT	Diesel	22.9	0.027904321	3.99E-03	26.49138	0.8351229	0.027904321	0.00E+00	3.01298E-05	TRUCKS	3600 sec/hr
Phase 1b	Grading and Utilities	2022	65	16320	HHDT	Diesel	8.2	0.027904321	3.99E-03	8.37606	0.8351229	0.027904321	0.00E+00	2.6312E-05	TRUCKS	
Phase 1b	Grading and Utilities	2023	65	16320	HHDT	Diesel	8.2	0.026582388	3.66E-03	7.97415	0.8351229	0.026582388	0.00E+00	2.50655E-05	TRUCKS	
Phase 2 Mixed Use	Grading and Utilities	2023	22	2464	HHDT	Diesel	8.2	0.026582388	3.66E-03	1.20394	0.8351229	0.026582388	0.00E+00	3.7844E-06	TRUCKS	
Alternate 1	Demolition	2024	22	422	HHDT	Diesel	22.9	0.026146962	3.38E-03	0.56020	0.8351229	0.026146962	0.00E+00	6.37523E-07	TRUCKS	
Alternate 1	Grading and Utilities	2024	1	18.50434783	HHDT	Diesel	8.2	0.026146962	3.38E-03	0.00888	0.8351229	0.026146962	0.00E+00	2.79549E-08	TRUCKS	
Alternate 1	Grading and Utilities	2025	22	407.0956522	HHDT	Diesel	8.2	0.02572326	3.15E-03	0.19213	0.8351229	0.02572326	0.00E+00	6.05041E-07	TRUCKS	
Phase 1a	Demolition	2021	13	2505	HHDT	Diesel	--	--	--	--	0.8351229	0.00E+00	5.54E-03	9.60E-07	PHS_1A	
Phase 1a	Demolition	2022	84	16183	HHDT	Diesel	--	--	--	--	0.8351229	0.00E+00	3.99E-03	4.46E-06	PHS_1A	
Phase 1a	Grading and Utilities	2022	143	32640	HHDT	Diesel	--	--	--	--	0.8351229	0.00E+00	3.99E-03	9.00E-06	PHS_1A	
Phase 1b	Demolition	2022	48	18688	HHDT	Diesel	--	--	--	--	0.8351229	0.00E+00	3.99E-03	5.15E-06	PHS_1B	
Phase 1b	Grading and Utilities	2022	65	16320	HHDT	Diesel	--	--	--	--	0.8351229	0.00E+00	3.99E-03	4.50E-06	PHS_1B	
Phase 1b	Grading and Utilities	2023	65	16320	HHDT	Diesel	--	--	--	--	0.8351229	0.00E+00	3.66E-03	4.13E-06	PHS_1B	
Phase 2 Mixed Use	Grading and Utilities	2023	22	2464	HHDT	Diesel	--	--	--	--	0.8351229	0.00E+00	3.66E-03	6.23E-07	PHS_2X	
Alternate 1	Demolition	2024	22	422	HHDT	Diesel	--	--	--	--	0.8351229	0.00E+00	3.38E-03	9.85E-08	RETAIL	
Alternate 1	Grading and Utilities	2024	1	18.50434783	HHDT	Diesel	--	--	--	--	0.8351229	0.00E+00	3.38E-03	4.32E-09	RETAIL	
Alternate 1	Grading and Utilities	2025	22	407.0956522	HHDT	Diesel	--	--	--	--	0.8351229	0.00E+00	3.15E-03	8.87E-08	RETAIL	

VENDOR TRIPS

Equipment Information							Information (mass emissions)			Mass Emissions	Information (emission rate)			Emission Rate (g/s)	Source Group
PHASE	SUBPHASE	YEAR	DAYS	VENDORTRIP_DAY	Fleet Mix	Fuel Type	Trip Length (mi)	EF (g/mi)	EF (g/trip)	(lb/year)	Modeled Trip Length (mi)	EF (g/mi)	EF (g/trip)		
Phase 2 Mixed Use	Tunnel Construction	2023	175	8	50% MHDT / 50% HHDT	Diesel	40	0.02310673	3.56E-03	2.86E+00	0.8351229	2.31E-02	0.00E+00	1.87E-06	TRUCKS
Phase 2 Mixed Use	Tunnel Construction	2024	87	8	50% MHDT / 50% HHDT	Diesel	40	0.021570606	3.14E-03	1.33E+00	0.8351229	2.16E-02	0.00E+00	8.67E-07	TRUCKS
Phase 2 Mixed Use	Foundations	2024	24	10	50% MHDT / 50% HHDT	Diesel	40	0.021570606	3.14E-03	4.58E-01	0.8351229	2.16E-02	0.00E+00	2.99E-07	TRUCKS
Phase 2 Mixed Use	Foundations	2025	99	10	50% MHDT / 50% HHDT	Diesel	40	0.020149096	2.77E-03	1.77E+00	0.8351229	2.01E-02	0.00E+00	1.15E-06	TRUCKS
Phase 2 Mixed Use	Core and Shell	2025	139	12	50% MHDT / 50% HHDT	Diesel	40	0.020149096	2.77E-03	2.97E+00	0.8351229	2.01E-02	0.00E+00	1.94E-06	TRUCKS
Phase 2 Mixed Use	Tenant Improvements	2025	25	12	50% MHDT / 50% HHDT	Diesel	40	0.020149096	2.77E-03	5.35E-01	0.8351229	2.01E-02	0.00E+00	3.49E-07	TRUCKS
Phase 2 Mixed Use	Tenant Improvements	2026	174	12	50% MHDT / 50% HHDT	Diesel	40	0.018978884	2.44E-03	3.51E+00	0.8351229	1.90E-02	0.00E+00	2.29E-06	TRUCKS
Phase 2 Mixed Use	Landscaping	2026	59	6.508474576	50% MHDT / 50% HHDT	Diesel	40	0.018978884	2.44E-03	6.45E-01	0.8351229	1.90E-02	0.00E+00	4.21E-07	TRUCKS
Alternate 1	Foundations	2025	22	12.43636364	50% MHDT / 50% HHDT	Diesel	40	0.020149096	2.77E-03	4.88E-01	0.8351229	2.01E-02	0.00E+00	3.19E-07	TRUCKS
Alternate 1	Core and Shell	2025	43	5.693023256	50% MHDT / 50% HHDT	Diesel	40	0.020149096	2.77E-03	4.36E-01	0.8351229	2.01E-02	0.00E+00	2.85E-07	TRUCKS
Alternate 1	Tenant Improvements	2025	33	9.272727273	50% MHDT / 50% HHDT	Diesel	40	0.020149096	2.77E-03	5.46E-01	0.8351229	2.01E-02	0.00E+00	3.56E-07	TRUCKS
Phase 1a Office	Foundations + Core and Shell	2022	42	11	50% MHDT / 50% HHDT	Diesel	40	0.026067218	4.08E-03	1.07E+00	0.8351229	2.61E-02	0.00E+00	6.96E-07	TRUCKS
Phase 1a Office	Foundations + Core and Shell	2023	260	11	50% MHDT / 50% HHDT	Diesel	40	0.02310673	3.56E-03	5.85E+00	0.8351229	2.31E-02	0.00E+00	3.82E-06	TRUCKS
Phase 1a Office	Foundations + Core and Shell	2024	262	11	50% MHDT / 50% HHDT	Diesel	40	0.021570606	3.14E-03	5.50E+00	0.8351229	2.16E-02	0.00E+00	3.59E-06	TRUCKS
Phase 1a Office	Foundations + Core and Shell	2025	261	11	50% MHDT / 50% HHDT	Diesel	40	0.020149096	2.77E-03	5.12E+00	0.8351229	2.01E-02	0.00E+00	3.34E-06	TRUCKS
Phase 1a Office	Tenant Improvements	2024	195	6	50% MHDT / 50% HHDT	Diesel	40	0.021570606	3.14E-03	2.23E+00	0.8351229	2.16E-02	0.00E+00	1.46E-06	TRUCKS
Phase 1a Office	Tenant Improvements	2025	261	6	50% MHDT / 50% HHDT	Diesel	40	0.020149096	2.77E-03	2.79E+00	0.8351229	2.01E-02	0.00E+00	1.82E-06	TRUCKS
Phase 1a Office	Tenant Improvements	2026	46	6	50% MHDT / 50% HHDT	Diesel	40	0.018978884	2.44E-03	4.63E-01	0.8351229	1.90E-02	0.00E+00	3.03E-07	TRUCKS
Phase 1a Mixed Use	Foundations	2023	224	2	50% MHDT / 50% HHDT	Diesel	40	0.02310673	3.56E-03	9.16E-01	0.8351229	2.31E-02	0.00E+00	5.98E-07	TRUCKS
Phase 1a Mixed Use	Foundations	2024	1	2	50% MHDT / 50% HHDT	Diesel	40	0.021570606	3.14E-03	3.82E-03	0.8351229	2.16E-02	0.00E+00	2.49E-09	TRUCKS
Phase 1a Mixed Use	Core and Shell	2023	64	2	50% MHDT / 50% HHDT	Diesel	40	0.02310673	3.56E-03	2.62E-01	0.8351229	2.31E-02	0.00E+00	1.71E-07	TRUCKS
Phase 1a Mixed Use	Core and Shell	2024	180	2	50% MHDT / 50% HHDT	Diesel	40	0.021570606	3.14E-03	6.87E-01	0.8351229	2.16E-02	0.00E+00	4.49E-07	TRUCKS
Phase 1a Mixed Use	Tenant Improvements	2024	147	2	50% MHDT / 50% HHDT	Diesel	40	0.021570606	3.14E-03	5.61E-01	0.8351229	2.16E-02	0.00E+00	3.66E-07	TRUCKS
Phase 1a Mixed Use	Tenant Improvements	2025	178	2	50% MHDT / 50% HHDT	Diesel	40	0.020149096	2.77E-03	6.35E-01	0.8351229	2.01E-02	0.00E+00	4.14E-07	TRUCKS
Phase 1a Mixed Use	Landscaping	2025	123	2	50% MHDT / 50% HHDT	Diesel	40	0.020149096	2.77E-03	4.39E-01	0.8351229	2.01E-02	0.00E+00	2.86E-07	TRUCKS
Phase 1b Office	Foundations + Core and Shell	2023	202	11	50% MHDT / 50% HHDT	Diesel	40	0.02310673	3.56E-03	4.55E+00	0.8351229	2.31E-02	0.00E+00	2.97E-06	TRUCKS
Phase 1b Office	Foundations + Core and Shell	2024	232	11	50% MHDT / 50% HHDT	Diesel	40	0.021570606	3.14E-03	4.87E+00	0.8351229	2.16E-02	0.00E+00	3.18E-06	TRUCKS
Phase 1b Office	Tenant Improvements	2024	154	14	50% MHDT / 50% HHDT	Diesel	40	0.021570606	3.14E-03	4.12E+00	0.8351229	2.16E-02	0.00E+00	2.69E-06	TRUCKS
Phase 1b Office	Tenant Improvements	2025	122	14	50% MHDT / 50% HHDT	Diesel	40	0.020149096	2.77E-03	3.05E+00	0.8351229	2.01E-02	0.00E+00	1.99E-06	TRUCKS
Phase 1b Mixed Use	Foundations	2024	180	2	50% MHDT / 50% HHDT	Diesel	40	0.021570606	3.14E-03	6.87E-01	0.8351229	2.16E-02	0.00E+00	4.49E-07	TRUCKS
Phase 1b Mixed Use	Core and Shell	2024	145	3	50% MHDT / 50% HHDT	Diesel	40	0.021570606	3.14E-03	8.30E-01	0.8351229	2.16E-02	0.00E+00	5.42E-07	TRUCKS
Phase 1b Mixed Use	Core and Shell	2025	48	3	50% MHDT / 50% HHDT	Diesel	40	0.020149096	2.77E-03	2.57E-01	0.8351229	2.01E-02	0.00E+00	1.68E-07	TRUCKS
Phase 1b Mixed Use	Tenant Improvements	2024	17	3	50% MHDT / 50% HHDT	Diesel	40	0.021570606	3.14E-03	9.74E-02	0.8351229	2.16E-02	0.00E+00	6.36E-08	TRUCKS
Phase 1b Mixed Use	Tenant Improvements	2025	235	3	50% MHDT / 50% HHDT	Diesel	40	0.020149096	2.77E-03	1.26E+00	0.8351229	2.01E-02	0.00E+00	8.21E-07	TRUCKS
Phase 1b Mixed Use	Landscaping	2025	91	2	50% MHDT / 50% HHDT	Diesel	40	0.020149096	2.77E-03	3.24E-01	0.8351229	2.01E-02	0.00E+00	2.12E-07	TRUCKS
Phase 1b Mixed Use	Landscaping	2026	32	2	50% MHDT / 50% HHDT	Diesel	40	0.018978884	2.44E-03	1.07E-01	0.8351229	1.90E-02	0.00E+00	7.02E-08	TRUCKS
Phase 2 Mixed Use	Tunnel Construction	2023	175	8	50% MHDT / 50% HHDT	Diesel	--	--	--	--	0.8351229	0.00E+00	3.56E-03	3.45E-07	TUNNEL
Phase 2 Mixed Use	Tunnel Construction	2024	87	8	50% MHDT / 50% HHDT	Diesel	--	--	--	--	0.8351229	0.00E+00	3.14E-03	1.51E-07	TUNNEL

Phase 2 Mixed Use	Foundations	2024	24	10	50% MHDT / 50% HHDT	Diesel	--	--	--	--	0.8351229	0.00E+00	3.14E-03	5.21E-08	RS45
Phase 2 Mixed Use	Foundations	2025	99	10	50% MHDT / 50% HHDT	Diesel	--	--	--	--	0.8351229	0.00E+00	2.77E-03	1.90E-07	RS45
Phase 2 Mixed Use	Core and Shell	2025	139	12	50% MHDT / 50% HHDT	Diesel	--	--	--	--	0.8351229	0.00E+00	2.77E-03	3.20E-07	RS45
Phase 2 Mixed Use	Tenant Improvements	2025	25	12	50% MHDT / 50% HHDT	Diesel	--	--	--	--	0.8351229	0.00E+00	2.77E-03	5.75E-08	RS45
Phase 2 Mixed Use	Tenant Improvements	2026	174	12	50% MHDT / 50% HHDT	Diesel	--	--	--	--	0.8351229	0.00E+00	2.44E-03	3.53E-07	RS45
Phase 2 Mixed Use	Landscaping	2026	59	6.508474576	50% MHDT / 50% HHDT	Diesel	--	--	--	--	0.8351229	0.00E+00	2.44E-03	6.49E-08	RS45
Alternate 1	Foundations	2025	22	12.43636364	50% MHDT / 50% HHDT	Diesel	--	--	--	--	0.8351229	0.00E+00	2.77E-03	5.25E-08	RETAIL
Alternate 1	Core and Shell	2025	43	5.693023256	50% MHDT / 50% HHDT	Diesel	--	--	--	--	0.8351229	0.00E+00	2.77E-03	4.70E-08	RETAIL
Alternate 1	Tenant Improvements	2025	33	9.272727273	50% MHDT / 50% HHDT	Diesel	--	--	--	--	0.8351229	0.00E+00	2.77E-03	5.87E-08	RETAIL
Phase 1a Office	Foundations + Core and Shell	2022	42	11	50% MHDT / 50% HHDT	Diesel	--	--	--	--	0.8351229	0.00E+00	4.08E-03	1.30E-07	PHS_1A
Phase 1a Office	Foundations + Core and Shell	2023	260	11	50% MHDT / 50% HHDT	Diesel	--	--	--	--	0.8351229	0.00E+00	3.56E-03	7.05E-07	PHS_1A
Phase 1a Office	Foundations + Core and Shell	2024	262	11	50% MHDT / 50% HHDT	Diesel	--	--	--	--	0.8351229	0.00E+00	3.14E-03	6.26E-07	PHS_1A
Phase 1a Office	Foundations + Core and Shell	2025	261	11	50% MHDT / 50% HHDT	Diesel	--	--	--	--	0.8351229	0.00E+00	2.77E-03	5.51E-07	PHS_1A
Phase 1a Office	Tenant Improvements	2024	195	6	50% MHDT / 50% HHDT	Diesel	--	--	--	--	0.8351229	0.00E+00	3.14E-03	2.54E-07	PHS_1A
Phase 1a Office	Tenant Improvements	2025	261	6	50% MHDT / 50% HHDT	Diesel	--	--	--	--	0.8351229	0.00E+00	2.77E-03	3.00E-07	PHS_1A
Phase 1a Office	Tenant Improvements	2026	46	6	50% MHDT / 50% HHDT	Diesel	--	--	--	--	0.8351229	0.00E+00	2.44E-03	4.67E-08	PHS_1A
Phase 1a Mixed Use	Foundations	2023	224	2	50% MHDT / 50% HHDT	Diesel	--	--	--	--	0.8351229	0.00E+00	3.56E-03	1.10E-07	PHS_1A
Phase 1a Mixed Use	Foundations	2024	1	2	50% MHDT / 50% HHDT	Diesel	--	--	--	--	0.8351229	0.00E+00	3.14E-03	4.34E-10	PHS_1A
Phase 1a Mixed Use	Core and Shell	2023	64	2	50% MHDT / 50% HHDT	Diesel	--	--	--	--	0.8351229	0.00E+00	3.56E-03	3.16E-08	PHS_1A
Phase 1a Mixed Use	Core and Shell	2024	180	2	50% MHDT / 50% HHDT	Diesel	--	--	--	--	0.8351229	0.00E+00	3.14E-03	7.82E-08	PHS_1A
Phase 1a Mixed Use	Tenant Improvements	2024	147	2	50% MHDT / 50% HHDT	Diesel	--	--	--	--	0.8351229	0.00E+00	3.14E-03	6.39E-08	PHS_1A
Phase 1a Mixed Use	Tenant Improvements	2025	178	2	50% MHDT / 50% HHDT	Diesel	--	--	--	--	0.8351229	0.00E+00	2.77E-03	6.83E-08	PHS_1A
Phase 1a Mixed Use	Landscaping	2025	123	2	50% MHDT / 50% HHDT	Diesel	--	--	--	--	0.8351229	0.00E+00	2.77E-03	4.72E-08	PHS_1A
Phase 1b Office	Foundations + Core and Shell	2023	202	11	50% MHDT / 50% HHDT	Diesel	--	--	--	--	0.8351229	0.00E+00	3.56E-03	5.48E-07	PHS_1B
Phase 1b Office	Foundations + Core and Shell	2024	232	11	50% MHDT / 50% HHDT	Diesel	--	--	--	--	0.8351229	0.00E+00	3.14E-03	5.54E-07	PHS_1B
Phase 1b Office	Tenant Improvements	2024	154	14	50% MHDT / 50% HHDT	Diesel	--	--	--	--	0.8351229	0.00E+00	3.14E-03	4.68E-07	PHS_1B
Phase 1b Office	Tenant Improvements	2025	122	14	50% MHDT / 50% HHDT	Diesel	--	--	--	--	0.8351229	0.00E+00	2.77E-03	3.28E-07	PHS_1B
Phase 1b Mixed Use	Foundations	2024	180	2	50% MHDT / 50% HHDT	Diesel	--	--	--	--	0.8351229	0.00E+00	3.14E-03	7.82E-08	PHS_1B
Phase 1b Mixed Use	Core and Shell	2024	145	3	50% MHDT / 50% HHDT	Diesel	--	--	--	--	0.8351229	0.00E+00	3.14E-03	9.45E-08	PHS_1B
Phase 1b Mixed Use	Core and Shell	2025	48	3	50% MHDT / 50% HHDT	Diesel	--	--	--	--	0.8351229	0.00E+00	2.77E-03	2.76E-08	PHS_1B
Phase 1b Mixed Use	Tenant Improvements	2024	17	3	50% MHDT / 50% HHDT	Diesel	--	--	--	--	0.8351229	0.00E+00	3.14E-03	1.11E-08	PHS_1B
Phase 1b Mixed Use	Tenant Improvements	2025	235	3	50% MHDT / 50% HHDT	Diesel	--	--	--	--	0.8351229	0.00E+00	2.77E-03	1.35E-07	PHS_1B
Phase 1b Mixed Use	Landscaping	2025	91	2	50% MHDT / 50% HHDT	Diesel	--	--	--	--	0.8351229	0.00E+00	2.77E-03	3.49E-08	PHS_1B
Phase 1b Mixed Use	Landscaping	2026	32	2	50% MHDT / 50% HHDT	Diesel	--	--	--	--	0.8351229	0.00E+00	2.44E-03	1.08E-08	PHS_1B

Equipment Information									Emissior		
PHASE	SUBPHASE	EQUIPMENT	CALEEMOD_EQUIPMENT	FUEL	NUMBER	HP	DAILYHRS	UTILIZATION	2021	2022	2023
Phase 1a	Demolition	Excavator	Excavators	Diesel	4	131	8	0.9	0.57525	3.71699	0.00000
Phase 1a	Demolition	Generator	Generator Sets	Diesel	2	25	6	0.5	0.06872	0.44401	0.00000
Phase 1a	Demolition	Tire Wash	Other Construction Equipment	Diesel	2	100	4	0.9	0.14907	0.96322	0.00000
Phase 1a	Demolition	Concrete Crusher	Crushing/Proc. Equipment	Diesel	2	200	2	0	0.00000	0.00000	0.00000
Phase 1a	Demolition	Bob Cat	Tractors/Loaders/Backhoes	Diesel	6	150	8	0.8	0.85513	5.52546	0.00000
Phase 1a	Demolition	Pressure Washer	Pressure Washers	Diesel	2	25	8	1	0.07429	0.48001	0.00000
Phase 1a	Demolition	Air Compressor	Air Compressors	Diesel	1	140	6	0.7	0.11325	0.73175	0.00000
Phase 1a	Grading and Utilities	Blade	Graders	Diesel	2	359	8	0.15	0.00000	1.33642	0.00000
Phase 1a	Grading and Utilities	Scraper	Scrapers	Diesel	2	52	8	0.15	0.00000	0.32483	0.00000
Phase 1a	Grading and Utilities	Loader	Tractors/Loaders/Backhoes	Diesel	4	100	4	0.9	0.00000	2.88912	0.00000
Phase 1a	Grading and Utilities	Tire Wash	Other Construction Equipment	Diesel	2	100	4	0.9	0.00000	1.63977	0.00000
Phase 1a	Grading and Utilities	Excavator	Excavators	Diesel	4	359	8	0.6	0.00000	9.90907	0.00000
Phase 1a	Grading and Utilities	Backhoe	Tractors/Loaders/Backhoes	Diesel	4	350	8	0.6	0.00000	9.40643	0.00000
Phase 1a	Grading and Utilities	Gradall	Forklifts	Diesel	4	350	4	0.6	0.00000	2.54228	0.00000
Phase 1a	Grading and Utilities	Compactor	Other Construction Equipment	Diesel	4	250	0.5	0.2	0.00000	0.15889	0.00000
Phase 1a	Grading and Utilities	Paver	Pavers	Diesel	2	250	8	0.01	0.00000	0.06356	0.00000
Phase 1a	Grading and Utilities	Generator	Generator Sets	Diesel	1	600	2	0.1	0.00000	0.33594	0.00000
Phase 1a Office	North Garage 2022	Air Compressor	Air Compressors	Diesel	1	150	0.47	1	0.00000	0.04373	0.00000
Phase 1a Office	North Garage 2022	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	0	1	0.00000	0.00000	0.00000
Phase 1a Office	North Garage 2022	Blade	Graders	Diesel	1	450	0	1	0.00000	0.00000	0.00000
Phase 1a Office	North Garage 2022	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	0	1	0.00000	0.00000	0.00000
Phase 1a Office	North Garage 2022	Boom Lift	Aerial Lifts	Diesel	1	40	0	1	0.00000	0.00000	0.00000
Phase 1a Office	North Garage 2022	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0.00000	0.00000	0.00000
Phase 1a Office	North Garage 2022	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.00000	0.00000	0.00000
Phase 1a Office	North Garage 2022	Concrete Pump	Pumps	Diesel	1	450	0.33	1	0.00000	0.12210	0.00000
Phase 1a Office	North Garage 2022	Excavator	Excavators	Diesel	1	500	11.71429	1	0.00000	2.47307	0.00000
Phase 1a Office	North Garage 2022	Generator	Generator Sets	Diesel	1	25	4.714286	1	0.00000	0.17443	0.00000
Phase 1a Office	North Garage 2022	Gradall	Forklifts	Diesel	1	350	2.928571	1	0.00000	0.22778	0.00000
Phase 1a Office	North Garage 2022	Hydro/Crawler Crane	Cranes	Diesel	1	550	2.928571	1	0.00000	0.51902	0.00000
Phase 1a Office	North Garage 2022	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	5.857143	1	0.00000	0.34515	0.00000
Phase 1a Office	North Garage 2022	Paver	Pavers	Diesel	1	250	0	1	0.00000	0.00000	0.00000
Phase 1a Office	North Garage 2022	Pile Rig	Bore/Drill Rigs	Diesel	1	600	4.142857	1	0.00000	1.38098	0.00000
Phase 1a Office	North Garage 2022	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0.00000	0.00000	0.00000
Phase 1a Office	North Garage 2022	Scraper	Scrapers	Diesel	1	600	0	1	0.00000	0.00000	0.00000
Phase 1a Office	North Garage 2022	Tire Wash	Other Construction Equipment	Diesel	1	100	1.178571	1	0.00000	0.07884	0.00000
Phase 1a Office	North Garage 2023	Air Compressor	Air Compressors	Diesel	1	150	0.48186	1	0.00000	0.00000	0.27627
Phase 1a Office	North Garage 2023	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	0.03907	1	0.00000	0.00000	0.03453
Phase 1a Office	North Garage 2023	Blade	Graders	Diesel	1	450	0	1	0.00000	0.00000	0.00000
Phase 1a Office	North Garage 2023	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	0.03907	1	0.00000	0.00000	0.01973
Phase 1a Office	North Garage 2023	Boom Lift	Aerial Lifts	Diesel	1	40	1.335814	1	0.00000	0.00000	0.20351
Phase 1a Office	North Garage 2023	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0.00000	0.00000	0.00000
Phase 1a Office	North Garage 2023	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.00000	0.00000	0.00000
Phase 1a Office	North Garage 2023	Concrete Pump	Pumps	Diesel	1	450	0.57907	1	0.00000	0.00000	1.31617
Phase 1a Office	North Garage 2023	Excavator	Excavators	Diesel	1	500	0.465116	1	0.00000	0.00000	0.60319
Phase 1a Office	North Garage 2023	Generator	Generator Sets	Diesel	1	25	1.767442	1	0.00000	0.00000	0.40172

Phase 1a Office	North Garage 2023	Gradall	Forklifts	Diesel	1	350	3.011628	1	0.00000	0.00000	1.43892
Phase 1a Office	North Garage 2023	Hydro/Crawler Crane	Cranes	Diesel	1	550	5.02907	1	0.00000	0.00000	5.47502
Phase 1a Office	North Garage 2023	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	0.232558	1	0.00000	0.00000	0.08418
Phase 1a Office	North Garage 2023	Paver	Pavers	Diesel	1	250	0	1	0.00000	0.00000	0.00000
Phase 1a Office	North Garage 2023	Pile Rig	Bore/Drill Rigs	Diesel	1	600	0	1	0.00000	0.00000	0.00000
Phase 1a Office	North Garage 2023	Pressure Washer	Pressure Washers	Diesel	1	25	0.122791	1	0.00000	0.00000	0.01131
Phase 1a Office	North Garage 2023	Scraper	Scrapers	Diesel	1	600	0	1	0.00000	0.00000	0.00000
Phase 1a Office	North Garage 2023	Tire Wash	Other Construction Equipment	Diesel	1	100	1.505814	1	0.00000	0.00000	0.61874
Phase 1a Office	Office Building 4 2023	Air Compressor	Air Compressors	Diesel	1	150	0.049091	1	0.00000	0.00000	0.02640
Phase 1a Office	Office Building 4 2023	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	1.264463	1	0.00000	0.00000	1.04836
Phase 1a Office	Office Building 4 2023	Blade	Graders	Diesel	1	450	0	1	0.00000	0.00000	0.00000
Phase 1a Office	Office Building 4 2023	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	1.264463	1	0.00000	0.00000	0.59906
Phase 1a Office	Office Building 4 2023	Boom Lift	Aerial Lifts	Diesel	1	40	7.438017	1	0.00000	0.00000	1.06288
Phase 1a Office	Office Building 4 2023	Compactor	Other Construction Equipment	Diesel	1	250	0.101157	1	0.00000	0.00000	0.06800
Phase 1a Office	Office Building 4 2023	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.00000	0.00000	0.00000
Phase 1a Office	Office Building 4 2023	Concrete Pump	Pumps	Diesel	1	450	0.075372	1	0.00000	0.00000	0.16069
Phase 1a Office	Office Building 4 2023	Excavator	Excavators	Diesel	1	500	0.063223	1	0.00000	0.00000	0.07691
Phase 1a Office	Office Building 4 2023	Generator	Generator Sets	Diesel	1	25	2.900826	1	0.00000	0.00000	0.61844
Phase 1a Office	Office Building 4 2023	Gradall	Forklifts	Diesel	1	350	0.48	1	0.00000	0.00000	0.21512
Phase 1a Office	Office Building 4 2023	Hydro/Crawler Crane	Cranes	Diesel	1	550	1.809917	1	0.00000	0.00000	1.84822
Phase 1a Office	Office Building 4 2023	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	0.719008	1	0.00000	0.00000	0.24413
Phase 1a Office	Office Building 4 2023	Paver	Pavers	Diesel	1	250	0	1	0.00000	0.00000	0.00000
Phase 1a Office	Office Building 4 2023	Pile Rig	Bore/Drill Rigs	Diesel	1	600	0.719008	1	0.00000	0.00000	1.38098
Phase 1a Office	Office Building 4 2023	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0.00000	0.00000	0.00000
Phase 1a Office	Office Building 4 2023	Scraper	Scrapers	Diesel	1	600	0	1	0.00000	0.00000	0.00000
Phase 1a Office	Office Building 4 2023	Tire Wash	Other Construction Equipment	Diesel	1	100	1.5	1	0.00000	0.00000	0.57812
Phase 1a Office	Office Building 4 2024	Air Compressor	Air Compressors	Diesel	1	150	0	1	0.00000	0.00000	0.00000
Phase 1a Office	Office Building 4 2024	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	0	1	0.00000	0.00000	0.00000
Phase 1a Office	Office Building 4 2024	Blade	Graders	Diesel	1	450	0	1	0.00000	0.00000	0.00000
Phase 1a Office	Office Building 4 2024	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	0	1	0.00000	0.00000	0.00000
Phase 1a Office	Office Building 4 2024	Boom Lift	Aerial Lifts	Diesel	1	40	1.405797	1	0.00000	0.00000	0.00000
Phase 1a Office	Office Building 4 2024	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0.00000	0.00000	0.00000
Phase 1a Office	Office Building 4 2024	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.00000	0.00000	0.00000
Phase 1a Office	Office Building 4 2024	Concrete Pump	Pumps	Diesel	1	450	0	1	0.00000	0.00000	0.00000
Phase 1a Office	Office Building 4 2024	Excavator	Excavators	Diesel	1	500	0	1	0.00000	0.00000	0.00000
Phase 1a Office	Office Building 4 2024	Generator	Generator Sets	Diesel	1	25	0	1	0.00000	0.00000	0.00000
Phase 1a Office	Office Building 4 2024	Gradall	Forklifts	Diesel	1	350	0.48	1	0.00000	0.00000	0.00000
Phase 1a Office	Office Building 4 2024	Hydro/Crawler Crane	Cranes	Diesel	1	550	0	1	0.00000	0.00000	0.00000
Phase 1a Office	Office Building 4 2024	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	0	1	0.00000	0.00000	0.00000
Phase 1a Office	Office Building 4 2024	Paver	Pavers	Diesel	1	250	0	1	0.00000	0.00000	0.00000
Phase 1a Office	Office Building 4 2024	Pile Rig	Bore/Drill Rigs	Diesel	1	600	0	1	0.00000	0.00000	0.00000
Phase 1a Office	Office Building 4 2024	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0.00000	0.00000	0.00000
Phase 1a Office	Office Building 4 2024	Scraper	Scrapers	Diesel	1	600	0	1	0.00000	0.00000	0.00000
Phase 1a Office	Office Building 4 2024	Tire Wash	Other Construction Equipment	Diesel	1	100	1.5	1	0.00000	0.00000	0.00000
Phase 1a Office	Meeting, Collaboration, Park 2022	Air Compressor	Air Compressors	Diesel	1	150	0	1	0.00000	0.00000	0.00000
Phase 1a Office	Meeting, Collaboration, Park 2022	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	5.857143	1	0.00000	0.84280	0.00000
Phase 1a Office	Meeting, Collaboration, Park 2022	Blade	Graders	Diesel	1	450	0	1	0.00000	0.00000	0.00000

Phase 1a Office	Meeting, Collaboration, Park 2022	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	5.857143	1	0.00000	0.48160	0.00000
Phase 1a Office	Meeting, Collaboration, Park 2022	Boom Lift	Aerial Lifts	Diesel	1	40	0	1	0.00000	0.00000	0.00000
Phase 1a Office	Meeting, Collaboration, Park 2022	Compactor	Other Construction Equipment	Diesel	1	250	0.314286	1	0.00000	0.03667	0.00000
Phase 1a Office	Meeting, Collaboration, Park 2022	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.00000	0.00000	0.00000
Phase 1a Office	Meeting, Collaboration, Park 2022	Concrete Pump	Pumps	Diesel	1	450	0	1	0.00000	0.00000	0.00000
Phase 1a Office	Meeting, Collaboration, Park 2022	Excavator	Excavators	Diesel	1	500	23.42857	1	0.00000	4.94614	0.00000
Phase 1a Office	Meeting, Collaboration, Park 2022	Generator	Generator Sets	Diesel	1	25	5.857143	1	0.00000	0.21672	0.00000
Phase 1a Office	Meeting, Collaboration, Park 2022	Gradall	Forklifts	Diesel	1	350	8.785714	1	0.00000	0.68335	0.00000
Phase 1a Office	Meeting, Collaboration, Park 2022	Hydro/Crawler Crane	Cranes	Diesel	1	550	1.571429	1	0.00000	0.27850	0.00000
Phase 1a Office	Meeting, Collaboration, Park 2022	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	4.392857	1	0.00000	0.25886	0.00000
Phase 1a Office	Meeting, Collaboration, Park 2022	Paver	Pavers	Diesel	1	250	0	1	0.00000	0.00000	0.00000
Phase 1a Office	Meeting, Collaboration, Park 2022	Pile Rig	Bore/Drill Rigs	Diesel	1	600	3.142857	1	0.00000	1.04764	0.00000
Phase 1a Office	Meeting, Collaboration, Park 2022	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0.00000	0.00000	0.00000
Phase 1a Office	Meeting, Collaboration, Park 2022	Scraper	Scrapers	Diesel	1	600	0	1	0.00000	0.00000	0.00000
Phase 1a Office	Meeting, Collaboration, Park 2022	Tire Wash	Other Construction Equipment	Diesel	1	100	1.464286	1	0.00000	0.09795	0.00000
Phase 1a Office	Meeting, Collaboration, Park 2023	Air Compressor	Air Compressors	Diesel	1	150	0.304615	1	0.00000	0.00000	0.17600
Phase 1a Office	Meeting, Collaboration, Park 2023	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	3.276923	1	0.00000	0.00000	2.91895
Phase 1a Office	Meeting, Collaboration, Park 2023	Blade	Graders	Diesel	1	450	0	1	0.00000	0.00000	0.00000
Phase 1a Office	Meeting, Collaboration, Park 2023	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	3.276923	1	0.00000	0.00000	1.66797
Phase 1a Office	Meeting, Collaboration, Park 2023	Boom Lift	Aerial Lifts	Diesel	1	40	0.888462	1	0.00000	0.00000	0.13640
Phase 1a Office	Meeting, Collaboration, Park 2023	Compactor	Other Construction Equipment	Diesel	1	250	0.152308	1	0.00000	0.00000	0.11000
Phase 1a Office	Meeting, Collaboration, Park 2023	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.00000	0.00000	0.00000
Phase 1a Office	Meeting, Collaboration, Park 2023	Concrete Pump	Pumps	Diesel	1	450	0.304615	1	0.00000	0.00000	0.69773
Phase 1a Office	Meeting, Collaboration, Park 2023	Excavator	Excavators	Diesel	1	500	5.492308	1	0.00000	0.00000	7.17794
Phase 1a Office	Meeting, Collaboration, Park 2023	Generator	Generator Sets	Diesel	1	25	6.715385	1	0.00000	0.00000	1.53818
Phase 1a Office	Meeting, Collaboration, Park 2023	Gradall	Forklifts	Diesel	1	350	7.661538	1	0.00000	0.00000	3.68897
Phase 1a Office	Meeting, Collaboration, Park 2023	Hydro/Crawler Crane	Cranes	Diesel	1	550	7.246154	1	0.00000	0.00000	7.94986
Phase 1a Office	Meeting, Collaboration, Park 2023	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	1.828846	1	0.00000	0.00000	0.66714
Phase 1a Office	Meeting, Collaboration, Park 2023	Paver	Pavers	Diesel	1	250	0	1	0.00000	0.00000	0.00000
Phase 1a Office	Meeting, Collaboration, Park 2023	Pile Rig	Bore/Drill Rigs	Diesel	1	600	2.007692	1	0.00000	0.00000	4.14295
Phase 1a Office	Meeting, Collaboration, Park 2023	Pressure Washer	Pressure Washers	Diesel	1	25	0.152308	1	0.00000	0.00000	0.01414
Phase 1a Office	Meeting, Collaboration, Park 2023	Scraper	Scrapers	Diesel	1	600	0	1	0.00000	0.00000	0.00000
Phase 1a Office	Meeting, Collaboration, Park 2023	Tire Wash	Other Construction Equipment	Diesel	1	100	0.819231	1	0.00000	0.00000	0.33923
Phase 1a Office	Meeting, Collaboration, Park 2024	Air Compressor	Air Compressors	Diesel	1	150	0	1	0.00000	0.00000	0.00000
Phase 1a Office	Meeting, Collaboration, Park 2024	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	0	1	0.00000	0.00000	0.00000
Phase 1a Office	Meeting, Collaboration, Park 2024	Blade	Graders	Diesel	1	450	0	1	0.00000	0.00000	0.00000
Phase 1a Office	Meeting, Collaboration, Park 2024	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	0	1	0.00000	0.00000	0.00000
Phase 1a Office	Meeting, Collaboration, Park 2024	Boom Lift	Aerial Lifts	Diesel	1	40	19.30534	1	0.00000	0.00000	0.00000
Phase 1a Office	Meeting, Collaboration, Park 2024	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0.00000	0.00000	0.00000
Phase 1a Office	Meeting, Collaboration, Park 2024	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.00000	0.00000	0.00000
Phase 1a Office	Meeting, Collaboration, Park 2024	Concrete Pump	Pumps	Diesel	1	450	0	1	0.00000	0.00000	0.00000
Phase 1a Office	Meeting, Collaboration, Park 2024	Excavator	Excavators	Diesel	1	500	0	1	0.00000	0.00000	0.00000
Phase 1a Office	Meeting, Collaboration, Park 2024	Generator	Generator Sets	Diesel	1	25	0	1	0.00000	0.00000	0.00000
Phase 1a Office	Meeting, Collaboration, Park 2024	Gradall	Forklifts	Diesel	1	350	10.25954	1	0.00000	0.00000	0.00000
Phase 1a Office	Meeting, Collaboration, Park 2024	Hydro/Crawler Crane	Cranes	Diesel	1	550	0.503817	1	0.00000	0.00000	0.00000
Phase 1a Office	Meeting, Collaboration, Park 2024	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	0	1	0.00000	0.00000	0.00000
Phase 1a Office	Meeting, Collaboration, Park 2024	Paver	Pavers	Diesel	1	250	0	1	0.00000	0.00000	0.00000

Phase 1a Office	Meeting, Collaboration, Park 2024	Pile Rig	Bore/Drill Rigs	Diesel	1	600	0	1	0.00000	0.00000	0.00000
Phase 1a Office	Meeting, Collaboration, Park 2024	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0.00000	0.00000	0.00000
Phase 1a Office	Meeting, Collaboration, Park 2024	Scraper	Scrapers	Diesel	1	600	0	1	0.00000	0.00000	0.00000
Phase 1a Office	Meeting, Collaboration, Park 2024	Tire Wash	Other Construction Equipment	Diesel	1	100	0	1	0.00000	0.00000	0.00000
Phase 1a Office	Meeting, Collaboration, Park 2025	Air Compressor	Air Compressors	Diesel	1	150	0	1	0.00000	0.00000	0.00000
Phase 1a Office	Meeting, Collaboration, Park 2025	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	0	1	0.00000	0.00000	0.00000
Phase 1a Office	Meeting, Collaboration, Park 2025	Blade	Graders	Diesel	1	450	0	1	0.00000	0.00000	0.00000
Phase 1a Office	Meeting, Collaboration, Park 2025	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	0	1	0.00000	0.00000	0.00000
Phase 1a Office	Meeting, Collaboration, Park 2025	Boom Lift	Aerial Lifts	Diesel	1	40	9.425287	1	0.00000	0.00000	0.00000
Phase 1a Office	Meeting, Collaboration, Park 2025	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0.00000	0.00000	0.00000
Phase 1a Office	Meeting, Collaboration, Park 2025	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.00000	0.00000	0.00000
Phase 1a Office	Meeting, Collaboration, Park 2025	Concrete Pump	Pumps	Diesel	1	450	0	1	0.00000	0.00000	0.00000
Phase 1a Office	Meeting, Collaboration, Park 2025	Excavator	Excavators	Diesel	1	500	0	1	0.00000	0.00000	0.00000
Phase 1a Office	Meeting, Collaboration, Park 2025	Generator	Generator Sets	Diesel	1	25	0	1	0.00000	0.00000	0.00000
Phase 1a Office	Meeting, Collaboration, Park 2025	Gradall	Forklifts	Diesel	1	350	11.77011	1	0.00000	0.00000	0.00000
Phase 1a Office	Meeting, Collaboration, Park 2025	Hydro/Crawler Crane	Cranes	Diesel	1	550	0.770115	1	0.00000	0.00000	0.00000
Phase 1a Office	Meeting, Collaboration, Park 2025	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	0	1	0.00000	0.00000	0.00000
Phase 1a Office	Meeting, Collaboration, Park 2025	Paver	Pavers	Diesel	1	250	0	1	0.00000	0.00000	0.00000
Phase 1a Office	Meeting, Collaboration, Park 2025	Pile Rig	Bore/Drill Rigs	Diesel	1	600	0	1	0.00000	0.00000	0.00000
Phase 1a Office	Meeting, Collaboration, Park 2025	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0.00000	0.00000	0.00000
Phase 1a Office	Meeting, Collaboration, Park 2025	Scraper	Scrapers	Diesel	1	600	0	1	0.00000	0.00000	0.00000
Phase 1a Office	Meeting, Collaboration, Park 2025	Tire Wash	Other Construction Equipment	Diesel	1	100	0	1	0.00000	0.00000	0.00000
Phase 1a Office	Meeting, Collaboration, Park 2026	Air Compressor	Air Compressors	Diesel	1	150	0	1	0.00000	0.00000	0.00000
Phase 1a Office	Meeting, Collaboration, Park 2026	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	0	1	0.00000	0.00000	0.00000
Phase 1a Office	Meeting, Collaboration, Park 2026	Blade	Graders	Diesel	1	450	0	1	0.00000	0.00000	0.00000
Phase 1a Office	Meeting, Collaboration, Park 2026	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	0	1	0.00000	0.00000	0.00000
Phase 1a Office	Meeting, Collaboration, Park 2026	Boom Lift	Aerial Lifts	Diesel	1	40	0	1	0.00000	0.00000	0.00000
Phase 1a Office	Meeting, Collaboration, Park 2026	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0.00000	0.00000	0.00000
Phase 1a Office	Meeting, Collaboration, Park 2026	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.00000	0.00000	0.00000
Phase 1a Office	Meeting, Collaboration, Park 2026	Concrete Pump	Pumps	Diesel	1	450	0	1	0.00000	0.00000	0.00000
Phase 1a Office	Meeting, Collaboration, Park 2026	Excavator	Excavators	Diesel	1	500	0	1	0.00000	0.00000	0.00000
Phase 1a Office	Meeting, Collaboration, Park 2026	Generator	Generator Sets	Diesel	1	25	0	1	0.00000	0.00000	0.00000
Phase 1a Office	Meeting, Collaboration, Park 2026	Gradall	Forklifts	Diesel	1	350	11.73913	1	0.00000	0.00000	0.00000
Phase 1a Office	Meeting, Collaboration, Park 2026	Hydro/Crawler Crane	Cranes	Diesel	1	550	5.869565	1	0.00000	0.00000	0.00000
Phase 1a Office	Meeting, Collaboration, Park 2026	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	0	1	0.00000	0.00000	0.00000
Phase 1a Office	Meeting, Collaboration, Park 2026	Paver	Pavers	Diesel	1	250	0	1	0.00000	0.00000	0.00000
Phase 1a Office	Meeting, Collaboration, Park 2026	Pile Rig	Bore/Drill Rigs	Diesel	1	600	0	1	0.00000	0.00000	0.00000
Phase 1a Office	Meeting, Collaboration, Park 2026	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0.00000	0.00000	0.00000
Phase 1a Office	Meeting, Collaboration, Park 2026	Scraper	Scrapers	Diesel	1	600	0	1	0.00000	0.00000	0.00000
Phase 1a Office	Meeting, Collaboration, Park 2026	Tire Wash	Other Construction Equipment	Diesel	1	100	0	1	0.00000	0.00000	0.00000
Phase 1a Office	Hotel Excavation 2022	Air Compressor	Air Compressors	Diesel	1	150	2.642857	1	0.00000	0.24667	0.00000
Phase 1a Office	Hotel Excavation 2022	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	2.642857	1	0.00000	0.38029	0.00000
Phase 1a Office	Hotel Excavation 2022	Blade	Graders	Diesel	1	450	0	1	0.00000	0.00000	0.00000
Phase 1a Office	Hotel Excavation 2022	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	2.928571	1	0.00000	0.24080	0.00000
Phase 1a Office	Hotel Excavation 2022	Boom Lift	Aerial Lifts	Diesel	1	40	1.464286	1	0.00000	0.03632	0.00000
Phase 1a Office	Hotel Excavation 2022	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0.00000	0.00000	0.00000
Phase 1a Office	Hotel Excavation 2022	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.00000	0.00000	0.00000

Phase 1a Office	Hotel Excavation 2022	Concrete Pump	Pumps	Diesel	1	450	0.422857	1	0.00000	0.15646	0.00000
Phase 1a Office	Hotel Excavation 2022	Excavator	Excavators	Diesel	1	500	11.71429	1	0.00000	2.47307	0.00000
Phase 1a Office	Hotel Excavation 2022	Generator	Generator Sets	Diesel	1	25	5.857143	1	0.00000	0.21672	0.00000
Phase 1a Office	Hotel Excavation 2022	Gradall	Forklifts	Diesel	1	350	5.857143	1	0.00000	0.45557	0.00000
Phase 1a Office	Hotel Excavation 2022	Hydro/Crawler Crane	Cranes	Diesel	1	550	2.642857	1	0.00000	0.46838	0.00000
Phase 1a Office	Hotel Excavation 2022	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	11.71429	1	0.00000	0.69029	0.00000
Phase 1a Office	Hotel Excavation 2022	Paver	Pavers	Diesel	1	250	0	1	0.00000	0.00000	0.00000
Phase 1a Office	Hotel Excavation 2022	Pile Rig	Bore/Drill Rigs	Diesel	1	600	10.57143	1	0.00000	3.52389	0.00000
Phase 1a Office	Hotel Excavation 2022	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0.00000	0.00000	0.00000
Phase 1a Office	Hotel Excavation 2022	Scraper	Scrapers	Diesel	1	600	0	1	0.00000	0.00000	0.00000
Phase 1a Office	Hotel Excavation 2022	Tire Wash	Other Construction Equipment	Diesel	1	100	2.928571	1	0.00000	0.19589	0.00000
Phase 1a Office	Hotel Excavation 2023	Air Compressor	Air Compressors	Diesel	1	150	2.311284	1	0.00000	0.00000	1.32003
Phase 1a Office	Hotel Excavation 2023	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	0	1	0.00000	0.00000	0.00000
Phase 1a Office	Hotel Excavation 2023	Blade	Graders	Diesel	1	450	0	1	0.00000	0.00000	0.00000
Phase 1a Office	Hotel Excavation 2023	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	0.700389	1	0.00000	0.00000	0.35239
Phase 1a Office	Hotel Excavation 2023	Boom Lift	Aerial Lifts	Diesel	1	40	0.350195	1	0.00000	0.00000	0.05314
Phase 1a Office	Hotel Excavation 2023	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0.00000	0.00000	0.00000
Phase 1a Office	Hotel Excavation 2023	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.00000	0.00000	0.00000
Phase 1a Office	Hotel Excavation 2023	Concrete Pump	Pumps	Diesel	1	450	2.311284	1	0.00000	0.00000	5.23297
Phase 1a Office	Hotel Excavation 2023	Excavator	Excavators	Diesel	1	500	2.801556	1	0.00000	0.00000	3.61913
Phase 1a Office	Hotel Excavation 2023	Generator	Generator Sets	Diesel	1	25	10.64591	1	0.00000	0.00000	2.41034
Phase 1a Office	Hotel Excavation 2023	Gradall	Forklifts	Diesel	1	350	10.64591	1	0.00000	0.00000	5.06678
Phase 1a Office	Hotel Excavation 2023	Hydro/Crawler Crane	Cranes	Diesel	1	550	9.245136	1	0.00000	0.00000	10.02594
Phase 1a Office	Hotel Excavation 2023	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	2.801556	1	0.00000	0.00000	1.01018
Phase 1a Office	Hotel Excavation 2023	Paver	Pavers	Diesel	1	250	0	1	0.00000	0.00000	0.00000
Phase 1a Office	Hotel Excavation 2023	Pile Rig	Bore/Drill Rigs	Diesel	1	600	0	1	0.00000	0.00000	0.00000
Phase 1a Office	Hotel Excavation 2023	Pressure Washer	Pressure Washers	Diesel	1	25	0.046226	1	0.00000	0.00000	0.00424
Phase 1a Office	Hotel Excavation 2023	Scraper	Scrapers	Diesel	1	600	0	1	0.00000	0.00000	0.00000
Phase 1a Office	Hotel Excavation 2023	Tire Wash	Other Construction Equipment	Diesel	1	100	1.856031	1	0.00000	0.00000	0.75968
Phase 1a Office	Hotel Construction 2024	Air Compressor	Air Compressors	Diesel	1	150	3	1	0.00000	0.00000	0.00000
Phase 1a Office	Hotel Construction 2024	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	0	1	0.00000	0.00000	0.00000
Phase 1a Office	Hotel Construction 2024	Blade	Graders	Diesel	1	450	0	1	0.00000	0.00000	0.00000
Phase 1a Office	Hotel Construction 2024	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	0	1	0.00000	0.00000	0.00000
Phase 1a Office	Hotel Construction 2024	Boom Lift	Aerial Lifts	Diesel	1	40	20.91429	1	0.00000	0.00000	0.00000
Phase 1a Office	Hotel Construction 2024	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0.00000	0.00000	0.00000
Phase 1a Office	Hotel Construction 2024	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.00000	0.00000	0.00000
Phase 1a Office	Hotel Construction 2024	Concrete Pump	Pumps	Diesel	1	450	3	1	0.00000	0.00000	0.00000
Phase 1a Office	Hotel Construction 2024	Excavator	Excavators	Diesel	1	500	0	1	0.00000	0.00000	0.00000
Phase 1a Office	Hotel Construction 2024	Generator	Generator Sets	Diesel	1	25	0	1	0.00000	0.00000	0.00000
Phase 1a Office	Hotel Construction 2024	Gradall	Forklifts	Diesel	1	350	12	1	0.00000	0.00000	0.00000
Phase 1a Office	Hotel Construction 2024	Hydro/Crawler Crane	Cranes	Diesel	1	550	0	1	0.00000	0.00000	0.00000
Phase 1a Office	Hotel Construction 2024	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	0	1	0.00000	0.00000	0.00000
Phase 1a Office	Hotel Construction 2024	Paver	Pavers	Diesel	1	250	0	1	0.00000	0.00000	0.00000
Phase 1a Office	Hotel Construction 2024	Pile Rig	Bore/Drill Rigs	Diesel	1	600	0	1	0.00000	0.00000	0.00000
Phase 1a Office	Hotel Construction 2024	Pressure Washer	Pressure Washers	Diesel	1	25	0.06	1	0.00000	0.00000	0.00000
Phase 1a Office	Hotel Construction 2024	Scraper	Scrapers	Diesel	1	600	0	1	0.00000	0.00000	0.00000
Phase 1a Office	Hotel Construction 2024	Tire Wash	Other Construction Equipment	Diesel	1	100	1.5	1	0.00000	0.00000	0.00000

Phase 1a Office	Hotel Construction 2025	Air Compressor	Air Compressors	Diesel	1	150	0.837662	1	0.00000	0.00000	0.00000
Phase 1a Office	Hotel Construction 2025	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	0	1	0.00000	0.00000	0.00000
Phase 1a Office	Hotel Construction 2025	Blade	Graders	Diesel	1	450	0	1	0.00000	0.00000	0.00000
Phase 1a Office	Hotel Construction 2025	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	0	1	0.00000	0.00000	0.00000
Phase 1a Office	Hotel Construction 2025	Boom Lift	Aerial Lifts	Diesel	1	40	20.18182	1	0.00000	0.00000	0.00000
Phase 1a Office	Hotel Construction 2025	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0.00000	0.00000	0.00000
Phase 1a Office	Hotel Construction 2025	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.00000	0.00000	0.00000
Phase 1a Office	Hotel Construction 2025	Concrete Pump	Pumps	Diesel	1	450	0.837662	1	0.00000	0.00000	0.00000
Phase 1a Office	Hotel Construction 2025	Excavator	Excavators	Diesel	1	500	0	1	0.00000	0.00000	0.00000
Phase 1a Office	Hotel Construction 2025	Generator	Generator Sets	Diesel	1	25	0	1	0.00000	0.00000	0.00000
Phase 1a Office	Hotel Construction 2025	Gradall	Forklifts	Diesel	1	350	12.07792	1	0.00000	0.00000	0.00000
Phase 1a Office	Hotel Construction 2025	Hydro/Crawler Crane	Cranes	Diesel	1	550	0	1	0.00000	0.00000	0.00000
Phase 1a Office	Hotel Construction 2025	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	0	1	0.00000	0.00000	0.00000
Phase 1a Office	Hotel Construction 2025	Paver	Pavers	Diesel	1	250	0	1	0.00000	0.00000	0.00000
Phase 1a Office	Hotel Construction 2025	Pile Rig	Bore/Drill Rigs	Diesel	1	600	0	1	0.00000	0.00000	0.00000
Phase 1a Office	Hotel Construction 2025	Pressure Washer	Pressure Washers	Diesel	1	25	0.016753	1	0.00000	0.00000	0.00000
Phase 1a Office	Hotel Construction 2025	Scraper	Scrapers	Diesel	1	600	0	1	0.00000	0.00000	0.00000
Phase 1a Office	Hotel Construction 2025	Tire Wash	Other Construction Equipment	Diesel	1	100	1.50974	1	0.00000	0.00000	0.00000
Phase 1a Office	Town Square 2023	Air Compressor	Air Compressors	Diesel	1	150	0	1	0.00000	0.00000	0.00000
Phase 1a Office	Town Square 2023	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	0	1	0.00000	0.00000	0.00000
Phase 1a Office	Town Square 2023	Blade	Graders	Diesel	1	450	0	1	0.00000	0.00000	0.00000
Phase 1a Office	Town Square 2023	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	3	1	0.00000	0.00000	1.39781
Phase 1a Office	Town Square 2023	Boom Lift	Aerial Lifts	Diesel	1	40	1.5	1	0.00000	0.00000	0.21080
Phase 1a Office	Town Square 2023	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0.00000	0.00000	0.00000
Phase 1a Office	Town Square 2023	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.00000	0.00000	0.00000
Phase 1a Office	Town Square 2023	Concrete Pump	Pumps	Diesel	1	450	0	1	0.00000	0.00000	0.00000
Phase 1a Office	Town Square 2023	Excavator	Excavators	Diesel	1	500	12	1	0.00000	0.00000	14.35587
Phase 1a Office	Town Square 2023	Generator	Generator Sets	Diesel	1	25	6	1	0.00000	0.00000	1.25803
Phase 1a Office	Town Square 2023	Gradall	Forklifts	Diesel	1	350	6	1	0.00000	0.00000	2.64450
Phase 1a Office	Town Square 2023	Hydro/Crawler Crane	Cranes	Diesel	1	550	0	1	0.00000	0.00000	0.00000
Phase 1a Office	Town Square 2023	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	12	1	0.00000	0.00000	4.00705
Phase 1a Office	Town Square 2023	Paver	Pavers	Diesel	1	250	0	1	0.00000	0.00000	0.00000
Phase 1a Office	Town Square 2023	Pile Rig	Bore/Drill Rigs	Diesel	1	600	0	1	0.00000	0.00000	0.00000
Phase 1a Office	Town Square 2023	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0.00000	0.00000	0.00000
Phase 1a Office	Town Square 2023	Scraper	Scrapers	Diesel	1	600	0	1	0.00000	0.00000	0.00000
Phase 1a Office	Town Square 2023	Tire Wash	Other Construction Equipment	Diesel	1	100	3	1	0.00000	0.00000	1.13714
Phase 1a Office	Town Square 2024	Air Compressor	Air Compressors	Diesel	1	150	0	1	0.00000	0.00000	0.00000
Phase 1a Office	Town Square 2024	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	0	1	0.00000	0.00000	0.00000
Phase 1a Office	Town Square 2024	Blade	Graders	Diesel	1	450	0	1	0.00000	0.00000	0.00000
Phase 1a Office	Town Square 2024	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	0.996183	1	0.00000	0.00000	0.00000
Phase 1a Office	Town Square 2024	Boom Lift	Aerial Lifts	Diesel	1	40	1.872137	1	0.00000	0.00000	0.00000
Phase 1a Office	Town Square 2024	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0.00000	0.00000	0.00000
Phase 1a Office	Town Square 2024	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.00000	0.00000	0.00000
Phase 1a Office	Town Square 2024	Concrete Pump	Pumps	Diesel	1	450	0.020382	1	0.00000	0.00000	0.00000
Phase 1a Office	Town Square 2024	Excavator	Excavators	Diesel	1	500	3.984733	1	0.00000	0.00000	0.00000
Phase 1a Office	Town Square 2024	Generator	Generator Sets	Diesel	1	25	0.549618	1	0.00000	0.00000	0.00000
Phase 1a Office	Town Square 2024	Gradall	Forklifts	Diesel	1	350	5.267176	1	0.00000	0.00000	0.00000

Phase 1a Office	Town Square 2024	Hydro/Crawler Crane	Cranes	Diesel	1	550	1.03145	1	0.00000	0.00000	0.00000
Phase 1a Office	Town Square 2024	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	3.984733	1	0.00000	0.00000	0.00000
Phase 1a Office	Town Square 2024	Paver	Pavers	Diesel	1	250	0	1	0.00000	0.00000	0.00000
Phase 1a Office	Town Square 2024	Pile Rig	Bore/Drill Rigs	Diesel	1	600	0	1	0.00000	0.00000	0.00000
Phase 1a Office	Town Square 2024	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0.00000	0.00000	0.00000
Phase 1a Office	Town Square 2024	Scraper	Scrapers	Diesel	1	600	0	1	0.00000	0.00000	0.00000
Phase 1a Office	Town Square 2024	Tire Wash	Other Construction Equipment	Diesel	1	100	0.996183	1	0.00000	0.00000	0.00000
Phase 1a Office	Town Square 2025	Air Compressor	Air Compressors	Diesel	1	150	0	1	0.00000	0.00000	0.00000
Phase 1a Office	Town Square 2025	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	0	1	0.00000	0.00000	0.00000
Phase 1a Office	Town Square 2025	Blade	Graders	Diesel	1	450	0	1	0.00000	0.00000	0.00000
Phase 1a Office	Town Square 2025	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	0	1	0.00000	0.00000	0.00000
Phase 1a Office	Town Square 2025	Boom Lift	Aerial Lifts	Diesel	1	40	0	1	0.00000	0.00000	0.00000
Phase 1a Office	Town Square 2025	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0.00000	0.00000	0.00000
Phase 1a Office	Town Square 2025	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.00000	0.00000	0.00000
Phase 1a Office	Town Square 2025	Concrete Pump	Pumps	Diesel	1	450	0	1	0.00000	0.00000	0.00000
Phase 1a Office	Town Square 2025	Excavator	Excavators	Diesel	1	500	0	1	0.00000	0.00000	0.00000
Phase 1a Office	Town Square 2025	Generator	Generator Sets	Diesel	1	25	0	1	0.00000	0.00000	0.00000
Phase 1a Office	Town Square 2025	Gradall	Forklifts	Diesel	1	350	18	1	0.00000	0.00000	0.00000
Phase 1a Office	Town Square 2025	Hydro/Crawler Crane	Cranes	Diesel	1	550	0.18	1	0.00000	0.00000	0.00000
Phase 1a Office	Town Square 2025	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	0	1	0.00000	0.00000	0.00000
Phase 1a Office	Town Square 2025	Paver	Pavers	Diesel	1	250	0	1	0.00000	0.00000	0.00000
Phase 1a Office	Town Square 2025	Pile Rig	Bore/Drill Rigs	Diesel	1	600	0	1	0.00000	0.00000	0.00000
Phase 1a Office	Town Square 2025	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0.00000	0.00000	0.00000
Phase 1a Office	Town Square 2025	Scraper	Scrapers	Diesel	1	600	0	1	0.00000	0.00000	0.00000
Phase 1a Office	Town Square 2025	Tire Wash	Other Construction Equipment	Diesel	1	100	0	1	0.00000	0.00000	0.00000
Phase 1a Mixed Use	Parcel 2 Foundations	Pile Rig	Bore/Drill Rigs	Diesel	0	600	8	0.4	0.00000	0.00000	0.00000
Phase 1a Mixed Use	Parcel 2 Foundations	Generator	Generator Sets	Diesel	0	25	6	1	0.00000	0.00000	0.00000
Phase 1a Mixed Use	Parcel 2 Foundations	Tire Wash	Other Construction Equipment	Diesel	1	100	4	0.9	0.00000	0.00000	0.92309
Phase 1a Mixed Use	Parcel 2 Foundations	Excavator	Excavators	Diesel	1	131	8	0.6	0.00000	0.00000	1.18737
Phase 1a Mixed Use	Parcel 2 Foundations	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	90	8	0.6	0.00000	0.00000	0.97583
Phase 1a Mixed Use	Parcel 2 Foundations	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	70	8	0.8	0.00000	0.00000	1.01198
Phase 1a Mixed Use	Parcel 2 Foundations	Gradall	Forklifts	Diesel	1	74	4	0.8	0.00000	0.00000	0.28914
Phase 1a Mixed Use	Parcel 2 Foundations	Crane	Cranes	Diesel	1	215	4	0.5	0.00000	0.00000	0.53114
Phase 1a Mixed Use	Parcel 2 Foundations	Concrete Pump	Pumps	Diesel	1	450	8	0.15	0.00000	0.00000	1.70204
Phase 1a Mixed Use	Parcel 2 Core and Shell	Generator	Generator Sets	Diesel	0	25	6	1	0.00000	0.00000	0.00000
Phase 1a Mixed Use	Parcel 2 Core and Shell	Tire Wash	Other Construction Equipment	Diesel	1	100	4	0.9	0.00000	0.00000	0.36694
Phase 1a Mixed Use	Parcel 2 Core and Shell	Crane	Cranes	Diesel	1	600	8	0.2	0.00000	0.00000	0.47138
Phase 1a Mixed Use	Parcel 2 Core and Shell	Gradall	Forklifts	Diesel	1	74	4	0.8	0.00000	0.00000	0.11494
Phase 1a Mixed Use	Parcel 2 Core and Shell	Concrete Pump	Pumps	Diesel	0	450	6	0.225	0.00000	0.00000	0.00000
Phase 1a Mixed Use	Parcel 2 Core and Shell	Air Compressor	Air Compressors	Diesel	0	140	2	0.4	0.00000	0.00000	0.00000
Phase 1a Mixed Use	Parcel 2 Core and Shell	Boom Lift	Aerial Lifts	Diesel	0	50	6	0.2	0.00000	0.00000	0.00000
Phase 1a Mixed Use	Parcel 2 Tenant Improvements	Generator	Generator Sets	Diesel	0	25	6	0.85	0.00000	0.00000	0.00000
Phase 1a Mixed Use	Parcel 2 Tenant Improvements	Tire Wash	Other Construction Equipment	Diesel	1	100	4	0.9	0.00000	0.00000	0.00000
Phase 1a Mixed Use	Parcel 2 Tenant Improvements	Gradall	Forklifts	Diesel	1	74	4	0.8	0.00000	0.00000	0.00000
Phase 1a Mixed Use	Parcel 2 Landscaping	Excavator	Excavators	Diesel	1	25	8	0.9	0.00000	0.00000	0.00000
Phase 1a Mixed Use	Parcel 2 Landscaping	Generator	Generator Sets	Diesel	0	25	6	0.5	0.00000	0.00000	0.00000
Phase 1a Mixed Use	Parcel 2 Landscaping	Tire Wash	Other Construction Equipment	Diesel	1	100	4	0.9	0.00000	0.00000	0.00000

Phase 1a Mixed Use	Parcel 2 Landscaping	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	90	8	1	0.00000	0.00000	0.00000
Phase 1a Mixed Use	Parcel 2 Landscaping	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	70	8	0.8	0.00000	0.00000	0.00000
Phase 1a Mixed Use	Parcel 3 Foundations	Pile Rig	Bore/Drill Rigs	Diesel	0	600	8	0.4	0.00000	0.00000	0.00000
Phase 1a Mixed Use	Parcel 3 Foundations	Generator	Generator Sets	Diesel	0	25	6	1	0.00000	0.00000	0.00000
Phase 1a Mixed Use	Parcel 3 Foundations	Tire Wash	Other Construction Equipment	Diesel	1	100	4	0.9	0.00000	0.00000	0.91735
Phase 1a Mixed Use	Parcel 3 Foundations	Excavator	Excavators	Diesel	1	131	8	0.6	0.00000	0.00000	1.18000
Phase 1a Mixed Use	Parcel 3 Foundations	Backhoe	Tractors/Loaders/Backhoes	Diesel	2	90	8	0.6	0.00000	0.00000	1.93955
Phase 1a Mixed Use	Parcel 3 Foundations	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	70	8	0.8	0.00000	0.00000	1.00569
Phase 1a Mixed Use	Parcel 3 Foundations	Gradall	Forklifts	Diesel	1	74	4	0.8	0.00000	0.00000	0.28734
Phase 1a Mixed Use	Parcel 3 Foundations	Crane	Cranes	Diesel	1	215	4	0.5	0.00000	0.00000	0.52784
Phase 1a Mixed Use	Parcel 3 Foundations	Concrete Pump	Pumps	Diesel	1	450	8	0.15	0.00000	0.00000	1.69147
Phase 1a Mixed Use	Parcel 3 Core and Shell	Generator	Generator Sets	Diesel	0	25	6	1	0.00000	0.00000	0.00000
Phase 1a Mixed Use	Parcel 3 Core and Shell	Tire Wash	Other Construction Equipment	Diesel	1	100	4	0.9	0.00000	0.00000	0.00000
Phase 1a Mixed Use	Parcel 3 Core and Shell	Crane	Cranes	Diesel	1	600	8	0.2	0.00000	0.00000	0.00000
Phase 1a Mixed Use	Parcel 3 Core and Shell	Gradall	Forklifts	Diesel	2	74	4	0.8	0.00000	0.00000	0.00000
Phase 1a Mixed Use	Parcel 3 Core and Shell	Concrete Pump	Pumps	Diesel	0	450	6	0.225	0.00000	0.00000	0.00000
Phase 1a Mixed Use	Parcel 3 Core and Shell	Air Compressor	Air Compressors	Diesel	0	140	2	0.4	0.00000	0.00000	0.00000
Phase 1a Mixed Use	Parcel 3 Core and Shell	Boom Lift	Aerial Lifts	Diesel	0	50	6	0.2	0.00000	0.00000	0.00000
Phase 1a Mixed Use	Parcel 3 Tenant Improvements	Generator	Generator Sets	Diesel	0	25	6	0.85	0.00000	0.00000	0.00000
Phase 1a Mixed Use	Parcel 3 Tenant Improvements	Tire Wash	Other Construction Equipment	Diesel	1	100	4	0.9	0.00000	0.00000	0.00000
Phase 1a Mixed Use	Parcel 3 Tenant Improvements	Gradall	Forklifts	Diesel	1	74	4	0.8	0.00000	0.00000	0.00000
Phase 1a Mixed Use	Parcel 3 Landscaping	Excavator	Excavators	Diesel	1	25	8	0.9	0.00000	0.00000	0.00000
Phase 1a Mixed Use	Parcel 3 Landscaping	Generator	Generator Sets	Diesel	0	25	6	0.5	0.00000	0.00000	0.00000
Phase 1a Mixed Use	Parcel 3 Landscaping	Tire Wash	Other Construction Equipment	Diesel	0	100	4	0.9	0.00000	0.00000	0.00000
Phase 1a Mixed Use	Parcel 3 Landscaping	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	90	8	1	0.00000	0.00000	0.00000
Phase 1a Mixed Use	Parcel 3 Landscaping	Tire Wash	Other Construction Equipment	Diesel	0	100	4	0.9	0.00000	0.00000	0.00000
Phase 1a Mixed Use	Parcel 3 Landscaping	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	90	8	1	0.00000	0.00000	0.00000
Phase 1a Mixed Use	Parcel 3 Landscaping	Bob Cat	Tractors/Loaders/Backhoes	Diesel	2	70	8	0.8	0.00000	0.00000	0.00000
Phase 1b	Demolition	Excavator	Excavators	Diesel	4	131	8	0.9	0.00000	2.12399	0.00000
Phase 1b	Demolition	Generator	Generator Sets	Diesel	2	25	6	0.5	0.00000	0.25372	0.00000
Phase 1b	Demolition	Tire Wash	Other Construction Equipment	Diesel	2	100	4	0.9	0.00000	0.55041	0.00000
Phase 1b	Demolition	Concrete Crusher	Crushing/Proc. Equipment	Diesel	2	200	2	0	0.00000	0.00000	0.00000
Phase 1b	Demolition	Bob Cat	Tractors/Loaders/Backhoes	Diesel	6	150	8	0.8	0.00000	3.15740	0.00000
Phase 1b	Demolition	Pressure Washer	Pressure Washers	Diesel	2	25	8	1	0.00000	0.27429	0.00000
Phase 1b	Demolition	Air Compressor	Air Compressors	Diesel	1	140	6	0.7	0.00000	0.41814	0.00000
Phase 1b	Grading and Utilities	Blade	Graders	Diesel	2	359	8	0.15	0.00000	0.60746	0.60746
Phase 1b	Grading and Utilities	Scraper	Scrapers	Diesel	2	52	8	0.15	0.00000	0.14765	0.14765
Phase 1b	Grading and Utilities	Loader	Tractors/Loaders/Backhoes	Diesel	4	100	4	0.9	0.00000	1.31324	1.31324
Phase 1b	Grading and Utilities	Tire Wash	Other Construction Equipment	Diesel	2	100	4	0.9	0.00000	0.74535	0.74535
Phase 1b	Grading and Utilities	Excavator	Excavators	Diesel	4	359	8	0.6	0.00000	4.50412	4.50412
Phase 1b	Grading and Utilities	Backhoe	Tractors/Loaders/Backhoes	Diesel	4	350	8	0.6	0.00000	4.27565	4.27565
Phase 1b	Grading and Utilities	Gradall	Forklifts	Diesel	4	350	4	0.6	0.00000	1.15558	1.15558
Phase 1b	Grading and Utilities	Compactor	Other Construction Equipment	Diesel	4	250	0.5	0.2	0.00000	0.07222	0.07222
Phase 1b	Grading and Utilities	Paver	Pavers	Diesel	2	250	8	0.01	0.00000	0.02889	0.02889
Phase 1b	Grading and Utilities	Generator	Generator Sets	Diesel	1	600	2	0.1	0.00000	0.15270	0.15270
Phase 1b Office	South Garage 2023	Air Compressor	Air Compressors	Diesel	1	150	0.48	1	0.00000	0.00000	0.21547
Phase 1b Office	South Garage 2023	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	0.054653	1	0.00000	0.00000	0.03782
Phase 1b Office	South Garage 2023	Blade	Graders	Diesel	1	450	0	1	0.00000	0.00000	0.00000
Phase 1b Office	South Garage 2023	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	0.054653	1	0.00000	0.00000	0.02161

Phase 1b Office	South Garage 2023	Boom Lift	Aerial Lifts	Diesel	1	40	0	1	0.00000	0.00000	0.00000
Phase 1b Office	South Garage 2023	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0.00000	0.00000	0.00000
Phase 1b Office	South Garage 2023	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.00000	0.00000	0.00000
Phase 1b Office	South Garage 2023	Concrete Pump	Pumps	Diesel	1	450	0.451485	1	0.00000	0.00000	0.80345
Phase 1b Office	South Garage 2023	Excavator	Excavators	Diesel	1	500	2.970297	1	0.00000	0.00000	3.01594
Phase 1b Office	South Garage 2023	Generator	Generator Sets	Diesel	1	25	3.237624	1	0.00000	0.00000	0.57616
Phase 1b Office	South Garage 2023	Gradall	Forklifts	Diesel	1	350	3	1	0.00000	0.00000	1.12225
Phase 1b Office	South Garage 2023	Hydro/Crawler Crane	Cranes	Diesel	1	550	4.923267	1	0.00000	0.00000	4.19646
Phase 1b Office	South Garage 2023	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	1.485149	1	0.00000	0.00000	0.42091
Phase 1b Office	South Garage 2023	Paver	Pavers	Diesel	1	250	0	1	0.00000	0.00000	0.00000
Phase 1b Office	South Garage 2023	Pile Rig	Bore/Drill Rigs	Diesel	1	600	0.861386	1	0.00000	0.00000	1.38098
Phase 1b Office	South Garage 2023	Pressure Washer	Pressure Washers	Diesel	1	25	0.156832	1	0.00000	0.00000	0.01131
Phase 1b Office	South Garage 2023	Scraper	Scrapers	Diesel	1	600	0	1	0.00000	0.00000	0.00000
Phase 1b Office	South Garage 2023	Tire Wash	Other Construction Equipment	Diesel	1	100	1.44802	1	0.00000	0.00000	0.46584
Phase 1b Office	South Garage 2024	Air Compressor	Air Compressors	Diesel	1	150	0.48	1	0.00000	0.00000	0.00000
Phase 1b Office	South Garage 2024	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	0	1	0.00000	0.00000	0.00000
Phase 1b Office	South Garage 2024	Blade	Graders	Diesel	1	450	0	1	0.00000	0.00000	0.00000
Phase 1b Office	South Garage 2024	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	0	1	0.00000	0.00000	0.00000
Phase 1b Office	South Garage 2024	Boom Lift	Aerial Lifts	Diesel	1	40	4.737447	1	0.00000	0.00000	0.00000
Phase 1b Office	South Garage 2024	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0.00000	0.00000	0.00000
Phase 1b Office	South Garage 2024	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.00000	0.00000	0.00000
Phase 1b Office	South Garage 2024	Concrete Pump	Pumps	Diesel	1	450	0.6	1	0.00000	0.00000	0.00000
Phase 1b Office	South Garage 2024	Excavator	Excavators	Diesel	1	500	0	1	0.00000	0.00000	0.00000
Phase 1b Office	South Garage 2024	Generator	Generator Sets	Diesel	1	25	0	1	0.00000	0.00000	0.00000
Phase 1b Office	South Garage 2024	Gradall	Forklifts	Diesel	1	350	3	1	0.00000	0.00000	0.00000
Phase 1b Office	South Garage 2024	Hydro/Crawler Crane	Cranes	Diesel	1	550	3.68617	1	0.00000	0.00000	0.00000
Phase 1b Office	South Garage 2024	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	0	1	0.00000	0.00000	0.00000
Phase 1b Office	South Garage 2024	Paver	Pavers	Diesel	1	250	0	1	0.00000	0.00000	0.00000
Phase 1b Office	South Garage 2024	Pile Rig	Bore/Drill Rigs	Diesel	1	600	0	1	0.00000	0.00000	0.00000
Phase 1b Office	South Garage 2024	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0.00000	0.00000	0.00000
Phase 1b Office	South Garage 2024	Scraper	Scrapers	Diesel	1	600	0	1	0.00000	0.00000	0.00000
Phase 1b Office	South Garage 2024	Tire Wash	Other Construction Equipment	Diesel	1	100	1.5	1	0.00000	0.00000	0.00000
Phase 1b Office	Office Building 3 2023	Air Compressor	Air Compressors	Diesel	1	150	0.067119	1	0.00000	0.00000	0.02640
Phase 1b Office	Office Building 3 2023	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	2.576271	1	0.00000	0.00000	1.56226
Phase 1b Office	Office Building 3 2023	Blade	Graders	Diesel	1	450	0	1	0.00000	0.00000	0.00000
Phase 1b Office	Office Building 3 2023	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	2.576271	1	0.00000	0.00000	0.89272
Phase 1b Office	Office Building 3 2023	Boom Lift	Aerial Lifts	Diesel	1	40	1.694915	1	0.00000	0.00000	0.17715
Phase 1b Office	Office Building 3 2023	Compactor	Other Construction Equipment	Diesel	1	250	0.206102	1	0.00000	0.00000	0.10134
Phase 1b Office	Office Building 3 2023	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.00000	0.00000	0.00000
Phase 1b Office	Office Building 3 2023	Concrete Pump	Pumps	Diesel	1	450	0.121356	1	0.00000	0.00000	0.18923
Phase 1b Office	Office Building 3 2023	Excavator	Excavators	Diesel	1	500	0.128814	1	0.00000	0.00000	0.11461
Phase 1b Office	Office Building 3 2023	Generator	Generator Sets	Diesel	1	25	4.813559	1	0.00000	0.00000	0.75059
Phase 1b Office	Office Building 3 2023	Gradall	Forklifts	Diesel	1	350	0.48	1	0.00000	0.00000	0.15734
Phase 1b Office	Office Building 3 2023	Hydro/Crawler Crane	Cranes	Diesel	1	550	3.322034	1	0.00000	0.00000	2.48117
Phase 1b Office	Office Building 3 2023	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	1.864407	1	0.00000	0.00000	0.46300
Phase 1b Office	Office Building 3 2023	Paver	Pavers	Diesel	1	250	0	1	0.00000	0.00000	0.00000
Phase 1b Office	Office Building 3 2023	Pile Rig	Bore/Drill Rigs	Diesel	1	600	1.864407	1	0.00000	0.00000	2.61911

Phase 1b Office	Office Building 3 2023	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0.00000	0.00000	0.00000
Phase 1b Office	Office Building 3 2023	Scraper	Scrapers	Diesel	1	600	0	1	0.00000	0.00000	0.00000
Phase 1b Office	Office Building 3 2023	Tire Wash	Other Construction Equipment	Diesel	1	100	1.5	1	0.00000	0.00000	0.42284
Phase 1b Office	Office Building 3 2024	Air Compressor	Air Compressors	Diesel	1	150	0	1	0.00000	0.00000	0.00000
Phase 1b Office	Office Building 3 2024	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	0	1	0.00000	0.00000	0.00000
Phase 1b Office	Office Building 3 2024	Blade	Graders	Diesel	1	450	0	1	0.00000	0.00000	0.00000
Phase 1b Office	Office Building 3 2024	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	0	1	0.00000	0.00000	0.00000
Phase 1b Office	Office Building 3 2024	Boom Lift	Aerial Lifts	Diesel	1	40	6.858779	1	0.00000	0.00000	0.00000
Phase 1b Office	Office Building 3 2024	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0.00000	0.00000	0.00000
Phase 1b Office	Office Building 3 2024	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.00000	0.00000	0.00000
Phase 1b Office	Office Building 3 2024	Concrete Pump	Pumps	Diesel	1	450	0.005038	1	0.00000	0.00000	0.00000
Phase 1b Office	Office Building 3 2024	Excavator	Excavators	Diesel	1	500	0	1	0.00000	0.00000	0.00000
Phase 1b Office	Office Building 3 2024	Generator	Generator Sets	Diesel	1	25	0	1	0.00000	0.00000	0.00000
Phase 1b Office	Office Building 3 2024	Gradall	Forklifts	Diesel	1	350	0.48	1	0.00000	0.00000	0.00000
Phase 1b Office	Office Building 3 2024	Hydro/Crawler Crane	Cranes	Diesel	1	550	0	1	0.00000	0.00000	0.00000
Phase 1b Office	Office Building 3 2024	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	0	1	0.00000	0.00000	0.00000
Phase 1b Office	Office Building 3 2024	Paver	Pavers	Diesel	1	250	0	1	0.00000	0.00000	0.00000
Phase 1b Office	Office Building 3 2024	Pile Rig	Bore/Drill Rigs	Diesel	1	600	0	1	0.00000	0.00000	0.00000
Phase 1b Office	Office Building 3 2024	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0.00000	0.00000	0.00000
Phase 1b Office	Office Building 3 2024	Scraper	Scrapers	Diesel	1	600	0	1	0.00000	0.00000	0.00000
Phase 1b Office	Office Building 3 2024	Tire Wash	Other Construction Equipment	Diesel	1	100	1.5	1	0.00000	0.00000	0.00000
Phase 1b Office	Office Building 3 2025	Air Compressor	Air Compressors	Diesel	1	150	0	1	0.00000	0.00000	0.00000
Phase 1b Office	Office Building 3 2025	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	0	1	0.00000	0.00000	0.00000
Phase 1b Office	Office Building 3 2025	Blade	Graders	Diesel	1	450	0	1	0.00000	0.00000	0.00000
Phase 1b Office	Office Building 3 2025	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	0	1	0.00000	0.00000	0.00000
Phase 1b Office	Office Building 3 2025	Boom Lift	Aerial Lifts	Diesel	1	40	0	1	0.00000	0.00000	0.00000
Phase 1b Office	Office Building 3 2025	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0.00000	0.00000	0.00000
Phase 1b Office	Office Building 3 2025	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.00000	0.00000	0.00000
Phase 1b Office	Office Building 3 2025	Concrete Pump	Pumps	Diesel	1	450	0	1	0.00000	0.00000	0.00000
Phase 1b Office	Office Building 3 2025	Excavator	Excavators	Diesel	1	500	0	1	0.00000	0.00000	0.00000
Phase 1b Office	Office Building 3 2025	Generator	Generator Sets	Diesel	1	25	0	1	0.00000	0.00000	0.00000
Phase 1b Office	Office Building 3 2025	Gradall	Forklifts	Diesel	1	350	0.48	1	0.00000	0.00000	0.00000
Phase 1b Office	Office Building 3 2025	Hydro/Crawler Crane	Cranes	Diesel	1	550	0	1	0.00000	0.00000	0.00000
Phase 1b Office	Office Building 3 2025	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	0	1	0.00000	0.00000	0.00000
Phase 1b Office	Office Building 3 2025	Paver	Pavers	Diesel	1	250	0	1	0.00000	0.00000	0.00000
Phase 1b Office	Office Building 3 2025	Pile Rig	Bore/Drill Rigs	Diesel	1	600	0	1	0.00000	0.00000	0.00000
Phase 1b Office	Office Building 3 2025	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0.00000	0.00000	0.00000
Phase 1b Office	Office Building 3 2025	Scraper	Scrapers	Diesel	1	600	0	1	0.00000	0.00000	0.00000
Phase 1b Office	Office Building 3 2025	Tire Wash	Other Construction Equipment	Diesel	1	100	1.5	1	0.00000	0.00000	0.00000
Phase 1b Office	Office Building 1 2023	Air Compressor	Air Compressors	Diesel	1	150	0.065363	1	0.00000	0.00000	0.02600
Phase 1b Office	Office Building 1 2023	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	2.24581	1	0.00000	0.00000	1.37725
Phase 1b Office	Office Building 1 2023	Blade	Graders	Diesel	1	450	0	1	0.00000	0.00000	0.00000
Phase 1b Office	Office Building 1 2023	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	2.24581	1	0.00000	0.00000	0.78700
Phase 1b Office	Office Building 1 2023	Boom Lift	Aerial Lifts	Diesel	1	40	2.480447	1	0.00000	0.00000	0.26218
Phase 1b Office	Office Building 1 2023	Compactor	Other Construction Equipment	Diesel	1	250	0.179665	1	0.00000	0.00000	0.08934
Phase 1b Office	Office Building 1 2023	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.00000	0.00000	0.00000
Phase 1b Office	Office Building 1 2023	Concrete Pump	Pumps	Diesel	1	450	0.109274	1	0.00000	0.00000	0.17232

Phase 1b Office	Office Building 1 2023	Excavator	Excavators	Diesel	1	500	0.112291	1	0.00000	0.00000	0.10103
Phase 1b Office	Office Building 1 2023	Generator	Generator Sets	Diesel	1	25	4.424581	1	0.00000	0.00000	0.69773
Phase 1b Office	Office Building 1 2023	Gradall	Forklifts	Diesel	1	350	0.48	1	0.00000	0.00000	0.15911
Phase 1b Office	Office Building 1 2023	Hydro/Crawler Crane	Cranes	Diesel	1	550	2.916201	1	0.00000	0.00000	2.20267
Phase 1b Office	Office Building 1 2023	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	1.47486	1	0.00000	0.00000	0.37040
Phase 1b Office	Office Building 1 2023	Paver	Pavers	Diesel	1	250	0	1	0.00000	0.00000	0.00000
Phase 1b Office	Office Building 1 2023	Pile Rig	Bore/Drill Rigs	Diesel	1	600	1.47486	1	0.00000	0.00000	2.09528
Phase 1b Office	Office Building 1 2023	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0.00000	0.00000	0.00000
Phase 1b Office	Office Building 1 2023	Scraper	Scrapers	Diesel	1	600	0	1	0.00000	0.00000	0.00000
Phase 1b Office	Office Building 1 2023	Tire Wash	Other Construction Equipment	Diesel	1	100	1.5	1	0.00000	0.00000	0.42762
Phase 1b Office	Office Building 1 2024	Air Compressor	Air Compressors	Diesel	1	150	0	1	0.00000	0.00000	0.00000
Phase 1b Office	Office Building 1 2024	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	0	1	0.00000	0.00000	0.00000
Phase 1b Office	Office Building 1 2024	Blade	Graders	Diesel	1	450	0	1	0.00000	0.00000	0.00000
Phase 1b Office	Office Building 1 2024	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	0	1	0.00000	0.00000	0.00000
Phase 1b Office	Office Building 1 2024	Boom Lift	Aerial Lifts	Diesel	1	40	6.554217	1	0.00000	0.00000	0.00000
Phase 1b Office	Office Building 1 2024	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0.00000	0.00000	0.00000
Phase 1b Office	Office Building 1 2024	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.00000	0.00000	0.00000
Phase 1b Office	Office Building 1 2024	Concrete Pump	Pumps	Diesel	1	450	0.005301	1	0.00000	0.00000	0.00000
Phase 1b Office	Office Building 1 2024	Excavator	Excavators	Diesel	1	500	0	1	0.00000	0.00000	0.00000
Phase 1b Office	Office Building 1 2024	Generator	Generator Sets	Diesel	1	25	0	1	0.00000	0.00000	0.00000
Phase 1b Office	Office Building 1 2024	Gradall	Forklifts	Diesel	1	350	0.478072	1	0.00000	0.00000	0.00000
Phase 1b Office	Office Building 1 2024	Hydro/Crawler Crane	Cranes	Diesel	1	550	0	1	0.00000	0.00000	0.00000
Phase 1b Office	Office Building 1 2024	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	0	1	0.00000	0.00000	0.00000
Phase 1b Office	Office Building 1 2024	Paver	Pavers	Diesel	1	250	0	1	0.00000	0.00000	0.00000
Phase 1b Office	Office Building 1 2024	Pile Rig	Bore/Drill Rigs	Diesel	1	600	0	1	0.00000	0.00000	0.00000
Phase 1b Office	Office Building 1 2024	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0.00000	0.00000	0.00000
Phase 1b Office	Office Building 1 2024	Scraper	Scrapers	Diesel	1	600	0	1	0.00000	0.00000	0.00000
Phase 1b Office	Office Building 1 2024	Tire Wash	Other Construction Equipment	Diesel	1	100	1.5	1	0.00000	0.00000	0.00000
Phase 1b Office	Office Building 2 2023	Air Compressor	Air Compressors	Diesel	1	150	0.075669	1	0.00000	0.00000	0.02640
Phase 1b Office	Office Building 2 2023	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	2.484076	1	0.00000	0.00000	1.33614
Phase 1b Office	Office Building 2 2023	Blade	Graders	Diesel	1	450	0	1	0.00000	0.00000	0.00000
Phase 1b Office	Office Building 2 2023	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	2.484076	1	0.00000	0.00000	0.76351
Phase 1b Office	Office Building 2 2023	Boom Lift	Aerial Lifts	Diesel	1	40	1.22293	1	0.00000	0.00000	0.11337
Phase 1b Office	Office Building 2 2023	Compactor	Other Construction Equipment	Diesel	1	250	0.198726	1	0.00000	0.00000	0.08667
Phase 1b Office	Office Building 2 2023	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.00000	0.00000	0.00000
Phase 1b Office	Office Building 2 2023	Concrete Pump	Pumps	Diesel	1	450	0.124204	1	0.00000	0.00000	0.17179
Phase 1b Office	Office Building 2 2023	Excavator	Excavators	Diesel	1	500	0.124204	1	0.00000	0.00000	0.09802
Phase 1b Office	Office Building 2 2023	Generator	Generator Sets	Diesel	1	25	5.006369	1	0.00000	0.00000	0.69244
Phase 1b Office	Office Building 2 2023	Gradall	Forklifts	Diesel	1	350	0.48	1	0.00000	0.00000	0.13956
Phase 1b Office	Office Building 2 2023	Hydro/Crawler Crane	Cranes	Diesel	1	550	3.324841	1	0.00000	0.00000	2.20267
Phase 1b Office	Office Building 2 2023	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	1.681529	1	0.00000	0.00000	0.37040
Phase 1b Office	Office Building 2 2023	Paver	Pavers	Diesel	1	250	0	1	0.00000	0.00000	0.00000
Phase 1b Office	Office Building 2 2023	Pile Rig	Bore/Drill Rigs	Diesel	1	600	1.681529	1	0.00000	0.00000	2.09528
Phase 1b Office	Office Building 2 2023	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0.00000	0.00000	0.00000
Phase 1b Office	Office Building 2 2023	Scraper	Scrapers	Diesel	1	600	0	1	0.00000	0.00000	0.00000
Phase 1b Office	Office Building 2 2023	Tire Wash	Other Construction Equipment	Diesel	1	100	1.5	1	0.00000	0.00000	0.37506
Phase 1b Office	Office Building 2 2024	Air Compressor	Air Compressors	Diesel	1	150	0	1	0.00000	0.00000	0.00000

Phase 1b Office	Office Building 2 2024	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	0	1	0.00000	0.00000	0.00000
Phase 1b Office	Office Building 2 2024	Blade	Graders	Diesel	1	450	0	1	0.00000	0.00000	0.00000
Phase 1b Office	Office Building 2 2024	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	0	1	0.00000	0.00000	0.00000
Phase 1b Office	Office Building 2 2024	Boom Lift	Aerial Lifts	Diesel	1	40	7.270992	1	0.00000	0.00000	0.00000
Phase 1b Office	Office Building 2 2024	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0.00000	0.00000	0.00000
Phase 1b Office	Office Building 2 2024	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.00000	0.00000	0.00000
Phase 1b Office	Office Building 2 2024	Concrete Pump	Pumps	Diesel	1	450	0.005038	1	0.00000	0.00000	0.00000
Phase 1b Office	Office Building 2 2024	Excavator	Excavators	Diesel	1	500	0	1	0.00000	0.00000	0.00000
Phase 1b Office	Office Building 2 2024	Generator	Generator Sets	Diesel	1	25	0	1	0.00000	0.00000	0.00000
Phase 1b Office	Office Building 2 2024	Gradall	Forklifts	Diesel	1	350	0.48	1	0.00000	0.00000	0.00000
Phase 1b Office	Office Building 2 2024	Hydro/Crawler Crane	Cranes	Diesel	1	550	0	1	0.00000	0.00000	0.00000
Phase 1b Office	Office Building 2 2024	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	0	1	0.00000	0.00000	0.00000
Phase 1b Office	Office Building 2 2024	Paver	Pavers	Diesel	1	250	0	1	0.00000	0.00000	0.00000
Phase 1b Office	Office Building 2 2024	Pile Rig	Bore/Drill Rigs	Diesel	1	600	0	1	0.00000	0.00000	0.00000
Phase 1b Office	Office Building 2 2024	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0.00000	0.00000	0.00000
Phase 1b Office	Office Building 2 2024	Scraper	Scrapers	Diesel	1	600	0	1	0.00000	0.00000	0.00000
Phase 1b Office	Office Building 2 2024	Tire Wash	Other Construction Equipment	Diesel	1	100	1.5	1	0.00000	0.00000	0.00000
Phase 1b Office	Office Building 2 2025	Air Compressor	Air Compressors	Diesel	1	150	0	1	0.00000	0.00000	0.00000
Phase 1b Office	Office Building 2 2025	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	0	1	0.00000	0.00000	0.00000
Phase 1b Office	Office Building 2 2025	Blade	Graders	Diesel	1	450	0	1	0.00000	0.00000	0.00000
Phase 1b Office	Office Building 2 2025	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	0	1	0.00000	0.00000	0.00000
Phase 1b Office	Office Building 2 2025	Boom Lift	Aerial Lifts	Diesel	1	40	0	1	0.00000	0.00000	0.00000
Phase 1b Office	Office Building 2 2025	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0.00000	0.00000	0.00000
Phase 1b Office	Office Building 2 2025	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.00000	0.00000	0.00000
Phase 1b Office	Office Building 2 2025	Concrete Pump	Pumps	Diesel	1	450	0	1	0.00000	0.00000	0.00000
Phase 1b Office	Office Building 2 2025	Excavator	Excavators	Diesel	1	500	0	1	0.00000	0.00000	0.00000
Phase 1b Office	Office Building 2 2025	Generator	Generator Sets	Diesel	1	25	0	1	0.00000	0.00000	0.00000
Phase 1b Office	Office Building 2 2025	Gradall	Forklifts	Diesel	1	350	0.48	1	0.00000	0.00000	0.00000
Phase 1b Office	Office Building 2 2025	Hydro/Crawler Crane	Cranes	Diesel	1	550	0	1	0.00000	0.00000	0.00000
Phase 1b Office	Office Building 2 2025	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	0	1	0.00000	0.00000	0.00000
Phase 1b Office	Office Building 2 2025	Paver	Pavers	Diesel	1	250	0	1	0.00000	0.00000	0.00000
Phase 1b Office	Office Building 2 2025	Pile Rig	Bore/Drill Rigs	Diesel	1	600	0	1	0.00000	0.00000	0.00000
Phase 1b Office	Office Building 2 2025	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0.00000	0.00000	0.00000
Phase 1b Office	Office Building 2 2025	Scraper	Scrapers	Diesel	1	600	0	1	0.00000	0.00000	0.00000
Phase 1b Office	Office Building 2 2025	Tire Wash	Other Construction Equipment	Diesel	1	100	1.5	1	0.00000	0.00000	0.00000
Phase 1b Office	Office Building 5 2023	Air Compressor	Air Compressors	Diesel	1	150	0.058812	1	0.00000	0.00000	0.02640
Phase 1b Office	Office Building 5 2023	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	2.643564	1	0.00000	0.00000	1.82948
Phase 1b Office	Office Building 5 2023	Blade	Graders	Diesel	1	450	0	1	0.00000	0.00000	0.00000
Phase 1b Office	Office Building 5 2023	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	2.643564	1	0.00000	0.00000	1.04542
Phase 1b Office	Office Building 5 2023	Boom Lift	Aerial Lifts	Diesel	1	40	2.19802	1	0.00000	0.00000	0.26218
Phase 1b Office	Office Building 5 2023	Compactor	Other Construction Equipment	Diesel	1	250	0.211485	1	0.00000	0.00000	0.11867
Phase 1b Office	Office Building 5 2023	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.00000	0.00000	0.00000
Phase 1b Office	Office Building 5 2023	Concrete Pump	Pumps	Diesel	1	450	0.117327	1	0.00000	0.00000	0.20879
Phase 1b Office	Office Building 5 2023	Excavator	Excavators	Diesel	1	500	0.132178	1	0.00000	0.00000	0.13421
Phase 1b Office	Office Building 5 2023	Generator	Generator Sets	Diesel	1	25	4.60396	1	0.00000	0.00000	0.81930
Phase 1b Office	Office Building 5 2023	Gradall	Forklifts	Diesel	1	350	0.48	1	0.00000	0.00000	0.17956
Phase 1b Office	Office Building 5 2023	Hydro/Crawler Crane	Cranes	Diesel	1	550	3.267327	1	0.00000	0.00000	2.78498

Phase 1b Office	Office Building 5 2023	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	1.960396	1	0.00000	0.00000	0.55560
Phase 1b Office	Office Building 5 2023	Paver	Pavers	Diesel	1	250	0	1	0.00000	0.00000	0.00000
Phase 1b Office	Office Building 5 2023	Pile Rig	Bore/Drill Rigs	Diesel	1	600	1.960396	1	0.00000	0.00000	3.14293
Phase 1b Office	Office Building 5 2023	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0.00000	0.00000	0.00000
Phase 1b Office	Office Building 5 2023	Scraper	Scrapers	Diesel	1	600	0	1	0.00000	0.00000	0.00000
Phase 1b Office	Office Building 5 2023	Tire Wash	Other Construction Equipment	Diesel	1	100	1.5	1	0.00000	0.00000	0.48257
Phase 1b Office	Office Building 5 2024	Air Compressor	Air Compressors	Diesel	1	150	0	1	0.00000	0.00000	0.00000
Phase 1b Office	Office Building 5 2024	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	0	1	0.00000	0.00000	0.00000
Phase 1b Office	Office Building 5 2024	Blade	Graders	Diesel	1	450	0	1	0.00000	0.00000	0.00000
Phase 1b Office	Office Building 5 2024	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	0	1	0.00000	0.00000	0.00000
Phase 1b Office	Office Building 5 2024	Boom Lift	Aerial Lifts	Diesel	1	40	6.194656	1	0.00000	0.00000	0.00000
Phase 1b Office	Office Building 5 2024	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0.00000	0.00000	0.00000
Phase 1b Office	Office Building 5 2024	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.00000	0.00000	0.00000
Phase 1b Office	Office Building 5 2024	Concrete Pump	Pumps	Diesel	1	450	0.004809	1	0.00000	0.00000	0.00000
Phase 1b Office	Office Building 5 2024	Excavator	Excavators	Diesel	1	500	0	1	0.00000	0.00000	0.00000
Phase 1b Office	Office Building 5 2024	Generator	Generator Sets	Diesel	1	25	0	1	0.00000	0.00000	0.00000
Phase 1b Office	Office Building 5 2024	Gradall	Forklifts	Diesel	1	350	0.48	1	0.00000	0.00000	0.00000
Phase 1b Office	Office Building 5 2024	Hydro/Crawler Crane	Cranes	Diesel	1	550	0	1	0.00000	0.00000	0.00000
Phase 1b Office	Office Building 5 2024	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	0	1	0.00000	0.00000	0.00000
Phase 1b Office	Office Building 5 2024	Paver	Pavers	Diesel	1	250	0	1	0.00000	0.00000	0.00000
Phase 1b Office	Office Building 5 2024	Pile Rig	Bore/Drill Rigs	Diesel	1	600	0	1	0.00000	0.00000	0.00000
Phase 1b Office	Office Building 5 2024	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0.00000	0.00000	0.00000
Phase 1b Office	Office Building 5 2024	Scraper	Scrapers	Diesel	1	600	0	1	0.00000	0.00000	0.00000
Phase 1b Office	Office Building 5 2024	Tire Wash	Other Construction Equipment	Diesel	1	100	1.5	1	0.00000	0.00000	0.00000
Phase 1b Office	Office Building 5 2025	Air Compressor	Air Compressors	Diesel	1	150	0	1	0.00000	0.00000	0.00000
Phase 1b Office	Office Building 5 2025	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	0	1	0.00000	0.00000	0.00000
Phase 1b Office	Office Building 5 2025	Blade	Graders	Diesel	1	450	0	1	0.00000	0.00000	0.00000
Phase 1b Office	Office Building 5 2025	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	0	1	0.00000	0.00000	0.00000
Phase 1b Office	Office Building 5 2025	Boom Lift	Aerial Lifts	Diesel	1	40	0	1	0.00000	0.00000	0.00000
Phase 1b Office	Office Building 5 2025	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0.00000	0.00000	0.00000
Phase 1b Office	Office Building 5 2025	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.00000	0.00000	0.00000
Phase 1b Office	Office Building 5 2025	Concrete Pump	Pumps	Diesel	1	450	0	1	0.00000	0.00000	0.00000
Phase 1b Office	Office Building 5 2025	Excavator	Excavators	Diesel	1	500	0	1	0.00000	0.00000	0.00000
Phase 1b Office	Office Building 5 2025	Generator	Generator Sets	Diesel	1	25	0	1	0.00000	0.00000	0.00000
Phase 1b Office	Office Building 5 2025	Gradall	Forklifts	Diesel	1	350	0.48	1	0.00000	0.00000	0.00000
Phase 1b Office	Office Building 5 2025	Hydro/Crawler Crane	Cranes	Diesel	1	550	0	1	0.00000	0.00000	0.00000
Phase 1b Office	Office Building 5 2025	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	0	1	0.00000	0.00000	0.00000
Phase 1b Office	Office Building 5 2025	Paver	Pavers	Diesel	1	250	0	1	0.00000	0.00000	0.00000
Phase 1b Office	Office Building 5 2025	Pile Rig	Bore/Drill Rigs	Diesel	1	600	0	1	0.00000	0.00000	0.00000
Phase 1b Office	Office Building 5 2025	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0.00000	0.00000	0.00000
Phase 1b Office	Office Building 5 2025	Scraper	Scrapers	Diesel	1	600	0	1	0.00000	0.00000	0.00000
Phase 1b Office	Office Building 5 2025	Tire Wash	Other Construction Equipment	Diesel	1	100	1.5	1	0.00000	0.00000	0.00000
Phase 1b Office	Office Building 6 2023	Air Compressor	Air Compressors	Diesel	1	150	0.062206	1	0.00000	0.00000	0.01880
Phase 1b Office	Office Building 6 2023	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	3.926471	1	0.00000	0.00000	1.82948
Phase 1b Office	Office Building 6 2023	Blade	Graders	Diesel	1	450	0	1	0.00000	0.00000	0.00000
Phase 1b Office	Office Building 6 2023	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	3.926471	1	0.00000	0.00000	1.04542
Phase 1b Office	Office Building 6 2023	Boom Lift	Aerial Lifts	Diesel	1	40	0	1	0.00000	0.00000	0.00000

Phase 1b Office	Office Building 6 2023	Compactor	Other Construction Equipment	Diesel	1	250	0.314118	1	0.00000	0.00000	0.11867
Phase 1b Office	Office Building 6 2023	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.00000	0.00000	0.00000
Phase 1b Office	Office Building 6 2023	Concrete Pump	Pumps	Diesel	1	450	0.157941	1	0.00000	0.00000	0.18923
Phase 1b Office	Office Building 6 2023	Excavator	Excavators	Diesel	1	500	0.196324	1	0.00000	0.00000	0.13421
Phase 1b Office	Office Building 6 2023	Generator	Generator Sets	Diesel	1	25	6	1	0.00000	0.00000	0.71887
Phase 1b Office	Office Building 6 2023	Gradall	Forklifts	Diesel	1	350	0.48	1	0.00000	0.00000	0.12089
Phase 1b Office	Office Building 6 2023	Hydro/Crawler Crane	Cranes	Diesel	1	550	4.897059	1	0.00000	0.00000	2.81030
Phase 1b Office	Office Building 6 2023	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	3	1	0.00000	0.00000	0.57244
Phase 1b Office	Office Building 6 2023	Paver	Pavers	Diesel	1	250	0	1	0.00000	0.00000	0.00000
Phase 1b Office	Office Building 6 2023	Pile Rig	Bore/Drill Rigs	Diesel	1	600	3	1	0.00000	0.00000	3.23817
Phase 1b Office	Office Building 6 2023	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0.00000	0.00000	0.00000
Phase 1b Office	Office Building 6 2023	Scraper	Scrapers	Diesel	1	600	0	1	0.00000	0.00000	0.00000
Phase 1b Office	Office Building 6 2023	Tire Wash	Other Construction Equipment	Diesel	1	100	1.5	1	0.00000	0.00000	0.32490
Phase 1b Office	Office Building 6 2024	Air Compressor	Air Compressors	Diesel	1	150	0.013053	1	0.00000	0.00000	0.00000
Phase 1b Office	Office Building 6 2024	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	0	1	0.00000	0.00000	0.00000
Phase 1b Office	Office Building 6 2024	Blade	Graders	Diesel	1	450	0	1	0.00000	0.00000	0.00000
Phase 1b Office	Office Building 6 2024	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	0	1	0.00000	0.00000	0.00000
Phase 1b Office	Office Building 6 2024	Boom Lift	Aerial Lifts	Diesel	1	40	8.003817	1	0.00000	0.00000	0.00000
Phase 1b Office	Office Building 6 2024	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0.00000	0.00000	0.00000
Phase 1b Office	Office Building 6 2024	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.00000	0.00000	0.00000
Phase 1b Office	Office Building 6 2024	Concrete Pump	Pumps	Diesel	1	450	0.013969	1	0.00000	0.00000	0.00000
Phase 1b Office	Office Building 6 2024	Excavator	Excavators	Diesel	1	500	0	1	0.00000	0.00000	0.00000
Phase 1b Office	Office Building 6 2024	Generator	Generator Sets	Diesel	1	25	0.435115	1	0.00000	0.00000	0.00000
Phase 1b Office	Office Building 6 2024	Gradall	Forklifts	Diesel	1	350	0.48	1	0.00000	0.00000	0.00000
Phase 1b Office	Office Building 6 2024	Hydro/Crawler Crane	Cranes	Diesel	1	550	0	1	0.00000	0.00000	0.00000
Phase 1b Office	Office Building 6 2024	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	0	1	0.00000	0.00000	0.00000
Phase 1b Office	Office Building 6 2024	Paver	Pavers	Diesel	1	250	0	1	0.00000	0.00000	0.00000
Phase 1b Office	Office Building 6 2024	Pile Rig	Bore/Drill Rigs	Diesel	1	600	0	1	0.00000	0.00000	0.00000
Phase 1b Office	Office Building 6 2024	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0.00000	0.00000	0.00000
Phase 1b Office	Office Building 6 2024	Scraper	Scrapers	Diesel	1	600	0	1	0.00000	0.00000	0.00000
Phase 1b Office	Office Building 6 2024	Tire Wash	Other Construction Equipment	Diesel	1	100	1.5	1	0.00000	0.00000	0.00000
Phase 1b Office	Office Building 6 2025	Air Compressor	Air Compressors	Diesel	1	150	0	1	0.00000	0.00000	0.00000
Phase 1b Office	Office Building 6 2025	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	0	1	0.00000	0.00000	0.00000
Phase 1b Office	Office Building 6 2025	Blade	Graders	Diesel	1	450	0	1	0.00000	0.00000	0.00000
Phase 1b Office	Office Building 6 2025	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	0	1	0.00000	0.00000	0.00000
Phase 1b Office	Office Building 6 2025	Boom Lift	Aerial Lifts	Diesel	1	40	0	1	0.00000	0.00000	0.00000
Phase 1b Office	Office Building 6 2025	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0.00000	0.00000	0.00000
Phase 1b Office	Office Building 6 2025	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.00000	0.00000	0.00000
Phase 1b Office	Office Building 6 2025	Concrete Pump	Pumps	Diesel	1	450	0	1	0.00000	0.00000	0.00000
Phase 1b Office	Office Building 6 2025	Excavator	Excavators	Diesel	1	500	0	1	0.00000	0.00000	0.00000
Phase 1b Office	Office Building 6 2025	Generator	Generator Sets	Diesel	1	25	0	1	0.00000	0.00000	0.00000
Phase 1b Office	Office Building 6 2025	Gradall	Forklifts	Diesel	1	350	0.48	1	0.00000	0.00000	0.00000
Phase 1b Office	Office Building 6 2025	Hydro/Crawler Crane	Cranes	Diesel	1	550	0	1	0.00000	0.00000	0.00000
Phase 1b Office	Office Building 6 2025	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	0	1	0.00000	0.00000	0.00000
Phase 1b Office	Office Building 6 2025	Paver	Pavers	Diesel	1	250	0	1	0.00000	0.00000	0.00000
Phase 1b Office	Office Building 6 2025	Pile Rig	Bore/Drill Rigs	Diesel	1	600	0	1	0.00000	0.00000	0.00000
Phase 1b Office	Office Building 6 2025	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0.00000	0.00000	0.00000

Phase 1b Office	Office Building 6 2025	Scraper	Scrapers	Diesel	1	600	0	1	0.00000	0.00000	0.00000
Phase 1b Office	Office Building 6 2025	Tire Wash	Other Construction Equipment	Diesel	1	100	1.5	1	0.00000	0.00000	0.00000
Phase 1b Mixed Use	Parcel 7 Foundations	Pile Rig	Bore/Drill Rigs	Diesel	0	600	8	0.4	0.00000	0.00000	0.00000
Phase 1b Mixed Use	Parcel 7 Foundations	Generator	Generator Sets	Diesel	0	25	6	1	0.00000	0.00000	0.00000
Phase 1b Mixed Use	Parcel 7 Foundations	Tire Wash	Other Construction Equipment	Diesel	1	100	4	0.9	0.00000	0.00000	0.00000
Phase 1b Mixed Use	Parcel 7 Foundations	Excavator	Excavators	Diesel	1	131	8	0.6	0.00000	0.00000	0.00000
Phase 1b Mixed Use	Parcel 7 Foundations	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	90	8	0.6	0.00000	0.00000	0.00000
Phase 1b Mixed Use	Parcel 7 Foundations	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	70	8	0.8	0.00000	0.00000	0.00000
Phase 1b Mixed Use	Parcel 7 Foundations	Gradall	Forklifts	Diesel	1	74	4	0.8	0.00000	0.00000	0.00000
Phase 1b Mixed Use	Parcel 7 Foundations	Crane	Cranes	Diesel	1	215	4	0.5	0.00000	0.00000	0.00000
Phase 1b Mixed Use	Parcel 7 Foundations	Concrete Pump	Pumps	Diesel	1	450	0.25	0.5	0.00000	0.00000	0.00000
Phase 1b Mixed Use	Parcel 7 Core and Shell	Generator	Generator Sets	Diesel	0	25	6	1	0.00000	0.00000	0.00000
Phase 1b Mixed Use	Parcel 7 Core and Shell	Tire Wash	Other Construction Equipment	Diesel	1	100	4	0.9	0.00000	0.00000	0.00000
Phase 1b Mixed Use	Parcel 7 Core and Shell	Crane	Cranes	Diesel	1	600	8	0.2	0.00000	0.00000	0.00000
Phase 1b Mixed Use	Parcel 7 Core and Shell	Gradall	Forklifts	Diesel	1	74	4	0.8	0.00000	0.00000	0.00000
Phase 1b Mixed Use	Parcel 7 Core and Shell	Concrete Pump	Pumps	Diesel	0	450	6	0.225	0.00000	0.00000	0.00000
Phase 1b Mixed Use	Parcel 7 Core and Shell	Air Compressor	Air Compressors	Diesel	0	140	2	0.4	0.00000	0.00000	0.00000
Phase 1b Mixed Use	Parcel 7 Core and Shell	Boom Lift	Aerial Lifts	Diesel	0	50	6	0.2	0.00000	0.00000	0.00000
Phase 1b Mixed Use	Parcel 7 Tenant Improvements	Generator	Generator Sets	Diesel	0	25	6	0.85	0.00000	0.00000	0.00000
Phase 1b Mixed Use	Parcel 7 Tenant Improvements	Tire Wash	Other Construction Equipment	Diesel	1	100	4	0.9	0.00000	0.00000	0.00000
Phase 1b Mixed Use	Parcel 7 Tenant Improvements	Gradall	Forklifts	Diesel	1	74	4	0.8	0.00000	0.00000	0.00000
Phase 1b Mixed Use	Parcel 7 Landscaping	Excavator	Excavators	Diesel	1	25	8	0.9	0.00000	0.00000	0.00000
Phase 1b Mixed Use	Parcel 7 Landscaping	Generator	Generator Sets	Diesel	0	25	6	0.5	0.00000	0.00000	0.00000
Phase 1b Mixed Use	Parcel 7 Landscaping	Tire Wash	Other Construction Equipment	Diesel	1	100	4	0.9	0.00000	0.00000	0.00000
Phase 1b Mixed Use	Parcel 7 Landscaping	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	90	8	0.6	0.00000	0.00000	0.00000
Phase 1b Mixed Use	Parcel 7 Landscaping	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	70	8	0.8	0.00000	0.00000	0.00000
Phase 1b Mixed Use	Parcel 6 Foundations	Pile Rig	Bore/Drill Rigs	Diesel	0	600	8	0.4	0.00000	0.00000	0.00000
Phase 1b Mixed Use	Parcel 6 Foundations	Generator	Generator Sets	Diesel	0	25	6	1	0.00000	0.00000	0.00000
Phase 1b Mixed Use	Parcel 6 Foundations	Tire Wash	Other Construction Equipment	Diesel	1	100	4	0.9	0.00000	0.00000	0.00000
Phase 1b Mixed Use	Parcel 6 Foundations	Excavator	Excavators	Diesel	1	131	8	0.6	0.00000	0.00000	0.00000
Phase 1b Mixed Use	Parcel 6 Foundations	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	90	8	0.6	0.00000	0.00000	0.00000
Phase 1b Mixed Use	Parcel 6 Foundations	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	70	8	0.8	0.00000	0.00000	0.00000
Phase 1b Mixed Use	Parcel 6 Foundations	Gradall	Forklifts	Diesel	1	74	4	0.8	0.00000	0.00000	0.00000
Phase 1b Mixed Use	Parcel 6 Foundations	Crane	Cranes	Diesel	1	215	4	0.5	0.00000	0.00000	0.00000
Phase 1b Mixed Use	Parcel 6 Foundations	Concrete Pump	Pumps	Diesel	1	450	0.5	0.5	0.00000	0.00000	0.00000
Phase 1b Mixed Use	Parcel 6 Core and Shell	Generator	Generator Sets	Diesel	0	25	6	1	0.00000	0.00000	0.00000
Phase 1b Mixed Use	Parcel 6 Core and Shell	Tire Wash	Other Construction Equipment	Diesel	1	100	4	0.9	0.00000	0.00000	0.00000
Phase 1b Mixed Use	Parcel 6 Core and Shell	Crane	Cranes	Diesel	1	600	8	0.2	0.00000	0.00000	0.00000
Phase 1b Mixed Use	Parcel 6 Core and Shell	Gradall	Forklifts	Diesel	2	74	4	0.8	0.00000	0.00000	0.00000
Phase 1b Mixed Use	Parcel 6 Core and Shell	Concrete Pump	Pumps	Diesel	0	450	6	0.225	0.00000	0.00000	0.00000
Phase 1b Mixed Use	Parcel 6 Core and Shell	Air Compressor	Air Compressors	Diesel	0	140	2	0.4	0.00000	0.00000	0.00000
Phase 1b Mixed Use	Parcel 6 Core and Shell	Boom Lift	Aerial Lifts	Diesel	0	50	6	0.2	0.00000	0.00000	0.00000
Phase 1b Mixed Use	Parcel 6 Tenant Improvements	Generator	Generator Sets	Diesel	0	25	6	0.85	0.00000	0.00000	0.00000
Phase 1b Mixed Use	Parcel 6 Tenant Improvements	Tire Wash	Other Construction Equipment	Diesel	1	100	4	0.9	0.00000	0.00000	0.00000
Phase 1b Mixed Use	Parcel 6 Tenant Improvements	Gradall	Forklifts	Diesel	1	74	4	0.8	0.00000	0.00000	0.00000
Phase 1b Mixed Use	Parcel 6 Landscaping	Excavator	Excavators	Diesel	1	25	8	0.9	0.00000	0.00000	0.00000
Phase 1b Mixed Use	Parcel 6 Landscaping	Generator	Generator Sets	Diesel	0	25	6	0.5	0.00000	0.00000	0.00000

Phase 1b Mixed Use	Parcel 6 Landscaping	Tire Wash	Other Construction Equipment	Diesel	0	100	4	0.9	0.00000	0.00000	0.00000
Phase 1b Mixed Use	Parcel 6 Landscaping	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	90	8	0.6	0.00000	0.00000	0.00000
Phase 1b Mixed Use	Parcel 6 Landscaping	Bob Cat	Tractors/Loaders/Backhoes	Diesel	2	70	8	0.8	0.00000	0.00000	0.00000
Phase 2 Mixed Use	Grading and Utilities	Blade	Graders	Diesel	1	359	8	0.15	0.00000	0.00000	0.10280
Phase 2 Mixed Use	Grading and Utilities	Scraper	Scrapers	Diesel	1	52	8	0.15	0.00000	0.00000	0.02499
Phase 2 Mixed Use	Grading and Utilities	Loader	Tractors/Loaders/Backhoes	Diesel	2	100	4	0.9	0.00000	0.00000	0.22224
Phase 2 Mixed Use	Grading and Utilities	Tire Wash	Other Construction Equipment	Diesel	1	100	4	0.9	0.00000	0.00000	0.12614
Phase 2 Mixed Use	Grading and Utilities	Excavator	Excavators	Diesel	2	359	8	0.6	0.00000	0.00000	0.76224
Phase 2 Mixed Use	Grading and Utilities	Backhoe	Tractors/Loaders/Backhoes	Diesel	2	350	8	0.6	0.00000	0.00000	0.72357
Phase 2 Mixed Use	Grading and Utilities	Gradall	Forklifts	Diesel	2	350	4	0.6	0.00000	0.00000	0.19556
Phase 2 Mixed Use	Grading and Utilities	Compactor	Other Construction Equipment	Diesel	2	250	0.5	0.2	0.00000	0.00000	0.01222
Phase 2 Mixed Use	Grading and Utilities	Paver	Pavers	Diesel	1	250	8	0.01	0.00000	0.00000	0.00489
Phase 2 Mixed Use	Grading and Utilities	Generator	Generator Sets	Diesel	1	600	2	0.1	0.00000	0.00000	0.05168
Phase 2 Mixed Use	Tunnel Construction	Crane	Cranes	Diesel	1	290	6	0.35	0.00000	0.00000	0.81766
Phase 2 Mixed Use	Tunnel Construction	Excavator	Excavators	Diesel	2	170	6	0.45	0.00000	0.00000	1.88421
Phase 2 Mixed Use	Tunnel Construction	Loader	Tractors/Loaders/Backhoes	Diesel	1	250	6	0.45	0.00000	0.00000	1.15628
Phase 2 Mixed Use	Tunnel Construction	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	103	6	0.4	0.00000	0.00000	0.60695
Phase 2 Mixed Use	Tunnel Construction	Gradall	Forklifts	Diesel	1	130	6	0.35	0.00000	0.00000	0.29491
Phase 2 Mixed Use	Tunnel Construction	Compressor	Air Compressors	Diesel	2	50	6	0.3	0.00000	0.00000	0.57335
Phase 2 Mixed Use	Foundations	Pile Rig	Bore/Drill Rigs	Diesel	0	600	8	0.4	0.00000	0.00000	0.00000
Phase 2 Mixed Use	Foundations	Generator	Generator Sets	Diesel	2	25	6	1	0.00000	0.00000	0.00000
Phase 2 Mixed Use	Foundations	Tire Wash	Other Construction Equipment	Diesel	2	100	4	0.9	0.00000	0.00000	0.00000
Phase 2 Mixed Use	Foundations	Excavator	Excavators	Diesel	2	131	8	0.6	0.00000	0.00000	0.00000
Phase 2 Mixed Use	Foundations	Backhoe	Tractors/Loaders/Backhoes	Diesel	2	90	8	0.6	0.00000	0.00000	0.00000
Phase 2 Mixed Use	Foundations	Bob Cat	Tractors/Loaders/Backhoes	Diesel	2	70	8	0.8	0.00000	0.00000	0.00000
Phase 2 Mixed Use	Foundations	Gradall	Forklifts	Diesel	2	74	4	0.8	0.00000	0.00000	0.00000
Phase 2 Mixed Use	Foundations	Crane	Cranes	Diesel	2	215	4	0.5	0.00000	0.00000	0.00000
Phase 2 Mixed Use	Foundations	Concrete Pump	Pumps	Diesel	3	450	0.5	0.5	0.00000	0.00000	0.00000
Phase 2 Mixed Use	Core and Shell	Generator	Generator Sets	Diesel	2	25	6	1	0.00000	0.00000	0.00000
Phase 2 Mixed Use	Core and Shell	Tire Wash	Other Construction Equipment	Diesel	2	100	4	0.9	0.00000	0.00000	0.00000
Phase 2 Mixed Use	Core and Shell	Crane	Cranes	Diesel	2	600	8	0.2	0.00000	0.00000	0.00000
Phase 2 Mixed Use	Core and Shell	Gradall	Forklifts	Diesel	3	74	4	0.8	0.00000	0.00000	0.00000
Phase 2 Mixed Use	Core and Shell	Concrete Pump	Pumps	Diesel	0	450	6	0.45	0.00000	0.00000	0.00000
Phase 2 Mixed Use	Core and Shell	Air Compressor	Air Compressors	Diesel	0	140	2	0.8	0.00000	0.00000	0.00000
Phase 2 Mixed Use	Core and Shell	Boom Lift	Aerial Lifts	Diesel	0	50	6	0.4	0.00000	0.00000	0.00000
Phase 2 Mixed Use	Tenant Improvements	Generator	Generator Sets	Diesel	2	25	6	0.85	0.00000	0.00000	0.00000
Phase 2 Mixed Use	Tenant Improvements	Tire Wash	Other Construction Equipment	Diesel	2	100	4	0.9	0.00000	0.00000	0.00000
Phase 2 Mixed Use	Tenant Improvements	Gradall	Forklifts	Diesel	1	74	4	0.8	0.00000	0.00000	0.00000
Phase 2 Mixed Use	Landscaping	Excavator	Excavators	Diesel	1	25	8	0.9	0.00000	0.00000	0.00000
Phase 2 Mixed Use	Landscaping	Generator	Generator Sets	Diesel	0	25	6	0.5	0.00000	0.00000	0.00000
Phase 2 Mixed Use	Landscaping	Tire Wash	Other Construction Equipment	Diesel	1	100	4	0.9	0.00000	0.00000	0.00000
Phase 2 Mixed Use	Landscaping	Backhoe	Tractors/Loaders/Backhoes	Diesel	2	90	8	0.6	0.00000	0.00000	0.00000
Phase 2 Mixed Use	Landscaping	Bob Cat	Tractors/Loaders/Backhoes	Diesel	3	70	8	0.8	0.00000	0.00000	0.00000
Alternate 1	Demolition	Excavator	Excavators	Diesel	1	131	8	0.9	0.00000	0.00000	0.00000
Alternate 1	Demolition	Generator	Generator Sets	Diesel	1	25	6	0.5	0.00000	0.00000	0.00000
Alternate 1	Demolition	Tire Wash	Other Construction Equipment	Diesel	2	100	4	0.9	0.00000	0.00000	0.00000
Alternate 1	Demolition	Bob Cat	Tractors/Loaders/Backhoes	Diesel	2	70	8	0.8	0.00000	0.00000	0.00000

Alternate 1	Demolition	Pressure Washer	Pressure Washers	Diesel	2	25	8	1	0.00000	0.00000	0.00000
Alternate 1	Demolition	Air Compressor	Air Compressors	Diesel	1	140	6	0.7	0.00000	0.00000	0.00000
Alternate 1	Grading and Utilities	Loader	Tractors/Loaders/Backhoes	Diesel	2	100	4	0.9	0.00000	0.00000	0.00000
Alternate 1	Grading and Utilities	Tire Wash	Other Construction Equipment	Diesel	1	100	4	0.9	0.00000	0.00000	0.00000
Alternate 1	Grading and Utilities	Excavator	Excavators	Diesel	1	359	8	0.6	0.00000	0.00000	0.00000
Alternate 1	Grading and Utilities	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	90	8	0.6	0.00000	0.00000	0.00000
Alternate 1	Grading and Utilities	Gradall	Forklifts	Diesel	1	74	4	0.6	0.00000	0.00000	0.00000
Alternate 1	Grading and Utilities	Compactor	Other Construction Equipment	Diesel	1	250	0.5	0.2	0.00000	0.00000	0.00000
Alternate 1	Grading and Utilities	Paver	Pavers	Diesel	1	250	8	0.01	0.00000	0.00000	0.00000
Alternate 1	Grading and Utilities	Generator	Generator Sets	Diesel	1	600	2	0.1	0.00000	0.00000	0.00000
Alternate 1	Foundations	Generator	Generator Sets	Diesel	1	25	6	1	0.00000	0.00000	0.00000
Alternate 1	Foundations	Tire Wash	Other Construction Equipment	Diesel	1	100	4	0.9	0.00000	0.00000	0.00000
Alternate 1	Foundations	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	90	8	0.6	0.00000	0.00000	0.00000
Alternate 1	Foundations	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	70	8	0.8	0.00000	0.00000	0.00000
Alternate 1	Foundations	Gradall	Forklifts	Diesel	1	74	4	0.8	0.00000	0.00000	0.00000
Alternate 1	Foundations	Concrete Pump	Pumps	Diesel	1	450	6	0.3	0.00000	0.00000	0.00000
Alternate 1	Core and Shell	Generator	Generator Sets	Diesel	1	25	6	1	0.00000	0.00000	0.00000
Alternate 1	Core and Shell	Tire Wash	Other Construction Equipment	Diesel	1	100	4	0.9	0.00000	0.00000	0.00000
Alternate 1	Core and Shell	Gradall	Forklifts	Diesel	1	74	4	0.8	0.00000	0.00000	0.00000
Alternate 1	Core and Shell	Concrete Pump	Pumps	Diesel	1	450	6	0.45	0.00000	0.00000	0.00000
Alternate 1	Tenant Improvements	Generator	Generator Sets	Diesel	1	25	6	0.85	0.00000	0.00000	0.00000
Alternate 1	Tenant Improvements	Tire Wash	Other Construction Equipment	Diesel	2	100	4	0.9	0.00000	0.00000	0.00000
Alternate 1	Tenant Improvements	Gradall	Forklifts	Diesel	1	74	4	0.8	0.00000	0.00000	0.00000

s (lb/yr)			Emission Rate (g/s)					
2024	2025	2026	2021	2022	2023	2024	2025	2026
0.00000	0.00000	0.00000	0.00002	0.00012	0.00000	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00001	0.00000	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00003	0.00000	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	0.00003	0.00017	0.00000	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00002	0.00000	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00002	0.00000	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00004	0.00000	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00001	0.00000	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00009	0.00000	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00005	0.00000	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00031	0.00000	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00030	0.00000	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00008	0.00000	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00001	0.00000	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00008	0.00000	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00001	0.00000	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00001	0.00000	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00002	0.00000	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00001	0.00000	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00004	0.00000	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00000	0.00001	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00000	0.00001	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00000	0.00004	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00000	0.00002	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00000	0.00001	0.00000	0.00000	0.00000

Before on-site residents	
% UNMIT	5%
% MIT	95%
After on-site residents	
% UNMIT	2%
% MIT	98%

0.00000	0.00000	0.00000	0.00000	0.00000	0.00005	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00000	0.00017	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00000	0.00002	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00000	0.00003	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00000	0.00002	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00000	0.00003	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00000	0.00001	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00000	0.00002	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00000	0.00001	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00000	0.00006	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00000	0.00001	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00000	0.00004	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00000	0.00002	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
0.17183	0.00000	0.00000	0.00000	0.00000	0.00000	0.00001	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
0.18400	0.00000	0.00000	0.00000	0.00000	0.00000	0.00001	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
0.49451	0.00000	0.00000	0.00000	0.00000	0.00000	0.00002	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00003	0.00000	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

0.00000	0.00000	0.00000	0.00000	0.00002	0.00000	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00016	0.00000	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00001	0.00000	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00002	0.00000	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00001	0.00000	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00001	0.00000	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00003	0.00000	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00000	0.00001	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00000	0.00009	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00000	0.00005	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00000	0.00002	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00000	0.00023	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00000	0.00005	0.00000	0.00000	0.00000
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0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00000	0.00013	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
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0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
2.98669	0.00000	0.00000	0.00000	0.00000	0.00000	0.00009	0.00000	0.00000
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0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
4.97789	0.00000	0.00000	0.00000	0.00000	0.00000	0.00016	0.00000	0.00000
0.55700	0.00000	0.00000	0.00000	0.00000	0.00000	0.00002	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
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0.00000	0.90384	0.00000	0.00000	0.00000	0.00000	0.00000	0.00003	0.00000
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0.00000	4.55121	0.00000	0.00000	0.00000	0.00000	0.00000	0.00014	0.00000
0.00000	0.67852	0.00000	0.00000	0.00000	0.00000	0.00000	0.00002	0.00000
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0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
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0.00000	0.00000	0.80002	0.00000	0.00000	0.00000	0.00000	0.00000	0.00003
0.00000	0.00000	0.91145	0.00000	0.00000	0.00000	0.00000	0.00000	0.00003
0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
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0.00000	0.00000	0.00000	0.00000	0.00001	0.00000	0.00000	0.00000	0.00000
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0.00000	0.00000	0.00000	0.00000	0.00008	0.00000	0.00000	0.00000	0.00000
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0.00000	0.00000	0.00000	0.00000	0.00001	0.00000	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00002	0.00000	0.00000	0.00000	0.00000
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0.00000	0.00000	0.00000	0.00000	0.00011	0.00000	0.00000	0.00000	0.00000
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0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00001	0.00000	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00000	0.00004	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
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0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00000	0.00016	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00000	0.00011	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00000	0.00008	0.00000	0.00000	0.00000
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0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
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0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00000	0.00002	0.00000	0.00000	0.00000
1.16669	0.00000	0.00000	0.00000	0.00000	0.00000	0.00004	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
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0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
2.16119	0.00000	0.00000	0.00000	0.00000	0.00000	0.00007	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
4.62510	0.00000	0.00000	0.00000	0.00000	0.00000	0.00015	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
3.88897	0.00000	0.00000	0.00000	0.00000	0.00000	0.00012	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
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0.00375	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
0.41806	0.00000	0.00000	0.00000	0.00000	0.00000	0.00001	0.00000	0.00000

0.00000	0.21296	0.00000	0.00000	0.00000	0.00000	0.00000	0.00001	0.00000
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0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
0.00000	1.14193	0.00000	0.00000	0.00000	0.00000	0.00000	0.00004	0.00000
0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
0.00000	0.90916	0.00000	0.00000	0.00000	0.00000	0.00000	0.00003	0.00000
0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
0.00000	2.75562	0.00000	0.00000	0.00000	0.00000	0.00000	0.00009	0.00000
0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
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0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
0.00000	0.00057	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
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0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00000	0.00004	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00000	0.00001	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
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0.00000	0.00000	0.00000	0.00000	0.00000	0.00045	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00000	0.00004	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00000	0.00008	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
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0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00000	0.00004	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
0.51096	0.00000	0.00000	0.00000	0.00000	0.00000	0.00002	0.00000	0.00000
0.28963	0.00000	0.00000	0.00000	0.00000	0.00000	0.00001	0.00000	0.00000
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0.04704	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
5.24773	0.00000	0.00000	0.00000	0.00000	0.00000	0.00016	0.00000	0.00000
0.12686	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
2.55561	0.00000	0.00000	0.00000	0.00000	0.00000	0.00008	0.00000	0.00000

1.14032	0.00000	0.00000	0.00000	0.00000	0.00000	0.00004	0.00000	0.00000
1.46476	0.00000	0.00000	0.00000	0.00000	0.00000	0.00005	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
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0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
0.41568	0.00000	0.00000	0.00000	0.00000	0.00000	0.00001	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
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0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
0.00000	2.93340	0.00000	0.00000	0.00000	0.00000	0.00000	0.00009	0.00000
0.00000	0.06684	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
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0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00000	0.00003	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00000	0.00004	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00000	0.00003	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00000	0.00003	0.00000	0.00000	0.00000
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0.00000	0.00000	0.00000	0.00000	0.00000	0.00005	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
0.66508	0.00000	0.00000	0.00000	0.00000	0.00001	0.00002	0.00000	0.00000
0.85437	0.00000	0.00000	0.00000	0.00000	0.0000148	0.00003	0.00000	0.00000
0.20832	0.00000	0.00000	0.00000	0.00000	0.00000	0.00001	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
0.84282	0.44385	0.00000	0.00000	0.00000	0.00000	0.00003	0.00001	0.00000
0.26399	0.13903	0.00000	0.00000	0.00000	0.00000	0.00001	0.00000	0.00000
0.00000	0.11958	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
0.00000	0.22971	0.00000	0.00000	0.00000	0.00000	0.00000	0.00001	0.00000

0.00000	0.40473	0.00000	0.00000	0.00000	0.00000	0.00000	0.00001	0.00000
0.00000	0.25183	0.00000	0.00000	0.00000	0.00000	0.00000	0.00001	0.00000
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0.00573	0.00000	0.00000	0.00000	0.00000	0.00003	0.00000	0.00000	0.00000
0.00737	0.00000	0.00000	0.00000	0.00000	0.00004	0.00000	0.00000	0.00000
0.01212	0.00000	0.00000	0.00000	0.00000	0.00006	0.00000	0.00000	0.00000
0.00629	0.00000	0.00000	0.00000	0.00000	0.00003	0.00000	0.00000	0.00000
0.00180	0.00000	0.00000	0.00000	0.00000	0.00001	0.00000	0.00000	0.00000
0.00330	0.00000	0.00000	0.00000	0.00000	0.0000166	0.00000	0.00000	0.00000
0.01057	0.00000	0.00000	0.00000	0.00000	0.00005	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
1.03202	0.00000	0.00000	0.00000	0.00000	0.00000	0.00003	0.00000	0.00000
1.32574	0.00000	0.00000	0.00000	0.00000	0.0000000	0.00004	0.00000	0.00000
0.64652	0.00000	0.00000	0.00000	0.00000	0.00000	0.00002	0.00000	0.00000
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0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
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0.47014	0.69303	0.00000	0.00000	0.00000	0.00000	0.00001	0.00002	0.00000
0.14726	0.21708	0.00000	0.00000	0.00000	0.00000	0.00000	0.00001	0.00000
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0.00000	0.49513	0.00000	0.00000	0.00000	0.00000	0.00000	0.00002	0.00000
0.00000	0.00000	0.00000	0.00000	0.00007	0.00000	0.00000	0.00000	0.00000
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0.00000	0.00000	0.00000	0.00000	0.00002	0.00000	0.00000	0.00000	0.00000
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0.00000	0.00000	0.00000	0.00000	0.00010	0.00000	0.00000	0.00000	0.00000
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0.00000	0.00000	0.00000	0.00000	0.00002	0.00002	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00004	0.00004	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00002	0.00002	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00014	0.00014	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00013	0.00013	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00004	0.00004	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
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0.00000	0.00000	0.00000	0.00000	0.00000	0.00003	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00000	0.00009	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00000	0.00002	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00000	0.00004	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00000	0.00013	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00000	0.00001	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00000	0.00004	0.00000	0.00000	0.00000
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0.20054	0.00000	0.00000	0.00000	0.00000	0.00000	0.00001	0.00000	0.00000
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0.52591	0.00000	0.00000	0.00000	0.00000	0.00000	0.00002	0.00000	0.00000
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0.99374	0.00000	0.00000	0.00000	0.00000	0.00000	0.00003	0.00000	0.00000
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1.04447	0.00000	0.00000	0.00000	0.00000	0.00000	0.00003	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
1.04447	0.00000	0.00000	0.00000	0.00000	0.00000	0.00003	0.00000	0.00000
2.92423	0.00000	0.00000	0.00000	0.00000	0.00000	0.00009	0.00000	0.00000
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0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
0.44912	0.00000	0.00000	0.00000	0.00000	0.00000	0.00001	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
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0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
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0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00000	0.00002	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00000	0.00008	0.00000	0.00000	0.00000
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0.00000	0.00000	0.00000	0.00000	0.00000	0.00008	0.00000	0.00000	0.00000

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0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
1.06111	0.00000	0.00000	0.00000	0.00000	0.00000	0.00003	0.00000	0.00000
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0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
0.01163	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
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0.23289	0.00000	0.00000	0.00000	0.00000	0.00000	0.00001	0.00000	0.00000
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0.62590	0.00000	0.00000	0.00000	0.00000	0.00000	0.00002	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
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0.00000	0.10058	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00000	0.00004	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
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0.00000	0.00000	0.00000	0.00000	0.00000	0.00002	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
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0.96368	0.00000	0.00000	0.00000	0.00000	0.00000	0.00003	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
0.01163	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
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0.22045	0.00000	0.00000	0.00000	0.00000	0.00000	0.00001	0.00000	0.00000
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0.59485	0.00000	0.00000	0.00000	0.00000	0.00000	0.00002	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
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0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
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0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00000	0.00007	0.00000	0.00000	0.00000
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0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
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0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00000	0.00001	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
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0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
1.12488	0.00000	0.00000	0.00000	0.00000	0.00000	0.00004	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
0.01163	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
0.23289	0.00000	0.00000	0.00000	0.00000	0.00000	0.00001	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
0.62590	0.00000	0.00000	0.00000	0.00000	0.00000	0.00002	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
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0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
0.00000	0.00498	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
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0.00000	0.01136	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00000	0.00006	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00000	0.00003	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00000	0.00001	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00000	0.00001	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00000	0.00003	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00000	0.00001	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00000	0.00009	0.00000	0.00000	0.00000

0.00000	0.00000	0.00000	0.00000	0.00000	0.00002	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00000	0.00010	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00000	0.00002	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
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0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
0.95836	0.00000	0.00000	0.00000	0.00000	0.00000	0.00003	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
0.01110	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
0.23289	0.00000	0.00000	0.00000	0.00000	0.00000	0.00001	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
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0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
0.62590	0.00000	0.00000	0.00000	0.00000	0.00000	0.00002	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
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0.00000	0.04053	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
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0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00000	0.00006	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00000	0.00003	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

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0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00000	0.00002	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00000	0.00009	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00000	0.00002	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
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0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00000	0.00001	0.00000	0.00000	0.00000
0.00760	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
1.23826	0.00000	0.00000	0.00000	0.00000	0.00000	0.00004	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
0.03224	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
0.10043	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
0.23289	0.00000	0.00000	0.00000	0.00000	0.00000	0.00001	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
0.62590	0.00000	0.00000	0.00000	0.00000	0.00000	0.00002	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
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0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
0.00000	0.08676	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
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0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
0.00000	0.19792	0.00000	0.00000	0.00000	0.00000	0.00000	0.00001	0.00000
0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
0.66508	0.00000	0.00000	0.00000	0.00000	0.00000	0.00002	0.00000	0.00000
0.85550	0.00000	0.00000	0.00000	0.00000	0.00000	0.00003	0.00000	0.00000
0.70309	0.00000	0.00000	0.00000	0.00000	0.00000	0.00002	0.00000	0.00000
0.72913	0.00000	0.00000	0.00000	0.00000	0.00000	0.00002	0.00000	0.00000
0.20832	0.00000	0.00000	0.00000	0.00000	0.00000	0.00001	0.00000	0.00000
0.38269	0.00000	0.00000	0.00000	0.00000	0.00000	0.00001	0.00000	0.00000
0.12774	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
0.73962	0.00000	0.00000	0.00000	0.00000	0.00000	0.00002	0.00000	0.00000
0.95012	0.00000	0.00000	0.00000	0.00000	0.00000	0.00003	0.00000	0.00000
0.23167	0.00000	0.00000	0.00000	0.00000	0.00000	0.00001	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
0.09747	0.66577	0.00000	0.00000	0.00000	0.00000	0.00000	0.00002	0.00000
0.03053	0.20854	0.00000	0.00000	0.00000	0.00000	0.00000	0.00001	0.00000
0.00000	0.11755	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
0.00000	0.22582	0.00000	0.00000	0.00000	0.00000	0.00000	0.00001	0.00000
0.00000	0.23872	0.00000	0.00000	0.00000	0.00000	0.00000	0.00001	0.00000
0.00000	0.24756	0.00000	0.00000	0.00000	0.00000	0.00000	0.00001	0.00000
0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
0.66508	0.00000	0.00000	0.00000	0.00000	0.00000	0.00002	0.00000	0.00000
0.85550	0.00000	0.00000	0.00000	0.00000	0.00000	0.00003	0.00000	0.00000
0.70309	0.00000	0.00000	0.00000	0.00000	0.00000	0.00002	0.00000	0.00000
0.72913	0.00000	0.00000	0.00000	0.00000	0.00000	0.00002	0.00000	0.00000
0.20832	0.00000	0.00000	0.00000	0.00000	0.00000	0.00001	0.00000	0.00000
0.38269	0.00000	0.00000	0.00000	0.00000	0.00000	0.00001	0.00000	0.00000
0.25548	0.00000	0.00000	0.00000	0.00000	0.00000	0.00001	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
0.46441	0.18688	0.00000	0.00000	0.00000	0.00000	0.00001	0.00001	0.00000
0.59658	0.28283	0.00000	0.00000	0.00000	0.00000	0.00002	0.00001	0.00000
0.29093	0.11707	0.00000	0.00000	0.00000	0.00000	0.00001	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
0.00000	0.72807	0.00000	0.00000	0.00000	0.00000	0.00000	0.00002	0.00000
0.00000	0.22805	0.00000	0.00000	0.00000	0.00000	0.00000	0.00001	0.00000
0.00000	0.05472	0.06485	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
0.00000	0.11113	0.13171	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
0.00000	0.23049	0.27317	0.00000	0.00000	0.00000	0.00000	0.00001	0.00001
0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00000	0.00001	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00000	0.00002	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00000	0.00002	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00000	0.00001	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
0.40649	0.00000	0.00000	0.00000	0.00000	0.00003	0.00001	0.00000	0.00000
0.93672	0.00000	0.00000	0.00000	0.00000	0.00006	0.00003	0.00000	0.00000
0.57483	0.00000	0.00000	0.00000	0.00000	0.00004	0.00002	0.00000	0.00000
0.30174	0.00000	0.00000	0.00000	0.00000	0.00002	0.00001	0.00000	0.00000
0.14661	0.00000	0.00000	0.00000	0.00000	0.00001	0.00000	0.00000	0.00000
0.28503	0.00000	0.00000	0.00000	0.00000	0.00002	0.00001	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
0.25372	0.65121	0.00000	0.00000	0.00000	0.00000	0.00001	0.00002	0.00000
0.27521	0.77090	0.00000	0.00000	0.00000	0.00000	0.00001	0.00002	0.00000
0.35400	1.08475	0.00000	0.00000	0.00000	0.00000	0.00001	0.00003	0.00000
0.29093	0.81495	0.00000	0.00000	0.00000	0.00000	0.00001	0.00003	0.00000
0.30171	0.84513	0.00000	0.00000	0.00000	0.00000	0.00001	0.00003	0.00000
0.08620	0.24147	0.00000	0.00000	0.00000	0.00000	0.00000	0.00001	0.00000
0.15835	0.52256	0.00000	0.00000	0.00000	0.00000	0.00000	0.00002	0.00000
0.15857	0.52330	0.00000	0.00000	0.00000	0.00000	0.00000	0.00002	0.00000
0.00000	0.91433	0.00000	0.00000	0.00000	0.00000	0.00000	0.00003	0.00000
0.00000	1.08237	0.00000	0.00000	0.00000	0.00000	0.00000	0.00003	0.00000
0.00000	1.63803	0.00000	0.00000	0.00000	0.00000	0.00000	0.00005	0.00000
0.00000	0.50854	0.00000	0.00000	0.00000	0.00000	0.00000	0.00002	0.00000
0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
0.00000	0.13978	0.97287	0.00000	0.00000	0.00000	0.00000	0.00000	0.00003
0.00000	0.19467	1.35491	0.00000	0.00000	0.00000	0.00000	0.00001	0.00004
0.00000	0.03049	0.21220	0.00000	0.00000	0.00000	0.00000	0.00000	0.00001
0.00000	0.00000	0.11958	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
0.00000	0.00000	0.22971	0.00000	0.00000	0.00000	0.00000	0.00000	0.00001
0.00000	0.00000	0.48568	0.00000	0.00000	0.00000	0.00000	0.00000	0.00002
0.00000	0.00000	0.75550	0.00000	0.00000	0.00000	0.00000	0.00000	0.00002
0.24337	0.00000	0.00000	0.00000	0.00000	0.00000	0.00001	0.00000	0.00000
0.05814	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
0.25227	0.00000	0.00000	0.00000	0.00000	0.00000	0.00001	0.00000	0.00000
0.27657	0.00000	0.00000	0.00000	0.00000	0.00000	0.00001	0.00000	0.00000

0.12572	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
0.19165	0.00000	0.00000	0.00000	0.00000	0.00000	0.00001	0.00000	0.00000
0.01010	0.15092	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
0.00573	0.08566	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
0.01732	0.30489	0.00000	0.00000	0.00000	0.00000	0.00000	0.00001	0.00000
0.00606	0.09055	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
0.00135	0.02012	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
0.00028	0.00489	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
0.00022	0.00391	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
0.00235	0.04135	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
0.00000	0.07236	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
0.00000	0.08566	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
0.00000	0.09055	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
0.00000	0.09390	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
0.00000	0.02683	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
0.00000	0.27909	0.00000	0.00000	0.00000	0.00000	0.00000	0.00001	0.00000
0.00000	0.14143	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
0.00000	0.16742	0.00000	0.00000	0.00000	0.00000	0.00000	0.00001	0.00000
0.00000	0.05244	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
0.00000	0.81825	0.00000	0.00000	0.00000	0.00000	0.00000	0.00003	0.00000
0.00000	0.09226	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
0.00000	0.25697	0.00000	0.00000	0.00000	0.00000	0.00000	0.00001	0.00000
0.00000	0.04024	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

Equipment Information											Daily Emissions (lb/day)	
PHASE	SUBPHASE	EQUIPMENT	CALEEMOD_EQUIPMENT	FUEL	NUMBER	HP	DAILYHRS	UTILIZATION	LF	EF		2021
Phase 1a	Demolition	Excavator	Excavators	Diesel	4	131	8	0.9	0.38	0.128	0.404570189	13
Phase 1a	Demolition	Generator	Generator Sets	Diesel	2	25	6	0.5	0.74	0.28	0.068520029	13
Phase 1a	Demolition	Tire Wash	Other Construction Equipment	Diesel	2	100	4	0.9	0.42	0.192	0.128002822	13
Phase 1a	Demolition	Concrete Crusher	Crushing/Proc. Equipment	Diesel	2	200	2	0	0.78	0.088	0	13
Phase 1a	Demolition	Bob Cat	Tractors/Loaders/Backhoes	Diesel	6	150	8	0.8	0.37	0.128	0.601410084	13
Phase 1a	Demolition	Pressure Washer	Pressure Washers	Diesel	2	25	8	1	0.3	0.28	0.074075707	13
Phase 1a	Demolition	Air Compressor	Air Compressors	Diesel	1	140	6	0.7	0.48	0.128	0.0796462	13
Phase 1a	Grading and Utilities	Blade	Graders	Diesel	2	359	8	0.15	0.41	0.088	0.068534421	0
Phase 1a	Grading and Utilities	Scraper	Scrapers	Diesel	2	52	8	0.15	0.48	0.192	0.025356749	0
Phase 1a	Grading and Utilities	Loader	Tractors/Loaders/Backhoes	Diesel	4	100	4	0.9	0.37	0.192	0.225528781	0
Phase 1a	Grading and Utilities	Tire Wash	Other Construction Equipment	Diesel	2	100	4	0.9	0.42	0.192	0.128002822	0
Phase 1a	Grading and Utilities	Excavator	Excavators	Diesel	4	359	8	0.6	0.38	0.088	0.508157658	0
Phase 1a	Grading and Utilities	Backhoe	Tractors/Loaders/Backhoes	Diesel	4	350	8	0.6	0.37	0.088	0.482381005	0
Phase 1a	Grading and Utilities	Gradall	Forklifts	Diesel	4	350	4	0.6	0.2	0.088	0.130373245	0
Phase 1a	Grading and Utilities	Compactor	Other Construction Equipment	Diesel	4	250	0.5	0.2	0.42	0.088	0.008148328	0
Phase 1a	Grading and Utilities	Paver	Pavers	Diesel	2	250	8	0.01	0.42	0.088	0.003259331	0
Phase 1a	Grading and Utilities	Generator	Generator Sets	Diesel	1	600	2	0.1	0.74	0.088	0.017227893	0
Phase 1a Office	North Garage 2022	Air Compressor	Air Compressors	Diesel	1	150	0.47	1	0.48	0.128	0.009520391	0
Phase 1a Office	North Garage 2022	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	0	1	0.37	0.088	0	0
Phase 1a Office	North Garage 2022	Blade	Graders	Diesel	1	450	0	1	0.41	0.088	0	0
Phase 1a Office	North Garage 2022	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	0	1	0.37	0.088	0	0
Phase 1a Office	North Garage 2022	Boom Lift	Aerial Lifts	Diesel	1	40	0	1	0.31	0.28	0	0
Phase 1a Office	North Garage 2022	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0.42	0.088	0	0
Phase 1a Office	North Garage 2022	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.78	0.088	0	0
Phase 1a Office	North Garage 2022	Concrete Pump	Pumps	Diesel	1	450	0.33	1	0.74	0.088	0.021319518	0
Phase 1a Office	North Garage 2022	Excavator	Excavators	Diesel	1	500	11.71429	1	0.38	0.088	0.431805942	0
Phase 1a Office	North Garage 2022	Generator	Generator Sets	Diesel	1	25	4.714286	1	0.74	0.28	0.053837166	0
Phase 1a Office	North Garage 2022	Gradall	Forklifts	Diesel	1	350	2.928571	1	0.2	0.088	0.0397716	0
Phase 1a Office	North Garage 2022	Hydro/Crawler Crane	Cranes	Diesel	1	550	2.928571	1	0.29	0.088	0.090622431	0
Phase 1a Office	North Garage 2022	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	5.857143	1	0.37	0.192	0.091732937	0
Phase 1a Office	North Garage 2022	Paver	Pavers	Diesel	1	250	0	1	0.42	0.088	0	0
Phase 1a Office	North Garage 2022	Pile Rig	Bore/Drill Rigs	Diesel	1	600	4.142857	1	0.5	0.088	0.241123985	0
Phase 1a Office	North Garage 2022	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0.3	0.28	0	0
Phase 1a Office	North Garage 2022	Scraper	Scrapers	Diesel	1	600	0	1	0.48	0.088	0	0
Phase 1a Office	North Garage 2022	Tire Wash	Other Construction Equipment	Diesel	1	100	1.178571	1	0.42	0.192	0.020952843	0
Phase 1a Office	North Garage 2023	Air Compressor	Air Compressors	Diesel	1	150	0.48186	1	0.48	0.128	0.009790397	0
Phase 1a Office	North Garage 2023	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	0.03907	1	0.37	0.088	0.000981589	0
Phase 1a Office	North Garage 2023	Blade	Graders	Diesel	1	450	0	1	0.41	0.088	0	0
Phase 1a Office	North Garage 2023	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	0.03907	1	0.37	0.088	0.000560908	0
Phase 1a Office	North Garage 2023	Boom Lift	Aerial Lifts	Diesel	1	40	1.335814	1	0.31	0.28	0.010224974	0
Phase 1a Office	North Garage 2023	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0.42	0.088	0	0
Phase 1a Office	North Garage 2023	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.78	0.088	0	0
Phase 1a Office	North Garage 2023	Concrete Pump	Pumps	Diesel	1	450	0.57907	1	0.74	0.088	0.03741057	0
Phase 1a Office	North Garage 2023	Excavator	Excavators	Diesel	1	500	0.465116	1	0.38	0.088	0.017144876	0
Phase 1a Office	North Garage 2023	Generator	Generator Sets	Diesel	1	25	1.767442	1	0.74	0.28	0.020184195	0
Phase 1a Office	North Garage 2023	Gradall	Forklifts	Diesel	1	350	3.011628	1	0.2	0.088	0.040899552	0
Phase 1a Office	North Garage 2023	Hydro/Crawler Crane	Cranes	Diesel	1	550	5.02907	1	0.29	0.088	0.155620766	0
Phase 1a Office	North Garage 2023	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	0.232558	1	0.37	0.192	0.003642261	0
Phase 1a Office	North Garage 2023	Paver	Pavers	Diesel	1	250	0	1	0.42	0.088	0	0
Phase 1a Office	North Garage 2023	Pile Rig	Bore/Drill Rigs	Diesel	1	600	0	1	0.5	0.088	0	0
Phase 1a Office	North Garage 2023	Pressure Washer	Pressure Washers	Diesel	1	25	0.122791	1	0.3	0.28	0.000568488	0
Phase 1a Office	North Garage 2023	Scraper	Scrapers	Diesel	1	600	0	1	0.48	0.088	0	0
Phase 1a Office	North Garage 2023	Tire Wash	Other Construction Equipment	Diesel	1	100	1.505814	1	0.42	0.192	0.026770616	0
Phase 1a Office	Office Building 4 2023	Air Compressor	Air Compressors	Diesel	1	150	0.049091	1	0.48	0.128	0.000997425	0
Phase 1a Office	Office Building 4 2023	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	1.264463	1	0.37	0.088	0.031768377	0
Phase 1a Office	Office Building 4 2023	Blade	Graders	Diesel	1	450	0	1	0.41	0.088	0	0

Phase 1a Office	Office Building 4 2023	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	1.264463	1	0.37	0.088	0.018153358	0
Phase 1a Office	Office Building 4 2023	Boom Lift	Aerial Lifts	Diesel	1	40	7.438017	1	0.31	0.28	0.056934221	0
Phase 1a Office	Office Building 4 2023	Compactor	Other Construction Equipment	Diesel	1	250	0.101157	1	0.42	0.088	0.002060651	0
Phase 1a Office	Office Building 4 2023	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.78	0.088	0	0
Phase 1a Office	Office Building 4 2023	Concrete Pump	Pumps	Diesel	1	450	0.075372	1	0.74	0.088	0.004869371	0
Phase 1a Office	Office Building 4 2023	Excavator	Excavators	Diesel	1	500	0.063223	1	0.38	0.088	0.002330499	0
Phase 1a Office	Office Building 4 2023	Generator	Generator Sets	Diesel	1	25	2.900826	1	0.74	0.28	0.033127452	0
Phase 1a Office	Office Building 4 2023	Gradall	Forklifts	Diesel	1	350	0.48	1	0.2	0.088	0.006518662	0
Phase 1a Office	Office Building 4 2023	Hydro/Crawler Crane	Cranes	Diesel	1	550	1.809917	1	0.29	0.088	0.056006526	0
Phase 1a Office	Office Building 4 2023	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	0.719008	1	0.37	0.192	0.011260907	0
Phase 1a Office	Office Building 4 2023	Paver	Pavers	Diesel	1	250	0	1	0.42	0.088	0	0
Phase 1a Office	Office Building 4 2023	Pile Rig	Bore/Drill Rigs	Diesel	1	600	0.719008	1	0.5	0.088	0.041847964	0
Phase 1a Office	Office Building 4 2023	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0.3	0.28	0	0
Phase 1a Office	Office Building 4 2023	Scraper	Scrapers	Diesel	1	600	0	1	0.48	0.088	0	0
Phase 1a Office	Office Building 4 2023	Tire Wash	Other Construction Equipment	Diesel	1	100	1.5	1	0.42	0.192	0.026667255	0
Phase 1a Office	Office Building 4 2024	Air Compressor	Air Compressors	Diesel	1	150	0	1	0.48	0.128	0	0
Phase 1a Office	Office Building 4 2024	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	0	1	0.37	0.088	0	0
Phase 1a Office	Office Building 4 2024	Blade	Graders	Diesel	1	450	0	1	0.41	0.088	0	0
Phase 1a Office	Office Building 4 2024	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	0	1	0.37	0.088	0	0
Phase 1a Office	Office Building 4 2024	Boom Lift	Aerial Lifts	Diesel	1	40	1.405797	1	0.31	0.28	0.010760659	0
Phase 1a Office	Office Building 4 2024	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0.42	0.088	0	0
Phase 1a Office	Office Building 4 2024	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.78	0.088	0	0
Phase 1a Office	Office Building 4 2024	Concrete Pump	Pumps	Diesel	1	450	0	1	0.74	0.088	0	0
Phase 1a Office	Office Building 4 2024	Excavator	Excavators	Diesel	1	500	0	1	0.38	0.088	0	0
Phase 1a Office	Office Building 4 2024	Generator	Generator Sets	Diesel	1	25	0	1	0.74	0.28	0	0
Phase 1a Office	Office Building 4 2024	Gradall	Forklifts	Diesel	1	350	0.48	1	0.2	0.088	0.006518662	0
Phase 1a Office	Office Building 4 2024	Hydro/Crawler Crane	Cranes	Diesel	1	550	0	1	0.29	0.088	0	0
Phase 1a Office	Office Building 4 2024	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	0	1	0.37	0.192	0	0
Phase 1a Office	Office Building 4 2024	Paver	Pavers	Diesel	1	250	0	1	0.42	0.088	0	0
Phase 1a Office	Office Building 4 2024	Pile Rig	Bore/Drill Rigs	Diesel	1	600	0	1	0.5	0.088	0	0
Phase 1a Office	Office Building 4 2024	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0.3	0.28	0	0
Phase 1a Office	Office Building 4 2024	Scraper	Scrapers	Diesel	1	600	0	1	0.48	0.088	0	0
Phase 1a Office	Office Building 4 2024	Tire Wash	Other Construction Equipment	Diesel	1	100	1.5	1	0.42	0.192	0.026667255	0
Phase 1a Office	Meeting, Collaboration, Park 2022	Air Compressor	Air Compressors	Diesel	1	150	0	1	0.48	0.128	0	0
Phase 1a Office	Meeting, Collaboration, Park 2022	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	5.857143	1	0.37	0.088	0.14715492	0
Phase 1a Office	Meeting, Collaboration, Park 2022	Blade	Graders	Diesel	1	450	0	1	0.41	0.088	0	0
Phase 1a Office	Meeting, Collaboration, Park 2022	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	5.857143	1	0.37	0.088	0.084088526	0
Phase 1a Office	Meeting, Collaboration, Park 2022	Boom Lift	Aerial Lifts	Diesel	1	40	0	1	0.31	0.28	0	0
Phase 1a Office	Meeting, Collaboration, Park 2022	Compactor	Other Construction Equipment	Diesel	1	250	0.314286	1	0.42	0.088	0.006402258	0
Phase 1a Office	Meeting, Collaboration, Park 2022	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.78	0.088	0	0
Phase 1a Office	Meeting, Collaboration, Park 2022	Concrete Pump	Pumps	Diesel	1	450	0	1	0.74	0.088	0	0
Phase 1a Office	Meeting, Collaboration, Park 2022	Excavator	Excavators	Diesel	1	500	23.42857	1	0.38	0.088	0.863611884	0
Phase 1a Office	Meeting, Collaboration, Park 2022	Generator	Generator Sets	Diesel	1	25	5.857143	1	0.74	0.28	0.0668886	0
Phase 1a Office	Meeting, Collaboration, Park 2022	Gradall	Forklifts	Diesel	1	350	8.785714	1	0.2	0.088	0.1193148	0
Phase 1a Office	Meeting, Collaboration, Park 2022	Hydro/Crawler Crane	Cranes	Diesel	1	550	1.571429	1	0.29	0.088	0.04862667	0
Phase 1a Office	Meeting, Collaboration, Park 2022	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	4.392857	1	0.37	0.192	0.068799703	0
Phase 1a Office	Meeting, Collaboration, Park 2022	Paver	Pavers	Diesel	1	250	0	1	0.42	0.088	0	0
Phase 1a Office	Meeting, Collaboration, Park 2022	Pile Rig	Bore/Drill Rigs	Diesel	1	600	3.142857	1	0.5	0.088	0.182921644	0
Phase 1a Office	Meeting, Collaboration, Park 2022	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0.3	0.28	0	0
Phase 1a Office	Meeting, Collaboration, Park 2022	Scraper	Scrapers	Diesel	1	600	0	1	0.48	0.088	0	0
Phase 1a Office	Meeting, Collaboration, Park 2022	Tire Wash	Other Construction Equipment	Diesel	1	100	1.464286	1	0.42	0.192	0.02603232	0
Phase 1a Office	Meeting, Collaboration, Park 2023	Air Compressor	Air Compressors	Diesel	1	150	0.304615	1	0.48	0.128	0.006189147	0
Phase 1a Office	Meeting, Collaboration, Park 2023	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	3.276923	1	0.37	0.088	0.08232945	0
Phase 1a Office	Meeting, Collaboration, Park 2023	Blade	Graders	Diesel	1	450	0	1	0.41	0.088	0	0
Phase 1a Office	Meeting, Collaboration, Park 2023	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	3.276923	1	0.37	0.088	0.0470454	0
Phase 1a Office	Meeting, Collaboration, Park 2023	Boom Lift	Aerial Lifts	Diesel	1	40	0.888462	1	0.31	0.28	0.00680072	0
Phase 1a Office	Meeting, Collaboration, Park 2023	Compactor	Other Construction Equipment	Diesel	1	250	0.152308	1	0.42	0.088	0.003102633	0
Phase 1a Office	Meeting, Collaboration, Park 2023	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.78	0.088	0	0

Phase 1a Office	Meeting, Collaboration, Park 2023	Concrete Pump	Pumps	Diesel	1	450	0.304615	1	0.74	0.088	0.019679555	0
Phase 1a Office	Meeting, Collaboration, Park 2023	Excavator	Excavators	Diesel	1	500	5.492308	1	0.38	0.088	0.202454606	0
Phase 1a Office	Meeting, Collaboration, Park 2023	Generator	Generator Sets	Diesel	1	25	6.715385	1	0.74	0.28	0.076689725	0
Phase 1a Office	Meeting, Collaboration, Park 2023	Gradall	Forklifts	Diesel	1	350	7.661538	1	0.2	0.088	0.104047878	0
Phase 1a Office	Meeting, Collaboration, Park 2023	Hydro/Crawler Crane	Cranes	Diesel	1	550	7.246154	1	0.29	0.088	0.224226758	0
Phase 1a Office	Meeting, Collaboration, Park 2023	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	1.828846	1	0.37	0.192	0.028642878	0
Phase 1a Office	Meeting, Collaboration, Park 2023	Paver	Pavers	Diesel	1	250	0	1	0.42	0.088	0	0
Phase 1a Office	Meeting, Collaboration, Park 2023	Pile Rig	Bore/Drill Rigs	Diesel	1	600	2.007692	1	0.5	0.088	0.116852393	0
Phase 1a Office	Meeting, Collaboration, Park 2023	Pressure Washer	Pressure Washers	Diesel	1	25	0.152308	1	0.3	0.28	0.000705144	0
Phase 1a Office	Meeting, Collaboration, Park 2023	Scraper	Scrapers	Diesel	1	600	0	1	0.48	0.088	0	0
Phase 1a Office	Meeting, Collaboration, Park 2023	Tire Wash	Other Construction Equipment	Diesel	1	100	0.819231	1	0.42	0.192	0.014564424	0
Phase 1a Office	Meeting, Collaboration, Park 2024	Air Compressor	Air Compressors	Diesel	1	150	0	1	0.48	0.128	0	0
Phase 1a Office	Meeting, Collaboration, Park 2024	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	0	1	0.37	0.088	0	0
Phase 1a Office	Meeting, Collaboration, Park 2024	Blade	Graders	Diesel	1	450	0	1	0.41	0.088	0	0
Phase 1a Office	Meeting, Collaboration, Park 2024	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	0	1	0.37	0.088	0	0
Phase 1a Office	Meeting, Collaboration, Park 2024	Boom Lift	Aerial Lifts	Diesel	1	40	19.30534	1	0.31	0.28	0.147772554	0
Phase 1a Office	Meeting, Collaboration, Park 2024	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0.42	0.088	0	0
Phase 1a Office	Meeting, Collaboration, Park 2024	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.78	0.088	0	0
Phase 1a Office	Meeting, Collaboration, Park 2024	Concrete Pump	Pumps	Diesel	1	450	0	1	0.74	0.088	0	0
Phase 1a Office	Meeting, Collaboration, Park 2024	Excavator	Excavators	Diesel	1	500	0	1	0.38	0.088	0	0
Phase 1a Office	Meeting, Collaboration, Park 2024	Generator	Generator Sets	Diesel	1	25	0	1	0.74	0.28	0	0
Phase 1a Office	Meeting, Collaboration, Park 2024	Gradall	Forklifts	Diesel	1	350	10.25954	1	0.2	0.088	0.139330185	0
Phase 1a Office	Meeting, Collaboration, Park 2024	Hydro/Crawler Crane	Cranes	Diesel	1	550	0.503817	1	0.29	0.088	0.01559023	0
Phase 1a Office	Meeting, Collaboration, Park 2024	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	0	1	0.37	0.192	0	0
Phase 1a Office	Meeting, Collaboration, Park 2024	Paver	Pavers	Diesel	1	250	0	1	0.42	0.088	0	0
Phase 1a Office	Meeting, Collaboration, Park 2024	Pile Rig	Bore/Drill Rigs	Diesel	1	600	0	1	0.5	0.088	0	0
Phase 1a Office	Meeting, Collaboration, Park 2024	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0.3	0.28	0	0
Phase 1a Office	Meeting, Collaboration, Park 2024	Scraper	Scrapers	Diesel	1	600	0	1	0.48	0.088	0	0
Phase 1a Office	Meeting, Collaboration, Park 2024	Tire Wash	Other Construction Equipment	Diesel	1	100	0	1	0.42	0.192	0	0
Phase 1a Office	Meeting, Collaboration, Park 2025	Air Compressor	Air Compressors	Diesel	1	150	0	1	0.48	0.128	0	0
Phase 1a Office	Meeting, Collaboration, Park 2025	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	0	1	0.37	0.088	0	0
Phase 1a Office	Meeting, Collaboration, Park 2025	Blade	Graders	Diesel	1	450	0	1	0.41	0.088	0	0
Phase 1a Office	Meeting, Collaboration, Park 2025	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	0	1	0.37	0.088	0	0
Phase 1a Office	Meeting, Collaboration, Park 2025	Boom Lift	Aerial Lifts	Diesel	1	40	9.425287	1	0.31	0.28	0.072145765	0
Phase 1a Office	Meeting, Collaboration, Park 2025	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0.42	0.088	0	0
Phase 1a Office	Meeting, Collaboration, Park 2025	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.78	0.088	0	0
Phase 1a Office	Meeting, Collaboration, Park 2025	Concrete Pump	Pumps	Diesel	1	450	0	1	0.74	0.088	0	0
Phase 1a Office	Meeting, Collaboration, Park 2025	Excavator	Excavators	Diesel	1	500	0	1	0.38	0.088	0	0
Phase 1a Office	Meeting, Collaboration, Park 2025	Generator	Generator Sets	Diesel	1	25	0	1	0.74	0.28	0	0
Phase 1a Office	Meeting, Collaboration, Park 2025	Gradall	Forklifts	Diesel	1	350	11.77011	1	0.2	0.088	0.159844591	0
Phase 1a Office	Meeting, Collaboration, Park 2025	Hydro/Crawler Crane	Cranes	Diesel	1	550	0.770115	1	0.29	0.088	0.023830625	0
Phase 1a Office	Meeting, Collaboration, Park 2025	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	0	1	0.37	0.192	0	0
Phase 1a Office	Meeting, Collaboration, Park 2025	Paver	Pavers	Diesel	1	250	0	1	0.42	0.088	0	0
Phase 1a Office	Meeting, Collaboration, Park 2025	Pile Rig	Bore/Drill Rigs	Diesel	1	600	0	1	0.5	0.088	0	0
Phase 1a Office	Meeting, Collaboration, Park 2025	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0.3	0.28	0	0
Phase 1a Office	Meeting, Collaboration, Park 2025	Scraper	Scrapers	Diesel	1	600	0	1	0.48	0.088	0	0
Phase 1a Office	Meeting, Collaboration, Park 2025	Tire Wash	Other Construction Equipment	Diesel	1	100	0	1	0.42	0.192	0	0
Phase 1a Office	Meeting, Collaboration, Park 2026	Air Compressor	Air Compressors	Diesel	1	150	0	1	0.48	0.128	0	0
Phase 1a Office	Meeting, Collaboration, Park 2026	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	0	1	0.37	0.088	0	0
Phase 1a Office	Meeting, Collaboration, Park 2026	Blade	Graders	Diesel	1	450	0	1	0.41	0.088	0	0
Phase 1a Office	Meeting, Collaboration, Park 2026	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	0	1	0.37	0.088	0	0
Phase 1a Office	Meeting, Collaboration, Park 2026	Boom Lift	Aerial Lifts	Diesel	1	40	0	1	0.31	0.28	0	0
Phase 1a Office	Meeting, Collaboration, Park 2026	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0.42	0.088	0	0
Phase 1a Office	Meeting, Collaboration, Park 2026	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.78	0.088	0	0
Phase 1a Office	Meeting, Collaboration, Park 2026	Concrete Pump	Pumps	Diesel	1	450	0	1	0.74	0.088	0	0
Phase 1a Office	Meeting, Collaboration, Park 2026	Excavator	Excavators	Diesel	1	500	0	1	0.38	0.088	0	0
Phase 1a Office	Meeting, Collaboration, Park 2026	Generator	Generator Sets	Diesel	1	25	0	1	0.74	0.28	0	0
Phase 1a Office	Meeting, Collaboration, Park 2026	Gradall	Forklifts	Diesel	1	350	11.73913	1	0.2	0.088	0.159423804	0

Phase 1a Office	Meeting, Collaboration, Park 2026	Hydro/Crawler Crane	Cranes	Diesel	1	550	5.869565	1	0.29	0.088	0.181629263	0
Phase 1a Office	Meeting, Collaboration, Park 2026	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	0	1	0.37	0.192	0	0
Phase 1a Office	Meeting, Collaboration, Park 2026	Paver	Pavers	Diesel	1	250	0	1	0.42	0.088	0	0
Phase 1a Office	Meeting, Collaboration, Park 2026	Pile Rig	Bore/Drill Rigs	Diesel	1	600	0	1	0.5	0.088	0	0
Phase 1a Office	Meeting, Collaboration, Park 2026	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0.3	0.28	0	0
Phase 1a Office	Meeting, Collaboration, Park 2026	Scraper	Scrapers	Diesel	1	600	0	1	0.48	0.088	0	0
Phase 1a Office	Meeting, Collaboration, Park 2026	Tire Wash	Other Construction Equipment	Diesel	1	100	0	1	0.42	0.192	0	0
Phase 1a Office	Hotel Excavation 2022	Air Compressor	Air Compressors	Diesel	1	150	2.642857	1	0.48	0.128	0.053697329	0
Phase 1a Office	Hotel Excavation 2022	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	2.642857	1	0.37	0.088	0.066399171	0
Phase 1a Office	Hotel Excavation 2022	Blade	Graders	Diesel	1	450	0	1	0.41	0.088	0	0
Phase 1a Office	Hotel Excavation 2022	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	2.928571	1	0.37	0.088	0.042044263	0
Phase 1a Office	Hotel Excavation 2022	Boom Lift	Aerial Lifts	Diesel	1	40	1.464286	1	0.31	0.28	0.01120836	0
Phase 1a Office	Hotel Excavation 2022	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0.42	0.088	0	0
Phase 1a Office	Hotel Excavation 2022	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.78	0.088	0	0
Phase 1a Office	Hotel Excavation 2022	Concrete Pump	Pumps	Diesel	1	450	0.422857	1	0.74	0.088	0.027318516	0
Phase 1a Office	Hotel Excavation 2022	Excavator	Excavators	Diesel	1	500	11.71429	1	0.38	0.088	0.431805942	0
Phase 1a Office	Hotel Excavation 2022	Generator	Generator Sets	Diesel	1	25	5.857143	1	0.74	0.28	0.0668886	0
Phase 1a Office	Hotel Excavation 2022	Gradall	Forklifts	Diesel	1	350	5.857143	1	0.2	0.088	0.0795432	0
Phase 1a Office	Hotel Excavation 2022	Hydro/Crawler Crane	Cranes	Diesel	1	550	2.642857	1	0.29	0.088	0.081781218	0
Phase 1a Office	Hotel Excavation 2022	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	11.71429	1	0.37	0.192	0.183465874	0
Phase 1a Office	Hotel Excavation 2022	Paver	Pavers	Diesel	1	250	0	1	0.42	0.088	0	0
Phase 1a Office	Hotel Excavation 2022	Pile Rig	Bore/Drill Rigs	Diesel	1	600	10.57143	1	0.5	0.088	0.615281894	0
Phase 1a Office	Hotel Excavation 2022	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0.3	0.28	0	0
Phase 1a Office	Hotel Excavation 2022	Scraper	Scrapers	Diesel	1	600	0	1	0.48	0.088	0	0
Phase 1a Office	Hotel Excavation 2022	Tire Wash	Other Construction Equipment	Diesel	1	100	2.928571	1	0.42	0.192	0.05206464	0
Phase 1a Office	Hotel Excavation 2023	Air Compressor	Air Compressors	Diesel	1	150	2.311284	1	0.48	0.128	0.046960457	0
Phase 1a Office	Hotel Excavation 2023	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	0	1	0.37	0.088	0	0
Phase 1a Office	Hotel Excavation 2023	Blade	Graders	Diesel	1	450	0	1	0.41	0.088	0	0
Phase 1a Office	Hotel Excavation 2023	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	0.700389	1	0.37	0.088	0.01005519	0
Phase 1a Office	Hotel Excavation 2023	Boom Lift	Aerial Lifts	Diesel	1	40	0.350195	1	0.31	0.28	0.002680561	0
Phase 1a Office	Hotel Excavation 2023	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0.42	0.088	0	0
Phase 1a Office	Hotel Excavation 2023	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.78	0.088	0	0
Phase 1a Office	Hotel Excavation 2023	Concrete Pump	Pumps	Diesel	1	450	2.311284	1	0.74	0.088	0.149319579	0
Phase 1a Office	Hotel Excavation 2023	Excavator	Excavators	Diesel	1	500	2.801556	1	0.38	0.088	0.103269524	0
Phase 1a Office	Hotel Excavation 2023	Generator	Generator Sets	Diesel	1	25	10.64591	1	0.74	0.28	0.121576394	0
Phase 1a Office	Hotel Excavation 2023	Gradall	Forklifts	Diesel	1	350	10.64591	1	0.2	0.088	0.144577333	0
Phase 1a Office	Hotel Excavation 2023	Hydro/Crawler Crane	Cranes	Diesel	1	550	9.245136	1	0.29	0.088	0.286083757	0
Phase 1a Office	Hotel Excavation 2023	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	2.801556	1	0.37	0.192	0.043877195	0
Phase 1a Office	Hotel Excavation 2023	Paver	Pavers	Diesel	1	250	0	1	0.42	0.088	0	0
Phase 1a Office	Hotel Excavation 2023	Pile Rig	Bore/Drill Rigs	Diesel	1	600	0	1	0.5	0.088	0	0
Phase 1a Office	Hotel Excavation 2023	Pressure Washer	Pressure Washers	Diesel	1	25	0.046226	1	0.3	0.28	0.000214013	0
Phase 1a Office	Hotel Excavation 2023	Scraper	Scrapers	Diesel	1	600	0	1	0.48	0.088	0	0
Phase 1a Office	Hotel Excavation 2023	Tire Wash	Other Construction Equipment	Diesel	1	100	1.856031	1	0.42	0.192	0.032996836	0
Phase 1a Office	Hotel Construction 2024	Air Compressor	Air Compressors	Diesel	1	150	3	1	0.48	0.128	0.060953725	0
Phase 1a Office	Hotel Construction 2024	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	0	1	0.37	0.088	0	0
Phase 1a Office	Hotel Construction 2024	Blade	Graders	Diesel	1	450	0	1	0.41	0.088	0	0
Phase 1a Office	Hotel Construction 2024	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	0	1	0.37	0.088	0	0
Phase 1a Office	Hotel Construction 2024	Boom Lift	Aerial Lifts	Diesel	1	40	20.91429	1	0.31	0.28	0.160088185	0
Phase 1a Office	Hotel Construction 2024	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0.42	0.088	0	0
Phase 1a Office	Hotel Construction 2024	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.78	0.088	0	0
Phase 1a Office	Hotel Construction 2024	Concrete Pump	Pumps	Diesel	1	450	3	1	0.74	0.088	0.193813797	0
Phase 1a Office	Hotel Construction 2024	Excavator	Excavators	Diesel	1	500	0	1	0.38	0.088	0	0
Phase 1a Office	Hotel Construction 2024	Generator	Generator Sets	Diesel	1	25	0	1	0.74	0.28	0	0
Phase 1a Office	Hotel Construction 2024	Gradall	Forklifts	Diesel	1	350	12	1	0.2	0.088	0.162966556	0
Phase 1a Office	Hotel Construction 2024	Hydro/Crawler Crane	Cranes	Diesel	1	550	0	1	0.29	0.088	0	0
Phase 1a Office	Hotel Construction 2024	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	0	1	0.37	0.192	0	0
Phase 1a Office	Hotel Construction 2024	Paver	Pavers	Diesel	1	250	0	1	0.42	0.088	0	0
Phase 1a Office	Hotel Construction 2024	Pile Rig	Bore/Drill Rigs	Diesel	1	600	0	1	0.5	0.088	0	0

Phase 1a Office	Hotel Construction 2024	Pressure Washer	Pressure Washers	Diesel	1	25	0.06	1	0.3	0.28	0.000277784	0
Phase 1a Office	Hotel Construction 2024	Scraper	Scrapers	Diesel	1	600	0	1	0.48	0.088	0	0
Phase 1a Office	Hotel Construction 2024	Tire Wash	Other Construction Equipment	Diesel	1	100	1.5	1	0.42	0.192	0.026667255	0
Phase 1a Office	Hotel Construction 2025	Air Compressor	Air Compressors	Diesel	1	150	0.837662	1	0.48	0.128	0.017019547	0
Phase 1a Office	Hotel Construction 2025	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	0	1	0.37	0.088	0	0
Phase 1a Office	Hotel Construction 2025	Blade	Graders	Diesel	1	450	0	1	0.41	0.088	0	0
Phase 1a Office	Hotel Construction 2025	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	0	1	0.37	0.088	0	0
Phase 1a Office	Hotel Construction 2025	Boom Lift	Aerial Lifts	Diesel	1	40	20.18182	1	0.31	0.28	0.15448152	0
Phase 1a Office	Hotel Construction 2025	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0.42	0.088	0	0
Phase 1a Office	Hotel Construction 2025	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.78	0.088	0	0
Phase 1a Office	Hotel Construction 2025	Concrete Pump	Pumps	Diesel	1	450	0.837662	1	0.74	0.088	0.054116839	0
Phase 1a Office	Hotel Construction 2025	Excavator	Excavators	Diesel	1	500	0	1	0.38	0.088	0	0
Phase 1a Office	Hotel Construction 2025	Generator	Generator Sets	Diesel	1	25	0	1	0.74	0.28	0	0
Phase 1a Office	Hotel Construction 2025	Gradall	Forklifts	Diesel	1	350	12.07792	1	0.2	0.088	0.16402478	0
Phase 1a Office	Hotel Construction 2025	Hydro/Crawler Crane	Cranes	Diesel	1	550	0	1	0.29	0.088	0	0
Phase 1a Office	Hotel Construction 2025	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	0	1	0.37	0.192	0	0
Phase 1a Office	Hotel Construction 2025	Paver	Pavers	Diesel	1	250	0	1	0.42	0.088	0	0
Phase 1a Office	Hotel Construction 2025	Pile Rig	Bore/Drill Rigs	Diesel	1	600	0	1	0.5	0.088	0	0
Phase 1a Office	Hotel Construction 2025	Pressure Washer	Pressure Washers	Diesel	1	25	0.016753	1	0.3	0.28	7.7563E-05	0
Phase 1a Office	Hotel Construction 2025	Scraper	Scrapers	Diesel	1	600	0	1	0.48	0.088	0	0
Phase 1a Office	Hotel Construction 2025	Tire Wash	Other Construction Equipment	Diesel	1	100	1.50974	1	0.42	0.192	0.026840419	0
Phase 1a Office	Town Square 2023	Air Compressor	Air Compressors	Diesel	1	150	0	1	0.48	0.128	0	0
Phase 1a Office	Town Square 2023	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	0	1	0.37	0.088	0	0
Phase 1a Office	Town Square 2023	Blade	Graders	Diesel	1	450	0	1	0.41	0.088	0	0
Phase 1a Office	Town Square 2023	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	3	1	0.37	0.088	0.043069733	0
Phase 1a Office	Town Square 2023	Boom Lift	Aerial Lifts	Diesel	1	40	1.5	1	0.31	0.28	0.011481735	0
Phase 1a Office	Town Square 2023	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0.42	0.088	0	0
Phase 1a Office	Town Square 2023	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.78	0.088	0	0
Phase 1a Office	Town Square 2023	Concrete Pump	Pumps	Diesel	1	450	0	1	0.74	0.088	0	0
Phase 1a Office	Town Square 2023	Excavator	Excavators	Diesel	1	500	12	1	0.38	0.088	0.442337794	0
Phase 1a Office	Town Square 2023	Generator	Generator Sets	Diesel	1	25	6	1	0.74	0.28	0.068520029	0
Phase 1a Office	Town Square 2023	Gradall	Forklifts	Diesel	1	350	6	1	0.2	0.088	0.081483278	0
Phase 1a Office	Town Square 2023	Hydro/Crawler Crane	Cranes	Diesel	1	550	0	1	0.29	0.088	0	0
Phase 1a Office	Town Square 2023	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	12	1	0.37	0.192	0.187940651	0
Phase 1a Office	Town Square 2023	Paver	Pavers	Diesel	1	250	0	1	0.42	0.088	0	0
Phase 1a Office	Town Square 2023	Pile Rig	Bore/Drill Rigs	Diesel	1	600	0	1	0.5	0.088	0	0
Phase 1a Office	Town Square 2023	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0.3	0.28	0	0
Phase 1a Office	Town Square 2023	Scraper	Scrapers	Diesel	1	600	0	1	0.48	0.088	0	0
Phase 1a Office	Town Square 2023	Tire Wash	Other Construction Equipment	Diesel	1	100	3	1	0.42	0.192	0.053334509	0
Phase 1a Office	Town Square 2024	Air Compressor	Air Compressors	Diesel	1	150	0	1	0.48	0.128	0	0
Phase 1a Office	Town Square 2024	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	0	1	0.37	0.088	0	0
Phase 1a Office	Town Square 2024	Blade	Graders	Diesel	1	450	0	1	0.41	0.088	0	0
Phase 1a Office	Town Square 2024	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	0.996183	1	0.37	0.088	0.014301781	0
Phase 1a Office	Town Square 2024	Boom Lift	Aerial Lifts	Diesel	1	40	1.872137	1	0.31	0.28	0.014330257	0
Phase 1a Office	Town Square 2024	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0.42	0.088	0	0
Phase 1a Office	Town Square 2024	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.78	0.088	0	0
Phase 1a Office	Town Square 2024	Concrete Pump	Pumps	Diesel	1	450	0.020382	1	0.74	0.088	0.00131675	0
Phase 1a Office	Town Square 2024	Excavator	Excavators	Diesel	1	500	3.984733	1	0.38	0.088	0.146883161	0
Phase 1a Office	Town Square 2024	Generator	Generator Sets	Diesel	1	25	0.549618	1	0.74	0.28	0.006276644	0
Phase 1a Office	Town Square 2024	Gradall	Forklifts	Diesel	1	350	5.267176	1	0.2	0.088	0.071531122	0
Phase 1a Office	Town Square 2024	Hydro/Crawler Crane	Cranes	Diesel	1	550	1.03145	1	0.29	0.088	0.031917453	0
Phase 1a Office	Town Square 2024	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	3.984733	1	0.37	0.192	0.062407774	0
Phase 1a Office	Town Square 2024	Paver	Pavers	Diesel	1	250	0	1	0.42	0.088	0	0
Phase 1a Office	Town Square 2024	Pile Rig	Bore/Drill Rigs	Diesel	1	600	0	1	0.5	0.088	0	0
Phase 1a Office	Town Square 2024	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0.3	0.28	0	0
Phase 1a Office	Town Square 2024	Scraper	Scrapers	Diesel	1	600	0	1	0.48	0.088	0	0
Phase 1a Office	Town Square 2024	Tire Wash	Other Construction Equipment	Diesel	1	100	0.996183	1	0.42	0.192	0.017710314	0
Phase 1a Office	Town Square 2025	Air Compressor	Air Compressors	Diesel	1	150	0	1	0.48	0.128	0	0

Phase 1a Office	Town Square 2025	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	0	1	0.37	0.088	0	0
Phase 1a Office	Town Square 2025	Blade	Graders	Diesel	1	450	0	1	0.41	0.088	0	0
Phase 1a Office	Town Square 2025	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	0	1	0.37	0.088	0	0
Phase 1a Office	Town Square 2025	Boom Lift	Aerial Lifts	Diesel	1	40	0	1	0.31	0.28	0	0
Phase 1a Office	Town Square 2025	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0.42	0.088	0	0
Phase 1a Office	Town Square 2025	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.78	0.088	0	0
Phase 1a Office	Town Square 2025	Concrete Pump	Pumps	Diesel	1	450	0	1	0.74	0.088	0	0
Phase 1a Office	Town Square 2025	Excavator	Excavators	Diesel	1	500	0	1	0.38	0.088	0	0
Phase 1a Office	Town Square 2025	Generator	Generator Sets	Diesel	1	25	0	1	0.74	0.28	0	0
Phase 1a Office	Town Square 2025	Gradall	Forklifts	Diesel	1	350	18	1	0.2	0.088	0.244449834	0
Phase 1a Office	Town Square 2025	Hydro/Crawler Crane	Cranes	Diesel	1	550	0.18	1	0.29	0.088	0.005569964	0
Phase 1a Office	Town Square 2025	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	0	1	0.37	0.192	0	0
Phase 1a Office	Town Square 2025	Paver	Pavers	Diesel	1	250	0	1	0.42	0.088	0	0
Phase 1a Office	Town Square 2025	Pile Rig	Bore/Drill Rigs	Diesel	1	600	0	1	0.5	0.088	0	0
Phase 1a Office	Town Square 2025	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0.3	0.28	0	0
Phase 1a Office	Town Square 2025	Scraper	Scrapers	Diesel	1	600	0	1	0.48	0.088	0	0
Phase 1a Office	Town Square 2025	Tire Wash	Other Construction Equipment	Diesel	1	100	0	1	0.42	0.192	0	0
Phase 1a Mixed Use	Parcel 2 Foundations	Pile Rig	Bore/Drill Rigs	Diesel	0	600	8	0.4	0.5	0.088	0	0
Phase 1a Mixed Use	Parcel 2 Foundations	Generator	Generator Sets	Diesel	0	25	6	1	0.74	0.28	0	0
Phase 1a Mixed Use	Parcel 2 Foundations	Tire Wash	Other Construction Equipment	Diesel	1	100	4	0.9	0.42	0.192	0.064001411	0
Phase 1a Mixed Use	Parcel 2 Foundations	Excavator	Excavators	Diesel	1	131	8	0.6	0.38	0.128	0.067428365	0
Phase 1a Mixed Use	Parcel 2 Foundations	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	90	8	0.6	0.37	0.192	0.067658634	0
Phase 1a Mixed Use	Parcel 2 Foundations	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	70	8	0.8	0.37	0.192	0.07016451	0
Phase 1a Mixed Use	Parcel 2 Foundations	Gradall	Forklifts	Diesel	1	74	4	0.8	0.2	0.192	0.020047003	0
Phase 1a Mixed Use	Parcel 2 Foundations	Crane	Cranes	Diesel	1	215	4	0.5	0.29	0.088	0.024192773	0
Phase 1a Mixed Use	Parcel 2 Foundations	Concrete Pump	Pumps	Diesel	1	450	8	0.15	0.74	0.088	0.077525519	0
Phase 1a Mixed Use	Parcel 2 Core and Shell	Generator	Generator Sets	Diesel	0	25	6	1	0.74	0.28	0	0
Phase 1a Mixed Use	Parcel 2 Core and Shell	Tire Wash	Other Construction Equipment	Diesel	1	100	4	0.9	0.42	0.192	0.064001411	0
Phase 1a Mixed Use	Parcel 2 Core and Shell	Crane	Cranes	Diesel	1	600	8	0.2	0.29	0.088	0.054011773	0
Phase 1a Mixed Use	Parcel 2 Core and Shell	Gradall	Forklifts	Diesel	1	74	4	0.8	0.2	0.192	0.020047003	0
Phase 1a Mixed Use	Parcel 2 Core and Shell	Concrete Pump	Pumps	Diesel	0	450	6	0.225	0.74	0.088	0	0
Phase 1a Mixed Use	Parcel 2 Core and Shell	Air Compressor	Air Compressors	Diesel	0	140	2	0.4	0.48	0.128	0	0
Phase 1a Mixed Use	Parcel 2 Core and Shell	Boom Lift	Aerial Lifts	Diesel	0	50	6	0.2	0.31	0.192	0	0
Phase 1a Mixed Use	Parcel 2 Tenant Improvements	Generator	Generator Sets	Diesel	0	25	6	0.85	0.74	0.28	0	0
Phase 1a Mixed Use	Parcel 2 Tenant Improvements	Tire Wash	Other Construction Equipment	Diesel	1	100	4	0.9	0.42	0.192	0.064001411	0
Phase 1a Mixed Use	Parcel 2 Tenant Improvements	Gradall	Forklifts	Diesel	1	74	4	0.8	0.2	0.192	0.020047003	0
Phase 1a Mixed Use	Parcel 2 Landscaping	Excavator	Excavators	Diesel	1	25	8	0.9	0.38	0.28	0.042223153	0
Phase 1a Mixed Use	Parcel 2 Landscaping	Generator	Generator Sets	Diesel	0	25	6	0.5	0.74	0.28	0	0
Phase 1a Mixed Use	Parcel 2 Landscaping	Tire Wash	Other Construction Equipment	Diesel	1	100	4	0.9	0.42	0.192	0.064001411	0
Phase 1a Mixed Use	Parcel 2 Landscaping	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	90	8	1	0.37	0.192	0.112764391	0
Phase 1a Mixed Use	Parcel 2 Landscaping	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	70	8	0.8	0.37	0.192	0.07016451	0
Phase 1a Mixed Use	Parcel 3 Foundations	Pile Rig	Bore/Drill Rigs	Diesel	0	600	8	0.4	0.5	0.088	0	0
Phase 1a Mixed Use	Parcel 3 Foundations	Generator	Generator Sets	Diesel	0	25	6	1	0.74	0.28	0	0
Phase 1a Mixed Use	Parcel 3 Foundations	Tire Wash	Other Construction Equipment	Diesel	1	100	4	0.9	0.42	0.192	0.064001411	0
Phase 1a Mixed Use	Parcel 3 Foundations	Excavator	Excavators	Diesel	1	131	8	0.6	0.38	0.128	0.067428365	0
Phase 1a Mixed Use	Parcel 3 Foundations	Backhoe	Tractors/Loaders/Backhoes	Diesel	2	90	8	0.6	0.37	0.192	0.135317269	0
Phase 1a Mixed Use	Parcel 3 Foundations	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	70	8	0.8	0.37	0.192	0.07016451	0
Phase 1a Mixed Use	Parcel 3 Foundations	Gradall	Forklifts	Diesel	1	74	4	0.8	0.2	0.192	0.020047003	0
Phase 1a Mixed Use	Parcel 3 Foundations	Crane	Cranes	Diesel	1	215	4	0.5	0.29	0.088	0.024192773	0
Phase 1a Mixed Use	Parcel 3 Foundations	Concrete Pump	Pumps	Diesel	1	450	8	0.15	0.74	0.088	0.077525519	0
Phase 1a Mixed Use	Parcel 3 Core and Shell	Generator	Generator Sets	Diesel	0	25	6	1	0.74	0.28	0	0
Phase 1a Mixed Use	Parcel 3 Core and Shell	Tire Wash	Other Construction Equipment	Diesel	1	100	4	0.9	0.42	0.192	0.064001411	0
Phase 1a Mixed Use	Parcel 3 Core and Shell	Crane	Cranes	Diesel	1	600	8	0.2	0.29	0.088	0.054011773	0
Phase 1a Mixed Use	Parcel 3 Core and Shell	Gradall	Forklifts	Diesel	2	74	4	0.8	0.2	0.192	0.040094006	0
Phase 1a Mixed Use	Parcel 3 Core and Shell	Concrete Pump	Pumps	Diesel	0	450	6	0.225	0.74	0.088	0	0
Phase 1a Mixed Use	Parcel 3 Core and Shell	Air Compressor	Air Compressors	Diesel	0	140	2	0.4	0.48	0.128	0	0
Phase 1a Mixed Use	Parcel 3 Core and Shell	Boom Lift	Aerial Lifts	Diesel	0	50	6	0.2	0.31	0.192	0	0
Phase 1a Mixed Use	Parcel 3 Tenant Improvements	Generator	Generator Sets	Diesel	0	25	6	0.85	0.74	0.28	0	0

Phase 1a Mixed Use	Parcel 3 Tenant Improvements	Tire Wash	Other Construction Equipment	Diesel	1	100	4	0.9	0.42	0.192	0.064001411	0
Phase 1a Mixed Use	Parcel 3 Tenant Improvements	Gradall	Forklifts	Diesel	1	74	4	0.8	0.2	0.192	0.020047003	0
Phase 1a Mixed Use	Parcel 3 Landscaping	Excavator	Excavators	Diesel	1	25	8	0.9	0.38	0.28	0.042223153	0
Phase 1a Mixed Use	Parcel 3 Landscaping	Generator	Generator Sets	Diesel	0	25	6	0.5	0.74	0.28	0	0
Phase 1a Mixed Use	Parcel 3 Landscaping	Tire Wash	Other Construction Equipment	Diesel	0	100	4	0.9	0.42	0.192	0	0
Phase 1a Mixed Use	Parcel 3 Landscaping	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	90	8	1	0.37	0.192	0.112764391	0
Phase 1a Mixed Use	Parcel 3 Landscaping	Bob Cat	Tractors/Loaders/Backhoes	Diesel	2	70	8	0.8	0.37	0.192	0.14032902	0
Phase 1b	Demolition	Excavator	Excavators	Diesel	4	131	8	0.9	0.38	0.128	0.404570189	0
Phase 1b	Demolition	Generator	Generator Sets	Diesel	2	25	6	0.5	0.74	0.28	0.068520029	0
Phase 1b	Demolition	Tire Wash	Other Construction Equipment	Diesel	2	100	4	0.9	0.42	0.192	0.128002822	0
Phase 1b	Demolition	Concrete Crusher	Crushing/Proc. Equipment	Diesel	2	200	2	0	0.78	0.088	0	0
Phase 1b	Demolition	Bob Cat	Tractors/Loaders/Backhoes	Diesel	6	150	8	0.8	0.37	0.128	0.601410084	0
Phase 1b	Demolition	Pressure Washer	Pressure Washers	Diesel	2	25	8	1	0.3	0.28	0.074075707	0
Phase 1b	Demolition	Air Compressor	Air Compressors	Diesel	1	140	6	0.7	0.48	0.128	0.0796462	0
Phase 1b	Grading and Utilities	Blade	Graders	Diesel	2	359	8	0.15	0.41	0.088	0.068534421	0
Phase 1b	Grading and Utilities	Scraper	Scrapers	Diesel	2	52	8	0.15	0.48	0.192	0.025356749	0
Phase 1b	Grading and Utilities	Loader	Tractors/Loaders/Backhoes	Diesel	4	100	4	0.9	0.37	0.192	0.225528781	0
Phase 1b	Grading and Utilities	Tire Wash	Other Construction Equipment	Diesel	2	100	4	0.9	0.42	0.192	0.128002822	0
Phase 1b	Grading and Utilities	Excavator	Excavators	Diesel	4	359	8	0.6	0.38	0.088	0.508157658	0
Phase 1b	Grading and Utilities	Backhoe	Tractors/Loaders/Backhoes	Diesel	4	350	8	0.6	0.37	0.088	0.482381005	0
Phase 1b	Grading and Utilities	Gradall	Forklifts	Diesel	4	350	4	0.6	0.2	0.088	0.130373245	0
Phase 1b	Grading and Utilities	Compactor	Other Construction Equipment	Diesel	4	250	0.5	0.2	0.42	0.088	0.008148328	0
Phase 1b	Grading and Utilities	Paver	Pavers	Diesel	2	250	8	0.01	0.42	0.088	0.003259331	0
Phase 1b	Grading and Utilities	Generator	Generator Sets	Diesel	1	600	2	0.1	0.74	0.088	0.017227893	0
Phase 1b Office	South Garage 2023	Air Compressor	Air Compressors	Diesel	1	150	0.48	1	0.48	0.128	0.009752596	0
Phase 1b Office	South Garage 2023	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	0.054653	1	0.37	0.088	0.001373114	0
Phase 1b Office	South Garage 2023	Blade	Graders	Diesel	1	450	0	1	0.41	0.088	0	0
Phase 1b Office	South Garage 2023	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	0.054653	1	0.37	0.088	0.000784637	0
Phase 1b Office	South Garage 2023	Boom Lift	Aerial Lifts	Diesel	1	40	0	1	0.31	0.28	0	0
Phase 1b Office	South Garage 2023	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0.42	0.088	0	0
Phase 1b Office	South Garage 2023	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.78	0.088	0	0
Phase 1b Office	South Garage 2023	Concrete Pump	Pumps	Diesel	1	450	0.451485	1	0.74	0.088	0.029168017	0
Phase 1b Office	South Garage 2023	Excavator	Excavators	Diesel	1	500	2.970297	1	0.38	0.088	0.109489553	0
Phase 1b Office	South Garage 2023	Generator	Generator Sets	Diesel	1	25	3.237624	1	0.74	0.28	0.036973679	0
Phase 1b Office	South Garage 2023	Gradall	Forklifts	Diesel	1	350	3	1	0.2	0.088	0.040741639	0
Phase 1b Office	South Garage 2023	Hydro/Crawler Crane	Cranes	Diesel	1	550	4.923267	1	0.29	0.088	0.152346789	0
Phase 1b Office	South Garage 2023	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	1.485149	1	0.37	0.192	0.023259982	0
Phase 1b Office	South Garage 2023	Paver	Pavers	Diesel	1	250	0	1	0.42	0.088	0	0
Phase 1b Office	South Garage 2023	Pile Rig	Bore/Drill Rigs	Diesel	1	600	0.861386	1	0.5	0.088	0.05013469	0
Phase 1b Office	South Garage 2023	Pressure Washer	Pressure Washers	Diesel	1	25	0.156832	1	0.3	0.28	0.000726089	0
Phase 1b Office	South Garage 2023	Scraper	Scrapers	Diesel	1	600	0	1	0.48	0.088	0	0
Phase 1b Office	South Garage 2023	Tire Wash	Other Construction Equipment	Diesel	1	100	1.44802	1	0.42	0.192	0.025743142	0
Phase 1b Office	South Garage 2024	Air Compressor	Air Compressors	Diesel	1	150	0.48	1	0.48	0.128	0.009752596	0
Phase 1b Office	South Garage 2024	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	0	1	0.37	0.088	0	0
Phase 1b Office	South Garage 2024	Blade	Graders	Diesel	1	450	0	1	0.41	0.088	0	0
Phase 1b Office	South Garage 2024	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	0	1	0.37	0.088	0	0
Phase 1b Office	South Garage 2024	Boom Lift	Aerial Lifts	Diesel	1	40	4.737447	1	0.31	0.28	0.036262738	0
Phase 1b Office	South Garage 2024	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0.42	0.088	0	0
Phase 1b Office	South Garage 2024	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.78	0.088	0	0
Phase 1b Office	South Garage 2024	Concrete Pump	Pumps	Diesel	1	450	0.6	1	0.74	0.088	0.038762759	0
Phase 1b Office	South Garage 2024	Excavator	Excavators	Diesel	1	500	0	1	0.38	0.088	0	0
Phase 1b Office	South Garage 2024	Generator	Generator Sets	Diesel	1	25	0	1	0.74	0.28	0	0
Phase 1b Office	South Garage 2024	Gradall	Forklifts	Diesel	1	350	3	1	0.2	0.088	0.040741639	0
Phase 1b Office	South Garage 2024	Hydro/Crawler Crane	Cranes	Diesel	1	550	3.68617	1	0.29	0.088	0.114065753	0
Phase 1b Office	South Garage 2024	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	0	1	0.37	0.192	0	0
Phase 1b Office	South Garage 2024	Paver	Pavers	Diesel	1	250	0	1	0.42	0.088	0	0
Phase 1b Office	South Garage 2024	Pile Rig	Bore/Drill Rigs	Diesel	1	600	0	1	0.5	0.088	0	0
Phase 1b Office	South Garage 2024	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0.3	0.28	0	0

Phase 1b Office	South Garage 2024	Scraper	Scrapers	Diesel	1	600	0	1	0.48	0.088	0	0
Phase 1b Office	South Garage 2024	Tire Wash	Other Construction Equipment	Diesel	1	100	1.5	1	0.42	0.192	0.026667255	0
Phase 1b Office	Office Building 3 2023	Air Compressor	Air Compressors	Diesel	1	150	0.067119	1	0.48	0.128	0.00136371	0
Phase 1b Office	Office Building 3 2023	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	2.576271	1	0.37	0.088	0.064726265	0
Phase 1b Office	Office Building 3 2023	Blade	Graders	Diesel	1	450	0	1	0.41	0.088	0	0
Phase 1b Office	Office Building 3 2023	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	2.576271	1	0.37	0.088	0.036986437	0
Phase 1b Office	Office Building 3 2023	Boom Lift	Aerial Lifts	Diesel	1	40	1.694915	1	0.31	0.28	0.012973711	0
Phase 1b Office	Office Building 3 2023	Compactor	Other Construction Equipment	Diesel	1	250	0.206102	1	0.42	0.088	0.00419846	0
Phase 1b Office	Office Building 3 2023	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.78	0.088	0	0
Phase 1b Office	Office Building 3 2023	Concrete Pump	Pumps	Diesel	1	450	0.121356	1	0.74	0.088	0.007840151	0
Phase 1b Office	Office Building 3 2023	Excavator	Excavators	Diesel	1	500	0.128814	1	0.38	0.088	0.004748259	0
Phase 1b Office	Office Building 3 2023	Generator	Generator Sets	Diesel	1	25	4.813559	1	0.74	0.28	0.054970871	0
Phase 1b Office	Office Building 3 2023	Gradall	Forklifts	Diesel	1	350	0.48	1	0.2	0.088	0.006518662	0
Phase 1b Office	Office Building 3 2023	Hydro/Crawler Crane	Cranes	Diesel	1	550	3.322034	1	0.29	0.088	0.10279783	0
Phase 1b Office	Office Building 3 2023	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	1.864407	1	0.37	0.192	0.029199819	0
Phase 1b Office	Office Building 3 2023	Paver	Pavers	Diesel	1	250	0	1	0.42	0.088	0	0
Phase 1b Office	Office Building 3 2023	Pile Rig	Bore/Drill Rigs	Diesel	1	600	1.864407	1	0.5	0.088	0.10851284	0
Phase 1b Office	Office Building 3 2023	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0.3	0.28	0	0
Phase 1b Office	Office Building 3 2023	Scraper	Scrapers	Diesel	1	600	0	1	0.48	0.088	0	0
Phase 1b Office	Office Building 3 2023	Tire Wash	Other Construction Equipment	Diesel	1	100	1.5	1	0.42	0.192	0.026667255	0
Phase 1b Office	Office Building 3 2024	Air Compressor	Air Compressors	Diesel	1	150	0	1	0.48	0.128	0	0
Phase 1b Office	Office Building 3 2024	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	0	1	0.37	0.088	0	0
Phase 1b Office	Office Building 3 2024	Blade	Graders	Diesel	1	450	0	1	0.41	0.088	0	0
Phase 1b Office	Office Building 3 2024	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	0	1	0.37	0.088	0	0
Phase 1b Office	Office Building 3 2024	Boom Lift	Aerial Lifts	Diesel	1	40	6.858779	1	0.31	0.28	0.052500451	0
Phase 1b Office	Office Building 3 2024	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0.42	0.088	0	0
Phase 1b Office	Office Building 3 2024	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.78	0.088	0	0
Phase 1b Office	Office Building 3 2024	Concrete Pump	Pumps	Diesel	1	450	0.005038	1	0.74	0.088	0.000325489	0
Phase 1b Office	Office Building 3 2024	Excavator	Excavators	Diesel	1	500	0	1	0.38	0.088	0	0
Phase 1b Office	Office Building 3 2024	Generator	Generator Sets	Diesel	1	25	0	1	0.74	0.28	0	0
Phase 1b Office	Office Building 3 2024	Excavator	Excavators	Diesel	1	500	0	1	0.38	0.088	0	0
Phase 1b Office	Office Building 3 2024	Generator	Generator Sets	Diesel	1	25	0	1	0.74	0.28	0	0
Phase 1b Office	Office Building 3 2024	Gradall	Forklifts	Diesel	1	350	0.48	1	0.2	0.088	0.006518662	0
Phase 1b Office	Office Building 3 2024	Hydro/Crawler Crane	Cranes	Diesel	1	550	0	1	0.29	0.088	0	0
Phase 1b Office	Office Building 3 2024	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	0	1	0.37	0.192	0	0
Phase 1b Office	Office Building 3 2024	Paver	Pavers	Diesel	1	250	0	1	0.42	0.088	0	0
Phase 1b Office	Office Building 3 2024	Pile Rig	Bore/Drill Rigs	Diesel	1	600	0	1	0.5	0.088	0	0
Phase 1b Office	Office Building 3 2024	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0.3	0.28	0	0
Phase 1b Office	Office Building 3 2024	Scraper	Scrapers	Diesel	1	600	0	1	0.48	0.088	0	0
Phase 1b Office	Office Building 3 2024	Tire Wash	Other Construction Equipment	Diesel	1	100	1.5	1	0.42	0.192	0.026667255	0
Phase 1b Office	Office Building 3 2025	Air Compressor	Air Compressors	Diesel	1	150	0	1	0.48	0.128	0	0
Phase 1b Office	Office Building 3 2025	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	0	1	0.37	0.088	0	0
Phase 1b Office	Office Building 3 2025	Blade	Graders	Diesel	1	450	0	1	0.41	0.088	0	0
Phase 1b Office	Office Building 3 2025	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	0	1	0.37	0.088	0	0
Phase 1b Office	Office Building 3 2025	Boom Lift	Aerial Lifts	Diesel	1	40	0	1	0.31	0.28	0	0
Phase 1b Office	Office Building 3 2025	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0.42	0.088	0	0
Phase 1b Office	Office Building 3 2025	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.78	0.088	0	0
Phase 1b Office	Office Building 3 2025	Concrete Pump	Pumps	Diesel	1	450	0	1	0.74	0.088	0	0
Phase 1b Office	Office Building 3 2025	Excavator	Excavators	Diesel	1	500	0	1	0.38	0.088	0	0
Phase 1b Office	Office Building 3 2025	Generator	Generator Sets	Diesel	1	25	0	1	0.74	0.28	0	0
Phase 1b Office	Office Building 3 2025	Gradall	Forklifts	Diesel	1	350	0.48	1	0.2	0.088	0.006518662	0
Phase 1b Office	Office Building 3 2025	Hydro/Crawler Crane	Cranes	Diesel	1	550	0	1	0.29	0.088	0	0
Phase 1b Office	Office Building 3 2025	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	0	1	0.37	0.192	0	0
Phase 1b Office	Office Building 3 2025	Paver	Pavers	Diesel	1	250	0	1	0.42	0.088	0	0
Phase 1b Office	Office Building 3 2025	Pile Rig	Bore/Drill Rigs	Diesel	1	600	0	1	0.5	0.088	0	0
Phase 1b Office	Office Building 3 2025	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0.3	0.28	0	0
Phase 1b Office	Office Building 3 2025	Scraper	Scrapers	Diesel	1	600	0	1	0.48	0.088	0	0
Phase 1b Office	Office Building 3 2025	Tire Wash	Other Construction Equipment	Diesel	1	100	1.5	1	0.42	0.192	0.026667255	0
Phase 1b Office	Office Building 1 2023	Air Compressor	Air Compressors	Diesel	1	150	0.065363	1	0.48	0.128	0.001328042	0
Phase 1b Office	Office Building 1 2023	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	2.24581	1	0.37	0.088	0.056423756	0

Phase 1b Office	Office Building 1 2023	Blade	Graders	Diesel	1	450	0	1	0.41	0.088	0	0
Phase 1b Office	Office Building 1 2023	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	2.24581	1	0.37	0.088	0.032242146	0
Phase 1b Office	Office Building 1 2023	Boom Lift	Aerial Lifts	Diesel	1	40	2.480447	1	0.31	0.28	0.018986556	0
Phase 1b Office	Office Building 1 2023	Compactor	Other Construction Equipment	Diesel	1	250	0.179665	1	0.42	0.088	0.003659919	0
Phase 1b Office	Office Building 1 2023	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.78	0.088	0	0
Phase 1b Office	Office Building 1 2023	Concrete Pump	Pumps	Diesel	1	450	0.109274	1	0.74	0.088	0.007059586	0
Phase 1b Office	Office Building 1 2023	Excavator	Excavators	Diesel	1	500	0.112291	1	0.38	0.088	0.004139194	0
Phase 1b Office	Office Building 1 2023	Generator	Generator Sets	Diesel	1	25	4.424581	1	0.74	0.28	0.050528737	0
Phase 1b Office	Office Building 1 2023	Gradall	Forklifts	Diesel	1	350	0.48	1	0.2	0.088	0.006518662	0
Phase 1b Office	Office Building 1 2023	Hydro/Crawler Crane	Cranes	Diesel	1	550	2.916201	1	0.29	0.088	0.090239641	0
Phase 1b Office	Office Building 1 2023	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	1.47486	1	0.37	0.192	0.023098851	0
Phase 1b Office	Office Building 1 2023	Paver	Pavers	Diesel	1	250	0	1	0.42	0.088	0	0
Phase 1b Office	Office Building 1 2023	Pile Rig	Bore/Drill Rigs	Diesel	1	600	1.47486	1	0.5	0.088	0.085840325	0
Phase 1b Office	Office Building 1 2023	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0.3	0.28	0	0
Phase 1b Office	Office Building 1 2023	Scraper	Scrapers	Diesel	1	600	0	1	0.48	0.088	0	0
Phase 1b Office	Office Building 1 2023	Tire Wash	Other Construction Equipment	Diesel	1	100	1.5	1	0.42	0.192	0.026667255	0
Phase 1b Office	Office Building 1 2024	Air Compressor	Air Compressors	Diesel	1	150	0	1	0.48	0.128	0	0
Phase 1b Office	Office Building 1 2024	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	0	1	0.37	0.088	0	0
Phase 1b Office	Office Building 1 2024	Blade	Graders	Diesel	1	450	0	1	0.41	0.088	0	0
Phase 1b Office	Office Building 1 2024	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	0	1	0.37	0.088	0	0
Phase 1b Office	Office Building 1 2024	Boom Lift	Aerial Lifts	Diesel	1	40	6.554217	1	0.31	0.28	0.050169186	0
Phase 1b Office	Office Building 1 2024	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0.42	0.088	0	0
Phase 1b Office	Office Building 1 2024	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.78	0.088	0	0
Phase 1b Office	Office Building 1 2024	Concrete Pump	Pumps	Diesel	1	450	0.005301	1	0.74	0.088	0.000342482	0
Phase 1b Office	Office Building 1 2024	Excavator	Excavators	Diesel	1	500	0	1	0.38	0.088	0	0
Phase 1b Office	Office Building 1 2024	Generator	Generator Sets	Diesel	1	25	0	1	0.74	0.28	0	0
Phase 1b Office	Office Building 1 2024	Gradall	Forklifts	Diesel	1	350	0.478072	1	0.2	0.088	0.006492483	0
Phase 1b Office	Office Building 1 2024	Hydro/Crawler Crane	Cranes	Diesel	1	550	0	1	0.29	0.088	0	0
Phase 1b Office	Office Building 1 2024	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	0	1	0.37	0.192	0	0
Phase 1b Office	Office Building 1 2024	Paver	Pavers	Diesel	1	250	0	1	0.42	0.088	0	0
Phase 1b Office	Office Building 1 2024	Pile Rig	Bore/Drill Rigs	Diesel	1	600	0	1	0.5	0.088	0	0
Phase 1b Office	Office Building 1 2024	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0.3	0.28	0	0
Phase 1b Office	Office Building 1 2024	Scraper	Scrapers	Diesel	1	600	0	1	0.48	0.088	0	0
Phase 1b Office	Office Building 1 2024	Tire Wash	Other Construction Equipment	Diesel	1	100	1.5	1	0.42	0.192	0.026667255	0
Phase 1b Office	Office Building 2 2023	Air Compressor	Air Compressors	Diesel	1	150	0.075669	1	0.48	0.128	0.001537432	0
Phase 1b Office	Office Building 2 2023	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	2.484076	1	0.37	0.088	0.062409963	0
Phase 1b Office	Office Building 2 2023	Blade	Graders	Diesel	1	450	0	1	0.41	0.088	0	0
Phase 1b Office	Office Building 2 2023	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	2.484076	1	0.37	0.088	0.035662836	0
Phase 1b Office	Office Building 2 2023	Boom Lift	Aerial Lifts	Diesel	1	40	1.22293	1	0.31	0.28	0.009360905	0
Phase 1b Office	Office Building 2 2023	Compactor	Other Construction Equipment	Diesel	1	250	0.198726	1	0.42	0.088	0.004048214	0
Phase 1b Office	Office Building 2 2023	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.78	0.088	0	0
Phase 1b Office	Office Building 2 2023	Concrete Pump	Pumps	Diesel	1	450	0.124204	1	0.74	0.088	0.008024138	0
Phase 1b Office	Office Building 2 2023	Excavator	Excavators	Diesel	1	500	0.124204	1	0.38	0.088	0.004578337	0
Phase 1b Office	Office Building 2 2023	Generator	Generator Sets	Diesel	1	25	5.006369	1	0.74	0.28	0.057172763	0
Phase 1b Office	Office Building 2 2023	Gradall	Forklifts	Diesel	1	350	0.48	1	0.2	0.088	0.006518662	0
Phase 1b Office	Office Building 2 2023	Hydro/Crawler Crane	Cranes	Diesel	1	550	3.324841	1	0.29	0.088	0.102884687	0
Phase 1b Office	Office Building 2 2023	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	1.681529	1	0.37	0.192	0.026335633	0
Phase 1b Office	Office Building 2 2023	Paver	Pavers	Diesel	1	250	0	1	0.42	0.088	0	0
Phase 1b Office	Office Building 2 2023	Pile Rig	Bore/Drill Rigs	Diesel	1	600	1.681529	1	0.5	0.088	0.097868905	0
Phase 1b Office	Office Building 2 2023	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0.3	0.28	0	0
Phase 1b Office	Office Building 2 2023	Scraper	Scrapers	Diesel	1	600	0	1	0.48	0.088	0	0
Phase 1b Office	Office Building 2 2023	Tire Wash	Other Construction Equipment	Diesel	1	100	1.5	1	0.42	0.192	0.026667255	0
Phase 1b Office	Office Building 2 2024	Air Compressor	Air Compressors	Diesel	1	150	0	1	0.48	0.128	0	0
Phase 1b Office	Office Building 2 2024	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	0	1	0.37	0.088	0	0
Phase 1b Office	Office Building 2 2024	Blade	Graders	Diesel	1	450	0	1	0.41	0.088	0	0
Phase 1b Office	Office Building 2 2024	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	0	1	0.37	0.088	0	0
Phase 1b Office	Office Building 2 2024	Boom Lift	Aerial Lifts	Diesel	1	40	7.270992	1	0.31	0.28	0.055655736	0
Phase 1b Office	Office Building 2 2024	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0.42	0.088	0	0

Phase 1b Office	Office Building 2 2024	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.78	0.088	0	0
Phase 1b Office	Office Building 2 2024	Concrete Pump	Pumps	Diesel	1	450	0.005038	1	0.74	0.088	0.000325489	0
Phase 1b Office	Office Building 2 2024	Excavator	Excavators	Diesel	1	500	0	1	0.38	0.088	0	0
Phase 1b Office	Office Building 2 2024	Generator	Generator Sets	Diesel	1	25	0	1	0.74	0.28	0	0
Phase 1b Office	Office Building 2 2024	Gradall	Forklifts	Diesel	1	350	0.48	1	0.2	0.088	0.006518662	0
Phase 1b Office	Office Building 2 2024	Hydro/Crawler Crane	Cranes	Diesel	1	550	0	1	0.29	0.088	0	0
Phase 1b Office	Office Building 2 2024	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	0	1	0.37	0.192	0	0
Phase 1b Office	Office Building 2 2024	Paver	Pavers	Diesel	1	250	0	1	0.42	0.088	0	0
Phase 1b Office	Office Building 2 2024	Pile Rig	Bore/Drill Rigs	Diesel	1	600	0	1	0.5	0.088	0	0
Phase 1b Office	Office Building 2 2024	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0.3	0.28	0	0
Phase 1b Office	Office Building 2 2024	Scraper	Scrapers	Diesel	1	600	0	1	0.48	0.088	0	0
Phase 1b Office	Office Building 2 2024	Tire Wash	Other Construction Equipment	Diesel	1	100	1.5	1	0.42	0.192	0.026667255	0
Phase 1b Office	Office Building 2 2025	Air Compressor	Air Compressors	Diesel	1	150	0	1	0.48	0.128	0	0
Phase 1b Office	Office Building 2 2025	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	0	1	0.37	0.088	0	0
Phase 1b Office	Office Building 2 2025	Blade	Graders	Diesel	1	450	0	1	0.41	0.088	0	0
Phase 1b Office	Office Building 2 2025	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	0	1	0.37	0.088	0	0
Phase 1b Office	Office Building 2 2025	Boom Lift	Aerial Lifts	Diesel	1	40	0	1	0.31	0.28	0	0
Phase 1b Office	Office Building 2 2025	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0.42	0.088	0	0
Phase 1b Office	Office Building 2 2025	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.78	0.088	0	0
Phase 1b Office	Office Building 2 2025	Concrete Pump	Pumps	Diesel	1	450	0	1	0.74	0.088	0	0
Phase 1b Office	Office Building 2 2025	Excavator	Excavators	Diesel	1	500	0	1	0.38	0.088	0	0
Phase 1b Office	Office Building 2 2025	Generator	Generator Sets	Diesel	1	25	0	1	0.74	0.28	0	0
Phase 1b Office	Office Building 2 2025	Gradall	Forklifts	Diesel	1	350	0.48	1	0.2	0.088	0.006518662	0
Phase 1b Office	Office Building 2 2025	Hydro/Crawler Crane	Cranes	Diesel	1	550	0	1	0.29	0.088	0	0
Phase 1b Office	Office Building 2 2025	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	0	1	0.37	0.192	0	0
Phase 1b Office	Office Building 2 2025	Paver	Pavers	Diesel	1	250	0	1	0.42	0.088	0	0
Phase 1b Office	Office Building 2 2025	Pile Rig	Bore/Drill Rigs	Diesel	1	600	0	1	0.5	0.088	0	0
Phase 1b Office	Office Building 2 2025	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0.3	0.28	0	0
Phase 1b Office	Office Building 2 2025	Scraper	Scrapers	Diesel	1	600	0	1	0.48	0.088	0	0
Phase 1b Office	Office Building 2 2025	Tire Wash	Other Construction Equipment	Diesel	1	100	1.5	1	0.42	0.192	0.026667255	0
Phase 1b Office	Office Building 5 2023	Air Compressor	Air Compressors	Diesel	1	150	0.058812	1	0.48	0.128	0.001194934	0
Phase 1b Office	Office Building 5 2023	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	2.643564	1	0.37	0.088	0.066416939	0
Phase 1b Office	Office Building 5 2023	Blade	Graders	Diesel	1	450	0	1	0.41	0.088	0	0
Phase 1b Office	Office Building 5 2023	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	2.643564	1	0.37	0.088	0.037952537	0
Phase 1b Office	Office Building 5 2023	Boom Lift	Aerial Lifts	Diesel	1	40	2.19802	1	0.31	0.28	0.01682472	0
Phase 1b Office	Office Building 5 2023	Compactor	Other Construction Equipment	Diesel	1	250	0.211485	1	0.42	0.088	0.004308126	0
Phase 1b Office	Office Building 5 2023	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.78	0.088	0	0
Phase 1b Office	Office Building 5 2023	Concrete Pump	Pumps	Diesel	1	450	0.117327	1	0.74	0.088	0.007579847	0
Phase 1b Office	Office Building 5 2023	Excavator	Excavators	Diesel	1	500	0.132178	1	0.38	0.088	0.004872285	0
Phase 1b Office	Office Building 5 2023	Generator	Generator Sets	Diesel	1	25	4.60396	1	0.74	0.28	0.05257725	0
Phase 1b Office	Office Building 5 2023	Gradall	Forklifts	Diesel	1	350	0.48	1	0.2	0.088	0.006518662	0
Phase 1b Office	Office Building 5 2023	Hydro/Crawler Crane	Cranes	Diesel	1	550	3.267327	1	0.29	0.088	0.101104958	0
Phase 1b Office	Office Building 5 2023	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	1.960396	1	0.37	0.192	0.030703176	0
Phase 1b Office	Office Building 5 2023	Paver	Pavers	Diesel	1	250	0	1	0.42	0.088	0	0
Phase 1b Office	Office Building 5 2023	Pile Rig	Bore/Drill Rigs	Diesel	1	600	1.960396	1	0.5	0.088	0.114099639	0
Phase 1b Office	Office Building 5 2023	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0.3	0.28	0	0
Phase 1b Office	Office Building 5 2023	Scraper	Scrapers	Diesel	1	600	0	1	0.48	0.088	0	0
Phase 1b Office	Office Building 5 2023	Tire Wash	Other Construction Equipment	Diesel	1	100	1.5	1	0.42	0.192	0.026667255	0
Phase 1b Office	Office Building 5 2024	Air Compressor	Air Compressors	Diesel	1	150	0	1	0.48	0.128	0	0
Phase 1b Office	Office Building 5 2024	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	0	1	0.37	0.088	0	0
Phase 1b Office	Office Building 5 2024	Blade	Graders	Diesel	1	450	0	1	0.41	0.088	0	0
Phase 1b Office	Office Building 5 2024	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	0	1	0.37	0.088	0	0
Phase 1b Office	Office Building 5 2024	Boom Lift	Aerial Lifts	Diesel	1	40	6.194656	1	0.31	0.28	0.047416935	0
Phase 1b Office	Office Building 5 2024	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0.42	0.088	0	0
Phase 1b Office	Office Building 5 2024	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.78	0.088	0	0
Phase 1b Office	Office Building 5 2024	Concrete Pump	Pumps	Diesel	1	450	0.004809	1	0.74	0.088	0.000310694	0
Phase 1b Office	Office Building 5 2024	Excavator	Excavators	Diesel	1	500	0	1	0.38	0.088	0	0
Phase 1b Office	Office Building 5 2024	Generator	Generator Sets	Diesel	1	25	0	1	0.74	0.28	0	0

Phase 1b Office	Office Building 5 2024	Gradall	Forklifts	Diesel	1	350	0.48	1	0.2	0.088	0.006518662	0
Phase 1b Office	Office Building 5 2024	Hydro/Crawler Crane	Cranes	Diesel	1	550	0	1	0.29	0.088	0	0
Phase 1b Office	Office Building 5 2024	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	0	1	0.37	0.192	0	0
Phase 1b Office	Office Building 5 2024	Paver	Pavers	Diesel	1	250	0	1	0.42	0.088	0	0
Phase 1b Office	Office Building 5 2024	Pile Rig	Bore/Drill Rigs	Diesel	1	600	0	1	0.5	0.088	0	0
Phase 1b Office	Office Building 5 2024	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0.3	0.28	0	0
Phase 1b Office	Office Building 5 2024	Scraper	Scrapers	Diesel	1	600	0	1	0.48	0.088	0	0
Phase 1b Office	Office Building 5 2024	Tire Wash	Other Construction Equipment	Diesel	1	100	1.5	1	0.42	0.192	0.026667255	0
Phase 1b Office	Office Building 5 2025	Air Compressor	Air Compressors	Diesel	1	150	0	1	0.48	0.128	0	0
Phase 1b Office	Office Building 5 2025	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	0	1	0.37	0.088	0	0
Phase 1b Office	Office Building 5 2025	Blade	Graders	Diesel	1	450	0	1	0.41	0.088	0	0
Phase 1b Office	Office Building 5 2025	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	0	1	0.37	0.088	0	0
Phase 1b Office	Office Building 5 2025	Boom Lift	Aerial Lifts	Diesel	1	40	0	1	0.31	0.28	0	0
Phase 1b Office	Office Building 5 2025	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0.42	0.088	0	0
Phase 1b Office	Office Building 5 2025	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.78	0.088	0	0
Phase 1b Office	Office Building 5 2025	Concrete Pump	Pumps	Diesel	1	450	0	1	0.74	0.088	0	0
Phase 1b Office	Office Building 5 2025	Excavator	Excavators	Diesel	1	500	0	1	0.38	0.088	0	0
Phase 1b Office	Office Building 5 2025	Generator	Generator Sets	Diesel	1	25	0	1	0.74	0.28	0	0
Phase 1b Office	Office Building 5 2025	Gradall	Forklifts	Diesel	1	350	0.48	1	0.2	0.088	0.006518662	0
Phase 1b Office	Office Building 5 2025	Hydro/Crawler Crane	Cranes	Diesel	1	550	0	1	0.29	0.088	0	0
Phase 1b Office	Office Building 5 2025	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	0	1	0.37	0.192	0	0
Phase 1b Office	Office Building 5 2025	Paver	Pavers	Diesel	1	250	0	1	0.42	0.088	0	0
Phase 1b Office	Office Building 5 2025	Pile Rig	Bore/Drill Rigs	Diesel	1	600	0	1	0.5	0.088	0	0
Phase 1b Office	Office Building 5 2025	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0.3	0.28	0	0
Phase 1b Office	Office Building 5 2025	Scraper	Scrapers	Diesel	1	600	0	1	0.48	0.088	0	0
Phase 1b Office	Office Building 5 2025	Tire Wash	Other Construction Equipment	Diesel	1	100	1.5	1	0.42	0.192	0.026667255	0
Phase 1b Office	Office Building 6 2023	Air Compressor	Air Compressors	Diesel	1	150	0.062206	1	0.48	0.128	0.001263893	0
Phase 1b Office	Office Building 6 2023	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	3.926471	1	0.37	0.088	0.098648689	0
Phase 1b Office	Office Building 6 2023	Blade	Graders	Diesel	1	450	0	1	0.41	0.088	0	0
Phase 1b Office	Office Building 6 2023	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	3.926471	1	0.37	0.088	0.056370679	0
Phase 1b Office	Office Building 6 2023	Boom Lift	Aerial Lifts	Diesel	1	40	0	1	0.31	0.28	0	0
Phase 1b Office	Office Building 6 2023	Compactor	Other Construction Equipment	Diesel	1	250	0.314118	1	0.42	0.088	0.006398834	0
Phase 1b Office	Office Building 6 2023	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.78	0.088	0	0
Phase 1b Office	Office Building 6 2023	Concrete Pump	Pumps	Diesel	1	450	0.157941	1	0.74	0.088	0.010203726	0
Phase 1b Office	Office Building 6 2023	Excavator	Excavators	Diesel	1	500	0.196324	1	0.38	0.088	0.007236776	0
Phase 1b Office	Office Building 6 2023	Generator	Generator Sets	Diesel	1	25	6	1	0.74	0.28	0.068520029	0
Phase 1b Office	Office Building 6 2023	Gradall	Forklifts	Diesel	1	350	0.48	1	0.2	0.088	0.006518662	0
Phase 1b Office	Office Building 6 2023	Hydro/Crawler Crane	Cranes	Diesel	1	550	4.897059	1	0.29	0.088	0.151535787	0
Phase 1b Office	Office Building 6 2023	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	3	1	0.37	0.192	0.046985163	0
Phase 1b Office	Office Building 6 2023	Paver	Pavers	Diesel	1	250	0	1	0.42	0.088	0	0
Phase 1b Office	Office Building 6 2023	Pile Rig	Bore/Drill Rigs	Diesel	1	600	3	1	0.5	0.088	0.174607024	0
Phase 1b Office	Office Building 6 2023	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0.3	0.28	0	0
Phase 1b Office	Office Building 6 2023	Scraper	Scrapers	Diesel	1	600	0	1	0.48	0.088	0	0
Phase 1b Office	Office Building 6 2023	Tire Wash	Other Construction Equipment	Diesel	1	100	1.5	1	0.42	0.192	0.026667255	0
Phase 1b Office	Office Building 6 2024	Air Compressor	Air Compressors	Diesel	1	150	0.013053	1	0.48	0.128	0.000265218	0
Phase 1b Office	Office Building 6 2024	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	0	1	0.37	0.088	0	0
Phase 1b Office	Office Building 6 2024	Blade	Graders	Diesel	1	450	0	1	0.41	0.088	0	0
Phase 1b Office	Office Building 6 2024	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	0	1	0.37	0.088	0	0
Phase 1b Office	Office Building 6 2024	Boom Lift	Aerial Lifts	Diesel	1	40	8.003817	1	0.31	0.28	0.061265134	0
Phase 1b Office	Office Building 6 2024	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0.42	0.088	0	0
Phase 1b Office	Office Building 6 2024	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.78	0.088	0	0
Phase 1b Office	Office Building 6 2024	Concrete Pump	Pumps	Diesel	1	450	0.013969	1	0.74	0.088	0.000902492	0
Phase 1b Office	Office Building 6 2024	Excavator	Excavators	Diesel	1	500	0	1	0.38	0.088	0	0
Phase 1b Office	Office Building 6 2024	Generator	Generator Sets	Diesel	1	25	0.435115	1	0.74	0.28	0.00496901	0
Phase 1b Office	Office Building 6 2024	Gradall	Forklifts	Diesel	1	350	0.48	1	0.2	0.088	0.006518662	0
Phase 1b Office	Office Building 6 2024	Hydro/Crawler Crane	Cranes	Diesel	1	550	0	1	0.29	0.088	0	0
Phase 1b Office	Office Building 6 2024	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	0	1	0.37	0.192	0	0
Phase 1b Office	Office Building 6 2024	Paver	Pavers	Diesel	1	250	0	1	0.42	0.088	0	0

Phase 1b Office	Office Building 6 2024	Pile Rig	Bore/Drill Rigs	Diesel	1	600	0	1	0.5	0.088	0	0
Phase 1b Office	Office Building 6 2024	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0.3	0.28	0	0
Phase 1b Office	Office Building 6 2024	Scraper	Scrapers	Diesel	1	600	0	1	0.48	0.088	0	0
Phase 1b Office	Office Building 6 2024	Tire Wash	Other Construction Equipment	Diesel	1	100	1.5	1	0.42	0.192	0.026667255	0
Phase 1b Office	Office Building 6 2025	Air Compressor	Air Compressors	Diesel	1	150	0	1	0.48	0.128	0	0
Phase 1b Office	Office Building 6 2025	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	0	1	0.37	0.088	0	0
Phase 1b Office	Office Building 6 2025	Blade	Graders	Diesel	1	450	0	1	0.41	0.088	0	0
Phase 1b Office	Office Building 6 2025	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	0	1	0.37	0.088	0	0
Phase 1b Office	Office Building 6 2025	Boom Lift	Aerial Lifts	Diesel	1	40	0	1	0.31	0.28	0	0
Phase 1b Office	Office Building 6 2025	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0.42	0.088	0	0
Phase 1b Office	Office Building 6 2025	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.78	0.088	0	0
Phase 1b Office	Office Building 6 2025	Concrete Pump	Pumps	Diesel	1	450	0	1	0.74	0.088	0	0
Phase 1b Office	Office Building 6 2025	Excavator	Excavators	Diesel	1	500	0	1	0.38	0.088	0	0
Phase 1b Office	Office Building 6 2025	Generator	Generator Sets	Diesel	1	25	0	1	0.74	0.28	0	0
Phase 1b Office	Office Building 6 2025	Gradall	Forklifts	Diesel	1	350	0.48	1	0.2	0.088	0.006518662	0
Phase 1b Office	Office Building 6 2025	Hydro/Crawler Crane	Cranes	Diesel	1	550	0	1	0.29	0.088	0	0
Phase 1b Office	Office Building 6 2025	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	0	1	0.37	0.192	0	0
Phase 1b Office	Office Building 6 2025	Paver	Pavers	Diesel	1	250	0	1	0.42	0.088	0	0
Phase 1b Office	Office Building 6 2025	Pile Rig	Bore/Drill Rigs	Diesel	1	600	0	1	0.5	0.088	0	0
Phase 1b Office	Office Building 6 2025	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0.3	0.28	0	0
Phase 1b Office	Office Building 6 2025	Scraper	Scrapers	Diesel	1	600	0	1	0.48	0.088	0	0
Phase 1b Office	Office Building 6 2025	Tire Wash	Other Construction Equipment	Diesel	1	100	1.5	1	0.42	0.192	0.026667255	0
Phase 1b Mixed Use	Parcel 7 Foundations	Pile Rig	Bore/Drill Rigs	Diesel	0	600	8	0.4	0.5	0.088	0	0
Phase 1b Mixed Use	Parcel 7 Foundations	Generator	Generator Sets	Diesel	0	25	6	1	0.74	0.28	0	0
Phase 1b Mixed Use	Parcel 7 Foundations	Tire Wash	Other Construction Equipment	Diesel	1	100	4	0.9	0.42	0.192	0.064001411	0
Phase 1b Mixed Use	Parcel 7 Foundations	Excavator	Excavators	Diesel	1	131	8	0.6	0.38	0.128	0.067428365	0
Phase 1b Mixed Use	Parcel 7 Foundations	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	90	8	0.6	0.37	0.192	0.067658634	0
Phase 1b Mixed Use	Parcel 7 Foundations	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	70	8	0.8	0.37	0.192	0.07016451	0
Phase 1b Mixed Use	Parcel 7 Foundations	Gradall	Forklifts	Diesel	1	74	4	0.8	0.2	0.192	0.020047003	0
Phase 1b Mixed Use	Parcel 7 Foundations	Crane	Cranes	Diesel	1	215	4	0.5	0.29	0.088	0.024192773	0
Phase 1b Mixed Use	Parcel 7 Foundations	Concrete Pump	Pumps	Diesel	1	450	0.25	0.5	0.74	0.088	0.008075575	0
Phase 1b Mixed Use	Parcel 7 Core and Shell	Generator	Generator Sets	Diesel	0	25	6	1	0.74	0.28	0	0
Phase 1b Mixed Use	Parcel 7 Core and Shell	Tire Wash	Other Construction Equipment	Diesel	1	100	4	0.9	0.42	0.192	0.064001411	0
Phase 1b Mixed Use	Parcel 7 Core and Shell	Crane	Cranes	Diesel	1	600	8	0.2	0.29	0.088	0.054011773	0
Phase 1b Mixed Use	Parcel 7 Core and Shell	Gradall	Forklifts	Diesel	1	74	4	0.8	0.2	0.192	0.020047003	0
Phase 1b Mixed Use	Parcel 7 Core and Shell	Concrete Pump	Pumps	Diesel	0	450	6	0.225	0.74	0.088	0	0
Phase 1b Mixed Use	Parcel 7 Core and Shell	Air Compressor	Air Compressors	Diesel	0	140	2	0.4	0.48	0.128	0	0
Phase 1b Mixed Use	Parcel 7 Core and Shell	Boom Lift	Aerial Lifts	Diesel	0	50	6	0.2	0.31	0.192	0	0
Phase 1b Mixed Use	Parcel 7 Tenant Improvements	Generator	Generator Sets	Diesel	0	25	6	0.85	0.74	0.28	0	0
Phase 1b Mixed Use	Parcel 7 Tenant Improvements	Tire Wash	Other Construction Equipment	Diesel	1	100	4	0.9	0.42	0.192	0.064001411	0
Phase 1b Mixed Use	Parcel 7 Tenant Improvements	Gradall	Forklifts	Diesel	1	74	4	0.8	0.2	0.192	0.020047003	0
Phase 1b Mixed Use	Parcel 7 Landscaping	Excavator	Excavators	Diesel	1	25	8	0.9	0.38	0.28	0.042223153	0
Phase 1b Mixed Use	Parcel 7 Landscaping	Generator	Generator Sets	Diesel	0	25	6	0.5	0.74	0.28	0	0
Phase 1b Mixed Use	Parcel 7 Landscaping	Tire Wash	Other Construction Equipment	Diesel	1	100	4	0.9	0.42	0.192	0.064001411	0
Phase 1b Mixed Use	Parcel 7 Landscaping	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	90	8	0.6	0.37	0.192	0.067658634	0
Phase 1b Mixed Use	Parcel 7 Landscaping	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	70	8	0.8	0.37	0.192	0.07016451	0
Phase 1b Mixed Use	Parcel 6 Foundations	Pile Rig	Bore/Drill Rigs	Diesel	0	600	8	0.4	0.5	0.088	0	0
Phase 1b Mixed Use	Parcel 6 Foundations	Generator	Generator Sets	Diesel	0	25	6	1	0.74	0.28	0	0
Phase 1b Mixed Use	Parcel 6 Foundations	Tire Wash	Other Construction Equipment	Diesel	1	100	4	0.9	0.42	0.192	0.064001411	0
Phase 1b Mixed Use	Parcel 6 Foundations	Excavator	Excavators	Diesel	1	131	8	0.6	0.38	0.128	0.067428365	0
Phase 1b Mixed Use	Parcel 6 Foundations	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	90	8	0.6	0.37	0.192	0.067658634	0
Phase 1b Mixed Use	Parcel 6 Foundations	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	70	8	0.8	0.37	0.192	0.07016451	0
Phase 1b Mixed Use	Parcel 6 Foundations	Gradall	Forklifts	Diesel	1	74	4	0.8	0.2	0.192	0.020047003	0
Phase 1b Mixed Use	Parcel 6 Foundations	Crane	Cranes	Diesel	1	215	4	0.5	0.29	0.088	0.024192773	0
Phase 1b Mixed Use	Parcel 6 Foundations	Concrete Pump	Pumps	Diesel	1	450	0.5	0.5	0.74	0.088	0.01615115	0
Phase 1b Mixed Use	Parcel 6 Core and Shell	Generator	Generator Sets	Diesel	0	25	6	1	0.74	0.28	0	0
Phase 1b Mixed Use	Parcel 6 Core and Shell	Tire Wash	Other Construction Equipment	Diesel	1	100	4	0.9	0.42	0.192	0.064001411	0
Phase 1b Mixed Use	Parcel 6 Core and Shell	Crane	Cranes	Diesel	1	600	8	0.2	0.29	0.088	0.054011773	0

Phase 1b Mixed Use	Parcel 6 Core and Shell	Gradall	Forklifts	Diesel	2	74	4	0.8	0.2	0.192	0.040094006	0
Phase 1b Mixed Use	Parcel 6 Core and Shell	Concrete Pump	Pumps	Diesel	0	450	6	0.225	0.74	0.088	0	0
Phase 1b Mixed Use	Parcel 6 Core and Shell	Air Compressor	Air Compressors	Diesel	0	140	2	0.4	0.48	0.128	0	0
Phase 1b Mixed Use	Parcel 6 Core and Shell	Boom Lift	Aerial Lifts	Diesel	0	50	6	0.2	0.31	0.192	0	0
Phase 1b Mixed Use	Parcel 6 Tenant Improvements	Generator	Generator Sets	Diesel	0	25	6	0.85	0.74	0.28	0	0
Phase 1b Mixed Use	Parcel 6 Tenant Improvements	Tire Wash	Other Construction Equipment	Diesel	1	100	4	0.9	0.42	0.192	0.064001411	0
Phase 1b Mixed Use	Parcel 6 Tenant Improvements	Gradall	Forklifts	Diesel	1	74	4	0.8	0.2	0.192	0.020047003	0
Phase 1b Mixed Use	Parcel 6 Landscaping	Excavator	Excavators	Diesel	1	25	8	0.9	0.38	0.28	0.042223153	0
Phase 1b Mixed Use	Parcel 6 Landscaping	Generator	Generator Sets	Diesel	0	25	6	0.5	0.74	0.28	0	0
Phase 1b Mixed Use	Parcel 6 Landscaping	Tire Wash	Other Construction Equipment	Diesel	0	100	4	0.9	0.42	0.192	0	0
Phase 1b Mixed Use	Parcel 6 Landscaping	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	90	8	0.6	0.37	0.192	0.067658634	0
Phase 1b Mixed Use	Parcel 6 Landscaping	Bob Cat	Tractors/Loaders/Backhoes	Diesel	2	70	8	0.8	0.37	0.192	0.14032902	0
Phase 2 Mixed Use	Grading and Utilities	Blade	Graders	Diesel	1	359	8	0.15	0.41	0.088	0.03426721	0
Phase 2 Mixed Use	Grading and Utilities	Scraper	Scrapers	Diesel	1	52	8	0.15	0.48	0.192	0.012678375	0
Phase 2 Mixed Use	Grading and Utilities	Loader	Tractors/Loaders/Backhoes	Diesel	2	100	4	0.9	0.37	0.192	0.112764391	0
Phase 2 Mixed Use	Grading and Utilities	Tire Wash	Other Construction Equipment	Diesel	1	100	4	0.9	0.42	0.192	0.064001411	0
Phase 2 Mixed Use	Grading and Utilities	Excavator	Excavators	Diesel	2	359	8	0.6	0.38	0.088	0.254078829	0
Phase 2 Mixed Use	Grading and Utilities	Backhoe	Tractors/Loaders/Backhoes	Diesel	2	350	8	0.6	0.37	0.088	0.241190502	0
Phase 2 Mixed Use	Grading and Utilities	Gradall	Forklifts	Diesel	2	350	4	0.6	0.2	0.088	0.065186622	0
Phase 2 Mixed Use	Grading and Utilities	Compactor	Other Construction Equipment	Diesel	2	250	0.5	0.2	0.42	0.088	0.004074164	0
Phase 2 Mixed Use	Grading and Utilities	Paver	Pavers	Diesel	1	250	8	0.01	0.42	0.088	0.001629666	0
Phase 2 Mixed Use	Grading and Utilities	Generator	Generator Sets	Diesel	1	600	2	0.1	0.74	0.088	0.017227893	0
Phase 2 Mixed Use	Tunnel Construction	Crane	Cranes	Diesel	1	290	6	0.35	0.29	0.088	0.034263718	0
Phase 2 Mixed Use	Tunnel Construction	Excavator	Excavators	Diesel	2	170	6	0.45	0.38	0.128	0.098440265	0
Phase 2 Mixed Use	Tunnel Construction	Loader	Tractors/Loaders/Backhoes	Diesel	1	250	6	0.45	0.37	0.088	0.048453449	0
Phase 2 Mixed Use	Tunnel Construction	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	103	6	0.4	0.37	0.192	0.038715774	0
Phase 2 Mixed Use	Tunnel Construction	Gradall	Forklifts	Diesel	1	130	6	0.35	0.2	0.128	0.015407747	0
Phase 2 Mixed Use	Tunnel Construction	Compressor	Air Compressors	Diesel	2	50	6	0.3	0.48	0.192	0.036572235	0
Phase 2 Mixed Use	Foundations	Pile Rig	Bore/Drill Rigs	Diesel	0	600	8	0.4	0.5	0.088	0	0
Phase 2 Mixed Use	Foundations	Generator	Generator Sets	Diesel	2	25	6	1	0.74	0.28	0.137040058	0
Phase 2 Mixed Use	Foundations	Tire Wash	Other Construction Equipment	Diesel	2	100	4	0.9	0.42	0.192	0.128002822	0
Phase 2 Mixed Use	Foundations	Excavator	Excavators	Diesel	2	131	8	0.6	0.38	0.128	0.13485673	0
Phase 2 Mixed Use	Foundations	Backhoe	Tractors/Loaders/Backhoes	Diesel	2	90	8	0.6	0.37	0.192	0.135317269	0
Phase 2 Mixed Use	Foundations	Bob Cat	Tractors/Loaders/Backhoes	Diesel	2	70	8	0.8	0.37	0.192	0.14032902	0
Phase 2 Mixed Use	Foundations	Gradall	Forklifts	Diesel	2	74	4	0.8	0.2	0.192	0.040094006	0
Phase 2 Mixed Use	Foundations	Crane	Cranes	Diesel	2	215	4	0.5	0.29	0.088	0.048385546	0
Phase 2 Mixed Use	Foundations	Concrete Pump	Pumps	Diesel	3	450	0.5	0.5	0.74	0.088	0.048453449	0
Phase 2 Mixed Use	Core and Shell	Generator	Generator Sets	Diesel	2	25	6	1	0.74	0.28	0.137040058	0
Phase 2 Mixed Use	Core and Shell	Tire Wash	Other Construction Equipment	Diesel	2	100	4	0.9	0.42	0.192	0.128002822	0
Phase 2 Mixed Use	Core and Shell	Crane	Cranes	Diesel	2	600	8	0.2	0.29	0.088	0.108023545	0
Phase 2 Mixed Use	Core and Shell	Gradall	Forklifts	Diesel	3	74	4	0.8	0.2	0.192	0.060141008	0
Phase 2 Mixed Use	Core and Shell	Concrete Pump	Pumps	Diesel	0	450	6	0.45	0.74	0.088	0	0
Phase 2 Mixed Use	Core and Shell	Air Compressor	Air Compressors	Diesel	0	140	2	0.8	0.48	0.128	0	0
Phase 2 Mixed Use	Core and Shell	Boom Lift	Aerial Lifts	Diesel	0	50	6	0.4	0.31	0.192	0	0
Phase 2 Mixed Use	Tenant Improvements	Generator	Generator Sets	Diesel	2	25	6	0.85	0.74	0.28	0.116484049	0
Phase 2 Mixed Use	Tenant Improvements	Tire Wash	Other Construction Equipment	Diesel	2	100	4	0.9	0.42	0.192	0.128002822	0
Phase 2 Mixed Use	Tenant Improvements	Gradall	Forklifts	Diesel	1	74	4	0.8	0.2	0.192	0.020047003	0
Phase 2 Mixed Use	Landscaping	Excavator	Excavators	Diesel	1	25	8	0.9	0.38	0.28	0.042223153	0
Phase 2 Mixed Use	Landscaping	Generator	Generator Sets	Diesel	0	25	6	0.5	0.74	0.28	0	0
Phase 2 Mixed Use	Landscaping	Tire Wash	Other Construction Equipment	Diesel	1	100	4	0.9	0.42	0.192	0.064001411	0
Phase 2 Mixed Use	Landscaping	Backhoe	Tractors/Loaders/Backhoes	Diesel	2	90	8	0.6	0.37	0.192	0.135317269	0
Phase 2 Mixed Use	Landscaping	Bob Cat	Tractors/Loaders/Backhoes	Diesel	3	70	8	0.8	0.37	0.192	0.210493529	0
Alternate 1	Demolition	Excavator	Excavators	Diesel	1	131	8	0.9	0.38	0.128	0.101142547	0
Alternate 1	Demolition	Generator	Generator Sets	Diesel	1	25	6	0.5	0.74	0.28	0.034260015	0
Alternate 1	Demolition	Tire Wash	Other Construction Equipment	Diesel	2	100	4	0.9	0.42	0.192	0.128002822	0
Alternate 1	Demolition	Bob Cat	Tractors/Loaders/Backhoes	Diesel	2	70	8	0.8	0.37	0.192	0.14032902	0
Alternate 1	Demolition	Pressure Washer	Pressure Washers	Diesel	2	25	8	1	0.3	0.28	0.074075707	0
Alternate 1	Demolition	Air Compressor	Air Compressors	Diesel	1	140	6	0.7	0.48	0.128	0.0796462	0

Alternate 1	Grading and Utilities	Loader	Tractors/Loaders/Backhoes	Diesel	2	100	4	0.9	0.37	0.192	0.112764391	0
Alternate 1	Grading and Utilities	Tire Wash	Other Construction Equipment	Diesel	1	100	4	0.9	0.42	0.192	0.064001411	0
Alternate 1	Grading and Utilities	Excavator	Excavators	Diesel	1	359	8	0.6	0.38	0.088	0.127039414	0
Alternate 1	Grading and Utilities	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	90	8	0.6	0.37	0.192	0.067658634	0
Alternate 1	Grading and Utilities	Gradall	Forklifts	Diesel	1	74	4	0.6	0.2	0.192	0.015035252	0
Alternate 1	Grading and Utilities	Compactor	Other Construction Equipment	Diesel	1	250	0.5	0.2	0.42	0.088	0.002037082	0
Alternate 1	Grading and Utilities	Paver	Pavers	Diesel	1	250	8	0.01	0.42	0.088	0.001629666	0
Alternate 1	Grading and Utilities	Generator	Generator Sets	Diesel	1	600	2	0.1	0.74	0.088	0.017227893	0
Alternate 1	Foundations	Generator	Generator Sets	Diesel	1	25	6	1	0.74	0.28	0.068520029	0
Alternate 1	Foundations	Tire Wash	Other Construction Equipment	Diesel	1	100	4	0.9	0.42	0.192	0.064001411	0
Alternate 1	Foundations	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	90	8	0.6	0.37	0.192	0.067658634	0
Alternate 1	Foundations	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	70	8	0.8	0.37	0.192	0.07016451	0
Alternate 1	Foundations	Gradall	Forklifts	Diesel	1	74	4	0.8	0.2	0.192	0.020047003	0
Alternate 1	Foundations	Concrete Pump	Pumps	Diesel	1	450	6	0.3	0.74	0.088	0.116288278	0
Alternate 1	Core and Shell	Generator	Generator Sets	Diesel	1	25	6	1	0.74	0.28	0.068520029	0
Alternate 1	Core and Shell	Tire Wash	Other Construction Equipment	Diesel	1	100	4	0.9	0.42	0.192	0.064001411	0
Alternate 1	Core and Shell	Gradall	Forklifts	Diesel	1	74	4	0.8	0.2	0.192	0.020047003	0
Alternate 1	Core and Shell	Concrete Pump	Pumps	Diesel	1	450	6	0.45	0.74	0.088	0.174432417	0
Alternate 1	Tenant Improvements	Generator	Generator Sets	Diesel	1	25	6	0.85	0.74	0.28	0.058242025	0
Alternate 1	Tenant Improvements	Tire Wash	Other Construction Equipment	Diesel	2	100	4	0.9	0.42	0.192	0.128002822	0
Alternate 1	Tenant Improvements	Gradall	Forklifts	Diesel	1	74	4	0.8	0.2	0.192	0.020047003	0

Days in each year					Emissions (lb/yr)						Emission Rate (g/s)					
2022	2023	2024	2025	2026	2021	2022	2023	2024	2025	2026	2021	2022	2023	2024	2025	2026
84	0	0	0	0	5.259412456	33.98389587	0	0	0	0	0.000165049	0.001066	0	0	0	0
84	0	0	0	0	0.890760378	5.755682444	0	0	0	0	2.79535E-05	0.000181	0	0	0	0
84	0	0	0	0	1.664036685	10.75223704	0	0	0	0	5.22202E-05	0.000337	0	0	0	0
84	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
84	0	0	0	0	7.818331092	50.51844706	0	0	0	0	0.000245352	0.001585	0	0	0	0
84	0	0	0	0	0.962984193	6.222359399	0	0	0	0	3.022E-05	0.000195	0	0	0	0
84	0	0	0	0	1.035400604	6.690280826	0	0	0	0	3.24926E-05	0.00021	0	0	0	0
143	0	0	0	0	0	9.800422196	0	0	0	0	0	0.000308	0	0	0	0
143	0	0	0	0	0	3.626015177	0	0	0	0	0	0.000114	0	0	0	0
143	0	0	0	0	0	32.25061575	0	0	0	0	0	0.001012	0	0	0	0
143	0	0	0	0	0	18.30440354	0	0	0	0	0	0.000574	0	0	0	0
143	0	0	0	0	0	72.66654506	0	0	0	0	0	0.00228	0	0	0	0
143	0	0	0	0	0	68.9804837	0	0	0	0	0	0.002165	0	0	0	0
143	0	0	0	0	0	18.64337397	0	0	0	0	0	0.000585	0	0	0	0
143	0	0	0	0	0	1.165210873	0	0	0	0	0	3.66E-05	0	0	0	0
143	0	0	0	0	0	0.466084349	0	0	0	0	0	1.46E-05	0	0	0	0
143	0	0	0	0	0	2.463588703	0	0	0	0	0	7.73E-05	0	0	0	0
42	0	0	0	0	0	0.399856434	0	0	0	0	0	1.25E-05	0	0	0	0
42	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
42	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
42	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
42	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
42	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
42	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
42	0	0	0	0	0	0.89541974	0	0	0	0	0	2.81E-05	0	0	0	0
42	0	0	0	0	0	18.13584956	0	0	0	0	0	0.000569	0	0	0	0
42	0	0	0	0	0	2.26116096	0	0	0	0	0	7.1E-05	0	0	0	0
42	0	0	0	0	0	1.670407196	0	0	0	0	0	5.24E-05	0	0	0	0
42	0	0	0	0	0	3.806142111	0	0	0	0	0	0.000119	0	0	0	0
42	0	0	0	0	0	3.852783351	0	0	0	0	0	0.000121	0	0	0	0
42	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
42	0	0	0	0	0	10.12720739	0	0	0	0	0	0.000318	0	0	0	0
42	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
42	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
42	0	0	0	0	0	0.880019401	0	0	0	0	0	2.76E-05	0	0	0	0
0	258	0	0	0	0	0	2.525922353	0	0	0	0	0	7.93E-05	0	0	0
0	258	0	0	0	0	0	0.253250028	0	0	0	0	0	7.95E-06	0	0	0
0	258	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	258	0	0	0	0	0	0.144714301	0	0	0	0	0	4.54E-06	0	0	0
0	258	0	0	0	0	0	2.638043343	0	0	0	0	0	8.28E-05	0	0	0
0	258	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	258	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	258	0	0	0	0	0	9.651927071	0	0	0	0	0	0.000303	0	0	0
0	258	0	0	0	0	0	4.42337794	0	0	0	0	0	0.000139	0	0	0
0	258	0	0	0	0	0	5.207522212	0	0	0	0	0	0.000163	0	0	0
0	258	0	0	0	0	0	10.55208448	0	0	0	0	0	0.000331	0	0	0
0	258	0	0	0	0	0	40.15015763	0	0	0	0	0	0.00126	0	0	0
0	258	0	0	0	0	0	0.939703256	0	0	0	0	0	2.95E-05	0	0	0
0	258	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	258	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	258	0	0	0	0	0	0.1466699	0	0	0	0	0	4.6E-06	0	0	0
0	258	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	258	0	0	0	0	0	6.906818933	0	0	0	0	0	0.000217	0	0	0
0	242	0	0	0	0	0	0.24137675	0	0	0	0	0	7.57E-06	0	0	0
0	242	0	0	0	0	0	7.687947265	0	0	0	0	0	0.000241	0	0	0
0	242	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

453.59

453.59 g/lb
11 hr/day
365 days/yr
3600 sec/hr

0	242	0	0	0	0	0	4.393112723	0	0	0	0	0	0.000138	0	0	0
0	242	0	0	0	0	0	13.77808153	0	0	0	0	0	0.000432	0	0	0
0	242	0	0	0	0	0	0.49867766	0	0	0	0	0	1.56E-05	0	0	0
0	242	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	242	0	0	0	0	0	1.178387883	0	0	0	0	0	3.7E-05	0	0	0
0	242	0	0	0	0	0	0.563980687	0	0	0	0	0	1.77E-05	0	0	0
0	242	0	0	0	0	0	8.016843405	0	0	0	0	0	0.000252	0	0	0
0	242	0	0	0	0	0	1.577516259	0	0	0	0	0	4.95E-05	0	0	0
0	242	0	0	0	0	0	13.55357922	0	0	0	0	0	0.000425	0	0	0
0	242	0	0	0	0	0	2.725139443	0	0	0	0	0	8.55E-05	0	0	0
0	242	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	242	0	0	0	0	0	10.12720739	0	0	0	0	0	0.000318	0	0	0
0	242	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	242	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	242	0	0	0	0	0	6.453475606	0	0	0	0	0	0.000203	0	0	0
0	0	207	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	207	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	207	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	207	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	207	0	0	0	0	0	2.227457	0	0	0	0	0	6.99E-05	0	0
0	0	207	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	207	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	207	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	207	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	207	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	207	0	0	0	0	0	1.349363	0	0	0	0	0	4.23E-05	0	0
0	0	207	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	207	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	207	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	207	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	207	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	207	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	207	0	0	0	0	0	5.520122	0	0	0	0	0	0.000173	0	0
42	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
42	0	0	0	0	0	6.180506625	0	0	0	0	0	0.000194	0	0	0	0
42	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
42	0	0	0	0	0	3.531718071	0	0	0	0	0	0.000111	0	0	0	0
42	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
42	0	0	0	0	0	0.268894817	0	0	0	0	0	8.44E-06	0	0	0	0
42	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
42	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
42	0	0	0	0	0	36.27169911	0	0	0	0	0	0.001138	0	0	0	0
42	0	0	0	0	0	2.809321193	0	0	0	0	0	8.82E-05	0	0	0	0
42	0	0	0	0	0	5.011221588	0	0	0	0	0	0.000157	0	0	0	0
42	0	0	0	0	0	2.042320157	0	0	0	0	0	6.41E-05	0	0	0	0
42	0	0	0	0	0	2.889587513	0	0	0	0	0	9.07E-05	0	0	0	0
42	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
42	0	0	0	0	0	7.682709054	0	0	0	0	0	0.000241	0	0	0	0
42	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
42	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
42	0	0	0	0	0	1.093357437	0	0	0	0	0	3.43E-05	0	0	0	0
0	260	0	0	0	0	0	1.609178333	0	0	0	0	0	5.05E-05	0	0	0
0	260	0	0	0	0	0	21.40565709	0	0	0	0	0	0.000672	0	0	0
0	260	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	260	0	0	0	0	0	12.23180405	0	0	0	0	0	0.000384	0	0	0
0	260	0	0	0	0	0	1.768187129	0	0	0	0	0	5.55E-05	0	0	0
0	260	0	0	0	0	0	0.806684451	0	0	0	0	0	2.53E-05	0	0	0
0	260	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

0	260	0	0	0	0	0	5.11668423	0	0	0	0	0	0.000161	0	0	0
0	260	0	0	0	0	0	52.63819749	0	0	0	0	0	0.001652	0	0	0
0	260	0	0	0	0	0	19.93932847	0	0	0	0	0	0.000626	0	0	0
0	260	0	0	0	0	0	27.05244825	0	0	0	0	0	0.000849	0	0	0
0	260	0	0	0	0	0	58.29895721	0	0	0	0	0	0.00183	0	0	0
0	260	0	0	0	0	0	7.447148306	0	0	0	0	0	0.000234	0	0	0
0	260	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	260	0	0	0	0	0	30.38162217	0	0	0	0	0	0.000953	0	0	0
0	260	0	0	0	0	0	0.183337375	0	0	0	0	0	5.75E-06	0	0	0
0	260	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	260	0	0	0	0	0	3.786750149	0	0	0	0	0	0.000119	0	0	0
0	0	262	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	262	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	262	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	262	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	262	0	0	0	0	0	38.71641	0	0	0	0	0	0.001215	0	0
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0	0	262	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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0	0	262	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	262	0	0	0	0	0	36.50451	0	0	0	0	0	0.001146	0	0
0	0	262	0	0	0	0	0	4.08464	0	0	0	0	0	0.000128	0	0
0	0	262	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	262	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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0	0	262	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	261	0	0	0	0	0	0	0	0	0	0	0	0	0
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0	0	0	261	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	261	0	0	0	0	18.83004	0	0	0	0	0	0.000591	0	0
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0	0	0	0	46	0	0	0	0	0	0	0	0	0	0	0	0
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0	0	0	0	46	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	46	0	0	0	0	0	7.333495	0	0	0	0	0	0.00023

0	0	0	0	46	0	0	0	0	0	8.354946	0	0	0	0	0	0.000262
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42	0	0	0	0	0	2.255287815	0	0	0	0	0	7.08E-05	0	0	0	0
42	0	0	0	0	0	2.788765184	0	0	0	0	0	8.75E-05	0	0	0	0
42	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
42	0	0	0	0	0	1.765859036	0	0	0	0	0	5.54E-05	0	0	0	0
42	0	0	0	0	0	0.470751119	0	0	0	0	0	1.48E-05	0	0	0	0
42	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
42	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
42	0	0	0	0	0	1.147377676	0	0	0	0	0	3.6E-05	0	0	0	0
42	0	0	0	0	0	18.13584956	0	0	0	0	0	0.000569	0	0	0	0
42	0	0	0	0	0	2.809321193	0	0	0	0	0	8.82E-05	0	0	0	0
42	0	0	0	0	0	3.340814392	0	0	0	0	0	0.000105	0	0	0	0
42	0	0	0	0	0	3.434811173	0	0	0	0	0	0.000108	0	0	0	0
42	0	0	0	0	0	7.705566701	0	0	0	0	0	0.000242	0	0	0	0
42	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
42	0	0	0	0	0	25.84183955	0	0	0	0	0	0.000811	0	0	0	0
42	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
42	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
42	0	0	0	0	0	2.186714875	0	0	0	0	0	6.86E-05	0	0	0	0
0	257	0	0	0	0	0	12.0688375	0	0	0	0	0	0.000379	0	0	0
0	257	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	257	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	257	0	0	0	0	0	2.584183955	0	0	0	0	0	8.11E-05	0	0	0
0	257	0	0	0	0	0	0.688904076	0	0	0	0	0	2.16E-05	0	0	0
0	257	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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0	257	0	0	0	0	0	38.37513173	0	0	0	0	0	0.001204	0	0	0
0	257	0	0	0	0	0	26.54026764	0	0	0	0	0	0.000833	0	0	0
0	257	0	0	0	0	0	31.24513327	0	0	0	0	0	0.000981	0	0	0
0	257	0	0	0	0	0	37.1563747	0	0	0	0	0	0.001166	0	0	0
0	257	0	0	0	0	0	73.52352565	0	0	0	0	0	0.002307	0	0	0
0	257	0	0	0	0	0	11.27643907	0	0	0	0	0	0.000354	0	0	0
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0	257	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	257	0	0	0	0	0	0.055001213	0	0	0	0	0	1.73E-06	0	0	0
0	257	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	257	0	0	0	0	0	8.480186953	0	0	0	0	0	0.000266	0	0	0
0	0	175	0	0	0	0	0	10.6669	0	0	0	0	0	0.000335	0	0
0	0	175	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	175	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	175	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	175	0	0	0	0	0	28.01543	0	0	0	0	0	0.000879	0	0
0	0	175	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	175	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	175	0	0	0	0	0	33.91741	0	0	0	0	0	0.001064	0	0
0	0	175	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	175	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	175	0	0	0	0	0	28.51915	0	0	0	0	0	0.000895	0	0
0	0	175	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	175	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	175	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	175	0	0	0	0	0	0	0	0	0	0	0	0	0	0

0	0	175	0	0	0	0	0	0.048612	0	0	0	0	0	1.53E-06	0	0
0	0	175	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	175	0	0	0	0	0	4.66677	0	0	0	0	0	0.000146	0	0
0	0	0	154	0	0	0	0	0	2.62101	0	0	0	0	0	8.23E-05	0
0	0	0	154	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	154	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	154	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	154	0	0	0	0	0	23.79015	0	0	0	0	0	0.000747	0
0	0	0	154	0	0	0	0	0	0	0	0	0	0	0	0	0
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0	0	0	154	0	0	0	0	0	0	0	0	0	0	0	0	0
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0	0	0	154	0	0	0	0	0	0	0	0	0	0	0	0	0
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0	0	0	154	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	154	0	0	0	0	0	4.133424	0	0	0	0	0	0.00013	0
0	238	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	238	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	238	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	238	0	0	0	0	0	10.25059635	0	0	0	0	0	0.000322	0	0	0
0	238	0	0	0	0	0	2.732652836	0	0	0	0	0	8.58E-05	0	0	0
0	238	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	238	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	238	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	238	0	0	0	0	0	105.276395	0	0	0	0	0	0.003304	0	0	0
0	238	0	0	0	0	0	16.30776693	0	0	0	0	0	0.000512	0	0	0
0	238	0	0	0	0	0	19.39302013	0	0	0	0	0	0.000609	0	0	0
0	238	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	238	0	0	0	0	0	44.729875	0	0	0	0	0	0.001404	0	0	0
0	238	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	238	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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0	238	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	238	0	0	0	0	0	12.69361317	0	0	0	0	0	0.000398	0	0	0
0	0	262	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	262	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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0	0	262	0	0	0	0	0	3.747067	0	0	0	0	0	0.000118	0	0
0	0	262	0	0	0	0	0	3.754527	0	0	0	0	0	0.000118	0	0
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0	0	262	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	262	0	0	0	0	0	0.344989	0	0	0	0	0	1.08E-05	0	0
0	0	262	0	0	0	0	0	38.48339	0	0	0	0	0	0.001208	0	0
0	0	262	0	0	0	0	0	1.644481	0	0	0	0	0	5.16E-05	0	0
0	0	262	0	0	0	0	0	18.74115	0	0	0	0	0	0.000588	0	0
0	0	262	0	0	0	0	0	8.362373	0	0	0	0	0	0.000262	0	0
0	0	262	0	0	0	0	0	16.35084	0	0	0	0	0	0.000513	0	0
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0	0	262	0	0	0	0	0	4.640102	0	0	0	0	0	0.000146	0	0
0	0	0	110	0	0	0	0	0	0	0	0	0	0	0	0	0

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0	0	0	110	0	0	0	0	0	0	0	0	0	0	0	0	0
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0	0	0	110	0	0	0	0	0	26.88948	0	0	0	0	0	0.000844	0
0	0	0	110	0	0	0	0	0	0.612696	0	0	0	0	0	1.92E-05	0
0	0	0	110	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	110	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	110	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	110	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	110	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	110	0	0	0	0	0	0	0	0	0	0	0	0	0
0	161	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	161	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	161	0	0	0	0	0	10.30422717	0	0	0	0	0	0.000323	0	0	0
0	161	0	0	0	0	0	10.85596674	0	0	0	0	0	0.000341	0	0	0
0	161	0	0	0	0	0	10.89304015	0	0	0	0	0	0.000342	0	0	0
0	161	0	0	0	0	0	11.29648608	0	0	0	0	0	0.000355	0	0	0
0	161	0	0	0	0	0	3.227567451	0	0	0	0	0	0.000101	0	0	0
0	161	0	0	0	0	0	3.895036487	0	0	0	0	0	0.000122	0	0	0
0	161	0	0	0	0	0	12.4816085	0	0	0	0	0	0.000392	0	0	0
0	64	116	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	64	116	0	0	0	0	4.096090302	7.424164	0	0	0	0	0.000129	0.000233	0	0
0	64	116	0	0	0	0	3.456753456	6.265366	0	0	0	0	0.000108	0.000197	0	0
0	64	116	0	0	0	0	1.283008179	2.325452	0	0	0	0	4.03E-05	7.3E-05	0	0
0	64	116	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	64	116	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	64	116	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	147	114	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	147	114	0	0	0	0	9.408207	7.296161	0	0	0	0	0.000295	0.000229	0
0	0	147	114	0	0	0	0	2.946909	2.285358	0	0	0	0	9.25E-05	7.17E-05	0
0	0	0	59	0	0	0	0	0	2.491166	0	0	0	0	0	7.82E-05	0
0	0	0	59	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	59	0	0	0	0	0	3.776083	0	0	0	0	0	0.000118	0
0	0	0	59	0	0	0	0	0	6.653099	0	0	0	0	0	0.000209	0
0	0	0	59	0	0	0	0	0	4.139706	0	0	0	0	0	0.00013	0
0	160	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	160	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	160	1	0	0	0	0	10.24022575	0.064001	0	0	0	0	0.000321	2.01E-06	0	0
0	160	1	0	0	0	0	10.78853837	0.067428	0	0	0	0	0.000339	2.12E-06	0	0
0	160	1	0	0	0	0	21.65076302	0.135317	0	0	0	0	0.000679	4.25E-06	0	0
0	160	1	0	0	0	0	11.22632157	0.070165	0	0	0	0	0.000352	2.2E-06	0	0
0	160	1	0	0	0	0	3.207520448	0.020047	0	0	0	0	0.000101	6.29E-07	0	0
0	160	1	0	0	0	0	3.870843713	0.024193	0	0	0	0	0.000121	7.59E-07	0	0
0	160	1	0	0	0	0	12.40408298	0.077526	0	0	0	0	0.000389	2.43E-06	0	0
0	0	180	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	180	0	0	0	0	0	11.52025	0	0	0	0	0	0.000362	0	0
0	0	180	0	0	0	0	0	9.722119	0	0	0	0	0	0.000305	0	0
0	0	180	0	0	0	0	0	7.216921	0	0	0	0	0	0.000226	0	0
0	0	180	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	180	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	180	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	82	178	0	0	0	0	0	0	0	0	0	0	0	0	0

0	0	82	178	0	0	0	0	5.248116	11.39225	0	0	0	0	0.000165	0.000358	0
0	0	82	178	0	0	0	0	1.643854	3.568366	0	0	0	0	5.16E-05	0.000112	0
0	0	0	58	0	0	0	0	0	2.448943	0	0	0	0	0	7.69E-05	0
0	0	0	58	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	58	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	58	0	0	0	0	0	6.540335	0	0	0	0	0	0.000205	0
0	0	0	58	0	0	0	0	0	8.139083	0	0	0	0	0	0.000255	0
48	0	0	0	0	0	19.41936907	0	0	0	0	0	0.000609	0	0	0	0
48	0	0	0	0	0	3.288961397	0	0	0	0	0	0.000103	0	0	0	0
48	0	0	0	0	0	6.144135453	0	0	0	0	0	0.000193	0	0	0	0
48	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
48	0	0	0	0	0	28.86768403	0	0	0	0	0	0.000906	0	0	0	0
48	0	0	0	0	0	3.555633943	0	0	0	0	0	0.000112	0	0	0	0
48	0	0	0	0	0	3.823017615	0	0	0	0	0	0.00012	0	0	0	0
65	65	0	0	0	0	4.454737362	4.454737362	0	0	0	0	0.00014	0.00014	0	0	0
65	65	0	0	0	0	1.648188717	1.648188717	0	0	0	0	5.17E-05	5.17E-05	0	0	0
65	65	0	0	0	0	14.6593708	14.6593708	0	0	0	0	0.00046	0.00046	0	0	0
65	65	0	0	0	0	8.320183426	8.320183426	0	0	0	0	0.000261	0.000261	0	0	0
65	65	0	0	0	0	33.03024776	33.03024776	0	0	0	0	0.001037	0.001037	0	0	0
65	65	0	0	0	0	31.35476532	31.35476532	0	0	0	0	0.000984	0.000984	0	0	0
65	65	0	0	0	0	8.474260896	8.474260896	0	0	0	0	0.000266	0.000266	0	0	0
65	65	0	0	0	0	0.529641306	0.529641306	0	0	0	0	1.66E-05	1.66E-05	0	0	0
65	65	0	0	0	0	0.211856522	0.211856522	0	0	0	0	6.65E-06	6.65E-06	0	0	0
65	65	0	0	0	0	1.119813047	1.119813047	0	0	0	0	3.51E-05	3.51E-05	0	0	0
0	202	0	0	0	0	0	1.970024383	0	0	0	0	0	6.18E-05	0	0	0
0	202	0	0	0	0	0	0.277369078	0	0	0	0	0	8.7E-06	0	0	0
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0	202	0	0	0	0	0	0.158496616	0	0	0	0	0	4.97E-06	0	0	0
0	202	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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0	202	0	0	0	0	0	5.891939417	0	0	0	0	0	0.000185	0	0	0
0	202	0	0	0	0	0	22.1168897	0	0	0	0	0	0.000694	0	0	0
0	202	0	0	0	0	0	7.468683172	0	0	0	0	0	0.000234	0	0	0
0	202	0	0	0	0	0	8.229811063	0	0	0	0	0	0.000258	0	0	0
0	202	0	0	0	0	0	30.77405146	0	0	0	0	0	0.000966	0	0	0
0	202	0	0	0	0	0	4.698516281	0	0	0	0	0	0.000147	0	0	0
0	202	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	202	0	0	0	0	0	10.12720739	0	0	0	0	0	0.000318	0	0	0
0	202	0	0	0	0	0	0.1466699	0	0	0	0	0	4.6E-06	0	0	0
0	202	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	202	0	0	0	0	0	5.200114641	0	0	0	0	0	0.000163	0	0	0
0	0	188	0	0	0	0	0	1.833488	0	0	0	0	0	5.75E-05	0	0
0	0	188	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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0	0	188	0	0	0	0	0	6.817395	0	0	0	0	0	0.000214	0	0
0	0	188	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	188	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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0	0	188	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	188	0	0	0	0	0	5.013444	0	0	0	0	0	0.000157	0	0
0	177	0	0	0	0	0	0.24137675	0	0	0	0	0	7.57E-06	0	0	0
0	177	0	0	0	0	0	11.45654887	0	0	0	0	0	0.00036	0	0	0
0	177	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	177	0	0	0	0	0	6.546599352	0	0	0	0	0	0.000205	0	0	0
0	177	0	0	0	0	0	2.296346921	0	0	0	0	0	7.21E-05	0	0	0
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0	177	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	177	0	0	0	0	0	1.387706784	0	0	0	0	0	4.35E-05	0	0	0
0	177	0	0	0	0	0	0.840441809	0	0	0	0	0	2.64E-05	0	0	0
0	177	0	0	0	0	0	9.729844132	0	0	0	0	0	0.000305	0	0	0
0	177	0	0	0	0	0	1.153803214	0	0	0	0	0	3.62E-05	0	0	0
0	177	0	0	0	0	0	18.19521594	0	0	0	0	0	0.000571	0	0	0
0	177	0	0	0	0	0	5.168367909	0	0	0	0	0	0.000162	0	0	0
0	177	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	177	0	0	0	0	0	19.20677264	0	0	0	0	0	0.000603	0	0	0
0	177	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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0	177	0	0	0	0	0	4.720104059	0	0	0	0	0	0.000148	0	0	0
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0	0	262	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	262	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	262	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	262	0	0	0	0	0	16.05146	0	0	0	0	0	0.000504	0	0
0	0	262	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	262	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	262	0	0	0	0	0	0.236453	0	0	0	0	0	7.42E-06	0	0
0	0	262	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	262	0	0	0	0	0	1.301881	0	0	0	0	0	4.09E-05	0	0
0	0	262	0	0	0	0	0	1.70789	0	0	0	0	0	5.36E-05	0	0
0	0	262	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	262	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	262	0	0	0	0	0	0	0	0	0	0	0	0	0	0

0	0	262	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	262	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	262	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	262	0	0	0	0	0	6.986821	0	0	0	0	0	0.000219	0	0
0	0	0	122	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	122	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	122	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	122	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	122	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	122	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	122	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	122	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	122	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	122	0	0	0	0	0.795277	0	0	0	0	0	2.5E-05	0	0
0	0	0	122	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	122	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	122	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	122	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	122	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	122	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	122	0	0	0	0	3.253405	0	0	0	0	0	0.000102	0	0
0	0	116	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	116	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	116	0	0	0	0	0	7.424164	0	0	0	0	0	0.000233	0	0
0	0	116	0	0	0	0	0	7.82169	0	0	0	0	0	0.000245	0	0
0	0	116	0	0	0	0	0	7.848402	0	0	0	0	0	0.000246	0	0
0	0	116	0	0	0	0	0	8.139083	0	0	0	0	0	0.000255	0	0
0	0	116	0	0	0	0	0	2.325452	0	0	0	0	0	7.3E-05	0	0
0	0	116	0	0	0	0	0	2.806362	0	0	0	0	0	8.81E-05	0	0
0	0	116	0	0	0	0	0	0.936767	0	0	0	0	0	2.94E-05	0	0
0	0	129	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	129	0	0	0	0	0	8.256182	0	0	0	0	0	0.000259	0	0
0	0	129	0	0	0	0	0	6.967519	0	0	0	0	0	0.000219	0	0
0	0	129	0	0	0	0	0	2.586063	0	0	0	0	0	8.12E-05	0	0
0	0	129	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	129	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	129	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	17	171	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	17	171	0	0	0	0	1.088024	10.94424	0	0	0	0	3.41E-05	0.000343	0
0	0	17	171	0	0	0	0	0.340799	3.428037	0	0	0	0	1.07E-05	0.000108	0
0	0	0	58	0	0	0	0	0	2.448943	0	0	0	0	0	7.69E-05	0
0	0	0	58	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	58	0	0	0	0	0	3.712082	0	0	0	0	0	0.000116	0
0	0	0	58	0	0	0	0	0	3.924201	0	0	0	0	0	0.000123	0
0	0	0	58	0	0	0	0	0	4.069542	0	0	0	0	0	0.000128	0
0	0	116	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	116	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	116	0	0	0	0	0	7.424164	0	0	0	0	0	0.000233	0	0
0	0	116	0	0	0	0	0	7.82169	0	0	0	0	0	0.000245	0	0
0	0	116	0	0	0	0	0	7.848402	0	0	0	0	0	0.000246	0	0
0	0	116	0	0	0	0	0	8.139083	0	0	0	0	0	0.000255	0	0
0	0	116	0	0	0	0	0	2.325452	0	0	0	0	0	7.3E-05	0	0
0	0	116	0	0	0	0	0	2.806362	0	0	0	0	0	8.81E-05	0	0
0	0	116	0	0	0	0	0	1.873533	0	0	0	0	0	5.88E-05	0	0
0	0	81	48	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	81	48	0	0	0	0	5.184114	3.072068	0	0	0	0	0.000163	9.64E-05	0
0	0	81	48	0	0	0	0	4.374954	2.592565	0	0	0	0	0.000137	8.14E-05	0

0	0	81	48	0	0	0	0	3.247614	1.924512	0	0	0	0	0.000102	6.04E-05	0
0	0	81	48	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	81	48	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	81	48	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	187	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	187	0	0	0	0	0	11.96826	0	0	0	0	0	0.000376	0
0	0	0	187	0	0	0	0	0	3.74879	0	0	0	0	0	0.000118	0
0	0	0	27	32	0	0	0	0	1.140025	1.351141	0	0	0	0	3.58E-05	4.24E-05
0	0	0	27	32	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	27	32	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	27	32	0	0	0	0	1.826783	2.165076	0	0	0	0	5.73E-05	6.79E-05
0	0	0	27	32	0	0	0	0	3.788884	4.490529	0	0	0	0	0.000119	0.000141
0	22	0	0	0	0	0	0.75387863	0	0	0	0	0	2.37E-05	0	0	0
0	22	0	0	0	0	0	0.278924244	0	0	0	0	0	8.75E-06	0	0	0
0	22	0	0	0	0	0	2.480816596	0	0	0	0	0	7.79E-05	0	0	0
0	22	0	0	0	0	0	1.408031041	0	0	0	0	0	4.42E-05	0	0	0
0	22	0	0	0	0	0	5.589734236	0	0	0	0	0	0.000175	0	0	0
0	22	0	0	0	0	0	5.306191054	0	0	0	0	0	0.000167	0	0	0
0	22	0	0	0	0	0	1.43410569	0	0	0	0	0	4.5E-05	0	0	0
0	22	0	0	0	0	0	0.089631606	0	0	0	0	0	2.81E-06	0	0	0
0	22	0	0	0	0	0	0.035852642	0	0	0	0	0	1.13E-06	0	0	0
0	22	0	0	0	0	0	0.379013647	0	0	0	0	0	1.19E-05	0	0	0
0	175	87	0	0	0	0	5.996150709	2.980943	0	0	0	0	0.000188	9.35E-05	0	0
0	175	87	0	0	0	0	17.22704645	8.564303	0	0	0	0	0.000541	0.000269	0	0
0	175	87	0	0	0	0	8.479353601	4.21545	0	0	0	0	0.000266	0.000132	0	0
0	175	87	0	0	0	0	6.775260478	3.368272	0	0	0	0	0.000213	0.000106	0	0
0	175	87	0	0	0	0	2.69635574	1.340474	0	0	0	0	8.46E-05	4.21E-05	0	0
0	175	87	0	0	0	0	6.400141097	3.181784	0	0	0	0	0.000201	9.98E-05	0	0
0	0	24	99	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	24	99	0	0	0	0	3.288961	13.56697	0	0	0	0	0.000103	0.000426	0
0	0	24	99	0	0	0	0	3.072068	12.67228	0	0	0	0	9.64E-05	0.000398	0
0	0	24	99	0	0	0	0	3.236562	13.35082	0	0	0	0	0.000102	0.000419	0
0	0	24	99	0	0	0	0	3.247614	13.39641	0	0	0	0	0.000102	0.00042	0
0	0	24	99	0	0	0	0	3.367896	13.89257	0	0	0	0	0.000106	0.000436	0
0	0	24	99	0	0	0	0	0.962256	3.969307	0	0	0	0	3.02E-05	0.000125	0
0	0	24	99	0	0	0	0	1.161253	4.790169	0	0	0	0	3.64E-05	0.00015	0
0	0	24	99	0	0	0	0	1.162883	4.796891	0	0	0	0	3.65E-05	0.000151	0
0	0	0	139	0	0	0	0	0	19.04857	0	0	0	0	0	0.000598	0
0	0	0	139	0	0	0	0	0	17.79239	0	0	0	0	0	0.000558	0
0	0	0	139	0	0	0	0	0	15.01527	0	0	0	0	0	0.000471	0
0	0	0	139	0	0	0	0	0	8.3596	0	0	0	0	0	0.000262	0
0	0	0	139	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	139	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	139	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	25	174	0	0	0	0	2.912101	20.26822	0	0	0	0	9.14E-05	0.000636
0	0	0	25	174	0	0	0	0	3.200071	22.27249	0	0	0	0	0.0001	0.000699
0	0	0	25	174	0	0	0	0	0.501175	3.488178	0	0	0	0	1.57E-05	0.000109
0	0	0	0	59	0	0	0	0	0	2.491166	0	0	0	0	0	7.82E-05
0	0	0	0	59	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	59	0	0	0	0	0	3.776083	0	0	0	0	0	0.000118
0	0	0	0	59	0	0	0	0	0	7.983719	0	0	0	0	0	0.000251
0	0	0	0	59	0	0	0	0	0	12.41912	0	0	0	0	0	0.00039
0	0	22	0	0	0	0	0	2.225136	0	0	0	0	0	6.98E-05	0	0
0	0	22	0	0	0	0	0	0.75372	0	0	0	0	0	2.37E-05	0	0
0	0	22	0	0	0	0	0	2.816062	0	0	0	0	0	8.84E-05	0	0
0	0	22	0	0	0	0	0	3.087238	0	0	0	0	0	9.69E-05	0	0
0	0	22	0	0	0	0	0	1.629666	0	0	0	0	0	5.11E-05	0	0
0	0	22	0	0	0	0	0	1.752216	0	0	0	0	0	5.5E-05	0	0

0	0	1	22	0	0	0	0	0.112764	2.480817	0	0	0	0	3.54E-06	7.79E-05	0
0	0	1	22	0	0	0	0	0.064001	1.408031	0	0	0	0	2.01E-06	4.42E-05	0
0	0	1	22	0	0	0	0	0.127039	2.794867	0	0	0	0	3.99E-06	8.77E-05	0
0	0	1	22	0	0	0	0	0.067659	1.48849	0	0	0	0	2.12E-06	4.67E-05	0
0	0	1	22	0	0	0	0	0.015035	0.330776	0	0	0	0	4.72E-07	1.04E-05	0
0	0	1	22	0	0	0	0	0.002037	0.044816	0	0	0	0	6.39E-08	1.41E-06	0
0	0	1	22	0	0	0	0	0.00163	0.035853	0	0	0	0	5.11E-08	1.13E-06	0
0	0	1	22	0	0	0	0	0.017228	0.379014	0	0	0	0	5.41E-07	1.19E-05	0
0	0	0	22	0	0	0	0	0	1.507441	0	0	0	0	0	4.73E-05	0
0	0	0	22	0	0	0	0	0	1.408031	0	0	0	0	0	4.42E-05	0
0	0	0	22	0	0	0	0	0	1.48849	0	0	0	0	0	4.67E-05	0
0	0	0	22	0	0	0	0	0	1.543619	0	0	0	0	0	4.84E-05	0
0	0	0	22	0	0	0	0	0	0.441034	0	0	0	0	0	1.38E-05	0
0	0	0	22	0	0	0	0	0	2.558342	0	0	0	0	0	8.03E-05	0
0	0	0	43	0	0	0	0	0	2.946361	0	0	0	0	0	9.25E-05	0
0	0	0	43	0	0	0	0	0	2.752061	0	0	0	0	0	8.64E-05	0
0	0	0	43	0	0	0	0	0	0.862021	0	0	0	0	0	2.71E-05	0
0	0	0	43	0	0	0	0	0	7.500594	0	0	0	0	0	0.000235	0
0	0	0	33	0	0	0	0	0	1.921987	0	0	0	0	0	6.03E-05	0
0	0	0	33	0	0	0	0	0	4.224093	0	0	0	0	0	0.000133	0
0	0	0	33	0	0	0	0	0	0.661551	0	0	0	0	0	2.08E-05	0

Equipment Information											Daily Emiss		
PHASE	SUBPHASE	EQUIPMENT	CALEEMOD_EQUIPMENT	FUEL	NUMBER	HP	DAILYHRS	UTILIZATION	LF	EF		2021	2022
Phase 1a	Demolition	Excavator	Excavators	Diesel	4	131	8	0.9	0.38	0.008	0.025286	13	84
Phase 1a	Demolition	Generator	Generator Sets	Diesel	2	25	6	0.5	0.74	0.008	0.001958	13	84
Phase 1a	Demolition	Tire Wash	Other Construction Equipment	Diesel	2	100	4	0.9	0.42	0.008	0.005333	13	84
Phase 1a	Demolition	Concrete Crusher	Crushing/Proc. Equipment	Diesel	2	200	2	0	0.78	0.008	0	13	84
Phase 1a	Demolition	Bob Cat	Tractors/Loaders/Backhoes	Diesel	6	150	8	0.8	0.37	0.008	0.037588	13	84
Phase 1a	Demolition	Pressure Washer	Pressure Washers	Diesel	2	25	8	1	0.3	0.008	0.002116	13	84
Phase 1a	Demolition	Air Compressor	Air Compressors	Diesel	1	140	6	0.7	0.48	0.008	0.004978	13	84
Phase 1a	Grading and Utilities	Blade	Graders	Diesel	2	359	8	0.15	0.41	0.008	0.00623	0	143
Phase 1a	Grading and Utilities	Scraper	Scrapers	Diesel	2	52	8	0.15	0.48	0.008	0.001057	0	143
Phase 1a	Grading and Utilities	Loader	Tractors/Loaders/Backhoes	Diesel	4	100	4	0.9	0.37	0.008	0.009397	0	143
Phase 1a	Grading and Utilities	Tire Wash	Other Construction Equipment	Diesel	2	100	4	0.9	0.42	0.008	0.005333	0	143
Phase 1a	Grading and Utilities	Excavator	Excavators	Diesel	4	359	8	0.6	0.38	0.008	0.046196	0	143
Phase 1a	Grading and Utilities	Backhoe	Tractors/Loaders/Backhoes	Diesel	4	350	8	0.6	0.37	0.008	0.043853	0	143
Phase 1a	Grading and Utilities	Gradall	Forklifts	Diesel	4	350	4	0.6	0.2	0.008	0.011852	0	143
Phase 1a	Grading and Utilities	Compactor	Other Construction Equipment	Diesel	4	250	0.5	0.2	0.42	0.008	0.000741	0	143
Phase 1a	Grading and Utilities	Paver	Pavers	Diesel	2	250	8	0.01	0.42	0.008	0.000296	0	143
Phase 1a	Grading and Utilities	Generator	Generator Sets	Diesel	1	600	2	0.1	0.74	0.008	0.001566	0	143
Phase 1a Office	North Garage 2022	Air Compressor	Air Compressors	Diesel	1	150	0.47	1	0.48	0.008	0.000595	0	42
Phase 1a Office	North Garage 2022	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	0	1	0.37	0.008	0	0	42
Phase 1a Office	North Garage 2022	Blade	Graders	Diesel	1	450	0	1	0.41	0.008	0	0	42
Phase 1a Office	North Garage 2022	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	0	1	0.37	0.008	0	0	42
Phase 1a Office	North Garage 2022	Boom Lift	Aerial Lifts	Diesel	1	40	0	1	0.31	0.008	0	0	42
Phase 1a Office	North Garage 2022	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0.42	0.008	0	0	42
Phase 1a Office	North Garage 2022	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.78	0.008	0	0	42
Phase 1a Office	North Garage 2022	Concrete Pump	Pumps	Diesel	1	450	0.33	1	0.74	0.008	0.001938	0	42
Phase 1a Office	North Garage 2022	Excavator	Excavators	Diesel	1	500	11.71429	1	0.38	0.008	0.039255	0	42
Phase 1a Office	North Garage 2022	Generator	Generator Sets	Diesel	1	25	4.714286	1	0.74	0.008	0.001538	0	42
Phase 1a Office	North Garage 2022	Gradall	Forklifts	Diesel	1	350	2.928571	1	0.2	0.008	0.003616	0	42
Phase 1a Office	North Garage 2022	Hydro/Crawler Crane	Cranes	Diesel	1	550	2.928571	1	0.29	0.008	0.008238	0	42
Phase 1a Office	North Garage 2022	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	5.857143	1	0.37	0.008	0.003822	0	42
Phase 1a Office	North Garage 2022	Paver	Pavers	Diesel	1	250	0	1	0.42	0.008	0	0	42
Phase 1a Office	North Garage 2022	Pile Rig	Bore/Drill Rigs	Diesel	1	600	4.142857	1	0.5	0.008	0.02192	0	42
Phase 1a Office	North Garage 2022	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0.3	0.008	0	0	42
Phase 1a Office	North Garage 2022	Scraper	Scrapers	Diesel	1	600	0	1	0.48	0.008	0	0	42
Phase 1a Office	North Garage 2022	Tire Wash	Other Construction Equipment	Diesel	1	100	1.178571	1	0.42	0.008	0.000873	0	42
Phase 1a Office	North Garage 2023	Air Compressor	Air Compressors	Diesel	1	150	0.48186	1	0.48	0.008	0.000612	0	0
Phase 1a Office	North Garage 2023	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	0.03907	1	0.37	0.008	8.92E-05	0	0
Phase 1a Office	North Garage 2023	Blade	Graders	Diesel	1	450	0	1	0.41	0.008	0	0	0
Phase 1a Office	North Garage 2023	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	0.03907	1	0.37	0.008	5.1E-05	0	0
Phase 1a Office	North Garage 2023	Boom Lift	Aerial Lifts	Diesel	1	40	1.335814	1	0.31	0.008	0.000292	0	0
Phase 1a Office	North Garage 2023	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0.42	0.008	0	0	0
Phase 1a Office	North Garage 2023	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.78	0.008	0	0	0
Phase 1a Office	North Garage 2023	Concrete Pump	Pumps	Diesel	1	450	0.57907	1	0.74	0.008	0.003401	0	0
Phase 1a Office	North Garage 2023	Excavator	Excavators	Diesel	1	500	0.465116	1	0.38	0.008	0.001559	0	0
Phase 1a Office	North Garage 2023	Generator	Generator Sets	Diesel	1	25	1.767442	1	0.74	0.008	0.000577	0	0
Phase 1a Office	North Garage 2023	Gradall	Forklifts	Diesel	1	350	3.011628	1	0.2	0.008	0.003718	0	0
Phase 1a Office	North Garage 2023	Hydro/Crawler Crane	Cranes	Diesel	1	550	5.02907	1	0.29	0.008	0.014147	0	0
Phase 1a Office	North Garage 2023	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	0.232558	1	0.37	0.008	0.000152	0	0
Phase 1a Office	North Garage 2023	Paver	Pavers	Diesel	1	250	0	1	0.42	0.008	0	0	0
Phase 1a Office	North Garage 2023	Pile Rig	Bore/Drill Rigs	Diesel	1	600	0	1	0.5	0.008	0	0	0
Phase 1a Office	North Garage 2023	Pressure Washer	Pressure Washers	Diesel	1	25	0.122791	1	0.3	0.008	1.62E-05	0	0
Phase 1a Office	North Garage 2023	Scraper	Scrapers	Diesel	1	600	0	1	0.48	0.008	0	0	0
Phase 1a Office	North Garage 2023	Tire Wash	Other Construction Equipment	Diesel	1	100	1.505814	1	0.42	0.008	0.001115	0	0
Phase 1a Office	Office Building 4 2023	Air Compressor	Air Compressors	Diesel	1	150	0.049091	1	0.48	0.008	6.23E-05	0	0

Phase 1a Office	Office Building 4 2023	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	1.264463	1	0.37	0.008	0.002888	0	0
Phase 1a Office	Office Building 4 2023	Blade	Graders	Diesel	1	450	0	1	0.41	0.008	0	0	0
Phase 1a Office	Office Building 4 2023	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	1.264463	1	0.37	0.008	0.00165	0	0
Phase 1a Office	Office Building 4 2023	Boom Lift	Aerial Lifts	Diesel	1	40	7.438017	1	0.31	0.008	0.001627	0	0
Phase 1a Office	Office Building 4 2023	Compactor	Other Construction Equipment	Diesel	1	250	0.101157	1	0.42	0.008	0.000187	0	0
Phase 1a Office	Office Building 4 2023	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.78	0.008	0	0	0
Phase 1a Office	Office Building 4 2023	Concrete Pump	Pumps	Diesel	1	450	0.075372	1	0.74	0.008	0.000443	0	0
Phase 1a Office	Office Building 4 2023	Excavator	Excavators	Diesel	1	500	0.063223	1	0.38	0.008	0.000212	0	0
Phase 1a Office	Office Building 4 2023	Generator	Generator Sets	Diesel	1	25	2.900826	1	0.74	0.008	0.000946	0	0
Phase 1a Office	Office Building 4 2023	Gradall	Forklifts	Diesel	1	350	0.48	1	0.2	0.008	0.000593	0	0
Phase 1a Office	Office Building 4 2023	Hydro/Crawler Crane	Cranes	Diesel	1	550	1.809917	1	0.29	0.008	0.005092	0	0
Phase 1a Office	Office Building 4 2023	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	0.719008	1	0.37	0.008	0.000469	0	0
Phase 1a Office	Office Building 4 2023	Paver	Pavers	Diesel	1	250	0	1	0.42	0.008	0	0	0
Phase 1a Office	Office Building 4 2023	Pile Rig	Bore/Drill Rigs	Diesel	1	600	0.719008	1	0.5	0.008	0.003804	0	0
Phase 1a Office	Office Building 4 2023	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0.3	0.008	0	0	0
Phase 1a Office	Office Building 4 2023	Scraper	Scrapers	Diesel	1	600	0	1	0.48	0.008	0	0	0
Phase 1a Office	Office Building 4 2023	Tire Wash	Other Construction Equipment	Diesel	1	100	1.5	1	0.42	0.008	0.001111	0	0
Phase 1a Office	Office Building 4 2024	Air Compressor	Air Compressors	Diesel	1	150	0	1	0.48	0.008	0	0	0
Phase 1a Office	Office Building 4 2024	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	0	1	0.37	0.008	0	0	0
Phase 1a Office	Office Building 4 2024	Blade	Graders	Diesel	1	450	0	1	0.41	0.008	0	0	0
Phase 1a Office	Office Building 4 2024	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	0	1	0.37	0.008	0	0	0
Phase 1a Office	Office Building 4 2024	Boom Lift	Aerial Lifts	Diesel	1	40	1.405797	1	0.31	0.008	0.000307	0	0
Phase 1a Office	Office Building 4 2024	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0.42	0.008	0	0	0
Phase 1a Office	Office Building 4 2024	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.78	0.008	0	0	0
Phase 1a Office	Office Building 4 2024	Concrete Pump	Pumps	Diesel	1	450	0	1	0.74	0.008	0	0	0
Phase 1a Office	Office Building 4 2024	Excavator	Excavators	Diesel	1	500	0	1	0.38	0.008	0	0	0
Phase 1a Office	Office Building 4 2024	Generator	Generator Sets	Diesel	1	25	0	1	0.74	0.008	0	0	0
Phase 1a Office	Office Building 4 2024	Gradall	Forklifts	Diesel	1	350	0.48	1	0.2	0.008	0.000593	0	0
Phase 1a Office	Office Building 4 2024	Hydro/Crawler Crane	Cranes	Diesel	1	550	0	1	0.29	0.008	0	0	0
Phase 1a Office	Office Building 4 2024	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	0	1	0.37	0.008	0	0	0
Phase 1a Office	Office Building 4 2024	Paver	Pavers	Diesel	1	250	0	1	0.42	0.008	0	0	0
Phase 1a Office	Office Building 4 2024	Pile Rig	Bore/Drill Rigs	Diesel	1	600	0	1	0.5	0.008	0	0	0
Phase 1a Office	Office Building 4 2024	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0.3	0.008	0	0	0
Phase 1a Office	Office Building 4 2024	Scraper	Scrapers	Diesel	1	600	0	1	0.48	0.008	0	0	0
Phase 1a Office	Office Building 4 2024	Tire Wash	Other Construction Equipment	Diesel	1	100	1.5	1	0.42	0.008	0.001111	0	0
Phase 1a Office	Meeting, Collaboration, Park 2022	Air Compressor	Air Compressors	Diesel	1	150	0	1	0.48	0.008	0	0	42
Phase 1a Office	Meeting, Collaboration, Park 2022	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	5.857143	1	0.37	0.008	0.013378	0	42
Phase 1a Office	Meeting, Collaboration, Park 2022	Blade	Graders	Diesel	1	450	0	1	0.41	0.008	0	0	42
Phase 1a Office	Meeting, Collaboration, Park 2022	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	5.857143	1	0.37	0.008	0.007644	0	42
Phase 1a Office	Meeting, Collaboration, Park 2022	Boom Lift	Aerial Lifts	Diesel	1	40	0	1	0.31	0.008	0	0	42
Phase 1a Office	Meeting, Collaboration, Park 2022	Compactor	Other Construction Equipment	Diesel	1	250	0.314286	1	0.42	0.008	0.000582	0	42
Phase 1a Office	Meeting, Collaboration, Park 2022	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.78	0.008	0	0	42
Phase 1a Office	Meeting, Collaboration, Park 2022	Concrete Pump	Pumps	Diesel	1	450	0	1	0.74	0.008	0	0	42
Phase 1a Office	Meeting, Collaboration, Park 2022	Excavator	Excavators	Diesel	1	500	23.42857	1	0.38	0.008	0.07851	0	42
Phase 1a Office	Meeting, Collaboration, Park 2022	Generator	Generator Sets	Diesel	1	25	5.857143	1	0.74	0.008	0.001911	0	42
Phase 1a Office	Meeting, Collaboration, Park 2022	Gradall	Forklifts	Diesel	1	350	8.785714	1	0.2	0.008	0.010847	0	42
Phase 1a Office	Meeting, Collaboration, Park 2022	Hydro/Crawler Crane	Cranes	Diesel	1	550	1.571429	1	0.29	0.008	0.004421	0	42
Phase 1a Office	Meeting, Collaboration, Park 2022	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	4.392857	1	0.37	0.008	0.002867	0	42
Phase 1a Office	Meeting, Collaboration, Park 2022	Paver	Pavers	Diesel	1	250	0	1	0.42	0.008	0	0	42
Phase 1a Office	Meeting, Collaboration, Park 2022	Pile Rig	Bore/Drill Rigs	Diesel	1	600	3.142857	1	0.5	0.008	0.016629	0	42
Phase 1a Office	Meeting, Collaboration, Park 2022	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0.3	0.008	0	0	42
Phase 1a Office	Meeting, Collaboration, Park 2022	Scraper	Scrapers	Diesel	1	600	0	1	0.48	0.008	0	0	42
Phase 1a Office	Meeting, Collaboration, Park 2022	Tire Wash	Other Construction Equipment	Diesel	1	100	1.464286	1	0.42	0.008	0.001085	0	42
Phase 1a Office	Meeting, Collaboration, Park 2023	Air Compressor	Air Compressors	Diesel	1	150	0.304615	1	0.48	0.008	0.000387	0	0
Phase 1a Office	Meeting, Collaboration, Park 2023	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	3.276923	1	0.37	0.008	0.007484	0	0
Phase 1a Office	Meeting, Collaboration, Park 2023	Blade	Graders	Diesel	1	450	0	1	0.41	0.008	0	0	0

Phase 1a Office	Meeting, Collaboration, Park 2023	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	3.276923	1	0.37	0.008	0.004277	0	0
Phase 1a Office	Meeting, Collaboration, Park 2023	Boom Lift	Aerial Lifts	Diesel	1	40	0.888462	1	0.31	0.008	0.000194	0	0
Phase 1a Office	Meeting, Collaboration, Park 2023	Compactor	Other Construction Equipment	Diesel	1	250	0.152308	1	0.42	0.008	0.000282	0	0
Phase 1a Office	Meeting, Collaboration, Park 2023	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.78	0.008	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2023	Concrete Pump	Pumps	Diesel	1	450	0.304615	1	0.74	0.008	0.001789	0	0
Phase 1a Office	Meeting, Collaboration, Park 2023	Excavator	Excavators	Diesel	1	500	5.492308	1	0.38	0.008	0.018405	0	0
Phase 1a Office	Meeting, Collaboration, Park 2023	Generator	Generator Sets	Diesel	1	25	6.715385	1	0.74	0.008	0.002191	0	0
Phase 1a Office	Meeting, Collaboration, Park 2023	Gradall	Forklifts	Diesel	1	350	7.661538	1	0.2	0.008	0.009459	0	0
Phase 1a Office	Meeting, Collaboration, Park 2023	Hydro/Crawler Crane	Cranes	Diesel	1	550	7.246154	1	0.29	0.008	0.020384	0	0
Phase 1a Office	Meeting, Collaboration, Park 2023	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	1.828846	1	0.37	0.008	0.001193	0	0
Phase 1a Office	Meeting, Collaboration, Park 2023	Paver	Pavers	Diesel	1	250	0	1	0.42	0.008	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2023	Pile Rig	Bore/Drill Rigs	Diesel	1	600	2.007692	1	0.5	0.008	0.010623	0	0
Phase 1a Office	Meeting, Collaboration, Park 2023	Pressure Washer	Pressure Washers	Diesel	1	25	0.152308	1	0.3	0.008	2.01E-05	0	0
Phase 1a Office	Meeting, Collaboration, Park 2023	Scraper	Scrapers	Diesel	1	600	0	1	0.48	0.008	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2023	Tire Wash	Other Construction Equipment	Diesel	1	100	0.819231	1	0.42	0.008	0.000607	0	0
Phase 1a Office	Meeting, Collaboration, Park 2024	Air Compressor	Air Compressors	Diesel	1	150	0	1	0.48	0.008	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2024	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	0	1	0.37	0.008	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2024	Blade	Graders	Diesel	1	450	0	1	0.41	0.008	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2024	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	0	1	0.37	0.008	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2024	Boom Lift	Aerial Lifts	Diesel	1	40	19.30534	1	0.31	0.008	0.004222	0	0
Phase 1a Office	Meeting, Collaboration, Park 2024	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0.42	0.008	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2024	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.78	0.008	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2024	Concrete Pump	Pumps	Diesel	1	450	0	1	0.74	0.008	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2024	Excavator	Excavators	Diesel	1	500	0	1	0.38	0.008	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2024	Generator	Generator Sets	Diesel	1	25	0	1	0.74	0.008	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2024	Gradall	Forklifts	Diesel	1	350	10.25954	1	0.2	0.008	0.012666	0	0
Phase 1a Office	Meeting, Collaboration, Park 2024	Hydro/Crawler Crane	Cranes	Diesel	1	550	0.503817	1	0.29	0.008	0.001417	0	0
Phase 1a Office	Meeting, Collaboration, Park 2024	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	0	1	0.37	0.008	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2024	Paver	Pavers	Diesel	1	250	0	1	0.42	0.008	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2024	Pile Rig	Bore/Drill Rigs	Diesel	1	600	0	1	0.5	0.008	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2024	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0.3	0.008	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2024	Scraper	Scrapers	Diesel	1	600	0	1	0.48	0.008	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2024	Tire Wash	Other Construction Equipment	Diesel	1	100	0	1	0.42	0.008	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2025	Air Compressor	Air Compressors	Diesel	1	150	0	1	0.48	0.008	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2025	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	0	1	0.37	0.008	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2025	Blade	Graders	Diesel	1	450	0	1	0.41	0.008	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2025	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	0	1	0.37	0.008	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2025	Boom Lift	Aerial Lifts	Diesel	1	40	9.425287	1	0.31	0.008	0.002061	0	0
Phase 1a Office	Meeting, Collaboration, Park 2025	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0.42	0.008	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2025	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.78	0.008	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2025	Concrete Pump	Pumps	Diesel	1	450	0	1	0.74	0.008	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2025	Excavator	Excavators	Diesel	1	500	0	1	0.38	0.008	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2025	Generator	Generator Sets	Diesel	1	25	0	1	0.74	0.008	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2025	Gradall	Forklifts	Diesel	1	350	11.77011	1	0.2	0.008	0.014531	0	0
Phase 1a Office	Meeting, Collaboration, Park 2025	Hydro/Crawler Crane	Cranes	Diesel	1	550	0.770115	1	0.29	0.008	0.002166	0	0
Phase 1a Office	Meeting, Collaboration, Park 2025	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	0	1	0.37	0.008	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2025	Paver	Pavers	Diesel	1	250	0	1	0.42	0.008	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2025	Pile Rig	Bore/Drill Rigs	Diesel	1	600	0	1	0.5	0.008	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2025	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0.3	0.008	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2025	Scraper	Scrapers	Diesel	1	600	0	1	0.48	0.008	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2025	Tire Wash	Other Construction Equipment	Diesel	1	100	0	1	0.42	0.008	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2026	Air Compressor	Air Compressors	Diesel	1	150	0	1	0.48	0.008	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2026	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	0	1	0.37	0.008	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2026	Blade	Graders	Diesel	1	450	0	1	0.41	0.008	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2026	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	0	1	0.37	0.008	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2026	Boom Lift	Aerial Lifts	Diesel	1	40	0	1	0.31	0.008	0	0	0

Phase 1a Office	Meeting, Collaboration, Park 2026	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0.42	0.008	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2026	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.78	0.008	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2026	Concrete Pump	Pumps	Diesel	1	450	0	1	0.74	0.008	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2026	Excavator	Excavators	Diesel	1	500	0	1	0.38	0.008	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2026	Generator	Generator Sets	Diesel	1	25	0	1	0.74	0.008	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2026	Gradall	Forklifts	Diesel	1	350	11.73913	1	0.2	0.008	0.014493	0	0
Phase 1a Office	Meeting, Collaboration, Park 2026	Hydro/Crawler Crane	Cranes	Diesel	1	550	5.869565	1	0.29	0.008	0.016512	0	0
Phase 1a Office	Meeting, Collaboration, Park 2026	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	0	1	0.37	0.008	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2026	Paver	Pavers	Diesel	1	250	0	1	0.42	0.008	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2026	Pile Rig	Bore/Drill Rigs	Diesel	1	600	0	1	0.5	0.008	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2026	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0.3	0.008	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2026	Scraper	Scrapers	Diesel	1	600	0	1	0.48	0.008	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2026	Tire Wash	Other Construction Equipment	Diesel	1	100	0	1	0.42	0.008	0	0	0
Phase 1a Office	Hotel Excavation 2022	Air Compressor	Air Compressors	Diesel	1	150	2.642857	1	0.48	0.008	0.003356	0	42
Phase 1a Office	Hotel Excavation 2022	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	2.642857	1	0.37	0.008	0.006036	0	42
Phase 1a Office	Hotel Excavation 2022	Blade	Graders	Diesel	1	450	0	1	0.41	0.008	0	0	42
Phase 1a Office	Hotel Excavation 2022	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	2.928571	1	0.37	0.008	0.003822	0	42
Phase 1a Office	Hotel Excavation 2022	Boom Lift	Aerial Lifts	Diesel	1	40	1.464286	1	0.31	0.008	0.00032	0	42
Phase 1a Office	Hotel Excavation 2022	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0.42	0.008	0	0	42
Phase 1a Office	Hotel Excavation 2022	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.78	0.008	0	0	42
Phase 1a Office	Hotel Excavation 2022	Concrete Pump	Pumps	Diesel	1	450	0.422857	1	0.74	0.008	0.002484	0	42
Phase 1a Office	Hotel Excavation 2022	Excavator	Excavators	Diesel	1	500	11.71429	1	0.38	0.008	0.039255	0	42
Phase 1a Office	Hotel Excavation 2022	Generator	Generator Sets	Diesel	1	25	5.857143	1	0.74	0.008	0.001911	0	42
Phase 1a Office	Hotel Excavation 2022	Gradall	Forklifts	Diesel	1	350	5.857143	1	0.2	0.008	0.007231	0	42
Phase 1a Office	Hotel Excavation 2022	Hydro/Crawler Crane	Cranes	Diesel	1	550	2.642857	1	0.29	0.008	0.007435	0	42
Phase 1a Office	Hotel Excavation 2022	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	11.71429	1	0.37	0.008	0.007644	0	42
Phase 1a Office	Hotel Excavation 2022	Paver	Pavers	Diesel	1	250	0	1	0.42	0.008	0	0	42
Phase 1a Office	Hotel Excavation 2022	Pile Rig	Bore/Drill Rigs	Diesel	1	600	10.57143	1	0.5	0.008	0.055935	0	42
Phase 1a Office	Hotel Excavation 2022	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0.3	0.008	0	0	42
Phase 1a Office	Hotel Excavation 2022	Scraper	Scrapers	Diesel	1	600	0	1	0.48	0.008	0	0	42
Phase 1a Office	Hotel Excavation 2022	Tire Wash	Other Construction Equipment	Diesel	1	100	2.928571	1	0.42	0.008	0.002169	0	42
Phase 1a Office	Hotel Excavation 2023	Air Compressor	Air Compressors	Diesel	1	150	2.311284	1	0.48	0.008	0.002935	0	0
Phase 1a Office	Hotel Excavation 2023	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	0	1	0.37	0.008	0	0	0
Phase 1a Office	Hotel Excavation 2023	Blade	Graders	Diesel	1	450	0	1	0.41	0.008	0	0	0
Phase 1a Office	Hotel Excavation 2023	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	0.700389	1	0.37	0.008	0.000914	0	0
Phase 1a Office	Hotel Excavation 2023	Boom Lift	Aerial Lifts	Diesel	1	40	0.350195	1	0.31	0.008	7.66E-05	0	0
Phase 1a Office	Hotel Excavation 2023	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0.42	0.008	0	0	0
Phase 1a Office	Hotel Excavation 2023	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.78	0.008	0	0	0
Phase 1a Office	Hotel Excavation 2023	Concrete Pump	Pumps	Diesel	1	450	2.311284	1	0.74	0.008	0.013575	0	0
Phase 1a Office	Hotel Excavation 2023	Excavator	Excavators	Diesel	1	500	2.801556	1	0.38	0.008	0.009388	0	0
Phase 1a Office	Hotel Excavation 2023	Generator	Generator Sets	Diesel	1	25	10.64591	1	0.74	0.008	0.003474	0	0
Phase 1a Office	Hotel Excavation 2023	Gradall	Forklifts	Diesel	1	350	10.64591	1	0.2	0.008	0.013143	0	0
Phase 1a Office	Hotel Excavation 2023	Hydro/Crawler Crane	Cranes	Diesel	1	550	9.245136	1	0.29	0.008	0.026008	0	0
Phase 1a Office	Hotel Excavation 2023	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	2.801556	1	0.37	0.008	0.001828	0	0
Phase 1a Office	Hotel Excavation 2023	Paver	Pavers	Diesel	1	250	0	1	0.42	0.008	0	0	0
Phase 1a Office	Hotel Excavation 2023	Pile Rig	Bore/Drill Rigs	Diesel	1	600	0	1	0.5	0.008	0	0	0
Phase 1a Office	Hotel Excavation 2023	Pressure Washer	Pressure Washers	Diesel	1	25	0.046226	1	0.3	0.008	6.11E-06	0	0
Phase 1a Office	Hotel Excavation 2023	Scraper	Scrapers	Diesel	1	600	0	1	0.48	0.008	0	0	0
Phase 1a Office	Hotel Excavation 2023	Tire Wash	Other Construction Equipment	Diesel	1	100	1.856031	1	0.42	0.008	0.001375	0	0
Phase 1a Office	Hotel Construction 2024	Air Compressor	Air Compressors	Diesel	1	150	3	1	0.48	0.008	0.00381	0	0
Phase 1a Office	Hotel Construction 2024	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	0	1	0.37	0.008	0	0	0
Phase 1a Office	Hotel Construction 2024	Blade	Graders	Diesel	1	450	0	1	0.41	0.008	0	0	0
Phase 1a Office	Hotel Construction 2024	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	0	1	0.37	0.008	0	0	0
Phase 1a Office	Hotel Construction 2024	Boom Lift	Aerial Lifts	Diesel	1	40	20.91429	1	0.31	0.008	0.004574	0	0
Phase 1a Office	Hotel Construction 2024	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0.42	0.008	0	0	0
Phase 1a Office	Hotel Construction 2024	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.78	0.008	0	0	0

Phase 1a Office	Hotel Construction 2024	Concrete Pump	Pumps	Diesel	1	450	3	1	0.74	0.008	0.017619	0	0
Phase 1a Office	Hotel Construction 2024	Excavator	Excavators	Diesel	1	500	0	1	0.38	0.008	0	0	0
Phase 1a Office	Hotel Construction 2024	Generator	Generator Sets	Diesel	1	25	0	1	0.74	0.008	0	0	0
Phase 1a Office	Hotel Construction 2024	Gradall	Forklifts	Diesel	1	350	12	1	0.2	0.008	0.014815	0	0
Phase 1a Office	Hotel Construction 2024	Hydro/Crawler Crane	Cranes	Diesel	1	550	0	1	0.29	0.008	0	0	0
Phase 1a Office	Hotel Construction 2024	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	0	1	0.37	0.008	0	0	0
Phase 1a Office	Hotel Construction 2024	Paver	Pavers	Diesel	1	250	0	1	0.42	0.008	0	0	0
Phase 1a Office	Hotel Construction 2024	Pile Rig	Bore/Drill Rigs	Diesel	1	600	0	1	0.5	0.008	0	0	0
Phase 1a Office	Hotel Construction 2024	Pressure Washer	Pressure Washers	Diesel	1	25	0.06	1	0.3	0.008	7.94E-06	0	0
Phase 1a Office	Hotel Construction 2024	Scraper	Scrapers	Diesel	1	600	0	1	0.48	0.008	0	0	0
Phase 1a Office	Hotel Construction 2024	Tire Wash	Other Construction Equipment	Diesel	1	100	1.5	1	0.42	0.008	0.001111	0	0
Phase 1a Office	Hotel Construction 2025	Air Compressor	Air Compressors	Diesel	1	150	0.837662	1	0.48	0.008	0.001064	0	0
Phase 1a Office	Hotel Construction 2025	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	0	1	0.37	0.008	0	0	0
Phase 1a Office	Hotel Construction 2025	Blade	Graders	Diesel	1	450	0	1	0.41	0.008	0	0	0
Phase 1a Office	Hotel Construction 2025	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	0	1	0.37	0.008	0	0	0
Phase 1a Office	Hotel Construction 2025	Boom Lift	Aerial Lifts	Diesel	1	40	20.18182	1	0.31	0.008	0.004414	0	0
Phase 1a Office	Hotel Construction 2025	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0.42	0.008	0	0	0
Phase 1a Office	Hotel Construction 2025	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.78	0.008	0	0	0
Phase 1a Office	Hotel Construction 2025	Concrete Pump	Pumps	Diesel	1	450	0.837662	1	0.74	0.008	0.00492	0	0
Phase 1a Office	Hotel Construction 2025	Excavator	Excavators	Diesel	1	500	0	1	0.38	0.008	0	0	0
Phase 1a Office	Hotel Construction 2025	Generator	Generator Sets	Diesel	1	25	0	1	0.74	0.008	0	0	0
Phase 1a Office	Hotel Construction 2025	Gradall	Forklifts	Diesel	1	350	12.07792	1	0.2	0.008	0.014911	0	0
Phase 1a Office	Hotel Construction 2025	Hydro/Crawler Crane	Cranes	Diesel	1	550	0	1	0.29	0.008	0	0	0
Phase 1a Office	Hotel Construction 2025	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	0	1	0.37	0.008	0	0	0
Phase 1a Office	Hotel Construction 2025	Paver	Pavers	Diesel	1	250	0	1	0.42	0.008	0	0	0
Phase 1a Office	Hotel Construction 2025	Pile Rig	Bore/Drill Rigs	Diesel	1	600	0	1	0.5	0.008	0	0	0
Phase 1a Office	Hotel Construction 2025	Pressure Washer	Pressure Washers	Diesel	1	25	0.016753	1	0.3	0.008	2.22E-06	0	0
Phase 1a Office	Hotel Construction 2025	Scraper	Scrapers	Diesel	1	600	0	1	0.48	0.008	0	0	0
Phase 1a Office	Hotel Construction 2025	Tire Wash	Other Construction Equipment	Diesel	1	100	1.50974	1	0.42	0.008	0.001118	0	0
Phase 1a Office	Town Square 2023	Air Compressor	Air Compressors	Diesel	1	150	0	1	0.48	0.008	0	0	0
Phase 1a Office	Town Square 2023	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	0	1	0.37	0.008	0	0	0
Phase 1a Office	Town Square 2023	Blade	Graders	Diesel	1	450	0	1	0.41	0.008	0	0	0
Phase 1a Office	Town Square 2023	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	3	1	0.37	0.008	0.003915	0	0
Phase 1a Office	Town Square 2023	Boom Lift	Aerial Lifts	Diesel	1	40	1.5	1	0.31	0.008	0.000328	0	0
Phase 1a Office	Town Square 2023	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0.42	0.008	0	0	0
Phase 1a Office	Town Square 2023	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.78	0.008	0	0	0
Phase 1a Office	Town Square 2023	Concrete Pump	Pumps	Diesel	1	450	0	1	0.74	0.008	0	0	0
Phase 1a Office	Town Square 2023	Excavator	Excavators	Diesel	1	500	12	1	0.38	0.008	0.040213	0	0
Phase 1a Office	Town Square 2023	Generator	Generator Sets	Diesel	1	25	6	1	0.74	0.008	0.001958	0	0
Phase 1a Office	Town Square 2023	Gradall	Forklifts	Diesel	1	350	6	1	0.2	0.008	0.007408	0	0
Phase 1a Office	Town Square 2023	Hydro/Crawler Crane	Cranes	Diesel	1	550	0	1	0.29	0.008	0	0	0
Phase 1a Office	Town Square 2023	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	12	1	0.37	0.008	0.007831	0	0
Phase 1a Office	Town Square 2023	Paver	Pavers	Diesel	1	250	0	1	0.42	0.008	0	0	0
Phase 1a Office	Town Square 2023	Pile Rig	Bore/Drill Rigs	Diesel	1	600	0	1	0.5	0.008	0	0	0
Phase 1a Office	Town Square 2023	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0.3	0.008	0	0	0
Phase 1a Office	Town Square 2023	Scraper	Scrapers	Diesel	1	600	0	1	0.48	0.008	0	0	0
Phase 1a Office	Town Square 2023	Tire Wash	Other Construction Equipment	Diesel	1	100	3	1	0.42	0.008	0.002222	0	0
Phase 1a Office	Town Square 2024	Air Compressor	Air Compressors	Diesel	1	150	0	1	0.48	0.008	0	0	0
Phase 1a Office	Town Square 2024	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	0	1	0.37	0.008	0	0	0
Phase 1a Office	Town Square 2024	Blade	Graders	Diesel	1	450	0	1	0.41	0.008	0	0	0
Phase 1a Office	Town Square 2024	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	0.996183	1	0.37	0.008	0.0013	0	0
Phase 1a Office	Town Square 2024	Boom Lift	Aerial Lifts	Diesel	1	40	1.872137	1	0.31	0.008	0.000409	0	0
Phase 1a Office	Town Square 2024	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0.42	0.008	0	0	0
Phase 1a Office	Town Square 2024	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.78	0.008	0	0	0
Phase 1a Office	Town Square 2024	Concrete Pump	Pumps	Diesel	1	450	0.020382	1	0.74	0.008	0.00012	0	0
Phase 1a Office	Town Square 2024	Excavator	Excavators	Diesel	1	500	3.984733	1	0.38	0.008	0.013353	0	0

Phase 1a Office	Town Square 2024	Generator	Generator Sets	Diesel	1	25	0.549618	1	0.74	0.008	0.000179	0	0
Phase 1a Office	Town Square 2024	Gradall	Forklifts	Diesel	1	350	5.267176	1	0.2	0.008	0.006503	0	0
Phase 1a Office	Town Square 2024	Hydro/Crawler Crane	Cranes	Diesel	1	550	1.03145	1	0.29	0.008	0.002902	0	0
Phase 1a Office	Town Square 2024	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	3.984733	1	0.37	0.008	0.0026	0	0
Phase 1a Office	Town Square 2024	Paver	Pavers	Diesel	1	250	0	1	0.42	0.008	0	0	0
Phase 1a Office	Town Square 2024	Pile Rig	Bore/Drill Rigs	Diesel	1	600	0	1	0.5	0.008	0	0	0
Phase 1a Office	Town Square 2024	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0.3	0.008	0	0	0
Phase 1a Office	Town Square 2024	Scraper	Scrapers	Diesel	1	600	0	1	0.48	0.008	0	0	0
Phase 1a Office	Town Square 2024	Tire Wash	Other Construction Equipment	Diesel	1	100	0.996183	1	0.42	0.008	0.000738	0	0
Phase 1a Office	Town Square 2025	Air Compressor	Air Compressors	Diesel	1	150	0	1	0.48	0.008	0	0	0
Phase 1a Office	Town Square 2025	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	0	1	0.37	0.008	0	0	0
Phase 1a Office	Town Square 2025	Blade	Graders	Diesel	1	450	0	1	0.41	0.008	0	0	0
Phase 1a Office	Town Square 2025	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	0	1	0.37	0.008	0	0	0
Phase 1a Office	Town Square 2025	Boom Lift	Aerial Lifts	Diesel	1	40	0	1	0.31	0.008	0	0	0
Phase 1a Office	Town Square 2025	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0.42	0.008	0	0	0
Phase 1a Office	Town Square 2025	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.78	0.008	0	0	0
Phase 1a Office	Town Square 2025	Concrete Pump	Pumps	Diesel	1	450	0	1	0.74	0.008	0	0	0
Phase 1a Office	Town Square 2025	Excavator	Excavators	Diesel	1	500	0	1	0.38	0.008	0	0	0
Phase 1a Office	Town Square 2025	Generator	Generator Sets	Diesel	1	25	0	1	0.74	0.008	0	0	0
Phase 1a Office	Town Square 2025	Gradall	Forklifts	Diesel	1	350	18	1	0.2	0.008	0.022223	0	0
Phase 1a Office	Town Square 2025	Hydro/Crawler Crane	Cranes	Diesel	1	550	0.18	1	0.29	0.008	0.000506	0	0
Phase 1a Office	Town Square 2025	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	0	1	0.37	0.008	0	0	0
Phase 1a Office	Town Square 2025	Paver	Pavers	Diesel	1	250	0	1	0.42	0.008	0	0	0
Phase 1a Office	Town Square 2025	Pile Rig	Bore/Drill Rigs	Diesel	1	600	0	1	0.5	0.008	0	0	0
Phase 1a Office	Town Square 2025	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0.3	0.008	0	0	0
Phase 1a Office	Town Square 2025	Scraper	Scrapers	Diesel	1	600	0	1	0.48	0.008	0	0	0
Phase 1a Office	Town Square 2025	Tire Wash	Other Construction Equipment	Diesel	1	100	0	1	0.42	0.008	0	0	0
Phase 1a Mixed Use	Parcel 2 Foundations	Pile Rig	Bore/Drill Rigs	Diesel	0	600	8	0.4	0.5	0.008	0	0	0
Phase 1a Mixed Use	Parcel 2 Foundations	Generator	Generator Sets	Diesel	0	25	6	1	0.74	0.008	0	0	0
Phase 1a Mixed Use	Parcel 2 Foundations	Tire Wash	Other Construction Equipment	Diesel	1	100	4	0.9	0.42	0.008	0.002667	0	0
Phase 1a Mixed Use	Parcel 2 Foundations	Generator	Generator Sets	Diesel	0	25	6	1	0.74	0.008	0	0	0
Phase 1a Mixed Use	Parcel 2 Foundations	Tire Wash	Other Construction Equipment	Diesel	1	100	4	0.9	0.42	0.008	0.002667	0	0
Phase 1a Mixed Use	Parcel 2 Foundations	Excavator	Excavators	Diesel	1	131	8	0.6	0.38	0.008	0.004214	0	0
Phase 1a Mixed Use	Parcel 2 Foundations	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	90	8	0.6	0.37	0.008	0.002819	0	0
Phase 1a Mixed Use	Parcel 2 Foundations	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	70	8	0.8	0.37	0.008	0.002924	0	0
Phase 1a Mixed Use	Parcel 2 Foundations	Gradall	Forklifts	Diesel	1	74	4	0.8	0.2	0.008	0.000835	0	0
Phase 1a Mixed Use	Parcel 2 Foundations	Crane	Cranes	Diesel	1	215	4	0.5	0.29	0.008	0.002199	0	0
Phase 1a Mixed Use	Parcel 2 Foundations	Concrete Pump	Pumps	Diesel	1	450	8	0.15	0.74	0.008	0.007048	0	0
Phase 1a Mixed Use	Parcel 2 Core and Shell	Generator	Generator Sets	Diesel	0	25	6	1	0.74	0.008	0	0	0
Phase 1a Mixed Use	Parcel 2 Core and Shell	Tire Wash	Other Construction Equipment	Diesel	1	100	4	0.9	0.42	0.008	0.002667	0	0
Phase 1a Mixed Use	Parcel 2 Core and Shell	Crane	Cranes	Diesel	1	600	8	0.2	0.29	0.008	0.00491	0	0
Phase 1a Mixed Use	Parcel 2 Core and Shell	Gradall	Forklifts	Diesel	1	74	4	0.8	0.2	0.008	0.000835	0	0
Phase 1a Mixed Use	Parcel 2 Core and Shell	Concrete Pump	Pumps	Diesel	0	450	6	0.225	0.74	0.008	0	0	0
Phase 1a Mixed Use	Parcel 2 Core and Shell	Air Compressor	Air Compressors	Diesel	0	140	2	0.4	0.48	0.008	0	0	0
Phase 1a Mixed Use	Parcel 2 Core and Shell	Boom Lift	Aerial Lifts	Diesel	0	50	6	0.2	0.31	0.008	0	0	0
Phase 1a Mixed Use	Parcel 2 Tenant Improvements	Generator	Generator Sets	Diesel	0	25	6	0.85	0.74	0.008	0	0	0
Phase 1a Mixed Use	Parcel 2 Tenant Improvements	Tire Wash	Other Construction Equipment	Diesel	1	100	4	0.9	0.42	0.008	0.002667	0	0
Phase 1a Mixed Use	Parcel 2 Tenant Improvements	Gradall	Forklifts	Diesel	1	74	4	0.8	0.2	0.008	0.000835	0	0
Phase 1a Mixed Use	Parcel 2 Landscaping	Excavator	Excavators	Diesel	1	25	8	0.9	0.38	0.008	0.001206	0	0
Phase 1a Mixed Use	Parcel 2 Landscaping	Generator	Generator Sets	Diesel	0	25	6	0.5	0.74	0.008	0	0	0
Phase 1a Mixed Use	Parcel 2 Landscaping	Tire Wash	Other Construction Equipment	Diesel	1	100	4	0.9	0.42	0.008	0.002667	0	0
Phase 1a Mixed Use	Parcel 2 Landscaping	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	90	8	1	0.37	0.008	0.004699	0	0
Phase 1a Mixed Use	Parcel 2 Landscaping	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	70	8	0.8	0.37	0.008	0.002924	0	0
Phase 1a Mixed Use	Parcel 3 Foundations	Pile Rig	Bore/Drill Rigs	Diesel	0	600	8	0.4	0.5	0.008	0	0	0
Phase 1a Mixed Use	Parcel 3 Foundations	Generator	Generator Sets	Diesel	0	25	6	1	0.74	0.008	0	0	0
Phase 1a Mixed Use	Parcel 3 Foundations	Tire Wash	Other Construction Equipment	Diesel	1	100	4	0.9	0.42	0.008	0.002667	0	0
Phase 1a Mixed Use	Parcel 3 Foundations	Excavator	Excavators	Diesel	1	131	8	0.6	0.38	0.008	0.004214	0	0
Phase 1a Mixed Use	Parcel 3 Foundations	Backhoe	Tractors/Loaders/Backhoes	Diesel	2	90	8	0.6	0.37	0.008	0.005638	0	0

Phase 1a Mixed Use	Parcel 3 Foundations	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	70	8	0.8	0.37	0.008	0.002924	0	0
Phase 1a Mixed Use	Parcel 3 Foundations	Gradall	Forklifts	Diesel	1	74	4	0.8	0.2	0.008	0.000835	0	0
Phase 1a Mixed Use	Parcel 3 Foundations	Crane	Cranes	Diesel	1	215	4	0.5	0.29	0.008	0.002199	0	0
Phase 1a Mixed Use	Parcel 3 Foundations	Concrete Pump	Pumps	Diesel	1	450	8	0.15	0.74	0.008	0.007048	0	0
Phase 1a Mixed Use	Parcel 3 Core and Shell	Generator	Generator Sets	Diesel	0	25	6	1	0.74	0.008	0	0	0
Phase 1a Mixed Use	Parcel 3 Core and Shell	Tire Wash	Other Construction Equipment	Diesel	1	100	4	0.9	0.42	0.008	0.002667	0	0
Phase 1a Mixed Use	Parcel 3 Core and Shell	Crane	Cranes	Diesel	1	600	8	0.2	0.29	0.008	0.00491	0	0
Phase 1a Mixed Use	Parcel 3 Core and Shell	Gradall	Forklifts	Diesel	2	74	4	0.8	0.2	0.008	0.001671	0	0
Phase 1a Mixed Use	Parcel 3 Core and Shell	Concrete Pump	Pumps	Diesel	0	450	6	0.225	0.74	0.008	0	0	0
Phase 1a Mixed Use	Parcel 3 Core and Shell	Air Compressor	Air Compressors	Diesel	0	140	2	0.4	0.48	0.008	0	0	0
Phase 1a Mixed Use	Parcel 3 Core and Shell	Boom Lift	Aerial Lifts	Diesel	0	50	6	0.2	0.31	0.008	0	0	0
Phase 1a Mixed Use	Parcel 3 Tenant Improvements	Generator	Generator Sets	Diesel	0	25	6	0.85	0.74	0.008	0	0	0
Phase 1a Mixed Use	Parcel 3 Tenant Improvements	Tire Wash	Other Construction Equipment	Diesel	1	100	4	0.9	0.42	0.008	0.002667	0	0
Phase 1a Mixed Use	Parcel 3 Tenant Improvements	Gradall	Forklifts	Diesel	1	74	4	0.8	0.2	0.008	0.000835	0	0
Phase 1a Mixed Use	Parcel 3 Landscaping	Excavator	Excavators	Diesel	1	25	8	0.9	0.38	0.008	0.001206	0	0
Phase 1a Mixed Use	Parcel 3 Landscaping	Generator	Generator Sets	Diesel	0	25	6	0.5	0.74	0.008	0	0	0
Phase 1a Mixed Use	Parcel 3 Landscaping	Tire Wash	Other Construction Equipment	Diesel	0	100	4	0.9	0.42	0.008	0	0	0
Phase 1a Mixed Use	Parcel 3 Landscaping	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	90	8	1	0.37	0.008	0.004699	0	0
Phase 1a Mixed Use	Parcel 3 Landscaping	Bob Cat	Tractors/Loaders/Backhoes	Diesel	2	70	8	0.8	0.37	0.008	0.005847	0	0
Phase 1b	Demolition	Excavator	Excavators	Diesel	4	131	8	0.9	0.38	0.008	0.025286	0	48
Phase 1b	Demolition	Generator	Generator Sets	Diesel	2	25	6	0.5	0.74	0.008	0.001958	0	48
Phase 1b	Demolition	Tire Wash	Other Construction Equipment	Diesel	2	100	4	0.9	0.42	0.008	0.005333	0	48
Phase 1b	Demolition	Concrete Crusher	Crushing/Proc. Equipment	Diesel	2	200	2	0	0.78	0.008	0	0	48
Phase 1b	Demolition	Bob Cat	Tractors/Loaders/Backhoes	Diesel	6	150	8	0.8	0.37	0.008	0.037588	0	48
Phase 1b	Demolition	Pressure Washer	Pressure Washers	Diesel	2	25	8	1	0.3	0.008	0.002116	0	48
Phase 1b	Demolition	Air Compressor	Air Compressors	Diesel	1	140	6	0.7	0.48	0.008	0.004978	0	48
Phase 1b	Grading and Utilities	Blade	Graders	Diesel	2	359	8	0.15	0.41	0.008	0.00623	0	65
Phase 1b	Grading and Utilities	Scraper	Scrapers	Diesel	2	52	8	0.15	0.48	0.008	0.001057	0	65
Phase 1b	Grading and Utilities	Loader	Tractors/Loaders/Backhoes	Diesel	4	100	4	0.9	0.37	0.008	0.009397	0	65
Phase 1b	Grading and Utilities	Tire Wash	Other Construction Equipment	Diesel	2	100	4	0.9	0.42	0.008	0.005333	0	65
Phase 1b	Grading and Utilities	Loader	Tractors/Loaders/Backhoes	Diesel	4	100	4	0.9	0.37	0.008	0.009397	0	65
Phase 1b	Grading and Utilities	Tire Wash	Other Construction Equipment	Diesel	2	100	4	0.9	0.42	0.008	0.005333	0	65
Phase 1b	Grading and Utilities	Excavator	Excavators	Diesel	4	359	8	0.6	0.38	0.008	0.046196	0	65
Phase 1b	Grading and Utilities	Backhoe	Tractors/Loaders/Backhoes	Diesel	4	350	8	0.6	0.37	0.008	0.043853	0	65
Phase 1b	Grading and Utilities	Gradall	Forklifts	Diesel	4	350	4	0.6	0.2	0.008	0.011852	0	65
Phase 1b	Grading and Utilities	Compactor	Other Construction Equipment	Diesel	4	250	0.5	0.2	0.42	0.008	0.000741	0	65
Phase 1b	Grading and Utilities	Paver	Pavers	Diesel	2	250	8	0.01	0.42	0.008	0.000296	0	65
Phase 1b	Grading and Utilities	Generator	Generator Sets	Diesel	1	600	2	0.1	0.74	0.008	0.001566	0	65
Phase 1b Office	South Garage 2023	Air Compressor	Air Compressors	Diesel	1	150	0.48	1	0.48	0.008	0.00061	0	0
Phase 1b Office	South Garage 2023	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	0.054653	1	0.37	0.008	0.000125	0	0
Phase 1b Office	South Garage 2023	Blade	Graders	Diesel	1	450	0	1	0.41	0.008	0	0	0
Phase 1b Office	South Garage 2023	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	0.054653	1	0.37	0.008	7.13E-05	0	0
Phase 1b Office	South Garage 2023	Boom Lift	Aerial Lifts	Diesel	1	40	0	1	0.31	0.008	0	0	0
Phase 1b Office	South Garage 2023	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0.42	0.008	0	0	0
Phase 1b Office	South Garage 2023	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.78	0.008	0	0	0
Phase 1b Office	South Garage 2023	Concrete Pump	Pumps	Diesel	1	450	0.451485	1	0.74	0.008	0.002652	0	0
Phase 1b Office	South Garage 2023	Excavator	Excavators	Diesel	1	500	2.970297	1	0.38	0.008	0.009954	0	0
Phase 1b Office	South Garage 2023	Generator	Generator Sets	Diesel	1	25	3.237624	1	0.74	0.008	0.001056	0	0
Phase 1b Office	South Garage 2023	Gradall	Forklifts	Diesel	1	350	3	1	0.2	0.008	0.003704	0	0
Phase 1b Office	South Garage 2023	Hydro/Crawler Crane	Cranes	Diesel	1	550	4.923267	1	0.29	0.008	0.01385	0	0
Phase 1b Office	South Garage 2023	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	1.485149	1	0.37	0.008	0.000969	0	0
Phase 1b Office	South Garage 2023	Paver	Pavers	Diesel	1	250	0	1	0.42	0.008	0	0	0
Phase 1b Office	South Garage 2023	Pile Rig	Bore/Drill Rigs	Diesel	1	600	0.861386	1	0.5	0.008	0.004558	0	0
Phase 1b Office	South Garage 2023	Pressure Washer	Pressure Washers	Diesel	1	25	0.156832	1	0.3	0.008	2.07E-05	0	0
Phase 1b Office	South Garage 2023	Scraper	Scrapers	Diesel	1	600	0	1	0.48	0.008	0	0	0
Phase 1b Office	South Garage 2023	Tire Wash	Other Construction Equipment	Diesel	1	100	1.44802	1	0.42	0.008	0.001073	0	0
Phase 1b Office	South Garage 2024	Air Compressor	Air Compressors	Diesel	1	150	0.48	1	0.48	0.008	0.00061	0	0
Phase 1b Office	South Garage 2024	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	0	1	0.37	0.008	0	0	0

Phase 1b Office	South Garage 2024	Blade	Graders	Diesel	1	450	0	1	0.41	0.008	0	0	0
Phase 1b Office	South Garage 2024	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	0	1	0.37	0.008	0	0	0
Phase 1b Office	South Garage 2024	Boom Lift	Aerial Lifts	Diesel	1	40	4.737447	1	0.31	0.008	0.001036	0	0
Phase 1b Office	South Garage 2024	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0.42	0.008	0	0	0
Phase 1b Office	South Garage 2024	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.78	0.008	0	0	0
Phase 1b Office	South Garage 2024	Concrete Pump	Pumps	Diesel	1	450	0.6	1	0.74	0.008	0.003524	0	0
Phase 1b Office	South Garage 2024	Excavator	Excavators	Diesel	1	500	0	1	0.38	0.008	0	0	0
Phase 1b Office	South Garage 2024	Generator	Generator Sets	Diesel	1	25	0	1	0.74	0.008	0	0	0
Phase 1b Office	South Garage 2024	Gradall	Forklifts	Diesel	1	350	3	1	0.2	0.008	0.003704	0	0
Phase 1b Office	South Garage 2024	Hydro/Crawler Crane	Cranes	Diesel	1	550	3.68617	1	0.29	0.008	0.01037	0	0
Phase 1b Office	South Garage 2024	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	0	1	0.37	0.008	0	0	0
Phase 1b Office	South Garage 2024	Paver	Pavers	Diesel	1	250	0	1	0.42	0.008	0	0	0
Phase 1b Office	South Garage 2024	Pile Rig	Bore/Drill Rigs	Diesel	1	600	0	1	0.5	0.008	0	0	0
Phase 1b Office	South Garage 2024	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0.3	0.008	0	0	0
Phase 1b Office	South Garage 2024	Scraper	Scrapers	Diesel	1	600	0	1	0.48	0.008	0	0	0
Phase 1b Office	South Garage 2024	Tire Wash	Other Construction Equipment	Diesel	1	100	1.5	1	0.42	0.008	0.001111	0	0
Phase 1b Office	Office Building 3 2023	Air Compressor	Air Compressors	Diesel	1	150	0.067119	1	0.48	0.008	8.52E-05	0	0
Phase 1b Office	Office Building 3 2023	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	2.576271	1	0.37	0.008	0.005884	0	0
Phase 1b Office	Office Building 3 2023	Blade	Graders	Diesel	1	450	0	1	0.41	0.008	0	0	0
Phase 1b Office	Office Building 3 2023	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	2.576271	1	0.37	0.008	0.003362	0	0
Phase 1b Office	Office Building 3 2023	Boom Lift	Aerial Lifts	Diesel	1	40	1.694915	1	0.31	0.008	0.000371	0	0
Phase 1b Office	Office Building 3 2023	Compactor	Other Construction Equipment	Diesel	1	250	0.206102	1	0.42	0.008	0.000382	0	0
Phase 1b Office	Office Building 3 2023	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.78	0.008	0	0	0
Phase 1b Office	Office Building 3 2023	Concrete Pump	Pumps	Diesel	1	450	0.121356	1	0.74	0.008	0.000713	0	0
Phase 1b Office	Office Building 3 2023	Excavator	Excavators	Diesel	1	500	0.128814	1	0.38	0.008	0.000432	0	0
Phase 1b Office	Office Building 3 2023	Generator	Generator Sets	Diesel	1	25	4.813559	1	0.74	0.008	0.001571	0	0
Phase 1b Office	Office Building 3 2023	Gradall	Forklifts	Diesel	1	350	0.48	1	0.2	0.008	0.000593	0	0
Phase 1b Office	Office Building 3 2023	Hydro/Crawler Crane	Cranes	Diesel	1	550	3.322034	1	0.29	0.008	0.009345	0	0
Phase 1b Office	Office Building 3 2023	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	1.864407	1	0.37	0.008	0.001217	0	0
Phase 1b Office	Office Building 3 2023	Paver	Pavers	Diesel	1	250	0	1	0.42	0.008	0	0	0
Phase 1b Office	Office Building 3 2023	Pile Rig	Bore/Drill Rigs	Diesel	1	600	1.864407	1	0.5	0.008	0.009865	0	0
Phase 1b Office	Office Building 3 2023	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0.3	0.008	0	0	0
Phase 1b Office	Office Building 3 2023	Scraper	Scrapers	Diesel	1	600	0	1	0.48	0.008	0	0	0
Phase 1b Office	Office Building 3 2023	Tire Wash	Other Construction Equipment	Diesel	1	100	1.5	1	0.42	0.008	0.001111	0	0
Phase 1b Office	Office Building 3 2024	Air Compressor	Air Compressors	Diesel	1	150	0	1	0.48	0.008	0	0	0
Phase 1b Office	Office Building 3 2024	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	0	1	0.37	0.008	0	0	0
Phase 1b Office	Office Building 3 2024	Blade	Graders	Diesel	1	450	0	1	0.41	0.008	0	0	0
Phase 1b Office	Office Building 3 2024	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	0	1	0.37	0.008	0	0	0
Phase 1b Office	Office Building 3 2024	Boom Lift	Aerial Lifts	Diesel	1	40	6.858779	1	0.31	0.008	0.0015	0	0
Phase 1b Office	Office Building 3 2024	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0.42	0.008	0	0	0
Phase 1b Office	Office Building 3 2024	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.78	0.008	0	0	0
Phase 1b Office	Office Building 3 2024	Concrete Pump	Pumps	Diesel	1	450	0.005038	1	0.74	0.008	2.96E-05	0	0
Phase 1b Office	Office Building 3 2024	Excavator	Excavators	Diesel	1	500	0	1	0.38	0.008	0	0	0
Phase 1b Office	Office Building 3 2024	Generator	Generator Sets	Diesel	1	25	0	1	0.74	0.008	0	0	0
Phase 1b Office	Office Building 3 2024	Gradall	Forklifts	Diesel	1	350	0.48	1	0.2	0.008	0.000593	0	0
Phase 1b Office	Office Building 3 2024	Hydro/Crawler Crane	Cranes	Diesel	1	550	0	1	0.29	0.008	0	0	0
Phase 1b Office	Office Building 3 2024	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	0	1	0.37	0.008	0	0	0
Phase 1b Office	Office Building 3 2024	Paver	Pavers	Diesel	1	250	0	1	0.42	0.008	0	0	0
Phase 1b Office	Office Building 3 2024	Pile Rig	Bore/Drill Rigs	Diesel	1	600	0	1	0.5	0.008	0	0	0
Phase 1b Office	Office Building 3 2024	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0.3	0.008	0	0	0
Phase 1b Office	Office Building 3 2024	Scraper	Scrapers	Diesel	1	600	0	1	0.48	0.008	0	0	0
Phase 1b Office	Office Building 3 2024	Tire Wash	Other Construction Equipment	Diesel	1	100	1.5	1	0.42	0.008	0.001111	0	0
Phase 1b Office	Office Building 3 2025	Air Compressor	Air Compressors	Diesel	1	150	0	1	0.48	0.008	0	0	0
Phase 1b Office	Office Building 3 2025	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	0	1	0.37	0.008	0	0	0
Phase 1b Office	Office Building 3 2025	Blade	Graders	Diesel	1	450	0	1	0.41	0.008	0	0	0
Phase 1b Office	Office Building 3 2025	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	0	1	0.37	0.008	0	0	0

Phase 1b Office	Office Building 3 2025	Boom Lift	Aerial Lifts	Diesel	1	40	0	1	0.31	0.008	0	0	0
Phase 1b Office	Office Building 3 2025	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0.42	0.008	0	0	0
Phase 1b Office	Office Building 3 2025	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.78	0.008	0	0	0
Phase 1b Office	Office Building 3 2025	Concrete Pump	Pumps	Diesel	1	450	0	1	0.74	0.008	0	0	0
Phase 1b Office	Office Building 3 2025	Excavator	Excavators	Diesel	1	500	0	1	0.38	0.008	0	0	0
Phase 1b Office	Office Building 3 2025	Generator	Generator Sets	Diesel	1	25	0	1	0.74	0.008	0	0	0
Phase 1b Office	Office Building 3 2025	Gradall	Forklifts	Diesel	1	350	0.48	1	0.2	0.008	0.000593	0	0
Phase 1b Office	Office Building 3 2025	Hydro/Crawler Crane	Cranes	Diesel	1	550	0	1	0.29	0.008	0	0	0
Phase 1b Office	Office Building 3 2025	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	0	1	0.37	0.008	0	0	0
Phase 1b Office	Office Building 3 2025	Paver	Pavers	Diesel	1	250	0	1	0.42	0.008	0	0	0
Phase 1b Office	Office Building 3 2025	Pile Rig	Bore/Drill Rigs	Diesel	1	600	0	1	0.5	0.008	0	0	0
Phase 1b Office	Office Building 3 2025	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0.3	0.008	0	0	0
Phase 1b Office	Office Building 3 2025	Scraper	Scrapers	Diesel	1	600	0	1	0.48	0.008	0	0	0
Phase 1b Office	Office Building 3 2025	Tire Wash	Other Construction Equipment	Diesel	1	100	1.5	1	0.42	0.008	0.001111	0	0
Phase 1b Office	Office Building 1 2023	Air Compressor	Air Compressors	Diesel	1	150	0.065363	1	0.48	0.008	8.3E-05	0	0
Phase 1b Office	Office Building 1 2023	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	2.24581	1	0.37	0.008	0.005129	0	0
Phase 1b Office	Office Building 1 2023	Blade	Graders	Diesel	1	450	0	1	0.41	0.008	0	0	0
Phase 1b Office	Office Building 1 2023	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	2.24581	1	0.37	0.008	0.002931	0	0
Phase 1b Office	Office Building 1 2023	Boom Lift	Aerial Lifts	Diesel	1	40	2.480447	1	0.31	0.008	0.000542	0	0
Phase 1b Office	Office Building 1 2023	Compactor	Other Construction Equipment	Diesel	1	250	0.179665	1	0.42	0.008	0.000333	0	0
Phase 1b Office	Office Building 1 2023	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.78	0.008	0	0	0
Phase 1b Office	Office Building 1 2023	Concrete Pump	Pumps	Diesel	1	450	0.109274	1	0.74	0.008	0.000642	0	0
Phase 1b Office	Office Building 1 2023	Excavator	Excavators	Diesel	1	500	0.112291	1	0.38	0.008	0.000376	0	0
Phase 1b Office	Office Building 1 2023	Generator	Generator Sets	Diesel	1	25	4.424581	1	0.74	0.008	0.001444	0	0
Phase 1b Office	Office Building 1 2023	Gradall	Forklifts	Diesel	1	350	0.48	1	0.2	0.008	0.000593	0	0
Phase 1b Office	Office Building 1 2023	Hydro/Crawler Crane	Cranes	Diesel	1	550	2.916201	1	0.29	0.008	0.008204	0	0
Phase 1b Office	Office Building 1 2023	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	1.47486	1	0.37	0.008	0.000962	0	0
Phase 1b Office	Office Building 1 2023	Paver	Pavers	Diesel	1	250	0	1	0.42	0.008	0	0	0
Phase 1b Office	Office Building 1 2023	Pile Rig	Bore/Drill Rigs	Diesel	1	600	1.47486	1	0.5	0.008	0.007804	0	0
Phase 1b Office	Office Building 1 2023	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0.3	0.008	0	0	0
Phase 1b Office	Office Building 1 2023	Scraper	Scrapers	Diesel	1	600	0	1	0.48	0.008	0	0	0
Phase 1b Office	Office Building 1 2023	Tire Wash	Other Construction Equipment	Diesel	1	100	1.5	1	0.42	0.008	0.001111	0	0
Phase 1b Office	Office Building 1 2024	Air Compressor	Air Compressors	Diesel	1	150	0	1	0.48	0.008	0	0	0
Phase 1b Office	Office Building 1 2024	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	0	1	0.37	0.008	0	0	0
Phase 1b Office	Office Building 1 2024	Blade	Graders	Diesel	1	450	0	1	0.41	0.008	0	0	0
Phase 1b Office	Office Building 1 2024	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	0	1	0.37	0.008	0	0	0
Phase 1b Office	Office Building 1 2024	Boom Lift	Aerial Lifts	Diesel	1	40	6.554217	1	0.31	0.008	0.001433	0	0
Phase 1b Office	Office Building 1 2024	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0.42	0.008	0	0	0
Phase 1b Office	Office Building 1 2024	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.78	0.008	0	0	0
Phase 1b Office	Office Building 1 2024	Concrete Pump	Pumps	Diesel	1	450	0.005301	1	0.74	0.008	3.11E-05	0	0
Phase 1b Office	Office Building 1 2024	Excavator	Excavators	Diesel	1	500	0	1	0.38	0.008	0	0	0
Phase 1b Office	Office Building 1 2024	Generator	Generator Sets	Diesel	1	25	0	1	0.74	0.008	0	0	0
Phase 1b Office	Office Building 1 2024	Gradall	Forklifts	Diesel	1	350	0.478072	1	0.2	0.008	0.00059	0	0
Phase 1b Office	Office Building 1 2024	Hydro/Crawler Crane	Cranes	Diesel	1	550	0	1	0.29	0.008	0	0	0
Phase 1b Office	Office Building 1 2024	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	0	1	0.37	0.008	0	0	0
Phase 1b Office	Office Building 1 2024	Paver	Pavers	Diesel	1	250	0	1	0.42	0.008	0	0	0
Phase 1b Office	Office Building 1 2024	Pile Rig	Bore/Drill Rigs	Diesel	1	600	0	1	0.5	0.008	0	0	0
Phase 1b Office	Office Building 1 2024	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0.3	0.008	0	0	0
Phase 1b Office	Office Building 1 2024	Scraper	Scrapers	Diesel	1	600	0	1	0.48	0.008	0	0	0
Phase 1b Office	Office Building 1 2024	Tire Wash	Other Construction Equipment	Diesel	1	100	1.5	1	0.42	0.008	0.001111	0	0
Phase 1b Office	Office Building 2 2023	Air Compressor	Air Compressors	Diesel	1	150	0.075669	1	0.48	0.008	9.61E-05	0	0
Phase 1b Office	Office Building 2 2023	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	2.484076	1	0.37	0.008	0.005674	0	0
Phase 1b Office	Office Building 2 2023	Blade	Graders	Diesel	1	450	0	1	0.41	0.008	0	0	0
Phase 1b Office	Office Building 2 2023	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	2.484076	1	0.37	0.008	0.003242	0	0
Phase 1b Office	Office Building 2 2023	Boom Lift	Aerial Lifts	Diesel	1	40	1.22293	1	0.31	0.008	0.000267	0	0
Phase 1b Office	Office Building 2 2023	Compactor	Other Construction Equipment	Diesel	1	250	0.198726	1	0.42	0.008	0.000368	0	0

Phase 1b Office	Office Building 2 2023	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.78	0.008	0	0	0
Phase 1b Office	Office Building 2 2023	Concrete Pump	Pumps	Diesel	1	450	0.124204	1	0.74	0.008	0.000729	0	0
Phase 1b Office	Office Building 2 2023	Excavator	Excavators	Diesel	1	500	0.124204	1	0.38	0.008	0.000416	0	0
Phase 1b Office	Office Building 2 2023	Generator	Generator Sets	Diesel	1	25	5.006369	1	0.74	0.008	0.001634	0	0
Phase 1b Office	Office Building 2 2023	Gradall	Forklifts	Diesel	1	350	0.48	1	0.2	0.008	0.000593	0	0
Phase 1b Office	Office Building 2 2023	Hydro/Crawler Crane	Cranes	Diesel	1	550	3.324841	1	0.29	0.008	0.009353	0	0
Phase 1b Office	Office Building 2 2023	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	1.681529	1	0.37	0.008	0.001097	0	0
Phase 1b Office	Office Building 2 2023	Paver	Pavers	Diesel	1	250	0	1	0.42	0.008	0	0	0
Phase 1b Office	Office Building 2 2023	Pile Rig	Bore/Drill Rigs	Diesel	1	600	1.681529	1	0.5	0.008	0.008897	0	0
Phase 1b Office	Office Building 2 2023	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0.3	0.008	0	0	0
Phase 1b Office	Office Building 2 2023	Scraper	Scrapers	Diesel	1	600	0	1	0.48	0.008	0	0	0
Phase 1b Office	Office Building 2 2023	Tire Wash	Other Construction Equipment	Diesel	1	100	1.5	1	0.42	0.008	0.001111	0	0
Phase 1b Office	Office Building 2 2024	Air Compressor	Air Compressors	Diesel	1	150	0	1	0.48	0.008	0	0	0
Phase 1b Office	Office Building 2 2024	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	0	1	0.37	0.008	0	0	0
Phase 1b Office	Office Building 2 2024	Blade	Graders	Diesel	1	450	0	1	0.41	0.008	0	0	0
Phase 1b Office	Office Building 2 2024	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	0	1	0.37	0.008	0	0	0
Phase 1b Office	Office Building 2 2024	Boom Lift	Aerial Lifts	Diesel	1	40	7.270992	1	0.31	0.008	0.00159	0	0
Phase 1b Office	Office Building 2 2024	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0.42	0.008	0	0	0
Phase 1b Office	Office Building 2 2024	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.78	0.008	0	0	0
Phase 1b Office	Office Building 2 2024	Concrete Pump	Pumps	Diesel	1	450	0.005038	1	0.74	0.008	2.96E-05	0	0
Phase 1b Office	Office Building 2 2024	Excavator	Excavators	Diesel	1	500	0	1	0.38	0.008	0	0	0
Phase 1b Office	Office Building 2 2024	Generator	Generator Sets	Diesel	1	25	0	1	0.74	0.008	0	0	0
Phase 1b Office	Office Building 2 2024	Gradall	Forklifts	Diesel	1	350	0.48	1	0.2	0.008	0.000593	0	0
Phase 1b Office	Office Building 2 2024	Hydro/Crawler Crane	Cranes	Diesel	1	550	0	1	0.29	0.008	0	0	0
Phase 1b Office	Office Building 2 2024	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	0	1	0.37	0.008	0	0	0
Phase 1b Office	Office Building 2 2024	Paver	Pavers	Diesel	1	250	0	1	0.42	0.008	0	0	0
Phase 1b Office	Office Building 2 2024	Pile Rig	Bore/Drill Rigs	Diesel	1	600	0	1	0.5	0.008	0	0	0
Phase 1b Office	Office Building 2 2024	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0.3	0.008	0	0	0
Phase 1b Office	Office Building 2 2024	Scraper	Scrapers	Diesel	1	600	0	1	0.48	0.008	0	0	0
Phase 1b Office	Office Building 2 2024	Tire Wash	Other Construction Equipment	Diesel	1	100	1.5	1	0.42	0.008	0.001111	0	0
Phase 1b Office	Office Building 2 2025	Air Compressor	Air Compressors	Diesel	1	150	0	1	0.48	0.008	0	0	0
Phase 1b Office	Office Building 2 2025	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	0	1	0.37	0.008	0	0	0
Phase 1b Office	Office Building 2 2025	Blade	Graders	Diesel	1	450	0	1	0.41	0.008	0	0	0
Phase 1b Office	Office Building 2 2025	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	0	1	0.37	0.008	0	0	0
Phase 1b Office	Office Building 2 2025	Boom Lift	Aerial Lifts	Diesel	1	40	0	1	0.31	0.008	0	0	0
Phase 1b Office	Office Building 2 2025	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0.42	0.008	0	0	0
Phase 1b Office	Office Building 2 2025	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.78	0.008	0	0	0
Phase 1b Office	Office Building 2 2025	Concrete Pump	Pumps	Diesel	1	450	0	1	0.74	0.008	0	0	0
Phase 1b Office	Office Building 2 2025	Excavator	Excavators	Diesel	1	500	0	1	0.38	0.008	0	0	0
Phase 1b Office	Office Building 2 2025	Generator	Generator Sets	Diesel	1	25	0	1	0.74	0.008	0	0	0
Phase 1b Office	Office Building 2 2025	Gradall	Forklifts	Diesel	1	350	0.48	1	0.2	0.008	0.000593	0	0
Phase 1b Office	Office Building 2 2025	Hydro/Crawler Crane	Cranes	Diesel	1	550	0	1	0.29	0.008	0	0	0
Phase 1b Office	Office Building 2 2025	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	0	1	0.37	0.008	0	0	0
Phase 1b Office	Office Building 2 2025	Paver	Pavers	Diesel	1	250	0	1	0.42	0.008	0	0	0
Phase 1b Office	Office Building 2 2025	Pile Rig	Bore/Drill Rigs	Diesel	1	600	0	1	0.5	0.008	0	0	0
Phase 1b Office	Office Building 2 2025	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0.3	0.008	0	0	0
Phase 1b Office	Office Building 2 2025	Scraper	Scrapers	Diesel	1	600	0	1	0.48	0.008	0	0	0
Phase 1b Office	Office Building 2 2025	Tire Wash	Other Construction Equipment	Diesel	1	100	1.5	1	0.42	0.008	0.001111	0	0
Phase 1b Office	Office Building 5 2023	Air Compressor	Air Compressors	Diesel	1	150	0.058812	1	0.48	0.008	7.47E-05	0	0
Phase 1b Office	Office Building 5 2023	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	2.643564	1	0.37	0.008	0.006038	0	0
Phase 1b Office	Office Building 5 2023	Blade	Graders	Diesel	1	450	0	1	0.41	0.008	0	0	0
Phase 1b Office	Office Building 5 2023	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	2.643564	1	0.37	0.008	0.00345	0	0
Phase 1b Office	Office Building 5 2023	Boom Lift	Aerial Lifts	Diesel	1	40	2.19802	1	0.31	0.008	0.000481	0	0
Phase 1b Office	Office Building 5 2023	Compactor	Other Construction Equipment	Diesel	1	250	0.211485	1	0.42	0.008	0.000392	0	0
Phase 1b Office	Office Building 5 2023	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.78	0.008	0	0	0
Phase 1b Office	Office Building 5 2023	Concrete Pump	Pumps	Diesel	1	450	0.117327	1	0.74	0.008	0.000689	0	0

Phase 1b Office	Office Building 5 2023	Excavator	Excavators	Diesel	1	500	0.132178	1	0.38	0.008	0.000443	0	0
Phase 1b Office	Office Building 5 2023	Generator	Generator Sets	Diesel	1	25	4.60396	1	0.74	0.008	0.001502	0	0
Phase 1b Office	Office Building 5 2023	Gradall	Forklifts	Diesel	1	350	0.48	1	0.2	0.008	0.000593	0	0
Phase 1b Office	Office Building 5 2023	Hydro/Crawler Crane	Cranes	Diesel	1	550	3.267327	1	0.29	0.008	0.009191	0	0
Phase 1b Office	Office Building 5 2023	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	1.960396	1	0.37	0.008	0.001279	0	0
Phase 1b Office	Office Building 5 2023	Paver	Pavers	Diesel	1	250	0	1	0.42	0.008	0	0	0
Phase 1b Office	Office Building 5 2023	Pile Rig	Bore/Drill Rigs	Diesel	1	600	1.960396	1	0.5	0.008	0.010373	0	0
Phase 1b Office	Office Building 5 2023	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0.3	0.008	0	0	0
Phase 1b Office	Office Building 5 2023	Scraper	Scrapers	Diesel	1	600	0	1	0.48	0.008	0	0	0
Phase 1b Office	Office Building 5 2023	Tire Wash	Other Construction Equipment	Diesel	1	100	1.5	1	0.42	0.008	0.001111	0	0
Phase 1b Office	Office Building 5 2024	Air Compressor	Air Compressors	Diesel	1	150	0	1	0.48	0.008	0	0	0
Phase 1b Office	Office Building 5 2024	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	0	1	0.37	0.008	0	0	0
Phase 1b Office	Office Building 5 2024	Blade	Graders	Diesel	1	450	0	1	0.41	0.008	0	0	0
Phase 1b Office	Office Building 5 2024	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	0	1	0.37	0.008	0	0	0
Phase 1b Office	Office Building 5 2024	Boom Lift	Aerial Lifts	Diesel	1	40	6.194656	1	0.31	0.008	0.001355	0	0
Phase 1b Office	Office Building 5 2024	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0.42	0.008	0	0	0
Phase 1b Office	Office Building 5 2024	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.78	0.008	0	0	0
Phase 1b Office	Office Building 5 2024	Concrete Pump	Pumps	Diesel	1	450	0.004809	1	0.74	0.008	2.82E-05	0	0
Phase 1b Office	Office Building 5 2024	Excavator	Excavators	Diesel	1	500	0	1	0.38	0.008	0	0	0
Phase 1b Office	Office Building 5 2024	Generator	Generator Sets	Diesel	1	25	0	1	0.74	0.008	0	0	0
Phase 1b Office	Office Building 5 2024	Gradall	Forklifts	Diesel	1	350	0.48	1	0.2	0.008	0.000593	0	0
Phase 1b Office	Office Building 5 2024	Hydro/Crawler Crane	Cranes	Diesel	1	550	0	1	0.29	0.008	0	0	0
Phase 1b Office	Office Building 5 2024	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	0	1	0.37	0.008	0	0	0
Phase 1b Office	Office Building 5 2024	Paver	Pavers	Diesel	1	250	0	1	0.42	0.008	0	0	0
Phase 1b Office	Office Building 5 2024	Pile Rig	Bore/Drill Rigs	Diesel	1	600	0	1	0.5	0.008	0	0	0
Phase 1b Office	Office Building 5 2024	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0.3	0.008	0	0	0
Phase 1b Office	Office Building 5 2024	Scraper	Scrapers	Diesel	1	600	0	1	0.48	0.008	0	0	0
Phase 1b Office	Office Building 5 2024	Tire Wash	Other Construction Equipment	Diesel	1	100	1.5	1	0.42	0.008	0.001111	0	0
Phase 1b Office	Office Building 5 2025	Air Compressor	Air Compressors	Diesel	1	150	0	1	0.48	0.008	0	0	0
Phase 1b Office	Office Building 5 2025	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	0	1	0.37	0.008	0	0	0
Phase 1b Office	Office Building 5 2025	Blade	Graders	Diesel	1	450	0	1	0.41	0.008	0	0	0
Phase 1b Office	Office Building 5 2025	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	0	1	0.37	0.008	0	0	0
Phase 1b Office	Office Building 5 2025	Boom Lift	Aerial Lifts	Diesel	1	40	0	1	0.31	0.008	0	0	0
Phase 1b Office	Office Building 5 2025	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0.42	0.008	0	0	0
Phase 1b Office	Office Building 5 2025	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.78	0.008	0	0	0
Phase 1b Office	Office Building 5 2025	Concrete Pump	Pumps	Diesel	1	450	0	1	0.74	0.008	0	0	0
Phase 1b Office	Office Building 5 2025	Excavator	Excavators	Diesel	1	500	0	1	0.38	0.008	0	0	0
Phase 1b Office	Office Building 5 2025	Generator	Generator Sets	Diesel	1	25	0	1	0.74	0.008	0	0	0
Phase 1b Office	Office Building 5 2025	Gradall	Forklifts	Diesel	1	350	0.48	1	0.2	0.008	0.000593	0	0
Phase 1b Office	Office Building 5 2025	Hydro/Crawler Crane	Cranes	Diesel	1	550	0	1	0.29	0.008	0	0	0
Phase 1b Office	Office Building 5 2025	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	0	1	0.37	0.008	0	0	0
Phase 1b Office	Office Building 5 2025	Paver	Pavers	Diesel	1	250	0	1	0.42	0.008	0	0	0
Phase 1b Office	Office Building 5 2025	Pile Rig	Bore/Drill Rigs	Diesel	1	600	0	1	0.5	0.008	0	0	0
Phase 1b Office	Office Building 5 2025	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0.3	0.008	0	0	0
Phase 1b Office	Office Building 5 2025	Scraper	Scrapers	Diesel	1	600	0	1	0.48	0.008	0	0	0
Phase 1b Office	Office Building 5 2025	Tire Wash	Other Construction Equipment	Diesel	1	100	1.5	1	0.42	0.008	0.001111	0	0
Phase 1b Office	Office Building 6 2023	Air Compressor	Air Compressors	Diesel	1	150	0.062206	1	0.48	0.008	7.9E-05	0	0
Phase 1b Office	Office Building 6 2023	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	3.926471	1	0.37	0.008	0.008968	0	0
Phase 1b Office	Office Building 6 2023	Blade	Graders	Diesel	1	450	0	1	0.41	0.008	0	0	0
Phase 1b Office	Office Building 6 2023	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	3.926471	1	0.37	0.008	0.005125	0	0
Phase 1b Office	Office Building 6 2023	Boom Lift	Aerial Lifts	Diesel	1	40	0	1	0.31	0.008	0	0	0
Phase 1b Office	Office Building 6 2023	Compactor	Other Construction Equipment	Diesel	1	250	0.314118	1	0.42	0.008	0.000582	0	0
Phase 1b Office	Office Building 6 2023	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.78	0.008	0	0	0
Phase 1b Office	Office Building 6 2023	Concrete Pump	Pumps	Diesel	1	450	0.157941	1	0.74	0.008	0.000928	0	0
Phase 1b Office	Office Building 6 2023	Excavator	Excavators	Diesel	1	500	0.196324	1	0.38	0.008	0.000658	0	0
Phase 1b Office	Office Building 6 2023	Generator	Generator Sets	Diesel	1	25	6	1	0.74	0.008	0.001958	0	0

Phase 1b Office	Office Building 6 2023	Gradall	Forklifts	Diesel	1	350	0.48	1	0.2	0.008	0.000593	0	0
Phase 1b Office	Office Building 6 2023	Hydro/Crawler Crane	Cranes	Diesel	1	550	4.897059	1	0.29	0.008	0.013776	0	0
Phase 1b Office	Office Building 6 2023	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	3	1	0.37	0.008	0.001958	0	0
Phase 1b Office	Office Building 6 2023	Paver	Pavers	Diesel	1	250	0	1	0.42	0.008	0	0	0
Phase 1b Office	Office Building 6 2023	Pile Rig	Bore/Drill Rigs	Diesel	1	600	3	1	0.5	0.008	0.015873	0	0
Phase 1b Office	Office Building 6 2023	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0.3	0.008	0	0	0
Phase 1b Office	Office Building 6 2023	Scraper	Scrapers	Diesel	1	600	0	1	0.48	0.008	0	0	0
Phase 1b Office	Office Building 6 2023	Tire Wash	Other Construction Equipment	Diesel	1	100	1.5	1	0.42	0.008	0.001111	0	0
Phase 1b Office	Office Building 6 2024	Air Compressor	Air Compressors	Diesel	1	150	0.013053	1	0.48	0.008	1.66E-05	0	0
Phase 1b Office	Office Building 6 2024	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	0	1	0.37	0.008	0	0	0
Phase 1b Office	Office Building 6 2024	Blade	Graders	Diesel	1	450	0	1	0.41	0.008	0	0	0
Phase 1b Office	Office Building 6 2024	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	0	1	0.37	0.008	0	0	0
Phase 1b Office	Office Building 6 2024	Boom Lift	Aerial Lifts	Diesel	1	40	8.003817	1	0.31	0.008	0.00175	0	0
Phase 1b Office	Office Building 6 2024	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0.42	0.008	0	0	0
Phase 1b Office	Office Building 6 2024	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.78	0.008	0	0	0
Phase 1b Office	Office Building 6 2024	Concrete Pump	Pumps	Diesel	1	450	0.013969	1	0.74	0.008	8.2E-05	0	0
Phase 1b Office	Office Building 6 2024	Excavator	Excavators	Diesel	1	500	0	1	0.38	0.008	0	0	0
Phase 1b Office	Office Building 6 2024	Generator	Generator Sets	Diesel	1	25	0.435115	1	0.74	0.008	0.000142	0	0
Phase 1b Office	Office Building 6 2024	Gradall	Forklifts	Diesel	1	350	0.48	1	0.2	0.008	0.000593	0	0
Phase 1b Office	Office Building 6 2024	Hydro/Crawler Crane	Cranes	Diesel	1	550	0	1	0.29	0.008	0	0	0
Phase 1b Office	Office Building 6 2024	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	0	1	0.37	0.008	0	0	0
Phase 1b Office	Office Building 6 2024	Paver	Pavers	Diesel	1	250	0	1	0.42	0.008	0	0	0
Phase 1b Office	Office Building 6 2024	Pile Rig	Bore/Drill Rigs	Diesel	1	600	0	1	0.5	0.008	0	0	0
Phase 1b Office	Office Building 6 2024	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0.3	0.008	0	0	0
Phase 1b Office	Office Building 6 2024	Scraper	Scrapers	Diesel	1	600	0	1	0.48	0.008	0	0	0
Phase 1b Office	Office Building 6 2024	Tire Wash	Other Construction Equipment	Diesel	1	100	1.5	1	0.42	0.008	0.001111	0	0
Phase 1b Office	Office Building 6 2025	Air Compressor	Air Compressors	Diesel	1	150	0	1	0.48	0.008	0	0	0
Phase 1b Office	Office Building 6 2025	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	0	1	0.37	0.008	0	0	0
Phase 1b Office	Office Building 6 2025	Blade	Graders	Diesel	1	450	0	1	0.41	0.008	0	0	0
Phase 1b Office	Office Building 6 2025	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	0	1	0.37	0.008	0	0	0
Phase 1b Office	Office Building 6 2025	Boom Lift	Aerial Lifts	Diesel	1	40	0	1	0.31	0.008	0	0	0
Phase 1b Office	Office Building 6 2025	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0.42	0.008	0	0	0
Phase 1b Office	Office Building 6 2025	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.78	0.008	0	0	0
Phase 1b Office	Office Building 6 2025	Concrete Pump	Pumps	Diesel	1	450	0	1	0.74	0.008	0	0	0
Phase 1b Office	Office Building 6 2025	Excavator	Excavators	Diesel	1	500	0	1	0.38	0.008	0	0	0
Phase 1b Office	Office Building 6 2025	Generator	Generator Sets	Diesel	1	25	0	1	0.74	0.008	0	0	0
Phase 1b Office	Office Building 6 2025	Gradall	Forklifts	Diesel	1	350	0.48	1	0.2	0.008	0.000593	0	0
Phase 1b Office	Office Building 6 2025	Hydro/Crawler Crane	Cranes	Diesel	1	550	0	1	0.29	0.008	0	0	0
Phase 1b Office	Office Building 6 2025	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	0	1	0.37	0.008	0	0	0
Phase 1b Office	Office Building 6 2025	Paver	Pavers	Diesel	1	250	0	1	0.42	0.008	0	0	0
Phase 1b Office	Office Building 6 2025	Pile Rig	Bore/Drill Rigs	Diesel	1	600	0	1	0.5	0.008	0	0	0
Phase 1b Office	Office Building 6 2025	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0.3	0.008	0	0	0
Phase 1b Office	Office Building 6 2025	Scraper	Scrapers	Diesel	1	600	0	1	0.48	0.008	0	0	0
Phase 1b Office	Office Building 6 2025	Tire Wash	Other Construction Equipment	Diesel	1	100	1.5	1	0.42	0.008	0.001111	0	0
Phase 1b Mixed Use	Parcel 7 Foundations	Pile Rig	Bore/Drill Rigs	Diesel	0	600	8	0.4	0.5	0.008	0	0	0
Phase 1b Mixed Use	Parcel 7 Foundations	Generator	Generator Sets	Diesel	0	25	6	1	0.74	0.008	0	0	0
Phase 1b Mixed Use	Parcel 7 Foundations	Tire Wash	Other Construction Equipment	Diesel	1	100	4	0.9	0.42	0.008	0.002667	0	0
Phase 1b Mixed Use	Parcel 7 Foundations	Excavator	Excavators	Diesel	1	131	8	0.6	0.38	0.008	0.004214	0	0
Phase 1b Mixed Use	Parcel 7 Foundations	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	90	8	0.6	0.37	0.008	0.002819	0	0
Phase 1b Mixed Use	Parcel 7 Foundations	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	70	8	0.8	0.37	0.008	0.002924	0	0
Phase 1b Mixed Use	Parcel 7 Foundations	Gradall	Forklifts	Diesel	1	74	4	0.8	0.2	0.008	0.000835	0	0
Phase 1b Mixed Use	Parcel 7 Foundations	Crane	Cranes	Diesel	1	215	4	0.5	0.29	0.008	0.002199	0	0
Phase 1b Mixed Use	Parcel 7 Foundations	Concrete Pump	Pumps	Diesel	1	450	0.25	0.5	0.74	0.008	0.000734	0	0
Phase 1b Mixed Use	Parcel 7 Core and Shell	Generator	Generator Sets	Diesel	0	25	6	1	0.74	0.008	0	0	0
Phase 1b Mixed Use	Parcel 7 Core and Shell	Tire Wash	Other Construction Equipment	Diesel	1	100	4	0.9	0.42	0.008	0.002667	0	0
Phase 1b Mixed Use	Parcel 7 Core and Shell	Crane	Cranes	Diesel	1	600	8	0.2	0.29	0.008	0.00491	0	0

Phase 1b Mixed Use	Parcel 7 Core and Shell	Gradall	Forklifts	Diesel	1	74	4	0.8	0.2	0.008	0.000835	0	0
Phase 1b Mixed Use	Parcel 7 Core and Shell	Concrete Pump	Pumps	Diesel	0	450	6	0.225	0.74	0.008	0	0	0
Phase 1b Mixed Use	Parcel 7 Core and Shell	Air Compressor	Air Compressors	Diesel	0	140	2	0.4	0.48	0.008	0	0	0
Phase 1b Mixed Use	Parcel 7 Core and Shell	Boom Lift	Aerial Lifts	Diesel	0	50	6	0.2	0.31	0.008	0	0	0
Phase 1b Mixed Use	Parcel 7 Tenant Improvements	Generator	Generator Sets	Diesel	0	25	6	0.85	0.74	0.008	0	0	0
Phase 1b Mixed Use	Parcel 7 Tenant Improvements	Tire Wash	Other Construction Equipment	Diesel	1	100	4	0.9	0.42	0.008	0.002667	0	0
Phase 1b Mixed Use	Parcel 7 Tenant Improvements	Gradall	Forklifts	Diesel	1	74	4	0.8	0.2	0.008	0.000835	0	0
Phase 1b Mixed Use	Parcel 7 Landscaping	Excavator	Excavators	Diesel	1	25	8	0.9	0.38	0.008	0.001206	0	0
Phase 1b Mixed Use	Parcel 7 Landscaping	Generator	Generator Sets	Diesel	0	25	6	0.5	0.74	0.008	0	0	0
Phase 1b Mixed Use	Parcel 7 Landscaping	Tire Wash	Other Construction Equipment	Diesel	1	100	4	0.9	0.42	0.008	0.002667	0	0
Phase 1b Mixed Use	Parcel 7 Landscaping	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	90	8	0.6	0.37	0.008	0.002819	0	0
Phase 1b Mixed Use	Parcel 7 Landscaping	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	70	8	0.8	0.37	0.008	0.002924	0	0
Phase 1b Mixed Use	Parcel 6 Foundations	Pile Rig	Bore/Drill Rigs	Diesel	0	600	8	0.4	0.5	0.008	0	0	0
Phase 1b Mixed Use	Parcel 6 Foundations	Generator	Generator Sets	Diesel	0	25	6	1	0.74	0.008	0	0	0
Phase 1b Mixed Use	Parcel 6 Foundations	Tire Wash	Other Construction Equipment	Diesel	1	100	4	0.9	0.42	0.008	0.002667	0	0
Phase 1b Mixed Use	Parcel 6 Foundations	Excavator	Excavators	Diesel	1	131	8	0.6	0.38	0.008	0.004214	0	0
Phase 1b Mixed Use	Parcel 6 Foundations	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	90	8	0.6	0.37	0.008	0.002819	0	0
Phase 1b Mixed Use	Parcel 6 Foundations	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	70	8	0.8	0.37	0.008	0.002924	0	0
Phase 1b Mixed Use	Parcel 6 Foundations	Gradall	Forklifts	Diesel	1	74	4	0.8	0.2	0.008	0.000835	0	0
Phase 1b Mixed Use	Parcel 6 Foundations	Crane	Cranes	Diesel	1	215	4	0.5	0.29	0.008	0.002199	0	0
Phase 1b Mixed Use	Parcel 6 Foundations	Concrete Pump	Pumps	Diesel	1	450	0.5	0.5	0.74	0.008	0.001468	0	0
Phase 1b Mixed Use	Parcel 6 Core and Shell	Generator	Generator Sets	Diesel	0	25	6	1	0.74	0.008	0	0	0
Phase 1b Mixed Use	Parcel 6 Core and Shell	Tire Wash	Other Construction Equipment	Diesel	1	100	4	0.9	0.42	0.008	0.002667	0	0
Phase 1b Mixed Use	Parcel 6 Core and Shell	Crane	Cranes	Diesel	1	600	8	0.2	0.29	0.008	0.00491	0	0
Phase 1b Mixed Use	Parcel 6 Core and Shell	Gradall	Forklifts	Diesel	2	74	4	0.8	0.2	0.008	0.001671	0	0
Phase 1b Mixed Use	Parcel 6 Core and Shell	Concrete Pump	Pumps	Diesel	0	450	6	0.225	0.74	0.008	0	0	0
Phase 1b Mixed Use	Parcel 6 Core and Shell	Air Compressor	Air Compressors	Diesel	0	140	2	0.4	0.48	0.008	0	0	0
Phase 1b Mixed Use	Parcel 6 Core and Shell	Boom Lift	Aerial Lifts	Diesel	0	50	6	0.2	0.31	0.008	0	0	0
Phase 1b Mixed Use	Parcel 6 Tenant Improvements	Generator	Generator Sets	Diesel	0	25	6	0.85	0.74	0.008	0	0	0
Phase 1b Mixed Use	Parcel 6 Tenant Improvements	Tire Wash	Other Construction Equipment	Diesel	1	100	4	0.9	0.42	0.008	0.002667	0	0
Phase 1b Mixed Use	Parcel 6 Tenant Improvements	Generator	Generator Sets	Diesel	0	25	6	0.85	0.74	0.008	0	0	0
Phase 1b Mixed Use	Parcel 6 Tenant Improvements	Tire Wash	Other Construction Equipment	Diesel	1	100	4	0.9	0.42	0.008	0.002667	0	0
Phase 1b Mixed Use	Parcel 6 Tenant Improvements	Gradall	Forklifts	Diesel	1	74	4	0.8	0.2	0.008	0.000835	0	0
Phase 1b Mixed Use	Parcel 6 Landscaping	Excavator	Excavators	Diesel	1	25	8	0.9	0.38	0.008	0.001206	0	0
Phase 1b Mixed Use	Parcel 6 Landscaping	Generator	Generator Sets	Diesel	0	25	6	0.5	0.74	0.008	0	0	0
Phase 1b Mixed Use	Parcel 6 Landscaping	Tire Wash	Other Construction Equipment	Diesel	0	100	4	0.9	0.42	0.008	0	0	0
Phase 1b Mixed Use	Parcel 6 Landscaping	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	90	8	0.6	0.37	0.008	0.002819	0	0
Phase 1b Mixed Use	Parcel 6 Landscaping	Bob Cat	Tractors/Loaders/Backhoes	Diesel	2	70	8	0.8	0.37	0.008	0.005847	0	0
Phase 2 Mixed Use	Grading and Utilities	Blade	Graders	Diesel	1	359	8	0.15	0.41	0.008	0.003115	0	0
Phase 2 Mixed Use	Grading and Utilities	Scraper	Scrapers	Diesel	1	52	8	0.15	0.48	0.008	0.000528	0	0
Phase 2 Mixed Use	Grading and Utilities	Loader	Tractors/Loaders/Backhoes	Diesel	2	100	4	0.9	0.37	0.008	0.004699	0	0
Phase 2 Mixed Use	Grading and Utilities	Tire Wash	Other Construction Equipment	Diesel	1	100	4	0.9	0.42	0.008	0.002667	0	0
Phase 2 Mixed Use	Grading and Utilities	Excavator	Excavators	Diesel	2	359	8	0.6	0.38	0.008	0.023098	0	0
Phase 2 Mixed Use	Grading and Utilities	Backhoe	Tractors/Loaders/Backhoes	Diesel	2	350	8	0.6	0.37	0.008	0.021926	0	0
Phase 2 Mixed Use	Grading and Utilities	Gradall	Forklifts	Diesel	2	350	4	0.6	0.2	0.008	0.005926	0	0
Phase 2 Mixed Use	Grading and Utilities	Compactor	Other Construction Equipment	Diesel	2	250	0.5	0.2	0.42	0.008	0.00037	0	0
Phase 2 Mixed Use	Grading and Utilities	Paver	Pavers	Diesel	1	250	8	0.01	0.42	0.008	0.000148	0	0
Phase 2 Mixed Use	Grading and Utilities	Generator	Generator Sets	Diesel	1	600	2	0.1	0.74	0.008	0.001566	0	0
Phase 2 Mixed Use	Tunnel Construction	Crane	Cranes	Diesel	1	290	6	0.35	0.29	0.008	0.003115	0	0
Phase 2 Mixed Use	Tunnel Construction	Excavator	Excavators	Diesel	2	170	6	0.45	0.38	0.008	0.006153	0	0
Phase 2 Mixed Use	Tunnel Construction	Loader	Tractors/Loaders/Backhoes	Diesel	1	250	6	0.45	0.37	0.008	0.004405	0	0
Phase 2 Mixed Use	Tunnel Construction	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	103	6	0.4	0.37	0.008	0.001613	0	0
Phase 2 Mixed Use	Tunnel Construction	Gradall	Forklifts	Diesel	1	130	6	0.35	0.2	0.008	0.000963	0	0
Phase 2 Mixed Use	Tunnel Construction	Compressor	Air Compressors	Diesel	2	50	6	0.3	0.48	0.008	0.001524	0	0
Phase 2 Mixed Use	Foundations	Pile Rig	Bore/Drill Rigs	Diesel	0	600	8	0.4	0.5	0.008	0	0	0
Phase 2 Mixed Use	Foundations	Generator	Generator Sets	Diesel	2	25	6	1	0.74	0.008	0.003915	0	0
Phase 2 Mixed Use	Foundations	Tire Wash	Other Construction Equipment	Diesel	2	100	4	0.9	0.42	0.008	0.005333	0	0
Phase 2 Mixed Use	Foundations	Excavator	Excavators	Diesel	2	131	8	0.6	0.38	0.008	0.008429	0	0

Phase 2 Mixed Use	Foundations	Backhoe	Tractors/Loaders/Backhoes	Diesel	2	90	8	0.6	0.37	0.008	0.005638	0	0
Phase 2 Mixed Use	Foundations	Bob Cat	Tractors/Loaders/Backhoes	Diesel	2	70	8	0.8	0.37	0.008	0.005847	0	0
Phase 2 Mixed Use	Foundations	Gradall	Forklifts	Diesel	2	74	4	0.8	0.2	0.008	0.001671	0	0
Phase 2 Mixed Use	Foundations	Crane	Cranes	Diesel	2	215	4	0.5	0.29	0.008	0.004399	0	0
Phase 2 Mixed Use	Foundations	Concrete Pump	Pumps	Diesel	3	450	0.5	0.5	0.74	0.008	0.004405	0	0
Phase 2 Mixed Use	Core and Shell	Generator	Generator Sets	Diesel	2	25	6	1	0.74	0.008	0.003915	0	0
Phase 2 Mixed Use	Core and Shell	Tire Wash	Other Construction Equipment	Diesel	2	100	4	0.9	0.42	0.008	0.005333	0	0
Phase 2 Mixed Use	Core and Shell	Crane	Cranes	Diesel	2	600	8	0.2	0.29	0.008	0.00982	0	0
Phase 2 Mixed Use	Core and Shell	Gradall	Forklifts	Diesel	3	74	4	0.8	0.2	0.008	0.002506	0	0
Phase 2 Mixed Use	Core and Shell	Concrete Pump	Pumps	Diesel	0	450	6	0.45	0.74	0.008	0	0	0
Phase 2 Mixed Use	Core and Shell	Air Compressor	Air Compressors	Diesel	0	140	2	0.8	0.48	0.008	0	0	0
Phase 2 Mixed Use	Core and Shell	Boom Lift	Aerial Lifts	Diesel	0	50	6	0.4	0.31	0.008	0	0	0
Phase 2 Mixed Use	Tenant Improvements	Generator	Generator Sets	Diesel	2	25	6	0.85	0.74	0.008	0.003328	0	0
Phase 2 Mixed Use	Tenant Improvements	Tire Wash	Other Construction Equipment	Diesel	2	100	4	0.9	0.42	0.008	0.005333	0	0
Phase 2 Mixed Use	Tenant Improvements	Gradall	Forklifts	Diesel	1	74	4	0.8	0.2	0.008	0.000835	0	0
Phase 2 Mixed Use	Landscaping	Excavator	Excavators	Diesel	1	25	8	0.9	0.38	0.008	0.001206	0	0
Phase 2 Mixed Use	Landscaping	Generator	Generator Sets	Diesel	0	25	6	0.5	0.74	0.008	0	0	0
Phase 2 Mixed Use	Landscaping	Tire Wash	Other Construction Equipment	Diesel	1	100	4	0.9	0.42	0.008	0.002667	0	0
Phase 2 Mixed Use	Landscaping	Backhoe	Tractors/Loaders/Backhoes	Diesel	2	90	8	0.6	0.37	0.008	0.005638	0	0
Phase 2 Mixed Use	Landscaping	Bob Cat	Tractors/Loaders/Backhoes	Diesel	3	70	8	0.8	0.37	0.008	0.008771	0	0
Alternate 1	Demolition	Excavator	Excavators	Diesel	1	131	8	0.9	0.38	0.008	0.006321	0	0
Alternate 1	Demolition	Generator	Generator Sets	Diesel	1	25	6	0.5	0.74	0.008	0.000979	0	0
Alternate 1	Demolition	Tire Wash	Other Construction Equipment	Diesel	2	100	4	0.9	0.42	0.008	0.005333	0	0
Alternate 1	Demolition	Bob Cat	Tractors/Loaders/Backhoes	Diesel	2	70	8	0.8	0.37	0.008	0.005847	0	0
Alternate 1	Demolition	Pressure Washer	Pressure Washers	Diesel	2	25	8	1	0.3	0.008	0.002116	0	0
Alternate 1	Demolition	Air Compressor	Air Compressors	Diesel	1	140	6	0.7	0.48	0.008	0.004978	0	0
Alternate 1	Grading and Utilities	Loader	Tractors/Loaders/Backhoes	Diesel	2	100	4	0.9	0.37	0.008	0.004699	0	0
Alternate 1	Grading and Utilities	Tire Wash	Other Construction Equipment	Diesel	1	100	4	0.9	0.42	0.008	0.002667	0	0
Alternate 1	Grading and Utilities	Excavator	Excavators	Diesel	1	359	8	0.6	0.38	0.008	0.011549	0	0
Alternate 1	Grading and Utilities	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	90	8	0.6	0.37	0.008	0.002819	0	0
Alternate 1	Grading and Utilities	Gradall	Forklifts	Diesel	1	74	4	0.6	0.2	0.008	0.000626	0	0
Alternate 1	Grading and Utilities	Compactor	Other Construction Equipment	Diesel	1	250	0.5	0.2	0.42	0.008	0.000185	0	0
Alternate 1	Grading and Utilities	Paver	Pavers	Diesel	1	250	8	0.01	0.42	0.008	0.000148	0	0
Alternate 1	Grading and Utilities	Generator	Generator Sets	Diesel	1	600	2	0.1	0.74	0.008	0.001566	0	0
Alternate 1	Foundations	Generator	Generator Sets	Diesel	1	25	6	1	0.74	0.008	0.001958	0	0
Alternate 1	Foundations	Tire Wash	Other Construction Equipment	Diesel	1	100	4	0.9	0.42	0.008	0.002667	0	0
Alternate 1	Foundations	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	90	8	0.6	0.37	0.008	0.002819	0	0
Alternate 1	Foundations	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	70	8	0.8	0.37	0.008	0.002924	0	0
Alternate 1	Foundations	Gradall	Forklifts	Diesel	1	74	4	0.8	0.2	0.008	0.000835	0	0
Alternate 1	Foundations	Concrete Pump	Pumps	Diesel	1	450	6	0.3	0.74	0.008	0.010572	0	0
Alternate 1	Core and Shell	Generator	Generator Sets	Diesel	1	25	6	1	0.74	0.008	0.001958	0	0
Alternate 1	Core and Shell	Tire Wash	Other Construction Equipment	Diesel	1	100	4	0.9	0.42	0.008	0.002667	0	0
Alternate 1	Core and Shell	Gradall	Forklifts	Diesel	1	74	4	0.8	0.2	0.008	0.000835	0	0
Alternate 1	Core and Shell	Concrete Pump	Pumps	Diesel	1	450	6	0.45	0.74	0.008	0.015857	0	0
Alternate 1	Tenant Improvements	Generator	Generator Sets	Diesel	1	25	6	0.85	0.74	0.008	0.001664	0	0
Alternate 1	Tenant Improvements	Tire Wash	Other Construction Equipment	Diesel	2	100	4	0.9	0.42	0.008	0.005333	0	0
Alternate 1	Tenant Improvements	Gradall	Forklifts	Diesel	1	74	4	0.8	0.2	0.008	0.000835	0	0

Days in each year				Emissions (lb/yr)						Emission Rate (g/s)					
2023	2024	2025	2026	2021	2022	2023	2024	2025	2026	2021	2022	2023	2024	2025	2026
0	0	0	0	0.328713279	2.123993492	0	0	0	0	1.03156E-05	6.67E-05	0	0	0	0
0	0	0	0	0.025450297	0.16444807	0	0	0	0	7.98672E-07	5.16E-06	0	0	0	0
0	0	0	0	0.069334862	0.448009877	0	0	0	0	2.17584E-06	1.41E-05	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0.488645693	3.157402941	0	0	0	0	1.53345E-05	9.91E-05	0	0	0	0
0	0	0	0	0.027513834	0.177781697	0	0	0	0	8.63429E-07	5.58E-06	0	0	0	0
0	0	0	0	0.064712538	0.418142552	0	0	0	0	2.03078E-06	1.31E-05	0	0	0	0
0	0	0	0	0	0.890947472	0	0	0	0	0	2.8E-05	0	0	0	0
0	0	0	0	0	0.151083966	0	0	0	0	0	4.74E-06	0	0	0	0
0	0	0	0	0	1.343775656	0	0	0	0	0	4.22E-05	0	0	0	0
0	0	0	0	0	0.762683481	0	0	0	0	0	2.39E-05	0	0	0	0
0	0	0	0	0	6.606049551	0	0	0	0	0	0.000207	0	0	0	0
0	0	0	0	0	6.270953063	0	0	0	0	0	0.000197	0	0	0	0
0	0	0	0	0	1.694852179	0	0	0	0	0	5.32E-05	0	0	0	0
0	0	0	0	0	0.105928261	0	0	0	0	0	3.32E-06	0	0	0	0
0	0	0	0	0	0.042371304	0	0	0	0	0	1.33E-06	0	0	0	0
0	0	0	0	0	0.223962609	0	0	0	0	0	7.03E-06	0	0	0	0
0	0	0	0	0	0.024991027	0	0	0	0	0	7.84E-07	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0.081401795	0	0	0	0	0	2.55E-06	0	0	0	0
0	0	0	0	0	1.648713596	0	0	0	0	0	5.17E-05	0	0	0	0
0	0	0	0	0	0.064604599	0	0	0	0	0	2.03E-06	0	0	0	0
0	0	0	0	0	0.1518552	0	0	0	0	0	4.77E-06	0	0	0	0
0	0	0	0	0	0.346012919	0	0	0	0	0	1.09E-05	0	0	0	0
0	0	0	0	0	0.16053264	0	0	0	0	0	5.04E-06	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0.920655217	0	0	0	0	0	2.89E-05	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0.036667475	0	0	0	0	0	1.15E-06	0	0	0	0
258	0	0	0	0	0	0.157870147	0	0	0	0	0	4.95E-06	0	0	0
258	0	0	0	0	0	0.02302273	0	0	0	0	0	7.22E-07	0	0	0
258	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
258	0	0	0	0	0	0.013155846	0	0	0	0	0	4.13E-07	0	0	0
258	0	0	0	0	0	0.075372667	0	0	0	0	0	2.37E-06	0	0	0
258	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
258	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
258	0	0	0	0	0	0.877447916	0	0	0	0	0	2.75E-05	0	0	0
258	0	0	0	0	0	0.402125267	0	0	0	0	0	1.26E-05	0	0	0
258	0	0	0	0	0	0.148786349	0	0	0	0	0	4.67E-06	0	0	0
258	0	0	0	0	0	0.959280407	0	0	0	0	0	3.01E-05	0	0	0
258	0	0	0	0	0	3.65001433	0	0	0	0	0	0.000115	0	0	0
258	0	0	0	0	0	0.039154302	0	0	0	0	0	1.23E-06	0	0	0
258	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
258	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
258	0	0	0	0	0	0.004190569	0	0	0	0	0	1.32E-07	0	0	0
258	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
258	0	0	0	0	0	0.287784122	0	0	0	0	0	9.03E-06	0	0	0
242	0	0	0	0	0	0.015086047	0	0	0	0	0	4.73E-07	0	0	0

453.59

453.59 g/lb
11 hr/day
365 days/yr
3600 sec/hr

242	0	0	0	0	0	0.698904297	0	0	0	0	0	2.19E-05	0	0	0
242	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
242	0	0	0	0	0	0.399373884	0	0	0	0	0	1.25E-05	0	0	0
242	0	0	0	0	0	0.393659472	0	0	0	0	0	1.24E-05	0	0	0
242	0	0	0	0	0	0.045334333	0	0	0	0	0	1.42E-06	0	0	0
242	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
242	0	0	0	0	0	0.107126171	0	0	0	0	0	3.36E-06	0	0	0
242	0	0	0	0	0	0.051270972	0	0	0	0	0	1.61E-06	0	0	0
242	0	0	0	0	0	0.229052669	0	0	0	0	0	7.19E-06	0	0	0
242	0	0	0	0	0	0.143410569	0	0	0	0	0	4.5E-06	0	0	0
242	0	0	0	0	0	1.232143566	0	0	0	0	0	3.87E-05	0	0	0
242	0	0	0	0	0	0.113547477	0	0	0	0	0	3.56E-06	0	0	0
242	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
242	0	0	0	0	0	0.920655217	0	0	0	0	0	2.89E-05	0	0	0
242	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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242	0	0	0	0	0	0.268894817	0	0	0	0	0	8.44E-06	0	0	0
0	207	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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0	207	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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0	207	0	0	0	0	0	0.122669371	0	0	0	0	0	3.85E-06	0	0
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0	207	0	0	0	0	0	0.230005071	0	0	0	0	0	7.22E-06	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0.561864239	0	0	0	0	0	1.76E-05	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0.321065279	0	0	0	0	0	1.01E-05	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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0	0	0	0	0	3.297427192	0	0	0	0	0	0.000103	0	0	0	0
0	0	0	0	0	0.08026632	0	0	0	0	0	2.52E-06	0	0	0	0
0	0	0	0	0	0.455565599	0	0	0	0	0	1.43E-05	0	0	0	0
0	0	0	0	0	0.185665469	0	0	0	0	0	5.83E-06	0	0	0	0
0	0	0	0	0	0.12039948	0	0	0	0	0	3.78E-06	0	0	0	0
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260	0	0	0	0	0	1.945968826	0	0	0	0	0	6.11E-05	0	0	0
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260	0	0	0	0	0	1.111982187	0	0	0	0	0	3.49E-05	0	0	0
260	0	0	0	0	0	0.050519632	0	0	0	0	0	1.59E-06	0	0	0
260	0	0	0	0	0	0.07333495	0	0	0	0	0	2.3E-06	0	0	0
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260	0	0	0	0	0	4.785290681	0	0	0	0	0	0.00015	0	0	0
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260	0	0	0	0	0	2.459313477	0	0	0	0	0	7.72E-05	0	0	0
260	0	0	0	0	0	5.299905201	0	0	0	0	0	0.000166	0	0	0
260	0	0	0	0	0	0.310297846	0	0	0	0	0	9.74E-06	0	0	0
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0	0	0	0	0	0.303710399	0	0	0	0	0	9.53E-06	0	0	0	0
0	0	0	0	0	0.312255561	0	0	0	0	0	9.8E-06	0	0	0	0
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257	0	0	0	0	0	2.412751604	0	0	0	0	0	7.57E-05	0	0	0
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257	0	0	0	0	0	3.377852245	0	0	0	0	0	0.000106	0	0	0
257	0	0	0	0	0	6.683956877	0	0	0	0	0	0.00021	0	0	0
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0	262	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	262	0	0	0	0	0	0.193337596	0	0	0	0	0	6.07E-06	0	0
0	0	110	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	110	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	110	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	110	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	110	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	110	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	110	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	110	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	110	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	110	0	0	0	0	0	2.444498336	0	0	0	0	0	7.67E-05	0
0	0	110	0	0	0	0	0	0.055699641	0	0	0	0	0	1.75E-06	0
0	0	110	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	110	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	110	0	0	0	0	0	0	0	0	0	0	0	0	0
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0	0	110	0	0	0	0	0	0	0	0	0	0	0	0	0
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161	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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161	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
161	0	0	0	0	0	0.429342799	0	0	0	0	0	1.35E-05	0	0	0
161	0	0	0	0	0	0.678497921	0	0	0	0	0	2.13E-05	0	0	0
161	0	0	0	0	0	0.453876673	0	0	0	0	0	1.42E-05	0	0	0
161	0	0	0	0	0	0.47068692	0	0	0	0	0	1.48E-05	0	0	0
161	0	0	0	0	0	0.134481977	0	0	0	0	0	4.22E-06	0	0	0
161	0	0	0	0	0	0.354094226	0	0	0	0	0	1.11E-05	0	0	0
161	0	0	0	0	0	1.134691682	0	0	0	0	0	3.56E-05	0	0	0
64	116	0	0	0	0	0	0	0	0	0	0	0	0	0	0
64	116	0	0	0	0	0.170670429	0.309340153	0	0	0	0	5.36E-06	9.71E-06	0	0
64	116	0	0	0	0	0.314250314	0.569578694	0	0	0	0	9.86E-06	1.79E-05	0	0
64	116	0	0	0	0	0.053458674	0.096893847	0	0	0	0	1.68E-06	3.04E-06	0	0
64	116	0	0	0	0	0	0	0	0	0	0	0	0	0	0
64	116	0	0	0	0	0	0	0	0	0	0	0	0	0	0
64	116	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	147	114	0	0	0	0	0	0	0	0	0	0	0	0	0
0	147	114	0	0	0	0	0.392008642	0.304006702	0	0	0	0	1.23E-05	9.54E-06	0
0	147	114	0	0	0	0	0.122787892	0.095223263	0	0	0	0	3.85E-06	2.99E-06	0
0	0	59	0	0	0	0	0	0.071176172	0	0	0	0	0	2.23E-06	0
0	0	59	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	59	0	0	0	0	0	0.157336802	0	0	0	0	0	4.94E-06	0
0	0	59	0	0	0	0	0	0.277212461	0	0	0	0	0	8.7E-06	0
0	0	59	0	0	0	0	0	0.172487753	0	0	0	0	0	5.41E-06	0
160	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
160	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
160	1	0	0	0	0	0.426676073	0.002666725	0	0	0	0	1.34E-05	8.37E-08	0	0
160	1	0	0	0	0	0.674283648	0.004214273	0	0	0	0	2.12E-05	1.32E-07	0	0
160	1	0	0	0	0	0.902115126	0.00563822	0	0	0	0	2.83E-05	1.77E-07	0	0

160	1	0	0	0	0	0.467763399	0.002923521	0	0	0	0	1.47E-05	9.17E-08	0	0
160	1	0	0	0	0	0.133646685	0.000835292	0	0	0	0	4.19E-06	2.62E-08	0	0
160	1	0	0	0	0	0.351894883	0.002199343	0	0	0	0	1.1E-05	6.9E-08	0	0
160	1	0	0	0	0	1.127643907	0.007047774	0	0	0	0	3.54E-05	2.21E-07	0	0
0	180	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	180	0	0	0	0	0	0.480010582	0	0	0	0	0	1.51E-05	0	0
0	180	0	0	0	0	0	0.883829009	0	0	0	0	0	2.77E-05	0	0
0	180	0	0	0	0	0	0.300705042	0	0	0	0	0	9.44E-06	0	0
0	180	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	180	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	180	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	82	178	0	0	0	0	0	0	0	0	0	0	0	0	0
0	82	178	0	0	0	0	0.218671487	0.474677131	0	0	0	0	6.86E-06	1.49E-05	0
0	82	178	0	0	0	0	0.068493926	0.148681937	0	0	0	0	2.15E-06	4.67E-06	0
0	0	58	0	0	0	0	0	0.069969797	0	0	0	0	0	2.2E-06	0
0	0	58	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	58	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	58	0	0	0	0	0	0.272513944	0	0	0	0	0	8.55E-06	0
0	0	58	0	0	0	0	0	0.339128464	0	0	0	0	0	1.06E-05	0
0	0	0	0	0	1.213710567	0	0	0	0	0	3.81E-05	0	0	0	0
0	0	0	0	0	0.093970326	0	0	0	0	0	2.95E-06	0	0	0	0
0	0	0	0	0	0.256005644	0	0	0	0	0	8.03E-06	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	1.804230252	0	0	0	0	0	5.66E-05	0	0	0	0
0	0	0	0	0	0.101589541	0	0	0	0	0	3.19E-06	0	0	0	0
0	0	0	0	0	0.238938601	0	0	0	0	0	7.5E-06	0	0	0	0
65	0	0	0	0	0.404976124	0.404976124	0	0	0	0	1.27E-05	1.27E-05	0	0	0
65	0	0	0	0	0.06867453	0.06867453	0	0	0	0	2.16E-06	2.16E-06	0	0	0
65	0	0	0	0	0.610807117	0.610807117	0	0	0	0	1.92E-05	1.92E-05	0	0	0
65	0	0	0	0	0.610807117	0.610807117	0	0	0	0	1.92E-05	1.92E-05	0	0	0
65	0	0	0	0	0.346674309	0.346674309	0	0	0	0	1.09E-05	1.09E-05	0	0	0
65	0	0	0	0	3.002749796	3.002749796	0	0	0	0	9.42E-05	9.42E-05	0	0	0
65	0	0	0	0	2.850433211	2.850433211	0	0	0	0	8.95E-05	8.95E-05	0	0	0
65	0	0	0	0	0.770387354	0.770387354	0	0	0	0	2.42E-05	2.42E-05	0	0	0
65	0	0	0	0	0.04814921	0.04814921	0	0	0	0	1.51E-06	1.51E-06	0	0	0
65	0	0	0	0	0.019259684	0.019259684	0	0	0	0	6.04E-07	6.04E-07	0	0	0
65	0	0	0	0	0.101801186	0.101801186	0	0	0	0	3.19E-06	3.19E-06	0	0	0
202	0	0	0	0	0	0.123126524	0	0	0	0	0	3.86E-06	0	0	0
202	0	0	0	0	0	0.025215371	0	0	0	0	0	7.91E-07	0	0	0
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202	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
202	0	0	0	0	0	0.535630856	0	0	0	0	0	1.68E-05	0	0	0
202	0	0	0	0	0	2.010626337	0	0	0	0	0	6.31E-05	0	0	0
202	0	0	0	0	0	0.213390948	0	0	0	0	0	6.7E-06	0	0	0
202	0	0	0	0	0	0.748164642	0	0	0	0	0	2.35E-05	0	0	0
202	0	0	0	0	0	2.797641041	0	0	0	0	0	8.78E-05	0	0	0
202	0	0	0	0	0	0.195771512	0	0	0	0	0	6.14E-06	0	0	0
202	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
202	0	0	0	0	0	0.920655217	0	0	0	0	0	2.89E-05	0	0	0
202	0	0	0	0	0	0.004190569	0	0	0	0	0	1.32E-07	0	0	0
202	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
202	0	0	0	0	0	0.216671443	0	0	0	0	0	6.8E-06	0	0	0
0	188	0	0	0	0	0	0.114593002	0	0	0	0	0	3.6E-06	0	0
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0	188	0	0	0	0	0	0.194782707	0	0	0	0	0	6.11E-06	0	0
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0	188	0	0	0	0	0	0.662490796	0	0	0	0	0	2.08E-05	0	0
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0	188	0	0	0	0	0	0.208893494	0	0	0	0	0	6.56E-06	0	0
177	0	0	0	0	0	0.015086047	0	0	0	0	0	4.73E-07	0	0	0
177	0	0	0	0	0	1.041504442	0	0	0	0	0	3.27E-05	0	0	0
177	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
177	0	0	0	0	0	0.595145396	0	0	0	0	0	1.87E-05	0	0	0
177	0	0	0	0	0	0.065609912	0	0	0	0	0	2.06E-06	0	0	0
177	0	0	0	0	0	0.067557045	0	0	0	0	0	2.12E-06	0	0	0
177	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
177	0	0	0	0	0	0.126155162	0	0	0	0	0	3.96E-06	0	0	0
177	0	0	0	0	0	0.076403801	0	0	0	0	0	2.4E-06	0	0	0
177	0	0	0	0	0	0.277995547	0	0	0	0	0	8.72E-06	0	0	0
177	0	0	0	0	0	0.104891201	0	0	0	0	0	3.29E-06	0	0	0
177	0	0	0	0	0	1.65411054	0	0	0	0	0	5.19E-05	0	0	0
177	0	0	0	0	0	0.215348663	0	0	0	0	0	6.76E-06	0	0	0
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177	0	0	0	0	0	0.196671002	0	0	0	0	0	6.17E-06	0	0	0
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179	0	0	0	0	0	0.01485747	0	0	0	0	0	4.66E-07	0	0	0
179	0	0	0	0	0	0.91816839	0	0	0	0	0	2.88E-05	0	0	0
179	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
179	0	0	0	0	0	0.524667651	0	0	0	0	0	1.65E-05	0	0	0
179	0	0	0	0	0	0.09710267	0	0	0	0	0	3.05E-06	0	0	0
179	0	0	0	0	0	0.059556869	0	0	0	0	0	1.87E-06	0	0	0
179	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
179	0	0	0	0	0	0.114878723	0	0	0	0	0	3.61E-06	0	0	0
179	0	0	0	0	0	0.067355982	0	0	0	0	0	2.11E-06	0	0	0
179	0	0	0	0	0	0.258418395	0	0	0	0	0	8.11E-06	0	0	0
179	0	0	0	0	0	0.106076413	0	0	0	0	0	3.33E-06	0	0	0
179	0	0	0	0	0	1.468445072	0	0	0	0	0	4.61E-05	0	0	0
179	0	0	0	0	0	0.17227893	0	0	0	0	0	5.41E-06	0	0	0
179	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
179	0	0	0	0	0	1.396856192	0	0	0	0	0	4.38E-05	0	0	0
179	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
179	0	0	0	0	0	1.396856192	0	0	0	0	0	4.38E-05	0	0	0
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0	249	0	0	0	0	0	0.146966203	0	0	0	0	0	4.61E-06	0	0
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0	249	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	249	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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0	249	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	249	0	0	0	0	0	0.276672766	0	0	0	0	0	8.68E-06	0	0
157	0	0	0	0	0	0.015086047	0	0	0	0	0	4.73E-07	0	0	0
157	0	0	0	0	0	0.890760378	0	0	0	0	0	2.8E-05	0	0	0
157	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
157	0	0	0	0	0	0.50900593	0	0	0	0	0	1.6E-05	0	0	0
157	0	0	0	0	0	0.041990344	0	0	0	0	0	1.32E-06	0	0	0
157	0	0	0	0	0	0.057779052	0	0	0	0	0	1.81E-06	0	0	0

157	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
157	0	0	0	0	0	0.114526334	0	0	0	0	0	3.59E-06	0	0	0
157	0	0	0	0	0	0.065345356	0	0	0	0	0	2.05E-06	0	0	0
157	0	0	0	0	0	0.25646068	0	0	0	0	0	8.05E-06	0	0	0
157	0	0	0	0	0	0.093039088	0	0	0	0	0	2.92E-06	0	0	0
157	0	0	0	0	0	1.468445072	0	0	0	0	0	4.61E-05	0	0	0
157	0	0	0	0	0	0.17227893	0	0	0	0	0	5.41E-06	0	0	0
157	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
157	0	0	0	0	0	1.396856192	0	0	0	0	0	4.38E-05	0	0	0
157	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
157	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
157	0	0	0	0	0	0.17444829	0	0	0	0	0	5.47E-06	0	0	0
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0	262	0	0	0	0	0	0.291117529	0	0	0	0	0	9.14E-06	0	0
0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0
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0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	7	0	0	0	0	0	0.007777949	0	0	0	0	0	2.44E-07	0
202	0	0	0	0	0	0.015086047	0	0	0	0	0	4.73E-07	0	0	0
202	0	0	0	0	0	1.219656518	0	0	0	0	0	3.83E-05	0	0	0
202	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
202	0	0	0	0	0	0.696946582	0	0	0	0	0	2.19E-05	0	0	0
202	0	0	0	0	0	0.09710267	0	0	0	0	0	3.05E-06	0	0	0
202	0	0	0	0	0	0.079112855	0	0	0	0	0	2.48E-06	0	0	0
202	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
202	0	0	0	0	0	0.139193545	0	0	0	0	0	4.37E-06	0	0	0

202	0	0	0	0	0	0.089472872	0	0	0	0	0	2.81E-06	0	0	0
202	0	0	0	0	0	0.303445843	0	0	0	0	0	9.52E-06	0	0	0
202	0	0	0	0	0	0.119706343	0	0	0	0	0	3.76E-06	0	0	0
202	0	0	0	0	0	1.856654688	0	0	0	0	0	5.83E-05	0	0	0
202	0	0	0	0	0	0.258418395	0	0	0	0	0	8.11E-06	0	0	0
202	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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0	262	0	0	0	0	0	0.155262682	0	0	0	0	0	4.87E-06	0	0
0	262	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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0	0	57	0	0	0	0	0	0	0	0	0	0	0	0	0
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136	0	0	0	0	0	0.010743094	0	0	0	0	0	3.37E-07	0	0	0
136	0	0	0	0	0	1.219656518	0	0	0	0	0	3.83E-05	0	0	0
136	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
136	0	0	0	0	0	0.696946582	0	0	0	0	0	2.19E-05	0	0	0
136	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
136	0	0	0	0	0	0.079112855	0	0	0	0	0	2.48E-06	0	0	0
136	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
136	0	0	0	0	0	0.126155162	0	0	0	0	0	3.96E-06	0	0	0
136	0	0	0	0	0	0.089472872	0	0	0	0	0	2.81E-06	0	0	0
136	0	0	0	0	0	0.266249256	0	0	0	0	0	8.36E-06	0	0	0

136	0	0	0	0	0	0.080594369	0	0	0	0	0	2.53E-06	0	0	0
136	0	0	0	0	0	1.873533367	0	0	0	0	0	5.88E-05	0	0	0
136	0	0	0	0	0	0.266249256	0	0	0	0	0	8.36E-06	0	0	0
136	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
136	0	0	0	0	0	2.158777751	0	0	0	0	0	6.77E-05	0	0	0
136	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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136	0	0	0	0	0	0.151114443	0	0	0	0	0	4.74E-06	0	0	0
0	262	0	0	0	0	0	0.004342953	0	0	0	0	0	1.36E-07	0	0
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0	262	0	0	0	0	0	0.021495712	0	0	0	0	0	6.75E-07	0	0
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0	262	0	0	0	0	0	0.155262682	0	0	0	0	0	4.87E-06	0	0
0	262	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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0	0	122	0	0	0	0	0	0	0	0	0	0	0	0	0
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0	116	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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0	116	0	0	0	0	0	0.309340153	0	0	0	0	0	9.71E-06	0	0
0	116	0	0	0	0	0	0.488855645	0	0	0	0	0	1.53E-05	0	0
0	116	0	0	0	0	0	0.327016733	0	0	0	0	0	1.03E-05	0	0
0	116	0	0	0	0	0	0.339128464	0	0	0	0	0	1.06E-05	0	0
0	116	0	0	0	0	0	0.096893847	0	0	0	0	0	3.04E-06	0	0
0	116	0	0	0	0	0	0.25512379	0	0	0	0	0	8.01E-06	0	0
0	116	0	0	0	0	0	0.085160608	0	0	0	0	0	2.67E-06	0	0
0	129	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	129	0	0	0	0	0	0.344007584	0	0	0	0	0	1.08E-05	0	0
0	129	0	0	0	0	0	0.633410789	0	0	0	0	0	1.99E-05	0	0

0	129	0	0	0	0	0	0.10775264	0	0	0	0	0	3.38E-06	0	0
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0	129	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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0	17	171	0	0	0	0	0	0	0	0	0	0	0	0	0
0	17	171	0	0	0	0	0.045334333	0.456010053	0	0	0	0	1.42E-06	1.43E-05	0
0	17	171	0	0	0	0	0.01419996	0.142834895	0	0	0	0	4.46E-07	4.48E-06	0
0	0	58	0	0	0	0	0	0.069969797	0	0	0	0	0	2.2E-06	0
0	0	58	0	0	0	0	0	0	0	0	0	0	0	0	0
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0	0	58	0	0	0	0	0	0.163508367	0	0	0	0	0	5.13E-06	0
0	0	58	0	0	0	0	0	0.169564232	0	0	0	0	0	5.32E-06	0
0	116	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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0	116	0	0	0	0	0	0.309340153	0	0	0	0	0	9.71E-06	0	0
0	116	0	0	0	0	0	0.488855645	0	0	0	0	0	1.53E-05	0	0
0	116	0	0	0	0	0	0.327016733	0	0	0	0	0	1.03E-05	0	0
0	116	0	0	0	0	0	0.339128464	0	0	0	0	0	1.06E-05	0	0
0	116	0	0	0	0	0	0.096893847	0	0	0	0	0	3.04E-06	0	0
0	116	0	0	0	0	0	0.25512379	0	0	0	0	0	8.01E-06	0	0
0	116	0	0	0	0	0	0.170321215	0	0	0	0	0	5.34E-06	0	0
0	81	48	0	0	0	0	0	0	0	0	0	0	0	0	0
0	81	48	0	0	0	0	0.216004762	0.128002822	0	0	0	0	6.78E-06	4.02E-06	0
0	81	48	0	0	0	0	0.397723054	0.235687736	0	0	0	0	1.25E-05	7.4E-06	0
0	81	48	0	0	0	0	0.135317269	0.080188011	0	0	0	0	4.25E-06	2.52E-06	0
0	81	48	0	0	0	0	0	0	0	0	0	0	0	0	0
0	81	48	0	0	0	0	0	0	0	0	0	0	0	0	0
0	81	48	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	187	0	0	0	0	0	0	0	0	0	0	0	0	0
0	81	48	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	187	0	0	0	0	0	0	0	0	0	0	0	0	0
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0	0	187	0	0	0	0	0	0.156199563	0	0	0	0	0	4.9E-06	0
0	0	27	32	0	0	0	0	0.032572147	0.038604	0	0	0	0	1.02E-06	1.21E-06
0	0	27	32	0	0	0	0	0	0	0	0	0	0	0	0
0	0	27	32	0	0	0	0	0	0	0	0	0	0	0	0
0	0	27	32	0	0	0	0	0.076115964	0.090212	0	0	0	0	2.39E-06	2.83E-06
0	0	27	32	0	0	0	0	0.157870147	0.187105	0	0	0	0	4.95E-06	5.87E-06
22	0	0	0	0	0	0.068534421	0	0	0	0	0	2.15E-06	0	0	0
22	0	0	0	0	0	0.011621844	0	0	0	0	0	3.65E-07	0	0	0
22	0	0	0	0	0	0.103367358	0	0	0	0	0	3.24E-06	0	0	0
22	0	0	0	0	0	0.05866796	0	0	0	0	0	1.84E-06	0	0	0
22	0	0	0	0	0	0.508157658	0	0	0	0	0	1.59E-05	0	0	0
22	0	0	0	0	0	0.482381005	0	0	0	0	0	1.51E-05	0	0	0
22	0	0	0	0	0	0.130373245	0	0	0	0	0	4.09E-06	0	0	0
22	0	0	0	0	0	0.008148328	0	0	0	0	0	2.56E-07	0	0	0
22	0	0	0	0	0	0.003259331	0	0	0	0	0	1.02E-07	0	0	0
22	0	0	0	0	0	0.034455786	0	0	0	0	0	1.08E-06	0	0	0
175	87	0	0	0	0	0.54510461	0.270994863	0	0	0	0	1.71E-05	8.5E-06	0	0
175	87	0	0	0	0	1.076690403	0.535268943	0	0	0	0	3.38E-05	1.68E-05	0	0
175	87	0	0	0	0	0.770850327	0.383222734	0	0	0	0	2.42E-05	1.2E-05	0	0
175	87	0	0	0	0	0.28230252	0.140344681	0	0	0	0	8.86E-06	4.4E-06	0	0
175	87	0	0	0	0	0.168522234	0.083779625	0	0	0	0	5.29E-06	2.63E-06	0	0
175	87	0	0	0	0	0.266672546	0.132574351	0	0	0	0	8.37E-06	4.16E-06	0	0
0	24	99	0	0	0	0	0	0	0	0	0	0	0	0	0
0	24	99	0	0	0	0	0.093970326	0.387627593	0	0	0	0	2.95E-06	1.22E-05	0
0	24	99	0	0	0	0	0.128002822	0.52801164	0	0	0	0	4.02E-06	1.66E-05	0
0	24	99	0	0	0	0	0.202285094	0.834426015	0	0	0	0	6.35E-06	2.62E-05	0

0	24	99	0	0	0	0	0.135317269	0.558183734	0	0	0	0	4.25E-06	1.75E-05	0
0	24	99	0	0	0	0	0.14032902	0.578857206	0	0	0	0	4.4E-06	1.82E-05	0
0	24	99	0	0	0	0	0.040094006	0.165387773	0	0	0	0	1.26E-06	5.19E-06	0
0	24	99	0	0	0	0	0.105568465	0.435469918	0	0	0	0	3.31E-06	1.37E-05	0
0	24	99	0	0	0	0	0.105716616	0.436081042	0	0	0	0	3.32E-06	1.37E-05	0
0	0	139	0	0	0	0	0	0.544244803	0	0	0	0	0	1.71E-05	0
0	0	139	0	0	0	0	0	0.741349677	0	0	0	0	0	2.33E-05	0
0	0	139	0	0	0	0	0	1.365024802	0	0	0	0	0	4.28E-05	0
0	0	139	0	0	0	0	0	0.348316674	0	0	0	0	0	1.09E-05	0
0	0	139	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	139	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	139	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	25	174	0	0	0	0	0.083202892	0.579092	0	0	0	0	2.61E-06	1.82E-05
0	0	25	174	0	0	0	0	0.133336273	0.92802	0	0	0	0	4.18E-06	2.91E-05
0	0	25	174	0	0	0	0	0.020882295	0.145341	0	0	0	0	6.55E-07	4.56E-06
0	0	0	59	0	0	0	0	0	0.071176	0	0	0	0	0	2.23E-06
0	0	0	59	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	59	0	0	0	0	0	0.157337	0	0	0	0	0	4.94E-06
0	0	0	59	0	0	0	0	0	0.332655	0	0	0	0	0	1.04E-05
0	0	0	59	0	0	0	0	0	0.517463	0	0	0	0	0	1.62E-05
0	22	0	0	0	0	0	0.139071002	0	0	0	0	0	4.36E-06	0	0
0	22	0	0	0	0	0	0.021534866	0	0	0	0	0	6.76E-07	0	0
0	22	0	0	0	0	0	0.11733592	0	0	0	0	0	3.68E-06	0	0
0	22	0	0	0	0	0	0.128634935	0	0	0	0	0	4.04E-06	0	0
0	22	0	0	0	0	0	0.046561873	0	0	0	0	0	1.46E-06	0	0
0	22	0	0	0	0	0	0.109513525	0	0	0	0	0	3.44E-06	0	0
0	1	22	0	0	0	0	0.004698516	0.103367358	0	0	0	0	1.47E-07	3.24E-06	0
0	1	22	0	0	0	0	0.002666725	0.05866796	0	0	0	0	8.37E-08	1.84E-06	0
0	1	22	0	0	0	0	0.011549038	0.254078829	0	0	0	0	3.62E-07	7.97E-06	0
0	1	22	0	0	0	0	0.00281911	0.062020415	0	0	0	0	8.85E-08	1.95E-06	0
0	1	22	0	0	0	0	0.000626469	0.013782314	0	0	0	0	1.97E-08	4.33E-07	0
0	1	22	0	0	0	0	0.000185189	0.004074164	0	0	0	0	5.81E-09	1.28E-07	0
0	1	22	0	0	0	0	0.000148151	0.003259331	0	0	0	0	4.65E-09	1.02E-07	0
0	1	22	0	0	0	0	0.001566172	0.034455786	0	0	0	0	4.91E-08	1.08E-06	0
0	0	22	0	0	0	0	0	0.043069733	0	0	0	0	0	1.35E-06	0
0	0	22	0	0	0	0	0	0.05866796	0	0	0	0	0	1.84E-06	0
0	0	22	0	0	0	0	0	0.062020415	0	0	0	0	0	1.95E-06	0
0	0	22	0	0	0	0	0	0.064317467	0	0	0	0	0	2.02E-06	0
0	0	22	0	0	0	0	0	0.018376419	0	0	0	0	0	5.77E-07	0
0	0	22	0	0	0	0	0	0.232576556	0	0	0	0	0	7.3E-06	0
0	0	43	0	0	0	0	0	0.08418175	0	0	0	0	0	2.64E-06	0
0	0	43	0	0	0	0	0	0.114669195	0	0	0	0	0	3.6E-06	0
0	0	43	0	0	0	0	0	0.035917547	0	0	0	0	0	1.13E-06	0
0	0	43	0	0	0	0	0	0.681872175	0	0	0	0	0	2.14E-05	0
0	0	33	0	0	0	0	0	0.054913909	0	0	0	0	0	1.72E-06	0
0	0	33	0	0	0	0	0	0.17600388	0	0	0	0	0	5.52E-06	0
0	0	33	0	0	0	0	0	0.027564629	0	0	0	0	0	8.65E-07	0

Source: EMFAC2021 (v1.0.1) Emissions Inventory
Region Type: County
Region: San Mateo
Calendar Year: 2021, 2022, 2023, 2024, 2025, 2026
Season: Annual
Vehicle Classification: EMFAC2007 Categories
Units: miles/day for CVMT and EVMT, trips/day for Trips, kWh/day for Energy Consumption, tons/day for Emissions, 1000 gallons/day for Fuel Consumption

Region	Calendar Year	Vehicle Category	Model Year	Speed	Fuel	Population	Total VMT	CVMT	EVMT	Trips	Energy Consun	*NOx_g/mi* NOx_RUNEX	*NOx_g/trip* NOx_IDLEX	*NOx_g/trip* NOx_STREX
San Mateo	2021	HHDT	Aggregate	Aggregate	Diesel	1273.437	118103.1	118103.1	0	13607.24486	0	0.485975748	0.071431199	0.035727361
San Mateo	2022	HHDT	Aggregate	Aggregate	Diesel	1289.917	118758.5	118758.5	0	13886.58645	0	0.440831018	0.071292219	0.039306253
San Mateo	2023	HHDT	Aggregate	Aggregate	Diesel	1295.72	119079.6	119079.6	0	14027.6605	0	0.379331068	0.067169587	0.044483639
San Mateo	2024	HHDT	Aggregate	Aggregate	Diesel	1314.625	119489.1	119489.1	0	14359.45506	0	0.363336571	0.067642168	0.046666765
San Mateo	2025	HHDT	Aggregate	Aggregate	Diesel	1328.41	119560.7	119560.7	0	14621.90863	0	0.346882671	0.067867722	0.048360621
San Mateo	2026	HHDT	Aggregate	Aggregate	Diesel	1339.121	119591.7	119591.7	0	14836.48598	0	0.331323619	0.067963589	0.049761315

Region	Calendar Year	Vehicle Category	Model Year	Speed	Fuel	Population	Total VMT	CVMT	EVMT	Trips	Energy Consun	*NOx_g/mi* NOx_RUNEX	*NOx_g/trip* NOx_IDLEX	*NOx_g/trip* NOx_STREX
San Mateo	2021	HHDT	Aggregate	Aggregate	Diesel	1273.437	118103.1	118103.1	0	13607.24486	0	0.485975748	0.071431199	0.035727361
San Mateo	2021	MHDT	Aggregate	Aggregate	Diesel	4141.708	172846.2	172846.2	0	49761.70349	0	0.392754525	0.076935824	0.076231677
San Mateo	2022	HHDT	Aggregate	Aggregate	Diesel	1289.917	118758.5	118758.5	0	13886.58645	0	0.440831018	0.071292219	0.039306253
San Mateo	2022	MHDT	Aggregate	Aggregate	Diesel	4156.051	174304	174304	0	49995.68892	0	0.356094321	0.072828326	0.079145567
San Mateo	2023	HHDT	Aggregate	Aggregate	Diesel	1295.72	119079.6	119079.6	0	14027.6605	0	0.379331068	0.067169587	0.044483639
San Mateo	2023	MHDT	Aggregate	Aggregate	Diesel	4189.443	175901.2	175901.2	0	50462.4899	0	0.276591385	0.065090544	0.08822477
San Mateo	2024	HHDT	Aggregate	Aggregate	Diesel	1314.625	119489.1	119489.1	0	14359.45506	0	0.363336571	0.067642168	0.046666765
San Mateo	2024	MHDT	Aggregate	Aggregate	Diesel	4233.233	177028	177028	0	51051.03747	0	0.255103282	0.063443635	0.090469371
San Mateo	2025	HHDT	Aggregate	Aggregate	Diesel	1328.41	119560.7	119560.7	0	14621.90863	0	0.346882671	0.067867722	0.048360621
San Mateo	2025	MHDT	Aggregate	Aggregate	Diesel	4294.917	177557.8	177557.8	0	51845.94907	0	0.232703868	0.062148364	0.092284554
San Mateo	2026	HHDT	Aggregate	Aggregate	Diesel	1339.121	119591.7	119591.7	0	14836.48598	0	0.331323619	0.067963589	0.049761315
San Mateo	2026	MHDT	Aggregate	Aggregate	Diesel	4345.03	177809.3	177809.3	0	52490.37491	0	0.21159172	0.060909768	0.09345826

		PM25_g/trip	*PM25_g/trip*						*PM10_g/trip*	*PM10_g/trip*					
	PM25_g/mi							*PM10_g/mi*							*CO2_g/mi*
	PM25_g/mi	*PM25_g/trip*	*PM25_g/trip*					*PM10_g/mi*	*PM10_g/trip*	*PM10_g/trip*					*CO2_g/mi*
NOx_TOTEX	PM2.5_RUNEX	PM2.5_IDLEX	PM2.5_STREX	PM2.5_TOTEX	PM2.5_PMTW	PM2.5_PMBW	PM2.5_TOTAL	PM10_RUNEX	PM10_IDLEX	PM10_STREX	PM10_TOTEX	PM10_PMTW	PM10_PMBW	PM10_TOTAL	CO2_RUNE
0.593134308	0.0044412	7.95E-05	0	0.004520723	0.001121102	0.004161992	0.009803817	0.004642012	8.31E-05	0	0.00472513	0.004484408	0.011891406	0.021100943	246.178
0.55142949	0.003494898	5.84E-05	0	0.003553273	0.00112712	0.004125534	0.008805927	0.003652922	6.10E-05	0	0.003713936	0.004508482	0.011787239	0.020009657	244.6292
0.490984295	0.003338332	5.41E-05	0	0.003392405	0.001129979	0.004061708	0.008584092	0.003489277	5.65E-05	0	0.003545794	0.004519918	0.011604879	0.019670591	242.0187
0.477645504	0.003294944	5.11E-05	0	0.003346059	0.001133709	0.0040391	0.008518868	0.003443927	5.34E-05	0	0.003497353	0.004534836	0.011540286	0.019572475	239.1763
0.463111013	0.003243491	4.86E-05	0	0.003292046	0.001134294	0.004006102	0.008432442	0.003390148	5.08E-05	0	0.003440898	0.004537176	0.011446007	0.01942408	235.1103
0.449048523	0.003207838	4.57E-05	0	0.00325358	0.001134588	0.003990695	0.008378862	0.003352882	4.78E-05	0	0.003400692	0.00453835	0.011401985	0.019341027	231.0921

		PM25_g/trip	*PM25_g/trip*						*PM10_g/trip*	*PM10_g/trip*					
	PM25_g/mi							*PM10_g/mi*							*CO2_g/mi*
	PM25_g/mi	*PM25_g/trip*	*PM25_g/trip*					*PM10_g/mi*	*PM10_g/trip*	*PM10_g/trip*					*CO2_g/mi*
NOx_TOTEX	PM2.5_RUNEX	PM2.5_IDLEX	PM2.5_STREX	PM2.5_TOTEX	PM2.5_PMTW	PM2.5_PMBW	PM2.5_TOTAL	PM10_RUNEX	PM10_IDLEX	PM10_STREX	PM10_TOTEX	PM10_PMTW	PM10_PMBW	PM10_TOTAL	CO2_RUNE
0.593134308	0.0044412	7.95E-05	0	0.004520723	0.001121102	0.004161992	0.009803817	0.004642012	8.31E-05	0	0.00472513	0.004484408	0.011891406	0.021100943	246.178
0.545922026	0.005347512	0.000260997	0	0.00560851	0.000571591	0.003045305	0.009225405	0.005589303	0.000272799	0	0.005862101	0.002286364	0.008700871	0.016849336	222.3203
0.55142949	0.003494898	5.84E-05	0	0.003553273	0.00112712	0.004125534	0.008805927	0.003652922	6.10E-05	0	0.003713936	0.004508482	0.011787239	0.020009657	244.6292
0.508068213	0.004454112	0.000219844	0	0.004673956	0.000576412	0.003070941	0.008321309	0.004655507	0.000229785	0	0.004885292	0.002305647	0.008774117	0.015965055	223.6045
0.490984295	0.003338332	5.41E-05	0	0.003392405	0.001129979	0.004061708	0.008584092	0.003489277	5.65E-05	0	0.003545794	0.004519918	0.011604879	0.019670591	242.0187
0.429906699	0.00364176	0.000184776	0	0.003826536	0.000581694	0.003099037	0.007507266	0.003806424	0.00019313	0	0.003999555	0.002326775	0.008854391	0.01518072	224.1302
0.477645504	0.003294944	5.11E-05	0	0.003346059	0.001133709	0.0040391	0.008518868	0.003443927	5.34E-05	0	0.003497353	0.004534836	0.011540286	0.019572475	239.1763
0.409016288	0.003172798	0.000156372	0	0.003329171	0.00058542	0.003118831	0.007033421	0.003316258	0.000163443	0	0.003479701	0.00234168	0.008910945	0.014732326	224.6732
0.463111013	0.003243491	4.86E-05	0	0.003292046	0.001134294	0.004006102	0.008432442	0.003390148	5.08E-05	0	0.003440898	0.004537176	0.011446007	0.01942408	235.1103
0.387136786	0.002729259	0.000131024	0	0.002860283	0.000587172	0.003128149	0.006575604	0.002852664	0.000136948	0	0.002989612	0.002348688	0.008937569	0.014275869	224.1275
0.449048523	0.003207838	4.57E-05	0	0.00325358	0.001134588	0.003990695	0.008378862	0.003352882	4.78E-05	0	0.003400692	0.00453835	0.011401985	0.019341027	231.0921
0.365959749	0.002348506	0.000108825	0	0.002457331	0.000588004	0.003132579	0.006177914	0.002454695	0.000113746	0	0.002568441	0.002352014	0.008950226	0.013870681	223.1582

CO2_g/trip CO2_IDLEX	*CO2_g/trip* CO2_STREX	CO2_TOTEX	*CH4_g/mi* *CH4_g/trip* CH4_RUNEX	*CH4_g/trip* CH4_IDLEX	*CH4_g/trip* CH4_STREX	CH4_TOTEX	*N2O_g/mi* *N2O_g/trip* N2O_RUNEX	*N2O_g/trip* N2O_IDLEX	*N2O_g/trip* N2O_STREX	N2O_TOTEX	*ROG_g/mi* *ROG_g/trip* ROG_RUNEX	*ROG_g/trip* ROG_IDLEX	*ROG_g/trip* ROG_STREX	ROG_TOTEX	ROG_DIURN
11.91679707	0	258.0948357	0.000332799	0.000215778	0	0.000548577	0.03878545	0.001877496	0	0.040662946	0.007165072	0.00464564	0	0.011810712	0
12.11821966	0	256.7474207	0.000254289	0.000220541	0	0.00047483	0.03854143	0.00190923	0	0.040450661	0.005474763	0.004748192	0	0.010222955	0
11.8428035	0	253.8615221	0.000173532	0.000223123	0	0.000396655	0.038130148	0.001865839	0	0.039995986	0.003736089	0.004803779	0	0.008539868	0
11.91013206	0	251.0864764	0.000166434	0.000227865	0	0.000394299	0.03768233	0.001876446	0	0.039558777	0.00358327	0.004905875	0	0.008489145	0
11.90953418	0	247.0197869	0.000159587	0.000231583	0	0.00039117	0.037041716	0.001876352	0	0.038918068	0.003435873	0.004985909	0	0.008421782	0
11.87527886	0	242.9673906	0.000152858	0.000234588	0	0.000387447	0.036408656	0.001870955	0	0.038279611	0.003290993	0.005050624	0	0.008341617	0

CO2_g/trip CO2_IDLEX	*CO2_g/trip* CO2_STREX	CO2_TOTEX	*CH4_g/mi* *CH4_g/trip* CH4_RUNEX	*CH4_g/trip* CH4_IDLEX	*CH4_g/trip* CH4_STREX	CH4_TOTEX	*N2O_g/mi* *N2O_g/trip* N2O_RUNEX	*N2O_g/trip* N2O_IDLEX	*N2O_g/trip* N2O_STREX	N2O_TOTEX	*ROG_g/mi* *ROG_g/trip* ROG_RUNEX	*ROG_g/trip* ROG_IDLEX	*ROG_g/trip* ROG_STREX	ROG_TOTEX	ROG_DIURN
11.91679707	0	258.0948357	0.000332799	0.000215778	0	0.000548577	0.03878545	0.001877496	0	0.040662946	0.007165072	0.00464564	0	0.011810712	0
10.70198386	0	233.0223157	0.000631749	6.88E-05	0	0.000700564	0.035026659	0.001686102	0	0.036712761	0.01360138	0.001481574	0	0.015082955	0
12.11821966	0	256.7474207	0.000254289	0.000220541	0	0.00047483	0.03854143	0.00190923	0	0.040450661	0.005474763	0.004748192	0	0.010222955	0
10.66403618	0	234.2685348	0.000540419	6.41E-05	0	0.000604554	0.03522898	0.001680123	0	0.036909103	0.011635077	0.001380811	0	0.013015888	0
11.8428035	0	253.8615221	0.000173532	0.000223123	0	0.000396655	0.038130148	0.001865839	0	0.039995986	0.003736089	0.004803779	0	0.008539868	0
10.45692956	0	234.5871445	0.000389492	5.90E-05	0	0.000448505	0.035311807	0.001647494	0	0.0369593	0.008385667	0.00127053	0	0.009656196	0
11.91013206	0	251.0864764	0.000166434	0.000227865	0	0.000394299	0.03768233	0.001876446	0	0.039558777	0.00358327	0.004905875	0	0.008489145	0
10.49222267	0	235.1653979	0.000341119	5.59E-05	0	0.000397047	0.03539735	0.001653054	0	0.037050404	0.007344188	0.001204117	0	0.008548305	0
11.90953418	0	247.0197869	0.000159587	0.000231583	0	0.00039117	0.037041716	0.001876352	0	0.038918068	0.003435873	0.004985909	0	0.008421782	0
10.55139778	0	234.6789334	0.000294681	5.34E-05	0	0.000348066	0.035311385	0.001662377	0	0.036973762	0.006344409	0.001149358	0	0.007493767	0
11.87527886	0	242.9673906	0.000152858	0.000234588	0	0.000387447	0.036408656	0.001870955	0	0.038279611	0.003290993	0.005050624	0	0.008341617	0
10.58093718	0	233.7391441	0.000253568	5.11E-05	0	0.000304697	0.035158666	0.001667031	0	0.036825697	0.005459251	0.001100798	0	0.006560049	0

ROG_HOTSOAI	ROG_RUNLOSS	ROG_TOTAL	TOG_RUNEX	TOG_IDLEX	TOG_STREX	TOG_TOTEX	TOG_DIURN	TOG_HOTSOAI	TOG_RUNLOSS	TOG_TOTA	CO_RUNEX	CO_IDLEX	CO_STREX	CO_TOTEX	SOx_RUNEX	SOx_IDLEX
0	0	0.011810712	0.008156889	0.005288707	0	0.013445596	0	0	0	0.013446	0.027403	0.058681	0	0.086084117	0.002331159	0.000112845
0	0	0.010222955	0.006232601	0.005405455	0	0.011638056	0	0	0	0.011638	0.020815	0.062311	0	0.083126272	0.002316492	0.000114752
0	0	0.008539868	0.004253253	0.005468737	0	0.00972199	0	0	0	0.009722	0.016259	0.06653	0	0.082789111	0.002291773	0.000112144
0	0	0.008489145	0.00407928	0.005584966	0	0.009664245	0	0	0	0.009664	0.015598	0.068398	0	0.08399662	0.002264857	0.000112782
0	0	0.008421782	0.00391148	0.005676077	0	0.009587557	0	0	0	0.009588	0.014937	0.069927	0	0.084863709	0.002226353	0.000112776
0	0	0.008341617	0.003746545	0.005749751	0	0.009496297	0	0	0	0.009496	0.014291	0.071225	0	0.085516265	0.002188304	0.000112452

ROG_HOTSOAI	ROG_RUNLOSS	ROG_TOTAL	TOG_RUNEX	TOG_IDLEX	TOG_STREX	TOG_TOTEX	TOG_DIURN	TOG_HOTSOAI	TOG_RUNLOSS	TOG_TOTA	CO_RUNEX	CO_IDLEX	CO_STREX	CO_TOTEX	SOx_RUNEX	SOx_IDLEX
0	0	0.011810712	0.008156889	0.005288707	0	0.013445596	0	0	0	0.013446	0.027403	0.058681	0	0.086084117	0.002331159	0.000112845
0	0	0.015082955	0.015484136	0.00168666	0	0.017170796	0	0	0	0.017171	0.041535	0.033197	0	0.074731921	0.002105241	0.000101341
0	0	0.010222955	0.006232601	0.005405455	0	0.011638056	0	0	0	0.011638	0.020815	0.062311	0	0.083126272	0.002316492	0.000114752
0	0	0.013015888	0.013245649	0.001571948	0	0.014817598	0	0	0	0.014818	0.03658	0.033284	0	0.069863932	0.002117401	0.000100982
0	0	0.008539868	0.004253253	0.005468737	0	0.00972199	0	0	0	0.009722	0.016259	0.06653	0	0.082789111	0.002291773	0.000112144
0	0	0.009656196	0.009546443	0.001446401	0	0.010992844	0	0	0	0.010993	0.028839	0.035001	0	0.06384042	0.002122379	9.90E-05
0	0	0.008489145	0.00407928	0.005584966	0	0.009664245	0	0	0	0.009664	0.015598	0.068398	0	0.08399662	0.002264857	0.000112782
0	0	0.008548305	0.008360799	0.001370795	0	0.009731595	0	0	0	0.009732	0.026235	0.03522	0	0.061454272	0.002127521	9.94E-05
0	0	0.008421782	0.00391148	0.005676077	0	0.009587557	0	0	0	0.009588	0.014937	0.069927	0	0.084863709	0.002226353	0.000112776
0	0	0.007493767	0.007222626	0.001308457	0	0.008531083	0	0	0	0.008531	0.023647	0.035616	0	0.059263193	0.002122354	9.99E-05
0	0	0.008341617	0.003746545	0.005749751	0	0.009496297	0	0	0	0.009496	0.014291	0.071225	0	0.085516265	0.002188304	0.000112452
0	0	0.006560049	0.006214941	0.001253175	0	0.007468116	0	0	0	0.007468	0.021319	0.035947	0	0.057266443	0.002113175	0.000100195

				Mass Emissions		TRUCKS Emission Rate		Off-Road SRCGRP Emission Rate	
SOx_STREX	SOx_TOTEX	NH3_RUNE	Fuel Consumption	**PM25_g/mi**	**PM25_g/trip**	**PM25_g/mi**	**PM25_g/trip**	**PM25_g/mi**	**PM25_g/trip**
0	0.002444	0.023429	23.05551	0.034114164	0.005301698	0.034114164	0	0	0.005301698
0	0.002431	0.024452	22.93515	0.026697191	0.003813497	0.026697191	0	0	0.003813497
0	0.002404	0.025956	22.67735	0.025432442	0.00349693	0.025432442	0	0	0.00349693
0	0.002378	0.026263	22.42946	0.025015855	0.003229309	0.025015855	0	0	0.003229309
0	0.002339	0.026496	22.06618	0.024610478	0.003012478	0.024610478	0	0	0.003012478
0	0.002301	0.026702	21.70418	0.024333635	0.002796894	0.024333635	0	0	0.002796894

				Mass Emissions					TRUCKS	
SOx_STREX	SOx_TOTEX	NH3_RUNE	Fuel Consumption	**PM25_g/mi**	**PM25_g/trip**	**Year**	**PM25_g/mi**	**PM25_g/trip**	**PM25_g/mi**	**PM25_g/trip**
0	0.002444	0.023429	23.05551	0.034114164	0.005301698	2021	0.031090315	0.005029913	0.034114164	0
0	0.002207	0.035985	20.81579	0.028066466	0.004758127	2022	0.024939561	0.003901312	0.028066466	0
0	0.002431	0.024452	22.93515	0.026697191	0.003813497	2023	0.022107142	0.003409362	0.026697191	0
0	0.002218	0.037199	20.92712	0.023181932	0.003989126	2024	0.020637469	0.003004031	0.023181932	0
0	0.002404	0.025956	22.67735	0.025432442	0.00349693	2025	0.019277453	0.002652548	0.025432442	0
0	0.002221	0.040121	20.95558	0.018781841	0.003321793	2026	0.018157867	0.002338852	0.018781841	0
0	0.002378	0.026263	22.42946	0.025015855	0.003229309				0.025015855	0
0	0.002227	0.04073	21.00723	0.016259084	0.002778754				0.016259084	0
0	0.002339	0.026496	22.06618	0.024610478	0.003012478				0.024610478	0
0	0.002222	0.041174	20.96378	0.013944428	0.002292618				0.013944428	0
0	0.002301	0.026702	21.70418	0.024333635	0.002796894				0.024333635	0
0	0.002213	0.041518	20.87983	0.0119821	0.001880809				0.0119821	0

S Emission Rate

Year	PM25_g/mi	PM25_g/trip
2021	0.031090315	0
2022	0.024939561	0
2023	0.022107142	0
2024	0.020637469	0
2025	0.019277453	0
2026	0.018157867	0

Off-Road SRCGRP Emission Rate

PM25_g/mi	PM25_g/trip
0	0.005301698
0	0.004758127
0	0.003813497
0	0.003989126
0	0.00349693
0	0.003321793
0	0.003229309
0	0.002778754
0	0.003012478
0	0.002292618
0	0.002796894
0	0.001880809

Year	PM25_g/mi	PM25_g/trip
2021	0	0.005029913
2022	0	0.003901312
2023	0	0.003409362
2024	0	0.003004031
2025	0	0.002652548
2026	0	0.002338852

Note to reviewer: Please see Technical Report Table 51 ("Summary of Construction Source Groups") footnote 6 for a description of methodology.

HAULING TRIPS

Equipment Information							Information (mass emissions)			Mass Emissions	Information (emission rate)			Emission Rate (g/s)	Source Group
PHASE	SUBPHASE	YEAR	DAYS	HAULTRIP_TOTAL	Fleet Mix	Fuel Type	Trip Length (mi)	EF (g/mi)	EF (g/trip)	(lb/year)	Modeled Trip Length (mi)	EF (g/mi)	EF (g/trip)		
Phase 1a	Demolition	2021	13	2505	HHDT	Diesel	22.9	0.034114164	5.30E-03	4.34360	0.8351229	0.034114164	0.00E+00	4.94E-06	TRUCKS
Phase 1a	Demolition	2022	84	16183	HHDT	Diesel	22.9	0.026697191	3.81E-03	21.94800	0.8351229	0.026697191	0.00E+00	2.49624E-05	TRUCKS
Phase 1a	Grading and Utilities	2022	143	32640	HHDT	Diesel	8.2	0.026697191	3.81E-03	16.02744	0.8351229	0.026697191	0.00E+00	5.03475E-05	TRUCKS
Phase 1b	Demolition	2022	48	18688	HHDT	Diesel	22.9	0.026697191	3.81E-03	25.34537	0.8351229	0.026697191	0.00E+00	2.88264E-05	TRUCKS
Phase 1b	Grading and Utilities	2022	65	16320	HHDT	Diesel	8.2	0.026697191	3.81E-03	8.01372	0.8351229	0.026697191	0.00E+00	2.51738E-05	TRUCKS
Phase 1b	Grading and Utilities	2023	65	16320	HHDT	Diesel	8.2	0.025432442	3.50E-03	7.62919	0.8351229	0.025432442	0.00E+00	2.39812E-05	TRUCKS
Phase 2 Mixed Use	Grading and Utilities	2023	22	2464	HHDT	Diesel	8.2	0.025432442	3.50E-03	1.15186	0.8351229	0.025432442	0.00E+00	3.62069E-06	TRUCKS
Alternate 1	Demolition	2024	22	422	HHDT	Diesel	22.9	0.025015855	3.23E-03	0.53597	0.8351229	0.025015855	0.00E+00	6.09944E-07	TRUCKS
Alternate 1	Grading and Utilities	2024	1	18.50434783	HHDT	Diesel	8.2	0.025015855	3.23E-03	0.00850	0.8351229	0.025015855	0.00E+00	2.67455E-08	TRUCKS
Alternate 1	Grading and Utilities	2025	22	407.0956522	HHDT	Diesel	8.2	0.024610478	3.01E-03	0.18382	0.8351229	0.024610478	0.00E+00	5.78867E-07	TRUCKS
Phase 1a	Demolition	2021	13	2505	HHDT	Diesel	--	--	--	--	0.8351229	0.00E+00	5.30E-03	9.19E-07	PHS_1A
Phase 1a	Demolition	2022	84	16183	HHDT	Diesel	--	--	--	--	0.8351229	0.00E+00	3.81E-03	4.27E-06	PHS_1A
Phase 1a	Grading and Utilities	2022	143	32640	HHDT	Diesel	--	--	--	--	0.8351229	0.00E+00	3.81E-03	8.61E-06	PHS_1A
Phase 1b	Demolition	2022	48	18688	HHDT	Diesel	--	--	--	--	0.8351229	0.00E+00	3.81E-03	4.93E-06	PHS_1B
Phase 1b	Grading and Utilities	2022	65	16320	HHDT	Diesel	--	--	--	--	0.8351229	0.00E+00	3.81E-03	4.31E-06	PHS_1B
Phase 1b	Grading and Utilities	2023	65	16320	HHDT	Diesel	--	--	--	--	0.8351229	0.00E+00	3.50E-03	3.95E-06	PHS_1B
Phase 2 Mixed Use	Grading and Utilities	2023	22	2464	HHDT	Diesel	--	--	--	--	0.8351229	0.00E+00	3.50E-03	5.96E-07	PHS_2X
Alternate 1	Demolition	2024	22	422	HHDT	Diesel	--	--	--	--	0.8351229	0.00E+00	3.23E-03	9.43E-08	RETAIL
Alternate 1	Grading and Utilities	2024	1	18.50434783	HHDT	Diesel	--	--	--	--	0.8351229	0.00E+00	3.23E-03	4.13E-09	RETAIL
Alternate 1	Grading and Utilities	2025	22	407.0956522	HHDT	Diesel	--	--	--	--	0.8351229	0.00E+00	3.01E-03	8.48E-08	RETAIL

VENDOR TRIPS

Equipment Information							Information (mass emissions)			Mass Emissions	Information (emission rate)			Emission Rate (g/s)	Source Group
PHASE	SUBPHASE	YEAR	DAYS	VENDORTRIP_DAY	Fleet Mix	Fuel Type	Trip Length (mi)	EF (g/mi)	EF (g/trip)	(lb/year)	Modeled Trip Length (mi)	EF (g/mi)	EF (g/trip)		
Phase 2 Mixed Use	Tunnel Construction	2023	175	8	50% MHDT / 50% HHDT	Diesel	40	0.022107142	3.41E-03	2.74E+00	0.8351229	2.21E-02	0.00E+00	1.79E-06	TRUCKS
Phase 2 Mixed Use	Tunnel Construction	2024	87	8	50% MHDT / 50% HHDT	Diesel	40	0.020637469	3.00E-03	1.27E+00	0.8351229	2.06E-02	0.00E+00	8.30E-07	TRUCKS
Phase 2 Mixed Use	Foundations	2024	24	10	50% MHDT / 50% HHDT	Diesel	40	0.020637469	3.00E-03	4.38E-01	0.8351229	2.06E-02	0.00E+00	2.86E-07	TRUCKS
Phase 2 Mixed Use	Foundations	2025	99	10	50% MHDT / 50% HHDT	Diesel	40	0.019277453	2.65E-03	1.69E+00	0.8351229	1.93E-02	0.00E+00	1.10E-06	TRUCKS
Phase 2 Mixed Use	Core and Shell	2025	139	12	50% MHDT / 50% HHDT	Diesel	40	0.019277453	2.65E-03	2.85E+00	0.8351229	1.93E-02	0.00E+00	1.86E-06	TRUCKS
Phase 2 Mixed Use	Tenant Improvements	2025	25	12	50% MHDT / 50% HHDT	Diesel	40	0.019277453	2.65E-03	5.12E-01	0.8351229	1.93E-02	0.00E+00	3.34E-07	TRUCKS
Phase 2 Mixed Use	Tenant Improvements	2026	174	12	50% MHDT / 50% HHDT	Diesel	40	0.018157867	2.34E-03	3.35E+00	0.8351229	1.82E-02	0.00E+00	2.19E-06	TRUCKS
Phase 2 Mixed Use	Landscaping	2026	59	6.508474576	50% MHDT / 50% HHDT	Diesel	40	0.018157867	2.34E-03	6.17E-01	0.8351229	1.82E-02	0.00E+00	4.03E-07	TRUCKS
Alternate 1	Foundations	2025	22	12.43636364	50% MHDT / 50% HHDT	Diesel	40	0.019277453	2.65E-03	4.67E-01	0.8351229	1.93E-02	0.00E+00	3.05E-07	TRUCKS
Alternate 1	Core and Shell	2025	43	5.693023256	50% MHDT / 50% HHDT	Diesel	40	0.019277453	2.65E-03	4.18E-01	0.8351229	1.93E-02	0.00E+00	2.73E-07	TRUCKS
Alternate 1	Tenant Improvements	2025	33	9.272727273	50% MHDT / 50% HHDT	Diesel	40	0.019277453	2.65E-03	5.22E-01	0.8351229	1.93E-02	0.00E+00	3.41E-07	TRUCKS
Phase 1a Office	Foundations + Core and Shell	2022	42	11	50% MHDT / 50% HHDT	Diesel	40	0.024939561	3.90E-03	1.02E+00	0.8351229	2.49E-02	0.00E+00	6.66E-07	TRUCKS
Phase 1a Office	Foundations + Core and Shell	2023	260	11	50% MHDT / 50% HHDT	Diesel	40	0.022107142	3.41E-03	5.60E+00	0.8351229	2.21E-02	0.00E+00	3.65E-06	TRUCKS
Phase 1a Office	Foundations + Core and Shell	2024	262	11	50% MHDT / 50% HHDT	Diesel	40	0.020637469	3.00E-03	5.26E+00	0.8351229	2.06E-02	0.00E+00	3.44E-06	TRUCKS
Phase 1a Office	Foundations + Core and Shell	2025	261	11	50% MHDT / 50% HHDT	Diesel	40	0.019277453	2.65E-03	4.90E+00	0.8351229	1.93E-02	0.00E+00	3.20E-06	TRUCKS
Phase 1a Office	Tenant Improvements	2024	195	6	50% MHDT / 50% HHDT	Diesel	40	0.020637469	3.00E-03	2.14E+00	0.8351229	2.06E-02	0.00E+00	1.40E-06	TRUCKS
Phase 1a Office	Tenant Improvements	2025	261	6	50% MHDT / 50% HHDT	Diesel	40	0.019277453	2.65E-03	2.67E+00	0.8351229	1.93E-02	0.00E+00	1.74E-06	TRUCKS
Phase 1a Office	Tenant Improvements	2026	46	6	50% MHDT / 50% HHDT	Diesel	40	0.018157867	2.34E-03	4.43E-01	0.8351229	1.82E-02	0.00E+00	2.90E-07	TRUCKS
Phase 1a Mixed Use	Foundations	2023	224	2	50% MHDT / 50% HHDT	Diesel	40	0.022107142	3.41E-03	8.77E-01	0.8351229	2.21E-02	0.00E+00	5.72E-07	TRUCKS
Phase 1a Mixed Use	Foundations	2024	1	2	50% MHDT / 50% HHDT	Diesel	40	0.020637469	3.00E-03	3.65E-03	0.8351229	2.06E-02	0.00E+00	2.38E-09	TRUCKS
Phase 1a Mixed Use	Core and Shell	2023	64	2	50% MHDT / 50% HHDT	Diesel	40	0.022107142	3.41E-03	2.51E-01	0.8351229	2.21E-02	0.00E+00	1.63E-07	TRUCKS
Phase 1a Mixed Use	Core and Shell	2024	180	2	50% MHDT / 50% HHDT	Diesel	40	0.020637469	3.00E-03	6.58E-01	0.8351229	2.06E-02	0.00E+00	4.29E-07	TRUCKS
Phase 1a Mixed Use	Tenant Improvements	2024	147	2	50% MHDT / 50% HHDT	Diesel	40	0.020637469	3.00E-03	5.37E-01	0.8351229	2.06E-02	0.00E+00	3.51E-07	TRUCKS
Phase 1a Mixed Use	Tenant Improvements	2025	178	2	50% MHDT / 50% HHDT	Diesel	40	0.019277453	2.65E-03	6.07E-01	0.8351229	1.93E-02	0.00E+00	3.97E-07	TRUCKS
Phase 1a Mixed Use	Landscaping	2025	123	2	50% MHDT / 50% HHDT	Diesel	40	0.019277453	2.65E-03	4.20E-01	0.8351229	1.93E-02	0.00E+00	2.74E-07	TRUCKS
Phase 1b Office	Foundations + Core and Shell	2023	202	11	50% MHDT / 50% HHDT	Diesel	40	0.022107142	3.41E-03	4.35E+00	0.8351229	2.21E-02	0.00E+00	2.84E-06	TRUCKS
Phase 1b Office	Foundations + Core and Shell	2024	232	11	50% MHDT / 50% HHDT	Diesel	40	0.020637469	3.00E-03	4.66E+00	0.8351229	2.06E-02	0.00E+00	3.04E-06	TRUCKS
Phase 1b Office	Tenant Improvements	2024	154	14	50% MHDT / 50% HHDT	Diesel	40	0.020637469	3.00E-03	3.94E+00	0.8351229	2.06E-02	0.00E+00	2.57E-06	TRUCKS
Phase 1b Office	Tenant Improvements	2025	122	14	50% MHDT / 50% HHDT	Diesel	40	0.019277453	2.65E-03	2.91E+00	0.8351229	1.93E-02	0.00E+00	1.90E-06	TRUCKS
Phase 1b Mixed Use	Foundations	2024	180	2	50% MHDT / 50% HHDT	Diesel	40	0.020637469	3.00E-03	6.58E-01	0.8351229	2.06E-02	0.00E+00	4.29E-07	TRUCKS
Phase 1b Mixed Use	Core and Shell	2024	145	3	50% MHDT / 50% HHDT	Diesel	40	0.020637469	3.00E-03	7.95E-01	0.8351229	2.06E-02	0.00E+00	5.19E-07	TRUCKS
Phase 1b Mixed Use	Core and Shell	2025	48	3	50% MHDT / 50% HHDT	Diesel	40	0.019277453	2.65E-03	2.46E-01	0.8351229	1.93E-02	0.00E+00	1.60E-07	TRUCKS
Phase 1b Mixed Use	Tenant Improvements	2024	17	3	50% MHDT / 50% HHDT	Diesel	40	0.020637469	3.00E-03	9.32E-02	0.8351229	2.06E-02	0.00E+00	6.08E-08	TRUCKS
Phase 1b Mixed Use	Tenant Improvements	2025	235	3	50% MHDT / 50% HHDT	Diesel	40	0.019277453	2.65E-03	1.20E+00	0.8351229	1.93E-02	0.00E+00	7.85E-07	TRUCKS
Phase 1b Mixed Use	Landscaping	2025	91	2	50% MHDT / 50% HHDT	Diesel	40	0.019277453	2.65E-03	3.10E-01	0.8351229	1.93E-02	0.00E+00	2.03E-07	TRUCKS
Phase 1b Mixed Use	Landscaping	2026	32	2	50% MHDT / 50% HHDT	Diesel	40	0.018157867	2.34E-03	1.03E-01	0.8351229	1.82E-02	0.00E+00	6.71E-08	TRUCKS
Phase 2 Mixed Use	Tunnel Construction	2023	175	8	50% MHDT / 50% HHDT	Diesel	--	--	--	--	0.8351229	0.00E+00	3.41E-03	3.30E-07	TUNNEL
Phase 2 Mixed Use	Tunnel Construction	2024	87	8	50% MHDT / 50% HHDT	Diesel	--	--	--	--	0.8351229	0.00E+00	3.00E-03	1.45E-07	TUNNEL

453.5924	g/lb
11	hr/day
365	days/yr
3600	sec/hr

Phase 2 Mixed Use	Foundations	2024	24	10	50% MHDT / 50% HHDT	Diesel	--	--	--	--	0.8351229	0.00E+00	3.00E-03	4.99E-08 RS45
Phase 2 Mixed Use	Foundations	2025	99	10	50% MHDT / 50% HHDT	Diesel	--	--	--	--	0.8351229	0.00E+00	2.65E-03	1.82E-07 RS45
Phase 2 Mixed Use	Core and Shell	2025	139	12	50% MHDT / 50% HHDT	Diesel	--	--	--	--	0.8351229	0.00E+00	2.65E-03	3.06E-07 RS45
Phase 2 Mixed Use	Tenant Improvements	2025	25	12	50% MHDT / 50% HHDT	Diesel	--	--	--	--	0.8351229	0.00E+00	2.65E-03	5.51E-08 RS45
Phase 2 Mixed Use	Tenant Improvements	2026	174	12	50% MHDT / 50% HHDT	Diesel	--	--	--	--	0.8351229	0.00E+00	2.34E-03	3.38E-07 RS45
Phase 2 Mixed Use	Landscaping	2026	59	6.508474576	50% MHDT / 50% HHDT	Diesel	--	--	--	--	0.8351229	0.00E+00	2.34E-03	6.21E-08 RS45
Alternate 1	Foundations	2025	22	12.43636364	50% MHDT / 50% HHDT	Diesel	--	--	--	--	0.8351229	0.00E+00	2.65E-03	5.02E-08 RETAIL
Alternate 1	Core and Shell	2025	43	5.693023256	50% MHDT / 50% HHDT	Diesel	--	--	--	--	0.8351229	0.00E+00	2.65E-03	4.49E-08 RETAIL
Alternate 1	Tenant Improvements	2025	33	9.272727273	50% MHDT / 50% HHDT	Diesel	--	--	--	--	0.8351229	0.00E+00	2.65E-03	5.62E-08 RETAIL
Phase 1a Office	Foundations + Core and Shell	2022	42	11	50% MHDT / 50% HHDT	Diesel	--	--	--	--	0.8351229	0.00E+00	3.90E-03	1.25E-07 PHS_1A
Phase 1a Office	Foundations + Core and Shell	2023	260	11	50% MHDT / 50% HHDT	Diesel	--	--	--	--	0.8351229	0.00E+00	3.41E-03	6.75E-07 PHS_1A
Phase 1a Office	Foundations + Core and Shell	2024	262	11	50% MHDT / 50% HHDT	Diesel	--	--	--	--	0.8351229	0.00E+00	3.00E-03	5.99E-07 PHS_1A
Phase 1a Office	Foundations + Core and Shell	2025	261	11	50% MHDT / 50% HHDT	Diesel	--	--	--	--	0.8351229	0.00E+00	2.65E-03	5.27E-07 PHS_1A
Phase 1a Office	Tenant Improvements	2024	195	6	50% MHDT / 50% HHDT	Diesel	--	--	--	--	0.8351229	0.00E+00	3.00E-03	2.43E-07 PHS_1A
Phase 1a Office	Tenant Improvements	2025	261	6	50% MHDT / 50% HHDT	Diesel	--	--	--	--	0.8351229	0.00E+00	2.65E-03	2.87E-07 PHS_1A
Phase 1a Office	Tenant Improvements	2026	46	6	50% MHDT / 50% HHDT	Diesel	--	--	--	--	0.8351229	0.00E+00	2.34E-03	4.47E-08 PHS_1A
Phase 1a Mixed Use	Foundations	2023	224	2	50% MHDT / 50% HHDT	Diesel	--	--	--	--	0.8351229	0.00E+00	3.41E-03	1.06E-07 PHS_1A
Phase 1a Mixed Use	Foundations	2024	1	2	50% MHDT / 50% HHDT	Diesel	--	--	--	--	0.8351229	0.00E+00	3.00E-03	4.16E-10 PHS_1A
Phase 1a Mixed Use	Core and Shell	2023	64	2	50% MHDT / 50% HHDT	Diesel	--	--	--	--	0.8351229	0.00E+00	3.41E-03	3.02E-08 PHS_1A
Phase 1a Mixed Use	Core and Shell	2024	180	2	50% MHDT / 50% HHDT	Diesel	--	--	--	--	0.8351229	0.00E+00	3.00E-03	7.48E-08 PHS_1A
Phase 1a Mixed Use	Tenant Improvements	2024	147	2	50% MHDT / 50% HHDT	Diesel	--	--	--	--	0.8351229	0.00E+00	3.00E-03	6.11E-08 PHS_1A
Phase 1a Mixed Use	Tenant Improvements	2025	178	2	50% MHDT / 50% HHDT	Diesel	--	--	--	--	0.8351229	0.00E+00	2.65E-03	6.53E-08 PHS_1A
Phase 1a Mixed Use	Landscaping	2025	123	2	50% MHDT / 50% HHDT	Diesel	--	--	--	--	0.8351229	0.00E+00	2.65E-03	4.51E-08 PHS_1A
Phase 1b Office	Foundations + Core and Shell	2023	202	11	50% MHDT / 50% HHDT	Diesel	--	--	--	--	0.8351229	0.00E+00	3.41E-03	5.24E-07 PHS_1B
Phase 1b Office	Foundations + Core and Shell	2024	232	11	50% MHDT / 50% HHDT	Diesel	--	--	--	--	0.8351229	0.00E+00	3.00E-03	5.30E-07 PHS_1B
Phase 1b Office	Tenant Improvements	2024	154	14	50% MHDT / 50% HHDT	Diesel	--	--	--	--	0.8351229	0.00E+00	3.00E-03	4.48E-07 PHS_1B
Phase 1b Office	Tenant Improvements	2025	122	14	50% MHDT / 50% HHDT	Diesel	--	--	--	--	0.8351229	0.00E+00	2.65E-03	3.13E-07 PHS_1B
Phase 1b Mixed Use	Foundations	2024	180	2	50% MHDT / 50% HHDT	Diesel	--	--	--	--	0.8351229	0.00E+00	3.00E-03	7.48E-08 PHS_1B
Phase 1b Mixed Use	Core and Shell	2024	145	3	50% MHDT / 50% HHDT	Diesel	--	--	--	--	0.8351229	0.00E+00	3.00E-03	9.04E-08 PHS_1B
Phase 1b Mixed Use	Core and Shell	2025	48	3	50% MHDT / 50% HHDT	Diesel	--	--	--	--	0.8351229	0.00E+00	2.65E-03	2.64E-08 PHS_1B
Phase 1b Mixed Use	Tenant Improvements	2024	17	3	50% MHDT / 50% HHDT	Diesel	--	--	--	--	0.8351229	0.00E+00	3.00E-03	1.06E-08 PHS_1B
Phase 1b Mixed Use	Tenant Improvements	2025	235	3	50% MHDT / 50% HHDT	Diesel	--	--	--	--	0.8351229	0.00E+00	2.65E-03	1.29E-07 PHS_1B
Phase 1b Mixed Use	Landscaping	2025	91	2	50% MHDT / 50% HHDT	Diesel	--	--	--	--	0.8351229	0.00E+00	2.65E-03	3.34E-08 PHS_1B
Phase 1b Mixed Use	Landscaping	2026	32	2	50% MHDT / 50% HHDT	Diesel	--	--	--	--	0.8351229	0.00E+00	2.34E-03	1.04E-08 PHS_1B

Equipment Information									Emissions (lb/yr)				
PHASE	SUBPHASE	EQUIPMENT	CALEEMOD_EQUIPMENT	FUEL	NUMBER	HP	DAILYHRS	UTILIZATION	2021	2022	2023	2024	2025
Phase 1a	Demolition	Excavator	Excavators	Diesel	4	131	8	0.9	0.575248	3.716989	0	0	0
Phase 1a	Demolition	Generator	Generator Sets	Diesel	2	25	6	0.5	0.068716	0.44401	0	0	0
Phase 1a	Demolition	Tire Wash	Other Construction Equipment	Diesel	2	100	4	0.9	0.14907	0.963221	0	0	0
Phase 1a	Demolition	Concrete Crusher	Crushing/Proc. Equipment	Diesel	2	200	2	0	0	0	0	0	0
Phase 1a	Demolition	Bob Cat	Tractors/Loaders/Backhoes	Diesel	6	150	8	0.8	0.85513	5.525455	0	0	0
Phase 1a	Demolition	Pressure Washer	Pressure Washers	Diesel	2	25	8	1	0.074287	0.480011	0	0	0
Phase 1a	Demolition	Air Compressor	Air Compressors	Diesel	1	140	6	0.7	0.113247	0.731749	0	0	0
Phase 1a	Grading and Utilities	Blade	Graders	Diesel	2	359	8	0.15	0	1.336421	0	0	0
Phase 1a	Grading and Utilities	Scraper	Scrapers	Diesel	2	52	8	0.15	0	0.324831	0	0	0
Phase 1a	Grading and Utilities	Loader	Tractors/Loaders/Backhoes	Diesel	4	100	4	0.9	0	2.889118	0	0	0
Phase 1a	Grading and Utilities	Tire Wash	Other Construction Equipment	Diesel	2	100	4	0.9	0	1.639769	0	0	0
Phase 1a	Grading and Utilities	Excavator	Excavators	Diesel	4	359	8	0.6	0	9.909074	0	0	0
Phase 1a	Grading and Utilities	Backhoe	Tractors/Loaders/Backhoes	Diesel	4	350	8	0.6	0	9.40643	0	0	0
Phase 1a	Grading and Utilities	Gradall	Forklifts	Diesel	4	350	4	0.6	0	2.542278	0	0	0
Phase 1a	Grading and Utilities	Compactor	Other Construction Equipment	Diesel	4	250	0.5	0.2	0	0.158892	0	0	0
Phase 1a	Grading and Utilities	Paver	Pavers	Diesel	2	250	8	0.01	0	0.063557	0	0	0
Phase 1a	Grading and Utilities	Generator	Generator Sets	Diesel	1	600	2	0.1	0	0.335944	0	0	0
Phase 1a Office	North Garage 2022	Air Compressor	Air Compressors	Diesel	1	150	0.47	1	0	0.043734	0	0	0
Phase 1a Office	North Garage 2022	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	0	1	0	0	0	0	0
Phase 1a Office	North Garage 2022	Blade	Graders	Diesel	1	450	0	1	0	0	0	0	0
Phase 1a Office	North Garage 2022	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	0	1	0	0	0	0	0
Phase 1a Office	North Garage 2022	Boom Lift	Aerial Lifts	Diesel	1	40	0	1	0	0	0	0	0
Phase 1a Office	North Garage 2022	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0	0	0	0	0
Phase 1a Office	North Garage 2022	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0	0	0	0	0
Phase 1a Office	North Garage 2022	Concrete Pump	Pumps	Diesel	1	450	0.33	1	0	0.122103	0	0	0
Phase 1a Office	North Garage 2022	Excavator	Excavators	Diesel	1	500	11.71429	1	0	2.47307	0	0	0
Phase 1a Office	North Garage 2022	Generator	Generator Sets	Diesel	1	25	4.714286	1	0	0.174432	0	0	0
Phase 1a Office	North Garage 2022	Gradall	Forklifts	Diesel	1	350	2.928571	1	0	0.227783	0	0	0
Phase 1a Office	North Garage 2022	Hydro/Crawler Crane	Cranes	Diesel	1	550	2.928571	1	0	0.519019	0	0	0
Phase 1a Office	North Garage 2022	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	5.857143	1	0	0.345145	0	0	0
Phase 1a Office	North Garage 2022	Paver	Pavers	Diesel	1	250	0	1	0	0	0	0	0
Phase 1a Office	North Garage 2022	Pile Rig	Bore/Drill Rigs	Diesel	1	600	4.142857	1	0	1.380983	0	0	0
Phase 1a Office	North Garage 2022	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0	0	0	0	0
Phase 1a Office	North Garage 2022	Scraper	Scrapers	Diesel	1	600	0	1	0	0	0	0	0
Phase 1a Office	North Garage 2022	Tire Wash	Other Construction Equipment	Diesel	1	100	1.178571	1	0	0.078835	0	0	0
Phase 1a Office	North Garage 2023	Air Compressor	Air Compressors	Diesel	1	150	0.48186	1	0	0	0.276273	0	0
Phase 1a Office	North Garage 2023	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	0.03907	1	0	0	0.034534	0	0
Phase 1a Office	North Garage 2023	Blade	Graders	Diesel	1	450	0	1	0	0	0	0	0
Phase 1a Office	North Garage 2023	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	0.03907	1	0	0	0.019734	0	0
Phase 1a Office	North Garage 2023	Boom Lift	Aerial Lifts	Diesel	1	40	1.335814	1	0	0	0.203506	0	0
Phase 1a Office	North Garage 2023	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0	0	0	0	0
Phase 1a Office	North Garage 2023	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0	0	0	0	0
Phase 1a Office	North Garage 2023	Concrete Pump	Pumps	Diesel	1	450	0.57907	1	0	0	1.316172	0	0
Phase 1a Office	North Garage 2023	Excavator	Excavators	Diesel	1	500	0.465116	1	0	0	0.603188	0	0
Phase 1a Office	North Garage 2023	Generator	Generator Sets	Diesel	1	25	1.767442	1	0	0	0.401723	0	0

Phase 1a Office	North Garage 2023	Gradall	Forklifts	Diesel	1	350	3.011628	1	0	0	1.438921	0	0
Phase 1a Office	North Garage 2023	Hydro/Crawler Crane	Cranes	Diesel	1	550	5.02907	1	0	0	5.475021	0	0
Phase 1a Office	North Garage 2023	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	0.232558	1	0	0	0.084182	0	0
Phase 1a Office	North Garage 2023	Paver	Pavers	Diesel	1	250	0	1	0	0	0	0	0
Phase 1a Office	North Garage 2023	Pile Rig	Bore/Drill Rigs	Diesel	1	600	0	1	0	0	0	0	0
Phase 1a Office	North Garage 2023	Pressure Washer	Pressure Washers	Diesel	1	25	0.122791	1	0	0	0.011315	0	0
Phase 1a Office	North Garage 2023	Scraper	Scrapers	Diesel	1	600	0	1	0	0	0	0	0
Phase 1a Office	North Garage 2023	Tire Wash	Other Construction Equipment	Diesel	1	100	1.505814	1	0	0	0.618736	0	0
Phase 1a Office	Office Building 4 2023	Air Compressor	Air Compressors	Diesel	1	150	0.049091	1	0	0	0.026401	0	0
Phase 1a Office	Office Building 4 2023	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	1.264463	1	0	0	1.048356	0	0
Phase 1a Office	Office Building 4 2023	Blade	Graders	Diesel	1	450	0	1	0	0	0	0	0
Phase 1a Office	Office Building 4 2023	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	1.264463	1	0	0	0.599061	0	0
Phase 1a Office	Office Building 4 2023	Boom Lift	Aerial Lifts	Diesel	1	40	7.438017	1	0	0	1.062881	0	0
Phase 1a Office	Office Building 4 2023	Compactor	Other Construction Equipment	Diesel	1	250	0.101157	1	0	0	0.068001	0	0
Phase 1a Office	Office Building 4 2023	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0	0	0	0	0
Phase 1a Office	Office Building 4 2023	Concrete Pump	Pumps	Diesel	1	450	0.075372	1	0	0	0.160689	0	0
Phase 1a Office	Office Building 4 2023	Excavator	Excavators	Diesel	1	500	0.063223	1	0	0	0.076906	0	0
Phase 1a Office	Office Building 4 2023	Generator	Generator Sets	Diesel	1	25	2.900826	1	0	0	0.618442	0	0
Phase 1a Office	Office Building 4 2023	Gradall	Forklifts	Diesel	1	350	0.48	1	0	0	0.215116	0	0
Phase 1a Office	Office Building 4 2023	Hydro/Crawler Crane	Cranes	Diesel	1	550	1.809917	1	0	0	1.848215	0	0
Phase 1a Office	Office Building 4 2023	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	0.719008	1	0	0	0.244127	0	0
Phase 1a Office	Office Building 4 2023	Paver	Pavers	Diesel	1	250	0	1	0	0	0	0	0
Phase 1a Office	Office Building 4 2023	Pile Rig	Bore/Drill Rigs	Diesel	1	600	0.719008	1	0	0	1.380983	0	0
Phase 1a Office	Office Building 4 2023	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0	0	0	0	0
Phase 1a Office	Office Building 4 2023	Scraper	Scrapers	Diesel	1	600	0	1	0	0	0	0	0
Phase 1a Office	Office Building 4 2023	Tire Wash	Other Construction Equipment	Diesel	1	100	1.5	1	0	0	0.578124	0	0
Phase 1a Office	Office Building 4 2024	Air Compressor	Air Compressors	Diesel	1	150	0	1	0	0	0	0	0
Phase 1a Office	Office Building 4 2024	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	0	1	0	0	0	0	0
Phase 1a Office	Office Building 4 2024	Blade	Graders	Diesel	1	450	0	1	0	0	0	0	0
Phase 1a Office	Office Building 4 2024	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	0	1	0	0	0	0	0
Phase 1a Office	Office Building 4 2024	Boom Lift	Aerial Lifts	Diesel	1	40	1.405797	1	0	0	0	0.171832	0
Phase 1a Office	Office Building 4 2024	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0	0	0	0	0
Phase 1a Office	Office Building 4 2024	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0	0	0	0	0
Phase 1a Office	Office Building 4 2024	Concrete Pump	Pumps	Diesel	1	450	0	1	0	0	0	0	0
Phase 1a Office	Office Building 4 2024	Excavator	Excavators	Diesel	1	500	0	1	0	0	0	0	0
Phase 1a Office	Office Building 4 2024	Generator	Generator Sets	Diesel	1	25	0	1	0	0	0	0	0
Phase 1a Office	Office Building 4 2024	Gradall	Forklifts	Diesel	1	350	0.48	1	0	0	0	0.184004	0
Phase 1a Office	Office Building 4 2024	Hydro/Crawler Crane	Cranes	Diesel	1	550	0	1	0	0	0	0	0
Phase 1a Office	Office Building 4 2024	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	0	1	0	0	0	0	0
Phase 1a Office	Office Building 4 2024	Paver	Pavers	Diesel	1	250	0	1	0	0	0	0	0
Phase 1a Office	Office Building 4 2024	Pile Rig	Bore/Drill Rigs	Diesel	1	600	0	1	0	0	0	0	0
Phase 1a Office	Office Building 4 2024	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0	0	0	0	0
Phase 1a Office	Office Building 4 2024	Scraper	Scrapers	Diesel	1	600	0	1	0	0	0	0	0
Phase 1a Office	Office Building 4 2024	Tire Wash	Other Construction Equipment	Diesel	1	100	1.5	1	0	0	0	0.494511	0
Phase 1a Office	Meeting, Collaboration, Park 2022	Air Compressor	Air Compressors	Diesel	1	150	0	1	0	0	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2022	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	5.857143	1	0	0.842796	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2022	Blade	Graders	Diesel	1	450	0	1	0	0	0	0	0

Phase 1a Office	Meeting, Collaboration, Park 2022	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	5.857143	1	0	0.481598	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2022	Boom Lift	Aerial Lifts	Diesel	1	40	0	1	0	0	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2022	Compactor	Other Construction Equipment	Diesel	1	250	0.314286	1	0	0.036667	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2022	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0	0	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2022	Concrete Pump	Pumps	Diesel	1	450	0	1	0	0	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2022	Excavator	Excavators	Diesel	1	500	23.42857	1	0	4.946141	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2022	Generator	Generator Sets	Diesel	1	25	5.857143	1	0	0.216719	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2022	Gradall	Forklifts	Diesel	1	350	8.785714	1	0	0.683348	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2022	Hydro/Crawler Crane	Cranes	Diesel	1	550	1.571429	1	0	0.278498	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2022	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	4.392857	1	0	0.258859	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2022	Paver	Pavers	Diesel	1	250	0	1	0	0	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2022	Pile Rig	Bore/Drill Rigs	Diesel	1	600	3.142857	1	0	1.047642	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2022	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0	0	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2022	Scraper	Scrapers	Diesel	1	600	0	1	0	0	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2022	Tire Wash	Other Construction Equipment	Diesel	1	100	1.464286	1	0	0.097947	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2023	Air Compressor	Air Compressors	Diesel	1	150	0.304615	1	0	0	0.176004	0	0
Phase 1a Office	Meeting, Collaboration, Park 2023	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	3.276923	1	0	0	2.918953	0	0
Phase 1a Office	Meeting, Collaboration, Park 2023	Blade	Graders	Diesel	1	450	0	1	0	0	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2023	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	3.276923	1	0	0	1.667973	0	0
Phase 1a Office	Meeting, Collaboration, Park 2023	Boom Lift	Aerial Lifts	Diesel	1	40	0.888462	1	0	0	0.136403	0	0
Phase 1a Office	Meeting, Collaboration, Park 2023	Compactor	Other Construction Equipment	Diesel	1	250	0.152308	1	0	0	0.110002	0	0
Phase 1a Office	Meeting, Collaboration, Park 2023	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0	0	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2023	Concrete Pump	Pumps	Diesel	1	450	0.304615	1	0	0	0.69773	0	0
Phase 1a Office	Meeting, Collaboration, Park 2023	Excavator	Excavators	Diesel	1	500	5.492308	1	0	0	7.177936	0	0
Phase 1a Office	Meeting, Collaboration, Park 2023	Generator	Generator Sets	Diesel	1	25	6.715385	1	0	0	1.538177	0	0
Phase 1a Office	Meeting, Collaboration, Park 2023	Gradall	Forklifts	Diesel	1	350	7.661538	1	0	0	3.68897	0	0
Phase 1a Office	Meeting, Collaboration, Park 2023	Hydro/Crawler Crane	Cranes	Diesel	1	550	7.246154	1	0	0	7.949858	0	0
Phase 1a Office	Meeting, Collaboration, Park 2023	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	1.828846	1	0	0	0.66714	0	0
Phase 1a Office	Meeting, Collaboration, Park 2023	Paver	Pavers	Diesel	1	250	0	1	0	0	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2023	Pile Rig	Bore/Drill Rigs	Diesel	1	600	2.007692	1	0	0	4.142948	0	0
Phase 1a Office	Meeting, Collaboration, Park 2023	Pressure Washer	Pressure Washers	Diesel	1	25	0.152308	1	0	0	0.014143	0	0
Phase 1a Office	Meeting, Collaboration, Park 2023	Scraper	Scrapers	Diesel	1	600	0	1	0	0	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2023	Tire Wash	Other Construction Equipment	Diesel	1	100	0.819231	1	0	0	0.33923	0	0
Phase 1a Office	Meeting, Collaboration, Park 2024	Air Compressor	Air Compressors	Diesel	1	150	0	1	0	0	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2024	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	0	1	0	0	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2024	Blade	Graders	Diesel	1	450	0	1	0	0	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2024	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	0	1	0	0	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2024	Boom Lift	Aerial Lifts	Diesel	1	40	19.30534	1	0	0	0	2.986694	0
Phase 1a Office	Meeting, Collaboration, Park 2024	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0	0	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2024	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0	0	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2024	Concrete Pump	Pumps	Diesel	1	450	0	1	0	0	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2024	Excavator	Excavators	Diesel	1	500	0	1	0	0	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2024	Generator	Generator Sets	Diesel	1	25	0	1	0	0	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2024	Gradall	Forklifts	Diesel	1	350	10.25954	1	0	0	0	4.977888	0
Phase 1a Office	Meeting, Collaboration, Park 2024	Hydro/Crawler Crane	Cranes	Diesel	1	550	0.503817	1	0	0	0	0.556996	0
Phase 1a Office	Meeting, Collaboration, Park 2024	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	0	1	0	0	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2024	Paver	Pavers	Diesel	1	250	0	1	0	0	0	0	0

Phase 1a Office	Meeting, Collaboration, Park 2024	Pile Rig	Bore/Drill Rigs	Diesel	1	600	0	1	0	0	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2024	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0	0	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2024	Scraper	Scrapers	Diesel	1	600	0	1	0	0	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2024	Tire Wash	Other Construction Equipment	Diesel	1	100	0	1	0	0	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2025	Air Compressor	Air Compressors	Diesel	1	150	0	1	0	0	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2025	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	0	1	0	0	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2025	Blade	Graders	Diesel	1	450	0	1	0	0	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2025	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	0	1	0	0	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2025	Boom Lift	Aerial Lifts	Diesel	1	40	9.425287	1	0	0	0	0	0.903842
Phase 1a Office	Meeting, Collaboration, Park 2025	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0	0	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2025	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0	0	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2025	Concrete Pump	Pumps	Diesel	1	450	0	1	0	0	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2025	Excavator	Excavators	Diesel	1	500	0	1	0	0	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2025	Generator	Generator Sets	Diesel	1	25	0	1	0	0	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2025	Gradall	Forklifts	Diesel	1	350	11.77011	1	0	0	0	0	4.551211
Phase 1a Office	Meeting, Collaboration, Park 2025	Hydro/Crawler Crane	Cranes	Diesel	1	550	0.770115	1	0	0	0	0	0.678523
Phase 1a Office	Meeting, Collaboration, Park 2025	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	0	1	0	0	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2025	Paver	Pavers	Diesel	1	250	0	1	0	0	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2025	Pile Rig	Bore/Drill Rigs	Diesel	1	600	0	1	0	0	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2025	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0	0	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2025	Scraper	Scrapers	Diesel	1	600	0	1	0	0	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2025	Tire Wash	Other Construction Equipment	Diesel	1	100	0	1	0	0	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2026	Air Compressor	Air Compressors	Diesel	1	150	0	1	0	0	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2026	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	0	1	0	0	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2026	Blade	Graders	Diesel	1	450	0	1	0	0	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2026	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	0	1	0	0	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2026	Boom Lift	Aerial Lifts	Diesel	1	40	0	1	0	0	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2026	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0	0	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2026	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0	0	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2026	Concrete Pump	Pumps	Diesel	1	450	0	1	0	0	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2026	Excavator	Excavators	Diesel	1	500	0	1	0	0	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2026	Generator	Generator Sets	Diesel	1	25	0	1	0	0	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2026	Gradall	Forklifts	Diesel	1	350	11.73913	1	0	0	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2026	Hydro/Crawler Crane	Cranes	Diesel	1	550	5.869565	1	0	0	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2026	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	0	1	0	0	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2026	Paver	Pavers	Diesel	1	250	0	1	0	0	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2026	Pile Rig	Bore/Drill Rigs	Diesel	1	600	0	1	0	0	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2026	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0	0	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2026	Scraper	Scrapers	Diesel	1	600	0	1	0	0	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2026	Tire Wash	Other Construction Equipment	Diesel	1	100	0	1	0	0	0	0	0
Phase 1a Office	Hotel Excavation 2022	Air Compressor	Air Compressors	Diesel	1	150	2.642857	1	0	0.246672	0	0	0
Phase 1a Office	Hotel Excavation 2022	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	2.642857	1	0	0.380286	0	0	0
Phase 1a Office	Hotel Excavation 2022	Blade	Graders	Diesel	1	450	0	1	0	0	0	0	0
Phase 1a Office	Hotel Excavation 2022	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	2.928571	1	0	0.240799	0	0	0
Phase 1a Office	Hotel Excavation 2022	Boom Lift	Aerial Lifts	Diesel	1	40	1.464286	1	0	0.036315	0	0	0
Phase 1a Office	Hotel Excavation 2022	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0	0	0	0	0
Phase 1a Office	Hotel Excavation 2022	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0	0	0	0	0

Phase 1a Office	Hotel Excavation 2022	Concrete Pump	Pumps	Diesel	1	450	0.422857	1	0	0.156461	0	0	0
Phase 1a Office	Hotel Excavation 2022	Excavator	Excavators	Diesel	1	500	11.71429	1	0	2.47307	0	0	0
Phase 1a Office	Hotel Excavation 2022	Generator	Generator Sets	Diesel	1	25	5.857143	1	0	0.216719	0	0	0
Phase 1a Office	Hotel Excavation 2022	Gradall	Forklifts	Diesel	1	350	5.857143	1	0	0.455566	0	0	0
Phase 1a Office	Hotel Excavation 2022	Hydro/Crawler Crane	Cranes	Diesel	1	550	2.642857	1	0	0.468383	0	0	0
Phase 1a Office	Hotel Excavation 2022	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	11.71429	1	0	0.69029	0	0	0
Phase 1a Office	Hotel Excavation 2022	Paver	Pavers	Diesel	1	250	0	1	0	0	0	0	0
Phase 1a Office	Hotel Excavation 2022	Pile Rig	Bore/Drill Rigs	Diesel	1	600	10.57143	1	0	3.523887	0	0	0
Phase 1a Office	Hotel Excavation 2022	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0	0	0	0	0
Phase 1a Office	Hotel Excavation 2022	Scraper	Scrapers	Diesel	1	600	0	1	0	0	0	0	0
Phase 1a Office	Hotel Excavation 2022	Tire Wash	Other Construction Equipment	Diesel	1	100	2.928571	1	0	0.195893	0	0	0
Phase 1a Office	Hotel Excavation 2023	Air Compressor	Air Compressors	Diesel	1	150	2.311284	1	0	0	1.320029	0	0
Phase 1a Office	Hotel Excavation 2023	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	0	1	0	0	0	0	0
Phase 1a Office	Hotel Excavation 2023	Blade	Graders	Diesel	1	450	0	1	0	0	0	0	0
Phase 1a Office	Hotel Excavation 2023	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	0.700389	1	0	0	0.352389	0	0
Phase 1a Office	Hotel Excavation 2023	Boom Lift	Aerial Lifts	Diesel	1	40	0.350195	1	0	0	0.053144	0	0
Phase 1a Office	Hotel Excavation 2023	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0	0	0	0	0
Phase 1a Office	Hotel Excavation 2023	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0	0	0	0	0
Phase 1a Office	Hotel Excavation 2023	Concrete Pump	Pumps	Diesel	1	450	2.311284	1	0	0	5.232973	0	0
Phase 1a Office	Hotel Excavation 2023	Excavator	Excavators	Diesel	1	500	2.801556	1	0	0	3.619127	0	0
Phase 1a Office	Hotel Excavation 2023	Generator	Generator Sets	Diesel	1	25	10.64591	1	0	0	2.410339	0	0
Phase 1a Office	Hotel Excavation 2023	Gradall	Forklifts	Diesel	1	350	10.64591	1	0	0	5.066778	0	0
Phase 1a Office	Hotel Excavation 2023	Hydro/Crawler Crane	Cranes	Diesel	1	550	9.245136	1	0	0	10.02594	0	0
Phase 1a Office	Hotel Excavation 2023	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	2.801556	1	0	0	1.010181	0	0
Phase 1a Office	Hotel Excavation 2023	Paver	Pavers	Diesel	1	250	0	1	0	0	0	0	0
Phase 1a Office	Hotel Excavation 2023	Pile Rig	Bore/Drill Rigs	Diesel	1	600	0	1	0	0	0	0	0
Phase 1a Office	Hotel Excavation 2023	Pressure Washer	Pressure Washers	Diesel	1	25	0.046226	1	0	0	0.004243	0	0
Phase 1a Office	Hotel Excavation 2023	Scraper	Scrapers	Diesel	1	600	0	1	0	0	0	0	0
Phase 1a Office	Hotel Excavation 2023	Tire Wash	Other Construction Equipment	Diesel	1	100	1.856031	1	0	0	0.759683	0	0
Phase 1a Office	Hotel Construction 2024	Air Compressor	Air Compressors	Diesel	1	150	3	1	0	0	0	1.166692	0
Phase 1a Office	Hotel Construction 2024	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	0	1	0	0	0	0	0
Phase 1a Office	Hotel Construction 2024	Blade	Graders	Diesel	1	450	0	1	0	0	0	0	0
Phase 1a Office	Hotel Construction 2024	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	0	1	0	0	0	0	0
Phase 1a Office	Hotel Construction 2024	Boom Lift	Aerial Lifts	Diesel	1	40	20.91429	1	0	0	0	2.161191	0
Phase 1a Office	Hotel Construction 2024	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0	0	0	0	0
Phase 1a Office	Hotel Construction 2024	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0	0	0	0	0
Phase 1a Office	Hotel Construction 2024	Concrete Pump	Pumps	Diesel	1	450	3	1	0	0	0	4.625102	0
Phase 1a Office	Hotel Construction 2024	Excavator	Excavators	Diesel	1	500	0	1	0	0	0	0	0
Phase 1a Office	Hotel Construction 2024	Generator	Generator Sets	Diesel	1	25	0	1	0	0	0	0	0
Phase 1a Office	Hotel Construction 2024	Gradall	Forklifts	Diesel	1	350	12	1	0	0	0	3.888975	0
Phase 1a Office	Hotel Construction 2024	Hydro/Crawler Crane	Cranes	Diesel	1	550	0	1	0	0	0	0	0
Phase 1a Office	Hotel Construction 2024	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	0	1	0	0	0	0	0
Phase 1a Office	Hotel Construction 2024	Paver	Pavers	Diesel	1	250	0	1	0	0	0	0	0
Phase 1a Office	Hotel Construction 2024	Pile Rig	Bore/Drill Rigs	Diesel	1	600	0	1	0	0	0	0	0
Phase 1a Office	Hotel Construction 2024	Pressure Washer	Pressure Washers	Diesel	1	25	0.06	1	0	0	0	0.00375	0
Phase 1a Office	Hotel Construction 2024	Scraper	Scrapers	Diesel	1	600	0	1	0	0	0	0	0
Phase 1a Office	Hotel Construction 2024	Tire Wash	Other Construction Equipment	Diesel	1	100	1.5	1	0	0	0	0.418065	0

Phase 1a Office	Hotel Construction 2025	Air Compressor	Air Compressors	Diesel	1	150	0.837662	1	0	0	0	0	0.212957
Phase 1a Office	Hotel Construction 2025	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	0	1	0	0	0	0	0
Phase 1a Office	Hotel Construction 2025	Blade	Graders	Diesel	1	450	0	1	0	0	0	0	0
Phase 1a Office	Hotel Construction 2025	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	0	1	0	0	0	0	0
Phase 1a Office	Hotel Construction 2025	Boom Lift	Aerial Lifts	Diesel	1	40	20.18182	1	0	0	0	0	1.141927
Phase 1a Office	Hotel Construction 2025	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0	0	0	0	0
Phase 1a Office	Hotel Construction 2025	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0	0	0	0	0
Phase 1a Office	Hotel Construction 2025	Concrete Pump	Pumps	Diesel	1	450	0.837662	1	0	0	0	0	0.909163
Phase 1a Office	Hotel Construction 2025	Excavator	Excavators	Diesel	1	500	0	1	0	0	0	0	0
Phase 1a Office	Hotel Construction 2025	Generator	Generator Sets	Diesel	1	25	0	1	0	0	0	0	0
Phase 1a Office	Hotel Construction 2025	Gradall	Forklifts	Diesel	1	350	12.07792	1	0	0	0	0	2.755616
Phase 1a Office	Hotel Construction 2025	Hydro/Crawler Crane	Cranes	Diesel	1	550	0	1	0	0	0	0	0
Phase 1a Office	Hotel Construction 2025	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	0	1	0	0	0	0	0
Phase 1a Office	Hotel Construction 2025	Paver	Pavers	Diesel	1	250	0	1	0	0	0	0	0
Phase 1a Office	Hotel Construction 2025	Pile Rig	Bore/Drill Rigs	Diesel	1	600	0	1	0	0	0	0	0
Phase 1a Office	Hotel Construction 2025	Pressure Washer	Pressure Washers	Diesel	1	25	0.016753	1	0	0	0	0	0.000573
Phase 1a Office	Hotel Construction 2025	Scraper	Scrapers	Diesel	1	600	0	1	0	0	0	0	0
Phase 1a Office	Hotel Construction 2025	Tire Wash	Other Construction Equipment	Diesel	1	100	1.50974	1	0	0	0	0	0.25145
Phase 1a Office	Town Square 2023	Air Compressor	Air Compressors	Diesel	1	150	0	1	0	0	0	0	0
Phase 1a Office	Town Square 2023	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	0	1	0	0	0	0	0
Phase 1a Office	Town Square 2023	Blade	Graders	Diesel	1	450	0	1	0	0	0	0	0
Phase 1a Office	Town Square 2023	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	3	1	0	0	1.397809	0	0
Phase 1a Office	Town Square 2023	Boom Lift	Aerial Lifts	Diesel	1	40	1.5	1	0	0	0.210805	0	0
Phase 1a Office	Town Square 2023	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0	0	0	0	0
Phase 1a Office	Town Square 2023	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0	0	0	0	0
Phase 1a Office	Town Square 2023	Concrete Pump	Pumps	Diesel	1	450	0	1	0	0	0	0	0
Phase 1a Office	Town Square 2023	Excavator	Excavators	Diesel	1	500	12	1	0	0	14.35587	0	0
Phase 1a Office	Town Square 2023	Generator	Generator Sets	Diesel	1	25	6	1	0	0	1.258028	0	0
Phase 1a Office	Town Square 2023	Gradall	Forklifts	Diesel	1	350	6	1	0	0	2.644503	0	0
Phase 1a Office	Town Square 2023	Hydro/Crawler Crane	Cranes	Diesel	1	550	0	1	0	0	0	0	0
Phase 1a Office	Town Square 2023	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	12	1	0	0	4.007051	0	0
Phase 1a Office	Town Square 2023	Paver	Pavers	Diesel	1	250	0	1	0	0	0	0	0
Phase 1a Office	Town Square 2023	Pile Rig	Bore/Drill Rigs	Diesel	1	600	0	1	0	0	0	0	0
Phase 1a Office	Town Square 2023	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0	0	0	0	0
Phase 1a Office	Town Square 2023	Scraper	Scrapers	Diesel	1	600	0	1	0	0	0	0	0
Phase 1a Office	Town Square 2023	Tire Wash	Other Construction Equipment	Diesel	1	100	3	1	0	0	1.137136	0	0
Phase 1a Office	Town Square 2024	Air Compressor	Air Compressors	Diesel	1	150	0	1	0	0	0	0	0
Phase 1a Office	Town Square 2024	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	0	1	0	0	0	0	0
Phase 1a Office	Town Square 2024	Blade	Graders	Diesel	1	450	0	1	0	0	0	0	0
Phase 1a Office	Town Square 2024	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	0.996183	1	0	0	0	0.510964	0
Phase 1a Office	Town Square 2024	Boom Lift	Aerial Lifts	Diesel	1	40	1.872137	1	0	0	0	0.289635	0
Phase 1a Office	Town Square 2024	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0	0	0	0	0
Phase 1a Office	Town Square 2024	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0	0	0	0	0
Phase 1a Office	Town Square 2024	Concrete Pump	Pumps	Diesel	1	450	0.020382	1	0	0	0	0.047044	0
Phase 1a Office	Town Square 2024	Excavator	Excavators	Diesel	1	500	3.984733	1	0	0	0	5.247735	0
Phase 1a Office	Town Square 2024	Generator	Generator Sets	Diesel	1	25	0.549618	1	0	0	0	0.12686	0
Phase 1a Office	Town Square 2024	Gradall	Forklifts	Diesel	1	350	5.267176	1	0	0	0	2.555612	0

Phase 1a Office	Town Square 2024	Hydro/Crawler Crane	Cranes	Diesel	1	550	1.03145	1	0	0	0	1.140324	0
Phase 1a Office	Town Square 2024	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	3.984733	1	0	0	0	1.464762	0
Phase 1a Office	Town Square 2024	Paver	Pavers	Diesel	1	250	0	1	0	0	0	0	0
Phase 1a Office	Town Square 2024	Pile Rig	Bore/Drill Rigs	Diesel	1	600	0	1	0	0	0	0	0
Phase 1a Office	Town Square 2024	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0	0	0	0	0
Phase 1a Office	Town Square 2024	Scraper	Scrapers	Diesel	1	600	0	1	0	0	0	0	0
Phase 1a Office	Town Square 2024	Tire Wash	Other Construction Equipment	Diesel	1	100	0.996183	1	0	0	0	0.415676	0
Phase 1a Office	Town Square 2025	Air Compressor	Air Compressors	Diesel	1	150	0	1	0	0	0	0	0
Phase 1a Office	Town Square 2025	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	0	1	0	0	0	0	0
Phase 1a Office	Town Square 2025	Blade	Graders	Diesel	1	450	0	1	0	0	0	0	0
Phase 1a Office	Town Square 2025	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	0	1	0	0	0	0	0
Phase 1a Office	Town Square 2025	Boom Lift	Aerial Lifts	Diesel	1	40	0	1	0	0	0	0	0
Phase 1a Office	Town Square 2025	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0	0	0	0	0
Phase 1a Office	Town Square 2025	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0	0	0	0	0
Phase 1a Office	Town Square 2025	Concrete Pump	Pumps	Diesel	1	450	0	1	0	0	0	0	0
Phase 1a Office	Town Square 2025	Excavator	Excavators	Diesel	1	500	0	1	0	0	0	0	0
Phase 1a Office	Town Square 2025	Generator	Generator Sets	Diesel	1	25	0	1	0	0	0	0	0
Phase 1a Office	Town Square 2025	Gradall	Forklifts	Diesel	1	350	18	1	0	0	0	0	2.933398
Phase 1a Office	Town Square 2025	Hydro/Crawler Crane	Cranes	Diesel	1	550	0.18	1	0	0	0	0	0.06684
Phase 1a Office	Town Square 2025	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	0	1	0	0	0	0	0
Phase 1a Office	Town Square 2025	Paver	Pavers	Diesel	1	250	0	1	0	0	0	0	0
Phase 1a Office	Town Square 2025	Pile Rig	Bore/Drill Rigs	Diesel	1	600	0	1	0	0	0	0	0
Phase 1a Office	Town Square 2025	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0	0	0	0	0
Phase 1a Office	Town Square 2025	Scraper	Scrapers	Diesel	1	600	0	1	0	0	0	0	0
Phase 1a Office	Town Square 2025	Tire Wash	Other Construction Equipment	Diesel	1	100	0	1	0	0	0	0	0
Phase 1a Mixed Use	Parcel 2 Foundations	Pile Rig	Bore/Drill Rigs	Diesel	0	600	8	0.4	0	0	0	0	0
Phase 1a Mixed Use	Parcel 2 Foundations	Generator	Generator Sets	Diesel	0	25	6	1	0	0	0	0	0
Phase 1a Mixed Use	Parcel 2 Foundations	Tire Wash	Other Construction Equipment	Diesel	1	100	4	0.9	0	0	0.923087	0	0
Phase 1a Mixed Use	Parcel 2 Foundations	Excavator	Excavators	Diesel	1	131	8	0.6	0	0	1.187371	0	0
Phase 1a Mixed Use	Parcel 2 Foundations	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	90	8	0.6	0	0	0.975835	0	0
Phase 1a Mixed Use	Parcel 2 Foundations	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	70	8	0.8	0	0	1.011977	0	0
Phase 1a Mixed Use	Parcel 2 Foundations	Gradall	Forklifts	Diesel	1	74	4	0.8	0	0	0.289136	0	0
Phase 1a Mixed Use	Parcel 2 Foundations	Crane	Cranes	Diesel	1	215	4	0.5	0	0	0.531141	0	0
Phase 1a Mixed Use	Parcel 2 Foundations	Concrete Pump	Pumps	Diesel	1	450	8	0.15	0	0	1.702038	0	0
Phase 1a Mixed Use	Parcel 2 Core and Shell	Generator	Generator Sets	Diesel	0	25	6	1	0	0	0	0	0
Phase 1a Mixed Use	Parcel 2 Core and Shell	Tire Wash	Other Construction Equipment	Diesel	1	100	4	0.9	0	0	0.366941	0.665081	0
Phase 1a Mixed Use	Parcel 2 Core and Shell	Crane	Cranes	Diesel	1	600	8	0.2	0	0	0.471375	0.854368	0
Phase 1a Mixed Use	Parcel 2 Core and Shell	Gradall	Forklifts	Diesel	1	74	4	0.8	0	0	0.114936	0.208322	0
Phase 1a Mixed Use	Parcel 2 Core and Shell	Concrete Pump	Pumps	Diesel	0	450	6	0.225	0	0	0	0	0
Phase 1a Mixed Use	Parcel 2 Core and Shell	Air Compressor	Air Compressors	Diesel	0	140	2	0.4	0	0	0	0	0
Phase 1a Mixed Use	Parcel 2 Core and Shell	Boom Lift	Aerial Lifts	Diesel	0	50	6	0.2	0	0	0	0	0
Phase 1a Mixed Use	Parcel 2 Tenant Improvements	Generator	Generator Sets	Diesel	0	25	6	0.85	0	0	0	0	0
Phase 1a Mixed Use	Parcel 2 Tenant Improvements	Tire Wash	Other Construction Equipment	Diesel	1	100	4	0.9	0	0	0	0.842819	0.44385
Phase 1a Mixed Use	Parcel 2 Tenant Improvements	Gradall	Forklifts	Diesel	1	74	4	0.8	0	0	0	0.263994	0.139026
Phase 1a Mixed Use	Parcel 2 Landscaping	Excavator	Excavators	Diesel	1	25	8	0.9	0	0	0	0	0.119576
Phase 1a Mixed Use	Parcel 2 Landscaping	Generator	Generator Sets	Diesel	0	25	6	0.5	0	0	0	0	0
Phase 1a Mixed Use	Parcel 2 Landscaping	Tire Wash	Other Construction Equipment	Diesel	1	100	4	0.9	0	0	0	0	0.229712

Phase 1a Mixed Use	Parcel 2 Landscaping	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	90	8	1	0	0	0	0	0.40473
Phase 1a Mixed Use	Parcel 2 Landscaping	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	70	8	0.8	0	0	0	0	0.251832
Phase 1a Mixed Use	Parcel 3 Foundations	Pile Rig	Bore/Drill Rigs	Diesel	0	600	8	0.4	0	0	0	0	0
Phase 1a Mixed Use	Parcel 3 Foundations	Generator	Generator Sets	Diesel	0	25	6	1	0	0	0	0	0
Phase 1a Mixed Use	Parcel 3 Foundations	Tire Wash	Other Construction Equipment	Diesel	1	100	4	0.9	0	0	0.917354	0.005733	0
Phase 1a Mixed Use	Parcel 3 Foundations	Excavator	Excavators	Diesel	1	131	8	0.6	0	0	1.179996	0.007375	0
Phase 1a Mixed Use	Parcel 3 Foundations	Backhoe	Tractors/Loaders/Backhoes	Diesel	2	90	8	0.6	0	0	1.939548	0.012122	0
Phase 1a Mixed Use	Parcel 3 Foundations	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	70	8	0.8	0	0	1.005691	0.006286	0
Phase 1a Mixed Use	Parcel 3 Foundations	Gradall	Forklifts	Diesel	1	74	4	0.8	0	0	0.28734	0.001796	0
Phase 1a Mixed Use	Parcel 3 Foundations	Crane	Cranes	Diesel	1	215	4	0.5	0	0	0.527842	0.003299	0
Phase 1a Mixed Use	Parcel 3 Foundations	Concrete Pump	Pumps	Diesel	1	450	8	0.15	0	0	1.691466	0.010572	0
Phase 1a Mixed Use	Parcel 3 Core and Shell	Generator	Generator Sets	Diesel	0	25	6	1	0	0	0	0	0
Phase 1a Mixed Use	Parcel 3 Core and Shell	Tire Wash	Other Construction Equipment	Diesel	1	100	4	0.9	0	0	0	1.032023	0
Phase 1a Mixed Use	Parcel 3 Core and Shell	Crane	Cranes	Diesel	1	600	8	0.2	0	0	0	1.325744	0
Phase 1a Mixed Use	Parcel 3 Core and Shell	Gradall	Forklifts	Diesel	2	74	4	0.8	0	0	0	0.646516	0
Phase 1a Mixed Use	Parcel 3 Core and Shell	Concrete Pump	Pumps	Diesel	0	450	6	0.225	0	0	0	0	0
Phase 1a Mixed Use	Parcel 3 Core and Shell	Air Compressor	Air Compressors	Diesel	0	140	2	0.4	0	0	0	0	0
Phase 1a Mixed Use	Parcel 3 Core and Shell	Boom Lift	Aerial Lifts	Diesel	0	50	6	0.2	0	0	0	0	0
Phase 1a Mixed Use	Parcel 3 Tenant Improvements	Generator	Generator Sets	Diesel	0	25	6	0.85	0	0	0	0	0
Phase 1a Mixed Use	Parcel 3 Tenant Improvements	Tire Wash	Other Construction Equipment	Diesel	1	100	4	0.9	0	0	0	0.470144	0.693029
Phase 1a Mixed Use	Parcel 3 Tenant Improvements	Gradall	Forklifts	Diesel	1	74	4	0.8	0	0	0	0.147262	0.217076
Phase 1a Mixed Use	Parcel 3 Landscaping	Excavator	Excavators	Diesel	1	25	8	0.9	0	0	0	0	0.117549
Phase 1a Mixed Use	Parcel 3 Landscaping	Generator	Generator Sets	Diesel	0	25	6	0.5	0	0	0	0	0
Phase 1a Mixed Use	Parcel 3 Landscaping	Tire Wash	Other Construction Equipment	Diesel	0	100	4	0.9	0	0	0	0	0
Phase 1a Mixed Use	Parcel 3 Landscaping	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	90	8	1	0	0	0	0	0.39787
Phase 1a Mixed Use	Parcel 3 Landscaping	Bob Cat	Tractors/Loaders/Backhoes	Diesel	2	70	8	0.8	0	0	0	0	0.495128
Phase 1b	Demolition	Excavator	Excavators	Diesel	4	131	8	0.9	0	2.123993	0	0	0
Phase 1b	Demolition	Generator	Generator Sets	Diesel	2	25	6	0.5	0	0.25372	0	0	0
Phase 1b	Demolition	Tire Wash	Other Construction Equipment	Diesel	2	100	4	0.9	0	0.550412	0	0	0
Phase 1b	Demolition	Concrete Crusher	Crushing/Proc. Equipment	Diesel	2	200	2	0	0	0	0	0	0
Phase 1b	Demolition	Bob Cat	Tractors/Loaders/Backhoes	Diesel	6	150	8	0.8	0	3.157403	0	0	0
Phase 1b	Demolition	Pressure Washer	Pressure Washers	Diesel	2	25	8	1	0	0.274292	0	0	0
Phase 1b	Demolition	Air Compressor	Air Compressors	Diesel	1	140	6	0.7	0	0.418143	0	0	0
Phase 1b	Grading and Utilities	Blade	Graders	Diesel	2	359	8	0.15	0	0.607464	0.607464	0	0
Phase 1b	Grading and Utilities	Scraper	Scrapers	Diesel	2	52	8	0.15	0	0.14765	0.14765	0	0
Phase 1b	Grading and Utilities	Loader	Tractors/Loaders/Backhoes	Diesel	4	100	4	0.9	0	1.313235	1.313235	0	0
Phase 1b	Grading and Utilities	Tire Wash	Other Construction Equipment	Diesel	2	100	4	0.9	0	0.74535	0.74535	0	0
Phase 1b	Grading and Utilities	Excavator	Excavators	Diesel	4	359	8	0.6	0	4.504125	4.504125	0	0
Phase 1b	Grading and Utilities	Backhoe	Tractors/Loaders/Backhoes	Diesel	4	350	8	0.6	0	4.27565	4.27565	0	0
Phase 1b	Grading and Utilities	Gradall	Forklifts	Diesel	4	350	4	0.6	0	1.155581	1.155581	0	0
Phase 1b	Grading and Utilities	Compactor	Other Construction Equipment	Diesel	4	250	0.5	0.2	0	0.072224	0.072224	0	0
Phase 1b	Grading and Utilities	Paver	Pavers	Diesel	2	250	8	0.01	0	0.02889	0.02889	0	0
Phase 1b	Grading and Utilities	Generator	Generator Sets	Diesel	1	600	2	0.1	0	0.152702	0.152702	0	0
Phase 1b Office	South Garage 2023	Air Compressor	Air Compressors	Diesel	1	150	0.48	1	0	0	0.215471	0	0
Phase 1b Office	South Garage 2023	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	0.054653	1	0	0	0.037823	0	0
Phase 1b Office	South Garage 2023	Blade	Graders	Diesel	1	450	0	1	0	0	0	0	0
Phase 1b Office	South Garage 2023	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	0.054653	1	0	0	0.021613	0	0

Phase 1b Office	South Garage 2023	Boom Lift	Aerial Lifts	Diesel	1	40	0	1	0	0	0	0	0
Phase 1b Office	South Garage 2023	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0	0	0	0	0
Phase 1b Office	South Garage 2023	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0	0	0	0	0
Phase 1b Office	South Garage 2023	Concrete Pump	Pumps	Diesel	1	450	0.451485	1	0	0	0.803446	0	0
Phase 1b Office	South Garage 2023	Excavator	Excavators	Diesel	1	500	2.970297	1	0	0	3.01594	0	0
Phase 1b Office	South Garage 2023	Generator	Generator Sets	Diesel	1	25	3.237624	1	0	0	0.576156	0	0
Phase 1b Office	South Garage 2023	Gradall	Forklifts	Diesel	1	350	3	1	0	0	1.122247	0	0
Phase 1b Office	South Garage 2023	Hydro/Crawler Crane	Cranes	Diesel	1	550	4.923267	1	0	0	4.196462	0	0
Phase 1b Office	South Garage 2023	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	1.485149	1	0	0	0.420909	0	0
Phase 1b Office	South Garage 2023	Paver	Pavers	Diesel	1	250	0	1	0	0	0	0	0
Phase 1b Office	South Garage 2023	Pile Rig	Bore/Drill Rigs	Diesel	1	600	0.861386	1	0	0	1.380983	0	0
Phase 1b Office	South Garage 2023	Pressure Washer	Pressure Washers	Diesel	1	25	0.156832	1	0	0	0.011315	0	0
Phase 1b Office	South Garage 2023	Scraper	Scrapers	Diesel	1	600	0	1	0	0	0	0	0
Phase 1b Office	South Garage 2023	Tire Wash	Other Construction Equipment	Diesel	1	100	1.44802	1	0	0	0.465844	0	0
Phase 1b Office	South Garage 2024	Air Compressor	Air Compressors	Diesel	1	150	0.48	1	0	0	0	0.200538	0
Phase 1b Office	South Garage 2024	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	0	1	0	0	0	0	0
Phase 1b Office	South Garage 2024	Blade	Graders	Diesel	1	450	0	1	0	0	0	0	0
Phase 1b Office	South Garage 2024	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	0	1	0	0	0	0	0
Phase 1b Office	South Garage 2024	Boom Lift	Aerial Lifts	Diesel	1	40	4.737447	1	0	0	0	0.525913	0
Phase 1b Office	South Garage 2024	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0	0	0	0	0
Phase 1b Office	South Garage 2024	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0	0	0	0	0
Phase 1b Office	South Garage 2024	Concrete Pump	Pumps	Diesel	1	450	0.6	1	0	0	0	0.993736	0
Phase 1b Office	South Garage 2024	Excavator	Excavators	Diesel	1	500	0	1	0	0	0	0	0
Phase 1b Office	South Garage 2024	Generator	Generator Sets	Diesel	1	25	0	1	0	0	0	0	0
Phase 1b Office	South Garage 2024	Gradall	Forklifts	Diesel	1	350	3	1	0	0	0	1.044467	0
Phase 1b Office	South Garage 2024	Hydro/Crawler Crane	Cranes	Diesel	1	550	3.68617	1	0	0	0	2.924231	0
Phase 1b Office	South Garage 2024	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	0	1	0	0	0	0	0
Phase 1b Office	South Garage 2024	Paver	Pavers	Diesel	1	250	0	1	0	0	0	0	0
Phase 1b Office	South Garage 2024	Pile Rig	Bore/Drill Rigs	Diesel	1	600	0	1	0	0	0	0	0
Phase 1b Office	South Garage 2024	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0	0	0	0	0
Phase 1b Office	South Garage 2024	Scraper	Scrapers	Diesel	1	600	0	1	0	0	0	0	0
Phase 1b Office	South Garage 2024	Tire Wash	Other Construction Equipment	Diesel	1	100	1.5	1	0	0	0	0.449121	0
Phase 1b Office	Office Building 3 2023	Air Compressor	Air Compressors	Diesel	1	150	0.067119	1	0	0	0.026401	0	0
Phase 1b Office	Office Building 3 2023	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	2.576271	1	0	0	1.562257	0	0
Phase 1b Office	Office Building 3 2023	Blade	Graders	Diesel	1	450	0	1	0	0	0	0	0
Phase 1b Office	Office Building 3 2023	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	2.576271	1	0	0	0.892718	0	0
Phase 1b Office	Office Building 3 2023	Boom Lift	Aerial Lifts	Diesel	1	40	1.694915	1	0	0	0.177147	0	0
Phase 1b Office	Office Building 3 2023	Compactor	Other Construction Equipment	Diesel	1	250	0.206102	1	0	0	0.101336	0	0
Phase 1b Office	Office Building 3 2023	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0	0	0	0	0
Phase 1b Office	Office Building 3 2023	Concrete Pump	Pumps	Diesel	1	450	0.121356	1	0	0	0.189233	0	0
Phase 1b Office	Office Building 3 2023	Excavator	Excavators	Diesel	1	500	0.128814	1	0	0	0.114606	0	0
Phase 1b Office	Office Building 3 2023	Generator	Generator Sets	Diesel	1	25	4.813559	1	0	0	0.750588	0	0
Phase 1b Office	Office Building 3 2023	Gradall	Forklifts	Diesel	1	350	0.48	1	0	0	0.157337	0	0
Phase 1b Office	Office Building 3 2023	Hydro/Crawler Crane	Cranes	Diesel	1	550	3.322034	1	0	0	2.481166	0	0
Phase 1b Office	Office Building 3 2023	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	1.864407	1	0	0	0.463	0	0
Phase 1b Office	Office Building 3 2023	Paver	Pavers	Diesel	1	250	0	1	0	0	0	0	0
Phase 1b Office	Office Building 3 2023	Pile Rig	Bore/Drill Rigs	Diesel	1	600	1.864407	1	0	0	2.619105	0	0

Phase 1b Office	Office Building 3 2023	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0	0	0	0	0
Phase 1b Office	Office Building 3 2023	Scraper	Scrapers	Diesel	1	600	0	1	0	0	0	0	0
Phase 1b Office	Office Building 3 2023	Tire Wash	Other Construction Equipment	Diesel	1	100	1.5	1	0	0	0.422843	0	0
Phase 1b Office	Office Building 3 2024	Air Compressor	Air Compressors	Diesel	1	150	0	1	0	0	0	0	0
Phase 1b Office	Office Building 3 2024	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	0	1	0	0	0	0	0
Phase 1b Office	Office Building 3 2024	Blade	Graders	Diesel	1	450	0	1	0	0	0	0	0
Phase 1b Office	Office Building 3 2024	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	0	1	0	0	0	0	0
Phase 1b Office	Office Building 3 2024	Boom Lift	Aerial Lifts	Diesel	1	40	6.858779	1	0	0	0	1.061109	0
Phase 1b Office	Office Building 3 2024	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0	0	0	0	0
Phase 1b Office	Office Building 3 2024	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0	0	0	0	0
Phase 1b Office	Office Building 3 2024	Concrete Pump	Pumps	Diesel	1	450	0.005038	1	0	0	0	0.011629	0
Phase 1b Office	Office Building 3 2024	Excavator	Excavators	Diesel	1	500	0	1	0	0	0	0	0
Phase 1b Office	Office Building 3 2024	Generator	Generator Sets	Diesel	1	25	0	1	0	0	0	0	0
Phase 1b Office	Office Building 3 2024	Gradall	Forklifts	Diesel	1	350	0.48	1	0	0	0	0.232894	0
Phase 1b Office	Office Building 3 2024	Hydro/Crawler Crane	Cranes	Diesel	1	550	0	1	0	0	0	0	0
Phase 1b Office	Office Building 3 2024	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	0	1	0	0	0	0	0
Phase 1b Office	Office Building 3 2024	Paver	Pavers	Diesel	1	250	0	1	0	0	0	0	0
Phase 1b Office	Office Building 3 2024	Pile Rig	Bore/Drill Rigs	Diesel	1	600	0	1	0	0	0	0	0
Phase 1b Office	Office Building 3 2024	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0	0	0	0	0
Phase 1b Office	Office Building 3 2024	Scraper	Scrapers	Diesel	1	600	0	1	0	0	0	0	0
Phase 1b Office	Office Building 3 2024	Tire Wash	Other Construction Equipment	Diesel	1	100	1.5	1	0	0	0	0.625903	0
Phase 1b Office	Office Building 3 2025	Air Compressor	Air Compressors	Diesel	1	150	0	1	0	0	0	0	0
Phase 1b Office	Office Building 3 2025	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	0	1	0	0	0	0	0
Phase 1b Office	Office Building 3 2025	Blade	Graders	Diesel	1	450	0	1	0	0	0	0	0
Phase 1b Office	Office Building 3 2025	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	0	1	0	0	0	0	0
Phase 1b Office	Office Building 3 2025	Boom Lift	Aerial Lifts	Diesel	1	40	0	1	0	0	0	0	0
Phase 1b Office	Office Building 3 2025	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0	0	0	0	0
Phase 1b Office	Office Building 3 2025	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0	0	0	0	0
Phase 1b Office	Office Building 3 2025	Concrete Pump	Pumps	Diesel	1	450	0	1	0	0	0	0	0
Phase 1b Office	Office Building 3 2025	Excavator	Excavators	Diesel	1	500	0	1	0	0	0	0	0
Phase 1b Office	Office Building 3 2025	Generator	Generator Sets	Diesel	1	25	0	1	0	0	0	0	0
Phase 1b Office	Office Building 3 2025	Gradall	Forklifts	Diesel	1	350	0.48	1	0	0	0	0	0.04409
Phase 1b Office	Office Building 3 2025	Hydro/Crawler Crane	Cranes	Diesel	1	550	0	1	0	0	0	0	0
Phase 1b Office	Office Building 3 2025	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	0	1	0	0	0	0	0
Phase 1b Office	Office Building 3 2025	Paver	Pavers	Diesel	1	250	0	1	0	0	0	0	0
Phase 1b Office	Office Building 3 2025	Pile Rig	Bore/Drill Rigs	Diesel	1	600	0	1	0	0	0	0	0
Phase 1b Office	Office Building 3 2025	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0	0	0	0	0
Phase 1b Office	Office Building 3 2025	Scraper	Scrapers	Diesel	1	600	0	1	0	0	0	0	0
Phase 1b Office	Office Building 3 2025	Tire Wash	Other Construction Equipment	Diesel	1	100	1.5	1	0	0	0	0	0.10058
Phase 1b Office	Office Building 1 2023	Air Compressor	Air Compressors	Diesel	1	150	0.065363	1	0	0	0.026001	0	0
Phase 1b Office	Office Building 1 2023	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	2.24581	1	0	0	1.377253	0	0
Phase 1b Office	Office Building 1 2023	Blade	Graders	Diesel	1	450	0	1	0	0	0	0	0
Phase 1b Office	Office Building 1 2023	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	2.24581	1	0	0	0.787001	0	0
Phase 1b Office	Office Building 1 2023	Boom Lift	Aerial Lifts	Diesel	1	40	2.480447	1	0	0	0.262177	0	0
Phase 1b Office	Office Building 1 2023	Compactor	Other Construction Equipment	Diesel	1	250	0.179665	1	0	0	0.089335	0	0
Phase 1b Office	Office Building 1 2023	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0	0	0	0	0
Phase 1b Office	Office Building 1 2023	Concrete Pump	Pumps	Diesel	1	450	0.109274	1	0	0	0.172318	0	0

Phase 1b Office	Office Building 1 2023	Excavator	Excavators	Diesel	1	500	0.112291	1	0	0	0.101034	0	0
Phase 1b Office	Office Building 1 2023	Generator	Generator Sets	Diesel	1	25	4.424581	1	0	0	0.69773	0	0
Phase 1b Office	Office Building 1 2023	Gradall	Forklifts	Diesel	1	350	0.48	1	0	0	0.159115	0	0
Phase 1b Office	Office Building 1 2023	Hydro/Crawler Crane	Cranes	Diesel	1	550	2.916201	1	0	0	2.202668	0	0
Phase 1b Office	Office Building 1 2023	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	1.47486	1	0	0	0.3704	0	0
Phase 1b Office	Office Building 1 2023	Paver	Pavers	Diesel	1	250	0	1	0	0	0	0	0
Phase 1b Office	Office Building 1 2023	Pile Rig	Bore/Drill Rigs	Diesel	1	600	1.47486	1	0	0	2.095284	0	0
Phase 1b Office	Office Building 1 2023	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0	0	0	0	0
Phase 1b Office	Office Building 1 2023	Scraper	Scrapers	Diesel	1	600	0	1	0	0	0	0	0
Phase 1b Office	Office Building 1 2023	Tire Wash	Other Construction Equipment	Diesel	1	100	1.5	1	0	0	0.427621	0	0
Phase 1b Office	Office Building 1 2024	Air Compressor	Air Compressors	Diesel	1	150	0	1	0	0	0	0	0
Phase 1b Office	Office Building 1 2024	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	0	1	0	0	0	0	0
Phase 1b Office	Office Building 1 2024	Blade	Graders	Diesel	1	450	0	1	0	0	0	0	0
Phase 1b Office	Office Building 1 2024	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	0	1	0	0	0	0	0
Phase 1b Office	Office Building 1 2024	Boom Lift	Aerial Lifts	Diesel	1	40	6.554217	1	0	0	0	0.963678	0
Phase 1b Office	Office Building 1 2024	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0	0	0	0	0
Phase 1b Office	Office Building 1 2024	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0	0	0	0	0
Phase 1b Office	Office Building 1 2024	Concrete Pump	Pumps	Diesel	1	450	0.005301	1	0	0	0	0.011629	0
Phase 1b Office	Office Building 1 2024	Excavator	Excavators	Diesel	1	500	0	1	0	0	0	0	0
Phase 1b Office	Office Building 1 2024	Generator	Generator Sets	Diesel	1	25	0	1	0	0	0	0	0
Phase 1b Office	Office Building 1 2024	Gradall	Forklifts	Diesel	1	350	0.478072	1	0	0	0	0.220449	0
Phase 1b Office	Office Building 1 2024	Hydro/Crawler Crane	Cranes	Diesel	1	550	0	1	0	0	0	0	0
Phase 1b Office	Office Building 1 2024	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	0	1	0	0	0	0	0
Phase 1b Office	Office Building 1 2024	Paver	Pavers	Diesel	1	250	0	1	0	0	0	0	0
Phase 1b Office	Office Building 1 2024	Pile Rig	Bore/Drill Rigs	Diesel	1	600	0	1	0	0	0	0	0
Phase 1b Office	Office Building 1 2024	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0	0	0	0	0
Phase 1b Office	Office Building 1 2024	Scraper	Scrapers	Diesel	1	600	0	1	0	0	0	0	0
Phase 1b Office	Office Building 1 2024	Tire Wash	Other Construction Equipment	Diesel	1	100	1.5	1	0	0	0	0.594846	0
Phase 1b Office	Office Building 2 2023	Air Compressor	Air Compressors	Diesel	1	150	0.075669	1	0	0	0.026401	0	0
Phase 1b Office	Office Building 2 2023	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	2.484076	1	0	0	1.336141	0	0
Phase 1b Office	Office Building 2 2023	Blade	Graders	Diesel	1	450	0	1	0	0	0	0	0
Phase 1b Office	Office Building 2 2023	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	2.484076	1	0	0	0.763509	0	0
Phase 1b Office	Office Building 2 2023	Boom Lift	Aerial Lifts	Diesel	1	40	1.22293	1	0	0	0.113374	0	0
Phase 1b Office	Office Building 2 2023	Compactor	Other Construction Equipment	Diesel	1	250	0.198726	1	0	0	0.086669	0	0
Phase 1b Office	Office Building 2 2023	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0	0	0	0	0
Phase 1b Office	Office Building 2 2023	Concrete Pump	Pumps	Diesel	1	450	0.124204	1	0	0	0.17179	0	0
Phase 1b Office	Office Building 2 2023	Excavator	Excavators	Diesel	1	500	0.124204	1	0	0	0.098018	0	0
Phase 1b Office	Office Building 2 2023	Generator	Generator Sets	Diesel	1	25	5.006369	1	0	0	0.692444	0	0
Phase 1b Office	Office Building 2 2023	Gradall	Forklifts	Diesel	1	350	0.48	1	0	0	0.139559	0	0
Phase 1b Office	Office Building 2 2023	Hydro/Crawler Crane	Cranes	Diesel	1	550	3.324841	1	0	0	2.202668	0	0
Phase 1b Office	Office Building 2 2023	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	1.681529	1	0	0	0.3704	0	0
Phase 1b Office	Office Building 2 2023	Paver	Pavers	Diesel	1	250	0	1	0	0	0	0	0
Phase 1b Office	Office Building 2 2023	Pile Rig	Bore/Drill Rigs	Diesel	1	600	1.681529	1	0	0	2.095284	0	0
Phase 1b Office	Office Building 2 2023	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0	0	0	0	0
Phase 1b Office	Office Building 2 2023	Scraper	Scrapers	Diesel	1	600	0	1	0	0	0	0	0
Phase 1b Office	Office Building 2 2023	Tire Wash	Other Construction Equipment	Diesel	1	100	1.5	1	0	0	0.375064	0	0
Phase 1b Office	Office Building 2 2024	Air Compressor	Air Compressors	Diesel	1	150	0	1	0	0	0	0	0

Phase 1b Office	Office Building 2 2024	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	0	1	0	0	0	0	0
Phase 1b Office	Office Building 2 2024	Blade	Graders	Diesel	1	450	0	1	0	0	0	0	0
Phase 1b Office	Office Building 2 2024	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	0	1	0	0	0	0	0
Phase 1b Office	Office Building 2 2024	Boom Lift	Aerial Lifts	Diesel	1	40	7.270992	1	0	0	0	1.124882	0
Phase 1b Office	Office Building 2 2024	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0	0	0	0	0
Phase 1b Office	Office Building 2 2024	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0	0	0	0	0
Phase 1b Office	Office Building 2 2024	Concrete Pump	Pumps	Diesel	1	450	0.005038	1	0	0	0	0.011629	0
Phase 1b Office	Office Building 2 2024	Excavator	Excavators	Diesel	1	500	0	1	0	0	0	0	0
Phase 1b Office	Office Building 2 2024	Generator	Generator Sets	Diesel	1	25	0	1	0	0	0	0	0
Phase 1b Office	Office Building 2 2024	Gradall	Forklifts	Diesel	1	350	0.48	1	0	0	0	0.232894	0
Phase 1b Office	Office Building 2 2024	Hydro/Crawler Crane	Cranes	Diesel	1	550	0	1	0	0	0	0	0
Phase 1b Office	Office Building 2 2024	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	0	1	0	0	0	0	0
Phase 1b Office	Office Building 2 2024	Paver	Pavers	Diesel	1	250	0	1	0	0	0	0	0
Phase 1b Office	Office Building 2 2024	Pile Rig	Bore/Drill Rigs	Diesel	1	600	0	1	0	0	0	0	0
Phase 1b Office	Office Building 2 2024	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0	0	0	0	0
Phase 1b Office	Office Building 2 2024	Scraper	Scrapers	Diesel	1	600	0	1	0	0	0	0	0
Phase 1b Office	Office Building 2 2024	Tire Wash	Other Construction Equipment	Diesel	1	100	1.5	1	0	0	0	0.625903	0
Phase 1b Office	Office Building 2 2025	Air Compressor	Air Compressors	Diesel	1	150	0	1	0	0	0	0	0
Phase 1b Office	Office Building 2 2025	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	0	1	0	0	0	0	0
Phase 1b Office	Office Building 2 2025	Blade	Graders	Diesel	1	450	0	1	0	0	0	0	0
Phase 1b Office	Office Building 2 2025	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	0	1	0	0	0	0	0
Phase 1b Office	Office Building 2 2025	Boom Lift	Aerial Lifts	Diesel	1	40	0	1	0	0	0	0	0
Phase 1b Office	Office Building 2 2025	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0	0	0	0	0
Phase 1b Office	Office Building 2 2025	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0	0	0	0	0
Phase 1b Office	Office Building 2 2025	Concrete Pump	Pumps	Diesel	1	450	0	1	0	0	0	0	0
Phase 1b Office	Office Building 2 2025	Excavator	Excavators	Diesel	1	500	0	1	0	0	0	0	0
Phase 1b Office	Office Building 2 2025	Generator	Generator Sets	Diesel	1	25	0	1	0	0	0	0	0
Phase 1b Office	Office Building 2 2025	Gradall	Forklifts	Diesel	1	350	0.48	1	0	0	0	0	0.004978
Phase 1b Office	Office Building 2 2025	Hydro/Crawler Crane	Cranes	Diesel	1	550	0	1	0	0	0	0	0
Phase 1b Office	Office Building 2 2025	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	0	1	0	0	0	0	0
Phase 1b Office	Office Building 2 2025	Paver	Pavers	Diesel	1	250	0	1	0	0	0	0	0
Phase 1b Office	Office Building 2 2025	Pile Rig	Bore/Drill Rigs	Diesel	1	600	0	1	0	0	0	0	0
Phase 1b Office	Office Building 2 2025	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0	0	0	0	0
Phase 1b Office	Office Building 2 2025	Scraper	Scrapers	Diesel	1	600	0	1	0	0	0	0	0
Phase 1b Office	Office Building 2 2025	Tire Wash	Other Construction Equipment	Diesel	1	100	1.5	1	0	0	0	0	0.011356
Phase 1b Office	Office Building 5 2023	Air Compressor	Air Compressors	Diesel	1	150	0.058812	1	0	0	0.026401	0	0
Phase 1b Office	Office Building 5 2023	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	2.643564	1	0	0	1.829485	0	0
Phase 1b Office	Office Building 5 2023	Blade	Graders	Diesel	1	450	0	1	0	0	0	0	0
Phase 1b Office	Office Building 5 2023	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	2.643564	1	0	0	1.04542	0	0
Phase 1b Office	Office Building 5 2023	Boom Lift	Aerial Lifts	Diesel	1	40	2.19802	1	0	0	0.262177	0	0
Phase 1b Office	Office Building 5 2023	Compactor	Other Construction Equipment	Diesel	1	250	0.211485	1	0	0	0.118669	0	0
Phase 1b Office	Office Building 5 2023	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0	0	0	0	0
Phase 1b Office	Office Building 5 2023	Concrete Pump	Pumps	Diesel	1	450	0.117327	1	0	0	0.20879	0	0
Phase 1b Office	Office Building 5 2023	Excavator	Excavators	Diesel	1	500	0.132178	1	0	0	0.134209	0	0
Phase 1b Office	Office Building 5 2023	Generator	Generator Sets	Diesel	1	25	4.60396	1	0	0	0.819304	0	0
Phase 1b Office	Office Building 5 2023	Gradall	Forklifts	Diesel	1	350	0.48	1	0	0	0.17956	0	0
Phase 1b Office	Office Building 5 2023	Hydro/Crawler Crane	Cranes	Diesel	1	550	3.267327	1	0	0	2.784982	0	0

Phase 1b Office	Office Building 5 2023	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	1.960396	1	0	0	0.5556	0	0
Phase 1b Office	Office Building 5 2023	Paver	Pavers	Diesel	1	250	0	1	0	0	0	0	0
Phase 1b Office	Office Building 5 2023	Pile Rig	Bore/Drill Rigs	Diesel	1	600	1.960396	1	0	0	3.142926	0	0
Phase 1b Office	Office Building 5 2023	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0	0	0	0	0
Phase 1b Office	Office Building 5 2023	Scraper	Scrapers	Diesel	1	600	0	1	0	0	0	0	0
Phase 1b Office	Office Building 5 2023	Tire Wash	Other Construction Equipment	Diesel	1	100	1.5	1	0	0	0.482566	0	0
Phase 1b Office	Office Building 5 2024	Air Compressor	Air Compressors	Diesel	1	150	0	1	0	0	0	0	0
Phase 1b Office	Office Building 5 2024	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	0	1	0	0	0	0	0
Phase 1b Office	Office Building 5 2024	Blade	Graders	Diesel	1	450	0	1	0	0	0	0	0
Phase 1b Office	Office Building 5 2024	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	0	1	0	0	0	0	0
Phase 1b Office	Office Building 5 2024	Boom Lift	Aerial Lifts	Diesel	1	40	6.194656	1	0	0	0	0.958364	0
Phase 1b Office	Office Building 5 2024	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0	0	0	0	0
Phase 1b Office	Office Building 5 2024	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0	0	0	0	0
Phase 1b Office	Office Building 5 2024	Concrete Pump	Pumps	Diesel	1	450	0.004809	1	0	0	0	0.0111	0
Phase 1b Office	Office Building 5 2024	Excavator	Excavators	Diesel	1	500	0	1	0	0	0	0	0
Phase 1b Office	Office Building 5 2024	Generator	Generator Sets	Diesel	1	25	0	1	0	0	0	0	0
Phase 1b Office	Office Building 5 2024	Gradall	Forklifts	Diesel	1	350	0.48	1	0	0	0	0.232894	0
Phase 1b Office	Office Building 5 2024	Hydro/Crawler Crane	Cranes	Diesel	1	550	0	1	0	0	0	0	0
Phase 1b Office	Office Building 5 2024	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	0	1	0	0	0	0	0
Phase 1b Office	Office Building 5 2024	Paver	Pavers	Diesel	1	250	0	1	0	0	0	0	0
Phase 1b Office	Office Building 5 2024	Pile Rig	Bore/Drill Rigs	Diesel	1	600	0	1	0	0	0	0	0
Phase 1b Office	Office Building 5 2024	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0	0	0	0	0
Phase 1b Office	Office Building 5 2024	Scraper	Scrapers	Diesel	1	600	0	1	0	0	0	0	0
Phase 1b Office	Office Building 5 2024	Tire Wash	Other Construction Equipment	Diesel	1	100	1.5	1	0	0	0	0.625903	0
Phase 1b Office	Office Building 5 2025	Air Compressor	Air Compressors	Diesel	1	150	0	1	0	0	0	0	0
Phase 1b Office	Office Building 5 2025	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	0	1	0	0	0	0	0
Phase 1b Office	Office Building 5 2025	Blade	Graders	Diesel	1	450	0	1	0	0	0	0	0
Phase 1b Office	Office Building 5 2025	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	0	1	0	0	0	0	0
Phase 1b Office	Office Building 5 2025	Boom Lift	Aerial Lifts	Diesel	1	40	0	1	0	0	0	0	0
Phase 1b Office	Office Building 5 2025	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0	0	0	0	0
Phase 1b Office	Office Building 5 2025	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0	0	0	0	0
Phase 1b Office	Office Building 5 2025	Concrete Pump	Pumps	Diesel	1	450	0	1	0	0	0	0	0
Phase 1b Office	Office Building 5 2025	Excavator	Excavators	Diesel	1	500	0	1	0	0	0	0	0
Phase 1b Office	Office Building 5 2025	Generator	Generator Sets	Diesel	1	25	0	1	0	0	0	0	0
Phase 1b Office	Office Building 5 2025	Gradall	Forklifts	Diesel	1	350	0.48	1	0	0	0	0	0.040534
Phase 1b Office	Office Building 5 2025	Hydro/Crawler Crane	Cranes	Diesel	1	550	0	1	0	0	0	0	0
Phase 1b Office	Office Building 5 2025	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	0	1	0	0	0	0	0
Phase 1b Office	Office Building 5 2025	Paver	Pavers	Diesel	1	250	0	1	0	0	0	0	0
Phase 1b Office	Office Building 5 2025	Pile Rig	Bore/Drill Rigs	Diesel	1	600	0	1	0	0	0	0	0
Phase 1b Office	Office Building 5 2025	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0	0	0	0	0
Phase 1b Office	Office Building 5 2025	Scraper	Scrapers	Diesel	1	600	0	1	0	0	0	0	0
Phase 1b Office	Office Building 5 2025	Tire Wash	Other Construction Equipment	Diesel	1	100	1.5	1	0	0	0	0	0.092469
Phase 1b Office	Office Building 6 2023	Air Compressor	Air Compressors	Diesel	1	150	0.062206	1	0	0	0.0188	0	0
Phase 1b Office	Office Building 6 2023	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	3.926471	1	0	0	1.829485	0	0
Phase 1b Office	Office Building 6 2023	Blade	Graders	Diesel	1	450	0	1	0	0	0	0	0
Phase 1b Office	Office Building 6 2023	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	3.926471	1	0	0	1.04542	0	0
Phase 1b Office	Office Building 6 2023	Boom Lift	Aerial Lifts	Diesel	1	40	0	1	0	0	0	0	0

Phase 1b Office	Office Building 6 2023	Compactor	Other Construction Equipment	Diesel	1	250	0.314118	1	0	0	0.118669	0	0
Phase 1b Office	Office Building 6 2023	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0	0	0	0	0
Phase 1b Office	Office Building 6 2023	Concrete Pump	Pumps	Diesel	1	450	0.157941	1	0	0	0.189233	0	0
Phase 1b Office	Office Building 6 2023	Excavator	Excavators	Diesel	1	500	0.196324	1	0	0	0.134209	0	0
Phase 1b Office	Office Building 6 2023	Generator	Generator Sets	Diesel	1	25	6	1	0	0	0.718873	0	0
Phase 1b Office	Office Building 6 2023	Gradall	Forklifts	Diesel	1	350	0.48	1	0	0	0.120892	0	0
Phase 1b Office	Office Building 6 2023	Hydro/Crawler Crane	Cranes	Diesel	1	550	4.897059	1	0	0	2.8103	0	0
Phase 1b Office	Office Building 6 2023	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	3	1	0	0	0.572436	0	0
Phase 1b Office	Office Building 6 2023	Paver	Pavers	Diesel	1	250	0	1	0	0	0	0	0
Phase 1b Office	Office Building 6 2023	Pile Rig	Bore/Drill Rigs	Diesel	1	600	3	1	0	0	3.238167	0	0
Phase 1b Office	Office Building 6 2023	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0	0	0	0	0
Phase 1b Office	Office Building 6 2023	Scraper	Scrapers	Diesel	1	600	0	1	0	0	0	0	0
Phase 1b Office	Office Building 6 2023	Tire Wash	Other Construction Equipment	Diesel	1	100	1.5	1	0	0	0.324896	0	0
Phase 1b Office	Office Building 6 2024	Air Compressor	Air Compressors	Diesel	1	150	0.013053	1	0	0	0	0.0076	0
Phase 1b Office	Office Building 6 2024	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	0	1	0	0	0	0	0
Phase 1b Office	Office Building 6 2024	Blade	Graders	Diesel	1	450	0	1	0	0	0	0	0
Phase 1b Office	Office Building 6 2024	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	0	1	0	0	0	0	0
Phase 1b Office	Office Building 6 2024	Boom Lift	Aerial Lifts	Diesel	1	40	8.003817	1	0	0	0	1.238256	0
Phase 1b Office	Office Building 6 2024	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0	0	0	0	0
Phase 1b Office	Office Building 6 2024	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0	0	0	0	0
Phase 1b Office	Office Building 6 2024	Concrete Pump	Pumps	Diesel	1	450	0.013969	1	0	0	0	0.032244	0
Phase 1b Office	Office Building 6 2024	Excavator	Excavators	Diesel	1	500	0	1	0	0	0	0	0
Phase 1b Office	Office Building 6 2024	Generator	Generator Sets	Diesel	1	25	0.435115	1	0	0	0	0.100431	0
Phase 1b Office	Office Building 6 2024	Gradall	Forklifts	Diesel	1	350	0.48	1	0	0	0	0.232894	0
Phase 1b Office	Office Building 6 2024	Hydro/Crawler Crane	Cranes	Diesel	1	550	0	1	0	0	0	0	0
Phase 1b Office	Office Building 6 2024	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	0	1	0	0	0	0	0
Phase 1b Office	Office Building 6 2024	Paver	Pavers	Diesel	1	250	0	1	0	0	0	0	0
Phase 1b Office	Office Building 6 2024	Pile Rig	Bore/Drill Rigs	Diesel	1	600	0	1	0	0	0	0	0
Phase 1b Office	Office Building 6 2024	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0	0	0	0	0
Phase 1b Office	Office Building 6 2024	Scraper	Scrapers	Diesel	1	600	0	1	0	0	0	0	0
Phase 1b Office	Office Building 6 2024	Tire Wash	Other Construction Equipment	Diesel	1	100	1.5	1	0	0	0	0.625903	0
Phase 1b Office	Office Building 6 2025	Air Compressor	Air Compressors	Diesel	1	150	0	1	0	0	0	0	0
Phase 1b Office	Office Building 6 2025	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	0	1	0	0	0	0	0
Phase 1b Office	Office Building 6 2025	Blade	Graders	Diesel	1	450	0	1	0	0	0	0	0
Phase 1b Office	Office Building 6 2025	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	0	1	0	0	0	0	0
Phase 1b Office	Office Building 6 2025	Boom Lift	Aerial Lifts	Diesel	1	40	0	1	0	0	0	0	0
Phase 1b Office	Office Building 6 2025	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0	0	0	0	0
Phase 1b Office	Office Building 6 2025	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0	0	0	0	0
Phase 1b Office	Office Building 6 2025	Concrete Pump	Pumps	Diesel	1	450	0	1	0	0	0	0	0
Phase 1b Office	Office Building 6 2025	Excavator	Excavators	Diesel	1	500	0	1	0	0	0	0	0
Phase 1b Office	Office Building 6 2025	Generator	Generator Sets	Diesel	1	25	0	1	0	0	0	0	0
Phase 1b Office	Office Building 6 2025	Gradall	Forklifts	Diesel	1	350	0.48	1	0	0	0	0	0.086757
Phase 1b Office	Office Building 6 2025	Hydro/Crawler Crane	Cranes	Diesel	1	550	0	1	0	0	0	0	0
Phase 1b Office	Office Building 6 2025	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	0	1	0	0	0	0	0
Phase 1b Office	Office Building 6 2025	Paver	Pavers	Diesel	1	250	0	1	0	0	0	0	0
Phase 1b Office	Office Building 6 2025	Pile Rig	Bore/Drill Rigs	Diesel	1	600	0	1	0	0	0	0	0
Phase 1b Office	Office Building 6 2025	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0	0	0	0	0

Phase 1b Office	Office Building 6 2025	Scraper	Scrapers	Diesel	1	600	0	1	0	0	0	0	0
Phase 1b Office	Office Building 6 2025	Tire Wash	Other Construction Equipment	Diesel	1	100	1.5	1	0	0	0	0	0.197915
Phase 1b Mixed Use	Parcel 7 Foundations	Pile Rig	Bore/Drill Rigs	Diesel	0	600	8	0.4	0	0	0	0	0
Phase 1b Mixed Use	Parcel 7 Foundations	Generator	Generator Sets	Diesel	0	25	6	1	0	0	0	0	0
Phase 1b Mixed Use	Parcel 7 Foundations	Tire Wash	Other Construction Equipment	Diesel	1	100	4	0.9	0	0	0	0.665081	0
Phase 1b Mixed Use	Parcel 7 Foundations	Excavator	Excavators	Diesel	1	131	8	0.6	0	0	0	0.855497	0
Phase 1b Mixed Use	Parcel 7 Foundations	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	90	8	0.6	0	0	0	0.703086	0
Phase 1b Mixed Use	Parcel 7 Foundations	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	70	8	0.8	0	0	0	0.729126	0
Phase 1b Mixed Use	Parcel 7 Foundations	Gradall	Forklifts	Diesel	1	74	4	0.8	0	0	0	0.208322	0
Phase 1b Mixed Use	Parcel 7 Foundations	Crane	Cranes	Diesel	1	215	4	0.5	0	0	0	0.382686	0
Phase 1b Mixed Use	Parcel 7 Foundations	Concrete Pump	Pumps	Diesel	1	450	0.25	0.5	0	0	0	0.127741	0
Phase 1b Mixed Use	Parcel 7 Core and Shell	Generator	Generator Sets	Diesel	0	25	6	1	0	0	0	0	0
Phase 1b Mixed Use	Parcel 7 Core and Shell	Tire Wash	Other Construction Equipment	Diesel	1	100	4	0.9	0	0	0	0.739616	0
Phase 1b Mixed Use	Parcel 7 Core and Shell	Crane	Cranes	Diesel	1	600	8	0.2	0	0	0	0.950116	0
Phase 1b Mixed Use	Parcel 7 Core and Shell	Gradall	Forklifts	Diesel	1	74	4	0.8	0	0	0	0.231668	0
Phase 1b Mixed Use	Parcel 7 Core and Shell	Concrete Pump	Pumps	Diesel	0	450	6	0.225	0	0	0	0	0
Phase 1b Mixed Use	Parcel 7 Core and Shell	Air Compressor	Air Compressors	Diesel	0	140	2	0.4	0	0	0	0	0
Phase 1b Mixed Use	Parcel 7 Core and Shell	Boom Lift	Aerial Lifts	Diesel	0	50	6	0.2	0	0	0	0	0
Phase 1b Mixed Use	Parcel 7 Tenant Improvements	Generator	Generator Sets	Diesel	0	25	6	0.85	0	0	0	0	0
Phase 1b Mixed Use	Parcel 7 Tenant Improvements	Tire Wash	Other Construction Equipment	Diesel	1	100	4	0.9	0	0	0	0.097469	0.665775
Phase 1b Mixed Use	Parcel 7 Tenant Improvements	Gradall	Forklifts	Diesel	1	74	4	0.8	0	0	0	0.03053	0.208539
Phase 1b Mixed Use	Parcel 7 Landscaping	Excavator	Excavators	Diesel	1	25	8	0.9	0	0	0	0	0.117549
Phase 1b Mixed Use	Parcel 7 Landscaping	Generator	Generator Sets	Diesel	0	25	6	0.5	0	0	0	0	0
Phase 1b Mixed Use	Parcel 7 Landscaping	Tire Wash	Other Construction Equipment	Diesel	1	100	4	0.9	0	0	0	0	0.225818
Phase 1b Mixed Use	Parcel 7 Landscaping	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	90	8	0.6	0	0	0	0	0.238722
Phase 1b Mixed Use	Parcel 7 Landscaping	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	70	8	0.8	0	0	0	0	0.247564
Phase 1b Mixed Use	Parcel 6 Foundations	Pile Rig	Bore/Drill Rigs	Diesel	0	600	8	0.4	0	0	0	0	0
Phase 1b Mixed Use	Parcel 6 Foundations	Generator	Generator Sets	Diesel	0	25	6	1	0	0	0	0	0
Phase 1b Mixed Use	Parcel 6 Foundations	Tire Wash	Other Construction Equipment	Diesel	1	100	4	0.9	0	0	0	0.665081	0
Phase 1b Mixed Use	Parcel 6 Foundations	Excavator	Excavators	Diesel	1	131	8	0.6	0	0	0	0.855497	0
Phase 1b Mixed Use	Parcel 6 Foundations	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	90	8	0.6	0	0	0	0.703086	0
Phase 1b Mixed Use	Parcel 6 Foundations	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	70	8	0.8	0	0	0	0.729126	0
Phase 1b Mixed Use	Parcel 6 Foundations	Gradall	Forklifts	Diesel	1	74	4	0.8	0	0	0	0.208322	0
Phase 1b Mixed Use	Parcel 6 Foundations	Crane	Cranes	Diesel	1	215	4	0.5	0	0	0	0.382686	0
Phase 1b Mixed Use	Parcel 6 Foundations	Concrete Pump	Pumps	Diesel	1	450	0.5	0.5	0	0	0	0.255482	0
Phase 1b Mixed Use	Parcel 6 Core and Shell	Generator	Generator Sets	Diesel	0	25	6	1	0	0	0	0	0
Phase 1b Mixed Use	Parcel 6 Core and Shell	Tire Wash	Other Construction Equipment	Diesel	1	100	4	0.9	0	0	0	0.46441	0.186884
Phase 1b Mixed Use	Parcel 6 Core and Shell	Crane	Cranes	Diesel	1	600	8	0.2	0	0	0	0.596585	0.282825
Phase 1b Mixed Use	Parcel 6 Core and Shell	Gradall	Forklifts	Diesel	2	74	4	0.8	0	0	0	0.290932	0.117074
Phase 1b Mixed Use	Parcel 6 Core and Shell	Concrete Pump	Pumps	Diesel	0	450	6	0.225	0	0	0	0	0
Phase 1b Mixed Use	Parcel 6 Core and Shell	Air Compressor	Air Compressors	Diesel	0	140	2	0.4	0	0	0	0	0
Phase 1b Mixed Use	Parcel 6 Core and Shell	Boom Lift	Aerial Lifts	Diesel	0	50	6	0.2	0	0	0	0	0
Phase 1b Mixed Use	Parcel 6 Tenant Improvements	Generator	Generator Sets	Diesel	0	25	6	0.85	0	0	0	0	0
Phase 1b Mixed Use	Parcel 6 Tenant Improvements	Tire Wash	Other Construction Equipment	Diesel	1	100	4	0.9	0	0	0	0	0.728069
Phase 1b Mixed Use	Parcel 6 Tenant Improvements	Gradall	Forklifts	Diesel	1	74	4	0.8	0	0	0	0	0.228051
Phase 1b Mixed Use	Parcel 6 Landscaping	Excavator	Excavators	Diesel	1	25	8	0.9	0	0	0	0	0.054721
Phase 1b Mixed Use	Parcel 6 Landscaping	Generator	Generator Sets	Diesel	0	25	6	0.5	0	0	0	0	0

Phase 1b Mixed Use	Parcel 6 Landscaping	Tire Wash	Other Construction Equipment	Diesel	0	100	4	0.9	0	0	0	0	0
Phase 1b Mixed Use	Parcel 6 Landscaping	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	90	8	0.6	0	0	0	0	0.111129
Phase 1b Mixed Use	Parcel 6 Landscaping	Bob Cat	Tractors/Loaders/Backhoes	Diesel	2	70	8	0.8	0	0	0	0	0.23049
Phase 2 Mixed Use	Grading and Utilities	Blade	Graders	Diesel	1	359	8	0.15	0	0	0.102802	0	0
Phase 2 Mixed Use	Grading and Utilities	Scraper	Scrapers	Diesel	1	52	8	0.15	0	0	0.024987	0	0
Phase 2 Mixed Use	Grading and Utilities	Loader	Tractors/Loaders/Backhoes	Diesel	2	100	4	0.9	0	0	0.22224	0	0
Phase 2 Mixed Use	Grading and Utilities	Tire Wash	Other Construction Equipment	Diesel	1	100	4	0.9	0	0	0.126136	0	0
Phase 2 Mixed Use	Grading and Utilities	Excavator	Excavators	Diesel	2	359	8	0.6	0	0	0.762236	0	0
Phase 2 Mixed Use	Grading and Utilities	Backhoe	Tractors/Loaders/Backhoes	Diesel	2	350	8	0.6	0	0	0.723572	0	0
Phase 2 Mixed Use	Grading and Utilities	Gradall	Forklifts	Diesel	2	350	4	0.6	0	0	0.19556	0	0
Phase 2 Mixed Use	Grading and Utilities	Compactor	Other Construction Equipment	Diesel	2	250	0.5	0.2	0	0	0.012222	0	0
Phase 2 Mixed Use	Grading and Utilities	Paver	Pavers	Diesel	1	250	8	0.01	0	0	0.004889	0	0
Phase 2 Mixed Use	Grading and Utilities	Generator	Generator Sets	Diesel	1	600	2	0.1	0	0	0.051684	0	0
Phase 2 Mixed Use	Tunnel Construction	Crane	Cranes	Diesel	1	290	6	0.35	0	0	0.817657	0.406492	0
Phase 2 Mixed Use	Tunnel Construction	Excavator	Excavators	Diesel	2	170	6	0.45	0	0	1.884208	0.936721	0
Phase 2 Mixed Use	Tunnel Construction	Loader	Tractors/Loaders/Backhoes	Diesel	1	250	6	0.45	0	0	1.156275	0.574834	0
Phase 2 Mixed Use	Tunnel Construction	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	103	6	0.4	0	0	0.60695	0.301741	0
Phase 2 Mixed Use	Tunnel Construction	Gradall	Forklifts	Diesel	1	130	6	0.35	0	0	0.294914	0.146614	0
Phase 2 Mixed Use	Tunnel Construction	Compressor	Air Compressors	Diesel	2	50	6	0.3	0	0	0.573346	0.285035	0
Phase 2 Mixed Use	Foundations	Pile Rig	Bore/Drill Rigs	Diesel	0	600	8	0.4	0	0	0	0	0
Phase 2 Mixed Use	Foundations	Generator	Generator Sets	Diesel	2	25	6	1	0	0	0	0.25372	0.651214
Phase 2 Mixed Use	Foundations	Tire Wash	Other Construction Equipment	Diesel	2	100	4	0.9	0	0	0	0.275206	0.770897
Phase 2 Mixed Use	Foundations	Excavator	Excavators	Diesel	2	131	8	0.6	0	0	0	0.353999	1.084754
Phase 2 Mixed Use	Foundations	Backhoe	Tractors/Loaders/Backhoes	Diesel	2	90	8	0.6	0	0	0	0.290932	0.814948
Phase 2 Mixed Use	Foundations	Bob Cat	Tractors/Loaders/Backhoes	Diesel	2	70	8	0.8	0	0	0	0.301707	0.845132
Phase 2 Mixed Use	Foundations	Gradall	Forklifts	Diesel	2	74	4	0.8	0	0	0	0.086202	0.241466
Phase 2 Mixed Use	Foundations	Crane	Cranes	Diesel	2	215	4	0.5	0	0	0	0.158353	0.522564
Phase 2 Mixed Use	Foundations	Concrete Pump	Pumps	Diesel	3	450	0.5	0.5	0	0	0	0.158575	0.523297
Phase 2 Mixed Use	Core and Shell	Generator	Generator Sets	Diesel	2	25	6	1	0	0	0	0	0.914331
Phase 2 Mixed Use	Core and Shell	Tire Wash	Other Construction Equipment	Diesel	2	100	4	0.9	0	0	0	0	1.082371
Phase 2 Mixed Use	Core and Shell	Crane	Cranes	Diesel	2	600	8	0.2	0	0	0	0	1.63803
Phase 2 Mixed Use	Core and Shell	Gradall	Forklifts	Diesel	3	74	4	0.8	0	0	0	0	0.508542
Phase 2 Mixed Use	Core and Shell	Concrete Pump	Pumps	Diesel	0	450	6	0.45	0	0	0	0	0
Phase 2 Mixed Use	Core and Shell	Air Compressor	Air Compressors	Diesel	0	140	2	0.8	0	0	0	0	0
Phase 2 Mixed Use	Core and Shell	Boom Lift	Aerial Lifts	Diesel	0	50	6	0.4	0	0	0	0	0
Phase 2 Mixed Use	Tenant Improvements	Generator	Generator Sets	Diesel	2	25	6	0.85	0	0	0	0	0.139781
Phase 2 Mixed Use	Tenant Improvements	Tire Wash	Other Construction Equipment	Diesel	2	100	4	0.9	0	0	0	0	0.194671
Phase 2 Mixed Use	Tenant Improvements	Gradall	Forklifts	Diesel	1	74	4	0.8	0	0	0	0	0.030488
Phase 2 Mixed Use	Landscaping	Excavator	Excavators	Diesel	1	25	8	0.9	0	0	0	0	0
Phase 2 Mixed Use	Landscaping	Generator	Generator Sets	Diesel	0	25	6	0.5	0	0	0	0	0
Phase 2 Mixed Use	Landscaping	Tire Wash	Other Construction Equipment	Diesel	1	100	4	0.9	0	0	0	0	0
Phase 2 Mixed Use	Landscaping	Backhoe	Tractors/Loaders/Backhoes	Diesel	2	90	8	0.6	0	0	0	0	0
Phase 2 Mixed Use	Landscaping	Bob Cat	Tractors/Loaders/Backhoes	Diesel	3	70	8	0.8	0	0	0	0	0
Alternate 1	Demolition	Excavator	Excavators	Diesel	1	131	8	0.9	0	0	0	0.243374	0
Alternate 1	Demolition	Generator	Generator Sets	Diesel	1	25	6	0.5	0	0	0	0.058144	0
Alternate 1	Demolition	Tire Wash	Other Construction Equipment	Diesel	2	100	4	0.9	0	0	0	0.252272	0
Alternate 1	Demolition	Bob Cat	Tractors/Loaders/Backhoes	Diesel	2	70	8	0.8	0	0	0	0.276565	0

Alternate 1	Demolition	Pressure Washer	Pressure Washers	Diesel	2	25	8	1	0	0	0	0.125717	0
Alternate 1	Demolition	Air Compressor	Air Compressors	Diesel	1	140	6	0.7	0	0	0	0.191649	0
Alternate 1	Grading and Utilities	Loader	Tractors/Loaders/Backhoes	Diesel	2	100	4	0.9	0	0	0	0.010102	0.150916
Alternate 1	Grading and Utilities	Tire Wash	Other Construction Equipment	Diesel	1	100	4	0.9	0	0	0	0.005733	0.085655
Alternate 1	Grading and Utilities	Excavator	Excavators	Diesel	1	359	8	0.6	0	0	0	0.017324	0.304895
Alternate 1	Grading and Utilities	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	90	8	0.6	0	0	0	0.006061	0.09055
Alternate 1	Grading and Utilities	Gradall	Forklifts	Diesel	1	74	4	0.6	0	0	0	0.001347	0.020122
Alternate 1	Grading and Utilities	Compactor	Other Construction Equipment	Diesel	1	250	0.5	0.2	0	0	0	0.000278	0.004889
Alternate 1	Grading and Utilities	Paver	Pavers	Diesel	1	250	8	0.01	0	0	0	0.000222	0.003911
Alternate 1	Grading and Utilities	Generator	Generator Sets	Diesel	1	600	2	0.1	0	0	0	0.002349	0.041347
Alternate 1	Foundations	Generator	Generator Sets	Diesel	1	25	6	1	0	0	0	0	0.072357
Alternate 1	Foundations	Tire Wash	Other Construction Equipment	Diesel	1	100	4	0.9	0	0	0	0	0.085655
Alternate 1	Foundations	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	90	8	0.6	0	0	0	0	0.09055
Alternate 1	Foundations	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	70	8	0.8	0	0	0	0	0.093904
Alternate 1	Foundations	Gradall	Forklifts	Diesel	1	74	4	0.8	0	0	0	0	0.02683
Alternate 1	Foundations	Concrete Pump	Pumps	Diesel	1	450	6	0.3	0	0	0	0	0.279092
Alternate 1	Core and Shell	Generator	Generator Sets	Diesel	1	25	6	1	0	0	0	0	0.141425
Alternate 1	Core and Shell	Tire Wash	Other Construction Equipment	Diesel	1	100	4	0.9	0	0	0	0	0.167417
Alternate 1	Core and Shell	Gradall	Forklifts	Diesel	1	74	4	0.8	0	0	0	0	0.05244
Alternate 1	Core and Shell	Concrete Pump	Pumps	Diesel	1	450	6	0.45	0	0	0	0	0.818247
Alternate 1	Tenant Improvements	Generator	Generator Sets	Diesel	1	25	6	0.85	0	0	0	0	0.092255
Alternate 1	Tenant Improvements	Tire Wash	Other Construction Equipment	Diesel	2	100	4	0.9	0	0	0	0	0.256966
Alternate 1	Tenant Improvements	Gradall	Forklifts	Diesel	1	74	4	0.8	0	0	0	0	0.040244

	Emission Rate (g/s)					
2026	2021	2022	2023	2024	2025	2026
0	1.80522E-05	0.000116645	0	0	0	0
0	2.15641E-06	1.39337E-05	0	0	0	0
0	4.67806E-06	3.02274E-05	0	0	0	0
0	0	0	0	0	0	0
0	2.68354E-05	0.000173398	0	0	0	0
0	2.33126E-06	1.50635E-05	0	0	0	0
0	3.55387E-06	2.29635E-05	0	0	0	0
0	0	4.19391E-05	0	0	0	0
0	0	1.01937E-05	0	0	0	0
0	0	9.06652E-05	0	0	0	0
0	0	5.14586E-05	0	0	0	0
0	0	0.000310963	0	0	0	0
0	0	0.000295189	0	0	0	0
0	0	7.97808E-05	0	0	0	0
0	0	4.9863E-06	0	0	0	0
0	0	1.99452E-06	0	0	0	0
0	0	1.05425E-05	0	0	0	0
0	0	1.37245E-06	0	0	0	0
0	0	0	0	0	0	0
0	0	0	0	0	0	0
0	0	0	0	0	0	0
0	0	0	0	0	0	0
0	0	0	0	0	0	0
0	0	0	0	0	0	0
0	0	0	0	0	0	0
0	0	0	0	0	0	0
0	0	3.83178E-06	0	0	0	0
0	0	7.7609E-05	0	0	0	0
0	0	5.47397E-06	0	0	0	0
0	0	7.14819E-06	0	0	0	0
0	0	1.62877E-05	0	0	0	0
0	0	1.08312E-05	0	0	0	0
0	0	0	0	0	0	0
0	0	4.33375E-05	0	0	0	0
0	0	0	0	0	0	0
0	0	0	0	0	0	0
0	0	2.47397E-06	0	0	0	0
0	0	0	8.67E-06	0	0	0
0	0	0	1.08E-06	0	0	0
0	0	0	0	0	0	0
0	0	0	6.19E-07	0	0	0
0	0	0	6.39E-06	0	0	0
0	0	0	0	0	0	0
0	0	0	0	0	0	0
0	0	0	4.13E-05	0	0	0
0	0	0	1.89E-05	0	0	0
0	0	0	1.26E-05	0	0	0

Before on-site residents

% UNMIT	5%
% MIT	95%

After on-site residents

% UNMIT	2%
% MIT	98%

0	0	0	4.52E-05	0	0	0
0	0	0	0.000172	0	0	0
0	0	0	2.64E-06	0	0	0
0	0	0	0	0	0	0
0	0	0	0	0	0	0
0	0	0	3.55E-07	0	0	0
0	0	0	0	0	0	0
0	0	0	1.94E-05	0	0	0
0	0	0	8.28E-07	0	0	0
0	0	0	3.29E-05	0	0	0
0	0	0	0	0	0	0
0	0	0	1.88E-05	0	0	0
0	0	0	3.34E-05	0	0	0
0	0	0	2.13E-06	0	0	0
0	0	0	0	0	0	0
0	0	0	5.04E-06	0	0	0
0	0	0	2.41E-06	0	0	0
0	0	0	1.94E-05	0	0	0
0	0	0	6.75E-06	0	0	0
0	0	0	0.000058	0	0	0
0	0	0	7.66E-06	0	0	0
0	0	0	0	0	0	0
0	0	0	4.33E-05	0	0	0
0	0	0	0	0	0	0
0	0	0	0	0	0	0
0	0	0	1.81E-05	0	0	0
0	0	0	0	0	0	0
0	0	0	0	0	0	0
0	0	0	0	0	0	0
0	0	0	0	0	0	0
0	0	0	0	5.39E-06	0	0
0	0	0	0	0	0	0
0	0	0	0	0	0	0
0	0	0	0	0	0	0
0	0	0	0	0	0	0
0	0	0	0	0	0	0
0	0	0	0	5.77E-06	0	0
0	0	0	0	0	0	0
0	0	0	0	0	0	0
0	0	0	0	0	0	0
0	0	0	0	0	0	0
0	0	0	0	0	0	0
0	0	0	0	0	0	0
0	0	0	0	1.55E-05	0	0
0	0	0	0	0	0	0
0	0	2.64483E-05	0	0	0	0
0	0	0	0	0	0	0

0	0	1.51133E-05	0	0	0	0
0	0	0	0	0	0	0
0	0	1.15068E-06	0	0	0	0
0	0	0	0	0	0	0
0	0	0	0	0	0	0
0	0	0.000155218	0	0	0	0
0	0	6.801E-06	0	0	0	0
0	0	2.14446E-05	0	0	0	0
0	0	8.73973E-06	0	0	0	0
0	0	8.12341E-06	0	0	0	0
0	0	0	0	0	0	0
0	0	3.28767E-05	0	0	0	0
0	0	0	0	0	0	0
0	0	0	0	0	0	0
0	0	3.07372E-06	0	0	0	0
0	0	0	5.52E-06	0	0	0
0	0	0	9.16E-05	0	0	0
0	0	0	0	0	0	0
0	0	0	5.23E-05	0	0	0
0	0	0	4.28E-06	0	0	0
0	0	0	3.45E-06	0	0	0
0	0	0	0	0	0	0
0	0	0	2.19E-05	0	0	0
0	0	0	0.000225	0	0	0
0	0	0	4.83E-05	0	0	0
0	0	0	0.000225	0	0	0
0	0	0	4.83E-05	0	0	0
0	0	0	0.000116	0	0	0
0	0	0	0.000249	0	0	0
0	0	0	2.09E-05	0	0	0
0	0	0	0	0	0	0
0	0	0	0.00013	0	0	0
0	0	0	4.44E-07	0	0	0
0	0	0	0	0	0	0
0	0	0	1.06E-05	0	0	0
0	0	0	0	0	0	0
0	0	0	0	0	0	0
0	0	0	0	0	0	0
0	0	0	0	0	0	0
0	0	0	0	9.37E-05	0	0
0	0	0	0	0	0	0
0	0	0	0	0	0	0
0	0	0	0	0	0	0
0	0	0	0	0	0	0
0	0	0	0	0	0	0
0	0	0	0	0.000156	0	0
0	0	0	0	1.75E-05	0	0
0	0	0	0	0	0	0
0	0	0	0	0	0	0

0	0	0	0	0	0	0
0	0	0	0	0	0	0
0	0	0	0	0	0	0
0	0	0	0	0	0	0
0	0	0	0	0	0	0
0	0	0	0	0	0	0
0	0	0	0	0	0	0
0	0	0	0	0	0	0
0	0	0	0	0	2.84E-05	0
0	0	0	0	0	0	0
0	0	0	0	0	0	0
0	0	0	0	0	0	0
0	0	0	0	0	0	0
0	0	0	0	0	0	0
0	0	0	0	0	0.000143	0
0	0	0	0	0	2.13E-05	0
0	0	0	0	0	0	0
0	0	0	0	0	0	0
0	0	0	0	0	0	0
0	0	0	0	0	0	0
0	0	0	0	0	0	0
0	0	0	0	0	0	0
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0	0	0	0	0	0	0
0	0	0	0	0	0	0
0	0	0	0	0	0	0
0	0	0	0	0	0	0
0.800018	0	0	0	0	0	2.51E-05
0.911449	0	0	0	0	0	2.86E-05
0	0	0	0	0	0	0
0	0	0	0	0	0	0
0	0	0	0	0	0	0
0	0	0	0	0	0	0
0	0	0	0	0	0	0
0	0	0	0	0	0	0
0	0	7.74097E-06	0	0	0	0
0	0	1.1934E-05	0	0	0	0
0	0	0	0	0	0	0
0	0	7.55666E-06	0	0	0	0
0	0	1.13963E-06	0	0	0	0
0	0	0	0	0	0	0
0	0	0	0	0	0	0

0	0	4.90999E-06	0	0	0	0
0	0	7.7609E-05	0	0	0	0
0	0	6.801E-06	0	0	0	0
0	0	1.42964E-05	0	0	0	0
0	0	1.46986E-05	0	0	0	0
0	0	2.16624E-05	0	0	0	0
0	0	0	0	0	0	0
0	0	0.000110585	0	0	0	0
0	0	0	0	0	0	0
0	0	0	0	0	0	0
0	0	6.14745E-06	0	0	0	0
0	0	0	4.14E-05	0	0	0
0	0	0	0	0	0	0
0	0	0	0	0	0	0
0	0	0	1.11E-05	0	0	0
0	0	0	1.67E-06	0	0	0
0	0	0	0	0	0	0
0	0	0	0	0	0	0
0	0	0	0.000164	0	0	0
0	0	0	0.000114	0	0	0
0	0	0	7.56E-05	0	0	0
0	0	0	0.000159	0	0	0
0	0	0	0.000315	0	0	0
0	0	0	3.17E-05	0	0	0
0	0	0	0	0	0	0
0	0	0	0	0	0	0
0	0	0	1.33E-07	0	0	0
0	0	0	0	0	0	0
0	0	0	2.38E-05	0	0	0
0	0	0	0	3.66E-05	0	0
0	0	0	0	0	0	0
0	0	0	0	0	0	0
0	0	0	0	0	0	0
0	0	0	0	6.78E-05	0	0
0	0	0	0	0	0	0
0	0	0	0	0	0	0
0	0	0	0	0.000145	0	0
0	0	0	0	0	0	0
0	0	0	0	0	0	0
0	0	0	0	0.000122	0	0
0	0	0	0	0	0	0
0	0	0	0	0	0	0
0	0	0	0	0	0	0
0	0	0	0	0	0	0
0	0	0	0	1.18E-07	0	0
0	0	0	0	0	0	0
0	0	0	0	1.31E-05	0	0

0	0	0	0	0	6.68E-06	0
0	0	0	0	0	0	0
0	0	0	0	0	0	0
0	0	0	0	0	0	0
0	0	0	0	0	3.58E-05	0
0	0	0	0	0	0	0
0	0	0	0	0	0	0
0	0	0	0	0	2.85E-05	0
0	0	0	0	0	0	0
0	0	0	0	0	0	0
0	0	0	0	0	8.65E-05	0
0	0	0	0	0	0	0
0	0	0	0	0	0	0
0	0	0	0	0	0	0
0	0	0	0	0	0	0
0	0	0	0	0	1.8E-08	0
0	0	0	0	0	0	0
0	0	0	0	0	7.89E-06	0
0	0	0	0	0	0	0
0	0	0	0	0	0	0
0	0	0	0	0	0	0
0	0	0	4.39E-05	0	0	0
0	0	0	6.62E-06	0	0	0
0	0	0	0	0	0	0
0	0	0	0	0	0	0
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0	0	0	0	0	0	0
0	0	0	0.000451	0	0	0
0	0	0	3.95E-05	0	0	0
0	0	0	8.3E-05	0	0	0
0	0	0	0	0	0	0
0	0	0	0.000126	0	0	0
0	0	0	0	0	0	0
0	0	0	0	0	0	0
0	0	0	0	0	0	0
0	0	0	0	0	0	0
0	0	0	3.57E-05	0	0	0
0	0	0	0	0	0	0
0	0	0	0	0	0	0
0	0	0	0	0	0	0
0	0	0	0	1.6E-05	0	0
0	0	0	0	9.09E-06	0	0
0	0	0	0	0	0	0
0	0	0	0	0	0	0
0	0	0	0	1.48E-06	0	0
0	0	0	0	0.000165	0	0
0	0	0	0	3.98E-06	0	0
0	0	0	0	8.02E-05	0	0

0	0	0	0	3.58E-05	0	0
0	0	0	0	4.6E-05	0	0
0	0	0	0	0	0	0
0	0	0	0	0	0	0
0	0	0	0	0	0	0
0	0	0	0	0	0	0
0	0	0	0	1.3E-05	0	0
0	0	0	0	0	0	0
0	0	0	0	0	0	0
0	0	0	0	0	0	0
0	0	0	0	0	0	0
0	0	0	0	0	0	0
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0	0	0	0	0	0	0
0	0	0	0	0	0	0
0	0	0	0	0	0	0
0	0	0	0	0	0	0
0	0	0	0	0	9.21E-05	0
0	0	0	0	0	2.1E-06	0
0	0	0	0	0	0	0
0	0	0	0	0	0	0
0	0	0	0	0	0	0
0	0	0	0	0	0	0
0	0	0	0	0	0	0
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0	0	0	3.73E-05	0	0	0
0	0	0	3.06E-05	0	0	0
0	0	0	3.18E-05	0	0	0
0	0	0	9.07E-06	0	0	0
0	0	0	1.67E-05	0	0	0
0	0	0	5.34E-05	0	0	0
0	0	0	0	0	0	0
0	0	0	1.15E-05	2.09E-05	0	0
0	0	0	1.48E-05	2.68E-05	0	0
0	0	0	3.61E-06	6.54E-06	0	0
0	0	0	0	0	0	0
0	0	0	0	0	0	0
0	0	0	0	0	0	0
0	0	0	0	0	0	0
0	0	0	0	2.64E-05	1.39E-05	0
0	0	0	0	8.28E-06	4.36E-06	0
0	0	0	0	0	3.75E-06	0
0	0	0	0	0	0	0
0	0	0	0	0	7.21E-06	0

0	0	0	0	0	1.27E-05	0
0	0	0	0	0	7.9E-06	0
0	0	0	0	0	0	0
0	0	0	0	0	0	0
0	0	0	2.88E-05	1.8E-07	0	0
0	0	0	3.7E-05	2.31E-07	0	0
0	0	0	6.09E-05	3.8E-07	0	0
0	0	0	3.16E-05	1.97E-07	0	0
0	0	0	9.02E-06	5.64E-08	0	0
0	0	0	1.66E-05	1.04E-07	0	0
0	0	0	5.31E-05	3.32E-07	0	0
0	0	0	0	0	0	0
0	0	0	0	3.24E-05	0	0
0	0	0	0	4.16E-05	0	0
0	0	0	0	2.03E-05	0	0
0	0	0	0	0	0	0
0	0	0	0	0	0	0
0	0	0	0	0	0	0
0	0	0	0	0	0	0
0	0	0	0	1.48E-05	2.17E-05	0
0	0	0	0	4.62E-06	6.81E-06	0
0	0	0	0	0	3.69E-06	0
0	0	0	0	0	0	0
0	0	0	0	0	0	0
0	0	0	0	0	1.25E-05	0
0	0	0	0	0	1.55E-05	0
0	0	6.66544E-05	0	0	0	0
0	0	7.96214E-06	0	0	0	0
0	0	1.72728E-05	0	0	0	0
0	0	0	0	0	0	0
0	0	9.90844E-05	0	0	0	0
0	0	8.60772E-06	0	0	0	0
0	0	1.3122E-05	0	0	0	0
0	0	1.90632E-05	1.91E-05	0	0	0
0	0	4.6335E-06	4.63E-06	0	0	0
0	0	4.12115E-05	4.12E-05	0	0	0
0	0	2.33903E-05	2.34E-05	0	0	0
0	0	0.000141347	0.000141	0	0	0
0	0	0.000134177	0.000134	0	0	0
0	0	3.6264E-05	3.63E-05	0	0	0
0	0	2.2665E-06	2.27E-06	0	0	0
0	0	9.066E-07	9.07E-07	0	0	0
0	0	4.79203E-06	4.79E-06	0	0	0
0	0	0	6.76E-06	0	0	0
0	0	0	1.19E-06	0	0	0
0	0	0	0	0	0	0
0	0	0	6.78E-07	0	0	0

0	0	0	0	0	0	0
0	0	0	0	0	0	0
0	0	0	0	0	0	0
0	0	0	2.52E-05	0	0	0
0	0	0	9.46E-05	0	0	0
0	0	0	1.81E-05	0	0	0
0	0	0	3.52E-05	0	0	0
0	0	0	0.000132	0	0	0
0	0	0	1.32E-05	0	0	0
0	0	0	0	0	0	0
0	0	0	4.33E-05	0	0	0
0	0	0	3.55E-07	0	0	0
0	0	0	0	0	0	0
0	0	0	1.46E-05	0	0	0
0	0	0	0	6.29E-06	0	0
0	0	0	0	0	0	0
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0	0	0	0	0	0	0
0	0	0	0	0	0	0
0	0	0	0	3.12E-05	0	0
0	0	0	0	0	0	0
0	0	0	0	0	0	0
0	0	0	0	3.28E-05	0	0
0	0	0	0	9.18E-05	0	0
0	0	0	0	0	0	0
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0	0	0	8.28E-07	0	0	0
0	0	0	4.9E-05	0	0	0
0	0	0	0	0	0	0
0	0	0	2.8E-05	0	0	0
0	0	0	5.56E-06	0	0	0
0	0	0	3.18E-06	0	0	0
0	0	0	0	0	0	0
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0	0	0	0	0	0	0
0	0	0	8.22E-05	0	0	0

0	0	0	0	0	0	0
0	0	0	0	0	0	0
0	0	0	1.33E-05	0	0	0
0	0	0	0	0	0	0
0	0	0	0	0	0	0
0	0	0	0	0	0	0
0	0	0	0	0	0	0
0	0	0	0	3.33E-05	0	0
0	0	0	0	0	0	0
0	0	0	0	0	0	0
0	0	0	0	3.65E-07	0	0
0	0	0	0	0	0	0
0	0	0	0	0	0	0
0	0	0	0	7.31E-06	0	0
0	0	0	0	0	0	0
0	0	0	0	0	0	0
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0	0	0	0	0	0	0
0	0	0	0	1.96E-05	0	0
0	0	0	0	0	0	0
0	0	0	0	0	0	0
0	0	0	0	0	0	0
0	0	0	0	0	0	0
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0	0	0	0	0	0	0
0	0	0	0	0	0	0
0	0	0	0	0	1.38E-06	0
0	0	0	0	0	0	0
0	0	0	0	0	0	0
0	0	0	0	0	0	0
0	0	0	0	0	0	0
0	0	0	0	0	0	0
0	0	0	0	0	0	0
0	0	0	0	0	3.16E-06	0
0	0	0	8.16E-07	0	0	0
0	0	0	4.32E-05	0	0	0
0	0	0	0	0	0	0
0	0	0	2.47E-05	0	0	0
0	0	0	8.23E-06	0	0	0
0	0	0	2.8E-06	0	0	0
0	0	0	0	0	0	0
0	0	0	5.41E-06	0	0	0

0	0	0	3.17E-06	0	0	0
0	0	0	2.19E-05	0	0	0
0	0	0	4.99E-06	0	0	0
0	0	0	6.91E-05	0	0	0
0	0	0	1.16E-05	0	0	0
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0	0	0	0	0	0	0
0	0	0	0	0	0	0
0	0	0	1.34E-05	0	0	0
0	0	0	0	0	0	0
0	0	0	0	0	0	0
0	0	0	0	0	0	0
0	0	0	0	0	0	0
0	0	0	0	3.02E-05	0	0
0	0	0	0	0	0	0
0	0	0	0	0	0	0
0	0	0	0	3.65E-07	0	0
0	0	0	0	0	0	0
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0	0	0	0	6.92E-06	0	0
0	0	0	0	0	0	0
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0	0	0	0	1.87E-05	0	0
0	0	0	8.28E-07	0	0	0
0	0	0	4.19E-05	0	0	0
0	0	0	0	0	0	0
0	0	0	2.4E-05	0	0	0
0	0	0	3.56E-06	0	0	0
0	0	0	2.72E-06	0	0	0
0	0	0	0	0	0	0
0	0	0	5.39E-06	0	0	0
0	0	0	3.08E-06	0	0	0
0	0	0	2.17E-05	0	0	0
0	0	0	4.38E-06	0	0	0
0	0	0	6.91E-05	0	0	0
0	0	0	1.16E-05	0	0	0
0	0	0	0	0	0	0
0	0	0	6.58E-05	0	0	0
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0	0	0	0	0	0	0
0	0	0	1.18E-05	0	0	0
0	0	0	0	0	0	0

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0	0	0	0	0	0	0
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0	0	0	0	0	0	0
0	0	0	0	0	0	0
0	0	0	0	3.65E-07	0	0
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0	0	0	0	0	0	0
0	0	0	0	7.31E-06	0	0
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0	0	0	8.23E-06	0	0	0
0	0	0	3.72E-06	0	0	0
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0	0	0	5.63E-06	0	0	0
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0	0	0	5.74E-05	0	0	0
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0	0	0	3.28E-05	0	0	0
0	0	0	0	0	0	0

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0	0	0	5.94E-06	0	0	0
0	0	0	4.21E-06	0	0	0
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0	0	0	0	1.2E-05	0	0
0	0	0	0	4.01E-06	0	0
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0	0	0	0	2.98E-05	0	0
0	0	0	0	7.27E-06	0	0
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0	0	0	0	9.58E-07	6.54E-06	0
0	0	0	0	0	3.69E-06	0
0	0	0	0	0	0	0
0	0	0	0	0	7.09E-06	0
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0	0	0	0	0	7.77E-06	0
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0	0	0	0	2.09E-05	0	0
0	0	0	0	2.68E-05	0	0
0	0	0	0	2.21E-05	0	0
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0	0	0	0	0	2.28E-05	0
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0.064855	0	0	0	0	1.72E-06	2.04E-06
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0	0	0	3.23E-06	0	0	0
0	0	0	7.84E-07	0	0	0
0	0	0	6.97E-06	0	0	0
0	0	0	3.96E-06	0	0	0
0	0	0	2.39E-05	0	0	0
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0	0	0	6.14E-06	0	0	0
0	0	0	3.84E-07	0	0	0
0	0	0	1.53E-07	0	0	0
0	0	0	1.62E-06	0	0	0
0	0	0	2.57E-05	1.28E-05	0	0
0	0	0	5.91E-05	2.94E-05	0	0
0	0	0	3.63E-05	1.8E-05	0	0
0	0	0	1.9E-05	9.47E-06	0	0
0	0	0	9.25E-06	4.6E-06	0	0
0	0	0	1.8E-05	8.94E-06	0	0
0	0	0	0	0	0	0
0	0	0	0	7.96E-06	2.04E-05	0
0	0	0	0	8.64E-06	2.42E-05	0
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0	0	0	0	4.97E-06	1.64E-05	0
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0	0	0	0	0	2.87E-05	0
0	0	0	0	0	3.4E-05	0
0	0	0	0	0	5.14E-05	0
0	0	0	0	0	1.6E-05	0
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0	0	0	0	0	0	0
0.972875	0	0	0	0	4.39E-06	3.05E-05
1.35491	0	0	0	0	6.11E-06	4.25E-05
0.212198	0	0	0	0	9.57E-07	6.66E-06
0.119576	0	0	0	0	0	3.75E-06
0	0	0	0	0	0	0
0.229712	0	0	0	0	0	7.21E-06
0.485676	0	0	0	0	0	1.52E-05
0.755496	0	0	0	0	0	2.37E-05
0	0	0	0	7.64E-06	0	0
0	0	0	0	1.82E-06	0	0
0	0	0	0	7.92E-06	0	0
0	0	0	0	8.68E-06	0	0

0	0	0	0	3.95E-06	0	0
0	0	0	0	6.01E-06	0	0
0	0	0	0	3.17E-07	4.74E-06	0
0	0	0	0	1.8E-07	2.69E-06	0
0	0	0	0	5.44E-07	9.57E-06	0
0	0	0	0	1.9E-07	2.84E-06	0
0	0	0	0	4.23E-08	6.31E-07	0
0	0	0	0	8.72E-09	1.53E-07	0
0	0	0	0	6.97E-09	1.23E-07	0
0	0	0	0	7.37E-08	1.3E-06	0
0	0	0	0	0	2.27E-06	0
0	0	0	0	0	2.69E-06	0
0	0	0	0	0	2.84E-06	0
0	0	0	0	0	2.95E-06	0
0	0	0	0	0	8.42E-07	0
0	0	0	0	0	8.76E-06	0
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0	0	0	0	0	2.9E-06	0
0	0	0	0	0	8.06E-06	0
0	0	0	0	0	1.26E-06	0

Equipment Information											Daily Emiss		
PHASE	SUBPHASE	EQUIPMENT	CALEEMOD_EQUIPMENT	FUEL	NUMBER	HP	DAILYHRS	UTILIZATION	LF	EF		2021	2022
Phase 1a	Demolition	Excavator	Excavators	Diesel	4	131	8	0.9	0.38	0.128	0.40457	13	84
Phase 1a	Demolition	Generator	Generator Sets	Diesel	2	25	6	0.5	0.74	0.28	0.06852	13	84
Phase 1a	Demolition	Tire Wash	Other Construction Equipment	Diesel	2	100	4	0.9	0.42	0.192	0.128003	13	84
Phase 1a	Demolition	Concrete Crusher	Crushing/Proc. Equipment	Diesel	2	200	2	0	0.78	0.088	0	13	84
Phase 1a	Demolition	Bob Cat	Tractors/Loaders/Backhoes	Diesel	6	150	8	0.8	0.37	0.128	0.60141	13	84
Phase 1a	Demolition	Pressure Washer	Pressure Washers	Diesel	2	25	8	1	0.3	0.28	0.074076	13	84
Phase 1a	Demolition	Air Compressor	Air Compressors	Diesel	1	140	6	0.7	0.48	0.128	0.079646	13	84
Phase 1a	Grading and Utilities	Blade	Graders	Diesel	2	359	8	0.15	0.41	0.088	0.068534	0	143
Phase 1a	Grading and Utilities	Scraper	Scrapers	Diesel	2	52	8	0.15	0.48	0.192	0.025357	0	143
Phase 1a	Grading and Utilities	Loader	Tractors/Loaders/Backhoes	Diesel	4	100	4	0.9	0.37	0.192	0.225529	0	143
Phase 1a	Grading and Utilities	Tire Wash	Other Construction Equipment	Diesel	2	100	4	0.9	0.42	0.192	0.128003	0	143
Phase 1a	Grading and Utilities	Excavator	Excavators	Diesel	4	359	8	0.6	0.38	0.088	0.508158	0	143
Phase 1a	Grading and Utilities	Backhoe	Tractors/Loaders/Backhoes	Diesel	4	350	8	0.6	0.37	0.088	0.482381	0	143
Phase 1a	Grading and Utilities	Gradall	Forklifts	Diesel	4	350	4	0.6	0.2	0.088	0.130373	0	143
Phase 1a	Grading and Utilities	Compactor	Other Construction Equipment	Diesel	4	250	0.5	0.2	0.42	0.088	0.008148	0	143
Phase 1a	Grading and Utilities	Paver	Pavers	Diesel	2	250	8	0.01	0.42	0.088	0.003259	0	143
Phase 1a	Grading and Utilities	Generator	Generator Sets	Diesel	1	600	2	0.1	0.74	0.088	0.017228	0	143
Phase 1a Office	North Garage 2022	Air Compressor	Air Compressors	Diesel	1	150	0.47	1	0.48	0.128	0.00952	0	42
Phase 1a Office	North Garage 2022	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	0	1	0.37	0.088	0	0	42
Phase 1a Office	North Garage 2022	Blade	Graders	Diesel	1	450	0	1	0.41	0.088	0	0	42
Phase 1a Office	North Garage 2022	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	0	1	0.37	0.088	0	0	42
Phase 1a Office	North Garage 2022	Boom Lift	Aerial Lifts	Diesel	1	40	0	1	0.31	0.28	0	0	42
Phase 1a Office	North Garage 2022	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0.42	0.088	0	0	42
Phase 1a Office	North Garage 2022	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.78	0.088	0	0	42
Phase 1a Office	North Garage 2022	Concrete Pump	Pumps	Diesel	1	450	0.33	1	0.74	0.088	0.02132	0	42
Phase 1a Office	North Garage 2022	Excavator	Excavators	Diesel	1	500	11.71429	1	0.38	0.088	0.431806	0	42
Phase 1a Office	North Garage 2022	Generator	Generator Sets	Diesel	1	25	4.714286	1	0.74	0.28	0.053837	0	42
Phase 1a Office	North Garage 2022	Gradall	Forklifts	Diesel	1	350	2.928571	1	0.2	0.088	0.039772	0	42
Phase 1a Office	North Garage 2022	Hydro/Crawler Crane	Cranes	Diesel	1	550	2.928571	1	0.29	0.088	0.090622	0	42
Phase 1a Office	North Garage 2022	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	5.857143	1	0.37	0.192	0.091733	0	42
Phase 1a Office	North Garage 2022	Paver	Pavers	Diesel	1	250	0	1	0.42	0.088	0	0	42
Phase 1a Office	North Garage 2022	Pile Rig	Bore/Drill Rigs	Diesel	1	600	4.142857	1	0.5	0.088	0.241124	0	42
Phase 1a Office	North Garage 2022	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0.3	0.28	0	0	42
Phase 1a Office	North Garage 2022	Scraper	Scrapers	Diesel	1	600	0	1	0.48	0.088	0	0	42
Phase 1a Office	North Garage 2022	Tire Wash	Other Construction Equipment	Diesel	1	100	1.178571	1	0.42	0.192	0.020953	0	42
Phase 1a Office	North Garage 2023	Air Compressor	Air Compressors	Diesel	1	150	0.48186	1	0.48	0.128	0.00979	0	0
Phase 1a Office	North Garage 2023	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	0.03907	1	0.37	0.088	0.000982	0	0
Phase 1a Office	North Garage 2023	Blade	Graders	Diesel	1	450	0	1	0.41	0.088	0	0	0
Phase 1a Office	North Garage 2023	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	0.03907	1	0.37	0.088	0.000561	0	0
Phase 1a Office	North Garage 2023	Boom Lift	Aerial Lifts	Diesel	1	40	1.335814	1	0.31	0.28	0.010225	0	0
Phase 1a Office	North Garage 2023	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0.42	0.088	0	0	0
Phase 1a Office	North Garage 2023	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.78	0.088	0	0	0
Phase 1a Office	North Garage 2023	Concrete Pump	Pumps	Diesel	1	450	0.57907	1	0.74	0.088	0.037411	0	0
Phase 1a Office	North Garage 2023	Excavator	Excavators	Diesel	1	500	0.465116	1	0.38	0.088	0.017145	0	0
Phase 1a Office	North Garage 2023	Generator	Generator Sets	Diesel	1	25	1.767442	1	0.74	0.28	0.020184	0	0
Phase 1a Office	North Garage 2023	Gradall	Forklifts	Diesel	1	350	3.011628	1	0.2	0.088	0.0409	0	0
Phase 1a Office	North Garage 2023	Hydro/Crawler Crane	Cranes	Diesel	1	550	5.02907	1	0.29	0.088	0.155621	0	0
Phase 1a Office	North Garage 2023	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	0.232558	1	0.37	0.192	0.003642	0	0
Phase 1a Office	North Garage 2023	Paver	Pavers	Diesel	1	250	0	1	0.42	0.088	0	0	0
Phase 1a Office	North Garage 2023	Pile Rig	Bore/Drill Rigs	Diesel	1	600	0	1	0.5	0.088	0	0	0
Phase 1a Office	North Garage 2023	Pressure Washer	Pressure Washers	Diesel	1	25	0.122791	1	0.3	0.28	0.000568	0	0
Phase 1a Office	North Garage 2023	Scraper	Scrapers	Diesel	1	600	0	1	0.48	0.088	0	0	0
Phase 1a Office	North Garage 2023	Tire Wash	Other Construction Equipment	Diesel	1	100	1.505814	1	0.42	0.192	0.026771	0	0
Phase 1a Office	Office Building 4 2023	Air Compressor	Air Compressors	Diesel	1	150	0.049091	1	0.48	0.128	0.000997	0	0

Phase 1a Office	Office Building 4 2023	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	1.264463	1	0.37	0.088	0.031768	0	0
Phase 1a Office	Office Building 4 2023	Blade	Graders	Diesel	1	450	0	1	0.41	0.088	0	0	0
Phase 1a Office	Office Building 4 2023	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	1.264463	1	0.37	0.088	0.018153	0	0
Phase 1a Office	Office Building 4 2023	Boom Lift	Aerial Lifts	Diesel	1	40	7.438017	1	0.31	0.28	0.056934	0	0
Phase 1a Office	Office Building 4 2023	Compactor	Other Construction Equipment	Diesel	1	250	0.101157	1	0.42	0.088	0.002061	0	0
Phase 1a Office	Office Building 4 2023	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.78	0.088	0	0	0
Phase 1a Office	Office Building 4 2023	Concrete Pump	Pumps	Diesel	1	450	0.075372	1	0.74	0.088	0.004869	0	0
Phase 1a Office	Office Building 4 2023	Excavator	Excavators	Diesel	1	500	0.063223	1	0.38	0.088	0.00233	0	0
Phase 1a Office	Office Building 4 2023	Generator	Generator Sets	Diesel	1	25	2.900826	1	0.74	0.28	0.033127	0	0
Phase 1a Office	Office Building 4 2023	Gradall	Forklifts	Diesel	1	350	0.48	1	0.2	0.088	0.006519	0	0
Phase 1a Office	Office Building 4 2023	Hydro/Crawler Crane	Cranes	Diesel	1	550	1.809917	1	0.29	0.088	0.056007	0	0
Phase 1a Office	Office Building 4 2023	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	0.719008	1	0.37	0.192	0.011261	0	0
Phase 1a Office	Office Building 4 2023	Paver	Pavers	Diesel	1	250	0	1	0.42	0.088	0	0	0
Phase 1a Office	Office Building 4 2023	Pile Rig	Bore/Drill Rigs	Diesel	1	600	0.719008	1	0.5	0.088	0.041848	0	0
Phase 1a Office	Office Building 4 2023	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0.3	0.28	0	0	0
Phase 1a Office	Office Building 4 2023	Scraper	Scrapers	Diesel	1	600	0	1	0.48	0.088	0	0	0
Phase 1a Office	Office Building 4 2023	Tire Wash	Other Construction Equipment	Diesel	1	100	1.5	1	0.42	0.192	0.026667	0	0
Phase 1a Office	Office Building 4 2024	Air Compressor	Air Compressors	Diesel	1	150	0	1	0.48	0.128	0	0	0
Phase 1a Office	Office Building 4 2024	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	0	1	0.37	0.088	0	0	0
Phase 1a Office	Office Building 4 2024	Blade	Graders	Diesel	1	450	0	1	0.41	0.088	0	0	0
Phase 1a Office	Office Building 4 2024	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	0	1	0.37	0.088	0	0	0
Phase 1a Office	Office Building 4 2024	Boom Lift	Aerial Lifts	Diesel	1	40	1.405797	1	0.31	0.28	0.010761	0	0
Phase 1a Office	Office Building 4 2024	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0.42	0.088	0	0	0
Phase 1a Office	Office Building 4 2024	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.78	0.088	0	0	0
Phase 1a Office	Office Building 4 2024	Concrete Pump	Pumps	Diesel	1	450	0	1	0.74	0.088	0	0	0
Phase 1a Office	Office Building 4 2024	Excavator	Excavators	Diesel	1	500	0	1	0.38	0.088	0	0	0
Phase 1a Office	Office Building 4 2024	Generator	Generator Sets	Diesel	1	25	0	1	0.74	0.28	0	0	0
Phase 1a Office	Office Building 4 2024	Gradall	Forklifts	Diesel	1	350	0.48	1	0.2	0.088	0.006519	0	0
Phase 1a Office	Office Building 4 2024	Hydro/Crawler Crane	Cranes	Diesel	1	550	0	1	0.29	0.088	0	0	0
Phase 1a Office	Office Building 4 2024	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	0	1	0.37	0.192	0	0	0
Phase 1a Office	Office Building 4 2024	Paver	Pavers	Diesel	1	250	0	1	0.42	0.088	0	0	0
Phase 1a Office	Office Building 4 2024	Pile Rig	Bore/Drill Rigs	Diesel	1	600	0	1	0.5	0.088	0	0	0
Phase 1a Office	Office Building 4 2024	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0.3	0.28	0	0	0
Phase 1a Office	Office Building 4 2024	Scraper	Scrapers	Diesel	1	600	0	1	0.48	0.088	0	0	0
Phase 1a Office	Office Building 4 2024	Tire Wash	Other Construction Equipment	Diesel	1	100	1.5	1	0.42	0.192	0.026667	0	0
Phase 1a Office	Meeting, Collaboration, Park 2022	Air Compressor	Air Compressors	Diesel	1	150	0	1	0.48	0.128	0	0	42
Phase 1a Office	Meeting, Collaboration, Park 2022	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	5.857143	1	0.37	0.088	0.147155	0	42
Phase 1a Office	Meeting, Collaboration, Park 2022	Blade	Graders	Diesel	1	450	0	1	0.41	0.088	0	0	42
Phase 1a Office	Meeting, Collaboration, Park 2022	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	5.857143	1	0.37	0.088	0.084089	0	42
Phase 1a Office	Meeting, Collaboration, Park 2022	Boom Lift	Aerial Lifts	Diesel	1	40	0	1	0.31	0.28	0	0	42
Phase 1a Office	Meeting, Collaboration, Park 2022	Compactor	Other Construction Equipment	Diesel	1	250	0.314286	1	0.42	0.088	0.006402	0	42
Phase 1a Office	Meeting, Collaboration, Park 2022	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.78	0.088	0	0	42
Phase 1a Office	Meeting, Collaboration, Park 2022	Concrete Pump	Pumps	Diesel	1	450	0	1	0.74	0.088	0	0	42
Phase 1a Office	Meeting, Collaboration, Park 2022	Excavator	Excavators	Diesel	1	500	23.42857	1	0.38	0.088	0.863612	0	42
Phase 1a Office	Meeting, Collaboration, Park 2022	Generator	Generator Sets	Diesel	1	25	5.857143	1	0.74	0.28	0.066889	0	42
Phase 1a Office	Meeting, Collaboration, Park 2022	Gradall	Forklifts	Diesel	1	350	8.785714	1	0.2	0.088	0.119315	0	42
Phase 1a Office	Meeting, Collaboration, Park 2022	Hydro/Crawler Crane	Cranes	Diesel	1	550	1.571429	1	0.29	0.088	0.048627	0	42
Phase 1a Office	Meeting, Collaboration, Park 2022	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	4.392857	1	0.37	0.192	0.0688	0	42
Phase 1a Office	Meeting, Collaboration, Park 2022	Paver	Pavers	Diesel	1	250	0	1	0.42	0.088	0	0	42
Phase 1a Office	Meeting, Collaboration, Park 2022	Pile Rig	Bore/Drill Rigs	Diesel	1	600	3.142857	1	0.5	0.088	0.182922	0	42
Phase 1a Office	Meeting, Collaboration, Park 2022	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0.3	0.28	0	0	42
Phase 1a Office	Meeting, Collaboration, Park 2022	Scraper	Scrapers	Diesel	1	600	0	1	0.48	0.088	0	0	42
Phase 1a Office	Meeting, Collaboration, Park 2022	Tire Wash	Other Construction Equipment	Diesel	1	100	1.464286	1	0.42	0.192	0.026032	0	42
Phase 1a Office	Meeting, Collaboration, Park 2023	Air Compressor	Air Compressors	Diesel	1	150	0.304615	1	0.48	0.128	0.006189	0	0
Phase 1a Office	Meeting, Collaboration, Park 2023	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	3.276923	1	0.37	0.088	0.082329	0	0
Phase 1a Office	Meeting, Collaboration, Park 2023	Blade	Graders	Diesel	1	450	0	1	0.41	0.088	0	0	0

Phase 1a Office	Meeting, Collaboration, Park 2023	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	3.276923	1	0.37	0.088	0.047045	0	0
Phase 1a Office	Meeting, Collaboration, Park 2023	Boom Lift	Aerial Lifts	Diesel	1	40	0.888462	1	0.31	0.28	0.006801	0	0
Phase 1a Office	Meeting, Collaboration, Park 2023	Compactor	Other Construction Equipment	Diesel	1	250	0.152308	1	0.42	0.088	0.003103	0	0
Phase 1a Office	Meeting, Collaboration, Park 2023	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.78	0.088	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2023	Concrete Pump	Pumps	Diesel	1	450	0.304615	1	0.74	0.088	0.01968	0	0
Phase 1a Office	Meeting, Collaboration, Park 2023	Excavator	Excavators	Diesel	1	500	5.492308	1	0.38	0.088	0.202455	0	0
Phase 1a Office	Meeting, Collaboration, Park 2023	Generator	Generator Sets	Diesel	1	25	6.715385	1	0.74	0.28	0.07669	0	0
Phase 1a Office	Meeting, Collaboration, Park 2023	Gradall	Forklifts	Diesel	1	350	7.661538	1	0.2	0.088	0.104048	0	0
Phase 1a Office	Meeting, Collaboration, Park 2023	Hydro/Crawler Crane	Cranes	Diesel	1	550	7.246154	1	0.29	0.088	0.224227	0	0
Phase 1a Office	Meeting, Collaboration, Park 2023	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	1.828846	1	0.37	0.192	0.028643	0	0
Phase 1a Office	Meeting, Collaboration, Park 2023	Paver	Pavers	Diesel	1	250	0	1	0.42	0.088	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2023	Pile Rig	Bore/Drill Rigs	Diesel	1	600	2.007692	1	0.5	0.088	0.116852	0	0
Phase 1a Office	Meeting, Collaboration, Park 2023	Pressure Washer	Pressure Washers	Diesel	1	25	0.152308	1	0.3	0.28	0.000705	0	0
Phase 1a Office	Meeting, Collaboration, Park 2023	Scraper	Scrapers	Diesel	1	600	0	1	0.48	0.088	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2023	Tire Wash	Other Construction Equipment	Diesel	1	100	0.819231	1	0.42	0.192	0.014564	0	0
Phase 1a Office	Meeting, Collaboration, Park 2024	Air Compressor	Air Compressors	Diesel	1	150	0	1	0.48	0.128	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2024	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	0	1	0.37	0.088	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2024	Blade	Graders	Diesel	1	450	0	1	0.41	0.088	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2024	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	0	1	0.37	0.088	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2024	Boom Lift	Aerial Lifts	Diesel	1	40	19.30534	1	0.31	0.28	0.147773	0	0
Phase 1a Office	Meeting, Collaboration, Park 2024	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0.42	0.088	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2024	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.78	0.088	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2024	Concrete Pump	Pumps	Diesel	1	450	0	1	0.74	0.088	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2024	Excavator	Excavators	Diesel	1	500	0	1	0.38	0.088	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2024	Generator	Generator Sets	Diesel	1	25	0	1	0.74	0.28	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2024	Gradall	Forklifts	Diesel	1	350	10.25954	1	0.2	0.088	0.13933	0	0
Phase 1a Office	Meeting, Collaboration, Park 2024	Hydro/Crawler Crane	Cranes	Diesel	1	550	0.503817	1	0.29	0.088	0.01559	0	0
Phase 1a Office	Meeting, Collaboration, Park 2024	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	0	1	0.37	0.192	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2024	Paver	Pavers	Diesel	1	250	0	1	0.42	0.088	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2024	Pile Rig	Bore/Drill Rigs	Diesel	1	600	0	1	0.5	0.088	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2024	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0.3	0.28	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2024	Scraper	Scrapers	Diesel	1	600	0	1	0.48	0.088	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2024	Tire Wash	Other Construction Equipment	Diesel	1	100	0	1	0.42	0.192	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2025	Air Compressor	Air Compressors	Diesel	1	150	0	1	0.48	0.128	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2025	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	0	1	0.37	0.088	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2025	Blade	Graders	Diesel	1	450	0	1	0.41	0.088	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2025	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	0	1	0.37	0.088	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2025	Boom Lift	Aerial Lifts	Diesel	1	40	9.425287	1	0.31	0.28	0.072146	0	0
Phase 1a Office	Meeting, Collaboration, Park 2025	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0.42	0.088	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2025	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.78	0.088	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2025	Concrete Pump	Pumps	Diesel	1	450	0	1	0.74	0.088	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2025	Excavator	Excavators	Diesel	1	500	0	1	0.38	0.088	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2025	Generator	Generator Sets	Diesel	1	25	0	1	0.74	0.28	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2025	Gradall	Forklifts	Diesel	1	350	11.77011	1	0.2	0.088	0.159845	0	0
Phase 1a Office	Meeting, Collaboration, Park 2025	Hydro/Crawler Crane	Cranes	Diesel	1	550	0.770115	1	0.29	0.088	0.023831	0	0
Phase 1a Office	Meeting, Collaboration, Park 2025	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	0	1	0.37	0.192	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2025	Paver	Pavers	Diesel	1	250	0	1	0.42	0.088	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2025	Pile Rig	Bore/Drill Rigs	Diesel	1	600	0	1	0.5	0.088	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2025	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0.3	0.28	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2025	Scraper	Scrapers	Diesel	1	600	0	1	0.48	0.088	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2025	Tire Wash	Other Construction Equipment	Diesel	1	100	0	1	0.42	0.192	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2026	Air Compressor	Air Compressors	Diesel	1	150	0	1	0.48	0.128	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2026	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	0	1	0.37	0.088	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2026	Blade	Graders	Diesel	1	450	0	1	0.41	0.088	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2026	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	0	1	0.37	0.088	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2026	Boom Lift	Aerial Lifts	Diesel	1	40	0	1	0.31	0.28	0	0	0

Phase 1a Office	Meeting, Collaboration, Park 2026	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0.42	0.088	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2026	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.78	0.088	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2026	Concrete Pump	Pumps	Diesel	1	450	0	1	0.74	0.088	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2026	Excavator	Excavators	Diesel	1	500	0	1	0.38	0.088	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2026	Generator	Generator Sets	Diesel	1	25	0	1	0.74	0.28	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2026	Gradall	Forklifts	Diesel	1	350	11.73913	1	0.2	0.088	0.159424	0	0
Phase 1a Office	Meeting, Collaboration, Park 2026	Hydro/Crawler Crane	Cranes	Diesel	1	550	5.869565	1	0.29	0.088	0.181629	0	0
Phase 1a Office	Meeting, Collaboration, Park 2026	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	0	1	0.37	0.192	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2026	Paver	Pavers	Diesel	1	250	0	1	0.42	0.088	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2026	Pile Rig	Bore/Drill Rigs	Diesel	1	600	0	1	0.5	0.088	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2026	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0.3	0.28	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2026	Scraper	Scrapers	Diesel	1	600	0	1	0.48	0.088	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2026	Tire Wash	Other Construction Equipment	Diesel	1	100	0	1	0.42	0.192	0	0	0
Phase 1a Office	Hotel Excavation 2022	Air Compressor	Air Compressors	Diesel	1	150	2.642857	1	0.48	0.128	0.053697	0	42
Phase 1a Office	Hotel Excavation 2022	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	2.642857	1	0.37	0.088	0.066399	0	42
Phase 1a Office	Hotel Excavation 2022	Blade	Graders	Diesel	1	450	0	1	0.41	0.088	0	0	42
Phase 1a Office	Hotel Excavation 2022	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	2.928571	1	0.37	0.088	0.042044	0	42
Phase 1a Office	Hotel Excavation 2022	Boom Lift	Aerial Lifts	Diesel	1	40	1.464286	1	0.31	0.28	0.011208	0	42
Phase 1a Office	Hotel Excavation 2022	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0.42	0.088	0	0	42
Phase 1a Office	Hotel Excavation 2022	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.78	0.088	0	0	42
Phase 1a Office	Hotel Excavation 2022	Concrete Pump	Pumps	Diesel	1	450	0.422857	1	0.74	0.088	0.027319	0	42
Phase 1a Office	Hotel Excavation 2022	Excavator	Excavators	Diesel	1	500	11.71429	1	0.38	0.088	0.431806	0	42
Phase 1a Office	Hotel Excavation 2022	Generator	Generator Sets	Diesel	1	25	5.857143	1	0.74	0.28	0.066889	0	42
Phase 1a Office	Hotel Excavation 2022	Gradall	Forklifts	Diesel	1	350	5.857143	1	0.2	0.088	0.079543	0	42
Phase 1a Office	Hotel Excavation 2022	Hydro/Crawler Crane	Cranes	Diesel	1	550	2.642857	1	0.29	0.088	0.081781	0	42
Phase 1a Office	Hotel Excavation 2022	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	11.71429	1	0.37	0.192	0.183466	0	42
Phase 1a Office	Hotel Excavation 2022	Paver	Pavers	Diesel	1	250	0	1	0.42	0.088	0	0	42
Phase 1a Office	Hotel Excavation 2022	Pile Rig	Bore/Drill Rigs	Diesel	1	600	10.57143	1	0.5	0.088	0.615282	0	42
Phase 1a Office	Hotel Excavation 2022	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0.3	0.28	0	0	42
Phase 1a Office	Hotel Excavation 2022	Scraper	Scrapers	Diesel	1	600	0	1	0.48	0.088	0	0	42
Phase 1a Office	Hotel Excavation 2022	Tire Wash	Other Construction Equipment	Diesel	1	100	2.928571	1	0.42	0.192	0.052065	0	42
Phase 1a Office	Hotel Excavation 2023	Air Compressor	Air Compressors	Diesel	1	150	2.311284	1	0.48	0.128	0.04696	0	0
Phase 1a Office	Hotel Excavation 2023	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	0	1	0.37	0.088	0	0	0
Phase 1a Office	Hotel Excavation 2023	Blade	Graders	Diesel	1	450	0	1	0.41	0.088	0	0	0
Phase 1a Office	Hotel Excavation 2023	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	0.700389	1	0.37	0.088	0.010055	0	0
Phase 1a Office	Hotel Excavation 2023	Boom Lift	Aerial Lifts	Diesel	1	40	0.350195	1	0.31	0.28	0.002681	0	0
Phase 1a Office	Hotel Excavation 2023	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0.42	0.088	0	0	0
Phase 1a Office	Hotel Excavation 2023	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.78	0.088	0	0	0
Phase 1a Office	Hotel Excavation 2023	Concrete Pump	Pumps	Diesel	1	450	2.311284	1	0.74	0.088	0.14932	0	0
Phase 1a Office	Hotel Excavation 2023	Excavator	Excavators	Diesel	1	500	2.801556	1	0.38	0.088	0.10327	0	0
Phase 1a Office	Hotel Excavation 2023	Generator	Generator Sets	Diesel	1	25	10.64591	1	0.74	0.28	0.121576	0	0
Phase 1a Office	Hotel Excavation 2023	Gradall	Forklifts	Diesel	1	350	10.64591	1	0.2	0.088	0.144577	0	0
Phase 1a Office	Hotel Excavation 2023	Hydro/Crawler Crane	Cranes	Diesel	1	550	9.245136	1	0.29	0.088	0.286084	0	0
Phase 1a Office	Hotel Excavation 2023	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	2.801556	1	0.37	0.192	0.043877	0	0
Phase 1a Office	Hotel Excavation 2023	Paver	Pavers	Diesel	1	250	0	1	0.42	0.088	0	0	0
Phase 1a Office	Hotel Excavation 2023	Pile Rig	Bore/Drill Rigs	Diesel	1	600	0	1	0.5	0.088	0	0	0
Phase 1a Office	Hotel Excavation 2023	Pressure Washer	Pressure Washers	Diesel	1	25	0.046226	1	0.3	0.28	0.000214	0	0
Phase 1a Office	Hotel Excavation 2023	Scraper	Scrapers	Diesel	1	600	0	1	0.48	0.088	0	0	0
Phase 1a Office	Hotel Excavation 2023	Tire Wash	Other Construction Equipment	Diesel	1	100	1.856031	1	0.42	0.192	0.032997	0	0
Phase 1a Office	Hotel Construction 2024	Air Compressor	Air Compressors	Diesel	1	150	3	1	0.48	0.128	0.060954	0	0
Phase 1a Office	Hotel Construction 2024	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	0	1	0.37	0.088	0	0	0
Phase 1a Office	Hotel Construction 2024	Blade	Graders	Diesel	1	450	0	1	0.41	0.088	0	0	0
Phase 1a Office	Hotel Construction 2024	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	0	1	0.37	0.088	0	0	0
Phase 1a Office	Hotel Construction 2024	Boom Lift	Aerial Lifts	Diesel	1	40	20.91429	1	0.31	0.28	0.160088	0	0
Phase 1a Office	Hotel Construction 2024	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0.42	0.088	0	0	0
Phase 1a Office	Hotel Construction 2024	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.78	0.088	0	0	0

Phase 1a Office	Hotel Construction 2024	Concrete Pump	Pumps	Diesel	1	450	3	1	0.74	0.088	0.193814	0	0
Phase 1a Office	Hotel Construction 2024	Excavator	Excavators	Diesel	1	500	0	1	0.38	0.088	0	0	0
Phase 1a Office	Hotel Construction 2024	Generator	Generator Sets	Diesel	1	25	0	1	0.74	0.28	0	0	0
Phase 1a Office	Hotel Construction 2024	Gradall	Forklifts	Diesel	1	350	12	1	0.2	0.088	0.162967	0	0
Phase 1a Office	Hotel Construction 2024	Hydro/Crawler Crane	Cranes	Diesel	1	550	0	1	0.29	0.088	0	0	0
Phase 1a Office	Hotel Construction 2024	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	0	1	0.37	0.192	0	0	0
Phase 1a Office	Hotel Construction 2024	Paver	Pavers	Diesel	1	250	0	1	0.42	0.088	0	0	0
Phase 1a Office	Hotel Construction 2024	Pile Rig	Bore/Drill Rigs	Diesel	1	600	0	1	0.5	0.088	0	0	0
Phase 1a Office	Hotel Construction 2024	Pressure Washer	Pressure Washers	Diesel	1	25	0.06	1	0.3	0.28	0.000278	0	0
Phase 1a Office	Hotel Construction 2024	Scraper	Scrapers	Diesel	1	600	0	1	0.48	0.088	0	0	0
Phase 1a Office	Hotel Construction 2024	Tire Wash	Other Construction Equipment	Diesel	1	100	1.5	1	0.42	0.192	0.026667	0	0
Phase 1a Office	Hotel Construction 2025	Air Compressor	Air Compressors	Diesel	1	150	0.837662	1	0.48	0.128	0.01702	0	0
Phase 1a Office	Hotel Construction 2025	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	0	1	0.37	0.088	0	0	0
Phase 1a Office	Hotel Construction 2025	Blade	Graders	Diesel	1	450	0	1	0.41	0.088	0	0	0
Phase 1a Office	Hotel Construction 2025	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	0	1	0.37	0.088	0	0	0
Phase 1a Office	Hotel Construction 2025	Boom Lift	Aerial Lifts	Diesel	1	40	20.18182	1	0.31	0.28	0.154482	0	0
Phase 1a Office	Hotel Construction 2025	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0.42	0.088	0	0	0
Phase 1a Office	Hotel Construction 2025	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.78	0.088	0	0	0
Phase 1a Office	Hotel Construction 2025	Concrete Pump	Pumps	Diesel	1	450	0.837662	1	0.74	0.088	0.054117	0	0
Phase 1a Office	Hotel Construction 2025	Excavator	Excavators	Diesel	1	500	0	1	0.38	0.088	0	0	0
Phase 1a Office	Hotel Construction 2025	Generator	Generator Sets	Diesel	1	25	0	1	0.74	0.28	0	0	0
Phase 1a Office	Hotel Construction 2025	Gradall	Forklifts	Diesel	1	350	12.07792	1	0.2	0.088	0.164025	0	0
Phase 1a Office	Hotel Construction 2025	Hydro/Crawler Crane	Cranes	Diesel	1	550	0	1	0.29	0.088	0	0	0
Phase 1a Office	Hotel Construction 2025	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	0	1	0.37	0.192	0	0	0
Phase 1a Office	Hotel Construction 2025	Paver	Pavers	Diesel	1	250	0	1	0.42	0.088	0	0	0
Phase 1a Office	Hotel Construction 2025	Pile Rig	Bore/Drill Rigs	Diesel	1	600	0	1	0.5	0.088	0	0	0
Phase 1a Office	Hotel Construction 2025	Pressure Washer	Pressure Washers	Diesel	1	25	0.016753	1	0.3	0.28	7.76E-05	0	0
Phase 1a Office	Hotel Construction 2025	Scraper	Scrapers	Diesel	1	600	0	1	0.48	0.088	0	0	0
Phase 1a Office	Hotel Construction 2025	Tire Wash	Other Construction Equipment	Diesel	1	100	1.50974	1	0.42	0.192	0.02684	0	0
Phase 1a Office	Town Square 2023	Air Compressor	Air Compressors	Diesel	1	150	0	1	0.48	0.128	0	0	0
Phase 1a Office	Town Square 2023	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	0	1	0.37	0.088	0	0	0
Phase 1a Office	Town Square 2023	Blade	Graders	Diesel	1	450	0	1	0.41	0.088	0	0	0
Phase 1a Office	Town Square 2023	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	3	1	0.37	0.088	0.04307	0	0
Phase 1a Office	Town Square 2023	Boom Lift	Aerial Lifts	Diesel	1	40	1.5	1	0.31	0.28	0.011482	0	0
Phase 1a Office	Town Square 2023	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0.42	0.088	0	0	0
Phase 1a Office	Town Square 2023	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.78	0.088	0	0	0
Phase 1a Office	Town Square 2023	Concrete Pump	Pumps	Diesel	1	450	0	1	0.74	0.088	0	0	0
Phase 1a Office	Town Square 2023	Excavator	Excavators	Diesel	1	500	12	1	0.38	0.088	0.442338	0	0
Phase 1a Office	Town Square 2023	Generator	Generator Sets	Diesel	1	25	6	1	0.74	0.28	0.06852	0	0
Phase 1a Office	Town Square 2023	Gradall	Forklifts	Diesel	1	350	6	1	0.2	0.088	0.081483	0	0
Phase 1a Office	Town Square 2023	Hydro/Crawler Crane	Cranes	Diesel	1	550	0	1	0.29	0.088	0	0	0
Phase 1a Office	Town Square 2023	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	12	1	0.37	0.192	0.187941	0	0
Phase 1a Office	Town Square 2023	Paver	Pavers	Diesel	1	250	0	1	0.42	0.088	0	0	0
Phase 1a Office	Town Square 2023	Pile Rig	Bore/Drill Rigs	Diesel	1	600	0	1	0.5	0.088	0	0	0
Phase 1a Office	Town Square 2023	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0.3	0.28	0	0	0
Phase 1a Office	Town Square 2023	Scraper	Scrapers	Diesel	1	600	0	1	0.48	0.088	0	0	0
Phase 1a Office	Town Square 2023	Tire Wash	Other Construction Equipment	Diesel	1	100	3	1	0.42	0.192	0.053335	0	0
Phase 1a Office	Town Square 2024	Air Compressor	Air Compressors	Diesel	1	150	0	1	0.48	0.128	0	0	0
Phase 1a Office	Town Square 2024	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	0	1	0.37	0.088	0	0	0
Phase 1a Office	Town Square 2024	Blade	Graders	Diesel	1	450	0	1	0.41	0.088	0	0	0
Phase 1a Office	Town Square 2024	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	0.996183	1	0.37	0.088	0.014302	0	0
Phase 1a Office	Town Square 2024	Boom Lift	Aerial Lifts	Diesel	1	40	1.872137	1	0.31	0.28	0.01433	0	0
Phase 1a Office	Town Square 2024	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0.42	0.088	0	0	0
Phase 1a Office	Town Square 2024	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.78	0.088	0	0	0
Phase 1a Office	Town Square 2024	Concrete Pump	Pumps	Diesel	1	450	0.020382	1	0.74	0.088	0.001317	0	0
Phase 1a Office	Town Square 2024	Excavator	Excavators	Diesel	1	500	3.984733	1	0.38	0.088	0.146883	0	0

Phase 1a Office	Town Square 2024	Generator	Generator Sets	Diesel	1	25	0.549618	1	0.74	0.28	0.006277	0	0
Phase 1a Office	Town Square 2024	Gradall	Forklifts	Diesel	1	350	5.267176	1	0.2	0.088	0.071531	0	0
Phase 1a Office	Town Square 2024	Hydro/Crawler Crane	Cranes	Diesel	1	550	1.03145	1	0.29	0.088	0.031917	0	0
Phase 1a Office	Town Square 2024	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	3.984733	1	0.37	0.192	0.062408	0	0
Phase 1a Office	Town Square 2024	Paver	Pavers	Diesel	1	250	0	1	0.42	0.088	0	0	0
Phase 1a Office	Town Square 2024	Pile Rig	Bore/Drill Rigs	Diesel	1	600	0	1	0.5	0.088	0	0	0
Phase 1a Office	Town Square 2024	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0.3	0.28	0	0	0
Phase 1a Office	Town Square 2024	Scraper	Scrapers	Diesel	1	600	0	1	0.48	0.088	0	0	0
Phase 1a Office	Town Square 2024	Tire Wash	Other Construction Equipment	Diesel	1	100	0.996183	1	0.42	0.192	0.01771	0	0
Phase 1a Office	Town Square 2025	Air Compressor	Air Compressors	Diesel	1	150	0	1	0.48	0.128	0	0	0
Phase 1a Office	Town Square 2025	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	0	1	0.37	0.088	0	0	0
Phase 1a Office	Town Square 2025	Blade	Graders	Diesel	1	450	0	1	0.41	0.088	0	0	0
Phase 1a Office	Town Square 2025	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	0	1	0.37	0.088	0	0	0
Phase 1a Office	Town Square 2025	Boom Lift	Aerial Lifts	Diesel	1	40	0	1	0.31	0.28	0	0	0
Phase 1a Office	Town Square 2025	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0.42	0.088	0	0	0
Phase 1a Office	Town Square 2025	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.78	0.088	0	0	0
Phase 1a Office	Town Square 2025	Concrete Pump	Pumps	Diesel	1	450	0	1	0.74	0.088	0	0	0
Phase 1a Office	Town Square 2025	Excavator	Excavators	Diesel	1	500	0	1	0.38	0.088	0	0	0
Phase 1a Office	Town Square 2025	Generator	Generator Sets	Diesel	1	25	0	1	0.74	0.28	0	0	0
Phase 1a Office	Town Square 2025	Gradall	Forklifts	Diesel	1	350	18	1	0.2	0.088	0.24445	0	0
Phase 1a Office	Town Square 2025	Hydro/Crawler Crane	Cranes	Diesel	1	550	0.18	1	0.29	0.088	0.00557	0	0
Phase 1a Office	Town Square 2025	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	0	1	0.37	0.192	0	0	0
Phase 1a Office	Town Square 2025	Paver	Pavers	Diesel	1	250	0	1	0.42	0.088	0	0	0
Phase 1a Office	Town Square 2025	Pile Rig	Bore/Drill Rigs	Diesel	1	600	0	1	0.5	0.088	0	0	0
Phase 1a Office	Town Square 2025	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0.3	0.28	0	0	0
Phase 1a Office	Town Square 2025	Scraper	Scrapers	Diesel	1	600	0	1	0.48	0.088	0	0	0
Phase 1a Office	Town Square 2025	Tire Wash	Other Construction Equipment	Diesel	1	100	0	1	0.42	0.192	0	0	0
Phase 1a Mixed Use	Parcel 2 Foundations	Pile Rig	Bore/Drill Rigs	Diesel	0	600	8	0.4	0.5	0.088	0	0	0
Phase 1a Mixed Use	Parcel 2 Foundations	Generator	Generator Sets	Diesel	0	25	6	1	0.74	0.28	0	0	0
Phase 1a Mixed Use	Parcel 2 Foundations	Tire Wash	Other Construction Equipment	Diesel	1	100	4	0.9	0.42	0.192	0.064001	0	0
Phase 1a Mixed Use	Parcel 2 Foundations	Generator	Generator Sets	Diesel	0	25	6	1	0.74	0.28	0	0	0
Phase 1a Mixed Use	Parcel 2 Foundations	Tire Wash	Other Construction Equipment	Diesel	1	100	4	0.9	0.42	0.192	0.064001	0	0
Phase 1a Mixed Use	Parcel 2 Foundations	Excavator	Excavators	Diesel	1	131	8	0.6	0.38	0.128	0.067428	0	0
Phase 1a Mixed Use	Parcel 2 Foundations	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	90	8	0.6	0.37	0.192	0.067659	0	0
Phase 1a Mixed Use	Parcel 2 Foundations	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	70	8	0.8	0.37	0.192	0.070165	0	0
Phase 1a Mixed Use	Parcel 2 Foundations	Gradall	Forklifts	Diesel	1	74	4	0.8	0.2	0.192	0.020047	0	0
Phase 1a Mixed Use	Parcel 2 Foundations	Crane	Cranes	Diesel	1	215	4	0.5	0.29	0.088	0.024193	0	0
Phase 1a Mixed Use	Parcel 2 Foundations	Concrete Pump	Pumps	Diesel	1	450	8	0.15	0.74	0.088	0.077526	0	0
Phase 1a Mixed Use	Parcel 2 Core and Shell	Generator	Generator Sets	Diesel	0	25	6	1	0.74	0.28	0	0	0
Phase 1a Mixed Use	Parcel 2 Core and Shell	Tire Wash	Other Construction Equipment	Diesel	1	100	4	0.9	0.42	0.192	0.064001	0	0
Phase 1a Mixed Use	Parcel 2 Core and Shell	Crane	Cranes	Diesel	1	600	8	0.2	0.29	0.088	0.054012	0	0
Phase 1a Mixed Use	Parcel 2 Core and Shell	Gradall	Forklifts	Diesel	1	74	4	0.8	0.2	0.192	0.020047	0	0
Phase 1a Mixed Use	Parcel 2 Core and Shell	Concrete Pump	Pumps	Diesel	0	450	6	0.225	0.74	0.088	0	0	0
Phase 1a Mixed Use	Parcel 2 Core and Shell	Air Compressor	Air Compressors	Diesel	0	140	2	0.4	0.48	0.128	0	0	0
Phase 1a Mixed Use	Parcel 2 Core and Shell	Boom Lift	Aerial Lifts	Diesel	0	50	6	0.2	0.31	0.192	0	0	0
Phase 1a Mixed Use	Parcel 2 Tenant Improvements	Generator	Generator Sets	Diesel	0	25	6	0.85	0.74	0.28	0	0	0
Phase 1a Mixed Use	Parcel 2 Tenant Improvements	Tire Wash	Other Construction Equipment	Diesel	1	100	4	0.9	0.42	0.192	0.064001	0	0
Phase 1a Mixed Use	Parcel 2 Tenant Improvements	Gradall	Forklifts	Diesel	1	74	4	0.8	0.2	0.192	0.020047	0	0
Phase 1a Mixed Use	Parcel 2 Landscaping	Excavator	Excavators	Diesel	1	25	8	0.9	0.38	0.28	0.042223	0	0
Phase 1a Mixed Use	Parcel 2 Landscaping	Generator	Generator Sets	Diesel	0	25	6	0.5	0.74	0.28	0	0	0
Phase 1a Mixed Use	Parcel 2 Landscaping	Tire Wash	Other Construction Equipment	Diesel	1	100	4	0.9	0.42	0.192	0.064001	0	0
Phase 1a Mixed Use	Parcel 2 Landscaping	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	90	8	1	0.37	0.192	0.112764	0	0
Phase 1a Mixed Use	Parcel 2 Landscaping	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	70	8	0.8	0.37	0.192	0.070165	0	0
Phase 1a Mixed Use	Parcel 3 Foundations	Pile Rig	Bore/Drill Rigs	Diesel	0	600	8	0.4	0.5	0.088	0	0	0
Phase 1a Mixed Use	Parcel 3 Foundations	Generator	Generator Sets	Diesel	0	25	6	1	0.74	0.28	0	0	0
Phase 1a Mixed Use	Parcel 3 Foundations	Tire Wash	Other Construction Equipment	Diesel	1	100	4	0.9	0.42	0.192	0.064001	0	0
Phase 1a Mixed Use	Parcel 3 Foundations	Excavator	Excavators	Diesel	1	131	8	0.6	0.38	0.128	0.067428	0	0
Phase 1a Mixed Use	Parcel 3 Foundations	Backhoe	Tractors/Loaders/Backhoes	Diesel	2	90	8	0.6	0.37	0.192	0.135317	0	0

Phase 1a Mixed Use	Parcel 3 Foundations	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	70	8	0.8	0.37	0.192	0.070165	0	0
Phase 1a Mixed Use	Parcel 3 Foundations	Gradall	Forklifts	Diesel	1	74	4	0.8	0.2	0.192	0.020047	0	0
Phase 1a Mixed Use	Parcel 3 Foundations	Crane	Cranes	Diesel	1	215	4	0.5	0.29	0.088	0.024193	0	0
Phase 1a Mixed Use	Parcel 3 Foundations	Concrete Pump	Pumps	Diesel	1	450	8	0.15	0.74	0.088	0.077526	0	0
Phase 1a Mixed Use	Parcel 3 Core and Shell	Generator	Generator Sets	Diesel	0	25	6	1	0.74	0.28	0	0	0
Phase 1a Mixed Use	Parcel 3 Core and Shell	Tire Wash	Other Construction Equipment	Diesel	1	100	4	0.9	0.42	0.192	0.064001	0	0
Phase 1a Mixed Use	Parcel 3 Core and Shell	Crane	Cranes	Diesel	1	600	8	0.2	0.29	0.088	0.054012	0	0
Phase 1a Mixed Use	Parcel 3 Core and Shell	Gradall	Forklifts	Diesel	2	74	4	0.8	0.2	0.192	0.040094	0	0
Phase 1a Mixed Use	Parcel 3 Core and Shell	Concrete Pump	Pumps	Diesel	0	450	6	0.225	0.74	0.088	0	0	0
Phase 1a Mixed Use	Parcel 3 Core and Shell	Air Compressor	Air Compressors	Diesel	0	140	2	0.4	0.48	0.128	0	0	0
Phase 1a Mixed Use	Parcel 3 Core and Shell	Boom Lift	Aerial Lifts	Diesel	0	50	6	0.2	0.31	0.192	0	0	0
Phase 1a Mixed Use	Parcel 3 Tenant Improvements	Generator	Generator Sets	Diesel	0	25	6	0.85	0.74	0.28	0	0	0
Phase 1a Mixed Use	Parcel 3 Tenant Improvements	Tire Wash	Other Construction Equipment	Diesel	1	100	4	0.9	0.42	0.192	0.064001	0	0
Phase 1a Mixed Use	Parcel 3 Tenant Improvements	Gradall	Forklifts	Diesel	1	74	4	0.8	0.2	0.192	0.020047	0	0
Phase 1a Mixed Use	Parcel 3 Landscaping	Excavator	Excavators	Diesel	1	25	8	0.9	0.38	0.28	0.042223	0	0
Phase 1a Mixed Use	Parcel 3 Landscaping	Generator	Generator Sets	Diesel	0	25	6	0.5	0.74	0.28	0	0	0
Phase 1a Mixed Use	Parcel 3 Landscaping	Tire Wash	Other Construction Equipment	Diesel	0	100	4	0.9	0.42	0.192	0	0	0
Phase 1a Mixed Use	Parcel 3 Landscaping	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	90	8	1	0.37	0.192	0.112764	0	0
Phase 1a Mixed Use	Parcel 3 Landscaping	Bob Cat	Tractors/Loaders/Backhoes	Diesel	2	70	8	0.8	0.37	0.192	0.140329	0	0
Phase 1b	Demolition	Excavator	Excavators	Diesel	4	131	8	0.9	0.38	0.128	0.40457	0	48
Phase 1b	Demolition	Generator	Generator Sets	Diesel	2	25	6	0.5	0.74	0.28	0.06852	0	48
Phase 1b	Demolition	Tire Wash	Other Construction Equipment	Diesel	2	100	4	0.9	0.42	0.192	0.128003	0	48
Phase 1b	Demolition	Concrete Crusher	Crushing/Proc. Equipment	Diesel	2	200	2	0	0.78	0.088	0	0	48
Phase 1b	Demolition	Bob Cat	Tractors/Loaders/Backhoes	Diesel	6	150	8	0.8	0.37	0.128	0.60141	0	48
Phase 1b	Demolition	Pressure Washer	Pressure Washers	Diesel	2	25	8	1	0.3	0.28	0.074076	0	48
Phase 1b	Demolition	Air Compressor	Air Compressors	Diesel	1	140	6	0.7	0.48	0.128	0.079646	0	48
Phase 1b	Grading and Utilities	Blade	Graders	Diesel	2	359	8	0.15	0.41	0.088	0.068534	0	65
Phase 1b	Grading and Utilities	Scraper	Scrapers	Diesel	2	52	8	0.15	0.48	0.192	0.025357	0	65
Phase 1b	Grading and Utilities	Loader	Tractors/Loaders/Backhoes	Diesel	4	100	4	0.9	0.37	0.192	0.225529	0	65
Phase 1b	Grading and Utilities	Tire Wash	Other Construction Equipment	Diesel	2	100	4	0.9	0.42	0.192	0.128003	0	65
Phase 1b	Grading and Utilities	Excavator	Excavators	Diesel	4	359	8	0.6	0.38	0.088	0.508158	0	65
Phase 1b	Grading and Utilities	Backhoe	Tractors/Loaders/Backhoes	Diesel	4	350	8	0.6	0.37	0.088	0.482381	0	65
Phase 1b	Grading and Utilities	Gradall	Forklifts	Diesel	4	350	4	0.6	0.2	0.088	0.130373	0	65
Phase 1b	Grading and Utilities	Compactor	Other Construction Equipment	Diesel	4	250	0.5	0.2	0.42	0.088	0.008148	0	65
Phase 1b	Grading and Utilities	Paver	Pavers	Diesel	2	250	8	0.01	0.42	0.088	0.003259	0	65
Phase 1b	Grading and Utilities	Generator	Generator Sets	Diesel	1	600	2	0.1	0.74	0.088	0.017228	0	65
Phase 1b Office	South Garage 2023	Air Compressor	Air Compressors	Diesel	1	150	0.48	1	0.48	0.128	0.009753	0	0
Phase 1b Office	South Garage 2023	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	0.054653	1	0.37	0.088	0.001373	0	0
Phase 1b Office	South Garage 2023	Blade	Graders	Diesel	1	450	0	1	0.41	0.088	0	0	0
Phase 1b Office	South Garage 2023	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	0.054653	1	0.37	0.088	0.000785	0	0
Phase 1b Office	South Garage 2023	Boom Lift	Aerial Lifts	Diesel	1	40	0	1	0.31	0.28	0	0	0
Phase 1b Office	South Garage 2023	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0.42	0.088	0	0	0
Phase 1b Office	South Garage 2023	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.78	0.088	0	0	0
Phase 1b Office	South Garage 2023	Concrete Pump	Pumps	Diesel	1	450	0.451485	1	0.74	0.088	0.029168	0	0
Phase 1b Office	South Garage 2023	Excavator	Excavators	Diesel	1	500	2.970297	1	0.38	0.088	0.10949	0	0
Phase 1b Office	South Garage 2023	Generator	Generator Sets	Diesel	1	25	3.237624	1	0.74	0.28	0.036974	0	0
Phase 1b Office	South Garage 2023	Gradall	Forklifts	Diesel	1	350	3	1	0.2	0.088	0.040742	0	0
Phase 1b Office	South Garage 2023	Hydro/Crawler Crane	Cranes	Diesel	1	550	4.923267	1	0.29	0.088	0.152347	0	0
Phase 1b Office	South Garage 2023	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	1.485149	1	0.37	0.192	0.02326	0	0
Phase 1b Office	South Garage 2023	Paver	Pavers	Diesel	1	250	0	1	0.42	0.088	0	0	0
Phase 1b Office	South Garage 2023	Pile Rig	Bore/Drill Rigs	Diesel	1	600	0.861386	1	0.5	0.088	0.050135	0	0
Phase 1b Office	South Garage 2023	Pressure Washer	Pressure Washers	Diesel	1	25	0.156832	1	0.3	0.28	0.000726	0	0
Phase 1b Office	South Garage 2023	Scraper	Scrapers	Diesel	1	600	0	1	0.48	0.088	0	0	0
Phase 1b Office	South Garage 2023	Tire Wash	Other Construction Equipment	Diesel	1	100	1.44802	1	0.42	0.192	0.025743	0	0
Phase 1b Office	South Garage 2024	Air Compressor	Air Compressors	Diesel	1	150	0.48	1	0.48	0.128	0.009753	0	0
Phase 1b Office	South Garage 2024	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	0	1	0.37	0.088	0	0	0

Phase 1b Office	South Garage 2024	Blade	Graders	Diesel	1	450	0	1	0.41	0.088	0	0	0
Phase 1b Office	South Garage 2024	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	0	1	0.37	0.088	0	0	0
Phase 1b Office	South Garage 2024	Boom Lift	Aerial Lifts	Diesel	1	40	4.737447	1	0.31	0.28	0.036263	0	0
Phase 1b Office	South Garage 2024	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0.42	0.088	0	0	0
Phase 1b Office	South Garage 2024	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.78	0.088	0	0	0
Phase 1b Office	South Garage 2024	Concrete Pump	Pumps	Diesel	1	450	0.6	1	0.74	0.088	0.038763	0	0
Phase 1b Office	South Garage 2024	Excavator	Excavators	Diesel	1	500	0	1	0.38	0.088	0	0	0
Phase 1b Office	South Garage 2024	Generator	Generator Sets	Diesel	1	25	0	1	0.74	0.28	0	0	0
Phase 1b Office	South Garage 2024	Gradall	Forklifts	Diesel	1	350	3	1	0.2	0.088	0.040742	0	0
Phase 1b Office	South Garage 2024	Hydro/Crawler Crane	Cranes	Diesel	1	550	3.68617	1	0.29	0.088	0.114066	0	0
Phase 1b Office	South Garage 2024	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	0	1	0.37	0.192	0	0	0
Phase 1b Office	South Garage 2024	Paver	Pavers	Diesel	1	250	0	1	0.42	0.088	0	0	0
Phase 1b Office	South Garage 2024	Pile Rig	Bore/Drill Rigs	Diesel	1	600	0	1	0.5	0.088	0	0	0
Phase 1b Office	South Garage 2024	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0.3	0.28	0	0	0
Phase 1b Office	South Garage 2024	Scraper	Scrapers	Diesel	1	600	0	1	0.48	0.088	0	0	0
Phase 1b Office	South Garage 2024	Tire Wash	Other Construction Equipment	Diesel	1	100	1.5	1	0.42	0.192	0.026667	0	0
Phase 1b Office	Office Building 3 2023	Air Compressor	Air Compressors	Diesel	1	150	0.067119	1	0.48	0.128	0.001364	0	0
Phase 1b Office	Office Building 3 2023	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	2.576271	1	0.37	0.088	0.064726	0	0
Phase 1b Office	Office Building 3 2023	Blade	Graders	Diesel	1	450	0	1	0.41	0.088	0	0	0
Phase 1b Office	Office Building 3 2023	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	2.576271	1	0.37	0.088	0.036986	0	0
Phase 1b Office	Office Building 3 2023	Boom Lift	Aerial Lifts	Diesel	1	40	1.694915	1	0.31	0.28	0.012974	0	0
Phase 1b Office	Office Building 3 2023	Compactor	Other Construction Equipment	Diesel	1	250	0.206102	1	0.42	0.088	0.004198	0	0
Phase 1b Office	Office Building 3 2023	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.78	0.088	0	0	0
Phase 1b Office	Office Building 3 2023	Concrete Pump	Pumps	Diesel	1	450	0.121356	1	0.74	0.088	0.00784	0	0
Phase 1b Office	Office Building 3 2023	Excavator	Excavators	Diesel	1	500	0.128814	1	0.38	0.088	0.004748	0	0
Phase 1b Office	Office Building 3 2023	Generator	Generator Sets	Diesel	1	25	4.813559	1	0.74	0.28	0.054971	0	0
Phase 1b Office	Office Building 3 2023	Gradall	Forklifts	Diesel	1	350	0.48	1	0.2	0.088	0.006519	0	0
Phase 1b Office	Office Building 3 2023	Hydro/Crawler Crane	Cranes	Diesel	1	550	3.322034	1	0.29	0.088	0.102798	0	0
Phase 1b Office	Office Building 3 2023	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	1.864407	1	0.37	0.192	0.0292	0	0
Phase 1b Office	Office Building 3 2023	Paver	Pavers	Diesel	1	250	0	1	0.42	0.088	0	0	0
Phase 1b Office	Office Building 3 2023	Pile Rig	Bore/Drill Rigs	Diesel	1	600	1.864407	1	0.5	0.088	0.108513	0	0
Phase 1b Office	Office Building 3 2023	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0.3	0.28	0	0	0
Phase 1b Office	Office Building 3 2023	Scraper	Scrapers	Diesel	1	600	0	1	0.48	0.088	0	0	0
Phase 1b Office	Office Building 3 2023	Tire Wash	Other Construction Equipment	Diesel	1	100	1.5	1	0.42	0.192	0.026667	0	0
Phase 1b Office	Office Building 3 2024	Air Compressor	Air Compressors	Diesel	1	150	0	1	0.48	0.128	0	0	0
Phase 1b Office	Office Building 3 2024	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	0	1	0.37	0.088	0	0	0
Phase 1b Office	Office Building 3 2024	Blade	Graders	Diesel	1	450	0	1	0.41	0.088	0	0	0
Phase 1b Office	Office Building 3 2024	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	0	1	0.37	0.088	0	0	0
Phase 1b Office	Office Building 3 2024	Boom Lift	Aerial Lifts	Diesel	1	40	6.858779	1	0.31	0.28	0.0525	0	0
Phase 1b Office	Office Building 3 2024	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0.42	0.088	0	0	0
Phase 1b Office	Office Building 3 2024	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.78	0.088	0	0	0
Phase 1b Office	Office Building 3 2024	Concrete Pump	Pumps	Diesel	1	450	0.005038	1	0.74	0.088	0.000325	0	0
Phase 1b Office	Office Building 3 2024	Excavator	Excavators	Diesel	1	500	0	1	0.38	0.088	0	0	0
Phase 1b Office	Office Building 3 2024	Generator	Generator Sets	Diesel	1	25	0	1	0.74	0.28	0	0	0
Phase 1b Office	Office Building 3 2024	Gradall	Forklifts	Diesel	1	350	0.48	1	0.2	0.088	0.006519	0	0
Phase 1b Office	Office Building 3 2024	Hydro/Crawler Crane	Cranes	Diesel	1	550	0	1	0.29	0.088	0	0	0
Phase 1b Office	Office Building 3 2024	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	0	1	0.37	0.192	0	0	0
Phase 1b Office	Office Building 3 2024	Paver	Pavers	Diesel	1	250	0	1	0.42	0.088	0	0	0
Phase 1b Office	Office Building 3 2024	Pile Rig	Bore/Drill Rigs	Diesel	1	600	0	1	0.5	0.088	0	0	0
Phase 1b Office	Office Building 3 2024	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0.3	0.28	0	0	0
Phase 1b Office	Office Building 3 2024	Scraper	Scrapers	Diesel	1	600	0	1	0.48	0.088	0	0	0
Phase 1b Office	Office Building 3 2024	Tire Wash	Other Construction Equipment	Diesel	1	100	1.5	1	0.42	0.192	0.026667	0	0
Phase 1b Office	Office Building 3 2025	Air Compressor	Air Compressors	Diesel	1	150	0	1	0.48	0.128	0	0	0
Phase 1b Office	Office Building 3 2025	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	0	1	0.37	0.088	0	0	0
Phase 1b Office	Office Building 3 2025	Blade	Graders	Diesel	1	450	0	1	0.41	0.088	0	0	0
Phase 1b Office	Office Building 3 2025	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	0	1	0.37	0.088	0	0	0

Phase 1b Office	Office Building 3 2025	Boom Lift	Aerial Lifts	Diesel	1	40	0	1	0.31	0.28	0	0	0
Phase 1b Office	Office Building 3 2025	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0.42	0.088	0	0	0
Phase 1b Office	Office Building 3 2025	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.78	0.088	0	0	0
Phase 1b Office	Office Building 3 2025	Concrete Pump	Pumps	Diesel	1	450	0	1	0.74	0.088	0	0	0
Phase 1b Office	Office Building 3 2025	Excavator	Excavators	Diesel	1	500	0	1	0.38	0.088	0	0	0
Phase 1b Office	Office Building 3 2025	Generator	Generator Sets	Diesel	1	25	0	1	0.74	0.28	0	0	0
Phase 1b Office	Office Building 3 2025	Gradall	Forklifts	Diesel	1	350	0.48	1	0.2	0.088	0.006519	0	0
Phase 1b Office	Office Building 3 2025	Hydro/Crawler Crane	Cranes	Diesel	1	550	0	1	0.29	0.088	0	0	0
Phase 1b Office	Office Building 3 2025	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	0	1	0.37	0.192	0	0	0
Phase 1b Office	Office Building 3 2025	Paver	Pavers	Diesel	1	250	0	1	0.42	0.088	0	0	0
Phase 1b Office	Office Building 3 2025	Pile Rig	Bore/Drill Rigs	Diesel	1	600	0	1	0.5	0.088	0	0	0
Phase 1b Office	Office Building 3 2025	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0.3	0.28	0	0	0
Phase 1b Office	Office Building 3 2025	Scraper	Scrapers	Diesel	1	600	0	1	0.48	0.088	0	0	0
Phase 1b Office	Office Building 3 2025	Tire Wash	Other Construction Equipment	Diesel	1	100	1.5	1	0.42	0.192	0.026667	0	0
Phase 1b Office	Office Building 1 2023	Air Compressor	Air Compressors	Diesel	1	150	0.065363	1	0.48	0.128	0.001328	0	0
Phase 1b Office	Office Building 1 2023	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	2.24581	1	0.37	0.088	0.056424	0	0
Phase 1b Office	Office Building 1 2023	Blade	Graders	Diesel	1	450	0	1	0.41	0.088	0	0	0
Phase 1b Office	Office Building 1 2023	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	2.24581	1	0.37	0.088	0.032242	0	0
Phase 1b Office	Office Building 1 2023	Boom Lift	Aerial Lifts	Diesel	1	40	2.480447	1	0.31	0.28	0.018987	0	0
Phase 1b Office	Office Building 1 2023	Compactor	Other Construction Equipment	Diesel	1	250	0.179665	1	0.42	0.088	0.00366	0	0
Phase 1b Office	Office Building 1 2023	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.78	0.088	0	0	0
Phase 1b Office	Office Building 1 2023	Concrete Pump	Pumps	Diesel	1	450	0.109274	1	0.74	0.088	0.00706	0	0
Phase 1b Office	Office Building 1 2023	Excavator	Excavators	Diesel	1	500	0.112291	1	0.38	0.088	0.004139	0	0
Phase 1b Office	Office Building 1 2023	Generator	Generator Sets	Diesel	1	25	4.424581	1	0.74	0.28	0.050529	0	0
Phase 1b Office	Office Building 1 2023	Gradall	Forklifts	Diesel	1	350	0.48	1	0.2	0.088	0.006519	0	0
Phase 1b Office	Office Building 1 2023	Hydro/Crawler Crane	Cranes	Diesel	1	550	2.916201	1	0.29	0.088	0.09024	0	0
Phase 1b Office	Office Building 1 2023	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	1.47486	1	0.37	0.192	0.023099	0	0
Phase 1b Office	Office Building 1 2023	Paver	Pavers	Diesel	1	250	0	1	0.42	0.088	0	0	0
Phase 1b Office	Office Building 1 2023	Pile Rig	Bore/Drill Rigs	Diesel	1	600	1.47486	1	0.5	0.088	0.08584	0	0
Phase 1b Office	Office Building 1 2023	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0.3	0.28	0	0	0
Phase 1b Office	Office Building 1 2023	Scraper	Scrapers	Diesel	1	600	0	1	0.48	0.088	0	0	0
Phase 1b Office	Office Building 1 2023	Tire Wash	Other Construction Equipment	Diesel	1	100	1.5	1	0.42	0.192	0.026667	0	0
Phase 1b Office	Office Building 1 2024	Air Compressor	Air Compressors	Diesel	1	150	0	1	0.48	0.128	0	0	0
Phase 1b Office	Office Building 1 2024	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	0	1	0.37	0.088	0	0	0
Phase 1b Office	Office Building 1 2024	Blade	Graders	Diesel	1	450	0	1	0.41	0.088	0	0	0
Phase 1b Office	Office Building 1 2024	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	0	1	0.37	0.088	0	0	0
Phase 1b Office	Office Building 1 2024	Boom Lift	Aerial Lifts	Diesel	1	40	6.554217	1	0.31	0.28	0.050169	0	0
Phase 1b Office	Office Building 1 2024	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0.42	0.088	0	0	0
Phase 1b Office	Office Building 1 2024	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.78	0.088	0	0	0
Phase 1b Office	Office Building 1 2024	Concrete Pump	Pumps	Diesel	1	450	0.005301	1	0.74	0.088	0.000342	0	0
Phase 1b Office	Office Building 1 2024	Excavator	Excavators	Diesel	1	500	0	1	0.38	0.088	0	0	0
Phase 1b Office	Office Building 1 2024	Generator	Generator Sets	Diesel	1	25	0	1	0.74	0.28	0	0	0
Phase 1b Office	Office Building 1 2024	Gradall	Forklifts	Diesel	1	350	0.478072	1	0.2	0.088	0.006492	0	0
Phase 1b Office	Office Building 1 2024	Hydro/Crawler Crane	Cranes	Diesel	1	550	0	1	0.29	0.088	0	0	0
Phase 1b Office	Office Building 1 2024	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	0	1	0.37	0.192	0	0	0
Phase 1b Office	Office Building 1 2024	Paver	Pavers	Diesel	1	250	0	1	0.42	0.088	0	0	0
Phase 1b Office	Office Building 1 2024	Pile Rig	Bore/Drill Rigs	Diesel	1	600	0	1	0.5	0.088	0	0	0
Phase 1b Office	Office Building 1 2024	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0.3	0.28	0	0	0
Phase 1b Office	Office Building 1 2024	Scraper	Scrapers	Diesel	1	600	0	1	0.48	0.088	0	0	0
Phase 1b Office	Office Building 1 2024	Tire Wash	Other Construction Equipment	Diesel	1	100	1.5	1	0.42	0.192	0.026667	0	0
Phase 1b Office	Office Building 2 2023	Air Compressor	Air Compressors	Diesel	1	150	0.075669	1	0.48	0.128	0.001537	0	0
Phase 1b Office	Office Building 2 2023	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	2.484076	1	0.37	0.088	0.06241	0	0
Phase 1b Office	Office Building 2 2023	Blade	Graders	Diesel	1	450	0	1	0.41	0.088	0	0	0
Phase 1b Office	Office Building 2 2023	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	2.484076	1	0.37	0.088	0.035663	0	0
Phase 1b Office	Office Building 2 2023	Boom Lift	Aerial Lifts	Diesel	1	40	1.22293	1	0.31	0.28	0.009361	0	0
Phase 1b Office	Office Building 2 2023	Compactor	Other Construction Equipment	Diesel	1	250	0.198726	1	0.42	0.088	0.004048	0	0

Phase 1b Office	Office Building 2 2023	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.78	0.088	0	0	0
Phase 1b Office	Office Building 2 2023	Concrete Pump	Pumps	Diesel	1	450	0.124204	1	0.74	0.088	0.008024	0	0
Phase 1b Office	Office Building 2 2023	Excavator	Excavators	Diesel	1	500	0.124204	1	0.38	0.088	0.004578	0	0
Phase 1b Office	Office Building 2 2023	Generator	Generator Sets	Diesel	1	25	5.006369	1	0.74	0.28	0.057173	0	0
Phase 1b Office	Office Building 2 2023	Gradall	Forklifts	Diesel	1	350	0.48	1	0.2	0.088	0.006519	0	0
Phase 1b Office	Office Building 2 2023	Hydro/Crawler Crane	Cranes	Diesel	1	550	3.324841	1	0.29	0.088	0.102885	0	0
Phase 1b Office	Office Building 2 2023	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	1.681529	1	0.37	0.192	0.026336	0	0
Phase 1b Office	Office Building 2 2023	Paver	Pavers	Diesel	1	250	0	1	0.42	0.088	0	0	0
Phase 1b Office	Office Building 2 2023	Pile Rig	Bore/Drill Rigs	Diesel	1	600	1.681529	1	0.5	0.088	0.097869	0	0
Phase 1b Office	Office Building 2 2023	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0.3	0.28	0	0	0
Phase 1b Office	Office Building 2 2023	Scraper	Scrapers	Diesel	1	600	0	1	0.48	0.088	0	0	0
Phase 1b Office	Office Building 2 2023	Tire Wash	Other Construction Equipment	Diesel	1	100	1.5	1	0.42	0.192	0.026667	0	0
Phase 1b Office	Office Building 2 2024	Air Compressor	Air Compressors	Diesel	1	150	0	1	0.48	0.128	0	0	0
Phase 1b Office	Office Building 2 2024	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	0	1	0.37	0.088	0	0	0
Phase 1b Office	Office Building 2 2024	Blade	Graders	Diesel	1	450	0	1	0.41	0.088	0	0	0
Phase 1b Office	Office Building 2 2024	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	0	1	0.37	0.088	0	0	0
Phase 1b Office	Office Building 2 2024	Boom Lift	Aerial Lifts	Diesel	1	40	7.270992	1	0.31	0.28	0.055656	0	0
Phase 1b Office	Office Building 2 2024	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0.42	0.088	0	0	0
Phase 1b Office	Office Building 2 2024	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.78	0.088	0	0	0
Phase 1b Office	Office Building 2 2024	Concrete Pump	Pumps	Diesel	1	450	0.005038	1	0.74	0.088	0.000325	0	0
Phase 1b Office	Office Building 2 2024	Excavator	Excavators	Diesel	1	500	0	1	0.38	0.088	0	0	0
Phase 1b Office	Office Building 2 2024	Generator	Generator Sets	Diesel	1	25	0	1	0.74	0.28	0	0	0
Phase 1b Office	Office Building 2 2024	Gradall	Forklifts	Diesel	1	350	0.48	1	0.2	0.088	0.006519	0	0
Phase 1b Office	Office Building 2 2024	Hydro/Crawler Crane	Cranes	Diesel	1	550	0	1	0.29	0.088	0	0	0
Phase 1b Office	Office Building 2 2024	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	0	1	0.37	0.192	0	0	0
Phase 1b Office	Office Building 2 2024	Paver	Pavers	Diesel	1	250	0	1	0.42	0.088	0	0	0
Phase 1b Office	Office Building 2 2024	Pile Rig	Bore/Drill Rigs	Diesel	1	600	0	1	0.5	0.088	0	0	0
Phase 1b Office	Office Building 2 2024	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0.3	0.28	0	0	0
Phase 1b Office	Office Building 2 2024	Scraper	Scrapers	Diesel	1	600	0	1	0.48	0.088	0	0	0
Phase 1b Office	Office Building 2 2024	Tire Wash	Other Construction Equipment	Diesel	1	100	1.5	1	0.42	0.192	0.026667	0	0
Phase 1b Office	Office Building 2 2025	Air Compressor	Air Compressors	Diesel	1	150	0	1	0.48	0.128	0	0	0
Phase 1b Office	Office Building 2 2025	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	0	1	0.37	0.088	0	0	0
Phase 1b Office	Office Building 2 2025	Blade	Graders	Diesel	1	450	0	1	0.41	0.088	0	0	0
Phase 1b Office	Office Building 2 2025	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	0	1	0.37	0.088	0	0	0
Phase 1b Office	Office Building 2 2025	Boom Lift	Aerial Lifts	Diesel	1	40	0	1	0.31	0.28	0	0	0
Phase 1b Office	Office Building 2 2025	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0.42	0.088	0	0	0
Phase 1b Office	Office Building 2 2025	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.78	0.088	0	0	0
Phase 1b Office	Office Building 2 2025	Concrete Pump	Pumps	Diesel	1	450	0	1	0.74	0.088	0	0	0
Phase 1b Office	Office Building 2 2025	Excavator	Excavators	Diesel	1	500	0	1	0.38	0.088	0	0	0
Phase 1b Office	Office Building 2 2025	Generator	Generator Sets	Diesel	1	25	0	1	0.74	0.28	0	0	0
Phase 1b Office	Office Building 2 2025	Gradall	Forklifts	Diesel	1	350	0.48	1	0.2	0.088	0.006519	0	0
Phase 1b Office	Office Building 2 2025	Hydro/Crawler Crane	Cranes	Diesel	1	550	0	1	0.29	0.088	0	0	0
Phase 1b Office	Office Building 2 2025	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	0	1	0.37	0.192	0	0	0
Phase 1b Office	Office Building 2 2025	Paver	Pavers	Diesel	1	250	0	1	0.42	0.088	0	0	0
Phase 1b Office	Office Building 2 2025	Pile Rig	Bore/Drill Rigs	Diesel	1	600	0	1	0.5	0.088	0	0	0
Phase 1b Office	Office Building 2 2025	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0.3	0.28	0	0	0
Phase 1b Office	Office Building 2 2025	Scraper	Scrapers	Diesel	1	600	0	1	0.48	0.088	0	0	0
Phase 1b Office	Office Building 2 2025	Tire Wash	Other Construction Equipment	Diesel	1	100	1.5	1	0.42	0.192	0.026667	0	0
Phase 1b Office	Office Building 5 2023	Air Compressor	Air Compressors	Diesel	1	150	0.058812	1	0.48	0.128	0.001195	0	0
Phase 1b Office	Office Building 5 2023	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	2.643564	1	0.37	0.088	0.066417	0	0
Phase 1b Office	Office Building 5 2023	Blade	Graders	Diesel	1	450	0	1	0.41	0.088	0	0	0
Phase 1b Office	Office Building 5 2023	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	2.643564	1	0.37	0.088	0.037953	0	0
Phase 1b Office	Office Building 5 2023	Boom Lift	Aerial Lifts	Diesel	1	40	2.19802	1	0.31	0.28	0.016825	0	0
Phase 1b Office	Office Building 5 2023	Compactor	Other Construction Equipment	Diesel	1	250	0.211485	1	0.42	0.088	0.004308	0	0
Phase 1b Office	Office Building 5 2023	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.78	0.088	0	0	0
Phase 1b Office	Office Building 5 2023	Concrete Pump	Pumps	Diesel	1	450	0.117327	1	0.74	0.088	0.00758	0	0

Phase 1b Office	Office Building 5 2023	Excavator	Excavators	Diesel	1	500	0.132178	1	0.38	0.088	0.004872	0	0
Phase 1b Office	Office Building 5 2023	Generator	Generator Sets	Diesel	1	25	4.60396	1	0.74	0.28	0.052577	0	0
Phase 1b Office	Office Building 5 2023	Gradall	Forklifts	Diesel	1	350	0.48	1	0.2	0.088	0.006519	0	0
Phase 1b Office	Office Building 5 2023	Hydro/Crawler Crane	Cranes	Diesel	1	550	3.267327	1	0.29	0.088	0.101105	0	0
Phase 1b Office	Office Building 5 2023	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	1.960396	1	0.37	0.192	0.030703	0	0
Phase 1b Office	Office Building 5 2023	Paver	Pavers	Diesel	1	250	0	1	0.42	0.088	0	0	0
Phase 1b Office	Office Building 5 2023	Pile Rig	Bore/Drill Rigs	Diesel	1	600	1.960396	1	0.5	0.088	0.1141	0	0
Phase 1b Office	Office Building 5 2023	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0.3	0.28	0	0	0
Phase 1b Office	Office Building 5 2023	Scraper	Scrapers	Diesel	1	600	0	1	0.48	0.088	0	0	0
Phase 1b Office	Office Building 5 2023	Tire Wash	Other Construction Equipment	Diesel	1	100	1.5	1	0.42	0.192	0.026667	0	0
Phase 1b Office	Office Building 5 2024	Air Compressor	Air Compressors	Diesel	1	150	0	1	0.48	0.128	0	0	0
Phase 1b Office	Office Building 5 2024	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	0	1	0.37	0.088	0	0	0
Phase 1b Office	Office Building 5 2024	Blade	Graders	Diesel	1	450	0	1	0.41	0.088	0	0	0
Phase 1b Office	Office Building 5 2024	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	0	1	0.37	0.088	0	0	0
Phase 1b Office	Office Building 5 2024	Boom Lift	Aerial Lifts	Diesel	1	40	6.194656	1	0.31	0.28	0.047417	0	0
Phase 1b Office	Office Building 5 2024	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0.42	0.088	0	0	0
Phase 1b Office	Office Building 5 2024	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.78	0.088	0	0	0
Phase 1b Office	Office Building 5 2024	Concrete Pump	Pumps	Diesel	1	450	0.004809	1	0.74	0.088	0.000311	0	0
Phase 1b Office	Office Building 5 2024	Excavator	Excavators	Diesel	1	500	0	1	0.38	0.088	0	0	0
Phase 1b Office	Office Building 5 2024	Generator	Generator Sets	Diesel	1	25	0	1	0.74	0.28	0	0	0
Phase 1b Office	Office Building 5 2024	Gradall	Forklifts	Diesel	1	350	0.48	1	0.2	0.088	0.006519	0	0
Phase 1b Office	Office Building 5 2024	Hydro/Crawler Crane	Cranes	Diesel	1	550	0	1	0.29	0.088	0	0	0
Phase 1b Office	Office Building 5 2024	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	0	1	0.37	0.192	0	0	0
Phase 1b Office	Office Building 5 2024	Paver	Pavers	Diesel	1	250	0	1	0.42	0.088	0	0	0
Phase 1b Office	Office Building 5 2024	Pile Rig	Bore/Drill Rigs	Diesel	1	600	0	1	0.5	0.088	0	0	0
Phase 1b Office	Office Building 5 2024	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0.3	0.28	0	0	0
Phase 1b Office	Office Building 5 2024	Scraper	Scrapers	Diesel	1	600	0	1	0.48	0.088	0	0	0
Phase 1b Office	Office Building 5 2024	Tire Wash	Other Construction Equipment	Diesel	1	100	1.5	1	0.42	0.192	0.026667	0	0
Phase 1b Office	Office Building 5 2025	Air Compressor	Air Compressors	Diesel	1	150	0	1	0.48	0.128	0	0	0
Phase 1b Office	Office Building 5 2025	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	0	1	0.37	0.088	0	0	0
Phase 1b Office	Office Building 5 2025	Blade	Graders	Diesel	1	450	0	1	0.41	0.088	0	0	0
Phase 1b Office	Office Building 5 2025	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	0	1	0.37	0.088	0	0	0
Phase 1b Office	Office Building 5 2025	Boom Lift	Aerial Lifts	Diesel	1	40	0	1	0.31	0.28	0	0	0
Phase 1b Office	Office Building 5 2025	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0.42	0.088	0	0	0
Phase 1b Office	Office Building 5 2025	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.78	0.088	0	0	0
Phase 1b Office	Office Building 5 2025	Concrete Pump	Pumps	Diesel	1	450	0	1	0.74	0.088	0	0	0
Phase 1b Office	Office Building 5 2025	Excavator	Excavators	Diesel	1	500	0	1	0.38	0.088	0	0	0
Phase 1b Office	Office Building 5 2025	Generator	Generator Sets	Diesel	1	25	0	1	0.74	0.28	0	0	0
Phase 1b Office	Office Building 5 2025	Gradall	Forklifts	Diesel	1	350	0.48	1	0.2	0.088	0.006519	0	0
Phase 1b Office	Office Building 5 2025	Hydro/Crawler Crane	Cranes	Diesel	1	550	0	1	0.29	0.088	0	0	0
Phase 1b Office	Office Building 5 2025	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	0	1	0.37	0.192	0	0	0
Phase 1b Office	Office Building 5 2025	Paver	Pavers	Diesel	1	250	0	1	0.42	0.088	0	0	0
Phase 1b Office	Office Building 5 2025	Pile Rig	Bore/Drill Rigs	Diesel	1	600	0	1	0.5	0.088	0	0	0
Phase 1b Office	Office Building 5 2025	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0.3	0.28	0	0	0
Phase 1b Office	Office Building 5 2025	Scraper	Scrapers	Diesel	1	600	0	1	0.48	0.088	0	0	0
Phase 1b Office	Office Building 5 2025	Tire Wash	Other Construction Equipment	Diesel	1	100	1.5	1	0.42	0.192	0.026667	0	0
Phase 1b Office	Office Building 6 2023	Air Compressor	Air Compressors	Diesel	1	150	0.062206	1	0.48	0.128	0.001264	0	0
Phase 1b Office	Office Building 6 2023	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	3.926471	1	0.37	0.088	0.098649	0	0
Phase 1b Office	Office Building 6 2023	Blade	Graders	Diesel	1	450	0	1	0.41	0.088	0	0	0
Phase 1b Office	Office Building 6 2023	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	3.926471	1	0.37	0.088	0.056371	0	0
Phase 1b Office	Office Building 6 2023	Boom Lift	Aerial Lifts	Diesel	1	40	0	1	0.31	0.28	0	0	0
Phase 1b Office	Office Building 6 2023	Compactor	Other Construction Equipment	Diesel	1	250	0.314118	1	0.42	0.088	0.006399	0	0
Phase 1b Office	Office Building 6 2023	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.78	0.088	0	0	0
Phase 1b Office	Office Building 6 2023	Concrete Pump	Pumps	Diesel	1	450	0.157941	1	0.74	0.088	0.010204	0	0
Phase 1b Office	Office Building 6 2023	Excavator	Excavators	Diesel	1	500	0.196324	1	0.38	0.088	0.007237	0	0
Phase 1b Office	Office Building 6 2023	Generator	Generator Sets	Diesel	1	25	6	1	0.74	0.28	0.06852	0	0

Phase 1b Office	Office Building 6 2023	Gradall	Forklifts	Diesel	1	350	0.48	1	0.2	0.088	0.006519	0	0
Phase 1b Office	Office Building 6 2023	Hydro/Crawler Crane	Cranes	Diesel	1	550	4.897059	1	0.29	0.088	0.151536	0	0
Phase 1b Office	Office Building 6 2023	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	3	1	0.37	0.192	0.046985	0	0
Phase 1b Office	Office Building 6 2023	Paver	Pavers	Diesel	1	250	0	1	0.42	0.088	0	0	0
Phase 1b Office	Office Building 6 2023	Pile Rig	Bore/Drill Rigs	Diesel	1	600	3	1	0.5	0.088	0.174607	0	0
Phase 1b Office	Office Building 6 2023	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0.3	0.28	0	0	0
Phase 1b Office	Office Building 6 2023	Scraper	Scrapers	Diesel	1	600	0	1	0.48	0.088	0	0	0
Phase 1b Office	Office Building 6 2023	Tire Wash	Other Construction Equipment	Diesel	1	100	1.5	1	0.42	0.192	0.026667	0	0
Phase 1b Office	Office Building 6 2024	Air Compressor	Air Compressors	Diesel	1	150	0.013053	1	0.48	0.128	0.000265	0	0
Phase 1b Office	Office Building 6 2024	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	0	1	0.37	0.088	0	0	0
Phase 1b Office	Office Building 6 2024	Blade	Graders	Diesel	1	450	0	1	0.41	0.088	0	0	0
Phase 1b Office	Office Building 6 2024	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	0	1	0.37	0.088	0	0	0
Phase 1b Office	Office Building 6 2024	Boom Lift	Aerial Lifts	Diesel	1	40	8.003817	1	0.31	0.28	0.061265	0	0
Phase 1b Office	Office Building 6 2024	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0.42	0.088	0	0	0
Phase 1b Office	Office Building 6 2024	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.78	0.088	0	0	0
Phase 1b Office	Office Building 6 2024	Concrete Pump	Pumps	Diesel	1	450	0.013969	1	0.74	0.088	0.000902	0	0
Phase 1b Office	Office Building 6 2024	Excavator	Excavators	Diesel	1	500	0	1	0.38	0.088	0	0	0
Phase 1b Office	Office Building 6 2024	Generator	Generator Sets	Diesel	1	25	0.435115	1	0.74	0.28	0.004969	0	0
Phase 1b Office	Office Building 6 2024	Gradall	Forklifts	Diesel	1	350	0.48	1	0.2	0.088	0.006519	0	0
Phase 1b Office	Office Building 6 2024	Hydro/Crawler Crane	Cranes	Diesel	1	550	0	1	0.29	0.088	0	0	0
Phase 1b Office	Office Building 6 2024	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	0	1	0.37	0.192	0	0	0
Phase 1b Office	Office Building 6 2024	Paver	Pavers	Diesel	1	250	0	1	0.42	0.088	0	0	0
Phase 1b Office	Office Building 6 2024	Pile Rig	Bore/Drill Rigs	Diesel	1	600	0	1	0.5	0.088	0	0	0
Phase 1b Office	Office Building 6 2024	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0.3	0.28	0	0	0
Phase 1b Office	Office Building 6 2024	Scraper	Scrapers	Diesel	1	600	0	1	0.48	0.088	0	0	0
Phase 1b Office	Office Building 6 2024	Tire Wash	Other Construction Equipment	Diesel	1	100	1.5	1	0.42	0.192	0.026667	0	0
Phase 1b Office	Office Building 6 2025	Air Compressor	Air Compressors	Diesel	1	150	0	1	0.48	0.128	0	0	0
Phase 1b Office	Office Building 6 2025	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	0	1	0.37	0.088	0	0	0
Phase 1b Office	Office Building 6 2025	Blade	Graders	Diesel	1	450	0	1	0.41	0.088	0	0	0
Phase 1b Office	Office Building 6 2025	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	0	1	0.37	0.088	0	0	0
Phase 1b Office	Office Building 6 2025	Boom Lift	Aerial Lifts	Diesel	1	40	0	1	0.31	0.28	0	0	0
Phase 1b Office	Office Building 6 2025	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0.42	0.088	0	0	0
Phase 1b Office	Office Building 6 2025	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.78	0.088	0	0	0
Phase 1b Office	Office Building 6 2025	Concrete Pump	Pumps	Diesel	1	450	0	1	0.74	0.088	0	0	0
Phase 1b Office	Office Building 6 2025	Excavator	Excavators	Diesel	1	500	0	1	0.38	0.088	0	0	0
Phase 1b Office	Office Building 6 2025	Generator	Generator Sets	Diesel	1	25	0	1	0.74	0.28	0	0	0
Phase 1b Office	Office Building 6 2025	Gradall	Forklifts	Diesel	1	350	0.48	1	0.2	0.088	0.006519	0	0
Phase 1b Office	Office Building 6 2025	Hydro/Crawler Crane	Cranes	Diesel	1	550	0	1	0.29	0.088	0	0	0
Phase 1b Office	Office Building 6 2025	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	0	1	0.37	0.192	0	0	0
Phase 1b Office	Office Building 6 2025	Paver	Pavers	Diesel	1	250	0	1	0.42	0.088	0	0	0
Phase 1b Office	Office Building 6 2025	Pile Rig	Bore/Drill Rigs	Diesel	1	600	0	1	0.5	0.088	0	0	0
Phase 1b Office	Office Building 6 2025	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0.3	0.28	0	0	0
Phase 1b Office	Office Building 6 2025	Scraper	Scrapers	Diesel	1	600	0	1	0.48	0.088	0	0	0
Phase 1b Office	Office Building 6 2025	Tire Wash	Other Construction Equipment	Diesel	1	100	1.5	1	0.42	0.192	0.026667	0	0
Phase 1b Mixed Use	Parcel 7 Foundations	Pile Rig	Bore/Drill Rigs	Diesel	0	600	8	0.4	0.5	0.088	0	0	0
Phase 1b Mixed Use	Parcel 7 Foundations	Generator	Generator Sets	Diesel	0	25	6	1	0.74	0.28	0	0	0
Phase 1b Mixed Use	Parcel 7 Foundations	Tire Wash	Other Construction Equipment	Diesel	1	100	4	0.9	0.42	0.192	0.064001	0	0
Phase 1b Mixed Use	Parcel 7 Foundations	Excavator	Excavators	Diesel	1	131	8	0.6	0.38	0.128	0.067428	0	0
Phase 1b Mixed Use	Parcel 7 Foundations	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	90	8	0.6	0.37	0.192	0.067659	0	0
Phase 1b Mixed Use	Parcel 7 Foundations	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	70	8	0.8	0.37	0.192	0.070165	0	0
Phase 1b Mixed Use	Parcel 7 Foundations	Gradall	Forklifts	Diesel	1	74	4	0.8	0.2	0.192	0.020047	0	0
Phase 1b Mixed Use	Parcel 7 Foundations	Crane	Cranes	Diesel	1	215	4	0.5	0.29	0.088	0.024193	0	0
Phase 1b Mixed Use	Parcel 7 Foundations	Concrete Pump	Pumps	Diesel	1	450	0.25	0.5	0.74	0.088	0.008076	0	0
Phase 1b Mixed Use	Parcel 7 Core and Shell	Generator	Generator Sets	Diesel	0	25	6	1	0.74	0.28	0	0	0
Phase 1b Mixed Use	Parcel 7 Core and Shell	Tire Wash	Other Construction Equipment	Diesel	1	100	4	0.9	0.42	0.192	0.064001	0	0
Phase 1b Mixed Use	Parcel 7 Core and Shell	Crane	Cranes	Diesel	1	600	8	0.2	0.29	0.088	0.054012	0	0

Phase 1b Mixed Use	Parcel 7 Core and Shell	Gradall	Forklifts	Diesel	1	74	4	0.8	0.2	0.192	0.020047	0	0
Phase 1b Mixed Use	Parcel 7 Core and Shell	Concrete Pump	Pumps	Diesel	0	450	6	0.225	0.74	0.088	0	0	0
Phase 1b Mixed Use	Parcel 7 Core and Shell	Air Compressor	Air Compressors	Diesel	0	140	2	0.4	0.48	0.128	0	0	0
Phase 1b Mixed Use	Parcel 7 Core and Shell	Boom Lift	Aerial Lifts	Diesel	0	50	6	0.2	0.31	0.192	0	0	0
Phase 1b Mixed Use	Parcel 7 Tenant Improvements	Generator	Generator Sets	Diesel	0	25	6	0.85	0.74	0.28	0	0	0
Phase 1b Mixed Use	Parcel 7 Tenant Improvements	Tire Wash	Other Construction Equipment	Diesel	1	100	4	0.9	0.42	0.192	0.064001	0	0
Phase 1b Mixed Use	Parcel 7 Tenant Improvements	Gradall	Forklifts	Diesel	1	74	4	0.8	0.2	0.192	0.020047	0	0
Phase 1b Mixed Use	Parcel 7 Landscaping	Excavator	Excavators	Diesel	1	25	8	0.9	0.38	0.28	0.042223	0	0
Phase 1b Mixed Use	Parcel 7 Landscaping	Generator	Generator Sets	Diesel	0	25	6	0.5	0.74	0.28	0	0	0
Phase 1b Mixed Use	Parcel 7 Landscaping	Tire Wash	Other Construction Equipment	Diesel	1	100	4	0.9	0.42	0.192	0.064001	0	0
Phase 1b Mixed Use	Parcel 7 Landscaping	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	90	8	0.6	0.37	0.192	0.067659	0	0
Phase 1b Mixed Use	Parcel 7 Landscaping	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	70	8	0.8	0.37	0.192	0.070165	0	0
Phase 1b Mixed Use	Parcel 6 Foundations	Pile Rig	Bore/Drill Rigs	Diesel	0	600	8	0.4	0.5	0.088	0	0	0
Phase 1b Mixed Use	Parcel 6 Foundations	Generator	Generator Sets	Diesel	0	25	6	1	0.74	0.28	0	0	0
Phase 1b Mixed Use	Parcel 6 Foundations	Tire Wash	Other Construction Equipment	Diesel	1	100	4	0.9	0.42	0.192	0.064001	0	0
Phase 1b Mixed Use	Parcel 6 Foundations	Excavator	Excavators	Diesel	1	131	8	0.6	0.38	0.128	0.067428	0	0
Phase 1b Mixed Use	Parcel 6 Foundations	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	90	8	0.6	0.37	0.192	0.067659	0	0
Phase 1b Mixed Use	Parcel 6 Foundations	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	70	8	0.8	0.37	0.192	0.070165	0	0
Phase 1b Mixed Use	Parcel 6 Foundations	Gradall	Forklifts	Diesel	1	74	4	0.8	0.2	0.192	0.020047	0	0
Phase 1b Mixed Use	Parcel 6 Foundations	Crane	Cranes	Diesel	1	215	4	0.5	0.29	0.088	0.024193	0	0
Phase 1b Mixed Use	Parcel 6 Foundations	Concrete Pump	Pumps	Diesel	1	450	0.5	0.5	0.74	0.088	0.016151	0	0
Phase 1b Mixed Use	Parcel 6 Core and Shell	Generator	Generator Sets	Diesel	0	25	6	1	0.74	0.28	0	0	0
Phase 1b Mixed Use	Parcel 6 Core and Shell	Tire Wash	Other Construction Equipment	Diesel	1	100	4	0.9	0.42	0.192	0.064001	0	0
Phase 1b Mixed Use	Parcel 6 Core and Shell	Crane	Cranes	Diesel	1	600	8	0.2	0.29	0.088	0.054012	0	0
Phase 1b Mixed Use	Parcel 6 Core and Shell	Gradall	Forklifts	Diesel	2	74	4	0.8	0.2	0.192	0.040094	0	0
Phase 1b Mixed Use	Parcel 6 Core and Shell	Concrete Pump	Pumps	Diesel	0	450	6	0.225	0.74	0.088	0	0	0
Phase 1b Mixed Use	Parcel 6 Core and Shell	Air Compressor	Air Compressors	Diesel	0	140	2	0.4	0.48	0.128	0	0	0
Phase 1b Mixed Use	Parcel 6 Core and Shell	Boom Lift	Aerial Lifts	Diesel	0	50	6	0.2	0.31	0.192	0	0	0
Phase 1b Mixed Use	Parcel 6 Tenant Improvements	Generator	Generator Sets	Diesel	0	25	6	0.85	0.74	0.28	0	0	0
Phase 1b Mixed Use	Parcel 6 Tenant Improvements	Tire Wash	Other Construction Equipment	Diesel	1	100	4	0.9	0.42	0.192	0.064001	0	0
Phase 1b Mixed Use	Parcel 6 Tenant Improvements	Generator	Generator Sets	Diesel	0	25	6	0.85	0.74	0.28	0	0	0
Phase 1b Mixed Use	Parcel 6 Tenant Improvements	Tire Wash	Other Construction Equipment	Diesel	1	100	4	0.9	0.42	0.192	0.064001	0	0
Phase 1b Mixed Use	Parcel 6 Tenant Improvements	Gradall	Forklifts	Diesel	1	74	4	0.8	0.2	0.192	0.020047	0	0
Phase 1b Mixed Use	Parcel 6 Landscaping	Excavator	Excavators	Diesel	1	25	8	0.9	0.38	0.28	0.042223	0	0
Phase 1b Mixed Use	Parcel 6 Landscaping	Generator	Generator Sets	Diesel	0	25	6	0.5	0.74	0.28	0	0	0
Phase 1b Mixed Use	Parcel 6 Landscaping	Tire Wash	Other Construction Equipment	Diesel	0	100	4	0.9	0.42	0.192	0	0	0
Phase 1b Mixed Use	Parcel 6 Landscaping	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	90	8	0.6	0.37	0.192	0.067659	0	0
Phase 1b Mixed Use	Parcel 6 Landscaping	Bob Cat	Tractors/Loaders/Backhoes	Diesel	2	70	8	0.8	0.37	0.192	0.140329	0	0
Phase 2 Mixed Use	Grading and Utilities	Blade	Graders	Diesel	1	359	8	0.15	0.41	0.088	0.034267	0	0
Phase 2 Mixed Use	Grading and Utilities	Scraper	Scrapers	Diesel	1	52	8	0.15	0.48	0.192	0.012678	0	0
Phase 2 Mixed Use	Grading and Utilities	Loader	Tractors/Loaders/Backhoes	Diesel	2	100	4	0.9	0.37	0.192	0.112764	0	0
Phase 2 Mixed Use	Grading and Utilities	Tire Wash	Other Construction Equipment	Diesel	1	100	4	0.9	0.42	0.192	0.064001	0	0
Phase 2 Mixed Use	Grading and Utilities	Excavator	Excavators	Diesel	2	359	8	0.6	0.38	0.088	0.254079	0	0
Phase 2 Mixed Use	Grading and Utilities	Backhoe	Tractors/Loaders/Backhoes	Diesel	2	350	8	0.6	0.37	0.088	0.241191	0	0
Phase 2 Mixed Use	Grading and Utilities	Gradall	Forklifts	Diesel	2	350	4	0.6	0.2	0.088	0.065187	0	0
Phase 2 Mixed Use	Grading and Utilities	Compactor	Other Construction Equipment	Diesel	2	250	0.5	0.2	0.42	0.088	0.004074	0	0
Phase 2 Mixed Use	Grading and Utilities	Paver	Pavers	Diesel	1	250	8	0.01	0.42	0.088	0.00163	0	0
Phase 2 Mixed Use	Grading and Utilities	Generator	Generator Sets	Diesel	1	600	2	0.1	0.74	0.088	0.017228	0	0
Phase 2 Mixed Use	Tunnel Construction	Crane	Cranes	Diesel	1	290	6	0.35	0.29	0.088	0.034264	0	0
Phase 2 Mixed Use	Tunnel Construction	Excavator	Excavators	Diesel	2	170	6	0.45	0.38	0.128	0.09844	0	0
Phase 2 Mixed Use	Tunnel Construction	Loader	Tractors/Loaders/Backhoes	Diesel	1	250	6	0.45	0.37	0.088	0.048453	0	0
Phase 2 Mixed Use	Tunnel Construction	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	103	6	0.4	0.37	0.192	0.038716	0	0
Phase 2 Mixed Use	Tunnel Construction	Gradall	Forklifts	Diesel	1	130	6	0.35	0.2	0.128	0.015408	0	0
Phase 2 Mixed Use	Tunnel Construction	Compressor	Air Compressors	Diesel	2	50	6	0.3	0.48	0.192	0.036572	0	0
Phase 2 Mixed Use	Foundations	Pile Rig	Bore/Drill Rigs	Diesel	0	600	8	0.4	0.5	0.088	0	0	0
Phase 2 Mixed Use	Foundations	Generator	Generator Sets	Diesel	2	25	6	1	0.74	0.28	0.13704	0	0
Phase 2 Mixed Use	Foundations	Tire Wash	Other Construction Equipment	Diesel	2	100	4	0.9	0.42	0.192	0.128003	0	0
Phase 2 Mixed Use	Foundations	Excavator	Excavators	Diesel	2	131	8	0.6	0.38	0.128	0.134857	0	0

Phase 2 Mixed Use	Foundations	Backhoe	Tractors/Loaders/Backhoes	Diesel	2	90	8	0.6	0.37	0.192	0.135317	0	0
Phase 2 Mixed Use	Foundations	Bob Cat	Tractors/Loaders/Backhoes	Diesel	2	70	8	0.8	0.37	0.192	0.140329	0	0
Phase 2 Mixed Use	Foundations	Gradall	Forklifts	Diesel	2	74	4	0.8	0.2	0.192	0.040094	0	0
Phase 2 Mixed Use	Foundations	Crane	Cranes	Diesel	2	215	4	0.5	0.29	0.088	0.048386	0	0
Phase 2 Mixed Use	Foundations	Concrete Pump	Pumps	Diesel	3	450	0.5	0.5	0.74	0.088	0.048453	0	0
Phase 2 Mixed Use	Core and Shell	Generator	Generator Sets	Diesel	2	25	6	1	0.74	0.28	0.13704	0	0
Phase 2 Mixed Use	Core and Shell	Tire Wash	Other Construction Equipment	Diesel	2	100	4	0.9	0.42	0.192	0.128003	0	0
Phase 2 Mixed Use	Core and Shell	Crane	Cranes	Diesel	2	600	8	0.2	0.29	0.088	0.108024	0	0
Phase 2 Mixed Use	Core and Shell	Gradall	Forklifts	Diesel	3	74	4	0.8	0.2	0.192	0.060141	0	0
Phase 2 Mixed Use	Core and Shell	Concrete Pump	Pumps	Diesel	0	450	6	0.45	0.74	0.088	0	0	0
Phase 2 Mixed Use	Core and Shell	Air Compressor	Air Compressors	Diesel	0	140	2	0.8	0.48	0.128	0	0	0
Phase 2 Mixed Use	Core and Shell	Boom Lift	Aerial Lifts	Diesel	0	50	6	0.4	0.31	0.192	0	0	0
Phase 2 Mixed Use	Tenant Improvements	Generator	Generator Sets	Diesel	2	25	6	0.85	0.74	0.28	0.116484	0	0
Phase 2 Mixed Use	Tenant Improvements	Tire Wash	Other Construction Equipment	Diesel	2	100	4	0.9	0.42	0.192	0.128003	0	0
Phase 2 Mixed Use	Tenant Improvements	Gradall	Forklifts	Diesel	1	74	4	0.8	0.2	0.192	0.020047	0	0
Phase 2 Mixed Use	Landscaping	Excavator	Excavators	Diesel	1	25	8	0.9	0.38	0.28	0.042223	0	0
Phase 2 Mixed Use	Landscaping	Generator	Generator Sets	Diesel	0	25	6	0.5	0.74	0.28	0	0	0
Phase 2 Mixed Use	Landscaping	Tire Wash	Other Construction Equipment	Diesel	1	100	4	0.9	0.42	0.192	0.064001	0	0
Phase 2 Mixed Use	Landscaping	Backhoe	Tractors/Loaders/Backhoes	Diesel	2	90	8	0.6	0.37	0.192	0.135317	0	0
Phase 2 Mixed Use	Landscaping	Bob Cat	Tractors/Loaders/Backhoes	Diesel	3	70	8	0.8	0.37	0.192	0.210494	0	0
Alternate 1	Demolition	Excavator	Excavators	Diesel	1	131	8	0.9	0.38	0.128	0.101143	0	0
Alternate 1	Demolition	Generator	Generator Sets	Diesel	1	25	6	0.5	0.74	0.28	0.03426	0	0
Alternate 1	Demolition	Tire Wash	Other Construction Equipment	Diesel	2	100	4	0.9	0.42	0.192	0.128003	0	0
Alternate 1	Demolition	Bob Cat	Tractors/Loaders/Backhoes	Diesel	2	70	8	0.8	0.37	0.192	0.140329	0	0
Alternate 1	Demolition	Pressure Washer	Pressure Washers	Diesel	2	25	8	1	0.3	0.28	0.074076	0	0
Alternate 1	Demolition	Air Compressor	Air Compressors	Diesel	1	140	6	0.7	0.48	0.128	0.079646	0	0
Alternate 1	Grading and Utilities	Loader	Tractors/Loaders/Backhoes	Diesel	2	100	4	0.9	0.37	0.192	0.112764	0	0
Alternate 1	Grading and Utilities	Tire Wash	Other Construction Equipment	Diesel	1	100	4	0.9	0.42	0.192	0.064001	0	0
Alternate 1	Grading and Utilities	Excavator	Excavators	Diesel	1	359	8	0.6	0.38	0.088	0.127039	0	0
Alternate 1	Grading and Utilities	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	90	8	0.6	0.37	0.192	0.067659	0	0
Alternate 1	Grading and Utilities	Gradall	Forklifts	Diesel	1	74	4	0.6	0.2	0.192	0.015035	0	0
Alternate 1	Grading and Utilities	Compactor	Other Construction Equipment	Diesel	1	250	0.5	0.2	0.42	0.088	0.002037	0	0
Alternate 1	Grading and Utilities	Paver	Pavers	Diesel	1	250	8	0.01	0.42	0.088	0.00163	0	0
Alternate 1	Grading and Utilities	Generator	Generator Sets	Diesel	1	600	2	0.1	0.74	0.088	0.017228	0	0
Alternate 1	Foundations	Generator	Generator Sets	Diesel	1	25	6	1	0.74	0.28	0.06852	0	0
Alternate 1	Foundations	Tire Wash	Other Construction Equipment	Diesel	1	100	4	0.9	0.42	0.192	0.064001	0	0
Alternate 1	Foundations	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	90	8	0.6	0.37	0.192	0.067659	0	0
Alternate 1	Foundations	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	70	8	0.8	0.37	0.192	0.070165	0	0
Alternate 1	Foundations	Gradall	Forklifts	Diesel	1	74	4	0.8	0.2	0.192	0.020047	0	0
Alternate 1	Foundations	Concrete Pump	Pumps	Diesel	1	450	6	0.3	0.74	0.088	0.116288	0	0
Alternate 1	Core and Shell	Generator	Generator Sets	Diesel	1	25	6	1	0.74	0.28	0.06852	0	0
Alternate 1	Core and Shell	Tire Wash	Other Construction Equipment	Diesel	1	100	4	0.9	0.42	0.192	0.064001	0	0
Alternate 1	Core and Shell	Gradall	Forklifts	Diesel	1	74	4	0.8	0.2	0.192	0.020047	0	0
Alternate 1	Core and Shell	Concrete Pump	Pumps	Diesel	1	450	6	0.45	0.74	0.088	0.174432	0	0
Alternate 1	Tenant Improvements	Generator	Generator Sets	Diesel	1	25	6	0.85	0.74	0.28	0.058242	0	0
Alternate 1	Tenant Improvements	Tire Wash	Other Construction Equipment	Diesel	2	100	4	0.9	0.42	0.192	0.128003	0	0
Alternate 1	Tenant Improvements	Gradall	Forklifts	Diesel	1	74	4	0.8	0.2	0.192	0.020047	0	0

Days in each year				Emissions (lb/yr)						Emission Rate (g/s)					
2023	2024	2025	2026	2021	2022	2023	2024	2025	2026	2021	2022	2023	2024	2025	2026
0	0	0	0	5.259412456	33.98389587	0	0	0	0	0.000165049	0.001066	0	0	0	0
0	0	0	0	0.890760378	5.755682444	0	0	0	0	2.79535E-05	0.000181	0	0	0	0
0	0	0	0	1.664036685	10.75223704	0	0	0	0	5.22202E-05	0.000337	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	7.818331092	50.51844706	0	0	0	0	0.000245352	0.001585	0	0	0	0
0	0	0	0	0.962984193	6.222359399	0	0	0	0	3.022E-05	0.000195	0	0	0	0
0	0	0	0	1.035400604	6.690280826	0	0	0	0	3.24926E-05	0.00021	0	0	0	0
0	0	0	0	0	9.800422196	0	0	0	0	0	0.000308	0	0	0	0
0	0	0	0	0	3.626015177	0	0	0	0	0	0.000114	0	0	0	0
0	0	0	0	0	32.25061575	0	0	0	0	0	0.001012	0	0	0	0
0	0	0	0	0	18.30440354	0	0	0	0	0	0.000574	0	0	0	0
0	0	0	0	0	72.66654506	0	0	0	0	0	0.00228	0	0	0	0
0	0	0	0	0	68.9804837	0	0	0	0	0	0.002165	0	0	0	0
0	0	0	0	0	18.64337397	0	0	0	0	0	0.000585	0	0	0	0
0	0	0	0	0	1.165210873	0	0	0	0	0	3.66E-05	0	0	0	0
0	0	0	0	0	0.466084349	0	0	0	0	0	1.46E-05	0	0	0	0
0	0	0	0	0	2.463588703	0	0	0	0	0	7.73E-05	0	0	0	0
0	0	0	0	0	0.399856434	0	0	0	0	0	1.25E-05	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0.89541974	0	0	0	0	0	2.81E-05	0	0	0	0
0	0	0	0	0	18.13584956	0	0	0	0	0	0.000569	0	0	0	0
0	0	0	0	0	2.26116096	0	0	0	0	0	7.1E-05	0	0	0	0
0	0	0	0	0	18.13584956	0	0	0	0	0	0.000569	0	0	0	0
0	0	0	0	0	2.26116096	0	0	0	0	0	7.1E-05	0	0	0	0
0	0	0	0	0	1.670407196	0	0	0	0	0	5.24E-05	0	0	0	0
0	0	0	0	0	3.806142111	0	0	0	0	0	0.000119	0	0	0	0
0	0	0	0	0	3.852783351	0	0	0	0	0	0.000121	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	10.12720739	0	0	0	0	0	0.000318	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0.880019401	0	0	0	0	0	2.76E-05	0	0	0	0
258	0	0	0	0	0	2.525922353	0	0	0	0	0	7.93E-05	0	0	0
258	0	0	0	0	0	0.253250028	0	0	0	0	0	7.95E-06	0	0	0
258	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
258	0	0	0	0	0	0.144714301	0	0	0	0	0	4.54E-06	0	0	0
258	0	0	0	0	0	2.638043343	0	0	0	0	0	8.28E-05	0	0	0
258	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
258	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
258	0	0	0	0	0	9.651927071	0	0	0	0	0	0.000303	0	0	0
258	0	0	0	0	0	4.42337794	0	0	0	0	0	0.000139	0	0	0
258	0	0	0	0	0	5.207522212	0	0	0	0	0	0.000163	0	0	0
258	0	0	0	0	0	10.55208448	0	0	0	0	0	0.000331	0	0	0
258	0	0	0	0	0	40.15015763	0	0	0	0	0	0.00126	0	0	0
258	0	0	0	0	0	0.939703256	0	0	0	0	0	2.95E-05	0	0	0
258	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
258	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
258	0	0	0	0	0	0.1466699	0	0	0	0	0	4.6E-06	0	0	0
258	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
258	0	0	0	0	0	6.906818933	0	0	0	0	0	0.000217	0	0	0
242	0	0	0	0	0	0.24137675	0	0	0	0	0	7.57E-06	0	0	0

453.59

453.59 g/lb
11 hr/day
365 days/yr
3600 sec/hr

242	0	0	0	0	0	7.687947265	0	0	0	0	0	0.000241	0	0	0
242	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
242	0	0	0	0	0	4.393112723	0	0	0	0	0	0.000138	0	0	0
242	0	0	0	0	0	13.77808153	0	0	0	0	0	0.000432	0	0	0
242	0	0	0	0	0	0.49867766	0	0	0	0	0	1.56E-05	0	0	0
242	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
242	0	0	0	0	0	1.178387883	0	0	0	0	0	3.7E-05	0	0	0
242	0	0	0	0	0	0.563980687	0	0	0	0	0	1.77E-05	0	0	0
242	0	0	0	0	0	8.016843405	0	0	0	0	0	0.000252	0	0	0
242	0	0	0	0	0	1.577516259	0	0	0	0	0	4.95E-05	0	0	0
242	0	0	0	0	0	13.55357922	0	0	0	0	0	0.000425	0	0	0
242	0	0	0	0	0	2.725139443	0	0	0	0	0	8.55E-05	0	0	0
242	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
242	0	0	0	0	0	10.12720739	0	0	0	0	0	0.000318	0	0	0
242	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
242	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
242	0	0	0	0	0	6.453475606	0	0	0	0	0	0.000203	0	0	0
0	207	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	207	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	207	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	207	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	207	0	0	0	0	0	2.227456514	0	0	0	0	0	6.99E-05	0	0
0	207	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	207	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	207	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	207	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	207	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	207	0	0	0	0	0	1.349363081	0	0	0	0	0	4.23E-05	0	0
0	207	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	207	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	207	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	207	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	207	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	207	0	0	0	0	0	5.520121696	0	0	0	0	0	0.000173	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	6.180506625	0	0	0	0	0	0.000194	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	3.531718071	0	0	0	0	0	0.000111	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0.268894817	0	0	0	0	0	8.44E-06	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	36.27169911	0	0	0	0	0	0.001138	0	0	0	0
0	0	0	0	0	2.809321193	0	0	0	0	0	8.82E-05	0	0	0	0
0	0	0	0	0	5.011221588	0	0	0	0	0	0.000157	0	0	0	0
0	0	0	0	0	2.042320157	0	0	0	0	0	6.41E-05	0	0	0	0
0	0	0	0	0	2.889587513	0	0	0	0	0	9.07E-05	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	7.682709054	0	0	0	0	0	0.000241	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	1.093357437	0	0	0	0	0	3.43E-05	0	0	0	0
260	0	0	0	0	0	1.609178333	0	0	0	0	0	5.05E-05	0	0	0
260	0	0	0	0	0	21.40565709	0	0	0	0	0	0.000672	0	0	0
260	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

260	0	0	0	0	0	12.23180405	0	0	0	0	0	0.000384	0	0	0
260	0	0	0	0	0	1.768187129	0	0	0	0	0	5.55E-05	0	0	0
260	0	0	0	0	0	0.806684451	0	0	0	0	0	2.53E-05	0	0	0
260	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
260	0	0	0	0	0	5.11668423	0	0	0	0	0	0.000161	0	0	0
260	0	0	0	0	0	52.63819749	0	0	0	0	0	0.001652	0	0	0
260	0	0	0	0	0	19.93932847	0	0	0	0	0	0.000626	0	0	0
260	0	0	0	0	0	27.05244825	0	0	0	0	0	0.000849	0	0	0
260	0	0	0	0	0	58.29895721	0	0	0	0	0	0.00183	0	0	0
260	0	0	0	0	0	7.447148306	0	0	0	0	0	0.000234	0	0	0
260	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
260	0	0	0	0	0	30.38162217	0	0	0	0	0	0.000953	0	0	0
260	0	0	0	0	0	0.183337375	0	0	0	0	0	5.75E-06	0	0	0
260	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
260	0	0	0	0	0	3.786750149	0	0	0	0	0	0.000119	0	0	0
0	262	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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0	262	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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0	262	0	0	0	0	0	38.71640909	0	0	0	0	0	0.001215	0	0
0	262	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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0	262	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	262	0	0	0	0	0	36.50450848	0	0	0	0	0	0.001146	0	0
0	262	0	0	0	0	0	4.084640314	0	0	0	0	0	0.000128	0	0
0	262	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	262	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	261	0	0	0	0	0	0	0	0	0	0	0	0	0
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0	0	261	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	261	0	0	0	0	0	18.83004475	0	0	0	0	0	0.000591	0
0	0	261	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	261	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	261	0	0	0	0	0	0	0	0	0	0	0	0	0
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0	0	261	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	261	0	0	0	0	0	41.71943826	0	0	0	0	0	0.001309	0
0	0	261	0	0	0	0	0	6.219793205	0	0	0	0	0	0.000195	0
0	0	261	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	261	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	261	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	261	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	261	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	261	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	46	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	46	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	46	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	46	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	46	0	0	0	0	0	0	0	0	0	0	0	0

0	0	0	46	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	46	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	46	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	46	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	46	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	46	0	0	0	0	0	7.333495	0	0	0	0	0	0.00023
0	0	0	46	0	0	0	0	0	8.354946	0	0	0	0	0	0.000262
0	0	0	46	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	46	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	46	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	46	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	46	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	46	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	2.255287815	0	0	0	0	0	7.08E-05	0	0	0	0
0	0	0	0	0	2.788765184	0	0	0	0	0	8.75E-05	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	1.765859036	0	0	0	0	0	5.54E-05	0	0	0	0
0	0	0	0	0	0.470751119	0	0	0	0	0	1.48E-05	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	1.147377676	0	0	0	0	0	3.6E-05	0	0	0	0
0	0	0	0	0	18.13584956	0	0	0	0	0	0.000569	0	0	0	0
0	0	0	0	0	2.809321193	0	0	0	0	0	8.82E-05	0	0	0	0
0	0	0	0	0	3.340814392	0	0	0	0	0	0.000105	0	0	0	0
0	0	0	0	0	3.434811173	0	0	0	0	0	0.000108	0	0	0	0
0	0	0	0	0	7.705566701	0	0	0	0	0	0.000242	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	25.84183955	0	0	0	0	0	0.000811	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	2.186714875	0	0	0	0	0	6.86E-05	0	0	0	0
257	0	0	0	0	0	12.0688375	0	0	0	0	0	0.000379	0	0	0
257	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
257	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
257	0	0	0	0	0	2.584183955	0	0	0	0	0	8.11E-05	0	0	0
257	0	0	0	0	0	0.688904076	0	0	0	0	0	2.16E-05	0	0	0
257	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
257	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
257	0	0	0	0	0	38.37513173	0	0	0	0	0	0.001204	0	0	0
257	0	0	0	0	0	26.54026764	0	0	0	0	0	0.000833	0	0	0
257	0	0	0	0	0	31.24513327	0	0	0	0	0	0.000981	0	0	0
257	0	0	0	0	0	37.1563747	0	0	0	0	0	0.001166	0	0	0
257	0	0	0	0	0	73.52352565	0	0	0	0	0	0.002307	0	0	0
257	0	0	0	0	0	11.27643907	0	0	0	0	0	0.000354	0	0	0
257	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
257	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
257	0	0	0	0	0	0.055001213	0	0	0	0	0	1.73E-06	0	0	0
257	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
257	0	0	0	0	0	8.480186953	0	0	0	0	0	0.000266	0	0	0
0	175	0	0	0	0	0	10.66690183	0	0	0	0	0	0.000335	0	0
0	175	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	175	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	175	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	175	0	0	0	0	0	28.01543244	0	0	0	0	0	0.000879	0	0
0	175	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	175	0	0	0	0	0	0	0	0	0	0	0	0	0	0

0	175	0	0	0	0	0	33.91741441	0	0	0	0	0	0.001064	0	0
0	175	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	175	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	175	0	0	0	0	0	28.51914725	0	0	0	0	0	0.000895	0	0
0	175	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	175	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	175	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	175	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	175	0	0	0	0	0	0.048612183	0	0	0	0	0	1.53E-06	0	0
0	175	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	175	0	0	0	0	0	4.66676955	0	0	0	0	0	0.000146	0	0
0	0	154	0	0	0	0	0	2.621010163	0	0	0	0	0	8.23E-05	0
0	0	154	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	154	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	154	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	154	0	0	0	0	0	23.7901541	0	0	0	0	0	0.000747	0
0	0	154	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	154	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	154	0	0	0	0	0	8.333993254	0	0	0	0	0	0.000262	0
0	0	154	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	154	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	154	0	0	0	0	0	25.25981613	0	0	0	0	0	0.000793	0
0	0	154	0	0	0	0	0	0	0	0	0	0	0	0	0
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0	0	154	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	154	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	154	0	0	0	0	0	0.011944708	0	0	0	0	0	3.75E-07	0
0	0	154	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	154	0	0	0	0	0	4.133424458	0	0	0	0	0	0.00013	0
0	0	154	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	154	0	0	0	0	0	4.133424458	0	0	0	0	0	0.00013	0
238	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
238	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
238	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
238	0	0	0	0	0	10.25059635	0	0	0	0	0	0.000322	0	0	0
238	0	0	0	0	0	2.732652836	0	0	0	0	0	8.58E-05	0	0	0
238	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
238	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
238	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
238	0	0	0	0	0	105.276395	0	0	0	0	0	0.003304	0	0	0
238	0	0	0	0	0	16.30776693	0	0	0	0	0	0.000512	0	0	0
238	0	0	0	0	0	19.39302013	0	0	0	0	0	0.000609	0	0	0
238	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
238	0	0	0	0	0	44.729875	0	0	0	0	0	0.001404	0	0	0
238	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
238	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
238	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
238	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
238	0	0	0	0	0	12.69361317	0	0	0	0	0	0.000398	0	0	0
0	262	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	262	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	262	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	262	0	0	0	0	0	3.747066734	0	0	0	0	0	0.000118	0	0
0	262	0	0	0	0	0	3.754527216	0	0	0	0	0	0.000118	0	0
0	262	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	262	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	262	0	0	0	0	0	0.344988558	0	0	0	0	0	1.08E-05	0	0
0	262	0	0	0	0	0	38.48338808	0	0	0	0	0	0.001208	0	0

0	262	0	0	0	0	0	1.644480698	0	0	0	0	0	5.16E-05	0	0
0	262	0	0	0	0	0	18.74115391	0	0	0	0	0	0.000588	0	0
0	262	0	0	0	0	0	8.362372715	0	0	0	0	0	0.000262	0	0
0	262	0	0	0	0	0	16.35083666	0	0	0	0	0	0.000513	0	0
0	262	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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0	262	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	262	0	0	0	0	0	4.640102295	0	0	0	0	0	0.000146	0	0
0	0	110	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	110	0	0	0	0	0	0	0	0	0	0	0	0	0
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0	0	110	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	110	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	110	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	110	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	110	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	110	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	110	0	0	0	0	0	26.88948169	0	0	0	0	0	0.000844	0
0	0	110	0	0	0	0	0	0.612696047	0	0	0	0	0	1.92E-05	0
0	0	110	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	110	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	110	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	110	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	110	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	110	0	0	0	0	0	0	0	0	0	0	0	0	0
161	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
161	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
161	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
161	0	0	0	0	0	10.30422717	0	0	0	0	0	0.000323	0	0	0
161	0	0	0	0	0	10.85596674	0	0	0	0	0	0.000341	0	0	0
161	0	0	0	0	0	10.89304015	0	0	0	0	0	0.000342	0	0	0
161	0	0	0	0	0	11.29648608	0	0	0	0	0	0.000355	0	0	0
161	0	0	0	0	0	3.227567451	0	0	0	0	0	0.000101	0	0	0
161	0	0	0	0	0	3.895036487	0	0	0	0	0	0.000122	0	0	0
161	0	0	0	0	0	12.4816085	0	0	0	0	0	0.000392	0	0	0
64	116	0	0	0	0	0	0	0	0	0	0	0	0	0	0
64	116	0	0	0	0	4.096090302	7.424163672	0	0	0	0	0.000129	0.000233	0	0
64	116	0	0	0	0	3.456753456	6.265365639	0	0	0	0	0.000108	0.000197	0	0
64	116	0	0	0	0	1.283008179	2.325452325	0	0	0	0	4.03E-05	7.3E-05	0	0
64	116	0	0	0	0	0	0	0	0	0	0	0	0	0	0
64	116	0	0	0	0	0	0	0	0	0	0	0	0	0	0
64	116	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	147	114	0	0	0	0	0	0	0	0	0	0	0	0	0
0	147	114	0	0	0	0	9.408207412	7.29616085	0	0	0	0	0.000295	0.000229	0
0	147	114	0	0	0	0	2.946909412	2.285358319	0	0	0	0	9.25E-05	7.17E-05	0
0	0	59	0	0	0	0	0	2.491166031	0	0	0	0	0	7.82E-05	0
0	0	59	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	59	0	0	0	0	0	3.776083247	0	0	0	0	0	0.000118	0
0	0	59	0	0	0	0	0	6.653099054	0	0	0	0	0	0.000209	0
0	0	59	0	0	0	0	0	4.139706078	0	0	0	0	0	0.00013	0
160	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
160	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
160	1	0	0	0	0	10.24022575	0.064001411	0	0	0	0	0.000321	2.01E-06	0	0
160	1	0	0	0	0	10.78853837	0.067428365	0	0	0	0	0.000339	2.12E-06	0	0
160	1	0	0	0	0	21.65076302	0.135317269	0	0	0	0	0.000679	4.25E-06	0	0

160	1	0	0	0	0	11.22632157	0.07016451	0	0	0	0	0.000352	2.2E-06	0	0
160	1	0	0	0	0	3.207520448	0.020047003	0	0	0	0	0.000101	6.29E-07	0	0
160	1	0	0	0	0	3.870843713	0.024192773	0	0	0	0	0.000121	7.59E-07	0	0
160	1	0	0	0	0	12.40408298	0.077525519	0	0	0	0	0.000389	2.43E-06	0	0
0	180	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	180	0	0	0	0	0	11.52025397	0	0	0	0	0	0.000362	0	0
0	180	0	0	0	0	0	9.722119094	0	0	0	0	0	0.000305	0	0
0	180	0	0	0	0	0	7.216921008	0	0	0	0	0	0.000226	0	0
0	180	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	180	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	180	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	82	178	0	0	0	0	0	0	0	0	0	0	0	0	0
0	82	178	0	0	0	0	5.248115699	11.39225115	0	0	0	0	0.000165	0.000358	0
0	82	178	0	0	0	0	1.64385423	3.568366498	0	0	0	0	5.16E-05	0.000112	0
0	0	58	0	0	0	0	0	2.448942878	0	0	0	0	0	7.69E-05	0
0	0	58	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	58	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	58	0	0	0	0	0	6.540334663	0	0	0	0	0	0.000205	0
0	0	58	0	0	0	0	0	8.139083137	0	0	0	0	0	0.000255	0
0	0	0	0	0	19.41936907	0	0	0	0	0	0.000609	0	0	0	0
0	0	0	0	0	3.288961397	0	0	0	0	0	0.000103	0	0	0	0
0	0	0	0	0	6.144135453	0	0	0	0	0	0.000193	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	28.86768403	0	0	0	0	0	0.000906	0	0	0	0
0	0	0	0	0	3.555633943	0	0	0	0	0	0.000112	0	0	0	0
0	0	0	0	0	3.823017615	0	0	0	0	0	0.00012	0	0	0	0
65	0	0	0	0	4.454737362	4.454737362	0	0	0	0	0.00014	0.00014	0	0	0
65	0	0	0	0	1.648188717	1.648188717	0	0	0	0	5.17E-05	5.17E-05	0	0	0
65	0	0	0	0	14.6593708	14.6593708	0	0	0	0	0.00046	0.00046	0	0	0
65	0	0	0	0	8.320183426	8.320183426	0	0	0	0	0.000261	0.000261	0	0	0
65	0	0	0	0	33.03024776	33.03024776	0	0	0	0	0.001037	0.001037	0	0	0
65	0	0	0	0	31.35476532	31.35476532	0	0	0	0	0.000984	0.000984	0	0	0
65	0	0	0	0	8.474260896	8.474260896	0	0	0	0	0.000266	0.000266	0	0	0
65	0	0	0	0	0.529641306	0.529641306	0	0	0	0	1.66E-05	1.66E-05	0	0	0
65	0	0	0	0	0.211856522	0.211856522	0	0	0	0	6.65E-06	6.65E-06	0	0	0
65	0	0	0	0	1.119813047	1.119813047	0	0	0	0	3.51E-05	3.51E-05	0	0	0
202	0	0	0	0	0	1.970024383	0	0	0	0	0	6.18E-05	0	0	0
202	0	0	0	0	0	0.277369078	0	0	0	0	0	8.7E-06	0	0	0
202	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
202	0	0	0	0	0	0.158496616	0	0	0	0	0	4.97E-06	0	0	0
202	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
202	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
202	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
202	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
202	0	0	0	0	0	5.891939417	0	0	0	0	0	0.000185	0	0	0
202	0	0	0	0	0	22.1168897	0	0	0	0	0	0.000694	0	0	0
202	0	0	0	0	0	7.468683172	0	0	0	0	0	0.000234	0	0	0
202	0	0	0	0	0	8.229811063	0	0	0	0	0	0.000258	0	0	0
202	0	0	0	0	0	30.77405146	0	0	0	0	0	0.000966	0	0	0
202	0	0	0	0	0	4.698516281	0	0	0	0	0	0.000147	0	0	0
202	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
202	0	0	0	0	0	10.12720739	0	0	0	0	0	0.000318	0	0	0
202	0	0	0	0	0	0.1466699	0	0	0	0	0	4.6E-06	0	0	0
202	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
202	0	0	0	0	0	5.200114641	0	0	0	0	0	0.000163	0	0	0
0	188	0	0	0	0	0	1.83348804	0	0	0	0	0	5.75E-05	0	0
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0	188	0	0	0	0	0	6.81739474	0	0	0	0	0	0.000214	0	0
0	188	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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0	188	0	0	0	0	0	7.287398752	0	0	0	0	0	0.000229	0	0
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0	188	0	0	0	0	0	21.44436165	0	0	0	0	0	0.000673	0	0
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0	188	0	0	0	0	0	5.013443859	0	0	0	0	0	0.000157	0	0
177	0	0	0	0	0	0.24137675	0	0	0	0	0	7.57E-06	0	0	0
177	0	0	0	0	0	11.45654887	0	0	0	0	0	0.00036	0	0	0
177	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
177	0	0	0	0	0	6.546599352	0	0	0	0	0	0.000205	0	0	0
177	0	0	0	0	0	2.296346921	0	0	0	0	0	7.21E-05	0	0	0
177	0	0	0	0	0	0.743127494	0	0	0	0	0	2.33E-05	0	0	0
177	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
177	0	0	0	0	0	1.387706784	0	0	0	0	0	4.35E-05	0	0	0
177	0	0	0	0	0	0.840441809	0	0	0	0	0	2.64E-05	0	0	0
177	0	0	0	0	0	9.729844132	0	0	0	0	0	0.000305	0	0	0
177	0	0	0	0	0	1.153803214	0	0	0	0	0	3.62E-05	0	0	0
177	0	0	0	0	0	18.19521594	0	0	0	0	0	0.000571	0	0	0
177	0	0	0	0	0	5.168367909	0	0	0	0	0	0.000162	0	0	0
177	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
177	0	0	0	0	0	19.20677264	0	0	0	0	0	0.000603	0	0	0
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177	0	0	0	0	0	4.720104059	0	0	0	0	0	0.000148	0	0	0
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0	0	62	0	0	0	0	0	0	0	0	0	0	0	0	0
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0	0	62	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	62	0	0	0	0	0	1.653369783	0	0	0	0	0	5.19E-05	0
179	0	0	0	0	0	0.237719526	0	0	0	0	0	7.46E-06	0	0	0
179	0	0	0	0	0	10.09985229	0	0	0	0	0	0.000317	0	0	0
179	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
179	0	0	0	0	0	5.771344165	0	0	0	0	0	0.000181	0	0	0
179	0	0	0	0	0	3.398593443	0	0	0	0	0	0.000107	0	0	0
179	0	0	0	0	0	0.655125554	0	0	0	0	0	2.06E-05	0	0	0
179	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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179	0	0	0	0	0	0.740915805	0	0	0	0	0	2.33E-05	0	0	0
179	0	0	0	0	0	9.044643841	0	0	0	0	0	0.000284	0	0	0
179	0	0	0	0	0	1.166840539	0	0	0	0	0	3.66E-05	0	0	0
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179	0	0	0	0	0	4.134694327	0	0	0	0	0	0.00013	0	0	0
179	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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179	0	0	0	0	0	4.773438568	0	0	0	0	0	0.00015	0	0	0
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157	0	0	0	0	0	0.24137675	0	0	0	0	0	7.57E-06	0	0	0
157	0	0	0	0	0	9.798364161	0	0	0	0	0	0.000307	0	0	0
157	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
157	0	0	0	0	0	5.599065235	0	0	0	0	0	0.000176	0	0	0
157	0	0	0	0	0	1.46966203	0	0	0	0	0	4.61E-05	0	0	0
157	0	0	0	0	0	0.635569567	0	0	0	0	0	1.99E-05	0	0	0

157	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
157	0	0	0	0	0	1.259789678	0	0	0	0	0	3.95E-05	0	0	0
157	0	0	0	0	0	0.718798915	0	0	0	0	0	2.26E-05	0	0	0
157	0	0	0	0	0	8.976123812	0	0	0	0	0	0.000282	0	0	0
157	0	0	0	0	0	1.02342997	0	0	0	0	0	3.21E-05	0	0	0
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157	0	0	0	0	0	4.134694327	0	0	0	0	0	0.00013	0	0	0
157	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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0	262	0	0	0	0	0	0.085278071	0	0	0	0	0	2.68E-06	0	0
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0	262	0	0	0	0	0	1.707889504	0	0	0	0	0	5.36E-05	0	0
0	262	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	262	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	262	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	262	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	262	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	262	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	262	0	0	0	0	0	6.986820697	0	0	0	0	0	0.000219	0	0
0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0
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0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0
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0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0
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0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	7	0	0	0	0	0	0.045630636	0	0	0	0	0	1.43E-06	0
0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0
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0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	7	0	0	0	0	0	0.186670782	0	0	0	0	0	5.86E-06	0
202	0	0	0	0	0	0.24137675	0	0	0	0	0	7.57E-06	0	0	0
202	0	0	0	0	0	13.4162217	0	0	0	0	0	0.000421	0	0	0
202	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
202	0	0	0	0	0	7.666412399	0	0	0	0	0	0.000241	0	0	0
202	0	0	0	0	0	3.398593443	0	0	0	0	0	0.000107	0	0	0
202	0	0	0	0	0	0.870241407	0	0	0	0	0	2.73E-05	0	0	0
202	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
202	0	0	0	0	0	1.531128993	0	0	0	0	0	4.8E-05	0	0	0

202	0	0	0	0	0	0.984201592	0	0	0	0	0	3.09E-05	0	0	0
202	0	0	0	0	0	10.62060451	0	0	0	0	0	0.000333	0	0	0
202	0	0	0	0	0	1.31676977	0	0	0	0	0	4.13E-05	0	0	0
202	0	0	0	0	0	20.42320157	0	0	0	0	0	0.000641	0	0	0
202	0	0	0	0	0	6.202041491	0	0	0	0	0	0.000195	0	0	0
202	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
202	0	0	0	0	0	23.04812716	0	0	0	0	0	0.000723	0	0	0
202	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
202	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
202	0	0	0	0	0	5.386785423	0	0	0	0	0	0.000169	0	0	0
0	262	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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0	262	0	0	0	0	0	12.42323684	0	0	0	0	0	0.00039	0	0
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0	262	0	0	0	0	0	0.081401795	0	0	0	0	0	2.55E-06	0	0
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0	262	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	262	0	0	0	0	0	1.707889504	0	0	0	0	0	5.36E-05	0	0
0	262	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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0	262	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	262	0	0	0	0	0	6.986820697	0	0	0	0	0	0.000219	0	0
0	0	57	0	0	0	0	0	0	0	0	0	0	0	0	0
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0	0	57	0	0	0	0	0	0.371563747	0	0	0	0	0	1.17E-05	0
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0	0	57	0	0	0	0	0	1.52003351	0	0	0	0	0	4.77E-05	0
136	0	0	0	0	0	0.171889504	0	0	0	0	0	5.39E-06	0	0	0
136	0	0	0	0	0	13.4162217	0	0	0	0	0	0.000421	0	0	0
136	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
136	0	0	0	0	0	7.666412399	0	0	0	0	0	0.000241	0	0	0
136	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
136	0	0	0	0	0	0.870241407	0	0	0	0	0	2.73E-05	0	0	0
136	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
136	0	0	0	0	0	1.387706784	0	0	0	0	0	4.35E-05	0	0	0
136	0	0	0	0	0	0.984201592	0	0	0	0	0	3.09E-05	0	0	0
136	0	0	0	0	0	9.318723958	0	0	0	0	0	0.000292	0	0	0

136	0	0	0	0	0	0.886538063	0	0	0	0	0	2.78E-05	0	0	0
136	0	0	0	0	0	20.60886704	0	0	0	0	0	0.000647	0	0	0
136	0	0	0	0	0	6.389982142	0	0	0	0	0	0.000201	0	0	0
136	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
136	0	0	0	0	0	23.74655526	0	0	0	0	0	0.000745	0	0	0
136	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
136	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
136	0	0	0	0	0	3.626746621	0	0	0	0	0	0.000114	0	0	0
0	262	0	0	0	0	0	0.069487246	0	0	0	0	0	2.18E-06	0	0
0	262	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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0	262	0	0	0	0	0	16.05146498	0	0	0	0	0	0.000504	0	0
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0	262	0	0	0	0	0	0.236452832	0	0	0	0	0	7.42E-06	0	0
0	262	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	262	0	0	0	0	0	1.301880553	0	0	0	0	0	4.09E-05	0	0
0	262	0	0	0	0	0	1.707889504	0	0	0	0	0	5.36E-05	0	0
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0	262	0	0	0	0	0	6.986820697	0	0	0	0	0	0.000219	0	0
0	0	122	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	122	0	0	0	0	0	0	0	0	0	0	0	0	0
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0	0	122	0	0	0	0	0	0	0	0	0	0	0	0	0
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0	0	122	0	0	0	0	0	0	0	0	0	0	0	0	0
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0	0	122	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	122	0	0	0	0	0	0.795276792	0	0	0	0	0	2.5E-05	0
0	0	122	0	0	0	0	0	0	0	0	0	0	0	0	0
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0	0	122	0	0	0	0	0	0	0	0	0	0	0	0	0
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0	0	122	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	122	0	0	0	0	0	3.253405057	0	0	0	0	0	0.000102	0
0	116	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	116	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	116	0	0	0	0	0	7.424163672	0	0	0	0	0	0.000233	0	0
0	116	0	0	0	0	0	7.821690319	0	0	0	0	0	0.000245	0	0
0	116	0	0	0	0	0	7.848401596	0	0	0	0	0	0.000246	0	0
0	116	0	0	0	0	0	8.139083137	0	0	0	0	0	0.000255	0	0
0	116	0	0	0	0	0	2.325452325	0	0	0	0	0	7.3E-05	0	0
0	116	0	0	0	0	0	2.806361692	0	0	0	0	0	8.81E-05	0	0
0	116	0	0	0	0	0	0.936766684	0	0	0	0	0	2.94E-05	0	0
0	129	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	129	0	0	0	0	0	8.256182015	0	0	0	0	0	0.000259	0	0
0	129	0	0	0	0	0	6.967518684	0	0	0	0	0	0.000219	0	0

0	129	0	0	0	0	0	2.586063361	0	0	0	0	0	8.12E-05	0	0
0	129	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	129	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	129	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	17	171	0	0	0	0	0	0	0	0	0	0	0	0	0
0	17	171	0	0	0	0	1.088023986	10.94424128	0	0	0	0	3.41E-05	0.000343	0
0	17	171	0	0	0	0	0.340799048	3.428037479	0	0	0	0	1.07E-05	0.000108	0
0	0	58	0	0	0	0	0	2.448942878	0	0	0	0	0	7.69E-05	0
0	0	58	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	58	0	0	0	0	0	3.712081836	0	0	0	0	0	0.000116	0
0	0	58	0	0	0	0	0	3.924200798	0	0	0	0	0	0.000123	0
0	0	58	0	0	0	0	0	4.069541568	0	0	0	0	0	0.000128	0
0	116	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	116	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	116	0	0	0	0	0	7.424163672	0	0	0	0	0	0.000233	0	0
0	116	0	0	0	0	0	7.821690319	0	0	0	0	0	0.000245	0	0
0	116	0	0	0	0	0	7.848401596	0	0	0	0	0	0.000246	0	0
0	116	0	0	0	0	0	8.139083137	0	0	0	0	0	0.000255	0	0
0	116	0	0	0	0	0	2.325452325	0	0	0	0	0	7.3E-05	0	0
0	116	0	0	0	0	0	2.806361692	0	0	0	0	0	8.81E-05	0	0
0	116	0	0	0	0	0	1.873533367	0	0	0	0	0	5.88E-05	0	0
0	81	48	0	0	0	0	0	0	0	0	0	0	0	0	0
0	81	48	0	0	0	0	5.184114288	3.072067726	0	0	0	0	0.000163	9.64E-05	0
0	81	48	0	0	0	0	4.374953592	2.592565092	0	0	0	0	0.000137	8.14E-05	0
0	81	48	0	0	0	0	3.247614454	1.924512269	0	0	0	0	0.000102	6.04E-05	0
0	81	48	0	0	0	0	0	0	0	0	0	0	0	0	0
0	81	48	0	0	0	0	0	0	0	0	0	0	0	0	0
0	81	48	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	187	0	0	0	0	0	0	0	0	0	0	0	0	0
0	81	48	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	187	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	187	0	0	0	0	0	11.96826385	0	0	0	0	0	0.000376	0
0	0	187	0	0	0	0	0	3.748789524	0	0	0	0	0	0.000118	0
0	0	27	32	0	0	0	0	1.140025133	1.351141	0	0	0	0	3.58E-05	4.24E-05
0	0	27	32	0	0	0	0	0	0	0	0	0	0	0	0
0	0	27	32	0	0	0	0	0	0	0	0	0	0	0	0
0	0	27	32	0	0	0	0	1.82678313	2.165076	0	0	0	0	5.73E-05	6.79E-05
0	0	27	32	0	0	0	0	3.788883529	4.490529	0	0	0	0	0.000119	0.000141
22	0	0	0	0	0	0.75387863	0	0	0	0	0	2.37E-05	0	0	0
22	0	0	0	0	0	0.278924244	0	0	0	0	0	8.75E-06	0	0	0
22	0	0	0	0	0	2.480816596	0	0	0	0	0	7.79E-05	0	0	0
22	0	0	0	0	0	1.408031041	0	0	0	0	0	4.42E-05	0	0	0
22	0	0	0	0	0	5.589734236	0	0	0	0	0	0.000175	0	0	0
22	0	0	0	0	0	5.306191054	0	0	0	0	0	0.000167	0	0	0
22	0	0	0	0	0	1.43410569	0	0	0	0	0	4.5E-05	0	0	0
22	0	0	0	0	0	0.089631606	0	0	0	0	0	2.81E-06	0	0	0
22	0	0	0	0	0	0.035852642	0	0	0	0	0	1.13E-06	0	0	0
22	0	0	0	0	0	0.379013647	0	0	0	0	0	1.19E-05	0	0	0
175	87	0	0	0	0	5.996150709	2.980943495	0	0	0	0	0.000188	9.35E-05	0	0
175	87	0	0	0	0	17.22704645	8.564303093	0	0	0	0	0.000541	0.000269	0	0
175	87	0	0	0	0	8.479353601	4.215450076	0	0	0	0	0.000266	0.000132	0	0
175	87	0	0	0	0	6.775260478	3.368272352	0	0	0	0	0.000213	0.000106	0	0
175	87	0	0	0	0	2.69635574	1.340473996	0	0	0	0	8.46E-05	4.21E-05	0	0
175	87	0	0	0	0	6.400141097	3.181784431	0	0	0	0	0.000201	9.98E-05	0	0
0	24	99	0	0	0	0	0	0	0	0	0	0	0	0	0
0	24	99	0	0	0	0	3.288961397	13.56696576	0	0	0	0	0.000103	0.000426	0
0	24	99	0	0	0	0	3.072067726	12.67227937	0	0	0	0	9.64E-05	0.000398	0
0	24	99	0	0	0	0	3.236561511	13.35081623	0	0	0	0	0.000102	0.000419	0

0	24	99	0	0	0	0	3.247614454	13.39640962	0	0	0	0	0.000102	0.00042	0
0	24	99	0	0	0	0	3.36789647	13.89257294	0	0	0	0	0.000106	0.000436	0
0	24	99	0	0	0	0	0.962256134	3.969306554	0	0	0	0	3.02E-05	0.000125	0
0	24	99	0	0	0	0	1.161253114	4.790169095	0	0	0	0	3.64E-05	0.00015	0
0	24	99	0	0	0	0	1.16288278	4.796891466	0	0	0	0	3.65E-05	0.000151	0
0	0	139	0	0	0	0	0	19.04856809	0	0	0	0	0	0.000598	0
0	0	139	0	0	0	0	0	17.79239225	0	0	0	0	0	0.000558	0
0	0	139	0	0	0	0	0	15.01527282	0	0	0	0	0	0.000471	0
0	0	139	0	0	0	0	0	8.359600168	0	0	0	0	0	0.000262	0
0	0	139	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	139	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	139	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	25	174	0	0	0	0	2.912101237	20.26822	0	0	0	0	9.14E-05	0.000636
0	0	25	174	0	0	0	0	3.200070548	22.27249	0	0	0	0	0.0001	0.000699
0	0	25	174	0	0	0	0	0.50117507	3.488178	0	0	0	0	1.57E-05	0.000109
0	0	0	59	0	0	0	0	0	2.491166	0	0	0	0	0	7.82E-05
0	0	0	59	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	59	0	0	0	0	0	3.776083	0	0	0	0	0	0.000118
0	0	0	59	0	0	0	0	0	7.983719	0	0	0	0	0	0.000251
0	0	0	59	0	0	0	0	0	12.41912	0	0	0	0	0	0.00039
0	22	0	0	0	0	0	2.225136039	0	0	0	0	0	6.98E-05	0	0
0	22	0	0	0	0	0	0.75372032	0	0	0	0	0	2.37E-05	0	0
0	22	0	0	0	0	0	2.816062082	0	0	0	0	0	8.84E-05	0	0
0	22	0	0	0	0	0	3.087238431	0	0	0	0	0	9.69E-05	0	0
0	22	0	0	0	0	0	1.629665557	0	0	0	0	0	5.11E-05	0	0
0	22	0	0	0	0	0	1.752216407	0	0	0	0	0	5.5E-05	0	0
0	1	22	0	0	0	0	0.112764391	2.480816596	0	0	0	0	3.54E-06	7.79E-05	0
0	1	22	0	0	0	0	0.064001411	1.408031041	0	0	0	0	2.01E-06	4.42E-05	0
0	1	22	0	0	0	0	0.127039414	2.794867118	0	0	0	0	3.99E-06	8.77E-05	0
0	1	22	0	0	0	0	0.067658634	1.488489958	0	0	0	0	2.12E-06	4.67E-05	0
0	1	22	0	0	0	0	0.015035252	0.330775546	0	0	0	0	4.72E-07	1.04E-05	0
0	1	22	0	0	0	0	0.002037082	0.044815803	0	0	0	0	6.39E-08	1.41E-06	0
0	1	22	0	0	0	0	0.001629666	0.035852642	0	0	0	0	5.11E-08	1.13E-06	0
0	1	22	0	0	0	0	0.017227893	0.379013647	0	0	0	0	5.41E-07	1.19E-05	0
0	0	22	0	0	0	0	0	1.50744064	0	0	0	0	0	4.73E-05	0
0	0	22	0	0	0	0	0	1.408031041	0	0	0	0	0	4.42E-05	0
0	0	22	0	0	0	0	0	1.488489958	0	0	0	0	0	4.67E-05	0
0	0	22	0	0	0	0	0	1.543619216	0	0	0	0	0	4.84E-05	0
0	0	22	0	0	0	0	0	0.441034062	0	0	0	0	0	1.38E-05	0
0	0	22	0	0	0	0	0	2.558342115	0	0	0	0	0	8.03E-05	0
0	0	43	0	0	0	0	0	2.946361251	0	0	0	0	0	9.25E-05	0
0	0	43	0	0	0	0	0	2.752060672	0	0	0	0	0	8.64E-05	0
0	0	43	0	0	0	0	0	0.86202112	0	0	0	0	0	2.71E-05	0
0	0	43	0	0	0	0	0	7.500593928	0	0	0	0	0	0.000235	0
0	0	33	0	0	0	0	0	1.921986816	0	0	0	0	0	6.03E-05	0
0	0	33	0	0	0	0	0	4.224093124	0	0	0	0	0	0.000133	0
0	0	33	0	0	0	0	0	0.661551092	0	0	0	0	0	2.08E-05	0

Equipment Information											Daily Emiss		
PHASE	SUBPHASE	EQUIPMENT	CALEEMOD_EQUIPMENT	FUEL	NUMBER	HP	DAILYHRS	UTILIZATION	LF	EF		2021	2022
Phase 1a	Demolition	Excavator	Excavators	Diesel	4	131	8	0.9	0.38	0.008	0.025286	13	84
Phase 1a	Demolition	Generator	Generator Sets	Diesel	2	25	6	0.5	0.74	0.008	0.001958	13	84
Phase 1a	Demolition	Tire Wash	Other Construction Equipment	Diesel	2	100	4	0.9	0.42	0.008	0.005333	13	84
Phase 1a	Demolition	Concrete Crusher	Crushing/Proc. Equipment	Diesel	2	200	2	0	0.78	0.008	0	13	84
Phase 1a	Demolition	Bob Cat	Tractors/Loaders/Backhoes	Diesel	6	150	8	0.8	0.37	0.008	0.037588	13	84
Phase 1a	Demolition	Pressure Washer	Pressure Washers	Diesel	2	25	8	1	0.3	0.008	0.002116	13	84
Phase 1a	Demolition	Air Compressor	Air Compressors	Diesel	1	140	6	0.7	0.48	0.008	0.004978	13	84
Phase 1a	Grading and Utilities	Blade	Graders	Diesel	2	359	8	0.15	0.41	0.008	0.00623	0	143
Phase 1a	Grading and Utilities	Scraper	Scrapers	Diesel	2	52	8	0.15	0.48	0.008	0.001057	0	143
Phase 1a	Grading and Utilities	Loader	Tractors/Loaders/Backhoes	Diesel	4	100	4	0.9	0.37	0.008	0.009397	0	143
Phase 1a	Grading and Utilities	Tire Wash	Other Construction Equipment	Diesel	2	100	4	0.9	0.42	0.008	0.005333	0	143
Phase 1a	Grading and Utilities	Excavator	Excavators	Diesel	4	359	8	0.6	0.38	0.008	0.046196	0	143
Phase 1a	Grading and Utilities	Backhoe	Tractors/Loaders/Backhoes	Diesel	4	350	8	0.6	0.37	0.008	0.043853	0	143
Phase 1a	Grading and Utilities	Gradall	Forklifts	Diesel	4	350	4	0.6	0.2	0.008	0.011852	0	143
Phase 1a	Grading and Utilities	Compactor	Other Construction Equipment	Diesel	4	250	0.5	0.2	0.42	0.008	0.000741	0	143
Phase 1a	Grading and Utilities	Paver	Pavers	Diesel	2	250	8	0.01	0.42	0.008	0.000296	0	143
Phase 1a	Grading and Utilities	Generator	Generator Sets	Diesel	1	600	2	0.1	0.74	0.008	0.001566	0	143
Phase 1a Office	North Garage 2022	Air Compressor	Air Compressors	Diesel	1	150	0.47	1	0.48	0.008	0.000595	0	42
Phase 1a Office	North Garage 2022	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	0	1	0.37	0.008	0	0	42
Phase 1a Office	North Garage 2022	Blade	Graders	Diesel	1	450	0	1	0.41	0.008	0	0	42
Phase 1a Office	North Garage 2022	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	0	1	0.37	0.008	0	0	42
Phase 1a Office	North Garage 2022	Boom Lift	Aerial Lifts	Diesel	1	40	0	1	0.31	0.008	0	0	42
Phase 1a Office	North Garage 2022	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0.42	0.008	0	0	42
Phase 1a Office	North Garage 2022	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.78	0.008	0	0	42
Phase 1a Office	North Garage 2022	Concrete Pump	Pumps	Diesel	1	450	0.33	1	0.74	0.008	0.001938	0	42
Phase 1a Office	North Garage 2022	Excavator	Excavators	Diesel	1	500	11.71429	1	0.38	0.008	0.039255	0	42
Phase 1a Office	North Garage 2022	Generator	Generator Sets	Diesel	1	25	4.714286	1	0.74	0.008	0.001538	0	42
Phase 1a Office	North Garage 2022	Gradall	Forklifts	Diesel	1	350	2.928571	1	0.2	0.008	0.003616	0	42
Phase 1a Office	North Garage 2022	Hydro/Crawler Crane	Cranes	Diesel	1	550	2.928571	1	0.29	0.008	0.008238	0	42
Phase 1a Office	North Garage 2022	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	5.857143	1	0.37	0.008	0.003822	0	42
Phase 1a Office	North Garage 2022	Paver	Pavers	Diesel	1	250	0	1	0.42	0.008	0	0	42
Phase 1a Office	North Garage 2022	Pile Rig	Bore/Drill Rigs	Diesel	1	600	4.142857	1	0.5	0.008	0.02192	0	42
Phase 1a Office	North Garage 2022	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0.3	0.008	0	0	42
Phase 1a Office	North Garage 2022	Scraper	Scrapers	Diesel	1	600	0	1	0.48	0.008	0	0	42
Phase 1a Office	North Garage 2022	Tire Wash	Other Construction Equipment	Diesel	1	100	1.178571	1	0.42	0.008	0.000873	0	42
Phase 1a Office	North Garage 2023	Air Compressor	Air Compressors	Diesel	1	150	0.48186	1	0.48	0.008	0.000612	0	0
Phase 1a Office	North Garage 2023	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	0.03907	1	0.37	0.008	8.92E-05	0	0
Phase 1a Office	North Garage 2023	Blade	Graders	Diesel	1	450	0	1	0.41	0.008	0	0	0
Phase 1a Office	North Garage 2023	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	0.03907	1	0.37	0.008	5.1E-05	0	0
Phase 1a Office	North Garage 2023	Boom Lift	Aerial Lifts	Diesel	1	40	1.335814	1	0.31	0.008	0.000292	0	0
Phase 1a Office	North Garage 2023	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0.42	0.008	0	0	0
Phase 1a Office	North Garage 2023	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.78	0.008	0	0	0
Phase 1a Office	North Garage 2023	Concrete Pump	Pumps	Diesel	1	450	0.57907	1	0.74	0.008	0.003401	0	0
Phase 1a Office	North Garage 2023	Excavator	Excavators	Diesel	1	500	0.465116	1	0.38	0.008	0.001559	0	0
Phase 1a Office	North Garage 2023	Generator	Generator Sets	Diesel	1	25	1.767442	1	0.74	0.008	0.000577	0	0
Phase 1a Office	North Garage 2023	Gradall	Forklifts	Diesel	1	350	3.011628	1	0.2	0.008	0.003718	0	0
Phase 1a Office	North Garage 2023	Hydro/Crawler Crane	Cranes	Diesel	1	550	5.02907	1	0.29	0.008	0.014147	0	0
Phase 1a Office	North Garage 2023	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	0.232558	1	0.37	0.008	0.000152	0	0
Phase 1a Office	North Garage 2023	Paver	Pavers	Diesel	1	250	0	1	0.42	0.008	0	0	0
Phase 1a Office	North Garage 2023	Pile Rig	Bore/Drill Rigs	Diesel	1	600	0	1	0.5	0.008	0	0	0
Phase 1a Office	North Garage 2023	Pressure Washer	Pressure Washers	Diesel	1	25	0.122791	1	0.3	0.008	1.62E-05	0	0
Phase 1a Office	North Garage 2023	Scraper	Scrapers	Diesel	1	600	0	1	0.48	0.008	0	0	0
Phase 1a Office	North Garage 2023	Tire Wash	Other Construction Equipment	Diesel	1	100	1.505814	1	0.42	0.008	0.001115	0	0
Phase 1a Office	Office Building 4 2023	Air Compressor	Air Compressors	Diesel	1	150	0.049091	1	0.48	0.008	6.23E-05	0	0

Phase 1a Office	Office Building 4 2023	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	1.264463	1	0.37	0.008	0.002888	0	0
Phase 1a Office	Office Building 4 2023	Blade	Graders	Diesel	1	450	0	1	0.41	0.008	0	0	0
Phase 1a Office	Office Building 4 2023	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	1.264463	1	0.37	0.008	0.00165	0	0
Phase 1a Office	Office Building 4 2023	Boom Lift	Aerial Lifts	Diesel	1	40	7.438017	1	0.31	0.008	0.001627	0	0
Phase 1a Office	Office Building 4 2023	Compactor	Other Construction Equipment	Diesel	1	250	0.101157	1	0.42	0.008	0.000187	0	0
Phase 1a Office	Office Building 4 2023	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.78	0.008	0	0	0
Phase 1a Office	Office Building 4 2023	Concrete Pump	Pumps	Diesel	1	450	0.075372	1	0.74	0.008	0.000443	0	0
Phase 1a Office	Office Building 4 2023	Excavator	Excavators	Diesel	1	500	0.063223	1	0.38	0.008	0.000212	0	0
Phase 1a Office	Office Building 4 2023	Generator	Generator Sets	Diesel	1	25	2.900826	1	0.74	0.008	0.000946	0	0
Phase 1a Office	Office Building 4 2023	Gradall	Forklifts	Diesel	1	350	0.48	1	0.2	0.008	0.000593	0	0
Phase 1a Office	Office Building 4 2023	Hydro/Crawler Crane	Cranes	Diesel	1	550	1.809917	1	0.29	0.008	0.005092	0	0
Phase 1a Office	Office Building 4 2023	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	0.719008	1	0.37	0.008	0.000469	0	0
Phase 1a Office	Office Building 4 2023	Paver	Pavers	Diesel	1	250	0	1	0.42	0.008	0	0	0
Phase 1a Office	Office Building 4 2023	Pile Rig	Bore/Drill Rigs	Diesel	1	600	0.719008	1	0.5	0.008	0.003804	0	0
Phase 1a Office	Office Building 4 2023	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0.3	0.008	0	0	0
Phase 1a Office	Office Building 4 2023	Scraper	Scrapers	Diesel	1	600	0	1	0.48	0.008	0	0	0
Phase 1a Office	Office Building 4 2023	Tire Wash	Other Construction Equipment	Diesel	1	100	1.5	1	0.42	0.008	0.001111	0	0
Phase 1a Office	Office Building 4 2024	Air Compressor	Air Compressors	Diesel	1	150	0	1	0.48	0.008	0	0	0
Phase 1a Office	Office Building 4 2024	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	0	1	0.37	0.008	0	0	0
Phase 1a Office	Office Building 4 2024	Blade	Graders	Diesel	1	450	0	1	0.41	0.008	0	0	0
Phase 1a Office	Office Building 4 2024	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	0	1	0.37	0.008	0	0	0
Phase 1a Office	Office Building 4 2024	Boom Lift	Aerial Lifts	Diesel	1	40	1.405797	1	0.31	0.008	0.000307	0	0
Phase 1a Office	Office Building 4 2024	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0.42	0.008	0	0	0
Phase 1a Office	Office Building 4 2024	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.78	0.008	0	0	0
Phase 1a Office	Office Building 4 2024	Concrete Pump	Pumps	Diesel	1	450	0	1	0.74	0.008	0	0	0
Phase 1a Office	Office Building 4 2024	Excavator	Excavators	Diesel	1	500	0	1	0.38	0.008	0	0	0
Phase 1a Office	Office Building 4 2024	Generator	Generator Sets	Diesel	1	25	0	1	0.74	0.008	0	0	0
Phase 1a Office	Office Building 4 2024	Gradall	Forklifts	Diesel	1	350	0.48	1	0.2	0.008	0.000593	0	0
Phase 1a Office	Office Building 4 2024	Hydro/Crawler Crane	Cranes	Diesel	1	550	0	1	0.29	0.008	0	0	0
Phase 1a Office	Office Building 4 2024	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	0	1	0.37	0.008	0	0	0
Phase 1a Office	Office Building 4 2024	Paver	Pavers	Diesel	1	250	0	1	0.42	0.008	0	0	0
Phase 1a Office	Office Building 4 2024	Pile Rig	Bore/Drill Rigs	Diesel	1	600	0	1	0.5	0.008	0	0	0
Phase 1a Office	Office Building 4 2024	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0.3	0.008	0	0	0
Phase 1a Office	Office Building 4 2024	Scraper	Scrapers	Diesel	1	600	0	1	0.48	0.008	0	0	0
Phase 1a Office	Office Building 4 2024	Tire Wash	Other Construction Equipment	Diesel	1	100	1.5	1	0.42	0.008	0.001111	0	0
Phase 1a Office	Meeting, Collaboration, Park 2022	Air Compressor	Air Compressors	Diesel	1	150	0	1	0.48	0.008	0	0	42
Phase 1a Office	Meeting, Collaboration, Park 2022	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	5.857143	1	0.37	0.008	0.013378	0	42
Phase 1a Office	Meeting, Collaboration, Park 2022	Blade	Graders	Diesel	1	450	0	1	0.41	0.008	0	0	42
Phase 1a Office	Meeting, Collaboration, Park 2022	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	5.857143	1	0.37	0.008	0.007644	0	42
Phase 1a Office	Meeting, Collaboration, Park 2022	Boom Lift	Aerial Lifts	Diesel	1	40	0	1	0.31	0.008	0	0	42
Phase 1a Office	Meeting, Collaboration, Park 2022	Compactor	Other Construction Equipment	Diesel	1	250	0.314286	1	0.42	0.008	0.000582	0	42
Phase 1a Office	Meeting, Collaboration, Park 2022	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.78	0.008	0	0	42
Phase 1a Office	Meeting, Collaboration, Park 2022	Concrete Pump	Pumps	Diesel	1	450	0	1	0.74	0.008	0	0	42
Phase 1a Office	Meeting, Collaboration, Park 2022	Excavator	Excavators	Diesel	1	500	23.42857	1	0.38	0.008	0.07851	0	42
Phase 1a Office	Meeting, Collaboration, Park 2022	Generator	Generator Sets	Diesel	1	25	5.857143	1	0.74	0.008	0.001911	0	42
Phase 1a Office	Meeting, Collaboration, Park 2022	Gradall	Forklifts	Diesel	1	350	8.785714	1	0.2	0.008	0.010847	0	42
Phase 1a Office	Meeting, Collaboration, Park 2022	Hydro/Crawler Crane	Cranes	Diesel	1	550	1.571429	1	0.29	0.008	0.004421	0	42
Phase 1a Office	Meeting, Collaboration, Park 2022	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	4.392857	1	0.37	0.008	0.002867	0	42
Phase 1a Office	Meeting, Collaboration, Park 2022	Paver	Pavers	Diesel	1	250	0	1	0.42	0.008	0	0	42
Phase 1a Office	Meeting, Collaboration, Park 2022	Pile Rig	Bore/Drill Rigs	Diesel	1	600	3.142857	1	0.5	0.008	0.016629	0	42
Phase 1a Office	Meeting, Collaboration, Park 2022	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0.3	0.008	0	0	42
Phase 1a Office	Meeting, Collaboration, Park 2022	Scraper	Scrapers	Diesel	1	600	0	1	0.48	0.008	0	0	42
Phase 1a Office	Meeting, Collaboration, Park 2022	Tire Wash	Other Construction Equipment	Diesel	1	100	1.464286	1	0.42	0.008	0.001085	0	42
Phase 1a Office	Meeting, Collaboration, Park 2023	Air Compressor	Air Compressors	Diesel	1	150	0.304615	1	0.48	0.008	0.000387	0	0
Phase 1a Office	Meeting, Collaboration, Park 2023	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	3.276923	1	0.37	0.008	0.007484	0	0
Phase 1a Office	Meeting, Collaboration, Park 2023	Blade	Graders	Diesel	1	450	0	1	0.41	0.008	0	0	0

Phase 1a Office	Meeting, Collaboration, Park 2023	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	3.276923	1	0.37	0.008	0.004277	0	0
Phase 1a Office	Meeting, Collaboration, Park 2023	Boom Lift	Aerial Lifts	Diesel	1	40	0.888462	1	0.31	0.008	0.000194	0	0
Phase 1a Office	Meeting, Collaboration, Park 2023	Compactor	Other Construction Equipment	Diesel	1	250	0.152308	1	0.42	0.008	0.000282	0	0
Phase 1a Office	Meeting, Collaboration, Park 2023	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.78	0.008	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2023	Concrete Pump	Pumps	Diesel	1	450	0.304615	1	0.74	0.008	0.001789	0	0
Phase 1a Office	Meeting, Collaboration, Park 2023	Excavator	Excavators	Diesel	1	500	5.492308	1	0.38	0.008	0.018405	0	0
Phase 1a Office	Meeting, Collaboration, Park 2023	Generator	Generator Sets	Diesel	1	25	6.715385	1	0.74	0.008	0.002191	0	0
Phase 1a Office	Meeting, Collaboration, Park 2023	Gradall	Forklifts	Diesel	1	350	7.661538	1	0.2	0.008	0.009459	0	0
Phase 1a Office	Meeting, Collaboration, Park 2023	Hydro/Crawler Crane	Cranes	Diesel	1	550	7.246154	1	0.29	0.008	0.020384	0	0
Phase 1a Office	Meeting, Collaboration, Park 2023	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	1.828846	1	0.37	0.008	0.001193	0	0
Phase 1a Office	Meeting, Collaboration, Park 2023	Paver	Pavers	Diesel	1	250	0	1	0.42	0.008	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2023	Pile Rig	Bore/Drill Rigs	Diesel	1	600	2.007692	1	0.5	0.008	0.010623	0	0
Phase 1a Office	Meeting, Collaboration, Park 2023	Pressure Washer	Pressure Washers	Diesel	1	25	0.152308	1	0.3	0.008	2.01E-05	0	0
Phase 1a Office	Meeting, Collaboration, Park 2023	Scraper	Scrapers	Diesel	1	600	0	1	0.48	0.008	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2023	Tire Wash	Other Construction Equipment	Diesel	1	100	0.819231	1	0.42	0.008	0.000607	0	0
Phase 1a Office	Meeting, Collaboration, Park 2024	Air Compressor	Air Compressors	Diesel	1	150	0	1	0.48	0.008	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2024	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	0	1	0.37	0.008	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2024	Blade	Graders	Diesel	1	450	0	1	0.41	0.008	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2024	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	0	1	0.37	0.008	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2024	Boom Lift	Aerial Lifts	Diesel	1	40	19.30534	1	0.31	0.008	0.004222	0	0
Phase 1a Office	Meeting, Collaboration, Park 2024	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0.42	0.008	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2024	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.78	0.008	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2024	Concrete Pump	Pumps	Diesel	1	450	0	1	0.74	0.008	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2024	Excavator	Excavators	Diesel	1	500	0	1	0.38	0.008	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2024	Generator	Generator Sets	Diesel	1	25	0	1	0.74	0.008	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2024	Gradall	Forklifts	Diesel	1	350	10.25954	1	0.2	0.008	0.012666	0	0
Phase 1a Office	Meeting, Collaboration, Park 2024	Hydro/Crawler Crane	Cranes	Diesel	1	550	0.503817	1	0.29	0.008	0.001417	0	0
Phase 1a Office	Meeting, Collaboration, Park 2024	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	0	1	0.37	0.008	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2024	Paver	Pavers	Diesel	1	250	0	1	0.42	0.008	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2024	Pile Rig	Bore/Drill Rigs	Diesel	1	600	0	1	0.5	0.008	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2024	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0.3	0.008	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2024	Scraper	Scrapers	Diesel	1	600	0	1	0.48	0.008	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2024	Tire Wash	Other Construction Equipment	Diesel	1	100	0	1	0.42	0.008	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2025	Air Compressor	Air Compressors	Diesel	1	150	0	1	0.48	0.008	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2025	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	0	1	0.37	0.008	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2025	Blade	Graders	Diesel	1	450	0	1	0.41	0.008	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2025	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	0	1	0.37	0.008	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2025	Boom Lift	Aerial Lifts	Diesel	1	40	9.425287	1	0.31	0.008	0.002061	0	0
Phase 1a Office	Meeting, Collaboration, Park 2025	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0.42	0.008	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2025	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.78	0.008	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2025	Concrete Pump	Pumps	Diesel	1	450	0	1	0.74	0.008	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2025	Excavator	Excavators	Diesel	1	500	0	1	0.38	0.008	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2025	Generator	Generator Sets	Diesel	1	25	0	1	0.74	0.008	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2025	Gradall	Forklifts	Diesel	1	350	11.77011	1	0.2	0.008	0.014531	0	0
Phase 1a Office	Meeting, Collaboration, Park 2025	Hydro/Crawler Crane	Cranes	Diesel	1	550	0.770115	1	0.29	0.008	0.002166	0	0
Phase 1a Office	Meeting, Collaboration, Park 2025	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	0	1	0.37	0.008	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2025	Paver	Pavers	Diesel	1	250	0	1	0.42	0.008	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2025	Pile Rig	Bore/Drill Rigs	Diesel	1	600	0	1	0.5	0.008	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2025	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0.3	0.008	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2025	Scraper	Scrapers	Diesel	1	600	0	1	0.48	0.008	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2025	Tire Wash	Other Construction Equipment	Diesel	1	100	0	1	0.42	0.008	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2026	Air Compressor	Air Compressors	Diesel	1	150	0	1	0.48	0.008	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2026	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	0	1	0.37	0.008	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2026	Blade	Graders	Diesel	1	450	0	1	0.41	0.008	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2026	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	0	1	0.37	0.008	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2026	Boom Lift	Aerial Lifts	Diesel	1	40	0	1	0.31	0.008	0	0	0

Phase 1a Office	Meeting, Collaboration, Park 2026	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0.42	0.008	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2026	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.78	0.008	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2026	Concrete Pump	Pumps	Diesel	1	450	0	1	0.74	0.008	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2026	Excavator	Excavators	Diesel	1	500	0	1	0.38	0.008	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2026	Generator	Generator Sets	Diesel	1	25	0	1	0.74	0.008	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2026	Gradall	Forklifts	Diesel	1	350	11.73913	1	0.2	0.008	0.014493	0	0
Phase 1a Office	Meeting, Collaboration, Park 2026	Hydro/Crawler Crane	Cranes	Diesel	1	550	5.869565	1	0.29	0.008	0.016512	0	0
Phase 1a Office	Meeting, Collaboration, Park 2026	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	0	1	0.37	0.008	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2026	Paver	Pavers	Diesel	1	250	0	1	0.42	0.008	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2026	Pile Rig	Bore/Drill Rigs	Diesel	1	600	0	1	0.5	0.008	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2026	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0.3	0.008	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2026	Scraper	Scrapers	Diesel	1	600	0	1	0.48	0.008	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2026	Tire Wash	Other Construction Equipment	Diesel	1	100	0	1	0.42	0.008	0	0	0
Phase 1a Office	Hotel Excavation 2022	Air Compressor	Air Compressors	Diesel	1	150	2.642857	1	0.48	0.008	0.003356	0	42
Phase 1a Office	Hotel Excavation 2022	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	2.642857	1	0.37	0.008	0.006036	0	42
Phase 1a Office	Hotel Excavation 2022	Blade	Graders	Diesel	1	450	0	1	0.41	0.008	0	0	42
Phase 1a Office	Hotel Excavation 2022	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	2.928571	1	0.37	0.008	0.003822	0	42
Phase 1a Office	Hotel Excavation 2022	Boom Lift	Aerial Lifts	Diesel	1	40	1.464286	1	0.31	0.008	0.00032	0	42
Phase 1a Office	Hotel Excavation 2022	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0.42	0.008	0	0	42
Phase 1a Office	Hotel Excavation 2022	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.78	0.008	0	0	42
Phase 1a Office	Hotel Excavation 2022	Concrete Pump	Pumps	Diesel	1	450	0.422857	1	0.74	0.008	0.002484	0	42
Phase 1a Office	Hotel Excavation 2022	Excavator	Excavators	Diesel	1	500	11.71429	1	0.38	0.008	0.039255	0	42
Phase 1a Office	Hotel Excavation 2022	Generator	Generator Sets	Diesel	1	25	5.857143	1	0.74	0.008	0.001911	0	42
Phase 1a Office	Hotel Excavation 2022	Gradall	Forklifts	Diesel	1	350	5.857143	1	0.2	0.008	0.007231	0	42
Phase 1a Office	Hotel Excavation 2022	Hydro/Crawler Crane	Cranes	Diesel	1	550	2.642857	1	0.29	0.008	0.007435	0	42
Phase 1a Office	Hotel Excavation 2022	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	11.71429	1	0.37	0.008	0.007644	0	42
Phase 1a Office	Hotel Excavation 2022	Paver	Pavers	Diesel	1	250	0	1	0.42	0.008	0	0	42
Phase 1a Office	Hotel Excavation 2022	Pile Rig	Bore/Drill Rigs	Diesel	1	600	10.57143	1	0.5	0.008	0.055935	0	42
Phase 1a Office	Hotel Excavation 2022	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0.3	0.008	0	0	42
Phase 1a Office	Hotel Excavation 2022	Scraper	Scrapers	Diesel	1	600	0	1	0.48	0.008	0	0	42
Phase 1a Office	Hotel Excavation 2022	Tire Wash	Other Construction Equipment	Diesel	1	100	2.928571	1	0.42	0.008	0.002169	0	42
Phase 1a Office	Hotel Excavation 2023	Air Compressor	Air Compressors	Diesel	1	150	2.311284	1	0.48	0.008	0.002935	0	0
Phase 1a Office	Hotel Excavation 2023	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	0	1	0.37	0.008	0	0	0
Phase 1a Office	Hotel Excavation 2023	Blade	Graders	Diesel	1	450	0	1	0.41	0.008	0	0	0
Phase 1a Office	Hotel Excavation 2023	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	0.700389	1	0.37	0.008	0.000914	0	0
Phase 1a Office	Hotel Excavation 2023	Boom Lift	Aerial Lifts	Diesel	1	40	0.350195	1	0.31	0.008	7.66E-05	0	0
Phase 1a Office	Hotel Excavation 2023	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0.42	0.008	0	0	0
Phase 1a Office	Hotel Excavation 2023	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.78	0.008	0	0	0
Phase 1a Office	Hotel Excavation 2023	Concrete Pump	Pumps	Diesel	1	450	2.311284	1	0.74	0.008	0.013575	0	0
Phase 1a Office	Hotel Excavation 2023	Excavator	Excavators	Diesel	1	500	2.801556	1	0.38	0.008	0.009388	0	0
Phase 1a Office	Hotel Excavation 2023	Generator	Generator Sets	Diesel	1	25	10.64591	1	0.74	0.008	0.003474	0	0
Phase 1a Office	Hotel Excavation 2023	Gradall	Forklifts	Diesel	1	350	10.64591	1	0.2	0.008	0.013143	0	0
Phase 1a Office	Hotel Excavation 2023	Hydro/Crawler Crane	Cranes	Diesel	1	550	9.245136	1	0.29	0.008	0.026008	0	0
Phase 1a Office	Hotel Excavation 2023	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	2.801556	1	0.37	0.008	0.001828	0	0
Phase 1a Office	Hotel Excavation 2023	Paver	Pavers	Diesel	1	250	0	1	0.42	0.008	0	0	0
Phase 1a Office	Hotel Excavation 2023	Pile Rig	Bore/Drill Rigs	Diesel	1	600	0	1	0.5	0.008	0	0	0
Phase 1a Office	Hotel Excavation 2023	Pressure Washer	Pressure Washers	Diesel	1	25	0.046226	1	0.3	0.008	6.11E-06	0	0
Phase 1a Office	Hotel Excavation 2023	Scraper	Scrapers	Diesel	1	600	0	1	0.48	0.008	0	0	0
Phase 1a Office	Hotel Excavation 2023	Tire Wash	Other Construction Equipment	Diesel	1	100	1.856031	1	0.42	0.008	0.001375	0	0
Phase 1a Office	Hotel Construction 2024	Air Compressor	Air Compressors	Diesel	1	150	3	1	0.48	0.008	0.00381	0	0
Phase 1a Office	Hotel Construction 2024	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	0	1	0.37	0.008	0	0	0
Phase 1a Office	Hotel Construction 2024	Blade	Graders	Diesel	1	450	0	1	0.41	0.008	0	0	0
Phase 1a Office	Hotel Construction 2024	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	0	1	0.37	0.008	0	0	0
Phase 1a Office	Hotel Construction 2024	Boom Lift	Aerial Lifts	Diesel	1	40	20.91429	1	0.31	0.008	0.004574	0	0
Phase 1a Office	Hotel Construction 2024	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0.42	0.008	0	0	0
Phase 1a Office	Hotel Construction 2024	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.78	0.008	0	0	0

Phase 1a Office	Hotel Construction 2024	Concrete Pump	Pumps	Diesel	1	450	3	1	0.74	0.008	0.017619	0	0
Phase 1a Office	Hotel Construction 2024	Excavator	Excavators	Diesel	1	500	0	1	0.38	0.008	0	0	0
Phase 1a Office	Hotel Construction 2024	Generator	Generator Sets	Diesel	1	25	0	1	0.74	0.008	0	0	0
Phase 1a Office	Hotel Construction 2024	Gradall	Forklifts	Diesel	1	350	12	1	0.2	0.008	0.014815	0	0
Phase 1a Office	Hotel Construction 2024	Hydro/Crawler Crane	Cranes	Diesel	1	550	0	1	0.29	0.008	0	0	0
Phase 1a Office	Hotel Construction 2024	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	0	1	0.37	0.008	0	0	0
Phase 1a Office	Hotel Construction 2024	Paver	Pavers	Diesel	1	250	0	1	0.42	0.008	0	0	0
Phase 1a Office	Hotel Construction 2024	Pile Rig	Bore/Drill Rigs	Diesel	1	600	0	1	0.5	0.008	0	0	0
Phase 1a Office	Hotel Construction 2024	Pressure Washer	Pressure Washers	Diesel	1	25	0.06	1	0.3	0.008	7.94E-06	0	0
Phase 1a Office	Hotel Construction 2024	Scraper	Scrapers	Diesel	1	600	0	1	0.48	0.008	0	0	0
Phase 1a Office	Hotel Construction 2024	Tire Wash	Other Construction Equipment	Diesel	1	100	1.5	1	0.42	0.008	0.001111	0	0
Phase 1a Office	Hotel Construction 2025	Air Compressor	Air Compressors	Diesel	1	150	0.837662	1	0.48	0.008	0.001064	0	0
Phase 1a Office	Hotel Construction 2025	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	0	1	0.37	0.008	0	0	0
Phase 1a Office	Hotel Construction 2025	Blade	Graders	Diesel	1	450	0	1	0.41	0.008	0	0	0
Phase 1a Office	Hotel Construction 2025	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	0	1	0.37	0.008	0	0	0
Phase 1a Office	Hotel Construction 2025	Boom Lift	Aerial Lifts	Diesel	1	40	20.18182	1	0.31	0.008	0.004414	0	0
Phase 1a Office	Hotel Construction 2025	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0.42	0.008	0	0	0
Phase 1a Office	Hotel Construction 2025	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.78	0.008	0	0	0
Phase 1a Office	Hotel Construction 2025	Concrete Pump	Pumps	Diesel	1	450	0.837662	1	0.74	0.008	0.00492	0	0
Phase 1a Office	Hotel Construction 2025	Excavator	Excavators	Diesel	1	500	0	1	0.38	0.008	0	0	0
Phase 1a Office	Hotel Construction 2025	Generator	Generator Sets	Diesel	1	25	0	1	0.74	0.008	0	0	0
Phase 1a Office	Hotel Construction 2025	Gradall	Forklifts	Diesel	1	350	12.07792	1	0.2	0.008	0.014911	0	0
Phase 1a Office	Hotel Construction 2025	Hydro/Crawler Crane	Cranes	Diesel	1	550	0	1	0.29	0.008	0	0	0
Phase 1a Office	Hotel Construction 2025	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	0	1	0.37	0.008	0	0	0
Phase 1a Office	Hotel Construction 2025	Paver	Pavers	Diesel	1	250	0	1	0.42	0.008	0	0	0
Phase 1a Office	Hotel Construction 2025	Pile Rig	Bore/Drill Rigs	Diesel	1	600	0	1	0.5	0.008	0	0	0
Phase 1a Office	Hotel Construction 2025	Pressure Washer	Pressure Washers	Diesel	1	25	0.016753	1	0.3	0.008	2.22E-06	0	0
Phase 1a Office	Hotel Construction 2025	Scraper	Scrapers	Diesel	1	600	0	1	0.48	0.008	0	0	0
Phase 1a Office	Hotel Construction 2025	Tire Wash	Other Construction Equipment	Diesel	1	100	1.50974	1	0.42	0.008	0.001118	0	0
Phase 1a Office	Town Square 2023	Air Compressor	Air Compressors	Diesel	1	150	0	1	0.48	0.008	0	0	0
Phase 1a Office	Town Square 2023	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	0	1	0.37	0.008	0	0	0
Phase 1a Office	Town Square 2023	Blade	Graders	Diesel	1	450	0	1	0.41	0.008	0	0	0
Phase 1a Office	Town Square 2023	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	3	1	0.37	0.008	0.003915	0	0
Phase 1a Office	Town Square 2023	Boom Lift	Aerial Lifts	Diesel	1	40	1.5	1	0.31	0.008	0.000328	0	0
Phase 1a Office	Town Square 2023	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0.42	0.008	0	0	0
Phase 1a Office	Town Square 2023	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.78	0.008	0	0	0
Phase 1a Office	Town Square 2023	Concrete Pump	Pumps	Diesel	1	450	0	1	0.74	0.008	0	0	0
Phase 1a Office	Town Square 2023	Excavator	Excavators	Diesel	1	500	12	1	0.38	0.008	0.040213	0	0
Phase 1a Office	Town Square 2023	Generator	Generator Sets	Diesel	1	25	6	1	0.74	0.008	0.001958	0	0
Phase 1a Office	Town Square 2023	Gradall	Forklifts	Diesel	1	350	6	1	0.2	0.008	0.007408	0	0
Phase 1a Office	Town Square 2023	Hydro/Crawler Crane	Cranes	Diesel	1	550	0	1	0.29	0.008	0	0	0
Phase 1a Office	Town Square 2023	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	12	1	0.37	0.008	0.007831	0	0
Phase 1a Office	Town Square 2023	Paver	Pavers	Diesel	1	250	0	1	0.42	0.008	0	0	0
Phase 1a Office	Town Square 2023	Pile Rig	Bore/Drill Rigs	Diesel	1	600	0	1	0.5	0.008	0	0	0
Phase 1a Office	Town Square 2023	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0.3	0.008	0	0	0
Phase 1a Office	Town Square 2023	Scraper	Scrapers	Diesel	1	600	0	1	0.48	0.008	0	0	0
Phase 1a Office	Town Square 2023	Tire Wash	Other Construction Equipment	Diesel	1	100	3	1	0.42	0.008	0.002222	0	0
Phase 1a Office	Town Square 2024	Air Compressor	Air Compressors	Diesel	1	150	0	1	0.48	0.008	0	0	0
Phase 1a Office	Town Square 2024	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	0	1	0.37	0.008	0	0	0
Phase 1a Office	Town Square 2024	Blade	Graders	Diesel	1	450	0	1	0.41	0.008	0	0	0
Phase 1a Office	Town Square 2024	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	0.996183	1	0.37	0.008	0.0013	0	0
Phase 1a Office	Town Square 2024	Boom Lift	Aerial Lifts	Diesel	1	40	1.872137	1	0.31	0.008	0.000409	0	0
Phase 1a Office	Town Square 2024	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0.42	0.008	0	0	0
Phase 1a Office	Town Square 2024	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.78	0.008	0	0	0
Phase 1a Office	Town Square 2024	Concrete Pump	Pumps	Diesel	1	450	0.020382	1	0.74	0.008	0.00012	0	0
Phase 1a Office	Town Square 2024	Excavator	Excavators	Diesel	1	500	3.984733	1	0.38	0.008	0.013353	0	0

Phase 1a Office	Town Square 2024	Generator	Generator Sets	Diesel	1	25	0.549618	1	0.74	0.008	0.000179	0	0
Phase 1a Office	Town Square 2024	Gradall	Forklifts	Diesel	1	350	5.267176	1	0.2	0.008	0.006503	0	0
Phase 1a Office	Town Square 2024	Hydro/Crawler Crane	Cranes	Diesel	1	550	1.03145	1	0.29	0.008	0.002902	0	0
Phase 1a Office	Town Square 2024	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	3.984733	1	0.37	0.008	0.0026	0	0
Phase 1a Office	Town Square 2024	Paver	Pavers	Diesel	1	250	0	1	0.42	0.008	0	0	0
Phase 1a Office	Town Square 2024	Pile Rig	Bore/Drill Rigs	Diesel	1	600	0	1	0.5	0.008	0	0	0
Phase 1a Office	Town Square 2024	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0.3	0.008	0	0	0
Phase 1a Office	Town Square 2024	Scraper	Scrapers	Diesel	1	600	0	1	0.48	0.008	0	0	0
Phase 1a Office	Town Square 2024	Tire Wash	Other Construction Equipment	Diesel	1	100	0.996183	1	0.42	0.008	0.000738	0	0
Phase 1a Office	Town Square 2025	Air Compressor	Air Compressors	Diesel	1	150	0	1	0.48	0.008	0	0	0
Phase 1a Office	Town Square 2025	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	0	1	0.37	0.008	0	0	0
Phase 1a Office	Town Square 2025	Blade	Graders	Diesel	1	450	0	1	0.41	0.008	0	0	0
Phase 1a Office	Town Square 2025	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	0	1	0.37	0.008	0	0	0
Phase 1a Office	Town Square 2025	Boom Lift	Aerial Lifts	Diesel	1	40	0	1	0.31	0.008	0	0	0
Phase 1a Office	Town Square 2025	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0.42	0.008	0	0	0
Phase 1a Office	Town Square 2025	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.78	0.008	0	0	0
Phase 1a Office	Town Square 2025	Concrete Pump	Pumps	Diesel	1	450	0	1	0.74	0.008	0	0	0
Phase 1a Office	Town Square 2025	Excavator	Excavators	Diesel	1	500	0	1	0.38	0.008	0	0	0
Phase 1a Office	Town Square 2025	Generator	Generator Sets	Diesel	1	25	0	1	0.74	0.008	0	0	0
Phase 1a Office	Town Square 2025	Gradall	Forklifts	Diesel	1	350	18	1	0.2	0.008	0.022223	0	0
Phase 1a Office	Town Square 2025	Hydro/Crawler Crane	Cranes	Diesel	1	550	0.18	1	0.29	0.008	0.000506	0	0
Phase 1a Office	Town Square 2025	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	0	1	0.37	0.008	0	0	0
Phase 1a Office	Town Square 2025	Paver	Pavers	Diesel	1	250	0	1	0.42	0.008	0	0	0
Phase 1a Office	Town Square 2025	Pile Rig	Bore/Drill Rigs	Diesel	1	600	0	1	0.5	0.008	0	0	0
Phase 1a Office	Town Square 2025	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0.3	0.008	0	0	0
Phase 1a Office	Town Square 2025	Scraper	Scrapers	Diesel	1	600	0	1	0.48	0.008	0	0	0
Phase 1a Office	Town Square 2025	Tire Wash	Other Construction Equipment	Diesel	1	100	0	1	0.42	0.008	0	0	0
Phase 1a Mixed Use	Parcel 2 Foundations	Pile Rig	Bore/Drill Rigs	Diesel	0	600	8	0.4	0.5	0.008	0	0	0
Phase 1a Mixed Use	Parcel 2 Foundations	Generator	Generator Sets	Diesel	0	25	6	1	0.74	0.008	0	0	0
Phase 1a Mixed Use	Parcel 2 Foundations	Tire Wash	Other Construction Equipment	Diesel	1	100	4	0.9	0.42	0.008	0.002667	0	0
Phase 1a Mixed Use	Parcel 2 Foundations	Generator	Generator Sets	Diesel	0	25	6	1	0.74	0.008	0	0	0
Phase 1a Mixed Use	Parcel 2 Foundations	Tire Wash	Other Construction Equipment	Diesel	1	100	4	0.9	0.42	0.008	0.002667	0	0
Phase 1a Mixed Use	Parcel 2 Foundations	Excavator	Excavators	Diesel	1	131	8	0.6	0.38	0.008	0.004214	0	0
Phase 1a Mixed Use	Parcel 2 Foundations	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	90	8	0.6	0.37	0.008	0.002819	0	0
Phase 1a Mixed Use	Parcel 2 Foundations	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	70	8	0.8	0.37	0.008	0.002924	0	0
Phase 1a Mixed Use	Parcel 2 Foundations	Gradall	Forklifts	Diesel	1	74	4	0.8	0.2	0.008	0.000835	0	0
Phase 1a Mixed Use	Parcel 2 Foundations	Crane	Cranes	Diesel	1	215	4	0.5	0.29	0.008	0.002199	0	0
Phase 1a Mixed Use	Parcel 2 Foundations	Concrete Pump	Pumps	Diesel	1	450	8	0.15	0.74	0.008	0.007048	0	0
Phase 1a Mixed Use	Parcel 2 Core and Shell	Generator	Generator Sets	Diesel	0	25	6	1	0.74	0.008	0	0	0
Phase 1a Mixed Use	Parcel 2 Core and Shell	Tire Wash	Other Construction Equipment	Diesel	1	100	4	0.9	0.42	0.008	0.002667	0	0
Phase 1a Mixed Use	Parcel 2 Core and Shell	Crane	Cranes	Diesel	1	600	8	0.2	0.29	0.008	0.00491	0	0
Phase 1a Mixed Use	Parcel 2 Core and Shell	Gradall	Forklifts	Diesel	1	74	4	0.8	0.2	0.008	0.000835	0	0
Phase 1a Mixed Use	Parcel 2 Core and Shell	Concrete Pump	Pumps	Diesel	0	450	6	0.225	0.74	0.008	0	0	0
Phase 1a Mixed Use	Parcel 2 Core and Shell	Air Compressor	Air Compressors	Diesel	0	140	2	0.4	0.48	0.008	0	0	0
Phase 1a Mixed Use	Parcel 2 Core and Shell	Boom Lift	Aerial Lifts	Diesel	0	50	6	0.2	0.31	0.008	0	0	0
Phase 1a Mixed Use	Parcel 2 Tenant Improvements	Generator	Generator Sets	Diesel	0	25	6	0.85	0.74	0.008	0	0	0
Phase 1a Mixed Use	Parcel 2 Tenant Improvements	Tire Wash	Other Construction Equipment	Diesel	1	100	4	0.9	0.42	0.008	0.002667	0	0
Phase 1a Mixed Use	Parcel 2 Tenant Improvements	Gradall	Forklifts	Diesel	1	74	4	0.8	0.2	0.008	0.000835	0	0
Phase 1a Mixed Use	Parcel 2 Landscaping	Excavator	Excavators	Diesel	1	25	8	0.9	0.38	0.008	0.001206	0	0
Phase 1a Mixed Use	Parcel 2 Landscaping	Generator	Generator Sets	Diesel	0	25	6	0.5	0.74	0.008	0	0	0
Phase 1a Mixed Use	Parcel 2 Landscaping	Tire Wash	Other Construction Equipment	Diesel	1	100	4	0.9	0.42	0.008	0.002667	0	0
Phase 1a Mixed Use	Parcel 2 Landscaping	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	90	8	1	0.37	0.008	0.004699	0	0
Phase 1a Mixed Use	Parcel 2 Landscaping	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	70	8	0.8	0.37	0.008	0.002924	0	0
Phase 1a Mixed Use	Parcel 3 Foundations	Pile Rig	Bore/Drill Rigs	Diesel	0	600	8	0.4	0.5	0.008	0	0	0
Phase 1a Mixed Use	Parcel 3 Foundations	Generator	Generator Sets	Diesel	0	25	6	1	0.74	0.008	0	0	0
Phase 1a Mixed Use	Parcel 3 Foundations	Tire Wash	Other Construction Equipment	Diesel	1	100	4	0.9	0.42	0.008	0.002667	0	0
Phase 1a Mixed Use	Parcel 3 Foundations	Excavator	Excavators	Diesel	1	131	8	0.6	0.38	0.008	0.004214	0	0
Phase 1a Mixed Use	Parcel 3 Foundations	Backhoe	Tractors/Loaders/Backhoes	Diesel	2	90	8	0.6	0.37	0.008	0.005638	0	0

Phase 1a Mixed Use	Parcel 3 Foundations	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	70	8	0.8	0.37	0.008	0.002924	0	0
Phase 1a Mixed Use	Parcel 3 Foundations	Gradall	Forklifts	Diesel	1	74	4	0.8	0.2	0.008	0.000835	0	0
Phase 1a Mixed Use	Parcel 3 Foundations	Crane	Cranes	Diesel	1	215	4	0.5	0.29	0.008	0.002199	0	0
Phase 1a Mixed Use	Parcel 3 Foundations	Concrete Pump	Pumps	Diesel	1	450	8	0.15	0.74	0.008	0.007048	0	0
Phase 1a Mixed Use	Parcel 3 Core and Shell	Generator	Generator Sets	Diesel	0	25	6	1	0.74	0.008	0	0	0
Phase 1a Mixed Use	Parcel 3 Core and Shell	Tire Wash	Other Construction Equipment	Diesel	1	100	4	0.9	0.42	0.008	0.002667	0	0
Phase 1a Mixed Use	Parcel 3 Core and Shell	Crane	Cranes	Diesel	1	600	8	0.2	0.29	0.008	0.00491	0	0
Phase 1a Mixed Use	Parcel 3 Core and Shell	Gradall	Forklifts	Diesel	2	74	4	0.8	0.2	0.008	0.001671	0	0
Phase 1a Mixed Use	Parcel 3 Core and Shell	Concrete Pump	Pumps	Diesel	0	450	6	0.225	0.74	0.008	0	0	0
Phase 1a Mixed Use	Parcel 3 Core and Shell	Air Compressor	Air Compressors	Diesel	0	140	2	0.4	0.48	0.008	0	0	0
Phase 1a Mixed Use	Parcel 3 Core and Shell	Boom Lift	Aerial Lifts	Diesel	0	50	6	0.2	0.31	0.008	0	0	0
Phase 1a Mixed Use	Parcel 3 Tenant Improvements	Generator	Generator Sets	Diesel	0	25	6	0.85	0.74	0.008	0	0	0
Phase 1a Mixed Use	Parcel 3 Tenant Improvements	Tire Wash	Other Construction Equipment	Diesel	1	100	4	0.9	0.42	0.008	0.002667	0	0
Phase 1a Mixed Use	Parcel 3 Tenant Improvements	Gradall	Forklifts	Diesel	1	74	4	0.8	0.2	0.008	0.000835	0	0
Phase 1a Mixed Use	Parcel 3 Landscaping	Excavator	Excavators	Diesel	1	25	8	0.9	0.38	0.008	0.001206	0	0
Phase 1a Mixed Use	Parcel 3 Landscaping	Generator	Generator Sets	Diesel	0	25	6	0.5	0.74	0.008	0	0	0
Phase 1a Mixed Use	Parcel 3 Landscaping	Tire Wash	Other Construction Equipment	Diesel	0	100	4	0.9	0.42	0.008	0	0	0
Phase 1a Mixed Use	Parcel 3 Landscaping	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	90	8	1	0.37	0.008	0.004699	0	0
Phase 1a Mixed Use	Parcel 3 Landscaping	Bob Cat	Tractors/Loaders/Backhoes	Diesel	2	70	8	0.8	0.37	0.008	0.005847	0	0
Phase 1b	Demolition	Excavator	Excavators	Diesel	4	131	8	0.9	0.38	0.008	0.025286	0	48
Phase 1b	Demolition	Generator	Generator Sets	Diesel	2	25	6	0.5	0.74	0.008	0.001958	0	48
Phase 1b	Demolition	Tire Wash	Other Construction Equipment	Diesel	2	100	4	0.9	0.42	0.008	0.005333	0	48
Phase 1b	Demolition	Concrete Crusher	Crushing/Proc. Equipment	Diesel	2	200	2	0	0.78	0.008	0	0	48
Phase 1b	Demolition	Bob Cat	Tractors/Loaders/Backhoes	Diesel	6	150	8	0.8	0.37	0.008	0.037588	0	48
Phase 1b	Demolition	Pressure Washer	Pressure Washers	Diesel	2	25	8	1	0.3	0.008	0.002116	0	48
Phase 1b	Demolition	Air Compressor	Air Compressors	Diesel	1	140	6	0.7	0.48	0.008	0.004978	0	48
Phase 1b	Grading and Utilities	Blade	Graders	Diesel	2	359	8	0.15	0.41	0.008	0.00623	0	65
Phase 1b	Grading and Utilities	Scraper	Scrapers	Diesel	2	52	8	0.15	0.48	0.008	0.001057	0	65
Phase 1b	Grading and Utilities	Loader	Tractors/Loaders/Backhoes	Diesel	4	100	4	0.9	0.37	0.008	0.009397	0	65
Phase 1b	Grading and Utilities	Tire Wash	Other Construction Equipment	Diesel	2	100	4	0.9	0.42	0.008	0.005333	0	65
Phase 1b	Grading and Utilities	Loader	Tractors/Loaders/Backhoes	Diesel	4	100	4	0.9	0.37	0.008	0.009397	0	65
Phase 1b	Grading and Utilities	Tire Wash	Other Construction Equipment	Diesel	2	100	4	0.9	0.42	0.008	0.005333	0	65
Phase 1b	Grading and Utilities	Excavator	Excavators	Diesel	4	359	8	0.6	0.38	0.008	0.046196	0	65
Phase 1b	Grading and Utilities	Backhoe	Tractors/Loaders/Backhoes	Diesel	4	350	8	0.6	0.37	0.008	0.043853	0	65
Phase 1b	Grading and Utilities	Gradall	Forklifts	Diesel	4	350	4	0.6	0.2	0.008	0.011852	0	65
Phase 1b	Grading and Utilities	Compactor	Other Construction Equipment	Diesel	4	250	0.5	0.2	0.42	0.008	0.000741	0	65
Phase 1b	Grading and Utilities	Paver	Pavers	Diesel	2	250	8	0.01	0.42	0.008	0.000296	0	65
Phase 1b	Grading and Utilities	Generator	Generator Sets	Diesel	1	600	2	0.1	0.74	0.008	0.001566	0	65
Phase 1b Office	South Garage 2023	Air Compressor	Air Compressors	Diesel	1	150	0.48	1	0.48	0.008	0.00061	0	0
Phase 1b Office	South Garage 2023	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	0.054653	1	0.37	0.008	0.000125	0	0
Phase 1b Office	South Garage 2023	Blade	Graders	Diesel	1	450	0	1	0.41	0.008	0	0	0
Phase 1b Office	South Garage 2023	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	0.054653	1	0.37	0.008	7.13E-05	0	0
Phase 1b Office	South Garage 2023	Boom Lift	Aerial Lifts	Diesel	1	40	0	1	0.31	0.008	0	0	0
Phase 1b Office	South Garage 2023	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0.42	0.008	0	0	0
Phase 1b Office	South Garage 2023	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.78	0.008	0	0	0
Phase 1b Office	South Garage 2023	Concrete Pump	Pumps	Diesel	1	450	0.451485	1	0.74	0.008	0.002652	0	0
Phase 1b Office	South Garage 2023	Excavator	Excavators	Diesel	1	500	2.970297	1	0.38	0.008	0.009954	0	0
Phase 1b Office	South Garage 2023	Generator	Generator Sets	Diesel	1	25	3.237624	1	0.74	0.008	0.001056	0	0
Phase 1b Office	South Garage 2023	Gradall	Forklifts	Diesel	1	350	3	1	0.2	0.008	0.003704	0	0
Phase 1b Office	South Garage 2023	Hydro/Crawler Crane	Cranes	Diesel	1	550	4.923267	1	0.29	0.008	0.01385	0	0
Phase 1b Office	South Garage 2023	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	1.485149	1	0.37	0.008	0.000969	0	0
Phase 1b Office	South Garage 2023	Paver	Pavers	Diesel	1	250	0	1	0.42	0.008	0	0	0
Phase 1b Office	South Garage 2023	Pile Rig	Bore/Drill Rigs	Diesel	1	600	0.861386	1	0.5	0.008	0.004558	0	0
Phase 1b Office	South Garage 2023	Pressure Washer	Pressure Washers	Diesel	1	25	0.156832	1	0.3	0.008	2.07E-05	0	0
Phase 1b Office	South Garage 2023	Scraper	Scrapers	Diesel	1	600	0	1	0.48	0.008	0	0	0
Phase 1b Office	South Garage 2023	Tire Wash	Other Construction Equipment	Diesel	1	100	1.44802	1	0.42	0.008	0.001073	0	0
Phase 1b Office	South Garage 2024	Air Compressor	Air Compressors	Diesel	1	150	0.48	1	0.48	0.008	0.00061	0	0
Phase 1b Office	South Garage 2024	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	0	1	0.37	0.008	0	0	0

Phase 1b Office	South Garage 2024	Blade	Graders	Diesel	1	450	0	1	0.41	0.008	0	0	0
Phase 1b Office	South Garage 2024	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	0	1	0.37	0.008	0	0	0
Phase 1b Office	South Garage 2024	Boom Lift	Aerial Lifts	Diesel	1	40	4.737447	1	0.31	0.008	0.001036	0	0
Phase 1b Office	South Garage 2024	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0.42	0.008	0	0	0
Phase 1b Office	South Garage 2024	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.78	0.008	0	0	0
Phase 1b Office	South Garage 2024	Concrete Pump	Pumps	Diesel	1	450	0.6	1	0.74	0.008	0.003524	0	0
Phase 1b Office	South Garage 2024	Excavator	Excavators	Diesel	1	500	0	1	0.38	0.008	0	0	0
Phase 1b Office	South Garage 2024	Generator	Generator Sets	Diesel	1	25	0	1	0.74	0.008	0	0	0
Phase 1b Office	South Garage 2024	Gradall	Forklifts	Diesel	1	350	3	1	0.2	0.008	0.003704	0	0
Phase 1b Office	South Garage 2024	Hydro/Crawler Crane	Cranes	Diesel	1	550	3.68617	1	0.29	0.008	0.01037	0	0
Phase 1b Office	South Garage 2024	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	0	1	0.37	0.008	0	0	0
Phase 1b Office	South Garage 2024	Paver	Pavers	Diesel	1	250	0	1	0.42	0.008	0	0	0
Phase 1b Office	South Garage 2024	Pile Rig	Bore/Drill Rigs	Diesel	1	600	0	1	0.5	0.008	0	0	0
Phase 1b Office	South Garage 2024	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0.3	0.008	0	0	0
Phase 1b Office	South Garage 2024	Scraper	Scrapers	Diesel	1	600	0	1	0.48	0.008	0	0	0
Phase 1b Office	South Garage 2024	Tire Wash	Other Construction Equipment	Diesel	1	100	1.5	1	0.42	0.008	0.001111	0	0
Phase 1b Office	Office Building 3 2023	Air Compressor	Air Compressors	Diesel	1	150	0.067119	1	0.48	0.008	8.52E-05	0	0
Phase 1b Office	Office Building 3 2023	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	2.576271	1	0.37	0.008	0.005884	0	0
Phase 1b Office	Office Building 3 2023	Blade	Graders	Diesel	1	450	0	1	0.41	0.008	0	0	0
Phase 1b Office	Office Building 3 2023	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	2.576271	1	0.37	0.008	0.003362	0	0
Phase 1b Office	Office Building 3 2023	Boom Lift	Aerial Lifts	Diesel	1	40	1.694915	1	0.31	0.008	0.000371	0	0
Phase 1b Office	Office Building 3 2023	Compactor	Other Construction Equipment	Diesel	1	250	0.206102	1	0.42	0.008	0.000382	0	0
Phase 1b Office	Office Building 3 2023	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.78	0.008	0	0	0
Phase 1b Office	Office Building 3 2023	Concrete Pump	Pumps	Diesel	1	450	0.121356	1	0.74	0.008	0.000713	0	0
Phase 1b Office	Office Building 3 2023	Excavator	Excavators	Diesel	1	500	0.128814	1	0.38	0.008	0.000432	0	0
Phase 1b Office	Office Building 3 2023	Generator	Generator Sets	Diesel	1	25	4.813559	1	0.74	0.008	0.001571	0	0
Phase 1b Office	Office Building 3 2023	Gradall	Forklifts	Diesel	1	350	0.48	1	0.2	0.008	0.000593	0	0
Phase 1b Office	Office Building 3 2023	Hydro/Crawler Crane	Cranes	Diesel	1	550	3.322034	1	0.29	0.008	0.009345	0	0
Phase 1b Office	Office Building 3 2023	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	1.864407	1	0.37	0.008	0.001217	0	0
Phase 1b Office	Office Building 3 2023	Paver	Pavers	Diesel	1	250	0	1	0.42	0.008	0	0	0
Phase 1b Office	Office Building 3 2023	Pile Rig	Bore/Drill Rigs	Diesel	1	600	1.864407	1	0.5	0.008	0.009865	0	0
Phase 1b Office	Office Building 3 2023	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0.3	0.008	0	0	0
Phase 1b Office	Office Building 3 2023	Scraper	Scrapers	Diesel	1	600	0	1	0.48	0.008	0	0	0
Phase 1b Office	Office Building 3 2023	Tire Wash	Other Construction Equipment	Diesel	1	100	1.5	1	0.42	0.008	0.001111	0	0
Phase 1b Office	Office Building 3 2024	Air Compressor	Air Compressors	Diesel	1	150	0	1	0.48	0.008	0	0	0
Phase 1b Office	Office Building 3 2024	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	0	1	0.37	0.008	0	0	0
Phase 1b Office	Office Building 3 2024	Blade	Graders	Diesel	1	450	0	1	0.41	0.008	0	0	0
Phase 1b Office	Office Building 3 2024	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	0	1	0.37	0.008	0	0	0
Phase 1b Office	Office Building 3 2024	Boom Lift	Aerial Lifts	Diesel	1	40	6.858779	1	0.31	0.008	0.0015	0	0
Phase 1b Office	Office Building 3 2024	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0.42	0.008	0	0	0
Phase 1b Office	Office Building 3 2024	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.78	0.008	0	0	0
Phase 1b Office	Office Building 3 2024	Concrete Pump	Pumps	Diesel	1	450	0.005038	1	0.74	0.008	2.96E-05	0	0
Phase 1b Office	Office Building 3 2024	Excavator	Excavators	Diesel	1	500	0	1	0.38	0.008	0	0	0
Phase 1b Office	Office Building 3 2024	Generator	Generator Sets	Diesel	1	25	0	1	0.74	0.008	0	0	0
Phase 1b Office	Office Building 3 2024	Gradall	Forklifts	Diesel	1	350	0.48	1	0.2	0.008	0.000593	0	0
Phase 1b Office	Office Building 3 2024	Hydro/Crawler Crane	Cranes	Diesel	1	550	0	1	0.29	0.008	0	0	0
Phase 1b Office	Office Building 3 2024	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	0	1	0.37	0.008	0	0	0
Phase 1b Office	Office Building 3 2024	Paver	Pavers	Diesel	1	250	0	1	0.42	0.008	0	0	0
Phase 1b Office	Office Building 3 2024	Pile Rig	Bore/Drill Rigs	Diesel	1	600	0	1	0.5	0.008	0	0	0
Phase 1b Office	Office Building 3 2024	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0.3	0.008	0	0	0
Phase 1b Office	Office Building 3 2024	Scraper	Scrapers	Diesel	1	600	0	1	0.48	0.008	0	0	0
Phase 1b Office	Office Building 3 2024	Tire Wash	Other Construction Equipment	Diesel	1	100	1.5	1	0.42	0.008	0.001111	0	0
Phase 1b Office	Office Building 3 2025	Air Compressor	Air Compressors	Diesel	1	150	0	1	0.48	0.008	0	0	0
Phase 1b Office	Office Building 3 2025	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	0	1	0.37	0.008	0	0	0
Phase 1b Office	Office Building 3 2025	Blade	Graders	Diesel	1	450	0	1	0.41	0.008	0	0	0
Phase 1b Office	Office Building 3 2025	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	0	1	0.37	0.008	0	0	0

Phase 1b Office	Office Building 3 2025	Boom Lift	Aerial Lifts	Diesel	1	40	0	1	0.31	0.008	0	0	0
Phase 1b Office	Office Building 3 2025	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0.42	0.008	0	0	0
Phase 1b Office	Office Building 3 2025	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.78	0.008	0	0	0
Phase 1b Office	Office Building 3 2025	Concrete Pump	Pumps	Diesel	1	450	0	1	0.74	0.008	0	0	0
Phase 1b Office	Office Building 3 2025	Excavator	Excavators	Diesel	1	500	0	1	0.38	0.008	0	0	0
Phase 1b Office	Office Building 3 2025	Generator	Generator Sets	Diesel	1	25	0	1	0.74	0.008	0	0	0
Phase 1b Office	Office Building 3 2025	Gradall	Forklifts	Diesel	1	350	0.48	1	0.2	0.008	0.000593	0	0
Phase 1b Office	Office Building 3 2025	Hydro/Crawler Crane	Cranes	Diesel	1	550	0	1	0.29	0.008	0	0	0
Phase 1b Office	Office Building 3 2025	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	0	1	0.37	0.008	0	0	0
Phase 1b Office	Office Building 3 2025	Paver	Pavers	Diesel	1	250	0	1	0.42	0.008	0	0	0
Phase 1b Office	Office Building 3 2025	Pile Rig	Bore/Drill Rigs	Diesel	1	600	0	1	0.5	0.008	0	0	0
Phase 1b Office	Office Building 3 2025	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0.3	0.008	0	0	0
Phase 1b Office	Office Building 3 2025	Scraper	Scrapers	Diesel	1	600	0	1	0.48	0.008	0	0	0
Phase 1b Office	Office Building 3 2025	Tire Wash	Other Construction Equipment	Diesel	1	100	1.5	1	0.42	0.008	0.001111	0	0
Phase 1b Office	Office Building 1 2023	Air Compressor	Air Compressors	Diesel	1	150	0.065363	1	0.48	0.008	8.3E-05	0	0
Phase 1b Office	Office Building 1 2023	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	2.24581	1	0.37	0.008	0.005129	0	0
Phase 1b Office	Office Building 1 2023	Blade	Graders	Diesel	1	450	0	1	0.41	0.008	0	0	0
Phase 1b Office	Office Building 1 2023	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	2.24581	1	0.37	0.008	0.002931	0	0
Phase 1b Office	Office Building 1 2023	Boom Lift	Aerial Lifts	Diesel	1	40	2.480447	1	0.31	0.008	0.000542	0	0
Phase 1b Office	Office Building 1 2023	Compactor	Other Construction Equipment	Diesel	1	250	0.179665	1	0.42	0.008	0.000333	0	0
Phase 1b Office	Office Building 1 2023	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.78	0.008	0	0	0
Phase 1b Office	Office Building 1 2023	Concrete Pump	Pumps	Diesel	1	450	0.109274	1	0.74	0.008	0.000642	0	0
Phase 1b Office	Office Building 1 2023	Excavator	Excavators	Diesel	1	500	0.112291	1	0.38	0.008	0.000376	0	0
Phase 1b Office	Office Building 1 2023	Generator	Generator Sets	Diesel	1	25	4.424581	1	0.74	0.008	0.001444	0	0
Phase 1b Office	Office Building 1 2023	Gradall	Forklifts	Diesel	1	350	0.48	1	0.2	0.008	0.000593	0	0
Phase 1b Office	Office Building 1 2023	Hydro/Crawler Crane	Cranes	Diesel	1	550	2.916201	1	0.29	0.008	0.008204	0	0
Phase 1b Office	Office Building 1 2023	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	1.47486	1	0.37	0.008	0.000962	0	0
Phase 1b Office	Office Building 1 2023	Paver	Pavers	Diesel	1	250	0	1	0.42	0.008	0	0	0
Phase 1b Office	Office Building 1 2023	Pile Rig	Bore/Drill Rigs	Diesel	1	600	1.47486	1	0.5	0.008	0.007804	0	0
Phase 1b Office	Office Building 1 2023	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0.3	0.008	0	0	0
Phase 1b Office	Office Building 1 2023	Scraper	Scrapers	Diesel	1	600	0	1	0.48	0.008	0	0	0
Phase 1b Office	Office Building 1 2023	Tire Wash	Other Construction Equipment	Diesel	1	100	1.5	1	0.42	0.008	0.001111	0	0
Phase 1b Office	Office Building 1 2024	Air Compressor	Air Compressors	Diesel	1	150	0	1	0.48	0.008	0	0	0
Phase 1b Office	Office Building 1 2024	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	0	1	0.37	0.008	0	0	0
Phase 1b Office	Office Building 1 2024	Blade	Graders	Diesel	1	450	0	1	0.41	0.008	0	0	0
Phase 1b Office	Office Building 1 2024	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	0	1	0.37	0.008	0	0	0
Phase 1b Office	Office Building 1 2024	Boom Lift	Aerial Lifts	Diesel	1	40	6.554217	1	0.31	0.008	0.001433	0	0
Phase 1b Office	Office Building 1 2024	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0.42	0.008	0	0	0
Phase 1b Office	Office Building 1 2024	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.78	0.008	0	0	0
Phase 1b Office	Office Building 1 2024	Concrete Pump	Pumps	Diesel	1	450	0.005301	1	0.74	0.008	3.11E-05	0	0
Phase 1b Office	Office Building 1 2024	Excavator	Excavators	Diesel	1	500	0	1	0.38	0.008	0	0	0
Phase 1b Office	Office Building 1 2024	Generator	Generator Sets	Diesel	1	25	0	1	0.74	0.008	0	0	0
Phase 1b Office	Office Building 1 2024	Gradall	Forklifts	Diesel	1	350	0.478072	1	0.2	0.008	0.00059	0	0
Phase 1b Office	Office Building 1 2024	Hydro/Crawler Crane	Cranes	Diesel	1	550	0	1	0.29	0.008	0	0	0
Phase 1b Office	Office Building 1 2024	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	0	1	0.37	0.008	0	0	0
Phase 1b Office	Office Building 1 2024	Paver	Pavers	Diesel	1	250	0	1	0.42	0.008	0	0	0
Phase 1b Office	Office Building 1 2024	Pile Rig	Bore/Drill Rigs	Diesel	1	600	0	1	0.5	0.008	0	0	0
Phase 1b Office	Office Building 1 2024	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0.3	0.008	0	0	0
Phase 1b Office	Office Building 1 2024	Scraper	Scrapers	Diesel	1	600	0	1	0.48	0.008	0	0	0
Phase 1b Office	Office Building 1 2024	Tire Wash	Other Construction Equipment	Diesel	1	100	1.5	1	0.42	0.008	0.001111	0	0
Phase 1b Office	Office Building 2 2023	Air Compressor	Air Compressors	Diesel	1	150	0.075669	1	0.48	0.008	9.61E-05	0	0
Phase 1b Office	Office Building 2 2023	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	2.484076	1	0.37	0.008	0.005674	0	0
Phase 1b Office	Office Building 2 2023	Blade	Graders	Diesel	1	450	0	1	0.41	0.008	0	0	0
Phase 1b Office	Office Building 2 2023	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	2.484076	1	0.37	0.008	0.003242	0	0
Phase 1b Office	Office Building 2 2023	Boom Lift	Aerial Lifts	Diesel	1	40	1.22293	1	0.31	0.008	0.000267	0	0
Phase 1b Office	Office Building 2 2023	Compactor	Other Construction Equipment	Diesel	1	250	0.198726	1	0.42	0.008	0.000368	0	0

Phase 1b Office	Office Building 2 2023	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.78	0.008	0	0	0
Phase 1b Office	Office Building 2 2023	Concrete Pump	Pumps	Diesel	1	450	0.124204	1	0.74	0.008	0.000729	0	0
Phase 1b Office	Office Building 2 2023	Excavator	Excavators	Diesel	1	500	0.124204	1	0.38	0.008	0.000416	0	0
Phase 1b Office	Office Building 2 2023	Generator	Generator Sets	Diesel	1	25	5.006369	1	0.74	0.008	0.001634	0	0
Phase 1b Office	Office Building 2 2023	Gradall	Forklifts	Diesel	1	350	0.48	1	0.2	0.008	0.000593	0	0
Phase 1b Office	Office Building 2 2023	Hydro/Crawler Crane	Cranes	Diesel	1	550	3.324841	1	0.29	0.008	0.009353	0	0
Phase 1b Office	Office Building 2 2023	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	1.681529	1	0.37	0.008	0.001097	0	0
Phase 1b Office	Office Building 2 2023	Paver	Pavers	Diesel	1	250	0	1	0.42	0.008	0	0	0
Phase 1b Office	Office Building 2 2023	Pile Rig	Bore/Drill Rigs	Diesel	1	600	1.681529	1	0.5	0.008	0.008897	0	0
Phase 1b Office	Office Building 2 2023	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0.3	0.008	0	0	0
Phase 1b Office	Office Building 2 2023	Scraper	Scrapers	Diesel	1	600	0	1	0.48	0.008	0	0	0
Phase 1b Office	Office Building 2 2023	Tire Wash	Other Construction Equipment	Diesel	1	100	1.5	1	0.42	0.008	0.001111	0	0
Phase 1b Office	Office Building 2 2024	Air Compressor	Air Compressors	Diesel	1	150	0	1	0.48	0.008	0	0	0
Phase 1b Office	Office Building 2 2024	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	0	1	0.37	0.008	0	0	0
Phase 1b Office	Office Building 2 2024	Blade	Graders	Diesel	1	450	0	1	0.41	0.008	0	0	0
Phase 1b Office	Office Building 2 2024	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	0	1	0.37	0.008	0	0	0
Phase 1b Office	Office Building 2 2024	Boom Lift	Aerial Lifts	Diesel	1	40	7.270992	1	0.31	0.008	0.00159	0	0
Phase 1b Office	Office Building 2 2024	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0.42	0.008	0	0	0
Phase 1b Office	Office Building 2 2024	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.78	0.008	0	0	0
Phase 1b Office	Office Building 2 2024	Concrete Pump	Pumps	Diesel	1	450	0.005038	1	0.74	0.008	2.96E-05	0	0
Phase 1b Office	Office Building 2 2024	Excavator	Excavators	Diesel	1	500	0	1	0.38	0.008	0	0	0
Phase 1b Office	Office Building 2 2024	Generator	Generator Sets	Diesel	1	25	0	1	0.74	0.008	0	0	0
Phase 1b Office	Office Building 2 2024	Gradall	Forklifts	Diesel	1	350	0.48	1	0.2	0.008	0.000593	0	0
Phase 1b Office	Office Building 2 2024	Hydro/Crawler Crane	Cranes	Diesel	1	550	0	1	0.29	0.008	0	0	0
Phase 1b Office	Office Building 2 2024	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	0	1	0.37	0.008	0	0	0
Phase 1b Office	Office Building 2 2024	Paver	Pavers	Diesel	1	250	0	1	0.42	0.008	0	0	0
Phase 1b Office	Office Building 2 2024	Pile Rig	Bore/Drill Rigs	Diesel	1	600	0	1	0.5	0.008	0	0	0
Phase 1b Office	Office Building 2 2024	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0.3	0.008	0	0	0
Phase 1b Office	Office Building 2 2024	Scraper	Scrapers	Diesel	1	600	0	1	0.48	0.008	0	0	0
Phase 1b Office	Office Building 2 2024	Tire Wash	Other Construction Equipment	Diesel	1	100	1.5	1	0.42	0.008	0.001111	0	0
Phase 1b Office	Office Building 2 2025	Air Compressor	Air Compressors	Diesel	1	150	0	1	0.48	0.008	0	0	0
Phase 1b Office	Office Building 2 2025	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	0	1	0.37	0.008	0	0	0
Phase 1b Office	Office Building 2 2025	Blade	Graders	Diesel	1	450	0	1	0.41	0.008	0	0	0
Phase 1b Office	Office Building 2 2025	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	0	1	0.37	0.008	0	0	0
Phase 1b Office	Office Building 2 2025	Boom Lift	Aerial Lifts	Diesel	1	40	0	1	0.31	0.008	0	0	0
Phase 1b Office	Office Building 2 2025	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0.42	0.008	0	0	0
Phase 1b Office	Office Building 2 2025	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.78	0.008	0	0	0
Phase 1b Office	Office Building 2 2025	Concrete Pump	Pumps	Diesel	1	450	0	1	0.74	0.008	0	0	0
Phase 1b Office	Office Building 2 2025	Excavator	Excavators	Diesel	1	500	0	1	0.38	0.008	0	0	0
Phase 1b Office	Office Building 2 2025	Generator	Generator Sets	Diesel	1	25	0	1	0.74	0.008	0	0	0
Phase 1b Office	Office Building 2 2025	Gradall	Forklifts	Diesel	1	350	0.48	1	0.2	0.008	0.000593	0	0
Phase 1b Office	Office Building 2 2025	Hydro/Crawler Crane	Cranes	Diesel	1	550	0	1	0.29	0.008	0	0	0
Phase 1b Office	Office Building 2 2025	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	0	1	0.37	0.008	0	0	0
Phase 1b Office	Office Building 2 2025	Paver	Pavers	Diesel	1	250	0	1	0.42	0.008	0	0	0
Phase 1b Office	Office Building 2 2025	Pile Rig	Bore/Drill Rigs	Diesel	1	600	0	1	0.5	0.008	0	0	0
Phase 1b Office	Office Building 2 2025	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0.3	0.008	0	0	0
Phase 1b Office	Office Building 2 2025	Scraper	Scrapers	Diesel	1	600	0	1	0.48	0.008	0	0	0
Phase 1b Office	Office Building 2 2025	Tire Wash	Other Construction Equipment	Diesel	1	100	1.5	1	0.42	0.008	0.001111	0	0
Phase 1b Office	Office Building 5 2023	Air Compressor	Air Compressors	Diesel	1	150	0.058812	1	0.48	0.008	7.47E-05	0	0
Phase 1b Office	Office Building 5 2023	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	2.643564	1	0.37	0.008	0.006038	0	0
Phase 1b Office	Office Building 5 2023	Blade	Graders	Diesel	1	450	0	1	0.41	0.008	0	0	0
Phase 1b Office	Office Building 5 2023	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	2.643564	1	0.37	0.008	0.00345	0	0
Phase 1b Office	Office Building 5 2023	Boom Lift	Aerial Lifts	Diesel	1	40	2.19802	1	0.31	0.008	0.000481	0	0
Phase 1b Office	Office Building 5 2023	Compactor	Other Construction Equipment	Diesel	1	250	0.211485	1	0.42	0.008	0.000392	0	0
Phase 1b Office	Office Building 5 2023	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.78	0.008	0	0	0
Phase 1b Office	Office Building 5 2023	Concrete Pump	Pumps	Diesel	1	450	0.117327	1	0.74	0.008	0.000689	0	0

Phase 1b Office	Office Building 5 2023	Excavator	Excavators	Diesel	1	500	0.132178	1	0.38	0.008	0.000443	0	0
Phase 1b Office	Office Building 5 2023	Generator	Generator Sets	Diesel	1	25	4.60396	1	0.74	0.008	0.001502	0	0
Phase 1b Office	Office Building 5 2023	Gradall	Forklifts	Diesel	1	350	0.48	1	0.2	0.008	0.000593	0	0
Phase 1b Office	Office Building 5 2023	Hydro/Crawler Crane	Cranes	Diesel	1	550	3.267327	1	0.29	0.008	0.009191	0	0
Phase 1b Office	Office Building 5 2023	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	1.960396	1	0.37	0.008	0.001279	0	0
Phase 1b Office	Office Building 5 2023	Paver	Pavers	Diesel	1	250	0	1	0.42	0.008	0	0	0
Phase 1b Office	Office Building 5 2023	Pile Rig	Bore/Drill Rigs	Diesel	1	600	1.960396	1	0.5	0.008	0.010373	0	0
Phase 1b Office	Office Building 5 2023	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0.3	0.008	0	0	0
Phase 1b Office	Office Building 5 2023	Scraper	Scrapers	Diesel	1	600	0	1	0.48	0.008	0	0	0
Phase 1b Office	Office Building 5 2023	Tire Wash	Other Construction Equipment	Diesel	1	100	1.5	1	0.42	0.008	0.001111	0	0
Phase 1b Office	Office Building 5 2024	Air Compressor	Air Compressors	Diesel	1	150	0	1	0.48	0.008	0	0	0
Phase 1b Office	Office Building 5 2024	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	0	1	0.37	0.008	0	0	0
Phase 1b Office	Office Building 5 2024	Blade	Graders	Diesel	1	450	0	1	0.41	0.008	0	0	0
Phase 1b Office	Office Building 5 2024	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	0	1	0.37	0.008	0	0	0
Phase 1b Office	Office Building 5 2024	Boom Lift	Aerial Lifts	Diesel	1	40	6.194656	1	0.31	0.008	0.001355	0	0
Phase 1b Office	Office Building 5 2024	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0.42	0.008	0	0	0
Phase 1b Office	Office Building 5 2024	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.78	0.008	0	0	0
Phase 1b Office	Office Building 5 2024	Concrete Pump	Pumps	Diesel	1	450	0.004809	1	0.74	0.008	2.82E-05	0	0
Phase 1b Office	Office Building 5 2024	Excavator	Excavators	Diesel	1	500	0	1	0.38	0.008	0	0	0
Phase 1b Office	Office Building 5 2024	Generator	Generator Sets	Diesel	1	25	0	1	0.74	0.008	0	0	0
Phase 1b Office	Office Building 5 2024	Gradall	Forklifts	Diesel	1	350	0.48	1	0.2	0.008	0.000593	0	0
Phase 1b Office	Office Building 5 2024	Hydro/Crawler Crane	Cranes	Diesel	1	550	0	1	0.29	0.008	0	0	0
Phase 1b Office	Office Building 5 2024	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	0	1	0.37	0.008	0	0	0
Phase 1b Office	Office Building 5 2024	Paver	Pavers	Diesel	1	250	0	1	0.42	0.008	0	0	0
Phase 1b Office	Office Building 5 2024	Pile Rig	Bore/Drill Rigs	Diesel	1	600	0	1	0.5	0.008	0	0	0
Phase 1b Office	Office Building 5 2024	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0.3	0.008	0	0	0
Phase 1b Office	Office Building 5 2024	Scraper	Scrapers	Diesel	1	600	0	1	0.48	0.008	0	0	0
Phase 1b Office	Office Building 5 2024	Tire Wash	Other Construction Equipment	Diesel	1	100	1.5	1	0.42	0.008	0.001111	0	0
Phase 1b Office	Office Building 5 2025	Air Compressor	Air Compressors	Diesel	1	150	0	1	0.48	0.008	0	0	0
Phase 1b Office	Office Building 5 2025	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	0	1	0.37	0.008	0	0	0
Phase 1b Office	Office Building 5 2025	Blade	Graders	Diesel	1	450	0	1	0.41	0.008	0	0	0
Phase 1b Office	Office Building 5 2025	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	0	1	0.37	0.008	0	0	0
Phase 1b Office	Office Building 5 2025	Boom Lift	Aerial Lifts	Diesel	1	40	0	1	0.31	0.008	0	0	0
Phase 1b Office	Office Building 5 2025	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0.42	0.008	0	0	0
Phase 1b Office	Office Building 5 2025	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.78	0.008	0	0	0
Phase 1b Office	Office Building 5 2025	Concrete Pump	Pumps	Diesel	1	450	0	1	0.74	0.008	0	0	0
Phase 1b Office	Office Building 5 2025	Excavator	Excavators	Diesel	1	500	0	1	0.38	0.008	0	0	0
Phase 1b Office	Office Building 5 2025	Generator	Generator Sets	Diesel	1	25	0	1	0.74	0.008	0	0	0
Phase 1b Office	Office Building 5 2025	Gradall	Forklifts	Diesel	1	350	0.48	1	0.2	0.008	0.000593	0	0
Phase 1b Office	Office Building 5 2025	Hydro/Crawler Crane	Cranes	Diesel	1	550	0	1	0.29	0.008	0	0	0
Phase 1b Office	Office Building 5 2025	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	0	1	0.37	0.008	0	0	0
Phase 1b Office	Office Building 5 2025	Paver	Pavers	Diesel	1	250	0	1	0.42	0.008	0	0	0
Phase 1b Office	Office Building 5 2025	Pile Rig	Bore/Drill Rigs	Diesel	1	600	0	1	0.5	0.008	0	0	0
Phase 1b Office	Office Building 5 2025	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0.3	0.008	0	0	0
Phase 1b Office	Office Building 5 2025	Scraper	Scrapers	Diesel	1	600	0	1	0.48	0.008	0	0	0
Phase 1b Office	Office Building 5 2025	Tire Wash	Other Construction Equipment	Diesel	1	100	1.5	1	0.42	0.008	0.001111	0	0
Phase 1b Office	Office Building 6 2023	Air Compressor	Air Compressors	Diesel	1	150	0.062206	1	0.48	0.008	7.9E-05	0	0
Phase 1b Office	Office Building 6 2023	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	3.926471	1	0.37	0.008	0.008968	0	0
Phase 1b Office	Office Building 6 2023	Blade	Graders	Diesel	1	450	0	1	0.41	0.008	0	0	0
Phase 1b Office	Office Building 6 2023	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	3.926471	1	0.37	0.008	0.005125	0	0
Phase 1b Office	Office Building 6 2023	Boom Lift	Aerial Lifts	Diesel	1	40	0	1	0.31	0.008	0	0	0
Phase 1b Office	Office Building 6 2023	Compactor	Other Construction Equipment	Diesel	1	250	0.314118	1	0.42	0.008	0.000582	0	0
Phase 1b Office	Office Building 6 2023	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.78	0.008	0	0	0
Phase 1b Office	Office Building 6 2023	Concrete Pump	Pumps	Diesel	1	450	0.157941	1	0.74	0.008	0.000928	0	0
Phase 1b Office	Office Building 6 2023	Excavator	Excavators	Diesel	1	500	0.196324	1	0.38	0.008	0.000658	0	0
Phase 1b Office	Office Building 6 2023	Generator	Generator Sets	Diesel	1	25	6	1	0.74	0.008	0.001958	0	0

Phase 1b Office	Office Building 6 2023	Gradall	Forklifts	Diesel	1	350	0.48	1	0.2	0.008	0.000593	0	0
Phase 1b Office	Office Building 6 2023	Hydro/Crawler Crane	Cranes	Diesel	1	550	4.897059	1	0.29	0.008	0.013776	0	0
Phase 1b Office	Office Building 6 2023	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	3	1	0.37	0.008	0.001958	0	0
Phase 1b Office	Office Building 6 2023	Paver	Pavers	Diesel	1	250	0	1	0.42	0.008	0	0	0
Phase 1b Office	Office Building 6 2023	Pile Rig	Bore/Drill Rigs	Diesel	1	600	3	1	0.5	0.008	0.015873	0	0
Phase 1b Office	Office Building 6 2023	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0.3	0.008	0	0	0
Phase 1b Office	Office Building 6 2023	Scraper	Scrapers	Diesel	1	600	0	1	0.48	0.008	0	0	0
Phase 1b Office	Office Building 6 2023	Tire Wash	Other Construction Equipment	Diesel	1	100	1.5	1	0.42	0.008	0.001111	0	0
Phase 1b Office	Office Building 6 2024	Air Compressor	Air Compressors	Diesel	1	150	0.013053	1	0.48	0.008	1.66E-05	0	0
Phase 1b Office	Office Building 6 2024	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	0	1	0.37	0.008	0	0	0
Phase 1b Office	Office Building 6 2024	Blade	Graders	Diesel	1	450	0	1	0.41	0.008	0	0	0
Phase 1b Office	Office Building 6 2024	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	0	1	0.37	0.008	0	0	0
Phase 1b Office	Office Building 6 2024	Boom Lift	Aerial Lifts	Diesel	1	40	8.003817	1	0.31	0.008	0.00175	0	0
Phase 1b Office	Office Building 6 2024	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0.42	0.008	0	0	0
Phase 1b Office	Office Building 6 2024	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.78	0.008	0	0	0
Phase 1b Office	Office Building 6 2024	Concrete Pump	Pumps	Diesel	1	450	0.013969	1	0.74	0.008	8.2E-05	0	0
Phase 1b Office	Office Building 6 2024	Excavator	Excavators	Diesel	1	500	0	1	0.38	0.008	0	0	0
Phase 1b Office	Office Building 6 2024	Generator	Generator Sets	Diesel	1	25	0.435115	1	0.74	0.008	0.000142	0	0
Phase 1b Office	Office Building 6 2024	Gradall	Forklifts	Diesel	1	350	0.48	1	0.2	0.008	0.000593	0	0
Phase 1b Office	Office Building 6 2024	Hydro/Crawler Crane	Cranes	Diesel	1	550	0	1	0.29	0.008	0	0	0
Phase 1b Office	Office Building 6 2024	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	0	1	0.37	0.008	0	0	0
Phase 1b Office	Office Building 6 2024	Paver	Pavers	Diesel	1	250	0	1	0.42	0.008	0	0	0
Phase 1b Office	Office Building 6 2024	Pile Rig	Bore/Drill Rigs	Diesel	1	600	0	1	0.5	0.008	0	0	0
Phase 1b Office	Office Building 6 2024	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0.3	0.008	0	0	0
Phase 1b Office	Office Building 6 2024	Scraper	Scrapers	Diesel	1	600	0	1	0.48	0.008	0	0	0
Phase 1b Office	Office Building 6 2024	Tire Wash	Other Construction Equipment	Diesel	1	100	1.5	1	0.42	0.008	0.001111	0	0
Phase 1b Office	Office Building 6 2025	Air Compressor	Air Compressors	Diesel	1	150	0	1	0.48	0.008	0	0	0
Phase 1b Office	Office Building 6 2025	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	0	1	0.37	0.008	0	0	0
Phase 1b Office	Office Building 6 2025	Blade	Graders	Diesel	1	450	0	1	0.41	0.008	0	0	0
Phase 1b Office	Office Building 6 2025	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	0	1	0.37	0.008	0	0	0
Phase 1b Office	Office Building 6 2025	Boom Lift	Aerial Lifts	Diesel	1	40	0	1	0.31	0.008	0	0	0
Phase 1b Office	Office Building 6 2025	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0.42	0.008	0	0	0
Phase 1b Office	Office Building 6 2025	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.78	0.008	0	0	0
Phase 1b Office	Office Building 6 2025	Concrete Pump	Pumps	Diesel	1	450	0	1	0.74	0.008	0	0	0
Phase 1b Office	Office Building 6 2025	Excavator	Excavators	Diesel	1	500	0	1	0.38	0.008	0	0	0
Phase 1b Office	Office Building 6 2025	Generator	Generator Sets	Diesel	1	25	0	1	0.74	0.008	0	0	0
Phase 1b Office	Office Building 6 2025	Gradall	Forklifts	Diesel	1	350	0.48	1	0.2	0.008	0.000593	0	0
Phase 1b Office	Office Building 6 2025	Hydro/Crawler Crane	Cranes	Diesel	1	550	0	1	0.29	0.008	0	0	0
Phase 1b Office	Office Building 6 2025	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	0	1	0.37	0.008	0	0	0
Phase 1b Office	Office Building 6 2025	Paver	Pavers	Diesel	1	250	0	1	0.42	0.008	0	0	0
Phase 1b Office	Office Building 6 2025	Pile Rig	Bore/Drill Rigs	Diesel	1	600	0	1	0.5	0.008	0	0	0
Phase 1b Office	Office Building 6 2025	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0.3	0.008	0	0	0
Phase 1b Office	Office Building 6 2025	Scraper	Scrapers	Diesel	1	600	0	1	0.48	0.008	0	0	0
Phase 1b Office	Office Building 6 2025	Tire Wash	Other Construction Equipment	Diesel	1	100	1.5	1	0.42	0.008	0.001111	0	0
Phase 1b Mixed Use	Parcel 7 Foundations	Pile Rig	Bore/Drill Rigs	Diesel	0	600	8	0.4	0.5	0.008	0	0	0
Phase 1b Mixed Use	Parcel 7 Foundations	Generator	Generator Sets	Diesel	0	25	6	1	0.74	0.008	0	0	0
Phase 1b Mixed Use	Parcel 7 Foundations	Tire Wash	Other Construction Equipment	Diesel	1	100	4	0.9	0.42	0.008	0.002667	0	0
Phase 1b Mixed Use	Parcel 7 Foundations	Excavator	Excavators	Diesel	1	131	8	0.6	0.38	0.008	0.004214	0	0
Phase 1b Mixed Use	Parcel 7 Foundations	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	90	8	0.6	0.37	0.008	0.002819	0	0
Phase 1b Mixed Use	Parcel 7 Foundations	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	70	8	0.8	0.37	0.008	0.002924	0	0
Phase 1b Mixed Use	Parcel 7 Foundations	Gradall	Forklifts	Diesel	1	74	4	0.8	0.2	0.008	0.000835	0	0
Phase 1b Mixed Use	Parcel 7 Foundations	Crane	Cranes	Diesel	1	215	4	0.5	0.29	0.008	0.002199	0	0
Phase 1b Mixed Use	Parcel 7 Foundations	Concrete Pump	Pumps	Diesel	1	450	0.25	0.5	0.74	0.008	0.000734	0	0
Phase 1b Mixed Use	Parcel 7 Core and Shell	Generator	Generator Sets	Diesel	0	25	6	1	0.74	0.008	0	0	0
Phase 1b Mixed Use	Parcel 7 Core and Shell	Tire Wash	Other Construction Equipment	Diesel	1	100	4	0.9	0.42	0.008	0.002667	0	0
Phase 1b Mixed Use	Parcel 7 Core and Shell	Crane	Cranes	Diesel	1	600	8	0.2	0.29	0.008	0.00491	0	0

Phase 1b Mixed Use	Parcel 7 Core and Shell	Gradall	Forklifts	Diesel	1	74	4	0.8	0.2	0.008	0.000835	0	0
Phase 1b Mixed Use	Parcel 7 Core and Shell	Concrete Pump	Pumps	Diesel	0	450	6	0.225	0.74	0.008	0	0	0
Phase 1b Mixed Use	Parcel 7 Core and Shell	Air Compressor	Air Compressors	Diesel	0	140	2	0.4	0.48	0.008	0	0	0
Phase 1b Mixed Use	Parcel 7 Core and Shell	Boom Lift	Aerial Lifts	Diesel	0	50	6	0.2	0.31	0.008	0	0	0
Phase 1b Mixed Use	Parcel 7 Tenant Improvements	Generator	Generator Sets	Diesel	0	25	6	0.85	0.74	0.008	0	0	0
Phase 1b Mixed Use	Parcel 7 Tenant Improvements	Tire Wash	Other Construction Equipment	Diesel	1	100	4	0.9	0.42	0.008	0.002667	0	0
Phase 1b Mixed Use	Parcel 7 Tenant Improvements	Gradall	Forklifts	Diesel	1	74	4	0.8	0.2	0.008	0.000835	0	0
Phase 1b Mixed Use	Parcel 7 Landscaping	Excavator	Excavators	Diesel	1	25	8	0.9	0.38	0.008	0.001206	0	0
Phase 1b Mixed Use	Parcel 7 Landscaping	Generator	Generator Sets	Diesel	0	25	6	0.5	0.74	0.008	0	0	0
Phase 1b Mixed Use	Parcel 7 Landscaping	Tire Wash	Other Construction Equipment	Diesel	1	100	4	0.9	0.42	0.008	0.002667	0	0
Phase 1b Mixed Use	Parcel 7 Landscaping	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	90	8	0.6	0.37	0.008	0.002819	0	0
Phase 1b Mixed Use	Parcel 7 Landscaping	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	70	8	0.8	0.37	0.008	0.002924	0	0
Phase 1b Mixed Use	Parcel 6 Foundations	Pile Rig	Bore/Drill Rigs	Diesel	0	600	8	0.4	0.5	0.008	0	0	0
Phase 1b Mixed Use	Parcel 6 Foundations	Generator	Generator Sets	Diesel	0	25	6	1	0.74	0.008	0	0	0
Phase 1b Mixed Use	Parcel 6 Foundations	Tire Wash	Other Construction Equipment	Diesel	1	100	4	0.9	0.42	0.008	0.002667	0	0
Phase 1b Mixed Use	Parcel 6 Foundations	Excavator	Excavators	Diesel	1	131	8	0.6	0.38	0.008	0.004214	0	0
Phase 1b Mixed Use	Parcel 6 Foundations	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	90	8	0.6	0.37	0.008	0.002819	0	0
Phase 1b Mixed Use	Parcel 6 Foundations	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	70	8	0.8	0.37	0.008	0.002924	0	0
Phase 1b Mixed Use	Parcel 6 Foundations	Gradall	Forklifts	Diesel	1	74	4	0.8	0.2	0.008	0.000835	0	0
Phase 1b Mixed Use	Parcel 6 Foundations	Crane	Cranes	Diesel	1	215	4	0.5	0.29	0.008	0.002199	0	0
Phase 1b Mixed Use	Parcel 6 Foundations	Concrete Pump	Pumps	Diesel	1	450	0.5	0.5	0.74	0.008	0.001468	0	0
Phase 1b Mixed Use	Parcel 6 Core and Shell	Generator	Generator Sets	Diesel	0	25	6	1	0.74	0.008	0	0	0
Phase 1b Mixed Use	Parcel 6 Core and Shell	Tire Wash	Other Construction Equipment	Diesel	1	100	4	0.9	0.42	0.008	0.002667	0	0
Phase 1b Mixed Use	Parcel 6 Core and Shell	Crane	Cranes	Diesel	1	600	8	0.2	0.29	0.008	0.00491	0	0
Phase 1b Mixed Use	Parcel 6 Core and Shell	Gradall	Forklifts	Diesel	2	74	4	0.8	0.2	0.008	0.001671	0	0
Phase 1b Mixed Use	Parcel 6 Core and Shell	Concrete Pump	Pumps	Diesel	0	450	6	0.225	0.74	0.008	0	0	0
Phase 1b Mixed Use	Parcel 6 Core and Shell	Air Compressor	Air Compressors	Diesel	0	140	2	0.4	0.48	0.008	0	0	0
Phase 1b Mixed Use	Parcel 6 Core and Shell	Boom Lift	Aerial Lifts	Diesel	0	50	6	0.2	0.31	0.008	0	0	0
Phase 1b Mixed Use	Parcel 6 Tenant Improvements	Generator	Generator Sets	Diesel	0	25	6	0.85	0.74	0.008	0	0	0
Phase 1b Mixed Use	Parcel 6 Tenant Improvements	Tire Wash	Other Construction Equipment	Diesel	1	100	4	0.9	0.42	0.008	0.002667	0	0
Phase 1b Mixed Use	Parcel 6 Tenant Improvements	Generator	Generator Sets	Diesel	0	25	6	0.85	0.74	0.008	0	0	0
Phase 1b Mixed Use	Parcel 6 Tenant Improvements	Tire Wash	Other Construction Equipment	Diesel	1	100	4	0.9	0.42	0.008	0.002667	0	0
Phase 1b Mixed Use	Parcel 6 Tenant Improvements	Gradall	Forklifts	Diesel	1	74	4	0.8	0.2	0.008	0.000835	0	0
Phase 1b Mixed Use	Parcel 6 Landscaping	Excavator	Excavators	Diesel	1	25	8	0.9	0.38	0.008	0.001206	0	0
Phase 1b Mixed Use	Parcel 6 Landscaping	Generator	Generator Sets	Diesel	0	25	6	0.5	0.74	0.008	0	0	0
Phase 1b Mixed Use	Parcel 6 Landscaping	Tire Wash	Other Construction Equipment	Diesel	0	100	4	0.9	0.42	0.008	0	0	0
Phase 1b Mixed Use	Parcel 6 Landscaping	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	90	8	0.6	0.37	0.008	0.002819	0	0
Phase 1b Mixed Use	Parcel 6 Landscaping	Bob Cat	Tractors/Loaders/Backhoes	Diesel	2	70	8	0.8	0.37	0.008	0.005847	0	0
Phase 2 Mixed Use	Grading and Utilities	Blade	Graders	Diesel	1	359	8	0.15	0.41	0.008	0.003115	0	0
Phase 2 Mixed Use	Grading and Utilities	Scraper	Scrapers	Diesel	1	52	8	0.15	0.48	0.008	0.000528	0	0
Phase 2 Mixed Use	Grading and Utilities	Loader	Tractors/Loaders/Backhoes	Diesel	2	100	4	0.9	0.37	0.008	0.004699	0	0
Phase 2 Mixed Use	Grading and Utilities	Tire Wash	Other Construction Equipment	Diesel	1	100	4	0.9	0.42	0.008	0.002667	0	0
Phase 2 Mixed Use	Grading and Utilities	Excavator	Excavators	Diesel	2	359	8	0.6	0.38	0.008	0.023098	0	0
Phase 2 Mixed Use	Grading and Utilities	Backhoe	Tractors/Loaders/Backhoes	Diesel	2	350	8	0.6	0.37	0.008	0.021926	0	0
Phase 2 Mixed Use	Grading and Utilities	Gradall	Forklifts	Diesel	2	350	4	0.6	0.2	0.008	0.005926	0	0
Phase 2 Mixed Use	Grading and Utilities	Compactor	Other Construction Equipment	Diesel	2	250	0.5	0.2	0.42	0.008	0.00037	0	0
Phase 2 Mixed Use	Grading and Utilities	Paver	Pavers	Diesel	1	250	8	0.01	0.42	0.008	0.000148	0	0
Phase 2 Mixed Use	Grading and Utilities	Generator	Generator Sets	Diesel	1	600	2	0.1	0.74	0.008	0.001566	0	0
Phase 2 Mixed Use	Tunnel Construction	Crane	Cranes	Diesel	1	290	6	0.35	0.29	0.008	0.003115	0	0
Phase 2 Mixed Use	Tunnel Construction	Excavator	Excavators	Diesel	2	170	6	0.45	0.38	0.008	0.006153	0	0
Phase 2 Mixed Use	Tunnel Construction	Loader	Tractors/Loaders/Backhoes	Diesel	1	250	6	0.45	0.37	0.008	0.004405	0	0
Phase 2 Mixed Use	Tunnel Construction	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	103	6	0.4	0.37	0.008	0.001613	0	0
Phase 2 Mixed Use	Tunnel Construction	Gradall	Forklifts	Diesel	1	130	6	0.35	0.2	0.008	0.000963	0	0
Phase 2 Mixed Use	Tunnel Construction	Compressor	Air Compressors	Diesel	2	50	6	0.3	0.48	0.008	0.001524	0	0
Phase 2 Mixed Use	Foundations	Pile Rig	Bore/Drill Rigs	Diesel	0	600	8	0.4	0.5	0.008	0	0	0
Phase 2 Mixed Use	Foundations	Generator	Generator Sets	Diesel	2	25	6	1	0.74	0.008	0.003915	0	0
Phase 2 Mixed Use	Foundations	Tire Wash	Other Construction Equipment	Diesel	2	100	4	0.9	0.42	0.008	0.005333	0	0
Phase 2 Mixed Use	Foundations	Excavator	Excavators	Diesel	2	131	8	0.6	0.38	0.008	0.008429	0	0

Phase 2 Mixed Use	Foundations	Backhoe	Tractors/Loaders/Backhoes	Diesel	2	90	8	0.6	0.37	0.008	0.005638	0	0
Phase 2 Mixed Use	Foundations	Bob Cat	Tractors/Loaders/Backhoes	Diesel	2	70	8	0.8	0.37	0.008	0.005847	0	0
Phase 2 Mixed Use	Foundations	Gradall	Forklifts	Diesel	2	74	4	0.8	0.2	0.008	0.001671	0	0
Phase 2 Mixed Use	Foundations	Crane	Cranes	Diesel	2	215	4	0.5	0.29	0.008	0.004399	0	0
Phase 2 Mixed Use	Foundations	Concrete Pump	Pumps	Diesel	3	450	0.5	0.5	0.74	0.008	0.004405	0	0
Phase 2 Mixed Use	Core and Shell	Generator	Generator Sets	Diesel	2	25	6	1	0.74	0.008	0.003915	0	0
Phase 2 Mixed Use	Core and Shell	Tire Wash	Other Construction Equipment	Diesel	2	100	4	0.9	0.42	0.008	0.005333	0	0
Phase 2 Mixed Use	Core and Shell	Crane	Cranes	Diesel	2	600	8	0.2	0.29	0.008	0.00982	0	0
Phase 2 Mixed Use	Core and Shell	Gradall	Forklifts	Diesel	3	74	4	0.8	0.2	0.008	0.002506	0	0
Phase 2 Mixed Use	Core and Shell	Concrete Pump	Pumps	Diesel	0	450	6	0.45	0.74	0.008	0	0	0
Phase 2 Mixed Use	Core and Shell	Air Compressor	Air Compressors	Diesel	0	140	2	0.8	0.48	0.008	0	0	0
Phase 2 Mixed Use	Core and Shell	Boom Lift	Aerial Lifts	Diesel	0	50	6	0.4	0.31	0.008	0	0	0
Phase 2 Mixed Use	Tenant Improvements	Generator	Generator Sets	Diesel	2	25	6	0.85	0.74	0.008	0.003328	0	0
Phase 2 Mixed Use	Tenant Improvements	Tire Wash	Other Construction Equipment	Diesel	2	100	4	0.9	0.42	0.008	0.005333	0	0
Phase 2 Mixed Use	Tenant Improvements	Gradall	Forklifts	Diesel	1	74	4	0.8	0.2	0.008	0.000835	0	0
Phase 2 Mixed Use	Landscaping	Excavator	Excavators	Diesel	1	25	8	0.9	0.38	0.008	0.001206	0	0
Phase 2 Mixed Use	Landscaping	Generator	Generator Sets	Diesel	0	25	6	0.5	0.74	0.008	0	0	0
Phase 2 Mixed Use	Landscaping	Tire Wash	Other Construction Equipment	Diesel	1	100	4	0.9	0.42	0.008	0.002667	0	0
Phase 2 Mixed Use	Landscaping	Backhoe	Tractors/Loaders/Backhoes	Diesel	2	90	8	0.6	0.37	0.008	0.005638	0	0
Phase 2 Mixed Use	Landscaping	Bob Cat	Tractors/Loaders/Backhoes	Diesel	3	70	8	0.8	0.37	0.008	0.008771	0	0
Alternate 1	Demolition	Excavator	Excavators	Diesel	1	131	8	0.9	0.38	0.008	0.006321	0	0
Alternate 1	Demolition	Generator	Generator Sets	Diesel	1	25	6	0.5	0.74	0.008	0.000979	0	0
Alternate 1	Demolition	Tire Wash	Other Construction Equipment	Diesel	2	100	4	0.9	0.42	0.008	0.005333	0	0
Alternate 1	Demolition	Bob Cat	Tractors/Loaders/Backhoes	Diesel	2	70	8	0.8	0.37	0.008	0.005847	0	0
Alternate 1	Demolition	Pressure Washer	Pressure Washers	Diesel	2	25	8	1	0.3	0.008	0.002116	0	0
Alternate 1	Demolition	Air Compressor	Air Compressors	Diesel	1	140	6	0.7	0.48	0.008	0.004978	0	0
Alternate 1	Grading and Utilities	Loader	Tractors/Loaders/Backhoes	Diesel	2	100	4	0.9	0.37	0.008	0.004699	0	0
Alternate 1	Grading and Utilities	Tire Wash	Other Construction Equipment	Diesel	1	100	4	0.9	0.42	0.008	0.002667	0	0
Alternate 1	Grading and Utilities	Excavator	Excavators	Diesel	1	359	8	0.6	0.38	0.008	0.011549	0	0
Alternate 1	Grading and Utilities	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	90	8	0.6	0.37	0.008	0.002819	0	0
Alternate 1	Grading and Utilities	Gradall	Forklifts	Diesel	1	74	4	0.6	0.2	0.008	0.000626	0	0
Alternate 1	Grading and Utilities	Compactor	Other Construction Equipment	Diesel	1	250	0.5	0.2	0.42	0.008	0.000185	0	0
Alternate 1	Grading and Utilities	Paver	Pavers	Diesel	1	250	8	0.01	0.42	0.008	0.000148	0	0
Alternate 1	Grading and Utilities	Generator	Generator Sets	Diesel	1	600	2	0.1	0.74	0.008	0.001566	0	0
Alternate 1	Foundations	Generator	Generator Sets	Diesel	1	25	6	1	0.74	0.008	0.001958	0	0
Alternate 1	Foundations	Tire Wash	Other Construction Equipment	Diesel	1	100	4	0.9	0.42	0.008	0.002667	0	0
Alternate 1	Foundations	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	90	8	0.6	0.37	0.008	0.002819	0	0
Alternate 1	Foundations	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	70	8	0.8	0.37	0.008	0.002924	0	0
Alternate 1	Foundations	Gradall	Forklifts	Diesel	1	74	4	0.8	0.2	0.008	0.000835	0	0
Alternate 1	Foundations	Concrete Pump	Pumps	Diesel	1	450	6	0.3	0.74	0.008	0.010572	0	0
Alternate 1	Core and Shell	Generator	Generator Sets	Diesel	1	25	6	1	0.74	0.008	0.001958	0	0
Alternate 1	Core and Shell	Tire Wash	Other Construction Equipment	Diesel	1	100	4	0.9	0.42	0.008	0.002667	0	0
Alternate 1	Core and Shell	Gradall	Forklifts	Diesel	1	74	4	0.8	0.2	0.008	0.000835	0	0
Alternate 1	Core and Shell	Concrete Pump	Pumps	Diesel	1	450	6	0.45	0.74	0.008	0.015857	0	0
Alternate 1	Tenant Improvements	Generator	Generator Sets	Diesel	1	25	6	0.85	0.74	0.008	0.001664	0	0
Alternate 1	Tenant Improvements	Tire Wash	Other Construction Equipment	Diesel	2	100	4	0.9	0.42	0.008	0.005333	0	0
Alternate 1	Tenant Improvements	Gradall	Forklifts	Diesel	1	74	4	0.8	0.2	0.008	0.000835	0	0

Days in each year				Emissions (lb/yr)						Emission Rate (g/s)					
2023	2024	2025	2026	2021	2022	2023	2024	2025	2026	2021	2022	2023	2024	2025	2026
0	0	0	0	0.328713279	2.123993492	0	0	0	0	1.03156E-05	6.67E-05	0	0	0	0
0	0	0	0	0.025450297	0.16444807	0	0	0	0	7.98672E-07	5.16E-06	0	0	0	0
0	0	0	0	0.069334862	0.448009877	0	0	0	0	2.17584E-06	1.41E-05	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0.488645693	3.157402941	0	0	0	0	1.53345E-05	9.91E-05	0	0	0	0
0	0	0	0	0.027513834	0.177781697	0	0	0	0	8.63429E-07	5.58E-06	0	0	0	0
0	0	0	0	0.064712538	0.418142552	0	0	0	0	2.03078E-06	1.31E-05	0	0	0	0
0	0	0	0	0	0.890947472	0	0	0	0	0	2.8E-05	0	0	0	0
0	0	0	0	0	0.151083966	0	0	0	0	0	4.74E-06	0	0	0	0
0	0	0	0	0	1.343775656	0	0	0	0	0	4.22E-05	0	0	0	0
0	0	0	0	0	0.762683481	0	0	0	0	0	2.39E-05	0	0	0	0
0	0	0	0	0	6.606049551	0	0	0	0	0	0.000207	0	0	0	0
0	0	0	0	0	6.270953063	0	0	0	0	0	0.000197	0	0	0	0
0	0	0	0	0	1.694852179	0	0	0	0	0	5.32E-05	0	0	0	0
0	0	0	0	0	0.105928261	0	0	0	0	0	3.32E-06	0	0	0	0
0	0	0	0	0	0.042371304	0	0	0	0	0	1.33E-06	0	0	0	0
0	0	0	0	0	0.223962609	0	0	0	0	0	7.03E-06	0	0	0	0
0	0	0	0	0	0.024991027	0	0	0	0	0	7.84E-07	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0.081401795	0	0	0	0	0	2.55E-06	0	0	0	0
0	0	0	0	0	1.648713596	0	0	0	0	0	5.17E-05	0	0	0	0
0	0	0	0	0	0.064604599	0	0	0	0	0	2.03E-06	0	0	0	0
0	0	0	0	0	0.1518552	0	0	0	0	0	4.77E-06	0	0	0	0
0	0	0	0	0	0.346012919	0	0	0	0	0	1.09E-05	0	0	0	0
0	0	0	0	0	0.16053264	0	0	0	0	0	5.04E-06	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0.920655217	0	0	0	0	0	2.89E-05	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0.036667475	0	0	0	0	0	1.15E-06	0	0	0	0
258	0	0	0	0	0	0.157870147	0	0	0	0	0	4.95E-06	0	0	0
258	0	0	0	0	0	0.02302273	0	0	0	0	0	7.22E-07	0	0	0
258	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
258	0	0	0	0	0	0.013155846	0	0	0	0	0	4.13E-07	0	0	0
258	0	0	0	0	0	0.075372667	0	0	0	0	0	2.37E-06	0	0	0
258	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
258	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
258	0	0	0	0	0	0.877447916	0	0	0	0	0	2.75E-05	0	0	0
258	0	0	0	0	0	0.402125267	0	0	0	0	0	1.26E-05	0	0	0
258	0	0	0	0	0	0.148786349	0	0	0	0	0	4.67E-06	0	0	0
258	0	0	0	0	0	0.959280407	0	0	0	0	0	3.01E-05	0	0	0
258	0	0	0	0	0	3.65001433	0	0	0	0	0	0.000115	0	0	0
258	0	0	0	0	0	0.039154302	0	0	0	0	0	1.23E-06	0	0	0
258	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
258	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
258	0	0	0	0	0	0.004190569	0	0	0	0	0	1.32E-07	0	0	0
258	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
258	0	0	0	0	0	0.287784122	0	0	0	0	0	9.03E-06	0	0	0
242	0	0	0	0	0	0.015086047	0	0	0	0	0	4.73E-07	0	0	0

453.59

453.59 g/lb
11 hr/day
365 days/yr
3600 sec/hr

242	0	0	0	0	0	0.698904297	0	0	0	0	0	2.19E-05	0	0	0
242	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
242	0	0	0	0	0	0.399373884	0	0	0	0	0	1.25E-05	0	0	0
242	0	0	0	0	0	0.393659472	0	0	0	0	0	1.24E-05	0	0	0
242	0	0	0	0	0	0.045334333	0	0	0	0	0	1.42E-06	0	0	0
242	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
242	0	0	0	0	0	0.107126171	0	0	0	0	0	3.36E-06	0	0	0
242	0	0	0	0	0	0.051270972	0	0	0	0	0	1.61E-06	0	0	0
242	0	0	0	0	0	0.229052669	0	0	0	0	0	7.19E-06	0	0	0
242	0	0	0	0	0	0.143410569	0	0	0	0	0	4.5E-06	0	0	0
242	0	0	0	0	0	1.232143566	0	0	0	0	0	3.87E-05	0	0	0
242	0	0	0	0	0	0.113547477	0	0	0	0	0	3.56E-06	0	0	0
242	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
242	0	0	0	0	0	0.920655217	0	0	0	0	0	2.89E-05	0	0	0
242	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
242	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
242	0	0	0	0	0	0.268894817	0	0	0	0	0	8.44E-06	0	0	0
0	207	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	207	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	207	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	207	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	207	0	0	0	0	0	0.063641615	0	0	0	0	0	2E-06	0	0
0	207	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	207	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	207	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	207	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	207	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	207	0	0	0	0	0	0.122669371	0	0	0	0	0	3.85E-06	0	0
0	207	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	207	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	207	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	207	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	207	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	207	0	0	0	0	0	0.230005071	0	0	0	0	0	7.22E-06	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0.561864239	0	0	0	0	0	1.76E-05	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0.321065279	0	0	0	0	0	1.01E-05	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0.024444983	0	0	0	0	0	7.67E-07	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	3.297427192	0	0	0	0	0	0.000103	0	0	0	0
0	0	0	0	0	0.08026632	0	0	0	0	0	2.52E-06	0	0	0	0
0	0	0	0	0	0.455565599	0	0	0	0	0	1.43E-05	0	0	0	0
0	0	0	0	0	0.185665469	0	0	0	0	0	5.83E-06	0	0	0	0
0	0	0	0	0	0.12039948	0	0	0	0	0	3.78E-06	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0.698428096	0	0	0	0	0	2.19E-05	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0.04555656	0	0	0	0	0	1.43E-06	0	0	0	0
260	0	0	0	0	0	0.100573646	0	0	0	0	0	3.16E-06	0	0	0
260	0	0	0	0	0	1.945968826	0	0	0	0	0	6.11E-05	0	0	0
260	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

260	0	0	0	0	0	1.111982187	0	0	0	0	0	3.49E-05	0	0	0
260	0	0	0	0	0	0.050519632	0	0	0	0	0	1.59E-06	0	0	0
260	0	0	0	0	0	0.07333495	0	0	0	0	0	2.3E-06	0	0	0
260	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
260	0	0	0	0	0	0.465153112	0	0	0	0	0	1.46E-05	0	0	0
260	0	0	0	0	0	4.785290681	0	0	0	0	0	0.00015	0	0	0
260	0	0	0	0	0	0.569695099	0	0	0	0	0	1.79E-05	0	0	0
260	0	0	0	0	0	2.459313477	0	0	0	0	0	7.72E-05	0	0	0
260	0	0	0	0	0	5.299905201	0	0	0	0	0	0.000166	0	0	0
260	0	0	0	0	0	0.310297846	0	0	0	0	0	9.74E-06	0	0	0
260	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
260	0	0	0	0	0	2.761965652	0	0	0	0	0	8.67E-05	0	0	0
260	0	0	0	0	0	0.005238211	0	0	0	0	0	1.64E-07	0	0	0
260	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
260	0	0	0	0	0	0.157781256	0	0	0	0	0	4.95E-06	0	0	0
0	262	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	262	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	262	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	262	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	262	0	0	0	0	0	1.106183117	0	0	0	0	0	3.47E-05	0	0
0	262	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	262	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	262	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	262	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	262	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	262	0	0	0	0	0	3.31859168	0	0	0	0	0	0.000104	0	0
0	262	0	0	0	0	0	0.371330938	0	0	0	0	0	1.17E-05	0	0
0	262	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	262	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	261	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	261	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	261	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	261	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	261	0	0	0	0	0	0.538001279	0	0	0	0	0	1.69E-05	0
0	0	261	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	261	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	261	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	261	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	261	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	261	0	0	0	0	0	3.792676205	0	0	0	0	0	0.000119	0
0	0	261	0	0	0	0	0	0.565435746	0	0	0	0	0	1.77E-05	0
0	0	261	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	261	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	261	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	261	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	261	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	261	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	46	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	46	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	46	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	46	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	46	0	0	0	0	0	0	0	0	0	0	0	0

0	0	0	46	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	46	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	46	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	46	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	46	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	46	0	0	0	0	0	0.666681	0	0	0	0	0	2.09E-05
0	0	0	46	0	0	0	0	0	0.759541	0	0	0	0	0	2.38E-05
0	0	0	46	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	46	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	46	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	46	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	46	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	46	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0.140955488	0	0	0	0	0	4.42E-06	0	0	0	0
0	0	0	0	0	0.253524108	0	0	0	0	0	7.96E-06	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0.16053264	0	0	0	0	0	5.04E-06	0	0	0	0
0	0	0	0	0	0.013450032	0	0	0	0	0	4.22E-07	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0.104307061	0	0	0	0	0	3.27E-06	0	0	0	0
0	0	0	0	0	1.648713596	0	0	0	0	0	5.17E-05	0	0	0	0
0	0	0	0	0	0.08026632	0	0	0	0	0	2.52E-06	0	0	0	0
0	0	0	0	0	0.303710399	0	0	0	0	0	9.53E-06	0	0	0	0
0	0	0	0	0	0.312255561	0	0	0	0	0	9.8E-06	0	0	0	0
0	0	0	0	0	0.321065279	0	0	0	0	0	1.01E-05	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	2.349258141	0	0	0	0	0	7.37E-05	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	2.349258141	0	0	0	0	0	7.37E-05	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0.09111312	0	0	0	0	0	2.86E-06	0	0	0	0
257	0	0	0	0	0	0.754302344	0	0	0	0	0	2.37E-05	0	0	0
257	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
257	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
257	0	0	0	0	0	0.234925814	0	0	0	0	0	7.37E-06	0	0	0
257	0	0	0	0	0	0.019682974	0	0	0	0	0	6.18E-07	0	0	0
257	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
257	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
257	0	0	0	0	0	3.488648339	0	0	0	0	0	0.000109	0	0	0
257	0	0	0	0	0	2.412751604	0	0	0	0	0	7.57E-05	0	0	0
257	0	0	0	0	0	0.892718093	0	0	0	0	0	2.8E-05	0	0	0
257	0	0	0	0	0	3.377852245	0	0	0	0	0	0.000106	0	0	0
257	0	0	0	0	0	6.683956877	0	0	0	0	0	0.00021	0	0	0
257	0	0	0	0	0	0.469851628	0	0	0	0	0	1.47E-05	0	0	0
257	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
257	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
257	0	0	0	0	0	0.001571463	0	0	0	0	0	4.93E-08	0	0	0
257	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
257	0	0	0	0	0	0.353341123	0	0	0	0	0	1.11E-05	0	0	0
0	175	0	0	0	0	0	0.666681364	0	0	0	0	0	2.09E-05	0	0
0	175	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	175	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	175	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	175	0	0	0	0	0	0.800440927	0	0	0	0	0	2.51E-05	0	0
0	175	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	175	0	0	0	0	0	0	0	0	0	0	0	0	0	0

0	175	0	0	0	0	0	3.08340131	0	0	0	0	0	9.68E-05	0	0
0	175	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	175	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	175	0	0	0	0	0	2.59264975	0	0	0	0	0	8.14E-05	0	0
0	175	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	175	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	175	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	175	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	175	0	0	0	0	0	0.00138892	0	0	0	0	0	4.36E-08	0	0
0	175	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	175	0	0	0	0	0	0.194448731	0	0	0	0	0	6.1E-06	0	0
0	0	154	0	0	0	0	0	0.163813135	0	0	0	0	0	5.14E-06	0
0	0	154	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	154	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	154	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	154	0	0	0	0	0	0.679718689	0	0	0	0	0	2.13E-05	0
0	0	154	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	154	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	154	0	0	0	0	0	0.75763575	0	0	0	0	0	2.38E-05	0
0	0	154	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	154	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	154	0	0	0	0	0	2.296346921	0	0	0	0	0	7.21E-05	0
0	0	154	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	154	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	154	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	154	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	154	0	0	0	0	0	0.000341277	0	0	0	0	0	1.07E-08	0
0	0	154	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	154	0	0	0	0	0	0.172226019	0	0	0	0	0	5.4E-06	0
0	0	154	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	154	0	0	0	0	0	0.172226019	0	0	0	0	0	5.4E-06	0
238	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
238	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
238	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
238	0	0	0	0	0	0.931872396	0	0	0	0	0	2.92E-05	0	0	0
238	0	0	0	0	0	0.078075795	0	0	0	0	0	2.45E-06	0	0	0
238	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
238	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
238	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
238	0	0	0	0	0	9.570581362	0	0	0	0	0	0.0003	0	0	0
238	0	0	0	0	0	0.465936198	0	0	0	0	0	1.46E-05	0	0	0
238	0	0	0	0	0	1.76300183	0	0	0	0	0	5.53E-05	0	0	0
238	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
238	0	0	0	0	0	1.863744792	0	0	0	0	0	5.85E-05	0	0	0
238	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
238	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
238	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
238	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
238	0	0	0	0	0	0.528900549	0	0	0	0	0	1.66E-05	0	0	0
0	262	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	262	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	262	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	262	0	0	0	0	0	0.34064243	0	0	0	0	0	1.07E-05	0	0
0	262	0	0	0	0	0	0.107272206	0	0	0	0	0	3.37E-06	0	0
0	262	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	262	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	262	0	0	0	0	0	0.031362596	0	0	0	0	0	9.84E-07	0	0
0	262	0	0	0	0	0	3.498489826	0	0	0	0	0	0.00011	0	0

0	262	0	0	0	0	0	0.046985163	0	0	0	0	0	1.47E-06	0	0
0	262	0	0	0	0	0	1.703741264	0	0	0	0	0	5.35E-05	0	0
0	262	0	0	0	0	0	0.760215701	0	0	0	0	0	2.39E-05	0	0
0	262	0	0	0	0	0	0.681284861	0	0	0	0	0	2.14E-05	0	0
0	262	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	262	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	262	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	262	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	262	0	0	0	0	0	0.193337596	0	0	0	0	0	6.07E-06	0	0
0	0	110	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	110	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	110	0	0	0	0	0	0	0	0	0	0	0	0	0
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0	0	110	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	110	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	110	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	110	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	110	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	110	0	0	0	0	0	2.444498336	0	0	0	0	0	7.67E-05	0
0	0	110	0	0	0	0	0	0.055699641	0	0	0	0	0	1.75E-06	0
0	0	110	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	110	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	110	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	110	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	110	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	110	0	0	0	0	0	0	0	0	0	0	0	0	0
161	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
161	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
161	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
161	0	0	0	0	0	0.429342799	0	0	0	0	0	1.35E-05	0	0	0
161	0	0	0	0	0	0.678497921	0	0	0	0	0	2.13E-05	0	0	0
161	0	0	0	0	0	0.453876673	0	0	0	0	0	1.42E-05	0	0	0
161	0	0	0	0	0	0.47068692	0	0	0	0	0	1.48E-05	0	0	0
161	0	0	0	0	0	0.134481977	0	0	0	0	0	4.22E-06	0	0	0
161	0	0	0	0	0	0.354094226	0	0	0	0	0	1.11E-05	0	0	0
161	0	0	0	0	0	1.134691682	0	0	0	0	0	3.56E-05	0	0	0
64	116	0	0	0	0	0	0	0	0	0	0	0	0	0	0
64	116	0	0	0	0	0.170670429	0.309340153	0	0	0	0	5.36E-06	9.71E-06	0	0
64	116	0	0	0	0	0.314250314	0.569578694	0	0	0	0	9.86E-06	1.79E-05	0	0
64	116	0	0	0	0	0.053458674	0.096893847	0	0	0	0	1.68E-06	3.04E-06	0	0
64	116	0	0	0	0	0	0	0	0	0	0	0	0	0	0
64	116	0	0	0	0	0	0	0	0	0	0	0	0	0	0
64	116	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	147	114	0	0	0	0	0	0	0	0	0	0	0	0	0
0	147	114	0	0	0	0	0.392008642	0.304006702	0	0	0	0	1.23E-05	9.54E-06	0
0	147	114	0	0	0	0	0.122787892	0.095223263	0	0	0	0	3.85E-06	2.99E-06	0
0	0	59	0	0	0	0	0	0.071176172	0	0	0	0	0	2.23E-06	0
0	0	59	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	59	0	0	0	0	0	0.157336802	0	0	0	0	0	4.94E-06	0
0	0	59	0	0	0	0	0	0.277212461	0	0	0	0	0	8.7E-06	0
0	0	59	0	0	0	0	0	0.172487753	0	0	0	0	0	5.41E-06	0
160	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
160	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
160	1	0	0	0	0	0.426676073	0.002666725	0	0	0	0	1.34E-05	8.37E-08	0	0
160	1	0	0	0	0	0.674283648	0.004214273	0	0	0	0	2.12E-05	1.32E-07	0	0
160	1	0	0	0	0	0.902115126	0.00563822	0	0	0	0	2.83E-05	1.77E-07	0	0

160	1	0	0	0	0	0.467763399	0.002923521	0	0	0	0	1.47E-05	9.17E-08	0	0
160	1	0	0	0	0	0.133646685	0.000835292	0	0	0	0	4.19E-06	2.62E-08	0	0
160	1	0	0	0	0	0.351894883	0.002199343	0	0	0	0	1.1E-05	6.9E-08	0	0
160	1	0	0	0	0	1.127643907	0.007047774	0	0	0	0	3.54E-05	2.21E-07	0	0
0	180	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	180	0	0	0	0	0	0.480010582	0	0	0	0	0	1.51E-05	0	0
0	180	0	0	0	0	0	0.883829009	0	0	0	0	0	2.77E-05	0	0
0	180	0	0	0	0	0	0.300705042	0	0	0	0	0	9.44E-06	0	0
0	180	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	180	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	180	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	82	178	0	0	0	0	0	0	0	0	0	0	0	0	0
0	82	178	0	0	0	0	0.218671487	0.474677131	0	0	0	0	6.86E-06	1.49E-05	0
0	82	178	0	0	0	0	0.068493926	0.148681937	0	0	0	0	2.15E-06	4.67E-06	0
0	0	58	0	0	0	0	0	0.069969797	0	0	0	0	0	2.2E-06	0
0	0	58	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	58	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	58	0	0	0	0	0	0.272513944	0	0	0	0	0	8.55E-06	0
0	0	58	0	0	0	0	0	0.339128464	0	0	0	0	0	1.06E-05	0
0	0	0	0	0	1.213710567	0	0	0	0	0	3.81E-05	0	0	0	0
0	0	0	0	0	0.093970326	0	0	0	0	0	2.95E-06	0	0	0	0
0	0	0	0	0	0.256005644	0	0	0	0	0	8.03E-06	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	1.804230252	0	0	0	0	0	5.66E-05	0	0	0	0
0	0	0	0	0	0.101589541	0	0	0	0	0	3.19E-06	0	0	0	0
0	0	0	0	0	0.238938601	0	0	0	0	0	7.5E-06	0	0	0	0
65	0	0	0	0	0.404976124	0.404976124	0	0	0	0	1.27E-05	1.27E-05	0	0	0
65	0	0	0	0	0.06867453	0.06867453	0	0	0	0	2.16E-06	2.16E-06	0	0	0
65	0	0	0	0	0.610807117	0.610807117	0	0	0	0	1.92E-05	1.92E-05	0	0	0
65	0	0	0	0	0.610807117	0.610807117	0	0	0	0	1.92E-05	1.92E-05	0	0	0
65	0	0	0	0	0.346674309	0.346674309	0	0	0	0	1.09E-05	1.09E-05	0	0	0
65	0	0	0	0	3.002749796	3.002749796	0	0	0	0	9.42E-05	9.42E-05	0	0	0
65	0	0	0	0	2.850433211	2.850433211	0	0	0	0	8.95E-05	8.95E-05	0	0	0
65	0	0	0	0	0.770387354	0.770387354	0	0	0	0	2.42E-05	2.42E-05	0	0	0
65	0	0	0	0	0.04814921	0.04814921	0	0	0	0	1.51E-06	1.51E-06	0	0	0
65	0	0	0	0	0.019259684	0.019259684	0	0	0	0	6.04E-07	6.04E-07	0	0	0
65	0	0	0	0	0.101801186	0.101801186	0	0	0	0	3.19E-06	3.19E-06	0	0	0
202	0	0	0	0	0	0.123126524	0	0	0	0	0	3.86E-06	0	0	0
202	0	0	0	0	0	0.025215371	0	0	0	0	0	7.91E-07	0	0	0
202	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
202	0	0	0	0	0	0.014408783	0	0	0	0	0	4.52E-07	0	0	0
202	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
202	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
202	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
202	0	0	0	0	0	0.535630856	0	0	0	0	0	1.68E-05	0	0	0
202	0	0	0	0	0	2.010626337	0	0	0	0	0	6.31E-05	0	0	0
202	0	0	0	0	0	0.213390948	0	0	0	0	0	6.7E-06	0	0	0
202	0	0	0	0	0	0.748164642	0	0	0	0	0	2.35E-05	0	0	0
202	0	0	0	0	0	2.797641041	0	0	0	0	0	8.78E-05	0	0	0
202	0	0	0	0	0	0.195771512	0	0	0	0	0	6.14E-06	0	0	0
202	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
202	0	0	0	0	0	0.920655217	0	0	0	0	0	2.89E-05	0	0	0
202	0	0	0	0	0	0.004190569	0	0	0	0	0	1.32E-07	0	0	0
202	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
202	0	0	0	0	0	0.216671443	0	0	0	0	0	6.8E-06	0	0	0
0	188	0	0	0	0	0	0.114593002	0	0	0	0	0	3.6E-06	0	0
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0	188	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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0	188	0	0	0	0	0	0.194782707	0	0	0	0	0	6.11E-06	0	0
0	188	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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0	188	0	0	0	0	0	0.662490796	0	0	0	0	0	2.08E-05	0	0
0	188	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	188	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	188	0	0	0	0	0	0.696311647	0	0	0	0	0	2.19E-05	0	0
0	188	0	0	0	0	0	1.949487423	0	0	0	0	0	6.12E-05	0	0
0	188	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	188	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	188	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	188	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	188	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	188	0	0	0	0	0	0.208893494	0	0	0	0	0	6.56E-06	0	0
177	0	0	0	0	0	0.015086047	0	0	0	0	0	4.73E-07	0	0	0
177	0	0	0	0	0	1.041504442	0	0	0	0	0	3.27E-05	0	0	0
177	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
177	0	0	0	0	0	0.595145396	0	0	0	0	0	1.87E-05	0	0	0
177	0	0	0	0	0	0.065609912	0	0	0	0	0	2.06E-06	0	0	0
177	0	0	0	0	0	0.067557045	0	0	0	0	0	2.12E-06	0	0	0
177	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
177	0	0	0	0	0	0.126155162	0	0	0	0	0	3.96E-06	0	0	0
177	0	0	0	0	0	0.076403801	0	0	0	0	0	2.4E-06	0	0	0
177	0	0	0	0	0	0.277995547	0	0	0	0	0	8.72E-06	0	0	0
177	0	0	0	0	0	0.104891201	0	0	0	0	0	3.29E-06	0	0	0
177	0	0	0	0	0	1.65411054	0	0	0	0	0	5.19E-05	0	0	0
177	0	0	0	0	0	0.215348663	0	0	0	0	0	6.76E-06	0	0	0
177	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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177	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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177	0	0	0	0	0	0.196671002	0	0	0	0	0	6.17E-06	0	0	0
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0	0	62	0	0	0	0	0	0	0	0	0	0	0	0	0
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179	0	0	0	0	0	0.01485747	0	0	0	0	0	4.66E-07	0	0	0
179	0	0	0	0	0	0.91816839	0	0	0	0	0	2.88E-05	0	0	0
179	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
179	0	0	0	0	0	0.524667651	0	0	0	0	0	1.65E-05	0	0	0
179	0	0	0	0	0	0.09710267	0	0	0	0	0	3.05E-06	0	0	0
179	0	0	0	0	0	0.059556869	0	0	0	0	0	1.87E-06	0	0	0
179	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
179	0	0	0	0	0	0.114878723	0	0	0	0	0	3.61E-06	0	0	0
179	0	0	0	0	0	0.067355982	0	0	0	0	0	2.11E-06	0	0	0
179	0	0	0	0	0	0.258418395	0	0	0	0	0	8.11E-06	0	0	0
179	0	0	0	0	0	0.106076413	0	0	0	0	0	3.33E-06	0	0	0
179	0	0	0	0	0	1.468445072	0	0	0	0	0	4.61E-05	0	0	0
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179	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
179	0	0	0	0	0	1.396856192	0	0	0	0	0	4.38E-05	0	0	0
179	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
179	0	0	0	0	0	1.396856192	0	0	0	0	0	4.38E-05	0	0	0
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179	0	0	0	0	0	0.198893274	0	0	0	0	0	6.24E-06	0	0	0
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0	249	0	0	0	0	0	0.276672766	0	0	0	0	0	8.68E-06	0	0
157	0	0	0	0	0	0.015086047	0	0	0	0	0	4.73E-07	0	0	0
157	0	0	0	0	0	0.890760378	0	0	0	0	0	2.8E-05	0	0	0
157	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
157	0	0	0	0	0	0.50900593	0	0	0	0	0	1.6E-05	0	0	0
157	0	0	0	0	0	0.041990344	0	0	0	0	0	1.32E-06	0	0	0
157	0	0	0	0	0	0.057779052	0	0	0	0	0	1.81E-06	0	0	0

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157	0	0	0	0	0	0.065345356	0	0	0	0	0	2.05E-06	0	0	0
157	0	0	0	0	0	0.25646068	0	0	0	0	0	8.05E-06	0	0	0
157	0	0	0	0	0	0.093039088	0	0	0	0	0	2.92E-06	0	0	0
157	0	0	0	0	0	1.468445072	0	0	0	0	0	4.61E-05	0	0	0
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0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0
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202	0	0	0	0	0	0.015086047	0	0	0	0	0	4.73E-07	0	0	0
202	0	0	0	0	0	1.219656518	0	0	0	0	0	3.83E-05	0	0	0
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202	0	0	0	0	0	0.696946582	0	0	0	0	0	2.19E-05	0	0	0
202	0	0	0	0	0	0.09710267	0	0	0	0	0	3.05E-06	0	0	0
202	0	0	0	0	0	0.079112855	0	0	0	0	0	2.48E-06	0	0	0
202	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
202	0	0	0	0	0	0.139193545	0	0	0	0	0	4.37E-06	0	0	0

202	0	0	0	0	0	0.089472872	0	0	0	0	0	2.81E-06	0	0	0
202	0	0	0	0	0	0.303445843	0	0	0	0	0	9.52E-06	0	0	0
202	0	0	0	0	0	0.119706343	0	0	0	0	0	3.76E-06	0	0	0
202	0	0	0	0	0	1.856654688	0	0	0	0	0	5.83E-05	0	0	0
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136	0	0	0	0	0	0.010743094	0	0	0	0	0	3.37E-07	0	0	0
136	0	0	0	0	0	1.219656518	0	0	0	0	0	3.83E-05	0	0	0
136	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
136	0	0	0	0	0	0.696946582	0	0	0	0	0	2.19E-05	0	0	0
136	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
136	0	0	0	0	0	0.079112855	0	0	0	0	0	2.48E-06	0	0	0
136	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
136	0	0	0	0	0	0.126155162	0	0	0	0	0	3.96E-06	0	0	0
136	0	0	0	0	0	0.089472872	0	0	0	0	0	2.81E-06	0	0	0
136	0	0	0	0	0	0.266249256	0	0	0	0	0	8.36E-06	0	0	0

136	0	0	0	0	0	0.080594369	0	0	0	0	0	2.53E-06	0	0	0
136	0	0	0	0	0	1.873533367	0	0	0	0	0	5.88E-05	0	0	0
136	0	0	0	0	0	0.266249256	0	0	0	0	0	8.36E-06	0	0	0
136	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
136	0	0	0	0	0	2.158777751	0	0	0	0	0	6.77E-05	0	0	0
136	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
136	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
136	0	0	0	0	0	0.151114443	0	0	0	0	0	4.74E-06	0	0	0
0	262	0	0	0	0	0	0.004342953	0	0	0	0	0	1.36E-07	0	0
0	262	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	262	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	262	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	262	0	0	0	0	0	0.458613285	0	0	0	0	0	1.44E-05	0	0
0	262	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	262	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	262	0	0	0	0	0	0.021495712	0	0	0	0	0	6.75E-07	0	0
0	262	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	262	0	0	0	0	0	0.037196587	0	0	0	0	0	1.17E-06	0	0
0	262	0	0	0	0	0	0.155262682	0	0	0	0	0	4.87E-06	0	0
0	262	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	262	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	262	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	262	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	262	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	262	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	262	0	0	0	0	0	0.291117529	0	0	0	0	0	9.14E-06	0	0
0	0	122	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	122	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	122	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	122	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	122	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	122	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	122	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	122	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	122	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	122	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	122	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	122	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	122	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	122	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	122	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	122	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	122	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	122	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	122	0	0	0	0	0	0.135558544	0	0	0	0	0	4.25E-06	0
0	116	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	116	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	116	0	0	0	0	0	0.309340153	0	0	0	0	0	9.71E-06	0	0
0	116	0	0	0	0	0	0.488855645	0	0	0	0	0	1.53E-05	0	0
0	116	0	0	0	0	0	0.327016733	0	0	0	0	0	1.03E-05	0	0
0	116	0	0	0	0	0	0.339128464	0	0	0	0	0	1.06E-05	0	0
0	116	0	0	0	0	0	0.096893847	0	0	0	0	0	3.04E-06	0	0
0	116	0	0	0	0	0	0.25512379	0	0	0	0	0	8.01E-06	0	0
0	116	0	0	0	0	0	0.085160608	0	0	0	0	0	2.67E-06	0	0
0	129	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	129	0	0	0	0	0	0.344007584	0	0	0	0	0	1.08E-05	0	0
0	129	0	0	0	0	0	0.633410789	0	0	0	0	0	1.99E-05	0	0

0	129	0	0	0	0	0	0.10775264	0	0	0	0	0	3.38E-06	0	0
0	129	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	129	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	129	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	17	171	0	0	0	0	0	0	0	0	0	0	0	0	0
0	17	171	0	0	0	0	0.045334333	0.456010053	0	0	0	0	1.42E-06	1.43E-05	0
0	17	171	0	0	0	0	0.01419996	0.142834895	0	0	0	0	4.46E-07	4.48E-06	0
0	0	58	0	0	0	0	0	0.069969797	0	0	0	0	0	2.2E-06	0
0	0	58	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	58	0	0	0	0	0	0.154670077	0	0	0	0	0	4.85E-06	0
0	0	58	0	0	0	0	0	0.163508367	0	0	0	0	0	5.13E-06	0
0	0	58	0	0	0	0	0	0.169564232	0	0	0	0	0	5.32E-06	0
0	116	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	116	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	116	0	0	0	0	0	0.309340153	0	0	0	0	0	9.71E-06	0	0
0	116	0	0	0	0	0	0.488855645	0	0	0	0	0	1.53E-05	0	0
0	116	0	0	0	0	0	0.327016733	0	0	0	0	0	1.03E-05	0	0
0	116	0	0	0	0	0	0.339128464	0	0	0	0	0	1.06E-05	0	0
0	116	0	0	0	0	0	0.096893847	0	0	0	0	0	3.04E-06	0	0
0	116	0	0	0	0	0	0.25512379	0	0	0	0	0	8.01E-06	0	0
0	116	0	0	0	0	0	0.170321215	0	0	0	0	0	5.34E-06	0	0
0	81	48	0	0	0	0	0	0	0	0	0	0	0	0	0
0	81	48	0	0	0	0	0.216004762	0.128002822	0	0	0	0	6.78E-06	4.02E-06	0
0	81	48	0	0	0	0	0.397723054	0.235687736	0	0	0	0	1.25E-05	7.4E-06	0
0	81	48	0	0	0	0	0.135317269	0.080188011	0	0	0	0	4.25E-06	2.52E-06	0
0	81	48	0	0	0	0	0	0	0	0	0	0	0	0	0
0	81	48	0	0	0	0	0	0	0	0	0	0	0	0	0
0	81	48	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	187	0	0	0	0	0	0	0	0	0	0	0	0	0
0	81	48	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	187	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	187	0	0	0	0	0	0.49867766	0	0	0	0	0	1.56E-05	0
0	0	187	0	0	0	0	0	0.156199563	0	0	0	0	0	4.9E-06	0
0	0	27	32	0	0	0	0	0.032572147	0.038604	0	0	0	0	1.02E-06	1.21E-06
0	0	27	32	0	0	0	0	0	0	0	0	0	0	0	0
0	0	27	32	0	0	0	0	0	0	0	0	0	0	0	0
0	0	27	32	0	0	0	0	0.076115964	0.090212	0	0	0	0	2.39E-06	2.83E-06
0	0	27	32	0	0	0	0	0.157870147	0.187105	0	0	0	0	4.95E-06	5.87E-06
22	0	0	0	0	0	0.068534421	0	0	0	0	0	2.15E-06	0	0	0
22	0	0	0	0	0	0.011621844	0	0	0	0	0	3.65E-07	0	0	0
22	0	0	0	0	0	0.103367358	0	0	0	0	0	3.24E-06	0	0	0
22	0	0	0	0	0	0.05866796	0	0	0	0	0	1.84E-06	0	0	0
22	0	0	0	0	0	0.508157658	0	0	0	0	0	1.59E-05	0	0	0
22	0	0	0	0	0	0.482381005	0	0	0	0	0	1.51E-05	0	0	0
22	0	0	0	0	0	0.130373245	0	0	0	0	0	4.09E-06	0	0	0
22	0	0	0	0	0	0.008148328	0	0	0	0	0	2.56E-07	0	0	0
22	0	0	0	0	0	0.003259331	0	0	0	0	0	1.02E-07	0	0	0
22	0	0	0	0	0	0.034455786	0	0	0	0	0	1.08E-06	0	0	0
175	87	0	0	0	0	0.54510461	0.270994863	0	0	0	0	1.71E-05	8.5E-06	0	0
175	87	0	0	0	0	1.076690403	0.535268943	0	0	0	0	3.38E-05	1.68E-05	0	0
175	87	0	0	0	0	0.770850327	0.383222734	0	0	0	0	2.42E-05	1.2E-05	0	0
175	87	0	0	0	0	0.28230252	0.140344681	0	0	0	0	8.86E-06	4.4E-06	0	0
175	87	0	0	0	0	0.168522234	0.083779625	0	0	0	0	5.29E-06	2.63E-06	0	0
175	87	0	0	0	0	0.266672546	0.132574351	0	0	0	0	8.37E-06	4.16E-06	0	0
0	24	99	0	0	0	0	0	0	0	0	0	0	0	0	0
0	24	99	0	0	0	0	0.093970326	0.387627593	0	0	0	0	2.95E-06	1.22E-05	0
0	24	99	0	0	0	0	0.128002822	0.52801164	0	0	0	0	4.02E-06	1.66E-05	0
0	24	99	0	0	0	0	0.202285094	0.834426015	0	0	0	0	6.35E-06	2.62E-05	0

0	24	99	0	0	0	0	0.135317269	0.558183734	0	0	0	0	4.25E-06	1.75E-05	0
0	24	99	0	0	0	0	0.14032902	0.578857206	0	0	0	0	4.4E-06	1.82E-05	0
0	24	99	0	0	0	0	0.040094006	0.165387773	0	0	0	0	1.26E-06	5.19E-06	0
0	24	99	0	0	0	0	0.105568465	0.435469918	0	0	0	0	3.31E-06	1.37E-05	0
0	24	99	0	0	0	0	0.105716616	0.436081042	0	0	0	0	3.32E-06	1.37E-05	0
0	0	139	0	0	0	0	0	0.544244803	0	0	0	0	0	1.71E-05	0
0	0	139	0	0	0	0	0	0.741349677	0	0	0	0	0	2.33E-05	0
0	0	139	0	0	0	0	0	1.365024802	0	0	0	0	0	4.28E-05	0
0	0	139	0	0	0	0	0	0.348316674	0	0	0	0	0	1.09E-05	0
0	0	139	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	139	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	139	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	25	174	0	0	0	0	0.083202892	0.579092	0	0	0	0	2.61E-06	1.82E-05
0	0	25	174	0	0	0	0	0.133336273	0.92802	0	0	0	0	4.18E-06	2.91E-05
0	0	25	174	0	0	0	0	0.020882295	0.145341	0	0	0	0	6.55E-07	4.56E-06
0	0	0	59	0	0	0	0	0	0.071176	0	0	0	0	0	2.23E-06
0	0	0	59	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	59	0	0	0	0	0	0.157337	0	0	0	0	0	4.94E-06
0	0	0	59	0	0	0	0	0	0.332655	0	0	0	0	0	1.04E-05
0	0	0	59	0	0	0	0	0	0.517463	0	0	0	0	0	1.62E-05
0	22	0	0	0	0	0	0.139071002	0	0	0	0	0	4.36E-06	0	0
0	22	0	0	0	0	0	0.021534866	0	0	0	0	0	6.76E-07	0	0
0	22	0	0	0	0	0	0.11733592	0	0	0	0	0	3.68E-06	0	0
0	22	0	0	0	0	0	0.128634935	0	0	0	0	0	4.04E-06	0	0
0	22	0	0	0	0	0	0.046561873	0	0	0	0	0	1.46E-06	0	0
0	22	0	0	0	0	0	0.109513525	0	0	0	0	0	3.44E-06	0	0
0	1	22	0	0	0	0	0.004698516	0.103367358	0	0	0	0	1.47E-07	3.24E-06	0
0	1	22	0	0	0	0	0.002666725	0.05866796	0	0	0	0	8.37E-08	1.84E-06	0
0	1	22	0	0	0	0	0.011549038	0.254078829	0	0	0	0	3.62E-07	7.97E-06	0
0	1	22	0	0	0	0	0.00281911	0.062020415	0	0	0	0	8.85E-08	1.95E-06	0
0	1	22	0	0	0	0	0.000626469	0.013782314	0	0	0	0	1.97E-08	4.33E-07	0
0	1	22	0	0	0	0	0.000185189	0.004074164	0	0	0	0	5.81E-09	1.28E-07	0
0	1	22	0	0	0	0	0.000148151	0.003259331	0	0	0	0	4.65E-09	1.02E-07	0
0	1	22	0	0	0	0	0.001566172	0.034455786	0	0	0	0	4.91E-08	1.08E-06	0
0	0	22	0	0	0	0	0	0.043069733	0	0	0	0	0	1.35E-06	0
0	0	22	0	0	0	0	0	0.05866796	0	0	0	0	0	1.84E-06	0
0	0	22	0	0	0	0	0	0.062020415	0	0	0	0	0	1.95E-06	0
0	0	22	0	0	0	0	0	0.064317467	0	0	0	0	0	2.02E-06	0
0	0	22	0	0	0	0	0	0.018376419	0	0	0	0	0	5.77E-07	0
0	0	22	0	0	0	0	0	0.232576556	0	0	0	0	0	7.3E-06	0
0	0	43	0	0	0	0	0	0.08418175	0	0	0	0	0	2.64E-06	0
0	0	43	0	0	0	0	0	0.114669195	0	0	0	0	0	3.6E-06	0
0	0	43	0	0	0	0	0	0.035917547	0	0	0	0	0	1.13E-06	0
0	0	43	0	0	0	0	0	0.681872175	0	0	0	0	0	2.14E-05	0
0	0	33	0	0	0	0	0	0.054913909	0	0	0	0	0	1.72E-06	0
0	0	33	0	0	0	0	0	0.17600388	0	0	0	0	0	5.52E-06	0
0	0	33	0	0	0	0	0	0.027564629	0	0	0	0	0	8.65E-07	0

Source: EMFAC2021 (v1.0.1) Emissions Inventory
Region Type: County
Region: San Mateo
Calendar Year: 2021, 2022, 2023, 2024, 2025, 2026
Season: Annual
Vehicle Classification: EMFAC2007 Categories
Units: miles/day for CVMT and EVMT, trips/day for Trips, kWh/day for Energy Consumption, tons/day for Emissions, 1000 gallons/day for Fuel Consumption

Region	Calendar Year	Vehicle Category	Model Year	Speed	Fuel	Population	Total VMT	CVMT	EVMT	Trips	Energy Consun	*NOx_g/mi* NOx_RUNEX	*NOx_g/trip* NOx_IDLEX	*NOx_g/trip* NOx_STREX
San Mateo	2021	HHDT	Aggregate	Aggregate	Diesel	1273.437	118103.1	118103.1	0	13607.24486	0	0.485975748	0.071431199	0.035727361
San Mateo	2022	HHDT	Aggregate	Aggregate	Diesel	1289.917	118758.5	118758.5	0	13886.58645	0	0.440831018	0.071292219	0.039306253
San Mateo	2023	HHDT	Aggregate	Aggregate	Diesel	1295.72	119079.6	119079.6	0	14027.6605	0	0.379331068	0.067169587	0.044483639
San Mateo	2024	HHDT	Aggregate	Aggregate	Diesel	1314.625	119489.1	119489.1	0	14359.45506	0	0.363336571	0.067642168	0.046666765
San Mateo	2025	HHDT	Aggregate	Aggregate	Diesel	1328.41	119560.7	119560.7	0	14621.90863	0	0.346882671	0.067867722	0.048360621
San Mateo	2026	HHDT	Aggregate	Aggregate	Diesel	1339.121	119591.7	119591.7	0	14836.48598	0	0.331323619	0.067963589	0.049761315

Region	Calendar Year	Vehicle Category	Model Year	Speed	Fuel	Population	Total VMT	CVMT	EVMT	Trips	Energy Consun	*NOx_g/mi* NOx_RUNEX	*NOx_g/trip* NOx_IDLEX	*NOx_g/trip* NOx_STREX
San Mateo	2021	HHDT	Aggregate	Aggregate	Diesel	1273.437	118103.1	118103.1	0	13607.24486	0	0.485975748	0.071431199	0.035727361
San Mateo	2021	MHDT	Aggregate	Aggregate	Diesel	4141.708	172846.2	172846.2	0	49761.70349	0	0.392754525	0.076935824	0.076231677
San Mateo	2022	HHDT	Aggregate	Aggregate	Diesel	1289.917	118758.5	118758.5	0	13886.58645	0	0.440831018	0.071292219	0.039306253
San Mateo	2022	MHDT	Aggregate	Aggregate	Diesel	4156.051	174304	174304	0	49995.68892	0	0.356094321	0.072828326	0.079145567
San Mateo	2023	HHDT	Aggregate	Aggregate	Diesel	1295.72	119079.6	119079.6	0	14027.6605	0	0.379331068	0.067169587	0.044483639
San Mateo	2023	MHDT	Aggregate	Aggregate	Diesel	4189.443	175901.2	175901.2	0	50462.4899	0	0.276591385	0.065090544	0.08822477
San Mateo	2024	HHDT	Aggregate	Aggregate	Diesel	1314.625	119489.1	119489.1	0	14359.45506	0	0.363336571	0.067642168	0.046666765
San Mateo	2024	MHDT	Aggregate	Aggregate	Diesel	4233.233	177028	177028	0	51051.03747	0	0.255103282	0.063443635	0.090469371
San Mateo	2025	HHDT	Aggregate	Aggregate	Diesel	1328.41	119560.7	119560.7	0	14621.90863	0	0.346882671	0.067867722	0.048360621
San Mateo	2025	MHDT	Aggregate	Aggregate	Diesel	4294.917	177557.8	177557.8	0	51845.94907	0	0.232703868	0.062148364	0.092284554
San Mateo	2026	HHDT	Aggregate	Aggregate	Diesel	1339.121	119591.7	119591.7	0	14836.48598	0	0.331323619	0.067963589	0.049761315
San Mateo	2026	MHDT	Aggregate	Aggregate	Diesel	4345.03	177809.3	177809.3	0	52490.37491	0	0.21159172	0.060909768	0.09345826

		PM25_g/trip	*PM25_g/trip*						*PM10_g/trip*	*PM10_g/trip*					
	PM25_g/mi							*PM10_g/mi*							*CO2_g/mi*
	PM25_g/mi	*PM25_g/trip*	*PM25_g/trip*					*PM10_g/mi*	*PM10_g/trip*	*PM10_g/trip*					*CO2_g/mi*
NOx_TOTEX	PM2.5_RUNEX	PM2.5_IDLEX	PM2.5_STREX	PM2.5_TOTEX	PM2.5_PMTW	PM2.5_PMBW	PM2.5_TOTAL	PM10_RUNEX	PM10_IDLEX	PM10_STREX	PM10_TOTEX	PM10_PMTW	PM10_PMBW	PM10_TOTAL	CO2_RUNE
0.593134308	0.0044412	7.95E-05	0	0.004520723	0.001121102	0.004161992	0.009803817	0.004642012	8.31E-05	0	0.00472513	0.004484408	0.011891406	0.021100943	246.178
0.55142949	0.003494898	5.84E-05	0	0.003553273	0.00112712	0.004125534	0.008805927	0.003652922	6.10E-05	0	0.003713936	0.004508482	0.011787239	0.020009657	244.6292
0.490984295	0.003338332	5.41E-05	0	0.003392405	0.001129979	0.004061708	0.008584092	0.003489277	5.65E-05	0	0.003545794	0.004519918	0.011604879	0.019670591	242.0187
0.477645504	0.003294944	5.11E-05	0	0.003346059	0.001133709	0.0040391	0.008518868	0.003443927	5.34E-05	0	0.003497353	0.004534836	0.011540286	0.019572475	239.1763
0.463111013	0.003243491	4.86E-05	0	0.003292046	0.001134294	0.004006102	0.008432442	0.003390148	5.08E-05	0	0.003440898	0.004537176	0.011446007	0.01942408	235.1103
0.449048523	0.003207838	4.57E-05	0	0.00325358	0.001134588	0.003990695	0.008378862	0.003352882	4.78E-05	0	0.003400692	0.00453835	0.011401985	0.019341027	231.0921

		PM25_g/trip	*PM25_g/trip*						*PM10_g/trip*	*PM10_g/trip*					
	PM25_g/mi							*PM10_g/mi*							*CO2_g/mi*
	PM25_g/mi	*PM25_g/trip*	*PM25_g/trip*					*PM10_g/mi*	*PM10_g/trip*	*PM10_g/trip*					*CO2_g/mi*
NOx_TOTEX	PM2.5_RUNEX	PM2.5_IDLEX	PM2.5_STREX	PM2.5_TOTEX	PM2.5_PMTW	PM2.5_PMBW	PM2.5_TOTAL	PM10_RUNEX	PM10_IDLEX	PM10_STREX	PM10_TOTEX	PM10_PMTW	PM10_PMBW	PM10_TOTAL	CO2_RUNE
0.593134308	0.0044412	7.95E-05	0	0.004520723	0.001121102	0.004161992	0.009803817	0.004642012	8.31E-05	0	0.00472513	0.004484408	0.011891406	0.021100943	246.178
0.545922026	0.005347512	0.000260997	0	0.00560851	0.000571591	0.003045305	0.009225405	0.005589303	0.000272799	0	0.005862101	0.002286364	0.008700871	0.016849336	222.3203
0.55142949	0.003494898	5.84E-05	0	0.003553273	0.00112712	0.004125534	0.008805927	0.003652922	6.10E-05	0	0.003713936	0.004508482	0.011787239	0.020009657	244.6292
0.508068213	0.004454112	0.000219844	0	0.004673956	0.000576412	0.003070941	0.008321309	0.004655507	0.000229785	0	0.004885292	0.002305647	0.008774117	0.015965055	223.6045
0.490984295	0.003338332	5.41E-05	0	0.003392405	0.001129979	0.004061708	0.008584092	0.003489277	5.65E-05	0	0.003545794	0.004519918	0.011604879	0.019670591	242.0187
0.429906699	0.00364176	0.000184776	0	0.003826536	0.000581694	0.003099037	0.007507266	0.003806424	0.00019313	0	0.003999555	0.002326775	0.008854391	0.01518072	224.1302
0.477645504	0.003294944	5.11E-05	0	0.003346059	0.001133709	0.0040391	0.008518868	0.003443927	5.34E-05	0	0.003497353	0.004534836	0.011540286	0.019572475	239.1763
0.409016288	0.003172798	0.000156372	0	0.003329171	0.00058542	0.003118831	0.007033421	0.003316258	0.000163443	0	0.003479701	0.00234168	0.008910945	0.014732326	224.6732
0.463111013	0.003243491	4.86E-05	0	0.003292046	0.001134294	0.004006102	0.008432442	0.003390148	5.08E-05	0	0.003440898	0.004537176	0.011446007	0.01942408	235.1103
0.387136786	0.002729259	0.000131024	0	0.002860283	0.000587172	0.003128149	0.006575604	0.002852664	0.000136948	0	0.002989612	0.002348688	0.008937569	0.014275869	224.1275
0.449048523	0.003207838	4.57E-05	0	0.00325358	0.001134588	0.003990695	0.008378862	0.003352882	4.78E-05	0	0.003400692	0.00453835	0.011401985	0.019341027	231.0921
0.365959749	0.002348506	0.000108825	0	0.002457331	0.000588004	0.003132579	0.006177914	0.002454695	0.000113746	0	0.002568441	0.002352014	0.008950226	0.013870681	223.1582

CO2_g/trip CO2_IDLEX	*CO2_g/trip* CO2_STREX	CO2_TOTEX	*CH4_g/mi* *CH4_g/trip* CH4_RUNEX	*CH4_g/trip* CH4_IDLEX	*CH4_g/trip* CH4_STREX	CH4_TOTEX	*N2O_g/mi* *N2O_g/trip* N2O_RUNEX	*N2O_g/trip* N2O_IDLEX	*N2O_g/trip* N2O_STREX	N2O_TOTEX	*ROG_g/mi* *ROG_g/trip* ROG_RUNEX	*ROG_g/trip* ROG_IDLEX	*ROG_g/trip* ROG_STREX	ROG_TOTEX	ROG_DIURN
11.91679707	0	258.0948357	0.000332799	0.000215778	0	0.000548577	0.03878545	0.001877496	0	0.040662946	0.007165072	0.00464564	0	0.011810712	0
12.11821966	0	256.7474207	0.000254289	0.000220541	0	0.00047483	0.03854143	0.00190923	0	0.040450661	0.005474763	0.004748192	0	0.010222955	0
11.8428035	0	253.8615221	0.000173532	0.000223123	0	0.000396655	0.038130148	0.001865839	0	0.039995986	0.003736089	0.004803779	0	0.008539868	0
11.91013206	0	251.0864764	0.000166434	0.000227865	0	0.000394299	0.03768233	0.001876446	0	0.039558777	0.00358327	0.004905875	0	0.008489145	0
11.90953418	0	247.0197869	0.000159587	0.000231583	0	0.00039117	0.037041716	0.001876352	0	0.038918068	0.003435873	0.004985909	0	0.008421782	0
11.87527886	0	242.9673906	0.000152858	0.000234588	0	0.000387447	0.036408656	0.001870955	0	0.038279611	0.003290993	0.005050624	0	0.008341617	0

CO2_g/trip CO2_IDLEX	*CO2_g/trip* CO2_STREX	CO2_TOTEX	*CH4_g/mi* *CH4_g/trip* CH4_RUNEX	*CH4_g/trip* CH4_IDLEX	*CH4_g/trip* CH4_STREX	CH4_TOTEX	*N2O_g/mi* *N2O_g/trip* N2O_RUNEX	*N2O_g/trip* N2O_IDLEX	*N2O_g/trip* N2O_STREX	N2O_TOTEX	*ROG_g/mi* *ROG_g/trip* ROG_RUNEX	*ROG_g/trip* ROG_IDLEX	*ROG_g/trip* ROG_STREX	ROG_TOTEX	ROG_DIURN
11.91679707	0	258.0948357	0.000332799	0.000215778	0	0.000548577	0.03878545	0.001877496	0	0.040662946	0.007165072	0.00464564	0	0.011810712	0
10.70198386	0	233.0223157	0.000631749	6.88E-05	0	0.000700564	0.035026659	0.001686102	0	0.036712761	0.01360138	0.001481574	0	0.015082955	0
12.11821966	0	256.7474207	0.000254289	0.000220541	0	0.00047483	0.03854143	0.00190923	0	0.040450661	0.005474763	0.004748192	0	0.010222955	0
10.66403618	0	234.2685348	0.000540419	6.41E-05	0	0.000604554	0.03522898	0.001680123	0	0.036909103	0.011635077	0.001380811	0	0.013015888	0
11.8428035	0	253.8615221	0.000173532	0.000223123	0	0.000396655	0.038130148	0.001865839	0	0.039995986	0.003736089	0.004803779	0	0.008539868	0
10.45692956	0	234.5871445	0.000389492	5.90E-05	0	0.000448505	0.035311807	0.001647494	0	0.0369593	0.008385667	0.00127053	0	0.009656196	0
11.91013206	0	251.0864764	0.000166434	0.000227865	0	0.000394299	0.03768233	0.001876446	0	0.039558777	0.00358327	0.004905875	0	0.008489145	0
10.49222267	0	235.1653979	0.000341119	5.59E-05	0	0.000397047	0.03539735	0.001653054	0	0.037050404	0.007344188	0.001204117	0	0.008548305	0
11.90953418	0	247.0197869	0.000159587	0.000231583	0	0.00039117	0.037041716	0.001876352	0	0.038918068	0.003435873	0.004985909	0	0.008421782	0
10.55139778	0	234.6789334	0.000294681	5.34E-05	0	0.000348066	0.035311385	0.001662377	0	0.036973762	0.006344409	0.001149358	0	0.007493767	0
11.87527886	0	242.9673906	0.000152858	0.000234588	0	0.000387447	0.036408656	0.001870955	0	0.038279611	0.003290993	0.005050624	0	0.008341617	0
10.58093718	0	233.7391441	0.000253568	5.11E-05	0	0.000304697	0.035158666	0.001667031	0	0.036825697	0.005459251	0.001100798	0	0.006560049	0

ROG_HOTSOAI	ROG_RUNLOSS	ROG_TOTAL	TOG_RUNEX	TOG_IDLEX	TOG_STREX	TOG_TOTEX	TOG_DIURN	TOG_HOTSOAI	TOG_RUNLOSS	TOG_TOTA	CO_RUNEX	CO_IDLEX	CO_STREX	CO_TOTEX	SOx_RUNEX	SOx_IDLEX
0	0	0.011810712	0.008156889	0.005288707	0	0.013445596	0	0	0	0.013446	0.027403	0.058681	0	0.086084117	0.002331159	0.000112845
0	0	0.010222955	0.006232601	0.005405455	0	0.011638056	0	0	0	0.011638	0.020815	0.062311	0	0.083126272	0.002316492	0.000114752
0	0	0.008539868	0.004253253	0.005468737	0	0.00972199	0	0	0	0.009722	0.016259	0.06653	0	0.082789111	0.002291773	0.000112144
0	0	0.008489145	0.00407928	0.005584966	0	0.009664245	0	0	0	0.009664	0.015598	0.068398	0	0.08399662	0.002264857	0.000112782
0	0	0.008421782	0.00391148	0.005676077	0	0.009587557	0	0	0	0.009588	0.014937	0.069927	0	0.084863709	0.002226353	0.000112776
0	0	0.008341617	0.003746545	0.005749751	0	0.009496297	0	0	0	0.009496	0.014291	0.071225	0	0.085516265	0.002188304	0.000112452

ROG_HOTSOAI	ROG_RUNLOSS	ROG_TOTAL	TOG_RUNEX	TOG_IDLEX	TOG_STREX	TOG_TOTEX	TOG_DIURN	TOG_HOTSOAI	TOG_RUNLOSS	TOG_TOTA	CO_RUNEX	CO_IDLEX	CO_STREX	CO_TOTEX	SOx_RUNEX	SOx_IDLEX
0	0	0.011810712	0.008156889	0.005288707	0	0.013445596	0	0	0	0.013446	0.027403	0.058681	0	0.086084117	0.002331159	0.000112845
0	0	0.015082955	0.015484136	0.00168666	0	0.017170796	0	0	0	0.017171	0.041535	0.033197	0	0.074731921	0.002105241	0.000101341
0	0	0.010222955	0.006232601	0.005405455	0	0.011638056	0	0	0	0.011638	0.020815	0.062311	0	0.083126272	0.002316492	0.000114752
0	0	0.013015888	0.013245649	0.001571948	0	0.014817598	0	0	0	0.014818	0.03658	0.033284	0	0.069863932	0.002117401	0.000100982
0	0	0.008539868	0.004253253	0.005468737	0	0.00972199	0	0	0	0.009722	0.016259	0.06653	0	0.082789111	0.002291773	0.000112144
0	0	0.009656196	0.009546443	0.001446401	0	0.010992844	0	0	0	0.010993	0.028839	0.035001	0	0.06384042	0.002122379	9.90E-05
0	0	0.008489145	0.00407928	0.005584966	0	0.009664245	0	0	0	0.009664	0.015598	0.068398	0	0.08399662	0.002264857	0.000112782
0	0	0.008548305	0.008360799	0.001370795	0	0.009731595	0	0	0	0.009732	0.026235	0.03522	0	0.061454272	0.002127521	9.94E-05
0	0	0.008421782	0.00391148	0.005676077	0	0.009587557	0	0	0	0.009588	0.014937	0.069927	0	0.084863709	0.002226353	0.000112776
0	0	0.007493767	0.007222626	0.001308457	0	0.008531083	0	0	0	0.008531	0.023647	0.035616	0	0.059263193	0.002122354	9.99E-05
0	0	0.008341617	0.003746545	0.005749751	0	0.009496297	0	0	0	0.009496	0.014291	0.071225	0	0.085516265	0.002188304	0.000112452
0	0	0.006560049	0.006214941	0.001253175	0	0.007468116	0	0	0	0.007468	0.021319	0.035947	0	0.057266443	0.002113175	0.000100195

					Mass Emissions	
SOx_STREX	SOx_TOTEX	NH3_RUNE	Fuel Consumption		**ROG_g/mi**	**ROG_g/trip**
0	0.002444	0.023429	23.05551		0.055037026	0.309721311
0	0.002431	0.024452	22.93515		0.04182119	0.310190509
0	0.002404	0.025956	22.67735		0.028462678	0.310665845
0	0.002378	0.026263	22.42946		0.027204881	0.309937593
0	0.002339	0.026496	22.06618		0.026070205	0.309339955
0	0.002301	0.026702	21.70418		0.024964422	0.308823061

				Mass Emissions				
SOx_STREX	SOx_TOTEX	NH3_RUNE	Fuel Consumption	**ROG_g/mi**	**ROG_g/trip**	**Year**	**ROG_g/mi**	**ROG_g/trip**
0	0.002444	0.023429	23.05551	0.055037026	0.309721311	2021	0.063211997	0.168365632
0	0.002207	0.035985	20.81579	0.071386968	0.027009954	2022	0.051188635	0.167622842
0	0.002431	0.024452	22.93515	0.04182119	0.310190509	2023	0.03585526	0.16675334
0	0.002218	0.037199	20.92712	0.06055608	0.025055174	2024	0.03242018	0.165667468
0	0.002404	0.025956	22.67735	0.028462678	0.310665845	2025	0.029242643	0.164725537
0	0.002221	0.040121	20.95558	0.043247843	0.022840835	2026	0.026408786	0.163924009
0	0.002378	0.026263	22.42946	0.027204881	0.309937593			
0	0.002227	0.04073	21.00723	0.037635479	0.021397343			
0	0.002339	0.026496	22.06618	0.026070205	0.309339955			
0	0.002222	0.041174	20.96378	0.032415081	0.020111119			
0	0.002301	0.026702	21.70418	0.024964422	0.308823061			
0	0.002213	0.041518	20.87983	0.02785315	0.019024957			

Note to reviewer: Please see Technical Report Table 51 ("Summary of Construction Source Groups") footnote 6 for a description of methodology.

HAULING TRIPS

Equipment Information							Information (mass emissions)			Mass Emissions
PHASE	SUBPHASE	YEAR	DAYS	HAULTRIP_TOTAL	Fleet Mix	Fuel Type	Trip Length (mi)	EF (g/mi)	EF (g/trip)	(lb/year)
Phase 1a	Demolition	2021	13	2505	HHDT	Diesel	22.9	0.055037026	3.10E-01	8.67083
Phase 1a	Demolition	2022	84	16183	HHDT	Diesel	22.9	0.04182119	3.10E-01	45.23523
Phase 1a	Grading and Utilities	2022	143	32640	HHDT	Diesel	8.2	0.04182119	3.10E-01	46.99809
Phase 1b	Demolition	2022	48	18688	HHDT	Diesel	22.9	0.04182119	3.10E-01	52.23729
Phase 1b	Grading and Utilities	2022	65	16320	HHDT	Diesel	8.2	0.04182119	3.10E-01	23.49905
Phase 1b	Grading and Utilities	2023	65	16320	HHDT	Diesel	8.2	0.028462678	3.11E-01	19.57497
Phase 2 Mixed Use	Grading and Utilities	2023	22	2464	HHDT	Diesel	8.2	0.028462678	3.11E-01	2.95544
Alternate 1	Demolition	2024	22	422	HHDT	Diesel	22.9	0.027204881	3.10E-01	0.86795
Alternate 1	Grading and Utilities	2024	1	18.50434783	HHDT	Diesel	8.2	0.027204881	3.10E-01	0.02174
Alternate 1	Grading and Utilities	2025	22	407.0956522	HHDT	Diesel	8.2	0.026070205	3.09E-01	0.46949

453.5924	g/lb	
11	hr/day	
365	days/yr	
3600	sec/hr	

VENDOR TRIPS

Equipment Information							Information (mass emissions)			Mass Emissions
PHASE	SUBPHASE	YEAR	DAYS	VENDORTRIP_DAY	Fleet Mix	Fuel Type	Trip Length (mi)	EF (g/mi)	EF (g/trip)	(lb/year)
Phase 2 Mixed Use	Tunnel Construction	2023	175	8	50% MHDT / 50% HHDT	Diesel	40	0.03585526	1.67E-01	4.94E+00
Phase 2 Mixed Use	Tunnel Construction	2024	87	8	50% MHDT / 50% HHDT	Diesel	40	0.03242018	1.66E-01	2.24E+00
Phase 2 Mixed Use	Foundations	2024	24	10	50% MHDT / 50% HHDT	Diesel	40	0.03242018	1.66E-01	7.74E-01
Phase 2 Mixed Use	Foundations	2025	99	10	50% MHDT / 50% HHDT	Diesel	40	0.029242643	1.65E-01	2.91E+00
Phase 2 Mixed Use	Core and Shell	2025	139	12	50% MHDT / 50% HHDT	Diesel	40	0.029242643	1.65E-01	4.91E+00
Phase 2 Mixed Use	Tenant Improvements	2025	25	12	50% MHDT / 50% HHDT	Diesel	40	0.029242643	1.65E-01	8.83E-01
Phase 2 Mixed Use	Tenant Improvements	2026	174	12	50% MHDT / 50% HHDT	Diesel	40	0.026408786	1.64E-01	5.62E+00
Phase 2 Mixed Use	Landscaping	2026	59	6.508474576	50% MHDT / 50% HHDT	Diesel	40	0.026408786	1.64E-01	1.03E+00
Alternate 1	Foundations	2025	22	12.43636364	50% MHDT / 50% HHDT	Diesel	40	0.029242643	1.65E-01	8.05E-01
Alternate 1	Core and Shell	2025	43	5.693023256	50% MHDT / 50% HHDT	Diesel	40	0.029242643	1.65E-01	7.20E-01
Alternate 1	Tenant Improvements	2025	33	9.272727273	50% MHDT / 50% HHDT	Diesel	40	0.029242643	1.65E-01	9.00E-01
Phase 1a Office	Foundations + Core and Shell	2022	42	11	50% MHDT / 50% HHDT	Diesel	40	0.051188635	1.68E-01	2.26E+00
Phase 1a Office	Foundations + Core and Shell	2023	260	11	50% MHDT / 50% HHDT	Diesel	40	0.03585526	1.67E-01	1.01E+01
Phase 1a Office	Foundations + Core and Shell	2024	262	11	50% MHDT / 50% HHDT	Diesel	40	0.03242018	1.66E-01	9.29E+00
Phase 1a Office	Foundations + Core and Shell	2025	261	11	50% MHDT / 50% HHDT	Diesel	40	0.029242643	1.65E-01	8.45E+00
Phase 1a Office	Tenant Improvements	2024	195	6	50% MHDT / 50% HHDT	Diesel	40	0.03242018	1.66E-01	3.77E+00
Phase 1a Office	Tenant Improvements	2025	261	6	50% MHDT / 50% HHDT	Diesel	40	0.029242643	1.65E-01	4.61E+00
Phase 1a Office	Tenant Improvements	2026	46	6	50% MHDT / 50% HHDT	Diesel	40	0.026408786	1.64E-01	7.43E-01
Phase 1a Mixed Use	Foundations	2023	224	2	50% MHDT / 50% HHDT	Diesel	40	0.03585526	1.67E-01	1.58E+00
Phase 1a Mixed Use	Foundations	2024	1	2	50% MHDT / 50% HHDT	Diesel	40	0.03242018	1.66E-01	6.45E-03
Phase 1a Mixed Use	Core and Shell	2023	64	2	50% MHDT / 50% HHDT	Diesel	40	0.03585526	1.67E-01	4.52E-01
Phase 1a Mixed Use	Core and Shell	2024	180	2	50% MHDT / 50% HHDT	Diesel	40	0.03242018	1.66E-01	1.16E+00
Phase 1a Mixed Use	Tenant Improvements	2024	147	2	50% MHDT / 50% HHDT	Diesel	40	0.03242018	1.66E-01	9.48E-01
Phase 1a Mixed Use	Tenant Improvements	2025	178	2	50% MHDT / 50% HHDT	Diesel	40	0.029242643	1.65E-01	1.05E+00
Phase 1a Mixed Use	Landscaping	2025	123	2	50% MHDT / 50% HHDT	Diesel	40	0.029242643	1.65E-01	7.24E-01
Phase 1b Office	Foundations + Core and Shell	2023	202	11	50% MHDT / 50% HHDT	Diesel	40	0.03585526	1.67E-01	7.84E+00
Phase 1b Office	Foundations + Core and Shell	2024	232	11	50% MHDT / 50% HHDT	Diesel	40	0.03242018	1.66E-01	8.23E+00
Phase 1b Office	Tenant Improvements	2024	154	14	50% MHDT / 50% HHDT	Diesel	40	0.03242018	1.66E-01	6.95E+00
Phase 1b Office	Tenant Improvements	2025	122	14	50% MHDT / 50% HHDT	Diesel	40	0.029242643	1.65E-01	5.02E+00
Phase 1b Mixed Use	Foundations	2024	180	2	50% MHDT / 50% HHDT	Diesel	40	0.03242018	1.66E-01	1.16E+00
Phase 1b Mixed Use	Core and Shell	2024	145	3	50% MHDT / 50% HHDT	Diesel	40	0.03242018	1.66E-01	1.40E+00
Phase 1b Mixed Use	Core and Shell	2025	48	3	50% MHDT / 50% HHDT	Diesel	40	0.029242643	1.65E-01	4.24E-01
Phase 1b Mixed Use	Tenant Improvements	2024	17	3	50% MHDT / 50% HHDT	Diesel	40	0.03242018	1.66E-01	1.64E-01
Phase 1b Mixed Use	Tenant Improvements	2025	235	3	50% MHDT / 50% HHDT	Diesel	40	0.029242643	1.65E-01	2.07E+00
Phase 1b Mixed Use	Landscaping	2025	91	2	50% MHDT / 50% HHDT	Diesel	40	0.029242643	1.65E-01	5.35E-01
Phase 1b Mixed Use	Landscaping	2026	32	2	50% MHDT / 50% HHDT	Diesel	40	0.026408786	1.64E-01	1.72E-01

Equipment Information									Emissions (lb/yr)					
PHASE	SUBPHASE	EQUIPMENT	CALEEMOD_EQUIPMENT	FUEL	NUMBER	HP	DAILYHRS	UTILIZATION	2021	2022	2023	2024	2025	2026
Phase 1a	Demolition	Excavator	Excavators	Diesel	4	131	8	0.9	2.732429	17.6557	0	0	0	0
Phase 1a	Demolition	Generator	Generator Sets	Diesel	2	25	6	0.5	0.408795	2.641447	0	0	0	0
Phase 1a	Demolition	Tire Wash	Other Construction Equipment	Diesel	2	100	4	0.9	0.59368	3.836085	0	0	0	0
Phase 1a	Demolition	Concrete Crusher	Crushing/Proc. Equipment	Diesel	2	200	2	0	0	0	0	0	0	0
Phase 1a	Demolition	Bob Cat	Tractors/Loaders/Backhoes	Diesel	6	150	8	0.8	4.061867	26.24591	0	0	0	0
Phase 1a	Demolition	Pressure Washer	Pressure Washers	Diesel	2	25	8	1	0.441941	2.855619	0	0	0	0
Phase 1a	Demolition	Air Compressor	Air Compressors	Diesel	1	140	6	0.7	0.537923	3.47581	0	0	0	0
Phase 1a	Grading and Utilities	Blade	Graders	Diesel	2	359	8	0.15	0	7.016211	0	0	0	0
Phase 1a	Grading and Utilities	Scraper	Scrapers	Diesel	2	52	8	0.15	0	2.37013	0	0	0	0
Phase 1a	Grading and Utilities	Loader	Tractors/Loaders/Backhoes	Diesel	4	100	4	0.9	0	11.50608	0	0	0	0
Phase 1a	Grading and Utilities	Tire Wash	Other Construction Equipment	Diesel	2	100	4	0.9	0	6.530477	0	0	0	0
Phase 1a	Grading and Utilities	Excavator	Excavators	Diesel	4	359	8	0.6	0	52.02264	0	0	0	0
Phase 1a	Grading and Utilities	Backhoe	Tractors/Loaders/Backhoes	Diesel	4	350	8	0.6	0	49.38376	0	0	0	0
Phase 1a	Grading and Utilities	Gradall	Forklifts	Diesel	4	350	4	0.6	0	13.34696	0	0	0	0
Phase 1a	Grading and Utilities	Compactor	Other Construction Equipment	Diesel	4	250	0.5	0.2	0	0.834185	0	0	0	0
Phase 1a	Grading and Utilities	Paver	Pavers	Diesel	2	250	8	0.01	0	0.333674	0	0	0	0
Phase 1a	Grading and Utilities	Generator	Generator Sets	Diesel	1	600	2	0.1	0	1.763706	0	0	0	0
Phase 1a C	North Garage 2022	Air Compressor	Air Compressors	Diesel	1	150	0.47	1	0	0.207738	0	0	0	0
Phase 1a C	North Garage 2022	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	0	1	0	0	0	0	0	0
Phase 1a C	North Garage 2022	Blade	Graders	Diesel	1	450	0	1	0	0	0	0	0	0
Phase 1a C	North Garage 2022	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	0	1	0	0	0	0	0	0
Phase 1a C	North Garage 2022	Boom Lift	Aerial Lifts	Diesel	1	40	0	1	0	0	0	0	0	0
Phase 1a C	North Garage 2022	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0	0	0	0	0	0
Phase 1a C	North Garage 2022	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0	0	0	0	0	0
Phase 1a C	North Garage 2022	Concrete Pump	Pumps	Diesel	1	450	0.33	1	0	0.471962	0	0	0	0
Phase 1a C	North Garage 2022	Excavator	Excavators	Diesel	1	500	11.71429	1	0	12.98362	0	0	0	0
Phase 1a C	North Garage 2022	Generator	Generator Sets	Diesel	1	25	4.714286	1	0	1.037711	0	0	0	0
Phase 1a C	North Garage 2022	Gradall	Forklifts	Diesel	1	350	2.928571	1	0	1.19586	0	0	0	0
Phase 1a C	North Garage 2022	Hydro/Crawler Crane	Cranes	Diesel	1	550	2.928571	1	0	2.724852	0	0	0	0
Phase 1a C	North Garage 2022	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	5.857143	1	0	1.374561	0	0	0	0
Phase 1a C	North Garage 2022	Paver	Pavers	Diesel	1	250	0	1	0	0	0	0	0	0
Phase 1a C	North Garage 2022	Pile Rig	Bore/Drill Rigs	Diesel	1	600	4.142857	1	0	7.25016	0	0	0	0
Phase 1a C	North Garage 2022	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0	0	0	0	0	0
Phase 1a C	North Garage 2022	Scraper	Scrapers	Diesel	1	600	0	1	0	0	0	0	0	0
Phase 1a C	North Garage 2022	Tire Wash	Other Construction Equipment	Diesel	1	100	1.178571	1	0	0.313965	0	0	0	0
Phase 1a C	North Garage 2023	Air Compressor	Air Compressors	Diesel	1	150	0.48186	1	0	0	1.312296	0	0	0
Phase 1a C	North Garage 2023	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	0.03907	1	0	0	0.181304	0	0	0
Phase 1a C	North Garage 2023	Blade	Graders	Diesel	1	450	0	1	0	0	0	0	0	0
Phase 1a C	North Garage 2023	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	0.03907	1	0	0	0.103602	0	0	0
Phase 1a C	North Garage 2023	Boom Lift	Aerial Lifts	Diesel	1	40	1.335814	1	0	0	1.210673	0	0	0
Phase 1a C	North Garage 2023	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0	0	0	0	0	0
Phase 1a C	North Garage 2023	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0	0	0	0	0	0
Phase 1a C	North Garage 2023	Concrete Pump	Pumps	Diesel	1	450	0.57907	1	0	0	5.10894	0	0	0
Phase 1a C	North Garage 2023	Excavator	Excavators	Diesel	1	500	0.465116	1	0	0	3.166736	0	0	0
Phase 1a C	North Garage 2023	Generator	Generator Sets	Diesel	1	25	1.767442	1	0	0	2.389881	0	0	0
Phase 1a C	North Garage 2023	Gradall	Forklifts	Diesel	1	350	3.011628	1	0	0	7.554333	0	0	0
Phase 1a C	North Garage 2023	Hydro/Crawler Crane	Cranes	Diesel	1	550	5.02907	1	0	0	28.74386	0	0	0
Phase 1a C	North Garage 2023	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	0.232558	1	0	0	0.335259	0	0	0
Phase 1a C	North Garage 2023	Paver	Pavers	Diesel	1	250	0	1	0	0	0	0	0	0
Phase 1a C	North Garage 2023	Pile Rig	Bore/Drill Rigs	Diesel	1	600	0	1	0	0	0	0	0	0
Phase 1a C	North Garage 2023	Pressure Washer	Pressure Washers	Diesel	1	25	0.122791	1	0	0	0.067311	0	0	0
Phase 1a C	North Garage 2023	Scraper	Scrapers	Diesel	1	600	0	1	0	0	0	0	0	0

Before on-site residents

% UNMIT	5%
% MIT	95%

After on-site residents

% UNMIT	2%
% MIT	98%

Phase 1a C	North Garage 2023	Tire Wash	Other Construction Equipment	Diesel	1	100	1.505814	1	0	0	2.464152	0	0	0
Phase 1a C	Office Building 4 2023	Air Compressor	Air Compressors	Diesel	1	150	0.049091	1	0	0	0.125403	0	0	0
Phase 1a C	Office Building 4 2023	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	1.264463	1	0	0	5.503871	0	0	0
Phase 1a C	Office Building 4 2023	Blade	Graders	Diesel	1	450	0	1	0	0	0	0	0	0
Phase 1a C	Office Building 4 2023	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	1.264463	1	0	0	3.145069	0	0	0
Phase 1a C	Office Building 4 2023	Boom Lift	Aerial Lifts	Diesel	1	40	7.438017	1	0	0	6.323155	0	0	0
Phase 1a C	Office Building 4 2023	Compactor	Other Construction Equipment	Diesel	1	250	0.101157	1	0	0	0.357008	0	0	0
Phase 1a C	Office Building 4 2023	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0	0	0	0	0	0
Phase 1a C	Office Building 4 2023	Concrete Pump	Pumps	Diesel	1	450	0.075372	1	0	0	0.623742	0	0	0
Phase 1a C	Office Building 4 2023	Excavator	Excavators	Diesel	1	500	0.063223	1	0	0	0.403759	0	0	0
Phase 1a C	Office Building 4 2023	Generator	Generator Sets	Diesel	1	25	2.900826	1	0	0	3.679158	0	0	0
Phase 1a C	Office Building 4 2023	Gradall	Forklifts	Diesel	1	350	0.48	1	0	0	1.129358	0	0	0
Phase 1a C	Office Building 4 2023	Hydro/Crawler Crane	Cranes	Diesel	1	550	1.809917	1	0	0	9.703131	0	0	0
Phase 1a C	Office Building 4 2023	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	0.719008	1	0	0	0.97225	0	0	0
Phase 1a C	Office Building 4 2023	Paver	Pavers	Diesel	1	250	0	1	0	0	0	0	0	0
Phase 1a C	Office Building 4 2023	Pile Rig	Bore/Drill Rigs	Diesel	1	600	0.719008	1	0	0	7.25016	0	0	0
Phase 1a C	Office Building 4 2023	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0	0	0	0	0	0
Phase 1a C	Office Building 4 2023	Scraper	Scrapers	Diesel	1	600	0	1	0	0	0	0	0	0
Phase 1a C	Office Building 4 2023	Tire Wash	Other Construction Equipment	Diesel	1	100	1.5	1	0	0	2.302412	0	0	0
Phase 1a C	Office Building 4 2024	Air Compressor	Air Compressors	Diesel	1	150	0	1	0	0	0	0	0	0
Phase 1a C	Office Building 4 2024	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	0	1	0	0	0	0	0	0
Phase 1a C	Office Building 4 2024	Blade	Graders	Diesel	1	450	0	1	0	0	0	0	0	0
Phase 1a C	Office Building 4 2024	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	0	1	0	0	0	0	0	0
Phase 1a C	Office Building 4 2024	Boom Lift	Aerial Lifts	Diesel	1	40	1.405797	1	0	0	0	1.022243	0	0
Phase 1a C	Office Building 4 2024	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0	0	0	0	0	0
Phase 1a C	Office Building 4 2024	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0	0	0	0	0	0
Phase 1a C	Office Building 4 2024	Concrete Pump	Pumps	Diesel	1	450	0	1	0	0	0	0	0	0
Phase 1a C	Office Building 4 2024	Excavator	Excavators	Diesel	1	500	0	1	0	0	0	0	0	0
Phase 1a C	Office Building 4 2024	Generator	Generator Sets	Diesel	1	25	0	1	0	0	0	0	0	0
Phase 1a C	Office Building 4 2024	Gradall	Forklifts	Diesel	1	350	0.48	1	0	0	0	0.966021	0	0
Phase 1a C	Office Building 4 2024	Hydro/Crawler Crane	Cranes	Diesel	1	550	0	1	0	0	0	0	0	0
Phase 1a C	Office Building 4 2024	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	0	1	0	0	0	0	0	0
Phase 1a C	Office Building 4 2024	Paver	Pavers	Diesel	1	250	0	1	0	0	0	0	0	0
Phase 1a C	Office Building 4 2024	Pile Rig	Bore/Drill Rigs	Diesel	1	600	0	1	0	0	0	0	0	0
Phase 1a C	Office Building 4 2024	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0	0	0	0	0	0
Phase 1a C	Office Building 4 2024	Scraper	Scrapers	Diesel	1	600	0	1	0	0	0	0	0	0
Phase 1a C	Office Building 4 2024	Tire Wash	Other Construction Equipment	Diesel	1	100	1.5	1	0	0	0	1.969418	0	0
Phase 1a C	Meeting, Collaboration, Park 2022	Air Compressor	Air Compressors	Diesel	1	150	0	1	0	0	0	0	0	0
Phase 1a C	Meeting, Collaboration, Park 2022	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	5.857143	1	0	4.424681	0	0	0	0
Phase 1a C	Meeting, Collaboration, Park 2022	Blade	Graders	Diesel	1	450	0	1	0	0	0	0	0	0
Phase 1a C	Meeting, Collaboration, Park 2022	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	5.857143	1	0	2.528389	0	0	0	0
Phase 1a C	Meeting, Collaboration, Park 2022	Boom Lift	Aerial Lifts	Diesel	1	40	0	1	0	0	0	0	0	0
Phase 1a C	Meeting, Collaboration, Park 2022	Compactor	Other Construction Equipment	Diesel	1	250	0.314286	1	0	0.192504	0	0	0	0
Phase 1a C	Meeting, Collaboration, Park 2022	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0	0	0	0	0	0
Phase 1a C	Meeting, Collaboration, Park 2022	Concrete Pump	Pumps	Diesel	1	450	0	1	0	0	0	0	0	0
Phase 1a C	Meeting, Collaboration, Park 2022	Excavator	Excavators	Diesel	1	500	23.42857	1	0	25.96724	0	0	0	0
Phase 1a C	Meeting, Collaboration, Park 2022	Generator	Generator Sets	Diesel	1	25	5.857143	1	0	1.289278	0	0	0	0
Phase 1a C	Meeting, Collaboration, Park 2022	Gradall	Forklifts	Diesel	1	350	8.785714	1	0	3.587579	0	0	0	0
Phase 1a C	Meeting, Collaboration, Park 2022	Hydro/Crawler Crane	Cranes	Diesel	1	550	1.571429	1	0	1.462116	0	0	0	0
Phase 1a C	Meeting, Collaboration, Park 2022	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	4.392857	1	0	1.030921	0	0	0	0
Phase 1a C	Meeting, Collaboration, Park 2022	Paver	Pavers	Diesel	1	250	0	1	0	0	0	0	0	0
Phase 1a C	Meeting, Collaboration, Park 2022	Pile Rig	Bore/Drill Rigs	Diesel	1	600	3.142857	1	0	5.500121	0	0	0	0
Phase 1a C	Meeting, Collaboration, Park 2022	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0	0	0	0	0	0
Phase 1a C	Meeting, Collaboration, Park 2022	Scraper	Scrapers	Diesel	1	600	0	1	0	0	0	0	0	0

Phase 1a C	Meeting, Collaboration, Park 2022	Tire Wash	Other Construction Equipment	Diesel	1	100	1.464286	1	0	0.390078	0	0	0	0
Phase 1a C	Meeting, Collaboration, Park 2023	Air Compressor	Air Compressors	Diesel	1	150	0.304615	1	0	0	0.836018	0	0	0
Phase 1a C	Meeting, Collaboration, Park 2023	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	3.276923	1	0	0	15.3245	0	0	0
Phase 1a C	Meeting, Collaboration, Park 2023	Blade	Graders	Diesel	1	450	0	1	0	0	0	0	0	0
Phase 1a C	Meeting, Collaboration, Park 2023	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	3.276923	1	0	0	8.75686	0	0	0
Phase 1a C	Meeting, Collaboration, Park 2023	Boom Lift	Aerial Lifts	Diesel	1	40	0.888462	1	0	0	0.811472	0	0	0
Phase 1a C	Meeting, Collaboration, Park 2023	Compactor	Other Construction Equipment	Diesel	1	250	0.152308	1	0	0	0.577513	0	0	0
Phase 1a C	Meeting, Collaboration, Park 2023	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0	0	0	0	0	0
Phase 1a C	Meeting, Collaboration, Park 2023	Concrete Pump	Pumps	Diesel	1	450	0.304615	1	0	0	2.708354	0	0	0
Phase 1a C	Meeting, Collaboration, Park 2023	Excavator	Excavators	Diesel	1	500	5.492308	1	0	0	37.68416	0	0	0
Phase 1a C	Meeting, Collaboration, Park 2023	Generator	Generator Sets	Diesel	1	25	6.715385	1	0	0	9.150728	0	0	0
Phase 1a C	Meeting, Collaboration, Park 2023	Gradall	Forklifts	Diesel	1	350	7.661538	1	0	0	19.36709	0	0	0
Phase 1a C	Meeting, Collaboration, Park 2023	Hydro/Crawler Crane	Cranes	Diesel	1	550	7.246154	1	0	0	41.73675	0	0	0
Phase 1a C	Meeting, Collaboration, Park 2023	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	1.828846	1	0	0	2.656925	0	0	0
Phase 1a C	Meeting, Collaboration, Park 2023	Paver	Pavers	Diesel	1	250	0	1	0	0	0	0	0	0
Phase 1a C	Meeting, Collaboration, Park 2023	Pile Rig	Bore/Drill Rigs	Diesel	1	600	2.007692	1	0	0	21.75048	0	0	0
Phase 1a C	Meeting, Collaboration, Park 2023	Pressure Washer	Pressure Washers	Diesel	1	25	0.152308	1	0	0	0.084139	0	0	0
Phase 1a C	Meeting, Collaboration, Park 2023	Scraper	Scrapers	Diesel	1	600	0	1	0	0	0	0	0	0
Phase 1a C	Meeting, Collaboration, Park 2023	Tire Wash	Other Construction Equipment	Diesel	1	100	0.819231	1	0	0	1.351002	0	0	0
Phase 1a C	Meeting, Collaboration, Park 2024	Air Compressor	Air Compressors	Diesel	1	150	0	1	0	0	0	0	0	0
Phase 1a C	Meeting, Collaboration, Park 2024	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	0	1	0	0	0	0	0	0
Phase 1a C	Meeting, Collaboration, Park 2024	Blade	Graders	Diesel	1	450	0	1	0	0	0	0	0	0
Phase 1a C	Meeting, Collaboration, Park 2024	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	0	1	0	0	0	0	0	0
Phase 1a C	Meeting, Collaboration, Park 2024	Boom Lift	Aerial Lifts	Diesel	1	40	19.30534	1	0	0	0	17.76807	0	0
Phase 1a C	Meeting, Collaboration, Park 2024	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0	0	0	0	0	0
Phase 1a C	Meeting, Collaboration, Park 2024	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0	0	0	0	0	0
Phase 1a C	Meeting, Collaboration, Park 2024	Concrete Pump	Pumps	Diesel	1	450	0	1	0	0	0	0	0	0
Phase 1a C	Meeting, Collaboration, Park 2024	Excavator	Excavators	Diesel	1	500	0	1	0	0	0	0	0	0
Phase 1a C	Meeting, Collaboration, Park 2024	Generator	Generator Sets	Diesel	1	25	0	1	0	0	0	0	0	0
Phase 1a C	Meeting, Collaboration, Park 2024	Gradall	Forklifts	Diesel	1	350	10.25954	1	0	0	0	26.13391	0	0
Phase 1a C	Meeting, Collaboration, Park 2024	Hydro/Crawler Crane	Cranes	Diesel	1	550	0.503817	1	0	0	0	2.924231	0	0
Phase 1a C	Meeting, Collaboration, Park 2024	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	0	1	0	0	0	0	0	0
Phase 1a C	Meeting, Collaboration, Park 2024	Paver	Pavers	Diesel	1	250	0	1	0	0	0	0	0	0
Phase 1a C	Meeting, Collaboration, Park 2024	Pile Rig	Bore/Drill Rigs	Diesel	1	600	0	1	0	0	0	0	0	0
Phase 1a C	Meeting, Collaboration, Park 2024	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0	0	0	0	0	0
Phase 1a C	Meeting, Collaboration, Park 2024	Scraper	Scrapers	Diesel	1	600	0	1	0	0	0	0	0	0
Phase 1a C	Meeting, Collaboration, Park 2024	Tire Wash	Other Construction Equipment	Diesel	1	100	0	1	0	0	0	0	0	0
Phase 1a C	Meeting, Collaboration, Park 2025	Air Compressor	Air Compressors	Diesel	1	150	0	1	0	0	0	0	0	0
Phase 1a C	Meeting, Collaboration, Park 2025	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	0	1	0	0	0	0	0	0
Phase 1a C	Meeting, Collaboration, Park 2025	Blade	Graders	Diesel	1	450	0	1	0	0	0	0	0	0
Phase 1a C	Meeting, Collaboration, Park 2025	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	0	1	0	0	0	0	0	0
Phase 1a C	Meeting, Collaboration, Park 2025	Boom Lift	Aerial Lifts	Diesel	1	40	9.425287	1	0	0	0	0	8.29867	0
Phase 1a C	Meeting, Collaboration, Park 2025	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0	0	0	0	0	0
Phase 1a C	Meeting, Collaboration, Park 2025	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0	0	0	0	0	0
Phase 1a C	Meeting, Collaboration, Park 2025	Concrete Pump	Pumps	Diesel	1	450	0	1	0	0	0	0	0	0
Phase 1a C	Meeting, Collaboration, Park 2025	Excavator	Excavators	Diesel	1	500	0	1	0	0	0	0	0	0
Phase 1a C	Meeting, Collaboration, Park 2025	Generator	Generator Sets	Diesel	1	25	0	1	0	0	0	0	0	0
Phase 1a C	Meeting, Collaboration, Park 2025	Gradall	Forklifts	Diesel	1	350	11.77011	1	0	0	0	0	29.01397	0
Phase 1a C	Meeting, Collaboration, Park 2025	Hydro/Crawler Crane	Cranes	Diesel	1	550	0.770115	1	0	0	0	0	4.325583	0
Phase 1a C	Meeting, Collaboration, Park 2025	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	0	1	0	0	0	0	0	0
Phase 1a C	Meeting, Collaboration, Park 2025	Paver	Pavers	Diesel	1	250	0	1	0	0	0	0	0	0
Phase 1a C	Meeting, Collaboration, Park 2025	Pile Rig	Bore/Drill Rigs	Diesel	1	600	0	1	0	0	0	0	0	0
Phase 1a C	Meeting, Collaboration, Park 2025	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0	0	0	0	0	0
Phase 1a C	Meeting, Collaboration, Park 2025	Scraper	Scrapers	Diesel	1	600	0	1	0	0	0	0	0	0

Phase 1a C	Meeting, Collaboration, Park 2025	Tire Wash	Other Construction Equipment	Diesel	1	100	0	1	0	0	0	0	0	0
Phase 1a C	Meeting, Collaboration, Park 2026	Air Compressor	Air Compressors	Diesel	1	150	0	1	0	0	0	0	0	0
Phase 1a C	Meeting, Collaboration, Park 2026	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	0	1	0	0	0	0	0	0
Phase 1a C	Meeting, Collaboration, Park 2026	Blade	Graders	Diesel	1	450	0	1	0	0	0	0	0	0
Phase 1a C	Meeting, Collaboration, Park 2026	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	0	1	0	0	0	0	0	0
Phase 1a C	Meeting, Collaboration, Park 2026	Boom Lift	Aerial Lifts	Diesel	1	40	0	1	0	0	0	0	0	0
Phase 1a C	Meeting, Collaboration, Park 2026	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0	0	0	0	0	0
Phase 1a C	Meeting, Collaboration, Park 2026	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0	0	0	0	0	0
Phase 1a C	Meeting, Collaboration, Park 2026	Concrete Pump	Pumps	Diesel	1	450	0	1	0	0	0	0	0	0
Phase 1a C	Meeting, Collaboration, Park 2026	Excavator	Excavators	Diesel	1	500	0	1	0	0	0	0	0	0
Phase 1a C	Meeting, Collaboration, Park 2026	Generator	Generator Sets	Diesel	1	25	0	1	0	0	0	0	0	0
Phase 1a C	Meeting, Collaboration, Park 2026	Gradall	Forklifts	Diesel	1	350	11.73913	1	0	0	0	0	0	5.100112
Phase 1a C	Meeting, Collaboration, Park 2026	Hydro/Crawler Crane	Cranes	Diesel	1	550	5.869565	1	0	0	0	0	0	5.810485
Phase 1a C	Meeting, Collaboration, Park 2026	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	0	1	0	0	0	0	0	0
Phase 1a C	Meeting, Collaboration, Park 2026	Paver	Pavers	Diesel	1	250	0	1	0	0	0	0	0	0
Phase 1a C	Meeting, Collaboration, Park 2026	Pile Rig	Bore/Drill Rigs	Diesel	1	600	0	1	0	0	0	0	0	0
Phase 1a C	Meeting, Collaboration, Park 2026	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0	0	0	0	0	0
Phase 1a C	Meeting, Collaboration, Park 2026	Scraper	Scrapers	Diesel	1	600	0	1	0	0	0	0	0	0
Phase 1a C	Meeting, Collaboration, Park 2026	Tire Wash	Other Construction Equipment	Diesel	1	100	0	1	0	0	0	0	0	0
Phase 1a C	Hotel Excavation 2022	Air Compressor	Air Compressors	Diesel	1	150	2.642857	1	0	1.171692	0	0	0	0
Phase 1a C	Hotel Excavation 2022	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	2.642857	1	0	1.996502	0	0	0	0
Phase 1a C	Hotel Excavation 2022	Blade	Graders	Diesel	1	450	0	1	0	0	0	0	0	0
Phase 1a C	Hotel Excavation 2022	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	2.928571	1	0	1.264195	0	0	0	0
Phase 1a C	Hotel Excavation 2022	Boom Lift	Aerial Lifts	Diesel	1	40	1.464286	1	0	0.216041	0	0	0	0
Phase 1a C	Hotel Excavation 2022	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0	0	0	0	0	0
Phase 1a C	Hotel Excavation 2022	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0	0	0	0	0	0
Phase 1a C	Hotel Excavation 2022	Concrete Pump	Pumps	Diesel	1	450	0.422857	1	0	0.604765	0	0	0	0
Phase 1a C	Hotel Excavation 2022	Excavator	Excavators	Diesel	1	500	11.71429	1	0	12.98362	0	0	0	0
Phase 1a C	Hotel Excavation 2022	Generator	Generator Sets	Diesel	1	25	5.857143	1	0	1.289278	0	0	0	0
Phase 1a C	Hotel Excavation 2022	Gradall	Forklifts	Diesel	1	350	5.857143	1	0	2.391719	0	0	0	0
Phase 1a C	Hotel Excavation 2022	Hydro/Crawler Crane	Cranes	Diesel	1	550	2.642857	1	0	2.459013	0	0	0	0
Phase 1a C	Hotel Excavation 2022	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	11.71429	1	0	2.749121	0	0	0	0
Phase 1a C	Hotel Excavation 2022	Paver	Pavers	Diesel	1	250	0	1	0	0	0	0	0	0
Phase 1a C	Hotel Excavation 2022	Pile Rig	Bore/Drill Rigs	Diesel	1	600	10.57143	1	0	18.50041	0	0	0	0
Phase 1a C	Hotel Excavation 2022	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0	0	0	0	0	0
Phase 1a C	Hotel Excavation 2022	Scraper	Scrapers	Diesel	1	600	0	1	0	0	0	0	0	0
Phase 1a C	Hotel Excavation 2022	Tire Wash	Other Construction Equipment	Diesel	1	100	2.928571	1	0	0.780156	0	0	0	0
Phase 1a C	Hotel Excavation 2023	Air Compressor	Air Compressors	Diesel	1	150	2.311284	1	0	0	6.270138	0	0	0
Phase 1a C	Hotel Excavation 2023	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	0	1	0	0	0	0	0	0
Phase 1a C	Hotel Excavation 2023	Blade	Graders	Diesel	1	450	0	1	0	0	0	0	0	0
Phase 1a C	Hotel Excavation 2023	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	0.700389	1	0	0	1.850041	0	0	0
Phase 1a C	Hotel Excavation 2023	Boom Lift	Aerial Lifts	Diesel	1	40	0.350195	1	0	0	0.316158	0	0	0
Phase 1a C	Hotel Excavation 2023	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0	0	0	0	0	0
Phase 1a C	Hotel Excavation 2023	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0	0	0	0	0	0
Phase 1a C	Hotel Excavation 2023	Concrete Pump	Pumps	Diesel	1	450	2.311284	1	0	0	20.31265	0	0	0
Phase 1a C	Hotel Excavation 2023	Excavator	Excavators	Diesel	1	500	2.801556	1	0	0	19.00042	0	0	0
Phase 1a C	Hotel Excavation 2023	Generator	Generator Sets	Diesel	1	25	10.64591	1	0	0	14.33928	0	0	0
Phase 1a C	Hotel Excavation 2023	Gradall	Forklifts	Diesel	1	350	10.64591	1	0	0	26.60059	0	0	0
Phase 1a C	Hotel Excavation 2023	Hydro/Crawler Crane	Cranes	Diesel	1	550	9.245136	1	0	0	52.63616	0	0	0
Phase 1a C	Hotel Excavation 2023	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	2.801556	1	0	0	4.023105	0	0	0
Phase 1a C	Hotel Excavation 2023	Paver	Pavers	Diesel	1	250	0	1	0	0	0	0	0	0
Phase 1a C	Hotel Excavation 2023	Pile Rig	Bore/Drill Rigs	Diesel	1	600	0	1	0	0	0	0	0	0
Phase 1a C	Hotel Excavation 2023	Pressure Washer	Pressure Washers	Diesel	1	25	0.046226	1	0	0	0.025242	0	0	0
Phase 1a C	Hotel Excavation 2023	Scraper	Scrapers	Diesel	1	600	0	1	0	0	0	0	0	0

Phase 1a C	Hotel Excavation 2023	Tire Wash	Other Construction Equipment	Diesel	1	100	1.856031	1	0	0	3.025483	0	0	0
Phase 1a C	Hotel Construction 2024	Air Compressor	Air Compressors	Diesel	1	150	3	1	0	0	0	5.541789	0	0
Phase 1a C	Hotel Construction 2024	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	0	1	0	0	0	0	0	0
Phase 1a C	Hotel Construction 2024	Blade	Graders	Diesel	1	450	0	1	0	0	0	0	0	0
Phase 1a C	Hotel Construction 2024	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	0	1	0	0	0	0	0	0
Phase 1a C	Hotel Construction 2024	Boom Lift	Aerial Lifts	Diesel	1	40	20.91429	1	0	0	0	12.85708	0	0
Phase 1a C	Hotel Construction 2024	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0	0	0	0	0	0
Phase 1a C	Hotel Construction 2024	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0	0	0	0	0	0
Phase 1a C	Hotel Construction 2024	Concrete Pump	Pumps	Diesel	1	450	3	1	0	0	0	17.36953	0	0
Phase 1a C	Hotel Construction 2024	Excavator	Excavators	Diesel	1	500	0	1	0	0	0	0	0	0
Phase 1a C	Hotel Construction 2024	Generator	Generator Sets	Diesel	1	25	0	1	0	0	0	0	0	0
Phase 1a C	Hotel Construction 2024	Gradall	Forklifts	Diesel	1	350	12	1	0	0	0	20.41712	0	0
Phase 1a C	Hotel Construction 2024	Hydro/Crawler Crane	Cranes	Diesel	1	550	0	1	0	0	0	0	0	0
Phase 1a C	Hotel Construction 2024	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	0	1	0	0	0	0	0	0
Phase 1a C	Hotel Construction 2024	Paver	Pavers	Diesel	1	250	0	1	0	0	0	0	0	0
Phase 1a C	Hotel Construction 2024	Pile Rig	Bore/Drill Rigs	Diesel	1	600	0	1	0	0	0	0	0	0
Phase 1a C	Hotel Construction 2024	Pressure Washer	Pressure Washers	Diesel	1	25	0.06	1	0	0	0	0.02231	0	0
Phase 1a C	Hotel Construction 2024	Scraper	Scrapers	Diesel	1	600	0	1	0	0	0	0	0	0
Phase 1a C	Hotel Construction 2024	Tire Wash	Other Construction Equipment	Diesel	1	100	1.5	1	0	0	0	1.664967	0	0
Phase 1a C	Hotel Construction 2025	Air Compressor	Air Compressors	Diesel	1	150	0.837662	1	0	0	0	0	1.281838	0
Phase 1a C	Hotel Construction 2025	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	0	1	0	0	0	0	0	0
Phase 1a C	Hotel Construction 2025	Blade	Graders	Diesel	1	450	0	1	0	0	0	0	0	0
Phase 1a C	Hotel Construction 2025	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	0	1	0	0	0	0	0	0
Phase 1a C	Hotel Construction 2025	Boom Lift	Aerial Lifts	Diesel	1	40	20.18182	1	0	0	0	0	10.48466	0
Phase 1a C	Hotel Construction 2025	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0	0	0	0	0	0
Phase 1a C	Hotel Construction 2025	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0	0	0	0	0	0
Phase 1a C	Hotel Construction 2025	Concrete Pump	Pumps	Diesel	1	450	0.837662	1	0	0	0	0	3.793376	0
Phase 1a C	Hotel Construction 2025	Excavator	Excavators	Diesel	1	500	0	1	0	0	0	0	0	0
Phase 1a C	Hotel Construction 2025	Generator	Generator Sets	Diesel	1	25	0	1	0	0	0	0	0	0
Phase 1a C	Hotel Construction 2025	Gradall	Forklifts	Diesel	1	350	12.07792	1	0	0	0	0	17.56705	0
Phase 1a C	Hotel Construction 2025	Hydro/Crawler Crane	Cranes	Diesel	1	550	0	1	0	0	0	0	0	0
Phase 1a C	Hotel Construction 2025	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	0	1	0	0	0	0	0	0
Phase 1a C	Hotel Construction 2025	Paver	Pavers	Diesel	1	250	0	1	0	0	0	0	0	0
Phase 1a C	Hotel Construction 2025	Pile Rig	Bore/Drill Rigs	Diesel	1	600	0	1	0	0	0	0	0	0
Phase 1a C	Hotel Construction 2025	Pressure Washer	Pressure Washers	Diesel	1	25	0.016753	1	0	0	0	0	0.005264	0
Phase 1a C	Hotel Construction 2025	Scraper	Scrapers	Diesel	1	600	0	1	0	0	0	0	0	0
Phase 1a C	Hotel Construction 2025	Tire Wash	Other Construction Equipment	Diesel	1	100	1.50974	1	0	0	0	0	1.364891	0
Phase 1a C	Town Square 2023	Air Compressor	Air Compressors	Diesel	1	150	0	1	0	0	0	0	0	0
Phase 1a C	Town Square 2023	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	0	1	0	0	0	0	0	0
Phase 1a C	Town Square 2023	Blade	Graders	Diesel	1	450	0	1	0	0	0	0	0	0
Phase 1a C	Town Square 2023	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	3	1	0	0	7.338495	0	0	0
Phase 1a C	Town Square 2023	Boom Lift	Aerial Lifts	Diesel	1	40	1.5	1	0	0	1.254092	0	0	0
Phase 1a C	Town Square 2023	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0	0	0	0	0	0
Phase 1a C	Town Square 2023	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0	0	0	0	0	0
Phase 1a C	Town Square 2023	Concrete Pump	Pumps	Diesel	1	450	0	1	0	0	0	0	0	0
Phase 1a C	Town Square 2023	Excavator	Excavators	Diesel	1	500	12	1	0	0	75.36833	0	0	0
Phase 1a C	Town Square 2023	Generator	Generator Sets	Diesel	1	25	6	1	0	0	7.4841	0	0	0
Phase 1a C	Town Square 2023	Gradall	Forklifts	Diesel	1	350	6	1	0	0	13.88364	0	0	0
Phase 1a C	Town Square 2023	Hydro/Crawler Crane	Cranes	Diesel	1	550	0	1	0	0	0	0	0	0
Phase 1a C	Town Square 2023	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	12	1	0	0	15.95831	0	0	0
Phase 1a C	Town Square 2023	Paver	Pavers	Diesel	1	250	0	1	0	0	0	0	0	0
Phase 1a C	Town Square 2023	Pile Rig	Bore/Drill Rigs	Diesel	1	600	0	1	0	0	0	0	0	0
Phase 1a C	Town Square 2023	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0	0	0	0	0	0
Phase 1a C	Town Square 2023	Scraper	Scrapers	Diesel	1	600	0	1	0	0	0	0	0	0

Phase 1a C	Town Square 2023	Tire Wash	Other Construction Equipment	Diesel	1	100	3	1	0	0	4.528711	0	0	0
Phase 1a C	Town Square 2024	Air Compressor	Air Compressors	Diesel	1	150	0	1	0	0	0	0	0	0
Phase 1a C	Town Square 2024	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	0	1	0	0	0	0	0	0
Phase 1a C	Town Square 2024	Blade	Graders	Diesel	1	450	0	1	0	0	0	0	0	0
Phase 1a C	Town Square 2024	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	0.996183	1	0	0	0	2.682559	0	0
Phase 1a C	Town Square 2024	Boom Lift	Aerial Lifts	Diesel	1	40	1.872137	1	0	0	0	1.72306	0	0
Phase 1a C	Town Square 2024	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0	0	0	0	0	0
Phase 1a C	Town Square 2024	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0	0	0	0	0	0
Phase 1a C	Town Square 2024	Concrete Pump	Pumps	Diesel	1	450	0.020382	1	0	0	0	0.176673	0	0
Phase 1a C	Town Square 2024	Excavator	Excavators	Diesel	1	500	3.984733	1	0	0	0	27.55061	0	0
Phase 1a C	Town Square 2024	Generator	Generator Sets	Diesel	1	25	0.549618	1	0	0	0	0.754699	0	0
Phase 1a C	Town Square 2024	Gradall	Forklifts	Diesel	1	350	5.267176	1	0	0	0	13.41696	0	0
Phase 1a C	Town Square 2024	Hydro/Crawler Crane	Cranes	Diesel	1	550	1.03145	1	0	0	0	5.986699	0	0
Phase 1a C	Town Square 2024	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	3.984733	1	0	0	0	5.833502	0	0
Phase 1a C	Town Square 2024	Paver	Pavers	Diesel	1	250	0	1	0	0	0	0	0	0
Phase 1a C	Town Square 2024	Pile Rig	Bore/Drill Rigs	Diesel	1	600	0	1	0	0	0	0	0	0
Phase 1a C	Town Square 2024	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0	0	0	0	0	0
Phase 1a C	Town Square 2024	Scraper	Scrapers	Diesel	1	600	0	1	0	0	0	0	0	0
Phase 1a C	Town Square 2024	Tire Wash	Other Construction Equipment	Diesel	1	100	0.996183	1	0	0	0	1.655453	0	0
Phase 1a C	Town Square 2025	Air Compressor	Air Compressors	Diesel	1	150	0	1	0	0	0	0	0	0
Phase 1a C	Town Square 2025	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	0	1	0	0	0	0	0	0
Phase 1a C	Town Square 2025	Blade	Graders	Diesel	1	450	0	1	0	0	0	0	0	0
Phase 1a C	Town Square 2025	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	0	1	0	0	0	0	0	0
Phase 1a C	Town Square 2025	Boom Lift	Aerial Lifts	Diesel	1	40	0	1	0	0	0	0	0	0
Phase 1a C	Town Square 2025	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0	0	0	0	0	0
Phase 1a C	Town Square 2025	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0	0	0	0	0	0
Phase 1a C	Town Square 2025	Concrete Pump	Pumps	Diesel	1	450	0	1	0	0	0	0	0	0
Phase 1a C	Town Square 2025	Excavator	Excavators	Diesel	1	500	0	1	0	0	0	0	0	0
Phase 1a C	Town Square 2025	Generator	Generator Sets	Diesel	1	25	0	1	0	0	0	0	0	0
Phase 1a C	Town Square 2025	Gradall	Forklifts	Diesel	1	350	18	1	0	0	0	0	18.70041	0
Phase 1a C	Town Square 2025	Hydro/Crawler Crane	Cranes	Diesel	1	550	0.18	1	0	0	0	0	0.426102	0
Phase 1a C	Town Square 2025	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	0	1	0	0	0	0	0	0
Phase 1a C	Town Square 2025	Paver	Pavers	Diesel	1	250	0	1	0	0	0	0	0	0
Phase 1a C	Town Square 2025	Pile Rig	Bore/Drill Rigs	Diesel	1	600	0	1	0	0	0	0	0	0
Phase 1a C	Town Square 2025	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0	0	0	0	0	0
Phase 1a C	Town Square 2025	Scraper	Scrapers	Diesel	1	600	0	1	0	0	0	0	0	0
Phase 1a C	Town Square 2025	Tire Wash	Other Construction Equipment	Diesel	1	100	0	1	0	0	0	0	0	0
Phase 1a M	Parcel 2 Foundations	Pile Rig	Bore/Drill Rigs	Diesel	0	600	8	0.4	0	0	0	0	0	0
Phase 1a M	Parcel 2 Foundations	Generator	Generator Sets	Diesel	0	25	6	1	0	0	0	0	0	0
Phase 1a M	Parcel 2 Foundations	Tire Wash	Other Construction Equipment	Diesel	1	100	4	0.9	0	0	3.676248	0	0	0
Phase 1a M	Parcel 2 Foundations	Excavator	Excavators	Diesel	1	131	8	0.6	0	0	5.640014	0	0	0
Phase 1a M	Parcel 2 Foundations	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	90	8	0.6	0	0	3.886319	0	0	0
Phase 1a M	Parcel 2 Foundations	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	70	8	0.8	0	0	7.383901	0	0	0
Phase 1a M	Parcel 2 Foundations	Gradall	Forklifts	Diesel	1	74	4	0.8	0	0	2.109686	0	0	0
Phase 1a M	Parcel 2 Foundations	Crane	Cranes	Diesel	1	215	4	0.5	0	0	2.788492	0	0	0
Phase 1a M	Parcel 2 Foundations	Concrete Pump	Pumps	Diesel	1	450	8	0.15	0	0	6.606742	0	0	0
Phase 1a M	Parcel 2 Core and Shell	Generator	Generator Sets	Diesel	0	25	6	1	0	0	0	0	0	0
Phase 1a M	Parcel 2 Core and Shell	Tire Wash	Other Construction Equipment	Diesel	1	100	4	0.9	0	0	1.461366	2.648725	0	0
Phase 1a M	Parcel 2 Core and Shell	Crane	Cranes	Diesel	1	600	8	0.2	0	0	2.474721	4.485432	0	0
Phase 1a M	Parcel 2 Core and Shell	Gradall	Forklifts	Diesel	1	74	4	0.8	0	0	0.838633	1.520022	0	0
Phase 1a M	Parcel 2 Core and Shell	Concrete Pump	Pumps	Diesel	0	450	6	0.225	0	0	0	0	0	0
Phase 1a M	Parcel 2 Core and Shell	Air Compressor	Air Compressors	Diesel	0	140	2	0.4	0	0	0	0	0	0
Phase 1a M	Parcel 2 Core and Shell	Boom Lift	Aerial Lifts	Diesel	0	50	6	0.2	0	0	0	0	0	0
Phase 1a M	Parcel 2 Tenant Improvements	Generator	Generator Sets	Diesel	0	25	6	0.85	0	0	0	0	0	0

Phase 1a M	Parcel 2 Tenant Improvements	Tire Wash	Other Construction Equipment	Diesel	1	100	4	0.9	0	0	0	3.356574	2.409253	0
Phase 1a M	Parcel 2 Tenant Improvements	Gradall	Forklifts	Diesel	1	74	4	0.8	0	0	0	1.926235	1.454535	0
Phase 1a M	Parcel 2 Landscaping	Excavator	Excavators	Diesel	1	25	8	0.9	0	0	0	0	1.097892	0
Phase 1a M	Parcel 2 Landscaping	Generator	Generator Sets	Diesel	0	25	6	0.5	0	0	0	0	0	0
Phase 1a M	Parcel 2 Landscaping	Tire Wash	Other Construction Equipment	Diesel	1	100	4	0.9	0	0	0	0	1.246894	0
Phase 1a M	Parcel 2 Landscaping	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	90	8	1	0	0	0	0	2.196909	0
Phase 1a M	Parcel 2 Landscaping	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	70	8	0.8	0	0	0	0	2.63475	0
Phase 1a M	Parcel 3 Foundations	Pile Rig	Bore/Drill Rigs	Diesel	0	600	8	0.4	0	0	0	0	0	0
Phase 1a M	Parcel 3 Foundations	Generator	Generator Sets	Diesel	0	25	6	1	0	0	0	0	0	0
Phase 1a M	Parcel 3 Foundations	Tire Wash	Other Construction Equipment	Diesel	1	100	4	0.9	0	0	3.653414	0.022834	0	0
Phase 1a M	Parcel 3 Foundations	Excavator	Excavators	Diesel	1	131	8	0.6	0	0	5.604983	0.035031	0	0
Phase 1a M	Parcel 3 Foundations	Backhoe	Tractors/Loaders/Backhoes	Diesel	2	90	8	0.6	0	0	7.724361	0.048277	0	0
Phase 1a M	Parcel 3 Foundations	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	70	8	0.8	0	0	7.338038	0.045863	0	0
Phase 1a M	Parcel 3 Foundations	Gradall	Forklifts	Diesel	1	74	4	0.8	0	0	2.096582	0.013104	0	0
Phase 1a M	Parcel 3 Foundations	Crane	Cranes	Diesel	1	215	4	0.5	0	0	2.771172	0.01732	0	0
Phase 1a M	Parcel 3 Foundations	Concrete Pump	Pumps	Diesel	1	450	8	0.15	0	0	6.565706	0.039702	0	0
Phase 1a M	Parcel 3 Core and Shell	Generator	Generator Sets	Diesel	0	25	6	1	0	0	0	0	0	0
Phase 1a M	Parcel 3 Core and Shell	Tire Wash	Other Construction Equipment	Diesel	1	100	4	0.9	0	0	0	4.110091	0	0
Phase 1a M	Parcel 3 Core and Shell	Crane	Cranes	Diesel	1	600	8	0.2	0	0	0	6.960153	0	0
Phase 1a M	Parcel 3 Core and Shell	Gradall	Forklifts	Diesel	2	74	4	0.8	0	0	0	4.71731	0	0
Phase 1a M	Parcel 3 Core and Shell	Concrete Pump	Pumps	Diesel	0	450	6	0.225	0	0	0	0	0	0
Phase 1a M	Parcel 3 Core and Shell	Air Compressor	Air Compressors	Diesel	0	140	2	0.4	0	0	0	0	0	0
Phase 1a M	Parcel 3 Core and Shell	Boom Lift	Aerial Lifts	Diesel	0	50	6	0.2	0	0	0	0	0	0
Phase 1a M	Parcel 3 Tenant Improvements	Generator	Generator Sets	Diesel	0	25	6	0.85	0	0	0	0	0	0
Phase 1a M	Parcel 3 Tenant Improvements	Tire Wash	Other Construction Equipment	Diesel	1	100	4	0.9	0	0	0	1.872375	3.761816	0
Phase 1a M	Parcel 3 Tenant Improvements	Gradall	Forklifts	Diesel	1	74	4	0.8	0	0	0	1.074498	2.271117	0
Phase 1a M	Parcel 3 Landscaping	Excavator	Excavators	Diesel	1	25	8	0.9	0	0	0	0	1.079284	0
Phase 1a M	Parcel 3 Landscaping	Generator	Generator Sets	Diesel	0	25	6	0.5	0	0	0	0	0	0
Phase 1a M	Parcel 3 Landscaping	Tire Wash	Other Construction Equipment	Diesel	0	100	4	0.9	0	0	0	0	0	0
Phase 1a M	Parcel 3 Landscaping	Generator	Generator Sets	Diesel	0	25	6	0.5	0	0	0	0	0	0
Phase 1a M	Parcel 3 Landscaping	Tire Wash	Other Construction Equipment	Diesel	0	100	4	0.9	0	0	0	0	0	0
Phase 1a M	Parcel 3 Landscaping	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	90	8	1	0	0	0	0	2.159673	0
Phase 1a M	Parcel 3 Landscaping	Bob Cat	Tractors/Loaders/Backhoes	Diesel	2	70	8	0.8	0	0	0	0	5.180187	0
Phase 1b	Demolition	Excavator	Excavators	Diesel	4	131	8	0.9	0	10.08897	0	0	0	0
Phase 1b	Demolition	Generator	Generator Sets	Diesel	2	25	6	0.5	0	1.509398	0	0	0	0
Phase 1b	Demolition	Tire Wash	Other Construction Equipment	Diesel	2	100	4	0.9	0	2.192048	0	0	0	0
Phase 1b	Demolition	Concrete Crusher	Crushing/Proc. Equipment	Diesel	2	200	2	0	0	0	0	0	0	0
Phase 1b	Demolition	Bob Cat	Tractors/Loaders/Backhoes	Diesel	6	150	8	0.8	0	14.99766	0	0	0	0
Phase 1b	Demolition	Pressure Washer	Pressure Washers	Diesel	2	25	8	1	0	1.631782	0	0	0	0
Phase 1b	Demolition	Air Compressor	Air Compressors	Diesel	1	140	6	0.7	0	1.986177	0	0	0	0
Phase 1b	Grading and Utilities	Blade	Graders	Diesel	2	359	8	0.15	0	3.189187	3.189187	0	0	0
Phase 1b	Grading and Utilities	Scraper	Scrapers	Diesel	2	52	8	0.15	0	1.077332	1.077332	0	0	0
Phase 1b	Grading and Utilities	Loader	Tractors/Loaders/Backhoes	Diesel	4	100	4	0.9	0	5.230036	5.230036	0	0	0
Phase 1b	Grading and Utilities	Tire Wash	Other Construction Equipment	Diesel	2	100	4	0.9	0	2.968399	2.968399	0	0	0
Phase 1b	Grading and Utilities	Excavator	Excavators	Diesel	4	359	8	0.6	0	23.64665	23.64665	0	0	0
Phase 1b	Grading and Utilities	Backhoe	Tractors/Loaders/Backhoes	Diesel	4	350	8	0.6	0	22.44716	22.44716	0	0	0
Phase 1b	Grading and Utilities	Gradall	Forklifts	Diesel	4	350	4	0.6	0	6.0668	6.0668	0	0	0
Phase 1b	Grading and Utilities	Compactor	Other Construction Equipment	Diesel	4	250	0.5	0.2	0	0.379175	0.379175	0	0	0
Phase 1b	Grading and Utilities	Paver	Pavers	Diesel	2	250	8	0.01	0	0.15167	0.15167	0	0	0
Phase 1b	Grading and Utilities	Generator	Generator Sets	Diesel	1	600	2	0.1	0	0.801684	0.801684	0	0	0
Phase 1b C	South Garage 2023	Air Compressor	Air Compressors	Diesel	1	150	0.48	1	0	0	1.023489	0	0	0
Phase 1b C	South Garage 2023	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	0.054653	1	0	0	0.198571	0	0	0
Phase 1b C	South Garage 2023	Blade	Graders	Diesel	1	450	0	1	0	0	0	0	0	0
Phase 1b C	South Garage 2023	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	0.054653	1	0	0	0.113469	0	0	0
Phase 1b C	South Garage 2023	Boom Lift	Aerial Lifts	Diesel	1	40	0	1	0	0	0	0	0	0
Phase 1b C	South Garage 2023	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0	0	0	0	0	0

Phase 1b C	South Garage 2023	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0	0	0	0	0	0
Phase 1b C	South Garage 2023	Concrete Pump	Pumps	Diesel	1	450	0.451485	1	0	0	3.11871	0	0	0
Phase 1b C	South Garage 2023	Excavator	Excavators	Diesel	1	500	2.970297	1	0	0	15.83368	0	0	0
Phase 1b C	South Garage 2023	Generator	Generator Sets	Diesel	1	25	3.237624	1	0	0	3.427592	0	0	0
Phase 1b C	South Garage 2023	Gradall	Forklifts	Diesel	1	350	3	1	0	0	5.891797	0	0	0
Phase 1b C	South Garage 2023	Hydro/Crawler Crane	Cranes	Diesel	1	550	4.923267	1	0	0	22.03142	0	0	0
Phase 1b C	South Garage 2023	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	1.485149	1	0	0	1.676294	0	0	0
Phase 1b C	South Garage 2023	Paver	Pavers	Diesel	1	250	0	1	0	0	0	0	0	0
Phase 1b C	South Garage 2023	Pile Rig	Bore/Drill Rigs	Diesel	1	600	0.861386	1	0	0	7.25016	0	0	0
Phase 1b C	South Garage 2023	Pressure Washer	Pressure Washers	Diesel	1	25	0.156832	1	0	0	0.067311	0	0	0
Phase 1b C	South Garage 2023	Scraper	Scrapers	Diesel	1	600	0	1	0	0	0	0	0	0
Phase 1b C	South Garage 2023	Tire Wash	Other Construction Equipment	Diesel	1	100	1.44802	1	0	0	1.855249	0	0	0
Phase 1b C	South Garage 2024	Air Compressor	Air Compressors	Diesel	1	150	0.48	1	0	0	0	0.952554	0	0
Phase 1b C	South Garage 2024	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	0	1	0	0	0	0	0	0
Phase 1b C	South Garage 2024	Blade	Graders	Diesel	1	450	0	1	0	0	0	0	0	0
Phase 1b C	South Garage 2024	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	0	1	0	0	0	0	0	0
Phase 1b C	South Garage 2024	Boom Lift	Aerial Lifts	Diesel	1	40	4.737447	1	0	0	0	3.128697	0	0
Phase 1b C	South Garage 2024	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0	0	0	0	0	0
Phase 1b C	South Garage 2024	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0	0	0	0	0	0
Phase 1b C	South Garage 2024	Concrete Pump	Pumps	Diesel	1	450	0.6	1	0	0	0	3.731968	0	0
Phase 1b C	South Garage 2024	Excavator	Excavators	Diesel	1	500	0	1	0	0	0	0	0	0
Phase 1b C	South Garage 2024	Generator	Generator Sets	Diesel	1	25	0	1	0	0	0	0	0	0
Phase 1b C	South Garage 2024	Gradall	Forklifts	Diesel	1	350	3	1	0	0	0	5.483454	0	0
Phase 1b C	South Garage 2024	Hydro/Crawler Crane	Cranes	Diesel	1	550	3.68617	1	0	0	0	15.35221	0	0
Phase 1b C	South Garage 2024	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	0	1	0	0	0	0	0	0
Phase 1b C	South Garage 2024	Paver	Pavers	Diesel	1	250	0	1	0	0	0	0	0	0
Phase 1b C	South Garage 2024	Pile Rig	Bore/Drill Rigs	Diesel	1	600	0	1	0	0	0	0	0	0
Phase 1b C	South Garage 2024	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0	0	0	0	0	0
Phase 1b C	South Garage 2024	Scraper	Scrapers	Diesel	1	600	0	1	0	0	0	0	0	0
Phase 1b C	South Garage 2024	Tire Wash	Other Construction Equipment	Diesel	1	100	1.5	1	0	0	0	1.788651	0	0
Phase 1b C	Office Building 3 2023	Air Compressor	Air Compressors	Diesel	1	150	0.067119	1	0	0	0.125403	0	0	0
Phase 1b C	Office Building 3 2023	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	2.576271	1	0	0	8.201847	0	0	0
Phase 1b C	Office Building 3 2023	Blade	Graders	Diesel	1	450	0	1	0	0	0	0	0	0
Phase 1b C	Office Building 3 2023	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	2.576271	1	0	0	4.68677	0	0	0
Phase 1b C	Office Building 3 2023	Boom Lift	Aerial Lifts	Diesel	1	40	1.694915	1	0	0	1.053859	0	0	0
Phase 1b C	Office Building 3 2023	Compactor	Other Construction Equipment	Diesel	1	250	0.206102	1	0	0	0.532012	0	0	0
Phase 1b C	Office Building 3 2023	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0	0	0	0	0	0
Phase 1b C	Office Building 3 2023	Concrete Pump	Pumps	Diesel	1	450	0.121356	1	0	0	0.734538	0	0	0
Phase 1b C	Office Building 3 2023	Excavator	Excavators	Diesel	1	500	0.128814	1	0	0	0.60168	0	0	0
Phase 1b C	Office Building 3 2023	Generator	Generator Sets	Diesel	1	25	4.813559	1	0	0	4.465303	0	0	0
Phase 1b C	Office Building 3 2023	Gradall	Forklifts	Diesel	1	350	0.48	1	0	0	0.826018	0	0	0
Phase 1b C	Office Building 3 2023	Hydro/Crawler Crane	Cranes	Diesel	1	550	3.322034	1	0	0	13.02612	0	0	0
Phase 1b C	Office Building 3 2023	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	1.864407	1	0	0	1.843923	0	0	0
Phase 1b C	Office Building 3 2023	Paver	Pavers	Diesel	1	250	0	1	0	0	0	0	0	0
Phase 1b C	Office Building 3 2023	Pile Rig	Bore/Drill Rigs	Diesel	1	600	1.864407	1	0	0	13.7503	0	0	0
Phase 1b C	Office Building 3 2023	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0	0	0	0	0	0
Phase 1b C	Office Building 3 2023	Scraper	Scrapers	Diesel	1	600	0	1	0	0	0	0	0	0
Phase 1b C	Office Building 3 2023	Tire Wash	Other Construction Equipment	Diesel	1	100	1.5	1	0	0	1.683995	0	0	0
Phase 1b C	Office Building 3 2024	Air Compressor	Air Compressors	Diesel	1	150	0	1	0	0	0	0	0	0
Phase 1b C	Office Building 3 2024	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	0	1	0	0	0	0	0	0
Phase 1b C	Office Building 3 2024	Blade	Graders	Diesel	1	450	0	1	0	0	0	0	0	0
Phase 1b C	Office Building 3 2024	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	0	1	0	0	0	0	0	0
Phase 1b C	Office Building 3 2024	Boom Lift	Aerial Lifts	Diesel	1	40	6.858779	1	0	0	0	6.312617	0	0
Phase 1b C	Office Building 3 2024	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0	0	0	0	0	0

Phase 1b C	Office Building 3 2024	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0	0	0	0	0	0
Phase 1b C	Office Building 3 2024	Concrete Pump	Pumps	Diesel	1	450	0.005038	1	0	0	0	0.043672	0	0
Phase 1b C	Office Building 3 2024	Excavator	Excavators	Diesel	1	500	0	1	0	0	0	0	0	0
Phase 1b C	Office Building 3 2024	Generator	Generator Sets	Diesel	1	25	0	1	0	0	0	0	0	0
Phase 1b C	Office Building 3 2024	Gradall	Forklifts	Diesel	1	350	0.48	1	0	0	0	1.222694	0	0
Phase 1b C	Office Building 3 2024	Hydro/Crawler Crane	Cranes	Diesel	1	550	0	1	0	0	0	0	0	0
Phase 1b C	Office Building 3 2024	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	0	1	0	0	0	0	0	0
Phase 1b C	Office Building 3 2024	Paver	Pavers	Diesel	1	250	0	1	0	0	0	0	0	0
Phase 1b C	Office Building 3 2024	Pile Rig	Bore/Drill Rigs	Diesel	1	600	0	1	0	0	0	0	0	0
Phase 1b C	Office Building 3 2024	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0	0	0	0	0	0
Phase 1b C	Office Building 3 2024	Scraper	Scrapers	Diesel	1	600	0	1	0	0	0	0	0	0
Phase 1b C	Office Building 3 2024	Tire Wash	Other Construction Equipment	Diesel	1	100	1.5	1	0	0	0	2.492694	0	0
Phase 1b C	Office Building 3 2025	Air Compressor	Air Compressors	Diesel	1	150	0	1	0	0	0	0	0	0
Phase 1b C	Office Building 3 2025	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	0	1	0	0	0	0	0	0
Phase 1b C	Office Building 3 2025	Blade	Graders	Diesel	1	450	0	1	0	0	0	0	0	0
Phase 1b C	Office Building 3 2025	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	0	1	0	0	0	0	0	0
Phase 1b C	Office Building 3 2025	Boom Lift	Aerial Lifts	Diesel	1	40	0	1	0	0	0	0	0	0
Phase 1b C	Office Building 3 2025	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0	0	0	0	0	0
Phase 1b C	Office Building 3 2025	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0	0	0	0	0	0
Phase 1b C	Office Building 3 2025	Concrete Pump	Pumps	Diesel	1	450	0	1	0	0	0	0	0	0
Phase 1b C	Office Building 3 2025	Excavator	Excavators	Diesel	1	500	0	1	0	0	0	0	0	0
Phase 1b C	Office Building 3 2025	Generator	Generator Sets	Diesel	1	25	0	1	0	0	0	0	0	0
Phase 1b C	Office Building 3 2025	Gradall	Forklifts	Diesel	1	350	0.48	1	0	0	0	0	0.281073	0
Phase 1b C	Office Building 3 2025	Hydro/Crawler Crane	Cranes	Diesel	1	550	0	1	0	0	0	0	0	0
Phase 1b C	Office Building 3 2025	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	0	1	0	0	0	0	0	0
Phase 1b C	Office Building 3 2025	Paver	Pavers	Diesel	1	250	0	1	0	0	0	0	0	0
Phase 1b C	Office Building 3 2025	Pile Rig	Bore/Drill Rigs	Diesel	1	600	0	1	0	0	0	0	0	0
Phase 1b C	Office Building 3 2025	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0	0	0	0	0	0
Phase 1b C	Office Building 3 2025	Scraper	Scrapers	Diesel	1	600	0	1	0	0	0	0	0	0
Phase 1b C	Office Building 3 2025	Tire Wash	Other Construction Equipment	Diesel	1	100	1.5	1	0	0	0	0	0.545956	0
Phase 1b C	Office Building 1 2023	Air Compressor	Air Compressors	Diesel	1	150	0.065363	1	0	0	0.123503	0	0	0
Phase 1b C	Office Building 1 2023	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	2.24581	1	0	0	7.230576	0	0	0
Phase 1b C	Office Building 1 2023	Blade	Graders	Diesel	1	450	0	1	0	0	0	0	0	0
Phase 1b C	Office Building 1 2023	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	2.24581	1	0	0	4.131758	0	0	0
Phase 1b C	Office Building 1 2023	Boom Lift	Aerial Lifts	Diesel	1	40	2.480447	1	0	0	1.559712	0	0	0
Phase 1b C	Office Building 1 2023	Compactor	Other Construction Equipment	Diesel	1	250	0.179665	1	0	0	0.46901	0	0	0
Phase 1b C	Office Building 1 2023	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0	0	0	0	0	0
Phase 1b C	Office Building 1 2023	Concrete Pump	Pumps	Diesel	1	450	0.109274	1	0	0	0.668881	0	0	0
Phase 1b C	Office Building 1 2023	Excavator	Excavators	Diesel	1	500	0.112291	1	0	0	0.530428	0	0	0
Phase 1b C	Office Building 1 2023	Generator	Generator Sets	Diesel	1	25	4.424581	1	0	0	4.150845	0	0	0
Phase 1b C	Office Building 1 2023	Gradall	Forklifts	Diesel	1	350	0.48	1	0	0	0.835352	0	0	0
Phase 1b C	Office Building 1 2023	Hydro/Crawler Crane	Cranes	Diesel	1	550	2.916201	1	0	0	11.564	0	0	0
Phase 1b C	Office Building 1 2023	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	1.47486	1	0	0	1.475138	0	0	0
Phase 1b C	Office Building 1 2023	Paver	Pavers	Diesel	1	250	0	1	0	0	0	0	0	0
Phase 1b C	Office Building 1 2023	Pile Rig	Bore/Drill Rigs	Diesel	1	600	1.47486	1	0	0	11.00024	0	0	0
Phase 1b C	Office Building 1 2023	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0	0	0	0	0	0
Phase 1b C	Office Building 1 2023	Scraper	Scrapers	Diesel	1	600	0	1	0	0	0	0	0	0
Phase 1b C	Office Building 1 2023	Tire Wash	Other Construction Equipment	Diesel	1	100	1.5	1	0	0	1.703024	0	0	0
Phase 1b C	Office Building 1 2024	Air Compressor	Air Compressors	Diesel	1	150	0	1	0	0	0	0	0	0
Phase 1b C	Office Building 1 2024	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	0	1	0	0	0	0	0	0
Phase 1b C	Office Building 1 2024	Blade	Graders	Diesel	1	450	0	1	0	0	0	0	0	0
Phase 1b C	Office Building 1 2024	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	0	1	0	0	0	0	0	0
Phase 1b C	Office Building 1 2024	Boom Lift	Aerial Lifts	Diesel	1	40	6.554217	1	0	0	0	5.732994	0	0
Phase 1b C	Office Building 1 2024	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0	0	0	0	0	0

Phase 1b C	Office Building 1 2024	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0	0	0	0	0	0
Phase 1b C	Office Building 1 2024	Concrete Pump	Pumps	Diesel	1	450	0.005301	1	0	0	0	0.043672	0	0
Phase 1b C	Office Building 1 2024	Excavator	Excavators	Diesel	1	500	0	1	0	0	0	0	0	0
Phase 1b C	Office Building 1 2024	Generator	Generator Sets	Diesel	1	25	0	1	0	0	0	0	0	0
Phase 1b C	Office Building 1 2024	Gradall	Forklifts	Diesel	1	350	0.478072	1	0	0	0	1.157359	0	0
Phase 1b C	Office Building 1 2024	Hydro/Crawler Crane	Cranes	Diesel	1	550	0	1	0	0	0	0	0	0
Phase 1b C	Office Building 1 2024	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	0	1	0	0	0	0	0	0
Phase 1b C	Office Building 1 2024	Paver	Pavers	Diesel	1	250	0	1	0	0	0	0	0	0
Phase 1b C	Office Building 1 2024	Pile Rig	Bore/Drill Rigs	Diesel	1	600	0	1	0	0	0	0	0	0
Phase 1b C	Office Building 1 2024	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0	0	0	0	0	0
Phase 1b C	Office Building 1 2024	Scraper	Scrapers	Diesel	1	600	0	1	0	0	0	0	0	0
Phase 1b C	Office Building 1 2024	Tire Wash	Other Construction Equipment	Diesel	1	100	1.5	1	0	0	0	2.369011	0	0
Phase 1b C	Office Building 2 2023	Air Compressor	Air Compressors	Diesel	1	150	0.075669	1	0	0	0.125403	0	0	0
Phase 1b C	Office Building 2 2023	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	2.484076	1	0	0	7.014738	0	0	0
Phase 1b C	Office Building 2 2023	Blade	Graders	Diesel	1	450	0	1	0	0	0	0	0	0
Phase 1b C	Office Building 2 2023	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	2.484076	1	0	0	4.008422	0	0	0
Phase 1b C	Office Building 2 2023	Boom Lift	Aerial Lifts	Diesel	1	40	1.22293	1	0	0	0.67447	0	0	0
Phase 1b C	Office Building 2 2023	Compactor	Other Construction Equipment	Diesel	1	250	0.198726	1	0	0	0.45501	0	0	0
Phase 1b C	Office Building 2 2023	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0	0	0	0	0	0
Phase 1b C	Office Building 2 2023	Concrete Pump	Pumps	Diesel	1	450	0.124204	1	0	0	0.666829	0	0	0
Phase 1b C	Office Building 2 2023	Excavator	Excavators	Diesel	1	500	0.124204	1	0	0	0.514595	0	0	0
Phase 1b C	Office Building 2 2023	Generator	Generator Sets	Diesel	1	25	5.006369	1	0	0	4.1194	0	0	0
Phase 1b C	Office Building 2 2023	Gradall	Forklifts	Diesel	1	350	0.48	1	0	0	0.732683	0	0	0
Phase 1b C	Office Building 2 2023	Hydro/Crawler Crane	Cranes	Diesel	1	550	3.324841	1	0	0	11.564	0	0	0
Phase 1b C	Office Building 2 2023	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	1.681529	1	0	0	1.475138	0	0	0
Phase 1b C	Office Building 2 2023	Paver	Pavers	Diesel	1	250	0	1	0	0	0	0	0	0
Phase 1b C	Office Building 2 2023	Pile Rig	Bore/Drill Rigs	Diesel	1	600	1.681529	1	0	0	11.00024	0	0	0
Phase 1b C	Office Building 2 2023	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0	0	0	0	0	0
Phase 1b C	Office Building 2 2023	Scraper	Scrapers	Diesel	1	600	0	1	0	0	0	0	0	0
Phase 1b C	Office Building 2 2023	Tire Wash	Other Construction Equipment	Diesel	1	100	1.5	1	0	0	1.493713	0	0	0
Phase 1b C	Office Building 2 2024	Air Compressor	Air Compressors	Diesel	1	150	0	1	0	0	0	0	0	0
Phase 1b C	Office Building 2 2024	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	0	1	0	0	0	0	0	0
Phase 1b C	Office Building 2 2024	Blade	Graders	Diesel	1	450	0	1	0	0	0	0	0	0
Phase 1b C	Office Building 2 2024	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	0	1	0	0	0	0	0	0
Phase 1b C	Office Building 2 2024	Boom Lift	Aerial Lifts	Diesel	1	40	7.270992	1	0	0	0	6.692006	0	0
Phase 1b C	Office Building 2 2024	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0	0	0	0	0	0
Phase 1b C	Office Building 2 2024	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0	0	0	0	0	0
Phase 1b C	Office Building 2 2024	Concrete Pump	Pumps	Diesel	1	450	0.005038	1	0	0	0	0.043672	0	0
Phase 1b C	Office Building 2 2024	Excavator	Excavators	Diesel	1	500	0	1	0	0	0	0	0	0
Phase 1b C	Office Building 2 2024	Generator	Generator Sets	Diesel	1	25	0	1	0	0	0	0	0	0
Phase 1b C	Office Building 2 2024	Gradall	Forklifts	Diesel	1	350	0.48	1	0	0	0	1.222694	0	0
Phase 1b C	Office Building 2 2024	Hydro/Crawler Crane	Cranes	Diesel	1	550	0	1	0	0	0	0	0	0
Phase 1b C	Office Building 2 2024	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	0	1	0	0	0	0	0	0
Phase 1b C	Office Building 2 2024	Paver	Pavers	Diesel	1	250	0	1	0	0	0	0	0	0
Phase 1b C	Office Building 2 2024	Pile Rig	Bore/Drill Rigs	Diesel	1	600	0	1	0	0	0	0	0	0
Phase 1b C	Office Building 2 2024	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0	0	0	0	0	0
Phase 1b C	Office Building 2 2024	Scraper	Scrapers	Diesel	1	600	0	1	0	0	0	0	0	0
Phase 1b C	Office Building 2 2024	Tire Wash	Other Construction Equipment	Diesel	1	100	1.5	1	0	0	0	2.492694	0	0
Phase 1b C	Office Building 2 2025	Air Compressor	Air Compressors	Diesel	1	150	0	1	0	0	0	0	0	0
Phase 1b C	Office Building 2 2025	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	0	1	0	0	0	0	0	0
Phase 1b C	Office Building 2 2025	Blade	Graders	Diesel	1	450	0	1	0	0	0	0	0	0
Phase 1b C	Office Building 2 2025	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	0	1	0	0	0	0	0	0
Phase 1b C	Office Building 2 2025	Boom Lift	Aerial Lifts	Diesel	1	40	0	1	0	0	0	0	0	0
Phase 1b C	Office Building 2 2025	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0	0	0	0	0	0

Phase 1b C	Office Building 2 2025	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0	0	0	0	0	0
Phase 1b C	Office Building 2 2025	Concrete Pump	Pumps	Diesel	1	450	0	1	0	0	0	0	0	0
Phase 1b C	Office Building 2 2025	Excavator	Excavators	Diesel	1	500	0	1	0	0	0	0	0	0
Phase 1b C	Office Building 2 2025	Generator	Generator Sets	Diesel	1	25	0	1	0	0	0	0	0	0
Phase 1b C	Office Building 2 2025	Gradall	Forklifts	Diesel	1	350	0.48	1	0	0	0	0	0.031734	0
Phase 1b C	Office Building 2 2025	Hydro/Crawler Crane	Cranes	Diesel	1	550	0	1	0	0	0	0	0	0
Phase 1b C	Office Building 2 2025	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	0	1	0	0	0	0	0	0
Phase 1b C	Office Building 2 2025	Paver	Pavers	Diesel	1	250	0	1	0	0	0	0	0	0
Phase 1b C	Office Building 2 2025	Pile Rig	Bore/Drill Rigs	Diesel	1	600	0	1	0	0	0	0	0	0
Phase 1b C	Office Building 2 2025	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0	0	0	0	0	0
Phase 1b C	Office Building 2 2025	Scraper	Scrapers	Diesel	1	600	0	1	0	0	0	0	0	0
Phase 1b C	Office Building 2 2025	Tire Wash	Other Construction Equipment	Diesel	1	100	1.5	1	0	0	0	0	0.06164	0
Phase 1b C	Office Building 5 2023	Air Compressor	Air Compressors	Diesel	1	150	0.058812	1	0	0	0.125403	0	0	0
Phase 1b C	Office Building 5 2023	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	2.643564	1	0	0	9.604795	0	0	0
Phase 1b C	Office Building 5 2023	Blade	Graders	Diesel	1	450	0	1	0	0	0	0	0	0
Phase 1b C	Office Building 5 2023	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	2.643564	1	0	0	5.488454	0	0	0
Phase 1b C	Office Building 5 2023	Boom Lift	Aerial Lifts	Diesel	1	40	2.19802	1	0	0	1.559712	0	0	0
Phase 1b C	Office Building 5 2023	Compactor	Other Construction Equipment	Diesel	1	250	0.211485	1	0	0	0.623014	0	0	0
Phase 1b C	Office Building 5 2023	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0	0	0	0	0	0
Phase 1b C	Office Building 5 2023	Concrete Pump	Pumps	Diesel	1	450	0.117327	1	0	0	0.810454	0	0	0
Phase 1b C	Office Building 5 2023	Excavator	Excavators	Diesel	1	500	0.132178	1	0	0	0.704599	0	0	0
Phase 1b C	Office Building 5 2023	Generator	Generator Sets	Diesel	1	25	4.60396	1	0	0	4.874099	0	0	0
Phase 1b C	Office Building 5 2023	Gradall	Forklifts	Diesel	1	350	0.48	1	0	0	0.942687	0	0	0
Phase 1b C	Office Building 5 2023	Hydro/Crawler Crane	Cranes	Diesel	1	550	3.267327	1	0	0	14.62116	0	0	0
Phase 1b C	Office Building 5 2023	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	1.960396	1	0	0	2.212708	0	0	0
Phase 1b C	Office Building 5 2023	Paver	Pavers	Diesel	1	250	0	1	0	0	0	0	0	0
Phase 1b C	Office Building 5 2023	Pile Rig	Bore/Drill Rigs	Diesel	1	600	1.960396	1	0	0	16.50036	0	0	0
Phase 1b C	Office Building 5 2023	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0	0	0	0	0	0
Phase 1b C	Office Building 5 2023	Scraper	Scrapers	Diesel	1	600	0	1	0	0	0	0	0	0
Phase 1b C	Office Building 5 2023	Tire Wash	Other Construction Equipment	Diesel	1	100	1.5	1	0	0	1.921848	0	0	0
Phase 1b C	Office Building 5 2024	Air Compressor	Air Compressors	Diesel	1	150	0	1	0	0	0	0	0	0
Phase 1b C	Office Building 5 2024	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	0	1	0	0	0	0	0	0
Phase 1b C	Office Building 5 2024	Blade	Graders	Diesel	1	450	0	1	0	0	0	0	0	0
Phase 1b C	Office Building 5 2024	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	0	1	0	0	0	0	0	0
Phase 1b C	Office Building 5 2024	Boom Lift	Aerial Lifts	Diesel	1	40	6.194656	1	0	0	0	5.701378	0	0
Phase 1b C	Office Building 5 2024	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0	0	0	0	0	0
Phase 1b C	Office Building 5 2024	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0	0	0	0	0	0
Phase 1b C	Office Building 5 2024	Concrete Pump	Pumps	Diesel	1	450	0.004809	1	0	0	0	0.041687	0	0
Phase 1b C	Office Building 5 2024	Excavator	Excavators	Diesel	1	500	0	1	0	0	0	0	0	0
Phase 1b C	Office Building 5 2024	Generator	Generator Sets	Diesel	1	25	0	1	0	0	0	0	0	0
Phase 1b C	Office Building 5 2024	Gradall	Forklifts	Diesel	1	350	0.48	1	0	0	0	1.222694	0	0
Phase 1b C	Office Building 5 2024	Hydro/Crawler Crane	Cranes	Diesel	1	550	0	1	0	0	0	0	0	0
Phase 1b C	Office Building 5 2024	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	0	1	0	0	0	0	0	0
Phase 1b C	Office Building 5 2024	Paver	Pavers	Diesel	1	250	0	1	0	0	0	0	0	0
Phase 1b C	Office Building 5 2024	Pile Rig	Bore/Drill Rigs	Diesel	1	600	0	1	0	0	0	0	0	0
Phase 1b C	Office Building 5 2024	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0	0	0	0	0	0
Phase 1b C	Office Building 5 2024	Scraper	Scrapers	Diesel	1	600	0	1	0	0	0	0	0	0
Phase 1b C	Office Building 5 2024	Tire Wash	Other Construction Equipment	Diesel	1	100	1.5	1	0	0	0	2.492694	0	0
Phase 1b C	Office Building 5 2025	Air Compressor	Air Compressors	Diesel	1	150	0	1	0	0	0	0	0	0
Phase 1b C	Office Building 5 2025	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	0	1	0	0	0	0	0	0
Phase 1b C	Office Building 5 2025	Blade	Graders	Diesel	1	450	0	1	0	0	0	0	0	0
Phase 1b C	Office Building 5 2025	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	0	1	0	0	0	0	0	0
Phase 1b C	Office Building 5 2025	Boom Lift	Aerial Lifts	Diesel	1	40	0	1	0	0	0	0	0	0
Phase 1b C	Office Building 5 2025	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0	0	0	0	0	0

Phase 1b C	Office Building 5 2025	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0	0	0	0	0	0
Phase 1b C	Office Building 5 2025	Concrete Pump	Pumps	Diesel	1	450	0	1	0	0	0	0	0	0
Phase 1b C	Office Building 5 2025	Excavator	Excavators	Diesel	1	500	0	1	0	0	0	0	0	0
Phase 1b C	Office Building 5 2025	Generator	Generator Sets	Diesel	1	25	0	1	0	0	0	0	0	0
Phase 1b C	Office Building 5 2025	Gradall	Forklifts	Diesel	1	350	0.48	1	0	0	0	0	0.258406	0
Phase 1b C	Office Building 5 2025	Hydro/Crawler Crane	Cranes	Diesel	1	550	0	1	0	0	0	0	0	0
Phase 1b C	Office Building 5 2025	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	0	1	0	0	0	0	0	0
Phase 1b C	Office Building 5 2025	Paver	Pavers	Diesel	1	250	0	1	0	0	0	0	0	0
Phase 1b C	Office Building 5 2025	Pile Rig	Bore/Drill Rigs	Diesel	1	600	0	1	0	0	0	0	0	0
Phase 1b C	Office Building 5 2025	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0	0	0	0	0	0
Phase 1b C	Office Building 5 2025	Scraper	Scrapers	Diesel	1	600	0	1	0	0	0	0	0	0
Phase 1b C	Office Building 5 2025	Tire Wash	Other Construction Equipment	Diesel	1	100	1.5	1	0	0	0	0	0.501928	0
Phase 1b C	Office Building 6 2023	Air Compressor	Air Compressors	Diesel	1	150	0.062206	1	0	0	0.089302	0	0	0
Phase 1b C	Office Building 6 2023	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	3.926471	1	0	0	9.604795	0	0	0
Phase 1b C	Office Building 6 2023	Blade	Graders	Diesel	1	450	0	1	0	0	0	0	0	0
Phase 1b C	Office Building 6 2023	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	3.926471	1	0	0	5.488454	0	0	0
Phase 1b C	Office Building 6 2023	Boom Lift	Aerial Lifts	Diesel	1	40	0	1	0	0	0	0	0	0
Phase 1b C	Office Building 6 2023	Compactor	Other Construction Equipment	Diesel	1	250	0.314118	1	0	0	0.623014	0	0	0
Phase 1b C	Office Building 6 2023	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0	0	0	0	0	0
Phase 1b C	Office Building 6 2023	Concrete Pump	Pumps	Diesel	1	450	0.157941	1	0	0	0.734538	0	0	0
Phase 1b C	Office Building 6 2023	Excavator	Excavators	Diesel	1	500	0.196324	1	0	0	0.704599	0	0	0
Phase 1b C	Office Building 6 2023	Generator	Generator Sets	Diesel	1	25	6	1	0	0	4.276629	0	0	0
Phase 1b C	Office Building 6 2023	Gradall	Forklifts	Diesel	1	350	0.48	1	0	0	0.634681	0	0	0
Phase 1b C	Office Building 6 2023	Hydro/Crawler Crane	Cranes	Diesel	1	550	4.897059	1	0	0	14.75408	0	0	0
Phase 1b C	Office Building 6 2023	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	3	1	0	0	2.279759	0	0	0
Phase 1b C	Office Building 6 2023	Paver	Pavers	Diesel	1	250	0	1	0	0	0	0	0	0
Phase 1b C	Office Building 6 2023	Pile Rig	Bore/Drill Rigs	Diesel	1	600	3	1	0	0	17.00037	0	0	0
Phase 1b C	Office Building 6 2023	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0	0	0	0	0	0
Phase 1b C	Office Building 6 2023	Scraper	Scrapers	Diesel	1	600	0	1	0	0	0	0	0	0
Phase 1b C	Office Building 6 2023	Tire Wash	Other Construction Equipment	Diesel	1	100	1.5	1	0	0	1.293917	0	0	0
Phase 1b C	Office Building 6 2024	Air Compressor	Air Compressors	Diesel	1	150	0.013053	1	0	0	0	0.036101	0	0
Phase 1b C	Office Building 6 2024	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	0	1	0	0	0	0	0	0
Phase 1b C	Office Building 6 2024	Blade	Graders	Diesel	1	450	0	1	0	0	0	0	0	0
Phase 1b C	Office Building 6 2024	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	0	1	0	0	0	0	0	0
Phase 1b C	Office Building 6 2024	Boom Lift	Aerial Lifts	Diesel	1	40	8.003817	1	0	0	0	7.366476	0	0
Phase 1b C	Office Building 6 2024	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0	0	0	0	0	0
Phase 1b C	Office Building 6 2024	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0	0	0	0	0	0
Phase 1b C	Office Building 6 2024	Concrete Pump	Pumps	Diesel	1	450	0.013969	1	0	0	0	0.12109	0	0
Phase 1b C	Office Building 6 2024	Excavator	Excavators	Diesel	1	500	0	1	0	0	0	0	0	0
Phase 1b C	Office Building 6 2024	Generator	Generator Sets	Diesel	1	25	0.435115	1	0	0	0	0.59747	0	0
Phase 1b C	Office Building 6 2024	Gradall	Forklifts	Diesel	1	350	0.48	1	0	0	0	1.222694	0	0
Phase 1b C	Office Building 6 2024	Hydro/Crawler Crane	Cranes	Diesel	1	550	0	1	0	0	0	0	0	0
Phase 1b C	Office Building 6 2024	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	0	1	0	0	0	0	0	0
Phase 1b C	Office Building 6 2024	Paver	Pavers	Diesel	1	250	0	1	0	0	0	0	0	0
Phase 1b C	Office Building 6 2024	Pile Rig	Bore/Drill Rigs	Diesel	1	600	0	1	0	0	0	0	0	0
Phase 1b C	Office Building 6 2024	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0	0	0	0	0	0
Phase 1b C	Office Building 6 2024	Scraper	Scrapers	Diesel	1	600	0	1	0	0	0	0	0	0
Phase 1b C	Office Building 6 2024	Tire Wash	Other Construction Equipment	Diesel	1	100	1.5	1	0	0	0	2.492694	0	0
Phase 1b C	Office Building 6 2025	Air Compressor	Air Compressors	Diesel	1	150	0	1	0	0	0	0	0	0
Phase 1b C	Office Building 6 2025	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	0	1	0	0	0	0	0	0
Phase 1b C	Office Building 6 2025	Blade	Graders	Diesel	1	450	0	1	0	0	0	0	0	0
Phase 1b C	Office Building 6 2025	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	0	1	0	0	0	0	0	0
Phase 1b C	Office Building 6 2025	Boom Lift	Aerial Lifts	Diesel	1	40	0	1	0	0	0	0	0	0
Phase 1b C	Office Building 6 2025	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0	0	0	0	0	0

Phase 1b C	Office Building 6 2025	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0	0	0	0	0	0
Phase 1b C	Office Building 6 2025	Concrete Pump	Pumps	Diesel	1	450	0	1	0	0	0	0	0	0
Phase 1b C	Office Building 6 2025	Excavator	Excavators	Diesel	1	500	0	1	0	0	0	0	0	0
Phase 1b C	Office Building 6 2025	Generator	Generator Sets	Diesel	1	25	0	1	0	0	0	0	0	0
Phase 1b C	Office Building 6 2025	Gradall	Forklifts	Diesel	1	350	0.48	1	0	0	0	0	0.553079	0
Phase 1b C	Office Building 6 2025	Hydro/Crawler Crane	Cranes	Diesel	1	550	0	1	0	0	0	0	0	0
Phase 1b C	Office Building 6 2025	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	0	1	0	0	0	0	0	0
Phase 1b C	Office Building 6 2025	Paver	Pavers	Diesel	1	250	0	1	0	0	0	0	0	0
Phase 1b C	Office Building 6 2025	Pile Rig	Bore/Drill Rigs	Diesel	1	600	0	1	0	0	0	0	0	0
Phase 1b C	Office Building 6 2025	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0	0	0	0	0	0
Phase 1b C	Office Building 6 2025	Scraper	Scrapers	Diesel	1	600	0	1	0	0	0	0	0	0
Phase 1b C	Office Building 6 2025	Tire Wash	Other Construction Equipment	Diesel	1	100	1.5	1	0	0	0	0	1.074301	0
Phase 1b N	Parcel 7 Foundations	Pile Rig	Bore/Drill Rigs	Diesel	0	600	8	0.4	0	0	0	0	0	0
Phase 1b N	Parcel 7 Foundations	Generator	Generator Sets	Diesel	0	25	6	1	0	0	0	0	0	0
Phase 1b N	Parcel 7 Foundations	Tire Wash	Other Construction Equipment	Diesel	1	100	4	0.9	0	0	0	2.648725	0	0
Phase 1b N	Parcel 7 Foundations	Excavator	Excavators	Diesel	1	131	8	0.6	0	0	0	4.063613	0	0
Phase 1b N	Parcel 7 Foundations	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	90	8	0.6	0	0	0	2.800081	0	0
Phase 1b N	Parcel 7 Foundations	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	70	8	0.8	0	0	0	5.320078	0	0
Phase 1b N	Parcel 7 Foundations	Gradall	Forklifts	Diesel	1	74	4	0.8	0	0	0	1.520022	0	0
Phase 1b N	Parcel 7 Foundations	Crane	Cranes	Diesel	1	215	4	0.5	0	0	0	2.0091	0	0
Phase 1b N	Parcel 7 Foundations	Concrete Pump	Pumps	Diesel	1	450	0.25	0.5	0	0	0	0.47973	0	0
Phase 1b N	Parcel 7 Core and Shell	Generator	Generator Sets	Diesel	0	25	6	1	0	0	0	0	0	0
Phase 1b N	Parcel 7 Core and Shell	Tire Wash	Other Construction Equipment	Diesel	1	100	4	0.9	0	0	0	2.945565	0	0
Phase 1b N	Parcel 7 Core and Shell	Crane	Cranes	Diesel	1	600	8	0.2	0	0	0	4.98811	0	0
Phase 1b N	Parcel 7 Core and Shell	Gradall	Forklifts	Diesel	1	74	4	0.8	0	0	0	1.69037	0	0
Phase 1b N	Parcel 7 Core and Shell	Concrete Pump	Pumps	Diesel	0	450	6	0.225	0	0	0	0	0	0
Phase 1b N	Parcel 7 Core and Shell	Air Compressor	Air Compressors	Diesel	0	140	2	0.4	0	0	0	0	0	0
Phase 1b N	Parcel 7 Core and Shell	Boom Lift	Aerial Lifts	Diesel	0	50	6	0.2	0	0	0	0	0	0
Phase 1b N	Parcel 7 Tenant Improvements	Generator	Generator Sets	Diesel	0	25	6	0.85	0	0	0	0	0	0
Phase 1b N	Parcel 7 Core and Shell	Boom Lift	Aerial Lifts	Diesel	0	50	6	0.2	0	0	0	0	0	0
Phase 1b N	Parcel 7 Tenant Improvements	Generator	Generator Sets	Diesel	0	25	6	0.85	0	0	0	0	0	0
Phase 1b N	Parcel 7 Tenant Improvements	Tire Wash	Other Construction Equipment	Diesel	1	100	4	0.9	0	0	0	0.388175	3.61388	0
Phase 1b N	Parcel 7 Tenant Improvements	Gradall	Forklifts	Diesel	1	74	4	0.8	0	0	0	0.222762	2.181803	0
Phase 1b N	Parcel 7 Landscaping	Excavator	Excavators	Diesel	1	25	8	0.9	0	0	0	0	1.079284	0
Phase 1b N	Parcel 7 Landscaping	Generator	Generator Sets	Diesel	0	25	6	0.5	0	0	0	0	0	0
Phase 1b N	Parcel 7 Landscaping	Tire Wash	Other Construction Equipment	Diesel	1	100	4	0.9	0	0	0	0	1.22576	0
Phase 1b N	Parcel 7 Landscaping	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	90	8	0.6	0	0	0	0	1.295804	0
Phase 1b N	Parcel 7 Landscaping	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	70	8	0.8	0	0	0	0	2.590094	0
Phase 1b N	Parcel 6 Foundations	Pile Rig	Bore/Drill Rigs	Diesel	0	600	8	0.4	0	0	0	0	0	0
Phase 1b N	Parcel 6 Foundations	Generator	Generator Sets	Diesel	0	25	6	1	0	0	0	0	0	0
Phase 1b N	Parcel 6 Foundations	Tire Wash	Other Construction Equipment	Diesel	1	100	4	0.9	0	0	0	2.648725	0	0
Phase 1b N	Parcel 6 Foundations	Excavator	Excavators	Diesel	1	131	8	0.6	0	0	0	4.063613	0	0
Phase 1b N	Parcel 6 Foundations	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	90	8	0.6	0	0	0	2.800081	0	0
Phase 1b N	Parcel 6 Foundations	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	70	8	0.8	0	0	0	5.320078	0	0
Phase 1b N	Parcel 6 Foundations	Gradall	Forklifts	Diesel	1	74	4	0.8	0	0	0	1.520022	0	0
Phase 1b N	Parcel 6 Foundations	Crane	Cranes	Diesel	1	215	4	0.5	0	0	0	2.0091	0	0
Phase 1b N	Parcel 6 Foundations	Concrete Pump	Pumps	Diesel	1	450	0.5	0.5	0	0	0	0.95946	0	0
Phase 1b N	Parcel 6 Core and Shell	Generator	Generator Sets	Diesel	0	25	6	1	0	0	0	0	0	0
Phase 1b N	Parcel 6 Core and Shell	Tire Wash	Other Construction Equipment	Diesel	1	100	4	0.9	0	0	0	1.849541	1.014422	0
Phase 1b N	Parcel 6 Core and Shell	Crane	Cranes	Diesel	1	600	8	0.2	0	0	0	3.132069	1.803011	0
Phase 1b N	Parcel 6 Core and Shell	Gradall	Forklifts	Diesel	2	74	4	0.8	0	0	0	2.12279	1.224872	0
Phase 1b N	Parcel 6 Core and Shell	Concrete Pump	Pumps	Diesel	0	450	6	0.225	0	0	0	0	0	0
Phase 1b N	Parcel 6 Core and Shell	Air Compressor	Air Compressors	Diesel	0	140	2	0.4	0	0	0	0	0	0
Phase 1b N	Parcel 6 Core and Shell	Boom Lift	Aerial Lifts	Diesel	0	50	6	0.2	0	0	0	0	0	0
Phase 1b N	Parcel 6 Tenant Improvements	Generator	Generator Sets	Diesel	0	25	6	0.85	0	0	0	0	0	0
Phase 1b N	Parcel 6 Tenant Improvements	Tire Wash	Other Construction Equipment	Diesel	1	100	4	0.9	0	0	0	0	3.95202	0

Phase 1b N	Parcel 6 Tenant Improvements	Gradall	Forklifts	Diesel	1	74	4	0.8	0	0	0	0	2.385948	0
Phase 1b N	Parcel 6 Landscaping	Excavator	Excavators	Diesel	1	25	8	0.9	0	0	0	0	0.502425	0.595467
Phase 1b N	Parcel 6 Landscaping	Generator	Generator Sets	Diesel	0	25	6	0.5	0	0	0	0	0	0
Phase 1b N	Parcel 6 Landscaping	Tire Wash	Other Construction Equipment	Diesel	0	100	4	0.9	0	0	0	0	0	0
Phase 1b N	Parcel 6 Landscaping	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	90	8	0.6	0	0	0	0	0.603219	0.714926
Phase 1b N	Parcel 6 Landscaping	Bob Cat	Tractors/Loaders/Backhoes	Diesel	2	70	8	0.8	0	0	0	0	2.411466	2.858034
Phase 2 Mi	Grading and Utilities	Blade	Graders	Diesel	1	359	8	0.15	0	0	0.539709	0	0	0
Phase 2 Mi	Grading and Utilities	Scraper	Scrapers	Diesel	1	52	8	0.15	0	0	0.182318	0	0	0
Phase 2 Mi	Grading and Utilities	Loader	Tractors/Loaders/Backhoes	Diesel	2	100	4	0.9	0	0	0.885083	0	0	0
Phase 2 Mi	Grading and Utilities	Tire Wash	Other Construction Equipment	Diesel	1	100	4	0.9	0	0	0.502344	0	0	0
Phase 2 Mi	Grading and Utilities	Excavator	Excavators	Diesel	2	359	8	0.6	0	0	4.001742	0	0	0
Phase 2 Mi	Grading and Utilities	Backhoe	Tractors/Loaders/Backhoes	Diesel	2	350	8	0.6	0	0	3.79875	0	0	0
Phase 2 Mi	Grading and Utilities	Gradall	Forklifts	Diesel	2	350	4	0.6	0	0	1.026689	0	0	0
Phase 2 Mi	Grading and Utilities	Compactor	Other Construction Equipment	Diesel	2	250	0.5	0.2	0	0	0.064168	0	0	0
Phase 2 Mi	Grading and Utilities	Paver	Pavers	Diesel	1	250	8	0.01	0	0	0.025667	0	0	0
Phase 2 Mi	Grading and Utilities	Generator	Generator Sets	Diesel	1	600	2	0.1	0	0	0.271339	0	0	0
Phase 2 Mi	Tunnel Construction	Crane	Cranes	Diesel	1	290	6	0.35	0	0	4.292699	2.134085	0	0
Phase 2 Mi	Tunnel Construction	Excavator	Excavators	Diesel	2	170	6	0.45	0	0	8.949989	4.449423	0	0
Phase 2 Mi	Tunnel Construction	Loader	Tractors/Loaders/Backhoes	Diesel	1	250	6	0.45	0	0	6.070446	3.017879	0	0
Phase 2 Mi	Tunnel Construction	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	103	6	0.4	0	0	2.417215	1.201701	0	0
Phase 2 Mi	Tunnel Construction	Gradall	Forklifts	Diesel	1	130	6	0.35	0	0	1.400841	0.696418	0	0
Phase 2 Mi	Tunnel Construction	Compressor	Air Compressors	Diesel	2	50	6	0.3	0	0	4.183426	2.07976	0	0
Phase 2 Mi	Foundations	Pile Rig	Bore/Drill Rigs	Diesel	0	600	8	0.4	0	0	0	0	0	0
Phase 2 Mi	Foundations	Generator	Generator Sets	Diesel	2	25	6	1	0	0	0	1.509398	5.979156	0
Phase 2 Mi	Foundations	Tire Wash	Other Construction Equipment	Diesel	2	100	4	0.9	0	0	0	1.096024	4.184492	0
Phase 2 Mi	Foundations	Excavator	Excavators	Diesel	2	131	8	0.6	0	0	0	1.681495	6.529384	0
Phase 2 Mi	Foundations	Backhoe	Tractors/Loaders/Backhoes	Diesel	2	90	8	0.6	0	0	0	1.158654	4.423606	0
Phase 2 Mi	Foundations	Bob Cat	Tractors/Loaders/Backhoes	Diesel	2	70	8	0.8	0	0	0	2.201411	8.842044	0
Phase 2 Mi	Foundations	Gradall	Forklifts	Diesel	2	74	4	0.8	0	0	0	0.628975	2.526298	0
Phase 2 Mi	Foundations	Crane	Cranes	Diesel	2	215	4	0.5	0	0	0	0.831352	3.331345	0
Phase 2 Mi	Foundations	Concrete Pump	Pumps	Diesel	3	450	0.5	0.5	0	0	0	0.595527	2.183397	0
Phase 2 Mi	Core and Shell	Generator	Generator Sets	Diesel	2	25	6	1	0	0	0	0	8.394976	0
Phase 2 Mi	Core and Shell	Tire Wash	Other Construction Equipment	Diesel	2	100	4	0.9	0	0	0	0	5.875196	0
Phase 2 Mi	Core and Shell	Crane	Cranes	Diesel	2	600	8	0.2	0	0	0	0	10.44244	0
Phase 2 Mi	Core and Shell	Gradall	Forklifts	Diesel	3	74	4	0.8	0	0	0	0	5.320537	0
Phase 2 Mi	Core and Shell	Concrete Pump	Pumps	Diesel	0	450	6	0.45	0	0	0	0	0	0
Phase 2 Mi	Core and Shell	Air Compressor	Air Compressors	Diesel	0	140	2	0.8	0	0	0	0	0	0
Phase 2 Mi	Core and Shell	Boom Lift	Aerial Lifts	Diesel	0	50	6	0.4	0	0	0	0	0	0
Phase 2 Mi	Tenant Improvements	Generator	Generator Sets	Diesel	2	25	6	0.85	0	0	0	0	1.283405	8.932496
Phase 2 Mi	Tenant Improvements	Tire Wash	Other Construction Equipment	Diesel	2	100	4	0.9	0	0	0	0	1.05669	7.354562
Phase 2 Mi	Tenant Improvements	Gradall	Forklifts	Diesel	1	74	4	0.8	0	0	0	0	0.318977	2.22008
Phase 2 Mi	Landscaping	Excavator	Excavators	Diesel	1	25	8	0.9	0	0	0	0	0	1.097892
Phase 2 Mi	Landscaping	Generator	Generator Sets	Diesel	0	25	6	0.5	0	0	0	0	0	0
Phase 2 Mi	Landscaping	Tire Wash	Other Construction Equipment	Diesel	1	100	4	0.9	0	0	0	0	0	1.246894
Phase 2 Mi	Landscaping	Backhoe	Tractors/Loaders/Backhoes	Diesel	2	90	8	0.6	0	0	0	0	0	2.636291
Phase 2 Mi	Landscaping	Bob Cat	Tractors/Loaders/Backhoes	Diesel	3	70	8	0.8	0	0	0	0	0	7.904251
Alternate 1	Demolition	Excavator	Excavators	Diesel	1	131	8	0.9	0	0	0	1.156028	0	0
Alternate 1	Demolition	Generator	Generator Sets	Diesel	1	25	6	0.5	0	0	0	0.345904	0	0
Alternate 1	Demolition	Tire Wash	Other Construction Equipment	Diesel	2	100	4	0.9	0	0	0	1.004689	0	0
Alternate 1	Demolition	Bob Cat	Tractors/Loaders/Backhoes	Diesel	2	70	8	0.8	0	0	0	2.017961	0	0
Alternate 1	Demolition	Pressure Washer	Pressure Washers	Diesel	2	25	8	1	0	0	0	0.7479	0	0
Alternate 1	Demolition	Air Compressor	Air Compressors	Diesel	1	140	6	0.7	0	0	0	0.910331	0	0
Alternate 1	Grading and Utilities	Loader	Tractors/Loaders/Backhoes	Diesel	2	100	4	0.9	0	0	0	0.040231	0.819186	0
Alternate 1	Grading and Utilities	Tire Wash	Other Construction Equipment	Diesel	1	100	4	0.9	0	0	0	0.022834	0.464944	0

Alternate 1	Grading and Utilities	Excavator	Excavators	Diesel	1	359	8	0.6	0	0	0	0.090949	1.943703	0
Alternate 1	Grading and Utilities	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	90	8	0.6	0	0	0	0.024139	0.491512	0
Alternate 1	Grading and Utilities	Gradall	Forklifts	Diesel	1	74	4	0.6	0	0	0	0.009828	0.210525	0
Alternate 1	Grading and Utilities	Compactor	Other Construction Equipment	Diesel	1	250	0.5	0.2	0	0	0	0.001458	0.031167	0
Alternate 1	Grading and Utilities	Paver	Pavers	Diesel	1	250	8	0.01	0	0	0	0.001167	0.024934	0
Alternate 1	Grading and Utilities	Generator	Generator Sets	Diesel	1	600	2	0.1	0	0	0	0.012334	0.263587	0
Alternate 1	Foundations	Generator	Generator Sets	Diesel	1	25	6	1	0	0	0	0	0.664351	0
Alternate 1	Foundations	Tire Wash	Other Construction Equipment	Diesel	1	100	4	0.9	0	0	0	0	0.464944	0
Alternate 1	Foundations	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	90	8	0.6	0	0	0	0	0.491512	0
Alternate 1	Foundations	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	70	8	0.8	0	0	0	0	0.982449	0
Alternate 1	Foundations	Gradall	Forklifts	Diesel	1	74	4	0.8	0	0	0	0	0.2807	0
Alternate 1	Foundations	Concrete Pump	Pumps	Diesel	1	450	6	0.3	0	0	0	0	1.164478	0
Alternate 1	Core and Shell	Generator	Generator Sets	Diesel	1	25	6	1	0	0	0	0	1.298503	0
Alternate 1	Core and Shell	Tire Wash	Other Construction Equipment	Diesel	1	100	4	0.9	0	0	0	0	0.908753	0
Alternate 1	Core and Shell	Gradall	Forklifts	Diesel	1	74	4	0.8	0	0	0	0	0.548641	0
Alternate 1	Core and Shell	Concrete Pump	Pumps	Diesel	1	450	6	0.45	0	0	0	0	3.414038	0
Alternate 1	Tenant Improvements	Generator	Generator Sets	Diesel	1	25	6	0.85	0	0	0	0	0.847047	0
Alternate 1	Tenant Improvements	Tire Wash	Other Construction Equipment	Diesel	2	100	4	0.9	0	0	0	0	1.394831	0
Alternate 1	Tenant Improvements	Gradall	Forklifts	Diesel	1	74	4	0.8	0	0	0	0	0.42105	0

Equipment Information										EF		
PHASE	SUBPHASE	EQUIPMENT	CALEEMOD_EQUIPMENT	FUEL	NUMBER	HP	DAILYHRS	UTILIZATION	LF	Tier 2	2021	2022
Phase 1a	Demolition	Excavator	Excavators	Diesel	4	131	8	0.9	0.38	0.19	13	84
Phase 1a	Demolition	Generator	Generator Sets	Diesel	2	25	6	0.5	0.74	0.29	13	84
Phase 1a	Demolition	Tire Wash	Other Construction Equipment	Diesel	2	100	4	0.9	0.42	0.23	13	84
Phase 1a	Demolition	Concrete Crusher	Crushing/Proc. Equipment	Diesel	2	200	2	0	0.78	0.12	13	84
Phase 1a	Demolition	Bob Cat	Tractors/Loaders/Backhoes	Diesel	6	150	8	0.8	0.37	0.19	13	84
Phase 1a	Demolition	Pressure Washer	Pressure Washers	Diesel	2	25	8	1	0.3	0.29	13	84
Phase 1a	Demolition	Air Compressor	Air Compressors	Diesel	1	140	6	0.7	0.48	0.19	13	84
Phase 1a	Grading and Utilities	Blade	Graders	Diesel	2	359	8	0.15	0.41	0.12	0	143
Phase 1a	Grading and Utilities	Scraper	Scrapers	Diesel	2	52	8	0.15	0.48	0.23	0	143
Phase 1a	Grading and Utilities	Loader	Tractors/Loaders/Backhoes	Diesel	4	100	4	0.9	0.37	0.23	0	143
Phase 1a	Grading and Utilities	Tire Wash	Other Construction Equipment	Diesel	2	100	4	0.9	0.42	0.23	0	143
Phase 1a	Grading and Utilities	Excavator	Excavators	Diesel	4	359	8	0.6	0.38	0.12	0	143
Phase 1a	Grading and Utilities	Backhoe	Tractors/Loaders/Backhoes	Diesel	4	350	8	0.6	0.37	0.12	0	143
Phase 1a	Grading and Utilities	Gradall	Forklifts	Diesel	4	350	4	0.6	0.2	0.12	0	143
Phase 1a	Grading and Utilities	Compactor	Other Construction Equipment	Diesel	4	250	0.5	0.2	0.42	0.12	0	143
Phase 1a	Grading and Utilities	Paver	Pavers	Diesel	2	250	8	0.01	0.42	0.12	0	143
Phase 1a	Grading and Utilities	Generator	Generator Sets	Diesel	1	600	2	0.1	0.74	0.12	0	143
Phase 1a Office	North Garage 2022	Air Compressor	Air Compressors	Diesel	1	150	0.47	1	0.48	0.19	0	42
Phase 1a Office	North Garage 2022	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	0	1	0.37	0.12	0	42
Phase 1a Office	North Garage 2022	Blade	Graders	Diesel	1	450	0	1	0.41	0.12	0	42
Phase 1a Office	North Garage 2022	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	0	1	0.37	0.12	0	42
Phase 1a Office	North Garage 2022	Boom Lift	Aerial Lifts	Diesel	1	40	0	1	0.31	0.29	0	42
Phase 1a Office	North Garage 2022	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0.42	0.12	0	42
Phase 1a Office	North Garage 2022	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.78	0.12	0	42
Phase 1a Office	North Garage 2022	Concrete Pump	Pumps	Diesel	1	450	0.33	1	0.74	0.12	0	42
Phase 1a Office	North Garage 2022	Excavator	Excavators	Diesel	1	500	11.71429	1	0.38	0.12	0	42
Phase 1a Office	North Garage 2022	Generator	Generator Sets	Diesel	1	25	4.714286	1	0.74	0.29	0	42
Phase 1a Office	North Garage 2022	Gradall	Forklifts	Diesel	1	350	2.928571	1	0.2	0.12	0	42
Phase 1a Office	North Garage 2022	Hydro/Crawler Crane	Cranes	Diesel	1	550	2.928571	1	0.29	0.12	0	42
Phase 1a Office	North Garage 2022	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	5.857143	1	0.37	0.23	0	42
Phase 1a Office	North Garage 2022	Paver	Pavers	Diesel	1	250	0	1	0.42	0.12	0	42
Phase 1a Office	North Garage 2022	Pile Rig	Bore/Drill Rigs	Diesel	1	600	4.142857	1	0.5	0.12	0	42
Phase 1a Office	North Garage 2022	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0.3	0.29	0	42
Phase 1a Office	North Garage 2022	Scraper	Scrapers	Diesel	1	600	0	1	0.48	0.12	0	42
Phase 1a Office	North Garage 2022	Tire Wash	Other Construction Equipment	Diesel	1	100	1.178571	1	0.42	0.23	0	42
Phase 1a Office	North Garage 2023	Air Compressor	Air Compressors	Diesel	1	150	0.48186	1	0.48	0.19	0	0
Phase 1a Office	North Garage 2023	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	0.03907	1	0.37	0.12	0	0
Phase 1a Office	North Garage 2023	Blade	Graders	Diesel	1	450	0	1	0.41	0.12	0	0
Phase 1a Office	North Garage 2023	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	0.03907	1	0.37	0.12	0	0
Phase 1a Office	North Garage 2023	Boom Lift	Aerial Lifts	Diesel	1	40	1.335814	1	0.31	0.29	0	0
Phase 1a Office	North Garage 2023	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0.42	0.12	0	0
Phase 1a Office	North Garage 2023	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.78	0.12	0	0
Phase 1a Office	North Garage 2023	Concrete Pump	Pumps	Diesel	1	450	0.57907	1	0.74	0.12	0	0
Phase 1a Office	North Garage 2023	Excavator	Excavators	Diesel	1	500	0.465116	1	0.38	0.12	0	0
Phase 1a Office	North Garage 2023	Generator	Generator Sets	Diesel	1	25	1.767442	1	0.74	0.29	0	0

Phase 1a Office	North Garage 2023	Gradall	Forklifts	Diesel	1	350	3.011628	1	0.2	0.12	0	0
Phase 1a Office	North Garage 2023	Hydro/Crawler Crane	Cranes	Diesel	1	550	5.02907	1	0.29	0.12	0	0
Phase 1a Office	North Garage 2023	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	0.232558	1	0.37	0.23	0	0
Phase 1a Office	North Garage 2023	Paver	Pavers	Diesel	1	250	0	1	0.42	0.12	0	0
Phase 1a Office	North Garage 2023	Pile Rig	Bore/Drill Rigs	Diesel	1	600	0	1	0.5	0.12	0	0
Phase 1a Office	North Garage 2023	Pressure Washer	Pressure Washers	Diesel	1	25	0.122791	1	0.3	0.29	0	0
Phase 1a Office	North Garage 2023	Scraper	Scrapers	Diesel	1	600	0	1	0.48	0.12	0	0
Phase 1a Office	North Garage 2023	Tire Wash	Other Construction Equipment	Diesel	1	100	1.505814	1	0.42	0.23	0	0
Phase 1a Office	Office Building 4 2023	Air Compressor	Air Compressors	Diesel	1	150	0.049091	1	0.48	0.19	0	0
Phase 1a Office	Office Building 4 2023	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	1.264463	1	0.37	0.12	0	0
Phase 1a Office	Office Building 4 2023	Blade	Graders	Diesel	1	450	0	1	0.41	0.12	0	0
Phase 1a Office	Office Building 4 2023	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	1.264463	1	0.37	0.12	0	0
Phase 1a Office	Office Building 4 2023	Boom Lift	Aerial Lifts	Diesel	1	40	7.438017	1	0.31	0.29	0	0
Phase 1a Office	Office Building 4 2023	Compactor	Other Construction Equipment	Diesel	1	250	0.101157	1	0.42	0.12	0	0
Phase 1a Office	Office Building 4 2023	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.78	0.12	0	0
Phase 1a Office	Office Building 4 2023	Concrete Pump	Pumps	Diesel	1	450	0.075372	1	0.74	0.12	0	0
Phase 1a Office	Office Building 4 2023	Excavator	Excavators	Diesel	1	500	0.063223	1	0.38	0.12	0	0
Phase 1a Office	Office Building 4 2023	Generator	Generator Sets	Diesel	1	25	2.900826	1	0.74	0.29	0	0
Phase 1a Office	Office Building 4 2023	Gradall	Forklifts	Diesel	1	350	0.48	1	0.2	0.12	0	0
Phase 1a Office	Office Building 4 2023	Hydro/Crawler Crane	Cranes	Diesel	1	550	1.809917	1	0.29	0.12	0	0
Phase 1a Office	Office Building 4 2023	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	0.719008	1	0.37	0.23	0	0
Phase 1a Office	Office Building 4 2023	Paver	Pavers	Diesel	1	250	0	1	0.42	0.12	0	0
Phase 1a Office	Office Building 4 2023	Pile Rig	Bore/Drill Rigs	Diesel	1	600	0.719008	1	0.5	0.12	0	0
Phase 1a Office	Office Building 4 2023	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0.3	0.29	0	0
Phase 1a Office	Office Building 4 2023	Scraper	Scrapers	Diesel	1	600	0	1	0.48	0.12	0	0
Phase 1a Office	Office Building 4 2023	Tire Wash	Other Construction Equipment	Diesel	1	100	1.5	1	0.42	0.23	0	0
Phase 1a Office	Office Building 4 2024	Air Compressor	Air Compressors	Diesel	1	150	0	1	0.48	0.19	0	0
Phase 1a Office	Office Building 4 2024	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	0	1	0.37	0.12	0	0
Phase 1a Office	Office Building 4 2024	Blade	Graders	Diesel	1	450	0	1	0.41	0.12	0	0
Phase 1a Office	Office Building 4 2024	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	0	1	0.37	0.12	0	0
Phase 1a Office	Office Building 4 2024	Boom Lift	Aerial Lifts	Diesel	1	40	1.405797	1	0.31	0.29	0	0
Phase 1a Office	Office Building 4 2024	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0.42	0.12	0	0
Phase 1a Office	Office Building 4 2024	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.78	0.12	0	0
Phase 1a Office	Office Building 4 2024	Concrete Pump	Pumps	Diesel	1	450	0	1	0.74	0.12	0	0
Phase 1a Office	Office Building 4 2024	Excavator	Excavators	Diesel	1	500	0	1	0.38	0.12	0	0
Phase 1a Office	Office Building 4 2024	Generator	Generator Sets	Diesel	1	25	0	1	0.74	0.29	0	0
Phase 1a Office	Office Building 4 2024	Gradall	Forklifts	Diesel	1	350	0.48	1	0.2	0.12	0	0
Phase 1a Office	Office Building 4 2024	Hydro/Crawler Crane	Cranes	Diesel	1	550	0	1	0.29	0.12	0	0
Phase 1a Office	Office Building 4 2024	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	0	1	0.37	0.23	0	0
Phase 1a Office	Office Building 4 2024	Paver	Pavers	Diesel	1	250	0	1	0.42	0.12	0	0
Phase 1a Office	Office Building 4 2024	Pile Rig	Bore/Drill Rigs	Diesel	1	600	0	1	0.5	0.12	0	0
Phase 1a Office	Office Building 4 2024	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0.3	0.29	0	0
Phase 1a Office	Office Building 4 2024	Scraper	Scrapers	Diesel	1	600	0	1	0.48	0.12	0	0
Phase 1a Office	Office Building 4 2024	Tire Wash	Other Construction Equipment	Diesel	1	100	1.5	1	0.42	0.23	0	0
Phase 1a Office	Meeting, Collaboration, Park 2022	Air Compressor	Air Compressors	Diesel	1	150	0	1	0.48	0.19	0	42
Phase 1a Office	Meeting, Collaboration, Park 2022	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	5.857143	1	0.37	0.12	0	42
Phase 1a Office	Meeting, Collaboration, Park 2022	Blade	Graders	Diesel	1	450	0	1	0.41	0.12	0	42

Phase 1a Office	Meeting, Collaboration, Park 2022	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	5.857143	1	0.37	0.12	0	42
Phase 1a Office	Meeting, Collaboration, Park 2022	Boom Lift	Aerial Lifts	Diesel	1	40	0	1	0.31	0.29	0	42
Phase 1a Office	Meeting, Collaboration, Park 2022	Compactor	Other Construction Equipment	Diesel	1	250	0.314286	1	0.42	0.12	0	42
Phase 1a Office	Meeting, Collaboration, Park 2022	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.78	0.12	0	42
Phase 1a Office	Meeting, Collaboration, Park 2022	Concrete Pump	Pumps	Diesel	1	450	0	1	0.74	0.12	0	42
Phase 1a Office	Meeting, Collaboration, Park 2022	Excavator	Excavators	Diesel	1	500	23.42857	1	0.38	0.12	0	42
Phase 1a Office	Meeting, Collaboration, Park 2022	Generator	Generator Sets	Diesel	1	25	5.857143	1	0.74	0.29	0	42
Phase 1a Office	Meeting, Collaboration, Park 2022	Gradall	Forklifts	Diesel	1	350	8.785714	1	0.2	0.12	0	42
Phase 1a Office	Meeting, Collaboration, Park 2022	Hydro/Crawler Crane	Cranes	Diesel	1	550	1.571429	1	0.29	0.12	0	42
Phase 1a Office	Meeting, Collaboration, Park 2022	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	4.392857	1	0.37	0.23	0	42
Phase 1a Office	Meeting, Collaboration, Park 2022	Paver	Pavers	Diesel	1	250	0	1	0.42	0.12	0	42
Phase 1a Office	Meeting, Collaboration, Park 2022	Pile Rig	Bore/Drill Rigs	Diesel	1	600	3.142857	1	0.5	0.12	0	42
Phase 1a Office	Meeting, Collaboration, Park 2022	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0.3	0.29	0	42
Phase 1a Office	Meeting, Collaboration, Park 2022	Scraper	Scrapers	Diesel	1	600	0	1	0.48	0.12	0	42
Phase 1a Office	Meeting, Collaboration, Park 2022	Tire Wash	Other Construction Equipment	Diesel	1	100	1.464286	1	0.42	0.23	0	42
Phase 1a Office	Meeting, Collaboration, Park 2023	Air Compressor	Air Compressors	Diesel	1	150	0.304615	1	0.48	0.19	0	0
Phase 1a Office	Meeting, Collaboration, Park 2023	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	3.276923	1	0.37	0.12	0	0
Phase 1a Office	Meeting, Collaboration, Park 2023	Blade	Graders	Diesel	1	450	0	1	0.41	0.12	0	0
Phase 1a Office	Meeting, Collaboration, Park 2023	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	3.276923	1	0.37	0.12	0	0
Phase 1a Office	Meeting, Collaboration, Park 2023	Boom Lift	Aerial Lifts	Diesel	1	40	0.888462	1	0.31	0.29	0	0
Phase 1a Office	Meeting, Collaboration, Park 2023	Compactor	Other Construction Equipment	Diesel	1	250	0.152308	1	0.42	0.12	0	0
Phase 1a Office	Meeting, Collaboration, Park 2023	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.78	0.12	0	0
Phase 1a Office	Meeting, Collaboration, Park 2023	Concrete Pump	Pumps	Diesel	1	450	0.304615	1	0.74	0.12	0	0
Phase 1a Office	Meeting, Collaboration, Park 2023	Excavator	Excavators	Diesel	1	500	5.492308	1	0.38	0.12	0	0
Phase 1a Office	Meeting, Collaboration, Park 2023	Generator	Generator Sets	Diesel	1	25	6.715385	1	0.74	0.29	0	0
Phase 1a Office	Meeting, Collaboration, Park 2023	Gradall	Forklifts	Diesel	1	350	7.661538	1	0.2	0.12	0	0
Phase 1a Office	Meeting, Collaboration, Park 2023	Hydro/Crawler Crane	Cranes	Diesel	1	550	7.246154	1	0.29	0.12	0	0
Phase 1a Office	Meeting, Collaboration, Park 2023	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	1.828846	1	0.37	0.23	0	0
Phase 1a Office	Meeting, Collaboration, Park 2023	Paver	Pavers	Diesel	1	250	0	1	0.42	0.12	0	0
Phase 1a Office	Meeting, Collaboration, Park 2023	Pile Rig	Bore/Drill Rigs	Diesel	1	600	2.007692	1	0.5	0.12	0	0
Phase 1a Office	Meeting, Collaboration, Park 2023	Pressure Washer	Pressure Washers	Diesel	1	25	0.152308	1	0.3	0.29	0	0
Phase 1a Office	Meeting, Collaboration, Park 2023	Scraper	Scrapers	Diesel	1	600	0	1	0.48	0.12	0	0
Phase 1a Office	Meeting, Collaboration, Park 2023	Tire Wash	Other Construction Equipment	Diesel	1	100	0.819231	1	0.42	0.23	0	0
Phase 1a Office	Meeting, Collaboration, Park 2024	Air Compressor	Air Compressors	Diesel	1	150	0	1	0.48	0.19	0	0
Phase 1a Office	Meeting, Collaboration, Park 2024	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	0	1	0.37	0.12	0	0
Phase 1a Office	Meeting, Collaboration, Park 2024	Blade	Graders	Diesel	1	450	0	1	0.41	0.12	0	0
Phase 1a Office	Meeting, Collaboration, Park 2024	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	0	1	0.37	0.12	0	0
Phase 1a Office	Meeting, Collaboration, Park 2024	Boom Lift	Aerial Lifts	Diesel	1	40	19.30534	1	0.31	0.29	0	0
Phase 1a Office	Meeting, Collaboration, Park 2024	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0.42	0.12	0	0
Phase 1a Office	Meeting, Collaboration, Park 2024	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.78	0.12	0	0
Phase 1a Office	Meeting, Collaboration, Park 2024	Concrete Pump	Pumps	Diesel	1	450	0	1	0.74	0.12	0	0
Phase 1a Office	Meeting, Collaboration, Park 2024	Excavator	Excavators	Diesel	1	500	0	1	0.38	0.12	0	0
Phase 1a Office	Meeting, Collaboration, Park 2024	Generator	Generator Sets	Diesel	1	25	0	1	0.74	0.29	0	0
Phase 1a Office	Meeting, Collaboration, Park 2024	Gradall	Forklifts	Diesel	1	350	10.25954	1	0.2	0.12	0	0
Phase 1a Office	Meeting, Collaboration, Park 2024	Hydro/Crawler Crane	Cranes	Diesel	1	550	0.503817	1	0.29	0.12	0	0
Phase 1a Office	Meeting, Collaboration, Park 2024	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	0	1	0.37	0.23	0	0
Phase 1a Office	Meeting, Collaboration, Park 2024	Paver	Pavers	Diesel	1	250	0	1	0.42	0.12	0	0

Phase 1a Office	Meeting, Collaboration, Park 2024	Pile Rig	Bore/Drill Rigs	Diesel	1	600	0	1	0.5	0.12	0	0
Phase 1a Office	Meeting, Collaboration, Park 2024	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0.3	0.29	0	0
Phase 1a Office	Meeting, Collaboration, Park 2024	Scraper	Scrapers	Diesel	1	600	0	1	0.48	0.12	0	0
Phase 1a Office	Meeting, Collaboration, Park 2024	Tire Wash	Other Construction Equipment	Diesel	1	100	0	1	0.42	0.23	0	0
Phase 1a Office	Meeting, Collaboration, Park 2025	Air Compressor	Air Compressors	Diesel	1	150	0	1	0.48	0.19	0	0
Phase 1a Office	Meeting, Collaboration, Park 2025	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	0	1	0.37	0.12	0	0
Phase 1a Office	Meeting, Collaboration, Park 2025	Blade	Graders	Diesel	1	450	0	1	0.41	0.12	0	0
Phase 1a Office	Meeting, Collaboration, Park 2025	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	0	1	0.37	0.12	0	0
Phase 1a Office	Meeting, Collaboration, Park 2025	Boom Lift	Aerial Lifts	Diesel	1	40	9.425287	1	0.31	0.29	0	0
Phase 1a Office	Meeting, Collaboration, Park 2025	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0.42	0.12	0	0
Phase 1a Office	Meeting, Collaboration, Park 2025	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.78	0.12	0	0
Phase 1a Office	Meeting, Collaboration, Park 2025	Concrete Pump	Pumps	Diesel	1	450	0	1	0.74	0.12	0	0
Phase 1a Office	Meeting, Collaboration, Park 2025	Excavator	Excavators	Diesel	1	500	0	1	0.38	0.12	0	0
Phase 1a Office	Meeting, Collaboration, Park 2025	Generator	Generator Sets	Diesel	1	25	0	1	0.74	0.29	0	0
Phase 1a Office	Meeting, Collaboration, Park 2025	Gradall	Forklifts	Diesel	1	350	11.77011	1	0.2	0.12	0	0
Phase 1a Office	Meeting, Collaboration, Park 2025	Hydro/Crawler Crane	Cranes	Diesel	1	550	0.770115	1	0.29	0.12	0	0
Phase 1a Office	Meeting, Collaboration, Park 2025	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	0	1	0.37	0.23	0	0
Phase 1a Office	Meeting, Collaboration, Park 2025	Paver	Pavers	Diesel	1	250	0	1	0.42	0.12	0	0
Phase 1a Office	Meeting, Collaboration, Park 2025	Pile Rig	Bore/Drill Rigs	Diesel	1	600	0	1	0.5	0.12	0	0
Phase 1a Office	Meeting, Collaboration, Park 2025	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0.3	0.29	0	0
Phase 1a Office	Meeting, Collaboration, Park 2025	Scraper	Scrapers	Diesel	1	600	0	1	0.48	0.12	0	0
Phase 1a Office	Meeting, Collaboration, Park 2025	Tire Wash	Other Construction Equipment	Diesel	1	100	0	1	0.42	0.23	0	0
Phase 1a Office	Meeting, Collaboration, Park 2026	Air Compressor	Air Compressors	Diesel	1	150	0	1	0.48	0.19	0	0
Phase 1a Office	Meeting, Collaboration, Park 2026	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	0	1	0.37	0.12	0	0
Phase 1a Office	Meeting, Collaboration, Park 2026	Blade	Graders	Diesel	1	450	0	1	0.41	0.12	0	0
Phase 1a Office	Meeting, Collaboration, Park 2026	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	0	1	0.37	0.12	0	0
Phase 1a Office	Meeting, Collaboration, Park 2026	Boom Lift	Aerial Lifts	Diesel	1	40	0	1	0.31	0.29	0	0
Phase 1a Office	Meeting, Collaboration, Park 2026	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0.42	0.12	0	0
Phase 1a Office	Meeting, Collaboration, Park 2026	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.78	0.12	0	0
Phase 1a Office	Meeting, Collaboration, Park 2026	Concrete Pump	Pumps	Diesel	1	450	0	1	0.74	0.12	0	0
Phase 1a Office	Meeting, Collaboration, Park 2026	Excavator	Excavators	Diesel	1	500	0	1	0.38	0.12	0	0
Phase 1a Office	Meeting, Collaboration, Park 2026	Generator	Generator Sets	Diesel	1	25	0	1	0.74	0.29	0	0
Phase 1a Office	Meeting, Collaboration, Park 2026	Gradall	Forklifts	Diesel	1	350	11.73913	1	0.2	0.12	0	0
Phase 1a Office	Meeting, Collaboration, Park 2026	Hydro/Crawler Crane	Cranes	Diesel	1	550	5.869565	1	0.29	0.12	0	0
Phase 1a Office	Meeting, Collaboration, Park 2026	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	0	1	0.37	0.23	0	0
Phase 1a Office	Meeting, Collaboration, Park 2026	Paver	Pavers	Diesel	1	250	0	1	0.42	0.12	0	0
Phase 1a Office	Meeting, Collaboration, Park 2026	Pile Rig	Bore/Drill Rigs	Diesel	1	600	0	1	0.5	0.12	0	0
Phase 1a Office	Meeting, Collaboration, Park 2026	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0.3	0.29	0	0
Phase 1a Office	Meeting, Collaboration, Park 2026	Scraper	Scrapers	Diesel	1	600	0	1	0.48	0.12	0	0
Phase 1a Office	Meeting, Collaboration, Park 2026	Tire Wash	Other Construction Equipment	Diesel	1	100	0	1	0.42	0.23	0	0
Phase 1a Office	Hotel Excavation 2022	Air Compressor	Air Compressors	Diesel	1	150	2.642857	1	0.48	0.19	0	42
Phase 1a Office	Hotel Excavation 2022	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	2.642857	1	0.37	0.12	0	42
Phase 1a Office	Hotel Excavation 2022	Blade	Graders	Diesel	1	450	0	1	0.41	0.12	0	42
Phase 1a Office	Hotel Excavation 2022	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	2.928571	1	0.37	0.12	0	42
Phase 1a Office	Hotel Excavation 2022	Boom Lift	Aerial Lifts	Diesel	1	40	1.464286	1	0.31	0.29	0	42
Phase 1a Office	Hotel Excavation 2022	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0.42	0.12	0	42
Phase 1a Office	Hotel Excavation 2022	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.78	0.12	0	42

Phase 1a Office	Hotel Excavation 2022	Concrete Pump	Pumps	Diesel	1	450	0.422857	1	0.74	0.12	0	42
Phase 1a Office	Hotel Excavation 2022	Excavator	Excavators	Diesel	1	500	11.71429	1	0.38	0.12	0	42
Phase 1a Office	Hotel Excavation 2022	Generator	Generator Sets	Diesel	1	25	5.857143	1	0.74	0.29	0	42
Phase 1a Office	Hotel Excavation 2022	Gradall	Forklifts	Diesel	1	350	5.857143	1	0.2	0.12	0	42
Phase 1a Office	Hotel Excavation 2022	Hydro/Crawler Crane	Cranes	Diesel	1	550	2.642857	1	0.29	0.12	0	42
Phase 1a Office	Hotel Excavation 2022	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	11.71429	1	0.37	0.23	0	42
Phase 1a Office	Hotel Excavation 2022	Paver	Pavers	Diesel	1	250	0	1	0.42	0.12	0	42
Phase 1a Office	Hotel Excavation 2022	Pile Rig	Bore/Drill Rigs	Diesel	1	600	10.57143	1	0.5	0.12	0	42
Phase 1a Office	Hotel Excavation 2022	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0.3	0.29	0	42
Phase 1a Office	Hotel Excavation 2022	Scraper	Scrapers	Diesel	1	600	0	1	0.48	0.12	0	42
Phase 1a Office	Hotel Excavation 2022	Tire Wash	Other Construction Equipment	Diesel	1	100	2.928571	1	0.42	0.23	0	42
Phase 1a Office	Hotel Excavation 2023	Air Compressor	Air Compressors	Diesel	1	150	2.311284	1	0.48	0.19	0	0
Phase 1a Office	Hotel Excavation 2023	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	0	1	0.37	0.12	0	0
Phase 1a Office	Hotel Excavation 2023	Blade	Graders	Diesel	1	450	0	1	0.41	0.12	0	0
Phase 1a Office	Hotel Excavation 2023	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	0.700389	1	0.37	0.12	0	0
Phase 1a Office	Hotel Excavation 2023	Boom Lift	Aerial Lifts	Diesel	1	40	0.350195	1	0.31	0.29	0	0
Phase 1a Office	Hotel Excavation 2023	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0.42	0.12	0	0
Phase 1a Office	Hotel Excavation 2023	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.78	0.12	0	0
Phase 1a Office	Hotel Excavation 2023	Concrete Pump	Pumps	Diesel	1	450	2.311284	1	0.74	0.12	0	0
Phase 1a Office	Hotel Excavation 2023	Excavator	Excavators	Diesel	1	500	2.801556	1	0.38	0.12	0	0
Phase 1a Office	Hotel Excavation 2023	Generator	Generator Sets	Diesel	1	25	10.64591	1	0.74	0.29	0	0
Phase 1a Office	Hotel Excavation 2023	Gradall	Forklifts	Diesel	1	350	10.64591	1	0.2	0.12	0	0
Phase 1a Office	Hotel Excavation 2023	Hydro/Crawler Crane	Cranes	Diesel	1	550	9.245136	1	0.29	0.12	0	0
Phase 1a Office	Hotel Excavation 2023	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	2.801556	1	0.37	0.23	0	0
Phase 1a Office	Hotel Excavation 2023	Paver	Pavers	Diesel	1	250	0	1	0.42	0.12	0	0
Phase 1a Office	Hotel Excavation 2023	Pile Rig	Bore/Drill Rigs	Diesel	1	600	0	1	0.5	0.12	0	0
Phase 1a Office	Hotel Excavation 2023	Pressure Washer	Pressure Washers	Diesel	1	25	0.046226	1	0.3	0.29	0	0
Phase 1a Office	Hotel Excavation 2023	Scraper	Scrapers	Diesel	1	600	0	1	0.48	0.12	0	0
Phase 1a Office	Hotel Excavation 2023	Tire Wash	Other Construction Equipment	Diesel	1	100	1.856031	1	0.42	0.23	0	0
Phase 1a Office	Hotel Construction 2024	Air Compressor	Air Compressors	Diesel	1	150	3	1	0.48	0.19	0	0
Phase 1a Office	Hotel Construction 2024	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	0	1	0.37	0.12	0	0
Phase 1a Office	Hotel Construction 2024	Blade	Graders	Diesel	1	450	0	1	0.41	0.12	0	0
Phase 1a Office	Hotel Construction 2024	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	0	1	0.37	0.12	0	0
Phase 1a Office	Hotel Construction 2024	Boom Lift	Aerial Lifts	Diesel	1	40	20.91429	1	0.31	0.29	0	0
Phase 1a Office	Hotel Construction 2024	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0.42	0.12	0	0
Phase 1a Office	Hotel Construction 2024	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.78	0.12	0	0
Phase 1a Office	Hotel Construction 2024	Concrete Pump	Pumps	Diesel	1	450	3	1	0.74	0.12	0	0
Phase 1a Office	Hotel Construction 2024	Excavator	Excavators	Diesel	1	500	0	1	0.38	0.12	0	0
Phase 1a Office	Hotel Construction 2024	Generator	Generator Sets	Diesel	1	25	0	1	0.74	0.29	0	0
Phase 1a Office	Hotel Construction 2024	Gradall	Forklifts	Diesel	1	350	12	1	0.2	0.12	0	0
Phase 1a Office	Hotel Construction 2024	Hydro/Crawler Crane	Cranes	Diesel	1	550	0	1	0.29	0.12	0	0
Phase 1a Office	Hotel Construction 2024	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	0	1	0.37	0.23	0	0
Phase 1a Office	Hotel Construction 2024	Paver	Pavers	Diesel	1	250	0	1	0.42	0.12	0	0
Phase 1a Office	Hotel Construction 2024	Pile Rig	Bore/Drill Rigs	Diesel	1	600	0	1	0.5	0.12	0	0
Phase 1a Office	Hotel Construction 2024	Pressure Washer	Pressure Washers	Diesel	1	25	0.06	1	0.3	0.29	0	0
Phase 1a Office	Hotel Construction 2024	Scraper	Scrapers	Diesel	1	600	0	1	0.48	0.12	0	0
Phase 1a Office	Hotel Construction 2024	Tire Wash	Other Construction Equipment	Diesel	1	100	1.5	1	0.42	0.23	0	0

Phase 1a Office	Hotel Construction 2025	Air Compressor	Air Compressors	Diesel	1	150	0.837662	1	0.48	0.19	0	0
Phase 1a Office	Hotel Construction 2025	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	0	1	0.37	0.12	0	0
Phase 1a Office	Hotel Construction 2025	Blade	Graders	Diesel	1	450	0	1	0.41	0.12	0	0
Phase 1a Office	Hotel Construction 2025	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	0	1	0.37	0.12	0	0
Phase 1a Office	Hotel Construction 2025	Boom Lift	Aerial Lifts	Diesel	1	40	20.18182	1	0.31	0.29	0	0
Phase 1a Office	Hotel Construction 2025	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0.42	0.12	0	0
Phase 1a Office	Hotel Construction 2025	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.78	0.12	0	0
Phase 1a Office	Hotel Construction 2025	Concrete Pump	Pumps	Diesel	1	450	0.837662	1	0.74	0.12	0	0
Phase 1a Office	Hotel Construction 2025	Excavator	Excavators	Diesel	1	500	0	1	0.38	0.12	0	0
Phase 1a Office	Hotel Construction 2025	Generator	Generator Sets	Diesel	1	25	0	1	0.74	0.29	0	0
Phase 1a Office	Hotel Construction 2025	Gradall	Forklifts	Diesel	1	350	12.07792	1	0.2	0.12	0	0
Phase 1a Office	Hotel Construction 2025	Hydro/Crawler Crane	Cranes	Diesel	1	550	0	1	0.29	0.12	0	0
Phase 1a Office	Hotel Construction 2025	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	0	1	0.37	0.23	0	0
Phase 1a Office	Hotel Construction 2025	Paver	Pavers	Diesel	1	250	0	1	0.42	0.12	0	0
Phase 1a Office	Hotel Construction 2025	Pile Rig	Bore/Drill Rigs	Diesel	1	600	0	1	0.5	0.12	0	0
Phase 1a Office	Hotel Construction 2025	Pressure Washer	Pressure Washers	Diesel	1	25	0.016753	1	0.3	0.29	0	0
Phase 1a Office	Hotel Construction 2025	Scraper	Scrapers	Diesel	1	600	0	1	0.48	0.12	0	0
Phase 1a Office	Hotel Construction 2025	Tire Wash	Other Construction Equipment	Diesel	1	100	1.50974	1	0.42	0.23	0	0
Phase 1a Office	Town Square 2023	Air Compressor	Air Compressors	Diesel	1	150	0	1	0.48	0.19	0	0
Phase 1a Office	Town Square 2023	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	0	1	0.37	0.12	0	0
Phase 1a Office	Town Square 2023	Blade	Graders	Diesel	1	450	0	1	0.41	0.12	0	0
Phase 1a Office	Town Square 2023	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	3	1	0.37	0.12	0	0
Phase 1a Office	Town Square 2023	Boom Lift	Aerial Lifts	Diesel	1	40	1.5	1	0.31	0.29	0	0
Phase 1a Office	Town Square 2023	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0.42	0.12	0	0
Phase 1a Office	Town Square 2023	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.78	0.12	0	0
Phase 1a Office	Town Square 2023	Concrete Pump	Pumps	Diesel	1	450	0	1	0.74	0.12	0	0
Phase 1a Office	Town Square 2023	Excavator	Excavators	Diesel	1	500	12	1	0.38	0.12	0	0
Phase 1a Office	Town Square 2023	Generator	Generator Sets	Diesel	1	25	6	1	0.74	0.29	0	0
Phase 1a Office	Town Square 2023	Gradall	Forklifts	Diesel	1	350	6	1	0.2	0.12	0	0
Phase 1a Office	Town Square 2023	Hydro/Crawler Crane	Cranes	Diesel	1	550	0	1	0.29	0.12	0	0
Phase 1a Office	Town Square 2023	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	12	1	0.37	0.23	0	0
Phase 1a Office	Town Square 2023	Paver	Pavers	Diesel	1	250	0	1	0.42	0.12	0	0
Phase 1a Office	Town Square 2023	Pile Rig	Bore/Drill Rigs	Diesel	1	600	0	1	0.5	0.12	0	0
Phase 1a Office	Town Square 2023	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0.3	0.29	0	0
Phase 1a Office	Town Square 2023	Scraper	Scrapers	Diesel	1	600	0	1	0.48	0.12	0	0
Phase 1a Office	Town Square 2023	Tire Wash	Other Construction Equipment	Diesel	1	100	3	1	0.42	0.23	0	0
Phase 1a Office	Town Square 2024	Air Compressor	Air Compressors	Diesel	1	150	0	1	0.48	0.19	0	0
Phase 1a Office	Town Square 2024	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	0	1	0.37	0.12	0	0
Phase 1a Office	Town Square 2024	Blade	Graders	Diesel	1	450	0	1	0.41	0.12	0	0
Phase 1a Office	Town Square 2024	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	0.996183	1	0.37	0.12	0	0
Phase 1a Office	Town Square 2024	Boom Lift	Aerial Lifts	Diesel	1	40	1.872137	1	0.31	0.29	0	0
Phase 1a Office	Town Square 2024	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0.42	0.12	0	0
Phase 1a Office	Town Square 2024	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.78	0.12	0	0
Phase 1a Office	Town Square 2024	Concrete Pump	Pumps	Diesel	1	450	0.020382	1	0.74	0.12	0	0
Phase 1a Office	Town Square 2024	Excavator	Excavators	Diesel	1	500	3.984733	1	0.38	0.12	0	0
Phase 1a Office	Town Square 2024	Generator	Generator Sets	Diesel	1	25	0.549618	1	0.74	0.29	0	0
Phase 1a Office	Town Square 2024	Gradall	Forklifts	Diesel	1	350	5.267176	1	0.2	0.12	0	0

Phase 1a Office	Town Square 2024	Hydro/Crawler Crane	Cranes	Diesel	1	550	1.03145	1	0.29	0.12	0	0
Phase 1a Office	Town Square 2024	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	3.984733	1	0.37	0.23	0	0
Phase 1a Office	Town Square 2024	Paver	Pavers	Diesel	1	250	0	1	0.42	0.12	0	0
Phase 1a Office	Town Square 2024	Pile Rig	Bore/Drill Rigs	Diesel	1	600	0	1	0.5	0.12	0	0
Phase 1a Office	Town Square 2024	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0.3	0.29	0	0
Phase 1a Office	Town Square 2024	Scraper	Scrapers	Diesel	1	600	0	1	0.48	0.12	0	0
Phase 1a Office	Town Square 2024	Tire Wash	Other Construction Equipment	Diesel	1	100	0.996183	1	0.42	0.23	0	0
Phase 1a Office	Town Square 2025	Air Compressor	Air Compressors	Diesel	1	150	0	1	0.48	0.19	0	0
Phase 1a Office	Town Square 2025	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	0	1	0.37	0.12	0	0
Phase 1a Office	Town Square 2025	Blade	Graders	Diesel	1	450	0	1	0.41	0.12	0	0
Phase 1a Office	Town Square 2025	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	0	1	0.37	0.12	0	0
Phase 1a Office	Town Square 2025	Boom Lift	Aerial Lifts	Diesel	1	40	0	1	0.31	0.29	0	0
Phase 1a Office	Town Square 2025	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0.42	0.12	0	0
Phase 1a Office	Town Square 2025	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.78	0.12	0	0
Phase 1a Office	Town Square 2025	Concrete Pump	Pumps	Diesel	1	450	0	1	0.74	0.12	0	0
Phase 1a Office	Town Square 2025	Excavator	Excavators	Diesel	1	500	0	1	0.38	0.12	0	0
Phase 1a Office	Town Square 2025	Generator	Generator Sets	Diesel	1	25	0	1	0.74	0.29	0	0
Phase 1a Office	Town Square 2025	Gradall	Forklifts	Diesel	1	350	18	1	0.2	0.12	0	0
Phase 1a Office	Town Square 2025	Hydro/Crawler Crane	Cranes	Diesel	1	550	0.18	1	0.29	0.12	0	0
Phase 1a Office	Town Square 2025	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	0	1	0.37	0.23	0	0
Phase 1a Office	Town Square 2025	Paver	Pavers	Diesel	1	250	0	1	0.42	0.12	0	0
Phase 1a Office	Town Square 2025	Pile Rig	Bore/Drill Rigs	Diesel	1	600	0	1	0.5	0.12	0	0
Phase 1a Office	Town Square 2025	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0.3	0.29	0	0
Phase 1a Office	Town Square 2025	Scraper	Scrapers	Diesel	1	600	0	1	0.48	0.12	0	0
Phase 1a Office	Town Square 2025	Tire Wash	Other Construction Equipment	Diesel	1	100	0	1	0.42	0.23	0	0
Phase 1a Mixed Use	Parcel 2 Foundations	Pile Rig	Bore/Drill Rigs	Diesel	0	600	8	0.4	0.5	0.12	0	0
Phase 1a Mixed Use	Parcel 2 Foundations	Generator	Generator Sets	Diesel	0	25	6	1	0.74	0.29	0	0
Phase 1a Mixed Use	Parcel 2 Foundations	Tire Wash	Other Construction Equipment	Diesel	1	100	4	0.9	0.42	0.23	0	0
Phase 1a Mixed Use	Parcel 2 Foundations	Excavator	Excavators	Diesel	1	131	8	0.6	0.38	0.19	0	0
Phase 1a Mixed Use	Parcel 2 Foundations	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	90	8	0.6	0.37	0.23	0	0
Phase 1a Mixed Use	Parcel 2 Foundations	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	70	8	0.8	0.37	0.23	0	0
Phase 1a Mixed Use	Parcel 2 Foundations	Gradall	Forklifts	Diesel	1	74	4	0.8	0.2	0.23	0	0
Phase 1a Mixed Use	Parcel 2 Foundations	Crane	Cranes	Diesel	1	215	4	0.5	0.29	0.12	0	0
Phase 1a Mixed Use	Parcel 2 Foundations	Concrete Pump	Pumps	Diesel	1	450	8	0.15	0.74	0.12	0	0
Phase 1a Mixed Use	Parcel 2 Core and Shell	Generator	Generator Sets	Diesel	0	25	6	1	0.74	0.29	0	0
Phase 1a Mixed Use	Parcel 2 Core and Shell	Tire Wash	Other Construction Equipment	Diesel	1	100	4	0.9	0.42	0.23	0	0
Phase 1a Mixed Use	Parcel 2 Core and Shell	Crane	Cranes	Diesel	1	600	8	0.2	0.29	0.12	0	0
Phase 1a Mixed Use	Parcel 2 Core and Shell	Gradall	Forklifts	Diesel	1	74	4	0.8	0.2	0.23	0	0
Phase 1a Mixed Use	Parcel 2 Core and Shell	Concrete Pump	Pumps	Diesel	0	450	6	0.225	0.74	0.12	0	0
Phase 1a Mixed Use	Parcel 2 Core and Shell	Air Compressor	Air Compressors	Diesel	0	140	2	0.4	0.48	0.19	0	0
Phase 1a Mixed Use	Parcel 2 Core and Shell	Boom Lift	Aerial Lifts	Diesel	0	50	6	0.2	0.31	0.23	0	0
Phase 1a Mixed Use	Parcel 2 Tenant Improvements	Generator	Generator Sets	Diesel	0	25	6	0.85	0.74	0.29	0	0
Phase 1a Mixed Use	Parcel 2 Tenant Improvements	Tire Wash	Other Construction Equipment	Diesel	1	100	4	0.9	0.42	0.23	0	0
Phase 1a Mixed Use	Parcel 2 Tenant Improvements	Gradall	Forklifts	Diesel	1	74	4	0.8	0.2	0.23	0	0
Phase 1a Mixed Use	Parcel 2 Landscaping	Excavator	Excavators	Diesel	1	25	8	0.9	0.38	0.29	0	0
Phase 1a Mixed Use	Parcel 2 Landscaping	Generator	Generator Sets	Diesel	0	25	6	0.5	0.74	0.29	0	0
Phase 1a Mixed Use	Parcel 2 Landscaping	Tire Wash	Other Construction Equipment	Diesel	1	100	4	0.9	0.42	0.23	0	0

Phase 1a Mixed Use	Parcel 2 Landscaping	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	90	8	1	0.37	0.23	0	0
Phase 1a Mixed Use	Parcel 2 Landscaping	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	70	8	0.8	0.37	0.23	0	0
Phase 1a Mixed Use	Parcel 3 Foundations	Pile Rig	Bore/Drill Rigs	Diesel	0	600	8	0.4	0.5	0.12	0	0
Phase 1a Mixed Use	Parcel 3 Foundations	Generator	Generator Sets	Diesel	0	25	6	1	0.74	0.29	0	0
Phase 1a Mixed Use	Parcel 3 Foundations	Tire Wash	Other Construction Equipment	Diesel	1	100	4	0.9	0.42	0.23	0	0
Phase 1a Mixed Use	Parcel 3 Foundations	Excavator	Excavators	Diesel	1	131	8	0.6	0.38	0.19	0	0
Phase 1a Mixed Use	Parcel 3 Foundations	Backhoe	Tractors/Loaders/Backhoes	Diesel	2	90	8	0.6	0.37	0.23	0	0
Phase 1a Mixed Use	Parcel 3 Foundations	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	70	8	0.8	0.37	0.23	0	0
Phase 1a Mixed Use	Parcel 3 Foundations	Gradall	Forklifts	Diesel	1	74	4	0.8	0.2	0.23	0	0
Phase 1a Mixed Use	Parcel 3 Foundations	Crane	Cranes	Diesel	1	215	4	0.5	0.29	0.12	0	0
Phase 1a Mixed Use	Parcel 3 Foundations	Concrete Pump	Pumps	Diesel	1	450	8	0.15	0.74	0.12	0	0
Phase 1a Mixed Use	Parcel 3 Core and Shell	Generator	Generator Sets	Diesel	0	25	6	1	0.74	0.29	0	0
Phase 1a Mixed Use	Parcel 3 Core and Shell	Tire Wash	Other Construction Equipment	Diesel	1	100	4	0.9	0.42	0.23	0	0
Phase 1a Mixed Use	Parcel 3 Core and Shell	Crane	Cranes	Diesel	1	600	8	0.2	0.29	0.12	0	0
Phase 1a Mixed Use	Parcel 3 Core and Shell	Gradall	Forklifts	Diesel	2	74	4	0.8	0.2	0.23	0	0
Phase 1a Mixed Use	Parcel 3 Core and Shell	Concrete Pump	Pumps	Diesel	0	450	6	0.225	0.74	0.12	0	0
Phase 1a Mixed Use	Parcel 3 Core and Shell	Air Compressor	Air Compressors	Diesel	0	140	2	0.4	0.48	0.19	0	0
Phase 1a Mixed Use	Parcel 3 Core and Shell	Boom Lift	Aerial Lifts	Diesel	0	50	6	0.2	0.31	0.23	0	0
Phase 1a Mixed Use	Parcel 3 Tenant Improvements	Generator	Generator Sets	Diesel	0	25	6	0.85	0.74	0.29	0	0
Phase 1a Mixed Use	Parcel 3 Tenant Improvements	Tire Wash	Other Construction Equipment	Diesel	1	100	4	0.9	0.42	0.23	0	0
Phase 1a Mixed Use	Parcel 3 Tenant Improvements	Gradall	Forklifts	Diesel	1	74	4	0.8	0.2	0.23	0	0
Phase 1a Mixed Use	Parcel 3 Landscaping	Excavator	Excavators	Diesel	1	25	8	0.9	0.38	0.29	0	0
Phase 1a Mixed Use	Parcel 3 Landscaping	Generator	Generator Sets	Diesel	0	25	6	0.5	0.74	0.29	0	0
Phase 1a Mixed Use	Parcel 3 Landscaping	Tire Wash	Other Construction Equipment	Diesel	0	100	4	0.9	0.42	0.23	0	0
Phase 1a Mixed Use	Parcel 3 Landscaping	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	90	8	1	0.37	0.23	0	0
Phase 1a Mixed Use	Parcel 3 Landscaping	Bob Cat	Tractors/Loaders/Backhoes	Diesel	2	70	8	0.8	0.37	0.23	0	0
Phase 1b	Demolition	Excavator	Excavators	Diesel	4	131	8	0.9	0.38	0.19	0	48
Phase 1b	Demolition	Generator	Generator Sets	Diesel	2	25	6	0.5	0.74	0.29	0	48
Phase 1b	Demolition	Tire Wash	Other Construction Equipment	Diesel	2	100	4	0.9	0.42	0.23	0	48
Phase 1b	Demolition	Concrete Crusher	Crushing/Proc. Equipment	Diesel	2	200	2	0	0.78	0.12	0	48
Phase 1b	Demolition	Bob Cat	Tractors/Loaders/Backhoes	Diesel	6	150	8	0.8	0.37	0.19	0	48
Phase 1b	Demolition	Pressure Washer	Pressure Washers	Diesel	2	25	8	1	0.3	0.29	0	48
Phase 1b	Demolition	Air Compressor	Air Compressors	Diesel	1	140	6	0.7	0.48	0.19	0	48
Phase 1b	Grading and Utilities	Blade	Graders	Diesel	2	359	8	0.15	0.41	0.12	0	65
Phase 1b	Grading and Utilities	Scraper	Scrapers	Diesel	2	52	8	0.15	0.48	0.23	0	65
Phase 1b	Grading and Utilities	Loader	Tractors/Loaders/Backhoes	Diesel	4	100	4	0.9	0.37	0.23	0	65
Phase 1b	Grading and Utilities	Tire Wash	Other Construction Equipment	Diesel	2	100	4	0.9	0.42	0.23	0	65
Phase 1b	Grading and Utilities	Excavator	Excavators	Diesel	4	359	8	0.6	0.38	0.12	0	65
Phase 1b	Grading and Utilities	Backhoe	Tractors/Loaders/Backhoes	Diesel	4	350	8	0.6	0.37	0.12	0	65
Phase 1b	Grading and Utilities	Gradall	Forklifts	Diesel	4	350	4	0.6	0.2	0.12	0	65
Phase 1b	Grading and Utilities	Compactor	Other Construction Equipment	Diesel	4	250	0.5	0.2	0.42	0.12	0	65
Phase 1b	Grading and Utilities	Paver	Pavers	Diesel	2	250	8	0.01	0.42	0.12	0	65
Phase 1b	Grading and Utilities	Generator	Generator Sets	Diesel	1	600	2	0.1	0.74	0.12	0	65
Phase 1b Office	South Garage 2023	Air Compressor	Air Compressors	Diesel	1	150	0.48	1	0.48	0.19	0	0
Phase 1b Office	South Garage 2023	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	0.054653	1	0.37	0.12	0	0
Phase 1b Office	South Garage 2023	Blade	Graders	Diesel	1	450	0	1	0.41	0.12	0	0
Phase 1b Office	South Garage 2023	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	0.054653	1	0.37	0.12	0	0

Phase 1b Office	South Garage 2023	Boom Lift	Aerial Lifts	Diesel	1	40	0	1	0.31	0.29	0	0
Phase 1b Office	South Garage 2023	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0.42	0.12	0	0
Phase 1b Office	South Garage 2023	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.78	0.12	0	0
Phase 1b Office	South Garage 2023	Concrete Pump	Pumps	Diesel	1	450	0.451485	1	0.74	0.12	0	0
Phase 1b Office	South Garage 2023	Excavator	Excavators	Diesel	1	500	2.970297	1	0.38	0.12	0	0
Phase 1b Office	South Garage 2023	Generator	Generator Sets	Diesel	1	25	3.237624	1	0.74	0.29	0	0
Phase 1b Office	South Garage 2023	Gradall	Forklifts	Diesel	1	350	3	1	0.2	0.12	0	0
Phase 1b Office	South Garage 2023	Hydro/Crawler Crane	Cranes	Diesel	1	550	4.923267	1	0.29	0.12	0	0
Phase 1b Office	South Garage 2023	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	1.485149	1	0.37	0.23	0	0
Phase 1b Office	South Garage 2023	Paver	Pavers	Diesel	1	250	0	1	0.42	0.12	0	0
Phase 1b Office	South Garage 2023	Pile Rig	Bore/Drill Rigs	Diesel	1	600	0.861386	1	0.5	0.12	0	0
Phase 1b Office	South Garage 2023	Pressure Washer	Pressure Washers	Diesel	1	25	0.156832	1	0.3	0.29	0	0
Phase 1b Office	South Garage 2023	Scraper	Scrapers	Diesel	1	600	0	1	0.48	0.12	0	0
Phase 1b Office	South Garage 2023	Tire Wash	Other Construction Equipment	Diesel	1	100	1.44802	1	0.42	0.23	0	0
Phase 1b Office	South Garage 2024	Air Compressor	Air Compressors	Diesel	1	150	0.48	1	0.48	0.19	0	0
Phase 1b Office	South Garage 2024	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	0	1	0.37	0.12	0	0
Phase 1b Office	South Garage 2024	Blade	Graders	Diesel	1	450	0	1	0.41	0.12	0	0
Phase 1b Office	South Garage 2024	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	0	1	0.37	0.12	0	0
Phase 1b Office	South Garage 2024	Boom Lift	Aerial Lifts	Diesel	1	40	4.737447	1	0.31	0.29	0	0
Phase 1b Office	South Garage 2024	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0.42	0.12	0	0
Phase 1b Office	South Garage 2024	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.78	0.12	0	0
Phase 1b Office	South Garage 2024	Concrete Pump	Pumps	Diesel	1	450	0.6	1	0.74	0.12	0	0
Phase 1b Office	South Garage 2024	Excavator	Excavators	Diesel	1	500	0	1	0.38	0.12	0	0
Phase 1b Office	South Garage 2024	Generator	Generator Sets	Diesel	1	25	0	1	0.74	0.29	0	0
Phase 1b Office	South Garage 2024	Gradall	Forklifts	Diesel	1	350	3	1	0.2	0.12	0	0
Phase 1b Office	South Garage 2024	Hydro/Crawler Crane	Cranes	Diesel	1	550	3.68617	1	0.29	0.12	0	0
Phase 1b Office	South Garage 2024	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	0	1	0.37	0.23	0	0
Phase 1b Office	South Garage 2024	Paver	Pavers	Diesel	1	250	0	1	0.42	0.12	0	0
Phase 1b Office	South Garage 2024	Pile Rig	Bore/Drill Rigs	Diesel	1	600	0	1	0.5	0.12	0	0
Phase 1b Office	South Garage 2024	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0.3	0.29	0	0
Phase 1b Office	South Garage 2024	Scraper	Scrapers	Diesel	1	600	0	1	0.48	0.12	0	0
Phase 1b Office	South Garage 2024	Tire Wash	Other Construction Equipment	Diesel	1	100	1.5	1	0.42	0.23	0	0
Phase 1b Office	Office Building 3 2023	Air Compressor	Air Compressors	Diesel	1	150	0.067119	1	0.48	0.19	0	0
Phase 1b Office	Office Building 3 2023	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	2.576271	1	0.37	0.12	0	0
Phase 1b Office	Office Building 3 2023	Blade	Graders	Diesel	1	450	0	1	0.41	0.12	0	0
Phase 1b Office	Office Building 3 2023	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	2.576271	1	0.37	0.12	0	0
Phase 1b Office	Office Building 3 2023	Boom Lift	Aerial Lifts	Diesel	1	40	1.694915	1	0.31	0.29	0	0
Phase 1b Office	Office Building 3 2023	Compactor	Other Construction Equipment	Diesel	1	250	0.206102	1	0.42	0.12	0	0
Phase 1b Office	Office Building 3 2023	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.78	0.12	0	0
Phase 1b Office	Office Building 3 2023	Concrete Pump	Pumps	Diesel	1	450	0.121356	1	0.74	0.12	0	0
Phase 1b Office	Office Building 3 2023	Excavator	Excavators	Diesel	1	500	0.128814	1	0.38	0.12	0	0
Phase 1b Office	Office Building 3 2023	Generator	Generator Sets	Diesel	1	25	4.813559	1	0.74	0.29	0	0
Phase 1b Office	Office Building 3 2023	Gradall	Forklifts	Diesel	1	350	0.48	1	0.2	0.12	0	0
Phase 1b Office	Office Building 3 2023	Hydro/Crawler Crane	Cranes	Diesel	1	550	3.322034	1	0.29	0.12	0	0
Phase 1b Office	Office Building 3 2023	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	1.864407	1	0.37	0.23	0	0
Phase 1b Office	Office Building 3 2023	Paver	Pavers	Diesel	1	250	0	1	0.42	0.12	0	0
Phase 1b Office	Office Building 3 2023	Pile Rig	Bore/Drill Rigs	Diesel	1	600	1.864407	1	0.5	0.12	0	0

Phase 1b Office	Office Building 3 2023	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0.3	0.29	0	0
Phase 1b Office	Office Building 3 2023	Scraper	Scrapers	Diesel	1	600	0	1	0.48	0.12	0	0
Phase 1b Office	Office Building 3 2023	Tire Wash	Other Construction Equipment	Diesel	1	100	1.5	1	0.42	0.23	0	0
Phase 1b Office	Office Building 3 2024	Air Compressor	Air Compressors	Diesel	1	150	0	1	0.48	0.19	0	0
Phase 1b Office	Office Building 3 2024	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	0	1	0.37	0.12	0	0
Phase 1b Office	Office Building 3 2024	Blade	Graders	Diesel	1	450	0	1	0.41	0.12	0	0
Phase 1b Office	Office Building 3 2024	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	0	1	0.37	0.12	0	0
Phase 1b Office	Office Building 3 2024	Boom Lift	Aerial Lifts	Diesel	1	40	6.858779	1	0.31	0.29	0	0
Phase 1b Office	Office Building 3 2024	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0.42	0.12	0	0
Phase 1b Office	Office Building 3 2024	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.78	0.12	0	0
Phase 1b Office	Office Building 3 2024	Concrete Pump	Pumps	Diesel	1	450	0.005038	1	0.74	0.12	0	0
Phase 1b Office	Office Building 3 2024	Excavator	Excavators	Diesel	1	500	0	1	0.38	0.12	0	0
Phase 1b Office	Office Building 3 2024	Generator	Generator Sets	Diesel	1	25	0	1	0.74	0.29	0	0
Phase 1b Office	Office Building 3 2024	Gradall	Forklifts	Diesel	1	350	0.48	1	0.2	0.12	0	0
Phase 1b Office	Office Building 3 2024	Hydro/Crawler Crane	Cranes	Diesel	1	550	0	1	0.29	0.12	0	0
Phase 1b Office	Office Building 3 2024	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	0	1	0.37	0.23	0	0
Phase 1b Office	Office Building 3 2024	Paver	Pavers	Diesel	1	250	0	1	0.42	0.12	0	0
Phase 1b Office	Office Building 3 2024	Pile Rig	Bore/Drill Rigs	Diesel	1	600	0	1	0.5	0.12	0	0
Phase 1b Office	Office Building 3 2024	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0.3	0.29	0	0
Phase 1b Office	Office Building 3 2024	Scraper	Scrapers	Diesel	1	600	0	1	0.48	0.12	0	0
Phase 1b Office	Office Building 3 2024	Tire Wash	Other Construction Equipment	Diesel	1	100	1.5	1	0.42	0.23	0	0
Phase 1b Office	Office Building 3 2025	Air Compressor	Air Compressors	Diesel	1	150	0	1	0.48	0.19	0	0
Phase 1b Office	Office Building 3 2025	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	0	1	0.37	0.12	0	0
Phase 1b Office	Office Building 3 2025	Blade	Graders	Diesel	1	450	0	1	0.41	0.12	0	0
Phase 1b Office	Office Building 3 2025	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	0	1	0.37	0.12	0	0
Phase 1b Office	Office Building 3 2025	Boom Lift	Aerial Lifts	Diesel	1	40	0	1	0.31	0.29	0	0
Phase 1b Office	Office Building 3 2025	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0.42	0.12	0	0
Phase 1b Office	Office Building 3 2025	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.78	0.12	0	0
Phase 1b Office	Office Building 3 2025	Concrete Pump	Pumps	Diesel	1	450	0	1	0.74	0.12	0	0
Phase 1b Office	Office Building 3 2025	Excavator	Excavators	Diesel	1	500	0	1	0.38	0.12	0	0
Phase 1b Office	Office Building 3 2025	Generator	Generator Sets	Diesel	1	25	0	1	0.74	0.29	0	0
Phase 1b Office	Office Building 3 2025	Gradall	Forklifts	Diesel	1	350	0.48	1	0.2	0.12	0	0
Phase 1b Office	Office Building 3 2025	Hydro/Crawler Crane	Cranes	Diesel	1	550	0	1	0.29	0.12	0	0
Phase 1b Office	Office Building 3 2025	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	0	1	0.37	0.23	0	0
Phase 1b Office	Office Building 3 2025	Paver	Pavers	Diesel	1	250	0	1	0.42	0.12	0	0
Phase 1b Office	Office Building 3 2025	Pile Rig	Bore/Drill Rigs	Diesel	1	600	0	1	0.5	0.12	0	0
Phase 1b Office	Office Building 3 2025	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0.3	0.29	0	0
Phase 1b Office	Office Building 3 2025	Scraper	Scrapers	Diesel	1	600	0	1	0.48	0.12	0	0
Phase 1b Office	Office Building 3 2025	Tire Wash	Other Construction Equipment	Diesel	1	100	1.5	1	0.42	0.23	0	0
Phase 1b Office	Office Building 1 2023	Air Compressor	Air Compressors	Diesel	1	150	0.065363	1	0.48	0.19	0	0
Phase 1b Office	Office Building 1 2023	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	2.24581	1	0.37	0.12	0	0
Phase 1b Office	Office Building 1 2023	Blade	Graders	Diesel	1	450	0	1	0.41	0.12	0	0
Phase 1b Office	Office Building 1 2023	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	2.24581	1	0.37	0.12	0	0
Phase 1b Office	Office Building 1 2023	Boom Lift	Aerial Lifts	Diesel	1	40	2.480447	1	0.31	0.29	0	0
Phase 1b Office	Office Building 1 2023	Compactor	Other Construction Equipment	Diesel	1	250	0.179665	1	0.42	0.12	0	0
Phase 1b Office	Office Building 1 2023	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.78	0.12	0	0
Phase 1b Office	Office Building 1 2023	Concrete Pump	Pumps	Diesel	1	450	0.109274	1	0.74	0.12	0	0

Phase 1b Office	Office Building 1 2023	Excavator	Excavators	Diesel	1	500	0.112291	1	0.38	0.12	0	0
Phase 1b Office	Office Building 1 2023	Generator	Generator Sets	Diesel	1	25	4.424581	1	0.74	0.29	0	0
Phase 1b Office	Office Building 1 2023	Gradall	Forklifts	Diesel	1	350	0.48	1	0.2	0.12	0	0
Phase 1b Office	Office Building 1 2023	Hydro/Crawler Crane	Cranes	Diesel	1	550	2.916201	1	0.29	0.12	0	0
Phase 1b Office	Office Building 1 2023	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	1.47486	1	0.37	0.23	0	0
Phase 1b Office	Office Building 1 2023	Paver	Pavers	Diesel	1	250	0	1	0.42	0.12	0	0
Phase 1b Office	Office Building 1 2023	Pile Rig	Bore/Drill Rigs	Diesel	1	600	1.47486	1	0.5	0.12	0	0
Phase 1b Office	Office Building 1 2023	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0.3	0.29	0	0
Phase 1b Office	Office Building 1 2023	Scraper	Scrapers	Diesel	1	600	0	1	0.48	0.12	0	0
Phase 1b Office	Office Building 1 2023	Tire Wash	Other Construction Equipment	Diesel	1	100	1.5	1	0.42	0.23	0	0
Phase 1b Office	Office Building 1 2024	Air Compressor	Air Compressors	Diesel	1	150	0	1	0.48	0.19	0	0
Phase 1b Office	Office Building 1 2024	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	0	1	0.37	0.12	0	0
Phase 1b Office	Office Building 1 2024	Blade	Graders	Diesel	1	450	0	1	0.41	0.12	0	0
Phase 1b Office	Office Building 1 2024	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	0	1	0.37	0.12	0	0
Phase 1b Office	Office Building 1 2024	Boom Lift	Aerial Lifts	Diesel	1	40	6.554217	1	0.31	0.29	0	0
Phase 1b Office	Office Building 1 2024	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0.42	0.12	0	0
Phase 1b Office	Office Building 1 2024	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.78	0.12	0	0
Phase 1b Office	Office Building 1 2024	Concrete Pump	Pumps	Diesel	1	450	0.005301	1	0.74	0.12	0	0
Phase 1b Office	Office Building 1 2024	Excavator	Excavators	Diesel	1	500	0	1	0.38	0.12	0	0
Phase 1b Office	Office Building 1 2024	Generator	Generator Sets	Diesel	1	25	0	1	0.74	0.29	0	0
Phase 1b Office	Office Building 1 2024	Gradall	Forklifts	Diesel	1	350	0.478072	1	0.2	0.12	0	0
Phase 1b Office	Office Building 1 2024	Hydro/Crawler Crane	Cranes	Diesel	1	550	0	1	0.29	0.12	0	0
Phase 1b Office	Office Building 1 2024	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	0	1	0.37	0.23	0	0
Phase 1b Office	Office Building 1 2024	Paver	Pavers	Diesel	1	250	0	1	0.42	0.12	0	0
Phase 1b Office	Office Building 1 2024	Pile Rig	Bore/Drill Rigs	Diesel	1	600	0	1	0.5	0.12	0	0
Phase 1b Office	Office Building 1 2024	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0.3	0.29	0	0
Phase 1b Office	Office Building 1 2024	Scraper	Scrapers	Diesel	1	600	0	1	0.48	0.12	0	0
Phase 1b Office	Office Building 1 2024	Tire Wash	Other Construction Equipment	Diesel	1	100	1.5	1	0.42	0.23	0	0
Phase 1b Office	Office Building 2 2023	Air Compressor	Air Compressors	Diesel	1	150	0.075669	1	0.48	0.19	0	0
Phase 1b Office	Office Building 2 2023	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	2.484076	1	0.37	0.12	0	0
Phase 1b Office	Office Building 2 2023	Blade	Graders	Diesel	1	450	0	1	0.41	0.12	0	0
Phase 1b Office	Office Building 2 2023	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	2.484076	1	0.37	0.12	0	0
Phase 1b Office	Office Building 2 2023	Boom Lift	Aerial Lifts	Diesel	1	40	1.22293	1	0.31	0.29	0	0
Phase 1b Office	Office Building 2 2023	Compactor	Other Construction Equipment	Diesel	1	250	0.198726	1	0.42	0.12	0	0
Phase 1b Office	Office Building 2 2023	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.78	0.12	0	0
Phase 1b Office	Office Building 2 2023	Concrete Pump	Pumps	Diesel	1	450	0.124204	1	0.74	0.12	0	0
Phase 1b Office	Office Building 2 2023	Excavator	Excavators	Diesel	1	500	0.124204	1	0.38	0.12	0	0
Phase 1b Office	Office Building 2 2023	Generator	Generator Sets	Diesel	1	25	5.006369	1	0.74	0.29	0	0
Phase 1b Office	Office Building 2 2023	Gradall	Forklifts	Diesel	1	350	0.48	1	0.2	0.12	0	0
Phase 1b Office	Office Building 2 2023	Hydro/Crawler Crane	Cranes	Diesel	1	550	3.324841	1	0.29	0.12	0	0
Phase 1b Office	Office Building 2 2023	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	1.681529	1	0.37	0.23	0	0
Phase 1b Office	Office Building 2 2023	Paver	Pavers	Diesel	1	250	0	1	0.42	0.12	0	0
Phase 1b Office	Office Building 2 2023	Pile Rig	Bore/Drill Rigs	Diesel	1	600	1.681529	1	0.5	0.12	0	0
Phase 1b Office	Office Building 2 2023	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0.3	0.29	0	0
Phase 1b Office	Office Building 2 2023	Scraper	Scrapers	Diesel	1	600	0	1	0.48	0.12	0	0
Phase 1b Office	Office Building 2 2023	Tire Wash	Other Construction Equipment	Diesel	1	100	1.5	1	0.42	0.23	0	0
Phase 1b Office	Office Building 2 2024	Air Compressor	Air Compressors	Diesel	1	150	0	1	0.48	0.19	0	0

Phase 1b Office	Office Building 2 2024	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	0	1	0.37	0.12	0	0
Phase 1b Office	Office Building 2 2024	Blade	Graders	Diesel	1	450	0	1	0.41	0.12	0	0
Phase 1b Office	Office Building 2 2024	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	0	1	0.37	0.12	0	0
Phase 1b Office	Office Building 2 2024	Boom Lift	Aerial Lifts	Diesel	1	40	7.270992	1	0.31	0.29	0	0
Phase 1b Office	Office Building 2 2024	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0.42	0.12	0	0
Phase 1b Office	Office Building 2 2024	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.78	0.12	0	0
Phase 1b Office	Office Building 2 2024	Concrete Pump	Pumps	Diesel	1	450	0.005038	1	0.74	0.12	0	0
Phase 1b Office	Office Building 2 2024	Excavator	Excavators	Diesel	1	500	0	1	0.38	0.12	0	0
Phase 1b Office	Office Building 2 2024	Generator	Generator Sets	Diesel	1	25	0	1	0.74	0.29	0	0
Phase 1b Office	Office Building 2 2024	Gradall	Forklifts	Diesel	1	350	0.48	1	0.2	0.12	0	0
Phase 1b Office	Office Building 2 2024	Hydro/Crawler Crane	Cranes	Diesel	1	550	0	1	0.29	0.12	0	0
Phase 1b Office	Office Building 2 2024	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	0	1	0.37	0.23	0	0
Phase 1b Office	Office Building 2 2024	Paver	Pavers	Diesel	1	250	0	1	0.42	0.12	0	0
Phase 1b Office	Office Building 2 2024	Pile Rig	Bore/Drill Rigs	Diesel	1	600	0	1	0.5	0.12	0	0
Phase 1b Office	Office Building 2 2024	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0.3	0.29	0	0
Phase 1b Office	Office Building 2 2024	Scraper	Scrapers	Diesel	1	600	0	1	0.48	0.12	0	0
Phase 1b Office	Office Building 2 2024	Tire Wash	Other Construction Equipment	Diesel	1	100	1.5	1	0.42	0.23	0	0
Phase 1b Office	Office Building 2 2025	Air Compressor	Air Compressors	Diesel	1	150	0	1	0.48	0.19	0	0
Phase 1b Office	Office Building 2 2025	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	0	1	0.37	0.12	0	0
Phase 1b Office	Office Building 2 2025	Blade	Graders	Diesel	1	450	0	1	0.41	0.12	0	0
Phase 1b Office	Office Building 2 2025	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	0	1	0.37	0.12	0	0
Phase 1b Office	Office Building 2 2025	Boom Lift	Aerial Lifts	Diesel	1	40	0	1	0.31	0.29	0	0
Phase 1b Office	Office Building 2 2025	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0.42	0.12	0	0
Phase 1b Office	Office Building 2 2025	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.78	0.12	0	0
Phase 1b Office	Office Building 2 2025	Concrete Pump	Pumps	Diesel	1	450	0	1	0.74	0.12	0	0
Phase 1b Office	Office Building 2 2025	Excavator	Excavators	Diesel	1	500	0	1	0.38	0.12	0	0
Phase 1b Office	Office Building 2 2025	Generator	Generator Sets	Diesel	1	25	0	1	0.74	0.29	0	0
Phase 1b Office	Office Building 2 2025	Gradall	Forklifts	Diesel	1	350	0.48	1	0.2	0.12	0	0
Phase 1b Office	Office Building 2 2025	Hydro/Crawler Crane	Cranes	Diesel	1	550	0	1	0.29	0.12	0	0
Phase 1b Office	Office Building 2 2025	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	0	1	0.37	0.23	0	0
Phase 1b Office	Office Building 2 2025	Paver	Pavers	Diesel	1	250	0	1	0.42	0.12	0	0
Phase 1b Office	Office Building 2 2025	Pile Rig	Bore/Drill Rigs	Diesel	1	600	0	1	0.5	0.12	0	0
Phase 1b Office	Office Building 2 2025	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0.3	0.29	0	0
Phase 1b Office	Office Building 2 2025	Scraper	Scrapers	Diesel	1	600	0	1	0.48	0.12	0	0
Phase 1b Office	Office Building 2 2025	Tire Wash	Other Construction Equipment	Diesel	1	100	1.5	1	0.42	0.23	0	0
Phase 1b Office	Office Building 5 2023	Air Compressor	Air Compressors	Diesel	1	150	0.058812	1	0.48	0.19	0	0
Phase 1b Office	Office Building 5 2023	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	2.643564	1	0.37	0.12	0	0
Phase 1b Office	Office Building 5 2023	Blade	Graders	Diesel	1	450	0	1	0.41	0.12	0	0
Phase 1b Office	Office Building 5 2023	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	2.643564	1	0.37	0.12	0	0
Phase 1b Office	Office Building 5 2023	Boom Lift	Aerial Lifts	Diesel	1	40	2.19802	1	0.31	0.29	0	0
Phase 1b Office	Office Building 5 2023	Compactor	Other Construction Equipment	Diesel	1	250	0.211485	1	0.42	0.12	0	0
Phase 1b Office	Office Building 5 2023	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.78	0.12	0	0
Phase 1b Office	Office Building 5 2023	Concrete Pump	Pumps	Diesel	1	450	0.117327	1	0.74	0.12	0	0
Phase 1b Office	Office Building 5 2023	Excavator	Excavators	Diesel	1	500	0.132178	1	0.38	0.12	0	0
Phase 1b Office	Office Building 5 2023	Generator	Generator Sets	Diesel	1	25	4.60396	1	0.74	0.29	0	0
Phase 1b Office	Office Building 5 2023	Gradall	Forklifts	Diesel	1	350	0.48	1	0.2	0.12	0	0
Phase 1b Office	Office Building 5 2023	Hydro/Crawler Crane	Cranes	Diesel	1	550	3.267327	1	0.29	0.12	0	0

Phase 1b Office	Office Building 5 2023	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	1.960396	1	0.37	0.23	0	0
Phase 1b Office	Office Building 5 2023	Paver	Pavers	Diesel	1	250	0	1	0.42	0.12	0	0
Phase 1b Office	Office Building 5 2023	Pile Rig	Bore/Drill Rigs	Diesel	1	600	1.960396	1	0.5	0.12	0	0
Phase 1b Office	Office Building 5 2023	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0.3	0.29	0	0
Phase 1b Office	Office Building 5 2023	Scraper	Scrapers	Diesel	1	600	0	1	0.48	0.12	0	0
Phase 1b Office	Office Building 5 2023	Tire Wash	Other Construction Equipment	Diesel	1	100	1.5	1	0.42	0.23	0	0
Phase 1b Office	Office Building 5 2024	Air Compressor	Air Compressors	Diesel	1	150	0	1	0.48	0.19	0	0
Phase 1b Office	Office Building 5 2024	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	0	1	0.37	0.12	0	0
Phase 1b Office	Office Building 5 2024	Blade	Graders	Diesel	1	450	0	1	0.41	0.12	0	0
Phase 1b Office	Office Building 5 2024	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	0	1	0.37	0.12	0	0
Phase 1b Office	Office Building 5 2024	Boom Lift	Aerial Lifts	Diesel	1	40	6.194656	1	0.31	0.29	0	0
Phase 1b Office	Office Building 5 2024	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0.42	0.12	0	0
Phase 1b Office	Office Building 5 2024	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.78	0.12	0	0
Phase 1b Office	Office Building 5 2024	Concrete Pump	Pumps	Diesel	1	450	0.004809	1	0.74	0.12	0	0
Phase 1b Office	Office Building 5 2024	Excavator	Excavators	Diesel	1	500	0	1	0.38	0.12	0	0
Phase 1b Office	Office Building 5 2024	Generator	Generator Sets	Diesel	1	25	0	1	0.74	0.29	0	0
Phase 1b Office	Office Building 5 2024	Gradall	Forklifts	Diesel	1	350	0.48	1	0.2	0.12	0	0
Phase 1b Office	Office Building 5 2024	Hydro/Crawler Crane	Cranes	Diesel	1	550	0	1	0.29	0.12	0	0
Phase 1b Office	Office Building 5 2024	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	0	1	0.37	0.23	0	0
Phase 1b Office	Office Building 5 2024	Paver	Pavers	Diesel	1	250	0	1	0.42	0.12	0	0
Phase 1b Office	Office Building 5 2024	Pile Rig	Bore/Drill Rigs	Diesel	1	600	0	1	0.5	0.12	0	0
Phase 1b Office	Office Building 5 2024	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0.3	0.29	0	0
Phase 1b Office	Office Building 5 2024	Scraper	Scrapers	Diesel	1	600	0	1	0.48	0.12	0	0
Phase 1b Office	Office Building 5 2024	Tire Wash	Other Construction Equipment	Diesel	1	100	1.5	1	0.42	0.23	0	0
Phase 1b Office	Office Building 5 2025	Air Compressor	Air Compressors	Diesel	1	150	0	1	0.48	0.19	0	0
Phase 1b Office	Office Building 5 2025	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	0	1	0.37	0.12	0	0
Phase 1b Office	Office Building 5 2025	Blade	Graders	Diesel	1	450	0	1	0.41	0.12	0	0
Phase 1b Office	Office Building 5 2025	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	0	1	0.37	0.12	0	0
Phase 1b Office	Office Building 5 2025	Boom Lift	Aerial Lifts	Diesel	1	40	0	1	0.31	0.29	0	0
Phase 1b Office	Office Building 5 2025	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0.42	0.12	0	0
Phase 1b Office	Office Building 5 2025	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.78	0.12	0	0
Phase 1b Office	Office Building 5 2025	Concrete Pump	Pumps	Diesel	1	450	0	1	0.74	0.12	0	0
Phase 1b Office	Office Building 5 2025	Excavator	Excavators	Diesel	1	500	0	1	0.38	0.12	0	0
Phase 1b Office	Office Building 5 2025	Generator	Generator Sets	Diesel	1	25	0	1	0.74	0.29	0	0
Phase 1b Office	Office Building 5 2025	Gradall	Forklifts	Diesel	1	350	0.48	1	0.2	0.12	0	0
Phase 1b Office	Office Building 5 2025	Hydro/Crawler Crane	Cranes	Diesel	1	550	0	1	0.29	0.12	0	0
Phase 1b Office	Office Building 5 2025	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	0	1	0.37	0.23	0	0
Phase 1b Office	Office Building 5 2025	Paver	Pavers	Diesel	1	250	0	1	0.42	0.12	0	0
Phase 1b Office	Office Building 5 2025	Pile Rig	Bore/Drill Rigs	Diesel	1	600	0	1	0.5	0.12	0	0
Phase 1b Office	Office Building 5 2025	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0.3	0.29	0	0
Phase 1b Office	Office Building 5 2025	Scraper	Scrapers	Diesel	1	600	0	1	0.48	0.12	0	0
Phase 1b Office	Office Building 5 2025	Tire Wash	Other Construction Equipment	Diesel	1	100	1.5	1	0.42	0.23	0	0
Phase 1b Office	Office Building 6 2023	Air Compressor	Air Compressors	Diesel	1	150	0.062206	1	0.48	0.19	0	0
Phase 1b Office	Office Building 6 2023	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	3.926471	1	0.37	0.12	0	0
Phase 1b Office	Office Building 6 2023	Blade	Graders	Diesel	1	450	0	1	0.41	0.12	0	0
Phase 1b Office	Office Building 6 2023	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	3.926471	1	0.37	0.12	0	0
Phase 1b Office	Office Building 6 2023	Boom Lift	Aerial Lifts	Diesel	1	40	0	1	0.31	0.29	0	0

Phase 1b Office	Office Building 6 2023	Compactor	Other Construction Equipment	Diesel	1	250	0.314118	1	0.42	0.12	0	0
Phase 1b Office	Office Building 6 2023	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.78	0.12	0	0
Phase 1b Office	Office Building 6 2023	Concrete Pump	Pumps	Diesel	1	450	0.157941	1	0.74	0.12	0	0
Phase 1b Office	Office Building 6 2023	Excavator	Excavators	Diesel	1	500	0.196324	1	0.38	0.12	0	0
Phase 1b Office	Office Building 6 2023	Generator	Generator Sets	Diesel	1	25	6	1	0.74	0.29	0	0
Phase 1b Office	Office Building 6 2023	Gradall	Forklifts	Diesel	1	350	0.48	1	0.2	0.12	0	0
Phase 1b Office	Office Building 6 2023	Hydro/Crawler Crane	Cranes	Diesel	1	550	4.897059	1	0.29	0.12	0	0
Phase 1b Office	Office Building 6 2023	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	3	1	0.37	0.23	0	0
Phase 1b Office	Office Building 6 2023	Paver	Pavers	Diesel	1	250	0	1	0.42	0.12	0	0
Phase 1b Office	Office Building 6 2023	Pile Rig	Bore/Drill Rigs	Diesel	1	600	3	1	0.5	0.12	0	0
Phase 1b Office	Office Building 6 2023	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0.3	0.29	0	0
Phase 1b Office	Office Building 6 2023	Scraper	Scrapers	Diesel	1	600	0	1	0.48	0.12	0	0
Phase 1b Office	Office Building 6 2023	Tire Wash	Other Construction Equipment	Diesel	1	100	1.5	1	0.42	0.23	0	0
Phase 1b Office	Office Building 6 2024	Air Compressor	Air Compressors	Diesel	1	150	0.013053	1	0.48	0.19	0	0
Phase 1b Office	Office Building 6 2024	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	0	1	0.37	0.12	0	0
Phase 1b Office	Office Building 6 2024	Blade	Graders	Diesel	1	450	0	1	0.41	0.12	0	0
Phase 1b Office	Office Building 6 2024	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	0	1	0.37	0.12	0	0
Phase 1b Office	Office Building 6 2024	Boom Lift	Aerial Lifts	Diesel	1	40	8.003817	1	0.31	0.29	0	0
Phase 1b Office	Office Building 6 2024	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0.42	0.12	0	0
Phase 1b Office	Office Building 6 2024	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.78	0.12	0	0
Phase 1b Office	Office Building 6 2024	Concrete Pump	Pumps	Diesel	1	450	0.013969	1	0.74	0.12	0	0
Phase 1b Office	Office Building 6 2024	Excavator	Excavators	Diesel	1	500	0	1	0.38	0.12	0	0
Phase 1b Office	Office Building 6 2024	Generator	Generator Sets	Diesel	1	25	0.435115	1	0.74	0.29	0	0
Phase 1b Office	Office Building 6 2024	Gradall	Forklifts	Diesel	1	350	0.48	1	0.2	0.12	0	0
Phase 1b Office	Office Building 6 2024	Hydro/Crawler Crane	Cranes	Diesel	1	550	0	1	0.29	0.12	0	0
Phase 1b Office	Office Building 6 2024	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	0	1	0.37	0.23	0	0
Phase 1b Office	Office Building 6 2024	Paver	Pavers	Diesel	1	250	0	1	0.42	0.12	0	0
Phase 1b Office	Office Building 6 2024	Pile Rig	Bore/Drill Rigs	Diesel	1	600	0	1	0.5	0.12	0	0
Phase 1b Office	Office Building 6 2024	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0.3	0.29	0	0
Phase 1b Office	Office Building 6 2024	Scraper	Scrapers	Diesel	1	600	0	1	0.48	0.12	0	0
Phase 1b Office	Office Building 6 2024	Tire Wash	Other Construction Equipment	Diesel	1	100	1.5	1	0.42	0.23	0	0
Phase 1b Office	Office Building 6 2025	Air Compressor	Air Compressors	Diesel	1	150	0	1	0.48	0.19	0	0
Phase 1b Office	Office Building 6 2025	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	0	1	0.37	0.12	0	0
Phase 1b Office	Office Building 6 2025	Blade	Graders	Diesel	1	450	0	1	0.41	0.12	0	0
Phase 1b Office	Office Building 6 2025	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	0	1	0.37	0.12	0	0
Phase 1b Office	Office Building 6 2025	Boom Lift	Aerial Lifts	Diesel	1	40	0	1	0.31	0.29	0	0
Phase 1b Office	Office Building 6 2025	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0.42	0.12	0	0
Phase 1b Office	Office Building 6 2025	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.78	0.12	0	0
Phase 1b Office	Office Building 6 2025	Concrete Pump	Pumps	Diesel	1	450	0	1	0.74	0.12	0	0
Phase 1b Office	Office Building 6 2025	Excavator	Excavators	Diesel	1	500	0	1	0.38	0.12	0	0
Phase 1b Office	Office Building 6 2025	Generator	Generator Sets	Diesel	1	25	0	1	0.74	0.29	0	0
Phase 1b Office	Office Building 6 2025	Gradall	Forklifts	Diesel	1	350	0.48	1	0.2	0.12	0	0
Phase 1b Office	Office Building 6 2025	Hydro/Crawler Crane	Cranes	Diesel	1	550	0	1	0.29	0.12	0	0
Phase 1b Office	Office Building 6 2025	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	0	1	0.37	0.23	0	0
Phase 1b Office	Office Building 6 2025	Paver	Pavers	Diesel	1	250	0	1	0.42	0.12	0	0
Phase 1b Office	Office Building 6 2025	Pile Rig	Bore/Drill Rigs	Diesel	1	600	0	1	0.5	0.12	0	0
Phase 1b Office	Office Building 6 2025	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0.3	0.29	0	0

Phase 1b Office	Office Building 6 2025	Scraper	Scrapers	Diesel	1	600	0	1	0.48	0.12	0	0
Phase 1b Office	Office Building 6 2025	Tire Wash	Other Construction Equipment	Diesel	1	100	1.5	1	0.42	0.23	0	0
Phase 1b Mixed Use	Parcel 7 Foundations	Pile Rig	Bore/Drill Rigs	Diesel	0	600	8	0.4	0.5	0.12	0	0
Phase 1b Mixed Use	Parcel 7 Foundations	Generator	Generator Sets	Diesel	0	25	6	1	0.74	0.29	0	0
Phase 1b Mixed Use	Parcel 7 Foundations	Tire Wash	Other Construction Equipment	Diesel	1	100	4	0.9	0.42	0.23	0	0
Phase 1b Mixed Use	Parcel 7 Foundations	Excavator	Excavators	Diesel	1	131	8	0.6	0.38	0.19	0	0
Phase 1b Mixed Use	Parcel 7 Foundations	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	90	8	0.6	0.37	0.23	0	0
Phase 1b Mixed Use	Parcel 7 Foundations	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	70	8	0.8	0.37	0.23	0	0
Phase 1b Mixed Use	Parcel 7 Foundations	Gradall	Forklifts	Diesel	1	74	4	0.8	0.2	0.23	0	0
Phase 1b Mixed Use	Parcel 7 Foundations	Crane	Cranes	Diesel	1	215	4	0.5	0.29	0.12	0	0
Phase 1b Mixed Use	Parcel 7 Foundations	Concrete Pump	Pumps	Diesel	1	450	0.25	0.5	0.74	0.12	0	0
Phase 1b Mixed Use	Parcel 7 Core and Shell	Generator	Generator Sets	Diesel	0	25	6	1	0.74	0.29	0	0
Phase 1b Mixed Use	Parcel 7 Core and Shell	Tire Wash	Other Construction Equipment	Diesel	1	100	4	0.9	0.42	0.23	0	0
Phase 1b Mixed Use	Parcel 7 Core and Shell	Crane	Cranes	Diesel	1	600	8	0.2	0.29	0.12	0	0
Phase 1b Mixed Use	Parcel 7 Core and Shell	Gradall	Forklifts	Diesel	1	74	4	0.8	0.2	0.23	0	0
Phase 1b Mixed Use	Parcel 7 Core and Shell	Concrete Pump	Pumps	Diesel	0	450	6	0.225	0.74	0.12	0	0
Phase 1b Mixed Use	Parcel 7 Core and Shell	Air Compressor	Air Compressors	Diesel	0	140	2	0.4	0.48	0.19	0	0
Phase 1b Mixed Use	Parcel 7 Core and Shell	Boom Lift	Aerial Lifts	Diesel	0	50	6	0.2	0.31	0.23	0	0
Phase 1b Mixed Use	Parcel 7 Tenant Improvements	Generator	Generator Sets	Diesel	0	25	6	0.85	0.74	0.29	0	0
Phase 1b Mixed Use	Parcel 7 Tenant Improvements	Tire Wash	Other Construction Equipment	Diesel	1	100	4	0.9	0.42	0.23	0	0
Phase 1b Mixed Use	Parcel 7 Tenant Improvements	Gradall	Forklifts	Diesel	1	74	4	0.8	0.2	0.23	0	0
Phase 1b Mixed Use	Parcel 7 Landscaping	Excavator	Excavators	Diesel	1	25	8	0.9	0.38	0.29	0	0
Phase 1b Mixed Use	Parcel 7 Landscaping	Generator	Generator Sets	Diesel	0	25	6	0.5	0.74	0.29	0	0
Phase 1b Mixed Use	Parcel 7 Landscaping	Tire Wash	Other Construction Equipment	Diesel	1	100	4	0.9	0.42	0.23	0	0
Phase 1b Mixed Use	Parcel 7 Landscaping	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	90	8	0.6	0.37	0.23	0	0
Phase 1b Mixed Use	Parcel 7 Landscaping	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	70	8	0.8	0.37	0.23	0	0
Phase 1b Mixed Use	Parcel 6 Foundations	Pile Rig	Bore/Drill Rigs	Diesel	0	600	8	0.4	0.5	0.12	0	0
Phase 1b Mixed Use	Parcel 6 Foundations	Generator	Generator Sets	Diesel	0	25	6	1	0.74	0.29	0	0
Phase 1b Mixed Use	Parcel 6 Foundations	Tire Wash	Other Construction Equipment	Diesel	1	100	4	0.9	0.42	0.23	0	0
Phase 1b Mixed Use	Parcel 6 Foundations	Excavator	Excavators	Diesel	1	131	8	0.6	0.38	0.19	0	0
Phase 1b Mixed Use	Parcel 6 Foundations	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	90	8	0.6	0.37	0.23	0	0
Phase 1b Mixed Use	Parcel 6 Foundations	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	70	8	0.8	0.37	0.23	0	0
Phase 1b Mixed Use	Parcel 6 Foundations	Gradall	Forklifts	Diesel	1	74	4	0.8	0.2	0.23	0	0
Phase 1b Mixed Use	Parcel 6 Foundations	Crane	Cranes	Diesel	1	215	4	0.5	0.29	0.12	0	0
Phase 1b Mixed Use	Parcel 6 Foundations	Concrete Pump	Pumps	Diesel	1	450	0.5	0.5	0.74	0.12	0	0
Phase 1b Mixed Use	Parcel 6 Core and Shell	Generator	Generator Sets	Diesel	0	25	6	1	0.74	0.29	0	0
Phase 1b Mixed Use	Parcel 6 Core and Shell	Tire Wash	Other Construction Equipment	Diesel	1	100	4	0.9	0.42	0.23	0	0
Phase 1b Mixed Use	Parcel 6 Core and Shell	Crane	Cranes	Diesel	1	600	8	0.2	0.29	0.12	0	0
Phase 1b Mixed Use	Parcel 6 Core and Shell	Gradall	Forklifts	Diesel	2	74	4	0.8	0.2	0.23	0	0
Phase 1b Mixed Use	Parcel 6 Core and Shell	Concrete Pump	Pumps	Diesel	0	450	6	0.225	0.74	0.12	0	0
Phase 1b Mixed Use	Parcel 6 Core and Shell	Air Compressor	Air Compressors	Diesel	0	140	2	0.4	0.48	0.19	0	0
Phase 1b Mixed Use	Parcel 6 Core and Shell	Boom Lift	Aerial Lifts	Diesel	0	50	6	0.2	0.31	0.23	0	0
Phase 1b Mixed Use	Parcel 6 Tenant Improvements	Generator	Generator Sets	Diesel	0	25	6	0.85	0.74	0.29	0	0
Phase 1b Mixed Use	Parcel 6 Tenant Improvements	Tire Wash	Other Construction Equipment	Diesel	1	100	4	0.9	0.42	0.23	0	0
Phase 1b Mixed Use	Parcel 6 Tenant Improvements	Gradall	Forklifts	Diesel	1	74	4	0.8	0.2	0.23	0	0
Phase 1b Mixed Use	Parcel 6 Landscaping	Excavator	Excavators	Diesel	1	25	8	0.9	0.38	0.29	0	0
Phase 1b Mixed Use	Parcel 6 Landscaping	Generator	Generator Sets	Diesel	0	25	6	0.5	0.74	0.29	0	0

Phase 1b Mixed Use	Parcel 6 Landscaping	Tire Wash	Other Construction Equipment	Diesel	0	100	4	0.9	0.42	0.23	0	0
Phase 1b Mixed Use	Parcel 6 Landscaping	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	90	8	0.6	0.37	0.23	0	0
Phase 1b Mixed Use	Parcel 6 Landscaping	Bob Cat	Tractors/Loaders/Backhoes	Diesel	2	70	8	0.8	0.37	0.23	0	0
Phase 2 Mixed Use	Grading and Utilities	Blade	Graders	Diesel	1	359	8	0.15	0.41	0.12	0	0
Phase 2 Mixed Use	Grading and Utilities	Scraper	Scrapers	Diesel	1	52	8	0.15	0.48	0.23	0	0
Phase 2 Mixed Use	Grading and Utilities	Loader	Tractors/Loaders/Backhoes	Diesel	2	100	4	0.9	0.37	0.23	0	0
Phase 2 Mixed Use	Grading and Utilities	Tire Wash	Other Construction Equipment	Diesel	1	100	4	0.9	0.42	0.23	0	0
Phase 2 Mixed Use	Grading and Utilities	Excavator	Excavators	Diesel	2	359	8	0.6	0.38	0.12	0	0
Phase 2 Mixed Use	Grading and Utilities	Backhoe	Tractors/Loaders/Backhoes	Diesel	2	350	8	0.6	0.37	0.12	0	0
Phase 2 Mixed Use	Grading and Utilities	Gradall	Forklifts	Diesel	2	350	4	0.6	0.2	0.12	0	0
Phase 2 Mixed Use	Grading and Utilities	Compactor	Other Construction Equipment	Diesel	2	250	0.5	0.2	0.42	0.12	0	0
Phase 2 Mixed Use	Grading and Utilities	Paver	Pavers	Diesel	1	250	8	0.01	0.42	0.12	0	0
Phase 2 Mixed Use	Grading and Utilities	Generator	Generator Sets	Diesel	1	600	2	0.1	0.74	0.12	0	0
Phase 2 Mixed Use	Tunnel Construction	Crane	Cranes	Diesel	1	290	6	0.35	0.29	0.12	0	0
Phase 2 Mixed Use	Tunnel Construction	Excavator	Excavators	Diesel	2	170	6	0.45	0.38	0.19	0	0
Phase 2 Mixed Use	Tunnel Construction	Loader	Tractors/Loaders/Backhoes	Diesel	1	250	6	0.45	0.37	0.12	0	0
Phase 2 Mixed Use	Tunnel Construction	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	103	6	0.4	0.37	0.23	0	0
Phase 2 Mixed Use	Tunnel Construction	Gradall	Forklifts	Diesel	1	130	6	0.35	0.2	0.19	0	0
Phase 2 Mixed Use	Tunnel Construction	Compressor	Air Compressors	Diesel	2	50	6	0.3	0.48	0.23	0	0
Phase 2 Mixed Use	Foundations	Pile Rig	Bore/Drill Rigs	Diesel	0	600	8	0.4	0.5	0.12	0	0
Phase 2 Mixed Use	Foundations	Generator	Generator Sets	Diesel	2	25	6	1	0.74	0.29	0	0
Phase 2 Mixed Use	Foundations	Tire Wash	Other Construction Equipment	Diesel	2	100	4	0.9	0.42	0.23	0	0
Phase 2 Mixed Use	Foundations	Excavator	Excavators	Diesel	2	131	8	0.6	0.38	0.19	0	0
Phase 2 Mixed Use	Foundations	Backhoe	Tractors/Loaders/Backhoes	Diesel	2	90	8	0.6	0.37	0.23	0	0
Phase 2 Mixed Use	Foundations	Bob Cat	Tractors/Loaders/Backhoes	Diesel	2	70	8	0.8	0.37	0.23	0	0
Phase 2 Mixed Use	Foundations	Gradall	Forklifts	Diesel	2	74	4	0.8	0.2	0.23	0	0
Phase 2 Mixed Use	Foundations	Crane	Cranes	Diesel	2	215	4	0.5	0.29	0.12	0	0
Phase 2 Mixed Use	Foundations	Concrete Pump	Pumps	Diesel	3	450	0.5	0.5	0.74	0.12	0	0
Phase 2 Mixed Use	Core and Shell	Generator	Generator Sets	Diesel	2	25	6	1	0.74	0.29	0	0
Phase 2 Mixed Use	Core and Shell	Tire Wash	Other Construction Equipment	Diesel	2	100	4	0.9	0.42	0.23	0	0
Phase 2 Mixed Use	Core and Shell	Crane	Cranes	Diesel	2	600	8	0.2	0.29	0.12	0	0
Phase 2 Mixed Use	Core and Shell	Gradall	Forklifts	Diesel	3	74	4	0.8	0.2	0.23	0	0
Phase 2 Mixed Use	Core and Shell	Concrete Pump	Pumps	Diesel	0	450	6	0.45	0.74	0.12	0	0
Phase 2 Mixed Use	Core and Shell	Air Compressor	Air Compressors	Diesel	0	140	2	0.8	0.48	0.19	0	0
Phase 2 Mixed Use	Core and Shell	Boom Lift	Aerial Lifts	Diesel	0	50	6	0.4	0.31	0.23	0	0
Phase 2 Mixed Use	Tenant Improvements	Generator	Generator Sets	Diesel	2	25	6	0.85	0.74	0.29	0	0
Phase 2 Mixed Use	Tenant Improvements	Tire Wash	Other Construction Equipment	Diesel	2	100	4	0.9	0.42	0.23	0	0
Phase 2 Mixed Use	Tenant Improvements	Gradall	Forklifts	Diesel	1	74	4	0.8	0.2	0.23	0	0
Phase 2 Mixed Use	Landscaping	Excavator	Excavators	Diesel	1	25	8	0.9	0.38	0.29	0	0
Phase 2 Mixed Use	Landscaping	Generator	Generator Sets	Diesel	0	25	6	0.5	0.74	0.29	0	0
Phase 2 Mixed Use	Landscaping	Tire Wash	Other Construction Equipment	Diesel	1	100	4	0.9	0.42	0.23	0	0
Phase 2 Mixed Use	Landscaping	Backhoe	Tractors/Loaders/Backhoes	Diesel	2	90	8	0.6	0.37	0.23	0	0
Phase 2 Mixed Use	Landscaping	Bob Cat	Tractors/Loaders/Backhoes	Diesel	3	70	8	0.8	0.37	0.23	0	0
Alternate 1	Demolition	Excavator	Excavators	Diesel	1	131	8	0.9	0.38	0.19	0	0
Alternate 1	Demolition	Generator	Generator Sets	Diesel	1	25	6	0.5	0.74	0.29	0	0
Alternate 1	Demolition	Tire Wash	Other Construction Equipment	Diesel	2	100	4	0.9	0.42	0.23	0	0
Alternate 1	Demolition	Bob Cat	Tractors/Loaders/Backhoes	Diesel	2	70	8	0.8	0.37	0.23	0	0

Alternate 1	Demolition	Pressure Washer	Pressure Washers	Diesel	2	25	8	1	0.3	0.29	0	0
Alternate 1	Demolition	Air Compressor	Air Compressors	Diesel	1	140	6	0.7	0.48	0.19	0	0
Alternate 1	Grading and Utilities	Loader	Tractors/Loaders/Backhoes	Diesel	2	100	4	0.9	0.37	0.23	0	0
Alternate 1	Grading and Utilities	Tire Wash	Other Construction Equipment	Diesel	1	100	4	0.9	0.42	0.23	0	0
Alternate 1	Grading and Utilities	Excavator	Excavators	Diesel	1	359	8	0.6	0.38	0.12	0	0
Alternate 1	Grading and Utilities	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	90	8	0.6	0.37	0.23	0	0
Alternate 1	Grading and Utilities	Gradall	Forklifts	Diesel	1	74	4	0.6	0.2	0.23	0	0
Alternate 1	Grading and Utilities	Compactor	Other Construction Equipment	Diesel	1	250	0.5	0.2	0.42	0.12	0	0
Alternate 1	Grading and Utilities	Paver	Pavers	Diesel	1	250	8	0.01	0.42	0.12	0	0
Alternate 1	Grading and Utilities	Generator	Generator Sets	Diesel	1	600	2	0.1	0.74	0.12	0	0
Alternate 1	Foundations	Generator	Generator Sets	Diesel	1	25	6	1	0.74	0.29	0	0
Alternate 1	Foundations	Tire Wash	Other Construction Equipment	Diesel	1	100	4	0.9	0.42	0.23	0	0
Alternate 1	Foundations	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	90	8	0.6	0.37	0.23	0	0
Alternate 1	Foundations	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	70	8	0.8	0.37	0.23	0	0
Alternate 1	Foundations	Gradall	Forklifts	Diesel	1	74	4	0.8	0.2	0.23	0	0
Alternate 1	Foundations	Concrete Pump	Pumps	Diesel	1	450	6	0.3	0.74	0.12	0	0
Alternate 1	Core and Shell	Generator	Generator Sets	Diesel	1	25	6	1	0.74	0.29	0	0
Alternate 1	Core and Shell	Tire Wash	Other Construction Equipment	Diesel	1	100	4	0.9	0.42	0.23	0	0
Alternate 1	Core and Shell	Gradall	Forklifts	Diesel	1	74	4	0.8	0.2	0.23	0	0
Alternate 1	Core and Shell	Concrete Pump	Pumps	Diesel	1	450	6	0.45	0.74	0.12	0	0
Alternate 1	Tenant Improvements	Generator	Generator Sets	Diesel	1	25	6	0.85	0.74	0.29	0	0
Alternate 1	Tenant Improvements	Tire Wash	Other Construction Equipment	Diesel	2	100	4	0.9	0.42	0.23	0	0
Alternate 1	Tenant Improvements	Gradall	Forklifts	Diesel	1	74	4	0.8	0.2	0.23	0	0

Days in each year				Emissions (lb/yr)					
2023	2024	2025	2026	2021	2022	2023	2024	2025	2026
0	0	0	0	7.806940365	50.44484543	0	0	0	0
0	0	0	0	0.922573249	5.961242532	0	0	0	0
0	0	0	0	1.993377279	12.88028396	0	0	0	0
0	0	0	0	0	0	0	0	0	0
0	0	0	0	11.60533521	74.98831985	0	0	0	0
0	0	0	0	0.997376485	6.444586521	0	0	0	0
0	0	0	0	1.536922772	9.930885602	0	0	0	0
0	0	0	0	0	13.36421209	0	0	0	0
0	0	0	0	0	4.343664014	0	0	0	0
0	0	0	0	0	38.63355012	0	0	0	0
0	0	0	0	0	21.92715007	0	0	0	0
0	0	0	0	0	99.09074327	0	0	0	0
0	0	0	0	0	94.06429595	0	0	0	0
0	0	0	0	0	25.42278269	0	0	0	0
0	0	0	0	0	1.588923918	0	0	0	0
0	0	0	0	0	0.635569567	0	0	0	0
0	0	0	0	0	3.359439141	0	0	0	0
0	0	0	0	0	0.593536895	0	0	0	0
0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0
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0	0	0	0	0	1.221026919	0	0	0	0
0	0	0	0	0	24.73070394	0	0	0	0
0	0	0	0	0	2.341916709	0	0	0	0
0	0	0	0	0	2.277827994	0	0	0	0
0	0	0	0	0	5.190193787	0	0	0	0
0	0	0	0	0	4.615313389	0	0	0	0
0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	13.80982826	0	0	0	0
0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	1.054189907	0	0	0	0
258	0	0	0	0	0	3.749415992	0	0	0
258	0	0	0	0	0	0.345340947	0	0	0
258	0	0	0	0	0	0	0	0	0
258	0	0	0	0	0	0.197337684	0	0	0
258	0	0	0	0	0	2.732259177	0	0	0
258	0	0	0	0	0	0	0	0	0
258	0	0	0	0	0	0	0	0	0
258	0	0	0	0	0	13.16171873	0	0	0
258	0	0	0	0	0	6.03187901	0	0	0
258	0	0	0	0	0	5.393505148	0	0	0

453.59 g/lb

258	0	0	0	0	0	14.38920611	0	0	0
258	0	0	0	0	0	54.75021495	0	0	0
258	0	0	0	0	0	1.125686192	0	0	0
258	0	0	0	0	0	0	0	0	0
258	0	0	0	0	0	0	0	0	0
258	0	0	0	0	0	0.151908111	0	0	0
258	0	0	0	0	0	0	0	0	0
258	0	0	0	0	0	8.273793514	0	0	0
242	0	0	0	0	0	0.358293613	0	0	0
242	0	0	0	0	0	10.48356445	0	0	0
242	0	0	0	0	0	0	0	0	0
242	0	0	0	0	0	5.990608259	0	0	0
242	0	0	0	0	0	14.27015587	0	0	0
242	0	0	0	0	0	0.680014992	0	0	0
242	0	0	0	0	0	0	0	0	0
242	0	0	0	0	0	1.606892568	0	0	0
242	0	0	0	0	0	0.769064574	0	0	0
242	0	0	0	0	0	8.303159241	0	0	0
242	0	0	0	0	0	2.151158535	0	0	0
242	0	0	0	0	0	18.48215349	0	0	0
242	0	0	0	0	0	3.264489958	0	0	0
242	0	0	0	0	0	0	0	0	0
242	0	0	0	0	0	13.80982826	0	0	0
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242	0	0	0	0	0	7.730725986	0	0	0
0	207	0	0	0	0	0	0	0	0
0	207	0	0	0	0	0	0	0	0
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0	207	0	0	0	0	0	2.307008532	0	0
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0	207	0	0	0	0	0	0	0	0
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0	207	0	0	0	0	0	0	0	0
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0	0	0	46	0	0	0	0	0	0
0	0	0	46	0	0	0	0	0	0
0	0	0	46	0	0	0	0	0	0
0	0	0	46	0	0	0	0	0	0
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0	0	0	0	0	0.487563659	0	0	0	0
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257	0	0	0	0	0	17.91468066	0	0	0
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257	0	0	0	0	0	0	0	0	0
257	0	0	0	0	0	3.523887211	0	0	0
257	0	0	0	0	0	0.713507793	0	0	0
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0	0	33	0	0	0	0	0	5.060111554	0
0	0	33	0	0	0	0	0	0.792483079	0

Equipment Information												E
PHASE	SUBPHASE	EQUIPMENT	CALEEMOD_EQUIPMENT	FUEL	NUMBER	HP	DAILYHRS	UTILIZATION	LF	2021	2022	2023
Phase 1a	Demolition	Excavator	Excavators	Diesel	4	131	8	0.9	0.38	0.06	0.06	0
Phase 1a	Demolition	Generator	Generator Sets	Diesel	2	25	6	0.5	0.74	0.12	0.12	0
Phase 1a	Demolition	Tire Wash	Other Construction Equipment	Diesel	2	100	4	0.9	0.42	0.06	0.06	0
Phase 1a	Demolition	Concrete Crusher	Crushing/Proc. Equipment	Diesel	2	200	2	0	0.78	0.06	0.06	0
Phase 1a	Demolition	Bob Cat	Tractors/Loaders/Backhoes	Diesel	6	150	8	0.8	0.37	0.06	0.06	0
Phase 1a	Demolition	Pressure Washer	Pressure Washers	Diesel	2	25	8	1	0.3	0.12	0.12	0
Phase 1a	Demolition	Air Compressor	Air Compressors	Diesel	1	140	6	0.7	0.48	0.06	0.06	0
Phase 1a	Grading and Utilities	Blade	Graders	Diesel	2	359	8	0.15	0.41	0	0.06	0
Phase 1a	Grading and Utilities	Scraper	Scrapers	Diesel	2	52	8	0.15	0.48	0	0.12	0
Phase 1a	Grading and Utilities	Loader	Tractors/Loaders/Backhoes	Diesel	4	100	4	0.9	0.37	0	0.06	0
Phase 1a	Grading and Utilities	Tire Wash	Other Construction Equipment	Diesel	2	100	4	0.9	0.42	0	0.06	0
Phase 1a	Grading and Utilities	Excavator	Excavators	Diesel	4	359	8	0.6	0.38	0	0.06	0
Phase 1a	Grading and Utilities	Backhoe	Tractors/Loaders/Backhoes	Diesel	4	350	8	0.6	0.37	0	0.06	0
Phase 1a	Grading and Utilities	Gradall	Forklifts	Diesel	4	350	4	0.6	0.2	0	0.06	0
Phase 1a	Grading and Utilities	Compactor	Other Construction Equipment	Diesel	4	250	0.5	0.2	0.42	0	0.06	0
Phase 1a	Grading and Utilities	Paver	Pavers	Diesel	2	250	8	0.01	0.42	0	0.06	0
Phase 1a	Grading and Utilities	Generator	Generator Sets	Diesel	1	600	2	0.1	0.74	0	0.06	0
Phase 1a Office	North Garage 2022	Air Compressor	Air Compressors	Diesel	1	150	0.47	1	0.48	0	0.06	0
Phase 1a Office	North Garage 2022	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	0	1	0.37	0	0.06	0
Phase 1a Office	North Garage 2022	Blade	Graders	Diesel	1	450	0	1	0.41	0	0.06	0
Phase 1a Office	North Garage 2022	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	0	1	0.37	0	0.06	0
Phase 1a Office	North Garage 2022	Boom Lift	Aerial Lifts	Diesel	1	40	0	1	0.31	0	0.12	0
Phase 1a Office	North Garage 2022	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0.42	0	0.06	0
Phase 1a Office	North Garage 2022	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.78	0	0.06	0
Phase 1a Office	North Garage 2022	Concrete Pump	Pumps	Diesel	1	450	0.33	1	0.74	0	0.042508854	0
Phase 1a Office	North Garage 2022	Excavator	Excavators	Diesel	1	500	11.71429	1	0.38	0	0.06	0
Phase 1a Office	North Garage 2022	Generator	Generator Sets	Diesel	1	25	4.714286	1	0.74	0	0.12	0
Phase 1a Office	North Garage 2022	Gradall	Forklifts	Diesel	1	350	2.928571	1	0.2	0	0.06	0
Phase 1a Office	North Garage 2022	Hydro/Crawler Crane	Cranes	Diesel	1	550	2.928571	1	0.29	0	0.06	0
Phase 1a Office	North Garage 2022	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	5.857143	1	0.37	0	0.06	0
Phase 1a Office	North Garage 2022	Paver	Pavers	Diesel	1	250	0	1	0.42	0	0.06	0
Phase 1a Office	North Garage 2022	Pile Rig	Bore/Drill Rigs	Diesel	1	600	4.142857	1	0.5	0	0.06	0
Phase 1a Office	North Garage 2022	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0.3	0	0.12	0
Phase 1a Office	North Garage 2022	Scraper	Scrapers	Diesel	1	600	0	1	0.48	0	0.06	0
Phase 1a Office	North Garage 2022	Tire Wash	Other Construction Equipment	Diesel	1	100	1.178571	1	0.42	0	0.06	0
Phase 1a Office	North Garage 2023	Air Compressor	Air Compressors	Diesel	1	150	0.48186	1	0.48	0	0	0.06
Phase 1a Office	North Garage 2023	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	0.03907	1	0.37	0	0	0.06
Phase 1a Office	North Garage 2023	Blade	Graders	Diesel	1	450	0	1	0.41	0	0	0.06
Phase 1a Office	North Garage 2023	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	0.03907	1	0.37	0	0	0.06
Phase 1a Office	North Garage 2023	Boom Lift	Aerial Lifts	Diesel	1	40	1.335814	1	0.31	0	0	0.12
Phase 1a Office	North Garage 2023	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0.42	0	0	0.06
Phase 1a Office	North Garage 2023	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.78	0	0	0.06
Phase 1a Office	North Garage 2023	Concrete Pump	Pumps	Diesel	1	450	0.57907	1	0.74	0	0	0.042715783
Phase 1a Office	North Garage 2023	Excavator	Excavators	Diesel	1	500	0.465116	1	0.38	0	0	0.06
Phase 1a Office	North Garage 2023	Generator	Generator Sets	Diesel	1	25	1.767442	1	0.74	0	0	0.12
Phase 1a Office	North Garage 2023	Gradall	Forklifts	Diesel	1	350	3.011628	1	0.2	0	0	0.06
Phase 1a Office	North Garage 2023	Hydro/Crawler Crane	Cranes	Diesel	1	550	5.02907	1	0.29	0	0	0.06
Phase 1a Office	North Garage 2023	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	0.232558	1	0.37	0	0	0.06
Phase 1a Office	North Garage 2023	Paver	Pavers	Diesel	1	250	0	1	0.42	0	0	0.06
Phase 1a Office	North Garage 2023	Pile Rig	Bore/Drill Rigs	Diesel	1	600	0	1	0.5	0	0	0.06
Phase 1a Office	North Garage 2023	Pressure Washer	Pressure Washers	Diesel	1	25	0.122791	1	0.3	0	0	0.12
Phase 1a Office	North Garage 2023	Scraper	Scrapers	Diesel	1	600	0	1	0.48	0	0	0.06
Phase 1a Office	North Garage 2023	Tire Wash	Other Construction Equipment	Diesel	1	100	1.505814	1	0.42	0	0	0.06

Phase 1a Office	Office Building 4 2023	Air Compressor	Air Compressors	Diesel	1	150	0.049091	1	0.48	0	0	0.06
Phase 1a Office	Office Building 4 2023	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	1.264463	1	0.37	0	0	0.06
Phase 1a Office	Office Building 4 2023	Blade	Graders	Diesel	1	450	0	1	0.41	0	0	0.06
Phase 1a Office	Office Building 4 2023	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	1.264463	1	0.37	0	0	0.06
Phase 1a Office	Office Building 4 2023	Boom Lift	Aerial Lifts	Diesel	1	40	7.438017	1	0.31	0	0	0.12
Phase 1a Office	Office Building 4 2023	Compactor	Other Construction Equipment	Diesel	1	250	0.101157	1	0.42	0	0	0.06
Phase 1a Office	Office Building 4 2023	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.78	0	0	0.06
Phase 1a Office	Office Building 4 2023	Concrete Pump	Pumps	Diesel	1	450	0.075372	1	0.74	0	0	0.042715783
Phase 1a Office	Office Building 4 2023	Excavator	Excavators	Diesel	1	500	0.063223	1	0.38	0	0	0.06
Phase 1a Office	Office Building 4 2023	Generator	Generator Sets	Diesel	1	25	2.900826	1	0.74	0	0	0.12
Phase 1a Office	Office Building 4 2023	Gradall	Forklifts	Diesel	1	350	0.48	1	0.2	0	0	0.06
Phase 1a Office	Office Building 4 2023	Hydro/Crawler Crane	Cranes	Diesel	1	550	1.809917	1	0.29	0	0	0.06
Phase 1a Office	Office Building 4 2023	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	0.719008	1	0.37	0	0	0.06
Phase 1a Office	Office Building 4 2023	Paver	Pavers	Diesel	1	250	0	1	0.42	0	0	0.06
Phase 1a Office	Office Building 4 2023	Pile Rig	Bore/Drill Rigs	Diesel	1	600	0.719008	1	0.5	0	0	0.06
Phase 1a Office	Office Building 4 2023	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0.3	0	0	0.12
Phase 1a Office	Office Building 4 2023	Scraper	Scrapers	Diesel	1	600	0	1	0.48	0	0	0.06
Phase 1a Office	Office Building 4 2023	Tire Wash	Other Construction Equipment	Diesel	1	100	1.5	1	0.42	0	0	0.06
Phase 1a Office	Office Building 4 2024	Air Compressor	Air Compressors	Diesel	1	150	0	1	0.48	0	0	0
Phase 1a Office	Office Building 4 2024	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	0	1	0.37	0	0	0
Phase 1a Office	Office Building 4 2024	Blade	Graders	Diesel	1	450	0	1	0.41	0	0	0
Phase 1a Office	Office Building 4 2024	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	0	1	0.37	0	0	0
Phase 1a Office	Office Building 4 2024	Boom Lift	Aerial Lifts	Diesel	1	40	1.405797	1	0.31	0	0	0
Phase 1a Office	Office Building 4 2024	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0.42	0	0	0
Phase 1a Office	Office Building 4 2024	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.78	0	0	0
Phase 1a Office	Office Building 4 2024	Concrete Pump	Pumps	Diesel	1	450	0	1	0.74	0	0	0
Phase 1a Office	Office Building 4 2024	Excavator	Excavators	Diesel	1	500	0	1	0.38	0	0	0
Phase 1a Office	Office Building 4 2024	Generator	Generator Sets	Diesel	1	25	0	1	0.74	0	0	0
Phase 1a Office	Office Building 4 2024	Gradall	Forklifts	Diesel	1	350	0.48	1	0.2	0	0	0
Phase 1a Office	Office Building 4 2024	Hydro/Crawler Crane	Cranes	Diesel	1	550	0	1	0.29	0	0	0
Phase 1a Office	Office Building 4 2024	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	0	1	0.37	0	0	0
Phase 1a Office	Office Building 4 2024	Paver	Pavers	Diesel	1	250	0	1	0.42	0	0	0
Phase 1a Office	Office Building 4 2024	Pile Rig	Bore/Drill Rigs	Diesel	1	600	0	1	0.5	0	0	0
Phase 1a Office	Office Building 4 2024	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0.3	0	0	0
Phase 1a Office	Office Building 4 2024	Scraper	Scrapers	Diesel	1	600	0	1	0.48	0	0	0
Phase 1a Office	Office Building 4 2024	Tire Wash	Other Construction Equipment	Diesel	1	100	1.5	1	0.42	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2022	Air Compressor	Air Compressors	Diesel	1	150	0	1	0.48	0	0.06	0
Phase 1a Office	Meeting, Collaboration, Park 2022	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	5.857143	1	0.37	0	0.06	0
Phase 1a Office	Meeting, Collaboration, Park 2022	Blade	Graders	Diesel	1	450	0	1	0.41	0	0.06	0
Phase 1a Office	Meeting, Collaboration, Park 2022	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	5.857143	1	0.37	0	0.06	0
Phase 1a Office	Meeting, Collaboration, Park 2022	Boom Lift	Aerial Lifts	Diesel	1	40	0	1	0.31	0	0.12	0
Phase 1a Office	Meeting, Collaboration, Park 2022	Compactor	Other Construction Equipment	Diesel	1	250	0.314286	1	0.42	0	0.06	0
Phase 1a Office	Meeting, Collaboration, Park 2022	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.78	0	0.06	0
Phase 1a Office	Meeting, Collaboration, Park 2022	Concrete Pump	Pumps	Diesel	1	450	0	1	0.74	0	0.042508854	0
Phase 1a Office	Meeting, Collaboration, Park 2022	Excavator	Excavators	Diesel	1	500	23.42857	1	0.38	0	0.06	0
Phase 1a Office	Meeting, Collaboration, Park 2022	Generator	Generator Sets	Diesel	1	25	5.857143	1	0.74	0	0.12	0
Phase 1a Office	Meeting, Collaboration, Park 2022	Gradall	Forklifts	Diesel	1	350	8.785714	1	0.2	0	0.06	0
Phase 1a Office	Meeting, Collaboration, Park 2022	Hydro/Crawler Crane	Cranes	Diesel	1	550	1.571429	1	0.29	0	0.06	0
Phase 1a Office	Meeting, Collaboration, Park 2022	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	4.392857	1	0.37	0	0.06	0
Phase 1a Office	Meeting, Collaboration, Park 2022	Paver	Pavers	Diesel	1	250	0	1	0.42	0	0.06	0
Phase 1a Office	Meeting, Collaboration, Park 2022	Pile Rig	Bore/Drill Rigs	Diesel	1	600	3.142857	1	0.5	0	0.06	0
Phase 1a Office	Meeting, Collaboration, Park 2022	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0.3	0	0.12	0
Phase 1a Office	Meeting, Collaboration, Park 2022	Scraper	Scrapers	Diesel	1	600	0	1	0.48	0	0.06	0
Phase 1a Office	Meeting, Collaboration, Park 2022	Tire Wash	Other Construction Equipment	Diesel	1	100	1.464286	1	0.42	0	0.06	0
Phase 1a Office	Meeting, Collaboration, Park 2023	Air Compressor	Air Compressors	Diesel	1	150	0.304615	1	0.48	0	0	0.06

Phase 1a Office	Meeting, Collaboration, Park 2023	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	3.276923	1	0.37	0	0	0.06
Phase 1a Office	Meeting, Collaboration, Park 2023	Blade	Graders	Diesel	1	450	0	1	0.41	0	0	0.06
Phase 1a Office	Meeting, Collaboration, Park 2023	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	3.276923	1	0.37	0	0	0.06
Phase 1a Office	Meeting, Collaboration, Park 2023	Boom Lift	Aerial Lifts	Diesel	1	40	0.888462	1	0.31	0	0	0.12
Phase 1a Office	Meeting, Collaboration, Park 2023	Compactor	Other Construction Equipment	Diesel	1	250	0.152308	1	0.42	0	0	0.06
Phase 1a Office	Meeting, Collaboration, Park 2023	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.78	0	0	0.06
Phase 1a Office	Meeting, Collaboration, Park 2023	Concrete Pump	Pumps	Diesel	1	450	0.304615	1	0.74	0	0	0.042715783
Phase 1a Office	Meeting, Collaboration, Park 2023	Excavator	Excavators	Diesel	1	500	5.492308	1	0.38	0	0	0.06
Phase 1a Office	Meeting, Collaboration, Park 2023	Generator	Generator Sets	Diesel	1	25	6.715385	1	0.74	0	0	0.12
Phase 1a Office	Meeting, Collaboration, Park 2023	Gradall	Forklifts	Diesel	1	350	7.661538	1	0.2	0	0	0.06
Phase 1a Office	Meeting, Collaboration, Park 2023	Hydro/Crawler Crane	Cranes	Diesel	1	550	7.246154	1	0.29	0	0	0.06
Phase 1a Office	Meeting, Collaboration, Park 2023	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	1.828846	1	0.37	0	0	0.06
Phase 1a Office	Meeting, Collaboration, Park 2023	Paver	Pavers	Diesel	1	250	0	1	0.42	0	0	0.06
Phase 1a Office	Meeting, Collaboration, Park 2023	Pile Rig	Bore/Drill Rigs	Diesel	1	600	2.007692	1	0.5	0	0	0.06
Phase 1a Office	Meeting, Collaboration, Park 2023	Pressure Washer	Pressure Washers	Diesel	1	25	0.152308	1	0.3	0	0	0.12
Phase 1a Office	Meeting, Collaboration, Park 2023	Scraper	Scrapers	Diesel	1	600	0	1	0.48	0	0	0.06
Phase 1a Office	Meeting, Collaboration, Park 2023	Tire Wash	Other Construction Equipment	Diesel	1	100	0.819231	1	0.42	0	0	0.06
Phase 1a Office	Meeting, Collaboration, Park 2024	Air Compressor	Air Compressors	Diesel	1	150	0	1	0.48	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2024	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	0	1	0.37	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2024	Blade	Graders	Diesel	1	450	0	1	0.41	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2024	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	0	1	0.37	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2024	Boom Lift	Aerial Lifts	Diesel	1	40	19.30534	1	0.31	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2024	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0.42	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2024	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.78	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2024	Concrete Pump	Pumps	Diesel	1	450	0	1	0.74	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2024	Excavator	Excavators	Diesel	1	500	0	1	0.38	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2024	Generator	Generator Sets	Diesel	1	25	0	1	0.74	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2024	Gradall	Forklifts	Diesel	1	350	10.25954	1	0.2	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2024	Hydro/Crawler Crane	Cranes	Diesel	1	550	0.503817	1	0.29	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2024	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	0	1	0.37	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2024	Paver	Pavers	Diesel	1	250	0	1	0.42	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2024	Pile Rig	Bore/Drill Rigs	Diesel	1	600	0	1	0.5	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2024	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0.3	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2024	Scraper	Scrapers	Diesel	1	600	0	1	0.48	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2024	Tire Wash	Other Construction Equipment	Diesel	1	100	0	1	0.42	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2025	Air Compressor	Air Compressors	Diesel	1	150	0	1	0.48	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2025	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	0	1	0.37	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2025	Blade	Graders	Diesel	1	450	0	1	0.41	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2025	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	0	1	0.37	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2025	Boom Lift	Aerial Lifts	Diesel	1	40	9.425287	1	0.31	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2025	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0.42	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2025	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.78	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2025	Concrete Pump	Pumps	Diesel	1	450	0	1	0.74	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2025	Excavator	Excavators	Diesel	1	500	0	1	0.38	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2025	Generator	Generator Sets	Diesel	1	25	0	1	0.74	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2025	Gradall	Forklifts	Diesel	1	350	11.77011	1	0.2	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2025	Hydro/Crawler Crane	Cranes	Diesel	1	550	0.770115	1	0.29	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2025	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	0	1	0.37	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2025	Paver	Pavers	Diesel	1	250	0	1	0.42	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2025	Pile Rig	Bore/Drill Rigs	Diesel	1	600	0	1	0.5	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2025	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0.3	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2025	Scraper	Scrapers	Diesel	1	600	0	1	0.48	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2025	Tire Wash	Other Construction Equipment	Diesel	1	100	0	1	0.42	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2026	Air Compressor	Air Compressors	Diesel	1	150	0	1	0.48	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2026	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	0	1	0.37	0	0	0

Phase 1a Office	Meeting, Collaboration, Park 2026	Blade	Graders	Diesel	1	450	0	1	0.41	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2026	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	0	1	0.37	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2026	Boom Lift	Aerial Lifts	Diesel	1	40	0	1	0.31	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2026	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0.42	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2026	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.78	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2026	Concrete Pump	Pumps	Diesel	1	450	0	1	0.74	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2026	Excavator	Excavators	Diesel	1	500	0	1	0.38	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2026	Generator	Generator Sets	Diesel	1	25	0	1	0.74	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2026	Gradall	Forklifts	Diesel	1	350	11.73913	1	0.2	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2026	Hydro/Crawler Crane	Cranes	Diesel	1	550	5.869565	1	0.29	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2026	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	0	1	0.37	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2026	Paver	Pavers	Diesel	1	250	0	1	0.42	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2026	Pile Rig	Bore/Drill Rigs	Diesel	1	600	0	1	0.5	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2026	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0.3	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2026	Scraper	Scrapers	Diesel	1	600	0	1	0.48	0	0	0
Phase 1a Office	Meeting, Collaboration, Park 2026	Tire Wash	Other Construction Equipment	Diesel	1	100	0	1	0.42	0	0	0
Phase 1a Office	Hotel Excavation 2022	Air Compressor	Air Compressors	Diesel	1	150	2.642857	1	0.48	0	0.06	0
Phase 1a Office	Hotel Excavation 2022	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	2.642857	1	0.37	0	0.06	0
Phase 1a Office	Hotel Excavation 2022	Blade	Graders	Diesel	1	450	0	1	0.41	0	0.06	0
Phase 1a Office	Hotel Excavation 2022	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	2.928571	1	0.37	0	0.06	0
Phase 1a Office	Hotel Excavation 2022	Boom Lift	Aerial Lifts	Diesel	1	40	1.464286	1	0.31	0	0.12	0
Phase 1a Office	Hotel Excavation 2022	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0.42	0	0.06	0
Phase 1a Office	Hotel Excavation 2022	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.78	0	0.06	0
Phase 1a Office	Hotel Excavation 2022	Concrete Pump	Pumps	Diesel	1	450	0.422857	1	0.74	0	0.042508854	0
Phase 1a Office	Hotel Excavation 2022	Excavator	Excavators	Diesel	1	500	11.71429	1	0.38	0	0.06	0
Phase 1a Office	Hotel Excavation 2022	Generator	Generator Sets	Diesel	1	25	5.857143	1	0.74	0	0.12	0
Phase 1a Office	Hotel Excavation 2022	Gradall	Forklifts	Diesel	1	350	5.857143	1	0.2	0	0.06	0
Phase 1a Office	Hotel Excavation 2022	Hydro/Crawler Crane	Cranes	Diesel	1	550	2.642857	1	0.29	0	0.06	0
Phase 1a Office	Hotel Excavation 2022	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	11.71429	1	0.37	0	0.06	0
Phase 1a Office	Hotel Excavation 2022	Paver	Pavers	Diesel	1	250	0	1	0.42	0	0.06	0
Phase 1a Office	Hotel Excavation 2022	Pile Rig	Bore/Drill Rigs	Diesel	1	600	10.57143	1	0.5	0	0.06	0
Phase 1a Office	Hotel Excavation 2022	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0.3	0	0.12	0
Phase 1a Office	Hotel Excavation 2022	Scraper	Scrapers	Diesel	1	600	0	1	0.48	0	0.06	0
Phase 1a Office	Hotel Excavation 2022	Tire Wash	Other Construction Equipment	Diesel	1	100	2.928571	1	0.42	0	0.06	0
Phase 1a Office	Hotel Excavation 2023	Air Compressor	Air Compressors	Diesel	1	150	2.311284	1	0.48	0	0	0.06
Phase 1a Office	Hotel Excavation 2023	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	0	1	0.37	0	0	0.06
Phase 1a Office	Hotel Excavation 2023	Blade	Graders	Diesel	1	450	0	1	0.41	0	0	0.06
Phase 1a Office	Hotel Excavation 2023	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	0.700389	1	0.37	0	0	0.06
Phase 1a Office	Hotel Excavation 2023	Boom Lift	Aerial Lifts	Diesel	1	40	0.350195	1	0.31	0	0	0.12
Phase 1a Office	Hotel Excavation 2023	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0.42	0	0	0.06
Phase 1a Office	Hotel Excavation 2023	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.78	0	0	0.06
Phase 1a Office	Hotel Excavation 2023	Concrete Pump	Pumps	Diesel	1	450	2.311284	1	0.74	0	0	0.042715783
Phase 1a Office	Hotel Excavation 2023	Excavator	Excavators	Diesel	1	500	2.801556	1	0.38	0	0	0.06
Phase 1a Office	Hotel Excavation 2023	Generator	Generator Sets	Diesel	1	25	10.64591	1	0.74	0	0	0.12
Phase 1a Office	Hotel Excavation 2023	Gradall	Forklifts	Diesel	1	350	10.64591	1	0.2	0	0	0.06
Phase 1a Office	Hotel Excavation 2023	Hydro/Crawler Crane	Cranes	Diesel	1	550	9.245136	1	0.29	0	0	0.06
Phase 1a Office	Hotel Excavation 2023	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	2.801556	1	0.37	0	0	0.06
Phase 1a Office	Hotel Excavation 2023	Paver	Pavers	Diesel	1	250	0	1	0.42	0	0	0.06
Phase 1a Office	Hotel Excavation 2023	Pile Rig	Bore/Drill Rigs	Diesel	1	600	0	1	0.5	0	0	0.06
Phase 1a Office	Hotel Excavation 2023	Pressure Washer	Pressure Washers	Diesel	1	25	0.046226	1	0.3	0	0	0.12
Phase 1a Office	Hotel Excavation 2023	Scraper	Scrapers	Diesel	1	600	0	1	0.48	0	0	0.06
Phase 1a Office	Hotel Excavation 2023	Tire Wash	Other Construction Equipment	Diesel	1	100	1.856031	1	0.42	0	0	0.06
Phase 1a Office	Hotel Construction 2024	Air Compressor	Air Compressors	Diesel	1	150	3	1	0.48	0	0	0
Phase 1a Office	Hotel Construction 2024	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	0	1	0.37	0	0	0
Phase 1a Office	Hotel Construction 2024	Blade	Graders	Diesel	1	450	0	1	0.41	0	0	0

Phase 1a Office	Hotel Construction 2024	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	0	1	0.37	0	0	0
Phase 1a Office	Hotel Construction 2024	Boom Lift	Aerial Lifts	Diesel	1	40	20.91429	1	0.31	0	0	0
Phase 1a Office	Hotel Construction 2024	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0.42	0	0	0
Phase 1a Office	Hotel Construction 2024	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.78	0	0	0
Phase 1a Office	Hotel Construction 2024	Concrete Pump	Pumps	Diesel	1	450	3	1	0.74	0	0	0
Phase 1a Office	Hotel Construction 2024	Excavator	Excavators	Diesel	1	500	0	1	0.38	0	0	0
Phase 1a Office	Hotel Construction 2024	Generator	Generator Sets	Diesel	1	25	0	1	0.74	0	0	0
Phase 1a Office	Hotel Construction 2024	Gradall	Forklifts	Diesel	1	350	12	1	0.2	0	0	0
Phase 1a Office	Hotel Construction 2024	Hydro/Crawler Crane	Cranes	Diesel	1	550	0	1	0.29	0	0	0
Phase 1a Office	Hotel Construction 2024	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	0	1	0.37	0	0	0
Phase 1a Office	Hotel Construction 2024	Paver	Pavers	Diesel	1	250	0	1	0.42	0	0	0
Phase 1a Office	Hotel Construction 2024	Pile Rig	Bore/Drill Rigs	Diesel	1	600	0	1	0.5	0	0	0
Phase 1a Office	Hotel Construction 2024	Pressure Washer	Pressure Washers	Diesel	1	25	0.06	1	0.3	0	0	0
Phase 1a Office	Hotel Construction 2024	Scraper	Scrapers	Diesel	1	600	0	1	0.48	0	0	0
Phase 1a Office	Hotel Construction 2024	Tire Wash	Other Construction Equipment	Diesel	1	100	1.5	1	0.42	0	0	0
Phase 1a Office	Hotel Construction 2025	Air Compressor	Air Compressors	Diesel	1	150	0.837662	1	0.48	0	0	0
Phase 1a Office	Hotel Construction 2025	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	0	1	0.37	0	0	0
Phase 1a Office	Hotel Construction 2025	Blade	Graders	Diesel	1	450	0	1	0.41	0	0	0
Phase 1a Office	Hotel Construction 2025	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	0	1	0.37	0	0	0
Phase 1a Office	Hotel Construction 2025	Boom Lift	Aerial Lifts	Diesel	1	40	20.18182	1	0.31	0	0	0
Phase 1a Office	Hotel Construction 2025	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0.42	0	0	0
Phase 1a Office	Hotel Construction 2025	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.78	0	0	0
Phase 1a Office	Hotel Construction 2025	Concrete Pump	Pumps	Diesel	1	450	0.837662	1	0.74	0	0	0
Phase 1a Office	Hotel Construction 2025	Excavator	Excavators	Diesel	1	500	0	1	0.38	0	0	0
Phase 1a Office	Hotel Construction 2025	Generator	Generator Sets	Diesel	1	25	0	1	0.74	0	0	0
Phase 1a Office	Hotel Construction 2025	Gradall	Forklifts	Diesel	1	350	12.07792	1	0.2	0	0	0
Phase 1a Office	Hotel Construction 2025	Hydro/Crawler Crane	Cranes	Diesel	1	550	0	1	0.29	0	0	0
Phase 1a Office	Hotel Construction 2025	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	0	1	0.37	0	0	0
Phase 1a Office	Hotel Construction 2025	Paver	Pavers	Diesel	1	250	0	1	0.42	0	0	0
Phase 1a Office	Hotel Construction 2025	Pile Rig	Bore/Drill Rigs	Diesel	1	600	0	1	0.5	0	0	0
Phase 1a Office	Hotel Construction 2025	Pressure Washer	Pressure Washers	Diesel	1	25	0.016753	1	0.3	0	0	0
Phase 1a Office	Hotel Construction 2025	Scraper	Scrapers	Diesel	1	600	0	1	0.48	0	0	0
Phase 1a Office	Hotel Construction 2025	Tire Wash	Other Construction Equipment	Diesel	1	100	1.50974	1	0.42	0	0	0
Phase 1a Office	Town Square 2023	Air Compressor	Air Compressors	Diesel	1	150	0	1	0.48	0	0	0.06
Phase 1a Office	Town Square 2023	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	0	1	0.37	0	0	0.06
Phase 1a Office	Town Square 2023	Blade	Graders	Diesel	1	450	0	1	0.41	0	0	0.06
Phase 1a Office	Town Square 2023	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	3	1	0.37	0	0	0.06
Phase 1a Office	Town Square 2023	Boom Lift	Aerial Lifts	Diesel	1	40	1.5	1	0.31	0	0	0.12
Phase 1a Office	Town Square 2023	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0.42	0	0	0.06
Phase 1a Office	Town Square 2023	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.78	0	0	0.06
Phase 1a Office	Town Square 2023	Concrete Pump	Pumps	Diesel	1	450	0	1	0.74	0	0	0.042715783
Phase 1a Office	Town Square 2023	Excavator	Excavators	Diesel	1	500	12	1	0.38	0	0	0.06
Phase 1a Office	Town Square 2023	Generator	Generator Sets	Diesel	1	25	6	1	0.74	0	0	0.12
Phase 1a Office	Town Square 2023	Gradall	Forklifts	Diesel	1	350	6	1	0.2	0	0	0.06
Phase 1a Office	Town Square 2023	Hydro/Crawler Crane	Cranes	Diesel	1	550	0	1	0.29	0	0	0.06
Phase 1a Office	Town Square 2023	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	12	1	0.37	0	0	0.06
Phase 1a Office	Town Square 2023	Paver	Pavers	Diesel	1	250	0	1	0.42	0	0	0.06
Phase 1a Office	Town Square 2023	Pile Rig	Bore/Drill Rigs	Diesel	1	600	0	1	0.5	0	0	0.06
Phase 1a Office	Town Square 2023	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0.3	0	0	0.12
Phase 1a Office	Town Square 2023	Scraper	Scrapers	Diesel	1	600	0	1	0.48	0	0	0.06
Phase 1a Office	Town Square 2023	Tire Wash	Other Construction Equipment	Diesel	1	100	3	1	0.42	0	0	0.06
Phase 1a Office	Town Square 2024	Air Compressor	Air Compressors	Diesel	1	150	0	1	0.48	0	0	0
Phase 1a Office	Town Square 2024	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	0	1	0.37	0	0	0
Phase 1a Office	Town Square 2024	Blade	Graders	Diesel	1	450	0	1	0.41	0	0	0
Phase 1a Office	Town Square 2024	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	0.996183	1	0.37	0	0	0

Phase 1a Office	Town Square 2024	Boom Lift	Aerial Lifts	Diesel	1	40	1.872137	1	0.31	0	0	0
Phase 1a Office	Town Square 2024	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0.42	0	0	0
Phase 1a Office	Town Square 2024	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.78	0	0	0
Phase 1a Office	Town Square 2024	Concrete Pump	Pumps	Diesel	1	450	0.020382	1	0.74	0	0	0
Phase 1a Office	Town Square 2024	Excavator	Excavators	Diesel	1	500	3.984733	1	0.38	0	0	0
Phase 1a Office	Town Square 2024	Generator	Generator Sets	Diesel	1	25	0.549618	1	0.74	0	0	0
Phase 1a Office	Town Square 2024	Gradall	Forklifts	Diesel	1	350	5.267176	1	0.2	0	0	0
Phase 1a Office	Town Square 2024	Hydro/Crawler Crane	Cranes	Diesel	1	550	1.03145	1	0.29	0	0	0
Phase 1a Office	Town Square 2024	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	3.984733	1	0.37	0	0	0
Phase 1a Office	Town Square 2024	Paver	Pavers	Diesel	1	250	0	1	0.42	0	0	0
Phase 1a Office	Town Square 2024	Pile Rig	Bore/Drill Rigs	Diesel	1	600	0	1	0.5	0	0	0
Phase 1a Office	Town Square 2024	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0.3	0	0	0
Phase 1a Office	Town Square 2024	Scraper	Scrapers	Diesel	1	600	0	1	0.48	0	0	0
Phase 1a Office	Town Square 2024	Tire Wash	Other Construction Equipment	Diesel	1	100	0.996183	1	0.42	0	0	0
Phase 1a Office	Town Square 2025	Air Compressor	Air Compressors	Diesel	1	150	0	1	0.48	0	0	0
Phase 1a Office	Town Square 2025	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	0	1	0.37	0	0	0
Phase 1a Office	Town Square 2025	Blade	Graders	Diesel	1	450	0	1	0.41	0	0	0
Phase 1a Office	Town Square 2025	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	0	1	0.37	0	0	0
Phase 1a Office	Town Square 2025	Boom Lift	Aerial Lifts	Diesel	1	40	0	1	0.31	0	0	0
Phase 1a Office	Town Square 2025	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0.42	0	0	0
Phase 1a Office	Town Square 2025	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.78	0	0	0
Phase 1a Office	Town Square 2025	Concrete Pump	Pumps	Diesel	1	450	0	1	0.74	0	0	0
Phase 1a Office	Town Square 2025	Excavator	Excavators	Diesel	1	500	0	1	0.38	0	0	0
Phase 1a Office	Town Square 2025	Generator	Generator Sets	Diesel	1	25	0	1	0.74	0	0	0
Phase 1a Office	Town Square 2025	Gradall	Forklifts	Diesel	1	350	18	1	0.2	0	0	0
Phase 1a Office	Town Square 2025	Hydro/Crawler Crane	Cranes	Diesel	1	550	0.18	1	0.29	0	0	0
Phase 1a Office	Town Square 2025	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	0	1	0.37	0	0	0
Phase 1a Office	Town Square 2025	Paver	Pavers	Diesel	1	250	0	1	0.42	0	0	0
Phase 1a Office	Town Square 2025	Pile Rig	Bore/Drill Rigs	Diesel	1	600	0	1	0.5	0	0	0
Phase 1a Office	Town Square 2025	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0.3	0	0	0
Phase 1a Office	Town Square 2025	Scraper	Scrapers	Diesel	1	600	0	1	0.48	0	0	0
Phase 1a Office	Town Square 2025	Tire Wash	Other Construction Equipment	Diesel	1	100	0	1	0.42	0	0	0
Phase 1a Mixed Use	Parcel 2 Foundations	Pile Rig	Bore/Drill Rigs	Diesel	0	600	8	0.4	0.5	0	0	0.06
Phase 1a Mixed Use	Parcel 2 Foundations	Generator	Generator Sets	Diesel	0	25	6	1	0.74	0	0	0.12
Phase 1a Mixed Use	Parcel 2 Foundations	Tire Wash	Other Construction Equipment	Diesel	1	100	4	0.9	0.42	0	0	0.06
Phase 1a Mixed Use	Parcel 2 Foundations	Excavator	Excavators	Diesel	1	131	8	0.6	0.38	0	0	0.06
Phase 1a Mixed Use	Parcel 2 Foundations	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	90	8	0.6	0.37	0	0	0.06
Phase 1a Mixed Use	Parcel 2 Foundations	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	70	8	0.8	0.37	0	0	0.12
Phase 1a Mixed Use	Parcel 2 Foundations	Gradall	Forklifts	Diesel	1	74	4	0.8	0.2	0	0	0.12
Phase 1a Mixed Use	Parcel 2 Foundations	Crane	Cranes	Diesel	1	215	4	0.5	0.29	0	0	0.06
Phase 1a Mixed Use	Parcel 2 Foundations	Concrete Pump	Pumps	Diesel	1	450	8	0.15	0.74	0	0	0.042715783
Phase 1a Mixed Use	Parcel 2 Core and Shell	Generator	Generator Sets	Diesel	0	25	6	1	0.74	0	0	0.12
Phase 1a Mixed Use	Parcel 2 Core and Shell	Tire Wash	Other Construction Equipment	Diesel	1	100	4	0.9	0.42	0	0	0.06
Phase 1a Mixed Use	Parcel 2 Core and Shell	Crane	Cranes	Diesel	1	600	8	0.2	0.29	0	0	0.06
Phase 1a Mixed Use	Parcel 2 Core and Shell	Gradall	Forklifts	Diesel	1	74	4	0.8	0.2	0	0	0.12
Phase 1a Mixed Use	Parcel 2 Core and Shell	Concrete Pump	Pumps	Diesel	0	450	6	0.225	0.74	0	0	0.042715783
Phase 1a Mixed Use	Parcel 2 Core and Shell	Air Compressor	Air Compressors	Diesel	0	140	2	0.4	0.48	0	0	0.06
Phase 1a Mixed Use	Parcel 2 Core and Shell	Boom Lift	Aerial Lifts	Diesel	0	50	6	0.2	0.31	0	0	0.12
Phase 1a Mixed Use	Parcel 2 Tenant Improvements	Generator	Generator Sets	Diesel	0	25	6	0.85	0.74	0	0	0
Phase 1a Mixed Use	Parcel 2 Tenant Improvements	Tire Wash	Other Construction Equipment	Diesel	1	100	4	0.9	0.42	0	0	0
Phase 1a Mixed Use	Parcel 2 Tenant Improvements	Gradall	Forklifts	Diesel	1	74	4	0.8	0.2	0	0	0
Phase 1a Mixed Use	Parcel 2 Landscaping	Excavator	Excavators	Diesel	1	25	8	0.9	0.38	0	0	0
Phase 1a Mixed Use	Parcel 2 Landscaping	Generator	Generator Sets	Diesel	0	25	6	0.5	0.74	0	0	0
Phase 1a Mixed Use	Parcel 2 Landscaping	Tire Wash	Other Construction Equipment	Diesel	1	100	4	0.9	0.42	0	0	0
Phase 1a Mixed Use	Parcel 2 Landscaping	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	90	8	1	0.37	0	0	0

Phase 1a Mixed Use	Parcel 2 Landscaping	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	70	8	0.8	0.37	0	0	0
Phase 1a Mixed Use	Parcel 3 Foundations	Pile Rig	Bore/Drill Rigs	Diesel	0	600	8	0.4	0.5	0	0	0.06
Phase 1a Mixed Use	Parcel 3 Foundations	Generator	Generator Sets	Diesel	0	25	6	1	0.74	0	0	0.12
Phase 1a Mixed Use	Parcel 3 Foundations	Tire Wash	Other Construction Equipment	Diesel	1	100	4	0.9	0.42	0	0	0.06
Phase 1a Mixed Use	Parcel 3 Foundations	Excavator	Excavators	Diesel	1	131	8	0.6	0.38	0	0	0.06
Phase 1a Mixed Use	Parcel 3 Foundations	Backhoe	Tractors/Loaders/Backhoes	Diesel	2	90	8	0.6	0.37	0	0	0.06
Phase 1a Mixed Use	Parcel 3 Foundations	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	70	8	0.8	0.37	0	0	0.12
Phase 1a Mixed Use	Parcel 3 Foundations	Gradall	Forklifts	Diesel	1	74	4	0.8	0.2	0	0	0.12
Phase 1a Mixed Use	Parcel 3 Foundations	Crane	Cranes	Diesel	1	215	4	0.5	0.29	0	0	0.06
Phase 1a Mixed Use	Parcel 3 Foundations	Concrete Pump	Pumps	Diesel	1	450	8	0.15	0.74	0	0	0.042715783
Phase 1a Mixed Use	Parcel 3 Core and Shell	Generator	Generator Sets	Diesel	0	25	6	1	0.74	0	0	0
Phase 1a Mixed Use	Parcel 3 Core and Shell	Tire Wash	Other Construction Equipment	Diesel	1	100	4	0.9	0.42	0	0	0
Phase 1a Mixed Use	Parcel 3 Core and Shell	Crane	Cranes	Diesel	1	600	8	0.2	0.29	0	0	0
Phase 1a Mixed Use	Parcel 3 Core and Shell	Gradall	Forklifts	Diesel	2	74	4	0.8	0.2	0	0	0
Phase 1a Mixed Use	Parcel 3 Core and Shell	Concrete Pump	Pumps	Diesel	0	450	6	0.225	0.74	0	0	0
Phase 1a Mixed Use	Parcel 3 Core and Shell	Air Compressor	Air Compressors	Diesel	0	140	2	0.4	0.48	0	0	0
Phase 1a Mixed Use	Parcel 3 Core and Shell	Boom Lift	Aerial Lifts	Diesel	0	50	6	0.2	0.31	0	0	0
Phase 1a Mixed Use	Parcel 3 Tenant Improvements	Generator	Generator Sets	Diesel	0	25	6	0.85	0.74	0	0	0
Phase 1a Mixed Use	Parcel 3 Tenant Improvements	Tire Wash	Other Construction Equipment	Diesel	1	100	4	0.9	0.42	0	0	0
Phase 1a Mixed Use	Parcel 3 Tenant Improvements	Gradall	Forklifts	Diesel	1	74	4	0.8	0.2	0	0	0
Phase 1a Mixed Use	Parcel 3 Landscaping	Excavator	Excavators	Diesel	1	25	8	0.9	0.38	0	0	0
Phase 1a Mixed Use	Parcel 3 Landscaping	Generator	Generator Sets	Diesel	0	25	6	0.5	0.74	0	0	0
Phase 1a Mixed Use	Parcel 3 Landscaping	Tire Wash	Other Construction Equipment	Diesel	0	100	4	0.9	0.42	0	0	0
Phase 1a Mixed Use	Parcel 3 Landscaping	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	90	8	1	0.37	0	0	0
Phase 1a Mixed Use	Parcel 3 Landscaping	Bob Cat	Tractors/Loaders/Backhoes	Diesel	2	70	8	0.8	0.37	0	0	0
Phase 1b	Demolition	Excavator	Excavators	Diesel	4	131	8	0.9	0.38	0	0.06	0
Phase 1b	Demolition	Generator	Generator Sets	Diesel	2	25	6	0.5	0.74	0	0.12	0
Phase 1b	Demolition	Tire Wash	Other Construction Equipment	Diesel	2	100	4	0.9	0.42	0	0.06	0
Phase 1b	Demolition	Concrete Crusher	Crushing/Proc. Equipment	Diesel	2	200	2	0	0.78	0	0.06	0
Phase 1b	Demolition	Bob Cat	Tractors/Loaders/Backhoes	Diesel	6	150	8	0.8	0.37	0	0.06	0
Phase 1b	Demolition	Pressure Washer	Pressure Washers	Diesel	2	25	8	1	0.3	0	0.12	0
Phase 1b	Demolition	Air Compressor	Air Compressors	Diesel	1	140	6	0.7	0.48	0	0.06	0
Phase 1b	Grading and Utilities	Blade	Graders	Diesel	2	359	8	0.15	0.41	0	0.06	0.06
Phase 1b	Grading and Utilities	Scraper	Scrapers	Diesel	2	52	8	0.15	0.48	0	0.12	0.12
Phase 1b	Grading and Utilities	Loader	Tractors/Loaders/Backhoes	Diesel	4	100	4	0.9	0.37	0	0.06	0.06
Phase 1b	Grading and Utilities	Tire Wash	Other Construction Equipment	Diesel	2	100	4	0.9	0.42	0	0.06	0.06
Phase 1b	Grading and Utilities	Excavator	Excavators	Diesel	4	359	8	0.6	0.38	0	0.06	0.06
Phase 1b	Grading and Utilities	Backhoe	Tractors/Loaders/Backhoes	Diesel	4	350	8	0.6	0.37	0	0.06	0.06
Phase 1b	Grading and Utilities	Gradall	Forklifts	Diesel	4	350	4	0.6	0.2	0	0.06	0.06
Phase 1b	Grading and Utilities	Compactor	Other Construction Equipment	Diesel	4	250	0.5	0.2	0.42	0	0.06	0.06
Phase 1b	Grading and Utilities	Paver	Pavers	Diesel	2	250	8	0.01	0.42	0	0.06	0.06
Phase 1b	Grading and Utilities	Generator	Generator Sets	Diesel	1	600	2	0.1	0.74	0	0.06	0.06
Phase 1b Office	South Garage 2023	Air Compressor	Air Compressors	Diesel	1	150	0.48	1	0.48	0	0	0.06
Phase 1b Office	South Garage 2023	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	0.054653	1	0.37	0	0	0.06
Phase 1b Office	South Garage 2023	Blade	Graders	Diesel	1	450	0	1	0.41	0	0	0.06
Phase 1b Office	South Garage 2023	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	0.054653	1	0.37	0	0	0.06
Phase 1b Office	South Garage 2023	Boom Lift	Aerial Lifts	Diesel	1	40	0	1	0.31	0	0	0.12
Phase 1b Office	South Garage 2023	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0.42	0	0	0.06
Phase 1b Office	South Garage 2023	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.78	0	0	0.06
Phase 1b Office	South Garage 2023	Concrete Pump	Pumps	Diesel	1	450	0.451485	1	0.74	0	0	0.042715783
Phase 1b Office	South Garage 2023	Excavator	Excavators	Diesel	1	500	2.970297	1	0.38	0	0	0.06
Phase 1b Office	South Garage 2023	Generator	Generator Sets	Diesel	1	25	3.237624	1	0.74	0	0	0.12
Phase 1b Office	South Garage 2023	Gradall	Forklifts	Diesel	1	350	3	1	0.2	0	0	0.06
Phase 1b Office	South Garage 2023	Hydro/Crawler Crane	Cranes	Diesel	1	550	4.923267	1	0.29	0	0	0.06
Phase 1b Office	South Garage 2023	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	1.485149	1	0.37	0	0	0.06

Phase 1b Office	South Garage 2023	Paver	Pavers	Diesel	1	250	0	1	0.42	0	0	0.06
Phase 1b Office	South Garage 2023	Pile Rig	Bore/Drill Rigs	Diesel	1	600	0.861386	1	0.5	0	0	0.06
Phase 1b Office	South Garage 2023	Pressure Washer	Pressure Washers	Diesel	1	25	0.156832	1	0.3	0	0	0.12
Phase 1b Office	South Garage 2023	Scraper	Scrapers	Diesel	1	600	0	1	0.48	0	0	0.06
Phase 1b Office	South Garage 2023	Tire Wash	Other Construction Equipment	Diesel	1	100	1.44802	1	0.42	0	0	0.06
Phase 1b Office	South Garage 2024	Air Compressor	Air Compressors	Diesel	1	150	0.48	1	0.48	0	0	0
Phase 1b Office	South Garage 2024	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	0	1	0.37	0	0	0
Phase 1b Office	South Garage 2024	Blade	Graders	Diesel	1	450	0	1	0.41	0	0	0
Phase 1b Office	South Garage 2024	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	0	1	0.37	0	0	0
Phase 1b Office	South Garage 2024	Boom Lift	Aerial Lifts	Diesel	1	40	4.737447	1	0.31	0	0	0
Phase 1b Office	South Garage 2024	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0.42	0	0	0
Phase 1b Office	South Garage 2024	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.78	0	0	0
Phase 1b Office	South Garage 2024	Concrete Pump	Pumps	Diesel	1	450	0.6	1	0.74	0	0	0
Phase 1b Office	South Garage 2024	Excavator	Excavators	Diesel	1	500	0	1	0.38	0	0	0
Phase 1b Office	South Garage 2024	Generator	Generator Sets	Diesel	1	25	0	1	0.74	0	0	0
Phase 1b Office	South Garage 2024	Gradall	Forklifts	Diesel	1	350	3	1	0.2	0	0	0
Phase 1b Office	South Garage 2024	Hydro/Crawler Crane	Cranes	Diesel	1	550	3.68617	1	0.29	0	0	0
Phase 1b Office	South Garage 2024	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	0	1	0.37	0	0	0
Phase 1b Office	South Garage 2024	Paver	Pavers	Diesel	1	250	0	1	0.42	0	0	0
Phase 1b Office	South Garage 2024	Pile Rig	Bore/Drill Rigs	Diesel	1	600	0	1	0.5	0	0	0
Phase 1b Office	South Garage 2024	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0.3	0	0	0
Phase 1b Office	South Garage 2024	Scraper	Scrapers	Diesel	1	600	0	1	0.48	0	0	0
Phase 1b Office	South Garage 2024	Tire Wash	Other Construction Equipment	Diesel	1	100	1.5	1	0.42	0	0	0
Phase 1b Office	Office Building 3 2023	Air Compressor	Air Compressors	Diesel	1	150	0.067119	1	0.48	0	0	0.06
Phase 1b Office	Office Building 3 2023	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	2.576271	1	0.37	0	0	0.06
Phase 1b Office	Office Building 3 2023	Blade	Graders	Diesel	1	450	0	1	0.41	0	0	0.06
Phase 1b Office	Office Building 3 2023	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	2.576271	1	0.37	0	0	0.06
Phase 1b Office	Office Building 3 2023	Boom Lift	Aerial Lifts	Diesel	1	40	1.694915	1	0.31	0	0	0.12
Phase 1b Office	Office Building 3 2023	Compactor	Other Construction Equipment	Diesel	1	250	0.206102	1	0.42	0	0	0.06
Phase 1b Office	Office Building 3 2023	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.78	0	0	0.06
Phase 1b Office	Office Building 3 2023	Concrete Pump	Pumps	Diesel	1	450	0.121356	1	0.74	0	0	0.042715783
Phase 1b Office	Office Building 3 2023	Excavator	Excavators	Diesel	1	500	0.128814	1	0.38	0	0	0.06
Phase 1b Office	Office Building 3 2023	Generator	Generator Sets	Diesel	1	25	4.813559	1	0.74	0	0	0.12
Phase 1b Office	Office Building 3 2023	Gradall	Forklifts	Diesel	1	350	0.48	1	0.2	0	0	0.06
Phase 1b Office	Office Building 3 2023	Hydro/Crawler Crane	Cranes	Diesel	1	550	3.322034	1	0.29	0	0	0.06
Phase 1b Office	Office Building 3 2023	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	1.864407	1	0.37	0	0	0.06
Phase 1b Office	Office Building 3 2023	Paver	Pavers	Diesel	1	250	0	1	0.42	0	0	0.06
Phase 1b Office	Office Building 3 2023	Pile Rig	Bore/Drill Rigs	Diesel	1	600	1.864407	1	0.5	0	0	0.06
Phase 1b Office	Office Building 3 2023	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0.3	0	0	0.12
Phase 1b Office	Office Building 3 2023	Scraper	Scrapers	Diesel	1	600	0	1	0.48	0	0	0.06
Phase 1b Office	Office Building 3 2023	Tire Wash	Other Construction Equipment	Diesel	1	100	1.5	1	0.42	0	0	0.06
Phase 1b Office	Office Building 3 2024	Air Compressor	Air Compressors	Diesel	1	150	0	1	0.48	0	0	0
Phase 1b Office	Office Building 3 2024	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	0	1	0.37	0	0	0
Phase 1b Office	Office Building 3 2024	Blade	Graders	Diesel	1	450	0	1	0.41	0	0	0
Phase 1b Office	Office Building 3 2024	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	0	1	0.37	0	0	0
Phase 1b Office	Office Building 3 2024	Boom Lift	Aerial Lifts	Diesel	1	40	6.858779	1	0.31	0	0	0
Phase 1b Office	Office Building 3 2024	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0.42	0	0	0
Phase 1b Office	Office Building 3 2024	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.78	0	0	0
Phase 1b Office	Office Building 3 2024	Concrete Pump	Pumps	Diesel	1	450	0.005038	1	0.74	0	0	0
Phase 1b Office	Office Building 3 2024	Excavator	Excavators	Diesel	1	500	0	1	0.38	0	0	0
Phase 1b Office	Office Building 3 2024	Generator	Generator Sets	Diesel	1	25	0	1	0.74	0	0	0
Phase 1b Office	Office Building 3 2024	Gradall	Forklifts	Diesel	1	350	0.48	1	0.2	0	0	0
Phase 1b Office	Office Building 3 2024	Hydro/Crawler Crane	Cranes	Diesel	1	550	0	1	0.29	0	0	0
Phase 1b Office	Office Building 3 2024	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	0	1	0.37	0	0	0
Phase 1b Office	Office Building 3 2024	Paver	Pavers	Diesel	1	250	0	1	0.42	0	0	0

Phase 1b Office	Office Building 3 2024	Pile Rig	Bore/Drill Rigs	Diesel	1	600	0	1	0.5	0	0	0
Phase 1b Office	Office Building 3 2024	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0.3	0	0	0
Phase 1b Office	Office Building 3 2024	Scraper	Scrapers	Diesel	1	600	0	1	0.48	0	0	0
Phase 1b Office	Office Building 3 2024	Tire Wash	Other Construction Equipment	Diesel	1	100	1.5	1	0.42	0	0	0
Phase 1b Office	Office Building 3 2025	Air Compressor	Air Compressors	Diesel	1	150	0	1	0.48	0	0	0
Phase 1b Office	Office Building 3 2025	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	0	1	0.37	0	0	0
Phase 1b Office	Office Building 3 2025	Blade	Graders	Diesel	1	450	0	1	0.41	0	0	0
Phase 1b Office	Office Building 3 2025	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	0	1	0.37	0	0	0
Phase 1b Office	Office Building 3 2025	Boom Lift	Aerial Lifts	Diesel	1	40	0	1	0.31	0	0	0
Phase 1b Office	Office Building 3 2025	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0.42	0	0	0
Phase 1b Office	Office Building 3 2025	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.78	0	0	0
Phase 1b Office	Office Building 3 2025	Concrete Pump	Pumps	Diesel	1	450	0	1	0.74	0	0	0
Phase 1b Office	Office Building 3 2025	Excavator	Excavators	Diesel	1	500	0	1	0.38	0	0	0
Phase 1b Office	Office Building 3 2025	Generator	Generator Sets	Diesel	1	25	0	1	0.74	0	0	0
Phase 1b Office	Office Building 3 2025	Gradall	Forklifts	Diesel	1	350	0.48	1	0.2	0	0	0
Phase 1b Office	Office Building 3 2025	Hydro/Crawler Crane	Cranes	Diesel	1	550	0	1	0.29	0	0	0
Phase 1b Office	Office Building 3 2025	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	0	1	0.37	0	0	0
Phase 1b Office	Office Building 3 2025	Paver	Pavers	Diesel	1	250	0	1	0.42	0	0	0
Phase 1b Office	Office Building 3 2025	Pile Rig	Bore/Drill Rigs	Diesel	1	600	0	1	0.5	0	0	0
Phase 1b Office	Office Building 3 2025	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0.3	0	0	0
Phase 1b Office	Office Building 3 2025	Scraper	Scrapers	Diesel	1	600	0	1	0.48	0	0	0
Phase 1b Office	Office Building 3 2025	Tire Wash	Other Construction Equipment	Diesel	1	100	1.5	1	0.42	0	0	0
Phase 1b Office	Office Building 1 2023	Air Compressor	Air Compressors	Diesel	1	150	0.065363	1	0.48	0	0	0.06
Phase 1b Office	Office Building 1 2023	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	2.24581	1	0.37	0	0	0.06
Phase 1b Office	Office Building 1 2023	Blade	Graders	Diesel	1	450	0	1	0.41	0	0	0.06
Phase 1b Office	Office Building 1 2023	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	2.24581	1	0.37	0	0	0.06
Phase 1b Office	Office Building 1 2023	Boom Lift	Aerial Lifts	Diesel	1	40	2.480447	1	0.31	0	0	0.12
Phase 1b Office	Office Building 1 2023	Compactor	Other Construction Equipment	Diesel	1	250	0.179665	1	0.42	0	0	0.06
Phase 1b Office	Office Building 1 2023	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.78	0	0	0.06
Phase 1b Office	Office Building 1 2023	Compactor	Other Construction Equipment	Diesel	1	250	0.179665	1	0.42	0	0	0.06
Phase 1b Office	Office Building 1 2023	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.78	0	0	0.06
Phase 1b Office	Office Building 1 2023	Concrete Pump	Pumps	Diesel	1	450	0.109274	1	0.74	0	0	0.042715783
Phase 1b Office	Office Building 1 2023	Excavator	Excavators	Diesel	1	500	0.112291	1	0.38	0	0	0.06
Phase 1b Office	Office Building 1 2023	Generator	Generator Sets	Diesel	1	25	4.424581	1	0.74	0	0	0.12
Phase 1b Office	Office Building 1 2023	Gradall	Forklifts	Diesel	1	350	0.48	1	0.2	0	0	0.06
Phase 1b Office	Office Building 1 2023	Hydro/Crawler Crane	Cranes	Diesel	1	550	2.916201	1	0.29	0	0	0.06
Phase 1b Office	Office Building 1 2023	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	1.47486	1	0.37	0	0	0.06
Phase 1b Office	Office Building 1 2023	Paver	Pavers	Diesel	1	250	0	1	0.42	0	0	0.06
Phase 1b Office	Office Building 1 2023	Pile Rig	Bore/Drill Rigs	Diesel	1	600	1.47486	1	0.5	0	0	0.06
Phase 1b Office	Office Building 1 2023	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0.3	0	0	0.12
Phase 1b Office	Office Building 1 2023	Scraper	Scrapers	Diesel	1	600	0	1	0.48	0	0	0.06
Phase 1b Office	Office Building 1 2023	Tire Wash	Other Construction Equipment	Diesel	1	100	1.5	1	0.42	0	0	0.06
Phase 1b Office	Office Building 1 2024	Air Compressor	Air Compressors	Diesel	1	150	0	1	0.48	0	0	0
Phase 1b Office	Office Building 1 2024	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	0	1	0.37	0	0	0
Phase 1b Office	Office Building 1 2024	Blade	Graders	Diesel	1	450	0	1	0.41	0	0	0
Phase 1b Office	Office Building 1 2024	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	0	1	0.37	0	0	0
Phase 1b Office	Office Building 1 2024	Boom Lift	Aerial Lifts	Diesel	1	40	6.554217	1	0.31	0	0	0
Phase 1b Office	Office Building 1 2024	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0.42	0	0	0
Phase 1b Office	Office Building 1 2024	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.78	0	0	0
Phase 1b Office	Office Building 1 2024	Concrete Pump	Pumps	Diesel	1	450	0.005301	1	0.74	0	0	0
Phase 1b Office	Office Building 1 2024	Excavator	Excavators	Diesel	1	500	0	1	0.38	0	0	0
Phase 1b Office	Office Building 1 2024	Generator	Generator Sets	Diesel	1	25	0	1	0.74	0	0	0
Phase 1b Office	Office Building 1 2024	Gradall	Forklifts	Diesel	1	350	0.478072	1	0.2	0	0	0
Phase 1b Office	Office Building 1 2024	Hydro/Crawler Crane	Cranes	Diesel	1	550	0	1	0.29	0	0	0
Phase 1b Office	Office Building 1 2024	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	0	1	0.37	0	0	0
Phase 1b Office	Office Building 1 2024	Paver	Pavers	Diesel	1	250	0	1	0.42	0	0	0
Phase 1b Office	Office Building 1 2024	Pile Rig	Bore/Drill Rigs	Diesel	1	600	0	1	0.5	0	0	0

Phase 1b Office	Office Building 1 2024	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0.3	0	0	0
Phase 1b Office	Office Building 1 2024	Scraper	Scrapers	Diesel	1	600	0	1	0.48	0	0	0
Phase 1b Office	Office Building 1 2024	Tire Wash	Other Construction Equipment	Diesel	1	100	1.5	1	0.42	0	0	0
Phase 1b Office	Office Building 2 2023	Air Compressor	Air Compressors	Diesel	1	150	0.075669	1	0.48	0	0	0.06
Phase 1b Office	Office Building 2 2023	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	2.484076	1	0.37	0	0	0.06
Phase 1b Office	Office Building 2 2023	Blade	Graders	Diesel	1	450	0	1	0.41	0	0	0.06
Phase 1b Office	Office Building 2 2023	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	2.484076	1	0.37	0	0	0.06
Phase 1b Office	Office Building 2 2023	Boom Lift	Aerial Lifts	Diesel	1	40	1.22293	1	0.31	0	0	0.12
Phase 1b Office	Office Building 2 2023	Compactor	Other Construction Equipment	Diesel	1	250	0.198726	1	0.42	0	0	0.06
Phase 1b Office	Office Building 2 2023	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.78	0	0	0.06
Phase 1b Office	Office Building 2 2023	Concrete Pump	Pumps	Diesel	1	450	0.124204	1	0.74	0	0	0.042715783
Phase 1b Office	Office Building 2 2023	Excavator	Excavators	Diesel	1	500	0.124204	1	0.38	0	0	0.06
Phase 1b Office	Office Building 2 2023	Generator	Generator Sets	Diesel	1	25	5.006369	1	0.74	0	0	0.12
Phase 1b Office	Office Building 2 2023	Gradall	Forklifts	Diesel	1	350	0.48	1	0.2	0	0	0.06
Phase 1b Office	Office Building 2 2023	Hydro/Crawler Crane	Cranes	Diesel	1	550	3.324841	1	0.29	0	0	0.06
Phase 1b Office	Office Building 2 2023	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	1.681529	1	0.37	0	0	0.06
Phase 1b Office	Office Building 2 2023	Paver	Pavers	Diesel	1	250	0	1	0.42	0	0	0.06
Phase 1b Office	Office Building 2 2023	Pile Rig	Bore/Drill Rigs	Diesel	1	600	1.681529	1	0.5	0	0	0.06
Phase 1b Office	Office Building 2 2023	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0.3	0	0	0.12
Phase 1b Office	Office Building 2 2023	Scraper	Scrapers	Diesel	1	600	0	1	0.48	0	0	0.06
Phase 1b Office	Office Building 2 2023	Tire Wash	Other Construction Equipment	Diesel	1	100	1.5	1	0.42	0	0	0.06
Phase 1b Office	Office Building 2 2024	Air Compressor	Air Compressors	Diesel	1	150	0	1	0.48	0	0	0
Phase 1b Office	Office Building 2 2024	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	0	1	0.37	0	0	0
Phase 1b Office	Office Building 2 2024	Blade	Graders	Diesel	1	450	0	1	0.41	0	0	0
Phase 1b Office	Office Building 2 2024	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	0	1	0.37	0	0	0
Phase 1b Office	Office Building 2 2024	Boom Lift	Aerial Lifts	Diesel	1	40	7.270992	1	0.31	0	0	0
Phase 1b Office	Office Building 2 2024	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0.42	0	0	0
Phase 1b Office	Office Building 2 2024	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.78	0	0	0
Phase 1b Office	Office Building 2 2024	Concrete Pump	Pumps	Diesel	1	450	0.005038	1	0.74	0	0	0
Phase 1b Office	Office Building 2 2024	Excavator	Excavators	Diesel	1	500	0	1	0.38	0	0	0
Phase 1b Office	Office Building 2 2024	Generator	Generator Sets	Diesel	1	25	0	1	0.74	0	0	0
Phase 1b Office	Office Building 2 2024	Gradall	Forklifts	Diesel	1	350	0.48	1	0.2	0	0	0
Phase 1b Office	Office Building 2 2024	Hydro/Crawler Crane	Cranes	Diesel	1	550	0	1	0.29	0	0	0
Phase 1b Office	Office Building 2 2024	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	0	1	0.37	0	0	0
Phase 1b Office	Office Building 2 2024	Paver	Pavers	Diesel	1	250	0	1	0.42	0	0	0
Phase 1b Office	Office Building 2 2024	Pile Rig	Bore/Drill Rigs	Diesel	1	600	0	1	0.5	0	0	0
Phase 1b Office	Office Building 2 2024	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0.3	0	0	0
Phase 1b Office	Office Building 2 2024	Scraper	Scrapers	Diesel	1	600	0	1	0.48	0	0	0
Phase 1b Office	Office Building 2 2024	Tire Wash	Other Construction Equipment	Diesel	1	100	1.5	1	0.42	0	0	0
Phase 1b Office	Office Building 2 2025	Air Compressor	Air Compressors	Diesel	1	150	0	1	0.48	0	0	0
Phase 1b Office	Office Building 2 2025	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	0	1	0.37	0	0	0
Phase 1b Office	Office Building 2 2025	Blade	Graders	Diesel	1	450	0	1	0.41	0	0	0
Phase 1b Office	Office Building 2 2025	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	0	1	0.37	0	0	0
Phase 1b Office	Office Building 2 2025	Boom Lift	Aerial Lifts	Diesel	1	40	0	1	0.31	0	0	0
Phase 1b Office	Office Building 2 2025	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0.42	0	0	0
Phase 1b Office	Office Building 2 2025	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.78	0	0	0
Phase 1b Office	Office Building 2 2025	Concrete Pump	Pumps	Diesel	1	450	0	1	0.74	0	0	0
Phase 1b Office	Office Building 2 2025	Excavator	Excavators	Diesel	1	500	0	1	0.38	0	0	0
Phase 1b Office	Office Building 2 2025	Generator	Generator Sets	Diesel	1	25	0	1	0.74	0	0	0
Phase 1b Office	Office Building 2 2025	Gradall	Forklifts	Diesel	1	350	0.48	1	0.2	0	0	0
Phase 1b Office	Office Building 2 2025	Hydro/Crawler Crane	Cranes	Diesel	1	550	0	1	0.29	0	0	0
Phase 1b Office	Office Building 2 2025	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	0	1	0.37	0	0	0
Phase 1b Office	Office Building 2 2025	Paver	Pavers	Diesel	1	250	0	1	0.42	0	0	0
Phase 1b Office	Office Building 2 2025	Pile Rig	Bore/Drill Rigs	Diesel	1	600	0	1	0.5	0	0	0
Phase 1b Office	Office Building 2 2025	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0.3	0	0	0

Phase 1b Office	Office Building 2 2025	Scraper	Scrapers	Diesel	1	600	0	1	0.48	0	0	0
Phase 1b Office	Office Building 2 2025	Tire Wash	Other Construction Equipment	Diesel	1	100	1.5	1	0.42	0	0	0
Phase 1b Office	Office Building 5 2023	Air Compressor	Air Compressors	Diesel	1	150	0.058812	1	0.48	0	0	0.06
Phase 1b Office	Office Building 5 2023	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	2.643564	1	0.37	0	0	0.06
Phase 1b Office	Office Building 5 2023	Blade	Graders	Diesel	1	450	0	1	0.41	0	0	0.06
Phase 1b Office	Office Building 5 2023	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	2.643564	1	0.37	0	0	0.06
Phase 1b Office	Office Building 5 2023	Boom Lift	Aerial Lifts	Diesel	1	40	2.19802	1	0.31	0	0	0.12
Phase 1b Office	Office Building 5 2023	Compactor	Other Construction Equipment	Diesel	1	250	0.211485	1	0.42	0	0	0.06
Phase 1b Office	Office Building 5 2023	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.78	0	0	0.06
Phase 1b Office	Office Building 5 2023	Concrete Pump	Pumps	Diesel	1	450	0.117327	1	0.74	0	0	0.042715783
Phase 1b Office	Office Building 5 2023	Excavator	Excavators	Diesel	1	500	0.132178	1	0.38	0	0	0.06
Phase 1b Office	Office Building 5 2023	Generator	Generator Sets	Diesel	1	25	4.60396	1	0.74	0	0	0.12
Phase 1b Office	Office Building 5 2023	Gradall	Forklifts	Diesel	1	350	0.48	1	0.2	0	0	0.06
Phase 1b Office	Office Building 5 2023	Hydro/Crawler Crane	Cranes	Diesel	1	550	3.267327	1	0.29	0	0	0.06
Phase 1b Office	Office Building 5 2023	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	1.960396	1	0.37	0	0	0.06
Phase 1b Office	Office Building 5 2023	Paver	Pavers	Diesel	1	250	0	1	0.42	0	0	0.06
Phase 1b Office	Office Building 5 2023	Pile Rig	Bore/Drill Rigs	Diesel	1	600	1.960396	1	0.5	0	0	0.06
Phase 1b Office	Office Building 5 2023	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0.3	0	0	0.12
Phase 1b Office	Office Building 5 2023	Scraper	Scrapers	Diesel	1	600	0	1	0.48	0	0	0.06
Phase 1b Office	Office Building 5 2023	Tire Wash	Other Construction Equipment	Diesel	1	100	1.5	1	0.42	0	0	0.06
Phase 1b Office	Office Building 5 2024	Air Compressor	Air Compressors	Diesel	1	150	0	1	0.48	0	0	0
Phase 1b Office	Office Building 5 2024	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	0	1	0.37	0	0	0
Phase 1b Office	Office Building 5 2024	Blade	Graders	Diesel	1	450	0	1	0.41	0	0	0
Phase 1b Office	Office Building 5 2024	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	0	1	0.37	0	0	0
Phase 1b Office	Office Building 5 2024	Boom Lift	Aerial Lifts	Diesel	1	40	6.194656	1	0.31	0	0	0
Phase 1b Office	Office Building 5 2024	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0.42	0	0	0
Phase 1b Office	Office Building 5 2024	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.78	0	0	0
Phase 1b Office	Office Building 5 2024	Concrete Pump	Pumps	Diesel	1	450	0.004809	1	0.74	0	0	0
Phase 1b Office	Office Building 5 2024	Excavator	Excavators	Diesel	1	500	0	1	0.38	0	0	0
Phase 1b Office	Office Building 5 2024	Generator	Generator Sets	Diesel	1	25	0	1	0.74	0	0	0
Phase 1b Office	Office Building 5 2024	Gradall	Forklifts	Diesel	1	350	0.48	1	0.2	0	0	0
Phase 1b Office	Office Building 5 2024	Hydro/Crawler Crane	Cranes	Diesel	1	550	0	1	0.29	0	0	0
Phase 1b Office	Office Building 5 2024	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	0	1	0.37	0	0	0
Phase 1b Office	Office Building 5 2024	Paver	Pavers	Diesel	1	250	0	1	0.42	0	0	0
Phase 1b Office	Office Building 5 2024	Pile Rig	Bore/Drill Rigs	Diesel	1	600	0	1	0.5	0	0	0
Phase 1b Office	Office Building 5 2024	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0.3	0	0	0
Phase 1b Office	Office Building 5 2024	Scraper	Scrapers	Diesel	1	600	0	1	0.48	0	0	0
Phase 1b Office	Office Building 5 2024	Tire Wash	Other Construction Equipment	Diesel	1	100	1.5	1	0.42	0	0	0
Phase 1b Office	Office Building 5 2025	Air Compressor	Air Compressors	Diesel	1	150	0	1	0.48	0	0	0
Phase 1b Office	Office Building 5 2025	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	0	1	0.37	0	0	0
Phase 1b Office	Office Building 5 2025	Blade	Graders	Diesel	1	450	0	1	0.41	0	0	0
Phase 1b Office	Office Building 5 2025	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	0	1	0.37	0	0	0
Phase 1b Office	Office Building 5 2025	Boom Lift	Aerial Lifts	Diesel	1	40	0	1	0.31	0	0	0
Phase 1b Office	Office Building 5 2025	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0.42	0	0	0
Phase 1b Office	Office Building 5 2025	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.78	0	0	0
Phase 1b Office	Office Building 5 2025	Concrete Pump	Pumps	Diesel	1	450	0	1	0.74	0	0	0
Phase 1b Office	Office Building 5 2025	Excavator	Excavators	Diesel	1	500	0	1	0.38	0	0	0
Phase 1b Office	Office Building 5 2025	Generator	Generator Sets	Diesel	1	25	0	1	0.74	0	0	0
Phase 1b Office	Office Building 5 2025	Gradall	Forklifts	Diesel	1	350	0.48	1	0.2	0	0	0
Phase 1b Office	Office Building 5 2025	Hydro/Crawler Crane	Cranes	Diesel	1	550	0	1	0.29	0	0	0
Phase 1b Office	Office Building 5 2025	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	0	1	0.37	0	0	0
Phase 1b Office	Office Building 5 2025	Paver	Pavers	Diesel	1	250	0	1	0.42	0	0	0
Phase 1b Office	Office Building 5 2025	Pile Rig	Bore/Drill Rigs	Diesel	1	600	0	1	0.5	0	0	0
Phase 1b Office	Office Building 5 2025	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0.3	0	0	0
Phase 1b Office	Office Building 5 2025	Scraper	Scrapers	Diesel	1	600	0	1	0.48	0	0	0

Phase 1b Office	Office Building 5 2025	Tire Wash	Other Construction Equipment	Diesel	1	100	1.5	1	0.42	0	0	0
Phase 1b Office	Office Building 6 2023	Air Compressor	Air Compressors	Diesel	1	150	0.062206	1	0.48	0	0	0.06
Phase 1b Office	Office Building 6 2023	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	3.926471	1	0.37	0	0	0.06
Phase 1b Office	Office Building 6 2023	Blade	Graders	Diesel	1	450	0	1	0.41	0	0	0.06
Phase 1b Office	Office Building 6 2023	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	3.926471	1	0.37	0	0	0.06
Phase 1b Office	Office Building 6 2023	Boom Lift	Aerial Lifts	Diesel	1	40	0	1	0.31	0	0	0.12
Phase 1b Office	Office Building 6 2023	Compactor	Other Construction Equipment	Diesel	1	250	0.314118	1	0.42	0	0	0.06
Phase 1b Office	Office Building 6 2023	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.78	0	0	0.06
Phase 1b Office	Office Building 6 2023	Concrete Pump	Pumps	Diesel	1	450	0.157941	1	0.74	0	0	0.042715783
Phase 1b Office	Office Building 6 2023	Excavator	Excavators	Diesel	1	500	0.196324	1	0.38	0	0	0.06
Phase 1b Office	Office Building 6 2023	Generator	Generator Sets	Diesel	1	25	6	1	0.74	0	0	0.12
Phase 1b Office	Office Building 6 2023	Gradall	Forklifts	Diesel	1	350	0.48	1	0.2	0	0	0.06
Phase 1b Office	Office Building 6 2023	Hydro/Crawler Crane	Cranes	Diesel	1	550	4.897059	1	0.29	0	0	0.06
Phase 1b Office	Office Building 6 2023	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	3	1	0.37	0	0	0.06
Phase 1b Office	Office Building 6 2023	Paver	Pavers	Diesel	1	250	0	1	0.42	0	0	0.06
Phase 1b Office	Office Building 6 2023	Pile Rig	Bore/Drill Rigs	Diesel	1	600	3	1	0.5	0	0	0.06
Phase 1b Office	Office Building 6 2023	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0.3	0	0	0.12
Phase 1b Office	Office Building 6 2023	Scraper	Scrapers	Diesel	1	600	0	1	0.48	0	0	0.06
Phase 1b Office	Office Building 6 2023	Tire Wash	Other Construction Equipment	Diesel	1	100	1.5	1	0.42	0	0	0.06
Phase 1b Office	Office Building 6 2024	Air Compressor	Air Compressors	Diesel	1	150	0.013053	1	0.48	0	0	0
Phase 1b Office	Office Building 6 2024	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	0	1	0.37	0	0	0
Phase 1b Office	Office Building 6 2024	Blade	Graders	Diesel	1	450	0	1	0.41	0	0	0
Phase 1b Office	Office Building 6 2024	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	0	1	0.37	0	0	0
Phase 1b Office	Office Building 6 2024	Boom Lift	Aerial Lifts	Diesel	1	40	8.003817	1	0.31	0	0	0
Phase 1b Office	Office Building 6 2024	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0.42	0	0	0
Phase 1b Office	Office Building 6 2024	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.78	0	0	0
Phase 1b Office	Office Building 6 2024	Concrete Pump	Pumps	Diesel	1	450	0.013969	1	0.74	0	0	0
Phase 1b Office	Office Building 6 2024	Excavator	Excavators	Diesel	1	500	0	1	0.38	0	0	0
Phase 1b Office	Office Building 6 2024	Generator	Generator Sets	Diesel	1	25	0.435115	1	0.74	0	0	0
Phase 1b Office	Office Building 6 2024	Gradall	Forklifts	Diesel	1	350	0.48	1	0.2	0	0	0
Phase 1b Office	Office Building 6 2024	Hydro/Crawler Crane	Cranes	Diesel	1	550	0	1	0.29	0	0	0
Phase 1b Office	Office Building 6 2024	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	0	1	0.37	0	0	0
Phase 1b Office	Office Building 6 2024	Paver	Pavers	Diesel	1	250	0	1	0.42	0	0	0
Phase 1b Office	Office Building 6 2024	Pile Rig	Bore/Drill Rigs	Diesel	1	600	0	1	0.5	0	0	0
Phase 1b Office	Office Building 6 2024	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0.3	0	0	0
Phase 1b Office	Office Building 6 2024	Scraper	Scrapers	Diesel	1	600	0	1	0.48	0	0	0
Phase 1b Office	Office Building 6 2024	Tire Wash	Other Construction Equipment	Diesel	1	100	1.5	1	0.42	0	0	0
Phase 1b Office	Office Building 6 2025	Air Compressor	Air Compressors	Diesel	1	150	0	1	0.48	0	0	0
Phase 1b Office	Office Building 6 2025	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	350	0	1	0.37	0	0	0
Phase 1b Office	Office Building 6 2025	Blade	Graders	Diesel	1	450	0	1	0.41	0	0	0
Phase 1b Office	Office Building 6 2025	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	200	0	1	0.37	0	0	0
Phase 1b Office	Office Building 6 2025	Boom Lift	Aerial Lifts	Diesel	1	40	0	1	0.31	0	0	0
Phase 1b Office	Office Building 6 2025	Compactor	Other Construction Equipment	Diesel	1	250	0	1	0.42	0	0	0
Phase 1b Office	Office Building 6 2025	Concrete Crusher	Crushing/Proc. Equipment	Diesel	1	450	0	1	0.78	0	0	0
Phase 1b Office	Office Building 6 2025	Concrete Pump	Pumps	Diesel	1	450	0	1	0.74	0	0	0
Phase 1b Office	Office Building 6 2025	Excavator	Excavators	Diesel	1	500	0	1	0.38	0	0	0
Phase 1b Office	Office Building 6 2025	Generator	Generator Sets	Diesel	1	25	0	1	0.74	0	0	0
Phase 1b Office	Office Building 6 2025	Gradall	Forklifts	Diesel	1	350	0.48	1	0.2	0	0	0
Phase 1b Office	Office Building 6 2025	Hydro/Crawler Crane	Cranes	Diesel	1	550	0	1	0.29	0	0	0
Phase 1b Office	Office Building 6 2025	Loader	Tractors/Loaders/Backhoes	Diesel	1	100	0	1	0.37	0	0	0
Phase 1b Office	Office Building 6 2025	Paver	Pavers	Diesel	1	250	0	1	0.42	0	0	0
Phase 1b Office	Office Building 6 2025	Pile Rig	Bore/Drill Rigs	Diesel	1	600	0	1	0.5	0	0	0
Phase 1b Office	Office Building 6 2025	Pressure Washer	Pressure Washers	Diesel	1	25	0	1	0.3	0	0	0
Phase 1b Office	Office Building 6 2025	Scraper	Scrapers	Diesel	1	600	0	1	0.48	0	0	0
Phase 1b Office	Office Building 6 2025	Tire Wash	Other Construction Equipment	Diesel	1	100	1.5	1	0.42	0	0	0

Phase 1b Mixed Use	Parcel 7 Foundations	Pile Rig	Bore/Drill Rigs	Diesel	0	600	8	0.4	0.5	0	0	0
Phase 1b Mixed Use	Parcel 7 Foundations	Generator	Generator Sets	Diesel	0	25	6	1	0.74	0	0	0
Phase 1b Mixed Use	Parcel 7 Foundations	Tire Wash	Other Construction Equipment	Diesel	1	100	4	0.9	0.42	0	0	0
Phase 1b Mixed Use	Parcel 7 Foundations	Excavator	Excavators	Diesel	1	131	8	0.6	0.38	0	0	0
Phase 1b Mixed Use	Parcel 7 Foundations	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	90	8	0.6	0.37	0	0	0
Phase 1b Mixed Use	Parcel 7 Foundations	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	70	8	0.8	0.37	0	0	0
Phase 1b Mixed Use	Parcel 7 Foundations	Gradall	Forklifts	Diesel	1	74	4	0.8	0.2	0	0	0
Phase 1b Mixed Use	Parcel 7 Foundations	Crane	Cranes	Diesel	1	215	4	0.5	0.29	0	0	0
Phase 1b Mixed Use	Parcel 7 Foundations	Concrete Pump	Pumps	Diesel	1	450	0.25	0.5	0.74	0	0	0
Phase 1b Mixed Use	Parcel 7 Core and Shell	Generator	Generator Sets	Diesel	0	25	6	1	0.74	0	0	0
Phase 1b Mixed Use	Parcel 7 Core and Shell	Tire Wash	Other Construction Equipment	Diesel	1	100	4	0.9	0.42	0	0	0
Phase 1b Mixed Use	Parcel 7 Core and Shell	Crane	Cranes	Diesel	1	600	8	0.2	0.29	0	0	0
Phase 1b Mixed Use	Parcel 7 Core and Shell	Gradall	Forklifts	Diesel	1	74	4	0.8	0.2	0	0	0
Phase 1b Mixed Use	Parcel 7 Core and Shell	Concrete Pump	Pumps	Diesel	0	450	6	0.225	0.74	0	0	0
Phase 1b Mixed Use	Parcel 7 Core and Shell	Air Compressor	Air Compressors	Diesel	0	140	2	0.4	0.48	0	0	0
Phase 1b Mixed Use	Parcel 7 Core and Shell	Boom Lift	Aerial Lifts	Diesel	0	50	6	0.2	0.31	0	0	0
Phase 1b Mixed Use	Parcel 7 Tenant Improvements	Generator	Generator Sets	Diesel	0	25	6	0.85	0.74	0	0	0
Phase 1b Mixed Use	Parcel 7 Tenant Improvements	Tire Wash	Other Construction Equipment	Diesel	1	100	4	0.9	0.42	0	0	0
Phase 1b Mixed Use	Parcel 7 Tenant Improvements	Gradall	Forklifts	Diesel	1	74	4	0.8	0.2	0	0	0
Phase 1b Mixed Use	Parcel 7 Landscaping	Excavator	Excavators	Diesel	1	25	8	0.9	0.38	0	0	0
Phase 1b Mixed Use	Parcel 7 Landscaping	Generator	Generator Sets	Diesel	0	25	6	0.5	0.74	0	0	0
Phase 1b Mixed Use	Parcel 7 Landscaping	Tire Wash	Other Construction Equipment	Diesel	1	100	4	0.9	0.42	0	0	0
Phase 1b Mixed Use	Parcel 7 Landscaping	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	90	8	0.6	0.37	0	0	0
Phase 1b Mixed Use	Parcel 7 Landscaping	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	70	8	0.8	0.37	0	0	0
Phase 1b Mixed Use	Parcel 6 Foundations	Pile Rig	Bore/Drill Rigs	Diesel	0	600	8	0.4	0.5	0	0	0
Phase 1b Mixed Use	Parcel 6 Foundations	Generator	Generator Sets	Diesel	0	25	6	1	0.74	0	0	0
Phase 1b Mixed Use	Parcel 6 Foundations	Tire Wash	Other Construction Equipment	Diesel	1	100	4	0.9	0.42	0	0	0
Phase 1b Mixed Use	Parcel 6 Foundations	Excavator	Excavators	Diesel	1	131	8	0.6	0.38	0	0	0
Phase 1b Mixed Use	Parcel 6 Foundations	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	90	8	0.6	0.37	0	0	0
Phase 1b Mixed Use	Parcel 6 Foundations	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	70	8	0.8	0.37	0	0	0
Phase 1b Mixed Use	Parcel 6 Foundations	Gradall	Forklifts	Diesel	1	74	4	0.8	0.2	0	0	0
Phase 1b Mixed Use	Parcel 6 Foundations	Crane	Cranes	Diesel	1	215	4	0.5	0.29	0	0	0
Phase 1b Mixed Use	Parcel 6 Foundations	Concrete Pump	Pumps	Diesel	1	450	0.5	0.5	0.74	0	0	0
Phase 1b Mixed Use	Parcel 6 Core and Shell	Generator	Generator Sets	Diesel	0	25	6	1	0.74	0	0	0
Phase 1b Mixed Use	Parcel 6 Core and Shell	Tire Wash	Other Construction Equipment	Diesel	1	100	4	0.9	0.42	0	0	0
Phase 1b Mixed Use	Parcel 6 Core and Shell	Crane	Cranes	Diesel	1	600	8	0.2	0.29	0	0	0
Phase 1b Mixed Use	Parcel 6 Core and Shell	Gradall	Forklifts	Diesel	2	74	4	0.8	0.2	0	0	0
Phase 1b Mixed Use	Parcel 6 Core and Shell	Concrete Pump	Pumps	Diesel	0	450	6	0.225	0.74	0	0	0
Phase 1b Mixed Use	Parcel 6 Core and Shell	Air Compressor	Air Compressors	Diesel	0	140	2	0.4	0.48	0	0	0
Phase 1b Mixed Use	Parcel 6 Core and Shell	Boom Lift	Aerial Lifts	Diesel	0	50	6	0.2	0.31	0	0	0
Phase 1b Mixed Use	Parcel 6 Tenant Improvements	Generator	Generator Sets	Diesel	0	25	6	0.85	0.74	0	0	0
Phase 1b Mixed Use	Parcel 6 Tenant Improvements	Tire Wash	Other Construction Equipment	Diesel	1	100	4	0.9	0.42	0	0	0
Phase 1b Mixed Use	Parcel 6 Tenant Improvements	Gradall	Forklifts	Diesel	1	74	4	0.8	0.2	0	0	0
Phase 1b Mixed Use	Parcel 6 Landscaping	Excavator	Excavators	Diesel	1	25	8	0.9	0.38	0	0	0
Phase 1b Mixed Use	Parcel 6 Landscaping	Generator	Generator Sets	Diesel	0	25	6	0.5	0.74	0	0	0
Phase 1b Mixed Use	Parcel 6 Landscaping	Tire Wash	Other Construction Equipment	Diesel	0	100	4	0.9	0.42	0	0	0
Phase 1b Mixed Use	Parcel 6 Landscaping	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	90	8	0.6	0.37	0	0	0
Phase 1b Mixed Use	Parcel 6 Landscaping	Bob Cat	Tractors/Loaders/Backhoes	Diesel	2	70	8	0.8	0.37	0	0	0
Phase 2 Mixed Use	Grading and Utilities	Blade	Graders	Diesel	1	359	8	0.15	0.41	0	0	0.06
Phase 2 Mixed Use	Grading and Utilities	Scraper	Scrapers	Diesel	1	52	8	0.15	0.48	0	0	0.12
Phase 2 Mixed Use	Grading and Utilities	Loader	Tractors/Loaders/Backhoes	Diesel	2	100	4	0.9	0.37	0	0	0.06
Phase 2 Mixed Use	Grading and Utilities	Tire Wash	Other Construction Equipment	Diesel	1	100	4	0.9	0.42	0	0	0.06
Phase 2 Mixed Use	Grading and Utilities	Excavator	Excavators	Diesel	2	359	8	0.6	0.38	0	0	0.06
Phase 2 Mixed Use	Grading and Utilities	Backhoe	Tractors/Loaders/Backhoes	Diesel	2	350	8	0.6	0.37	0	0	0.06
Phase 2 Mixed Use	Grading and Utilities	Gradall	Forklifts	Diesel	2	350	4	0.6	0.2	0	0	0.06

Phase 2 Mixed Use	Grading and Utilities	Compactor	Other Construction Equipment	Diesel	2	250	0.5	0.2	0.42	0	0	0.06
Phase 2 Mixed Use	Grading and Utilities	Paver	Pavers	Diesel	1	250	8	0.01	0.42	0	0	0.06
Phase 2 Mixed Use	Grading and Utilities	Generator	Generator Sets	Diesel	1	600	2	0.1	0.74	0	0	0.06
Phase 2 Mixed Use	Tunnel Construction	Crane	Cranes	Diesel	1	290	6	0.35	0.29	0	0	0.06
Phase 2 Mixed Use	Tunnel Construction	Excavator	Excavators	Diesel	2	170	6	0.45	0.38	0	0	0.06
Phase 2 Mixed Use	Tunnel Construction	Loader	Tractors/Loaders/Backhoes	Diesel	1	250	6	0.45	0.37	0	0	0.06
Phase 2 Mixed Use	Tunnel Construction	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	103	6	0.4	0.37	0	0	0.06
Phase 2 Mixed Use	Tunnel Construction	Gradall	Forklifts	Diesel	1	130	6	0.35	0.2	0	0	0.06
Phase 2 Mixed Use	Tunnel Construction	Compressor	Air Compressors	Diesel	2	50	6	0.3	0.48	0	0	0.12
Phase 2 Mixed Use	Foundations	Pile Rig	Bore/Drill Rigs	Diesel	0	600	8	0.4	0.5	0	0	0
Phase 2 Mixed Use	Foundations	Generator	Generator Sets	Diesel	2	25	6	1	0.74	0	0	0
Phase 2 Mixed Use	Foundations	Tire Wash	Other Construction Equipment	Diesel	2	100	4	0.9	0.42	0	0	0
Phase 2 Mixed Use	Foundations	Excavator	Excavators	Diesel	2	131	8	0.6	0.38	0	0	0
Phase 2 Mixed Use	Foundations	Backhoe	Tractors/Loaders/Backhoes	Diesel	2	90	8	0.6	0.37	0	0	0
Phase 2 Mixed Use	Foundations	Bob Cat	Tractors/Loaders/Backhoes	Diesel	2	70	8	0.8	0.37	0	0	0
Phase 2 Mixed Use	Foundations	Gradall	Forklifts	Diesel	2	74	4	0.8	0.2	0	0	0
Phase 2 Mixed Use	Foundations	Crane	Cranes	Diesel	2	215	4	0.5	0.29	0	0	0
Phase 2 Mixed Use	Foundations	Concrete Pump	Pumps	Diesel	3	450	0.5	0.5	0.74	0	0	0
Phase 2 Mixed Use	Core and Shell	Generator	Generator Sets	Diesel	2	25	6	1	0.74	0	0	0
Phase 2 Mixed Use	Core and Shell	Tire Wash	Other Construction Equipment	Diesel	2	100	4	0.9	0.42	0	0	0
Phase 2 Mixed Use	Core and Shell	Crane	Cranes	Diesel	2	600	8	0.2	0.29	0	0	0
Phase 2 Mixed Use	Core and Shell	Gradall	Forklifts	Diesel	3	74	4	0.8	0.2	0	0	0
Phase 2 Mixed Use	Core and Shell	Concrete Pump	Pumps	Diesel	0	450	6	0.45	0.74	0	0	0
Phase 2 Mixed Use	Core and Shell	Air Compressor	Air Compressors	Diesel	0	140	2	0.8	0.48	0	0	0
Phase 2 Mixed Use	Core and Shell	Boom Lift	Aerial Lifts	Diesel	0	50	6	0.4	0.31	0	0	0
Phase 2 Mixed Use	Tenant Improvements	Generator	Generator Sets	Diesel	2	25	6	0.85	0.74	0	0	0
Phase 2 Mixed Use	Tenant Improvements	Tire Wash	Other Construction Equipment	Diesel	2	100	4	0.9	0.42	0	0	0
Phase 2 Mixed Use	Tenant Improvements	Gradall	Forklifts	Diesel	1	74	4	0.8	0.2	0	0	0
Phase 2 Mixed Use	Landscaping	Excavator	Excavators	Diesel	1	25	8	0.9	0.38	0	0	0
Phase 2 Mixed Use	Tenant Improvements	Gradall	Forklifts	Diesel	1	74	4	0.8	0.2	0	0	0
Phase 2 Mixed Use	Landscaping	Excavator	Excavators	Diesel	1	25	8	0.9	0.38	0	0	0
Phase 2 Mixed Use	Landscaping	Generator	Generator Sets	Diesel	0	25	6	0.5	0.74	0	0	0
Phase 2 Mixed Use	Landscaping	Tire Wash	Other Construction Equipment	Diesel	1	100	4	0.9	0.42	0	0	0
Phase 2 Mixed Use	Landscaping	Backhoe	Tractors/Loaders/Backhoes	Diesel	2	90	8	0.6	0.37	0	0	0
Phase 2 Mixed Use	Landscaping	Bob Cat	Tractors/Loaders/Backhoes	Diesel	3	70	8	0.8	0.37	0	0	0
Alternate 1	Demolition	Excavator	Excavators	Diesel	1	131	8	0.9	0.38	0	0	0
Alternate 1	Demolition	Generator	Generator Sets	Diesel	1	25	6	0.5	0.74	0	0	0
Alternate 1	Demolition	Tire Wash	Other Construction Equipment	Diesel	2	100	4	0.9	0.42	0	0	0
Alternate 1	Demolition	Bob Cat	Tractors/Loaders/Backhoes	Diesel	2	70	8	0.8	0.37	0	0	0
Alternate 1	Demolition	Pressure Washer	Pressure Washers	Diesel	2	25	8	1	0.3	0	0	0
Alternate 1	Demolition	Air Compressor	Air Compressors	Diesel	1	140	6	0.7	0.48	0	0	0
Alternate 1	Grading and Utilities	Loader	Tractors/Loaders/Backhoes	Diesel	2	100	4	0.9	0.37	0	0	0
Alternate 1	Grading and Utilities	Tire Wash	Other Construction Equipment	Diesel	1	100	4	0.9	0.42	0	0	0
Alternate 1	Grading and Utilities	Excavator	Excavators	Diesel	1	359	8	0.6	0.38	0	0	0
Alternate 1	Grading and Utilities	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	90	8	0.6	0.37	0	0	0
Alternate 1	Grading and Utilities	Gradall	Forklifts	Diesel	1	74	4	0.6	0.2	0	0	0
Alternate 1	Grading and Utilities	Compactor	Other Construction Equipment	Diesel	1	250	0.5	0.2	0.42	0	0	0
Alternate 1	Grading and Utilities	Paver	Pavers	Diesel	1	250	8	0.01	0.42	0	0	0
Alternate 1	Grading and Utilities	Generator	Generator Sets	Diesel	1	600	2	0.1	0.74	0	0	0
Alternate 1	Foundations	Generator	Generator Sets	Diesel	1	25	6	1	0.74	0	0	0
Alternate 1	Foundations	Tire Wash	Other Construction Equipment	Diesel	1	100	4	0.9	0.42	0	0	0
Alternate 1	Foundations	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	90	8	0.6	0.37	0	0	0
Alternate 1	Foundations	Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	70	8	0.8	0.37	0	0	0
Alternate 1	Foundations	Gradall	Forklifts	Diesel	1	74	4	0.8	0.2	0	0	0
Alternate 1	Foundations	Concrete Pump	Pumps	Diesel	1	450	6	0.3	0.74	0	0	0
Alternate 1	Core and Shell	Generator	Generator Sets	Diesel	1	25	6	1	0.74	0	0	0
Alternate 1	Core and Shell	Tire Wash	Other Construction Equipment	Diesel	1	100	4	0.9	0.42	0	0	0

Alternate 1	Core and Shell	Gradall	Forklifts	Diesel	1	74	4	0.8	0.2	0	0	0
Alternate 1	Core and Shell	Concrete Pump	Pumps	Diesel	1	450	6	0.45	0.74	0	0	0
Alternate 1	Tenant Improvements	Generator	Generator Sets	Diesel	1	25	6	0.85	0.74	0	0	0
Alternate 1	Tenant Improvements	Tire Wash	Other Construction Equipment	Diesel	2	100	4	0.9	0.42	0	0	0
Alternate 1	Tenant Improvements	Gradall	Forklifts	Diesel	1	74	4	0.8	0.2	0	0	0

F			Days in each year						Emissions (lb/yr)						
2024	2025	2026	2021	2022	2023	2024	2025	2026	2021	2022	2023	2024	2025	2026	
0	0	0	13	84	0	0	0	0	2.465349589	15.92995	0	0	0	0	453.59
0	0	0	13	84	0	0	0	0	0.381754448	2.466721	0	0	0	0	
0	0	0	13	84	0	0	0	0	0.520011464	3.360074	0	0	0	0	
0	0	0	13	84	0	0	0	0	0	0	0	0	0	0	453.59 g/lb
0	0	0	13	84	0	0	0	0	3.664842699	23.68052	0	0	0	0	
0	0	0	13	84	0	0	0	0	0.412707511	2.666725	0	0	0	0	
0	0	0	13	84	0	0	0	0	0.485344033	3.136069	0	0	0	0	
0	0	0	0	143	0	0	0	0	0	6.682106	0	0	0	0	
0	0	0	0	143	0	0	0	0	0	2.266259	0	0	0	0	
0	0	0	0	143	0	0	0	0	0	10.07832	0	0	0	0	
0	0	0	0	143	0	0	0	0	0	5.720126	0	0	0	0	
0	0	0	0	143	0	0	0	0	0	49.54537	0	0	0	0	
0	0	0	0	143	0	0	0	0	0	47.03215	0	0	0	0	
0	0	0	0	143	0	0	0	0	0	12.71139	0	0	0	0	
0	0	0	0	143	0	0	0	0	0	0.794462	0	0	0	0	
0	0	0	0	143	0	0	0	0	0	0.317785	0	0	0	0	
0	0	0	0	143	0	0	0	0	0	1.67972	0	0	0	0	
0	0	0	0	42	0	0	0	0	0	0.187433	0	0	0	0	
0	0	0	0	42	0	0	0	0	0	0	0	0	0	0	
0	0	0	0	42	0	0	0	0	0	0	0	0	0	0	
0	0	0	0	42	0	0	0	0	0	0	0	0	0	0	
0	0	0	0	42	0	0	0	0	0	0	0	0	0	0	
0	0	0	0	42	0	0	0	0	0	0	0	0	0	0	
0	0	0	0	42	0	0	0	0	0	0	0	0	0	0	
0	0	0	0	42	0	0	0	0	0	0.432537	0	0	0	0	
0	0	0	0	42	0	0	0	0	0	12.36535	0	0	0	0	
0	0	0	0	42	0	0	0	0	0	0.969069	0	0	0	0	
0	0	0	0	42	0	0	0	0	0	1.138914	0	0	0	0	
0	0	0	0	42	0	0	0	0	0	2.595097	0	0	0	0	
0	0	0	0	42	0	0	0	0	0	1.203995	0	0	0	0	
0	0	0	0	42	0	0	0	0	0	0	0	0	0	0	
0	0	0	0	42	0	0	0	0	0	6.904914	0	0	0	0	
0	0	0	0	42	0	0	0	0	0	0	0	0	0	0	
0	0	0	0	42	0	0	0	0	0	0	0	0	0	0	
0	0	0	0	42	0	0	0	0	0	0.275006	0	0	0	0	
0	0	0	0	0	258	0	0	0	0	0	1.184026	0	0	0	
0	0	0	0	0	258	0	0	0	0	0	0.17267	0	0	0	
0	0	0	0	0	258	0	0	0	0	0	0	0	0	0	
0	0	0	0	0	258	0	0	0	0	0	0.098669	0	0	0	
0	0	0	0	0	258	0	0	0	0	0	1.13059	0	0	0	
0	0	0	0	0	258	0	0	0	0	0	0	0	0	0	
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0	0	0	0	0	258	0	0	0	0	0	4.685109	0	0	0	
0	0	0	0	0	258	0	0	0	0	0	3.01594	0	0	0	
0	0	0	0	0	258	0	0	0	0	0	2.231795	0	0	0	
0	0	0	0	0	258	0	0	0	0	0	7.194603	0	0	0	
0	0	0	0	0	258	0	0	0	0	0	27.37511	0	0	0	
0	0	0	0	0	258	0	0	0	0	0	0.293657	0	0	0	
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0	0	0	0	0	258	0	0	0	0	0	0.062859	0	0	0	
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0	0	0	0	0	242	0	0	0	0	0	5.241782	0	0	0
0	0	0	0	0	242	0	0	0	0	0	0	0	0	0
0	0	0	0	0	242	0	0	0	0	0	2.995304	0	0	0
0	0	0	0	0	242	0	0	0	0	0	5.904892	0	0	0
0	0	0	0	0	242	0	0	0	0	0	0.340007	0	0	0
0	0	0	0	0	242	0	0	0	0	0	0	0	0	0
0	0	0	0	0	242	0	0	0	0	0	0.571997	0	0	0
0	0	0	0	0	242	0	0	0	0	0	0.384532	0	0	0
0	0	0	0	0	242	0	0	0	0	0	3.43579	0	0	0
0	0	0	0	0	242	0	0	0	0	0	1.075579	0	0	0
0	0	0	0	0	242	0	0	0	0	0	9.241077	0	0	0
0	0	0	0	0	242	0	0	0	0	0	0.851606	0	0	0
0	0	0	0	0	242	0	0	0	0	0	0	0	0	0
0	0	0	0	0	242	0	0	0	0	0	6.904914	0	0	0
0	0	0	0	0	242	0	0	0	0	0	0	0	0	0
0	0	0	0	0	242	0	0	0	0	0	0	0	0	0
0	0	0	0	0	242	0	0	0	0	0	2.016711	0	0	0
0.06	0	0	0	0	0	207	0	0	0	0	0	0	0	0
0.06	0	0	0	0	0	207	0	0	0	0	0	0	0	0
0.06	0	0	0	0	0	207	0	0	0	0	0	0	0	0
0.06	0	0	0	0	0	207	0	0	0	0	0	0	0	0
0.12	0	0	0	0	0	207	0	0	0	0	0	0.954624	0	0
0.06	0	0	0	0	0	207	0	0	0	0	0	0	0	0
0.06	0	0	0	0	0	207	0	0	0	0	0	0	0	0
0.041122002	0	0	0	0	0	207	0	0	0	0	0	0	0	0
0.06	0	0	0	0	0	207	0	0	0	0	0	0	0	0
0.12	0	0	0	0	0	207	0	0	0	0	0	0	0	0
0.06	0	0	0	0	0	207	0	0	0	0	0	0.92002	0	0
0.12	0	0	0	0	0	207	0	0	0	0	0	0	0	0
0.06	0	0	0	0	0	207	0	0	0	0	0	0.92002	0	0
0.06	0	0	0	0	0	207	0	0	0	0	0	0	0	0
0.06	0	0	0	0	0	207	0	0	0	0	0	0	0	0
0.06	0	0	0	0	0	207	0	0	0	0	0	0	0	0
0.12	0	0	0	0	0	207	0	0	0	0	0	0	0	0
0.06	0	0	0	0	0	207	0	0	0	0	0	0	0	0
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0	0	0	0	0	42	0	0	0	0	24.7307	0	0	0	0
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0.06	0	0	0	0	0	262	0	0	0	0	0	0	0	0
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0.041122002	0	0	0	0	0	262	0	0	0	0	0	0	0	0
0.06	0	0	0	0	0	262	0	0	0	0	0	0	0	0
0.12	0	0	0	0	0	262	0	0	0	0	0	0	0	0
0.06	0	0	0	0	0	262	0	0	0	0	0	24.88944	0	0
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0.06	0	0	0	0	0	262	0	0	0	0	0	0	0	0
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0.06	0	0	0	0	0	262	0	0	0	0	0	0	0	0
0.06	0	0	0	0	0	262	0	0	0	0	0	0	0	0
0	0.06	0	0	0	0	0	261	0	0	0	0	0	0	0
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0	0.06	0	0	0	0	0	261	0	0	0	0	0	0	0
0	0.06	0	0	0	0	0	261	0	0	0	0	0	0	0
0	0.12	0	0	0	0	0	261	0	0	0	0	0	8.070019	0
0	0.06	0	0	0	0	0	261	0	0	0	0	0	0	0
0	0.06	0	0	0	0	0	261	0	0	0	0	0	0	0
0	0.038423345	0	0	0	0	0	261	0	0	0	0	0	0	0
0	0.06	0	0	0	0	0	261	0	0	0	0	0	0	0
0	0.12	0	0	0	0	0	261	0	0	0	0	0	0	0
0	0.06	0	0	0	0	0	261	0	0	0	0	0	28.44507	0
0	0.06	0	0	0	0	0	261	0	0	0	0	0	4.240768	0
0	0.06	0	0	0	0	0	261	0	0	0	0	0	0	0
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0	0.12	0	0	0	0	0	261	0	0	0	0	0	0	0
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0	0	0.06	0	0	0	0	0	46	0	0	0	0	0	0
0	0	0.06	0	0	0	0	0	46	0	0	0	0	0	0

0	0	0.06	0	0	0	0	0	46	0	0	0	0	0	0
0	0	0.06	0	0	0	0	0	46	0	0	0	0	0	0
0	0	0.12	0	0	0	0	0	46	0	0	0	0	0	0
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0	0	0.038842232	0	0	0	0	0	46	0	0	0	0	0	0
0	0	0.06	0	0	0	0	0	46	0	0	0	0	0	0
0	0	0.12	0	0	0	0	0	46	0	0	0	0	0	0
0	0	0.06	0	0	0	0	0	46	0	0	0	0	0	5.00011
0	0	0.06	0	0	0	0	0	46	0	0	0	0	0	5.696554
0	0	0.06	0	0	0	0	0	46	0	0	0	0	0	0
0	0	0.06	0	0	0	0	0	46	0	0	0	0	0	0
0	0	0.06	0	0	0	0	0	46	0	0	0	0	0	0
0	0	0.12	0	0	0	0	0	46	0	0	0	0	0	0
0	0	0.06	0	0	0	0	0	46	0	0	0	0	0	0
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0	0	0	0	42	0	0	0	0	0	0.554247	0	0	0	0
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0	0	0	0	42	0	0	0	0	0	1.203995	0	0	0	0
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0	0	0	0	0	257	0	0	0	0	0	1.761944	0	0	0
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0	0	0	0	0	257	0	0	0	0	0	0	0	0	0
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0	0	0	0	0	257	0	0	0	0	0	18.09564	0	0	0
0	0	0	0	0	257	0	0	0	0	0	13.39077	0	0	0
0	0	0	0	0	257	0	0	0	0	0	25.33389	0	0	0
0	0	0	0	0	257	0	0	0	0	0	50.12968	0	0	0
0	0	0	0	0	257	0	0	0	0	0	3.523887	0	0	0
0	0	0	0	0	257	0	0	0	0	0	0	0	0	0
0	0	0	0	0	257	0	0	0	0	0	0	0	0	0
0	0	0	0	0	257	0	0	0	0	0	0.023572	0	0	0
0	0	0	0	0	257	0	0	0	0	0	0	0	0	0
0	0	0	0	0	257	0	0	0	0	0	2.650058	0	0	0
0.06	0	0	0	0	0	175	0	0	0	0	0	5.00011	0	0
0.06	0	0	0	0	0	175	0	0	0	0	0	0	0	0
0.06	0	0	0	0	0	175	0	0	0	0	0	0	0	0

0.06	0	0	0	0	0	175	0	0	0	0	0	0	0	0
0.12	0	0	0	0	0	175	0	0	0	0	0	12.00661	0	0
0.06	0	0	0	0	0	175	0	0	0	0	0	0	0	0
0.06	0	0	0	0	0	175	0	0	0	0	0	0	0	0
0.041122002	0	0	0	0	0	175	0	0	0	0	0	15.84945	0	0
0.06	0	0	0	0	0	175	0	0	0	0	0	0	0	0
0.12	0	0	0	0	0	175	0	0	0	0	0	0	0	0
0.06	0	0	0	0	0	175	0	0	0	0	0	19.44487	0	0
0.06	0	0	0	0	0	175	0	0	0	0	0	0	0	0
0.06	0	0	0	0	0	175	0	0	0	0	0	0	0	0
0.06	0	0	0	0	0	175	0	0	0	0	0	0	0	0
0.06	0	0	0	0	0	175	0	0	0	0	0	0	0	0
0.12	0	0	0	0	0	175	0	0	0	0	0	0.020834	0	0
0.06	0	0	0	0	0	175	0	0	0	0	0	0	0	0
0.06	0	0	0	0	0	175	0	0	0	0	0	1.458365	0	0
0	0.06	0	0	0	0	0	154	0	0	0	0	0	1.228599	0
0	0.06	0	0	0	0	0	154	0	0	0	0	0	0	0
0	0.06	0	0	0	0	0	154	0	0	0	0	0	0	0
0	0.06	0	0	0	0	0	154	0	0	0	0	0	0	0
0	0.12	0	0	0	0	0	154	0	0	0	0	0	10.19578	0
0	0.06	0	0	0	0	0	154	0	0	0	0	0	0	0
0	0.06	0	0	0	0	0	154	0	0	0	0	0	0	0
0	0.038423345	0	0	0	0	0	154	0	0	0	0	0	3.638862	0
0	0.06	0	0	0	0	0	154	0	0	0	0	0	0	0
0	0.12	0	0	0	0	0	154	0	0	0	0	0	0	0
0	0.06	0	0	0	0	0	154	0	0	0	0	0	17.2226	0
0	0.06	0	0	0	0	0	154	0	0	0	0	0	0	0
0	0.06	0	0	0	0	0	154	0	0	0	0	0	0	0
0	0.06	0	0	0	0	0	154	0	0	0	0	0	0	0
0	0.06	0	0	0	0	0	154	0	0	0	0	0	0	0
0	0.06	0	0	0	0	0	154	0	0	0	0	0	0	0
0	0.12	0	0	0	0	0	154	0	0	0	0	0.005119	0	0
0	0.06	0	0	0	0	0	154	0	0	0	0	0	0	0
0	0.06	0	0	0	0	0	154	0	0	0	0	0	1.291695	0
0	0	0	0	0	238	0	0	0	0	0	0	0	0	0
0	0	0	0	0	238	0	0	0	0	0	0	0	0	0
0	0	0	0	0	238	0	0	0	0	0	0	0	0	0
0	0	0	0	0	238	0	0	0	0	0	6.989043	0	0	0
0	0	0	0	0	238	0	0	0	0	0	1.171137	0	0	0
0	0	0	0	0	238	0	0	0	0	0	0	0	0	0
0	0	0	0	0	238	0	0	0	0	0	0	0	0	0
0	0	0	0	0	238	0	0	0	0	0	0	0	0	0
0	0	0	0	0	238	0	0	0	0	0	71.77936	0	0	0
0	0	0	0	0	238	0	0	0	0	0	6.989043	0	0	0
0	0	0	0	0	238	0	0	0	0	0	13.22251	0	0	0
0	0	0	0	0	238	0	0	0	0	0	0	0	0	0
0	0	0	0	0	238	0	0	0	0	0	13.97809	0	0	0
0	0	0	0	0	238	0	0	0	0	0	0	0	0	0
0	0	0	0	0	238	0	0	0	0	0	0	0	0	0
0	0	0	0	0	238	0	0	0	0	0	0	0	0	0
0	0	0	0	0	238	0	0	0	0	0	0	0	0	0
0	0	0	0	0	238	0	0	0	0	0	3.966754	0	0	0
0.06	0	0	0	0	0	262	0	0	0	0	0	0	0	0
0.06	0	0	0	0	0	262	0	0	0	0	0	0	0	0
0.06	0	0	0	0	0	262	0	0	0	0	0	0	0	0
0.06	0	0	0	0	0	262	0	0	0	0	0	2.554818	0	0

0.12	0	0	0	0	0	262	0	0	0	0	0	1.609083	0	0
0.06	0	0	0	0	0	262	0	0	0	0	0	0	0	0
0.06	0	0	0	0	0	262	0	0	0	0	0	0	0	0
0.041122002	0	0	0	0	0	262	0	0	0	0	0	0.161212	0	0
0.06	0	0	0	0	0	262	0	0	0	0	0	26.23867	0	0
0.12	0	0	0	0	0	262	0	0	0	0	0	0.704777	0	0
0.06	0	0	0	0	0	262	0	0	0	0	0	12.77806	0	0
0.06	0	0	0	0	0	262	0	0	0	0	0	5.701618	0	0
0.06	0	0	0	0	0	262	0	0	0	0	0	5.109636	0	0
0.06	0	0	0	0	0	262	0	0	0	0	0	0	0	0
0.06	0	0	0	0	0	262	0	0	0	0	0	0	0	0
0.12	0	0	0	0	0	262	0	0	0	0	0	0	0	0
0.06	0	0	0	0	0	262	0	0	0	0	0	0	0	0
0.06	0	0	0	0	0	262	0	0	0	0	0	1.450032	0	0
0	0.06	0	0	0	0	0	110	0	0	0	0	0	0	0
0	0.06	0	0	0	0	0	110	0	0	0	0	0	0	0
0	0.06	0	0	0	0	0	110	0	0	0	0	0	0	0
0	0.06	0	0	0	0	0	110	0	0	0	0	0	0	0
0	0.12	0	0	0	0	0	110	0	0	0	0	0	0	0
0	0.06	0	0	0	0	0	110	0	0	0	0	0	0	0
0	0.06	0	0	0	0	0	110	0	0	0	0	0	0	0
0	0.038423345	0	0	0	0	0	110	0	0	0	0	0	0	0
0	0.06	0	0	0	0	0	110	0	0	0	0	0	0	0
0	0.12	0	0	0	0	0	110	0	0	0	0	0	0	0
0	0.06	0	0	0	0	0	110	0	0	0	0	0	18.33374	0
0	0.06	0	0	0	0	0	110	0	0	0	0	0	0.417747	0
0	0.06	0	0	0	0	0	110	0	0	0	0	0	0	0
0	0.06	0	0	0	0	0	110	0	0	0	0	0	0	0
0	0.06	0	0	0	0	0	110	0	0	0	0	0	0	0
0	0.06	0	0	0	0	0	110	0	0	0	0	0	0	0
0	0.06	0	0	0	0	0	110	0	0	0	0	0	0	0
0	0.12	0	0	0	0	0	110	0	0	0	0	0	0	0
0	0.06	0	0	0	0	0	110	0	0	0	0	0	0	0
0	0.06	0	0	0	0	0	110	0	0	0	0	0	0	0
0	0	0	0	0	161	0	0	0	0	0	0	0	0	0
0	0	0	0	0	161	0	0	0	0	0	0	0	0	0
0	0	0	0	0	161	0	0	0	0	0	3.220071	0	0	0
0	0	0	0	0	161	0	0	0	0	0	5.088734	0	0	0
0	0	0	0	0	161	0	0	0	0	0	3.404075	0	0	0
0	0	0	0	0	161	0	0	0	0	0	7.060304	0	0	0
0	0	0	0	0	161	0	0	0	0	0	2.01723	0	0	0
0	0	0	0	0	161	0	0	0	0	0	2.655707	0	0	0
0	0	0	0	0	161	0	0	0	0	0	6.058656	0	0	0
0.12	0	0	0	0	64	116	0	0	0	0	0	0	0	0
0.06	0	0	0	0	64	116	0	0	0	0	1.280028	2.320051	0	0
0.06	0	0	0	0	64	116	0	0	0	0	2.356877	4.27184	0	0
0.12	0	0	0	0	64	116	0	0	0	0	0.80188	1.453408	0	0
0.041122002	0	0	0	0	64	116	0	0	0	0	0	0	0	0
0.06	0	0	0	0	64	116	0	0	0	0	0	0	0	0
0.12	0	0	0	0	64	116	0	0	0	0	0	0	0	0
0.12	0.12	0	0	0	0	147	114	0	0	0	0	0	0	0
0.06	0.06	0	0	0	0	147	114	0	0	0	0	2.940065	2.28005	0
0.12	0.12	0	0	0	0	147	114	0	0	0	0	1.841818	1.428349	0
0	0.12	0	0	0	0	0	59	0	0	0	0	0	1.067643	0
0	0.12	0	0	0	0	0	59	0	0	0	0	0	0	0
0	0.06	0	0	0	0	0	59	0	0	0	0	0	1.180026	0
0	0.06	0	0	0	0	0	59	0	0	0	0	0	2.079093	0

0	0.12	0	0	0	0	0	59	0	0	0	0	0	2.587316	0
0.06	0	0	0	0	160	1	0	0	0	0	0	0	0	0
0.12	0	0	0	0	160	1	0	0	0	0	0	0	0	0
0.06	0	0	0	0	160	1	0	0	0	0	3.200071	0.02	0	0
0.06	0	0	0	0	160	1	0	0	0	0	5.057127	0.031607	0	0
0.06	0	0	0	0	160	1	0	0	0	0	6.765863	0.042287	0	0
0.12	0	0	0	0	160	1	0	0	0	0	7.016451	0.043853	0	0
0.12	0	0	0	0	160	1	0	0	0	0	2.0047	0.012529	0	0
0.06	0	0	0	0	160	1	0	0	0	0	2.639212	0.016495	0	0
0.041122002	0	0	0	0	160	1	0	0	0	0	6.021024	0.036227	0	0
0.12	0	0	0	0	0	180	0	0	0	0	0	0	0	0
0.06	0	0	0	0	0	180	0	0	0	0	0	3.600079	0	0
0.06	0	0	0	0	0	180	0	0	0	0	0	6.628718	0	0
0.12	0	0	0	0	0	180	0	0	0	0	0	4.510576	0	0
0.041122002	0	0	0	0	0	180	0	0	0	0	0	0	0	0
0.06	0	0	0	0	0	180	0	0	0	0	0	0	0	0
0.12	0	0	0	0	0	180	0	0	0	0	0	0	0	0
0.12	0.12	0	0	0	0	82	178	0	0	0	0	0	0	0
0.06	0.06	0	0	0	0	82	178	0	0	0	0	1.640036	3.560078	0
0.12	0.12	0	0	0	0	82	178	0	0	0	0	1.027409	2.230229	0
0	0.12	0	0	0	0	0	58	0	0	0	0	0	1.049547	0
0	0.12	0	0	0	0	0	58	0	0	0	0	0	0	0
0	0.06	0	0	0	0	0	58	0	0	0	0	0	0	0
0	0.06	0	0	0	0	0	58	0	0	0	0	0	2.043855	0
0	0.12	0	0	0	0	0	58	0	0	0	0	0	5.086927	0
0	0	0	0	48	0	0	0	0	0	9.102829	0	0	0	0
0	0	0	0	48	0	0	0	0	0	1.409555	0	0	0	0
0	0	0	0	48	0	0	0	0	0	1.920042	0	0	0	0
0	0	0	0	48	0	0	0	0	0	0	0	0	0	0
0	0	0	0	48	0	0	0	0	0	13.53173	0	0	0	0
0	0	0	0	48	0	0	0	0	0	1.523843	0	0	0	0
0	0	0	0	48	0	0	0	0	0	1.79204	0	0	0	0
0	0	0	0	65	65	0	0	0	0	3.037321	3.037321	0	0	0
0	0	0	0	65	65	0	0	0	0	1.030118	1.030118	0	0	0
0	0	0	0	65	65	0	0	0	0	4.581053	4.581053	0	0	0
0	0	0	0	65	65	0	0	0	0	2.600057	2.600057	0	0	0
0	0	0	0	65	65	0	0	0	0	22.52062	22.52062	0	0	0
0	0	0	0	65	65	0	0	0	0	21.37825	21.37825	0	0	0
0	0	0	0	65	65	0	0	0	0	5.777905	5.777905	0	0	0
0	0	0	0	65	65	0	0	0	0	0.361119	0.361119	0	0	0
0	0	0	0	65	65	0	0	0	0	0.144448	0.144448	0	0	0
0	0	0	0	65	65	0	0	0	0	0.763509	0.763509	0	0	0
0	0	0	0	0	202	0	0	0	0	0	0.923449	0	0	0
0	0	0	0	0	202	0	0	0	0	0	0.189115	0	0	0
0	0	0	0	0	202	0	0	0	0	0	0	0	0	0
0	0	0	0	0	202	0	0	0	0	0	0.108066	0	0	0
0	0	0	0	0	202	0	0	0	0	0	0	0	0	0
0	0	0	0	0	202	0	0	0	0	0	0	0	0	0
0	0	0	0	0	202	0	0	0	0	0	0	0	0	0
0	0	0	0	0	202	0	0	0	0	0	2.859986	0	0	0
0	0	0	0	0	202	0	0	0	0	0	15.0797	0	0	0
0	0	0	0	0	202	0	0	0	0	0	3.200864	0	0	0
0	0	0	0	0	202	0	0	0	0	0	5.611235	0	0	0
0	0	0	0	0	202	0	0	0	0	0	20.98231	0	0	0
0	0	0	0	0	202	0	0	0	0	0	1.468286	0	0	0

0	0	0	0	0	202	0	0	0	0	0	0	0	0	0
0	0	0	0	0	202	0	0	0	0	0	6.904914	0	0	0
0	0	0	0	0	202	0	0	0	0	0	0.062859	0	0	0
0	0	0	0	0	202	0	0	0	0	0	0	0	0	0
0	0	0	0	0	202	0	0	0	0	0	1.625036	0	0	0
0.06	0	0	0	0	0	188	0	0	0	0	0	0.859448	0	0
0.06	0	0	0	0	0	188	0	0	0	0	0	0	0	0
0.06	0	0	0	0	0	188	0	0	0	0	0	0	0	0
0.06	0	0	0	0	0	188	0	0	0	0	0	0	0	0
0.12	0	0	0	0	0	188	0	0	0	0	0	2.921741	0	0
0.06	0	0	0	0	0	188	0	0	0	0	0	0	0	0
0.06	0	0	0	0	0	188	0	0	0	0	0	0	0	0
0.041122002	0	0	0	0	0	188	0	0	0	0	0	3.405368	0	0
0.06	0	0	0	0	0	188	0	0	0	0	0	0	0	0
0.12	0	0	0	0	0	188	0	0	0	0	0	0	0	0
0.06	0	0	0	0	0	188	0	0	0	0	0	5.222337	0	0
0.06	0	0	0	0	0	188	0	0	0	0	0	14.62116	0	0
0.06	0	0	0	0	0	188	0	0	0	0	0	0	0	0
0.06	0	0	0	0	0	188	0	0	0	0	0	0	0	0
0.06	0	0	0	0	0	188	0	0	0	0	0	0	0	0
0.12	0	0	0	0	0	188	0	0	0	0	0	0	0	0
0.06	0	0	0	0	0	188	0	0	0	0	0	0	0	0
0.06	0	0	0	0	0	188	0	0	0	0	0	1.566701	0	0
0	0	0	0	0	177	0	0	0	0	0	0.113145	0	0	0
0	0	0	0	0	177	0	0	0	0	0	7.811283	0	0	0
0	0	0	0	0	177	0	0	0	0	0	0	0	0	0
0	0	0	0	0	177	0	0	0	0	0	4.46359	0	0	0
0	0	0	0	0	177	0	0	0	0	0	0.984149	0	0	0
0	0	0	0	0	177	0	0	0	0	0	0.506678	0	0	0
0	0	0	0	0	177	0	0	0	0	0	0	0	0	0
0	0	0	0	0	177	0	0	0	0	0	0.673602	0	0	0
0	0	0	0	0	177	0	0	0	0	0	0.573029	0	0	0
0	0	0	0	0	177	0	0	0	0	0	4.169933	0	0	0
0	0	0	0	0	177	0	0	0	0	0	0.786684	0	0	0
0	0	0	0	0	177	0	0	0	0	0	12.40583	0	0	0
0	0	0	0	0	177	0	0	0	0	0	1.615115	0	0	0
0	0	0	0	0	177	0	0	0	0	0	0	0	0	0
0	0	0	0	0	177	0	0	0	0	0	13.09553	0	0	0
0	0	0	0	0	177	0	0	0	0	0	0	0	0	0
0	0	0	0	0	177	0	0	0	0	0	0	0	0	0
0	0	0	0	0	177	0	0	0	0	0	1.475033	0	0	0
0.06	0	0	0	0	0	262	0	0	0	0	0	0	0	0
0.06	0	0	0	0	0	262	0	0	0	0	0	0	0	0
0.06	0	0	0	0	0	262	0	0	0	0	0	0	0	0
0.06	0	0	0	0	0	262	0	0	0	0	0	0	0	0
0.12	0	0	0	0	0	262	0	0	0	0	0	5.895051	0	0
0.06	0	0	0	0	0	262	0	0	0	0	0	0	0	0
0.06	0	0	0	0	0	262	0	0	0	0	0	0	0	0
0.041122002	0	0	0	0	0	262	0	0	0	0	0	0.03985	0	0
0.06	0	0	0	0	0	262	0	0	0	0	0	0	0	0
0.12	0	0	0	0	0	262	0	0	0	0	0	0	0	0
0.06	0	0	0	0	0	262	0	0	0	0	0	1.16447	0	0
0.06	0	0	0	0	0	262	0	0	0	0	0	0	0	0
0.06	0	0	0	0	0	262	0	0	0	0	0	0	0	0
0.06	0	0	0	0	0	262	0	0	0	0	0	0	0	0

0.06	0	0	0	0	0	262	0	0	0	0	0	0	0	0
0.12	0	0	0	0	0	262	0	0	0	0	0	0	0	0
0.06	0	0	0	0	0	262	0	0	0	0	0	0	0	0
0.06	0	0	0	0	0	262	0	0	0	0	0	2.183381	0	0
0	0.06	0	0	0	0	0	62	0	0	0	0	0	0	0
0	0.06	0	0	0	0	0	62	0	0	0	0	0	0	0
0	0.06	0	0	0	0	0	62	0	0	0	0	0	0	0
0	0.06	0	0	0	0	0	62	0	0	0	0	0	0	0
0	0.12	0	0	0	0	0	62	0	0	0	0	0	0	0
0	0.06	0	0	0	0	0	62	0	0	0	0	0	0	0
0	0.06	0	0	0	0	0	62	0	0	0	0	0	0	0
0	0.038423345	0	0	0	0	0	62	0	0	0	0	0	0	0
0	0.06	0	0	0	0	0	62	0	0	0	0	0	0	0
0	0.12	0	0	0	0	0	62	0	0	0	0	0	0	0
0	0.06	0	0	0	0	0	62	0	0	0	0	0	0.275562	0
0	0.06	0	0	0	0	0	62	0	0	0	0	0	0	0
0	0.06	0	0	0	0	0	62	0	0	0	0	0	0	0
0	0.06	0	0	0	0	0	62	0	0	0	0	0	0	0
0	0.06	0	0	0	0	0	62	0	0	0	0	0	0	0
0	0.12	0	0	0	0	0	62	0	0	0	0	0	0	0
0	0.06	0	0	0	0	0	62	0	0	0	0	0	0	0
0	0.06	0	0	0	0	0	62	0	0	0	0	0	0.516678	0
0	0	0	0	0	179	0	0	0	0	0	0.111431	0	0	0
0	0	0	0	0	179	0	0	0	0	0	6.886263	0	0	0
0	0	0	0	0	179	0	0	0	0	0	0	0	0	0
0	0	0	0	0	179	0	0	0	0	0	3.935007	0	0	0
0	0	0	0	0	179	0	0	0	0	0	1.45654	0	0	0
0	0	0	0	0	179	0	0	0	0	0	0.446677	0	0	0
0	0	0	0	0	179	0	0	0	0	0	0	0	0	0
0	0	0	0	0	179	0	0	0	0	0	0.446677	0	0	0
0	0	0	0	0	179	0	0	0	0	0	0	0	0	0
0	0	0	0	0	179	0	0	0	0	0	0.613392	0	0	0
0	0	0	0	0	179	0	0	0	0	0	0.50517	0	0	0
0	0	0	0	0	179	0	0	0	0	0	3.876276	0	0	0
0	0	0	0	0	179	0	0	0	0	0	0.795573	0	0	0
0	0	0	0	0	179	0	0	0	0	0	11.01334	0	0	0
0	0	0	0	0	179	0	0	0	0	0	1.292092	0	0	0
0	0	0	0	0	179	0	0	0	0	0	0	0	0	0
0	0	0	0	0	179	0	0	0	0	0	10.47642	0	0	0
0	0	0	0	0	179	0	0	0	0	0	0	0	0	0
0	0	0	0	0	179	0	0	0	0	0	0	0	0	0
0	0	0	0	0	179	0	0	0	0	0	1.4917	0	0	0
0.06	0	0	0	0	0	249	0	0	0	0	0	0	0	0
0.06	0	0	0	0	0	249	0	0	0	0	0	0	0	0
0.06	0	0	0	0	0	249	0	0	0	0	0	0	0	0
0.06	0	0	0	0	0	249	0	0	0	0	0	0	0	0
0.12	0	0	0	0	0	249	0	0	0	0	0	5.353769	0	0
0.06	0	0	0	0	0	249	0	0	0	0	0	0	0	0
0.06	0	0	0	0	0	249	0	0	0	0	0	0	0	0
0.041122002	0	0	0	0	0	249	0	0	0	0	0	0.03985	0	0
0.06	0	0	0	0	0	249	0	0	0	0	0	0	0	0
0.12	0	0	0	0	0	249	0	0	0	0	0	0	0	0
0.06	0	0	0	0	0	249	0	0	0	0	0	1.102247	0	0
0.06	0	0	0	0	0	249	0	0	0	0	0	0	0	0
0.06	0	0	0	0	0	249	0	0	0	0	0	0	0	0
0.06	0	0	0	0	0	249	0	0	0	0	0	0	0	0
0.06	0	0	0	0	0	249	0	0	0	0	0	0	0	0

0.12	0	0	0	0	0	249	0	0	0	0	0	0	0	0
0.06	0	0	0	0	0	249	0	0	0	0	0	0	0	0
0.06	0	0	0	0	0	249	0	0	0	0	0	2.075046	0	0
0	0	0	0	0	157	0	0	0	0	0	0.113145	0	0	0
0	0	0	0	0	157	0	0	0	0	0	6.680703	0	0	0
0	0	0	0	0	157	0	0	0	0	0	0	0	0	0
0	0	0	0	0	157	0	0	0	0	0	3.817544	0	0	0
0	0	0	0	0	157	0	0	0	0	0	0.629855	0	0	0
0	0	0	0	0	157	0	0	0	0	0	0.433343	0	0	0
0	0	0	0	0	157	0	0	0	0	0	0	0	0	0
0	0	0	0	0	157	0	0	0	0	0	0.61151	0	0	0
0	0	0	0	0	157	0	0	0	0	0	0.49009	0	0	0
0	0	0	0	0	157	0	0	0	0	0	3.84691	0	0	0
0	0	0	0	0	157	0	0	0	0	0	0.697793	0	0	0
0	0	0	0	0	157	0	0	0	0	0	11.01334	0	0	0
0	0	0	0	0	157	0	0	0	0	0	1.292092	0	0	0
0	0	0	0	0	157	0	0	0	0	0	0	0	0	0
0	0	0	0	0	157	0	0	0	0	0	10.47642	0	0	0
0	0	0	0	0	157	0	0	0	0	0	0	0	0	0
0	0	0	0	0	157	0	0	0	0	0	0	0	0	0
0	0	0	0	0	157	0	0	0	0	0	1.308362	0	0	0
0.06	0	0	0	0	0	262	0	0	0	0	0	0	0	0
0.06	0	0	0	0	0	262	0	0	0	0	0	0	0	0
0.06	0	0	0	0	0	262	0	0	0	0	0	0	0	0
0.06	0	0	0	0	0	262	0	0	0	0	0	0	0	0
0.12	0	0	0	0	0	262	0	0	0	0	0	6.249344	0	0
0.06	0	0	0	0	0	262	0	0	0	0	0	0	0	0
0.06	0	0	0	0	0	262	0	0	0	0	0	0	0	0
0.041122002	0	0	0	0	0	262	0	0	0	0	0	0.03985	0	0
0.06	0	0	0	0	0	262	0	0	0	0	0	0	0	0
0.041122002	0	0	0	0	0	262	0	0	0	0	0	0.03985	0	0
0.06	0	0	0	0	0	262	0	0	0	0	0	0	0	0
0.12	0	0	0	0	0	262	0	0	0	0	0	0	0	0
0.06	0	0	0	0	0	262	0	0	0	0	0	1.16447	0	0
0.06	0	0	0	0	0	262	0	0	0	0	0	0	0	0
0.06	0	0	0	0	0	262	0	0	0	0	0	0	0	0
0.06	0	0	0	0	0	262	0	0	0	0	0	0	0	0
0.06	0	0	0	0	0	262	0	0	0	0	0	0	0	0
0.12	0	0	0	0	0	262	0	0	0	0	0	0	0	0
0.06	0	0	0	0	0	262	0	0	0	0	0	0	0	0
0.06	0	0	0	0	0	262	0	0	0	0	0	2.183381	0	0
0	0.06	0	0	0	0	0	7	0	0	0	0	0	0	0
0	0.06	0	0	0	0	0	7	0	0	0	0	0	0	0
0	0.06	0	0	0	0	0	7	0	0	0	0	0	0	0
0	0.06	0	0	0	0	0	7	0	0	0	0	0	0	0
0	0.12	0	0	0	0	0	7	0	0	0	0	0	0	0
0	0.06	0	0	0	0	0	7	0	0	0	0	0	0	0
0	0.06	0	0	0	0	0	7	0	0	0	0	0	0	0
0	0.038423345	0	0	0	0	0	7	0	0	0	0	0	0	0
0	0.06	0	0	0	0	0	7	0	0	0	0	0	0	0
0	0.12	0	0	0	0	0	7	0	0	0	0	0	0	0
0	0.06	0	0	0	0	0	7	0	0	0	0	0	0.031112	0
0	0.06	0	0	0	0	0	7	0	0	0	0	0	0	0
0	0.06	0	0	0	0	0	7	0	0	0	0	0	0	0
0	0.06	0	0	0	0	0	7	0	0	0	0	0	0	0
0	0.06	0	0	0	0	0	7	0	0	0	0	0	0	0
0	0.12	0	0	0	0	0	7	0	0	0	0	0	0	0

0	0.06	0	0	0	0	0	7	0	0	0	0	0	0	0
0	0.06	0	0	0	0	0	7	0	0	0	0	0	0.058335	0
0	0	0	0	0	202	0	0	0	0	0	0.113145	0	0	0
0	0	0	0	0	202	0	0	0	0	0	9.147424	0	0	0
0	0	0	0	0	202	0	0	0	0	0	0	0	0	0
0	0	0	0	0	202	0	0	0	0	0	5.227099	0	0	0
0	0	0	0	0	202	0	0	0	0	0	1.45654	0	0	0
0	0	0	0	0	202	0	0	0	0	0	0.593346	0	0	0
0	0	0	0	0	202	0	0	0	0	0	0	0	0	0
0	0	0	0	0	202	0	0	0	0	0	0.74322	0	0	0
0	0	0	0	0	202	0	0	0	0	0	0.671047	0	0	0
0	0	0	0	0	202	0	0	0	0	0	4.551688	0	0	0
0	0	0	0	0	202	0	0	0	0	0	0.897798	0	0	0
0	0	0	0	0	202	0	0	0	0	0	13.92491	0	0	0
0	0	0	0	0	202	0	0	0	0	0	1.938138	0	0	0
0	0	0	0	0	202	0	0	0	0	0	0	0	0	0
0	0	0	0	0	202	0	0	0	0	0	15.71463	0	0	0
0	0	0	0	0	202	0	0	0	0	0	0	0	0	0
0	0	0	0	0	202	0	0	0	0	0	0	0	0	0
0	0	0	0	0	202	0	0	0	0	0	1.68337	0	0	0
0.06	0	0	0	0	0	262	0	0	0	0	0	0	0	0
0.06	0	0	0	0	0	262	0	0	0	0	0	0	0	0
0.06	0	0	0	0	0	262	0	0	0	0	0	0	0	0
0.06	0	0	0	0	0	262	0	0	0	0	0	0	0	0
0.12	0	0	0	0	0	262	0	0	0	0	0	5.324244	0	0
0.06	0	0	0	0	0	262	0	0	0	0	0	0	0	0
0.06	0	0	0	0	0	262	0	0	0	0	0	0	0	0
0.041122002	0	0	0	0	0	262	0	0	0	0	0	0.038039	0	0
0.06	0	0	0	0	0	262	0	0	0	0	0	0	0	0
0.041122002	0	0	0	0	0	262	0	0	0	0	0	0.038039	0	0
0.06	0	0	0	0	0	262	0	0	0	0	0	0	0	0
0.12	0	0	0	0	0	262	0	0	0	0	0	0	0	0
0.06	0	0	0	0	0	262	0	0	0	0	0	1.16447	0	0
0.06	0	0	0	0	0	262	0	0	0	0	0	0	0	0
0.06	0	0	0	0	0	262	0	0	0	0	0	0	0	0
0.06	0	0	0	0	0	262	0	0	0	0	0	0	0	0
0.06	0	0	0	0	0	262	0	0	0	0	0	0	0	0
0.12	0	0	0	0	0	262	0	0	0	0	0	0	0	0
0.06	0	0	0	0	0	262	0	0	0	0	0	0	0	0
0.06	0	0	0	0	0	262	0	0	0	0	0	2.183381	0	0
0	0.06	0	0	0	0	0	57	0	0	0	0	0	0	0
0	0.06	0	0	0	0	0	57	0	0	0	0	0	0	0
0	0.06	0	0	0	0	0	57	0	0	0	0	0	0	0
0	0.06	0	0	0	0	0	57	0	0	0	0	0	0	0
0	0.12	0	0	0	0	0	57	0	0	0	0	0	0	0
0	0.06	0	0	0	0	0	57	0	0	0	0	0	0	0
0	0.06	0	0	0	0	0	57	0	0	0	0	0	0	0
0	0.038423345	0	0	0	0	0	57	0	0	0	0	0	0	0
0	0.06	0	0	0	0	0	57	0	0	0	0	0	0	0
0	0.12	0	0	0	0	0	57	0	0	0	0	0	0	0
0	0.06	0	0	0	0	0	57	0	0	0	0	0	0.253339	0
0	0.06	0	0	0	0	0	57	0	0	0	0	0	0	0
0	0.06	0	0	0	0	0	57	0	0	0	0	0	0	0
0	0.06	0	0	0	0	0	57	0	0	0	0	0	0	0
0	0.06	0	0	0	0	0	57	0	0	0	0	0	0	0
0	0.12	0	0	0	0	0	57	0	0	0	0	0	0	0
0	0.06	0	0	0	0	0	57	0	0	0	0	0	0	0

0	0.06	0	0	0	0	0	57	0	0	0	0	0	0.47501	0
0	0	0	0	0	136	0	0	0	0	0	0.080573	0	0	0
0	0	0	0	0	136	0	0	0	0	0	9.147424	0	0	0
0	0	0	0	0	136	0	0	0	0	0	0	0	0	0
0	0	0	0	0	136	0	0	0	0	0	5.227099	0	0	0
0	0	0	0	0	136	0	0	0	0	0	0	0	0	0
0	0	0	0	0	136	0	0	0	0	0	0.593346	0	0	0
0	0	0	0	0	136	0	0	0	0	0	0	0	0	0
0	0	0	0	0	136	0	0	0	0	0	0.673602	0	0	0
0	0	0	0	0	136	0	0	0	0	0	0.671047	0	0	0
0	0	0	0	0	136	0	0	0	0	0	3.993739	0	0	0
0	0	0	0	0	136	0	0	0	0	0	0.604458	0	0	0
0	0	0	0	0	136	0	0	0	0	0	14.0515	0	0	0
0	0	0	0	0	136	0	0	0	0	0	1.996869	0	0	0
0	0	0	0	0	136	0	0	0	0	0	0	0	0	0
0	0	0	0	0	136	0	0	0	0	0	16.19083	0	0	0
0	0	0	0	0	136	0	0	0	0	0	0	0	0	0
0	0	0	0	0	136	0	0	0	0	0	0	0	0	0
0	0	0	0	0	136	0	0	0	0	0	1.133358	0	0	0
0.06	0	0	0	0	0	262	0	0	0	0	0	0.032572	0	0
0.06	0	0	0	0	0	262	0	0	0	0	0	0	0	0
0.06	0	0	0	0	0	262	0	0	0	0	0	0	0	0
0.06	0	0	0	0	0	262	0	0	0	0	0	0	0	0
0.12	0	0	0	0	0	262	0	0	0	0	0	6.879199	0	0
0.06	0	0	0	0	0	262	0	0	0	0	0	0	0	0
0.06	0	0	0	0	0	262	0	0	0	0	0	0	0	0
0.041122002	0	0	0	0	0	262	0	0	0	0	0	0.110493	0	0
0.06	0	0	0	0	0	262	0	0	0	0	0	0	0	0
0.12	0	0	0	0	0	262	0	0	0	0	0	0.557949	0	0
0.06	0	0	0	0	0	262	0	0	0	0	0	1.16447	0	0
0.06	0	0	0	0	0	262	0	0	0	0	0	0	0	0
0.06	0	0	0	0	0	262	0	0	0	0	0	0	0	0
0.06	0	0	0	0	0	262	0	0	0	0	0	0	0	0
0.06	0	0	0	0	0	262	0	0	0	0	0	0	0	0
0.12	0	0	0	0	0	262	0	0	0	0	0	0	0	0
0.06	0	0	0	0	0	262	0	0	0	0	0	0	0	0
0.06	0	0	0	0	0	262	0	0	0	0	0	2.183381	0	0
0	0.06	0	0	0	0	0	122	0	0	0	0	0	0	0
0	0.06	0	0	0	0	0	122	0	0	0	0	0	0	0
0	0.06	0	0	0	0	0	122	0	0	0	0	0	0	0
0	0.06	0	0	0	0	0	122	0	0	0	0	0	0	0
0	0.12	0	0	0	0	0	122	0	0	0	0	0	0	0
0	0.06	0	0	0	0	0	122	0	0	0	0	0	0	0
0	0.06	0	0	0	0	0	122	0	0	0	0	0	0	0
0	0.038423345	0	0	0	0	0	122	0	0	0	0	0	0	0
0	0.06	0	0	0	0	0	122	0	0	0	0	0	0	0
0	0.12	0	0	0	0	0	122	0	0	0	0	0	0	0
0	0.06	0	0	0	0	0	122	0	0	0	0	0	0.542234	0
0	0.06	0	0	0	0	0	122	0	0	0	0	0	0	0
0	0.06	0	0	0	0	0	122	0	0	0	0	0	0	0
0	0.06	0	0	0	0	0	122	0	0	0	0	0	0	0
0	0.06	0	0	0	0	0	122	0	0	0	0	0	0	0
0	0.12	0	0	0	0	0	122	0	0	0	0	0	0	0
0	0.06	0	0	0	0	0	122	0	0	0	0	0	0	0
0	0.06	0	0	0	0	0	122	0	0	0	0	0	1.016689	0

0.06	0	0	0	0	0	116	0	0	0	0	0	0	0	0
0.12	0	0	0	0	0	116	0	0	0	0	0	0	0	0
0.06	0	0	0	0	0	116	0	0	0	0	0	2.320051	0	0
0.06	0	0	0	0	0	116	0	0	0	0	0	3.666417	0	0
0.06	0	0	0	0	0	116	0	0	0	0	0	2.452625	0	0
0.12	0	0	0	0	0	116	0	0	0	0	0	5.086927	0	0
0.12	0	0	0	0	0	116	0	0	0	0	0	1.453408	0	0
0.06	0	0	0	0	0	116	0	0	0	0	0	1.913428	0	0
0.041122002	0	0	0	0	0	116	0	0	0	0	0	0.437747	0	0
0.12	0	0	0	0	0	129	0	0	0	0	0	0	0	0
0.06	0	0	0	0	0	129	0	0	0	0	0	2.580057	0	0
0.06	0	0	0	0	0	129	0	0	0	0	0	4.750581	0	0
0.12	0	0	0	0	0	129	0	0	0	0	0	1.61629	0	0
0.041122002	0	0	0	0	0	129	0	0	0	0	0	0	0	0
0.06	0	0	0	0	0	129	0	0	0	0	0	0	0	0
0.12	0	0	0	0	0	129	0	0	0	0	0	0	0	0
0.12	0.12	0	0	0	0	17	171	0	0	0	0	0	0	0
0.06	0.06	0	0	0	0	17	171	0	0	0	0	0.340007	3.420075	0
0.12	0.12	0	0	0	0	17	171	0	0	0	0	0.212999	2.142523	0
0	0.12	0	0	0	0	0	58	0	0	0	0	0	1.049547	0
0	0.12	0	0	0	0	0	58	0	0	0	0	0	0	0
0	0.06	0	0	0	0	0	58	0	0	0	0	0	1.160026	0
0	0.06	0	0	0	0	0	58	0	0	0	0	0	1.226313	0
0	0.12	0	0	0	0	0	58	0	0	0	0	0	2.543463	0
0.06	0	0	0	0	0	116	0	0	0	0	0	0	0	0
0.12	0	0	0	0	0	116	0	0	0	0	0	0	0	0
0.06	0	0	0	0	0	116	0	0	0	0	0	2.320051	0	0
0.06	0	0	0	0	0	116	0	0	0	0	0	3.666417	0	0
0.06	0	0	0	0	0	116	0	0	0	0	0	2.452625	0	0
0.06	0	0	0	0	0	116	0	0	0	0	0	3.666417	0	0
0.06	0	0	0	0	0	116	0	0	0	0	0	2.452625	0	0
0.12	0	0	0	0	0	116	0	0	0	0	0	5.086927	0	0
0.12	0	0	0	0	0	116	0	0	0	0	0	1.453408	0	0
0.06	0	0	0	0	0	116	0	0	0	0	0	1.913428	0	0
0.041122002	0	0	0	0	0	116	0	0	0	0	0	0.875494	0	0
0.12	0.12	0	0	0	0	81	48	0	0	0	0	0	0	0
0.06	0.06	0	0	0	0	81	48	0	0	0	0	1.620036	0.960021	0
0.06	0.06	0	0	0	0	81	48	0	0	0	0	2.982923	1.767658	0
0.12	0.12	0	0	0	0	81	48	0	0	0	0	2.029759	1.20282	0
0.041122002	0.038423345	0	0	0	0	81	48	0	0	0	0	0	0	0
0.06	0.06	0	0	0	0	81	48	0	0	0	0	0	0	0
0.12	0.12	0	0	0	0	81	48	0	0	0	0	0	0	0
0	0.12	0	0	0	0	0	187	0	0	0	0	0	0	0
0	0.06	0	0	0	0	0	187	0	0	0	0	0	3.740082	0
0	0.12	0	0	0	0	0	187	0	0	0	0	0	2.342993	0
0	0.12	0.12	0	0	0	0	27	32	0	0	0	0	0.488582	0.57906
0	0.12	0.12	0	0	0	0	27	32	0	0	0	0	0	0
0	0.06	0.06	0	0	0	0	27	32	0	0	0	0	0	0
0	0.06	0.06	0	0	0	0	27	32	0	0	0	0	0.57087	0.676586
0	0.12	0.12	0	0	0	0	27	32	0	0	0	0	2.368052	2.80658
0	0	0	0	0	22	0	0	0	0	0	0.514008	0	0	0
0	0	0	0	0	22	0	0	0	0	0	0.174328	0	0	0
0	0	0	0	0	22	0	0	0	0	0	0.775255	0	0	0
0	0	0	0	0	22	0	0	0	0	0	0.44001	0	0	0
0	0	0	0	0	22	0	0	0	0	0	3.811182	0	0	0
0	0	0	0	0	22	0	0	0	0	0	3.617858	0	0	0
0	0	0	0	0	22	0	0	0	0	0	0.977799	0	0	0

0	0	0	0	0	22	0	0	0	0	0	0.061112	0	0	0
0	0	0	0	0	22	0	0	0	0	0	0.024445	0	0	0
0	0	0	0	0	22	0	0	0	0	0	0.258418	0	0	0
0.06	0	0	0	0	175	87	0	0	0	0	4.088285	2.032461	0	0
0.06	0	0	0	0	175	87	0	0	0	0	8.075178	4.014517	0	0
0.06	0	0	0	0	175	87	0	0	0	0	5.781377	2.874171	0	0
0.06	0	0	0	0	175	87	0	0	0	0	2.117269	1.052585	0	0
0.06	0	0	0	0	175	87	0	0	0	0	1.263917	0.628347	0	0
0.12	0	0	0	0	175	87	0	0	0	0	4.000088	1.988615	0	0
0.06	0.06	0	0	0	0	24	99	0	0	0	0	0	0	0
0.12	0.12	0	0	0	0	24	99	0	0	0	0	1.409555	5.814414	0
0.06	0.06	0	0	0	0	24	99	0	0	0	0	0.960021	3.960087	0
0.06	0.06	0	0	0	0	24	99	0	0	0	0	1.517138	6.258195	0
0.06	0.06	0	0	0	0	24	99	0	0	0	0	1.01488	4.186378	0
0.12	0.12	0	0	0	0	24	99	0	0	0	0	2.104935	8.682858	0
0.12	0.12	0	0	0	0	24	99	0	0	0	0	0.60141	2.480817	0
0.06	0.06	0	0	0	0	24	99	0	0	0	0	0.791763	3.266024	0
0.041122002	0.038423345	0	0	0	0	24	99	0	0	0	0	0.54341	2.094462	0
0	0.12	0	0	0	0	0	139	0	0	0	0	0	8.163672	0
0	0.06	0	0	0	0	0	139	0	0	0	0	0	5.560123	0
0	0.06	0	0	0	0	0	139	0	0	0	0	0	10.23769	0
0	0.12	0	0	0	0	0	139	0	0	0	0	0	5.22475	0
0	0.038423345	0	0	0	0	0	139	0	0	0	0	0	0	0
0	0.06	0	0	0	0	0	139	0	0	0	0	0	0	0
0	0.12	0	0	0	0	0	139	0	0	0	0	0	0	0
0	0.12	0.12	0	0	0	0	25	174	0	0	0	0	1.248043	8.686382
0	0.06	0.06	0	0	0	0	25	174	0	0	0	0	1.000022	6.960153
0	0.12	0.12	0	0	0	0	25	174	0	0	0	0	0.313234	2.180112
0	0	0.12	0	0	0	0	0	59	0	0	0	0	0	1.067643
0	0	0.12	0	0	0	0	0	59	0	0	0	0	0	0
0	0	0.06	0	0	0	0	0	59	0	0	0	0	0	1.180026
0	0	0.06	0	0	0	0	0	59	0	0	0	0	0	2.494912
0	0	0.12	0	0	0	0	0	59	0	0	0	0	0	7.761949
0.06	0	0	0	0	0	22	0	0	0	0	0	1.043033	0	0
0.12	0	0	0	0	0	22	0	0	0	0	0	0.323023	0	0
0.06	0	0	0	0	0	22	0	0	0	0	0	0.880019	0	0
0.12	0	0	0	0	0	22	0	0	0	0	0	1.929524	0	0
0.12	0	0	0	0	0	22	0	0	0	0	0	0.698428	0	0
0.06	0	0	0	0	0	22	0	0	0	0	0	0.821351	0	0
0.06	0.06	0	0	0	0	1	22	0	0	0	0	0.035239	0.775255	0
0.06	0.06	0	0	0	0	1	22	0	0	0	0	0.02	0.44001	0
0.06	0.06	0	0	0	0	1	22	0	0	0	0	0.086618	1.905591	0
0.06	0.06	0	0	0	0	1	22	0	0	0	0	0.021143	0.465153	0
0.12	0.12	0	0	0	0	1	22	0	0	0	0	0.009397	0.206735	0
0.06	0.06	0	0	0	0	1	22	0	0	0	0	0.001389	0.030556	0
0.06	0.06	0	0	0	0	1	22	0	0	0	0	0.001111	0.024445	0
0.06	0.06	0	0	0	0	1	22	0	0	0	0	0.011746	0.258418	0
0	0.12	0	0	0	0	0	22	0	0	0	0	0	0.646046	0
0	0.06	0	0	0	0	0	22	0	0	0	0	0	0.44001	0
0	0.06	0	0	0	0	0	22	0	0	0	0	0	0.465153	0
0	0.12	0	0	0	0	0	22	0	0	0	0	0	0.964762	0
0	0.12	0	0	0	0	0	22	0	0	0	0	0	0.275646	0
0	0.038423345	0	0	0	0	0	22	0	0	0	0	0	1.117046	0
0	0.12	0	0	0	0	0	43	0	0	0	0	0	1.262726	0
0	0.06	0	0	0	0	0	43	0	0	0	0	0	0.860019	0

0	0.12	0	0	0	0	0	43	0	0	0	0	0	0.538763	0
0	0.038423345	0	0	0	0	0	43	0	0	0	0	0	3.274976	0
0	0.12	0	0	0	0	0	33	0	0	0	0	0	0.823709	0
0	0.06	0	0	0	0	0	33	0	0	0	0	0	1.320029	0
0	0.12	0	0	0	0	0	33	0	0	0	0	0	0.413469	0

Appendix 3.4.3

Supplemental Memorandum to the Health Risk Assessment

RAMBOLL

ENVIRONMENT
& HEALTH

MEMORANDUM

Date March 4, 2022

To Eric Harrison, Signature Development Group

From Michael Keinath
Sarah Manzano

Subject **Air Quality and Greenhouse Gas Impacts of Re-location of Dialysis Center at Willow Village in Menlo Park, California**

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We understand that the Dialysis Center currently in Willow Campus Building 43 may need to stay on-site for six to nine months after demolition and construction is scheduled to begin for Willow Village Mixed Use Development Project (the Project). We understand the Dialysis Center temporarily may remain at Building 43 or relocate to trailers on the southwest side of the site. Regardless of whether the Dialysis Center remains at Building 43 for several months, relocates to the southern portion of the site for several months, or moves off-site, the conclusions in the Air Quality, Greenhouse Gas, and Health Risk Assessment Technical Report[1] (herein referred to as the "Technical Report") do not need to be updated, as discussed in detail below.

Construction Emissions

The Air Quality, Greenhouse Gas, and Health Risk Assessment Technical Report analyzed demolition within the first two calendar years of construction, as shown in Figure 9 of the Technical Report. The location of the existing Dialysis Center at Building 43 and the potential Dialysis Center temporary relocation site in the trailers along with construction areas is shown in **Figure 1**.

If the Dialysis Center remains in Building 43 for several months after the beginning of demolition, Building 43 may need to be demolished later than anticipated. However, this demolition would still require the same extent of construction activity and thus would result in the same quantity of emissions. Furthermore, it is likely that the overall demolition duration evaluated in the Technical Report would accommodate the delayed demolition of Building 43 within the same year, so they delay would not affect emissions estimation. However, even if the demolition was pushed into a later year, the emissions change would be minor (and would likely decrease due to fleets becoming less polluting) and therefore would not affect significance conclusions.

[1] Ramboll. 2022. CEQA Air Quality, Greenhouse Gas and Health Risk Assessment Technical Report Willow Village. February.

If the Dialysis Center temporarily moves to trailers in the southern portion of the site, demolition and construction would occur on the schedule evaluated in the Technical Report. The delivery of the trailers would involve seven truck trips to drop off the trailers themselves. These trips would be single occurrences and these trips would be within the bounds of the truck trip estimates already evaluated for the Project. Furthermore, the installation would not involve heavy duty construction equipment that was not already incorporated into equipment use assumptions. Therefore, the installation of the trailers would not change construction emissions from what was estimated in the Technical Report.

Operational Emissions

The Dialysis Center would be off-site by the time the Project became operational, so the Dialysis Center would not affect or be affected by operational emissions.

However, the Dialysis Center remaining on-site for several months would adjust the reduction associated with existing emissions in the calculation of net construction and operational emissions. If the Dialysis Center does not move off-site at the beginning of construction, emissions from the building, trips to the Center and emergency generator may still occur. However, these emissions would be minor since it is only one building out of the whole campus. Further, these emissions would occur in early years when net emissions of construction emissions would be negative (i.e., when construction emissions would be less than existing emissions). This minor delay in the reduction of existing emissions would not change this conclusion.

The temporary re-location of the Dialysis Center on-site is not expected to change the existing emissions. The existing Dialysis Center uses a 324-horsepower emergency generator, and the re-located Center would use four 50 horsepower natural gas emergency generators, which would reduce emissions compared to the existing operations.

Health Risk Assessment on Off-site Receptors and On-site Residents

As discussed above, the Dialysis Center temporarily remaining in its current location might change the schedule for demolition for this single building but would not change the overall emissions estimates. The demolition would still likely occur in the first two years of construction, when exposure assumptions are highest, so would not change health impacts to off-site receptors and on-site residents.

If the Dialysis Center is temporarily relocated on-site, the demolition would still likely occur as analyzed explicitly in the Technical Report. As mentioned above the addition of the trailers would not substantively increase construction emissions, so would not impact the health risk assessment.

The Dialysis Center currently has an emergency generator. If the Dialysis Center remains at Building 43, the emergency generator may be tested a few more times after the start of demolition. However, in the Technical Report, the benefit of the removal of the emergency generator was not recognized until operations commence. Therefore, this additional testing would not affect the analysis in the Technical Report.

If the Dialysis Center temporarily moves to the trailers, four new 50-horsepower natural gas emergency generators may be installed. The total capacity of the new emergency generators is smaller than the existing emergency generator at Building 43, so would have lower emissions. Furthermore, the new emergency generators are expected to be natural gas powered. Health impacts from natural gas combustion are much lower than diesel combustion due to lower toxicity of the natural gas combustion

emissions. As such, any health impacts associated with the generators are expected to be much lower than exiting conditions. The relocation would temporarily move the emergency generators closer to the high school, but further from the residents and maximally exposed individual identified in the Technical Report. However, moving closer to the high school is not expected to change the maximally exposed individual because of the reduction in health impacts due to the use of natural gas emergency generators and their extremely low emissions profile.

Health Risk Assessment on Dialysis Center Patients

A health risk assessment of construction emissions was performed on the patients of the Dialysis Center for both the possible temporary locations: remaining at Building 43 and re-locating to the southwest portion of the site.

As discussed, construction emissions would not change from what was analyzed in the Technical Report with the Dialysis Center remaining in its current location or re-locating on-site. To perform a conservative assessment, the air dispersion modeling of the emissions was also not updated. This is conservative because it does not remove emissions from the demolition and grading associated with the respective locations (Building 43 or trailer location). Therefore, Dialysis Center receptors are co-located with emissions, which would overestimate results. Receptor locations are shown in **Figure 1**.

Exposure parameters were developed for an adult dialysis patient who requires treatment three times per week for three to four hours per treatment,[2] as shown in **Table 1**. This was implemented by using exposure parameters for an individual in the 16-70 age bin. The 95th percentile eight hour breathing rate for passive activities was used.[3] This assumes a person is exposed for 8 hours when patients would only be at the center for 3-4 hours a day. Additionally, exposure was assumed for the first 13 months of construction. This is conservative because the Dialysis Center is not expected to remain on-site for 13 months. The Modeling Adjustment Factor (MAF) of 2.55 used in the Technical Report was also used here.

Results of the health risk assessment, using the same methodologies as used in the Technical Report, are shown in **Table A** below. **Table A** shows the maximum impact at the existing location and at the relocated position, as shown in **Figure 1**. The mitigation is the same as was implemented in the technical report.

As shown in the table, the maximum impacts are the same or lower than the maximum off-site and on-site residential health impacts discussed in the Technical Report. The maximum $PM_{2.5}$ concentration at the existing location for the Dialysis Center is the same as the maximum $PM_{2.5}$ concentration reported in the Technical Report while all other health impacts are much lower than reported in the Technical Report. Therefore, further updates to the Technical Report are not necessary.

[2] Satellite Health Care. 2022. Treatment Options. Dialysis at Satellite. Available at https://www.satellitehealthcare.com/treatment-options/dialysis-at-satellite. Accessed March 2, 2022.
[3] Cal/EPA. 2015. Air Toxics Hot Spots Program Risk Assessment Guidelines. Guidance Manual for Preparation of Health Risk Assessments. February.

Table A. Summary of Health Risk Assessment Results at the Temporary Dialysis Center Location[A]				
	Existing Location (Building 43)		Relocated Location (Trailers)	
	Unmitigated[B]	Mitigated	Unmitigated[B]	Mitigated
Excess Lifetime Cancer Risk (in a million)	0.22	0.050	0.13	0.029
Chronic Hazard Index (HI)	0.031	0.0072	0.018	0.0041
$PM_{2.5}$ Concentration ($\mu g/m^3$)	0.46	0.18[C]	0.29	0.11[C]

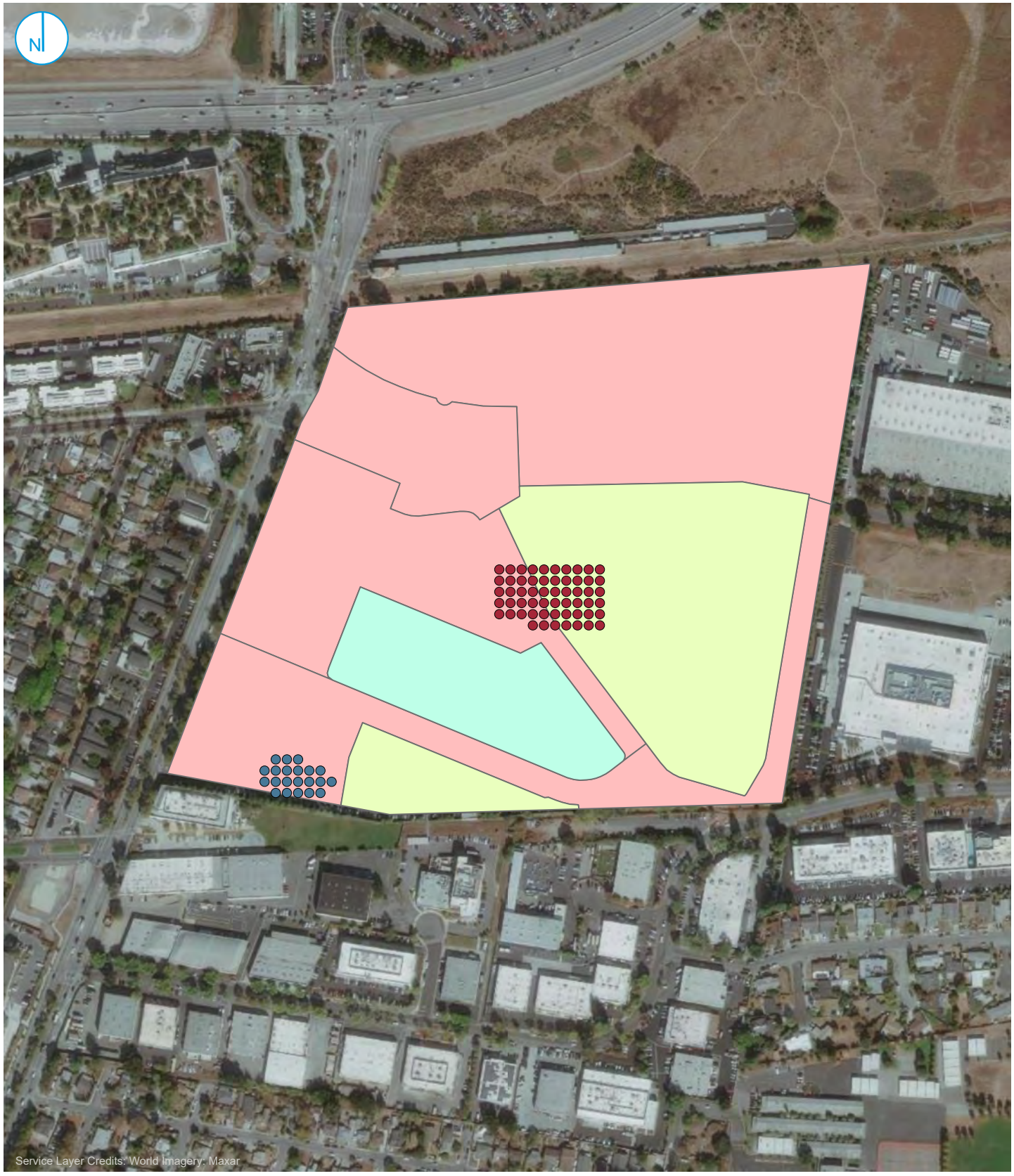
Notes:

A. For the existing location (Building 43), the location of the maximum Excess Lifetime Cancer Risk and Chronic HI is UTMx 575,255, UTMy 4,148,275. Location of the maximum $PM_{2.5}$ Concentration is UTMx 575,345, UTMy 4,148,235.
For the relocated location (Trailers), the location of the maximum Excess Lifetime Cancer Risk, Chronic HI, and $PM_{2.5}$ Concentration is UTMx 575,105, UTMy 4,148,085.

B. The Unmitigated risks reflect default construction off-road equipment fleet. The Mitigated risks reflect use of 95 percent Tier 4 construction off-road equipment; the other 5 percent are assumed to have Tier 2 engines.

C. This concentration is an outdoor concentration that assumes someone is exposed to construction emissions for a full year. However, in reality, the patient will not be at the center for more than a few days a week for a few hours per day and the Dialysis Center is only expected to be onsite for six to nine months. Furthermore, the patient will be indoors where windows likely would not be open in the middle of a construction site. This concentration also assumes the construction is co-located with the receptor, which drastically over-estimates impact. The maximum $PM_{2.5}$ concentration reported in the Technical Report was 0.18 $\mu g/m^3$, which is the same as the maximum concentration for the overly conservative analysis for the Dialysis Center. An additional note, the maximum $PM_{2.5}$ concentration reported in the Technical Report was driven by operational traffic. The maximum construction only mitigated $PM_{2.5}$ concentration for non-dialysis center receptors is 0.12 $\mu g/m^3$. This was not reported in the Technical Report because this location was not the overall maximum concentration for all sources (construction + operational generators and traffic). If the $PM_{2.5}$ concentration for the Dialysis Center at the existing location was reduced to only consider six to nine months of actual exposure, the concentration would be 0.09 $\mu g/m^3$ to 0.12 $\mu g/m^3$. Therefore, this overly conservative assessment of $PM_{2.5}$ concentration for the Dialysis Center results in similar concentration to the maximum $PM_{2.5}$ concentration from construction for non-dialysis receptors.

FIGURE 1



C:\Users\sbisogno\OneDrive - Ramboll\Documents\ArcGIS\Projects\FacebookDialysis\FacebookDialysis.aprx\Ramboll_ANSI_A_Portrait

PROJECT: 169000XXXX | DATED: 3/3/2022 | DESIGNER: SBISOGNO

Dialysis Receptors
- Relocated Location
- Existing Location (Building 43)

Construction Areas
- Area 1
- Area 2
- Area 3

0 250 500 Meters

DIALYSIS RECEPTORS

Willow Village
Menlo Park, California

FIGURE 01

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TABLE 1

Table 1
Exposure Parameters
Willow Village
Menlo Park, California

Receptor Type	Receptor Age Group[1]	Exposure Parameters					
		Breathing Rate (DBR)[2]	Exposure Duration (ED)[3]	Exposure Frequency (EF)[4]	Averaging Time (AT)	Intake Factor, Inhalation (If_{inh})	Age Sensitivity Factor (ASF)[5]
		(L/kg-per 8hrs)	(years)	(days/year)	(days)	(m^3/kg-day)	(unitless)
Dialysis	Age 16-30 Years	40	2	156	25,550	0.00049	1

Notes:

1. Receptor age group 16-30 is used for the Dialysis Center patients. The breathing rate is the same as the 16-70 age group.
2. Daily breathing rates for residents reflect default breathing rates from Cal/EPA 2015 as follows:
   95th percentile 8-hour breathing rate for age 16-30 years for passive and sedentary activities.
3. Exposure was assumed for the first 13 months of construction. The first month was a fraction of a month. However, in the calculation of cancer risk, an exposure duration of 2 was used since the concentration is averaged over the entire year and exposure is over two modeled years.
4. Exposure frequency was determined assuming visits 3 days a week reflective of the typical treatement schedule, which is Monday, Wednesday, Friday or Tuesday, Thursday, Saturday (Satellite 2022).
5. Age sensitivity factors account for an "anticipated special sensitivity to carcinogens" of infants and children as recommended in the OEHHA Technical Support Document (Cal/EPA 2009) and current OEHHA guidance (Cal/EPA 2015). An age sensitivity factor of 1 was used to account for adult patients.

Abbreviations:

AT - averaging time
Cal/EPA - California Environmental Protection Agency
DBR - daily breathing rate
EF - exposure frequency

Reference:

Cal/EPA. 2015. Air Toxics Hot Spots Program Risk Assessment Guidelines. Guidance Manual for Preparation of Health Risk Assessments. February.
Satellite Health Care. 2022. Treatment Options. Dialysis at Satellite. Available at https://www.satellitehealthcare.com/treatment-options/dialysis-at-satellite. Accessed March 2, 2022.

Appendix 3.4.4
Local Air Quality Modeling Report

RAMBOLL

ENVIRONMENT
& HEALTH

MEMORANDUM

To: Kyle Peralta, City of Menlo Park

From: Michael Keinath, Sarah Manzano, Ashley Sorensen, Ramboll

Subject: Menlo Park Air Monitoring Program Continuation

October 22, 2021

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As you know, at the request of Peninsula Innovation Partners (Peninsula), Ramboll US Consulting, Inc. (Ramboll) has been conducting air quality monitoring at four locations in the Belle Haven Community in Menlo Park since October 8, 2020. Initially, the monitoring was proposed for a period of three months, but it was extended and has continued to the current date. This memorandum summarizes the monitoring work that will continue in the Belle Haven Community commencing on October 26, 2021.

We propose to remove two of the monitoring stations (Child Development Center and MPK64) and keep the Kelly Park and Willow Road stations for six more months. More discussion on background and reasons for continuing monitoring at these stations is provided below.

Background

In October 2020, Ramboll started conducting air monitoring at four locations in the Belle Haven Community to better understand the community's localized air quality ("The Menlo Park Air Monitoring Program"). The Belle Haven Community is uniquely placed between the high traffic corridors of Highway 101, Bayfront Expressway and Willow Road. In depth air monitoring had not been performed in this area before and the nearest Bay Area Air Quality Management District (BAAQMD) air monitoring station is approximately 2 miles away in Redwood City. The goal of this monitoring effort was to gather data on the background air quality in the Belle Haven community for possible inclusion in the Willow Village Draft EIR and to compare that data to current and historical data from the BAAQMD Redwood City monitoring station to put the existing air quality in the neighborhood into perspective.

The Menlo Park Air Monitoring Program originally consisted of four monitoring stations each with an identical array of air monitoring equipment: Child Development Center, Kelly Park, MPK64, and Willow Road located at 410 Ivy Drive, 100 Terminal Avenue, 135 Commonwealth Drive, and 1283 Willow Road, respectively. The Menlo Park Air Monitoring Program measured continuous particulate matter less than 2.5 micrometers in diameter ($PM_{2.5}$) concentrations for 1 year along with filter-based PM_{10}/metals concentrations and canister-based volatile organic compound (VOC) concentrations for 6 months. The filter-based

PM10/metals samples and canister-based VOC samples were stopped on April 10, 2021 after 6 months of sampling.

The Menlo Park Air Monitoring Program utilized US Environmental Protection Agency (EPA) and California Air Resources Board (CARB) approved monitoring and sampling methodologies to gather data on the existing air quality in the Belle Haven Community. The particulate matter monitors used in this monitoring program are EPA-approved monitors that were awarded Federal Equivalency Method (FEM) or Federal Reference Method (FRM) designations.

We understand SMC Labs has also been monitoring particulate matter at various locations in Belle Haven using Clarity monitors. Clarity monitors provide estimates of particulate matter concentrations and are available at a lower cost than the monitors used in Ramboll's monitoring program. However, they are not approved by the EPA for regulatory compliance and do not provide the same data quality as the monitoring equipment used at the BAAQMD stations. The Menlo Park Air Monitoring Program uses equipment that matches the caliber of the BAAQMD monitoring stations, which are EPA approved, designated as FRM or FEM, and meet rigorous quality assurance and accuracy requirements. Because the program uses monitoring equipment equivalent to the equipment used by BAAQMD, the results of the program can be compared to the readings from the BAAQMD air monitoring station.

Proposed Program Modification

Ramboll is proposing to remove two of the monitoring stations, Child Development Center and MPK64, and keep the Kelly Park and Willow Road stations based on the following factors: data consistency with BAAQMD monitor, minimal difference in concentrations between stations, proximity to Willow Road, and co-location with the Clarity monitors. For reference, **Figure 1** below shows the current location of the four Ramboll monitors, the nearby Clarity monitors, and the BAAQMD Redwood City monitor.

Figure 1: Ramboll, BAAQMD, and Clarity Monitor Locations

Data Consistency with BAAQMD Monitor

The data collected during the Menlo Park Air Monitoring Program will be discussed in the forthcoming Air Quality and Meteorological Monitoring Data Summary Report. These data show that the concentrations measured at the BAAQMD Redwood City monitor were, on average, higher than those in the Belle Haven Community, and followed the same trends. Based on this finding, BAAQMD's monitor at Redwood City is representative of $PM_{2.5}$ concentrations in the Belle Haven Community, though the concentrations from Redwood City are likely an overestimate for the Belle Haven Community. Because the BAAQMD Redwood City monitor is representative of the Belle Have Community, Ramboll is proposing to reduce the number of stations in the Menlo Park Air Monitoring Program.

Difference Between Belle Haven Monitors

The data collected during the Menlo Park Air Monitoring Program shows that concentrations in the Belle Haven area were similar at each of the monitoring stations and result in a similar conclusion when comparing to the BAAQMD Redwood City monitoring station. The average 24-hour concentration was 5.8, 5.6, 5.9, and 5.6 $\mu g/m^3$ at the Child Development Center, Kelly Park, MPK64, and Willow

Road, respectively, compared to a value of 6.9 µg/m^3 at the BAAQMD station.[1] Because the difference between the monitors in Menlo Park is so minor compared to the differences between the BAAQMD Redwood City monitor and the Menlo Park monitors, having four stations is redundant.

Traffic on Willow Road

The Willow Road station is adjacent to Willow Road, which is a primary route to the Facebook campuses as well as a major roadway for traffic moving through the community. As more people return to work due to easing of pandemic restrictions, the traffic along Willow Road is expected to increase. Ramboll is proposing to keep the Willow Road monitoring station to make sure this potential increase in traffic is analyzed. The MPK64 station is adjacent to Highway 101, which is also a major roadway in the area. However, the Willow Road station is closer to the Belle Haven Community than the MPK64 station.

Co-Location with Clarity Monitors

Figure 1 above shows the location of the nearby Clarity monitors, the BAAQMD monitor, and Ramboll's monitors. As mentioned in the Background section of this memo and discussed in detail in the forthcoming Air Quality and Meteorological Monitoring Data Summary Report, Clarity monitors are low-cost sensors that are not approved by the EPA for regulatory compliance and do not provide the same data quality as the monitoring equipment used at the BAAQMD/Ramboll stations. These monitors tend to overestimate $PM_{2.5}$ concentrations during higher ambient concentrations when compared to the FEM BAM monitors.

While the low-cost sensors are helpful to understand hyperlocal trends, the concentrations from low-cost sensors should not be used in a direct comparison to those from BAAQMD's monitor in Redwood City. Ramboll is proposing to keep the two stations that are closest to the Clarity monitors in order to allow for a comparison of the concentrations between the low-cost Clarity monitors and the FEM/FRM monitors in the Menlo Park Air Monitoring Program.

Conclusion

Based on the rationale laid out above, Ramboll is proposing to reduce the number of monitoring stations from four to two. Ramboll is proposing to remove the monitoring stations at the MPK64 and Child Development Center locations and continue to monitor $PM_{2.5}$ concentrations using the continuous monitors at the Kelly Park and Willow Road stations. The filter-based PM_{10}/metals samples and canister-based VOC samples were stopped at all stations on April 10, 2021 after 6 months of sampling.

[1] Average includes data from October 8, 2020 to September 26, 2021 for all sites except Willow Road. The average for the Willow Road station includes data from February 24, 2021 to September 26, 2021.

Appendix 3.5.1

Assessment of Energy Use and Impacts
Willow Village Project

RAMBOLL

DRAFT

ENVIRONMENT & HEALTH

MEMORANDUM

Date: February 18, 2022

To: Eric Harrison, Signature Development Group

From: Michael Keinath, PE
Sarah Manzano

Subject: **Assessment of Energy Use and Impacts**
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Ramboll conducted an assessment of energy use for the construction and operation of the proposed mixed-use development at Willow Village in Menlo Park, California (referred to hereafter as the “Proposed Project” or “Project”) for Peninsula Innovation Partners, LLC. The scope and methods used in this assessment are consistent with recommended analyses for projects requiring review under California Environmental Quality Act (CEQA). The analysis in this report will be independently reviewed by the City of Menlo Park, California (referred to as the "City") and peer reviewed by ICF Incorporated, LLC., the City's environmental consultant for possible incorporation into the Environmental Impact Report (EIR) for the Project. Assumptions used herein are consistent with assumptions used in our Air Quality, Greenhouse Gas, and Health Risk Assessment Technical Report for Willow Village.

1. METHODOLOGY FOR DEVELOPMENT OF ENERGY PROJECTIONS

Table 1 lists the sources for which energy use estimates from the Project are quantified.

1.1 Project Construction Energy Use

This analysis assumes that construction of buildings will overlap, that the complete build out would occur in roughly five years and that the buildings constructed would be occupied and fully operational as soon as construction of each building is completed. This is conservative because occupancy and operation of each building would likely ramp up over time, rather than occur immediately upon completion of construction. The analysis also assumes that operational energy use from completed buildings would overlap with construction energy use from buildings that are still being constructed.

The construction program would commence after all existing uses have vacated.[1,2] The preliminary construction schedule assumes that construction would begin after project entitlements and would last for roughly five years. See the **Air Quality, Greenhouse Gas, and Health Risk Assessment Technical Report** for a summary of the expected construction phasing timeline, provided by the Project Applicant.

Initial construction activities affecting the full site area include demolition of the existing buildings and parking lots, followed by grading and utilities. Construction activities related to the proposed Project (including constructing the Town Square District, Residential/Shopping District, and Campus District) include foundations, core and shell, tenant improvements, and landscaping.

Energy use calculations associated with off-road construction equipment are based on the construction schedule, type and quantity of equipment and hours of operation for each piece of equipment based on Project-specific information provided by the Project Applicant for demolition, grading and site preparation, building construction, architectural coating, and paving. Sources of energy use from construction are shown in **Table 1**. Fuel use from off-road construction equipment is estimated using consistent with Environmental Protection Agency (EPA) AP-42 diesel fuel. All off-road equipment is either diesel-fueled or electric based on Project-specific information. **Table 2** shows the anticipated fuel and electricity usage from off-road equipment for Campus and Town Square District construction equipment and **Table 3** shows Residential/Shopping District, Hamilton Avenue Parcels North and South, Tunnel, Substation Upgrade, Feeder Line, and Intersection Improvements construction equipment.

Passenger vehicles for construction workers are assumed to use gasoline. On-road construction vehicles such as vendors and trucks for demolition material, soil, and other material hauling are assumed to use diesel fuel. These fuel uses are calculated based on the number of trips and vehicle miles travelled (VMT) along with fuel efficiency from EMFAC2021. Trip counts were provided by the Project Applicant for hauling, worker and vendor trips, and California Emissions Estimator Model (CalEEMod®) defaults are used for worker trip lengths. The vendor and haul trip lengths were provided by the Project Applicant. **Table 4** shows the fuel efficiency derivations for the on-road vehicle types, while **Table 5** shows the anticipated fuel consumption from on-road construction vehicles.

Construction water trucks use indirect electricity to supply, treat, and distribute the water. **Table 6** shows the electricity required for construction water usage.

Total construction energy use is summarized in **Table 7**.

1.2 Existing Conditions Operational Energy Use

Detailed calculations of Existing Conditions operational energy uses are further explained below. These are calculated to estimate the net energy use of the Project (Project energy use minus Existing Conditions energy use).

[1] The existing dialysis center may remain open for a few months after demolition commences. If this were to occur, changes to the analysis would be negligible. The dialysis center would not be considered a sensitive receptor based on BAAQMD guidance, so the impacts of construction on the dialysis center do not need to be analyzed. The existing operational emissions associated with the dialysis center remaining and the shifting of emissions from the demolition of the dialysis center would not change conclusions as these are would minor changes.

[2] The analysis only considers net new retail in the Hamilton Avenue Parcels North and South, so does not consider the existing retail in this area to be vacated.

1.2.1 Building Energy Use

Natural gas and electricity provide building energy for residential and commercial use. The **Air Quality, Greenhouse Gas, and Health Risk Assessment Technical Report** shows the annual electricity and natural gas use for the existing land uses.

Energy use for the Existing Conditions was based on 2019 historical data provided by the Project Applicant. Additional information and tables regarding building electricity and natural gas usage estimates can be found in the **Air Quality, Greenhouse Gas, and Health Risk Assessment Technical Report**.

1.2.2 Water Energy Use

Electricity is used to supply, treat, and distribute potable water and treat the resulting wastewater. Water consumption and wastewater generation were quantified as shown in the **Air Quality, Greenhouse Gas, and Health Risk Assessment Technical Report**. This electricity from water use is summarized in **Table 8**.

1.2.3 Mobile Energy Use

Fuel usage was estimated from on-road VMT by employees and visitors. Trip generation rates and total VMT for each land use for the existing conditions were provided by Hexagon, as shown in the **Air Quality, Greenhouse Gas, and Health Risk Assessment Technical Report**. Fuel usage was estimated using an average mpg obtained from EMFAC2021 for the fleet mix corresponding to the vehicle category and fuel type (gasoline, diesel, compressed natural gas, or electricity).

Table 9 shows detailed mobile fuel consumption estimates for Existing Conditions.

1.2.4 Stationary Source Energy Use

Diesel fuel usage is from diesel combustion resulting from their operation for testing and maintenance and for emergency operation. Under Existing Conditions, there is currently one emergency generator installed.

Operation for routine maintenance and testing is conservatively assumed to be 50 hours per year, consistent with the maximum allowed testing time from the Airborne Toxic Control Measures (ATCM) for Stationary Compression Ignition Engines (17 CCR 93115).

Fuel usage was estimated based on the fuel consumption rate based on generator size, provided by the Project Applicant. **Table 11** provides details on fuel usage estimates from emergency generators. Additional details on fuel consumption rate and hours of operation can be found in the **Air Quality, Greenhouse Gas, and Health Risk Assessment Technical Report**.

1.2.5 Summary of Existing Conditions Energy Consumption

Table 12 shows the total energy use for the Existing Conditions, including electricity, natural gas, diesel fuel, and gasoline.

1.3 Project Operational Energy Use

Detailed calculations of Project operational energy uses are further explained below.

1.3.1 Building Energy Use

Natural gas and electricity provide building energy for residential and commercial use. **Air Quality, Greenhouse Gas, and Health Risk Assessment Technical Report** shows the annual electricity and natural gas use for the Project buildings.

In an effort to reduce greenhouse gas (GHG) emissions, the Project would be entirely electrically powered with the exception of commercial culinary uses. The residential buildings would be entirely electrically powered. Therefore, energy use totals for the Project are based on Project-specific electricity and natural gas usage studies, as provided by the Project Applicant.

Additional information and tables regarding building electricity and natural gas usage estimates can be found in the **Air Quality, Greenhouse Gas, and Health Risk Assessment Technical Report**.

1.3.2 Water Energy Use

Electricity is used to supply, treat, and distribute potable water and treat the resulting wastewater. Water consumption and wastewater generation were quantified as shown in the **Air Quality, Greenhouse Gas, and Health Risk Assessment Technical Report**. This electricity from water use is summarized in **Table 8**.

1.3.3 Mobile Energy Use

Fuel usage was estimated from on-road VMT by residents, employees, and visitors. Trip generation rates and total VMT for each land use were provided by Hexagon, as shown in the **Air Quality, Greenhouse Gas, and Health Risk Assessment Technical Report**. Fuel usage was estimated using an average miles-per-gallon (mpg) obtained from EMFAC2021 for the fleet mix corresponding to the vehicle category and fuel type (gasoline, diesel, compressed natural gas, or electricity).

Table 9 shows detailed vehicle fuel usage estimates for the Project, including implementation of the Transportation Demand Management (TDM) Plan measures.

This is discussed further in the **Air Quality, Greenhouse Gas, and Health Risk Assessment Technical Report**.

1.3.4 Electric Vehicle Charging Energy Use

Electricity used to charge additional electric vehicles beyond the projected fleet-average due to the Project's commitment to including electric vehicle (EV) charging stations onsite is included in building energy use estimates. Battery electric vehicles use electricity to drive their motors rather than that combustion of gasoline or diesel fuel. The gasoline and diesel displaced by the additional electric vehicles is calculated in **Table 10**. The detailed derivation of the electricity usage VMT displacement estimates are shown in the **Air Quality, Greenhouse Gas, and Health Risk Assessment Technical Report**.

1.3.5 Stationary Source Energy Use

Diesel fuel usage from diesel combustion resulting from generator operation for testing and maintenance is included in this analysis. For the Full Buildout Project, 13 emergency generators are anticipated to be installed. Operation for routine maintenance and testing is

conservatively assumed to be 50 hours per year, consistent with the maximum allowed testing time from the ATCM for Stationary Compression Ignition Engines (17 CCR 93115).

Fuel usage was estimated based on the fuel consumption rate based on generator size, provided by the Project Applicant. **Table 11** provides details on fuel usage estimates from emergency generators. Additional details on fuel consumption rate and hours of operation can be found in the **Air Quality, Greenhouse Gas, and Health Risk Assessment Technical Report**.

1.3.6 Summary of Net Project Operational Energy Consumption

The table below summarizes the change in operational energy use with the project. More detail can be found in **Table 12**, which summarizes Existing Conditions and Full Project Buildout operational energy use by source and the change in energy use between the Existing Conditions and Full Project Buildout.

	Electricity (MWh/yr)	Natural Gas (MMBtu/yr)	Gasoline (gallons)	Diesel (gallons)
Existing Conditions	13,484	30,274	1,201,685	543,432
Project	81,336	3,806	2,923,540	748,392
Net Change	67,851	-26,468	1,721,855	204,960

2. IMPACT ASSESSMENT AND MITIGATION MEASURES

2.1 Standards of Significance

CEQA Guidelines Appendix G (as amended December 28, 2018) includes two significance thresholds related to Energy as follows:

Would the project:

A. Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?

B. Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

In addition, Part I of Appendix F of the CEQA Guidelines states as follows:

“The goal of conserving energy implies the wise and efficient use of energy. The means of achieving this goal include:

1. decreasing overall per capita energy consumption,
2. decreasing reliance on natural gas and oil, and
3. increasing reliance on renewable energy resources.”

Appendix F states that an EIR should discuss the general energy impacts of a project, with particular emphasis on avoiding or reducing inefficient, wasteful, and unnecessary consumption of energy. The avoidance of inefficient, wasteful, and unnecessary consumption of energy will be the standard of significance used for this Project.

For purposes of this analysis, impacts to Energy Resources will be considered to be significant if the Project would result in the wasteful, inefficient or unnecessary consumption of energy resources, and conversely if the project would conflict with or obstruct a state or local plan for renewable energy or energy efficiency.

2.2 Methodology

The methodology used to evaluate the significance of the Project's energy-related impacts is explained in the context of each impact, as discussed below.

2.3 Environmental Analysis

Impact ER-1: The Project Would Not Result in the Wasteful, Inefficient or Unnecessary Consumption of Fuel or Energy, and Conversely the Project Would Not Conflict With or Obstruct a State or Local Plan for Renewable Energy or Energy Efficiency (Less Than Significant)

2.3.1 Overview

The Project will be constructed in compliance with California's Building Energy Efficiency Standards; California's Green Building Standards; Leadership in Energy and Environmental Design (LEED) Gold Standards for buildings over 10,000 square feet; City of Menlo Park Municipal and Reach Codes additional requirements; and will implement transportation demand management strategies to reduce vehicle miles traveled and mobile fuel use. Overall, these programs will ensure that the Project reduces wasteful consumption of energy and does not obstruct any plans for renewable energy or energy efficiency.

2.3.2 Analysis of Factors Identified in CEQA Guidelines Appendix F

To determine whether a project would result in the wasteful, inefficient or unnecessary consumption of fuel or energy, and conversely whether the project would fail to incorporate renewable energy or energy efficiency measures into building design, equipment use, transportation or other project features, Appendix F of the CEQA Guidelines identifies six categories of potential energy-related environmental impacts, and five categories of potential mitigation measures that may be incorporated into the project. Each impact and mitigation category identified in Appendix F is addressed below.

Based on the analysis of each of these factors, the potential for the Project to result in wasteful, inefficient or unnecessary consumption of fuel or energy, and conversely to fail to incorporate renewable energy or energy efficiency measures into building design, equipment use, transportation or other project features is **Less Than Significant.**

2.3.2.1 Appendix F.II.C.1 Energy Requirements and Energy Use Efficiencies

In section II.C.1, CEQA Guidelines Appendix F states that environmental impacts may include:

The project's energy requirements and its energy use efficiencies by amount and fuel type for each stage of the project including construction, operation, maintenance and/or removal. If appropriate the energy intensiveness of materials may be discussed.

The inventories prepared for this evaluation include energy and fuel used for construction and operation of the Project. Energy intensiveness of materials is not addressed because the California Governor's Office of Planning and Research (OPR) has stated that lifecycle analyses

are not required under CEQA,[3] and in December 2009 the California Natural Resources Agency (CNRA) issued energy conservation guidelines for EIRs that make no reference to lifecycle emissions.[4] The CNRA explained that: (1) There exists no standard regulatory definition for lifecycle emissions, and (2) Even if a standard definition for 'lifecycle' existed, the term might be interpreted to refer to emissions "beyond those that could be considered 'indirect effects'" as defined by CEQA Guidelines, and therefore, beyond what an EIR is required to estimate and mitigate.[5] This reasoning was reaffirmed in the November 2018 CEQA Guidelines Update.[6]

The Project requires energy in the forms of electricity, natural gas, and gasoline and diesel fuel. These energy use requirements are summarized in **Table 12** for operational activities and **Table 7** for construction activities.

Construction-related energy consumption would be limited to the construction period. As shown in the tables noted above, construction would require the use of electricity, diesel and gasoline. **Table 7** shows the fuel use for construction over the length of the construction period. **Table 12** shows the annual fuel use of operation. The construction gasoline and diesel fuel use over the length of construction would be less than the associated gasoline and diesel fuel use if the Existing Conditions remained over the length of construction. Electricity would be used to reduce other impacts of construction, such as the electricity associated with providing watering for fugitive dust control and the electricity to power construction equipment to reduce fossil fuel use. Therefore, construction energy consumption is not wasteful, inefficient, or unnecessary.

As shown in the tables noted above, operational electricity, diesel, and gasoline requirements are projected to increase from the Existing Conditions to the Project due to the increase in density associated with the Project and the addition of new land uses, such as residences. However, the mobile fuel requirements will not increase as much as they would in the absence of the Project's TDM programs, electric vehicle initiatives, and increasing fuel efficiencies of vehicles. The electricity may be further reduced due to the Project's commitment to achieve LEED Gold building design for all buildings with more than 10,000 square feet, which has not been fully incorporated quantitatively into this assessment. Furthermore, the electricity usage assumes a conservative estimate of EV charging that is more than the associated reduction in gasoline and fuel usage, which overestimates energy use.

[3] California Natural Resources Agency, 2009. *Final Statement of Reasons for Regulatory Action: Amendments to the State CEQA Guidelines Addressing Analysis and Mitigation of Greenhouse Gas Emissions Pursuant to SB97*, pp. 71-72. http://resources.ca.gov/ceqa/docs/Final_Statement_of_Reasons.pdf. Accessed December 16, 2021.

[4] State CEQA Guidelines, Appendix F. These new guidelines were part of amendments issued pursuant to SB97. A copy of this document is available for public review at the San Francisco Planning Department, 1650 Mission Street, Suite 400, in Case File No. 2007.0903E.

[5] California Natural Resources Agency, 2009. *Final Statement of Reasons for Regulatory Action: Amendments to the State CEQA Guidelines Addressing Analysis and Mitigation of Greenhouse Gas Emissions Pursuant to SB97*, p. 71. http://resources.ca.gov/ceqa/docs/Final_Statement_of_Reasons.pdf. Accessed December 16, 2021.

[6] CNRA, 2018. Final Statement of Reasons For Regulatory Action
Amendments to the State CEQA Guidelines. Available at:
http://resources.ca.gov/ceqa/docs/2018_CEQA_Final_Statement_of%20Reasons_111218.pdf, pg 41. Accessed December 16, 2021.

In addition, the Project's commitment to encourage the use of EVs increases overall energy efficiency of the Project. EVs convert more electrical energy from the grid to power vehicles than conventional gasoline vehicles.[7]

Natural gas consumption is reduced with the Project compared to the Existing Conditions.

Due to its energy-efficient design and focus on reducing mobile fuel use, the resulting energy use from Project implementation is not wasteful or unnecessary.

2.3.2.2 Appendix F.II.C.2 Local and Regional Energy Supplies

In section II.C.2, CEQA Guidelines Appendix F states that environmental impacts may include:

The effects of the project on local and regional energy supplies and on requirements for additional capacity.

The Project will not have a substantial impact on the local or regional energy supplies or require additional capacity to be constructed. Through use of renewable energy, energy efficiency standards, and electric vehicle charging infrastructure, the Project will minimize impacts on the local and regional energy supply. The transition toward electric fuels for on-site vehicles and 100 percent electric building will result in an increase in calculated total electricity usage that will not significantly impact overall electricity infrastructure. This small increase may be offset by gains in energy efficiency at the Project that are not quantitatively addressed in the energy usage calculations as noted above.

As discussed in **Section 1.3** above, the Project relies on electricity, natural gas, and gasoline and diesel consumption associated with mobile operations, emergency generator operations, and construction operations. Total energy use requirements for Existing Conditions, Construction, and Project Full Buildout years are summarized in **Tables 7** and **12**.

The Project site is supplied electricity from Peninsula Clean Energy (PCE) and natural gas through Pacific Gas and Electric (PG&E). PCE and PG&E have established contracts to ensure there is adequate electricity generation capacity to meet its current and future loads. In addition, the Project would include solar photovoltaics that would generate renewable electricity and further reduce the burden on regional energy supplies. This extensive generation of new renewable energy would reduce the strain on electricity production by reducing the demand for electricity generation from the grid resources, particularly during peak times when energy demand is the highest and solar energy potential is also the highest. The Project would use minimal amounts of natural gas as only commercial culinary uses would be supplied with natural gas.

To put the Project's energy use in context, in 2020 Californians consumed 279,510 gigawatt hour (GWh) of electricity, of which San Mateo County consumed 4,167 GWh.[8] California Energy Commission (CEC) estimates that state-wide energy demand will increase to 320,375 GWh in 2025, an average annual growth rate of 1.32%.[9] The Project's anticipated increase in

[7] United States Department of Energy. All-Electric Vehicles. Office of Energy Efficiency and Renewable Energy. www.fueleconomy.gov. Available online at: https://www.fueleconomy.gov/feg/evtech.shtml. Accessed December 22, 2021.

[8] California Energy Commission. 2020. Energy Consumption Data Management Service. Electricity Consumption by County. Available online at: http://www.ecdms.energy.ca.gov/elecbycounty.aspx. Accessed December 13, 2021.

[9] California Energy Commission. 2018. California Energy Demand 2018-2030 Revised Forecast. Available online at: https://efiling.energy.ca.gov/getdocument.aspx?tn=223244. Accessed January 3, 2020.

electricity usage from 13,484 megawatt-hours (MWh) for Existing Conditions to 81,336 MWh by Full Buildout reflects an increase of 67,851 MWh in electricity usage. This increase represents approximately 0.024% of the total 2020 state-wide electricity usage and 1.63% of San Mateo County 2020 electricity usage. The electricity use associated with the Project incorporates a large demand for charging electric vehicles in 2026. This trend for increased demand for electric vehicles is likely to increase the state-wide and county electricity usage regardless of the Project. Therefore, these percentages would likely be much smaller compared to 2026 state-wide and county usage. Therefore, the Project will not require additional generation capacity or cause the need for more additionally generation capacity beyond more general state-wide expansion.

The Project's annual natural gas consumption is estimated to decrease by 26,468 Million British Thermal Unit (MMBtu) from 30,274 MMBtu for Existing Conditions to 3,806 MMBtu at Full Buildout. California's natural gas demand in 2020 was 1,232,858,633.8 MMBtu, and San Mateo County's natural gas demand in 2020 was approximately 20,025,518 MMBtu.[10] The Project's decrease in natural gas consumption accounts for just 0.0021% of the projected statewide annual consumption and 0.13% of the projected countywide consumption.

Although natural gas is the most common source for the generation of electricity in California, 90% of the state's natural gas is imported from the Rocky Mountain region, the Southwest, and Canadian basins.[11] The United States produces 20 trillion standard cubic feet per year (scf/yr) and had 340 trillion scf of proven reserves in 2014.[12] The Project's natural gas consumption is not substantial in comparison to the national natural gas reserves and comprises a tiny portion of annual national natural gas production.

Gasoline and diesel are provided by California's transportation fuels supplier network, as the majority of gasoline and diesel fuels are used for transportation to and from the Project.

Based on the very small increases in overall energy demand, the Project will not have a substantial impact on the local or regional energy supplies or require additional capacity to be constructed.

2.3.2.3 Appendix F.II.C.3 Peak and Base Period Demands

In section II.C.3, CEQA Guidelines Appendix F states that environmental impacts may include:

The effects of the project on peak and base period demands for electricity and other forms of energy.

The Project will not have a substantial impact on the peak and base period demands for electricity or other forms of energy. The Project's base energy consumption compared to regional and statewide energy consumption is discussed above in Section 2.3.2.2. Further details and reasoning on the peak demand are described below.

[10]California Energy Commission. 2018. Gas Consumption by County. Available online at: http://www.ecdms.energy.ca.gov/gasbycounty.aspx. Accessed December 13, 2021.

[11]U.S. Energy Information Administration. 2018. California State Profile and Energy Estimates: Profile Analysis. Available online at: https://www.eia.gov/state/analysis.cfm?sid=CA. Accessed December 13, 2021.

[12]California Energy Commission. 2019. Draft Staff Report: 2019 Natural Gas Market Trends and Outlook. Available online at: https://efiling.energy.ca.gov/getdocument.aspx?tn=233214#:~:text=The%20U.S.%20Energy%20Information%20Administration,or%20energy%20source%20in%20California. Accessed December 13, 2021.

In 2016, California's peak grid demand was 46,193 megawatts (MW). On the same day, PG&E reached a maximum demand of 23,752 MW.[13] In 2018, California's peak grid demand increased to 46,427 MW.[14] In comparison, the Project's maximum demand is expected to be 37.1 MW. This also conservatively excludes all the benefits of LEED Gold design and improvements in demand response due to the Title 24 energy standards, which would further reduce peak demand. Therefore, the Project peak demand represents less than 0.16 percent of PG&E's peak demand. This is a conservative estimate because the Project's peak may not occur at the same time as the utility or statewide peak. Therefore, the Project would have a relatively negligible effect on state-wide peak demands.

2.3.2.4 Appendix F.II.C.4 Existing Energy Standards

In section II.C.4, CEQA Guidelines Appendix F states that environmental impacts may include:

The degree to which the project complies with existing energy standards.

The Project complies with existing energy standards. During implementation of the Project, the Project will continue to adhere to State standards designed to minimize use of fuel in construction vehicles, ensure that buildings employ strict energy efficiency techniques, and operate comprehensive transportation demand management programs, as described further below.

Construction Vehicles and Electricity Usage

Project construction requires use of on-road trucks for soil hauling and deliveries, and off-road equipment such as excavators, cranes, forklifts, and pavers. The Project would comply with state and local requirements designed to minimize idling and associated emissions, which also minimizes use of fuel. Specifically, idling of commercial vehicles and off-road equipment would be limited to five minutes in accordance with the Commercial Motor Vehicle Idling Regulation and the Off-Road Regulation, and the trucks used would be compliant with the requirements of the Tractor-Trailer Greenhouse Gas Regulation.

Building Efficiency

The Project's anticipated electricity and natural gas use in buildings is shown in the sections above. New building construction is subject to California's Title 24. California's Title 24 reduces energy use in residential and commercial buildings through progressive updates to both the Green Building Standards Code (Title 24, Part 11) and the Energy Efficiency Standards (Title 24, Part 6). Provisions added over the years include consideration and possible incorporation of new energy efficiency technologies and methods for building features such as space conditioning, water heating, lighting, and whole envelope, as well as construction waste diversion goals. Additionally, some standards focus on larger energy saving concepts such as reducing loads at peak periods and seasons, improving the quality of energy-saving installations, and performing energy system inspections. Past updates to the Title 24 standards have proven very effective in reducing building energy use. The 2019 standards have reduced residential and non-residential electricity consumption further. Non-residential

[13] California ISO. 2021. 2020-2021 Transmission Plan. Available online at: http://www.caiso.com/planning/Pages/TransmissionPlanning/2020-2021TransmissionPlanningProcess.aspx. Accessed December 13, 2021.

[14] California ISO. 2021. California ISO Peak Load History 1998 through 2020. Available online at: https://www.caiso.com/documents/californiaisopeakloadhistory.pdf. Accessed December 13, 2021.

buildings built according to the 2019 code are expected to use 30% less energy than those built per 2016 code, mainly due to lighting upgrades.[15] . The draft 2022 Building Energy Efficiency Standards have been published and are scheduled to be approved in December 2021. If approved, the 2022 standards will go into effect on January 1, 2023. The 2022 standards improve upon the 2019 standards and focus on four key areas in new residential and nonresidential construction: (1) encouraging electric heat pump technology and use, (2) establishing electric-ready requirements when natural gas is installed, (3) expanding solar photovoltaic system and battery storage standards, and (4) strengthening ventilation standards to improve indoor air quality.[16] Future updates, which occur every 3 years, are expected to further reduce high-rise residential and non-residential electricity consumption.

As the Project schedule anticipates build out between 2024 and 2027, further reductions can be anticipated from future Title 24 code updates. Additionally, the Project will go beyond Title 24 requirements in construction and operation of new buildings by achieving the LEED Gold standard for all buildings with more than 10,000 square feet. This energy benefit of this commitment has conservatively not been quantified.

The buildings on the main Project Site also must comply with applicable Menlo Park Municipal Code energy efficiency requirements, which are more stringent than Title 24. These requirements state:

> *For all new construction, a project will meet 100 percent of energy demand (electricity and natural gas) through any combination of the following measures:*
>
> *(i) Onsite energy generation,*
>
> *(ii) Purchase of 100 percent renewable electricity through Peninsula Clean Energy or Pacific Gas and Electric Company (PG&E) in an amount equal to the annual energy demand of the project,*
>
> *(iii) Purchase of local renewable energy generation in Menlo Park in an amount equal to the annual energy demand of the project, and*
>
> *(iv) Purchase of certified renewable energy credits and/or certified renewable energy offsets annually in an amount equal to the annual energy demand of the project.*

The Campus District would meet this code requirement by eliminating the use of natural gas, except for culinary purposes, and committing to purchasing 100 percent carbon free electricity from PCE.

Portions of the Town Square, Campus, and/or the Residential/Shopping District would include natural gas for cooking in the retail area. To meet this code requirement, the on-site solar would offset any emissions from the natural gas combustion for cooking and any electricity that may not be carbon free.

[15] Stok. 2020. 2019 Title 24 Energy Code Update: What Project Teams Should Know. Available online at: https://stok.com/insights/2019-title-24-energy-code-update-what-project-teams-should-know/

[16] CEC. 2021. 2022 Building Energy Efficiency Standards. Available online at: https://www.energy.ca.gov/programs-and-topics/programs/building-energy-efficiency-standards/2022-building-energy-efficiency

The compliance method is discussed further in the memorandum from Signature Development Group to the City of Menlo Park dated December 2, 2021 regarding Willow Village 100% Renewable Energy Memo.

Transportation

Vehicle use at the Project has been reduced through TDM programs. VMT has a direct correlation to fuel usage. Many regulatory requirements reduce mobile fuel use and VMT, and the Project will comply with or exceed all requirements. For example, SB 743 requires projects to evaluate VMT relative to existing regional averages rather than evaluating Level of Service (LOS) for CEQA significance and allows streamlining for projects in high quality transit areas. SB 375, the Sustainable Communities & Climate Protection Program, requires Metropolitan Planning Organizations MPOs to develop Sustainable Community Strategies (SCS) to reduce per capita VMT. The California Air Resources Board (ARB) has prepared a white paper that identifies how VMT reductions consistent with SB 743 and SB 375 relate to statewide climate goals.[17] The Project focuses housing and job growth within existing urbanized areas, reducing VMT below regional averages and thus fulfills one of the key aspects of the SCS.[18] The Project also helps fulfill the Governor's Zero Emission Vehicle Action Plan (Executive Order B-48-18) by promoting the adoption of electric vehicles. The vehicles that travel to and from the Project will be registered at the Department of Motor Vehicles consistent with the overall regional fleet and therefore will comply with vehicle efficiency standards.

2.3.2.5 Appendix F.II.C.5 Energy Resources

In section II.C.5, CEQA Guidelines Appendix F states that environmental impacts may include:

The effects of the project on energy resources.

The Project's use of energy will not have a substantial effect on statewide or regional energy resources. The Project's energy use is discussed above, including electricity, natural gas, and gasoline and diesel consumption associated with mobile operations, emergency generator operations, and construction operations. The change in energy use requirements from the Existing Conditions to Full Buildout Project years is summarized in **Table 12**. Programs and measures relevant to energy resources are discussed in detail in **Sections 2.3.2.2** and **2.3.2.3**.

2.3.2.6 Appendix F.II.C.6 Transportation Energy Use

In section II.C.6, CEQA Guidelines Appendix F states that environmental impacts may include:

The project's projected transportation energy use requirements and its overall use of efficient transportation alternatives.

The Project uses efficient transportation alternatives to reduce its transportation energy use requirements, as described further below.

[17]ARB. 2019. CARB 2017 Scoping Plan-Identified VMT Reductions and Relationship to State Climate Goals. Available at: https://ww2.arb.ca.gov/resources/documents/carb-2017-scoping-plan-identified-vmt-reductions-and-relationship-state-climate. Accessed December 16, 2021.

[18]ARB. 2019. What are Sustainable Communities Strategies. Available at: https://ww2.arb.ca.gov/our-workprogramssustainable-communities-program/what-are-sustainable-communities-strategies. Accessed December 16, 2021.

The Project's transportation energy use is discussed above and gasoline and diesel quantities for all inventory scenarios, including the Existing Conditions and Project are presented in **Tables 7** and **12**. The quantification of VMT associated with Project operations, which feeds into total transportation energy use quantified, is discussed in detail in the **Air Quality, Greenhouse Gas, and Health Risk Assessment Technical Report**.

The Project includes reductions in VMT from TDM Plan measures, which result in a reduction in gasoline, diesel, natural gas, and electricity usage at Full Buildout. Additional displacement of gasoline or diesel fuel will occur due to the Project's commitment to installing additional EV charging stations.

The Project's EV charging stations will reduce fuel use and GHG emissions by assisting Californians in the shift from fossil-fueled vehicles to electric vehicles, while the fossil fuels needed to produce electricity for charging continues to decrease. As shown in the **Air Quality, Greenhouse Gas, and Health Risk Assessment Technical Report**, by 2026 a conventional passenger vehicle is expected to emit 289 grams of Carbon Dioxide Equivalent (CO_2e) per mile, while the indirect electricity emissions for an EV charged with carbon-free electricity is 0. Therefore, for every mile that is driven in an EV rather than in a gasoline or diesel car, GHG emissions are reduced by 289 grams, and corresponding fuel use decreases.

2.3.2.7 Appendix F.II.D.1 Energy Reduction Measures

In section II.D.1, CEQA Guidelines Appendix F states that mitigation measures (including those already incorporated into the project) may include:

Potential measures to reduce wasteful, inefficient and unnecessary consumption of energy during construction, operation, maintenance and/or removal. The discussion should explain why certain measures were incorporated in the project and why other measures were dismissed.

As discussed above, construction energy consumption is not wasteful, inefficient, or unnecessary. As discussed in the **Air Quality, Greenhouse Gas, and Health Risk Assessment Technical Report**, the project has proposed to implement the Bay Area Air Quality Management District (BAAQMD) Basic Construction Mitigation Measures. These measures would result in reduced fuel consumption during construction.

The Project implements a number of programs to reduce the consumption of energy, as discussed above. Buildings with more than 10,000 square feet will achieve LEED Gold standards, will comply with increasingly stringent Title 24 Building Energy Efficiency and Green Building standards, and will comply with City of Menlo Park's Municipal and Reach Codes. Mobile fuel use is reduced through an extensive TDM program. Mobile fuel is also displaced through use of EV charging stations. Solid waste energy use is reduced through diversion, recycling, and composting programs. The Project also incorporates on-site solar generation, and water and waste reduction measures, including low-water landscaping, low-flow toilets, and low-flow faucets. These measures have not all been completely quantitatively incorporated in the Project to be conservative. However, the Project is committed to enough onsite renewable electricity generation to offset non-carbon free energy use in buildings.

2.3.2.8 Appendix F.II.D.2 Siting, Orientation, and Design

In section II.D.2, CEQA Guidelines Appendix F states that mitigation measures (including those already incorporated into the project) may include:

The potential of siting, orientation, and design to minimize energy consumption, including transportation energy, increase water conservation and reduce solid waste.

A number of Project initiatives and programs, as well as general features of the location itself, utilize siting, orientation, or design elements to minimize energy consumption, as discussed further below.

Transportation (Siting)

The Project is an infill development positioned within existing residential and industrial land uses. The Project brings amenities, such as a grocery store and pharmacy, to an area devoid of such amenities, thereby reducing existing trip lengths for residents of the neighboring community and reducing demand for transportation fuels. The Project is a mixed-use development placing residents near office and retail areas, reducing the need for trips outside the development.

Building Energy Efficiency (Siting, Orientation)

The Project's high-performance design and construction of new buildings to achieve LEED Gold for buildings over 10,000 square feet, stringent Title 24 building energy requirements, and compliance with City of Menlo Park Municipal code will allow for increased energy efficiency and opportunities for on-site renewables generation. Title 24 performance-based compliance requires building energy modeling through computer software that calculates energy use and reductions by incorporating building orientation and climate data; it penalizes buildings that are oriented in a way that will increase energy consumption, as such buildings would be required to achieve additional energy efficiency features to reach the target energy design ratings. Therefore, the Project is incentivized to site and orient its buildings in a way that maximizes energy efficiency or will implement additional energy efficiency to reduce demand.

Furthermore, the Project would incorporate potable water conservation, utilize recycled water for non-potable uses and implement an aggressive solid waste reduction program at the Campus District that exceeds the goals of the City's waste goals.

2.3.2.9 Appendix F.II.D.3 Reducing Peak Energy Demand

In section II.D.3, CEQA Guidelines Appendix F states that mitigation measures (including those already incorporated into the project) may include:

The potential for reducing peak energy demand.

The Project's energy mitigation measures and project features will help reduce peak energy demand throughout the Project life. LEED Gold and Title 24 Building Energy Efficiency Standards include measures that encourage load-shifting and demand-response. In addition, rooftop solar should reduce grid demand, particularly during peak times when energy demand is the highest and solar energy potential is also the highest. Title 24 energy use performance standards are based on the time dependent valuation (TDV) of energy, which uses the value of the electricity or natural gas used at every hour of the year to incentivize load shifting off of the peak. In addition, the mixed-use nature of the Project site naturally allows for a balanced energy load, as not all uses will be occupied at the same time of day.

2.3.2.10 Appendix F.II.D.4 Alternative Fuels

In section II.D.4, CEQA Guidelines Appendix F states that mitigation measures (including those already incorporated into the project) may include:

Alternative fuels (particularly renewable ones) or energy systems.

The Project has pursued the use of alternative fuels or energy systems for heating, cooling, electricity, and transportation, as discussed below.

The Project has committed to providing on-site EV charging stations to support the expanded use of electric vehicles. The Project's EV charging stations will reduce fuel use and GHG emissions by assisting Californians in the shift from fossil-fueled vehicles to electric vehicles, while the fossil fuels needed to produce electricity for charging continues to decrease. Additional details regarding the number and type of EV chargers to be installed by the Project are shown in the **Air Quality, Greenhouse Gas, and Health Risk Assessment Technical Report**.

2.3.2.11 Appendix F.II.D.5 Recycling Efforts

In section II.D.5, CEQA Guidelines Appendix F states that mitigation measures (including those already incorporated into the project) may include:

Energy conservation which could result from recycling efforts.

California has a statewide goal of 75% waste diversion by 2020, while the City of Menlo Park Zero Waste goal reduces emissions from waste by 90 percent between 2005 and 2035.[19] The City of Menlo Park administers recycling and solid waste services. For multifamily homes, this includes recycling for residential solid waste and organics. Recology provides recycling services for residential as well as commercial establishments.[20] The Project will comply with these goals by implementing waste diversion policies and infrastructure. At the Campus District, the Project will implement an aggressive solid waste reduction program that exceeds the goals of the City's waste goals.

2.3.2.12 Summary

In summary, based on the analysis of each of the factors identified in CEQA Guidelines Appendix F, the potential for the Project to result in wasteful, inefficient or unnecessary consumption of fuel or energy, and conversely to fail to incorporate renewable energy or energy efficiency measures into building design, equipment use, transportation or other project features is **Less Than Significant.**

[19]City of Menlo Park. Zero Waste Management Plans. Available at: https://www.menlopark.org/1482/Zero-waste-management-plans. Accessed December 13, 2021.

[20]City of Menlo Park. Solid Waste and Recycling Services. Available at: https://www.menlopark.org/335/Commercial-solid-waste-and-recycling-ser. Accessed December 16, 2021.

Table 1
Energy Use Sources for the Project
Willow Village
Menlo Park, California

Type	Source	Description
Construction	Off-Road Equipment	Diesel fuel and electricity use of off-road equipment
	On-Road Mobile Sources	Diesel hauling and vendor vehicle fuel use, and gasoline worker vehicle fuel use
	Water	Electricity use for water supply, distribution, and treatment
Operations	Building Energy Use	Electricity and natural gas used in buildings
	On-Road Mobile Sources	Diesel, gasoline, electricity, and natural gas fuel used for vehicles
	Water	Electricity use for water supply, distribution, and treatment
	Standby Emergency Generators	Diesel fuel used by generators

Table 2
Campus and Town Square District Construction Equipment Energy Use
Willow Village
Menlo Park, California

Construction Subphase	Equipment Type[1]	CalEEMod Equipment Category	Fuel[1]	Horsepower[1]	kW	Load Factor	Cumulative Hours per Building[1]	Year 2 Equipment Hours/Day[1]	Year 3 Equipment Hours/Day[1]	Year 4 Equipment Hours/Day[1]	Year 5 Equipment Hours/Day[1]	Year 6 Equipment Hours/Day[1]	Fuel Usage (gal diesel)[2]
North Garage	Air Compressor	Air Compressors	Diesel	150	112	0.48	144	0.47	0.48	0	0	0	530
	Backhoe	Tractors/Loaders/Backhoes	Diesel	350	261	0.37	10	0	0.039	0	0	0	67
	Bob Cat	Tractors/Loaders/Backhoes	Diesel	200	149	0.37	10	0	0.039	0	0	0	38
	Boom Lift	Aerial Lifts	Diesel	40	30	0.31	345	0	1.3	0	0	0	218
	Concrete Pump	Pumps	Diesel	450	336	0.74	163	0.33	0.58	0	0	0	2,777
	Concrete Truck	Onsite HHDT	Diesel	400	298	1.00	163	0.33	0.58	0	0	0	3,337
	Dump Truck	Onsite HHDT	Diesel	450	336	1.00	31	0.59	0.023	0	0	0	703
	Excavator	Excavators	Diesel	500	373	0.38	612	12	0.47	0	0	0	5,940
	Generator	Generator Sets	Diesel	25	19	0.74	654	4.7	1.8	0	0	0	618
	Gradall	Forklifts	Diesel	350	261	0.20	900	2.9	3.0	0	0	0	3,218
	Hydro/Crawler Crane	Cranes	Diesel	550	410	0.29	1,421	2.9	5.0	0	0	0	11,574
	Loader	Tractors/Loaders/Backhoes	Diesel	100	75	0.37	306	5.9	0.23	0	0	0	578
	Pile Rig	Bore/Drill Rigs	Diesel	600	447	0.50	174	4.1	0	0	0	0	2,667
	Pressure Washer	Pressure Washers	Diesel	25	19	0.30	32	0	0.12	0	0	0	12
	Semi Dump Truck	Onsite HHDT	Diesel	450	336	1.00	459	8.8	0.35	0	0	0	10,551
	Semi Truck	Onsite HHDT	Diesel	450	336	1.00	580	1.0	2.1	0	0	0	13,333
	Tire Wash	Other Construction Equipment	Diesel	100	75	0.42	438	1.2	1.5	0	0	0	940
	Water Truck	Onsite HHDT	Diesel	300	224	1.00	219	2.9	0.37	0	0	0	3,356
	Work Truck	Onsite LHDT1	Diesel	200	149	1.00	111	0.15	0.41	0	0	0	1,137
Office Building 4	Air Compressor	Air Compressors	Diesel	150	112	0.48	12	0	0.049	0	0	0	44
	Backhoe	Tractors/Loaders/Backhoes	Diesel	350	261	0.37	306	0	1.3	0	0	0	2,024
	Bob Cat	Tractors/Loaders/Backhoes	Diesel	200	149	0.37	306	0	1.3	0	0	0	1,157
	Boom Lift	Aerial Lifts	Diesel	40	30	0.31	2,091	0	7.4	1.4	0	0	1,325
	Compactor	Other Construction Equipment	Diesel	250	186	0.42	24	0	0.10	0	0	0	131
	Concrete Pump	Pumps	Diesel	450	336	0.74	18	0	0.075	0	0	0	310
	Concrete Truck	Onsite HHDT	Diesel	400	298	1.00	34	0	0.14	0	0	0	685
	Dump Truck	Onsite HHDT	Diesel	450	336	1.00	9.2	0	0.04	0	0	0	211
	Excavator	Excavators	Diesel	500	373	0.38	15	0	0.06	0	0	0	149
	Generator	Generator Sets	Diesel	25	19	0.74	702	0	2.9	0	0	0	663
	Gradall	Forklifts	Diesel	350	261	0.20	216	0	0.48	0.48	0	0	771
	Hydro/Crawler Crane	Cranes	Diesel	550	410	0.29	438	0	1.8	0	0	0	3,569
	Loader	Tractors/Loaders/Backhoes	Diesel	100	75	0.37	174	0	0.72	0	0	0	329
	Pile Rig	Bore/Drill Rigs	Diesel	600	447	0.50	174	0	0.72	0	0	0	2,667
	Semi Truck	Onsite HHDT	Diesel	450	336	1.00	1,120	0	2.3	2.7	0	0	25,742
	Tire Wash	Other Construction Equipment	Diesel	100	75	0.42	674	0	1.5	1.5	0	0	1,445
	Water Truck	Onsite HHDT	Diesel	300	224	1.00	219	0	0.90	0	0	0	3,356
	Work Truck	Onsite LHDT1	Diesel	200	149	1.00	190	0	0.36	0.50	0	0	1,944
Meeting, Collaboration, Park	Air Compressor	Air Compressors	Diesel	150	112	0.48	79	0	0.30	0	0	0	291
	Backhoe	Tractors/Loaders/Backhoes	Diesel	350	261	0.37	1,098	5.9	3.3	0	0	0	7,264
	Bob Cat	Tractors/Loaders/Backhoes	Diesel	200	149	0.37	1,098	5.9	3.3	0	0	0	4,151
	Boom Lift	Aerial Lifts	Diesel	40	30	0.31	7,749	0	0.89	19	9.4	0	4,909
	Compactor	Other Construction Equipment	Diesel	250	186	0.42	53	0.31	0.15	0	0	0	283
	Concrete Pump	Pumps	Diesel	450	336	0.74	79	0	0.30	0	0	0	1,347
	Concrete Truck	Onsite HHDT	Diesel	400	298	1.00	158	0	0.61	0	0	0	3,237
	Dump Truck	Onsite HHDT	Diesel	450	336	1.00	639	5.9	1.5	0	0	0	14,689
	Excavator	Excavators	Diesel	500	373	0.38	2,412	23	5.5	0	0	0	23,411
	Generator	Generator Sets	Diesel	25	19	0.74	1,992	5.9	6.7	0	0	0	1,883
	Gradall	Forklifts	Diesel	350	261	0.20	8,661	8.8	7.7	10	12	12	30,971
	Hydro/Crawler Crane	Cranes	Diesel	550	410	0.29	2,553	1.6	7.2	0.50	0.77	5.9	20,801
	Loader	Tractors/Loaders/Backhoes	Diesel	100	75	0.37	660	4.4	1.8	0	0	0	1,247
	Pile Rig	Bore/Drill Rigs	Diesel	600	447	0.50	654	3.1	2.0	0	0	0	10,023
	Pressure Washer	Pressure Washers	Diesel	25	19	0.30	40	0	0.15	0	0	0	15
	Semi Dump Truck	Onsite HHDT	Diesel	450	336	1.00	570	5.9	1.2	0	0	0	13,103
	Semi Truck	Onsite HHDT	Diesel	450	336	1.00	2,603	0.39	1.4	4.2	4.2	1.0	59,846
	Tire Wash	Other Construction Equipment	Diesel	100	75	0.42	275	1.5	0.82	0	0	0	589
	Water Truck	Onsite HHDT	Diesel	300	224	1.00	718	2.9	1.9	0.37	0	0	11,006
	Work Truck	Onsite LHDT1	Diesel	200	149	1.00	1,425	0.73	1.0	2.0	2.0	2.0	14,561

Table 2
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Menlo Park, California

Construction Subphase	Equipment Type[1]	CalEEMod Equipment Category	Fuel[1]	Horsepower[1]	kW	Load Factor	Cumulative Hours per Building[1]	Year 2 Equipment Hours/Day[1]	Year 3 Equipment Hours/Day[1]	Year 4 Equipment Hours/Day[1]	Year 5 Equipment Hours/Day[1]	Year 6 Equipment Hours/Day[1]	Fuel Usage (gal diesel)[2]
Hotel Excavation	Air Compressor	Air Compressors	Diesel	150	112	0.48	705	2.6	2.3	0	0	0	2,593
	Backhoe	Tractors/Loaders/Backhoes	Diesel	350	261	0.37	111	2.6	0	0	0	0	734
	Bob Cat	Tractors/Loaders/Backhoes	Diesel	200	149	0.37	303	2.9	0.70	0	0	0	1,145
	Boom Lift	Aerial Lifts	Diesel	40	30	0.31	152	1.5	0.35	0	0	0	96
	Concrete Pump	Pumps	Diesel	450	336	0.74	612	0.42	2.3	0	0	0	10,407
	Concrete Truck	Onsite HHDT	Diesel	400	298	1.00	612	0.42	2.3	0	0	0	12,500
	Dump Truck	Onsite HHDT	Diesel	450	336	1.00	303	2.9	0.70	0	0	0	6,965
	Excavator	Excavators	Diesel	500	373	0.38	1,212	12	2.8	0	0	0	11,764
	Generator	Generator Sets	Diesel	25	19	0.74	2,982	5.9	11	0	0	0	2,818
	Gradall	Forklifts	Diesel	350	261	0.20	2,982	5.9	11	0	0	0	10,663
	Hydro/Crawler Crane	Cranes	Diesel	550	410	0.29	2,487	2.6	9.2	0	0	0	20,264
	Loader	Tractors/Loaders/Backhoes	Diesel	100	75	0.37	1,212	12	2.8	0	0	0	2,291
	Pile Rig	Bore/Drill Rigs	Diesel	600	447	0.50	444	11	0	0	0	0	6,804
	Pressure Washer	Pressure Washers	Diesel	25	19	0.30	12	0	0.046	0	0	0	4.6
	Semi Dump Truck	Onsite HHDT	Diesel	450	336	1.00	606	5.9	1.4	0	0	0	13,931
	Semi Truck	Onsite HHDT	Diesel	450	336	1.00	115	0.16	0.42	0	0	0	2,647
	Tire Wash	Other Construction Equipment	Diesel	100	75	0.42	600	2.9	1.9	0	0	0	1,287
	Water Truck	Onsite HHDT	Diesel	300	224	1.00	398	2.9	1.1	0	0	0	6,100
	Work Truck	Onsite LHDT1	Diesel	200	149	1.00	796	2.0	2.8	0	0	0	8,133
Hotel Construction	Air Compressor	Air Compressors	Diesel	150	112	0.48	654	0	0	3.0	0.84	0	2,405
	Boom Lift	Aerial Lifts	Diesel	40	30	0.31	6,768	0	0	21	20	0	4,287
	Concrete Pump	Pumps	Diesel	450	336	0.74	654	0	0	3.0	0.84	0	11,125
	Concrete Truck	Onsite HHDT	Diesel	400	298	1.00	654	0	0	3.0	0.84	0	13,363
	Gradall	Forklifts	Diesel	350	261	0.20	3,960	0	0	12	12	0	14,160
	Pressure Washer	Pressure Washers	Diesel	25	19	0.30	13	0	0	0.060	0.017	0	5.0
	Semi Truck	Onsite HHDT	Diesel	450	336	1.00	1,733	0	0	1.9	9.1	0	39,838
	Tire Wash	Other Construction Equipment	Diesel	100	75	0.42	495	0	0	1.5	1.5	0	1,062
	Water Truck	Onsite HHDT	Diesel	300	224	1.00	158	0	0	0.48	0.48	0	2,427
	Work Truck	Onsite LHDT1	Diesel	200	149	1.00	400	0	0	1.4	1.0	0	4,087
Town Square	Bob Cat	Tractors/Loaders/Backhoes	Diesel	200	149	0.37	975	0	3.0	1.0	0	0	3,686
	Boom Lift	Aerial Lifts	Diesel	40	30	0.31	848	0	1.5	1.9	0	0	537
	Concrete Pump	Pumps	Diesel	450	336	0.74	5.3	0	0	0.020	0	0	91
	Concrete Truck	Onsite HHDT	Diesel	400	298	1.00	5.3	0	0	0.020	0	0	109
	Dump Truck	Onsite HHDT	Diesel	450	336	1.00	975	0	3.0	1.0	0	0	22,413
	Excavator	Excavators	Diesel	500	373	0.38	3,900	0	12	4.0	0	0	37,853
	Generator	Generator Sets	Diesel	25	19	0.74	1,572	0	6.0	0.55	0	0	1,486
	Gradall	Forklifts	Diesel	350	261	0.20	4,788	0	6.0	5.3	18	0	17,121
	Hydro/Crawler Crane	Cranes	Diesel	550	410	0.29	290	0	0	1.0	0.18	0	2,363
	Loader	Tractors/Loaders/Backhoes	Diesel	100	75	0.37	3,900	0	12.0	4.0	0	0	7,371
	Semi Dump Truck	Onsite HHDT	Diesel	450	336	1.00	1,950	0	6.0	2.0	0	0	44,826
	Semi Truck	Onsite HHDT	Diesel	450	336	1.00	397	0	0.16	0.53	2.0	0	9,126
	Tire Wash	Other Construction Equipment	Diesel	100	75	0.42	975	0	3.0	1.0	0	0	2,092
	Water Truck	Onsite HHDT	Diesel	300	224	1.00	975	0	3.0	1.0	0	0	14,942
	Work Truck	Onsite LHDT1	Diesel	200	149	1.00	1,084	0	2.0	1.5	2.0	0	11,075
South Garage	Air Compressor	Air Compressors	Diesel	150	112	0.48	187	0	0.48	0.48	0	0	689
	Backhoe	Tractors/Loaders/Backhoes	Diesel	350	261	0.37	11	0	0.055	0	0	0	73
	Bob Cat	Tractors/Loaders/Backhoes	Diesel	200	149	0.37	11	0	0.055	0	0	0	42
	Boom Lift	Aerial Lifts	Diesel	40	30	0.31	891	0	0	4.7	0	0	564
	Concrete Pump	Pumps	Diesel	450	336	0.74	204	0	0.45	0.60	0	0	3,470
	Concrete Truck	Onsite HHDT	Diesel	400	298	1.00	218	0	0.52	0.60	0	0	4,453
	Dump Truck	Onsite HHDT	Diesel	450	336	1.00	30	0	0.15	0	0	0	690
	Excavator	Excavators	Diesel	500	373	0.38	600	0	3.0	0	0	0	5,824

Table 2
Campus and Town Square District Construction Equipment Energy Use
Willow Village
Menlo Park, California

Construction Subphase	Equipment Type[1]	CalEEMod Equipment Category	Fuel[1]	Horsepower[1]	kW	Load Factor	Cumulative Hours per Building[1]	Year 2 Equipment Hours/Day[1]	Year 3 Equipment Hours/Day[1]	Year 4 Equipment Hours/Day[1]	Year 5 Equipment Hours/Day[1]	Year 6 Equipment Hours/Day[1]	Fuel Usage (gal diesel)[2]
South Garage	Generator	Generator Sets	Diesel	25	19	0.74	654	0	3.2	0	0	0	618
	Gradall	Forklifts	Diesel	350	261	0.20	1,170	0	3.0	3.0	0	0	4,184
	Hydro/Crawler Crane	Cranes	Diesel	550	410	0.29	1,688	0	4.9	3.7	0	0	13,749
	Loader	Tractors/Loaders/Backhoes	Diesel	100	75	0.37	300	0	1.5	0	0	0	567
	Pile Rig	Bore/Drill Rigs	Diesel	600	447	0.50	174	0	0.86	0	0	0	2,667
	Pressure Washer	Pressure Washers	Diesel	25	19	0.30	32	0	0.16	0	0	0	12
	Semi Dump Truck	Onsite HHDT	Diesel	450	336	1.00	450	0	2.2	0	0	0	10,344
	Semi Truck	Onsite HHDT	Diesel	450	336	1.00	873	0	1.9	2.6	0	0	20,068
	Tire Wash	Other Construction Equipment	Diesel	100	75	0.42	575	0	1.4	1.5	0	0	1,233
	Water Truck	Onsite HHDT	Diesel	300	224	1.00	216	0	1.1	0	0	0	3,310
	Work Truck	Onsite LHDT1	Diesel	200	149	1.00	159	0	0.32	0.50	0	0	1,624
Office Building 3	Air Compressor	Air Compressors	Diesel	150	112	0.48	12	0	0.067	0	0	0	44
	Backhoe	Tractors/Loaders/Backhoes	Diesel	350	261	0.37	456	0	2.6	0	0	0	3,017
	Bob Cat	Tractors/Loaders/Backhoes	Diesel	200	149	0.37	456	0	2.6	0	0	0	1,724
	Boom Lift	Aerial Lifts	Diesel	40	30	0.31	2,097	0	1.7	6.9	0	0	1,328
	Compactor	Other Construction Equipment	Diesel	250	186	0.42	36	0	0.21	0	0	0	196
	Concrete Pump	Pumps	Diesel	450	336	0.74	23	0	0.12	5.0E-03	0	0	388
	Concrete Truck	Onsite HHDT	Diesel	400	298	1.00	46	0	0.25	5.0E-03	0	0	932
	Dump Truck	Onsite HHDT	Diesel	450	336	1.00	14	0	0.077	0	0	0	314
	Excavator	Excavators	Diesel	500	373	0.38	23	0	0.13	0	0	0	221
	Generator	Generator Sets	Diesel	25	19	0.74	852	0	4.8	0	0	0	805
	Gradall	Forklifts	Diesel	350	261	0.20	240	0	0.48	0.48	0.48	0	860
	Hydro/Crawler Crane	Cranes	Diesel	550	410	0.29	588	0	3.3	0	0	0	4,791
	Loader	Tractors/Loaders/Backhoes	Diesel	100	75	0.37	330	0	1.9	0	0	0	624
	Pile Rig	Bore/Drill Rigs	Diesel	600	447	0.50	330	0	1.9	0	0	0	5,057
	Semi Truck	Onsite HHDT	Diesel	450	336	1.00	1,223	0	1.8	2.8	3.0	0	28,114
	Tire Wash	Other Construction Equipment	Diesel	100	75	0.42	752	0	1.5	1.5	1.5	0	1,612
	Water Truck	Onsite HHDT	Diesel	300	224	1.00	294	0	1.7	0	0	0	4,506
	Work Truck	Onsite LHDT1	Diesel	200	149	1.00	210	0	0.27	0.50	0.50	0	2,146
Office Building 1	Air Compressor	Air Compressors	Diesel	150	112	0.48	12	0	0.07	0	0	0	43
	Backhoe	Tractors/Loaders/Backhoes	Diesel	350	261	0.37	402	0	2.2	0	0	0	2,659
	Bob Cat	Tractors/Loaders/Backhoes	Diesel	200	149	0.37	402	0	2.2	0	0	0	1,520
	Boom Lift	Aerial Lifts	Diesel	40	30	0.31	2,076	0	2.5	6.6	0	0	1,315
	Compactor	Other Construction Equipment	Diesel	250	186	0.42	32	0	0.18	0	0	0	172
	Concrete Pump	Pumps	Diesel	450	336	0.74	21	0	0.11	5.3E-03	0	0	355
	Concrete Truck	Onsite HHDT	Diesel	400	298	1.00	41	0	0.22	5.3E-03	0	0	837
	Dump Truck	Onsite HHDT	Diesel	450	336	1.00	12	0	0.067	0	0	0	277
	Excavator	Excavators	Diesel	500	373	0.38	20	0	0.11	0	0	0	195
	Generator	Generator Sets	Diesel	25	19	0.74	792	0	4.4	0	0	0	748
	Gradall	Forklifts	Diesel	350	261	0.20	205	0	0.48	0.48	0	0	733
	Hydro/Crawler Crane	Cranes	Diesel	550	410	0.29	522	0	2.9	0	0	0	4,253
	Loader	Tractors/Loaders/Backhoes	Diesel	100	75	0.37	264	0	1.5	0	0	0	499
	Pile Rig	Bore/Drill Rigs	Diesel	600	447	0.50	264	0	1.5	0	0	0	4,046
	Semi Truck	Onsite HHDT	Diesel	450	336	1.00	1,025	0	1.9	2.7	0	0	23,558
	Tire Wash	Other Construction Equipment	Diesel	100	75	0.42	642	0	1.5	1.5	0	0	1,377
	Water Truck	Onsite HHDT	Diesel	300	224	1.00	261	0	1.5	0	0	0	4,000
	Work Truck	Onsite LHDT1	Diesel	200	149	1.00	176	0	0.29	0.50	0	0	1,798
Office Building 2	Air Compressor	Air Compressors	Diesel	150	112	0.48	12	0	0.076	0	0	0	44
	Backhoe	Tractors/Loaders/Backhoes	Diesel	350	261	0.37	390	0	2.5	0	0	0	2,580
	Bob Cat	Tractors/Loaders/Backhoes	Diesel	200	149	0.37	390	0	2.5	0	0	0	1,474
	Boom Lift	Aerial Lifts	Diesel	40	30	0.31	2,097	0	1.2	7.3	0	0	1,328
	Compactor	Other Construction Equipment	Diesel	250	186	0.42	31	0	0.20	0	0	0	167
	Concrete Pump	Pumps	Diesel	450	336	0.74	21	0	0.12	5.0E-03	0	0	354
	Concrete Truck	Onsite HHDT	Diesel	400	298	1.00	40	0	0.25	5.0E-03	0	0	824
	Dump Truck	Onsite HHDT	Diesel	450	336	1.00	12	0	0.075	0	0	0	269
	Excavator	Excavators	Diesel	500	373	0.38	20	0	0.12	0	0	0	189
	Generator	Generator Sets	Diesel	25	19	0.74	786	0	5.0	0	0	0	743
	Gradall	Forklifts	Diesel	350	261	0.20	204	0	0.48	0.48	0.48	0	731
	Hydro/Crawler Crane	Cranes	Diesel	550	410	0.29	522	0	3.3	0	0	0	4,253
	Loader	Tractors/Loaders/Backhoes	Diesel	100	75	0.37	264	0	1.7	0	0	0	499

Table 2
Campus and Town Square District Construction Equipment Energy Use
Willow Village
Menlo Park, California

Construction Subphase	Equipment Type[1]	CalEEMod Equipment Category	Fuel[1]	Horsepower[1]	kW	Load Factor	Cumulative Hours per Building[1]	Year 2 Equipment Hours/Day[1]	Year 3 Equipment Hours/Day[1]	Year 4 Equipment Hours/Day[1]	Year 5 Equipment Hours/Day[1]	Year 6 Equipment Hours/Day[1]	Fuel Usage (gal diesel)[2]
Office Building 2	Pile Rig	Bore/Drill Rigs	Diesel	600	447	0.50	264	0	1.7	0	0	0	4,046
	Semi Truck	Onsite HHDT	Diesel	450	336	1.00	1,020	0	1.8	2.8	3.0	0	23,447
	Tire Wash	Other Construction Equipment	Diesel	100	75	0.42	639	0	1.5	1.5	1.5	0	1,371
	Water Truck	Onsite HHDT	Diesel	300	224	1.00	261	0	1.7	0	0	0	4,000
	Work Truck	Onsite LHDT1	Diesel	200	149	1.00	175	0	0.26	0.50	0.50	0	1,790
Office Building 5	Air Compressor	Air Compressors	Diesel	150	112	0.48	12	0	0.059	0	0	0	44
	Backhoe	Tractors/Loaders/Backhoes	Diesel	350	261	0.37	534	0	2.6	0	0	0	3,533
	Bob Cat	Tractors/Loaders/Backhoes	Diesel	200	149	0.37	534	0	2.6	0	0	0	2,019
	Boom Lift	Aerial Lifts	Diesel	40	30	0.31	2,067	0	2.2	6.2	0	0	1,309
	Compactor	Other Construction Equipment	Diesel	250	186	0.42	43	0	0.21	0	0	0	229
	Concrete Pump	Pumps	Diesel	450	336	0.74	25	0	0.12	4.8E-03	0	0	425
	Concrete Truck	Onsite HHDT	Diesel	400	298	1.00	52	0	0.25	4.8E-03	0	0	1,056
	Dump Truck	Onsite HHDT	Diesel	450	336	1.00	16	0	0.08	0	0	0	368
	Excavator	Excavators	Diesel	500	373	0.38	27	0	0.13	0	0	0	259
	Generator	Generator Sets	Diesel	25	19	0.74	930	0	4.6	0	0	0	879
	Gradall	Forklifts	Diesel	350	261	0.20	250	0	0.48	0.48	0.48	0	894
	Hydro/Crawler Crane	Cranes	Diesel	550	410	0.29	660	0	3.3	0	0	0	5,378
	Loader	Tractors/Loaders/Backhoes	Diesel	100	75	0.37	396	0	2.0	0	0	0	748
	Pile Rig	Bore/Drill Rigs	Diesel	600	447	0.50	396	0	2.0	0	0	0	6,069
	Semi Truck	Onsite HHDT	Diesel	450	336	1.00	1,260	0	1.8	2.8	3.0	0	28,960
	Tire Wash	Other Construction Equipment	Diesel	100	75	0.42	782	0	1.5	1.5	1.5	0	1,677
	Water Truck	Onsite HHDT	Diesel	300	224	1.00	330	0	1.6	0	0	0	5,057
	Work Truck	Onsite LHDT1	Diesel	200	149	1.00	217	0	0.28	0.50	0.50	0	2,214
Office Building 6	Air Compressor	Air Compressors	Diesel	150	112	0.48	12	0	0.062	0.013	0	0	44
	Backhoe	Tractors/Loaders/Backhoes	Diesel	350	261	0.37	534	0	3.9	0	0	0	3,533
	Bob Cat	Tractors/Loaders/Backhoes	Diesel	200	149	0.37	534	0	3.9	0	0	0	2,019
	Boom Lift	Aerial Lifts	Diesel	40	30	0.31	2,097	0	0	8.0	0	0	1,328
	Compactor	Other Construction Equipment	Diesel	250	186	0.42	43	0	0.31	0	0	0	229
	Concrete Pump	Pumps	Diesel	450	336	0.74	25	0	0.16	0.014	0	0	428
	Concrete Truck	Onsite HHDT	Diesel	400	298	1.00	52	0	0.35	0.014	0	0	1,059
	Dump Truck	Onsite HHDT	Diesel	450	336	1.00	16	0	0.12	0	0	0	368
	Excavator	Excavators	Diesel	500	373	0.38	27	0	0.20	0	0	0	259
	Generator	Generator Sets	Diesel	25	19	0.74	930	0	6.0	0.44	0	0	879
	Gradall	Forklifts	Diesel	350	261	0.20	250	0	0.48	0.48	0.48	0	893
	Hydro/Crawler Crane	Cranes	Diesel	550	410	0.29	666	0	4.9	0	0	0	5,426
	Loader	Tractors/Loaders/Backhoes	Diesel	100	75	0.37	408	0	3.0	0	0	0	771
	Pile Rig	Bore/Drill Rigs	Diesel	600	447	0.50	408	0	3.0	0	0	0	6,253
	Semi Truck	Onsite HHDT	Diesel	450	336	1.00	1,254	0	1.2	2.8	3.0	0	28,827
	Tire Wash	Other Construction Equipment	Diesel	100	75	0.42	780	0	1.5	1.5	1.5	0	1,674
	Water Truck	Onsite HHDT	Diesel	300	224	1.00	333	0	2.4	0	0	0	5,103
	Work Truck	Onsite LHDT1	Diesel	200	149	1.00	216	0	0.25	0.46	0.50	0	2,209
												Total	**1,070,514**

Notes:

1. Information on Project equipment list, horsepower, quantity, and hours per equipment per year were provided by the Project Applicant. Cumulative hours per building represents the sum of hours per equipment across all years. All off-road equipment is assumed to have diesel engines except aerial lifts and cranes which were assumed to be electric, as designated by Project Applicant.
2. Fuel usage is calculated by taking the horsepower-hours for each piece of equipment (calculated as horsepower * usage hours * load factor) and multiplying it by the gallons of diesel consumption per horsepower-hour consistent with USEPA AP-42 diesel fuel data in Table 3.4.1, which cites an average brake-specific fuel consumption (BSFC) of 7,000 BTU/hp-hr, a heating value of 19,300 BTU/lb, and density of 7.1 lb/gal.

Abbreviations:

CalEEMod - CALifornia Emissions Estimator MODel

Table 3
Residential / Shopping District Construction Equipment Energy
Willow Village
Menlo Park, California

Phase	Construction Subphase[1]	Equipment Type[1]	CalEEMod Equipment Category	Fuel	Number[1]	Horsepower[1]	kW	Load Factor	Hours / Day[1]	Days / Year[1]	Utilization Percent[1]	Fuel Usage (gal diesel)[2]	Electricity Usage (kWh)
Area 1	Demolition	Excavator	Excavators	Diesel	4	131	98	0.38	8	97	90%	7,104	--
		Semi Truck	Onsite HHDT	Diesel	12	450	336	1.00	8	97	25%	53,515	--
		Generator	Generator Sets	Diesel	2	25	19	0.74	6	97	50%	550	--
		Tire Wash	Other Construction Equipment	Diesel	2	100	75	0.42	4	97	90%	1,498	--
		Work Truck	Onsite LHDT1	Diesel	24	250	186	1.00	0.5	97	100%	14,865	--
		Water Truck	Onsite HHDT	Diesel	2	300	224	1.00	8	97	50%	11,892	--
		Bob Cat	Tractors/Loaders/Backhoes	Diesel	6	150	112	0.37	8	97	80%	10,560	--
		Pressure Washer	Pressure Washers	Diesel	2	25	19	0.30	8	97	100%	595	--
		Air Compressor	Air Compressors	Diesel	1	140	104	0.48	6	97	70%	1,399	--
	Grading and Utilities	Blade	Graders	Diesel	2	359	268	0.41	8	143	15%	2,581	--
		Semi Dump Truck	Onsite HHDT	Diesel	10	450	336	1.00	8	143	25%	65,745	--
		Scraper	Scrapers	Diesel	2	41	31	0.48	8	143	15%	345	--
		Loader	Tractors/Loaders/Backhoes	Diesel	4	100	75	0.37	4	143	90%	3,892	--
		Tire Wash	Other Construction Equipment	Diesel	2	100	75	0.42	4	143	90%	2,209	--
		Excavator	Excavators	Diesel	4	359	268	0.38	8	143	60%	19,134	--
		Backhoe	Tractors/Loaders/Backhoes	Diesel	4	350	261	0.37	8	143	60%	18,163	--
		Gradall	Forklifts	Diesel	4	350	261	0.20	4	143	60%	4,909	--
		Compactor	Other Construction Equipment	Diesel	4	250	186	0.42	0.5	143	20%	307	--
		Paver	Pavers	Diesel	2	250	186	0.42	8	143	1%	123	--
		Water Truck	Onsite HHDT	Diesel	2	300	224	1.00	8	143	50%	17,532	--
		Work Truck	Onsite LHDT1	Diesel	38	250	186	1.00	0.5	143	100%	34,699	--
		Generator	Generator Sets	Diesel	1	600	447	0.74	2	143	10%	649	--
		Concrete Truck	Onsite HHDT	Diesel	2	400	298	1.00	2	143	10%	1,169	--
Parcel 2 Foundations		Dump Truck	Onsite HHDT	Diesel	3	450	336	1.00	8	161	0	22,206	--
		Tire Wash	Other Construction Equipment	Diesel	1	100	75	0.42	4	161	90%	1,244	--
		Excavator	Excavators	Diesel	1	131	98	0.38	8	161	60%	1,965	--
		Semi Trucks	Onsite HHDT	Diesel	2	450	336	1.00	8	161	25%	14,804	--
		Backhoe	Tractors/Loaders/Backhoes	Diesel	1	90	67	0.37	8	161	60%	1,315	--
		Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	70	52	0.37	8	161	80%	1,363	--
		Gradall	Forklifts	Diesel	1	74	55	0.20	4	161	80%	390	--
		Crane	Cranes	Diesel	1	215	160	0.29	4	161	50%	1,026	--
		Work Truck	Onsite LHDT1	Diesel	4	250	186	1.00	0.5	161	100%	4,112	--
		Concrete Truck	Onsite HHDT	Diesel	8	400	298	1.00	8	161	15%	31,386	--
		Concrete Pump	Pumps	Diesel	1	450	336	0.74	8	161	15%	3,287	--
Parcel 2 Core and Shell		Semi Truck	Onsite HHDT	Diesel	1	450	336	1.00	8	180	25%	8,276	--
		Tire Wash	Other Construction Equipment	Diesel	1	100	75	0.42	4	180	90%	1,390	--
		Crane	Cranes	Diesel	1	600	447	0.29	8	180	20%	2,560	--
		Gradall	Forklifts	Diesel	1	74	55	0.20	4	180	80%	435	--
		Manlift	Aerial Lifts	Electric	1	48	36	0.31	8	180	40%	--	6391
		Work Truck	Onsite LHDT1	Diesel	8	250	186	1.00	0.5	180	100%	9,195	--
Parcel 2 Tenant Improvements		Semi Truck	Onsite HHDT	Diesel	1	450	336	1.00	8	261	25%	12,000	--
		Tire Wash	Other Construction Equipment	Diesel	1	100	75	0.42	4	261	90%	2,016	--
		Manlift	Aerial Lifts	Electric	1	48	36	0.31	0.5	261	90%	--	1303.2
		Scissor Lift	Aerial Lifts	Electric	1	3	2	0.31	4	261	80%	--	579.2
		Gradall	Forklifts	Diesel	1	74	55	0.20	4	261	80%	631	--
		Work Truck	Onsite LHDT1	Diesel	6	250	186	1.00	0.5	261	90%	9,000	--
Parcel 2 Landscaping		Excavator	Excavators	Diesel	1	25	19	0.38	8	59	90%	206	--
		Semi Truck	Onsite HHDT	Diesel	3	450	336	1.00	8	59	25%	8,138	--
		Tire Wash	Other Construction Equipment	Diesel	1	100	75	0.42	4	59	90%	456	--
		Backhoe	Tractors/Loaders/Backhoes	Diesel	1	90	67	0.37	8	59	100%	803	--
		Work Truck	Onsite LHDT1	Diesel	5	250	186	1.00	0.5	59	100%	1,884	--
		Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	70	52	0.37	8	59	80%	500	--
Parcel 3 Foundations		Dump Truck	Onsite HHDT	Diesel	4	450	336	1.00	8	161	25%	29,608	--
		Tire Wash	Other Construction Equipment	Diesel	1	100	75	0.42	4	161	90%	1,244	--
		Excavator	Excavators	Diesel	1	131	98	0.38	8	161	60%	1,965	--
		Semi Trucks	Onsite HHDT	Diesel	2	450	336	1.00	8	161	25%	14,804	--
		Backhoe	Tractors/Loaders/Backhoes	Diesel	2	90	67	0.37	8	161	60%	2,629	--
		Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	70	52	0.37	8	161	80%	1,363	--
		Gradall	Forklifts	Diesel	1	74	55	0.20	4	161	80%	390	--

Table 3
Residential / Shopping District Construction Equipment Energy
Willow Village
Menlo Park, California

Phase	Construction Subphase[1]	Equipment Type[1]	CalEEMod Equipment Category	Fuel	Number[1]	Horsepower[1]	kW	Load Factor	Hours / Day[1]	Days / Year[1]	Utilization Percent[1]	Fuel Usage (gal diesel)[2]	Electricity Usage (kWh)
Parcel 3 Foundations		Crane	Cranes	Diesel	1	215	160	0.29	4	161	50%	1,026	--
		Work Truck	Onsite LHDT1	Diesel	4	250	186	1.00	0.5	161	100%	4,112	--
		Concrete Truck	Onsite HHDT	Diesel	8	400	298	1.00	8	161	15%	31,582	--
		Concrete Pump	Pumps	Diesel	1	450	336	0.74	8	161	15%	3,287	--
Parcel 3 Core and Shell		Semi Truck	Onsite HHDT	Diesel	2	450	336	1.00	8	180	25%	16,551	--
		Tire Wash	Other Construction Equipment	Diesel	1	100	75	0.42	4	180	90%	1,390	--
		Crane	Cranes	Diesel	1	600	447	0.29	8	180	20%	2,560	--
		Gradall	Forklifts	Diesel	2	74	55	0.20	4	180	80%	871	--
		Manlift	Aerial Lifts	Electric	2	48	36	0.31	8	180	40%	--	12783
		Work Truck	Onsite LHDT1	Diesel	8	250	186	1.00	0.5	180	100%	9,195	--
Parcel 3 Tenant Improvements		Semi Truck	Onsite HHDT	Diesel	2	450	336	1.00	8	260	25%	23,907	--
		Tire Wash	Other Construction Equipment	Diesel	1	100	75	0.42	4	260	90%	2,008	--
		Manlift	Aerial Lifts	Electric	2	48	36	0.31	0.5	260	90%	--	2596
		Scissor Lift	Aerial Lifts	Electric	2	3	2	0.31	4	260	80%	--	1154.0
		Gradall	Forklifts	Diesel	1	74	55	0.20	4	260	80%	629	--
		Work Truck	Onsite LHDT1	Diesel	7	250	186	1.00	0.5	260	90%	10,459	--
Parcel 3 Landscaping		Excavator	Excavators	Diesel	1	25	19	0.38	8	58	90%	203	--
		Semi Truck	Onsite HHDT	Diesel	3	450	336	1.00	8	58	25%	8,000	--
		Backhoe	Tractors/Loaders/Backhoes	Diesel	1	90	67	0.37	8	58	100%	789	--
		Work Truck	Onsite LHDT1	Diesel	5	250	186	1.00	0.5	58	100%	1,852	--
		Bob Cat	Tractors/Loaders/Backhoes	Diesel	2	70	52	0.37	8	58	80%	982	--
Area 2	Demolition	Excavator	Excavators	Diesel	4	131	98	0.38	8	48	90%	3,515	--
		Semi Truck	Onsite HHDT	Diesel	12	450	336	1.00	8	48	25%	26,482	--
		Generator	Generator Sets	Diesel	2	25	19	0.74	6	48	50%	272	--
		Tire Wash	Other Construction Equipment	Diesel	2	100	75	0.42	4	48	90%	741	--
		Work Truck	Onsite LHDT1	Diesel	24	250	186	1.00	0.5	48	100%	7,356	--
		Water Truck	Onsite HHDT	Diesel	2	300	224	1.00	8	48	50%	5,885	--
		Bob Cat	Tractors/Loaders/Backhoes	Diesel	6	150	112	0.37	8	48	80%	5,226	--
		Pressure Washer	Pressure Washers	Diesel	2	25	19	0.30	8	48	100%	294	--
		Air Compressor	Air Compressors	Diesel	1	140	104	0.48	6	48	70%	692	--
	Grading and Utilities	Blade	Graders	Diesel	2	359	268	0.41	8	130	15%	2,346	--
		Semi Dump Truck	Onsite HHDT	Diesel	10	450	336	1.00	8	130	25%	59,768	--
		Scraper	Scrapers	Diesel	2	41	31	0.48	8	130	15%	314	--
		Loader	Tractors/Loaders/Backhoes	Diesel	4	100	75	0.37	4	130	90%	3,538	--
		Tire Wash	Other Construction Equipment	Diesel	2	100	75	0.42	4	130	90%	2,008	--
		Excavator	Excavators	Diesel	4	359	268	0.38	8	130	60%	17,394	--
		Backhoe	Tractors/Loaders/Backhoes	Diesel	4	350	261	0.37	8	130	60%	16,512	--
		Gradall	Forklifts	Diesel	4	350	261	0.20	4	130	60%	4,463	--
		Compactor	Other Construction Equipment	Diesel	4	250	186	0.42	0.5	130	20%	279	--
		Paver	Pavers	Diesel	2	250	186	0.42	8	130	1%	112	--
		Water Truck	Onsite HHDT	Diesel	2	300	224	1.00	8	130	50%	15,938	--
		Work Truck	Onsite LHDT1	Diesel	38	250	186	1.00	0.5	130	100%	31,544	--
		Generator	Generator Sets	Diesel	1	600	447	0.74	2	130	10%	590	--
		Concrete Truck	Onsite HHDT	Diesel	2	400	298	1.00	2	130	10%	1,063	--
Parcel 7 Foundations		Dump Truck	Onsite HHDT	Diesel	3	450	336	1.00	8	116	25%	15,999	--
		Tire Wash	Other Construction Equipment	Diesel	1	100	75	0.42	4	116	90%	896	--
		Excavator	Excavators	Diesel	1	131	98	0.38	8	116	60%	1,416	--
		Semi Trucks	Onsite HHDT	Diesel	1	450	336	1.00	8	116	25%	5,333	--
		Backhoe	Tractors/Loaders/Backhoes	Diesel	1	90	67	0.37	8	116	60%	947	--
		Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	70	52	0.37	8	116	80%	982	--
		Gradall	Forklifts	Diesel	1	74	55	0.20	4	116	80%	281	--
		Crane	Cranes	Diesel	1	215	160	0.29	4	116	50%	739	--
		Work Truck	Onsite LHDT1	Diesel	4	250	186	1.00	0.5	116	100%	2,963	--
		Concrete Truck	Onsite HHDT	Diesel	1	400	298	1.00	1.5	116	70%	2,489	--
		Concrete Pump	Pumps	Diesel	1	450	336	0.74	0.25	116	50%	247	--
Parcel 7 Core and Shell		Semi Truck	Onsite HHDT	Diesel	1	450	336	1.00	8	129	25%	5,931	--
		Tire Wash	Other Construction Equipment	Diesel	1	100	75	0.42	4	129	90%	996	--
		Crane	Cranes	Diesel	1	600	447	0.29	8	129	20%	1,835	--

Table 3
Residential / Shopping District Construction Equipment Energy
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Phase	Construction Subphase[1]	Equipment Type[1]	CalEEMod Equipment Category	Fuel	Number[1]	Horsepower[1]	kW	Load Factor	Hours / Day[1]	Days / Year[1]	Utilization Percent[1]	Fuel Usage (gal diesel)[2]	Electricity Usage (kWh)
Parcel 7 Core and Shell		Gradall	Forklifts	Diesel	1	74	55	0.20	4	129	80%	312	--
		Manlift	Aerial Lifts	Electric	1	48	36	0.31	8	129	40%	--	4580
		Work Truck	Onsite LHDT1	Diesel	8	250	186	1.00	0.5	129	100%	6,590	--
Parcel 7 Tenant Improvements		Semi Truck	Onsite HHDT	Diesel	1	450	336	1.00	8	188	25%	8,643	--
		Tire Wash	Other Construction Equipment	Diesel	1	100	75	0.42	4	188	90%	1,452	--
		Manlift	Aerial Lifts	Electric	1	48	36	0.31	0.5	188	90%	--	938.7
		Scissor Lift	Aerial Lifts	Electric	1	3	2	0.31	4	188	80%	--	417.2
		Gradall	Forklifts	Diesel	1	74	55	0.20	4	188	80%	455	--
		Work Truck	Onsite LHDT1	Diesel	6	250	186	1.00	0.5	188	90%	6,483	--
Parcel 7 Landscaping		Excavator	Excavators	Diesel	1	25	19	0.38	8	58	90%	203	--
		Semi Truck	Onsite HHDT	Diesel	3	450	336	1.00	8	58	25%	8,000	--
		Tire Wash	Other Construction Equipment	Diesel	1	100	75	0.42	4	58	90%	448	--
		Backhoe	Tractors/Loaders/Backhoes	Diesel	1	90	67	0.37	8	58	60%	474	--
		Work Truck	Onsite LHDT1	Diesel	5	250	186	1.00	0.5	58	100%	1,852	--
		Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	70	52	0.37	8	58	80%	491	--
Parcel 6 Foundations		Dump Truck	Onsite HHDT	Diesel	3	450	336	1.00	8	116	25%	15,999	--
		Tire Wash	Other Construction Equipment	Diesel	1	100	75	0.42	4	116	90%	896	--
		Excavator	Excavators	Diesel	1	131	98	0.38	8	116	60%	1,416	--
		Semi Trucks	Onsite HHDT	Diesel	2	450	336	1.00	8	116	25%	10,666	--
		Backhoe	Tractors/Loaders/Backhoes	Diesel	1	90	67	0.37	8	116	60%	947	--
		Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	70	52	0.37	8	116	80%	982	--
		Gradall	Forklifts	Diesel	1	74	55	0.20	4	116	80%	281	--
		Crane	Cranes	Diesel	1	215	160	0.29	4	116	50%	739	--
		Work Truck	Onsite LHDT1	Diesel	4	250	186	1.00	0.5	116	100%	2,963	--
		Concrete Truck	Onsite HHDT	Diesel	1	400	298	1.00	3	116	70%	4,978	--
		Concrete Pump	Pumps	Diesel	1	450	336	0.74	0.5	116	50%	493	--
Parcel 6 Core and Shell		Semi Truck	Onsite HHDT	Diesel	2	450	336	1.00	8	129	25%	11,862	--
		Tire Wash	Other Construction Equipment	Diesel	1	100	75	0.42	4	129	90%	996	--
		Crane	Cranes	Diesel	1	600	447	0.29	8	129	20%	1,835	--
		Gradall	Forklifts	Diesel	2	74	55	0.20	4	129	80%	624	--
		Manlift	Aerial Lifts	Electric	1	48	36	0.31	8	129	40%	--	4580
		Work Truck	Onsite LHDT1	Diesel	8	250	186	1.00	0.5	129	100%	6,590	--
Parcel 6 Tenant Improvements		Semi Truck	Onsite HHDT	Diesel	2	450	336	1.00	8	187	25%	17,195	--
		Tire Wash	Other Construction Equipment	Diesel	1	100	75	0.42	4	187	90%	1,444	--
		Manlift	Aerial Lifts	Electric	1	48	36	0.31	0.5	187	90%	--	933.7
		Scissor Lift	Aerial Lifts	Electric	2	3	2	0.31	4	187	80%	--	830.0
		Gradall	Forklifts	Diesel	1	74	55	0.20	4	187	80%	452	--
		Work Truck	Onsite LHDT1	Diesel	7	250	186	1.00	0.5	187	90%	7,523	--
Parcel 6 Landscaping		Excavator	Excavators	Diesel	1	25	19	0.38	8	59	90%	206	--
		Semi Truck	Onsite HHDT	Diesel	3	450	336	1.00	8	59	25%	8,138	--
		Backhoe	Tractors/Loaders/Backhoes	Diesel	1	90	67	0.37	8	59	60%	482	--
		Work Truck	Onsite LHDT1	Diesel	5	250	186	1.00	0.5	59	100%	1,884	--
		Bob Cat	Tractors/Loaders/Backhoes	Diesel	2	70	52	0.37	8	59	80%	999	--
Area 3	Grading and Utilities	Blade	Graders	Diesel	1	359	268	0.41	8	22	15%	199	--
		Semi Dump Truck	Onsite HHDT	Diesel	6	450	336	1.00	8	22	25%	6,069	--
		Scraper	Scrapers	Diesel	1	41	31	0.48	8	22	15%	27	--
		Loader	Tractors/Loaders/Backhoes	Diesel	2	100	75	0.37	4	22	90%	299	--
		Tire Wash	Other Construction Equipment	Diesel	1	100	75	0.42	4	22	90%	170	--
		Excavator	Excavators	Diesel	2	359	268	0.38	8	22	60%	1,472	--
		Backhoe	Tractors/Loaders/Backhoes	Diesel	2	350	261	0.37	8	22	60%	1,397	--
		Gradall	Forklifts	Diesel	2	350	261	0.20	4	22	60%	378	--
		Compactor	Other Construction Equipment	Diesel	2	250	186	0.42	0.5	22	20%	24	--
		Paver	Pavers	Diesel	1	250	186	0.42	8	22	1%	9	--
		Water Truck	Onsite HHDT	Diesel	1	300	224	1.00	8	22	50%	1,349	--
		Work Truck	Onsite LHDT1	Diesel	20	250	186	1.00	0.5	22	100%	2,810	--
		Generator	Generator Sets	Diesel	1	600	447	0.74	2	22	10%	100	--
		Concrete Truck	Onsite HHDT	Diesel	2	400	298	1.00	2	22	10%	180	--

Table 3
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Phase	Construction Subphase[1]	Equipment Type[1]	CalEEMod Equipment Category	Fuel	Number[1]	Horsepower[1]	kW	Load Factor	Hours / Day[1]	Days / Year[1]	Utilization Percent[1]	Fuel Usage (gal diesel)[2]	Electricity Usage (kWh)
Area 3	Tunnel Construction	Crane	Cranes	Diesel	1	290	216	0.29	6	262	35%	2,364	--
		Excavator	Excavators	Diesel	2	170	127	0.38	6	262	45%	4,669	--
		Loader	Tractors/Loaders/Backhoes	Diesel	1	250	186	0.37	6	262	45%	3,343	--
		Backhoe	Tractors/Loaders/Backhoes	Diesel	1	103	77	0.37	6	262	40%	1,224	--
		Gradall	Forklifts	Diesel	1	130	97	0.20	6	262	35%	731	--
		Boom Truck	Onsite HHDT	Diesel	1	200	149	1.00	6	262	35%	5,621	--
		Concrete Truck	Onsite HHDT	Diesel	3	300	224	1.00	5	262	25%	15,057	--
		Dump Truck	Onsite HHDT	Diesel	4	300	224	1.00	5	262	25%	20,076	--
		Work Truck	Onsite LHDT1	Diesel	5	250	186	1.00	4	262	30%	20,076	--
		Compressor	Air Compressors	Diesel	2	50	37	0.48	6	262	30%	1,156	--
	Foundations	Dump Truck	Onsite HHDT	Diesel	4	450	336	1.00	8	123	25%	22,620	--
		Generator	Generator Sets	Diesel	2	25	19	0.74	6	123	100%	1,395	--
		Tire Wash	Other Construction Equipment	Diesel	2	100	75	0.42	4	123	90%	1,900	--
		Excavator	Excavators	Diesel	2	131	98	0.38	8	123	60%	3,003	--
		Semi Trucks	Onsite HHDT	Diesel	4	450	336	1.00	8	123	25%	22,620	--
		Backhoe	Tractors/Loaders/Backhoes	Diesel	2	90	67	0.37	8	123	60%	2,009	--
		Bob Cat	Tractors/Loaders/Backhoes	Diesel	2	70	52	0.37	8	123	80%	2,083	--
		Gradall	Forklifts	Diesel	2	74	55	0.20	4	123	80%	595	--
		Crane	Cranes	Diesel	2	215	160	0.29	4	123	50%	1,567	--
		Work Truck	Onsite LHDT1	Diesel	4	250	186	1.00	0.5	123	100%	3,142	--
		Concrete Truck	Onsite HHDT	Diesel	3	400	298	1.00	3	123	70%	15,834	--
		Concrete Pump	Pumps	Diesel	3	450	336	0.74	0.5	123	50%	1,569	--
	Core and Shell	Semi Truck	Onsite HHDT	Diesel	3	450	336	1.00	8	139	25%	19,172	--
		Generator	Generator Sets	Diesel	2	25	19	0.74	6	139	100%	1,576	--
		Tire Wash	Other Construction Equipment	Diesel	2	100	75	0.42	4	139	90%	2,147	--
		Crane	Cranes	Diesel	2	600	447	0.29	8	139	20%	3,954	--
		Gradall	Forklifts	Diesel	3	74	55	0.20	4	139	80%	1,009	--
		Manlift	Aerial Lifts	Electric	3	48	36	0.31	8	139	40%	--	14807
		Work Truck	Onsite LHDT1	Diesel	16	250	186	1.00	0.5	139	100%	14,201	--
	Tenant Improvements	Semi Truck	Onsite HHDT	Diesel	3	450	336	1.00	8	199	25%	27,447	--
		Generator	Generator Sets	Diesel	2	25	19	0.74	6	199	85%	1,918	--
		Tire Wash	Other Construction Equipment	Diesel	2	100	75	0.42	4	199	90%	3,074	--
		Manlift	Aerial Lifts	Electric	3	48	36	0.31	0.5	199	90%	--	2981
		Scissor Lift	Aerial Lifts	Electric	3	3	2	0.31	4	199	80%	--	1324.9
		Gradall	Forklifts	Diesel	1	74	55	0.20	4	199	80%	481	--
		Work Truck	Onsite LHDT1	Diesel	13	250	186	1.00	0.5	199	90%	14,867	--
	Landscaping	Excavator	Excavators	Diesel	1	25	19	0.38	8	59	90%	206	--
		Semi Truck	Onsite HHDT	Diesel	6	450	336	1.00	8	59	25%	16,275	--
		Tire Wash	Other Construction Equipment	Diesel	1	100	75	0.42	4	59	90%	456	--
		Backhoe	Tractors/Loaders/Backhoes	Diesel	2	90	67	0.37	8	59	60%	963	--
		Work Truck	Onsite LHDT1	Diesel	10	250	186	1.00	0.5	59	100%	3,767	--
		Bob Cat	Tractors/Loaders/Backhoes	Diesel	3	70	52	0.37	8	59	80%	1,499	--
Hamilton Avenue Parcels North and South	Demolition	Excavator	Excavators	Diesel	1	131	98	0.38	8	22	90%	403	--
		Semi Truck	Onsite HHDT	Diesel	3	450	336	1.00	8	22	80%	9,710	--
		Generator	Generator Sets	Diesel	1	25	19	0.74	6	22	50%	62	--
		Tire Wash	Other Construction Equipment	Diesel	2	100	75	0.42	4	22	90%	340	--
		Work Truck	Onsite LHDT1	Diesel	6	250	186	1.00	0.5	22	100%	843	--
		Water Truck	Onsite HHDT	Diesel	1	300	224	1.00	8	22	100%	2,697	--
		Bob Cat	Tractors/Loaders/Backhoes	Diesel	2	70	52	0.37	8	22	80%	373	--
		Pressure Washer	Pressure Washers	Diesel	2	25	19	0.30	8	22	100%	135	--
		Air Compressor	Air Compressors	Diesel	1	140	104	0.48	6	22	70%	317	--

Table 3
Residential / Shopping District Construction Equipment Energy
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Phase	Construction Subphase[1]	Equipment Type[1]	CalEEMod Equipment Category	Fuel	Number[1]	Horsepower[1]	kW	Load Factor	Hours / Day[1]	Days / Year[1]	Utilization Percent[1]	Fuel Usage (gal diesel)[2]	Electricity Usage (kWh)
Hamilton Avenue Parcels North and South	Grading and Utilities	Semi Dump Truck	Onsite HHDT	Diesel	3	450	336	1.00	8	23	80%	10,151	--
		Loader	Tractors/Loaders/Backhoes	Diesel	2	100	75	0.37	4	23	90%	313	--
		Tire Wash	Other Construction Equipment	Diesel	1	100	75	0.42	4	23	90%	178	--
		Excavator	Excavators	Diesel	1	359	268	0.38	8	23	60%	769	--
		Backhoe	Tractors/Loaders/Backhoes	Diesel	1	90	67	0.37	8	23	60%	188	--
		Gradall	Forklifts	Diesel	1	74	55	0.20	4	23	60%	42	--
		Compactor	Other Construction Equipment	Diesel	1	250	186	0.42	0.5	23	20%	12	--
		Paver	Pavers	Diesel	1	250	186	0.42	8	23	1%	10	--
		Water Truck	Onsite HHDT	Diesel	1	300	224	1.00	8	23	100%	2,820	--
		Work Truck	Onsite LHDT1	Diesel	8	250	186	1.00	0.5	23	100%	1,175	--
		Generator	Generator Sets	Diesel	1	600	447	0.74	2	23	10%	104	--
		Concrete Truck	Onsite HHDT	Diesel	2	400	298	1.00	2	23	10%	188	--
	Foundations	Dump Truck	Onsite HHDT	Diesel	1	450	336	1.00	8	22	60%	2,427	--
		Generator	Generator Sets	Diesel	1	25	19	0.74	6	22	100%	125	--
		Tire Wash	Other Construction Equipment	Diesel	1	100	75	0.42	4	22	90%	170	--
		Semi Trucks	Onsite HHDT	Diesel	1	450	336	1.00	8	22	80%	3,237	--
		Backhoe	Tractors/Loaders/Backhoes	Diesel	1	90	67	0.37	8	22	60%	180	--
		Bob Cat	Tractors/Loaders/Backhoes	Diesel	1	70	52	0.37	8	22	80%	186	--
		Gradall	Forklifts	Diesel	1	74	55	0.20	4	22	80%	53	--
		Work Truck	Onsite LHDT1	Diesel	2	250	186	1.00	0.5	22	100%	281	--
		Concrete Truck	Onsite HHDT	Diesel	1	400	298	1.00	3	22	60%	809	--
		Concrete Pump	Pumps	Diesel	1	450	336	0.74	6	22	30%	674	--
	Core and Shell	Semi Truck	Onsite HHDT	Diesel	1	450	336	1.00	8	43	75%	5,931	--
		Generator	Generator Sets	Diesel	1	25	19	0.74	6	43	100%	244	--
		Tire Wash	Other Construction Equipment	Diesel	1	100	75	0.42	4	43	90%	332	--
		Gradall	Forklifts	Diesel	1	74	55	0.20	4	43	80%	104	--
		Work Truck	Onsite LHDT1	Diesel	4	250	186	1.00	0.5	43	100%	1,098	--
		Concrete Truck	Onsite HHDT	Diesel	1	400	298	1.00	6	43	30%	1,582	--
		Concrete Pump	Pumps	Diesel	1	450	336	0.74	6	43	45%	1,975	--
	Tenant Improvements	Semi Truck	Onsite HHDT	Diesel	1	450	336	1.00	8	33	60%	3,641	--
		Generator	Generator Sets	Diesel	1	25	19	0.74	6	33	85%	159	--
		Tire Wash	Other Construction Equipment	Diesel	2	100	75	0.42	4	33	90%	510	--
		Scissor Lift	Aerial Lifts	Electric	1	3	2	0.31	6	33	80%	--	110
		Gradall	Forklifts	Diesel	1	74	55	0.20	4	33	80%	80	--
		Work Truck	Onsite LHDT1	Diesel	3	250	186	1.00	0.5	33	90%	569	--
Substation Upgrade	PG&E Substation Work	Backhoe	Tractors/Loaders/Backhoes	Diesel	2	90	67	0.37	8	109	60%	1,780	--
		Loader	Tractors/Loaders/Backhoes	Diesel	2	100	75	0.37	8	109	45%	1,483	--
Feeder Line	PG&E Offsite Work	Excavator	Excavators	Diesel	2	131	98	0.38	8	240	90%	8,788	--
		Loader	Tractors/Loaders/Backhoes	Diesel	1	100	75	0.37	8	240	45%	1,633	--
	Surface Improvements	Paver	Pavers	Diesel	1	250	186	0.42	8	23	60%	592	--
		Backhoe	Tractors/Loaders/Backhoes	Diesel	1	90	67	0.37	8	23	60%	188	--
		Vibratory Roller	Other Construction Equipment	Diesel	1	250	186	0.42	8	23	20%	197	--
		Finish Roller	Other Construction Equipment	Diesel	1	250	186	0.42	8	23	20%	197	--
Intersection Improvements	O'Brien and Kavanaugh	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	90	67	0.37	8	15	60%	122	--
	Adams and O'Brien	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	90	67	0.37	8	10	60%	82	--
	Willow Road and Ivy Drive	Backhoe	Tractors/Loaders/Backhoes	Diesel	1	90	67	0.37	8	10	60%	82	--
											Total	1,319,290	56,309

Notes:

1. Information on Project equipment list, horsepower, quantity, and utilization factor were provided by the Project Applicant. All off-road equipment is assumed to have diesel engines except aerial lifts which were assumed to be electric, as designated by Project Applicant. Utilizations for duration represent the usage percentage during the indicated equipment date range. Utilization percentage is multiplied by the number of hours per day in the calculation of off-road emissions.

2. Fuel usage is calculated by taking the horsepower-hours for each piece of equipment (calculated as horsepower * usage hours * load factor) and multiplying it by the gallons of diesel consumption per horsepower-hour consistent with USEPA AP-42 diesel fuel data in Table 3.4.1, which cites an average brake-specific fuel consumption (BSFC) of 7,000 BTU/hp-hr, a heating value of 19,300 BTU/lb, and density of 7.1 lb/gal.

Abbreviations:

CalEEMod - CALifornia Emissions Estimator MODel

Table 4
Fuel Efficiency Derivation for On-Road Construction Equipment
Willow Village
Menlo Park, California

Year	Fuel Consumption (gallons/day)[1]					VMT (miles/day)[1]					Fuel Efficiency (gallon/mile)[2]					Fuel Efficiency by Category (miles/gallon)		
	HHDT	MHDT	LDA	LDT1	LDT2	HHDT	MHDT	LDA	LDT1	LDT2	HHDT	MHDT	LDA	LDT1	LDT2	Hauling	Vendor	Worker
Year 1	23,056	20,816	596	5.8	530	118,103	172,846	25,369	140	16,522	0.20	0.12	0.023	0.041	0.032	5.1	6.3	33
Year 2	22,935	20,927	524	4.9	550	118,758	174,304	22,502	119	17,455	0.19	0.12	0.023	0.041	0.031	5.2	6.4	34
Year 3	22,678	20,956	460	4.2	566	119,080	175,901	19,907	102	18,281	0.19	0.12	0.023	0.041	0.031	5.3	6.5	34
Year 4	22,436	21,015	402	3.6	577	119,489	177,028	17,557	88	18,954	0.19	0.12	0.023	0.041	0.030	5.3	6.5	34
Year 5	22,094	21,004	350	3.1	581	119,561	177,558	15,407	76	19,447	0.18	0.12	0.023	0.041	0.030	5.4	6.6	34
Year 6	21,769	20,975	304	2.7	584	119,592	177,809	13,511	66	19,853	0.18	0.118	0.022	0.041	0.029	5.5	6.7	35

Notes:

1. Fuel consumption and VMT from EMFAC2021 online database for San Mateo County. HHDT and MHDT are assumed to be diesel. LDA, LDT1 and LDT2 are assumed to be gasoline.
2. Fuel efficiency calculated based off of EMFAC data: [Fuel Consumption]/ [VMT]
3. Consistent with CalEEMod, Hauling assumes 100% HHDT, Vendor assumes 50% HHDT and 50% MHDT, and Worker assumes 50% LDA, 25% LDT1, and 25% LDT2 vehicles.

Abbreviations:

CalEEMod - California Emissions Estimator Model
EMFAC2021 - California Air Resources Board EMission FACtor model
LDA - light duty auto
LDT - light duty truck
MHDT - medium-heavy duty truck
HHDT - heavy-heavy duty truck
VMT - vehicle miles traveled

Table 5
Project On-Road Construction Vehicle Fuel Use
Willow Village
Menlo Park, California

Phase	Construction Subphase	Year	One-Way Trips Per Phase[1]			Annual VMT (mi/yr)[1]			Fuel Consumption (gallons)[2]		
			Worker	Vendor	Hauling	Worker	Vendor	Hauling	Worker (Gasoline)	Vendor (Diesel)	Hauling (Diesel)
Area 1	Demolition	Year 1	520	0	2,505	5,616	0	57,355	169	0	11,197
		Year 2	3,360	0	16,183	36,288	0	370,600	1,082	0	71,572
	Grading and Utilities	Year 2	17,160	0	32,640	185,328	0	267,648	5,528	0	51,689
Area 1 Campus District	Foundations + Core and Shell	Year 2	0	469	0	0	18,767	0	0	2,939	0
		Year 3	0	2,904	0	0	116,177	0	0	17,983	0
		Year 4	0	2,927	0	0	117,071	0	0	17,940	0
		Year 5	0	2,916	0	0	116,624	0	0	17,674	0
	Tenant Improvements	Year 4	0	1,217	0	0	48,665	0	0	7,457	0
		Year 5	0	1,628	0	0	65,136	0	0	9,871	0
		Year 6	0	287	0	0	11,480	0	0	1,722	0
Area 1 Town Square and Residential/Shopping District	Foundations	Year 3	0	384	0	0	15,371	0	0	2,379	0
		Year 4	0	2	0	0	69	0	0	11	0
	Core and Shell	Year 3	0	132	0	0	5,288	0	0	819	0
		Year 4	0	372	0	0	14,872	0	0	2,279	0
	Tenant Improvements	Year 4	0	330	0	0	13,207	0	0	2,024	0
		Year 5	0	400	0	0	15,993	0	0	2,424	0
	Landscaping	Year 5	0	192	0	0	7,680	0	0	1,164	0
Area 1 Campus District	O4 and NG Worker Mobile Trips	Year 2	16,800	0	0	181,440	0	0	5,412	0	0
		Year 3	104,000	0	0	1,123,200	0	0	33,241	0	0
		Year 4	82,800	0	0	894,240	0	0	26,246	0	0
	MCS Worker Mobile Trips	Year 2	12,600	0	0	136,080	0	0	4,059	0	0
		Year 3	78,000	0	0	842,400	0	0	24,931	0	0
		Year 4	78,600	0	0	848,880	0	0	24,915	0	0
		Year 5	78,300	0	0	845,640	0	0	24,602	0	0
		Year 6	13,800	0	0	149,040	0	0	4,296	0	0
Area 1 Town Square and Residential/Shopping District	Mixed Use Worker Mobile Trips	Year 3	100,800	0	0	1,088,640	0	0	32,218	0	0
		Year 4	117,900	0	0	1,273,320	0	0	37,373	0	0
		Year 5	80,100	0	0	865,080	0	0	25,168	0	0
	Landscaping Worker Mobile Trips	Year 5	14,760	0	0	159,408	0	0	4,638	0	0
Area 2	Demolition	Year 2	1,920	0	18,688	20,736	0	427,955	619	0	82,649
	Grading and Utilities	Year 2	7,800	0	16,320	84,240	0	133,824	2,513	0	25,845
		Year 3	7,800	0	16,320	84,240	0	133,824	2,493	0	25,486
Area 2 Campus District	Foundations + Core and Shell	Year 3	0	2,223	0	0	88,917	0	0	13,763	0
		Year 4	0	2,553	0	0	102,123	0	0	15,649	0
	Tenant Improvements	Year 4	0	2,205	0	0	88,204	0	0	13,516	0
		Year 5	0	1,747	0	0	69,876	0	0	10,589	0
Area 2 Town Square and Residential/Shopping District	Foundations	Year 4	0	386	0	0	15,440	0	0	2,366	0
	Core and Shell	Year 4	0	379	0	0	15,146	0	0	2,321	0
		Year 5	0	125	0	0	5,014	0	0	760	0
	Tenant Improvements	Year 4	0	49	0	0	1,970	0	0	302	0
		Year 5	0	681	0	0	27,230	0	0	4,127	0
	Landscaping	Year 5	0	142	0	0	5,682	0	0	861	0
		Year 6	0	50	0	0	1,998	0	0	300	0
Area 2 Campus District	Worker Mobile Trips	Year 3	173,720	0	0	1,876,176	0	0	55,526	0	0
		Year 4	225,320	0	0	2,433,456	0	0	71,423	0	0
		Year 5	104,920	0	0	1,133,136	0	0	32,966	0	0
Area 2 Town Square and Residential/Shopping District	Mixed Use Worker Mobile Trips	Year 4	117,000	0	0	1,263,600	0	0	37,087	0	0
		Year 5	105,750	0	0	1,142,100	0	0	33,227	0	0
	Landscaping Worker Mobile Trips	Year 5	10,920	0	0	117,936	0	0	3,431	0	0
		Year 6	3,840	0	0	41,472	0	0	1,195	0	0
Area 3	Grading and Utilities	Year 3	13,024	0	2,464	140,659	0	20,205	4,163	0	3,848
	Tunnel Construction	Year 3	229,250	1,400	0	2,475,900	56,000	0	73,274	8,668	0
		Year 4	113,970	696	0	1,230,876	27,840	0	36,127	4,266	0
	Foundations	Year 4	31,440	242	0	339,552	9,662	0	9,966	1,481	0
		Year 5	129,690	996	0	1,400,652	39,858	0	40,749	6,040	0
	Core and Shell	Year 5	182,090	1,612	0	1,966,572	64,480	0	57,213	9,771	0
	Tenant Improvements	Year 5	32,750	293	0	353,700	11,739	0	10,290	1,779	0
		Year 6	227,940	2,043	0	2,461,752	81,701	0	70,962	12,255	0
	Landscaping	Year 6	3,540	384	0	38,232	15,360	0	1,102	2,304	0
Hamilton Avenue Parcels North and South	Demolition	Year 4	440	0	422	4,752	0	9,664	139	0	1,815
	Grading and Utilities	Year 4	20	0	19	216	0	152	6	0	28
		Year 5	440	0	407	4,752	0	3,338	138	0	617
	Foundations	Year 5	0	274	0	0	10,944	0	0	1,658	0
	Core and Shell	Year 5	0	245	0	0	9,792	0	0	1,484	0
	Tenant Improvements	Year 5	0	306	0	0	12,240	0	0	1,855	0
	Worker Mobile Trips	Year 5	27,354	0	0	295,423	0	0	8,595	0	0
Substation Upgrade	PG&E Substation Work	Year 3	1,744	100	0	18,835	4,000	0	557	619	0
Feeder Line	PG&E Offsite Work	Year 3	4,800	228	0	51,840	9,125	0	1,534	1,413	0
	Surface Improvements	Year 3	460	22	0	4,968	875	0	147	135	0
Intersection Improvements	O'Brien and Kavanaugh	Year 3	180	50	0	1,944	2,000	0	58	310	0
	Adams and O'Brien	Year 3	120	50	0	1,296	2,000	0	38	310	0
	Willow Road and Ivy Drive	Year 3	120	50	0	1,296	2,000	0	38	310	0
								Total Fuel Consumption:	**809,457**	**205,895**	**274,744**

Notes

1. Total miles based on trip generation provided by Project sponsor and CalEEMod default trip distance by trip type.
2. Fuel usage based on VMT data and fuel efficiency values calculated in Table 4. It is assumed that worker vehicles use gasoline while vendor and hauling vehicles use diesel.
3. Onroad fuel usage does not vary between the unmitigated and mitigated scenario.

Abbreviations:

CalEEMod - California Emissions Estimator Model
mi - mile
yr - year
VMT - vehicle miles traveled

Table 6
Electricity Required for Project Construction Water Usage
Willow Village
Menlo Park, California

Construction Area	Construction Activity	Year	Number of Work Days	Average Acreage Needing Water[1]	Water Usage[1]	Total Water Usage	Electricity Usage[2]
				(acres)	(gal/acre/ day)	(million gal)	(MWh)
Area 1	Demolition	Year 1	13	18	500	0.11	0.40
		Year 2	84	18	500	0.74	2.6
	Grading and Utilities	Year 2	143	18	500	1.3	4.4
Area 1 Town Square and Residential/Shopping District	Foundations	Year 3	224	4	143	0.13	0.45
		Year 4	1	4	143	5.7E-04	2.0E-03
	Core and Shell	Year 3	64	4	148	0.038	0.13
		Year 4	180	4	148	0.11	0.37
	Tenant Improvements	Year 4	147	4	161	0.094	0.33
		Year 5	178	4	161	0.11	0.40
	Landscaping	Year 5	123	4	130	0.064	0.22
Area 1 Campus District	Vertical Construction	Year 2	42	5	200	0.038	0.13
		Year 3	260	5	200	0.24	0.82
		Year 4	262	5	200	0.24	0.83
		Year 5	261	5	200	0.24	0.83
		Year 6	46	5	200	0.042	0.15
Area 2	Demolition	Year 2	48	13	500	0.31	1.1
	Grading and Utilities	Year 2	65	13	500	0.42	1.5
		Year 3	65	13	500	0.42	1.5
Area 2 Town Square and Residential/Shopping District	Foundations	Year 4	180	4	129	0.093	0.32
	Core and Shell	Year 4	145	4	134	0.078	0.27
		Year 5	48	4	134	0.026	0.090
	Tenant Improvements	Year 4	17	4	148	0.010	0.035
		Year 5	235	4	148	0.14	0.49
	Landscaping	Year 5	91	4	96	0.035	0.12
		Year 6	32	4	96	0.012	0.043
Area 2 Campus District	Vertical Construction	Year 3	202	6	200	0.23	0.79
		Year 4	262	6	200	0.29	1.0
		Year 5	122	6	200	0.14	0.48
Area 3	Grading and Utilities	Year 3	22	5	500	0.055	0.19
	Tunnel Construction	Year 3	175	5	500	0.44	1.5
		Year 4	87	5	500	0.22	0.76
	Foundations	Year 4	24	5	200	0.024	0.084
		Year 5	99	5	200	0.099	0.35
	Core and Shell	Year 5	139	5	200	0.14	0.49
	Tenant Improvements	Year 5	25	5	200	0.025	0.088
		Year 6	174	5	200	0.17	0.61
	Landscaping	Year 6	59	8	200	0.094	0.33
Hamilton Avenue Parcels North and South	Demolition	Year 4	22	4	682	0.056	0.19
	Grading and Utilities	Year 4	1	4	2,891	0.011	0.037
		Year 5	22	4	2,891	0.24	0.82
	Foundations	Year 5	22	4	518	0.042	0.15
	Core and Shell	Year 5	43	4	316	0.050	0.18
	Tenant Improvements	Year 5	33	4	515	0.063	0.22
Feeder Line	PG&E Offsite Work	Year 3	240	--	--	0.250	0.88
						Total[3]	**27**

Notes:

1. Information on Project water use was provided by the Project Applicant.
2. Energy usage is calculated by applying the electric intensity factor for outdoor water to total water usage. An electric intensity factor of 3,500 kWh/million gallons was taken from Table 9.2 in Appendix D of the CalEEMod User's Guide as the sum of supply water, treat water and distribute water electric intensity factors. Since the water use reported here is only for construction fugitive dust control, operational indoor water use-related emissions and wastewater treatment-related emissions are not estimated here.
3. Water usage does not vary between the unmitigated and mitigated scenario.

Abbreviations:

gal - Gallons
kWh - kilowatt-hours
MWh - megawatt-hours

References:

CalEEMod User's Guide (Available online at: http://www.aqmd.gov/caleemod/user's-guide)
PG&E, Pacific Gas and Electric - Gas and power company for California (https://www.pge.com/)

Table 7
Summary of Project Construction Energy Use
Willow Village
Menlo Park, California

Source		Units	Project Construction Usage[1]
Electricity	Water Consumption[2]	kWh	26,689
	Off-Road Construction Equipment[3]	kWh	56,309
	Electricity Total	**kWh**	**82,998**
Diesel	On-Road Construction Trips[4]	gallons	480,639
	Off-Road Construction Equipment[3]	gallons	2,389,804
	Diesel Total	**gallons**	**2,870,443**
Gasoline	On-Road Construction Trips[4]	gallons	809,457
	Gasoline Total	**gallons**	**809,457**

Notes:

1. The energy usage for the unmitigated and mitigated scenarios is the same.
2. Construction water use based on project-specific estimate provided by Project sponsor. See Table 6 for more details on the methodology.
3. Off-road equipment electricity use based on hours of operation for electric equipment. Off-road diesel fuel usage based on a fuel usage rate of 0.051 gallons of diesel per horsepower (hp)-hour, consistent with diesel conversion factors given in USEPA AP-42 Table 3.4.1. See Tables 2 and 3 for more details on the methodology.
4. On-road mobile source fuel use based on vehicle miles traveled (VMT) for all years of construction and fleet-average fuel consumption in gallons per mile from EMFAC2021 for CY 2021 through 2026 in San Mateo County. See Table 4 for more details on the methodology.

Abbreviations:

CY - calendar year

EMFAC2021 - California Air Resources Board EMission FACtor model

hp - horsepower

kWh - kilowatt-hour

USEPA - United States Environmental Protection Agency

VMT - vehicle miles traveled

References:

USEPA. 1996. AP 42. Compilation of Air Pollutant Emission Factors, Volume 1. Fifth Edition. Chapter 3.4, Large Stationary Diesel and All Stationary Dual-fuel Engines. Available online at: http://www.epa.gov/ttn/chief/ap42/ch03/final/c03s04.pdf. Accessed March 2019.

Table 8
Water Energy Use
Willow Village
Menlo Park, California

Scenario	Water Usage[1]		Electricity Usage[2]		
	Indoor	Outdoor	Indoor	Outdoor	Total
	(million gallons/year)		(kWh/year)		
Existing Conditions	247	28	1,335,508	98,953	1,434,462
Full Buildout	114	35	617,173	122,546	739,719

Notes:

1. Water usage rates consistent with Air Quality, Greenhouse Gas, and Health Risk Assessment Technical Report.
2. Energy Usage is based on the water usage rates and the default water electricity intensity found in Tables 9.2 of Appendix D of the CalEEMod user guide. Indoor water electricity usage assumes electricity is used to supply, treat and distribute water and treat wastewater. Outdoor water electricity usage does not include treating wastewater.

Abbreviations:

CalEEMod - California Emissions Estimator Model
kWh - kilowatt hour
yr - year

References:

California Air Pollution Control Officers Association (CAPCOA). California Emissions Estimator Model (CalEEMod®), Version 2020.4.0. Available online at http://www.caleemod.com

Table 9
Mobile Fuel Consumption
Willow Village
Menlo Park, California

Year	Land Use	Fleet Type	Annual VMT[1]	Percent Gasoline Vehicle Miles[2]	Gasoline Miles per Gallon[2]	Percent Diesel Vehicle Miles[2]	Diesel Miles per Gallon[2]	Percent Natural Gas Vehicle Miles[2]	Natural Gas Miles per DEG[2]	Percent Electric Vehicle Miles[2]	Electric kWh per Mile[3]	Annual Fuel Consumption[4]			
			VMT/year									Gallons of Gasoline	Gallons of Diesel	DEG of CNG	kWh
Existing Conditions	Campus District	Cars	30,742,244	99.7%	26	0.3%	37	--	--	--	--	1,174,641	2,759	0	0
		Trucks	731,958	47.9%	8.2	51.0%	8.1	1.1%	4.7	--	--	42,923	46,189	1,709	0
		Shuttles	3,916,358	--	--	100%	7.9	--	--	--	--	0	493,816	0	0
		On-Demand	1,470,590	100.0%	28	--	--	--	--	--	--	52,255	0	0	0
											Existing Conditions Fuel Consumption:	**1,269,819**	**542,764**	**1,709**	**0**
Full Buildout	Campus District	Cars	48,565,689	99.7%	29	0.3%	38	--	--	--	--	1,693,066	3,323	0	0
		Trucks	1,101,879	45.1%	9.3	53.5%	9.6	1.3%	5.2	--	--	53,394	61,198	2,768	0
		Shuttles	3,916,358	--	--	100%	8.2	--	--	--	--	0	475,358	0	0
		On-Demand	2,259,721	100.0%	31	--	--	--	--	--	--	72,256	0	0	0
	Residential	San Mateo	25,517,254	90.8%	25	4.3%	10	0.1%	5.5	4.8%	0.30	916,656	108,039	5,122	370,026
	Retail	San Mateo	12,358,799	90.8%	25	4.3%	10	0.1%	5.5	4.8%	0.30	443,965	52,327	2,481	179,215
	Park	San Mateo	1,548,641	90.8%	25	4.3%	10	0.1%	5.5	4.8%	0.30	55,632	6,557	311	22,457
	Hotel	San Mateo	5,199,035	90.8%	25	4.3%	10	0.1%	5.5	4.8%	0.30	186,765	22,013	1,044	75,391
											Full Buildout Fuel Consumption:	**3,421,733**	**728,814**	**11,726**	**647,090**

Notes:

1. The VMT and fleet mixes are based on data provided by The Transportation Engineer, for detailed VMT calculations see Air Quality, Greenhouse Gas, and Health Risk Assessment Technical Report.
2. The percent of each fuel type for a given fleet and the fuel efficiency (miles per gallon, diesel miles per gallon, natural gas miles per DEG) were calculated based on EMFAC2021 for San Mateo County.
3. An average EV fuel economy of 0.30 kWh per mile was used. The fuel economy is based on electric fleet data from fueleconomy.gov. Available at: https://www.fueleconomy.gov/.
4. Fuel consumption is calculated by multiplying the VMT by the fuel efficiency and percent of vehicles for each fuel type.

Abbreviations:

VMT - Vehicle miles traveled
DEG - Diesel equivalent gallon
CNG- Compressed natural gas

References:

California Air Resources Board. EMFAC2021. Available at: https://arb.ca.gov/emfac/

Table 10
Fuel Reduction from Electric Vehicles
Willow Village
Menlo Park, California

Year	Land Use	Annual Electric VMT (mi/yr)[1]	Percent Replacing Gasoline Vehicle Miles[2]	Percent Replacing Diesel Vehicle Miles[2]	Replaced Vehicle Miles		Miles per Gallon		Fuel Reduction	
					Gasoline	Diesel	Gasoline	Diesel	(gallons of gasoline)	(gallons of diesel)
2019	Campus District	1,783,182	99.7%	0.3%	1,777,261	5,921	26	37	68,134	160
2027	Town Square and the Residential/Shopping District	4,404,570	90.8%	4.3%	3,999,357	187,472	25	10	158,225	18,649
	Campus District	9,752,026	99.7%	0.3%	9,726,961	25,065	29	38	339,969	667
								Total Fuel Reduction:	**430,060**	**19,156**

Notes:

1. The electric VMT and fleet mixes are based on the expected increase in eVMT that the project will contribute. For detailed EV calculations see Air Quality, Greenhouse Gas, and Health Risk Assessment Technical Report.
2. The percent of each fuel type for a given fleet were calculated based on EMFAC2021 for San Mateo County.
3. Replaced vehicles miles is found by multiplying the fleet percentage by fuel type by the expected eVMT due to the project.
4. Fuel reduction is calculated by dividing the replaced VMT by the fleet fuel efficiency derived from EMFAC2021.

Abbreviations:

VMT - Vehicle miles traveled
mi/yr - Miles per year

References:

California Air Resources Board. EMFAC2021. Available at: https://arb.ca.gov/emfac/

Table 11
Project Generator Fuel Consumption
Willow Village
Menlo Park, California

Project Generators

Scenario[1]	Generator Hours of Operation [2] (hrs)	Average Horsepower (hp)	Fuel Consumption[3] (gallons of diesel)
Existing Conditions	50	324	828
Project Full Buildout	650	1,171	38,893

Notes:

1. The table shows generator fuel consumption for an annual operation of 50 hours/year, the maximum allowable by the Airborne Toxics Control Measure (ATCM) for Stationary Compression Ignition Engines (17 CCR 93115).

2. Total annual hours of operation and average horsepower from Air Quality Technical Report Table 27.

3. Consistent with USEPA AP-42 diesel fuel data in Table 3.4.1, which cites an average brake-specific fuel consumption (BSFC) of 7,000 BTU/hp-hr, a heating value of 19,300 BTU/lb, and density of 7.1 lb/gal.

Abbreviations:

BTU - British Thermal Units
gal - gallon
hp - horsepower
hrs - hours
lb - pound

References:

California Air Resources Board. Airborne Toxic Control Measures (ATCM), 17 CCR § 93115. Available online at: https://ww2.arb.ca.gov/sites/default/files/classic/diesel/documents/finalreg2011.pdf

Table 12
Summary of Operational Energy Use
Willow Village
Menlo Park, California

Operational Energy Use	Existing Conditions[1]				Project[1]				Net Change[2]			
	Electricity (MWh/yr)	Natural Gas (MMBtu/yr)	Gasoline (gallons)	Diesel (gallons)	Electricity (MWh/yr)	Natural Gas (MMBtu/yr)	Gasoline (gallons)	Diesel (gallons)	Electricity (MWh/yr)	Natural Gas (MMBtu/yr)	Gasoline (gallons)	Diesel (gallons)
Building Energy Use	12,050	30,039	--	--	79,949	2,195	--	--	67,899	-27,844	--	--
Water Energy Use	1,434	--	--	--	740	--	--	--	-695	--	--	--
Mobile Energy Use	0	235	1,269,819	542,764	647	1,611	3,421,734	728,815	647	1,376	2,151,915	186,051
Electric Vehicle Charging Energy Use Reduction	--	--	-68,134	-160	--	--	-498,194	-19,316	--	--	-430,060	-19,156
Stationary Source Energy Use	--	--	--	828	--	--	--	38,893	--	--	--	38,065
Total	***13,484***	***30,274***	***1,201,685***	***543,432***	***81,336***	***3,806***	***2,923,540***	***748,392***	***67,851***	***-26,468***	***1,721,855***	***204,960***

Notes:

1. Energy use as calculated in previous tables and as discussed in the memorandum.
2. Net Change in energy use is the Existing Conditions energy use removed from the Project energy use.
3. A conversion factor of 1 diesel-equivalent gallon = 137,381 BTU was used to calculate the natural gas usage for the mobile sources, based on information provided by the US Energy Information Administration (EIA).

Abbreviations:

CalEEMod - California Emissions Estimator Model
MMBtu - million British Thermal Units
MWh - Megawatt-hour
yr - year

Reference:

US Energy Information Administration. Units and Calculators Explained. Available online at: https://www.eia.gov/energyexplained/units-and-calculators/

Appendix 3.5.2
Calculations

Existing			
electricity (Mwh)	13,484	**46009.32273**	
natural gas (Mmbtu)	30,274	**30,274**	
gasoline (gallons)	1,201,685	1.44546E+11	**144545.9**
diesel (gallons)	543,432	74657231592	**74657.23**
Total			295,486
Project			
electricity (Mwh)	81,336	**277529.9817**	
natural gas (Mmbtu)	3,806	**3,806**	
gasoline (gallons)	2,923,540	3.51661E+11	**351660.9**
diesel (gallons)	748,392	1.02815E+11	**102814.8**
Total			735,812
Net Change			
electricity (Mwh)	67,851	**231517.2468**	
natural gas (Mmbtu)	-26,468	**-26,468**	
gasoline (gallons)	1,721,855	2.07115E+11	**207115.1**
diesel (gallons)	204,960	28157609760	**28157.61**
Total			440,322

1 Mwh= 3.412142 MMBTU

3.412142

1 gallon gasoline= 120,286 BTU

120,286

1 gallon diesel= 137,381 BTU

137,381

Total proposed development (sf)
1,600,000
172,000
1,695,976
200,000
22,400
5,700
3,696,076

Electricity			
Water(kwh)	26,689	91.062868	
Off-road (kwh)	56,309	192.126308	
Total (kwh)	**82,998**	**283.189176**	

1 kwh= 0.003412 MMBTU

0.003412

1 gallon gasoline= 120,286 BTU

120,286

1 gallon diesel= 137,381 BTU

137,381

Diesel			
On-road (gallons)	480,639	66030666459	**66030.666**
Off-road (gallons)	2,389,804	3.28314E+11	**328313.66**
Total	**2,870,443**	**3.94344E+11**	**394344.33**

Gasoline			
On-road (gallons)	809,457	97366344702	97366.345
total (gallons)	**809,457**	**97366344702**	**97366.345**

total, total	**491993.86**

Appendix 3.7

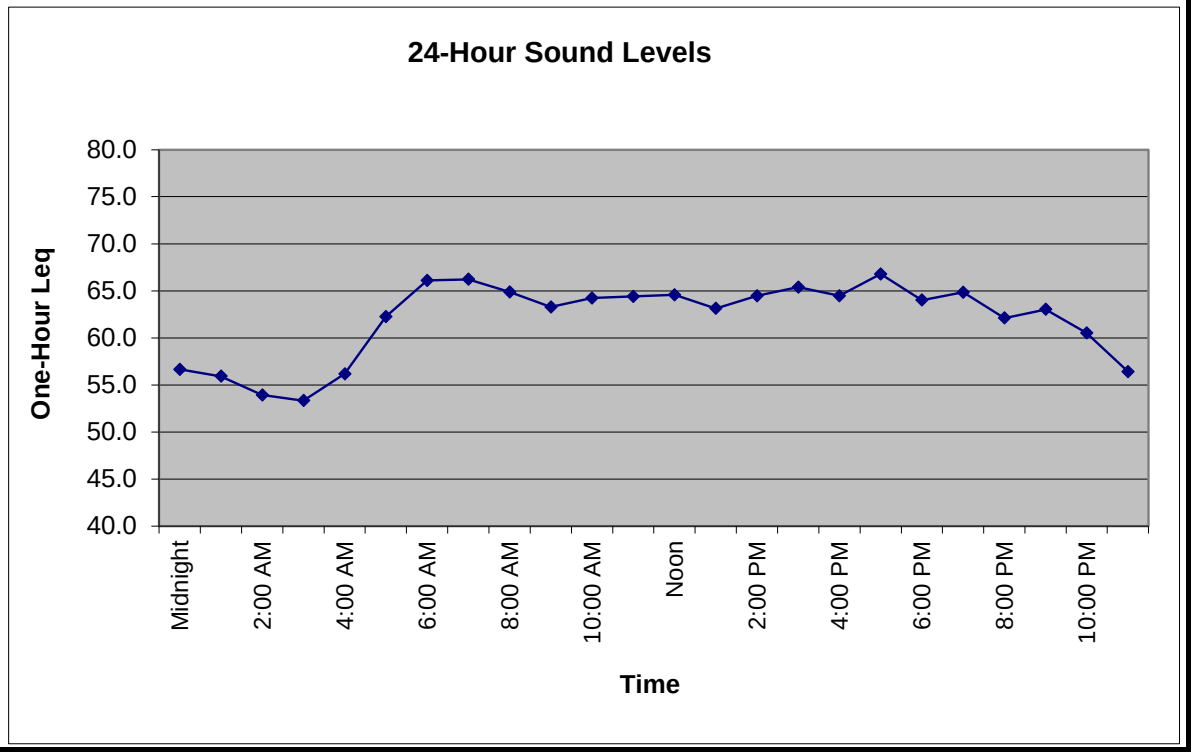
Noise Measurements and Data

Noise Appendix

Long Term Measurement Data

Ldn/CNEL Calculation Spreadsheet

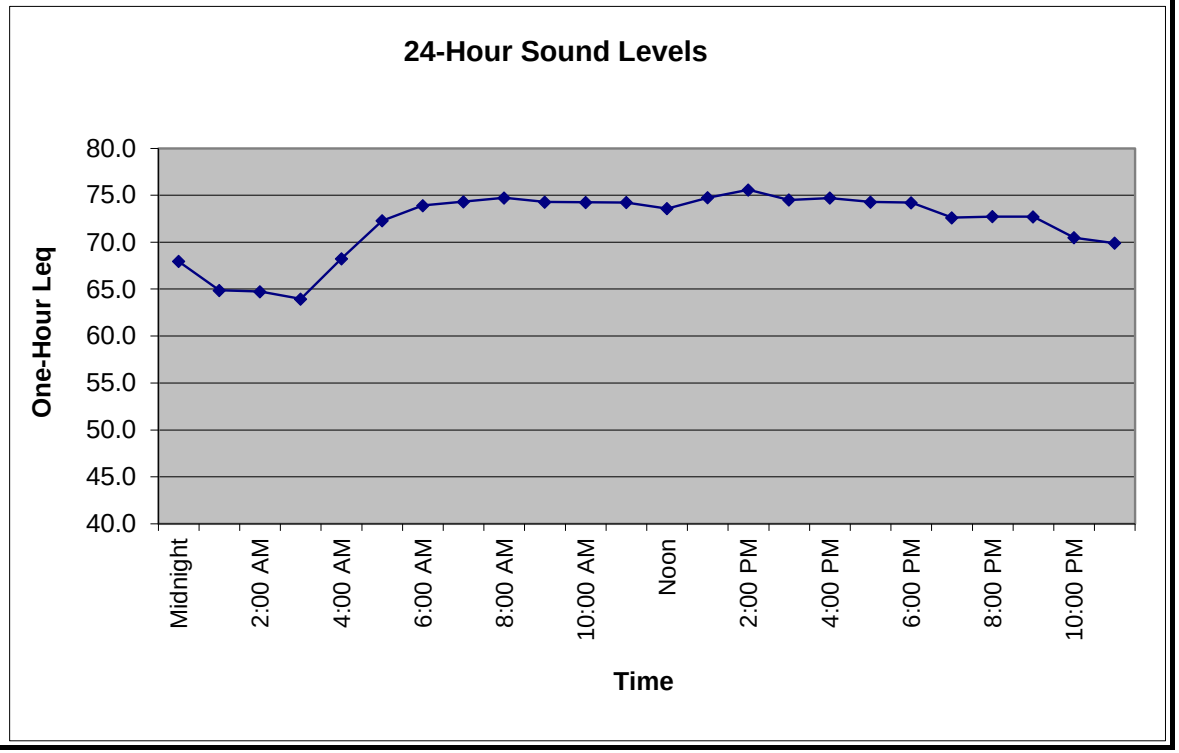
Project:	CitMenlo: Facebook Willow Village		Date:	7/27/2021	Analyst:	Schumaker, N		
Location:	LT-1							
	Tuesday				Worst Hour	Ldn minus	CNEL minus	
Time	7/27/2021	Leq(24)	Ldn	CNEL	Leq	Worst Hour Leq	Ldn	Day
Midnight	56.7	63.3	67.4	67.9	66.8	0.7	0.4	Evening
1:00 AM	55.9		1.2	1.7				Night
2:00 AM	53.9							
3:00 AM	53.3							
4:00 AM	56.2							
5:00 AM	62.3							
6:00 AM	66.1							
7:00 AM	66.2							
8:00 AM	64.9							
9:00 AM	63.3							
10:00 AM	64.2							
11:00 AM	64.4							
Noon	64.6							
1:00 PM	63.1							
2:00 PM	64.5							
3:00 PM	65.4							
4:00 PM	64.5							
5:00 PM	66.8							
6:00 PM	64.0							
7:00 PM	64.8							
8:00 PM	62.1							
9:00 PM	63.0							
10:00 PM	60.5							
11:00 PM	56.4							



Ldn	67.4
Worst Hour Leq	66.8
Lowest Hour LEQ	53.3
12-hour Leq	64.8

Ldn/CNEL Calculation Spreadsheet

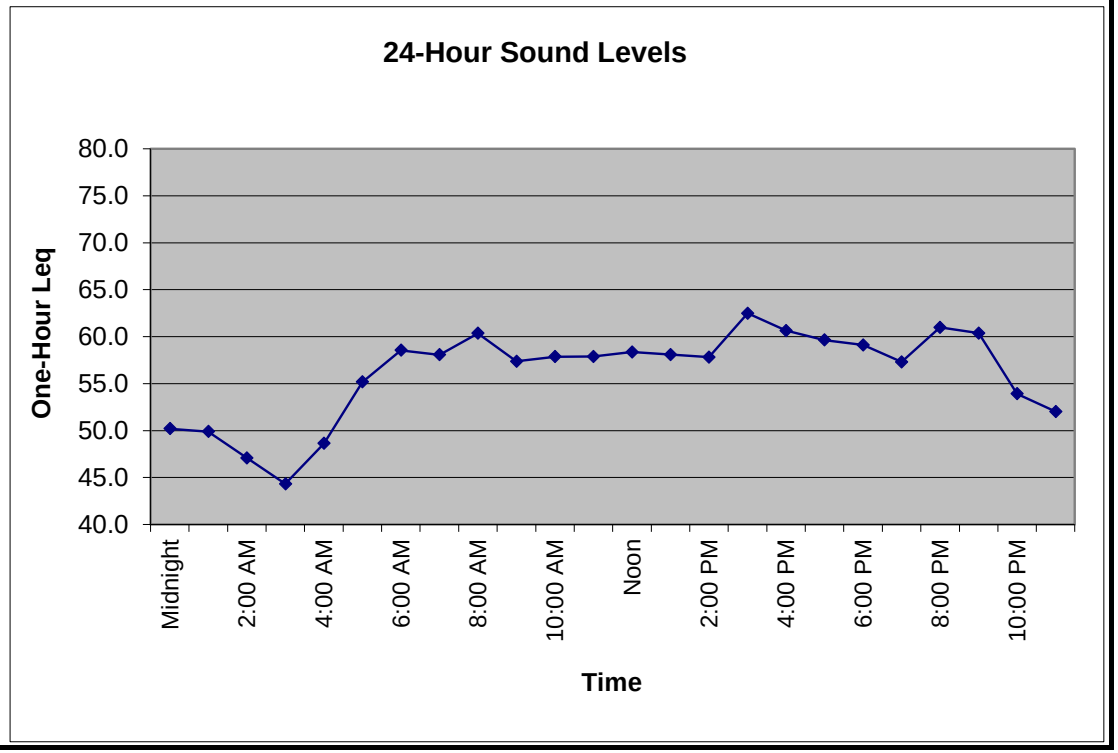
Project:	CitMenlo: Facebook Willow Village		Date:	7/27/2021	Analyst:	Schumaker, N		
Location:	LT-2							
	Tuesday				Worst Hour	Ldn minus	CNEL minus	
Time	7/27/2021	Leq(24)	Ldn	CNEL	Leq	Worst Hour Leq	Ldn	Day
Midnight	68.0	73.0	77.1	77.5	75.6	1.5	0.4	Evening
1:00 AM	64.9		2.8	3.2				Night
2:00 AM	64.7							
3:00 AM	64.0							
4:00 AM	68.2							
5:00 AM	72.3							
6:00 AM	73.9							
7:00 AM	74.3							
8:00 AM	74.7							
9:00 AM	74.3							
10:00 AM	74.2							
11:00 AM	74.2							
Noon	73.6							
1:00 PM	74.7							
2:00 PM	75.6							
3:00 PM	74.5							
4:00 PM	74.7							
5:00 PM	74.3							
6:00 PM	74.2							
7:00 PM	72.6							
8:00 PM	72.7							
9:00 PM	72.7							
10:00 PM	70.5							
11:00 PM	69.9							



Ldn	77.1
Worst Hour Leq	75.6
Lowest Hour LEQ	64.0
12-hour Leq	74.5

Ldn/CNEL Calculation Spreadsheet

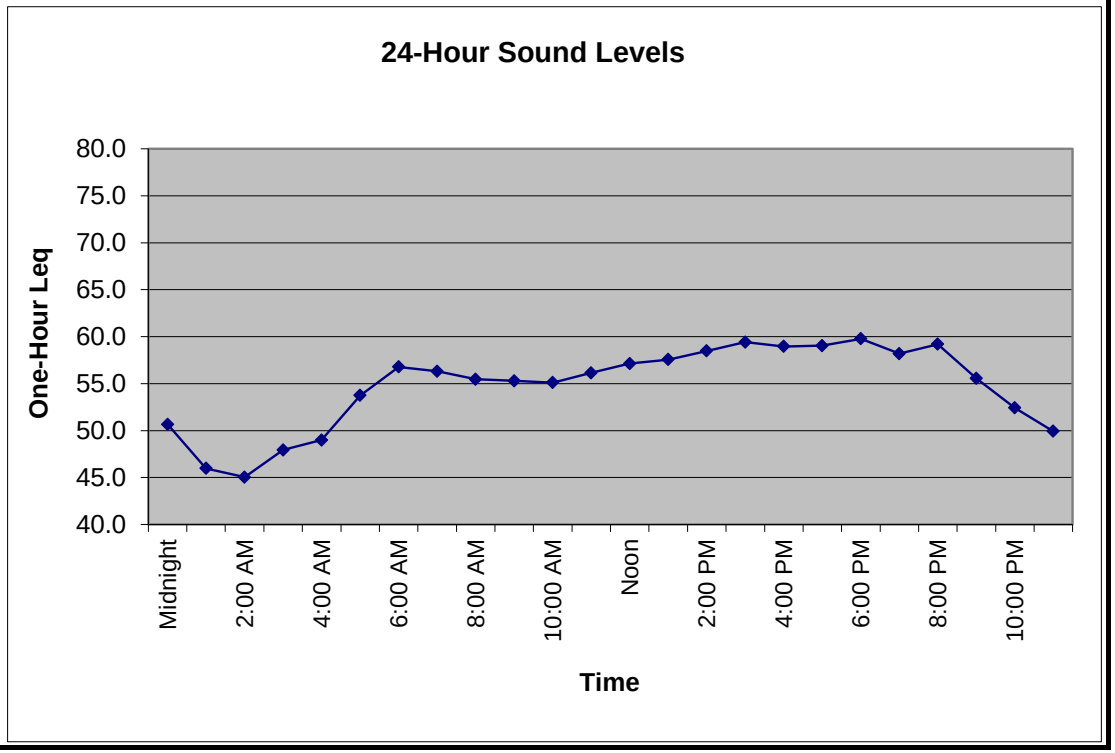
Project:	CitMenlo: Facebook Willow Village		Date:	7/27/2021	Analyst:	Schumaker, N		
Location:	LT-3							
	Tuesday				Worst Hour	Ldn minus	CNEL minus	
Time	7/27/2021	Leq(24)	Ldn	CNEL	Leq	Worst Hour Leq	Ldn	Day
Midnight	50.2	57.9	61.1	61.9	62.5	-1.4	0.8	Evening
1:00 AM	49.9		3.0	3.8				Night
2:00 AM	47.1							
3:00 AM	44.3							
4:00 AM	48.6							
5:00 AM	55.2							
6:00 AM	58.5							
7:00 AM	58.1							
8:00 AM	60.4							
9:00 AM	57.4							
10:00 AM	57.9							
11:00 AM	57.9							
Noon	58.4							
1:00 PM	58.1							
2:00 PM	57.8							
3:00 PM	62.5							
4:00 PM	60.6							
5:00 PM	59.6							
6:00 PM	59.1							
7:00 PM	57.3							
8:00 PM	61.0							
9:00 PM	60.4							
10:00 PM	53.9							
11:00 PM	52.0							



Ldn	61.1
Worst Hour Leq	62.5
Lowest Hour LEQ	44.3
12-hour Leq	59.3

Ldn/CNEL Calculation Spreadsheet

Project:	CitMenlo: Facebook Willow Village		Date:	7/27/2021	Analyst:	Schumaker, N		
Location:	LT-4							
	Tuesday				Worst Hour	Ldn minus	CNEL minus	
Time	7/27/2021	Leq(24)	Ldn	CNEL	Leq	Worst Hour Leq	Ldn	Day
Midnight	50.7	56.3	59.6	60.4	59.8	-0.2	0.7	Evening
1:00 AM	46.0		3.3	4.0				Night
2:00 AM	45.0							
3:00 AM	47.9							
4:00 AM	49.0							
5:00 AM	53.8							
6:00 AM	56.8							
7:00 AM	56.3							
8:00 AM	55.5							
9:00 AM	55.3							
10:00 AM	55.1							
11:00 AM	56.2							
Noon	57.1							
1:00 PM	57.6							
2:00 PM	58.5							
3:00 PM	59.4							
4:00 PM	59.0							
5:00 PM	59.0							
6:00 PM	59.8							
7:00 PM	58.2							
8:00 PM	59.2							
9:00 PM	55.6							
10:00 PM	52.4							
11:00 PM	49.9							



Ldn	59.6
Worst Hour Leq	59.8
Lowest Hour LEQ	45.0
12-hour Leq	57.7

Noise Appendix

Short Term Measurement Data

ST-1 Summary

Summary

File Name on Meter	LxT_Data.012.s
File Name on PC	LxT_0004004-20210727 133200-LxT_Data.012.ldbin
Serial Number	0004004
Model	SoundTrack LxT®
Firmware Version	2.404
User	
Location	
Job Description	
Note	

Measurement

Description	
Start	2021-07-27 13:32:00
Stop	2021-07-27 13:47:01
Duration	00:15:00.7
Run Time	00:15:00.7
Pause	00:00:00.0
Pre-Calibration	2021-07-27 13:12:05
Post-Calibration	None
Calibration Deviation	---

Overall Settings

RMS Weight	A Weighting
Peak Weight	Z Weighting
Detector	Slow
Preamplifier	PRMLxT1L
Microphone Correction	Off
Integration Method	Linear
Overload	123.3 dB

	A	**C**	**Z**
Under Range Peak	79.9	76.9	**81.9** dB
Under Range Limit	**24.5**	25.8	32.1 dB
Noise Floor	15.4	16.7	23.0 dB

Results

LAeq	65.2
LAE	94.7
EA	327.872 µPa²h
EA8	10.484 mPa²h
EA40	52.419 mPa²h
LZpeak (max)	2021-07-27 13:35:08 103.6 dB
LASmax	2021-07-27 13:44:12 78.9 dB
LASmin	2021-07-27 13:46:25 54.3 dB
SEA	-99.9 dB
LAS > 85.0 dB (Exceedance Counts / Duration)	0 0.0 s
LAS > 115.0 dB (Exceedance Counts / Duration)	0 0.0 s
LZpeak > 135.0 dB (Exceedance Counts / Duration)	0 0.0 s
LZpeak > 137.0 dB (Exceedance Counts / Duration)	0 0.0 s
LZpeak > 140.0 dB (Exceedance Counts / Duration)	0 0.0 s

Community Noise	**Ldn**	**LDay 07:00-22:00**	**LNight 22:00-07:00**	**Lden**	**LDay 07:00-19:00**	**LEvening 19:00-22:00**
	65.2	65.2	-99.9	65.2	65.2	-99.9

LCeq	73.0 dB
LAeq	65.2 dB
LCeq - LAeq	7.9 dB
LAleq	67.1 dB
LAeq	65.2 dB
LAleq - LAeq	2.0 dB

	A		**C**		**Z**	
	dB	**Time Stamp**	**dB**	**Time Stamp**	**dB**	**Time Stamp**
Leq	65.2		73.0			
LS(max)	78.9	2021/07/27 13:44:12				
LS(min)	54.3	2021/07/27 13:46:25				
LPeak(max)					103.6	2021/07/27 13:35:08

Overload Count	0
Overload Duration	0.0 s

Dose Settings

Dose Name	OSHA-1	OSHA-2
Exchange Rate	5	5 dB
Threshold	90	80 dB
Criterion Level	90	90 dB

Criterion Duration	8	8 h

Results		
Dose	-99.94	-99.94 %
Projected Dose	-99.94	-99.94 %
TWA (Projected)	-99.9	-99.9 dB
TWA (t)	-99.9	-99.9 dB
Lep (t)	50.1	50.1 dB

Statistics	
LA5.00	69.6 dB
LA10.00	67.7 dB
LA33.30	65.2 dB
LA50.00	63.8 dB
LA66.60	62.5 dB
LA90.00	58.4 dB

Calibration History

Preamp	**Date**	**dB re. 1V/Pa**	**6.3**	**8.0**	**10.0**
PRMLxT1L	2021-07-27 13:12:05	-29.61	43.30	47.93	50.24

ST-2 Summary

Summary

File Name on Meter	LxT_Data.016.s
File Name on PC	LxT_0004004-20210728 121400-LxT_Data.016.ldbin
Serial Number	0004004
Model	SoundTrack LxT®
Firmware Version	2.404
User	
Location	
Job Description	
Note	

Measurement

Description	
Start	2021-07-28 12:14:00
Stop	2021-07-28 12:29:01
Duration	00:15:00.6
Run Time	00:15:00.6
Pause	00:00:00.0
Pre-Calibration	2021-07-28 12:11:25
Post-Calibration	None
Calibration Deviation	---

Overall Settings

RMS Weight	A Weighting
Peak Weight	Z Weighting
Detector	Slow
Preamplifier	PRMLxT1L
Microphone Correction	Off
Integration Method	Linear
Overload	123.4 dB

	A	**C**	**Z**
Under Range Peak	79.9	76.9	**81.9** dB
Under Range Limit	**24.5**	25.8	32.2 dB
Noise Floor	15.4	16.7	23.0 dB

Results

LAeq	67.3
LAE	96.9
EA	542.504 µPa²h
EA8	17.349 mPa²h
EA40	86.743 mPa²h
LZpeak (max)	2021-07-28 12:15:29 105.5 dB
LASmax	2021-07-28 12:19:06 79.1 dB
LASmin	2021-07-28 12:18:06 47.5 dB
SEA	-99.9 dB
LAS > 85.0 dB (Exceedance Counts / Duration)	0 0.0 s
LAS > 115.0 dB (Exceedance Counts / Duration)	0 0.0 s
LZpeak > 135.0 dB (Exceedance Counts / Duration)	0 0.0 s
LZpeak > 137.0 dB (Exceedance Counts / Duration)	0 0.0 s
LZpeak > 140.0 dB (Exceedance Counts / Duration)	0 0.0 s

Community Noise	**Ldn**	**LDay 07:00-22:00**	**LNight 22:00-07:00**	**Lden**	**LDay 07:00-19:00**	**LEvening 19:00-22:00**
	67.3	67.3	-99.9	67.3	67.3	-99.9

LCeq	74.1 dB
LAeq	67.3 dB
LCeq - LAeq	6.8 dB
LAleq	69.0 dB
LAeq	67.3 dB
LAleq - LAeq	1.7 dB

	A		**C**		**Z**	
	dB	**Time Stamp**	**dB**	**Time Stamp**	**dB**	**Time Stamp**
Leq	67.3		74.1			
LS(max)	79.1	2021/07/28 12:19:06				
LS(min)	47.5	2021/07/28 12:18:06				
LPeak(max)					105.5	2021/07/28 12:15:29

Overload Count	0
Overload Duration	0.0 s

Dose Settings

Dose Name	OSHA-1	OSHA-2
Exchange Rate	5	5 dB
Threshold	90	80 dB
Criterion Level	90	90 dB

Criterion Duration	8	8	h

Results			
Dose	-99.94	-99.94	%
Projected Dose	-99.94	-99.94	%
TWA (Projected)	-99.9	-99.9	dB
TWA (t)	-99.9	-99.9	dB
Lep (t)	52.3	52.3	dB

Statistics		
LA5.00	72.8	dB
LA10.00	71.4	dB
LA33.30	67.6	dB
LA50.00	63.9	dB
LA66.60	58.7	dB
LA90.00	53.3	dB

Calibration History

Preamp	**Date**	**dB re. 1V/Pa**	**6.3**	**8.0**	**10.0**
PRMLxT1L	2021-07-28 12:11:25	-29.64	56.50	56.62	47.66

ST-3 Summary

Summary

File Name on Meter	LxT_Data.014.s
File Name on PC	LxT_0004004-20210727 144500-LxT_Data.014.ldbin
Serial Number	0004004
Model	SoundTrack LxT®
Firmware Version	2.404
User	
Location	
Job Description	
Note	

Measurement

Description	
Start	2021-07-27 14:45:00
Stop	2021-07-27 15:00:02
Duration	00:15:01.8
Run Time	00:15:01.8
Pause	00:00:00.0
Pre-Calibration	2021-07-27 14:32:09
Post-Calibration	None
Calibration Deviation	---

Overall Settings

RMS Weight	A Weighting
Peak Weight	Z Weighting
Detector	Slow
Preamplifier	PRMLxT1L
Microphone Correction	Off
Integration Method	Linear
Overload	123.4 dB

	A	**C**	**Z**	
Under Range Peak	79.9	76.9	**81.9**	dB
Under Range Limit	**24.5**	25.8	32.2	dB
Noise Floor	15.4	16.7	23.0	dB

Results

LAeq	55.8	
LAE	85.4	
EA	38.385	µPa²h
EA8	1.226	mPa²h
EA40	6.129	mPa²h
LZpeak (max)	2021-07-27 14:52:05	98.9 dB
LASmax	2021-07-27 14:55:32	74.3 dB
LASmin	2021-07-27 14:46:34	48.2 dB
SEA	-99.9	dB
LAS > 85.0 dB (Exceedance Counts / Duration)	0	0.0 s
LAS > 115.0 dB (Exceedance Counts / Duration)	0	0.0 s
LZpeak > 135.0 dB (Exceedance Counts / Duration)	0	0.0 s
LZpeak > 137.0 dB (Exceedance Counts / Duration)	0	0.0 s
LZpeak > 140.0 dB (Exceedance Counts / Duration)	0	0.0 s

Community Noise	**Ldn**	**LDay 07:00-22:00**	**LNight 22:00-07:00**	**Lden**	**LDay 07:00-19:00**	**LEvening 19:00-22:00**
	55.8	55.8	-99.9	55.8	55.8	-99.9

LCeq	64.6	dB
LAeq	55.8	dB
LCeq - LAeq	8.8	dB
LAleq	60.6	dB
LAeq	55.8	dB
LAleq - LAeq	4.8	dB

	A		**C**		**Z**	
	dB	**Time Stamp**	**dB**	**Time Stamp**	**dB**	**Time Stamp**
Leq	55.8		64.6			
LS(max)	74.3	2021/07/27 14:55:32				
LS(min)	48.2	2021/07/27 14:46:34				
LPeak(max)					98.9	2021/07/27 14:52:05

Overload Count	0
Overload Duration	0.0 s

Dose Settings

Dose Name	OSHA-1	OSHA-2
Exchange Rate	5	5 dB
Threshold	90	80 dB
Criterion Level	90	90 dB

Criterion Duration	8	8 h

Results		
Dose	-99.94	-99.94 %
Projected Dose	-99.94	-99.94 %
TWA (Projected)	-99.9	-99.9 dB
TWA (t)	-99.9	-99.9 dB
Lep (t)	40.8	40.8 dB

Statistics	
LA5.00	58.6 dB
LA10.00	55.1 dB
LA33.30	52.6 dB
LA50.00	52.1 dB
LA66.60	51.5 dB
LA90.00	50.3 dB

Calibration History

Preamp	**Date**	**dB re. 1V/Pa**	**6.3**	**8.0**	**10.0**
PRMLxT1L	2021-07-27 14:32:07	-29.64	58.44	59.58	52.38

ST-4 Summary

Summary

File Name on Meter	LxT_Data.013.s
File Name on PC	LxT_0004004-20210727 140800-LxT_Data.013.ldbin
Serial Number	0004004
Model	SoundTrack LxT®
Firmware Version	2.404
User	
Location	
Job Description	
Note	

Measurement

Description	
Start	2021-07-27 14:08:00
Stop	2021-07-27 14:23:01
Duration	00:15:00.5
Run Time	00:15:00.5
Pause	00:00:00.0
Pre-Calibration	2021-07-27 14:04:38
Post-Calibration	None
Calibration Deviation	---

Overall Settings

RMS Weight	A Weighting
Peak Weight	Z Weighting
Detector	Slow
Preamplifier	PRMLxT1L
Microphone Correction	Off
Integration Method	Linear
Overload	123.4 dB

	A	**C**	**Z**
Under Range Peak	80.0	77.0	**82.0** dB
Under Range Limit	**24.5**	25.8	32.2 dB
Noise Floor	15.4	16.7	23.1 dB

Results

LAeq	55.9
LAE	85.5
EA	39.245 µPa²h
EA8	1.255 mPa²h
EA40	6.276 mPa²h
LZpeak (max)	2021-07-27 14:20:59 102.6 dB
LASmax	2021-07-27 14:15:16 71.5 dB
LASmin	2021-07-27 14:19:59 49.4 dB
SEA	-99.9 dB
LAS > 85.0 dB (Exceedance Counts / Duration)	0 0.0 s
LAS > 115.0 dB (Exceedance Counts / Duration)	0 0.0 s
LZpeak > 135.0 dB (Exceedance Counts / Duration)	0 0.0 s
LZpeak > 137.0 dB (Exceedance Counts / Duration)	0 0.0 s
LZpeak > 140.0 dB (Exceedance Counts / Duration)	0 0.0 s

Community Noise	**Ldn**	**LDay 07:00-22:00**	**LNight 22:00-07:00**	**Lden**	**LDay 07:00-19:00**	**LEvening 19:00-22:00**
	55.9	55.9	-99.9	55.9	55.9	-99.9

LCeq	68.3 dB
LAeq	55.9 dB
LCeq - LAeq	12.4 dB
LAleq	57.7 dB
LAeq	55.9 dB
LAleq - LAeq	1.8 dB

	A		**C**		**Z**	
	dB	**Time Stamp**	**dB**	**Time Stamp**	**dB**	**Time Stamp**
Leq	55.9		68.3			
LS(max)	71.5	2021/07/27 14:15:16				
LS(min)	49.4	2021/07/27 14:19:59				
LPeak(max)					102.6	2021/07/27 14:20:59

Overload Count	0
Overload Duration	0.0 s

Dose Settings

Dose Name	OSHA-1	OSHA-2
Exchange Rate	5	5 dB
Threshold	90	80 dB
Criterion Level	90	90 dB

Criterion Duration	8	8	h

Results			
Dose	-99.94	-99.94	%
Projected Dose	-99.94	-99.94	%
TWA (Projected)	-99.9	-99.9	dB
TWA (t)	-99.9	-99.9	dB
Lep (t)	40.9	40.9	dB

Statistics		
LA5.00	60.3	dB
LA10.00	57.7	dB
LA33.30	54.6	dB
LA50.00	53.4	dB
LA66.60	52.3	dB
LA90.00	50.8	dB

Calibration History

Preamp	**Date**	**dB re. 1V/Pa**	**6.3**	**8.0**	**10.0**
PRMLxT1L	2021-07-27 14:04:38	-29.68	77.57	67.41	50.35

ST-5 Summary

Summary

File Name on Meter	LxT_Data.015.s
File Name on PC	LxT_0004004-20210728 114400-LxT_Data.015.ldbin
Serial Number	0004004
Model	SoundTrack LxT®
Firmware Version	2.404
User	
Location	
Job Description	
Note	

Measurement

Description	
Start	2021-07-28 11:44:00
Stop	2021-07-28 11:59:01
Duration	00:15:00.6
Run Time	00:15:00.6
Pause	00:00:00.0
Pre-Calibration	2021-07-28 11:38:14
Post-Calibration	None
Calibration Deviation	---

Overall Settings

RMS Weight	A Weighting
Peak Weight	Z Weighting
Detector	Slow
Preamplifier	PRMLxT1L
Microphone Correction	Off
Integration Method	Linear
Overload	123.4 dB

	A	**C**	**Z**
Under Range Peak	80.0	77.0	**82.0** dB
Under Range Limit	**24.5**	25.8	32.2 dB
Noise Floor	15.4	16.7	23.1 dB

Results

LAeq	59.5
LAE	89.1
EA	90.127 µPa²h
EA8	2.882 mPa²h
EA40	14.411 mPa²h
LZpeak (max)	2021-07-28 11:57:22 98.8 dB
LASmax	2021-07-28 11:54:26 72.0 dB
LASmin	2021-07-28 11:52:28 45.4 dB
SEA	-99.9 dB
LAS > 85.0 dB (Exceedance Counts / Duration)	0 0.0 s
LAS > 115.0 dB (Exceedance Counts / Duration)	0 0.0 s
LZpeak > 135.0 dB (Exceedance Counts / Duration)	0 0.0 s
LZpeak > 137.0 dB (Exceedance Counts / Duration)	0 0.0 s
LZpeak > 140.0 dB (Exceedance Counts / Duration)	0 0.0 s

Community Noise	**Ldn**	**LDay 07:00-22:00**	**LNight 22:00-07:00**	**Lden**	**LDay 07:00-19:00**	**LEvening 19:00-22:00**
	59.5	59.5	-99.9	59.5	59.5	-99.9

LCeq	71.7 dB
LAeq	59.5 dB
LCeq - LAeq	12.1 dB
LAleq	60.7 dB
LAeq	59.5 dB
LAleq - LAeq	1.2 dB

	A		**C**		**Z**	
	dB	**Time Stamp**	**dB**	**Time Stamp**	**dB**	**Time Stamp**
Leq	59.5		71.7			
LS(max)	72.0	2021/07/28 11:54:26				
LS(min)	45.4	2021/07/28 11:52:28				
LPeak(max)					98.8	2021/07/28 11:57:22

Overload Count	0
Overload Duration	0.0 s

Dose Settings

Dose Name	OSHA-1	OSHA-2
Exchange Rate	5	5 dB
Threshold	90	80 dB
Criterion Level	90	90 dB

Criterion Duration	8	8 h

Results		
Dose	-99.94	-99.94 %
Projected Dose	-99.94	-99.94 %
TWA (Projected)	-99.9	-99.9 dB
TWA (t)	-99.9	-99.9 dB
Lep (t)	44.5	44.5 dB

Statistics	
LA5.00	63.6 dB
LA10.00	62.6 dB
LA33.30	59.8 dB
LA50.00	57.9 dB
LA66.60	55.8 dB
LA90.00	52.7 dB

Calibration History

Preamp	**Date**	**dB re. 1V/Pa**	**6.3**	**8.0**	**10.0**
PRMLxT1L	2021-07-28 11:38:14	-29.71	55.17	49.54	53.22

Noise Appendix

Field Sheets

NOISE MEASUREMENT SITE INFORMATION SHEET

Jones & Stokes

PROJECT NAME: Menlo Park Projects

PROJECT #:

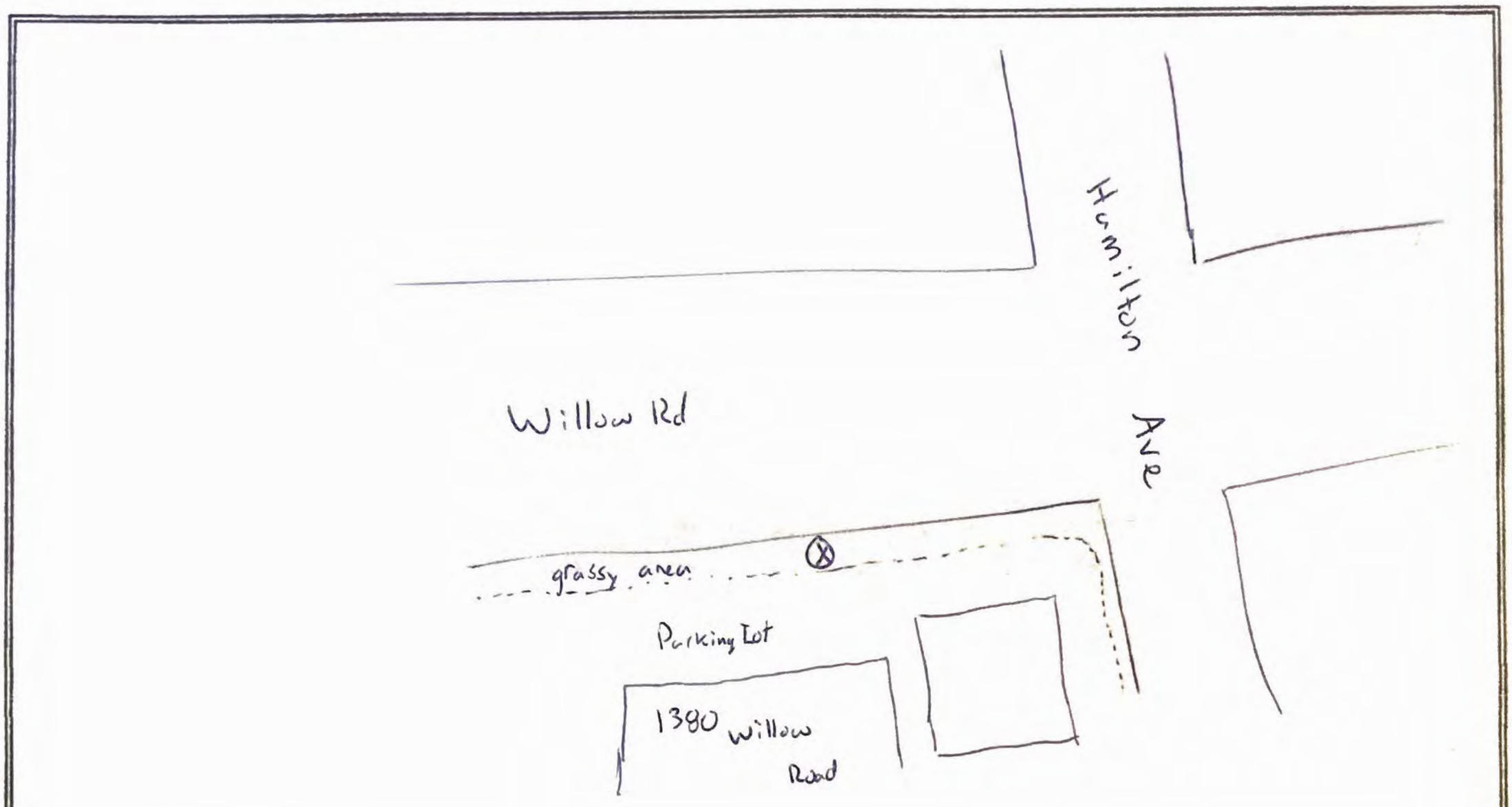
SITE NUMBER: ST-1

DATE/TIME: 2021 07 27

LOCATION/ADDRESS: 1380 Willow Road

ENGINEERS: Matsui / Schumaker

SITE SKETCH: Show microphone location, nearby residences/buildings, potential reflective surfaces, project roadways, local roadways, driveways, ground type, trees. Indicate reference distances between objects, arrows showing wind direction, North, and camera locations/directions. Describe the line-of-sight and topography/elevation changes relative to noise sources.



WEATHER DATA: (temperature, wind speed/direction, sky conditions, relative humidity)

79°F	2.6 mph	Blue skies mostly clear	57%

EQUIPMENT DATA: (sound level meter, microphone, preamp, calibrator, factory cal. date)

LXT

ESTIMATED CONSTRUCTION DATE OF RESIDENCES: (Pre-1978, or new construction)

POSTED SPEED: COMMENTS:

TRAFFIC COUNTS:

Roadway/Direction	Autos	Medium	Heavy	Speed	Start Time	Duration

NOISE MEASUREMENT LOG SHEET (20)

Jones & Stokes

PROJECT NAME: Menlo Park Projects
PROJECT #:
SITE NUMBER: ST-1
DATE/TIME: 2021 07 27 13:32
LOCATION/ADDRESS: 1380 willow Rd
ENGINEERS: Matsui / Schumaker

#	Minute Starting	Measured Leq (dBA)	O or X	Autos	Medium Trucks	Heavy Trucks	Other Noise Sources/Comments (include SLM equipment, Calibration Data)
1	13:32						
2	13:33						helicopter fly by.
3	13:34						drilling noises from across willow Rd
4	13:35						
5	13:36						
6	13:37						office door shuts heavily
7	13:38						
8	13:39						Small plane fly by
9	13:40						
10	13:41						group talking as walking by
11	13:42						
12	13:43						Small plane fly by
13	13:44						
14	13:45						
15	13:46						
16							decent amount of traffic throughout
17							LXT_Data.012
18							
19							
20							

Leq	65.2
Lmax	78.4
Lmin	54.3
L10	67.7
L33	65.2
L50	63.8
L90	58.4

Overall Leq (Include "O" minutes, Exclude "X" minutes) = dBA

Subset Leq (Exclude "O" and "X" minutes) = dBA

"O" = other characteristic sources that contributed to the Leq

"X" = exclude from Leq calculation; a non-typical source contaminated the measurement

NOISE MEASUREMENT SITE INFORMATION SHEET

Jones & Stokes

PROJECT NAME: Menlo Park

SITE NUMBER: ST-2

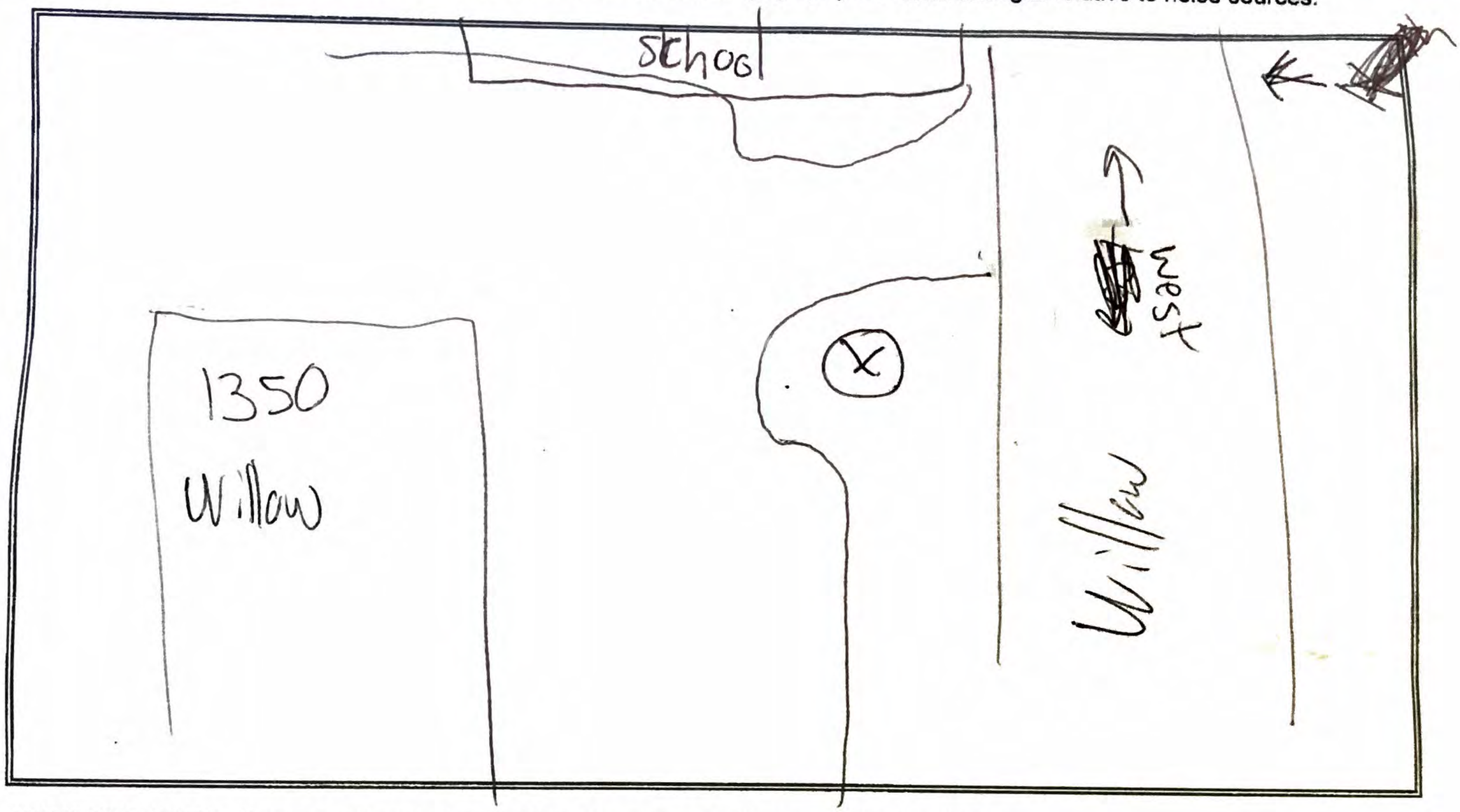
LOCATION/ADDRESS: 1350 Willow, SW corner

PROJECT #:

DATE/TIME: 7/20/21

ENGINEERS: C. Matsui

SITE SKETCH: Show microphone location, nearby residences/buildings, potential reflective surfaces, project roadways, local roadways, driveways, ground type, trees. Indicate reference distances between objects, arrows showing wind direction, North, and camera locations/directions. Describe the line-of-sight and topography/elevation changes relative to noise sources.



WEATHER DATA: (temperature, wind speed/direction, sky conditions, relative humidity)

75° F, 1.9mph, mostly sunny, 67-68%

EQUIPMENT DATA: (sound level meter, microphone, preamp, calibrator, factory cal. date)

LxT

ESTIMATED CONSTRUCTION DATE OF RESIDENCES: (Pre-1978, or new construction)

POSTED SPEED: 40 mph (Willow Rd)

COMMENTS:

TRAFFIC COUNTS:

Roadway/Direction	Autos	Medium	Heavy	Speed	Start Time	Duration

NOISE MEASUREMENT LOG SHEET (20)

Jones & Stokes

PROJECT NAME: Menlo Park
SITE NUMBER: ST-2
LOCATION/ADDRESS: 350 Willow, SW corner

PROJECT #:
DATE/TIME: 7/28/21
ENGINEERS: C. Matsui

#	Minute Starting	Measured Leq (dBA)	O or X	Autos	Medium Trucks	Heavy Trucks	Other Noise Sources/Comments (include SLM equipment, Calibration Data)
1	1214						
2	1215						
3	1216						vehicle reverse alarm ↓
4	1217						
5	1218						
6	1219						
7	1220						car start nearby
8	1221						
9	1222						
10	1223						car passby in lot
11	1224						
12	1225						
13	1226						
14	1227						vehicle reverse alarm
15	1228						rear passby in lot
16							LxT_Data.016
17							
18							
19							
20							

Leq	67.3
Lmax	79.1
Lmin	47.5
L10	71.4
L33	67.6
L50	63.9
L90	53.3

Overall Leq (Include "O" minutes, Exclude "X" minutes) = _____ dBA

Subset Leq (Exclude "O" and "X" minutes) = _____ dBA

"O" = other characteristic sources that contributed to the Leq

"X" = exclude from Leq calculation; a non-typical source contaminated the measurement

NOISE MEASUREMENT SITE INFORMATION SHEET

Jones & Stokes

PROJECT NAME: Menlo Park

PROJECT #:

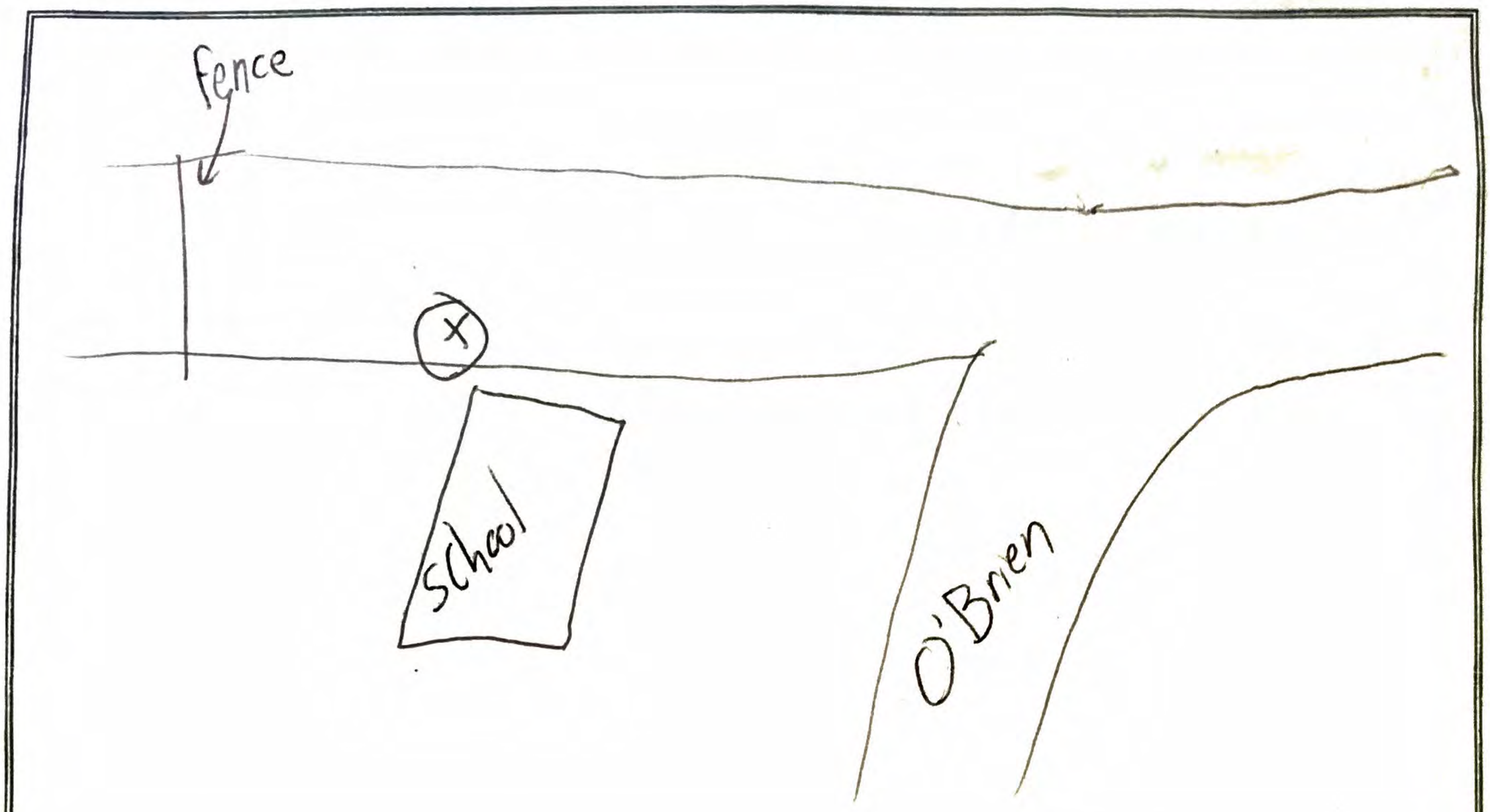
SITE NUMBER: ST-3

DATE/TIME: 7/27/21

LOCATION/ADDRESS: Near school

ENGINEERS: C. Matsui

SITE SKETCH: Show microphone location, nearby residences/buildings, potential reflective surfaces, project roadways, local roadways, driveways, ground type, trees. Indicate reference distances between objects, arrows showing wind direction, North, and camera locations/directions. Describe the line-of-sight and topography/elevation changes relative to noise sources.



WEATHER DATA: (temperature, wind speed/direction, sky conditions, relative humidity)

79°F, 1.3mph, Mostly clear 55%

EQUIPMENT DATA: (sound level meter, microphone, preamp, calibrator, factory cal. date)

LxT

ESTIMATED CONSTRUCTION DATE OF RESIDENCES: (Pre-1978, or new construction)

POSTED SPEED: 30 mph

COMMENTS:

TRAFFIC COUNTS: (O'Brien)

Roadway/Direction	Autos	Medium	Heavy	Speed	Start Time	Duration

NOISE MEASUREMENT LOG SHEET (20)

Jones & Stokes

PROJECT NAME: Menlo Park
SITE NUMBER: ST-3
LOCATION/ADDRESS: Near school

PROJECT #:
DATE/TIME: 7/27/21
ENGINEERS: C. Matsui

#	Minute Starting	Measured Leq (dBA)	O or X	Autos	Medium Trucks	Heavy Trucks	Other Noise Sources/Comments (include SLM equipment, Calibration Data)
1	14:45						
2	14:46						Horn
3	14:47						
4	14:48						commercial airliner
5	14:49						
6	14:50						
7	14:51						
8	14:52						commercial airliner
9	14:53						
10	14:54						
11	14:55						very loud motorcycle
12	14:56						
13	14:57						
14	14:58						voices
15	14:59						Machine hum throughout
16							LT_Data.014
17							
18							
19							
20							

Leq	55.8
Lmax	74.3
Lmin	48.2
L10	55.8
L33	52.6
L50	52.1
L90	50.3

Overall Leq (Include "O" minutes, Exclude "X" minutes) = dBA

Subset Leq (Exclude "O" and "X" minutes) = dBA

"O" = other characteristic sources that contributed to the Leq

"X" = exclude from Leq calculation; a non-typical source contaminated the measurement

NOISE MEASUREMENT SITE INFORMATION SHEET

Jones & Stokes

PROJECT NAME: Menlo Park Project

PROJECT #:

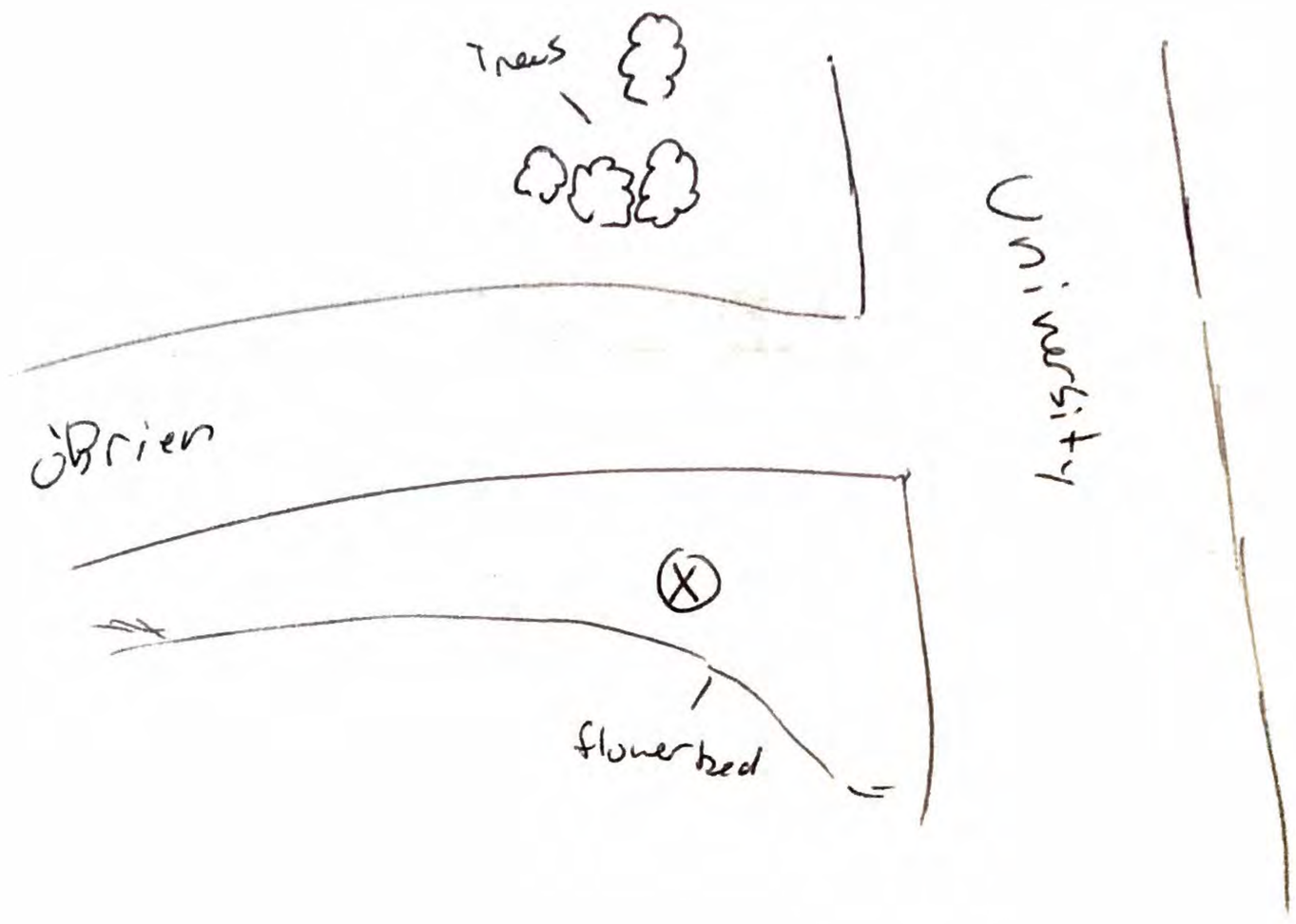
SITE NUMBER: ST-4

DATE/TIME: 2021 07 27 2:08 PM

LOCATION/ADDRESS: 1530 O'brien

ENGINEERS: Matsui / Schumacher

SITE SKETCH: Show microphone location, nearby residences/buildings, potential reflective surfaces, project roadways, local roadways, driveways, ground type, trees. Indicate reference distances between objects, arrows showing wind direction, North, and camera locations/directions. Describe the line-of-sight and topography/elevation changes relative to noise sources.



WEATHER DATA: (temperature, wind speed/direction, sky conditions, relative humidity)

64.9 | 1.4 | Blue and Lite clouds. | 52.6

EQUIPMENT DATA: (sound level meter, microphone, preamp, calibrator, factory cal. date)

LD LXT

ESTIMATED CONSTRUCTION DATE OF RESIDENCES: (Pre-1978, or new construction)

POSTED SPEED: 25 mph (University)

COMMENTS:

TRAFFIC COUNTS:

Roadway/Direction	Autos	Medium	Heavy	Speed	Start Time	Duration

NOISE MEASUREMENT LOG SHEET (20)

Jones & Stokes

PROJECT NAME: Menlo Park Projects
PROJECT #:
SITE NUMBER: ST-4 LXT_Data.013
DATE/TIME: 2:08 PM 20210727
LOCATION/ADDRESS: 1530 O'brien
ENGINEERS: Matsui/Schumacher

#	Minute Starting	Measured Leq (dBA)	O or X	Autos	Medium Trucks	Heavy Trucks	Other Noise Sources/Comments (include SLM equipment, Calibration Data)
1	2:08pm						
2	2:09						
3	2:10						
4	2:11						
5	2:12						
6	2:13						
7	2:14						
8	~~2:15~~ 2:15						car horn driving by
9	2:16						
10	2:17						
11	2:18						
12	2:19						
13	2:20						
14	2:21						
15	2:22						
16							
17							
18							
19							
20							

Leq	55.9
Lmax	71.5
Lmin	44.4
L10	57.7
L33	54.6
L50	53.4
L90	50.8

Overall Leq (Include "O" minutes, Exclude "X" minutes) = dBA

Subset Leq (Exclude "O" and "X" minutes) = dBA

"O" = other characteristic sources that contributed to the Leq

"X" = exclude from Leq calculation; a non-typical source contaminated the measurement

NOISE MEASUREMENT SITE INFORMATION SHEET

Jones & Stokes

PROJECT NAME: Menlo Park

SITE NUMBER: ST-5

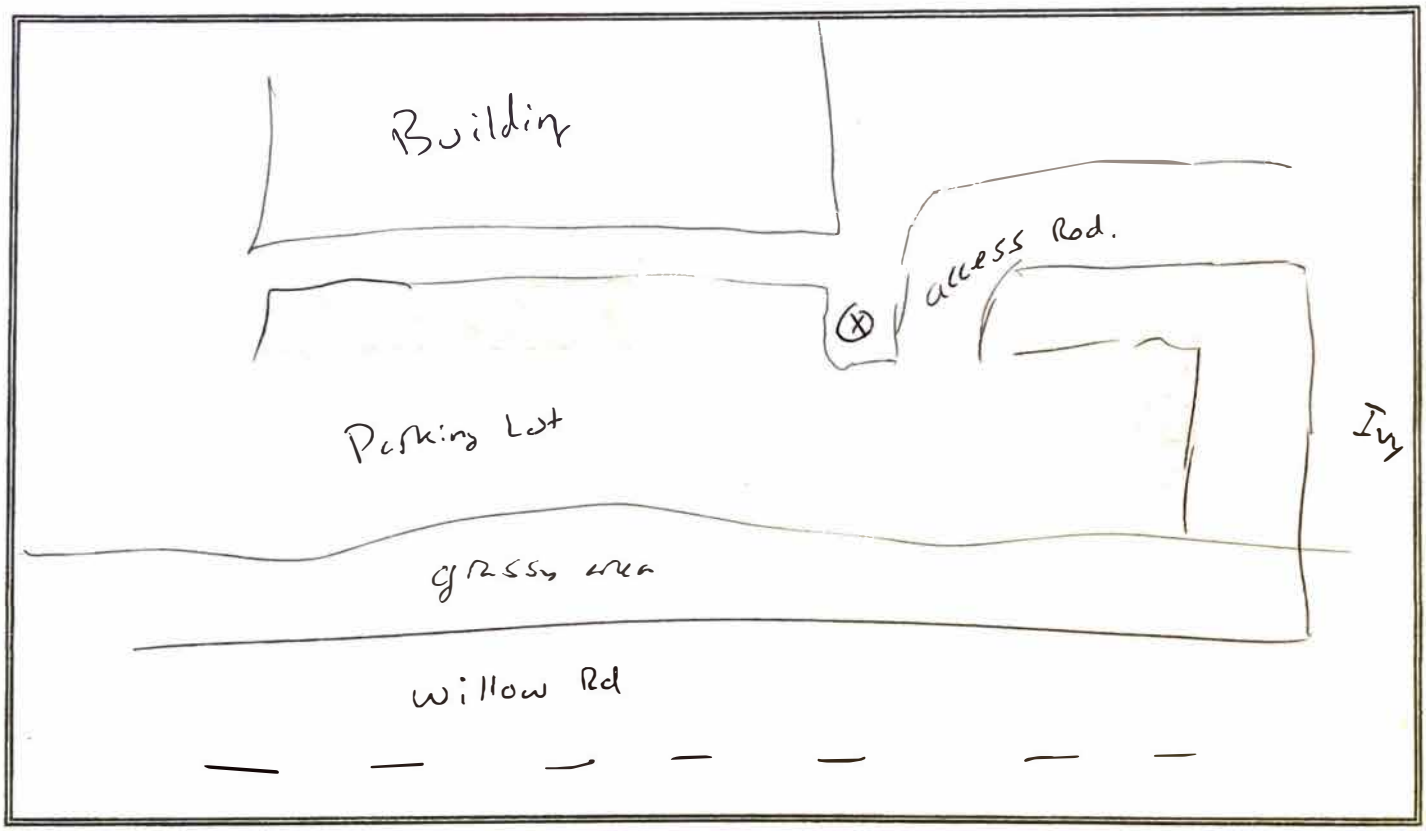
LOCATION/ADDRESS: 1221 Willow Rd

PROJECT #:

DATE/TIME: 2021 07 28 11:44

ENGINEERS: Schumer

SITE SKETCH: Show microphone location, nearby residences/buildings, potential reflective surfaces, project roadways, local roadways, driveways, ground type, trees. Indicate reference distances between objects, arrows showing wind direction, North, and camera locations/directions. Describe the line-of-sight and topography/elevation changes relative to noise sources.



WEATHER DATA: (temperature, wind speed/direction, sky conditions, relative humidity)

78.6° F | 1.06 mph | partly cloudy | 62.3%

EQUIPMENT DATA: (sound level meter, microphone, preamp, calibrator, factory cal. date)

LXT

ESTIMATED CONSTRUCTION DATE OF RESIDENCES: (Pre-1978, or new construction)

POSTED SPEED: 40 mph (Willow Rd)

COMMENTS:

TRAFFIC COUNTS:

Roadway/Direction	Autos	Medium	Heavy	Speed	Start Time	Duration

NOISE MEASUREMENT LOG SHEET (20)

Jones & Stokes

PROJECT NAME: Menlo Park
PROJECT #:
SITE NUMBER: ST-5
DATE/TIME:
LOCATION/ADDRESS: 1221 Willow Road
ENGINEERS:

#	Minute Starting	Measured Leq (dBA)	O or X	Autos	Medium Trucks	Heavy Trucks	Other Noise Sources/Comments (include SLM equipment, Calibration Data)
1	11:44						
2	11:45						
3	11:46						
4	11:47						car horn
5	11:48						
6	11:49						Door slam Small Plane fly by
7	11:50						
8	11:51						Building door slam X2
9	11:52						
10	11:53						car starting nearby ~ 15ft away
11	11:54						Plane flying over
12	11:55						
13	11:56						
14	11:57						Back up beeping sort of distant
15	11:58						
16							LXT_Data.015
17							Decent traffic flow
18							
19							
20							

Leq	59.5
Lmax	72.0
Lmin	45.4
L10	62.6
L33	59.8
L50	57.9
L90	52.7

Overall Leq (Include "O" minutes, Exclude "X" minutes) = _____ dBA

Subset Leq (Exclude "O" and "X" minutes) = _____ dBA

"O" = other characteristic sources that contributed to the Leq

"X" = exclude from Leq calculation; a non-typical source contaminated the measurement

Noise Appendix

Field Pictures

Noise Monitoring Site LT-1.
Location: 1439 Kavanaugh Drive

On Kavanaugh Drive looking East, ~130 feet West of the Kavanaugh Drive/Gertrude Court intersection.

On Kavanaugh Drive, looking North towards 1439 Kavanaugh Drive.

On Kavanaugh Drive looking West, ~180 feet East of the Kavanaugh Drive/Clarence Court intersection.

On Kavanaugh Drive, looking Northwest towards 1439 Kavanaugh Drive.

Noise Monitoring Site LT-2.
Location: 1360 Willow Road

West of 1360 Willow Road, looking North towards the Willow Road/Hamilton Avenue intersection.

~110 feet Northwest of 1360 Willow Road, looking West.

Looking Southwest towards Willow Road.

Looking South along Willow Road.

Noise Monitoring Site LT-3.
Location: 1125 Alberni Avenue

Looking West along Alberni Avenue.

Looking Southwest along Alberni Avenue.

Looking East towards along Alberni Avenue. The Alberni Avenue/Poplar Avenue intersection is ~25 feet to the Southeast.

Looking South on the Northeast corner of Orizaba Avenue and Broad Street.

Noise Monitoring Site LT-4.
Location: 1396 Carlton Avenue

On Carlton Avenue, looking South.

On Carlton Avenue, looking East towards 1396 Carlton Avenue.

Looking North on Carlton Avenue, ~170 feet South of Hamilton Avenue.

Looking Northwest on Carlton Avenue, South of Hamilton Avenue.

Noise Monitoring Site ST-1.
Location: 1380 Willow Road

Looking West towards Willow Road.

Looking Northwest towards Willow Road.

Looking East, ~60 feet West from 1380 Willow Road.

Looking Southwest towards Willow Road.

Noise Monitoring Site ST-2.
Location: 1350 Willow Road

~40 feet from Willow Road, looking West.

Looking South towards Mid-Peninsula High School. Sound level meter is ~70 feet from the school.

Looking East, with 1350 Willow Road to the Northeast (left) and Mid-Peninsula High School to the Southeast (right).

On Willow Road, looking Northeast towards 1350 Willow Road.

Noise Monitoring Site ST-3.
Location: Open Mind School (1215 O'Brien Drive)

Looking North, the Northwest corner of Open Mind School is behind the camera.

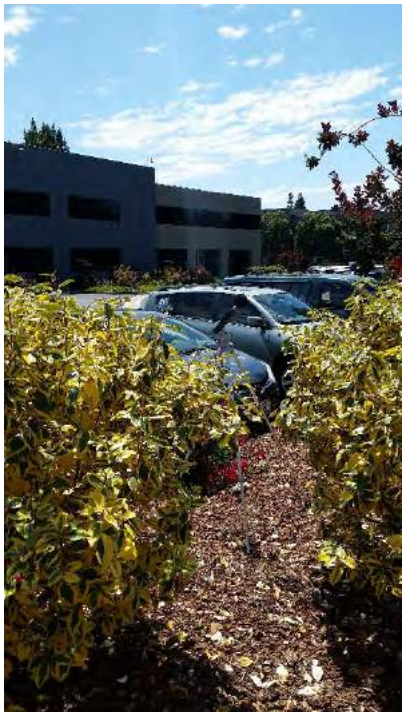
Looking South towards Open Mind School.

Looking East, ~220 feet from O’Brien Drive.

Noise Monitoring Site ST-4.
Location: 1530 O’Brien Drive

Looking Northeast towards the O’Brien Drive/University Avenue intersection.

Looking North, ~30 feet from O’Brien Drive.



Looking Southwest towards 1530 O’Brien Drive.

Looking South at 1530 O’Brien, ~100 feet from the sound level meter.

Noise Monitoring Site ST-5.
Location: 1221 Willow Road

Looking Southwest towards 1221 Willow Road (~40 feet away).

Looking East, towards Willow Road.

Looking Northeast, ~80 feet from Willow Road.

Looking West, at 1221 Willow Road.

Noise Appendix

Construction Noise Modeling

Distance Between Project Site Construction and Sensitive Receptors

Sensitive Receptor	Structure Type	Distance to… (ft)	Project
Mid-Peninsula High School	Modern industrial/commercial	10	Park
Mid-Peninsula High School	Modern industrial/commercial	290	Nearest Vertical Building
Open Mind School	Modern industrial/commercial	190	Nearest Vertical Building
Commercial/Industrial	Modern industrial/commercial	100	North Parking Garage
Residential #1	Older Residential Structures	170	Nearest Vertical Building
Residential #2	Older Residential Structures	170	Nearest Vertical Building
Hamilton Avenue Parcel - Residential	Older Residential Structures	20	Hamilton Avenue Parcel

Construction Noise at 50 feet, Summary by Phase/Subphase

Phase	Description	Distance	Calculated Leq (dBA)
Phase 1	Demolition	50	82
Phase 1	Grading and Utilities	50	85
Phase 1 Office	North Garage, 2022	50	94
Phase 1 Office	North Garage, 2023	50	83
Phase 1 Office	Office Building 4, 2023	50	94
Phase 1 Office	Office Building 4, 2024	50	80
Phase 1 Office	Meeting, Collaboration, Park, 2022	50	94
Phase 1 Office	Meeting, Collaboration, Park, 2023	50	94
Phase 1 Office	Meeting, Collaboration, Park, 2024	50	81
Phase 1 Office	Meeting, Collaboration, Park, 2025	50	81
Phase 1 Office	Meeting, Collaboration, Park, 2026	50	81
Phase 1 Office	Hotel Excavation, 2022	50	94
Phase 1 Office	Hotel Excavation, 2023	50	83
Phase 1 Office	Hotel Construction, 2024	50	81
Phase 1 Office	Hotel Construction, 2025	50	81
Phase 1 Office	Town Square, 2024	50	83
Phase 1 Office	Town Square, 2025	50	81
Phase 1 Multi Use	Parcel 2 Foundation	50	83
Phase 1 Multi Use	Parcel 2 Core and Shell	50	82
Phase 1 Multi Use	Parcel 2 Tenant Improvements	50	82
Phase 1 Multi Use	Parcel 2 Landscaping	50	80
Phase 1 Multi Use	Parcel 3 Foundation	50	83
Phase 1 Multi Use	Parcel 3 Core and Shell	50	82
Phase 1 Multi Use	Parcel 3 Tenant Improvements	50	82
Phase 1 Multi Use	Parcel 3 Landscaping	50	80
Phase 1	Demolition	50	82
Phase 1	Grading and Utilities	50	85
Phase 1 Office	South Garage, 2023	50	94
Phase 1 Office	South Garage, 2024	50	81
Phase 1 Office	Office Building 3, 2023	50	94
Phase 1 Office	Office Building 3, 2024	50	81
Phase 1 Office	Office Building 3, 2025	50	80
Phase 1 Office	Office Building 1, 2023	50	94
Phase 1 Office	Office Building 1, 2024	50	81
Phase 1 Office	Office Building 2, 2023	50	94
Phase 1 Office	Office Building 2, 2024	50	81
Phase 1 Office	Office Building 2, 2025	50	80
Phase 1 Office	Office Building 5, 2023	50	94
Phase 1 Office	Office Building 5, 2024	50	81
Phase 1 Office	Office Building 5, 2025	50	80
Phase 1 Office	Office Building 6, 2023	50	94
Phase 1 Office	Office Building 6, 2024	50	81
Phase 1 Office	Office Building 6, 2025	50	80

Phase 1 Multi Use	Parcel 7 Foundation	50	83
Phase 1 Multi Use	Parcel 7 Core and Shell	50	82
Phase 1 Multi Use	Parcel 7 Tenant Improvements	50	82
Phase 1 Multi Use	Parcel 7 Landscaping	50	80
Phase 1 Multi Use	Parcel 6 Foundation	50	83
Phase 1 Multi Use	Parcel 6 Core and Shell	50	82
Phase 1 Multi Use	Parcel 6 Tenant Improvements	50	82
Phase 1 Multi Use	Parcel 6 Landscaping	50	80
Phase 2Multi Use	Grading and Utilities	50	85
Phase 2Multi Use	Tunnel Construction	50	82
Phase 2Multi Use	Foundations	50	83
Phase 2Multi Use	Core and Shell	50	82
Phase 2Multi Use	Tenant Improvements	50	82
Phase 2Multi Use	Tenant Improvements	50	80
Hamilton Avenue	Demolition	50	82
Hamilton Avenue	Grading and Utilities	50	82
Hamilton Avenue	Foundations	50	82
Hamilton Avenue	Core and Shell	50	82
Hamilton Avenue	Tenant Improvements	50	82
Nighttime	Install/Remove Detours	50	87
Nighttime	Traffic Shift	50	82
Nighttime	Tunnel Shoring	50	97
Nighttime	Restore Willow Road	50	82

Table 1. Construction Noise

Source Data:	Maximum Sound Level (dBA)	Utilization Factor	Leq Sound Level (dBA)
Construction Condition: Phase 1 Demolition			
Source 1: Excavator - Sound level (dBA) at 50 feet =	81	40%	77.0
Source 2: Front end loader - Sound level (dBA) at 50 feet =	79	40%	75.0
Source 3: Generator - Sound level (dBA) at 50 feet =	81	50%	78.0
Calculated Data:			
All Sources Combined - Lmax sound level (dBA) at 50 feet =			85
All Sources Combined - Leq sound level (dBA) at 50 feet =			82

Distance Between Source and Receiver (ft.)	Geometric Attenuation (dB)	Ground Effect Attenuation (dB)	Calculated Lmax Sound Level (dBA)	Calculated Leq Sound Level (dBA)
25	6	0.0	91	88
50	0	0.0	85	82
100	-6	0.0	79	76
150	-10	0.0	76	72
200	-12	0.0	73	70
250	-14	0.0	71	68
300	-16	0.0	70	66
400	-18	0.0	67	64
500	-20	0.0	65	62
600	-22	0.0	64	60
700	-23	0.0	62	59

Geometric attenuation based on 6 dB per doubling of distance.
Note: This calculation does not include the effects, if any, of local shielding from walls, topography or other barriers which may reduce sound levels further.

Table 2. Construction Noise

Source Data:	Maximum Sound Level (dBA)	Utilization Factor	Leq Sound Level (dBA)
Construction Condition: Phase 1 Grading & Utilities			
Source 1: Grader - Sound level (dBA) at 50 feet =	85	40%	81.0
Source 2: Scraper - Sound level (dBA) at 50 feet =	84	40%	80.0
Source 3: Gradall - Sound level (dBA) at 50 feet =	83	40%	79.0
Calculated Data:			
All Sources Combined - Lmax sound level (dBA) at 50 feet =			89
All Sources Combined - Leq sound level (dBA) at 50 feet =			85

Distance Between Source and Receiver (ft.)	Geometric Attenuation (dB)	Ground Effect Attenuation (dB)	Calculated Lmax Sound Level (dBA)	Calculated Leq Sound Level (dBA)
10	14	0.0	103	99
25	6	0.0	95	91
50	0	0.0	89	85
60	-2	0.0	87	83
100	-6	0.0	83	79
150	-10	0.0	79	75
300	-16	0.0	73	69
400	-18	0.0	71	67
500	-20	0.0	69	65
600	-22	0.0	67	63
700	-23	0.0	66	62

Geometric attenuation based on 6 dB per doubling of distance.
Note: This calculation does not include the effects, if any, of local shielding from walls, topography or other barriers which may reduce sound levels further.

Table 3. Construction Noise

Source Data:	Maximum Sound Level (dBA)	Utilization Factor	Leq Sound Level (dBA)
Construction Condition: Phase 1 Office - North Garage 2022			
Source 1: Pile Driver - Sound level (dBA) at 50 feet =	101	20%	94.0
Source 2: Generator - Sound level (dBA) at 50 feet =	81	50%	78.0
Source 3: Trencher - Sound level (dBA) at 50 feet =	80	50%	77.0
Calculated Data:			
All Sources Combined - Lmax sound level (dBA) at 50 feet =			101
All Sources Combined - Leq sound level (dBA) at 50 feet =			94

Distance Between Source and Receiver (ft.)	Geometric Attenuation (dB)	Ground Effect Attenuation (dB)	Calculated Lmax Sound Level (dBA)	Calculated Leq Sound Level (dBA)
10	14	0.0	115	108
25	6	0.0	107	100
50	0	0.0	101	94
100	-6	0.0	95	88
170	-11	0.0	90	84
190	-12	0.0	89	83
290	-15	0.0	86	79
400	-18	0.0	83	76
500	-20	0.0	81	74
600	-22	0.0	79	73
700	-23	0.0	78	71

Geometric attenuation based on 6 dB per doubling of distance.
Note: This calculation does not include the effects, if any, of local shielding from walls, topography or other barriers which may reduce sound levels further.

Table 4. Construction Noise

Source Data:	Maximum Sound Level (dBA)	Utilization Factor	Leq Sound Level (dBA)
Construction Condition: Phase 1 Office North Garage 2023			
Source 1: Excavator - Sound level (dBA) at 50 feet =	81	40%	77.0
Source 2: Generator - Sound level (dBA) at 50 feet =	81	50%	78.0
Source 3: Gradall - Sound level (dBA) at 50 feet =	83	40%	79.0
Calculated Data:			
All Sources Combined - Lmax sound level (dBA) at 50 feet =			87
All Sources Combined - Leq sound level (dBA) at 50 feet =			83

Distance Between Source and Receiver (ft.)	Geometric Attenuation (dB)	Ground Effect Attenuation (dB)	Calculated Lmax Sound Level (dBA)	Calculated Leq Sound Level (dBA)
25	6	0.0	93	89
50	0	0.0	87	83
100	-6	0.0	81	77
150	-10	0.0	77	73
200	-12	0.0	75	71
250	-14	0.0	73	69
300	-16	0.0	71	67
400	-18	0.0	68	65
500	-20	0.0	67	63
600	-22	0.0	65	61
700	-23	0.0	64	60

Geometric attenuation based on 6 dB per doubling of distance.
Note: This calculation does not include the effects, if any, of local shielding from walls, topography or other barriers which may reduce sound levels further.

Table 5. Construction Noise

Source Data:	Maximum Sound Level (dBA)	Utilization Factor	Leq Sound Level (dBA)
Construction Condition: Phase 1 Office - Office Building 4, 2023			
Source 1: Pile Driver - Sound level (dBA) at 50 feet =	101	20%	94.0
Source 2: Gradall - Sound level (dBA) at 50 feet =	83	40%	79.0
Source 3: Compactor (ground) - Sound level (dBA) at 50 feet =	83	20%	76.0
Calculated Data:			
All Sources Combined - Lmax sound level (dBA) at 50 feet =			101
All Sources Combined - Leq sound level (dBA) at 50 feet =			94

Distance Between Source and Receiver (ft.)	Geometric Attenuation (dB)	Ground Effect Attenuation (dB)	Calculated Lmax Sound Level (dBA)	Calculated Leq Sound Level (dBA)
50	0	0.0	101	94
65	-2	0.0	99	92
85	-5	0.0	97	90
100	-6	0.0	95	88
150	-10	0.0	92	85
200	-12	0.0	89	82
250	-14	0.0	87	80
300	-16	0.0	86	79
500	-20	0.0	81	74
600	-22	0.0	80	73
700	-23	0.0	78	71

Geometric attenuation based on 6 dB per doubling of distance.
Note: This calculation does not include the effects, if any, of local shielding from walls, topography or other barriers which may reduce sound levels further.

Table 6. Construction Noise

Source Data:	Maximum Sound Level (dBA)	Utilization Factor	Leq Sound Level (dBA)
Construction Condition: Phase 1 Office - Office Building 4, 2024			
Source 1: Dump truck - Sound level (dBA) at 50 feet =	76	40%	72.0
Source 2: Gradall - Sound level (dBA) at 50 feet =	83	40%	79.0
Source 3: Pickup Truck - Sound level (dBA) at 50 feet =	75	40%	71.0
Calculated Data:			
All Sources Combined - Lmax sound level (dBA) at 50 feet =			84
All Sources Combined - Leq sound level (dBA) at 50 feet =			80

Distance Between Source and Receiver (ft.)	Geometric Attenuation (dB)	Ground Effect Attenuation (dB)	Calculated Lmax Sound Level (dBA)	Calculated Leq Sound Level (dBA)
25	6	0.0	90	86
50	0	0.0	84	80
100	-6	0.0	78	74
150	-10	0.0	75	71
200	-12	0.0	72	68
250	-14	0.0	70	66
300	-16	0.0	69	65
400	-18	0.0	66	62
500	-20	0.0	64	60
600	-22	0.0	63	59
700	-23	0.0	61	57

Geometric attenuation based on 6 dB per doubling of distance.
Note: This calculation does not include the effects, if any, of local shielding from walls, topography or other barriers which may reduce sound levels further.

Table 7. Construction Noise

Source Data:	Maximum Sound Level (dBA)	Utilization Factor	Leq Sound Level (dBA)
Construction Condition: Phase 1 Office - Meeting, Collaboration, Park, 2022			
Source 1: Compactor (ground) - Sound level (dBA) at 50 feet =	83	20%	76.0
Source 2: Gradall - Sound level (dBA) at 50 feet =	83	40%	79.0
Source 3: Pile Driver - Sound level (dBA) at 50 feet =	101	20%	94.0
Calculated Data:			
All Sources Combined - Lmax sound level (dBA) at 50 feet =			101
All Sources Combined - Leq sound level (dBA) at 50 feet =			94

Distance Between Source and Receiver (ft.)	Geometric Attenuation (dB)	Ground Effect Attenuation (dB)	Calculated Lmax Sound Level (dBA)	Calculated Leq Sound Level (dBA)
25	6	0.0	107	100
50	0	0.0	101	94
100	-6	0.0	95	88
150	-10	0.0	92	85
200	-12	0.0	89	82
250	-14	0.0	87	80
300	-16	0.0	86	79
400	-18	0.0	83	76
500	-20	0.0	81	74
600	-22	0.0	80	73
700	-23	0.0	78	71

Geometric attenuation based on 6 dB per doubling of distance.
Note: This calculation does not include the effects, if any, of local shielding
from walls, topography or other barriers which may reduce sound levels further.

Table 8. Construction Noise

Source Data:	Maximum Sound Level (dBA)	Utilization Factor	Leq Sound Level (dBA)
Construction Condition: Phase 1 Office - Meeting, Collaboration, Park, 2023			
Source 1: Compactor (ground) - Sound level (dBA) at 50 feet =	83	20%	76.0
Source 2: Gradall - Sound level (dBA) at 50 feet =	83	40%	79.0
Source 3: Pile Driver - Sound level (dBA) at 50 feet =	101	20%	94.0
Calculated Data:			
All Sources Combined - Lmax sound level (dBA) at 50 feet =			101
All Sources Combined - Leq sound level (dBA) at 50 feet =			94

Distance Between Source and Receiver (ft.)	Geometric Attenuation (dB)	Ground Effect Attenuation (dB)	Calculated Lmax Sound Level (dBA)	Calculated Leq Sound Level (dBA)
25	6	0.0	107	100
50	0	0.0	101	94
100	-6	0.0	95	88
150	-10	0.0	92	85
200	-12	0.0	89	82
250	-14	0.0	87	80
300	-16	0.0	86	79
400	-18	0.0	83	76
500	-20	0.0	81	74
600	-22	0.0	80	73
700	-23	0.0	78	71

Geometric attenuation based on 6 dB per doubling of distance.
Note: This calculation does not include the effects, if any, of local shielding from walls, topography or other barriers which may reduce sound levels further.

Table 9. Construction Noise

Source Data:	Maximum Sound Level (dBA)	Utilization Factor	Leq Sound Level (dBA)
Construction Condition: Phase 1 Office - Meeting, Collaboration, Park, 2024			
Source 1: Dump truck - Sound level (dBA) at 50 feet =	76	40%	72.0
Source 2: Gradall - Sound level (dBA) at 50 feet =	83	40%	79.0
Source 3: Crane - Sound level (dBA) at 50 feet =	81	16%	73.0
Calculated Data:			
All Sources Combined - Lmax sound level (dBA) at 50 feet =			86
All Sources Combined - Leq sound level (dBA) at 50 feet =			81

Distance Between Source and Receiver (ft.)	Geometric Attenuation (dB)	Ground Effect Attenuation (dB)	Calculated Lmax Sound Level (dBA)	Calculated Leq Sound Level (dBA)
25	6	0.0	92	87
50	0	0.0	86	81
100	-6	0.0	80	75
150	-10	0.0	76	71
200	-12	0.0	74	69
250	-14	0.0	72	67
300	-16	0.0	70	65
400	-18	0.0	68	63
500	-20	0.0	66	61
600	-22	0.0	64	59
700	-23	0.0	63	58

Geometric attenuation based on 6 dB per doubling of distance.
Note: This calculation does not include the effects, if any, of local shielding from walls, topography or other barriers which may reduce sound levels further.

Table 10. Construction Noise

Source Data:	Maximum Sound Level (dBA)	Utilization Factor	Leq Sound Level (dBA)
Construction Condition: Phase 1 Office - Meeting, Collaboration, Park, 2025			
Source 1: Dump truck - Sound level (dBA) at 50 feet =	76	40%	72.0
Source 2: Gradall - Sound level (dBA) at 50 feet =	83	40%	79.0
Source 3: Crane - Sound level (dBA) at 50 feet =	81	16%	73.0
Calculated Data:			
All Sources Combined - Lmax sound level (dBA) at 50 feet =			86
All Sources Combined - Leq sound level (dBA) at 50 feet =			81

Distance Between Source and Receiver (ft.)	Geometric Attenuation (dB)	Ground Effect Attenuation (dB)	Calculated Lmax Sound Level (dBA)	Calculated Leq Sound Level (dBA)
25	6	0.0	92	87
50	0	0.0	86	81
100	-6	0.0	80	75
150	-10	0.0	76	71
200	-12	0.0	74	69
250	-14	0.0	72	67
300	-16	0.0	70	65
400	-18	0.0	68	63
500	-20	0.0	66	61
600	-22	0.0	64	59
700	-23	0.0	63	58

Geometric attenuation based on 6 dB per doubling of distance.
Note: This calculation does not include the effects, if any, of local shielding from walls, topography or other barriers which may reduce sound levels further.

Table 11. Construction Noise

Source Data:	Maximum Sound Level (dBA)	Utilization Factor	Leq Sound Level (dBA)
Construction Condition: Phase 1 Office - Meeting, Collaboration, Park, 2026			
Source 1: Dump truck - Sound level (dBA) at 50 feet =	76	40%	72.0
Source 2: Gradall - Sound level (dBA) at 50 feet =	83	40%	79.0
Source 3: Crane - Sound level (dBA) at 50 feet =	81	16%	73.0
Calculated Data:			
All Sources Combined - Lmax sound level (dBA) at 50 feet =			86
All Sources Combined - Leq sound level (dBA) at 50 feet =			81

Distance Between Source and Receiver (ft.)	Geometric Attenuation (dB)	Ground Effect Attenuation (dB)	Calculated Lmax Sound Level (dBA)	Calculated Leq Sound Level (dBA)
25	6	0.0	92	87
35	3	0.0	89	84
50	0	0.0	86	81
85	-5	0.0	81	76
90	-5	0.0	81	76
100	-6	0.0	80	75
150	-10	0.0	76	71
200	-12	0.0	74	69
400	-18	0.0	68	63
600	-22	0.0	64	59
800	-24	0.0	62	57

Geometric attenuation based on 6 dB per doubling of distance.
Note: This calculation does not include the effects, if any, of local shielding from walls, topography or other barriers which may reduce sound levels further.

Table 12. Construction Noise

Source Data:	Maximum Sound Level (dBA)	Utilization Factor	Leq Sound Level (dBA)
Construction Condition: Phase 1 Office - Hotel Excavation 2022			
Source 1: Generator - Sound level (dBA) at 50 feet =	81	50%	78.0
Source 2: Gradall - Sound level (dBA) at 50 feet =	83	40%	79.0
Source 3: Pile Driver - Sound level (dBA) at 50 feet =	101	20%	94.0
Calculated Data:			
All Sources Combined - Lmax sound level (dBA) at 50 feet =			101
All Sources Combined - Leq sound level (dBA) at 50 feet =			94

Distance Between Source and Receiver (ft.)	Geometric Attenuation (dB)	Ground Effect Attenuation (dB)	Calculated Lmax Sound Level (dBA)	Calculated Leq Sound Level (dBA)
25	6	0.0	107	100
50	0	0.0	101	94
100	-6	0.0	95	88
150	-10	0.0	92	85
200	-12	0.0	89	82
250	-14	0.0	87	80
300	-16	0.0	86	79
400	-18	0.0	83	76
500	-20	0.0	81	74
600	-22	0.0	80	73
700	-23	0.0	78	71

Geometric attenuation based on 6 dB per doubling of distance.
Note: This calculation does not include the effects, if any, of local shielding from walls, topography or other barriers which may reduce sound levels further.

Table 13. Construction Noise

Source Data:	Maximum Sound Level (dBA)	Utilization Factor	Leq Sound Level (dBA)
Construction Condition: Phase 1 Office - Hotel Excavation 2023			
Source 1: Generator - Sound level (dBA) at 50 feet =	81	50%	78.0
Source 2: Gradall - Sound level (dBA) at 50 feet =	83	40%	79.0
Source 3: Excavator - Sound level (dBA) at 50 feet =	81	40%	77.0
Calculated Data:			
All Sources Combined - Lmax sound level (dBA) at 50 feet =			87
All Sources Combined - Leq sound level (dBA) at 50 feet =			83

Distance Between Source and Receiver (ft.)	Geometric Attenuation (dB)	Ground Effect Attenuation (dB)	Calculated Lmax Sound Level (dBA)	Calculated Leq Sound Level (dBA)
25	6	0.0	93	89
50	0	0.0	87	83
100	-6	0.0	81	77
150	-10	0.0	77	73
200	-12	0.0	75	71
250	-14	0.0	73	69
300	-16	0.0	71	67
400	-18	0.0	68	65
500	-20	0.0	67	63
600	-22	0.0	65	61
700	-23	0.0	64	60

Geometric attenuation based on 6 dB per doubling of distance.
Note: This calculation does not include the effects, if any, of local shielding from walls, topography or other barriers which may reduce sound levels further.

Table 14. Construction Noise

Source Data:	Maximum Sound Level (dBA)	Utilization Factor	Leq Sound Level (dBA)
Construction Condition: Phase 1 Office - Hotel Construction 2024			
Source 1: Concrete mixer truck - Sound level (dBA) at 50 feet =	79	40%	75.0
Source 2: Concrete pump truck - Sound level (dBA) at 50 feet =	81	20%	74.0
Source 3: Gradall - Sound level (dBA) at 50 feet =	83	40%	79.0
Calculated Data:			
All Sources Combined - Lmax sound level (dBA) at 50 feet =			86
All Sources Combined - Leq sound level (dBA) at 50 feet =			81

Distance Between Source and Receiver (ft.)	Geometric Attenuation (dB)	Ground Effect Attenuation (dB)	Calculated Lmax Sound Level (dBA)	Calculated Leq Sound Level (dBA)
25	6	0.0	92	87
50	0	0.0	86	81
100	-6	0.0	80	75
150	-10	0.0	77	72
200	-12	0.0	74	69
250	-14	0.0	72	67
300	-16	0.0	71	66
400	-18	0.0	68	63
500	-20	0.0	66	61
600	-22	0.0	64	60
700	-23	0.0	63	58

Geometric attenuation based on 6 dB per doubling of distance.
Note: This calculation does not include the effects, if any, of local shielding from walls, topography or other barriers which may reduce sound levels further.

Table 15. Construction Noise

Source Data:	Maximum Sound Level (dBA)	Utilization Factor	Leq Sound Level (dBA)
Construction Condition: Phase 1 Office - Hotel Construction 2025			
Source 1: Concrete mixer truck - Sound level (dBA) at 50 feet =	79	40%	75.0
Source 2: Concrete pump truck - Sound level (dBA) at 50 feet =	81	20%	74.0
Source 3: Gradall - Sound level (dBA) at 50 feet =	83	40%	79.0
Calculated Data:			
All Sources Combined - Lmax sound level (dBA) at 50 feet =			86
All Sources Combined - Leq sound level (dBA) at 50 feet =			81

Distance Between Source and Receiver (ft.)	Geometric Attenuation (dB)	Ground Effect Attenuation (dB)	Calculated Lmax Sound Level (dBA)	Calculated Leq Sound Level (dBA)
25	6	0.0	92	87
50	0	0.0	86	81
100	-6	0.0	80	75
150	-10	0.0	77	72
200	-12	0.0	74	69
250	-14	0.0	72	67
300	-16	0.0	71	66
400	-18	0.0	68	63
500	-20	0.0	66	61
600	-22	0.0	64	60
700	-23	0.0	63	58

Geometric attenuation based on 6 dB per doubling of distance.
Note: This calculation does not include the effects, if any, of local shielding from walls, topography or other barriers which may reduce sound levels further.

Table 16. Construction Noise

Source Data:	Maximum Sound Level (dBA)	Utilization Factor	Leq Sound Level (dBA)
Construction Condition: Phase 1 Office - Town Square 2024			
Source 1: Excavator - Sound level (dBA) at 50 feet =	81	40%	77.0
Source 2: Generator - Sound level (dBA) at 50 feet =	81	50%	78.0
Source 3: Gradall - Sound level (dBA) at 50 feet =	83	40%	79.0
Calculated Data:			
All Sources Combined - Lmax sound level (dBA) at 50 feet =			87
All Sources Combined - Leq sound level (dBA) at 50 feet =			83

Distance Between Source and Receiver (ft.)	Geometric Attenuation (dB)	Ground Effect Attenuation (dB)	Calculated Lmax Sound Level (dBA)	Calculated Leq Sound Level (dBA)
25	6	0.0	93	89
50	0	0.0	87	83
100	-6	0.0	81	77
150	-10	0.0	77	73
200	-12	0.0	75	71
250	-14	0.0	73	69
300	-16	0.0	71	67
400	-18	0.0	68	65
500	-20	0.0	67	63
600	-22	0.0	65	61
700	-23	0.0	64	60

Geometric attenuation based on 6 dB per doubling of distance.
Note: This calculation does not include the effects, if any, of local shielding from walls, topography or other barriers which may reduce sound levels further.

Table 17. Construction Noise

Source Data:	Maximum Sound Level (dBA)	Utilization Factor	Leq Sound Level (dBA)
Construction Condition: Phase 1 Office - Town Square 2025			
Source 1: Crane - Sound level (dBA) at 50 feet =	81	16%	73.0
Source 2: Dump truck - Sound level (dBA) at 50 feet =	76	40%	72.0
Source 3: Gradall - Sound level (dBA) at 50 feet =	83	40%	79.0
Calculated Data:			
All Sources Combined - Lmax sound level (dBA) at 50 feet =			86
All Sources Combined - Leq sound level (dBA) at 50 feet =			81

Distance Between Source and Receiver (ft.)	Geometric Attenuation (dB)	Ground Effect Attenuation (dB)	Calculated Lmax Sound Level (dBA)	Calculated Leq Sound Level (dBA)
25	6	0.0	92	87
50	0	0.0	86	81
100	-6	0.0	80	75
150	-10	0.0	76	71
200	-12	0.0	74	69
250	-14	0.0	72	67
300	-16	0.0	70	65
400	-18	0.0	68	63
500	-20	0.0	66	61
600	-22	0.0	64	59
700	-23	0.0	63	58

Geometric attenuation based on 6 dB per doubling of distance.
Note: This calculation does not include the effects, if any, of local shielding from walls, topography or other barriers which may reduce sound levels further.

Table 18. Construction Noise

Source Data:	Maximum Sound Level (dBA)	Utilization Factor	Leq Sound Level (dBA)
Construction Condition: Phase 1 Mixed Use - Parcel 2 Foundations			
Source 1: Excavator - Sound level (dBA) at 50 feet =	81	40%	77.0
Source 2: Generator - Sound level (dBA) at 50 feet =	81	50%	78.0
Source 3: Gradall - Sound level (dBA) at 50 feet =	83	40%	79.0
Calculated Data:			
All Sources Combined - Lmax sound level (dBA) at 50 feet =			87
All Sources Combined - Leq sound level (dBA) at 50 feet =			83

Distance Between Source and Receiver (ft.)	Geometric Attenuation (dB)	Ground Effect Attenuation (dB)	Calculated Lmax Sound Level (dBA)	Calculated Leq Sound Level (dBA)
25	6	0.0	93	89
50	0	0.0	87	83
100	-6	0.0	81	77
150	-10	0.0	77	73
200	-12	0.0	75	71
250	-14	0.0	73	69
300	-16	0.0	71	67
400	-18	0.0	68	65
500	-20	0.0	67	63
600	-22	0.0	65	61
700	-23	0.0	64	60

Geometric attenuation based on 6 dB per doubling of distance.
Note: This calculation does not include the effects, if any, of local shielding from walls, topography or other barriers which may reduce sound levels further.

Table 19. Construction Noise

Source Data:	**Maximum Sound Level (dBA)**	**Utilization Factor**	**Leq Sound Level (dBA)**
Construction Condition: Phase 1 Mixed Use - Parcel 2 Core and Shell			
Source 1: Crane - Sound level (dBA) at 50 feet =	81	16%	73.0
Source 2: Generator - Sound level (dBA) at 50 feet =	81	50%	78.0
Source 3: Gradall - Sound level (dBA) at 50 feet =	83	40%	79.0
Calculated Data:			
All Sources Combined - Lmax sound level (dBA) at 50 feet =			87
All Sources Combined - Leq sound level (dBA) at 50 feet =			82

Distance Between Source and Receiver (ft.)	Geometric Attenuation (dB)	Ground Effect Attenuation (dB)	Calculated Lmax Sound Level (dBA)	Calculated Leq Sound Level (dBA)
25	6	0.0	93	88
50	0	0.0	87	82
100	-6	0.0	81	76
150	-10	0.0	77	73
200	-12	0.0	75	70
250	-14	0.0	73	68
300	-16	0.0	71	67
400	-18	0.0	68	64
500	-20	0.0	67	62
600	-22	0.0	65	61
700	-23	0.0	64	59

Geometric attenuation based on 6 dB per doubling of distance.
Note: This calculation does not include the effects, if any, of local shielding from walls, topography or other barriers which may reduce sound levels further.

Table 20. Construction Noise

Source Data:	Maximum Sound Level (dBA)	Utilization Factor	Leq Sound Level (dBA)
Construction Condition: Phase 1 Mixed Use - Parcel 2 Tenant Improvements			
Source 1: Dump truck - Sound level (dBA) at 50 feet =	76	40%	72.0
Source 2: Generator - Sound level (dBA) at 50 feet =	81	50%	78.0
Source 3: Gradall - Sound level (dBA) at 50 feet =	83	40%	79.0
Calculated Data:			
All Sources Combined - Lmax sound level (dBA) at 50 feet =			86
All Sources Combined - Leq sound level (dBA) at 50 feet =			82

Distance Between Source and Receiver (ft.)	Geometric Attenuation (dB)	Ground Effect Attenuation (dB)	Calculated Lmax Sound Level (dBA)	Calculated Leq Sound Level (dBA)
25	6	0.0	92	88
50	0	0.0	86	82
100	-6	0.0	80	76
150	-10	0.0	76	72
200	-12	0.0	74	70
250	-14	0.0	72	68
300	-16	0.0	70	66
400	-18	0.0	68	64
500	-20	0.0	66	62
600	-22	0.0	64	60
700	-23	0.0	63	59

Geometric attenuation based on 6 dB per doubling of distance.
Note: This calculation does not include the effects, if any, of local shielding from walls, topography or other barriers which may reduce sound levels further.

Table 21. Construction Noise

Source Data:	Maximum Sound Level (dBA)	Utilization Factor	Leq Sound Level (dBA)
Construction Condition: Phase 1 Mixed Use - Parcel 2 Landscaping			
Source 1: Excavator - Sound level (dBA) at 50 feet =	81	40%	77.0
Source 2: Backhoe - Sound level (dBA) at 50 feet =	78	40%	74.0
Source 3: Front end loader - Sound level (dBA) at 50 feet =	79	40%	75.0
Calculated Data:			
All Sources Combined - Lmax sound level (dBA) at 50 feet =			84
All Sources Combined - Leq sound level (dBA) at 50 feet =			80

Distance Between Source and Receiver (ft.)	Geometric Attenuation (dB)	Ground Effect Attenuation (dB)	Calculated Lmax Sound Level (dBA)	Calculated Leq Sound Level (dBA)
10	14	0.0	98	94
25	6	0.0	90	86
50	0	0.0	84	80
100	-6	0.0	78	74
170	-11	0.0	74	70
250	-14	0.0	70	66
300	-16	0.0	69	65
400	-18	0.0	66	62
500	-20	0.0	64	60
600	-22	0.0	63	59
700	-23	0.0	61	57

Geometric attenuation based on 6 dB per doubling of distance.

Note: This calculation does not include the effects, if any, of local shielding from walls, topography or other barriers which may reduce sound levels further.

Table 22. Construction Noise

Source Data:	Maximum Sound Level (dBA)	Utilization Factor	Leq Sound Level (dBA)
Construction Condition: Phase 1 Mixed Use - Parcel 3 Foundations			
Source 1: Excavator - Sound level (dBA) at 50 feet =	81	40%	77.0
Source 2: Generator - Sound level (dBA) at 50 feet =	81	50%	78.0
Source 3: Gradall - Sound level (dBA) at 50 feet =	83	40%	79.0
Calculated Data:			
All Sources Combined - Lmax sound level (dBA) at 50 feet =			87
All Sources Combined - Leq sound level (dBA) at 50 feet =			83

Distance Between Source and Receiver (ft.)	Geometric Attenuation (dB)	Ground Effect Attenuation (dB)	Calculated Lmax Sound Level (dBA)	Calculated Leq Sound Level (dBA)
25	6	0.0	93	89
50	0	0.0	87	83
100	-6	0.0	81	77
150	-10	0.0	77	73
200	-12	0.0	75	71
250	-14	0.0	73	69
300	-16	0.0	71	67
400	-18	0.0	68	65
500	-20	0.0	67	63
600	-22	0.0	65	61
700	-23	0.0	64	60

Geometric attenuation based on 6 dB per doubling of distance.
Note: This calculation does not include the effects, if any, of local shielding from walls, topography or other barriers which may reduce sound levels further.

Table 23. Construction Noise

Source Data:	Maximum Sound Level (dBA)	Utilization Factor	Leq Sound Level (dBA)
Construction Condition: Phase 1 Mixed Use - Parcel 3 Core and Shell			
Source 1: Crane - Sound level (dBA) at 50 feet =	81	16%	73.0
Source 2: Generator - Sound level (dBA) at 50 feet =	81	50%	78.0
Source 3: Gradall - Sound level (dBA) at 50 feet =	83	40%	79.0
Calculated Data:			
All Sources Combined - Lmax sound level (dBA) at 50 feet =			87
All Sources Combined - Leq sound level (dBA) at 50 feet =			82

Distance Between Source and Receiver (ft.)	Geometric Attenuation (dB)	Ground Effect Attenuation (dB)	Calculated Lmax Sound Level (dBA)	Calculated Leq Sound Level (dBA)
25	6	0.0	93	88
50	0	0.0	87	82
100	-6	0.0	81	76
150	-10	0.0	77	73
200	-12	0.0	75	70
250	-14	0.0	73	68
300	-16	0.0	71	67
400	-18	0.0	68	64
500	-20	0.0	67	62
600	-22	0.0	65	61
700	-23	0.0	64	59

Geometric attenuation based on 6 dB per doubling of distance.
Note: This calculation does not include the effects, if any, of local shielding from walls, topography or other barriers which may reduce sound levels further.

Table 24. Construction Noise

Source Data:	Maximum Sound Level (dBA)	Utilization Factor	Leq Sound Level (dBA)
Construction Condition: Phase 1 Mixed Use - Parcel 3 Tenant Improvements			
Source 1: Dump truck - Sound level (dBA) at 50 feet =	76	40%	72.0
Source 2: Generator - Sound level (dBA) at 50 feet =	81	50%	78.0
Source 3: Gradall - Sound level (dBA) at 50 feet =	83	40%	79.0
Calculated Data:			
All Sources Combined - Lmax sound level (dBA) at 50 feet =			86
All Sources Combined - Leq sound level (dBA) at 50 feet =			82

Distance Between Source and Receiver (ft.)	Geometric Attenuation (dB)	Ground Effect Attenuation (dB)	Calculated Lmax Sound Level (dBA)	Calculated Leq Sound Level (dBA)
25	6	0.0	92	88
50	0	0.0	86	82
100	-6	0.0	80	76
150	-10	0.0	76	72
200	-12	0.0	74	70
250	-14	0.0	72	68
300	-16	0.0	70	66
400	-18	0.0	68	64
500	-20	0.0	66	62
600	-22	0.0	64	60
700	-23	0.0	63	59

Geometric attenuation based on 6 dB per doubling of distance.
Note: This calculation does not include the effects, if any, of local shielding from walls, topography or other barriers which may reduce sound levels further.

Table 25. Construction Noise

Source Data:	Maximum Sound Level (dBA)	Utilization Factor	Leq Sound Level (dBA)
Construction Condition: Phase 1 Mixed Use - Parcel 3 Landscaping			
Source 1: Excavator - Sound level (dBA) at 50 feet =	81	40%	77.0
Source 2: Backhoe - Sound level (dBA) at 50 feet =	78	40%	74.0
Source 3: Front end loader - Sound level (dBA) at 50 feet =	79	40%	75.0
Calculated Data:			
All Sources Combined - Lmax sound level (dBA) at 50 feet =			84
All Sources Combined - Leq sound level (dBA) at 50 feet =			80

Distance Between Source and Receiver (ft.)	Geometric Attenuation (dB)	Ground Effect Attenuation (dB)	Calculated Lmax Sound Level (dBA)	Calculated Leq Sound Level (dBA)
25	6	0.0	90	86
50	0	0.0	84	80
100	-6	0.0	78	74
150	-10	0.0	75	71
200	-12	0.0	72	68
250	-14	0.0	70	66
300	-16	0.0	69	65
400	-18	0.0	66	62
500	-20	0.0	64	60
600	-22	0.0	63	59
700	-23	0.0	61	57

Geometric attenuation based on 6 dB per doubling of distance.
Note: This calculation does not include the effects, if any, of local shielding from walls, topography or other barriers which may reduce sound levels further.

Table 26. Construction Noise

Source Data:	Maximum Sound Level (dBA)	Utilization Factor	Leq Sound Level (dBA)
Construction Condition: Phase 1 Demolition			
Source 1: Excavator - Sound level (dBA) at 50 feet =	81	40%	77.0
Source 2: Generator - Sound level (dBA) at 50 feet =	81	50%	78.0
Source 3: Front end loader - Sound level (dBA) at 50 feet =	79	40%	75.0
Calculated Data:			
All Sources Combined - Lmax sound level (dBA) at 50 feet =			85
All Sources Combined - Leq sound level (dBA) at 50 feet =			82

Distance Between Source and Receiver (ft.)	Geometric Attenuation (dB)	Ground Effect Attenuation (dB)	Calculated Lmax Sound Level (dBA)	Calculated Leq Sound Level (dBA)
25	6	0.0	91	88
50	0	0.0	85	82
100	-6	0.0	79	76
150	-10	0.0	76	72
200	-12	0.0	73	70
250	-14	0.0	71	68
300	-16	0.0	70	66
400	-18	0.0	67	64
500	-20	0.0	65	62
600	-22	0.0	64	60
700	-23	0.0	62	59

Geometric attenuation based on 6 dB per doubling of distance.
Note: This calculation does not include the effects, if any, of local shielding from walls, topography or other barriers which may reduce sound levels further.

Table 27. Construction Noise

Source Data:	Maximum Sound Level (dBA)	Utilization Factor	Leq Sound Level (dBA)
Construction Condition: Phase 1 Grading & Utilities			
Source 1: Grader - Sound level (dBA) at 50 feet =	85	40%	81.0
Source 2: Scraper - Sound level (dBA) at 50 feet =	84	40%	80.0
Source 3: Gradall - Sound level (dBA) at 50 feet =	83	40%	79.0
Calculated Data:			
All Sources Combined - Lmax sound level (dBA) at 50 feet =			89
All Sources Combined - Leq sound level (dBA) at 50 feet =			85

Distance Between Source and Receiver (ft.)	Geometric Attenuation (dB)	Ground Effect Attenuation (dB)	Calculated Lmax Sound Level (dBA)	Calculated Leq Sound Level (dBA)
25	6	0.0	95	91
50	0	0.0	89	85
100	-6	0.0	83	79
150	-10	0.0	79	75
200	-12	0.0	77	73
250	-14	0.0	75	71
300	-16	0.0	73	69
400	-18	0.0	71	67
500	-20	0.0	69	65
600	-22	0.0	67	63
700	-23	0.0	66	62

Geometric attenuation based on 6 dB per doubling of distance.
Note: This calculation does not include the effects, if any, of local shielding from walls, topography or other barriers which may reduce sound levels further.

Table 28. Construction Noise

Source Data:	Maximum Sound Level (dBA)	Utilization Factor	Leq Sound Level (dBA)
Construction Condition: Phase 1 Office - South Garage 2023			
Source 1: Pile Driver - Sound level (dBA) at 50 feet =	101	20%	94.0
Source 2: Generator - Sound level (dBA) at 50 feet =	81	50%	78.0
Source 3: Gradall - Sound level (dBA) at 50 feet =	83	40%	79.0
Calculated Data:			
All Sources Combined - Lmax sound level (dBA) at 50 feet =			101
All Sources Combined - Leq sound level (dBA) at 50 feet =			94

Distance Between Source and Receiver (ft.)	Geometric Attenuation (dB)	Ground Effect Attenuation (dB)	Calculated Lmax Sound Level (dBA)	Calculated Leq Sound Level (dBA)
25	6	0.0	107	100
50	0	0.0	101	94
100	-6	0.0	95	88
150	-10	0.0	92	85
200	-12	0.0	89	82
250	-14	0.0	87	80
300	-16	0.0	86	79
400	-18	0.0	83	76
500	-20	0.0	81	74
600	-22	0.0	80	73
700	-23	0.0	78	71

Geometric attenuation based on 6 dB per doubling of distance.
Note: This calculation does not include the effects, if any, of local shielding from walls, topography or other barriers which may reduce sound levels further.

Table 29. Construction Noise

Source Data:	Maximum Sound Level (dBA)	Utilization Factor	Leq Sound Level (dBA)
Construction Condition: Phase 1 Office - South Garage 2024			
Source 1: Crane - Sound level (dBA) at 50 feet =	81	16%	73.0
Source 2: Concrete pump truck - Sound level (dBA) at 50 feet =	81	20%	74.0
Source 3: Gradall - Sound level (dBA) at 50 feet =	83	40%	79.0
Calculated Data:			
All Sources Combined - Lmax sound level (dBA) at 50 feet =			87
All Sources Combined - Leq sound level (dBA) at 50 feet =			81

Distance Between Source and Receiver (ft.)	Geometric Attenuation (dB)	Ground Effect Attenuation (dB)	Calculated Lmax Sound Level (dBA)	Calculated Leq Sound Level (dBA)
25	6	0.0	93	87
50	0	0.0	87	81
100	-6	0.0	81	75
150	-10	0.0	77	71
200	-12	0.0	75	69
250	-14	0.0	73	67
300	-16	0.0	71	65
400	-18	0.0	68	63
500	-20	0.0	67	61
600	-22	0.0	65	59
700	-23	0.0	64	58

Geometric attenuation based on 6 dB per doubling of distance.
Note: This calculation does not include the effects, if any, of local shielding from walls, topography or other barriers which may reduce sound levels further.

Table 30. Construction Noise

Source Data:	Maximum Sound Level (dBA)	Utilization Factor	Leq Sound Level (dBA)
Construction Condition: Phase 1 Office - Office Building 3 2023			
Source 1: Compactor (ground) - Sound level (dBA) at 50 feet =	83	20%	76.0
Source 2: Pile Driver - Sound level (dBA) at 50 feet =	101	20%	94.0
Source 3: Gradall - Sound level (dBA) at 50 feet =	83	40%	79.0
Calculated Data:			
All Sources Combined - Lmax sound level (dBA) at 50 feet =			101
All Sources Combined - Leq sound level (dBA) at 50 feet =			94

Distance Between Source and Receiver (ft.)	Geometric Attenuation (dB)	Ground Effect Attenuation (dB)	Calculated Lmax Sound Level (dBA)	Calculated Leq Sound Level (dBA)
25	6	0.0	107	100
50	0	0.0	101	94
100	-6	0.0	95	88
150	-10	0.0	92	85
200	-12	0.0	89	82
250	-14	0.0	87	80
300	-16	0.0	86	79
400	-18	0.0	83	76
500	-20	0.0	81	74
600	-22	0.0	80	73
700	-23	0.0	78	71

Geometric attenuation based on 6 dB per doubling of distance.
Note: This calculation does not include the effects, if any, of local shielding from walls, topography or other barriers which may reduce sound levels further.

Table 31. Construction Noise

Source Data:	Maximum Sound Level (dBA)	Utilization Factor	Leq Sound Level (dBA)
Construction Condition: Phase 1 Office - Office Building 3 2024			
Source 1: Concrete mixer truck - Sound level (dBA) at 50 feet =	79	40%	75.0
Source 2: Concrete pump truck - Sound level (dBA) at 50 feet =	81	20%	74.0
Source 3: Gradall - Sound level (dBA) at 50 feet =	83	40%	79.0
Calculated Data:			
All Sources Combined - Lmax sound level (dBA) at 50 feet =			86
All Sources Combined - Leq sound level (dBA) at 50 feet =			81

Distance Between Source and Receiver (ft.)	Geometric Attenuation (dB)	Ground Effect Attenuation (dB)	Calculated Lmax Sound Level (dBA)	Calculated Leq Sound Level (dBA)
25	6	0.0	92	87
50	0	0.0	86	81
100	-6	0.0	80	75
150	-10	0.0	77	72
200	-12	0.0	74	69
250	-14	0.0	72	67
300	-16	0.0	71	66
400	-18	0.0	68	63
500	-20	0.0	66	61
600	-22	0.0	64	60
700	-23	0.0	63	58

Geometric attenuation based on 6 dB per doubling of distance.
Note: This calculation does not include the effects, if any, of local shielding from walls, topography or other barriers which may reduce sound levels further.

Table 32. Construction Noise

Source Data:	Maximum Sound Level (dBA)	Utilization Factor	Leq Sound Level (dBA)
Construction Condition: Phase 1 Office - Office Building 3 2025			
Source 1: Dump truck - Sound level (dBA) at 50 feet =	76	40%	72.0
Source 2: Pickup Truck - Sound level (dBA) at 50 feet =	75	40%	71.0
Source 3: Gradall - Sound level (dBA) at 50 feet =	83	40%	79.0
Calculated Data:			
All Sources Combined - Lmax sound level (dBA) at 50 feet =			84
All Sources Combined - Leq sound level (dBA) at 50 feet =			80

Distance Between Source and Receiver (ft.)	Geometric Attenuation (dB)	Ground Effect Attenuation (dB)	Calculated Lmax Sound Level (dBA)	Calculated Leq Sound Level (dBA)
25	6	0.0	90	86
50	0	0.0	84	80
100	-6	0.0	78	74
150	-10	0.0	75	71
200	-12	0.0	72	68
250	-14	0.0	70	66
300	-16	0.0	69	65
400	-18	0.0	66	62
500	-20	0.0	64	60
600	-22	0.0	63	59
700	-23	0.0	61	57

Geometric attenuation based on 6 dB per doubling of distance.
Note: This calculation does not include the effects, if any, of local shielding from walls, topography or other barriers which may reduce sound levels further.

Table 33. Construction Noise

Source Data:	Maximum Sound Level (dBA)	Utilization Factor	Leq Sound Level (dBA)
Construction Condition: Phase 1 Office - Office Building 1 2023			
Source 1: Compactor (ground) - Sound level (dBA) at 50 feet =	83	20%	76.0
Source 2: Pile Driver - Sound level (dBA) at 50 feet =	101	20%	94.0
Source 3: Gradall - Sound level (dBA) at 50 feet =	83	40%	79.0
Calculated Data:			
All Sources Combined - Lmax sound level (dBA) at 50 feet =			101
All Sources Combined - Leq sound level (dBA) at 50 feet =			94

Distance Between Source and Receiver (ft.)	Geometric Attenuation (dB)	Ground Effect Attenuation (dB)	Calculated Lmax Sound Level (dBA)	Calculated Leq Sound Level (dBA)
25	6	0.0	107	100
50	0	0.0	101	94
100	-6	0.0	95	88
150	-10	0.0	92	85
200	-12	0.0	89	82
250	-14	0.0	87	80
300	-16	0.0	86	79
400	-18	0.0	83	76
500	-20	0.0	81	74
600	-22	0.0	80	73
700	-23	0.0	78	71

Geometric attenuation based on 6 dB per doubling of distance.
Note: This calculation does not include the effects, if any, of local shielding from walls, topography or other barriers which may reduce sound levels further.

Table 34. Construction Noise

Source Data:	Maximum Sound Level (dBA)	Utilization Factor	Leq Sound Level (dBA)
Construction Condition: Phase 1 Office - Office Building 1 2024			
Source 1: Concrete mixer truck - Sound level (dBA) at 50 feet =	79	40%	75.0
Source 2: Concrete pump truck - Sound level (dBA) at 50 feet =	81	20%	74.0
Source 3: Gradall - Sound level (dBA) at 50 feet =	83	40%	79.0
Calculated Data:			
All Sources Combined - Lmax sound level (dBA) at 50 feet =			86
All Sources Combined - Leq sound level (dBA) at 50 feet =			81

Distance Between Source and Receiver (ft.)	Geometric Attenuation (dB)	Ground Effect Attenuation (dB)	Calculated Lmax Sound Level (dBA)	Calculated Leq Sound Level (dBA)
25	6	0.0	92	87
50	0	0.0	86	81
100	-6	0.0	80	75
150	-10	0.0	77	72
200	-12	0.0	74	69
250	-14	0.0	72	67
300	-16	0.0	71	66
400	-18	0.0	68	63
500	-20	0.0	66	61
600	-22	0.0	64	60
700	-23	0.0	63	58

Geometric attenuation based on 6 dB per doubling of distance.
Note: This calculation does not include the effects, if any, of local shielding from walls, topography or other barriers which may reduce sound levels further.

Table 35. Construction Noise

Source Data:	Maximum Sound Level (dBA)	Utilization Factor	Leq Sound Level (dBA)
Construction Condition: Phase 1 Office - Office Building 2 2023			
Source 1: Compactor (ground) - Sound level (dBA) at 50 feet =	83	20%	76.0
Source 2: Pile Driver - Sound level (dBA) at 50 feet =	101	20%	94.0
Source 3: Gradall - Sound level (dBA) at 50 feet =	83	40%	79.0
Calculated Data:			
All Sources Combined - Lmax sound level (dBA) at 50 feet =			101
All Sources Combined - Leq sound level (dBA) at 50 feet =			94

Distance Between Source and Receiver (ft.)	Geometric Attenuation (dB)	Ground Effect Attenuation (dB)	Calculated Lmax Sound Level (dBA)	Calculated Leq Sound Level (dBA)
25	6	0.0	107	100
50	0	0.0	101	94
100	-6	0.0	95	88
150	-10	0.0	92	85
200	-12	0.0	89	82
250	-14	0.0	87	80
300	-16	0.0	86	79
400	-18	0.0	83	76
500	-20	0.0	81	74
600	-22	0.0	80	73
700	-23	0.0	78	71

Geometric attenuation based on 6 dB per doubling of distance.
Note: This calculation does not include the effects, if any, of local shielding from walls, topography or other barriers which may reduce sound levels further.

Table 36. Construction Noise

Source Data:	Maximum Sound Level (dBA)	Utilization Factor	Leq Sound Level (dBA)
Construction Condition: Phase 1 Office - Office Building 2 2024			
Source 1: Concrete mixer truck - Sound level (dBA) at 50 feet =	79	40%	75.0
Source 2: Concrete pump truck - Sound level (dBA) at 50 feet =	81	20%	74.0
Source 3: Gradall - Sound level (dBA) at 50 feet =	83	40%	79.0
Calculated Data:			
All Sources Combined - Lmax sound level (dBA) at 50 feet =			86
All Sources Combined - Leq sound level (dBA) at 50 feet =			81

Distance Between Source and Receiver (ft.)	Geometric Attenuation (dB)	Ground Effect Attenuation (dB)	Calculated Lmax Sound Level (dBA)	Calculated Leq Sound Level (dBA)
25	6	0.0	92	87
50	0	0.0	86	81
100	-6	0.0	80	75
150	-10	0.0	77	72
200	-12	0.0	74	69
250	-14	0.0	72	67
300	-16	0.0	71	66
400	-18	0.0	68	63
500	-20	0.0	66	61
600	-22	0.0	64	60
700	-23	0.0	63	58

Geometric attenuation based on 6 dB per doubling of distance.
Note: This calculation does not include the effects, if any, of local shielding from walls, topography or other barriers which may reduce sound levels further.

Table 37. Construction Noise

Source Data:	Maximum Sound Level (dBA)	Utilization Factor	Leq Sound Level (dBA)
Construction Condition: Phase 1 Office - Office Building 2 2025			
Source 1: Dump truck - Sound level (dBA) at 50 feet =	76	40%	72.0
Source 2: Pickup Truck - Sound level (dBA) at 50 feet =	75	40%	71.0
Source 3: Gradall - Sound level (dBA) at 50 feet =	83	40%	79.0
Calculated Data:			
All Sources Combined - Lmax sound level (dBA) at 50 feet =			84
All Sources Combined - Leq sound level (dBA) at 50 feet =			80

Distance Between Source and Receiver (ft.)	Geometric Attenuation (dB)	Ground Effect Attenuation (dB)	Calculated Lmax Sound Level (dBA)	Calculated Leq Sound Level (dBA)
25	6	0.0	90	86
50	0	0.0	84	80
100	-6	0.0	78	74
150	-10	0.0	75	71
200	-12	0.0	72	68
250	-14	0.0	70	66
300	-16	0.0	69	65
400	-18	0.0	66	62
500	-20	0.0	64	60
600	-22	0.0	63	59
700	-23	0.0	61	57

Geometric attenuation based on 6 dB per doubling of distance.
Note: This calculation does not include the effects, if any, of local shielding from walls, topography or other barriers which may reduce sound levels further.

Table 38. Construction Noise

Source Data:	Maximum Sound Level (dBA)	Utilization Factor	Leq Sound Level (dBA)
Construction Condition: Phase 1 Office - Office Building 5 2023			
Source 1: Compactor (ground) - Sound level (dBA) at 50 feet =	83	20%	76.0
Source 2: Pile Driver - Sound level (dBA) at 50 feet =	101	20%	94.0
Source 3: Gradall - Sound level (dBA) at 50 feet =	83	40%	79.0
Calculated Data:			
All Sources Combined - Lmax sound level (dBA) at 50 feet =			101
All Sources Combined - Leq sound level (dBA) at 50 feet =			94

Distance Between Source and Receiver (ft.)	Geometric Attenuation (dB)	Ground Effect Attenuation (dB)	Calculated Lmax Sound Level (dBA)	Calculated Leq Sound Level (dBA)
25	6	0.0	107	100
50	0	0.0	101	94
100	-6	0.0	95	88
150	-10	0.0	92	85
200	-12	0.0	89	82
250	-14	0.0	87	80
300	-16	0.0	86	79
400	-18	0.0	83	76
500	-20	0.0	81	74
600	-22	0.0	80	73
700	-23	0.0	78	71

Geometric attenuation based on 6 dB per doubling of distance.
Note: This calculation does not include the effects, if any, of local shielding from walls, topography or other barriers which may reduce sound levels further.

Table 39. Construction Noise

Source Data:	Maximum Sound Level (dBA)	Utilization Factor	Leq Sound Level (dBA)
Construction Condition: Phase 1 Office - Office Building 5 2024			
Source 1: Concrete mixer truck - Sound level (dBA) at 50 feet =	79	40%	75.0
Source 2: Concrete pump truck - Sound level (dBA) at 50 feet =	81	20%	74.0
Source 3: Gradall - Sound level (dBA) at 50 feet =	83	40%	79.0
Calculated Data:			
All Sources Combined - Lmax sound level (dBA) at 50 feet =			86
All Sources Combined - Leq sound level (dBA) at 50 feet =			81

Distance Between Source and Receiver (ft.)	Geometric Attenuation (dB)	Ground Effect Attenuation (dB)	Calculated Lmax Sound Level (dBA)	Calculated Leq Sound Level (dBA)
25	6	0.0	92	87
50	0	0.0	86	81
100	-6	0.0	80	75
150	-10	0.0	77	72
200	-12	0.0	74	69
250	-14	0.0	72	67
300	-16	0.0	71	66
400	-18	0.0	68	63
500	-20	0.0	66	61
600	-22	0.0	64	60
700	-23	0.0	63	58

Geometric attenuation based on 6 dB per doubling of distance.
Note: This calculation does not include the effects, if any, of local shielding from walls, topography or other barriers which may reduce sound levels further.

Table 40. Construction Noise

Source Data:	Maximum Sound Level (dBA)	Utilization Factor	Leq Sound Level (dBA)
Construction Condition: Phase 1 Office - Office Building 5 2025			
Source 1: Dump truck - Sound level (dBA) at 50 feet =	76	40%	72.0
Source 2: Pickup Truck - Sound level (dBA) at 50 feet =	75	40%	71.0
Source 3: Gradall - Sound level (dBA) at 50 feet =	83	40%	79.0
Calculated Data:			
All Sources Combined - Lmax sound level (dBA) at 50 feet =			84
All Sources Combined - Leq sound level (dBA) at 50 feet =			80

Distance Between Source and Receiver (ft.)	Geometric Attenuation (dB)	Ground Effect Attenuation (dB)	Calculated Lmax Sound Level (dBA)	Calculated Leq Sound Level (dBA)
25	6	0.0	90	86
50	0	0.0	84	80
100	-6	0.0	78	74
150	-10	0.0	75	71
200	-12	0.0	72	68
250	-14	0.0	70	66
300	-16	0.0	69	65
400	-18	0.0	66	62
500	-20	0.0	64	60
600	-22	0.0	63	59
700	-23	0.0	61	57

Geometric attenuation based on 6 dB per doubling of distance.
Note: This calculation does not include the effects, if any, of local shielding from walls, topography or other barriers which may reduce sound levels further.

Table 41. Construction Noise

Source Data:	Maximum Sound Level (dBA)	Utilization Factor	Leq Sound Level (dBA)
Construction Condition: Phase 1 Office - Office Building 6 2023			
Source 1: Compactor (ground) - Sound level (dBA) at 50 feet =	83	20%	76.0
Source 2: Pile Driver - Sound level (dBA) at 50 feet =	101	20%	94.0
Source 3: Gradall - Sound level (dBA) at 50 feet =	83	40%	79.0
Calculated Data:			
All Sources Combined - Lmax sound level (dBA) at 50 feet =			101
All Sources Combined - Leq sound level (dBA) at 50 feet =			94

Distance Between Source and Receiver (ft.)	Geometric Attenuation (dB)	Ground Effect Attenuation (dB)	Calculated Lmax Sound Level (dBA)	Calculated Leq Sound Level (dBA)
25	6	0.0	107	100
50	0	0.0	101	94
100	-6	0.0	95	88
150	-10	0.0	92	85
200	-12	0.0	89	82
250	-14	0.0	87	80
300	-16	0.0	86	79
400	-18	0.0	83	76
500	-20	0.0	81	74
600	-22	0.0	80	73
700	-23	0.0	78	71

Geometric attenuation based on 6 dB per doubling of distance.
Note: This calculation does not include the effects, if any, of local shielding from walls, topography or other barriers which may reduce sound levels further.

Table 42. Construction Noise

Source Data:	Maximum Sound Level (dBA)	Utilization Factor	Leq Sound Level (dBA)
Construction Condition: Phase 1 Office - Office Building 6 2024			
Source 1: Concrete mixer truck - Sound level (dBA) at 50 feet =	79	40%	75.0
Source 2: Concrete pump truck - Sound level (dBA) at 50 feet =	81	20%	74.0
Source 3: Gradall - Sound level (dBA) at 50 feet =	83	40%	79.0
Calculated Data:			
All Sources Combined - Lmax sound level (dBA) at 50 feet =			86
All Sources Combined - Leq sound level (dBA) at 50 feet =			81

Distance Between Source and Receiver (ft.)	Geometric Attenuation (dB)	Ground Effect Attenuation (dB)	Calculated Lmax Sound Level (dBA)	Calculated Leq Sound Level (dBA)
25	6	0.0	92	87
50	0	0.0	86	81
100	-6	0.0	80	75
150	-10	0.0	77	72
200	-12	0.0	74	69
250	-14	0.0	72	67
300	-16	0.0	71	66
400	-18	0.0	68	63
500	-20	0.0	66	61
600	-22	0.0	64	60
700	-23	0.0	63	58

Geometric attenuation based on 6 dB per doubling of distance.
Note: This calculation does not include the effects, if any, of local shielding from walls, topography or other barriers which may reduce sound levels further.

Table 43. Construction Noise

Source Data:	Maximum Sound Level (dBA)	Utilization Factor	Leq Sound Level (dBA)
Construction Condition: Phase 1 Office - Office Building 6 2025			
Source 1: Dump truck - Sound level (dBA) at 50 feet =	76	40%	72.0
Source 2: Pickup Truck - Sound level (dBA) at 50 feet =	75	40%	71.0
Source 3: Gradall - Sound level (dBA) at 50 feet =	83	40%	79.0
Calculated Data:			
All Sources Combined - Lmax sound level (dBA) at 50 feet =			84
All Sources Combined - Leq sound level (dBA) at 50 feet =			80

Distance Between Source and Receiver (ft.)	Geometric Attenuation (dB)	Ground Effect Attenuation (dB)	Calculated Lmax Sound Level (dBA)	Calculated Leq Sound Level (dBA)
25	6	0.0	90	86
50	0	0.0	84	80
100	-6	0.0	78	74
150	-10	0.0	75	71
200	-12	0.0	72	68
250	-14	0.0	70	66
300	-16	0.0	69	65
400	-18	0.0	66	62
500	-20	0.0	64	60
600	-22	0.0	63	59
700	-23	0.0	61	57

Geometric attenuation based on 6 dB per doubling of distance.
Note: This calculation does not include the effects, if any, of local shielding from walls, topography or other barriers which may reduce sound levels further.

Table 44. Construction Noise

Source Data:	Maximum Sound Level (dBA)	Utilization Factor	Leq Sound Level (dBA)
Construction Condition: Phase 1 Mixed Use - Parcel 7 Foundations			
Source 1: Excavator - Sound level (dBA) at 50 feet =	81	40%	77.0
Source 2: Generator - Sound level (dBA) at 50 feet =	81	50%	78.0
Source 3: Gradall - Sound level (dBA) at 50 feet =	83	40%	79.0
Calculated Data:			
All Sources Combined - Lmax sound level (dBA) at 50 feet =			87
All Sources Combined - Leq sound level (dBA) at 50 feet =			83

Distance Between Source and Receiver (ft.)	Geometric Attenuation (dB)	Ground Effect Attenuation (dB)	Calculated Lmax Sound Level (dBA)	Calculated Leq Sound Level (dBA)
25	6	0.0	93	89
50	0	0.0	87	83
100	-6	0.0	81	77
150	-10	0.0	77	73
200	-12	0.0	75	71
250	-14	0.0	73	69
300	-16	0.0	71	67
400	-18	0.0	68	65
500	-20	0.0	67	63
600	-22	0.0	65	61
700	-23	0.0	64	60

Geometric attenuation based on 6 dB per doubling of distance.
Note: This calculation does not include the effects, if any, of local shielding from walls, topography or other barriers which may reduce sound levels further.

Table 45. Construction Noise

Source Data:	Maximum Sound Level (dBA)	Utilization Factor	Leq Sound Level (dBA)
Construction Condition: Phase 1 Mixed Use - Parcel 7 Core and Shell			
Source 1: Crane - Sound level (dBA) at 50 feet =	81	16%	73.0
Source 2: Generator - Sound level (dBA) at 50 feet =	81	50%	78.0
Source 3: Gradall - Sound level (dBA) at 50 feet =	83	40%	79.0
Calculated Data:			
All Sources Combined - Lmax sound level (dBA) at 50 feet =			87
All Sources Combined - Leq sound level (dBA) at 50 feet =			82

Distance Between Source and Receiver (ft.)	Geometric Attenuation (dB)	Ground Effect Attenuation (dB)	Calculated Lmax Sound Level (dBA)	Calculated Leq Sound Level (dBA)
25	6	0.0	93	88
50	0	0.0	87	82
100	-6	0.0	81	76
150	-10	0.0	77	73
200	-12	0.0	75	70
250	-14	0.0	73	68
300	-16	0.0	71	67
400	-18	0.0	68	64
500	-20	0.0	67	62
600	-22	0.0	65	61
700	-23	0.0	64	59

Geometric attenuation based on 6 dB per doubling of distance.
Note: This calculation does not include the effects, if any, of local shielding from walls, topography or other barriers which may reduce sound levels further.

Table 46. Construction Noise

Source Data:	Maximum Sound Level (dBA)	Utilization Factor	Leq Sound Level (dBA)
Construction Condition: Phase 1 Mixed Use - Parcel 7 Tenant Improvements			
Source 1: Dump truck - Sound level (dBA) at 50 feet =	76	40%	72.0
Source 2: Generator - Sound level (dBA) at 50 feet =	81	50%	78.0
Source 3: Gradall - Sound level (dBA) at 50 feet =	83	40%	79.0
Calculated Data:			
All Sources Combined - Lmax sound level (dBA) at 50 feet =			86
All Sources Combined - Leq sound level (dBA) at 50 feet =			82

Distance Between Source and Receiver (ft.)	Geometric Attenuation (dB)	Ground Effect Attenuation (dB)	Calculated Lmax Sound Level (dBA)	Calculated Leq Sound Level (dBA)
25	6	0.0	92	88
50	0	0.0	86	82
100	-6	0.0	80	76
150	-10	0.0	76	72
200	-12	0.0	74	70
250	-14	0.0	72	68
300	-16	0.0	70	66
400	-18	0.0	68	64
500	-20	0.0	66	62
600	-22	0.0	64	60
700	-23	0.0	63	59

Geometric attenuation based on 6 dB per doubling of distance.
Note: This calculation does not include the effects, if any, of local shielding from walls, topography or other barriers which may reduce sound levels further.

Table 47. Construction Noise

Source Data:	Maximum Sound Level (dBA)	Utilization Factor	Leq Sound Level (dBA)
Construction Condition: Phase 1 Mixed Use - Parcel 7 Landscaping			
Source 1: Excavator - Sound level (dBA) at 50 feet =	81	40%	77.0
Source 2: Backhoe - Sound level (dBA) at 50 feet =	78	40%	74.0
Source 3: Front end loader - Sound level (dBA) at 50 feet =	79	40%	75.0
Calculated Data:			
All Sources Combined - Lmax sound level (dBA) at 50 feet =			84
All Sources Combined - Leq sound level (dBA) at 50 feet =			80

Distance Between Source and Receiver (ft.)	Geometric Attenuation (dB)	Ground Effect Attenuation (dB)	Calculated Lmax Sound Level (dBA)	Calculated Leq Sound Level (dBA)
25	6	0.0	90	86
50	0	0.0	84	80
100	-6	0.0	78	74
150	-10	0.0	75	71
200	-12	0.0	72	68
250	-14	0.0	70	66
300	-16	0.0	69	65
400	-18	0.0	66	62
500	-20	0.0	64	60
600	-22	0.0	63	59
700	-23	0.0	61	57

Geometric attenuation based on 6 dB per doubling of distance.
Note: This calculation does not include the effects, if any, of local shielding from walls, topography or other barriers which may reduce sound levels further.

Table 48. Construction Noise

Source Data:	Maximum Sound Level (dBA)	Utilization Factor	Leq Sound Level (dBA)
Construction Condition: Phase 1 Mixed Use - Parcel 6 Foundations			
Source 1: Excavator - Sound level (dBA) at 50 feet =	81	40%	77.0
Source 2: Generator - Sound level (dBA) at 50 feet =	81	50%	78.0
Source 3: Gradall - Sound level (dBA) at 50 feet =	83	40%	79.0
Calculated Data:			
All Sources Combined - Lmax sound level (dBA) at 50 feet =			87
All Sources Combined - Leq sound level (dBA) at 50 feet =			83

Distance Between Source and Receiver (ft.)	Geometric Attenuation (dB)	Ground Effect Attenuation (dB)	Calculated Lmax Sound Level (dBA)	Calculated Leq Sound Level (dBA)
25	6	0.0	93	89
50	0	0.0	87	83
100	-6	0.0	81	77
150	-10	0.0	77	73
200	-12	0.0	75	71
250	-14	0.0	73	69
300	-16	0.0	71	67
400	-18	0.0	68	65
500	-20	0.0	67	63
600	-22	0.0	65	61
700	-23	0.0	64	60

Geometric attenuation based on 6 dB per doubling of distance.
Note: This calculation does not include the effects, if any, of local shielding from walls, topography or other barriers which may reduce sound levels further.

Table 49. Construction Noise

Source Data:	Maximum Sound Level (dBA)	Utilization Factor	Leq Sound Level (dBA)
Construction Condition: Phase 1 Mixed Use - Parcel 6 Core and Shell			
Source 1: Crane - Sound level (dBA) at 50 feet =	81	16%	73.0
Source 2: Generator - Sound level (dBA) at 50 feet =	81	50%	78.0
Source 3: Gradall - Sound level (dBA) at 50 feet =	83	40%	79.0
Calculated Data:			
All Sources Combined - Lmax sound level (dBA) at 50 feet =			87
All Sources Combined - Leq sound level (dBA) at 50 feet =			82

Distance Between Source and Receiver (ft.)	Geometric Attenuation (dB)	Ground Effect Attenuation (dB)	Calculated Lmax Sound Level (dBA)	Calculated Leq Sound Level (dBA)
25	6	0.0	93	88
50	0	0.0	87	82
100	-6	0.0	81	76
150	-10	0.0	77	73
200	-12	0.0	75	70
250	-14	0.0	73	68
300	-16	0.0	71	67
400	-18	0.0	68	64
500	-20	0.0	67	62
600	-22	0.0	65	61
700	-23	0.0	64	59

Geometric attenuation based on 6 dB per doubling of distance.
Note: This calculation does not include the effects, if any, of local shielding from walls, topography or other barriers which may reduce sound levels further.

Table 50. Construction Noise

Source Data:	Maximum Sound Level (dBA)	Utilization Factor	Leq Sound Level (dBA)
Construction Condition: Phase 1 Mixed Use - Parcel 6 Tenant Improvements			
Source 1: Dump truck - Sound level (dBA) at 50 feet =	76	40%	72.0
Source 2: Generator - Sound level (dBA) at 50 feet =	81	50%	78.0
Source 3: Gradall - Sound level (dBA) at 50 feet =	83	40%	79.0
Calculated Data:			
All Sources Combined - Lmax sound level (dBA) at 50 feet =			86
All Sources Combined - Leq sound level (dBA) at 50 feet =			82

Distance Between Source and Receiver (ft.)	Geometric Attenuation (dB)	Ground Effect Attenuation (dB)	Calculated Lmax Sound Level (dBA)	Calculated Leq Sound Level (dBA)
25	6	0.0	92	88
35	3	0.0	89	85
50	0	0.0	86	82
85	-5	0.0	81	77
90	-5	0.0	81	77
100	-6	0.0	80	76
150	-10	0.0	76	72
200	-12	0.0	74	70
400	-18	0.0	68	64
600	-22	0.0	64	60
800	-24	0.0	62	58

Geometric attenuation based on 6 dB per doubling of distance.
Note: This calculation does not include the effects, if any, of local shielding from walls, topography or other barriers which may reduce sound levels further.

Table 51. Construction Noise

Source Data:	Maximum Sound Level (dBA)	Utilization Factor	Leq Sound Level (dBA)
Construction Condition: Phase 1 Mixed Use - Parcel 6 Landscaping			
Source 1: Excavator - Sound level (dBA) at 50 feet =	81	40%	77.0
Source 2: Backhoe - Sound level (dBA) at 50 feet =	78	40%	74.0
Source 3: Front end loader - Sound level (dBA) at 50 feet =	79	40%	75.0
Calculated Data:			
All Sources Combined - Lmax sound level (dBA) at 50 feet =			84
All Sources Combined - Leq sound level (dBA) at 50 feet =			80

Distance Between Source and Receiver (ft.)	Geometric Attenuation (dB)	Ground Effect Attenuation (dB)	Calculated Lmax Sound Level (dBA)	Calculated Leq Sound Level (dBA)
25	6	0.0	90	86
35	3	0.0	87	83
50	0	0.0	84	80
85	-5	0.0	80	76
90	-5	0.0	79	75
100	-6	0.0	78	74
150	-10	0.0	75	71
200	-12	0.0	72	68
400	-18	0.0	66	62
600	-22	0.0	63	59
800	-24	0.0	60	56

Geometric attenuation based on 6 dB per doubling of distance.
Note: This calculation does not include the effects, if any, of local shielding from walls, topography or other barriers which may reduce sound levels further.

Table 52. Construction Noise

Source Data:	Maximum Sound Level (dBA)	Utilization Factor	Leq Sound Level (dBA)
Construction Condition: Phase 2 Mixed Use - Grading and Utilities			
Source 1: Grader - Sound level (dBA) at 50 feet =	85	40%	81.0
Source 2: Gradall - Sound level (dBA) at 50 feet =	83	40%	79.0
Source 3: Scraper - Sound level (dBA) at 50 feet =	84	40%	80.0
Calculated Data:			
All Sources Combined - Lmax sound level (dBA) at 50 feet =			89
All Sources Combined - Leq sound level (dBA) at 50 feet =			85

Distance Between Source and Receiver (ft.)	Geometric Attenuation (dB)	Ground Effect Attenuation (dB)	Calculated Lmax Sound Level (dBA)	Calculated Leq Sound Level (dBA)
25	6	0.0	95	91
50	0	0.0	89	85
100	-6	0.0	83	79
150	-10	0.0	79	75
200	-12	0.0	77	73
250	-14	0.0	75	71
300	-16	0.0	73	69
400	-18	0.0	71	67
500	-20	0.0	69	65
600	-22	0.0	67	63
700	-23	0.0	66	62

Geometric attenuation based on 6 dB per doubling of distance.
Note: This calculation does not include the effects, if any, of local shielding from walls, topography or other barriers which may reduce sound levels further.

Table 53. Construction Noise

Source Data:	Maximum Sound Level (dBA)	Utilization Factor	Leq Sound Level (dBA)
Construction Condition: Phase 2 Mixed Use - Tunnel Construction			
Source 1: Crane - Sound level (dBA) at 50 feet =	81	16%	73.0
Source 2: Gradall - Sound level (dBA) at 50 feet =	83	40%	79.0
Source 3: Excavator - Sound level (dBA) at 50 feet =	81	40%	77.0
Calculated Data:			
All Sources Combined - Lmax sound level (dBA) at 50 feet =			87
All Sources Combined - Leq sound level (dBA) at 50 feet =			82

Distance Between Source and Receiver (ft.)	Geometric Attenuation (dB)	Ground Effect Attenuation (dB)	Calculated Lmax Sound Level (dBA)	Calculated Leq Sound Level (dBA)
25	6	0.0	93	88
50	0	0.0	87	82
100	-6	0.0	81	76
150	-10	0.0	77	72
200	-12	0.0	75	70
250	-14	0.0	73	68
300	-16	0.0	71	66
400	-18	0.0	68	64
500	-20	0.0	67	62
600	-22	0.0	65	60
700	-23	0.0	64	59

Geometric attenuation based on 6 dB per doubling of distance.
Note: This calculation does not include the effects, if any, of local shielding from walls, topography or other barriers which may reduce sound levels further.

Table 54. Construction Noise

Source Data:	Maximum Sound Level (dBA)	Utilization Factor	Leq Sound Level (dBA)
Construction Condition: Phase 2 Mixed Use - Foundations			
Source 1: Generator - Sound level (dBA) at 50 feet =	81	50%	78.0
Source 2: Gradall - Sound level (dBA) at 50 feet =	83	40%	79.0
Source 3: Excavator - Sound level (dBA) at 50 feet =	81	40%	77.0
Calculated Data:			
All Sources Combined - Lmax sound level (dBA) at 50 feet =			87
All Sources Combined - Leq sound level (dBA) at 50 feet =			83

Distance Between Source and Receiver (ft.)	Geometric Attenuation (dB)	Ground Effect Attenuation (dB)	Calculated Lmax Sound Level (dBA)	Calculated Leq Sound Level (dBA)
25	6	0.0	93	89
50	0	0.0	87	83
100	-6	0.0	81	77
150	-10	0.0	77	73
200	-12	0.0	75	71
250	-14	0.0	73	69
300	-16	0.0	71	67
400	-18	0.0	68	65
500	-20	0.0	67	63
600	-22	0.0	65	61
700	-23	0.0	64	60

Geometric attenuation based on 6 dB per doubling of distance.
Note: This calculation does not include the effects, if any, of local shielding from walls, topography or other barriers which may reduce sound levels further.

Table 55. Construction Noise

Source Data:	Maximum Sound Level (dBA)	Utilization Factor	Leq Sound Level (dBA)
Construction Condition: Phase 2 Mixed Use - Core and Shell			
Source 1: Generator - Sound level (dBA) at 50 feet =	81	50%	78.0
Source 2: Gradall - Sound level (dBA) at 50 feet =	83	40%	79.0
Source 3: Crane - Sound level (dBA) at 50 feet =	81	16%	73.0
Calculated Data:			
All Sources Combined - Lmax sound level (dBA) at 50 feet =			87
All Sources Combined - Leq sound level (dBA) at 50 feet =			82

Distance Between Source and Receiver (ft.)	Geometric Attenuation (dB)	Ground Effect Attenuation (dB)	Calculated Lmax Sound Level (dBA)	Calculated Leq Sound Level (dBA)
25	6	0.0	93	88
35	3	0.0	90	85
50	0	0.0	87	82
85	-5	0.0	82	78
90	-5	0.0	81	77
100	-6	0.0	81	76
150	-10	0.0	77	73
200	-12	0.0	75	70
400	-18	0.0	68	64
600	-22	0.0	65	61
800	-24	0.0	62	58

Geometric attenuation based on 6 dB per doubling of distance.
Note: This calculation does not include the effects, if any, of local shielding from walls, topography or other barriers which may reduce sound levels further.

Table 56. Construction Noise

Source Data:	Maximum Sound Level (dBA)	Utilization Factor	Leq Sound Level (dBA)
Construction Condition: Phase 2 Mixed Use - Tenant Improvements			
Source 1: Generator - Sound level (dBA) at 50 feet =	81	50%	78.0
Source 2: Gradall - Sound level (dBA) at 50 feet =	83	40%	79.0
Source 3: Dump truck - Sound level (dBA) at 50 feet =	76	40%	72.0
Calculated Data:			
All Sources Combined - Lmax sound level (dBA) at 50 feet =			86
All Sources Combined - Leq sound level (dBA) at 50 feet =			82

Distance Between Source and Receiver (ft.)	Geometric Attenuation (dB)	Ground Effect Attenuation (dB)	Calculated Lmax Sound Level (dBA)	Calculated Leq Sound Level (dBA)
25	6	0.0	92	88
35	3	0.0	89	85
50	0	0.0	86	82
85	-5	0.0	81	77
90	-5	0.0	81	77
100	-6	0.0	80	76
150	-10	0.0	76	72
200	-12	0.0	74	70
400	-18	0.0	68	64
600	-22	0.0	64	60
800	-24	0.0	62	58

Geometric attenuation based on 6 dB per doubling of distance.
Note: This calculation does not include the effects, if any, of local shielding from walls, topography or other barriers which may reduce sound levels further.

Table 57. Construction Noise

Source Data:	Maximum Sound Level (dBA)	Utilization Factor	Leq Sound Level (dBA)
Construction Condition: Phase 2 Mixed Use - Landscaping			
Source 1: Excavator - Sound level (dBA) at 50 feet =	81	40%	77.0
Source 2: Backhoe - Sound level (dBA) at 50 feet =	78	40%	74.0
Source 3: Front end loader - Sound level (dBA) at 50 feet =	79	40%	75.0
Calculated Data:			
All Sources Combined - Lmax sound level (dBA) at 50 feet =			84
All Sources Combined - Leq sound level (dBA) at 50 feet =			80

Distance Between Source and Receiver (ft.)	Geometric Attenuation (dB)	Ground Effect Attenuation (dB)	Calculated Lmax Sound Level (dBA)	Calculated Leq Sound Level (dBA)
25	6	0.0	90	86
35	3	0.0	87	83
50	0	0.0	84	80
85	-5	0.0	80	76
90	-5	0.0	79	75
100	-6	0.0	78	74
150	-10	0.0	75	71
200	-12	0.0	72	68
400	-18	0.0	66	62
600	-22	0.0	63	59
800	-24	0.0	60	56

Geometric attenuation based on 6 dB per doubling of distance.
Note: This calculation does not include the effects, if any, of local shielding from walls, topography or other barriers which may reduce sound levels further.

Table 58. Construction Noise

Source Data:	Maximum Sound Level (dBA)	Utilization Factor	Leq Sound Level (dBA)
Construction Condition: Hamilton Avenue - Demolition			
Source 1: Excavator - Sound level (dBA) at 50 feet =	81	40%	77.0
Source 2: Generator - Sound level (dBA) at 50 feet =	81	50%	78.0
Source 3: Front end loader - Sound level (dBA) at 50 feet =	79	40%	75.0
Calculated Data:			
All Sources Combined - Lmax sound level (dBA) at 50 feet =			85
All Sources Combined - Leq sound level (dBA) at 50 feet =			82

Distance Between Source and Receiver (ft.)	Geometric Attenuation (dB)	Ground Effect Attenuation (dB)	Calculated Lmax Sound Level (dBA)	Calculated Leq Sound Level (dBA)
10	14	0.0	99	96
20	8	0.0	93	90
25	6	0.0	91	88
50	0	0.0	85	82
100	-6	0.0	79	76
150	-10	0.0	76	72
200	-12	0.0	73	70
300	-16	0.0	70	66
500	-20	0.0	65	62
600	-22	0.0	64	60
700	-23	0.0	62	59

Geometric attenuation based on 6 dB per doubling of distance.
Note: This calculation does not include the effects, if any, of local shielding from walls, topography or other barriers which may reduce sound levels further.

Table 59. Construction Noise

Source Data:	Maximum Sound Level (dBA)	Utilization Factor	Leq Sound Level (dBA)
Construction Condition: Hamilton Avenue - Grading and Utilities			
Source 1: Excavator - Sound level (dBA) at 50 feet =	81	40%	77.0
Source 2: Gradall - Sound level (dBA) at 50 feet =	83	40%	79.0
Source 3: Compactor (ground) - Sound level (dBA) at 50 feet =	83	20%	76.0
Calculated Data:			
All Sources Combined - Lmax sound level (dBA) at 50 feet =			87
All Sources Combined - Leq sound level (dBA) at 50 feet =			82

Distance Between Source and Receiver (ft.)	Geometric Attenuation (dB)	Ground Effect Attenuation (dB)	Calculated Lmax Sound Level (dBA)	Calculated Leq Sound Level (dBA)
10	14	0.0	101	96
20	8	0.0	95	90
25	6	0.0	93	88
50	0	0.0	87	82
100	-6	0.0	81	76
150	-10	0.0	78	73
200	-12	0.0	75	70
300	-16	0.0	72	67
500	-20	0.0	67	62
600	-22	0.0	66	61
700	-23	0.0	64	59

Geometric attenuation based on 6 dB per doubling of distance.
Note: This calculation does not include the effects, if any, of local shielding from walls, topography or other barriers which may reduce sound levels further.

Table 60. Construction Noise

Source Data:	Maximum Sound Level (dBA)	Utilization Factor	Leq Sound Level (dBA)
Construction Condition: Hamilton Avenue - Foundations			
Source 1: Generator - Sound level (dBA) at 50 feet =	81	50%	78.0
Source 2: Gradall - Sound level (dBA) at 50 feet =	83	40%	79.0
Source 3: Front end loader - Sound level (dBA) at 50 feet =	79	40%	75.0
Calculated Data:			
All Sources Combined - Lmax sound level (dBA) at 50 feet =			86
All Sources Combined - Leq sound level (dBA) at 50 feet =			82

Distance Between Source and Receiver (ft.)	Geometric Attenuation (dB)	Ground Effect Attenuation (dB)	Calculated Lmax Sound Level (dBA)	Calculated Leq Sound Level (dBA)
10	14	0.0	100	96
20	8	0.0	94	90
25	6	0.0	92	88
50	0	0.0	86	82
100	-6	0.0	80	76
150	-10	0.0	77	73
200	-12	0.0	74	70
300	-16	0.0	71	67
500	-20	0.0	66	62
600	-22	0.0	64	61
700	-23	0.0	63	59

Geometric attenuation based on 6 dB per doubling of distance.
Note: This calculation does not include the effects, if any, of local shielding from walls, topography or other barriers which may reduce sound levels further.

Table 61. Construction Noise

Source Data:	Maximum Sound Level (dBA)	Utilization Factor	Leq Sound Level (dBA)
Construction Condition: Hamilton Avenue - Core and Shell			
Source 1: Generator - Sound level (dBA) at 50 feet =	81	50%	78.0
Source 2: Gradall - Sound level (dBA) at 50 feet =	83	40%	79.0
Source 3: Dump truck - Sound level (dBA) at 50 feet =	76	40%	72.0
Calculated Data:			
All Sources Combined - Lmax sound level (dBA) at 50 feet =			86
All Sources Combined - Leq sound level (dBA) at 50 feet =			82

Distance Between Source and Receiver (ft.)	Geometric Attenuation (dB)	Ground Effect Attenuation (dB)	Calculated Lmax Sound Level (dBA)	Calculated Leq Sound Level (dBA)
10	14	0.0	100	96
20	8	0.0	94	90
25	6	0.0	92	88
50	0	0.0	86	82
100	-6	0.0	80	76
150	-10	0.0	76	72
200	-12	0.0	74	70
300	-16	0.0	70	66
500	-20	0.0	66	62
600	-22	0.0	64	60
700	-23	0.0	63	59

Geometric attenuation based on 6 dB per doubling of distance.
Note: This calculation does not include the effects, if any, of local shielding from walls, topography or other barriers which may reduce sound levels further.

Table 62. Construction Noise

Source Data:	Maximum Sound Level (dBA)	Utilization Factor	Leq Sound Level (dBA)
Construction Condition: Hamilton Avenue - Tenant Improvements			
Source 1: Generator - Sound level (dBA) at 50 feet =	81	50%	78.0
Source 2: Gradall - Sound level (dBA) at 50 feet =	83	40%	79.0
Source 3: Dump truck - Sound level (dBA) at 50 feet =	76	40%	72.0
Calculated Data:			
All Sources Combined - Lmax sound level (dBA) at 50 feet =			86
All Sources Combined - Leq sound level (dBA) at 50 feet =			82

Distance Between Source and Receiver (ft.)	Geometric Attenuation (dB)	Ground Effect Attenuation (dB)	Calculated Lmax Sound Level (dBA)	Calculated Leq Sound Level (dBA)
10	14	0.0	100	96
20	8	0.0	94	90
25	6	0.0	92	88
50	0	0.0	86	82
100	-6	0.0	80	76
150	-10	0.0	76	72
200	-12	0.0	74	70
300	-16	0.0	70	66
500	-20	0.0	66	62
600	-22	0.0	64	60
700	-23	0.0	63	59

Geometric attenuation based on 6 dB per doubling of distance.
Note: This calculation does not include the effects, if any, of local shielding from walls, topography or other barriers which may reduce sound levels further.

Table 63. Construction Noise

Source Data:	Maximum Sound Level (dBA)	Utilization Factor	Leq Sound Level (dBA)
Construction Condition: Install/Remove Detours			
Source 1: Mounted Impact Hammer (hoe ram) - Sound level (dBA) at 50 feet =	90	20%	83.0
Source 2: Concrete saw - Sound level (dBA) at 50 feet =	90	20%	83.0
Source 3: Jackhammer - Sound level (dBA) at 50 feet =	89	20%	82.0
Calculated Data:			
All Sources Combined - Lmax sound level (dBA) at 50 feet =			94
All Sources Combined - Leq sound level (dBA) at 50 feet =			87

Distance Between Source and Receiver (ft.)	Geometric Attenuation (dB)	Ground Effect Attenuation (dB)	Calculated Lmax Sound Level (dBA)	Calculated Leq Sound Level (dBA)
50	0	0.0	94	87
100	-6	0.0	88	81
150	-10	0.0	85	78
200	-12	0.0	82	75
250	-14	0.0	80	73
300	-16	0.0	79	72
400	-18	0.0	76	69
480	-20	0.0	75	68
620	-22	0.0	73	66
800	-24	0.0	70	63
1200	-28	0.0	67	60

Geometric attenuation based on 6 dB per doubling of distance.
Note: This calculation does not include the effects, if any, of local shielding
from walls, topography or other barriers which may reduce sound levels further.
1. Concrete Saw was used as source data for an AC Grinder

Table 64. Nighttime Construction Noise

Source Data:	Maximum Sound Level (dBA)	Utilization Factor	Leq Sound Level (dBA)
Construction Condition: Traffic Shift			
Source 1: Generator - Sound level (dBA) at 50 feet =	81	50%	78.0
Source 2: Generator - Sound level (dBA) at 50 feet =	81	50%	78.0
Source 3: Air Compressor - Sound level (dBA) at 50 feet =	78	40%	74.0
Calculated Data:			
All Sources Combined - Lmax sound level (dBA) at 50 feet =			85
All Sources Combined - Leq sound level (dBA) at 50 feet =			82

Distance Between Source and Receiver (ft.)	Geometric Attenuation (dB)	Ground Effect Attenuation (dB)	Calculated Lmax Sound Level (dBA)	Calculated Leq Sound Level (dBA)
50	0	0.0	85	82
100	-6	0.0	79	76
150	-10	0.0	75	72
200	-12	0.0	73	70
250	-14	0.0	71	68
300	-16	0.0	69	66
400	-18	0.0	67	64
480	-20	0.0	65	62
620	-22	0.0	63	60
800	-24	0.0	61	58
1200	-28	0.0	57	54

Geometric attenuation based on 6 dB per doubling of distance.
Note: This calculation does not include the effects, if any, of local shielding from walls, topography or other barriers which may reduce sound levels further.
1. Generators were used to model Light Plants

Table 65. Nighttime Construction Noise

Source Data:	Maximum Sound Level (dBA)	Utilization Factor	Leq Sound Level (dBA)
Construction Condition: Tunnel Shoring			
Source 1: Vibratory Pile Driver - Sound level (dBA) at 50 feet =	101	20%	94
Source 2: Auger Drill Rig - Sound level (dBA) at 50 feet =	84	20%	77
Source 3: Pile Driver - Sound level (dBA) at 50 feet =	101	20%	94
Calculated Data:			
All Sources Combined - Lmax sound level (dBA) at 50 feet =			104
All Sources Combined - Leq sound level (dBA) at 50 feet =			97

Distance Between Source and Receiver (ft.)	Geometric Attenuation (dB)	Ground Effect Attenuation (dB)	Calculated Lmax Sound Level (dBA)	Calculated Leq Sound Level (dBA)
50	0	0.0	104	97
100	-6	0.0	98	91
150	-10	0.0	95	88
200	-12	0.0	92	85
250	-14	0.0	90	83
300	-16	0.0	88	82
480	-20	0.0	84	77
515	-20	0.0	84	77
610	-22	0.0	82	75
800	-24	0.0	80	73
1200	-28	0.0	76	69

Geometric attenuation based on 6 dB per doubling of distance.
Note: This calculation does not include the effects, if any, of local shielding from walls, topography or other barriers which may reduce sound levels further.
1. Pile Driver was used to model Vibratory Hammer

Table 66. Nighttime Construction Noise

Source Data:	Maximum Sound Level (dBA)	Utilization Factor	Leq Sound Level (dBA)
Construction Condition: Restore Willow Road			
Source 1: Excavator - Sound level (dBA) at 50 feet =	81	40%	77.0
Source 2: Generator - Sound level (dBA) at 50 feet =	81	50%	78.0
Source 3: Generator - Sound level (dBA) at 50 feet =	81	50%	78.0
Calculated Data:			
All Sources Combined - Lmax sound level (dBA) at 50 feet =			86
All Sources Combined - Leq sound level (dBA) at 50 feet =			82

Distance Between Source and Receiver (ft.)	Geometric Attenuation (dB)	Ground Effect Attenuation (dB)	Calculated Lmax Sound Level (dBA)	Calculated Leq Sound Level (dBA)
50	0	0.0	86	82
100	-6	0.0	80	76
150	-10	0.0	76	73
200	-12	0.0	74	70
250	-14	0.0	72	68
300	-16	0.0	70	67
400	-18	0.0	68	64
480	-20	0.0	66	63
620	-22	0.0	64	61
800	-24	0.0	62	58
1200	-28	0.0	58	55

Geometric attenuation based on 6 dB per doubling of distance.
Note: This calculation does not include the effects, if any, of local shielding from walls, topography or other barriers which may reduce sound levels further.
1. Generators were used to model Light Plants

Noise Appendix

Off-site Improvement

Construction Noise Modeling

Off-Site Improvement Equipment by Activity, Screening Assessment

Update Std Utilization

Rank 3 loudest pieces of equipment by Phase. When two have the same Lmax, pick one with highest Utilization %

Phase	Subphase	Equipment Type	Number	Horsepower	Hours/Day	Utilization for Duration	Construction Equipment Terminology	Lmax Noise Level 50 feet	FHWA Utilization Rates	Rank	3 Loudest Equipment By Phase
Off-site 1	Intersections - Marsh & Bayfront	Striping Truck	1				Flat bed Truck	74	40%	2	Flat bed Truck
Off-site 1	Intersections - Marsh & Bayfront	Pick-Ups	2				Pickup Truck	75	40%	1	Pickup Truck
Off-site 1	Intersections - Marsh & Bayfront	Traffic Control Truck	1				Flat bed Truck	74	40%	3	Flat bed Truck
Off-site 2	Intersections - Chilco & Hamilton	Truck Mounted Auger	1				Drill Rig Truck	79	20%	2	Drill Rig Truck
Off-site 2	Intersections - Chilco & Hamilton	Truck Mounted Crane	1				Crane	81	16%	1	Crane
Off-site 2	Intersections - Chilco & Hamilton	Utility Truck	2				Flat bed Truck	74	40%		
Off-site 2	Intersections - Chilco & Hamilton	Pick-Ups	2				Pickup Truck	75	40%	3	Pickup Truck
Off-site 2	Intersections - Chilco & Hamilton	Traffic Control Truck	1				Flat bed Truck	74	40%		
Off-site 3	Intersections - Willow & Ivy	Rubber-Tired Backhoe	1				Backhoe	78	40%	1	Backhoe
Off-site 3	Intersections - Willow & Ivy	10-wheel Dump	1				Dump Truck	76	40%	2	Dump Truck
Off-site 3	Intersections - Willow & Ivy	Utility Trucks	1				Flat bed Truck	74	40%		
Off-site 3	Intersections - Willow & Ivy	Pick-Ups	3				Pickup Truck	75	40%	3	Pickup Truck
Off-site 3	Intersections - Willow & Ivy	Traffic Control Truck	1				Flat bed Truck	74	40%		
Off-site 4	Intersections - O'Brien & Kavanaugh	Rubber-Tired Backhoe	1				Backhoe	78	40%	3	Backhoe
Off-site 4	Intersections - O'Brien & Kavanaugh	10-wheel Dump	1				Dump truck	76	40%	4	
Off-site 4	Intersections - O'Brien & Kavanaugh	Utility Trucks	1				Flat Bed Truck	74	40%	7	
Off-site 4	Intersections - O'Brien & Kavanaugh	Pick-Ups	3				Pickup Truck	75	40%	5	
Off-site 4	Intersections - O'Brien & Kavanaugh	Traffic Control Truck	1				Flat Bed Truck	74	40%	7	
Off-site 4	Intersections - O'Brien & Kavanaugh	Truck-Mounted Auger	1				Drill Rig Truck	79	20%	2	Drill Rig Truck
Off-site 4	Intersections - O'Brien & Kavanaugh	Truck-Mounted Crane	1				Crane	81	16%	1	Crane
Off-site 4	Intersections - O'Brien & Kavanaugh	Utility Trucks	2				Flat Bed Truck	74	40%	7	
Off-site 4	Intersections - O'Brien & Kavanaugh	Pick-Ups	2				Pickup Truck	75	40%	5	
Off-site 4	Intersections - O'Brien & Kavanaugh	Traffic Control Truck	1				Flat Bed Truck	74	40%	7	
Off-site 5	Intersections - Adams & O'Brien	Rubber-Tired Backhoe	1				Backhoe	78	40%	3	Backhoe
Off-site 5	Intersections - Adams & O'Brien	10-wheel Dump	1				Dump truck	76	40%	4	
Off-site 5	Intersections - Adams & O'Brien	Utility Trucks	1				Flat Bed Truck	74	40%	7	
Off-site 5	Intersections - Adams & O'Brien	Pick-Ups	3				Pickup Truck	75	40%	5	
Off-site 5	Intersections - Adams & O'Brien	Traffic Control Truck	1				Flat Bed Truck	74	40%	7	
Off-site 5	Intersections - Adams & O'Brien	Truck-Mounted Auger	1				Drill Rig Truck	79	20%	2	Drill Rig Truck
Off-site 5	Intersections - Adams & O'Brien	Truck-Mounted Crane	1				Crane	81	16%	1	Crane
Off-site 5	Intersections - Adams & O'Brien	Utility Trucks	2				Flat Bed Truck	74	40%	7	
Off-site 5	Intersections - Adams & O'Brien	Pick-Ups	2				Pickup Truck	75	40%	5	
Off-site 5	Intersections - Adams & O'Brien	Traffic Control Truck	1				Flat Bed Truck	74	40%	7	
Off-site 6	Recycled Water Line - Main	Tracked Excavators	2				Excavator	81	40%	1	Excavator
Off-site 6	Recycled Water Line - Main	Rubber Tired Loaders	2				Front End Loader	79	40%		
Off-site 6	Recycled Water Line - Main	Utility/Crew Trucks	2				Flat Bed Truck	74	40%		
Off-site 6	Recycled Water Line - Main	Pickup Trucks	3				Pickup Truck	75	40%		
Off-site 6	Recycled Water Line - Main	10-wheel Dump Truck	2				Dump Truck	76	40%		
Off-site 6	Recycled Water Line - Main	Backhoe	1				Backhoe	78	40%		
Off-site 6	Recycled Water Line - Main	Vibratory Roller	1				Roller	80	20%	2	Roller
Off-site 6	Recycled Water Line - Main	Finish Roller	1				Roller	80	20%	3	Roller
Off-site 6	Recycled Water Line - Main	Utility/Crew Trucks	1				Flat Bed Truck	74	40%		
Off-site 6	Recycled Water Line - Main	Pickup Trucks	2				Pickup Truck	75	40%		
Off-site 7	PGE Feeder Line	Tracked Excavators	2				Excavator	81	40%	1	Excavator
Off-site 7	PGE Feeder Line	Rubber Tired Loaders	1				Front End Loader	79	40%		
Off-site 7	PGE Feeder Line	Utility/Crew Trucks	2				Flat Bed Truck	74	40%		
Off-site 7	PGE Feeder Line	Pickup Trucks	2				Pickup Truck	75	40%		
Off-site 7	PGE Feeder Line	10-wheel Dump Truck	2				Dump Truck	76	40%		
Off-site 7	PGE Feeder Line	AC Paver	1				Paver	77	50%		
Off-site 7	PGE Feeder Line	Backhoe	1				Backhoe	78	40%		
Off-site 7	PGE Feeder Line	Vibratory Roller	1				Roller	80	20%	2	Roller
Off-site 7	PGE Feeder Line	Finish Roller	1				Roller	80	20%	3	Roller
Off-site 7	PGE Feeder Line	Utility/Crew Trucks	1				Flat Bed Truck	74	40%		
Off-site 7	PGE Feeder Line	Pickup Trucks	2				Pickup Truck	75	40%		
Off-site 7	PGE Feeder Line	10-wheel Dump Truck	4				Dump Truck	76	40%		

Table 1. Construction Noise

Intersections - Marsh & Bayfront

Source Data:	Maximum Sound Level (dBA)	Utilization Factor	Leq Sound Level (dBA)
Construction Condition: Intersections - Marsh & Bayfront			
Source 1: Pick-Ups - Sound level (dBA) at 50 feet =	75	40%	71.0
Source 2: Striping Truck - Sound level (dBA) at 50 feet =	74	40%	70.0
Source 3: Traffic Control Truck - Sound level (dBA) at 50 fee	74	40%	70.0
Calculated Data:			
All Sources Combined - Lmax sound level (dBA) at 50 feet =			79
All Sources Combined - Leq sound level (dBA) at 50 feet =			75

Distance Between Source and Receiver (ft.)	Geometric Attenuation (dB)	Ground Effect Attenuation (dB)	Calculated Lmax Sound Level (dBA)	Calculated Leq Sound Level (dBA)
15	10	0.0	90	86
40	2	0.0	81	77
75	-4	0.0	76	72
100	-6	0.0	73	69
125	-8	0.0	71	67
150	-10	0.0	70	66
170	-11	0.0	69	65
230	-13	0.0	66	62
290	-15	0.0	64	60
300	-16	0.0	64	60
400	-18	0.0	61	57
550	-21	0.0	58	54
600	-22	0.0	58	54
750	-24	0.0	56	52
830	-24	0.0	55	51
900	-25	0.0	54	50
1000	-26	0.0	53	49

Geometric attenuation based on 6 dB per doubling of distance.

Note: This calculation does not include the effects, if any, of local shielding from walls, topography or other barriers which may reduce sound levels further.

Table 2. Construction Noise

Intersections - Chilco & Hamilton

Source Data:	Maximum Sound Level (dBA)	Utilization Factor	Leq Sound Level (dBA)
Construction Condition: Intersections - Chilco & Hamilton			
Source 1: Truck Mounted Crane - Sound level (dBA) at 50 fe	81	16%	73.0
Source 2: Truck Mounted Auger - Sound level (dBA) at 50 fe	79	20%	72.0
Source 3: Pick-Ups - Sound level (dBA) at 50 feet =	75	40%	71.0
Calculated Data:			
All Sources Combined - Lmax sound level (dBA) at 50 feet =			84
All Sources Combined - Leq sound level (dBA) at 50 feet =			77

Distance Between Source and Receiver (ft.)	Geometric Attenuation (dB)	Ground Effect Attenuation (dB)	Calculated Lmax Sound Level (dBA)	Calculated Leq Sound Level (dBA)
15	10	0.0	94	87
40	2	0.0	86	79
75	-4	0.0	80	73
100	-6	0.0	78	71
125	-8	0.0	76	69
150	-10	0.0	74	67
170	-11	0.0	73	66
230	-13	0.0	70	64
290	-15	0.0	68	62
300	-16	0.0	68	61
400	-18	0.0	66	59
550	-21	0.0	63	56
600	-22	0.0	62	55
750	-24	0.0	60	53
830	-24	0.0	59	52
900	-25	0.0	59	52
1000	-26	0.0	58	51

Geometric attenuation based on 6 dB per doubling of distance.

Note: This calculation does not include the effects, if any, of local shielding from walls, topography or other barriers which may reduce sound levels further.

Table 3. Construction Noise

Intersections - Willow & Ivy

Source Data:	Maximum Sound Level (dBA)	Utilization Factor	Leq Sound Level (dBA)
Construction Condition: Intersections - Willow & Ivy			
Source 1: Rubber-Tired Backhoe - Sound level (dBA) at 50 feet =	78	40%	74.0
Source 2: 10-wheel Dump - Sound level (dBA) at 50 feet =	76	40%	72.0
Source 3: Pick-Ups - Sound level (dBA) at 50 feet =	75	40%	71.0
Calculated Data:			
All Sources Combined - Lmax sound level (dBA) at 50 feet =			81
All Sources Combined - Leq sound level (dBA) at 50 feet =			77

Distance Between Source and Receiver (ft.)	Geometric Attenuation (dB)	Ground Effect Attenuation (dB)	Calculated Lmax Sound Level (dBA)	Calculated Leq Sound Level (dBA)
15	10	0.0	92	88
40	2	0.0	83	79
75	-4	0.0	78	74
100	-6	0.0	75	71
125	-8	0.0	73	69
150	-10	0.0	72	68
170	-11	0.0	71	67
230	-13	0.0	68	64
290	-15	0.0	66	62
300	-16	0.0	66	62
400	-18	0.0	63	59
550	-21	0.0	60	56
600	-22	0.0	60	56
750	-24	0.0	58	54
830	-24	0.0	57	53
900	-25	0.0	56	52
1000	-26	0.0	55	51

Geometric attenuation based on 6 dB per doubling of distance.

Note: This calculation does not include the effects, if any, of local shielding from walls, topography or other barriers which may reduce sound levels further.

Table 4. Construction Noise

Intersections - O'Brien & Kavanaugh

Source Data:	Maximum Sound Level (dBA)	Utilization Factor	Leq Sound Level (dBA)
Construction Condition: Intersections - O'Brien & Kavanaugh			
Source 1: Truck-Mounted Crane - Sound level (dBA) at 50 feet =	81	16%	73.0
Source 2: Truck-Mounted Auger - Sound level (dBA) at 50 feet =	79	20%	72.0
Source 3: Rubber-Tired Backhoe - Sound level (dBA) at 50 feet =	78	40%	74.0
Calculated Data:			
All Sources Combined - Lmax sound level (dBA) at 50 feet =			84
All Sources Combined - Leq sound level (dBA) at 50 feet =			78

Distance Between Source and Receiver (ft.)	Geometric Attenuation (dB)	Ground Effect Attenuation (dB)	Calculated Lmax Sound Level (dBA)	Calculated Leq Sound Level (dBA)
15	10	0.0	95	88
40	2	0.0	86	80
75	-4	0.0	81	74
100	-6	0.0	78	72
125	-8	0.0	76	70
150	-10	0.0	75	68
170	-11	0.0	74	67
230	-13	0.0	71	65
290	-15	0.0	69	63
300	-16	0.0	69	62
400	-18	0.0	66	60
550	-21	0.0	63	57
600	-22	0.0	63	56
750	-24	0.0	61	54
830	-24	0.0	60	53
900	-25	0.0	59	53
1000	-26	0.0	58	52

Geometric attenuation based on 6 dB per doubling of distance.

Note: This calculation does not include the effects, if any, of local shielding from walls, topography or other barriers which may reduce sound levels further.

Table 5. Construction Noise

Intersections - Adams & O'Brien

Source Data:	Maximum Sound Level (dBA)	Utilization Factor	Leq Sound Level (dBA)
Construction Condition: Intersections - Adams & O'Brien			
Source 1: Truck-Mounted Crane - Sound level (dBA) at 50 feet =	81	16%	73.0
Source 2: Truck-Mounted Auger - Sound level (dBA) at 50 feet =	79	20%	72.0
Source 3: Rubber-Tired Backhoe - Sound level (dBA) at 50 feet =	78	40%	74.0
Calculated Data:			
All Sources Combined - Lmax sound level (dBA) at 50 feet =			84
All Sources Combined - Leq sound level (dBA) at 50 feet =			78

Distance Between Source and Receiver (ft.)	Geometric Attenuation (dB)	Ground Effect Attenuation (dB)	Calculated Lmax Sound Level (dBA)	Calculated Leq Sound Level (dBA)
15	10	0.0	95	88
40	2	0.0	86	80
75	-4	0.0	81	74
100	-6	0.0	78	72
125	-8	0.0	76	70
150	-10	0.0	75	68
170	-11	0.0	74	67
230	-13	0.0	71	65
290	-15	0.0	69	63
300	-16	0.0	69	62
400	-18	0.0	66	60
550	-21	0.0	63	57
600	-22	0.0	63	56
750	-24	0.0	61	54
830	-24	0.0	60	53
900	-25	0.0	59	53
1000	-26	0.0	58	52

Geometric attenuation based on 6 dB per doubling of distance.

Note: This calculation does not include the effects, if any, of local shielding from walls, topography or other barriers which may reduce sound levels further.

Table 6. Construction Noise

Recycled Water Line - Main

Source Data:	Maximum Sound Level (dBA)	Utilization Factor	Leq Sound Level (dBA)
Construction Condition: Recycled Water Line - Main			
Source 1: Tracked Excavators - Sound level (dBA) at 50 feet =	81	40%	77.0
Source 2: Vibratory Roller - Sound level (dBA) at 50 feet =	80	20%	73.0
Source 3: Finish Roller - Sound level (dBA) at 50 feet =	80	20%	73.0
Calculated Data:			
All Sources Combined - Lmax sound level (dBA) at 50 feet =			85
All Sources Combined - Leq sound level (dBA) at 50 feet =			80

Distance Between Source and Receiver (ft.)	Geometric Attenuation (dB)	Ground Effect Attenuation (dB)	Calculated Lmax Sound Level (dBA)	Calculated Leq Sound Level (dBA)
15	10	0.0	96	90
25	6	0.0	91	86
50	0	0.0	85	80
100	-6	0.0	79	74
150	-10	0.0	76	70
200	-12	0.0	73	68
250	-14	0.0	71	66
300	-16	0.0	70	64
400	-18	0.0	67	61
500	-20	0.0	65	60
600	-22	0.0	64	58
700	-23	0.0	62	57
800	-24	0.0	61	55
900	-25	0.0	60	54
1000	-26	0.0	59	54

Geometric attenuation based on 6 dB per doubling of distance.
Note: This calculation does not include the effects, if any, of local shielding from walls, topography or other barriers which may reduce sound levels further.

Table 8. Construction Noise

PGE Feeder Line

Source Data:	Maximum Sound Level (dBA)	Utilization Factor	Leq Sound Level (dBA)
Construction Condition: PGE Feeder Line			
Source 1: Tracked Excavators - Sound level (dBA) at 50 feet =	81	40%	77.0
Source 2: Vibratory Roller - Sound level (dBA) at 50 feet =	80	20%	73.0
Source 3: Finish Roller - Sound level (dBA) at 50 feet =	80	20%	73.0
Calculated Data:			
All Sources Combined - Lmax sound level (dBA) at 50 feet =			85
All Sources Combined - Leq sound level (dBA) at 50 feet =			80

Distance Between Source and Receiver (ft.)	Geometric Attenuation (dB)	Ground Effect Attenuation (dB)	Calculated Lmax Sound Level (dBA)	Calculated Leq Sound Level (dBA)
15	10	0.0	96	90
25	6	0.0	91	86
75	-4	0.0	82	76
100	-6	0.0	79	74
150	-10	0.0	76	70
200	-12	0.0	73	68
250	-14	0.0	71	66
300	-16	0.0	70	64
400	-18	0.0	67	61
500	-20	0.0	65	60
600	-22	0.0	64	58
700	-23	0.0	62	57
800	-24	0.0	61	55
900	-25	0.0	60	54
1000	-26	0.0	59	54
2500	-34	0.0	51	46
3000	-36	0.0	50	44

Geometric attenuation based on 6 dB per doubling of distance.

Note: This calculation does not include the effects, if any, of local shielding from walls, topography or other barriers which may reduce sound levels further.

Noise Appendix

Construction Haul Truck Noise Modeling

Haul Truck Noise Modeling, Received Data for Phase 1 (a - not worst-case)

Roadway	Segment	ADT			Baseline Truck Percentage	Baseline Truck Volumes	Baseline Trucks + Haul Trucks	Baseline Trucks + Haul Truck Percentage	Posted Speeds
		Baseline Conditions	Truck Counts	Baseline Conditions + Haul Trucks					
Bayfront Expressway	Between Willow Road and University Avenue	42,495	268	42,763	4%	1700	1,968	5%	45
Bayfront Expressway	East of University Avenue	57,918	268	58,186	4%	2317	2,585	4%	45
Willow Road	Between Bayfront Expressway and Hamilton Avenue	21,735	268	22,003	4%	869	1,137	5%	40
Willow Road	Between Hamilton Avenue and Ivy Drive	22,195	268	22,463	4%	888	1,156	5%	40
Willow Road	Between Ivy Drive and O'Brien Drive	23,300	268	23,568	3%	699	967	4%	40
Willow Road	Between O'Brien Drive and Newbridge Street	28,260	268	28,528	3%	848	1,116	4%	40
Willow Road	Between Newbridge Street and the US 101 NB Ramps	35,427	268	35,695	3%	1063	1,331	4%	40

Haul Truck Noise Modeling, Received Data for Phase 1 (b - worst-case)

Roadway	Segment	ADT			Baseline Truck Percentage	Baseline Truck Volumes	Baseline Trucks + Haul Trucks	Baseline Trucks + Haul Truck Percentage	Posted Speeds
		Baseline Conditions	Truck Counts	Baseline Conditions + Haul Trucks					
Bayfront Expressway	Between Willow Road and University Avenue	42,495	386	42,881	4%	1700	2,086	5%	45
Bayfront Expressway	East of University Avenue	57,918	386	58,304	4%	2317	2,703	5%	45
Willow Road	Between Bayfront Expressway and Hamilton Avenue	21,735	386	22,121	4%	869	1,255	6%	40
Willow Road	Between Hamilton Avenue and Ivy Drive	22,195	386	22,581	4%	888	1,274	6%	40
Willow Road	Between Ivy Drive and O'Brien Drive	23,300	386	23,686	3%	699	1,085	5%	40
Willow Road	Between O'Brien Drive and Newbridge Street	28,260	386	28,646	3%	848	1,234	4%	40
Willow Road	Between Newbridge Street and the US 101 NB Ramps	35,427	386	35,813	3%	1063	1,449	4%	40

Haul Truck Noise Modeling, Received Data for Phase 2

Roadway	Segment	ADT			Baseline Truck Percentage	Baseline Truck Volumes	Baseline Trucks + Haul Trucks	Baseline Trucks + Haul Truck Percentage	Posted Speeds
		Baseline Conditions	Truck Counts	Baseline Conditions + Haul Trucks					
Bayfront Expressway	Between Willow Road and University Avenue	42,495	70	42,565	4%	1700	1,770	4%	45
Bayfront Expressway	East of University Avenue	57,918	70	57,988	4%	2317	2,387	4%	45
Willow Road	Between Bayfront Expressway and Hamilton Avenue	21,735	70	21,805	4%	869	939	4%	40
Willow Road	Between Hamilton Avenue and Ivy Drive	22,195	70	22,265	4%	888	958	4%	40
Willow Road	Between Ivy Drive and O'Brien Drive	23,300	70	23,370	3%	699	769	3%	40
Willow Road	Between O'Brien Drive and Newbridge Street	28,260	70	28,330	3%	848	918	3%	40
Willow Road	Between Newbridge Street and the US 101 NB Ramps	35,427	70	35,497	3%	1063	1,133	3%	40

Haul Truck Noise Modeling, Phase 1 Summary (a)

Roadway	Segment	Baseline Conditions dBA Ldn	Baseline Plus Haul Trucks dBA Ldn	Change in Sound Level (dBA Ldn)	Haul Truck Noise Only (dBA Ldn)
Bayfront Expressway	Between Willow Road and University Avenue	74.0	74.4	0.3	63.0
Bayfront Expressway	East of University Avenue	75.4	75.4	0.0	52.0
Willow Road	Between Bayfront Expressway and Hamilton Avenue	69.8	70.2	0.4	59.7
Willow Road	Between Hamilton Avenue and Ivy Drive	69.9	70.3	0.4	59.7
Willow Road	Between Ivy Drive and O'Brien Drive	69.7	70.2	0.4	59.9
Willow Road	Between O'Brien Drive and Newbridge Street	70.6	71.0	0.4	60.6
Willow Road	Between Newbridge Street and the US 101 NB Ramps	71.5	72.0	0.4	61.5

Note: Modeled Distance is 50 feet

Haul Truck Noise Modeling, Phase 1 Summary (b)

Roadway	Segment	Baseline Conditions dBA Ldn	Baseline Plus Haul Trucks dBA Ldn	Change in Sound Level (dBA Ldn)	Haul Truck Noise Only (dBA Ldn)
Bayfront Expressway	Between Willow Road and University Avenue	74.0	74.4	0.3	63.2
Bayfront Expressway	East of University Avenue	75.4	75.7	0.3	64.4
Willow Road	Between Bayfront Expressway and Hamilton Avenue	69.8	70.5	0.7	62.5
Willow Road	Between Hamilton Avenue and Ivy Drive	69.9	70.6	0.7	62.6
Willow Road	Between Ivy Drive and O'Brien Drive	69.7	70.5	0.8	62.8
Willow Road	Between O'Brien Drive and Newbridge Street	70.6	71.0	0.4	60.8
Willow Road	Between Newbridge Street and the US 101 NB Ramps	71.5	72.0	0.4	61.7

Note: Modeled Distance is 50 feet

Haul Truck Noise Modeling, Phase 2 Summary

Roadway	Segment	Baseline Conditions dBA Ldn	Baseline Plus Haul Trucks dBA Ldn	Change in Sound Level (dBA Ldn)	Haul Truck Noise Only (dBA Ldn)
Bayfront Expressway	Between Willow Road and University Avenue	74.0	74.1	0.0	46.2
Bayfront Expressway	East of University Avenue	75.4	75.4	0.0	46.2
Willow Road	Between Bayfront Expressway and Hamilton Avenue	69.8	69.8	0.0	44.9
Willow Road	Between Hamilton Avenue and Ivy Drive	69.9	69.9	0.0	44.9
Willow Road	Between Ivy Drive and O'Brien Drive	69.7	69.7	0.0	44.5
Willow Road	Between O'Brien Drive and Newbridge Street	70.6	70.6	0.0	44.5
Willow Road	Between Newbridge Street and the US 101 NB Ramps	71.5	71.5	0.0	44.5

Note: Modeled Distance is 50 feet

Noise Appendix

Operations

Noise Appendix

Traffic Noise Modeling

Received ADT Data

Roadway	Segment	Truck %	Posted Speed (MPH)	Existing ADT	Background ADT	Background + Project ADT	Cumulative ADT	Cumulative + Project ADT
Marsh Road	North of Bayfront	0%	25	1,135	1,135	1,135	1,135	1,135
Bayfront Expressway	East of Marsh Road	3%	45	41,750	41,750	46,491	60,856	62,597
Marsh Road	South of Bayfront Expressway	3%	35	40,310	40,310	44,112	54,022	54,782
Haven Avenue	West of Marsh Road	3%	25	10,325	11,673	12,503	20,403	21,044
Marsh Road	North of US 101 Ramps	3%	35	30,080	30,560	34,094	44,571	45,368
US 101 NB On-Ramp	East of Marsh Road	3%	25	12,090	14,132	14,619	17,905	18,026
Marsh Road	South of US 101 NB Ramps	3%	35	31,400	31,400	34,109	40,519	40,882
Marsh Road	North of US 101 SB Ramps	2%	35	33,055	33,055	33,828	39,167	39,573
Marsh Road	South of US 101 SB Ramps	2%	35	25,220	25,999	26,716	30,364	30,881
US 101 SB Off-Ramp	West of Marsh Road	2%	25	15,155	15,694	15,745	19,315	19,315
Marsh Road	North of Scott Drive	2%	30	31,375	32,446	33,335	38,484	38,903
Scott Drive	East of Marsh Road	4%	25	5,125	5,125	5,129	5,805	5,805
Marsh Road	South of Scott Drive	2%	30	22,420	23,003	24,014	27,280	28,015
Marsh Road/Scott Drive	West of Marsh Road	2%	25	5,210	5,745	5,745	7,072	7,072
Marsh Road	North of Bohannon Street	2%	30	25,325	25,927	26,847	30,257	31,029
Bohannon Drive	East of Marsh Road	2%	25	2,495	2,535	2,542	3,226	3,261
Marsh Road	South of Bohannon Street	2%	30	20,545	21,025	21,866	25,987	26,645
Florence Street	West of Marsh Road	2%	25	12,085	12,775	12,980	15,174	15,515
Marsh Road	North of Bay Road	2%	30	20,805	21,285	22,126	26,247	26,905
Bay Road	East of Marsh Road	1%	30	6,230	6,349	6,494	9,069	9,488
Marsh Road	South of Bay Road	2%	30	16,065	16,065	16,709	17,616	17,969
Bay Road	West of Marsh Road	1%	25	2,000	2,860	2,917	4,403	4,561
Marsh Road	North of Middlefield Road	2%	30	16,445	16,483	17,085	18,679	19,006
Middlefield Road	East of Marsh Road	2%	30	15,285	16,017	16,697	18,777	19,085
Middlefield Road	West of Marsh Road	1%	30	12,540	12,923	13,083	15,083	15,247
Bayfront Expressway	East of Chrysler Drive	3%	45	36,835	36,835	41,729	49,141	50,934
Chrysler Drive	South of Bayfront Expressway	3%	25	9,035	9,035	9,247	15,854	16,007
Bayfront Expressway	West of Chrysler Drive	3%	45	43,420	43,420	48,161	62,526	64,267
Bayfront Expressway	East of Chilco Street	4%	45	36,060	36,060	40,704	48,858	50,332
Chilco Street	South of Bayfront Expressway	3%	25	9,580	9,874	10,293	14,358	14,358
Bayfront Expressway	West of Chilco Street	3%	45	36,820	36,820	41,714	49,126	50,919
Bayfront Expressway	East of MPK 21	4%	45	33,995	34,447	37,737	42,837	43,407
MPK 21	South of Bayfront Expressway	4%	25	6,670	6,670	8,024	11,078	11,983

Bayfront Expressway	West of MPK 21	4%	45	35,865	35,865	40,509	48,663	50,137
Bayfront Expressway	East of MPK 20	4%	45	34,410	34,410	36,200	44,652	44,652
MPK 20	South of Bayfront Expressway	5%	25	2,975	2,975	2,975	4,826	4,826
Bayfront Expressway	West of MPK 20	4%	45	34,375	34,827	38,117	43,217	43,787
Chrysler Drive	North of Constitution Drive	3%	25	10,105	10,105	10,317	16,924	17,077
Constitution Drive	East of Chrysler Drive	2%	25	2,885	3,995	4,197	8,829	8,957
Chrysler Drive	South of Constitution Drive	3%	25	7,945	7,945	8,230	12,756	12,767
Constitution Drive	West of Chrysler Drive	2%	25	295	4,417	4,511	5,577	5,701
Chilco Street	North of Constitution Drive	3%	25	10,310	10,604	11,023	15,088	15,088
Constitution Drive	East of Chilco Street	1%	25	3,080	3,080	3,292	3,622	3,622
Chilco Street	South of Constitution Drive	2%	25	7,630	7,630	8,711	10,971	11,271
Constitution Drive	West of Chilco Street	3%	25	6,250	6,527	6,809	11,853	12,195
Chilco Street	North of Hamilton Avenue	2%	25	5,225	5,225	6,313	8,555	8,854
Hamilton Avenue	East of Chilco Street	0%	25	2,940	2,940	3,054	3,675	3,675
Chilco Street	South of Hamilton Avenue	2%	25	3,815	3,815	4,724	6,258	7,017
Hamilton Avenue	West of Chilco Street	0%	25	2,050	2,050	2,251	2,050	2,194
Middlefield Road	East of Ravenswood Avenue	1%	30	17,145	18,786	19,369	21,061	21,304
Ravenswood Avenue	South of Middlefield Road	1%	25	10,750	11,229	11,242	11,229	11,320
Middlefield Road	West of Ravenswood Avenue	2%	30	10,715	10,769	11,263	11,617	11,699
Ringwood Avenue	North of Middlefield Road	2%	30	6,860	8,092	8,188	9,775	9,934
Middlefield Road	East of Ringwood Avenue	1%	30	14,420	14,903	15,472	17,803	18,045
Ringwood Avenue	South of Middlefield Road	0%	25	1,165	1,165	1,165	1,165	1,165
Middlefield Road	West of Ringwood Avenue	1%	30	16,925	18,566	19,149	20,841	21,084
Willow Road	North of Bayfront Expressway	5%	40	8,565	8,650	9,019	9,013	9,229
Bayfront Expressway	East of Willow Road	4%	45	42,495	42,495	43,645	51,362	51,362
Willow Road	South of Bayfront Expressway	4%	40	21,665	21,665	23,757	27,060	27,060
Bayfront Expressway	West of Willow Road	4%	45	32,125	32,125	33,915	42,367	42,367
Willow Road	North of Hamilton Avenue	4%	40	21,735	21,735	23,827	27,130	27,130
Hamilton Avenue	East of Willow Road	0%	25	4,570	4,570	4,570	7,504	7,504
Willow Road	South of Hamilton Avenue	4%	40	20,845	20,845	26,966	28,679	29,775
Hamilton Avenue	West of Willow Road	0%	25	2,600	2,600	2,600	2,600	2,600
Willow Road	North of Ivy Drive	3%	40	22,195	22,195	25,800	28,070	29,128
Willow Road	South of Ivy Drive	3%	40	23,300	23,300	24,997	29,547	29,547
Ivy Drive	West of Willow Road	2%	25	1,915	1,915	1,915	6,602	6,602
Willow Road	North of O'Brien Drive	3%	40	23,180	23,180	24,877	29,427	29,427
O'Brien Drive	East of Willow Road	3%	30	6,970	8,026	9,455	14,290	14,290
Willow Road	South of O'Brien Drive	3%	40	28,260	28,260	33,165	35,843	37,142

Willow Road	North of Newbridge Street	3%	40	27,795	27,795	32,705	34,354	35,838
Newbridge Street	East of Willow Road	1%	25	7,475	10,062	10,062	12,877	12,877
Willow Road	South of Newbridge Street	3%	40	34,290	34,387	39,625	45,326	47,267
Newbridge Street	West of Willow Road	2%	25	7,860	8,046	8,154	12,164	12,164
Willow Road	North of US 101 NB Ramps	3%	40	35,330	35,427	40,665	46,366	48,307
US 101 NB Ramps	East of Willow Road	3%	25	13,245	14,788	14,788	14,788	14,788
Willow Road	South of US 101 NB Ramps	3%	40	27,490	34,562	37,150	43,295	43,978
US 101 NB Ramps	West of Willow Road	2%	25	4,595	4,857	6,335	7,281	8,249
Willow Road	North of US 101 SB Ramps	3%	40	27,190	34,262	36,850	42,995	43,678
US 101 SB Ramps	East of Willow Road	3%	25	4,110	4,110	4,301	4,205	4,472
Willow Road	South of US 101 SB Ramps	3%	40	24,365	28,207	28,982	32,229	32,304
US 101 SB Ramps	West of Willow Road	3%	25	14,365	15,967	17,681	21,095	21,717
Willow Road	North of Bay Road	3%	25	26,310	30,152	30,927	34,174	34,249
Willow Road	South of Bay Road	3%	25	21,650	23,007	23,007	24,882	24,882
Bay Road	West of Willow Road	3%	30	6,505	8,551	9,409	10,866	11,605
Willow Road	North of Durham Street	3%	25	19,195	19,710	19,733	21,762	21,762
Durham Street	East of Willow Road	2%	25	1,300	1,741	1,741	2,441	2,441
Willow Road	South of Durham Street	3%	25	17,775	17,811	18,051	19,183	19,183
Hospital Plaza	West of Willow Road	0%	25	2,200	2,271	2,345	2,720	2,729
Willow Road	North of Coleman Avenue	3%	25	17,490	17,623	17,971	18,709	18,709
Coleman Avenue	East of Willow Road	0%	25	300	300	300	300	300
Willow Road	South of Coleman Avenue	3%	25	16,000	16,000	16,376	16,581	16,581
Coleman Avenue	West of Willow Road	0%	25	2,940	3,224	3,224	3,946	3,946
Willow Road	North of Gilbert Avenue	3%	25	16,025	16,025	16,401	16,606	16,606
Gilbert Avenue	East of Willow Road	0%	25	4,040	4,104	4,104	4,640	4,640
Willow Road	South of Gilbert Avenue	0%	25	16,120	16,120	16,120	16,120	16,120
Gilbert Avenue	West of Willow Road	1%	25	1,635	1,962	1,962	2,197	2,197
Willow Road	North of Middlefield Road	3%	25	15,155	15,235	15,681	15,824	15,824
Middlefield Road	East of Willow Road	3%	30	15,725	15,725	16,389	17,838	18,198
Willow Road	South of Middlefield Road	1%	25	6,270	7,293	7,548	8,227	8,306
Middlefield Road	West of Willow Road	3%	30	14,510	14,510	15,223	16,344	16,488
O'Biren Drive	North of Kavanaugh Drive	4%	30	5,695	6,116	10,753	9,987	13,993
Kavanaugh Drive	East of O'Brien Drive	2%	25	2,410	2,872	4,710	5,369	7,444
O'Brien Drive	South of Kavanaugh Drive	3%	30	7,510	8,391	10,157	14,700	14,700
Adams Drive	North of Adams Court	5%	25	2,535	2,535	2,628	2,537	2,665
Adams Drive	South of Adams Court	4%	25	2,635	2,636	2,636	5,300	5,300
Adams Court	West of Adams Drive	4%	25	1,710	1,711	1,711	4,373	4,373

Adams Drive	North of O'Brien Drive	4%	25	2,960	2,961	2,961	5,625	5,625
O'Brien Drive	East of Adams Drive	5%	30	3,925	4,174	9,921	8,362	15,759
O'Brien Drive	West of Adams Drive	5%	30	5,435	5,856	11,605	9,727	17,178
Bayfront Expressway	East of University Avenue	4%	45	57,635	57,918	58,901	70,168	70,626
University Avenue	South of Bayfront Expressway	5%	35	20,430	23,645	23,645	29,961	29,961
Bayfront Expressway	West of University Avenue	4%	45	40,805	40,805	41,602	49,337	49,337
University Avenue	North of Purdue Avenue	5%	35	22,355	25,570	25,570	31,886	31,886
Purdue Avenue	East of University Avenue	4%	25	2,080	4,271	4,475	8,303	9,099
University Avenue	South of Purdue Avenue	5%	35	21,485	22,624	22,624	26,158	26,158
University Avenue	North of Adams Drive	5%	35	23,930	25,069	25,069	28,603	28,603
University Avenue	South of Adams Drive	5%	35	22,735	23,949	23,949	26,586	26,586
Adams Drive	West of University Avenue	4%	25	2,640	2,640	2,640	3,538	3,538
University Avenue	North of O'Brien Drive	5%	35	22,025	23,239	23,239	25,876	25,876
University Avenue	South of O'Brien Drive	5%	35	20,900	21,943	23,477	25,202	27,443
O'Brien Drive	West of University Avenue	5%	30	3,890	3,954	9,579	8,534	15,567
University Avenue	North of Notre Dame Avenue	5%	25	21,705	22,748	24,282	26,007	28,248
Notre Dame Avenue	East of University Avenue	3%	25	1,190	1,195	1,461	1,564	2,023
University Avenue	South of Notre Dame Avenue	5%	25	22,155	23,194	24,497	26,093	27,894
University Avenue	North of Kavanaugh Drive	5%	25	23,270	24,309	25,612	27,208	29,009
University Avenue	South of Kavanaugh Drive	5%	25	22,345	23,510	24,836	27,521	29,200
Kavanaugh Drive	West of University Avenue	2%	25	2,385	2,530	2,530	4,349	4,349
University Avenue	North of Bay Road	5%	25	22,840	23,368	24,971	26,050	28,030
Bay Road	East of University Avenue	4%	25	10,380	14,802	14,802	25,046	25,046
University Avenue	South of Bay Road	4%	25	20,555	24,922	26,005	29,893	31,416
Bay Road	West of University Avenue	2%	25	7,165	9,409	9,718	13,001	13,388
University Avenue	North of Runnymede Street	4%	25	20,090	24,337	24,979	28,132	28,731
Runnymede Street	East of University Avenue	2%	25	5,015	5,095	5,419	5,233	5,334
University Avenue	South of Runnymede Street	4%	25	18,175	22,555	23,377	27,193	28,297
Runnymede Street	West of University Avenue	2%	25	3,320	3,534	4,038	4,532	5,142
University Avenue	North of Bell Street	4%	25	19,395	23,775	24,597	28,413	29,517
Bell Street	East of University Avenue	1%	25	3,865	4,297	4,297	6,277	7,231
University Avenue	South of Bell Street	4%	25	20,575	25,530	26,179	29,820	30,987
Bell Street	West of University Avenue	1%	25	2,995	3,696	3,696	6,919	7,224
University Avenue	North of Donohoe Street	4%	25	17,570	22,525	23,174	26,815	27,982
Donohoe Street	East of University Avenue	3%	25	20,835	21,337	21,337	25,381	25,530
University Avenue	South of Donohoe Street	3%	25	27,715	27,715	28,810	32,885	32,885
Donohoe Street	West of University Avenue	2%	25	12,190	12,427	12,427	12,818	12,818

Donohoe Street	North of US 101 NB Ramps	0%	25	1,615	1,615	1,615	1,615	1,615
US 101 NB Ramps	East of University Avenue	3%	25	18,540	18,762	19,323	22,151	22,176
University Avenue	South of US 101 NB Ramps	4%	25	10,915	11,677	12,082	17,054	18,683
US 101 NB Ramps	West of University Avenue	3%	25	21,160	21,662	21,662	25,706	25,855
Cooley Avenue	North of Donohoe Street	4%	25	7,115	7,311	8,056	10,427	12,017
Donohoe Street	East of Cooley Avenue	2%	25	14,200	14,498	14,735	16,489	16,489
Cooley Avenue	South of Donohoe Street	0%	25	690	690	690	690	690
Donohoe Street	West of Cooley Avenue	3%	25	17,985	18,207	18,768	21,596	21,621
University Avenue	North of US 101 SB Ramps	3%	25	32,555	32,882	33,341	37,572	37,785
US 101 SB Ramps	East of University Avenue	3%	25	18,005	19,546	19,843	20,802	20,802
University Avenue	South of US 101 SB Ramps	2%	25	26,160	26,645	26,667	29,892	30,160
University Avenue	North of Woodland Avenue	2%	25	27,030	27,515	27,537	30,762	31,030
Woodland Avenue	East of University Avenue	1%	25	7,035	7,179	7,179	7,938	8,154
University Avenue	South of Woodland Avenue	4%	25	14,745	14,980	14,980	16,183	16,183
Woodland Avenue	West of University Avenue	1%	25	10,520	10,520	10,953	13,144	13,144
University Avenue	North of Middlefield Road	4%	25	9,680	9,680	9,680	11,066	11,179
Middlefield Road	East of University Avenue	3%	25	8,420	8,691	9,091	10,272	10,582
University Avenue	South of Middlefield Road	4%	25	7,330	7,330	7,330	7,954	8,128
Middlefield Road	West of University Avenue	3%	25	9,440	9,440	10,032	10,428	11,184
Lytton Avenue	North of Middlefield Road	2%	25	2,140	2,189	2,189	2,189	2,202
Middlefield Road	East of Lytton Avenue	3%	25	9,485	9,485	10,077	10,473	11,229
Lytton Avenue	South of Middlefield Road	1%	25	7,320	7,405	7,405	7,675	7,675
Middlefield Road	West Lytton Avenue	3%	25	12,045	12,045	12,653	13,445	13,830
Donohoe Street	North of East Bayshore Road	2%	25	14,660	14,958	15,195	16,949	16,949
Donohoe Street	East of East Bayshore Road	2%	25	5,420	5,945	5,963	7,214	7,214
East Bayshore Road	South of Donohoe Street	1%	25	9,750	9,750	9,969	10,471	10,471
East Bayshore Road	North of Holland Street	0%	25	2,460	2,460	2,460	2,460	2,460
Holland Street	East of East Bayshore Road	3%	25	210	210	210	219	219
East Bayshore Road	South of Holland Street	2%	25	2,370	2,374	2,374	3,603	3,603
Saratoga Avenue	North of Newbridge Street	2%	25	495	495	495	1,538	1,538
Newbridge Street	East of Saratoga Avenue	1%	25	7,210	9,880	9,880	12,486	12,486
Saratoga Avenue	South of Newbridge Street	2%	25	1,690	1,694	1,694	2,932	2,932
Newbridge Street	West of Saratoga Avenue	1%	25	9,125	11,712	11,712	14,527	14,527
Euclid Avenue	North of East Bayshore Road	1%	25	3,310	4,302	4,302	7,023	7,218
East Bayshore Road	East of Euclid Avenue	1%	25	10,515	11,169	11,169	13,931	13,931
East Bayshore Road	West of Euclid Avenue	1%	25	7,655	7,655	7,655	8,965	8,965
Clark Avenue	North of East Bayshore Road	4%	25	4,025	4,087	4,227	4,921	5,072

East Bayshore Road	East of Clark Avenue	2%	25	7,120	7,157	7,372	8,393	8,550
East Bayshore Road	West of Clark Avenue	1%	25	5,055	5,055	5,130	5,457	5,463
Pulgas Avenue	North of East Bayshore Road	5%	25	8,675	10,213	10,303	14,091	14,619
East Bayshore Road	East of Pulgas Avenue	5%	25	12,115	13,689	13,995	18,804	19,489
East Bayshore Road	West of Pulgas Avenue	2%	25	6,580	6,617	6,832	7,853	8,010

Traffic Modeling Summary for ADT Changes of 10% and More, Background and Background with Project

					Background				Background + Project								
Roadway	Segment	Truck %	Posted speed	Distance Modeled	Background ADT	Ldn (dB)	CNEL (dB)	Leq (dB)	Background + Project ADT	Ldn (dB)	CNEL (dB)	Leq (dB)	DELTA Ldn	DELTA CNEL	DELTA Leq	Delta (Project ADT)	Delta (% increase from Project)
Bayfront Expressway	East of Marsh Road	3%	45	50	41,750	73.6	74.2	72.8	46,491	74.1	74.7	73.3	0.5	0.5	0.5	4,741	11%
Marsh Road	North of US 101 Ramps	3%	35	50	30,560	69.5	70.1	68.7	34,094	69.9	70.5	69.1	0.5	0.5	0.5	3,534	12%
Bayfront Expressway	East of Chrysler Drive	3%	45	50	36,835	73.1	73.7	72.3	41,729	73.6	74.2	72.8	0.5	0.5	0.5	4,894	13%
Bayfront Expressway	West of Chrysler Drive	3%	45	50	43,420	73.8	74.4	73.0	48,161	74.3	74.9	73.5	0.4	0.4	0.4	4,741	11%
Bayfront Expressway	East of Chilco Street	4%	45	50	36,060	73.1	73.7	72.3	40,704	73.6	74.2	72.8	0.5	0.5	0.5	4,644	13%
Bayfront Expressway	West of Chilco Street	3%	45	50	36,820	73.3	73.9	72.5	41,714	73.9	74.5	73.1	0.5	0.5	0.5	4,894	13%
Bayfront Expressway	East of MPK 21	4%	45	50	34,447	61.0	61.6	60.2	37,737	61.8	62.4	61.0	0.8	0.8	0.8	3,290	10%
MPK 21	South of Bayfront Expressway	4%	25	50	6,670	73.3	73.9	72.5	8,024	73.8	74.4	73.0	0.5	0.5	0.5	1,354	20%
Bayfront Expressway	West of MPK 21	4%	45	50	35,865	73.1	73.7	72.3	40,509	73.5	74.1	72.7	0.4	0.4	0.4	4,644	13%
Chilco Street	South of Constitution Drive	2%	25	50	7,630	60.1	60.7	59.2	8,711	60.6	61.2	59.8	0.6	0.6	0.6	1,081	14%
Chilco Street	North of Hamilton Avenue	2%	25	50	5,225	57.1	57.7	56.2	6,313	58.0	58.6	57.1	0.9	0.9	0.9	1,088	21%
Chilco Street	South of Hamilton Avenue	2%	25	50	3,815	58.5	59.0	57.6	4,724	59.3	59.8	58.4	0.8	0.8	0.8	909	24%
Hamilton Avenue	West of Chilco Street	0%	25	50	2,050	52.4	53.0	51.2	2,251	52.8	53.3	51.6	0.4	0.4	0.4	201	10%
Willow Road	South of Bayfront Expressway	4%	40	50	21,665	69.8	70.4	69.0	23,757	70.2	70.8	69.4	0.4	0.4	0.4	2,092	10%
Willow Road	North of Hamilton Avenue	4%	40	50	21,735	69.6	70.2	68.8	23,827	70.7	71.3	69.9	1.1	1.1	1.1	2,092	10%
Willow Road	South of Hamilton Avenue	4%	40	50	20,845	69.8	70.4	69.0	26,966	70.2	70.8	69.4	0.4	0.4	0.4	6,121	29%
Willow Road	North of Ivy Drive	3%	40	50	22,195	69.5	70.1	68.7	25,800	70.2	70.8	69.4	0.7	0.7	0.7	3,605	16%
O'Brien Drive	East of Willow Road	3%	30	50	8,026	62.3	62.9	61.5	9,455	63.0	63.6	62.2	0.7	0.7	0.7	1,429	18%
Willow Road	South of O'Brien Drive	3%	40	50	28,260	70.6	71.2	69.8	33,165	71.3	71.9	70.5	0.7	0.7	0.7	4,905	17%
Willow Road	North of Newbridge Street	3%	40	50	27,795	70.5	71.1	69.7	32,705	71.2	71.8	70.4	0.7	0.7	0.7	4,910	18%
Willow Road	South of Newbridge Street	3%	40	50	34,387	71.4	72.0	70.6	39,625	72.0	72.6	71.2	0.6	0.6	0.6	5,238	15%
Willow Road	North of US 101 NB Ramps	3%	40	50	35,427	58.2	58.7	57.3	40,665	59.3	59.9	58.4	1.1	1.1	1.1	5,238	15%
US 101 NB Ramps	West of Willow Road	2%	25	50	4,857	71.5	72.1	70.7	6,335	72.1	72.7	71.3	0.6	0.6	0.6	1,478	30%
US 101 SB Ramps	West of Willow Road	3%	25	50	15,967	64.1	64.7	63.2	17,681	64.5	65.1	63.7	0.4	0.4	0.4	1,714	11%
Bay Road	West of Willow Road	3%	30	50	8,551	62.6	63.2	61.7	9,409	63.0	63.6	62.2	0.4	0.4	0.4	858	10%
O'Biren Drive	North of Kavanaugh Drive	4%	30	50	6,116	61.7	62.3	60.9	10,753	64.1	64.7	63.3	2.4	2.4	2.4	4,637	76%
Kavanaugh Drive	East of O'Brien Drive	2%	25	50	2,872	56.0	56.6	55.0	4,710	58.0	58.6	57.1	2.1	2.1	2.1	1,838	64%
O'Brien Drive	South of Kavanaugh Drive	3%	30	50	8,391	62.5	63.1	61.7	10,157	63.3	63.9	62.5	0.8	0.8	0.8	1,766	21%
O'Brien Drive	East of Adams Drive	5%	30	280	4,174	52.8	53.3	51.9	9,921	56.5	57.0	55.6	3.7	3.7	3.7	5,747	138%
O'Brien Drive	West of Adams Drive	5%	30	50	5,856	62.0	62.6	61.2	11,605	64.9	65.5	64.1	2.9	2.9	3.0	5,749	98%
O'Brien Drive	West of University Avenue	5%	30	280	3,954	52.5	53.1	51.7	9,579	56.3	56.9	55.5	3.8	3.8	3.8	5,625	142%
Notre Dame Avenue	East of University Avenue	3%	25	50	1,195	53.2	53.8	52.1	1,461	54.0	54.6	53.0	0.8	0.8	0.8	266	22%
Runnymede Street	West of University Avenue	2%	25	50	3,534	56.8	57.4	55.9	4,038	57.4	58.0	56.5	0.6	0.6	0.6	504	14%
Cooley Avenue	North of Donohoe Street	4%	25	50	7,311	61.4	62.0	60.6	8,056	61.8	62.4	61.0	0.4	0.4	0.4	745	10%

Traffic Modeling Summary for ADT Changes of 10% and More, Cumulative and Cumulative with Project

					Cumulative				Cumulative + Project								
Roadway	Segment	Truck %	Posted speed	Distance Modeled	Cumulative ADT	Ldn (dB)	CNEL (dB)	Leq (dB)	Cumulative + Project ADT	Ldn (dB)	CNEL (dB)	Leq (dB)	DELTA Ldn	DELTA CNEL	DELTA Leq	Delta (Project ADT)	Delta (% increase from Project)
Chilco Street	South of Hamilton Avenue	2%	25	50	6,258	59.2	59.8	58.3	7,017	59.7	60.3	58.8	0.5	0.5	0.5	759	12%
US 101 NB Ramps	West of Willow Road	2%	25	50	7,281	59.9	60.5	59.0	8,249	60.4	61.0	59.5	0.5	0.5	0.5	968	13%
O'Biren Drive	North of Kavanaugh Drive	4%	30	50	9,987	63.8	64.4	63.0	13,993	65.2	65.8	64.4	1.5	1.5	1.5	4,006	40%
Kavanaugh Drive	East of O'Brien Drive	2%	25	50	5,369	58.6	59.2	57.7	7,444	60.0	60.5	59.1	1.4	1.4	1.4	2,075	39%
O'Brien Drive	East of Adams Drive	5%	30	50	8,362	63.5	64.1	62.7	15,759	66.3	66.9	65.4	2.7	2.7	2.7	7,397	88%
O'Brien Drive	West of Adams Drive	5%	30	50	9,727	64.2	64.8	63.4	17,178	66.6	67.2	65.8	2.5	2.5	2.5	7,451	77%
Purdue Avenue	East of University Avenue	4%	25	50	8,303	61.9	62.5	61.1	9,099	62.3	62.9	61.5	0.4	0.4	0.4	796	10%
O'Brien Drive	West of University Avenue	5%	30	50	8,534	63.6	64.2	62.8	15,567	66.2	66.8	65.4	2.6	2.6	2.6	7,033	82%
Notre Dame Avenue	East of University Avenue	3%	25	50	1,564	54.3	54.9	53.2	2,023	55.3	55.9	54.3	1.0	1.0	1.1	459	29%
Runnymede Street	West of University Avenue	2%	25	50	4,532	57.9	58.4	57.0	5,142	58.4	59.0	57.5	0.5	0.5	0.5	610	13%
Bell Street	East of University Avenue	1%	25	50	6,277	58.2	58.8	57.3	7,231	58.8	59.4	57.9	0.6	0.6	0.6	954	15%
University Avenue	South of US 101 NB Ramps	4%	25	50	17,054	65.0	65.6	64.2	18,683	65.4	66.0	64.6	0.4	0.4	0.4	1,629	10%
Cooley Avenue	North of Donohoe Street	4%	25	50	10,427	62.9	63.5	62.1	12,017	63.5	64.1	62.7	0.6	0.6	0.6	1,590	15%

Full Traffic Noise Data

				Existing			Background			Background + Project			Cumulative			Cumulative + Project		
Roadway	Segment	Truck %	Posted speed	Existing ADT	Existing Ldn (dB)	Existing CNEL (dB)	Background ADT	Existing Ldn (dB)	Existing CNEL (dB)	Background + Project ADT	Existing Ldn (dB)	Existing CNEL (dB)	Cumulative ADT	Existing Ldn (dB)	Existing CNEL (dB)	Cumulative + Project ADT	Existing Ldn (dB)	Existing CNEL (dB)
Marsh Road	North of Bayfront	0%	25	1,135	50.3	50.8	1,135	50.3	50.8	1,135	50.3	50.8	1,135	50.3	50.8	1,135	50.3	50.8
Bayfront Expressway	East of Marsh Road	3%	45	41,750	73.6	74.2	41,750	61.4	62.0	46,491	61.6	62.2	60,856	75.3	75.9	62,597	75.4	76.0
Marsh Road	South of Bayfront Expressway	3%	35	40,310	70.7	71.3	40,310	48.7	49.2	44,112	48.7	49.2	54,022	71.9	72.5	54,782	72.0	72.6
Haven Avenue	West of Marsh Road	3%	25	10,325	62.2	62.8	11,673	51.5	52.1	12,503	51.5	52.1	20,403	65.1	65.7	21,044	65.2	65.8
Marsh Road	North of US 101 Ramps	3%	35	30,080	69.4	70.0	30,560	61.4	62.0	34,094	61.4	62.0	44,571	71.1	71.7	45,368	71.2	71.8
US 101 NB On-Ramp	East of Marsh Road	3%	25	12,090	62.9	63.5	14,132	61.7	62.3	14,619	64.1	64.7	17,905	64.6	65.1	18,026	64.6	65.2
Marsh Road	South of US 101 NB Ramps	3%	35	31,400	69.6	70.2	31,400	62.8	63.4	34,109	62.9	63.5	40,519	70.7	71.3	40,882	70.7	71.3
Marsh Road	North of US 101 SB Ramps	2%	35	33,055	69.3	69.9	33,055	58.3	58.9	33,828	58.5	59.0	39,167	70.0	70.6	39,573	70.1	70.7
Marsh Road	South of US 101 SB Ramps	2%	35	25,220	68.1	68.7	25,999	64.5	65.1	26,716	64.6	65.2	30,364	68.9	69.5	30,881	69.0	69.6
US 101 SB Off-Ramp	West of Marsh Road	2%	25	15,155	63.0	63.6	15,694	69.8	70.4	15,745	70.2	70.8	19,315	64.0	64.6	19,315	64.0	64.6
Marsh Road	North of Scott Drive	2%	30	31,375	67.5	68.1	32,446	64.5	65.1	33,335	64.6	65.2	38,484	68.4	69.0	38,903	68.5	69.1
Scott Drive	East of Marsh Road	4%	25	5,125	59.9	60.5	5,125	62.9	63.5	5,129	63.1	63.7	5,805	60.4	61.0	5,805	60.4	61.0
Marsh Road	South of Scott Drive	2%	30	22,420	66.1	66.7	23,003	67.0	67.6	24,014	67.2	67.8	27,280	66.9	67.5	28,015	67.0	67.6
Marsh Road/Scott Drive	West of Marsh Road	2%	25	5,210	58.4	59.0	5,745	73.6	74.2	5,745	74.1	74.7	7,072	59.7	60.3	7,072	59.7	60.3
Marsh Road	North of Bohannon Street	2%	30	25,325	66.6	67.2	25,927	57.1	57.7	26,847	57.1	57.7	30,257	67.4	68.0	31,029	67.5	68.1
Bohannon Drive	East of Marsh Road	2%	25	2,495	55.4	56.0	2,535	66.2	66.8	2,542	66.4	66.9	3,226	56.5	57.0	3,261	56.5	57.1
Marsh Road	South of Bohannon Street	2%	30	20,545	65.7	66.3	21,025	69.0	69.6	21,866	69.0	69.6	25,987	66.7	67.3	26,645	66.8	67.4
Florence Street	West of Marsh Road	2%	25	12,085	62.0	62.6	12,775	62.3	62.9	12,980	63.0	63.6	15,174	63.0	63.6	15,515	63.1	63.7
Marsh Road	North of Bay Road	2%	30	20,805	65.8	66.4	21,285	69.6	70.2	22,126	69.6	70.2	26,247	66.8	67.4	26,905	66.9	67.5
Bay Road	East of Marsh Road	1%	30	6,230	59.8	60.4	6,349	71.4	72.0	6,494	71.7	72.3	9,069	61.4	62.0	9,488	61.6	62.2
Marsh Road	South of Bay Road	2%	30	16,065	64.6	65.2	16,065	69.5	70.1	16,709	69.5	70.1	17,616	65.0	65.6	17,969	65.1	65.7
Bay Road	West of Marsh Road	1%	25	2,000	53.5	54.1	2,860	60.3	60.9	2,917	60.3	60.9	4,403	56.7	57.3	4,561	56.9	57.5
Marsh Road	North of Middlefield Road	2%	30	16,445	64.7	65.3	16,483	52.8	53.3	17,085	56.5	57.0	18,679	65.3	65.9	19,006	65.4	66.0
Middlefield Road	East of Marsh Road	2%	30	15,285	64.4	65.0	16,017	68.9	69.5	16,697	69.2	69.8	18,777	65.3	65.9	19,085	65.4	66.0
Middlefield Road	West of Marsh Road	1%	30	12,540	62.8	63.4	12,923	55.6	56.1	13,083	55.6	56.1	15,083	63.6	64.2	15,247	63.7	64.3
Bayfront Expressway	East of Chrysler Drive	3%	45	36,835	73.1	73.7	36,835	61.8	62.4	41,729	62.1	62.7	49,141	74.4	74.9	50,934	74.5	75.1
Chrysler Drive	South of Bayfront Expressway	3%	25	9,035	61.6	62.2	9,035	64.1	64.7	9,247	64.5	65.1	15,854	64.0	64.6	16,007	64.1	64.7
Bayfront Expressway	West of Chrysler Drive	3%	45	43,420	73.8	74.4	43,420	62.6	63.2	48,161	62.6	63.2	62,526	75.4	76.0	64,267	75.5	76.1
Bayfront Expressway	East of Chilco Street	4%	45	36,060	73.3	73.9	36,060	61.8	62.4	40,704	62.1	62.7	48,858	74.7	75.2	50,332	74.8	75.4
Chilco Street	South of Bayfront Expressway	3%	25	9,580	61.9	62.5	9,874	69.2	69.7	10,293	69.2	69.7	14,358	63.6	64.2	14,358	63.6	64.2
Bayfront Expressway	West of Chilco Street	3%	45	36,820	73.1	73.7	36,820	58.9	59.5	41,714	58.9	59.5	49,126	74.3	74.9	50,919	74.5	75.1
Bayfront Expressway	East of MPK 21	4%	45	33,995	73.1	73.7	34,447	67.2	67.8	37,737	67.2	67.8	42,837	74.1	74.7	43,407	74.1	74.7
MPK 21	South of Bayfront Expressway	4%	25	6,670	61.0	61.6	6,670	60.1	60.7	8,024	60.1	60.7	11,078	63.2	63.8	11,983	63.5	64.1
Bayfront Expressway	West of MPK 21	4%	45	35,865	73.3	73.9	35,865	54.9	55.4	40,509	54.9	55.4	48,663	74.6	75.2	50,137	74.8	75.4
Bayfront Expressway	East of MPK 20	4%	45	34,410	73.1	73.7	34,410	66.6	67.2	36,200	66.7	67.3	44,652	74.3	74.9	44,652	74.3	74.9
MPK 20	South of Bayfront Expressway	5%	25	2,975	58.2	58.8	2,975	70.7	71.3	2,975	71.1	71.7	4,826	60.2	60.8	4,826	60.2	60.8
Bayfront Expressway	West of MPK 20	4%	45	34,375	73.1	73.7	34,827	64.6	65.2	38,117	64.8	65.3	43,217	74.1	74.7	43,787	74.2	74.8
Chrysler Drive	North of Constitution Drive	3%	25	10,105	62.1	62.7	10,105	71.5	72.1	10,317	72.1	72.7	16,924	64.3	64.9	17,077	64.3	64.9
Constitution Drive	East of Chrysler Drive	2%	25	2,885	56.0	56.6	3,995	61.0	61.5	4,197	61.1	61.7	8,829	60.7	61.3	8,957	60.7	61.3
Chrysler Drive	South of Constitution Drive	3%	25	7,945	61.1	61.7	7,945	55.3	55.9	8,230	55.3	55.9	12,756	63.1	63.7	12,767	63.1	63.7
Constitution Drive	West of Chrysler Drive	2%	25	295	47.8	48.3	4,417	63.7	64.3	4,511	63.7	64.3	5,577	58.7	59.3	5,701	58.8	59.4
Chilco Street	North of Constitution Drive	3%	25	10,310	62.2	62.8	10,604	59.1	59.7	11,023	59.3	59.9	15,088	63.8	64.4	15,088	63.8	64.4
Constitution Drive	East of Chilco Street	1%	25	3,080	55.3	55.8	3,080	66.4	67.0	3,292	66.6	67.2	3,622	55.9	56.5	3,622	55.9	56.5
Chilco Street	South of Constitution Drive	2%	25	7,630	60.1	60.7	7,630	62.8	63.4	8,711	63.1	63.6	10,971	61.6	62.2	11,271	61.7	62.3
Constitution Drive	West of Chilco Street	3%	25	6,250	60.0	60.6	6,527	66.9	67.5	6,809	67.2	67.8	11,853	62.8	63.4	12,195	62.9	63.5
Chilco Street	North of Hamilton Avenue	2%	25	5,225	58.5	59.0	5,225	53.8	54.4	6,313	53.8	54.4	8,555	60.5	61.1	8,854	60.7	61.3
Hamilton Avenue	East of Chilco Street	0%	25	2,940	53.8	54.4	2,940	69.2	69.8	3,054	69.2	69.8	3,675	54.7	55.3	3,675	54.7	55.3
Chilco Street	South of Hamilton Avenue	2%	25	3,815	57.1	57.7	3,815	60.7	61.2	4,724	60.7	61.2	6,258	59.2	59.8	7,017	59.7	60.3
Hamilton Avenue	West of Chilco Street	0%	25	2,050	52.4	53.0	2,050	65.6	66.2	2,251	65.6	66.2	2,050	52.4	53.0	2,194	52.7	53.2
Middlefield Road	East of Ravenswood Avenue	1%	30	17,145	64.2	64.8	18,786	60.8	61.4	19,369	60.8	61.4	21,061	65.1	65.7	21,304	65.1	65.7
Ravenswood Avenue	South of Middlefield Road	1%	25	10,750	60.5	61.1	11,229	50.4	50.9	11,242	50.4	50.9	11,229	60.7	61.3	11,320	60.7	61.3
Middlefield Road	West of Ravenswood Avenue	2%	30	10,715	62.9	63.5	10,769	67.2	67.8	11,263	67.4	68.0	11,617	63.3	63.8	11,699	63.3	63.9
Ringwood Avenue	North of Middlefield Road	2%	30	6,860	61.0	61.6	8,092	69.8	70.4	8,188	70.2	70.8	9,775	62.5	63.1	9,934	62.6	63.2
Middlefield Road	East of Ringwood Avenue	1%	30	14,420	63.4	64.0	14,903	75.4	76.0	15,472	75.5	76.1	17,803	64.3	64.9	18,045	64.4	65.0
Ringwood Avenue	South of Middlefield Road	0%	25	1,165	50.4	50.9	1,165	62.7	63.3	1,165	63.0	63.6	1,165	50.4	50.9	1,165	50.4	50.9
Middlefield Road	West of Ringwood Avenue	1%	30	16,925	64.1	64.7	18,566	53.5	54.0	19,149	53.5	54.0	20,841	65.0	65.6	21,084	65.1	65.7
Willow Road	North of Bayfront Expressway	5%	40	8,565	66.1	66.7	8,650	52.5	53.1	9,019	56.3	56.9	9,013	66.3	66.9	9,229	66.5	67.0
Bayfront Expressway	East of Willow Road	4%	45	42,495	74.0	74.6	42,495	54.0	54.5	43,645	54.0	54.5	51,362	74.9	75.5	51,362	74.9	75.5
Willow Road	South of Bayfront Expressway	4%	40	21,665	69.8	70.4	21,665	65.4	66.0	23,757	65.4	66.0	27,060	70.8	71.3	27,060	70.8	71.3

Bayfront Expressway	West of Willow Road	4%	45	32,125	72.8	73.4	32,125	66.3	66.8	33,915	66.4	67.0	42,367	74.0	74.6	42,367	74.0	74.6
Willow Road	North of Hamilton Avenue	4%	40	21,735	69.8	70.4	21,735	64.9	65.5	23,827	65.0	65.6	27,130	70.8	71.4	27,130	70.8	71.4
Hamilton Avenue	East of Willow Road	0%	25	4,570	55.6	56.1	4,570	69.5	70.1	4,570	69.9	70.5	7,504	57.6	58.2	7,504	57.6	58.2
Willow Road	South of Hamilton Avenue	4%	40	20,845	69.6	70.2	20,845	59.0	59.6	26,966	59.0	59.6	28,679	71.0	71.6	29,775	71.2	71.8
Hamilton Avenue	West of Willow Road	0%	25	2,600	53.3	53.9	2,600	63.5	64.1	2,600	63.7	64.3	2,600	53.3	53.9	2,600	53.3	53.9
Willow Road	North of Ivy Drive	3%	40	22,195	69.5	70.1	22,195	53.1	53.7	25,800	53.1	53.7	28,070	70.5	71.1	29,128	70.7	71.3
Willow Road	South of Ivy Drive	3%	40	23,300	69.7	70.3	23,300	64.8	65.3	24,997	64.9	65.5	29,547	70.8	71.4	29,547	70.8	71.4
Ivy Drive	West of Willow Road	2%	25	1,915	54.3	54.9	1,915	69.6	70.2	1,915	69.9	70.5	6,602	59.4	60.0	6,602	59.4	60.0
Willow Road	North of O'Brien Drive	3%	40	23,180	69.7	70.3	23,180	63.4	64.0	24,877	63.6	64.2	29,427	70.7	71.3	29,427	70.7	71.3
O'Brien Drive	East of Willow Road	3%	30	6,970	61.7	62.3	8,026	49.4	49.9	9,455	49.4	49.9	14,290	64.8	65.4	14,290	64.8	65.4
Willow Road	South of O'Brien Drive	3%	40	28,260	70.6	71.2	28,260	47.4	47.9	33,165	47.4	47.9	35,843	71.6	72.2	37,142	71.7	72.3
Willow Road	North of Newbridge Street	3%	40	27,795	70.5	71.1	27,795	55.2	55.8	32,705	55.2	55.8	34,354	71.4	72.0	35,838	71.6	72.2
Newbridge Street	East of Willow Road	1%	25	7,475	58.9	59.5	10,062	69.3	69.9	10,062	69.4	70.0	12,877	61.3	61.8	12,877	61.3	61.8
Willow Road	South of Newbridge Street	3%	40	34,290	71.4	72.0	34,387	60.1	60.7	39,625	60.2	60.8	45,326	72.6	73.2	47,267	72.8	73.4
Newbridge Street	West of Willow Road	2%	25	7,860	60.2	60.8	8,046	69.6	70.2	8,154	70.7	71.3	12,164	62.1	62.6	12,164	62.1	62.6
Willow Road	North of US 101 NB Ramps	3%	40	35,330	71.5	72.1	35,427	59.0	59.6	40,665	59.0	59.6	46,366	72.7	73.3	48,307	72.9	73.5
US 101 NB Ramps	East of Willow Road	3%	25	13,245	63.3	63.8	14,788	68.3	68.9	14,788	68.4	69.0	14,788	63.7	64.3	14,788	63.7	64.3
Willow Road	South of US 101 NB Ramps	3%	40	27,490	70.4	71.0	34,562	65.4	66.0	37,150	65.4	66.0	43,295	72.4	73.0	43,978	72.5	73.1
US 101 NB Ramps	West of Willow Road	2%	25	4,595	57.9	58.5	4,857	58.9	59.5	6,335	59.1	59.7	7,281	59.9	60.5	8,249	60.4	61.0
Willow Road	North of US 101 SB Ramps	3%	40	27,190	70.4	71.0	34,262	61.4	62.0	36,850	61.8	62.4	42,995	72.4	73.0	43,678	72.4	73.0
US 101 SB Ramps	East of Willow Road	3%	25	4,110	58.3	58.9	4,110	55.5	56.0	4,301	55.5	56.0	4,205	58.4	59.0	4,472	58.6	59.2
Willow Road	South of US 101 SB Ramps	3%	40	24,365	69.9	70.5	28,207	52.8	53.4	28,982	52.9	53.5	32,229	71.1	71.7	32,304	71.1	71.7
US 101 SB Ramps	West of Willow Road	3%	25	14,365	63.6	64.2	15,967	60.4	61.0	17,681	60.6	61.2	21,095	65.3	65.9	21,717	65.4	66.0
Willow Road	North of Bay Road	3%	25	26,310	66.2	66.8	30,152	62.6	63.2	30,927	63.0	63.6	34,174	67.3	67.9	34,249	67.4	67.9
Willow Road	South of Bay Road	3%	25	21,650	65.4	66.0	23,007	63.1	63.7	23,007	63.2	63.8	24,882	66.0	66.6	24,882	66.0	66.6
Bay Road	West of Willow Road	3%	30	6,505	61.4	62.0	8,551	58.8	59.4	9,409	58.8	59.4	10,866	63.6	64.2	11,605	63.9	64.5
Willow Road	North of Durham Street	3%	25	19,195	64.9	65.4	19,710	64.5	65.1	19,733	64.6	65.2	21,762	65.4	66.0	21,762	65.4	66.0
Durham Street	East of Willow Road	2%	25	1,300	52.8	53.4	1,741	67.7	68.3	1,741	67.8	68.4	2,441	55.3	55.9	2,441	55.3	55.9
Willow Road	South of Durham Street	3%	25	17,775	64.5	65.1	17,811	53.3	53.9	18,051	53.3	53.9	19,183	64.8	65.4	19,183	64.8	65.4
Hospital Plaza	West of Willow Road	0%	25	2,200	52.7	53.2	2,271	65.2	65.8	2,345	65.4	66.0	2,720	53.5	54.1	2,729	53.5	54.1
Willow Road	North of Coleman Avenue	3%	25	17,490	64.4	65.0	17,623	71.4	72.0	17,971	72.0	72.6	18,709	64.7	65.3	18,709	64.7	65.3
Coleman Avenue	East of Willow Road	0%	25	300	46.5	46.9	300	59.9	60.5	300	59.9	60.5	300	46.5	46.9	300	46.5	46.9
Willow Road	South of Coleman Avenue	3%	25	16,000	64.1	64.7	16,000	66.8	67.4	16,376	66.9	67.5	16,581	64.2	64.8	16,581	64.2	64.8
Coleman Avenue	West of Willow Road	0%	25	2,940	53.8	54.4	3,224	66.2	66.8	3,224	66.4	67.0	3,946	55.0	55.5	3,946	55.0	55.5
Willow Road	North of Gilbert Avenue	3%	25	16,025	64.1	64.7	16,025	70.6	71.1	16,401	70.7	71.3	16,606	64.2	64.8	16,606	64.2	64.8
Gilbert Avenue	East of Willow Road	0%	25	4,040	55.1	55.6	4,104	58.9	59.4	4,104	58.9	59.4	4,640	55.6	56.2	4,640	55.6	56.2
Willow Road	South of Gilbert Avenue	0%	25	16,120	60.8	61.4	16,120	66.7	67.3	16,120	66.9	67.5	16,120	60.8	61.4	16,120	60.8	61.4
Gilbert Avenue	West of Willow Road	1%	25	1,635	52.8	53.3	1,962	55.5	56.0	1,962	55.5	56.1	2,197	53.9	54.5	2,197	53.9	54.5
Willow Road	North of Middlefield Road	3%	25	15,155	63.8	64.4	15,235	64.1	64.7	15,681	64.2	64.8	15,824	64.0	64.6	15,824	64.0	64.6
Middlefield Road	East of Willow Road	3%	30	15,725	65.2	65.8	15,725	57.1	57.7	16,389	57.1	57.7	17,838	65.7	66.3	18,198	65.8	66.4
Willow Road	South of Middlefield Road	1%	25	6,270	58.2	58.8	7,293	57.5	58.1	7,548	57.7	58.3	8,227	59.4	59.9	8,306	59.4	60.0
Middlefield Road	West of Willow Road	3%	30	14,510	64.8	65.4	14,510	64.4	65.0	15,223	64.4	65.0	16,344	65.4	66.0	16,488	65.4	66.0
O'Biren Drive	North of Kavanaugh Drive	4%	30	5,695	61.4	62.0	6,116	57.3	57.9	10,753	57.4	58.0	9,987	63.8	64.4	13,993	65.2	65.8
Kavanaugh Drive	East of O'Brien Drive	2%	25	2,410	55.3	55.8	2,872	59.8	60.4	4,710	59.9	60.5	5,369	58.6	59.2	7,444	60.0	60.5
O'Brien Drive	South of Kavanaugh Drive	3%	30	7,510	62.0	62.6	8,391	60.9	61.4	10,157	60.9	61.4	14,700	64.9	65.5	14,700	64.9	65.5
Adams Drive	North of Adams Court	5%	25	2,535	57.5	58.1	2,535	62.0	62.6	2,628	64.9	65.5	2,537	57.5	58.1	2,665	57.7	58.3
Adams Drive	South of Adams Court	4%	25	2,635	57.1	57.7	2,636	65.8	66.4	2,636	66.0	66.6	5,300	60.0	60.6	5,300	60.0	60.6
Adams Court	West of Adams Drive	4%	25	1,710	55.3	55.9	1,711	62.3	62.9	1,711	62.3	62.9	4,373	59.2	59.8	4,373	59.2	59.8
Adams Drive	North of O'Brien Drive	4%	25	2,960	57.6	58.2	2,961	65.9	66.5	2,961	66.0	66.6	5,625	60.3	60.9	5,625	60.3	60.9
O'Brien Drive	East of Adams Drive	5%	30	3,925	60.3	60.9	4,174	64.7	65.3	9,921	64.8	65.4	8,362	63.5	64.1	15,759	66.3	66.9
O'Brien Drive	West of Adams Drive	5%	30	5,435	61.7	62.3	5,856	63.4	64.0	11,605	63.5	64.1	9,727	64.2	64.8	17,178	66.6	67.2
Bayfront Expressway	East of University Avenue	4%	45	57,635	75.4	76.0	57,918	70.5	71.1	58,901	71.2	71.8	70,168	76.2	76.8	70,626	76.2	76.8
University Avenue	South of Bayfront Expressway	5%	35	20,430	68.6	69.2	23,645	59.9	60.5	23,645	60.0	60.6	29,961	70.3	70.8	29,961	70.3	70.8
Bayfront Expressway	West of University Avenue	4%	45	40,805	73.9	74.5	40,805	60.2	60.8	41,602	60.2	60.8	49,337	74.7	75.3	49,337	74.7	75.3
University Avenue	North of Purdue Avenue	5%	35	22,355	69.0	69.6	25,570	64.6	65.2	25,570	64.8	65.4	31,886	70.5	71.1	31,886	70.5	71.1
Purdue Avenue	East of University Avenue	4%	25	2,080	56.1	56.7	4,271	67.0	67.6	4,475	67.3	67.9	8,303	61.9	62.5	9,099	62.3	62.9
University Avenue	South of Purdue Avenue	5%	35	21,485	68.8	69.4	22,624	55.0	55.5	22,624	55.0	55.6	26,158	69.7	70.3	26,158	69.7	70.3
University Avenue	North of Adams Drive	5%	35	23,930	69.3	69.9	25,069	64.8	65.3	25,069	64.9	65.5	28,603	70.0	70.6	28,603	70.0	70.6
University Avenue	South of Adams Drive	5%	35	22,735	69.1	69.7	23,949	64.6	65.2	23,949	64.8	65.4	26,586	69.7	70.3	26,586	69.7	70.3
Adams Drive	West of University Avenue	4%	25	2,640	57.1	57.7	2,640	63.0	63.5	2,640	63.0	63.6	3,538	58.3	58.9	3,538	58.3	58.9
University Avenue	North of O'Brien Drive	5%	35	22,025	68.9	69.5	23,239	73.1	73.7	23,239	73.6	74.2	25,876	69.6	70.2	25,876	69.6	70.2
University Avenue	South of O'Brien Drive	5%	35	20,900	68.7	69.3	21,943	62.1	62.7	23,477	62.1	62.7	25,202	69.5	70.1	27,443	69.9	70.5
O'Brien Drive	West of University Avenue	5%	30	3,890	60.3	60.8	3,954	59.5	60.0	9,579	59.6	60.2	8,534	63.6	64.2	15,567	66.2	66.8
University Avenue	North of Notre Dame Avenue	5%	25	21,705	66.7	67.3	22,748	66.2	66.8	24,282	66.4	67.0	26,007	67.5	68.1	28,248	67.8	68.4

Notre Dame Avenue	East of University Avenue	3%	25	1,190	53.2	53.8	1,195	56.6	57.2	1,461	56.6	57.2	1,564	54.3	54.9	2,023	55.3	55.9
University Avenue	South of Notre Dame Avenue	5%	25	22,155	66.8	67.4	23,194	56.8	57.4	24,497	57.4	58.0	26,093	67.5	68.1	27,894	67.8	68.4
University Avenue	North of Kavanaugh Drive	5%	25	23,270	67.0	67.6	24,309	58.4	58.9	25,612	58.6	59.2	27,208	67.7	68.3	29,009	67.9	68.5
University Avenue	South of Kavanaugh Drive	5%	25	22,345	66.8	67.4	23,510	66.5	67.1	24,836	66.6	67.2	27,521	67.7	68.3	29,200	68.0	68.6
Kavanaugh Drive	West of University Avenue	2%	25	2,385	55.2	55.8	2,530	61.6	62.2	2,530	61.7	62.3	4,349	57.7	58.3	4,349	57.7	58.3
University Avenue	North of Bay Road	5%	25	22,840	66.9	67.5	23,368	65.3	65.9	24,971	65.3	65.9	26,050	67.5	68.1	28,030	67.8	68.4
Bay Road	East of University Avenue	4%	25	10,380	62.9	63.5	14,802	73.8	74.4	14,802	74.3	74.9	25,046	66.7	67.3	25,046	66.7	67.3
University Avenue	South of Bay Road	4%	25	20,555	65.8	66.4	24,922	53.2	53.8	26,005	54.0	54.6	29,893	67.5	68.1	31,416	67.7	68.3
Bay Road	West of University Avenue	2%	25	7,165	59.8	60.4	9,409	58.8	59.4	9,718	59.0	59.6	13,001	62.3	62.9	13,388	62.5	63.1
University Avenue	North of Runnymede Street	4%	25	20,090	65.8	66.3	24,337	65.0	65.6	24,979	65.0	65.6	28,132	67.2	67.8	28,731	67.3	67.9
Runnymede Street	East of University Avenue	2%	25	5,015	58.3	58.9	5,095	56.0	56.6	5,419	56.0	56.6	5,233	58.5	59.1	5,334	58.5	59.1
University Avenue	South of Runnymede Street	4%	25	18,175	65.3	65.9	22,555	57.6	58.2	23,377	57.6	58.2	27,193	67.1	67.7	28,297	67.2	67.8
Runnymede Street	West of University Avenue	2%	25	3,320	56.6	57.2	3,534	62.9	63.5	4,038	63.0	63.6	4,532	57.9	58.4	5,142	58.4	59.0
University Avenue	North of Bell Street	4%	25	19,395	65.6	66.2	23,775	56.0	56.6	24,597	58.0	58.6	28,413	67.2	67.8	29,517	67.4	68.0
Bell Street	East of University Avenue	1%	25	3,865	56.2	56.8	4,297	73.3	73.9	4,297	73.9	74.5	6,277	58.2	58.8	7,231	58.8	59.4
University Avenue	South of Bell Street	4%	25	20,575	65.9	66.4	25,530	65.6	66.2	26,179	65.6	66.2	29,820	67.5	68.1	30,987	67.6	68.2
Bell Street	West of University Avenue	1%	25	2,995	55.2	55.7	3,696	62.0	62.6	3,696	62.2	62.8	6,919	58.6	59.2	7,224	58.8	59.4
University Avenue	North of Donohoe Street	4%	25	17,570	65.2	65.8	22,525	46.5	46.9	23,174	46.5	46.9	26,815	67.0	67.6	27,982	67.2	67.8
Donohoe Street	East of University Avenue	3%	25	20,835	65.2	65.8	21,337	73.1	73.7	21,337	73.6	74.2	25,381	66.1	66.7	25,530	66.1	66.7
University Avenue	South of Donohoe Street	3%	25	27,715	66.4	67.0	27,715	73.9	74.5	28,810	74.0	74.6	32,885	67.2	67.8	32,885	67.2	67.8
Donohoe Street	West of University Avenue	2%	25	12,190	62.1	62.7	12,427	73.1	73.7	12,427	73.5	74.1	12,818	62.3	62.9	12,818	62.3	62.9
Donohoe Street	North of US 101 NB Ramps	0%	25	1,615	51.5	52.1	1,615	61.0	61.6	1,615	61.8	62.4	1,615	51.5	52.1	1,615	51.5	52.1
US 101 NB Ramps	East of University Avenue	3%	25	18,540	64.7	65.3	18,762	54.2	54.7	19,323	54.2	54.7	22,151	65.5	66.1	22,176	65.5	66.1
University Avenue	South of US 101 NB Ramps	4%	25	10,915	63.1	63.7	11,677	62.5	63.1	12,082	63.3	63.9	17,054	65.0	65.6	18,683	65.4	66.0
US 101 NB Ramps	West of University Avenue	3%	25	21,160	65.3	65.9	21,662	73.3	73.9	21,662	73.8	74.4	25,706	66.1	66.7	25,855	66.1	66.7
Cooley Avenue	North of Donohoe Street	4%	25	7,115	61.3	61.9	7,311	64.5	65.1	8,056	64.5	65.1	10,427	62.9	63.5	12,017	63.5	64.1
Donohoe Street	East of Cooley Avenue	2%	25	14,200	62.7	63.3	14,498	70.6	71.2	14,735	71.3	71.9	16,489	63.4	63.9	16,489	63.4	63.9
Cooley Avenue	South of Donohoe Street	0%	25	690	48.7	49.2	690	73.1	73.7	690	73.4	73.9	690	48.7	49.2	690	48.7	49.2
Donohoe Street	West of Cooley Avenue	3%	25	17,985	64.6	65.2	18,207	55.1	55.7	18,768	55.1	55.7	21,596	65.4	66.0	21,621	65.4	66.0
University Avenue	North of US 101 SB Ramps	3%	25	32,555	67.1	67.7	32,882	69.5	70.1	33,341	70.2	70.8	37,572	67.8	68.3	37,785	67.8	68.4
US 101 SB Ramps	East of University Avenue	3%	25	18,005	64.6	65.2	19,546	54.3	54.9	19,843	54.3	54.9	20,802	65.2	65.8	20,802	65.2	65.8
University Avenue	South of US 101 SB Ramps	2%	25	26,160	65.3	65.9	26,645	63.6	64.2	26,667	63.7	64.3	29,892	65.9	66.5	30,160	66.0	66.6
University Avenue	North of Woodland Avenue	2%	25	27,030	65.5	66.1	27,515	61.7	62.3	27,537	61.8	62.3	30,762	66.0	66.6	31,030	66.1	66.7
Woodland Avenue	East of University Avenue	1%	25	7,035	58.7	59.3	7,179	58.2	58.8	7,179	58.2	58.8	7,938	59.2	59.8	8,154	59.3	59.9
University Avenue	South of Woodland Avenue	4%	25	14,745	64.4	65.0	14,980	73.2	73.8	14,980	73.6	74.2	16,183	64.8	65.4	16,183	64.8	65.4
Woodland Avenue	West of University Avenue	1%	25	10,520	60.4	61.0	10,520	69.3	69.9	10,953	69.3	69.9	13,144	61.3	61.9	13,144	61.3	61.9
University Avenue	North of Middlefield Road	4%	25	9,680	62.6	63.2	9,680	62.1	62.7	9,680	62.2	62.8	11,066	63.2	63.8	11,179	63.2	63.8
Middlefield Road	East of University Avenue	3%	25	8,420	61.3	61.9	8,691	67.0	67.6	9,091	67.3	67.9	10,272	62.2	62.8	10,582	62.3	62.9
University Avenue	South of Middlefield Road	4%	25	7,330	61.4	62.0	7,330	57.3	57.9	7,330	57.5	58.1	7,954	61.8	62.4	8,128	61.9	62.5
Middlefield Road	West of University Avenue	3%	25	9,440	61.8	62.4	9,440	66.8	67.4	10,032	66.9	67.5	10,428	62.2	62.8	11,184	62.5	63.1
Lytton Avenue	North of Middlefield Road	2%	25	2,140	54.8	55.4	2,189	61.1	61.7	2,189	61.2	61.8	2,189	54.9	55.4	2,202	54.9	55.5
Middlefield Road	East of Lytton Avenue	3%	25	9,485	61.8	62.4	9,485	56.6	57.2	10,077	56.6	57.2	10,473	62.2	62.8	11,229	62.5	63.1
Lytton Avenue	South of Middlefield Road	1%	25	7,320	58.9	59.4	7,405	57.8	58.3	7,405	57.8	58.4	7,675	59.1	59.6	7,675	59.1	59.6
Middlefield Road	West Lytton Avenue	3%	25	12,045	62.8	63.4	12,045	66.7	67.3	12,653	66.9	67.5	13,445	63.3	63.9	13,830	63.4	64.0
Donohoe Street	North of East Bayshore Road	2%	25	14,660	62.9	63.4	14,958	69.7	70.3	15,195	70.0	70.6	16,949	63.5	64.1	16,949	63.5	64.1
Donohoe Street	East of East Bayshore Road	2%	25	5,420	58.6	59.2	5,945	74.0	74.6	5,963	74.2	74.8	7,214	59.8	60.4	7,214	59.8	60.4
East Bayshore Road	South of Donohoe Street	1%	25	9,750	60.1	60.7	9,750	58.2	58.7	9,969	59.3	59.9	10,471	60.4	61.0	10,471	60.4	61.0
East Bayshore Road	North of Holland Street	0%	25	2,460	53.1	53.7	2,460	62.3	62.9	2,460	62.5	63.1	2,460	53.1	53.7	2,460	53.1	53.7
Holland Street	East of East Bayshore Road	3%	25	210	47.4	47.9	210	55.3	55.8	210	55.5	56.1	219	47.6	48.0	219	47.6	48.0
East Bayshore Road	South of Holland Street	2%	25	2,370	55.2	55.8	2,374	60.1	60.7	2,374	60.6	61.2	3,603	56.9	57.5	3,603	56.9	57.5
Saratoga Avenue	North of Newbridge Street	2%	25	495	49.4	49.9	495	60.2	60.8	495	60.4	61.0	1,538	53.5	54.0	1,538	53.5	54.0
Newbridge Street	East of Saratoga Avenue	1%	25	7,210	58.8	59.4	9,880	58.5	59.0	9,880	59.3	59.8	12,486	61.1	61.7	12,486	61.1	61.7
Saratoga Avenue	South of Newbridge Street	2%	25	1,690	53.8	54.4	1,694	53.8	54.4	1,694	54.0	54.5	2,932	56.1	56.6	2,932	56.1	56.6
Newbridge Street	West of Saratoga Avenue	1%	25	9,125	59.8	60.4	11,712	57.1	57.7	11,712	58.0	58.6	14,527	61.8	62.4	14,527	61.8	62.4
Euclid Avenue	North of East Bayshore Road	1%	25	3,310	55.6	56.1	4,302	52.4	53.0	4,302	52.8	53.3	7,023	58.7	59.3	7,218	58.8	59.4
East Bayshore Road	East of Euclid Avenue	1%	25	10,515	60.4	61.0	11,169	64.6	65.2	11,169	64.7	65.3	13,931	61.6	62.2	13,931	61.6	62.2
East Bayshore Road	West of Euclid Avenue	1%	25	7,655	59.0	59.6	7,655	60.7	61.3	7,655	60.7	61.3	8,965	59.7	60.3	8,965	59.7	60.3
Clark Avenue	North of East Bayshore Road	4%	25	4,025	58.9	59.5	4,087	64.8	65.4	4,227	65.1	65.6	4,921	59.7	60.3	5,072	59.8	60.4
East Bayshore Road	East of Clark Avenue	2%	25	7,120	59.8	60.4	7,157	64.1	64.7	7,372	64.2	64.8	8,393	60.5	61.1	8,550	60.5	61.1
East Bayshore Road	West of Clark Avenue	1%	25	5,055	57.3	57.9	5,055	69.7	70.3	5,130	70.0	70.6	5,457	57.6	58.2	5,463	57.6	58.2
Pulgas Avenue	North of East Bayshore Road	5%	25	8,675	62.7	63.3	10,213	72.8	73.4	10,303	73.1	73.7	14,091	64.8	65.4	14,619	65.0	65.6
East Bayshore Road	East of Pulgas Avenue	5%	25	12,115	64.2	64.8	13,689	71.4	72.0	13,995	71.7	72.3	18,804	66.1	66.7	19,489	66.2	66.8
East Bayshore Road	West of Pulgas Avenue	2%	25	6,580	59.4	60.0	6,617	63.9	64.4	6,832	64.0	64.6	7,853	60.2	60.8	8,010	60.3	60.9

Noise Appendix

Mechanical Equipment Noise Modeling

Mixed Use Parcels

Parcel 2				Building Quantity	2					
Equipment Type	Model	Leq @ 50 ft per equipment piece	Equipment Location	Location Attenuation (dB)	Total Quantity for Parcel	Qty per building*	Leq @ 50 ft for total of each Equipment type	**Combined total Leq @ 50 ft**	Horizontal Distance to Nearest Sensative Land Use	**Leq @ Nearest Sensitive Receiver**
VRF Air Cooled Condensing Units	REYQ432TYDN	33.2		0.0	24	12	44.0			
Scavenger Fans	USF-18	51.0		0.0	48	24	64.8			
Garage Exhaust	Custom Fan Array	56.0		0.0	5	3	60.8			
DOAS Units	DPSA031	61.7		0.0	4	2	64.7			
Grease Exhaust Fans	USF-24	53.0		0.0	1	1	53.0	**84.3**	150	**74.8**
Vaport Exhaust Fans	USF-13	48.4		0.0	1	1	48.4			
Hot Water Heating Pumps	N/A - FHWA	78.0		0.0	8	4	84.0			
Air Cooled Heat Pump Boiler	NRK700	53.4		0.0	2	1	53.4			
Air Source Heat Pump Water Heater	CxA-25	65.4		0.0	6	3	70.2			

Parcel 3				Building Quantity	2					
Equipment Type	Model	Leq @ 50 ft per equipment piece	Equipment Location	Location Attenuation (dB)	Total Quantity for Parcel	Qty per building*	Leq @ 50 ft for total of each Equipment type	**Combined total Leq @ 50 ft**	Horizontal Distance to Nearest Sensative Land Use	**Leq @ Nearest Sensitive Receiver**
VRF Air Cooled Condensing Units	REYQ432TYDN	33.6		0.0	22	11	44.0			
Scavenger Fans	USF-18	51.0		0.0	2	1	51.0			
Garage Exhaust	Custom Fan Array	56.0		0.0	4	2	59.0			
DOAS Units	DPSA031	61.7		0.0	4	2	64.7			
Grease Exhaust Fans	USF-24	53.0		0.0	1	1	53.0	**84.3**	480	**64.6**
Vaport Exhaust Fans	USF-13	48.4		0.0	1	1	48.4			
Hot Water Heating Pumps	N/A - FHWA	78.0		0.0	8	4	84.0			
Air Cooled Heat Pump Boiler	NRK700	53.4		0.0	2	1	53.4			
Air Source Heat Pump Water Heater	CxA-25	65.4		0.0	5	3	70.2			

Parcel 4				Building Quantity	2					
Equipment Type	Model	Leq @ 50 ft per equipment piece	Equipment Location	Location Attenuation (dB)	Total Quantity for Parcel	Qty per building*	Leq @ 50 ft for total of each Equipment type	**Combined total Leq @ 50 ft**	Horizontal Distance to Nearest Sensative Land Use	**Leq @ Nearest Sensitive Receiver**
VRF Air Cooled Condensing Units	REYQ432TYDN	33.6		0.0	20	10	43.6			
Scavenger Fans	USF-18	51.0		0.0	2	1	51.0			
Garage Exhaust	AER-E20C-610-VG	50.6		0.0	2	1	50.6			
DOAS Units	DPSA031	61.7		0.0	4	2	64.7	**84.2**	410	**66.0**
Hot Water Heating Pumps	N/A - FHWA	78.0		0.0	8	4	84.0			
Air Cooled Heat Pump Boiler	NRK700	53.4		0.0	2	1	53.4			
Air Source Heat Pump Water Heater	CxA-25	65.4		0.0	5	3	70.2			

* Quantity per building is rounded up to the nearest whole number.

Parcel 5				Building Quantity		1				
Equipment Type	Model	Leq @ 50 ft per equipment piece	Equipment Location	Location Attenuation (dB)	Total Quantity for Parcel	Qty per building*	Leq @ 50 ft for total of each Equipment type	**Combined total Leq @ 50 ft**	Horizontal Distance to Nearest Sensative Land Use	**Leq @ Nearest Sensitive Receiver**
VRF Air Cooled Condensing Units	REYQ240TYDN	33.2		0.0	22	11	43.6			
Scavenger Fans	USF-18	51.0		0.0	2	1	51.0			
Garage Exhaust	AER-E20C-610-VG	50.6		0.0	2	1	50.6			
DOAS Units	DPSA0314S	55.3		0.0	4	2	58.3	**84.1**	200	**72.1**
Hot Water Heating Pumps	N/A - FHWA	78.0		0.0	8	4	84.0			
Air Cooled Heat Pump Boiler	NRK700	53.4		0.0	2	1	53.4			
Air Source Heat Pump Water Heater	CxA-25	65.4		0.0	3	2	68.4			

Parcel 6				Building Quantity		1				
Equipment Type	Model	Leq @ 50 ft per equipment piece	Equipment Location	Location Attenuation (dB)	Total Quantity for Parcel	Qty per building*	Leq @ 50 ft for total of each Equipment type	**Combined total Leq @ 50 ft**	Horizontal Distance to Nearest Sensative Land Use	**Leq @ Nearest Sensitive Receiver**
VRF Air Cooled Condensing Units	REYQ240TYDN	33.2		0.0	22	11	43.6			
Scavenger Fans	USF-18	51.0		0.0	2	1	51.0			
Garage Exhaust	Custom Fan Array	56.0		0.0	2	1	56.0			
DOAS Units	DPSA0314S	55.3		0.0	4	2	58.3	**84.2**	290	**68.9**
Hot Water Heating Pumps	N/A - FHWA	78.0		0.0	8	4	84.0			
Air Cooled Heat Pump Boiler	NRK700	53.4		0.0	2	1	53.4			
Air Source Heat Pump Water Heater	CxA-25	65.4		0.0	3	2	68.4			

Parcel 7				Building Quantity		1				
Equipment Type	Model	Leq @ 50 ft per equipment piece	Equipment Location	Location Attenuation (dB)	Total Quantity for Parcel	Qty per building*	Leq @ 50 ft for total of each Equipment type	**Combined total Leq @ 50 ft**	Horizontal Distance to Nearest Sensative Land Use	**Leq @ Nearest Sensitive Receiver**
VRF Air Cooled Condensing Units	REYQ240TYDN	33.2		0.0	8	4	39.3			
Scavenger Fans	USF-18	51.0		0.0	2	1	51.0			
Garage Exhaust	AER-E20C-610-VG	50.6		0.0	5	3	55.3			
DOAS Units	DPSA031	61.7		0.0	1	1	61.7	**84.1**	280	**69.1**
Hot Water Heating Pumps	N/A - FHWA	78.0		0.0	8	4	84.0			
Air Cooled Heat Pump Boiler	NRK700	53.4		0.0	2	1	53.4			
Air Source Heat Pump Water Heater	CxA-25	65.4		0.0	2	1	65.4			

* Quantity per building is rounded up to the nearest whole number.

South Garage Central Plant

Equipment Type	Model	Leq @ 50 ft per equipment piece	Total Quantity for Parcel	Equipment Location	Location Attenuation (dB)	dBA Leq @ 50 ft for total of each Equipment type	With Attenation	Combined total dBA Leq @ 50 ft	Horizontal Distance to Nearest School (ft)	Horizontal Distance to Nearest Residence (ft)	dBA Leq @ Nearest School	dBA Leq @ Nearest Residence
Chiller	CVHF 1070	56.9	5	Mech Room	5.0	63.9	58.9					
Condenser Water Pump	N/A - FHWA	78.0	4	Mech Room	5.0	84.0	79.0	82.1	225	400	69.0	64.0
Chilled Water Pump	N/A - FHWA	78.0	4	Mech Room	5.0	84.0	79.0					
Cooling Tower	S3E-142412S Series 3000	57.3	4	Screen	0.0	63.3	63.3					

Northern Garage CUP

Equipment Type	Model	Leq @ 50 ft per equipment piece	Total Quantity for Parcel	Equipment Location	Location Attenuation (dB)	Leq @ 50 ft for total of each Equipment type	Combined total dBA Leq @ 50 ft	Horizontal Distance to Nearest School (ft)	Horizontal Distance to Nearest Residence (ft)	dBA Leq @ Nearest School	dBA Leq @ Nearest Residence
Chiller	CVHF 1070	56.9	4	Mech Room	5.0	58.0					
Ice Storage Tank	N/A - Assuming Chiller	60.6	6	Mech Room	5.0	63.4					
Glycol Chilled Water Pump	N/A - FHWA	78.0	2	Mech Room	5.0	76.0					
Chilled Water Pump	N/A - FHWA	78.0	3	Mech Room	5.0	77.8					
Heat Pump	N/A - FHWA	78.0	4	Mech Room	5.0	79.0					
Heating Water Pump	N/A - FHWA	78.0	3	Mech Room	5.0	77.8					
Cooling Tower	S3E-142412S Series 3000	57.3	6	Screen	0.0	65.1	100.6	1080	1250.00	73.9	72.6
Condensing Water Pump	N/A - FHWA	78.0	2	Mech Room	5.0	76.0					
Heat Exchangers	REYQ432TYDN	33.6	4	Mech Room	5.0	34.7					
Fuel Oil Pump	N/A - FHWA	78.0	2	Mech Room	5.0	76.0					
Generator	TIB-114 1750REOZMD	102.4	2	Mech Room	5.0	100.4					
Battery Storage	MEGAPACK	57.0	1	Mech Room	5.0	52.0					
MV Substation	N/A - Streamview Substation Rebuild and Expansion	59.4	3	Mech Room	5.0	59.2					

Noise Appendix

Generator Noise Modeling

Generator Location	Generator Size	Sound Pressure at 50 Feet (combined Engine & Exhuast)	Combined Noise from 2	Nearest Receptor Distance (ft)	What is the Receptor?	Attenuation	Sound Pressure a nearest Receptor
TS1 – Hotel	600 kW	99.7	NA	465	Residential - 1385 Willow Rd	-19.4	80.3
NG – North Garage – two	750 kW	100.7	103.7	1100	Open Mind School - 1215 O'Brien Dr	-26.8	73.8
SG – South Garage – two	1,750 kW	96.9	99.9	210	Open Mind School - 1215 O'Brien Dr	-12.5	84.4
RS2 - Parcel 2	1000 kW	100.2	NA	330	Residential - 1363 Willow Rd	-16.4	83.8
RS3 - Parcel 3	750 kW	100.7	NA	660	Residential - 1383 Willow Rd	-22.4	78.3
RS4 - Parcel 4	500 kW	101.5	NA	490	Residential - 1373 Willow Rd	-19.8	81.7
RS5 - Parcel 5	500 kW	101.5	NA	345	Open Mind School - 1215 O'Brien Dr	-16.8	84.8
RS6 - Parcel 6	250 kW	88.8	NA	520	Mid-Peninsula High School - 1340 Willow Rd	-20.3	68.5
RS7 - Parcel 7	150 kW	69.9	NA	525	Open Mind School - 1215 O'Brien Dr	-20.4	49.5
Hamilton Avenue Parcel	150 kW	69.9	NA	400	Residences to the south	-18.1	51.8
SW Park	500 KW	101.5	NA	25	Mid Peninsula High School	6.0	107.5

Noise Appendix

Parking Garage Noise Modeling

Parking Garage Noise Calculations - Daytime Peak Hour

Source: FTA 2006

Calculation:

LEQ=**92** + (10*log([# of cars]/1000)**-35.6)**

Equation to convert SEL to LEQ 10*log(3600) = 35.6

SEL of 1000 cars **3600 seconds in an hour**

92 SEL with 1,000 cars **35.56**

Delta? 0.00 35.56

56.437 **dBA leq** **of 1000 vehicles at 50 feet**

Adjust to Project-Specific Distance?

d= 210 Distance to nearest receiver

-12.46 Distance attenuation

44.0 dBA Leq **of 1000 vehicles at 210 feet**

Noise Appendix

Parking Transit Noise Modeling

Federal Transit Administration
Noise Impact Assessment Spreadsheet

version: 1/29/2019

Project:	

Project Results Summary

Existing Leqh:	60 dBA
Total Project Leqh:	48 dBA
Total Noise Exposure:	60 dBA
Increase:	0 dB
Impact?:	None

Receiver Parameters	
Receiver:	Receiver 1
Land Use Category:	1. Outdoor Quiet
Existing Noise (Measured or Generic Value):	60 dBA

Distance to Impact Contours

Dist to Mod. Impact Contour (Source 1):	40 ft
Dist to Sev. Impact Contour (Source 1):	24 ft

Noise Source Parameters	
Number of Noise Sources:	1

Noise Source Parameters		Source 1
	Source Type:	Stationary Source
	Specific Source:	Bus Transit Center
Noisiest hr of Activity During Sensitive hrs	Number of Buses/hr	2
Distance	Distance from Source to Receiver (ft)	100
	Number of Intervening Rows of Buildings	0
Adjustments	Noise Barrier?	

Source 1 Results

Leqh: 47.9 dBA

Appendix 3.8
Historical Resources Evaluations

Appendix 3.8: Historical Resource Evaluations

3.8-1 JRP Historical Consulting, LLC, *Menlo Science and Technology Park, Department of Parks and Recreation Forms,* 2019, revised 2021.

3.8-2 JRP Historical Consulting, LLC*, 1385 Willow Road, Menlo Park, California*, Department of Parks and Recreation forms, 2021.

3.8-3 JRP Historical Consulting, LLC*, 1396 Carlton Avenue, Menlo Park, California*, Department of Parks and Recreation forms, 2021.

3.8-4 Evaluations of Dumbarton Cutoff Linear Historic District

JRP Historical Consulting, LLC, *Dumbarton Cutoff*, Department of Parks and Recreation Update Sheet, 2017.

JRP Historical Consulting, LLC, *Southern Pacific Railroad, Dumbarton Cutoff Linear Historic District*, Department of Parks and Recreation Update Sheet, 2008.

P.S. Preservation Services, *Request for Determination of Eligibility for Inclusion in the National Register of Historic Places, Southern Pacific Railroad Dumbarton Cutoff, Southern Pacific Railroad Dumbarton Bridge, and Southern Pacific Railroad Newark Slough Bridge*, 1996, prepared for U.S. Coast Guard.

State of California – The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
PRIMARY RECORD

Primary # _____
HRI # _____
Trinomial _____
NRHP Status Code 6Z
Other Listings _____
Review Code _____ Reviewer _____ Date _____

***Resource Name or #** (Assigned by recorder): Menlo Science & Technology Park

P1. Other Identifier: _____

***P2. Location:** ☐ **Not for Publication** ☒ **Unrestricted**

***a. County:** San Mateo

and (P2b and P2c or P2d. Attach a Location Map as necessary.)

***b. USGS 7.5' Quad:** Palo Alto **Date:** 1997 **T:**_; **R:**_; **Sec:**_; Mount Diablo Meridian

c. Address: Willow Road City: Menlo Park Zip: 94062

d. UTM: (give more than one for large and/or linear resources) Zone: 10S; 566579.45mE/ 4139012.99mN

e. Other Locational Data: (e.g., parcel #, directions to resource, elevation, etc., as appropriate)

See Table 1 in Section P3a, Continuation Sheets for APNs and associated addresses for the buildings on this property.

***P3a. Description:** (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries)

This form records the Menlo Science & Technology Park complex, an administrative and light-industrial park located in Menlo Park, San Mateo County (**Photograph 1**). Menlo Science & Technology Park is accessed via a primary entrance drive located on the east side of Willow Road, between U.S. Highway 101 and State Route 84. The complex is comprised of six historic-era buildings (50 years of age or older) and 14 modern structures located on 18 legal parcels (see **Table 1** and **Site Map** on Continuation Sheet). The historic-period facilities, which were constructed between 1956 and 1962, are centered near the western boundary of the complex. These buildings are immediately adjacent to Willow Road and share a similar International-style appearance and common materials, such as concrete and aluminum. The buildings set back from Willow Road are more utilitarian in their design with subtle International-style details. The site landscaping largely consists of paved parking and planting strips adjacent to buildings and around the complex perimeter (see Continuation Sheets).

***P3b. Resource Attributes:** (List attributes and codes) HP6—1-3 Story Commercial Building; HP8—Industrial Building

***P4. Resources Present:** ☒ Building ☐ Structure ☐ Object ☐ Site ☐ District ☐ Element of District ☐ Other (Isolates, etc.)

P5b. Description of Photo: (View, date, accession#) **Photograph 1.** 1370 and 1380 (left) Willow Road at Menlo Science & Technology Park, camera facing northeast, March 27, 2019.

***P6. Date Constructed/Age and Sources:**
☒ Historic ☐ Prehistoric ☐ Both
1956-1962; and P3a, continuation sheet (San Mateo County Assessor)

***P7. Owner and Address:**
Peninsula Innovation Partners, LLC
1 Hacker Way
Menlo Park, CA 94025

***P8. Recorded by:** (Name, affiliation, address)
Joseph Freeman &
Michelle Van Meter
JRP Historical Consulting, LLC
2850 Spafford Street
Davis, CA 95618

***P9. Date Recorded:** March 27, 2019

***P10. Survey Type:** (Describe) Intensive

***P11. Report Citation:** (Cite survey report and other sources, or enter "none.") None

***Attachments:** ☐ None ☒ Location Map ☒Sketch Map ☒ Continuation Sheet ☒ Building, Structure, and Object Record ☐ Archaeological Record ☐ District Record ☐ Linear Feature Record ☐ Milling Station Record ☐ Rock Art Record ☐ Artifact Record ☐ Photograph Record ☐Other (list) _____

B1. Historic Name: Hiller Aircraft; Fairchild Hiller Corporation; Fairchild Hiller Industrial Park; Lincoln Industrial Park
B2. Common Name: Menlo Science & Technology Park
B3. Original Use: Industrial B4. Present Use: Commercial Offices
***B5. Architectural Style:** International and Utilitarian
***B6. Construction History**: (Construction date, alteration, and date of alterations) See details on Continuation Sheet, including Table 1.
***B7. Moved?** ☒ **No** ☐ **Yes** ☐ **Unknown Date:** _____ **Original Location:** _____
***B8. Related Features:** _____
B9. Architect: unknown b. Builder: unknown
***B10. Significance: Theme:** Aircraft Manufacturing / Cold War Satellite Surveillance **Area:** Menlo Park, CA
Period of Significance: n/a **Property Type:** Industrial / Commercial **Applicable Criteria:** n/a
(Discuss importance in terms of historical or architectural context as defined by theme, period, and geographic scope. Also address integrity.)

The buildings at Menlo Science & Technology Park property do not meet the criteria individually or collectively for listing in the National Register of Historic Places (NRHP) or the California Register of Historical Resources (CRHR), nor are they historical resources for the purposes of CEQA. A resource must possess historical significance and retain historic integrity to convey that significance to be eligible for listing in the NRHP or CRHR. While three of the buildings on the property possess historical significance for their associations during the Cold War with the covert Corona satellite surveillance program, the individual buildings and the property as a whole have undergone substantial alterations such that the buildings no longer retain the historic integrity necessary to convey any significance and thus do not meet the eligibility requirements for listing in either the NRHP or CRHR. This property has been evaluated in accordance with Section 15064.5(a)(2)-(3) of the CEQA Guidelines, using the criteria outlined in Section 5024.1 of the California Public Resources Code, and National Register Bulletin, "How to Apply the National Register Criteria for Evaluation." An explanation of the NRHP and CRHR eligibility significance and integrity requirements, and a detailed eligibility evaluation for the buildings on this property are provided on the Continuation Sheets.

B11. Additional Resource Attributes: (List attributes and codes)

***B12. References:** Alan Hynding, *From Frontier to Suburb: The Story of the San Mateo Peninsula* (Belmont, CA: Star Publishing Company, 1982); John Straubel, *One Way Up* (Palo Alto, CA: Hiller Aircraft Co., 1964); San Mateo County Assessor Records; Menlo Park Building Permits; also see footnotes.

B13. Remarks:

***B14. Evaluator:** Joseph Freeman
***Date of Evaluation:** April 2019; revised June 2021

(This space reserved for official comments.)

P3a. Description (continued):

Table 1. Buildings at Menlo Science & Technology Park with APN, address, and built dates

APN	Building #	Address	Year Built#
Historic-Period Buildings (50 years or older)			
055-440-130	MPK 50	1390 Willow Road	1956
055-440-210	MPK 54	1370 Willow Road	1962
055-440-110	MPK 55	1374-1376 Willow Road	1959 thru 1962*
055-440-230	MPK 51	940 Hamilton Court (aka 1392 Hamilton Court)	1961 / 1962*
	MPK53	960 Hamilton Court	1961 / 1982*
055-440-260	MPK 56	980 Hamilton Avenue	1962
Modern Buildings			
055-440-010	MPK 44	1205-1275 Hamilton Court	1979*
055-440-020	MPK 42	1200-1240 Hamilton Court	1979*
055-440-030	MPK 45	1105-1195 Hamilton Court	1980*
055-440-040	MPK 41	1100-1190 Hamilton Court	1980*
055-440-050	MPK 46	1003-1005 Hamilton Court	1996
055-440-090	MPK 48	927-953 Hamilton Avenue	1988*
	MPK 47	959-967 Hamilton Avenue	1988*
055-440-190	MPK 49	925 Hamilton Avenue (aka 923-925 Hamilton Avenue)	1988*
055-440-300	MPK 52	1380 Willow Road	1982
055-440-310	MPK 43	1010-1048 Hamilton Court	1981*
055-440-320	MPK 40	1050-1098 Hamilton Court	1981*
055-440-330	MPK 59	990-998 Hamilton Court (aka 960, 970, 976, 978 Hamilton Court)	1982 / n.d.*
055-440-340	MPK 58	1360 Willow Road	1982*
055-440-350	MPK57	1350 Willow Road	1985

Year built established using sources cited herein, see section B6 and P10 (footnotes), unless otherwise noted.
* Year built provided by City of Menlo Park.

1390 Willow Road (MPK 50)

The building at 1390 Willow Road was constructed in 1956 for the Hiller Aircraft Corporation. The facility is comprised of an office with a windowless warehouse and secondary office wing arranged in a U-shape plan on a concrete foundation. A courtyard is located at the center of the building; however, for security reasons, it was not accessible at the time of the recordation. The main office wing is a single-story building constructed of concrete with incised concrete panel walls on the primary, northwest facade. The roof is flat, extending slightly over the windows and main entrance and this eave and the roof-wall juncture is accented with horizontally grooved wood panels. The roof covering is a rolled composite material. The building is entered along the northwest-facing façade via a concrete walkway that leads to a glazed vestibule with a glass and metal door that projects from the north corner (**Photograph 2**).

The entrance is sheltered by the roof extension and stub walls that flank the entrance. The vestibule windows are recessed between vertical concrete panels. To the south of the door is a flat concrete surface that once bore the insignia of its former occupant. The southern half of the façade is fenestrated with narrow rectangular windows with reinforced glass. The window frames appear to be painted metal. The fenestration on the northeast side of the building, which includes a secondary entrance, consists of a ribbon of rectangular fixed-frame modern windows and a modern glass and metal door set beneath the roof extension (**Photograph 3**).

The warehouse wing is located on the east end of the building and is constructed of concrete panels and features a flat roof clad in a rolled composite material. An entrance vestibule with metal double doors is located on the south side of the building. There is no visible fenestration (**Photograph 4**).

The single-story secondary office wing forming the south end of the building, part of which was a later addition, is constructed of concrete and features a flat roof with a boxed overhang that extends on the northeast courtyard-facing side to shelter the entrance. Fenestration, also located on the northeast side of the wing, consists of a ribbon of modern rectangular windows with fixed aluminum frames.

1370 Willow Road (MPK 54)

The one- and two-story office located at 1370 Willow Road, located south of 1390 Willow Road and the modern building at 1380 Willow Road, was constructed in 1962. The building has a generally L-shaped plan with an oversized two-story entrance projection on the primary, northwest-facing façade and a walled courtyard located on the rear, southeast side. The flat roof features a moderate, boxed overhang with metal coping at the rim of the parapet. The roof is covered with a rolled composite material. The walls are sheathed in replacement stucco superimposed onto concrete panels. The stucco is scored to give the appearance of long horizontal tiles.

The projecting oversized entrance and vestibule is accessed by a concrete walkway and is located near the north end of the northwest façade (**Photograph 5**). The projection is fenestrated by large, vertically-oriented windows set in fixed aluminum frames. Groups of windows are segmented by narrow square columns that extend the height of the structure. A set of glass double doors open to the first story of the building. On both sides of the entrance vestibule, the second story slightly overhangs the first story. The first story is defined by a smooth stucco wall surface and evenly spaced square windows with aluminum frames. The stucco replaced an original stone veneer at an unknown date. The second story features full-length ribbon of single-pane windows. The aluminum frames or mullions, are elongated from the edge of the second-story overhang to the eaves, adding to the geometric aesthetic of the façade.

The sparsely ornamented northeast and southwest sides of the building are similar in their materials and types of fenestration. The northeast side has seven window openings and a plain metal door (**Photograph 6**). All of the windows are set in fixed aluminum frames. Likewise, the southwest side end of the building is punctuated by two horizontally-oriented windows with fixed aluminum frames (**Photograph 7**).

The rear, southeast-facing side of the building is separated into two sections. The single-story north half extends outward towards the southeast. This section has two openings, occupied by an overhead garage door and an adjacent metal door with a single window, but otherwise lacks fenestration (**Photograph 8**). The south half bears a form and fenestration pattern that resembles the front façade, consisting and overhanging second story with a band of windows with fixed aluminum frames. The recessed first story also has aluminum frame windows, with a set of aluminum-framed glass doors near the center. The rear concrete-slab courtyard features a stand-alone, wood-frame shade structure and is partially enclosed by decorative cinderblock privacy walls (**Photograph 9**).

1374 - 1376 Willow Road (MPK 55)

The light-industrial and office building at 1374 and 1376 Willow Road, located southeast of 1370 Willow Road, was constructed in two phases in 1959 and 1962. The adjoining rectangular-plan buildings form a roughly square footprint. Their roofs are a combination of hipped and flat elements surrounded by a short parapet that outlines the two buildings. The roofs are clad in asphalt shingles and dotted with several vents. The exterior walls are concrete panels covered in replacement stucco with vertical score marks. All sides of the building are windowless except for the main, northwest façade.

The main façade is characterized by rows of evenly-placed, aluminum-frame, fixed windows at the first and second-story levels. These windows are all modern replacements of original steel-frame windows. The windows are separated by raised concrete panels and pilasters. The façade includes two metal and glass entrance doors, located on the north and south ends (**Photograph 10**). The southwest and northeast sides of the building are far less elaborate. The southwest side characterized by plain stucco wall surface with vertical incisions. An overhead garage door, plain metal door, and glass door are offset to the west (**Photograph 11**). The northeast side, which is segmented into several bays by concrete pilasters, has no openings except for four plain metal doors (**Photograph 12**). The locations of former openings are evidenced by breaks in the siding

near the east corner. The rear, southeast side of the building serves as a loading zone and is punctuated by five overhead garage doors. The two southern-most garage doors have been resized and two former garage openings near the north end have been enclosed. The southeast side also has two metal entrance doors located near the center, one of which is sheltered by a canvas awning (**Photograph 13**)

940 Hamilton Court (aka 1392 Hamilton Court; MPK 51)

Located northeast of 1390 Willow Road, the two-story building at 940 Hamilton Court, built in 1961, is nearly rectangular in plan and is constructed of concrete. Raised concrete panels extend the height of the wall and separate the windows. The roof features a hipped element in the center and a flat element that extends out from the hipped portion to a small parapet. The hipped element is clad in composition shingles and numerous vents dot both the hipped and flat elements of the roof. The entrance, located on the northeast façade, is accessed by a metal and glass modern enclosure with a bowed wall of aluminum frame windows that extends to the roofline (**Photograph 14**). The glass enclosure was constructed in 2007. Fenestration on the northeast and northwest sides consists of paired windows with fixed aluminum frames, also added in 2007. Two metal roll-up freight doors and two secondary entrance doors are located on the southeast side of the building (**Photograph 15**). Both the southeast and southwest sides of the building are void of fenestration. A large, two-story addition, also added in 2007, is located on the building's southwest side and features corrugated metal siding.

960 Hamilton Court (MPK 53)

The rectangular plan, two-story building at 960 Hamilton Court, immediately south of 940 Hamilton Court, was built in 1961. The building is constructed of concrete panels. The roof features a centered hipped element with a wide flat element that extends from the base of the hipped element to a small parapet. The hipped element is clad in composition shingles and numerous vents dot both the hipped and flat elements of the roof. The entrance, located on the northwest side of the building, is accessed by a short concrete walkway leading to a glass and metal door that is sheltered by an aluminum and canvas awning (**Photograph 16**). Fenestration on this elevation consists of modern fixed aluminum-frame windows on both the first and second stories. Overhead freight doors are located on the southeast side of the building and there are no openings on the southwest or northeast sides of the building (**Photograph 17** and **Photograph 18**).

980 Hamilton Avenue (MPK 56)

The two-story building located at 980 Hamilton Avenue, southeast of 1374 and 1376 Willow Road, was constructed in 1962. The rectangular plan building sits on concrete foundation and is topped a roof clad in composition shingles. The roof is a combination of a central hipped element and a flat element that extends out from the hipped portion to a small parapet. Numerous vents dot both the hipped and flat elements of the roof. The exterior walls of the building are constructed of concrete panels clad in replacement stucco with vertical score marks. The building's northwest façade is the only side that features fenestration.

A set of glass and metal double doors sheltered beneath a metal awning on the west half of the southwest-facing façade serves as the building's primary entrance. This entrance is located in a former freight opening. The remainder of the wall surface has no openings (**Photograph 19**). The northwest and southeast ends of the building each feature additional entrances. The northwest side has three metal doors. The upper portion is fenestrated by a row of ten square windows with fixed aluminum frames, all of which appear to be modern replacements (**Photograph 20**). The southeast side, which has no windows, is punctuated by a set of metal double doors at the center and a single metal door at the south corner. The location of three former garage doors is evidenced by horizontal breaks in the in the three central wall panels (**Photograph 21**). The northeast side, which was partially obscured at the time of recordation by busses and trucks, has no openings except for a set of metal doors at the center, two metal louvered vents, and two openings occupied by exterior air conditioning units. Whereas the other sides of the building feature vertical score marks to demarcate separate bays, the northeast side includes concrete pilasters that divide the wall surface (**Photograph 22**).

Modern Buildings

The complex also contains 14 modern buildings, constructed between 1981 and 1996, most on the eastern two-thirds of the site. They exhibit a variety architectural styles and forms and are visually distinct from the discussed historic-era buildings. See typical examples shown in **Photographs 1, 23,** and **24**, and for a list of the modern buildings, see **Table 1**.

B6. Construction History (continued):

Table 2. Construction History for Evaluated Buildings at Menlo Science & Technology Park

Address / Bldg No.	Construction History
1390 Willow Road / MPK 50	Built 1956; southeast wing addition, built 1960; alteration dates unknown: roof parapet addition; windows and doors replaced; Hiller Aircraft signage removed
1370 Willow Road / MPK 54	Built 1962; alteration dates unknown: replacement doors; replacement windows (mostly on first floor); first-floor northwest entrance enclosed with fixed windows; modern stucco siding application.
1374-76 Willow Road / MPK 55	Built 1959; Addition, 1376 Willow Road built 1962; alteration dates unknown: replacement aluminum-frame windows and aluminum-frame glass doors; enclosed and reduced freight door openings on southeast side; altered walls on northeast side.
940 Hamilton Court (1392 Hamilton Court, MPK 51)	Built 1961; major remodel in 2007 included two-story projecting main entrance addition, replacement windows, replacement doors, window additions, two-story full-length southwest-side addition, and siding alterations, including adding raised wall panels.
960 Hamilton Court / MPK 53	Built 1961; alteration dates unknown: multiple enclosed freight openings; replacement aluminum-frame windows; replacement main entrance door; prefabricated buildings on northeast side added 1962 and demolished dates unknown.
980 Hamilton Avenue / MPK 56	Built 1962; alteration dates unknown: replacement aluminum windows and doors; added windows and doors, including on southwest and northwest sides; remove freight doors on southeast side.

The construction histories for the individual buildings are based on Building Permits on file at City of Menlo Park Building Division; Assessor Property Records on file at San Mateo County Assessor Office; historical and aerials photographs; and field survey conducted for this document. The buildings also underwent many interior alterations throughout their histories that are not enumerated here.

B10. Significance (continued):

Historic Context

The buildings at Menlo Science & Technology Park were initially developed in 1956 in north Menlo Park, a city along the San Francisco Bay in southeast San Mateo County. Since that time, the buildings served a variety of purposes, including the design and testing of Hiller Aircraft helicopters, the covert development of spy satellites for the CIA, and, more recently, offices and warehouses for tech-related businesses.

Menlo Park History

The Menlo Science & Technology Park property is located within the former 35,200-acre *Rancho de las Pulgas*, which was granted to Luis Arguello—the first Mexican governor of California—in 1835. Settlement of the area was slow through the mid nineteenth century, led in large part by its proximity to the shipping port at Ravenswood Slough (see **Location Map**). The port and its townsite were established in 1849 with the intent of becoming the premier shipping wharf for southern San Mateo County's burgeoning lumber industry, but ultimately that mantle was taken up by Redwood City, a bayfront town a few miles to the northwest. As the importance of Ravenswood waned in the 1860s, Lester Cooley began acquiring property in the area, using the land for a successful agricultural business. Other early settlers included Maurice Dooley, who used wealth he earned from an express delivery company to invest in real estate in Ravenswood and Menlo Park, and Charles Kavanaugh, who arrived in the area in the 1850s, purchasing 150 acres of land which he used for a profitable grain farming operation.[1]

Most of the Ravenswood area remained rural and undeveloped until the mid-twentieth century, when the City of East Palo Alto and the City of Menlo Park incorporated, following an unsuccessful attempt to found a City of Ravenswood. The City of

[1] Alan Hynding, *From Frontier to Suburb: The Story of the San Mateo Peninsula* (Belmont, Calif.: Star Publishing, 1982), 30, 36, 37, 133-134; B.F. Alley, *History of San Mateo County, California* (San Francisco: B.F. Alley, 1883), 211.

Menlo Park first incorporated in 1874, but landowners fearful of high local taxes led a campaign to disincorporate two years later, which remained the formal status of Menlo Park until the 1920s. Through the end of the nineteenth century, Menlo Park's commercial core located on the Southern Pacific Railroad (about two miles west of the subject property), remained the local hub of activity in this part of San Mateo County, while the area surrounding town was farmland. Samuel Carnduff settled the land on which the subject property is located and farmed there until his death in the 1880s (**Figure 1**). The land remained in the Carnduff family through the first half of the twentieth century.[2]

Figure 1. Menlo Park and Ravenswood in 1894, with the subject property in circle.[3]

The area around the subject property during the early twentieth century was held in large tracts of agricultural land until several major changes helped to transform the Ravenswood and Menlo Park areas. In 1910, Ravenswood was bisected by the Southern Pacific Railroad's Dumbarton Cutoff, which branched from the main line connecting San Francisco and San Jose near Redwood City. The Dumbarton Cutoff followed an easterly route through Ravenswood and then across the San Francisco Bay on a newly constructed bridge, and connected the Peninsula with the East Bay. To the south, in Menlo Park, the St. Patrick's Seminary & University was founded just before the turn of the twentieth century north of Middlefield Road, and would continue as one of the city's largest landowners through the twentieth century. During World War I, the military used land south of downtown Menlo Park to train nearly 30,000 soldiers at Camp Fremont, which helped drive infrastructural improvements in town. In association with Camp Fremont, the Army built a hospital north of the seminary and after the war it was transferred first to the Public Health Service, which oversaw the medical needs of veterans returning from war, then to the newly created Veterans Bureau (precursor to the Veterans Administration and, later, Department of Veterans Affairs), established to oversee the federal government's wide array of veteran benefits, including health care. The increasing density of this development and throughout the Peninsula and San Mateo County led to expansion of state and local roads, including construction of the Dumbarton Bridge and Bayshore Highway in the late 1920s and early 1930s.[4]

[2] Hynding, *From Frontier to Suburb*, 133-136; Werner C. Foss, Jr., "The History of Ravenswood," 23, San Mateo Junior College, on file at San Mateo County Historical Museum; Davenport Bromfield, *Official Map of San Mateo County, California* (San Francisco: Schmidt Label & Lith. Co., 1894);
[3] Bromfield, *Official Map of San Mateo County, California*.
[4] Hynding, *From Frontier to Suburb*, 247, 260; ESA, "Menlo Park El Camino Real and Downtown Specific Plan, Draft Environmental Impact Report," prepared for City of Menlo Park, April 2011, 4.4-5; J.V. Newman, *Official Map of San Mateo County*, 1909; Davenport Bromfield, *Map of the County of San Mateo, California* (San Francisco: D. Bromfield, 1910).

Despite these substantial changes to Menlo Park and its surroundings, the army closed Camp Fremont after World War I and the local population receded and growth returned to a more gradual pace until the post-World War II period. The end of the Second World War brought rapid suburban expansion to the Peninsula, as it did to the rest of the country, along with Cold War-related development and the introduction of the high-tech industry. Menlo Park's population grew tenfold between 1930 and 1970 as suburban tracts spread in the areas around downtown. The city quickly annexed many of these new residential areas, expanding north and east into the Ravenswood district. In 1949, the neighborhoods of Belle Haven and Suburban Park, west of Willow Road and north of Bay Road, were incorporated into Menlo Park. By the late 1950s, a fight erupted over the remaining unincorporated portions of the Ravenswood district as the City of Menlo Park sought to annex much of the land but faced opposition. A proposal to incorporate a separate City of Ravenswood was put forward, but after its incorporation failed, Menlo Park annexed a large swath of land generally north and east of the Belle Haven and Suburban Park neighborhoods, an area that included the subject property.[5]

In the post-war era, the rise of technology companies drove the growth of Menlo Park and the surrounding area, which in many ways was closely linked to research and development undertaken by the federal government's intelligence and military departments. It was in the early years of the post-war period that Silicon Valley, a tech-heavy region of the south San Francisco Bay, was born. Major electronics companies were attracted to the area by cheap land, improved transportation facilities, willing local governments, and the availability of professional talent coming out of University of California, Berkeley, and Stanford University. The establishment of the Stanford Research Institute, founded in 1946 and eventually located on Ravenswood Avenue in Menlo Park, was an early foray in the relationship between high-tech innovations, university resources, and government research. During its first years, Stanford Research Institute helped the Air Force study the potential for expansion in the aircraft industry, hosted the first national symposium on air pollution, and over time was an important stepping stone for engineers coming out of college before entering private industry.[6]

As the high-tech industry grew throughout the region, several local governments promoted the development of professional office buildings and relatively clean industrial plants. The City of Menlo Park prepared a land use-focused master plan to manage the boom of the late 1940s and early 1950s through regulated professionally-administrative zoning and it was adopted by the City Council in 1953. The new zoning districts were established outside of the city center, often where agriculture had historically dominated, and were strictly limited to industrial uses by "smokeless" companies. This spurred the development of new light-industrial parks in northeast Menlo Park, including the 200-acre Bohannon Industrial Park by noted Bay Area developer David Bohannon that included several pharmaceutical and electronic companies on a site about a mile west of the subject property. The Kavanaugh family, descendants of early Ravenswood settler Charles Kavanaugh, who still owned a vast acreage of farmland including an area south of the Menlo Science & Technology Park, decided cash out on their holdings that had appreciated in value to $1,000 per acre, turning "barley into buildings." The Kavanaugh Industrial Park quickly attracted noteworthy tenants, such as Signal Oil and *Sunset Magazine*.[7]

[5] "Menlo May Annex Portion of E.P.A.," *San Mateo Times*, 23 April 1958, 20; "New Hassle Develops in East Palo Alto Incorporation Row," *San Mateo Times*, 28 May 1958, 2; "Annexation Vote at Menlo," *San Mateo Times*, 16 December 1958, 1; "Bellehaven to Join Menlo Pk.," *San Mateo Times*, 15 January 1949, 2.

[6] Hynding, *From Frontier to Suburb*, 296; SRI International, "Timeline of SRI International Innovations: 1940s-1950s," [webpage], accessed online at https://web.archive.org/web/20061129224242/http://www.sri.com/about/timeline/timeline1.html on 4 April 2019; Placeworks, "ConnectMenlo: General Plan Land Use & Circulation Elements and M-2 Area Zoning Update for the City of Menlo Park," June 2016, 4.4-6 – 4.4-7.

[7] Charmayne Kreuz, *A Tradition of New Horizons: The Story of Menlo Park Commemorating Its 1874 Incorporation* (Menlo Park, CA: City of Menlo Park, 1974), 53-54; Michael Svanevik and Shirley Burgett, *Menlo Park, California: Beyond the Gate* (San Francisco, CA: Custom & Limited Editions, 2000), 153.

Hiller Aircraft

The Menlo Science & Technology Park property was developed starting in the 1940s by Stanley Hiller, who used the property for nearly 20 years to design, test, and manufacture helicopters by his company Hiller Aircraft.[8] During this period, part of the property was used by Lockheed Corporation for a secret CIA-sponsored program to design and build surveillance satellites. Like other local properties turned into industrial parks during the mid-twentieth century, the Hiller Aircraft site had previously been used as farmland. The Carnduff family, who were descendants of long-term Ravenswood farmers, owned the land. When Hiller developed the site in 1947, he constructed his plant in open fields at the southeast corner of the former Carnduff property and initially retained the agriculture-related buildings that were sited on the north end of the property, adjacent the railroad tracks.[9]

Stanley Hiller's story started when he was still a teenager building toy race cars in a barn behind his parents' house. He was only 19 in 1944 when he launched his first successful flight of a helicopter he designed and built. This project formed the basis of Hiller Aircraft, a company that would compete with the leading aircraft manufacturers around the country, developing a wide range of helicopters for both civilian and military uses. By 1948, Hiller Aircraft had won multiple military contracts, briefly teamed up with Henry Kaiser, and eventually purchased the old Carnduff farmland for construction of a new research and production plant (**Figure 2**).[10]

Figure 2. Hiller Helicopters' first plant at the site, a large building at the southwest corner that was demolished in the 1980s as the property was transformed into offices.[11]

Stanley Hiller's initial success was driven in part by his design for a coaxial rotor helicopter, which placed two rotors spinning in opposite directions in a vertical position above the cockpit. This design eliminated the need for a long tail with counterbalancing rotor and made the helicopter more compact. However, the design was less stable and in an accident that was nearly catastrophic for Hiller, he was convinced to abandon the coaxial rotor. What Hiller and his team came up with was a single rotor with a tail rotor and innovative stabilization features that made it easier to use. While he was initially among a limited number of helicopter makers using the coaxial rotor design, the single rotor design he turned to was typical of helicopters of that era. The company turned this new design into the Hiller 360, a reliable, consumer-oriented helicopter that

[8] Throughout its history, the company went by several names, including Hiller Industries, United Helicopters, Hiller Helicopters, and Hiller Aircraft Corporation. For the purposes of this form, the name Hiller Aircraft is used to identify the company before it is acquired by Fairchild Stratos Corporation in the 1960s, after which it is referred to as Fairchild Hiller.

[9] Several former Carnduff buildings, which included both agriculture-related structures and the family's residential area, remained on the property until about the 1970s. Over time Hiller added a few more buildings and structures, but all have since been demolished. Hiller used this area of the property for experimental research and testing.

[10] Foss, "The History of Ravenswood," ; Davenport Bromfield, *Official Map of San Mateo County, California* (San Francisco: Schmidt Label & Lith. Co., 1894); George A. Kneese, *Official Map of San Mateo County, California* ([Redwood City, CA]: San Mateo County, 1927; John Straubel, *One Way Up* (Palo Alto, CA: Hiller Aircraft Co., 1964), 5-7; "Genius Declares His Vertical Flying Craft Lands in Small Area," *Oakland Tribune*, 30 August 1944, 8; Rosa Jenson, "The Hiller-Hornet," *Skyline*, December 1951: 39-41; "Helicopter Plant for South County," *San Mateo Times*, 9 December 1946.

[11] Jenson, "The Hiller-Hornet," 39.

was relatively affordable. Hiller gained attention for his helicopter with creative marketing—he flew the Hiller 360 across the country, stopping in more than 400 cities along the way, before ultimately creating a spectacle in downtown Manhattan.[12]

Despite Hiller's concerted efforts to market his helicopters to civilian buyers, sales sputtered. The cost of the helicopter was simply out of reach for many civilians and while Hiller demonstrated the benefits—for example, as a crop duster or commute vehicle—the civilian market never emerged. Undeterred, Hiller Aircraft turned back to the military, which began ramping up its war effort in the late 1940s as Post-World War II divisions on the Korean Peninsula turned to armed conflict between the US-backed South Koreans and the Chinese and Soviet Union-backed North Koreans in 1950. The United States immediately invested in new military equipment, including aircraft like helicopters. Hiller Aircraft immediately set about converting its Hiller 360s to meet military standards, developing what was renamed the Hiller Raven. The revamped helicopter received military approval in 1950 and by the end of the year Hiller Aircraft was working under a $3.5 million contract with the Army and Navy. In Korea, the Ravens were employed in medical evacuations, spotting gunfire, and guarding planes and other aircraft. The Ravens proved successful despite the complications of using what was essentially a casual civilian aircraft for precise and demanding military requirements. Still, Hiller Aircraft faced competition with other emerging helicopter companies, like Hughes Aircraft and Bell Aircraft, and only a few hundred of the Hiller Ravens were ever deployed during the Korean War.[13]

After the Korean War, Hiller Aircraft won smaller military contracts and focused less on the production of aircrafts and more on research and development. The company turned its efforts from rapid manufacturing of the Raven to more deliberate research of unique and innovative technology, much of which was still funded by the U.S. military. In the early 1950s, the increased demand for Hiller Ravens had led Hiller to build an addition onto the main plant, nearly doubling its square footage, and construct three engineering and manufacturing buildings to the south and east.[14] But as the company turned its attention toward research and development, Hiller Aircraft initiated plans to develop a new research facility on the property in 1955. The Advanced Research Division facility (**Figure 3**) was designed by Vincent G. Raney, a San Francisco architect, and erected in 1956. This building remains on the property at 1390 Willow Road (MPK 50) (**Photographs** 2-4). Raney, who earned an architectural engineering degree in 1929 and worked for other architectural firms through the early 1930s, founded his own firm in 1935 designing a variety of building types. He became proficient in designs of churches, schools, shopping centers, and gas stations, but was best known for his unique dome design for Century Theatres, which were built to showcase new widescreen film technology.[15]

[12] Straubel, *One Way Up*, 7-11; Jenson, "The Hiller-Hornet," 39; "Hiller Helicopter 'Unveiled' to Public," *Oakland Tribune*, 12 December 1947.
[13] Straubel, *One Way Up*, 15-19; "Navy Gives Contract to Hiller Helicopters," *Oakland Tribune*, 23 November 1950; "Hiller Helicopter Wins Army Order," *San Francisco Examiner*, 14 December 1950; Robert Sandifer, "War Experience Boosts Demand for Helicopters," *Los Angeles Times*, 9 May 1951.
[14] The main plant and the three adjacent buildings constructed during the early 1950s have since been demolished.
[15] "Hiller Helicopters Establishes New Division of Research," *San Mateo Times*, 5 July 1955; Straubel, *One Way Up*, 15-19; Aero Services Corporation, Santa Clara County Aerial Photography, CIV-1956, prepared for USDA – Agricultural Stabilization and Conservation Service, 1956, on file at UC Santa Barbara Davidson Library.

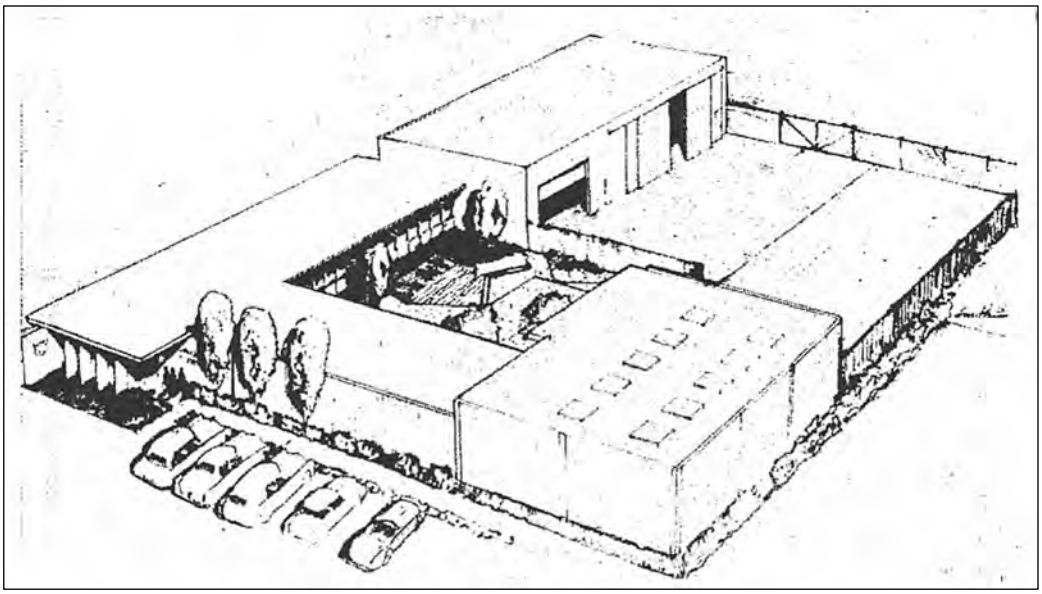


Figure 3. Architect's drawing of Hiller Aircraft's Advanced Research Division Facility.[16]

Military contracts continued to support Hiller Aircraft during the late 1950s and early 1960s. The company designed several new aircraft, but most proved to be duds. A helicopter powered by small jets on the tips of the rotor blades helped to reduce the overall weight of the aircraft, but was too loud and visible for military uses. Hiller designed multiple platform-style aircrafts, but because of the complications in the engineering, proved more of a novelty than a realistic craft. Hiller also entered the competition to design a vertical takeoff and landing aircraft, designing an airplane with two coaxial propellers attached to a wing that rotated in the vertical position for helicopter-like function and in the horizontal position for airplane-like function. The complications associated with what Hiller called the Propelloplane also proved too difficult to turn into reality. Still, the military contracts funded this research and development helped support continued expansion at the Hiller Aircraft site during the late 1950s and early 1960s (**Figure 4, Figure 5**, and **Table 1**). In 1958, Hiller constructed a new 10,260-square-foot warehouse and shipping building (the building currently at 1374 Willow Road, MPK 55) (**Photographs 10-13**), some of which was used for production of military and civilian helicopter components. Hiller Aircraft continued to obtain Defense Department contacts, and through a series of acquisitions and mergers with related companies, expanded its workforce and planned a $2 million expansion starting in 1961. The expansion included four new buildings to provide offices for a marketing division (1370 Willow Road, MPK 54, **Photographs 5-9**), and two for engineering and manufacturing (1376 Willow Road, MPK 55, **Photographs 10-13**, and 980 Hamilton Avenue, MPK 56, **Photographs 16-18**). It was during this period that the former Advanced Research Division was occupied by Lockheed Corporation for their work on the Corona satellite (see discussion of the Corona satellite program, below).[17]

[16] "Hiller Helicopters Establishes New Division of Research," *San Mateo Times*, 5 July 1955.
[17] Straubel, *One Way Up*, 20-22, 26, 28-30; "Hiller Tells Plans to Build Plant Addition," *San Mateo Times*, 17 June 1958; "Hiller Helicopters Noe Hiller Aircraft Corporation," *San Mateo Times*, 12 July 1958; "Business, Real Estate Loans Up in Far West," *San Francisco Examiner*, 10 October 1958; "$6,000,000 'Copter Contract Awarded," *Oakland Tribune*, 1 January 1959; "Hiller Lands Defense Job," *San Mateo Times*, 7 February 1961; "$2,000,000 Expansion at Hiller," *San Mateo Times*, 6 March 1961;

Figure 4. In 1956, the property includes an expanded main factory with three adjacent buildings and the newly constructed Advanced Research Division facility, near the north end of the property.[18]

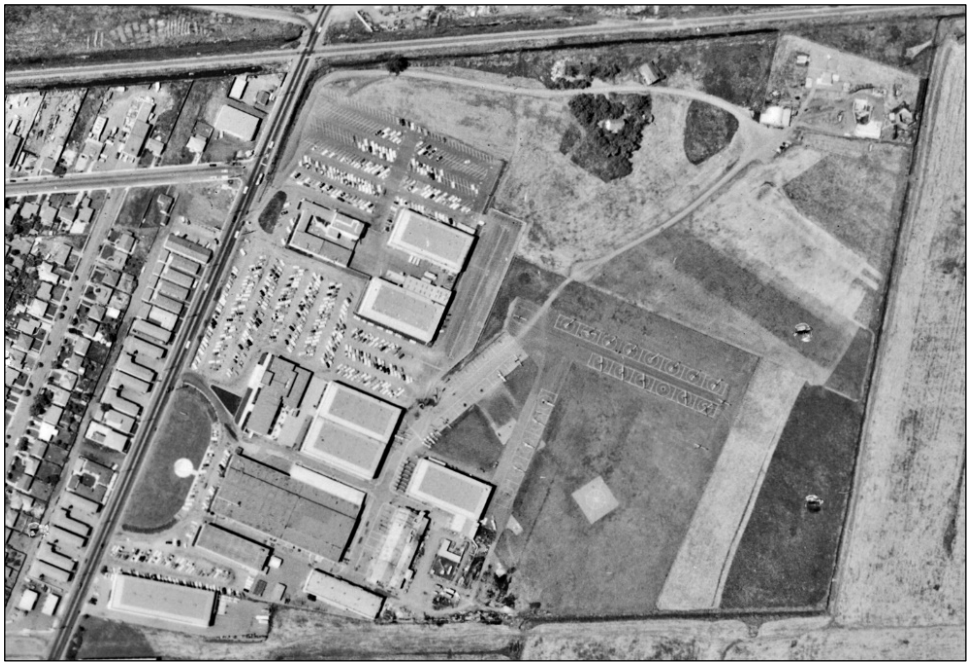


Figure 5. By 1965, the facilities Hiller Aircraft had built a few years earlier, including offices for the marketing division located immediately north of the original plant, fronting Willow Road. Three new warehouses surrounded the plant. At the north end of the property, the former Advanced Research Facility, now occupied by Lockheed, included two new support warehouses.[19]

[18] Aero Services Corporation, Santa Clara County Aerial Photography, CIV-1956, prepared for USDA – Agricultural Stabilization and Conservation Service, 1956, on file at UC Santa Barbara Davidson Library.
[19] Cartwright Aerial Surveys, Alameda, Contra Costa, Marin, Napa, Sacramento, San Francisco, San Mateo, Solano, Sonoma Counties Aerial Photography, CAS-65-130, prepared for California Division of Highways, 1965, on file at Santa Barbara Davidson Library.

By the mid 1960s, the helicopter industry began to suffer the reality of being closely tied to the military. Commercial uses of helicopters were never realized in the manner Hiller and others imagined. The technology also proved too expensive and too complicated for casual use. Ultimately, it required the investment of time and money that only the military was willing to provide, and this cause many helicopter companies to begin to consolidate. Hiller had already agreed to a merger deal with Ohio-based Electric Autolite Company. Under the arrangement Hiller remained a semi-autonomous subsidiary assisted by Electric Autolite's Research Division in further research and development. It continued to build newer versions of its Raven helicopter, which the military began deploying to Vietnam, but Hiller Aircraft struggled to develop new, profitable models. In 1964, Fairchild Stratos Corporation purchased Hiller from Electric Autolite in a move that marked a much more significant change for Hiller. Fairchild wanted to win an upcoming military helicopter contract that Hiller was competing for, but also sought to diversify its aircraft holdings. The merged company was renamed Fairchild Hiller Corporation and Stanley Hiller was named executive vice president. Fairchild Hiller ultimately lost the contract to Hughes.[20]

After another failed attempt to gain a lucrative military contract—this time with an airplane designed to compete with what would become the highly successful F-4 Phantom—Fairchild Hiller refocused its energies on aerospace. As the company began to downsize, it announced plans in 1965 to move most of the Menlo Park operations to the company's headquarters in Maryland. The primary elements of the Menlo Park plant were relocated, including management, marketing, and personnel, as well as the teams manufacturing of the company's FH-1100 helicopter. The company retained a pared-down operation in Menlo Park, which now included only spare parts distribution, overhaul, and some research facilities. Disillusioned, Stanley Hiller left not only Fairchild Hiller but the industry to start a business that helped turn around failing companies.[21]

By the late 1960s, Fairchild began leasing out parts of the Menlo Park property after Fairchild Hiller scaled back and Lockheed ceased operations at the site (see the Corona Satellite Program, below). Listed as the Fairchild Hiller Industrial Park, the property had several tenants, including US Geological Survey and engineering and manufacturing companies. It appears many of the companies that occupied the buildings through the 1970s were associated with research and development of aeronautic electrical engineer equipment. Granger Associates, an aeronautic electrical research and manufacturing company started by John Granger, used the properties at 1360 Willow Road through 1977. By 1973, the US Geological Survey opened offices at 1380 Willow Road and remained there through at least 1978. The building at 1390 Willow Road was used in 1973 by a company working on scientific instrumentation, Radiation Systems, Incorporated, and subsequently companies associated with aeronautic engineering. In 1979, Fairchild sold the property to Lincoln Properties, a development company that began expanding and redeveloping the buildings. All buildings have undergone some level of alterations since then and several new buildings were added to the site in the 1980s, often resulting in changes to street numbers (**Figure 6**).[22]

[20] "Autolite to Merge Hiller Air," *San Francisco Examiner*, 28 July 1960; "Hiller Firm is Purchased By Fairchild," *San Mateo Times*, 4 May 1960; "Hiller Name is Added to That of Parent Firm," *San Mateo Times*, 23 September 1964; Donald M. Patillo, *Pushing the Envelope: The American Aircraft Industry* (Ann Arbor, MI: University of Michigan Press, 1998), 239-240.
[21] Patillo, *Pushing the Envelope*, 240; "Hiller Sets Eastern Move," *San Mateo Times*, 22 July 1965.
[22] "Fairchild-Hiller Industrial Park," [advertisement], *San Francisco Examiner*, 20 April 1967; R. L. Polk & Co., *Polk's Menlo Park (San Mateo County, Calif.) City* (Monterey Park, CA: R. L. Polk & Co., 1967, 1971, 1973, 1977, 1978);

Figure 6. In the early 1980s, Lincoln Properties had begun to make substantial changes to the property by adding new buildings, developing a new road system, and paving parking lots. In this 1982 aerial, the original Hiller plant and its adjacent buildings remained but within a few years they would be demolished and replaced with new office buildings.[23]

CONONA Satellite Program

The Lockheed Corporation used part of the Hiller Aircraft property between 1958 and 1969 as a secret facility for the development of the CIA's Corona surveillance satellite. The satellite was developed as part of the United States' effort to improve surveillance during heightening tensions with the Soviet Union, reflecting various aspects of the Cold War contest, in the space race, nuclear arms, espionage, and intelligence gathering. During the 1950s, both the United States and the Soviet Union rushed to achieve strategic military advantage by developing increasingly more powerful nuclear weapons, rockets, and airplanes to deliver weapons and a variety of systems to monitor each other's progress. The Soviet Union's successful 1957 launch of Sputnik, the first satellite to orbit Earth and evidence that the Soviets had progressed significantly in developing an intercontinental ballistic missile, and the risks of reconnaissance flights using aircraft like the U-2, created urgency in better understanding the Soviet Union's capabilities. For the United States, the solution was the Corona surveillance satellite.[24]

Agencies of the US government had been researching the possibility of sending surveillance satellites to space since just after World War II. The nature of nuclear warfare necessitated knowing as much as possible, as soon as possible about an opponent's capabilities. This became accepted wisdom within the US government at the same time that researchers were exploring the possibility of space travel and installing satellites in Earth's orbit. By the early 1950s, the Air Force was working with private contractors to study a reconnaissance satellite, but it was not until Sputnik launched that plans were fast-tracked. The Corona program was initiated under the cover of deep secrecy and only a select number of government officials and contractors of its existence. The primary contract to design and build the Corona was awarded to Lockheed Corporation under the direction Lockheed engineer James Plummer, who was working at the company's Palo Alto research facility. In March 1958, Plummer presented his preliminary designs to the Air Force, CIA, and others, and received approval to proceed with development. On

[23] USGS, Aerial Photograph, [San Mateo County], 1982.
[24] Curtis Peebles, *The Corona Project: America's First Spy Satellites* (Annapolis, MD: Naval Institute Press, 1997), 16-21, 23-24, 35-40, 48-49; Donald P. Steury, "A Tribute to the People of the Air Force Satellite Control Facility; the National Security Impact of Its Corona Satellites," History Section, Center for the Study of National Reconnaissance, Business Plans and Operations, National Reconnaissance Office, Chantilly, Virginia, April 2007, 1-2.

April 1, 1958, Lockheed signed a lease with Hiller Aircraft to use the helicopter company's then vacant Advanced Research Division facility (**Figure 7**).[25]

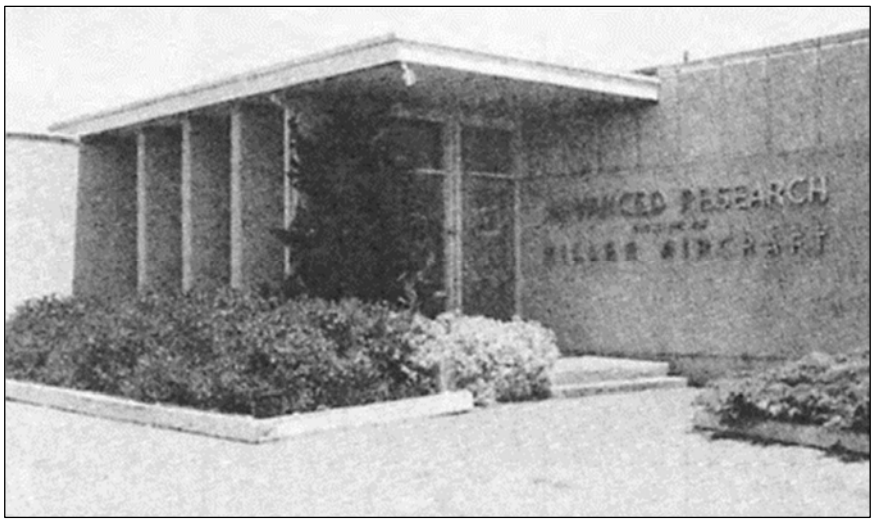


Figure 7. From 1958 to 1969, the Hiller Aircraft Advanced Research Division building was used by Lockheed Corporation to develop the Corona surveillance satellites. As a highly guarded secret, the program did not change the appearance of the building, which retained the Hiller Aircraft signage, as seen in this photograph. The signage has since been removed.[26]

Work developing the satellite started immediately after Lockheed took over the facilities at the Hiller Aircraft property. One of the critical elements of working at the site was ensuring secrecy of the program. Lockheed took great measures to restrict access to the site while maintaining the cover that the building remained part of the Hiller Aircraft operation. Within a couple years, two large research and manufacturing buildings were constructed, and fences went up around the site, separating it from Hiller Aircraft operations to the south (**Figure 8**). These three buildings remained on the property at 1390 Willow Road, 940 Hamilton Court, and 960 Hamilton Court (**Photographs 2-4 and 14-18**), but were substantially altered after 1970. Though Lockheed retained the Hiller Aircraft signage (which has since been removed) and dressed security guards in Hiller attire, Hiller employees were instructed never to enter the facility. Plummer and the other Lockheed engineers drove a different route to the facility each day to make sure they were not followed. This secrecy was important for ensuring the Soviets would be kept in the dark. If successful, the satellite could be launched into orbit about 100 miles above Earth, capture high-resolution stereo-image photography of secret sites throughout the Soviet Union, and be retrieved, all without revealing its surveillance purpose and thus giving the United States an upper hand. However, achieving these goals was difficult. It took the work of several contractors, each of which worked on different aspects of the satellites. It was Lockheed's job to receive all the parts at the Hiller Aircraft facility, assemble them into launch-ready satellites, and conduct testing. Eastman Kodak made the film. Itek Corporation engineered the cameras. General Electric created the reentry capsule that was ejected from the satellite after photographs were taken.[27]

[25] Peebles, *The Corona Project*, 40-42, 44-45, 50-51; Dwayne A. Day, "The Development and Improvement of the CORONA Satellite," in *Eye in the Sky: The Story of the Corona Spy Satellites*, editors Dwayne A. Day, John M. Logsdon, and Brian Latell (Washington, DC: Smithsonian Institution Press, 1998), 48-49; Dwayne A. Day, John M. Logsdon, and Brian Latell, eds., *Eye in the Sky: The Story of the Corona Spy Satellites* (Washington, DC: Smithsonian Institution Press, 1998), 191.

[26] Frederick C.E. Oder, James C. Fitzpatrick, and Paul E. Worthman, *The CORONA Story* (Washington, DC: NRO, 1987), 33.

[27] Peebles, *The Corona Project*, 50-51;. Day, Logsdon, and Latell, eds., *Eye in the Sky: The Story of the Corona Spy Satellites*, 191. National Reconnaissance Office, "Review and Redaction for Automatic Declassification of 25-Year-Old Information," Version 1.0, Approved by Donald M. Kerr, 2006, 254.

Figure 8. These three buildings at the Hiller Aircraft property were used by Lockheed from 1958 until 1969 for testing and development of the Corona satellites. Note that these buildings were separated from the rest of the facility to the south by fencing.[28]

It took only nine months for the Corona team to develop a test satellite ready for launch, but that proved to be only the first step in a multi-year effort to build a reliable system. The first test launch on January 21, 1959, failed. The second one a month later did too. In fact, it was not until August 10, 1960, that the first Corona satellite was successfully launched into space, placed in orbit, and returned with photographs of Earth, making the first of its kind. Despite this achievement, the Corona satellite program struggled for several years because its success rate was spotty, as problems arose with nearly every aspect of the system, from blurred or foggy film to failed rocket launches. Nonetheless, engineering improved and by the mid-1960s Corona launches were succeeding more than they were failing. And the images captured helped fortify the United States' understanding of the strength and capabilities of the Soviet Union and its influence around the world. As the 1960s progressed, a new generation of surveillance satellites emerged and the Corona program was scaled down. In 1969, Lockheed moved its Corona program to its in Sunnyvale facility, near Moffett Field, where it continued the work until 1971 when the final Corona satellite was launched.[29]

NRHP and CRHR Eligibility Criteria

The criteria for listing properties in the NRHP and CRHR are essentially the same. The criteria for NRHP eligibility are codified in 36 CFR 60 and expanded upon in numerous guidelines published by the National Park Service. The eligibility criteria for listing a property in the CRHR closely parallel those of the NRHP and are codified in PRC 5024.1(c)(1)-(4). Eligibility rests on twin factors of significance and integrity. A property must have *both* significance and integrity to be considered eligible for listing in either the CRHR or NRHP. If a property possesses significance, it must be able to convey that significance through the integrity of the defining physical and architectural characteristics from the period of its significance. Loss of integrity from its significant period will remove a property's ability to convey its historical significance

[28] Cartwright Aerial Surveys, Alameda, Contra Costa, Marin, Napa, Sacramento, San Francisco, San Mateo, Solano, Sonoma Counties Aerial Photography, CAS-65-130, prepared for California Division of Highways, 1965, on filed at Santa Barbara Davidson Library.
[29] Peebles, *The Corona Project*, 62-66, 80-83, 156, 173-174; Day, "The Development and Improvement of the CORONA Satellite,"51-52, 59-60, 83-85.

and render it ineligible. Likewise, a resource can have complete integrity, but if it lacks significance, it does not meet the eligibility requirements for listing in either the NRHP or CRHR and must also be considered ineligible.

Historic significance is judged by applying the NRHP criteria, identified as Criteria A through D. The NRHP guidelines state that a historic resource's significance must be determined by meeting at least one of the four main criteria. The NRHP criteria are:

NRHP Criterion A: Are associated with events that have made a significant contribution to the broad patterns of our history;

NRHP Criterion B: Are associated with the lives of persons significant in our past;

NRHP Criterion C: Embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values;

NRHP Criterion D: Have yielded, or may be likely to yield, information important to history or prehistory.[30]

The criteria for the CRHR are nearly identical to NRHP criteria, but have some differences. The CRHR criteria are identified as Criteria 1 through 4 and are:

CRHR Criterion 1: Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;

CRHR Criterion 2: Is associated with the lives of persons important in our past;

CRHR Criterion 3: Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values;

CRHR Criterion 4: Has yielded, or may be likely to yield, information important in prehistory or history.[31]

Integrity is determined by regarding the property's retention of its location, design, setting, workmanship, materials, feeling, and association to its period of significance. These seven aspects of integrity can be roughly grouped into three types of integrity considerations. Location and setting relate to the relationship between the property and its environment. Design, materials, and workmanship, as they apply to historic buildings, relate to construction methods and architectural details. Feeling and association are the least objective of the seven criteria and pertain to the overall ability of the property to convey a sense of the historical time and place in which it was constructed, or the historic events or people associated with the property. Feeling is a property's expression of the aesthetic or historic sense of a particular period of time. It results from the presence of physical features that, taken together, convey the property's historic character. Association is the direct link between an important historic event or person and a historic property. A property retains association if it is the place where the event or activity occurred and is sufficiently intact to convey that relationship to an observer. Because feeling and association depend on individual perceptions, their retention alone is insufficient to support eligibility of a property for the NRHP or CRHR.

[30] US Department of the Interior, National Park Service, "Guidelines for Applying the National Register Criteria for Evaluation," *National Register Bulletin 15*, 2.
[31] PRC 5024.1(c)(1)-(4).

Evaluation: Significance

Six of the Buildings at the Menlo Science & Technology Park have important associations with significant historic events, patterns, or trends of development under NRHP Criterion A or CRHR Criterion 1; however, the individual buildings and the property as a whole have lost historic integrity and no longer convey the significance of the property (see integrity discussion below). Three of the buildings, 1390 Willow Road, 940 Hamilton Court, and 960 Hamilton Court (MPK 50, MPK 51, and MPK 53), are directly and importantly associated with the significant research and development the created the Corona surveillance satellite, the first spy satellite sent into space to capture aerial photography of sites around the world, including in the Soviet Union. The Corona satellite program proved pivotal in intelligence collection and national security, as well as future surveillance programs. While highly guarded information at the time, it has since been revealed that the Lockheed Corporation used these three buildings as the primary location for the research and development of the satellites between 1958 and 1969. As such, the buildings possess significance under Criteria A and 1 for their association with the pioneering period of the United States Cold War space-based surveillance programs. The period of significance for these buildings is 1958 to 1969. The characteristics that defined the buildings included the general architectural designs as well as the specific materials—such as windows, siding, and doors, arrangement of windows and doors—and the layout and spatial relationship of the buildings. These features included the International-style architecture for the building at 1390 Willow Road with original windows, signage, doors, stucco siding materials, and roof forms. The buildings at 940 Hamilton Court (aka 1392 Hamilton Court, MPK 51) and 960 Hamilton Court (MPK 53) featured mostly utilitarian designs with unadorned concrete walls, small square windows on the west side, steel personnel doors, and large rollup freight doors. Among the most important characteristics of the buildings were their relative isolation within the larger property, and the security features that helped secure the highly classified activities being undertaken inside, such as fencing that surrounded the buildings to separate them from the other buildings on the property, and each also included their own parking lot, which further segregated them from each other. Some features that characterized the buildings were present when Lockheed moved in, such as its original association with the Hiller Aircraft and the signage on the front of 1390 Willow Road (MPK 50) for Hiller Aircraft, both of which served as covers for the Lockheed operations. Additionally, the site location itself was generally secluded, at the far north end of Menlo Park's built environment and surrounded to the north and east by open fields. Since 1969, however, the buildings and the site as a whole have undergone considerable changes that have substantially diminished the historic integrity of the buildings and site and the ability of the property to convey its association with the historic Corona satellite program. The changes to the individual buildings—such as the major alterations to the entrance and the rear addition on 940 Hamilton Court (MPK 51), the removal of the original Hiller Aircraft signage, replacement doors and windows on 1390 Willow Road (MPK 50), and replacement windows on 960 Hamilton Court (MPK 53)—change the physical appearance and important characteristics of the buildings. Additionally, the changes to the site as a whole, particularly the addition of several office buildings and much larger warehouses to the north and east of the original buildings, removal of internal fencing, and integration of parking lots, substantially alter the original character of the individual buildings and the complex. See the discussion in the Integrity section below for additional information on the changes and the historic integrity of the buildings.

The three remaining historic-period buildings were developed for use by Hiller Aircraft to research, test, and manufacture helicopters and other aircraft. Most of the projects were conducted under contract with the United States Army or Navy, but only a few of the company's helicopter models were put into full production. While significant money, time, and effort were spent designing and building helicopters at this site, Hiller Aircraft did not prove to be an important company in the development of helicopters during the decades after World War II. The company frequently competed for military contracts to develop production-ready aircrafts, but repeatedly did not meet the military's requirements. It did succeed in earning research and development contracts, which proved lucrative for short periods, but usually never materialized into military aircrafts. One of its only successful helicopter models was the light observation type helicopter known as the Raven. It was first used in relatively small numbers during the Korean War and later used more extensively during the Vietnam War. Its success, however, did not translate into significance within the helicopter manufacturing industry. Many of the company's competitors, such as Bell Helicopters and Hughes Helicopters, developed a greater number of frequently more successful helicopter models and, unlike Hiller Aircraft, were able to transition into civilian markets. The buildings at this property associated with Hiller Aircraft do not possess significance within the helicopter industry that meet the eligibility requirements for listing in the NRHP and CRHR under these criteria. Even if the buildings possessed significance for their association with

Hiller Aircraft, the buildings and the property as a whole have undergone substantial changes since they were used by Hiller Aircraft and these changes have diminished their historic integrity. See the discussion in the Integrity section below for additional information on the changes and the historic integrity of the buildings.

While the six historic-period buildings are also associated with the post-World War II rise of technology companies in the Silicon Valley, they are not significant within that association. Relative to other important projects throughout the area, such as the Stanford Research Institute, the Hiller Aircraft operation and the use of the buildings for development of the Corona satellites did not play a major or important role in the regional growth of technology companies. Despite having success, Hiller Aircraft was not among the most important technology-related companies in the area nor was it instrumental in the growth of additional tech-related companies. Lockheed's use of the buildings for the Corona project was highly insular and secretive. Although it was important for its association with the federal government's Cold War space-based surveillance programs, it did not play a significant role in the local technology industry. In any event, the buildings and the property as a whole have undergone major changes since the early history of the property such that the property no longer conveys its association with the growth of the technology industry.

The Menlo Science & Technology Park—individual buildings and as a whole—are also not eligible under NRHP Criterion B and CRHR Criterion 2, because they do not have direct, significant association with persons important to history. The property in general is most closely linked to Stanley Hiller, who started Hiller Aircraft and directed the development of the historic-period buildings on the property. Hiller proved to be a relatively successful innovator in helicopter technology. However, his innovations did not prove significant within the industry. His chief innovations, such as the coaxial rotor, stabilizing elements in his "Rotormatic" system, platform helicopters, ramjet powered helicopters, and tiltwing vertical takeoff and landing helicopter, were either derivatives of previous designs developed by others or failed to translate into successful, production-level aircrafts. While Hiller's business was successful for a time, especially during the early years, and his Raven helicopter contributed to the United States effort in the Korean and Vietnam wars, these were comparatively minor accomplishments compared to leaders of the field. As such, for the purposes of NRHP Criterion B and CRHR Criterion 2, Stanley Hiller is not considered a person whose contributions in his field of helicopter development rose to the level of significance. Moreover, the buildings are no longer associated with Stanley Hiller and have undergone significant changes since he was directly connected with the site. Thus, the buildings do not possess the historic integrity to convey their association with Hiller.

The historic-period buildings at Menlo Science & Technology Park are not significant as important examples of a type, period, or method of construction, they are not important examples of master architects or engineers, and they do not represent high artistic value. Therefore, the buildings—individually and as a collection—are not eligible for listing in the NRHP or CRHR under Criterion C or Criterion 3. Some of the buildings represent modest examples of International-style architecture, while most are mostly utilitarian in design. The buildings at 1370 Willow Road (MPK 54) and 1390 Willow Road (MPK 50) contain some elements of the International style, such as contrasting horizontal and vertical elements, rectilinear asymmetric designs, and lack of architectural ornament, but these are decidedly typical and basic elements of the style. The buildings lack the level of architectural detail and quality of design and materials to be considered important examples of International style. The building at 1390 Willow Road was designed by Vincent Raney, who was a successful architect in the San Francisco Bay Area who became known for is designs of the Century dome movie theaters. Despite gaining moderate success in the field, Raney was not generally recognized as one of the distinguished architects of his time. Some of his buildings, such as the domed theaters, may be considered significant for their designs, but his overall body of work in the field does not rise to the level of greatness. As such, the building at 1390 Willow Road is not an important example of a master architect. The remaining buildings represent very modest utilitarian designs. They were built as large warehouses and feature minimal windows, large freight doors, and tilt-up concrete panels. The buildings were designed to meet the basic functions of their occupants with little effort paid to aesthetic and architectural qualities. While the architects of these buildings are not known, they do not represent an important work of an unidentified craftsman. As such, none of the buildings at Menlo Science & Technology Park meet the requirements for eligibility under NRHP Criterion C or CRHR Criterion 3.

Under NRHP Criterion D and CRHR Criterion 4, this property and its buildings are not significant or likely sources of important information about historic construction materials or technologies that otherwise would not be available through documentary evidence. The buildings represent standard construction techniques of their historical period that are well

recorded by documentary evidence. The buildings mostly feature concrete tilt-up or wood-frame construction, both of which are very common and well understood methods. It is unlikely that any information revealed would add historically significant information to the common understanding of these type of structures.

Evaluation: Integrity

The property and the individual buildings have lost historic integrity to the historic period, including during the years when the building was associated with the historically significant Corona satellite program (1958-1969). All of the buildings have undergone some changes, and some of the buildings have undergone significant alterations. The buildings alterations are detailed in Sections P3a Description and in **Table 2** of B6 Construction History above, and can be seen illustrated in the photographs on the following pages. As detailed in the Significance section above, the features that characterize the three buildings directly associated with the important Corona satellite program—1390 Willow Road, 940 Hamilton Court, and 960 Hamilton Court (MPK 50, MPK 51, and MPK 53)—include their overall architectural designs, materials, layout, and spatial relationships within the complex. Since their significant period, the buildings have undergone several changes, including the replacement of windows, doors, and siding, and construction of roof parapets. The building at 1390 Willow Road has replacement siding and the original Hiller Aircraft signage on the front of the building has been removed. The buildings at 940 Hamilton Court and 960 Hamilton Court have replacement windows, personnel doors, and freight doors. In addition, the building at 940 Hamilton Court has substantial additions on the north and south sides. Elements of the overall property were also important to the character of these buildings. The relative isolation of the site and the security features for the three buildings associated with the Corona program were important character-defining elements. After their association with the Corona program, the security features have been removed and several new buildings have been constructed in the surrounding areas. The buildings are no longer directly associated with their historical uses. The three buildings directly connected with the development of the Corona satellites (1390 Willow Road, 940 Hamilton Court, and 960 Hamilton Court; MPK 50, MPK 51, and MPK 53) lost this association after the program was moved to facilities in Sunnyvale in 1969. These changes have substantially diminished the integrity of design, materials, workmanship, feeling, and association of the buildings at 1390 Willow Road, 940 Hamilton Court, and 960 Hamilton Court. The integrity of setting is also diminished because of modern construction in the immediate vicinity. The buildings retain their integrity of location because they have not been moved, but these three buildings do not retain overall historic integrity.

The remaining buildings on the property do not meet the NRHP or CRHR significance criteria. They have also undergone a variety of alterations that have diminished their historic integrity, including: additions, replacement of original windows and doors, enclosing freight doors, personnel doors, and other openings, creation of new openings, and changes to siding. It appears very few original windows or doors remain at any of the buildings. More substantial changes include additions and major alterations to entrances, such as at 960 Hamilton Court, where a two-story glass-wall entrance was built. These changes substantially diminish the integrity of materials, design, workmanship, and feeling of the historic-period buildings.

In addition to the changes to the individual buildings, the site as a whole underwent a major overhaul during the 1970s and 1980s. The original Hiller Aircraft plant and three adjacent buildings constructed in the 1950s (and seen in **Figures 2**, **4**, **5**, and **6** above) were demolished. In the largely open space that was used for testing aircraft from the late 1940s to the mid 1960s, several new buildings were constructed, including some that dwarf the square footage of the historic-period buildings. In fact, as stated above, a critical element to the history of the site includes the large open space that characterized and helped protect the privacy of the Corona satellite program. Overall, 14 new buildings were constructed at the site, new roads were added, and paved parking lots fill most of the space between the buildings. These changes substantially diminish the integrity setting, association, feeling, and design of the property as a whole, as well as the individual buildings.

Like the buildings formerly associated with the Corona program, the other buildings on the property are no longer directly associated with their historical uses. The associations with the Hiller companies were lost during the 1960s when most of the operations were moved to the East Coast. Since then, the buildings have been used for a variety of office and industrial purposes. Ultimately, even though some of the buildings once possessed significance for association with the Corona satellite program, none of the buildings on the property, nor the site as a whole, meet the criteria for listing in the NRHP or CRHR because of the loss of integrity of materials, design, workmanship, feeling, setting, and association to the individual buildings, and the loss of design, feeling, setting, and association to the overall site.

Photographs (continued):

Photograph 2: Northwest façade of 1390 Willow Road (MPK 50), with the entrance vestibule in the foreground, camera facing south, March 27, 2019.

Photograph 3: Northeast façade of 1390 Willow Road, showing the location of a secondary entrance and window ribbon, camera facing south, March 27, 2019.

Photographs (continued):

Photograph 4: Unfenestrated warehouse section of 1390 Willow Road (MPK 50), camera facing west, March 27, 2019.

Photograph 5: Primary, northwest façade of 1370 Willow Road (MPK 54), camera facing southeast, March 27, 2019.

Photographs (continued):

Photograph 6: Northeast façade of 1370 Willow Road (MPK 54), camera facing west, March 27, 2019.

Photograph 7: Southwest façade of 1370 Willow Road, camera facing northwest, March 27, 2019.

Photographs (continued):

Photograph 8: Unfenestrated section of the southeast façade of 1370 Willow Road, camera facing southwest, March 27, 2019.

Photograph 9: Semi-enclosed patio area at the rear of 1370 Willow Road, camera facing northwest, March 27, 2019.

Photographs (continued):

Photograph 10: Northwest façade of 1374 and 1376 Willow Road (MPK 55), camera facing south, March 27, 2019.

Photograph 11: Unfenestrated southwest façade of 1374 and 1376 Willow Road, camera facing north, March 27, 2019.

Photographs (continued):

Photograph 12: Northeast façade of 1374 and 1376 Willow Road (MPK 55), camera facing south, March 27, 2019.

Photograph 13: Southeast façade of 1374 and 1376 Willow Road, camera facing north, March 27, 2019.

Photographs (continued):

Photograph 14: Glass enclosure addition on the northeast façade of 940 Hamilton Court, aka 1392 Hamilton Court (MPK 51), camera facing south, March 27, 2019.

Photograph 15: Southeast façade of 940 Hamilton Court, camera facing southwest, March 27, 2019.

Photographs (continued):

Photograph 16: Northwest façade of 960 Hamilton Court (MPK 53), camera facing east, March 27, 2019.

Photograph 17: Overhead freight doors on the southeast façade of 960 Hamilton Court, camera facing northwest, March 27, 2019.

Photographs (continued):

Photograph 18: Unfenestrated northeast façade of 960 Hamilton Court (MPK 53), camera facing south, March 27, 2019.

Photograph 19: Southwest façade of 980 Hamilton Avenue (MPK 56), camera facing north, March 27, 2019.

Photographs (continued):

Photograph 20: Northwest façade of 980 Hamilton Avenue (MPK 56), camera facing southeast, March 27, 2019.

Photograph 21: Southeast façade of 980 Hamilton Avenue, camera facing northwest, March 27, 2019.

Photographs (continued):

Photograph 22: Northeast façade of 980 Hamilton Avenue (MPK 56), camera facing south, March 27, 2019.

Photograph 23: Typical view of modern buildings within the Willow Village complex, camera facing northeast, March 27, 2019.

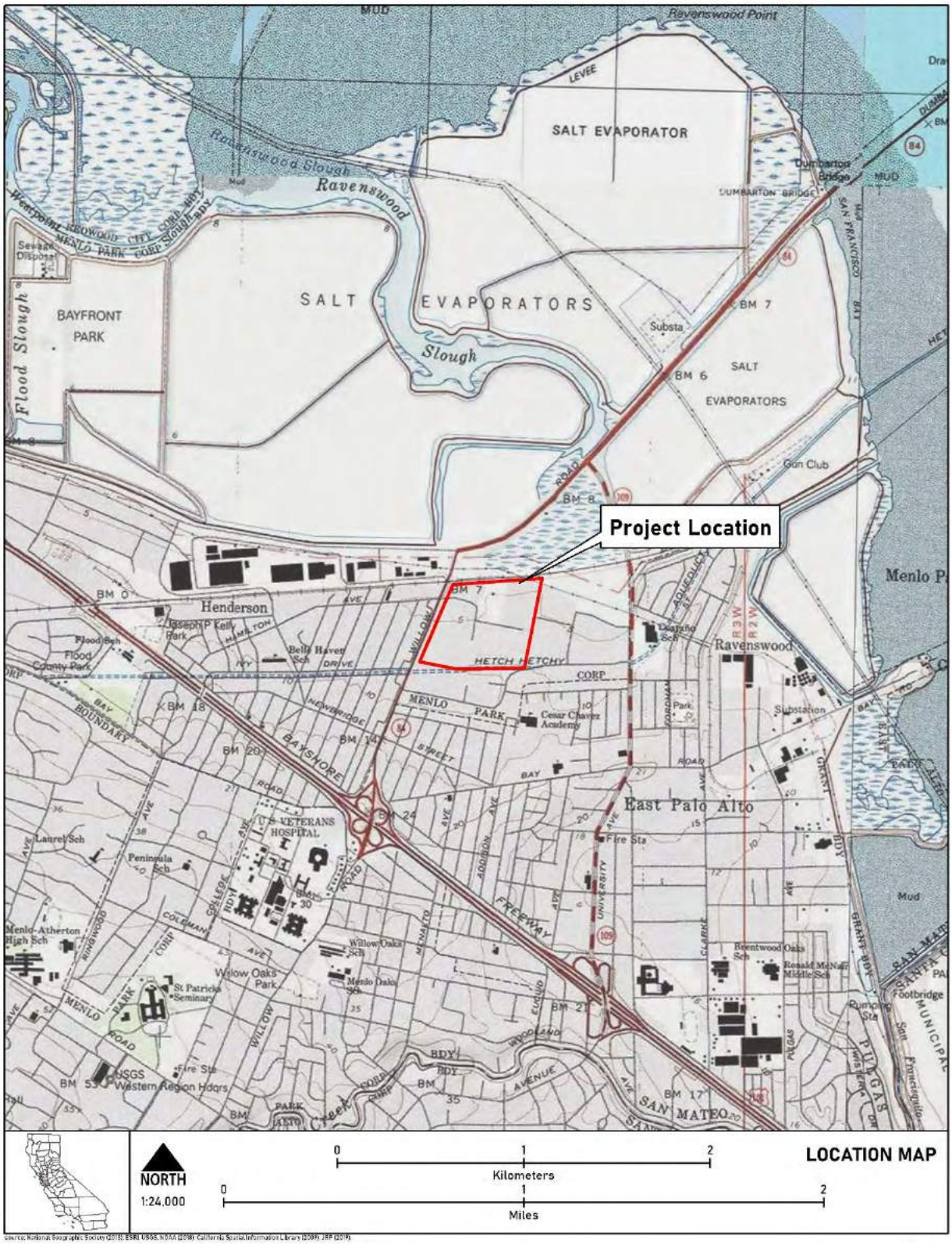
Photographs (continued):

Photograph 24: Typical view of modern buildings within the Willow Village Complex, camera facing west, March 27, 2019.

Site Map:


HAMILTON AVE
WILLOW RD
HAMILTON CT
O'BRIEN DR
923-925 Hamilton Ave
959-967 Hamilton Ave
927-953 Hamilton Ave
1390 Willow Rd
940 Hamilton Ct
1380 Willow Rd
960 Hamilton Ct
1370-1378 Willow Rd
1374 & 1376 Willow Rd
1350 Willow Rd
1360 Willow Rd
980 Hamilton Ave
990-998 Hamilton Ct
1003-1005 Hamilton Ct
1010-1048 Hamilton Ct
1050-1098 Hamilton Ct
1105-1195 Hamilton Ct
1100-1190 Hamilton Ct
1205-1275 Hamilton Ct
1200-1240 Hamilton Ct
055-440-010
055-440-020
055-440-030
055-440-040
055-440-050
055-440-090
055-440-110
055-440-130
055-440-190
055-440-210
055-440-230
055-440-260
055-440-300
055-440-310
055-440-320
055-440-330
055-440-340
055-440-350
114
Historic-period buildings
Modern buildings
0
300
Feet
NORTH

Location Map:



State of California – The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
PRIMARY RECORD

Primary # _____
HRI # _____
Trinomial _____
NRHP Status Code 6Z
Other Listings _____
Review Code _____ Reviewer _____ Date _____

***Resource Name or #** (Assigned by recorder): 1385 Willow Road

P1. Other Identifier: _____

***P2. Location:** ☐ **Not for Publication** ☒ **Unrestricted**

***a. County:** San Mateo

and (P2b and P2c or P2d. Attach a Location Map as necessary.)

***b. USGS 7.5' Quad:** Palo Alto **Date:** 1961 (photorevised 1968 and 1973) **T:**5S; **R:**3W; **Sec:**___; Mount Diablo Meridian

c. Address: 1385 Willow Road City: Menlo Park Zip: 94025

d. UTM: (give more than one for large and/or linear resources) Zone: _____; _____mE/ _____mN

e. Other Locational Data: (e.g., parcel #, directions to resource, elevation, etc., as appropriate)

Assessor Parcel Number (APN): 055-383-560

***P3a. Description:** (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries)

This form records an apartment building located on the west side of Willow Road south of Hamilton Avenue in the Belle Haven neighborhood of the city of Menlo Park. It is the northernmost apartment building on a 2.969-acre parcel that spans most of the block between Hamilton Avenue and Ivy Drive, containing the northern half of the multi-unit Gateway Garden Apartments complex, see **Sketch Map**, and **Figures 1 and 3**. Gateway Garden Apartments consists of numerous single- and two-story apartment buildings. The current study evaluates the northernmost one, which is a single-story, Ranch-style, four-unit building at 1385 Willow Road. The subject building has a rectilinear footprint, stucco cladding, and a low-pitched side-gable roof with composition shingles, open overhanging eaves, wood fascia, and rectangular louvered vents in the gable peaks (**Photograph 1**). The building has a symmetrical, south-facing main façade, with entries to the four residential evenly distributed living units that feature replacement wood panel doors—one with a metal security door (Unit C)—and replacement vinyl, horizontal-sliding windows. The units open out to a courtyard shared with the adjacent, virtually identical, north-facing, single-story, four-unit apartment building at 1381 Willow Road (**Photograph 2**). (See Continuation Sheet.)

***P3b. Resource Attributes:** (List attributes and codes) HP3 – Multiple-family property

***P4. Resources Present:** ☒ Building ☐ Structure ☐ Object ☐ Site ☐ District ☐ Element of District ☐ Other (Isolates, etc.)

P5b. Description of Photo: (View, date, accession#) **Photograph 1.** 1385 Willow Road (right); camera facing west / southwest, June 2, 2021.

***P6. Date Constructed/Age and Sources:**
☒ Historic ☐ Prehistoric ☐ Both
1953 (Menlo Park Building Permit)

***P7. Owner and Address:**
Menlo Gateway, Inc.
P.O. Box 167928
Irving, TX 75016

***P8. Recorded by:** (Name, affiliation, address)
Samuel Skow & Andrew Young
JRP Historical Consulting, LLC
2850 Spafford Street
Davis, CA 95618

***P9. Date Recorded:** June 2, 2021

***P10. Survey Type:** (Describe)
Intensive

***P11. Report Citation:** (Cite survey report and other sources, or enter "none.") None.

***Attachments:** ☐ None ☐ Location Map ☐ Sketch Map ☒ Continuation Sheet ☒ Building, Structure, and Object Record ☐ Archaeological Record ☐ District Record ☐ Linear Feature Record ☐ Milling Station Record ☐ Rock Art Record ☐ Artifact Record ☐ Photograph Record ☐ Other (list) _____

***NRHP Status Code:** 6Z

***Resource Name or #** (Assigned by recorder): 1385 Willow Road

B1. Historic Name: _____

B2. Common Name: Gateway Garden Apartments

B3. Original Use: Apartment building B4. Present Use: Apartment building

***B5. Architectural Style:** Ranch

***B6. Construction History**: (Construction date, alteration, and date of alterations) Built 1953; replacement roofing installed 2010; replacement doors and windows installed pre-2011.

***B7. Moved?** ☒ **No** ☐ **Yes** ☐ **Unknown** **Date:** _____ **Original Location:** _____

***B8. Related Features:** _____

B9. Architect: unknown b. Builder: Redwood Terrace Co.

***B10. Significance: Theme:** n/a **Area:** n/a

Period of Significance: n/a **Property Type:** n/a **Applicable Criteria:** n/a

(Discuss importance in terms of historical or architectural context as defined by theme, period, and geographic scope. Also address integrity.)

The apartment building at 1385 Willow Road does not meet the criteria for listing in the National Register of Historic Places (NRHP) or the California Register of Historical Resources (CRHR) because it is not historically significant. This property was also evaluated in accordance with Section 15064.5(a)(2)-(3) of the CEQA Guidelines, using the criteria outlined in Section 5024.1 of the California Public Resources Code and it is not an historical resource for the purposes of the California Environmental Quality Act (CEQA). (See Continuation Sheet.)

B11. Additional Resource Attributes: (List attributes and codes) ____

***B12. References:** Alan Hynding, *From Frontier to Suburb: The Story of the San Mateo Peninsula* (Belmont, CA: Star Publishing Company, 1982); R. L. Polk & Co. *Polk's Menlo Park City Directory*, various years 1957-1978, accessed via Ancestry.com; San Mateo County Assessor records; see also footnotes.

B13. Remarks:

***B14. Evaluator:** Samuel Skow

***Date of Evaluation:** June 2021

(This space reserved for official comments.)

(Sketch Map with north arrow required.)

See Continuation Sheet.

P3a. Description (continued):

In addition to the courtyard framed at the east end by a wood fence and pergola, the two apartment buildings (1381 and 1385 Willow Road) also share two asphalt-paved parking areas—comprising a former frontage road to the east and an alley to the west—as well as a metal-frame shade structure to the south.

B10. Significance (continued):

Historic Context

The apartment building recorded on this form was constructed in 1953 in north Menlo Park, a city along the San Francisco Bay in southeast San Mateo County. Since its initial construction, the building has continued to function as a multi-family residential property. The parcel is located on land once within the former 35,200-acre *Rancho de las Pulgas*, which was granted to Luis Arguello—the first Mexican governor of California—in 1835. Settlement of the area was slow through the mid nineteenth century, and most of the acreage was devoted to agricultural uses. Landowners and their tenant farmers used the nearby port at Ravenswood Slough (established in 1849) to ship products to market. As the importance of the Ravenswood port and its surrounding settlement waned in the 1860s, the rancho was divided and sold to various investors and agriculturalists, including Robert E. Doyle and Charles C. Bowman. Doyle and Bowman acquired many former rancho parcels, including Tract No. 1 that stretched along the bay between what is now Marsh Road and Willow Road. This more than 1,770-acre tract included the study area near Hamilton Avenue and Willow Road. Doyle held the tract for several more years, but gradually further subdivided and sold portions of it.[1]

James P. Rynder, a banker based in Eureka, California, acquired some of Doyle's acreage in the 1870s, and by 1894 had amassed a 400-acre portion that was bounded by the salt marshes on the north, Bay Road on the south, and Willow Road on the east. Rynder never occupied this land and most likely rented it for grain and forage farming. His son and one of his two daughters, George and Ida, inherited the tract when their father died in 1910. George Y. Henderson and Ida Henderson Sevier appear to have continued renting it as farmland for about 15 years before subdividing much of the eastern half of the parcel to create Newbridge Park—the location of the subject property—and selling the new residential tract to a real estate sales company (**Figure 1**). The subdivision offered small lots on a grid of streets located south of the Dumbarton Cutoff rail line and straddling Willow Road, a layout designed to take advantage of the new bay crossing for vehicles, the Dumbarton Bridge.[2] Sales were very slow despite repeated efforts to market the lots throughout the greater San Francisco Bay Area. Although the first buildings at the southwest corner of Willow Road and Hamilton Avenue (just north of the property) appeared not long after the subdivision map was filed, Newbridge Park and the surrounding lands remained rural and agricultural through the 1940s, even though the residential streets were laid out. Very few lots sold during the great depression, and it was not until after World War II that most of the area—including the row of apartment buildings containing the subject property—was densely developed.[3]

The end of the Second World War brought rapid suburban expansion to the San Francisco Peninsula, as it did to the rest of the country, along with Cold War-related development and the introduction of the high-tech industry. Menlo Park's population grew tenfold between 1930 and 1970 as suburban tracts spread in the areas around downtown. The city quickly annexed many of these new residential areas, expanding north and east into the Ravenswood district. In 1949, the neighborhoods of Belle

[1] Alan Hynding, *From Frontier to Suburb: The Story of the San Mateo Peninsula* (Belmont, California: Star Publishing, 1982), 30, 36, 37, 133-134; B.F. Alley, *History of San Mateo County, California* (San Francisco: B.F. Alley, 1883), 211.
[2] Hynding, *From Frontier to Suburb*, 133-136; Werner C. Foss, Jr., "The History of Ravenswood," 23, San Mateo Junior College, San Mateo County Historical Museum; "Tracts No. 1 and No. 2," Map Book 1, page 8, filed 14 Nov 1863, San Mateo County Assessor; Davenport Bromfield, *Official Map of San Mateo County, California* (San Francisco: Schmidt Label & Lith. Co., 1894); "Newbridge Park," subdivision map, Map Book 14, pages 6-7, filed 10 Jun 1926, San Mateo County Assessor; "The Bay is Bridged at Newbridge Park," advertisement, *San Francisco Examiner*, 17 Jul 1926, page 8.
[3] Fairchild Aerial Surveys, for Redwood City, Flight C-1025, June 1930, UCSB Davidson Library; Fairchild Aerial Surveys, for Palo Alto City, Flight C-7065, April 1941, UCSB Davidson Library.

Haven and Newbridge Park, west of Willow Road and north of Bay Road, were incorporated into Menlo Park, including the lot for the subject property.[4]

The parcels on the west side of Willow Road were developed in the mid twentieth century and tended to be commercial or residential in nature.[5] After the first commercial buildings appeared at the southwest corner of Willow Road and Hamilton Avenue, the other Newbridge Park parcels started to be developed as well, and by the late 1940s and early 1950s a few small residences and a few roadside commercial buildings appear in aerial photographs. Early in 1956, real estate agents Hare, Brewer & Kelly advertised property for sale in Menlo Park, including a "drive-in commercial corner opposite Hiller Helicopter plant, Willow Road, can be used for industry."[6]

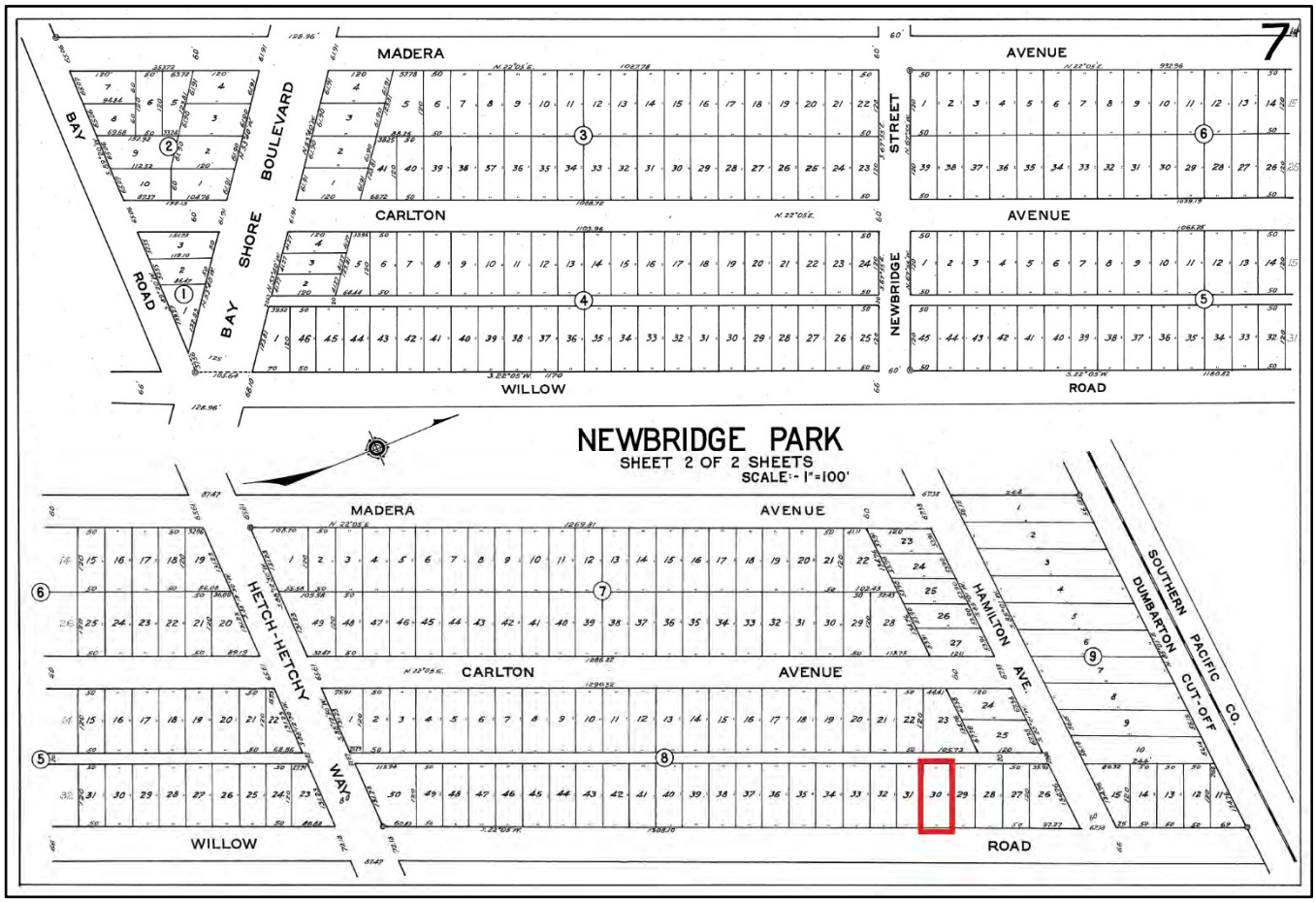


Figure 1. 1926 Newbridge Park subdivision map, with approximate location of subject property outlined in red.[7]

Commercial and multi-family residential buildings dominated the development of the west side of Willow Road area through the rest of the twentieth century, including the first row of apartment buildings containing the subject property on, which were built in the early 1950s. In addition to a market, restaurant, and bakery, a contractor's yard was among the businesses located

[4] "Bellehaven to Join Menlo Pk," *San Mateo Times*, 15 Jan 1949, page 2; Hynding, *From Frontier to Suburb*, 296.
[5] Charmayne Kreuz, *A Tradition of New Horizons: The Story of Menlo Park Commemorating Its 1874 Incorporation* (Menlo Park, California: City of Menlo Park, 1974), 53-54; Michael Svanevik and Shirley Burgett, *Menlo Park, California: Beyond the Gate* (San Francisco: Custom & Limited Editions, 2000), 153.
[6] Aero Services Corporation, Santa Clara County, flight CIV-1956, for USDA, Agricultural Stabilization and Conservation Svc, 1956, UCSB Davidson Library; Aero Services Corporation, Santa Clara County, flight DDB-1956, for USDA, Commodity Stabilization Svc, 1956, UCSB Davidson Library; "Menlo Park," real estate advertisement, *San Francisco Examiner*, 23 Feb 1956, page 36.
[7] "Newbridge Park," page 7, San Mateo County Assessor.

on Willow Road near Hamilton Avenue in the 1960s and 1970s (**Figure 2**). Single-family homes faced Hamilton Avenue or Carlton Avenue, the street running parallel to Willow Road one block west, and a youth center and a church appeared north of Hamilton Avenue in the 1970s as well.[8]

Figure 2. Excerpt of 1964 aerial photograph, with subject property circled in red. Annotation by JRP.[9]

By the late 1980s, the Community Development Agency (CDA) of Menlo Park began to focus its efforts in the area when it submitted a re-subdivision map for the row of apartment buildings on the west side of Willow Road (**Figure 3**). The CDA also resurveyed the parcels within the study area, and it appears that the parcels at the southwest corner of Hamilton and Willow Road were cleared of buildings not long after. The site, just north of the apartment building at 1385 Willow Road, remained vacant for about a decade until the CDA filed a new resurvey of all the parcels at both the northwest and southwest corners of the intersection. This resurvey was called Belle Haven Retail Center and eventually led to the construction of the current buildings at the site by 2002.[10]

[8] Cartwright Aerial Surveys, flight CAS-65-130, prepared for California Division of Highways, 1965, UCSB Davidson Library; R.L. Polk & Co., *Polk's Menlo Park City Directory*, various years 1961-1978, accessed via Ancestry.com; Cartwright Aerial Surveys, flight CAS-2310, Santa Clara County, May 1968, UCSB Davidson Library.

[9] Cartwright Aerial Surveys, flight CAS-SM, 1963-1964, UCSB Davidson Library.

[10] Western Aerial Photos, flight GS-VEZR, Santa Clara County, October 1980-April 1981, for USGS, UCSB Davidson Library; "Parcel Map," Book 59, page 17, filed 13 Apr 1987, San Mateo County Assessor; "Parcel Map," Book 59, page 17, filed 9 Jun 1987, San Mateo County Assessor; Aerial photographs, unknown photographer, Flight NAPP-3C, 1998, for USGS, UCSB Davison Library; "Parcel Map for Belle Haven Retail Center," PM Book 71, pages 15-16, filed 31 Dec 1987, San Mateo County Assessor; Hauts-Monts, Inc., Santa Clara County, flight HM-2002-USA, 2002, UCSB Davidson Library; March 2020, Street View, google earth.com.

The Redwood Terrace Company built the property recorded and evaluated on this form in 1953 (1385 Willow Road) as one of many independently developed apartment buildings along the west side of Willow Road between Hamilton Avenue and the Bayshore Freeway (US Highway 101) in the 1950s and 1960s. The Redwood Terrace Company was a residential development firm active throughout the San Francisco Peninsula in the late 1940s through the 1950s. By the early 1960s, the company relocated to Citrus Heights in Sacramento County. Multiple development companies constructed the various multi-family residential complexes ad hoc in this area, and it appears that the Redwood Terrace Company developed the subject building in tandem with three virtually identical buildings: the extant apartment building at 1381 Willow Road, which contains the odd-numbered units as counterpart to the subject property's even numbers; and two buildings with identical footprints originally sited to the immediate south and demolished sometime after 1981. By 1963, Castle Realty, a San Francisco Peninsula-based real estate firm, had acquired ownership of the apartment building, with Bob Olden listed as the owner in 1976. The four-unit apartment building experienced a high rate of turnover during the pre-1971 period, with tenants employed in such professions as: maintenance and construction workers, general laborers, machinists, a nurse, and a security guard at the adjacent Hiller Aircraft compound. Since 1987, the non-profit housing organization, MidPen Housing, has owned and managed the Gateway Garden Apartments (1221-1385 Willow Road), which includes the apartment building recorded on this form.[11]

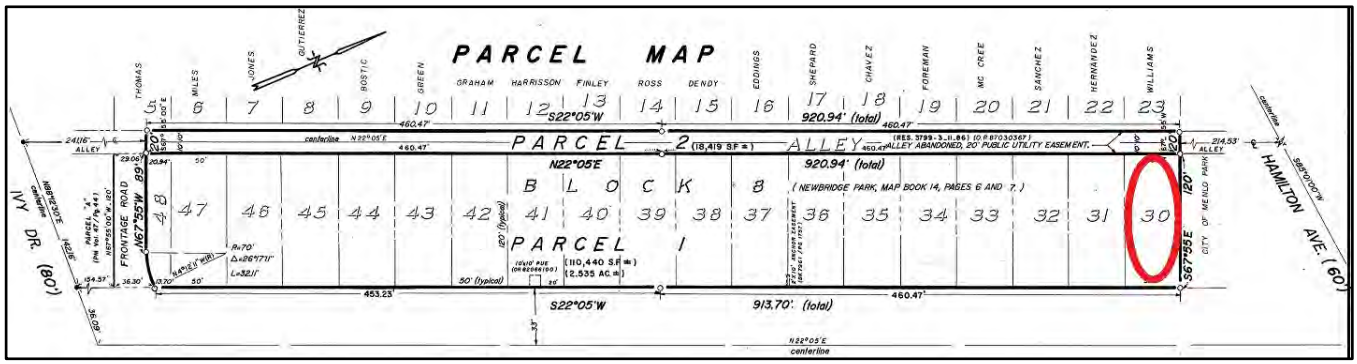


Figure 3. Excerpt of 1987 parcel map, with approximate location of subject property circled in red. Annotation by JRP.[12]

Evaluation

This property does not have important associations with significant historic events, patterns, or trends of development (NRHP Criterion A / CRHR Criterion 1). This multi-family residential property was developed in 1953 during a period of general expansion for the city of Menlo Park and while generally associated with this trend, 1385 Willow Road did not play a demonstrably important role in the post-World War II growth of the city. Additionally, the building does not have important associations with any other known local historic contexts or themes explored within this document, or any state or national historic contexts. Therefore, the property does not meet NRHP Criterion A / CRHR Criterion 1.

[11] Menlo Park, Office of the Building Inspector, Job Record: Permit No. A-2927 (1 May 1953), Menlo Park Community Development Department, Menlo Park, California (MPCDD); "South San Francisco – Cash Out of Trade," advertisement, *San Francisco Examiner*, 25 Jul 1948, page 14; "318 Reasons Why You Get More Selection of Homes for Sale in The Examiner Want Ads!" advertisement, *San Francisco Examiner*, 18 Jan 1953, page 7; "Roseville Building Permits," *Roseville Press-Tribune*, 12 Feb 1962, page 1; R.L. Polk & Co., *Polk's Menlo Park City Directory*, various years 1957-1978 (Ancestry.com); Western Aerial Photos, flight GS-VEZR (1980-1981), for USGS, UCSB Davidson Library; Menlo Park, Office of the Building Inspector, Job Record: Permit No. A-8494 (15 Mar 1963), MPCDD; Building Permit No. A-14765 (17 May 1976), MPCDD; Menlo Park Building Department, Record BLD2020-03328-DEF001 (2020), https://aca-prod.accela.com/MENLOPARK/Cap/CapDetail.aspx?Module=Building&TabName=Building&capID1=20CAP&capID2=00000&capID3=003AQ&agencyCode=MENLOPARK&IsToShowInspection= (accessed May 2021); MidPen Housing, "About MidPen" (2020), https://www.midpen-housing.org/about-midpen/ (accessed May 2021); Apartments.com, "The Gateway Garden Apartments" (2021), https://www.apartments.com/the-gateway-garden-apartments-menlo-park-ca/hbh2vt3/ (accessed May 2021).

[12] "Parcel Map," Book 59, page 17, filed 29 Jan 1987, San Mateo County Assessor.

The building at 1385 Willow Road is not significant for an association with the lives of persons important to history (NRHP Criterion B/CRHR Criterion 2). It does not appear that any individual associated with this muli-unit residence made demonstrably important contributions to history at the local, state, or national level.

Under NRHP Criterion C / CRHR Criterion 3, this apartment building is not significant as an important example of a type, period, or method of construction. The building is a modest example of the Ranch style that grew in popularity from the 1940s through the 1960s. The style is characterized by a single-story, sprawling rectilinear plan with a wide façade, and a broad, low- to medium-pitched roof. Other common elements include sliding windows and stucco cladding.[13] The building on the study parcel is an unremarkable example of the style and does not embody enough of the distinctive characteristics of the type necessary for significance under these criteria. The apartment building also lacks high artistic value and is not the important work of a master architect or builder.

Under NRHP Criterion D / CRHR Criterion 4, this property is not a significant or likely source of important information about historic construction materials or technologies that otherwise would not be available through documentary evidence.

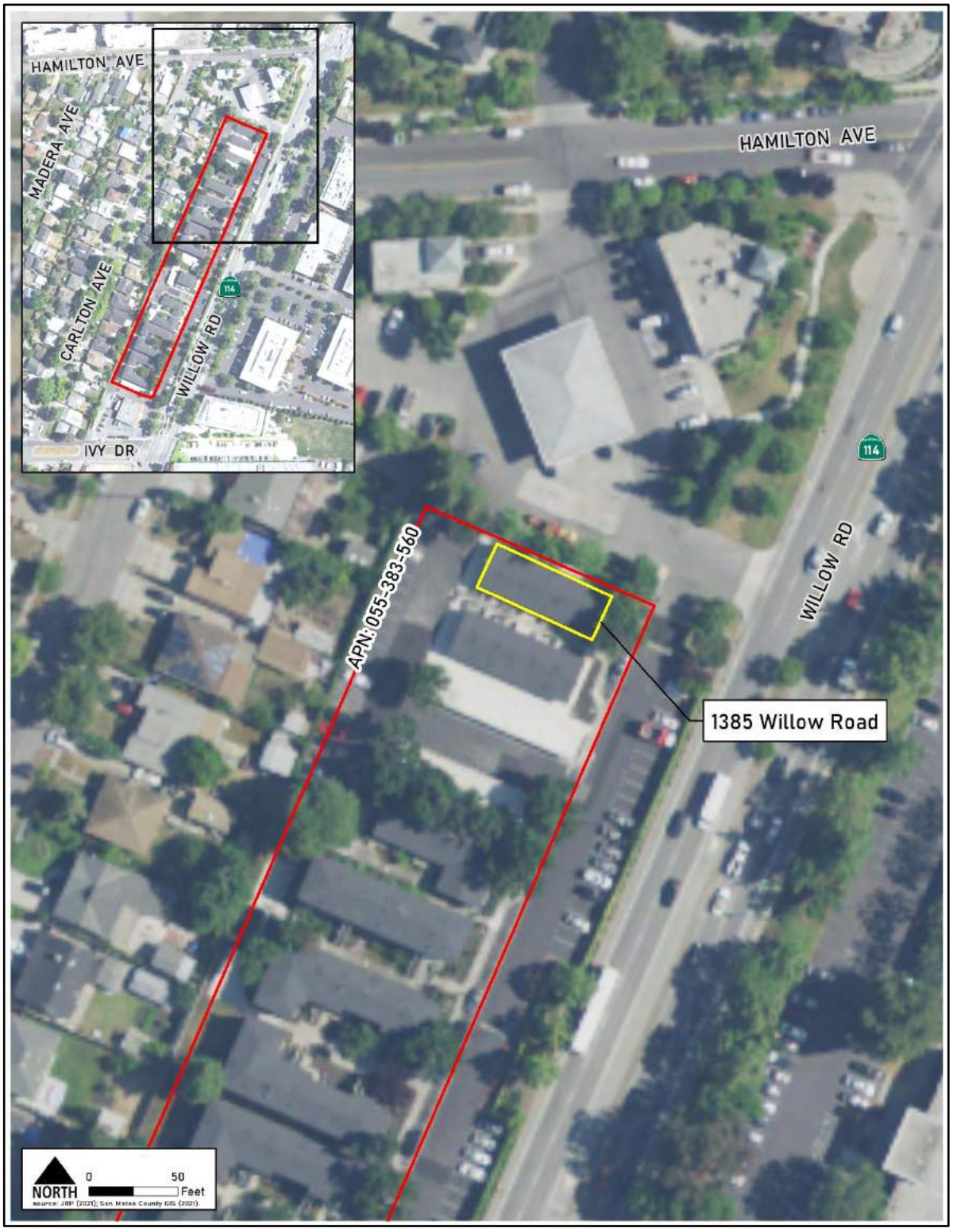
Aside from the installation of replacement vinyl window, the subject property retains overall historic integrity; however, it lacks historical significance and does not meet the criteria necessary for eligibility for listing in either the NRHP or CRHR.

Photographs (continued):

Photograph 2: View of adjacent building 1381 Willow Road (left), with 1385 Willow Road obscured by storage container, at right; camera facing northwest, June 2, 2021.

[13] Virginia McAlester and Lee McAlester, A Field Guide to American Houses (New York: Knopf, 2005), 479.

Sketch Map:


HAMILTON AVE
MADERA AVE
CARLTON AVE
WILLOW RD
IVY DR
114
HAMILTON AVE
114
WILLOW RD
APN: 055-383-560
1385 Willow Road
NORTH
0
50
Feet

State of California – The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
PRIMARY RECORD

Primary # _____
HRI # _____
Trinomial _____
NRHP Status Code 6Z
Other Listings _____
Review Code _____ Reviewer _____ Date _____

***Resource Name or #** (Assigned by recorder): 1396 Carlton Avenue

P1. Other Identifier: 1396 Carlton Avenue

***P2. Location:** ☐ **Not for Publication** ☒ **Unrestricted**

***a. County:** San Mateo

and (P2b and P2c or P2d. Attach a Location Map as necessary.)

***b. USGS 7.5' Quad:** Palo Alto **Date:** 1961 (photorevised 1968 and 1973) **T:**5S; **R:**3W; **Sec:**__; Mount Diablo Meridian

c. Address: 1396 Carlton Avenue City: Menlo Park Zip: 94025

d. UTM: (give more than one for large and/or linear resources) Zone: _____; _____mE/ _____mN

e. Other Locational Data: (e.g., parcel #, directions to resource, elevation, etc., as appropriate)

Assessor Parcel Number (APN): 055-395-560

***P3a. Description:** (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries)

This form records a 0.206-acre parcel located on the east side of Carlton Avenue south of Hamilton Avenue in the Belle Haven neighborhood of the city of Menlo Park. The parcel contains a 960-square-foot, single-story Ranch Bungalow with attached garage, an approximately 230-square-foot rear utility shed, a metal-frame shade shelter, and minimal landscape / hardscape features. This residence has a generally rectangular footprint, stucco cladding, and a medium-pitched, side-gable roof with composition shingles, narrow closed eaves along the front (west) façade, and flush eaves in the north- and southside gable peaks (**Photograph 1**). A stucco-clad chimney rises through the roof the south end of the main (west) slope. The main (west) entrance is located within an inset porch with a horizontal wood railing or balustrade and gate. The entry features a replacement wood panel door with a fanlight in the top panel and narrow vertical sidelight (**Photograph 2**). At the south end of the house is the attached single-car garage with a replacement metal roll-up door. Fenestration consists of replacement, sliding, vinyl windows with false muntins. (See Continuation Sheet.)

***P3b. Resource Attributes:** (List attributes and codes) HP2 – Single-family property

***P4. Resources Present:** ☒ Building ☐ Structure ☐ Object ☐ Site ☐ District ☐ Element of District ☐ Other (Isolates, etc.)

Photograph 1

P5b. Description of Photo: (View, date, accession#) **Photograph 1.** 1396 Carlton Avenue; camera facing east / northeast, June 2, 2021.

***P6. Date Constructed/Age and Sources:**
☒ Historic ☐ Prehistoric ☐ Both
1952 (San Mateo County Assessor)

***P7. Owner and Address:**
Yang Tzjeng Hsu Yaping
1396 Carlton Ave
Menlo Park, CA 94025

***P8. Recorded by:** (Name, affiliation, address)
Samuel Skow & Andrew Young
JRP Historical Consulting, LLC
2850 Spafford Street
Davis, CA 95618

***P9. Date Recorded:** June 2, 2021

***P10. Survey Type:** (Describe)
Intensive

***P11. Report Citation:** (Cite survey report and other sources, or enter "none.") None.

***Attachments:** ☐ None ☐ Location Map ☐ Sketch Map ☒ Continuation Sheet ☒ Building, Structure, and Object Record ☐ Archaeological Record ☐ District Record ☐ Linear Feature Record ☐ Milling Station Record ☐ Rock Art Record ☐ Artifact Record ☐ Photograph Record ☐ Other (list) _____

B1. Historic Name: none

B2. Common Name: none

B3. Original Use: Residential B4. Present Use: Residential

***B5. Architectural Style:** Ranch Bungalow

***B6. Construction History**: (Construction date, alteration, and date of alterations) **Residence:** built 1952, replacement windows and front door installed pre-2007, front-porch railing erected ca. 2012; **Outbuilding:** built between 1991-1998; **Shade Structure:** erected / added to parcel ca. 2003; **Grounds:** parcel reconfigured and masonry wall erected 1987, driveway extended and portions of front (west) and rear (east) yards paved with concrete pre-2003, concrete-block perimeter wall on southern boundary replaced with vertical wood fencing ca. 2018, concrete-block and horizontal wood fencing erected along western parcel boundary ca. 2020.

***B7. Moved?** ☒ **No** ☐ **Yes** ☐ **Unknown** **Date:** _____ **Original Location:** _____

***B8. Related Features:** _____

B9. Architect: unknown b. Builder: Moore & Tahaney

***B10. Significance: Theme:** n/a **Area:** n/a

Period of Significance: n/a **Property Type:** n/a **Applicable Criteria:** n/a

(Discuss importance in terms of historical or architectural context as defined by theme, period, and geographic scope. Also address integrity.)

The residence at 1396 Carlton Avenue does not meet the criteria for listing in the National Register of Historic Places (NRHP) or the California Register of Historical Resources (CRHR) because it is not historically significant. This property was also evaluated in accordance with Section 15064.5(a)(2)-(3) of the CEQA Guidelines, using the criteria outlined in Section 5024.1 of the California Public Resources Code and it is not an historical resource for the purposes of the California Environmental Quality Act (CEQA). (See Continuation Sheet.)

B11. Additional Resource Attributes: (List attributes and codes) ____

***B12. References:** Alan Hynding, *From Frontier to Suburb: The Story of the San Mateo Peninsula* (Belmont, CA: Star Publishing Company, 1982); R. L. Polk & Co. *Polk's Menlo Park City Directory*, various years 1957-1978, accessed via Ancestry.com; San Mateo County Assessor records; see also footnotes.

B13. Remarks:

***B14. Evaluator:** Samuel Skow

***Date of Evaluation:** June 2021

(This space reserved for official comments.)

(Sketch Map with north arrow required.)

P3a. Description (continued):

Sited to the rear (east) and side (north) of the residence are a modern outbuilding and modern shade structure, respectively. They are not visible from the public right-of-way on Carlton Avenue, but are evident in aerial satellite imaging.

The parcel is framed by concrete-block and horizontal and vertical wood fencing. The front features a semicircular grass lawn framed by a concrete driveway and brick walkway (**Photograph 3**). The rear yard is divided between a rectangular grass lawn and a concrete patio.

B10. Significance (continued):

Historic Context

The residence recorded on this form was constructed in 1952 in north Menlo Park, a city along the San Francisco Bay in southeast San Mateo County. Since its initial construction, the building has continued to function as a single-family residential property. The parcel is located on land once within the former 35,200-acre *Rancho de las Pulgas*, which was granted to Luis Arguello—the first Mexican governor of California—in 1835. Settlement of the area was slow through the mid nineteenth century, and most of the acreage was devoted to agricultural uses. Landowners and their tenant farmers used the nearby port at Ravenswood Slough (established in 1849) to ship products to market. As the importance of the Ravenswood port and its surrounding settlement waned in the 1860s, the rancho was divided and sold to various investors and agriculturalists, including Robert E. Doyle and Charles C. Bowman. Doyle and Bowman acquired many former rancho parcels, including Tract No. 1 that stretched along the bay between what is now Marsh Road and Willow Road. This more than 1,770-acre tract included the study area near Hamilton Avenue and Willow Road. Doyle held the tract for several more years, but gradually further subdivided and sold portions of it.[1]

James P. Rynder, a banker based in Eureka, California, acquired some of Doyle's acreage in the 1870s, and by 1894 had amassed a 400-acre portion that was bounded by the salt marshes on the north, Bay Road on the south, and Willow Road on the east. Rynder never occupied this land and most likely rented it for grain and forage farming. His son and one of his two daughters, George and Ida, inherited the tract when their father died in 1910. George Y. Henderson and Ida Henderson Sevier appear to have continued renting it as farmland for about 15 years before subdividing much of the eastern half of the parcel to create Newbridge Park—the location of the subject property—and selling the new residential tract to a real estate sales company (**Figure 1**). The subdivision offered small lots on a grid of streets located south of the Dumbarton Cutoff rail line and straddling Willow Road a layout designed to take advantage of the new bay crossing for vehicles, the Dumbarton Bridge.[2] Sales were very slow despite repeated efforts to market the lots throughout the greater San Francisco Bay Area. Although the first buildings at the southwest corner of Willow Road and Hamilton Avenue (just north of the subject property) appeared not long after the subdivision map was filed, Newbridge Park and the surrounding lands remained rural and agricultural through the 1940s, even though the residential streets were laid out. Very few lots sold during the great depression, and it was not until after World War II that most of the area—including that residential block containing the subject property—was densely developed.[3]

The end of the Second World War brought rapid suburban expansion to the San Francisco Peninsula, as it did to the rest of the country, along with Cold War-related development and the introduction of the high-tech industry. Menlo Park's population grew tenfold between 1930 and 1970 as suburban tracts spread in the areas around downtown. The city quickly annexed many

[1] Alan Hynding, *From Frontier to Suburb: The Story of the San Mateo Peninsula* (Belmont, California: Star Publishing, 1982), 30, 36, 37, 133-134; B.F. Alley, *History of San Mateo County, California* (San Francisco: B.F. Alley, 1883), 211.
[2] Hynding, *From Frontier to Suburb*, 133-136; Werner C. Foss, Jr., "The History of Ravenswood," 23, San Mateo Junior College, San Mateo County Historical Museum; "Tracts No. 1 and No. 2," Map Book 1, page 8, filed 14 Nov 1863, San Mateo County Assessor; Davenport Bromfield, *Official Map of San Mateo County, California* (San Francisco: Schmidt Label & Lith. Co., 1894); "Newbridge Park," subdivision map, Map Book 14, pages 6-7, filed 10 Jun 1926, San Mateo County Assessor; "The Bay is Bridged at Newbridge Park," advertisement, *San Francisco Examiner*, 17 Jul 1926, page 8.
[3] Fairchild Aerial Surveys, for Redwood City, Flight C-1025, June 1930, UCSB Davidson Library; Fairchild Aerial Surveys, for Palo Alto City, Flight C-7065, April 1941, UCSB Davidson Library.

of these new residential areas, expanding north and east into the Ravenswood district. In 1949, the neighborhoods of Belle Haven and Newbridge Park, west of Willow Road and north of Bay Road, were incorporated into Menlo Park, including the lot for the subject property.[4]

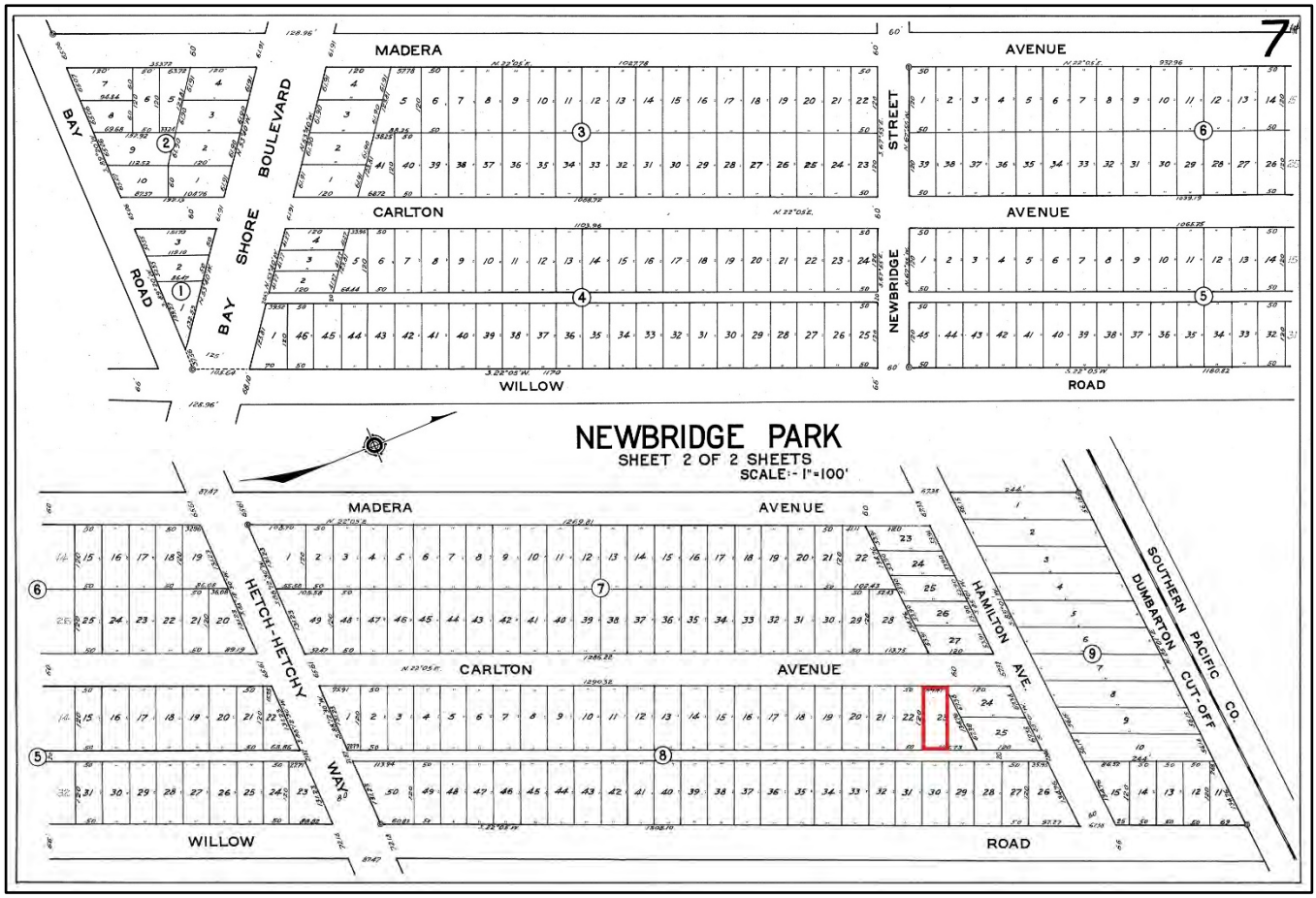


Figure 1. 1926 Newbridge Park subdivision map, approximate location of subject property outlined in red.[5]

The parcels west of Willow Road, on either side of Hamilton Avenue, were also developed in the mid twentieth century, but were commercial and residential in nature.[6] After the first commercial buildings appeared at the southwest corner, the other Newbridge Park parcels on Hamilton and Willow Road started to develop as well, and by the late 1940s and early 1950s a few small residences and a few roadside commercial buildings appeared in aerial photographs. Early in 1956, real estate agents Hare, Brewer & Kelly advertised property for sale in Menlo Park, including a "drive-in commercial corner opposite Hiller Helicopter plant, Willow Road, can be used for industry."[7]

Commercial and residential buildings dominated the development of the area through the rest of the twentieth century, including a row of apartment buildings along the west side of Willow Road in the 1950s and 1960s. In addition to a market,

[4] "Bellehaven to Join Menlo Pk," *San Mateo Times*, 15 Jan 1949, page 2; Hynding, *From Frontier to Suburb*, 296.
[5] "Newbridge Park," page 7, San Mateo County Assessor.
[6] Charmayne Kreuz, *A Tradition of New Horizons: The Story of Menlo Park Commemorating Its 1874 Incorporation* (Menlo Park, California: City of Menlo Park, 1974), 53-54; Michael Svanevik and Shirley Burgett, *Menlo Park, California: Beyond the Gate* (San Francisco: Custom & Limited Editions, 2000), 153.
[7] Aero Services Corporation, Santa Clara County, flight CIV-1956, for USDA, Agricultural Stabilization and Conservation Svc, 1956, UCSB Davidson Library; Aero Services Corporation, Santa Clara County, flight DDB-1956, for USDA, Commodity Stabilization Svc, 1956, UCSB Davidson Library; "Menlo Park," real estate advertisement, *San Francisco Examiner*, 23 Feb 1956, page 36.

restaurant, and bakery, a contractor's yard was among the businesses located on Willow Road near Hamilton Avenue in the 1960s and 1970s. The single-family homes—including the subject property—faced Hamilton Avenue or Carlton Avenue, the street running parallel to Willow Road one block west. A youth center and a church appeared north of Hamilton Avenue in the 1970s as well.[8]

Moore and Tahaney, presumably a local development firm, developed the property recorded on this form in 1952 on Lot 23, Block 8 of the Newbridge Park subdivision. As originally built, the subject property contained the Ranch Bungalow with attached garage on a roughly 0.24-acre, trapezoidal-shaped lot. The parcel attained its current configuration through subdivision in 1987 (**Figure 2** and **Figure 3**). For the first roughly 20 years of its history, numerous short-term occupants were listed at the address, indicating that it may have functioned as a rental property for at least part of this period. The earliest recorded residents were Harold W. Bryan, his wife Laverne, and at least two of their children by 1957. Harold Bryan was born in Oregon, raised in the San Francisco Bay Area, and worked as a carpenter for Schirmer Contractors, a local general contracting firm owned by Arthur Shirmer. Laverne Bryan was as a housewife. The Bryans remained at the subject property through about 1960, after which residents changed at least every two years or so. By 1971, Charlene Williams, a dietician at Stanford Hospital, was listed at the property, and she remained through 1978, and a relative—Melvie Lee Williams—retained ownership until sometime prior to 1987. The current owners and occupants acquired the property in 2012.[9]

Figure 2. Excerpt of 1956 aerial photograph, with subject property circled in red. Note the original trapezoidal lot configuration.[10]

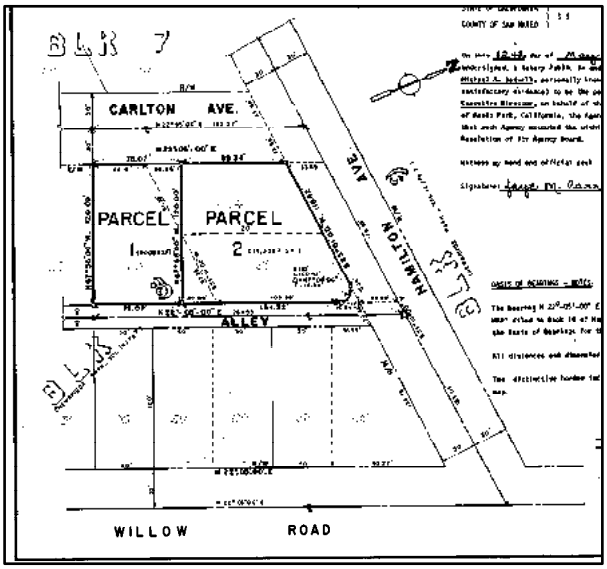


Figure 3. Excerpt of 1987 map; subject property is "Parcel 1."[11]

[8] Cartwright Aerial Surveys, flight CAS-65-130, prepared for California Division of Highways, 1965, UCSB Davidson Library; R.L. Polk & Co., *Polk's Menlo Park City Directory*, various years 1961-1978, accessed via Ancestry.com; Cartwright Aerial Surveys, flight CAS-2310, Santa Clara County, May 1968, UCSB Davidson Library.

[9] Menlo Park, Office of the Building Inspector, Job Record: Permit No. A-2020 (18 Oct 1951), Menlo Park Community Development Department, Menlo Park, California (MPCDD); San Mateo County Assessor, property information for APN 055-395-060, accessed via ParcelQuest.com; "Newbridge Park," page 7, San Mateo County Assessor; "Parcel Map," Book 59, page 52, filed 29 Jan 1987, San Mateo County Assessor; R.L. Polk & Co., *Polk's Menlo Park City Directory*, various years 1957-1978 (Ancestry.com); "New Arrivals," *San Mateo Times*, 18 Apr 1946, page 6; "Births," *San Mateo Times*, 20 Jan 1959, page 10; "Remembrances," *The Sacramento Bee*, 21 Jan 2009, page B4; Menlo Park, Office of the Building Inspector, Job Record: Permit No. A-8634 (10 Jun 1963), MPCDD.

[10] Aero Services Corporation, Santa Clara County, flight CIV-1956, for USDA, Agricultural Stabilization and Conservation Svc, 1956, UCSB Davidson Library.

[11] Note that the subject parcel was resurveyed and contains most of the original Lot 23 and a portion of Lot 24, Block 8, from the original subdivision (see Figure 1). "Parcel Map," Book 59, page 52, filed 29 Jan 1987, San Mateo County Assessor.

Evaluation

This property does not have important associations with significant historic events, patterns, or trends of development at the local, state, or national level (NRHP Criterion A / CRHR Criterion 1). This residential property was developed in 1952 during a period of general expansion for the city of Menlo Park. While an example of this trend, 1396 Carlton Avenue did not play a demonstrably important role in the post-World War II growth of the city. Additionally, it does not have important associations with any other known local historic contexts or themes explored within this document, or any state or national historic contexts. Therefore, the property does not meet NRHP Criterion A / CRHR Criterion 1.

This property is not significant for an association with the lives of persons important to history (NRHP Criterion B/CRHR Criterion 2). It does not appear that any individual associated with the development, ownership, use, or occupancy of this residence made demonstrably important contributions to history at the local, state, or national level. The achievements of Howard and Laverne Bryan, Charlene Williams, and any other recorded occupant do not elevate them to the level of a person important to history.

Under NRHP Criterion C / CRHR Criterion 3, this residence is not significant as an important example of a type, period, or method of construction. The main building on this property is a Ranch Bungalow, a style that grew in popularity from the 1940s through the 1960s. The style is characterized by a single-story, compact rectilinear plan with a wide façade, and a broad, low- to medium-pitched roof. Other common elements include stucco cladding.[12] The building on the study parcel is a modest and typical example of the style and does not embody enough of the distinctive characteristics of the type necessary for significance under these criteria. The house also lacks high artistic value and is not the important work of a master architect or builder.

Under NRHP Criterion D / CRHR Criterion 4, this property is not a significant or likely source of important information about historic construction materials or technologies that otherwise would not be available through documentary evidence.

In addition to lacking historical significance and not meeting the criteria necessary for eligibility for listing in either the NRHP or CRHR, the replacement of all visible windows and doors, the reconfiguration of the parcel, and the addition of non-original landscape / hardscape features have changed the building relative to its historic-era appearance, thus diminishing its historic integrity.

[12] Virginia McAlester and Lee McAlester, *A Field Guide to American Houses* (New York: Knopf, 2005), 479.

Photographs (continued):

Photograph 2: Detail view of main (west) entrance of residence at 1396 Carlton Avenue; camera facing southeast, June 2, 2021.

Photograph 3: Alternate view of 1396 Carlton Avenue, showing north end of driveway; camera facing southeast, June 2, 2021.

P1. Other Identifier: Dumbarton Cutoff

*P2 e. Other Locational Data: The short segment of the Dumbarton Cutoff railroad line (MR 21a) in the APE is in Redwood City just south of the SR 84 Woodside Freeway Overpass where the Dumbarton Cutoff splits from the mainline at railroad M.P. 26.25.

***P3a. Description:** Only a short segment of the westernmost end of the Dumbarton Cutoff line is in the APE for the project listed in P11. This segment is bordered by private property, far from the public right-of-way, and obscured by fencing, conditions that made it difficult to view and photograph during field survey (**Photograph 1**). The resource at this location is a single track standard gauge railroad that appears to have wood ties and stone ballast, which was confirmed using current aerial photography. The railroad bed is roughly level with the surrounding flat terrain. This resource has been field checked and has not been altered since its last recordation (see attached previous documentation and B10).

***P3b. Resource Attributes:** HP11—Engineering Structure
***P6. Date Constructed/Age:** 1907–1910
***P8. Recorded by:** Heather Miller and Samuel Skow, JRP Historical Consulting, LLC, 2850 Spafford Street, Davis, CA 95618; January 25, 2017

***P11. Report Citation:** JRP Historical Consulting, LLC, "California High Speed Rail Authority San Francisco to San Jose Project Section Historical Architectural Survey Report," 2019.

***B10. Significance:**

John W. Snyder previously recorded the Dumbarton Cutoff (MR 21) in 1996 during a survey and evaluation that identified the Dumbarton Cutoff Linear Historic District as a National Register of Historic Places (NRHP)-eligible resource. Snyder defined the district contributors as the Dumbarton Cutoff railroad line and two bridges along the line: the Dumbarton Bridge and Newark Slough Bridge. Southern Pacific built the Dumbarton Cutoff between 1907 and 1910 as a 16.4-mile route to provide a shortcut between the mainline on the San Francisco Peninsula and the SPRR routes on the east side of San Francisco Bay. The APE for this project intersects only a very short segment of the westernmost end of the Dumbarton Cutoff line. Snyder concluded that the Dumbarton Cutoff Linear Historic District appeared eligible for the NRHP under Criterion A, B, and C, but the Dumbarton Cutoff line was only eligible as a contributor under Criterion A and B for its important association with "system-wide improvements to the Southern Pacific" in the early 20th century and "national defense efforts during World War I and World War II" and for its important association with E.B. Harriman, the president of SPRR who initiated the construction of the Dumbarton Cutoff. Snyder identified the period of significance for the district as from 1909, when the earliest contributor was completed, to 1945, presumably for the end of World War II (Snyder 1996). The California Register of Historical Resources (CRHR) had not been established at the time of Snyder's study.

In 2012, JRP prepared an update DPR 523 form for the Dumbarton Cutoff Linear Historic District and agreed with Snyder's conclusions. JRP also added an underpass and two culverts as contributors to the district and provided evaluations under each of the CRHR Criterion. It appears that the conclusions reached by Snyder in 1996 and JRP in 2012 have not received concurrence from the State Historic Preservation Officer (Snyder 1996; JRP 2012). The present study agrees with the previous conclusions that the Dumbarton Cutoff railroad line is eligible under NRHP Criterion A and B/CRHR Criterion 1 and 2 as a contributor to the Dumbarton Cutoff Linear Historic District. The previous studies do not explicitly state the character-defining features of the Dumbarton Cutoff line, but these are its alignment, location, and all rails, ties, ballast, and signal structures dating to the period of significance. The historic property boundaries are the footprint of the engineering structure within its alignment from its split at the mainline in Redwood City to the Niles Railroad Depot. The Dumbarton Cutoff line has been evaluated in accordance with Section 106 of the National Historic Preservation Act (NHPA) of 1966 (as amended) (54 U.S.C. 306108) and its implementing regulations (36 CFR Part 800), and Section 15064.5(a)(2)-(3) of the CEQA Guidelines, using the criteria outlined in Section 5024.1 of the California Public Resources Code. It is an historic property under Section 106, and an historical resource under CEQA.

***B14. Evaluator:** Steven J. Melvin ***Date of Evaluation:** February 2017

B12. References:

JRP Historical Consulting, LLC. 2012. "Historic Resources Inventory and Evaluation Report, Dumbarton Rail Corridor Project." April.

Snyder, John W. P.S. Preservation Services. 1996. "Request for Determination of Eligibility for Inclusion in the National Register of Historic Places, Southern Pacific Railroad Dumbarton Cutoff, Dumbarton Bridge, and Newark Slough Bridge, Alameda and San Mateo Counties, California." Prepared for the San Mateo County Transportation Agency. December. Northwest Information Center.

Photograph:

Photograph 1: View of Dumbarton Cutoff where it splits from the mainline; camera facing south, January 25, 2017.

State of California – The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
UPDATE SHEET

Primary # _____
HRI # _____
Trinomial _____
NRHP Status Code 3B

*Resource Name or # (Assigned by recorder) Map Reference #11

☐ Continuation ☑ Update

P1. Other Identifier: Southern Pacific Railroad, Dumbarton Cutoff Linear Historic District

P2d. UTM: Redwood Junction at west end of Dumbarton Cutoff: 10 569140 mE / 4148020 mN
West end of Dumbarton Bridge: 10 577450 mE / 4149100 mN; Newark Junction: 10 585260 mE / 4152550 mN
Culvert at University Avenue: 10 057605 mE / 4148432 mN; Henderson Underpass: 10 0573261 mE / 4148139 mN; Newark culvert: 10 0583491 mE / 4152976 mN

***P3a. Description:**

This form updates a 1996 study by John Snyder of the Southern Pacific Railroad, Dumbarton Cutoff. In that study, Snyder inventoried and evaluated on separate DPR forms the Southern Pacific Railroad Dumbarton Cutoff, the Southern Pacific Railroad Dumbarton Bridge and the Newark Slough Bridge. This form is an update to only that portion of the Dumbarton Cutoff that enters the APE for this study, running from Redwood Junction in San Mateo County on the west side of the San Francisco Bay to just before the Niles station in Alameda County on the east side of the Bay. In 1998, a major fire damaged nearly 2000 feet of the western spans of the Dumbarton Bridge. All but the pilings are now gone in that section of the line. Otherwise, the railroad alignment appears as it did when John Snyder recorded it. In addition to the railroad and the two bridges, JRP also recorded two culverts and an underpass. The forms for these resources can be found attached to the HRIER prepared for this project. These resources are: the Henderson Underpass (Map Reference #12) in Menlo Park, the University Avenue / M.P. 30.80 culvert (Map Reference #13) and the Newark culvert (Map Reference #17). The Dumbarton Bridge (Map Reference #14) and Newark Slough Bridge (Map Reference #16) can also be found attached to the HRIER. (See Continuation Sheet.)

***P3b. Resource Attributes:** (List attributes and codes) (HP19) Bridge (HP 11) Engineering Structure

***P11. Report Citation:** (Cite survey report and other sources, or enter "none.") JRP Historical Consulting, LLC, "Historic Resources Inventory and Evaluation Report, Dumbarton Rail Corridor Project," 2012.

***B10: Significance:**

The previous study determined that the cutoff appeared to be eligible for listing in the National Register of Historic Places (NRHP) at the local level of significance in transportation and engineering. Snyder also concluded that the cutoff retained integrity of location, setting, feeling, and association, noting that the trestle replacements from the 1970s constituted a "minor compromise to integrity of design, materials, and workmanship." Under Criterion A, the Dumbarton Cutoff is associated with significant system-wide improvements to the Southern Pacific Railroad, and the economic growth of San Francisco in the first half of the twentieth century. It is also associated with the national defense activities during World War I and World War II. Under Criterion B, the Dumbarton Cutoff is associated with E.H. Harriman, who drove the growth of the Southern Pacific Railroad during the first two decades of the twentieth century. Harriman directed the construction of the bridge. Under Criterion C, Snyder concluded that contributive elements, such as the Dumbarton and Newark Slough Bridges, are representative examples of their type (Harriman Common Standard timber trestle, deck girder, and through truss bridges), period (first decade of the twentieth century), and method of construction. A 1995 fire and a more disastrous 1998 fire damaged the bridge. The 1998 fire destroyed most of the western ballast-deck timber trestle approach spans, comprising 1,766 feet of the bridge. Above water, only partial remains of some of the posts still exist. Other changes to the railroad include replacement rails and ties, as well as the placement of concrete grade-crossings and similar modernizing features. The fire damage appears to compromise the integrity of design, materials and workmanship; however, the bridge retains integrity of location, setting, feeling and association. While the damage to the bridge compromises the integrity, the segment that was destroyed is small enough to have a relatively minor effect on the integrity of the Dumbarton Cutoff as a whole. The modernization of the rails and ties and other mechanical elements of the railroad do not affect the integrity of the railroad route. The route the original railroad took remains the same. (see Continuation Sheet)

***B14. Evaluator:** Rand Herbert & Joseph Freeman ***Date of Evaluation:** June 2008

P3a. Description (continued):

JRP conducted a survey of the railroad alignment at several locations, usually at street crossings but also at underpasses, overpasses, bridges and some culverts. Access was limited to the railroad. The following is a detailed description of each of the recordation sites.

The segment begins in San Mateo County at Redwood Junction near Willow Street, just south of the State Route 84 crossing. Light and heavy industrial buildings surround this railroad wye, however no cultural resources aside from the rail line appear within the APE, which is aligned with the railroad right of way. The railroad line at this point consists of four standard-gauge tracks on the main line and two tracks along the Dumbarton Cutoff. Of the mainline tracks, three appear to be modernized, with concrete ties. On the Dumbarton Cutoff line, the tracks sit on wood ties and rock ballast.

The rail line continues along a slight curve to Middlefield Road, a wide, two-lane road. At this at-grade crossing the APE extends beyond the width of the railroad right-of-way; however the APE does not incorporate any features that are not associated with the rail line. The APE does include two street medians, both of which are inside the railroad right-of-way, as well as part of Middlefield Road, both north and south of the tracks. The surrounding area at this crossing, but outside the APE, is characterized by light and heavy industrial development, with some residential units located south of the crossing. This crossing also designates another railroad wye which connects the cutoff with the main line.

The next crossing along the rail line is at 2nd Street, a two lane road. The APE at this point does not extend beyond the railroad right-of-way, and the crossing is at-grade. Thus, there are no non-railroad features within the APE. This intersection is bordered to the north by residential units and a small parking lot and to the south by industrial buildings and a parking lot for an automobile towing company. The APE includes part of the street north of the tracks. East of this location is the 5th Avenue at-grade crossing, which intersects the two lines of track at this location (**Photograph 1**). As at 2nd Street, the area surrounding this intersection is characterized by residential development to the north and large warehouses to the south. The APE at this intersection does not encroach on any of these properties. The APE includes part of the street north of the rail line.

Marsh Road, the next crossing nearly a mile east of 5th Avenue, is a wide, four-lane road with a center median (**Photograph 2**). A modern office park is located at the northeast corner, while a strip mall is located across Marsh Road. Beyond the strip mall and south of the tracks are residential buildings. The Dumbarton Cutoff crosses over the US 101 on the Henderson Underpass (**Photograph 3**). The highway at this location is eight lanes wide. A variety of development constitutes the surrounding area. Office parks and large industrial-style warehouses are located north of the railroad, while residential development characterizes the area south of the railroad.

Chilco Street, which parallels the rail line to the north for a quarter of a mile, crosses the tracks at grade. The area north of the tracks and east of the freeway is comprised of large industrial warehouses, while residential buildings are located south of the railroad at this location. The APE at this location includes portions of the Chilco Street north and south of the tracks, but it does not include any structures. The area surrounding Willow Road, site of the next crossing, is characterized by modern commercial and industrial buildings. The APE at this location extends north and south of the tracks along Willow Road and parts of Hamilton Avenue. The Menlo Park Station is proposed for this site.

As the railroad nears the western shore of the bay, a culvert carries the railroad tracks over a small unnamed creek/drainage approximately 150 feet west of University Avenue (**Photograph 8**). At the University Avenue crossing, the APE remains within the railroad right-of-way. There are no buildings within the APE or in the close vicinity of the tracks. A residential development is located southeast of the tracks. At this point, the railroad crosses the San Francisco Bay on the Dumbarton Bridge (**Photograph 4**). It then passes through the marsh area before reaching the Newark Slough Bridge (both bridges are discussed in full on separate forms).

Near the Cargill Salt loading facility, the railroad passes over a culvert with a date stamp of 1924. Beyond the Cargill Salt facility, the current project proposes constructing a parking lot near the Willow Street crossing. This site is surrounded by modern construction and vacant lots. To the north the railroad is bordered by industrial warehouses west of Willow Street. South of the tracks an abandoned warehouse and office complex is located at 8787 Enterprise Drive. That building was determined to be ineligible for listing in the NRHP in the accompanying HRIER. Three other properties with all modern buildings are located within the APE near this intersection. Modern residential housing is located east of Willow Street and outside the APE for this project.

At the Spruce Street crossing, the APE remains within the railroad right-of-way. The surrounding area is characterized by residential buildings dating to the 1950s and 1960s. The Ash Street at-grade crossing is surrounded by residential buildings dating to the first decades of the twentieth century. At this intersection, the APE includes part of the street north and south of the railroad right-of-way for proposed road medians. The properties at 37069 Ash Street, 37144 Ash Street, 37115 Ash Street and 7590 Snow Avenue were recorded for this project. These properties were determined ineligible for listing in the NRHP. Past the Ash Street crossing, the railroad makes an S-turn before paralleling Baine Avenue. It crosses Cherry Street; however the APE remains within the railroad right-of-way (**Photograph 5**). It next passes under Newark Boulevard, which is carried over the tracks on the modern Newark Boulevard Overhead, designated by Caltrans as Bridge # 33C0137. This part of Newark is characterized by single- and multiple-family residences. The last crossing before the railroad enters the City of Fremont is at Cedar Boulevard, where the APE remains within the right-of-way.

In Fremont, the tracks cross over Interstate 880 on two through plate girder bridges designated by Caltrans as the East Newark Underpass, Bridge # 33-0262 (**Photograph 6**). While this crossing has been used since the construction of Interstate 880, the bridges were replaced in 1995. The APE for this overpass remains within the right-of-way and includes no historic resources. The area surrounding the overpass consists of single- and multiple-family residences as well as industrial-use warehouses. East of the Interstate 880 crossing, the railroad crosses Blacow Road, where the APE remains within the railroad right-of-way. No historic resources were recorded at this intersection. The surrounding area consists primarily of single-family residential buildings with some commercial and industrial development. The APE remains within the railroad right-of-way as it crosses Dusterberry Way and Maple Street. This area is characterized by a mixture of residential buildings and complexes, light industrial buildings and commercial properties.

Following Maple Street, the railroad tracks cross Fremont Boulevard and enter the Centerville Station (**Photograph 7**). The Centerville Station (Centerville Railroad Depot) is ineligible for listing in the NRHP. The APE extends outside the railroad right-of-way at this location to include improvements to the Centerville Railroad Depot. This part of Fremont Boulevard is generally represented by commercial buildings, many of which date to the late nineteenth or early twentieth century. North of the station and west of Fremont Boulevard, the APE incorporates part of two properties, on which sit three buildings. Among these are the buildings at 3810 and 3850 Bonde Way, which have been previously inventoried and evaluated, and are discussed in more detail below.

The railroad continues northeast to Niles, crossing the Paseo Padre Parkway on a bridge designated by Caltrans as 33C0225. Built in 1975 the Paseo Padre Parkway Underpass is a concrete box beam bridge. The railroad then passes under the Bay Area Rapid Transit (BART) line which is carried on a bridge. At this point, the APE leaves the Dumbarton Cutoff before it enters the Niles Railroad Depot.

B10. Significance (continued):

Southern Pacific Railroad built the Henderson Underpass in 1931 and expanded it from a single span to a double span in 1958 to accommodate the construction of four more lanes of highway.

Research did not indicate when the culvert west of University Avenue was built, but the type of construction and materials used suggest an early construction date in the history of the Southern Pacific Railroad Dumbarton Cutoff. Timber and concrete box culverts were used in early railroad construction. Aerial photographs, dating back to 1948, show a culvert of similar style at this location. The Newark culvert was built by Southern Pacific Railroad in 1924. [1]

These three resources are contributing structures to the historic district. They were all constructed within the period of significance (1909-1945) as defined by John Snyder. These resources were not included in the previous study. These resources are not eligible for listing in the NRHP or CRHR as individual historic properties. JRP conducted a survey of the railroad alignment at several locations, usually at street crossings but also at underpasses, overpasses, bridges and some culverts. Access was limited to the railroad.

[1] Bob Haydon, ed., *Model Railroad Bridges & Trestles: A Reprint from Model Railroader Magazine* (Waukesha, WI: Kalmback Publishing Co., 1992), 36-42. Aerial Photographs, (1946, 1956, 1968, 1980, 1991, 1993, 2000, 2005). Accessed online at: http://www.historicaerials.com, June 6, 2008

Photographs (continued):

Photograph 1. At 5th Avenue in Redwood City, San Mateo County, camera facing west, 6/16/2008.

Photograph 2. At Marsh Road in Redwood City, San Mateo County, camera facing east, 6/16/2008.

Photographs (continued):

Photograph 3. Showing Henderson overpass, San Mateo County, camera facing east, 6/16/2008.

Photograph 4. Dumbarton Bridge over San Francisco Bay, camera facing southwest, 6/16/2008.

Photographs (continued):

Photograph 5. Crossing at Cherry Street in Newark, Alameda County, camera facing northeast, 6/16/2008.

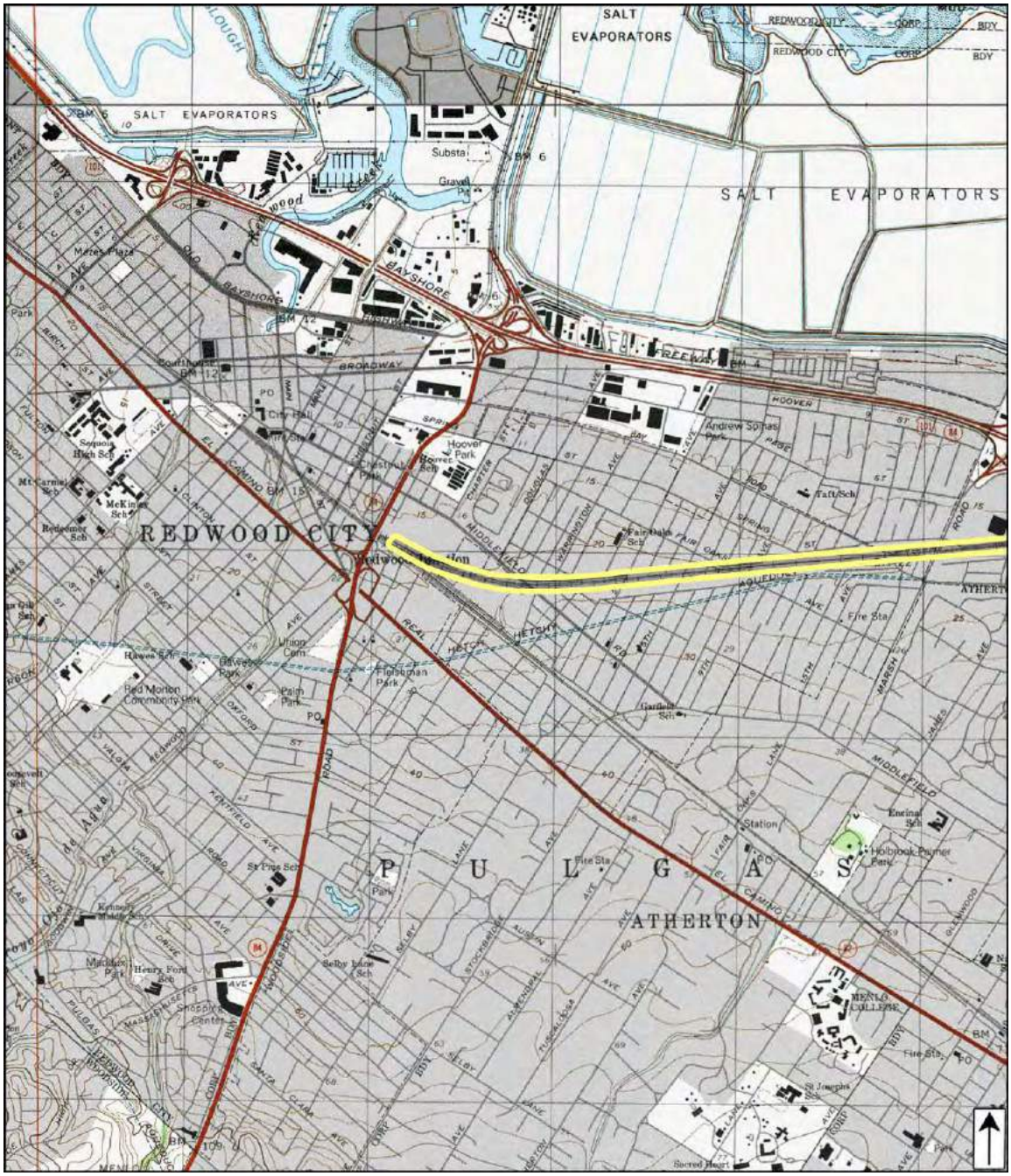
Photograph 6. I-880 Overpass in Fremont, Alameda County, camera facing northeast, 6/16/2008.

Photographs (continued):

Photograph 7. Centerville Station, Fremont, Alameda County, camera facing west, 6/16/2008.

Photograph 8. Showing culvert west of University Avenue, camera facing southwest, 6/16/2008.

Sketch Maps:

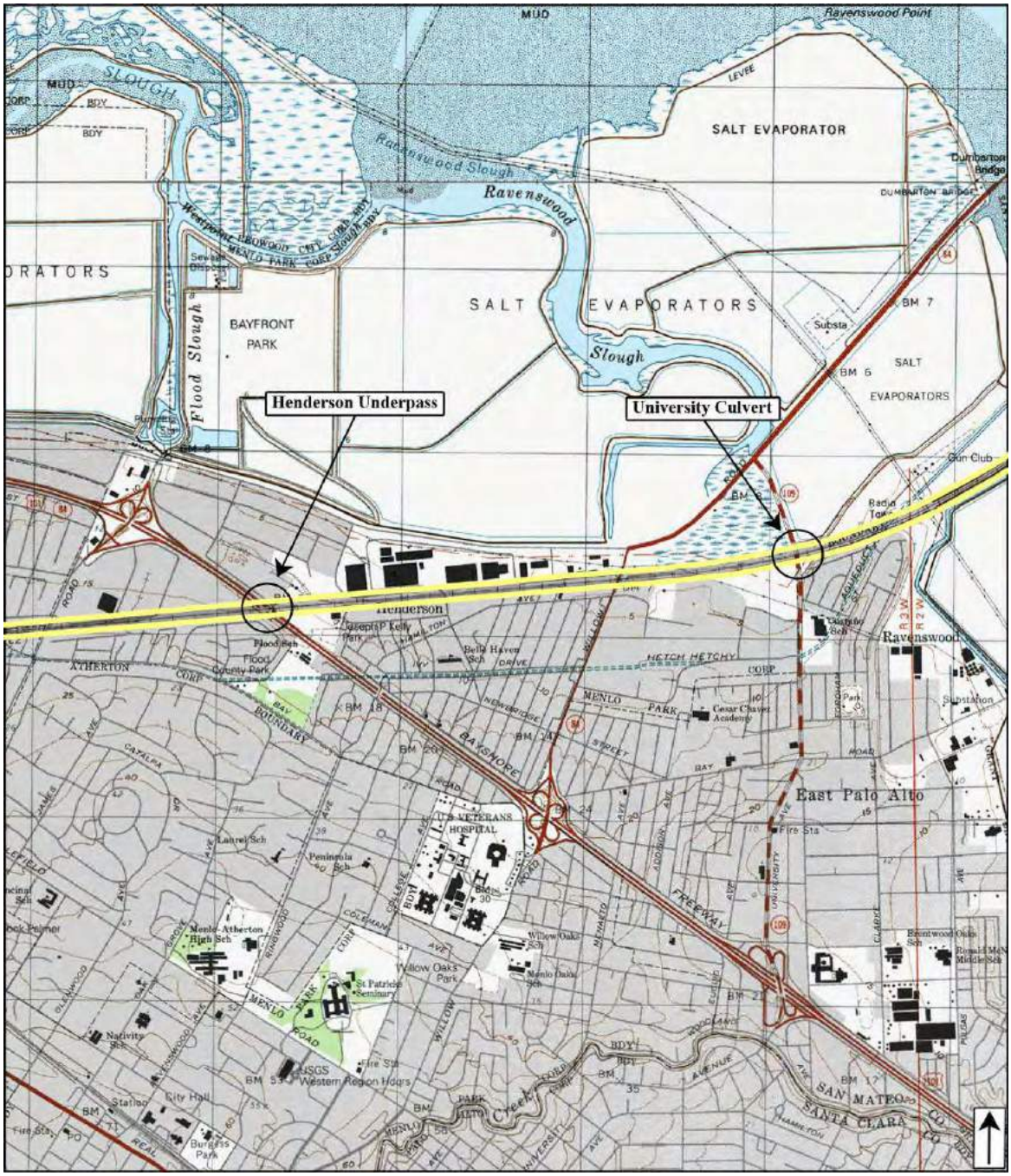


State of California – The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
UPDATE SHEET

Primary # _____
HRI # _____
Trinomial _____
NRHP Status Code 3B

***Resource Name or #** (Assigned by recorder) Map Reference #11

☐ Continuation ☑ Update



State of California – The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
UPDATE SHEET

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HRI # _____
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NRHP Status Code 3B

***Resource Name or #** (Assigned by recorder) Map Reference #11

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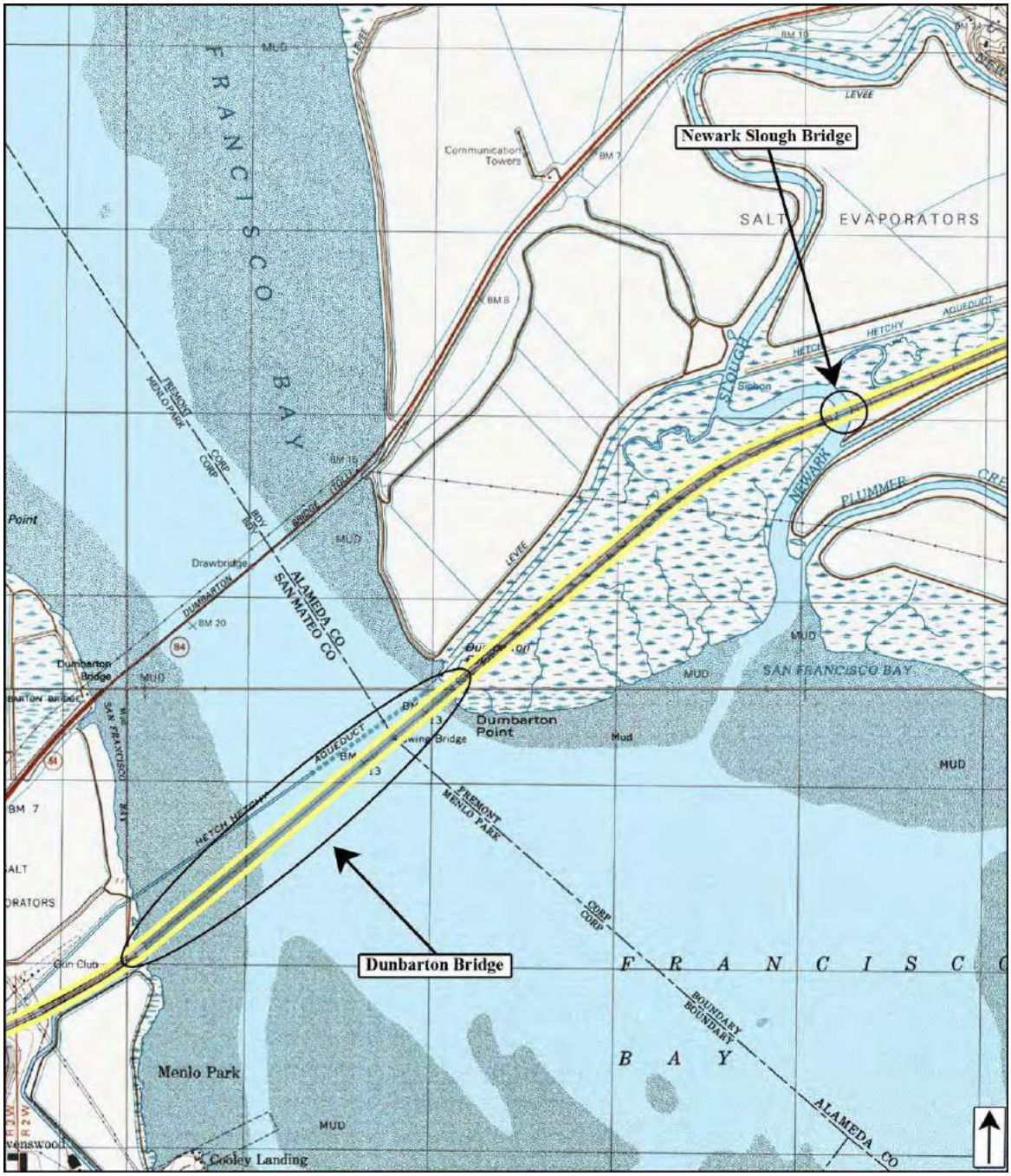

State of California – The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
UPDATE SHEET

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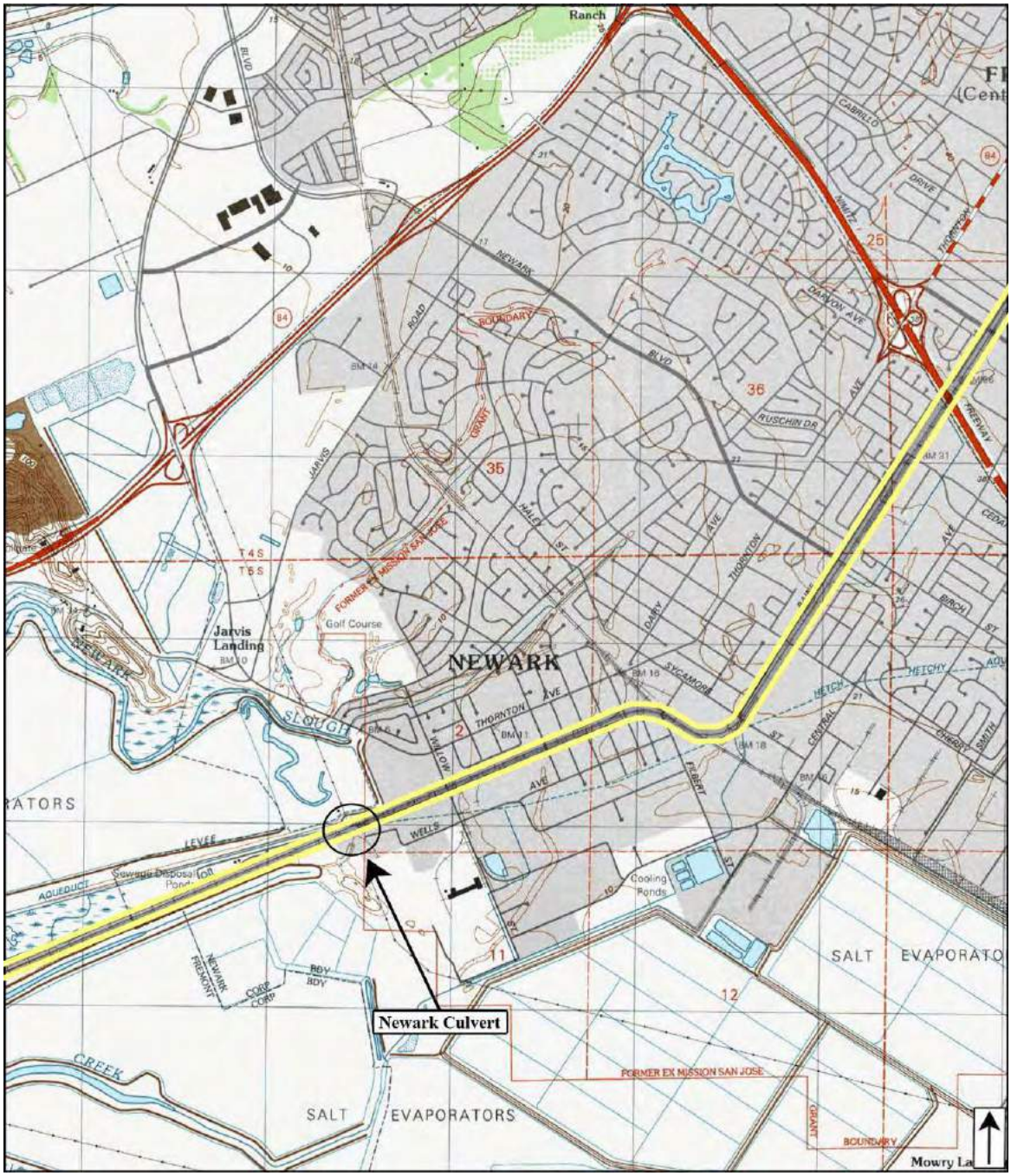
HRI # _____
Trinomial _____
NRHP Status Code 3B

***Resource Name or #** (Assigned by recorder) Map Reference #11

☐ Continuation ☑ Update



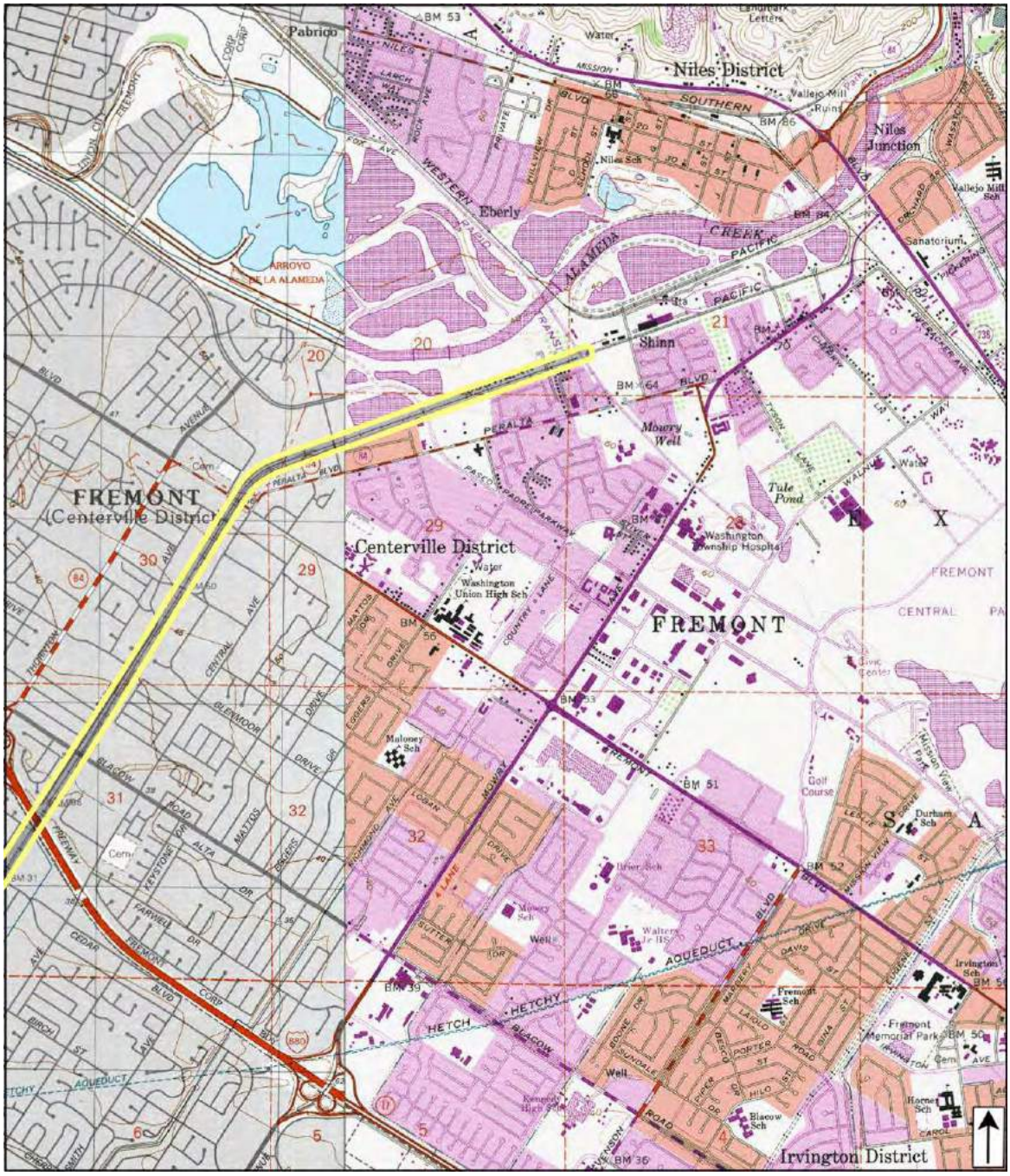
Previous Documentation - NOT FOR REVIEW

State of California – The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
UPDATE SHEET

Primary # _____
HRI # _____
Trinomial _____
NRHP Status Code 3B

***Resource Name or #** (Assigned by recorder) Map Reference #11

☐ Continuation ☑ Update



REQUEST FOR DETERMINATION OF ELIGIBILITY FOR INCLUSION IN THE NATIONAL REGISTER OF HISTORIC PLACES

Southern Pacific Railroad Dumbarton Cutoff [Historic District]
Southern Pacific Railroad Dumbarton Bridge
Southern Pacific Railroad Newark Slough Bridge
Alameda and San Mateo Counties, California

BY

John W. Snyder
P.S. Preservation Services
Sacramento, CA 95819

REQUEST FOR

DETERMINATION OF ELIGIBILITY

FOR INCLUSION IN THE

NATIONAL REGISTER OF HISTORIC PLACES

SOUTHERN PACIFIC RAILROAD DUMBARTON CUTOFF

SOUTHERN PACIFIC RAILROAD DUMBARTON BRIDGE

SOUTHERN PACIFIC RAILROAD NEWARK SLOUGH BRIDGE

Alameda and San Mateo Counties, California

Submitted pursuant to 36 CFR 800.6(e)

U.S. Coast Guard

December 1996

ABSTRACT

This document has been prepared to report on the history, and evaluate the significance of, the Southern Pacific Railroad Dumbarton Cutoff Linear Historic District, which connects Niles in Alameda County, California with Redwood Junction in San Mateo County, California, and traverses the lower reached of San Francisco Bay. In addition, this document also seeks a determination of eligibility of two of the District's contributing features, the Southern Pacific Railroad Dumbarton Bridge, and the Southern Pacific Railroad Newark Slough Bridge. In evaluating the District's and the bridges' significance, this report will satisfy the requirements of 36 CFR 63, allowing a determination as to whether or not the resources meet the eligibility criteria of the National Register of Historic Places. The San Mateo County Transportation Agency (Samtrans), current owner of this rail line, is proposing rehabilitation of the two bridges, contributors to the District. This work will require a permit from the U.S. Coast Guard.

This document concludes that the Southern Pacific Railroad Dumbarton Cutoff Linear Historic District appears to be eligible for inclusion in the National Register of Historic Places, and that the Southern Pacific Railroad Dumbarton Bridge and Southern Pacific Railroad Newark Slough Bridge are contributors to that eligible district. In addition, this document concludes that the Southern Pacific Railroad Dumbarton Bridge is individually eligible for inclusion in the National Register of Historic Places as the first successful bridging of San Francisco Bay.

I. PROPERTY NAME

A. Historic Name: Southern Pacific Railroad Dumbarton Cutoff.

1. Original owner or builder: Southern Pacific Railroad; American Bridge Company.
2. Significant persons or events associated with the District: Edward H. Harriman.
3. Innovative or unusual characteristics of the District: The first successful crossing of San Francisco Bay. The two bridges are the second oldest known movable bridges in California.

B. Common Names: Dumbarton Cutoff; Samtrans Dumbarton Cutoff.

III. LOCATION

The Southern Pacific Railroad Dumbarton Cutoff Linear Historic District generally extends from Niles in southern Alameda County, southwestward to Redwood Junction in southern San Mateo County. The Cutoff was conceived in 1904 to provide a link between the railroad's Sunset Route (San Francisco-New Orleans) and the Ogden (San Francisco-Ogden) and Shasta (San Francisco-Portland) lines, obviating the need for trains to travel as far south as San Jose before turning north again. For the District's and the bridges' UTM references, see the attached forms.

IV. CLASSIFICATION

A. Category: Linear District; bridge.

V. OWNERSHIP: San Mateo County Transportation Agency.

VI. REPRESENTATION IN EXISTING SURVEYS: None.

VII. DESCRIPTION

In brief, the Southern Pacific Railroad Dumbarton Cutoff Linear Historic District is described as a 16.4-mile standard-gauge railroad line, with attendant turnouts, spurs, sidings, signals, culverts, bridges, and other contributive elements. For a more complete description of the line and its history, see the attached forms. While a full survey of the line and all its contributing elements was beyond the scope of this survey, the information developed in the evaluation of the two bridges will allow a finding of eligibility for the District, which is perhaps the most intact Harriman-era Southern Pacific rail line in California.

Dumbarton Bridge: In brief, this is a 1.4-mile long structure, built in 1908-9, crossing the south end of San Francisco Bay. Its elements include timber trestle spans, reinforced concrete trestle spans, steel deck girder spans, steel through Pratt truss spans, and a steel through Pennsylvania (Petit) truss swing span. This bridge, and the nearby Newark Slough Bridge, are the

second oldest movable bridges in California. For a complete description, see the attached forms.

Newark Slough Bridge: Built in 1908-9 across Newark Slough, southwest of Newark, Alameda County, this bridge has an overall length of 817 feet. Its elements include timber trestle spans, steel deck girder spans, and a steel through Baltimore (Petit) truss span. For a complete description, see the attached forms.

VIII. SIGNIFICANCE

A. History: For a complete history of the Southern Pacific Railroad Dumbarton Cutoff, Dumbarton Bridge, and Newark Slough Bridge, see the attached forms.

B. Evaluation: "The National Register of Historic Places is the official Federal list of districts, sites, buildings, structures, and objects significant in American history, architecture, archeology, engineering, and culture." [NPS, Bulletin 16A, p.i] In general, properties must be at least 50 years old to be eligible for listing in the National Register. The National Register defines as district as follows: "A district is a geographically definable area--urban or rural, small or large--possessing a significant concentration, linkage, or continuity of sites, buildings, structures, and/or objects united by past events or aesthetically by plan or physical development." [NPS Bulletin 15]

The National Register uses specific criteria, codified in 36 CFR 60, to assess the significance of these property types. Critical to this assessment are seven points of integrity, set apart from the criteria themselves. These points of integrity--location, design, setting, materials, workmanship, feeling, and association--serve to define the historic authenticity of any given property, through the survival of physical characteristics. According the *National Register Bulletin 16A*, "Not only must a property *resemble* [emphasis added] its historic appearance, but it must also retain physical materials, design features, and aspects of construction dating from the period when it attained significance." [NPS, Bulletin 16A, p.4] Properties that lack these qualities, or

in which these qualities are severely compromised, no longer meet the National Register eligibility criteria.

The Southern Pacific Railroad Dumbarton Cutoff Linear Historic District retains a high degree of integrity of location, design, setting, materials, workmanship, feeling, and association; with the exception of reinforced concrete trestle portions of the Dumbarton Bridge, which must be considered as non-contributors, all elements are virtually unmodified from the period of significance, 1909-1945. The Southern Pacific Railroad Dumbarton Cutoff Linear Historic District appears to meet National Register criteria A, B, and C; the Dumbarton Bridge and Newark Slough Bridge are contributors to the eligible district. In addition, the Dumbarton Bridge appears individually eligible under the three criteria, as the first successful bridging of San Francisco Bay. For a complete discussion of integrity and significance of the District and the bridges, see the attached forms.

IX. BIBLIOGRAPHY

See the attached forms.

X. MAPS AND ACREAGE

A. Map: See the attached forms.

B. Acreage: Unknown.

XI. PHOTOGRAPHS See the attached forms.

XII. INDIVIDUAL COMPILING DOCUMENTATION

John W. Snyder, Co-Principal
P.S. Preservation Services
P.O. Box 191275
Sacramento CA 95819-1275

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

PRIMARY RECORD

HRI #
Trinomial
NRHP Status Code
Other Listings
Review Code ____ Reviewer ____ Date ____

Resource Name or #: (Assigned by recorder) Southern Pacific Railroad Dumbarton Cutoff

P1. **Other Identifier:** Samtrans Dumbarton Cutoff

P2. **Location:** ☐ Not for Publication ☒ Unrestricted a. County Alameda, San Mateo
and (P2b and P2c or P2d. Attach a Location Map as necessary.)

b. USGS 7.5' Quad see continuation Date T ; R ; 1/4 of 1/4 of Sec ; B.M.

c. Address: City Zip

d. UTM: (Give more than one for large and/linear resources) *10* ; *569140* mE/ *4148020* mN

e. Other Locational Data (Enter Parcel #, legal description, directions to resource, elevation, etc., as appropriate)

Crossing San Francisco Bay at Dumbarton Point, linking Alameda and San Mateo counties between Niles and Redwood City. Parcel No.

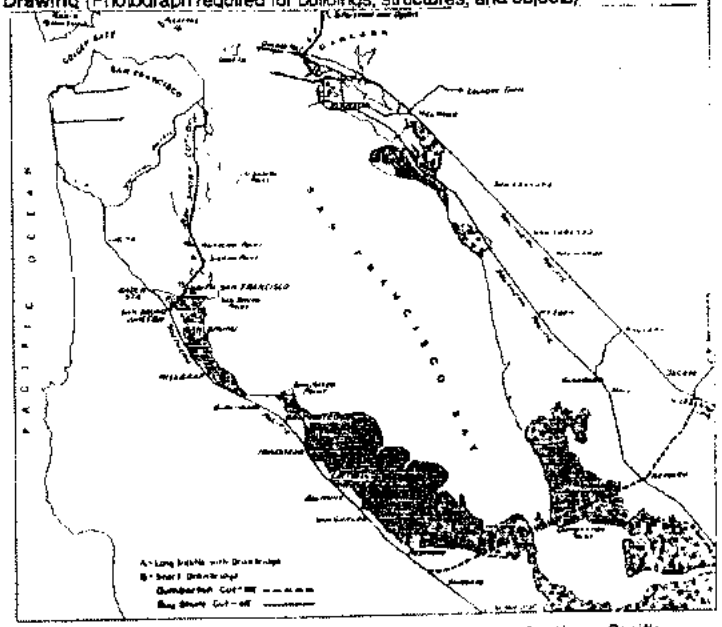
P3. Description (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries)

The Southern Pacific Railroad Dumbarton Cutoff links the railroad's Sunset Route (San Francisco-New Orleans) line with the Ogden (San Francisco-Ogden) and Shasta (San Francisco-Portland) lines, providing a cutoff from the former route that required trains to transit via San Jose. Contributors to this property, and the subject of this survey, are the Southern Pacific Railroad Dumbarton Bridge, located at milepost 31.51, carrying the Dumbarton Cutoff across the south end of San Francisco Bay between Dumbarton Point in Alameda County and East Palo Alto in San Mateo County, and the Newark Slough Bridge, carrying the cutoff over the navigable waters of Newark Slough at milepost 34.53. The Dumbarton Cutoff is 16.4 miles long, connecting the two main lines between Niles, Alameda County, and Redwood Junction, San Mateo County. The cutoff is a single-track rail line with attendant spurs and sidings, turnouts and searchlight-type block and bridge approach signals. It crosses marsh areas on dredged fill, and crosses San Francisco Bay and Newark Slough on through truss swing bridges.

P3b. **Resource Attributes:** (List attributes and codes) HP19 - Bridge

P4. **Resources Present** ☐ Building ☒ Structure ☐ Object ☐ Site ☐ District ☐ Element of District ☐ Other (Isolates, etc.)

. Photograph or Drawing (Photograph required for buildings, structures, and objects)



Map of Bay Shore and Dumbarton Cut-Offs of the Southern Pacific.

P5b. Description of Photo: (View, date, accession #)
See continuation sheets

P6. **Date Constructed/Age and Sources:**
☐ Prehistoric ☒ Historic ☐ Both

1907-1910, research, date plate on bridges

P7. **Owner and Address**
San Mateo County Transportation Agency
1250 San Carlos Avenue
San Carlos, California

P8. **Recorded by:** (Name, affiliation, and address)
John W. Snyder, P.S. Preservation Services
P.O. Box 191275
Sacramento CA 95819-1275

P9. **Date Recorded:** *11/29/96*

P10. **Survey Type:** (Describe)
Intensive - Section 106.

P11. **Report Citation:** (Cite survey report and other sources, or enter "none")
P S Preservation Services, November 1996, Historic Resource Evaluation Report, Southern Pacific Railroad Dumbarton and Newark Slough Bridges, prepared

Attachments ☐ NONE ☒ Continuation Sheet ☐ District Record ☐ Rock Art Record ☐ Other: (List)
☒ Location Map ☐ Building, Structure, and Object Record ☐ Linear Feature Record ☐ Artifact Record
☐ Sketch Map ☐ Archaeological Record ☐ Milling Station Record ☐ Photograph Record

P2b. Quads for this resource are: Niles, 1961, photorevised 1968; Newark, 1959, photorevised 1980; Mountain View, 1991; Palo Alto, 1991. Township and Range varies, from T5S/R3W at Redwood Junction, to T5S/R2W at the Dumbarton Bridge, to T5S/R2W at the Newark Slough Bridge, Newark Junction, and Niles.

P2d. UTM (continued) UTM reference on Primary Record is for Redwood Junction at west end of Dumbarton Cutoff. UTM reference for west end of Dumbarton Bridge is 10-577450-4149100; east end of bridge is 10-579110-41500510. UTM Reference for Newark Slough Bridge is 10-581220-4152020. UTM reference for Newark Junction is 10-585260-4152550. UTM Reference for Niles Junction at east end of Dumbarton Cutoff is 10-591100-4158500.

P3. Description (continued) (Descriptions of the Dumbarton and Newark Slough Bridges can be found on the individual records compiled for those structures.) Rails on the Dumbarton Bridge, while continuous-welded, carry rolling dates of 1944 and 1951. Rails on adjacent fill approaches carry rolling dates of 1923 (siding) and 1939 (main line). Mainline rail east of the Newark Slough Bridge is largely 112-pound rail, rolled in 1935 and 1939. There is a handcar setout platform just east of the east approach spans to the Newark Slough Bridge, on the south side of the mainline.

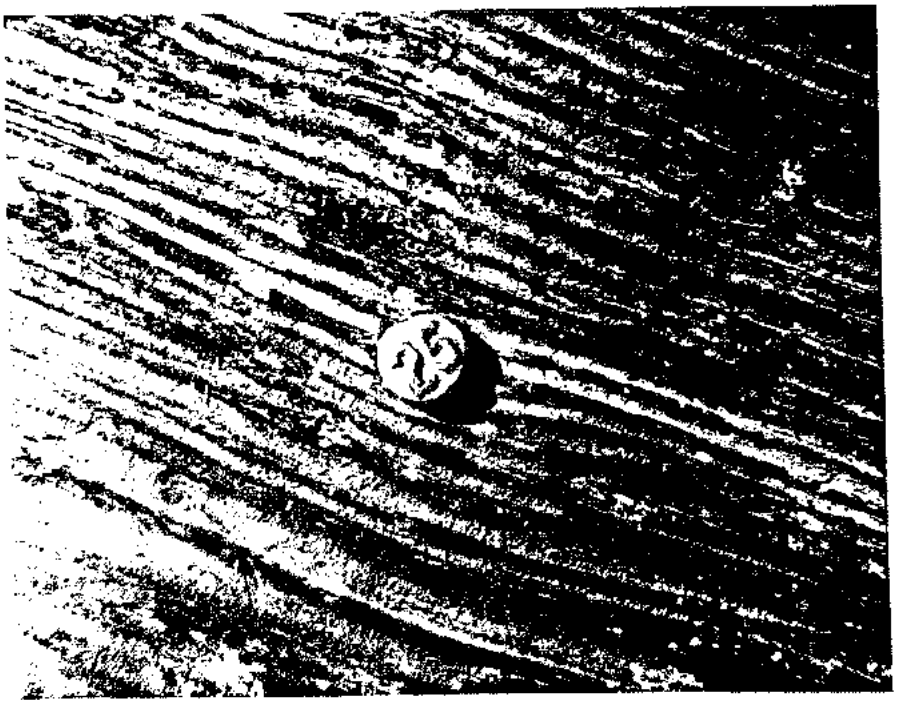
All along the mainline track and on the trestle approaches to the bridges, ties still carry date nails from 1926, 1928, the 1930s and the 1940s; coupled with the rolling dates observed on the rails, these indicate a high degree of integrity of materials for this line.

The Southern Pacific Dumbarton Cutoff appears to meet the eligibility criteria of the National Register of Historic Places, at the local level of significance in transportation and engineering. It retains integrity of location, setting, feeling, and association; trestle replacements from the 1970s constitute a very minor compromise to integrity of design, materials, and workmanship. Under criterion A, it is associated with the system-wide improvements to the Southern Pacific that gave the railroad its 20th century form and made it the standard railroad of the West. It is inextricably linked with the economic growth of San Francisco and its port in the first half of the 20th century, and with the national defense efforts during both world wars. Under criterion B, it is associated with the life of E.H. Harriman, the genius of whom drove the modernization of the S.P. during the first two decades of this century, even beyond his death. Harriman saw the need for, and directed the building of, the Dumbarton Cutoff. Under criterion C, contributive elements of the Cutoff, such as the Dumbarton and Newark Slough Bridges, are representative examples of their type (Harriman Common Standard timber trestle, deck girder, and through truss ges), period (first decade of the 20th century), and method of construction. Built in 1908-9, they are among the oldest of their type in fornia, with only the Southern Pacific's Sacramento River Bridge at Tehama (1898) known to predate them. In addition, the Southern Pacific Dumbarton Bridge appears to be individually eligible for the National Register under criterion A, as the first successful bridging of San Francisco Bay.

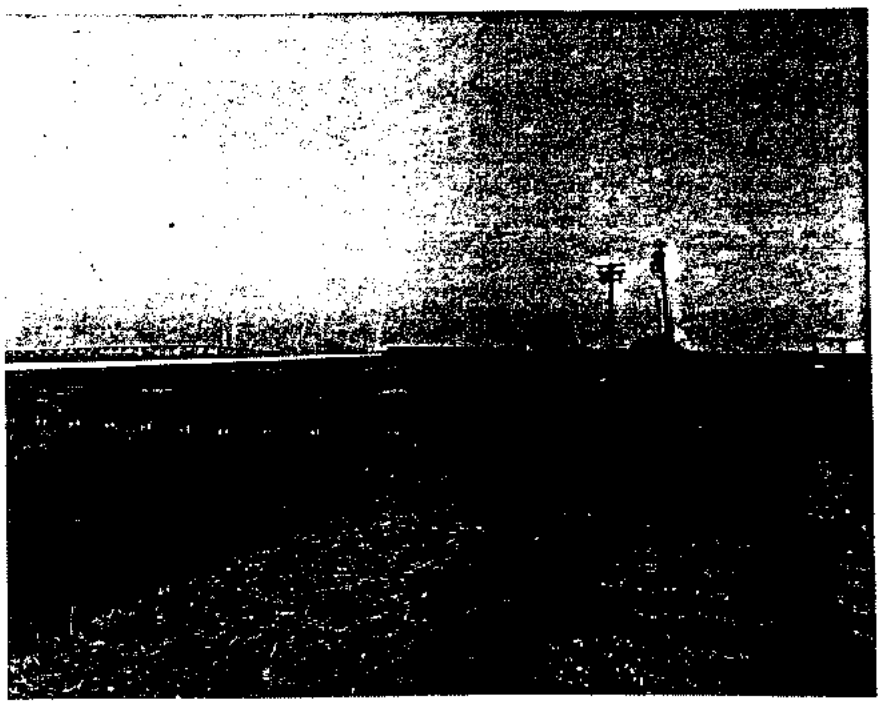
P5b. Description of Photo (continued) Southern Pacific Railroad Dumbarton Cutoff, view to northeast from Ravenswood Point toward Dumbarton Bridge, November 1, 1996.

P11. Report Citation (continued) for San Mateo County Transportation Agency.

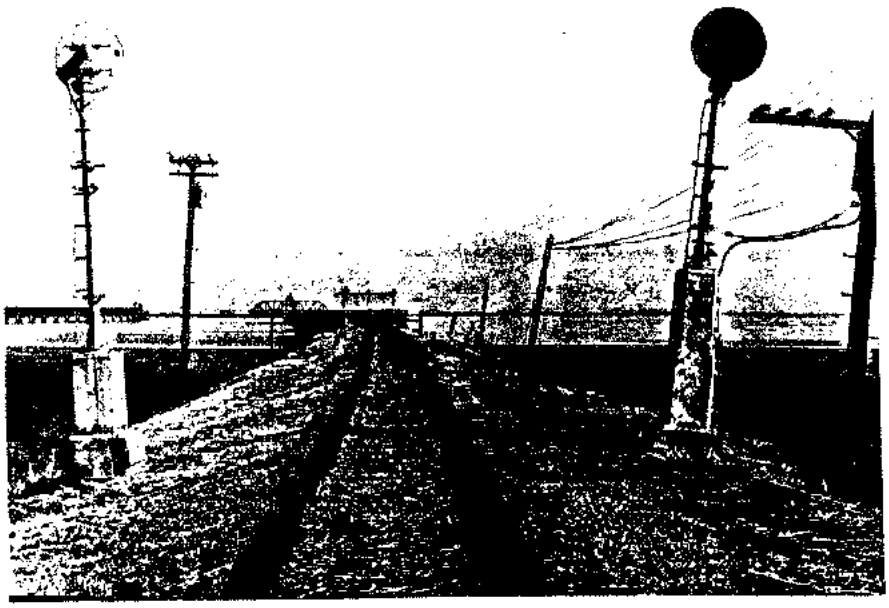
View to northeast toward Dumbarton Bridge from Ravenswood. Mainline to left, spur to former salt company to right. Loading facility at left in distance built from former bridge girders.



1926 tie date nail, located on main line between Ravenswood and west end of Dumbarton Bridge.

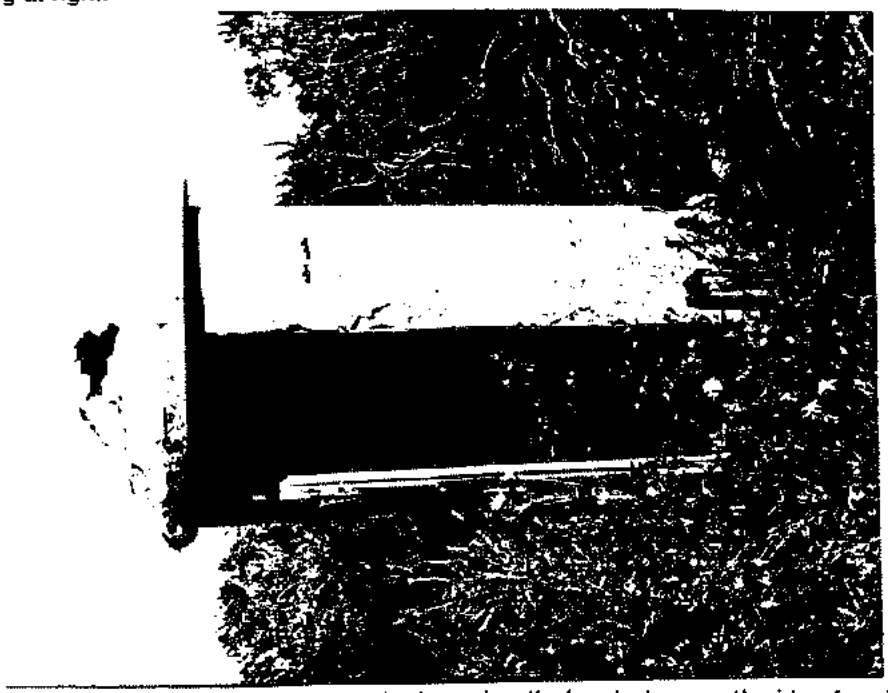


Typical main line view, to northeast toward Dumbarton Bridge, amid salt marshes. Dumbarton highway bridge visible at left in distance.



Bridge approach signals, view to northeast toward Dumbarton Bridge. Open draw span visible in distance.

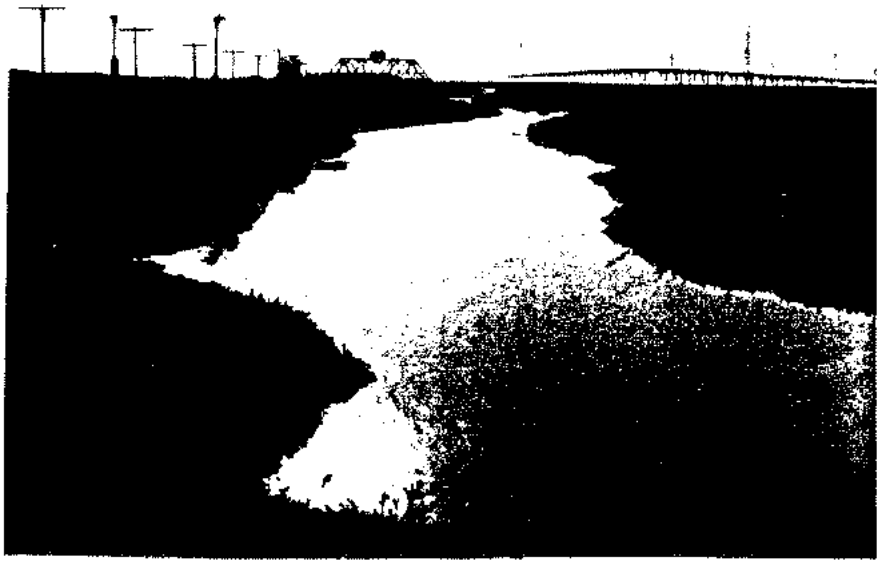
View to northeast toward Newark Slough Bridge from just east of the Dumbarton Bridge. Switch led to former siding at right.



S.P. Common Standard precast concrete telephone booth, located on north side of main line between Dumbarton and Newark Slough Bridges. View to southeast.

View to northeast, showing bridge approach signals located bewteen Dumbarton and Newark Slough Bridges.

View to southwest across unchanged salt marshes west of Newark. Rail line at left, Newark Slough at center, Newark Slough Bridge visible in distance.



View to southwest across unaltered salt marshes west of Newark. Rail line at left, with bridge approach signals and Newark Slough Bridge visible. Newark Slough at center. Dumbarton highway bridge at right.

View to east of handcar/speeder setout platform located just east of Newark Slough Bridge.

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

PRIMARY RECORD

Previous Documentation - NOT FOR REVIEW

Trinomial

NRHP Status Code

Other Listings

Review Code _____ Reviewer _____ Date _____

Resource Name or #: (Assigned by recorder) Southern Pacific Railroad Dumbarton Bridge

P1. **Other Identifier:** Samtrans Dumbarton Bridge

P2. **Location:** ☐ Not for Publication ☒ Unrestricted a. **County** Alameda, San Mateo

and (P2b and P2c or P2d. Attach a Location Map as necessary.)

b. USGS 7.5' Quad Mountain View Date 1991 T 5S ; R 2W ; 1/4 of 1/4 of Sec ; B.M.

c. Address: City Zip

d. UTM: (Give more than one for large and/linear resources) *10* ; *579110* mE/ *4150510* mN

e. Other Locational Data (Enter Parcel #, legal description, directions to resource, elevation, etc., as appropriate)

Crossing San Francisco Bay at Dumbarton Point, linking Alameda and San Mateo counties between Newark and Redwood City. Parcel No.

P3. Description (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries)

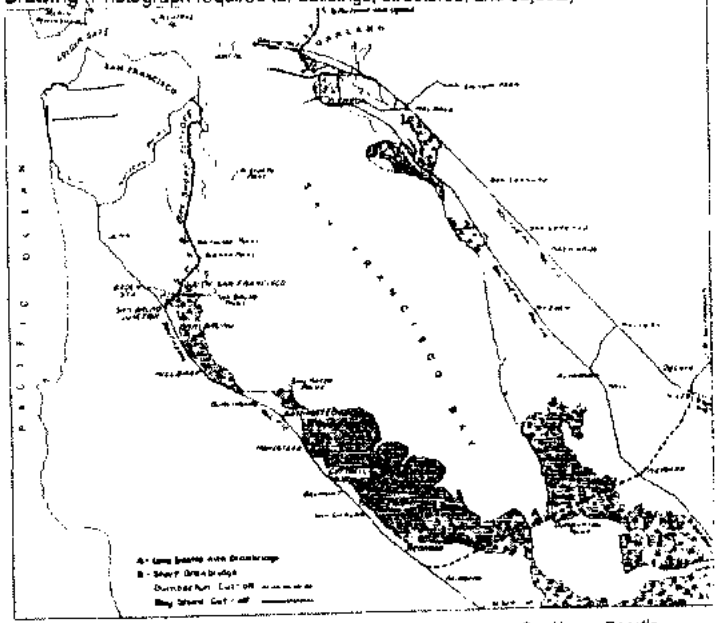
An element of the Southern Pacific Railroad Dumbarton Cutoff linking the railroad's Sunset Route (San Francisco-New Orleans) line with the Ogden (San Francisco-Ogden) and Shasta (San Francisco-Portland) lines, and providing a cutoff from a former route that required trains to transit via San Jose, the Southern Pacific Railroad Dumbarton Bridge, located at milepost 31.51, carries the Dumbarton Cutoff across the south end of San Francisco Bay between Dumbarton Point in Alameda County and East Palo Alto in San Mateo County. See continuation sheet for complete description.

The Dumbarton Cutoff is 16.4 miles long, connecting the two main lines between Niles, Alameda County, and Redwood Junction, San Mateo County. The cutoff is a single-track rail line with attendant spurs and sidings, turnouts and searchlight-type block and bridge approach signals. It crosses marsh areas on dredged fill, and crosses San Francisco Bay and Newark Slough on through truss swing bridges.

P3b. **Resource Attributes:** (List attributes and codes) HP29 - Railroad Grade;

P4. **Resources Present** ☐ Building ☒ Structure ☐ Object ☐ Site ☐ District ☒ Element of District ☐ Other (Isolates, etc.)

P5a. **Photograph or Drawing** (Photograph required for buildings, structures, and objects)



Map of Bay Shore and Dumbarton Cut-Offs of the Southern Pacific.

P5b. Description of Photo: (View, date, accession #)
See continuation sheets

P6. Date Constructed/Age and Sources:
☐ Prehistoric ☒ Historic ☐ Both

1907-10 (factual); research; 1909 (factual): date plate on bridges

P7. Owner and Address
San Mateo County Transportation Agency
1250 San Carlos Avenue
San Carlos, California

P8. Recorded by: (Name, affiliation, and address)
John W. Snyder, P.S. Preservation Services
P.O. Box 191275
Sacramento CA 95819-1275

P9. Date Recorded: *11/29/96*

P10. Survey Type: (Describe)
Intensive - Section 106.

P11. Report Citation: (Cite survey report and other sources, or enter "none")
P.S. Preservation Services, November 1996, Historic Resource Evaluation Report, Southern Pacific Railroad Dumbarton and Newark Slough Bridges, prepared

Attachments ☐ NONE ☒ Continuation Sheet ☐ District Record ☐ Rock Art Record ☐ Other: (List)
☒ Location Map ☒ Building, Structure, and Object Record ☐ Linear Feature Record ☐ Artifact Record
☐ Sketch Map ☐ Archaeological Record ☐ Milling Station Record ☐ Photograph Record

2d. UTM (continued) UTM reference on Primary Record is for east end of Dumbarton Bridge. UTM reference for center pier of swing span is 10-578795-4150250. UTM reference for west end of Dumbarton Bridge is 10-577450-4149100.

P3. Description (continued) The Dumbarton Bridge, crossing San Francisco Bay is comprised of, from west to east:

a. A backfilled timber abutment.

b. 1,766 feet of Harriman Common Standard ballast-deck timber trestle approach spans on 7-pile timber bents, with each span comprising two lines of five timber stringers each below the rails, and a single timber stringer at each outer edge, with timber posts supporting timber guardrails.

c. Thirty reinforced concrete ballast-deck trestle approach spans of 30 feet each, on reinforced concrete 4-pile bents and bent caps, with railings of steel posts and wire cable.

d. Fifty-three reinforced concrete ballast-deck trestle approach spans of approximately totalling 2,374 feet, on cylindrical, cast-in-place 2-column bents and bent caps, with railings of steel posts and wire cable.

e. One 26-foot, three-inch Harriman Common Standard open-deck, steel deck girder approach span.

f. Three double-track Harriman Common Standard 180-foot open-deck riveted steel Pratt through truss approach spans, with the main line track carried on the north side of the deck, and a spur track carried on the south side. The westernmost truss span (historically Span 6) carries a mast-mounted searchlight-type block signal to protect the draw span, and a switch stand and turnout leading to the spur track. The trusses have boxed end posts and top chords with solid steel plate tops and sides, and latticed soffits; laced bottom chords; laced diagonal tension members; latticed and laced vertical compression members; latticed top laterals and struts; latticed portals and interior top transverse braces. The truss spans are carried on two-column bents, each column consisting of a concrete-filled steel cylinder, founded on timber piles.

g. One double-track, 310-foot open deck riveted steel through Pennsylvania (Petit) truss, with sub-struts and sub-ties, center-bearing swing span. Its built-up members are as described for the Pratt truss spans, above. The bridge operator's control cabin, containing operating machinery, is carried atop the trusses at the center of the span. The swing span is carried on a large, cylindrical, steel-shelled mass concrete center pier, which is founded on timber piles. When in the closed position, its ends rest on two-column bents as described for the Pratt truss spans, above. Lines of timber pile dolphins, connected by catwalks, delineate the navigable channel on each side of the draw span, and protect it when it is in the open position. The draw span is currently maintained in the open position (i.e., closed to rail traffic).

h. Three double-track Harriman Common Standard 180-foot open-deck riveted steel Pratt through truss approach spans, as described above. The searchlight-type block signal protecting the east end of the draw span is mounted on the north end post of the easternmost span (historically Span 1).

i. Eight reinforced concrete ballast-deck trestle approach spans of approximately totalling 394 feet, on cylindrical, cast-in-place 2-column bent s and bent caps, with railings of steel posts and wire cable.

j. One reinforced concrete ballast-deck trestle approach span of approximately 30 feet, on reinforced concrete pile bents and bent caps, with railings of steel posts and wire cable.

j. 610 feet of single-track Harriman Common Standard ballast-deck timber trestle approach spans on 6-pile timber bents, with each span comprising two lines of five timber stringers each below the rails, and a single timber stringer at each outer edge, with timber posts supporting timber guardrails.

Rails on the Dumbarton Bridge, while continuous-welded, carry rolling dates of 1944 and 1951. Rails on adjacent fill approaches carry rolling dates of 1923 (siding) and 1939 (main line). Mainline rail east of the Newark Slough Bridge is largely 112-pound rail, rolled in 1935 and 1939. There is a handcar setout platform just east of the east approach spans to the Newark Slough Bridge, on the south side of the mainline.

All along the mainline track and on the trestle approaches to the bridges, ties still carry date nails from 1926, 1928, the 1930s and the 1940s: coupled with the rolling dates observed on the rails, these indicate a high degree of integrity of materials for this line.

P3b. Resource Attributes (continued) HP19 - Bridge.

11. Report Citation (continued) for San Mateo County Transportation Agency.

Resource Name or #: (Assigned by recorder) Southern Pacific Railroad Dumbarton Bridge

B1. Historic Name: Southern Pacific Railroad Dumbarton Bridge
B2. Common Name: Samtrans Dumbarton Bridge
B3. Original Use: Railroad Bridge
B4. Present Use: Abandoned
B5. Architectural Style: See Continuation Sheet
B6. Construction History: (Construction date, alterations, and date of alterations)
Truss and draw span, timber trestle approaches built 1908-9. Present western timber trestle may date to mid-1930s; eastern timber trestle appears to be original. Reinforced concrete trestle approaches built 1967-8, and 1976.

B7. **Moved?** ☒ No ☐ Yes ☐ Unknown Date: Original Location:
B8. **Related Features:** Southern Pacific Railroad Dumbarton Cutoff, connecting Niles in Alameda County with Redwood Junction in San Mateo County.

B9a. Architect: Engineering Department, Southern Pacific RR b. Builder: American Bridge Company (fabricators of trusses)
B10. **Significance: Theme:** Transportation Area: Engineering
Period of Significance: 1909-45 **Property Type:** Bridge **Applicable Criteria:** A,B,C
(Discuss importance in terms of historical or architectural context as defined by theme, period and geographic scope. Also address integrity.)

By the 1890s, the Central Pacific and Southern Pacific Railroads were under the control of Colis P. Huntington, sole survivor of the "Big Four" who had undertaken construction of the Central Pacific portion of the transcontinental railroad beginning in 1863 (the others had been, of course, Charles Crocker, Mark Hopkins, and Leland Stanford). Huntington was parsimonious in his management, and the S.P. was in a period of retrenchment during this era, helped along by the Panic of 1893 that affected railroads nationwide. After Huntington's death, however, railroad magnate Edward H. Harriman was able in 1901 to obtain control of Huntington's interest in the S.P. from his heirs, adding that railroad to the Union Pacific, Illinois Central, and others already under his control. In contrast to the frugality of the Huntington era, Harriman, assuming the presidency of the Southern Pacific, immediately initiated large expenditures that began a series of system-wide improvements to the S.P. to improve its efficiency (and hence its rate of return to him and company stockholders). During the next two decades then, these improvements, representing engineering and construction on a scale not seen on the S.P. since the initial construction of the Central Pacific, shaped both the physical plant and the operations of the railroad into what we see today.

B11. Additional Resource Attributes: (List attributes and codes) HP29 - Railroad Grade;

B12. **References:**

Books

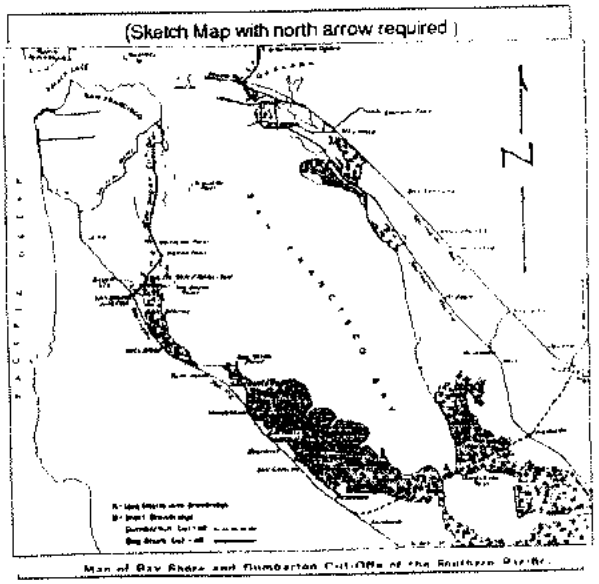
Beebe, Lucius. *The Central Pacific & The Southern Pacific Railroads*. Berkeley: Howell-North, 1963.

B13. Remarks:

B14. **Evaluator:** John W. Snyder
Date of Evaluation: *11/29/96*

(This space reserved for official comments.)

(Sketch Map with north arrow required.)



Map of Bay Shore and Dumbarton Cutoffs of the Southern Pacific

B8. The cutoff was built in conjunction with the Bayshore Cutoff and other Peninsula rail improvements during the administration of E.H. Harriman to expedite rail freight shipment between San Francisco and the Southern Pacific's Ogden and Shasta routes.

B10. Under Harriman's direction, beginning in 1903 the engineering and maintenance of way departments of all the railroads under his control undertook standardization of virtually all elements, from track spikes to locomotives, and from bridges to stations. This allowed the companies to achieve greater economies as they expanded and improved. Among the standardized bridge types developed at this period were the timber pile trestles, deck plate girders, and through truss types used on the S.P. Dumbarton Bridge. At the same time, the S.P. began to modernize its locomotive and car fleet, transitioning to much larger and heavier locomotives (including the first of the articulated Mallet engines that were to become its hallmark), converting to oil fuel, and to all-steel passenger cars; freight cars likewise increased in size and capacity. Harriman invested in oil lands so that the oil-hungry Southern Pacific would not be dependent on outside sources, amassing some of the largest oil holdings in the nation.

In addition, Harriman began massive construction projects all around the S.P. system to increase operating efficiency, and to upgrade lines and bridges for modern traffic loadings; often these efforts took the form of newly-incorporated railroads that were totally S.P.-controlled, and that would be subsumed by the parent company upon their completion; more about this later. He also instituted an enlightened plan of formal training for employees, and built employee club houses to offer an alternative to bars and saloons. By late 1910, his efforts had resulted in the once-moribund Southern Pacific becoming one of only three railroads in the United States with an annual gross income of more than $100 million!

By 1904 Harriman had completed the Lucin Cutoff across the Great Salt Lake, eliminating the original Central Pacific/Union Pacific route around the north end of the lake (and in the process bypassing the meeting site at Promontory Summit). In 1905 the S.P. began improvements to main lines between San Francisco and the Pacific northwest, between San Francisco and Ogden, and between San Francisco and New Orleans, where S.P. steamships connected to New York. Harriman authorized more than 400 miles of new line system-wide, at a cost of $14 million, and gained concessions for 775 miles of new line for S.P.'s wholly-owned subsidiary in Mexico. During this period Harriman obtained a $2 million loan from New York banks, and is alleged to have told S.P. General Manager Julius Kruttschnitt that it was all to be spent improving mainline track in California. According to author, Lucius Beebe, Harriman called to Kruttschnitt as the latter was leaving the Thursday meeting, saying, "Spend it this week." While apocryphal, the story illustrates Harriman's impact upon the S.P. By the end of the year, S.P. had installed automatic block signals on 1,038 miles of track, with 664 more miles projected to be so signalled in 1906. In the San Francisco area, the company began construction of the Bayshore Cutoff between San Francisco and San Bruno to replace the circuitous and hilly line that had originally been built into the city by the predecessor San Francisco and San Jose Railroad in 1863. The new line, built in tunnels and on fill across Visitacion Bay, would be shorter and virtually level, and would include a major new yard and shops on 200 acres of reclaimed land at Visitacion. The Bayshore Cutoff would materially shorten running times between San Francisco and San Jose, and would facilitate freight shipment into San Francisco.

Related to this, and to facilitate freight shipments between San Francisco and the Ogden and Shasta lines, Harriman also directed the incorporation of the Central California Railway, to build a 16.4 mile line between Niles in Alameda County, and Redwood Junction in San Mateo County. This would obviate the need to ship freight across the Bay by ferry, or by rail south to San Jose and then back up the east side of the Bay, a trip of more than 100 miles; it would also be a logical link in conjunction with the new Bayshore Cutoff, then building. Completion of the two cutoffs would unify and improve the railroad's terminal facilities in San Francisco, shortening the trip around the south end of the Bay by 50 miles, and dispensing with the need for two car ferry transfers of freight. While conceived before the April 18, 1906 disaster in San Francisco, that event demonstrated to Harriman the need to improve access to and from the city.

The Central California Railway incorporated on October 3, 1904 with a capital stock of $1 million, to build a standard gauge railroad, with all appurtenances, from Niles to Dumbarton Point, across San Francisco Bay to Redwood City, and then to a point near San Mateo. While the articles of incorporation made no mention of the Southern Pacific, save in noting the two end connections with the S.P. mainlines, the makeup of the Board of Directors left no doubt as to the seat of control of the Central California: Director, Nathaniel T. Smith was Treasurer of the Southern Pacific; Director, William Hood was S.P.'s Chief Engineer; Director, Edgar E. Calvin was a Southern Pacific Vice-President; Director, John E. Foulds was an S.P attorney; only Director, Frank Shay of Oakland seemingly had no connection to Southern Pacific. (Even more telling was the allocation of shares in 1912: members of the Board of Directors of the Central California held 300 shares; the Southern Pacific Railroad held 49,700 shares!)

.n 1906 the railroad built a new ferryboat facility at Alameda for both freight and passengers, replacing one built in the 1880s. It built new stations, including completing a stylish new Mission Revival station at Santa Barbara. When San Francisco was devastated by earthquake and fire on April 18, Harriman directed the railroad's response: in eighteen days the railroad carried in 1,252 cars of relief supplies, and carried out 115,295 passengers, 78,560 of which were carried free, some as far as Chicago. Harriman himself came west to the stricken city to direct efforts. In the southern part of the state, the Colorado River left its channel and began to flood the Imperial Valley, creating the Salton Sea. Forced to move its tracks five times, S.P. finally undertook the efforts, which would consume two years, to close the breach and force the river back into its natural channel. This year also saw Harriman decide to build a new line in Oregon to replace the steep and dangerous Siskiyou line; to build a cutoff line through eastern California to shorten times between Sparks, Nevada and Portland. In the few years remaining before his death in 1909, Harriman also began a major reconstruction of the original Central Pacific route over the Sierras. Under Harriman's presidency the Southern Pacific joined in cooperation with rival Santa Fe to build the Northwestern Pacific Railroad north from Willits to Eureka; such cooperation was hardly surprising, since Harriman owned controlling stock in Santa Fe.

The year 1906 saw Harriman and the S.P. investigating railroad electrification, including consideration of electrifying the S.P. main line over Donner Summit. Southern Pacific began acquisition of power generating plants and sites in the Sierras, but ultimately backed away from the expense when new, larger, oil-fired, and more efficient steam locomotives arrived. In the Bay Area, Harriman moved to electrify local lines in Oakland and the East Bay, with the ultimate intent to electrify all S.P. lines on both sides of the Bay, though his death, coupled with uncertainties related to government anti-trust proceedings would quash that effort. Related to this was the construction of the Dumbarton Cutoff, which would have carried electric-powered trains around the south end of the Bay.

Niles is located on the Southern Pacific mainline at the south end of Alameda County. Though Central Pacific crews had conducted initial surveys for a bridge between Dumbarton Point and Ravenswood as early as March 1875, the first actual rail link had been a narrow-gauge line projected between Santa Clara and Newark, intended to transport strawberries and other Santa Clara Valley produce to a steamer landing at Alviso, for transhipment to San Francisco. The company went bankrupt long before completion of the effort, and it fell upon Alfred Davis and the South Pacific Coast Railroad to complete it. Eventually connecting Oakland and Alameda with Santa Cruz, the narrow gauge SPC joined San Jose to Newark by 1877. Southern Pacific acquired the company in 1887, and eventually standard-gauged the line beginning in 1906, in conjunction with the other Harriman system improvements. Newark was to be the staging point for construction of the Dumbarton Cutoff and its attendant bridges.

he first surveying crews had actually arrived in 1905, setting off local speculation that the project would result in Newark receiving major yards and shops that would boost the local economy--speculation that was reinforced by similar reports in *The Railroad Gazette*; alas, this was not to be. Still, the little town boomed--sometimes literally with the off-loading and assembly of bridge steel--for the duration of the $15 million-dollar project to build the Dumbarton Cutoff. Bridge materials and other supplies arrived at Newark by rail from Oakland. Crews were busy grading the five miles between Niles and Newark, and the eleven miles between Newark and Redwood Junction. The most difficult work was to the west, for just outside Newark lay the tidal marshes of San Francisco Bay. By mid-1908, workers had completed nearly seven miles of track and an additional seven miles of grading, and were at work on the bridges. Construction steel, fabricated by American Bridge Company in Pennsylvania, was delivered by rail and off-loaded to the subassembly site at Dumbarton Point. Working from both sides of the Bay, and in several locations at once, crews began constructing the timber pile trestle approaches for the drawbridges at Newark Slough (subject of a separate form and evaluation) and at Dumbarton. Piledrivers rode both ends of isolated sections of trestles as crews built toward each other. Adjacent to Dumbarton Point, and paralleling the shoreline at right angles to the eventual alignment of the Dumbarton Bridge, workers erected falsework on pilings. Crews then moved steel subassemblies from shore onto the falsework, where they assembled them, one-by-one, into the six through truss approach spans. At the same time, a similar process was taking place in the fifty-foot-deep water of the navigable channel.

Here (and at Newark Slough), crews erected an elaborate system of timber pile dolphins topped by a timber truss falsework placed parallel to the navigable channel, allowing shipping to proceed relatively unimpeded during construction. With the falsework in place, they built a vertical steel guiding frame to place the steel shell of the central pivot pier. When they had placed the outside shell of the pier, the workers then proceeded to dredge the inside to a predetermined depth, after which they drove a forest of timber piles, finally filling the shell with concrete. (The two-column bents for the truss approach spans were constructed in similar fashion.) They then pulled cut the timber pile dolphins surrounding the pivot pier. With the pivot pier in place, workers began the task of assembling the machine they would use to erect the 310-foot swing span. With the machine in place, they could then begin assembly of the massive through truss, with subassemblies delivered by barge.

Meanwhile, other crews were erecting the through truss approach spans alongside the shoreline, making them ready for final placement by use of the area's twelve-foot tides. As each was completed, a pair of large barges (constructed by cutting the hull of the obsolete S.P. ferry *Thoroughfare* in half) was carefully maneuvered among the falsework and beneath the span at low tide. As the tide came in, the barges rose until timber cribbing on their decks lifted the span off the falsework. The S.P. fireboat *Ajax* took up the tow, with the steam launch *W.E. Marsh* pushing, and with equal care maneuvered the span over its waiting piers, holding the assembly in place until the tide went out and gently deposited the span into place. Six times the crews repeated the process, and six times the assemblies came to rest precisely as intended.

On land, crews used dredgers to build three miles of new railroad grade above the marsh, while in San Mateo County that scene was repeated to reach from the solid ground to the western trestle approaches. The line was finally completed on September 12, 1910 and the bridge was formally opened on September 24, amid festivities that included an all-night dance, a barbecue, special trains, and the obligatory speeches. As soon as construction was completed, the line was leased to the Central Pacific and was ultimately sold to the C.P. (itself a subsidiary of the S.P.) on February 29, 1912.

The Dumbarton Cutoff proved to be the valuable freight link that Harriman had foreseen, though he had died in 1909, before its completion. During World War 1, when U.S. railroads came under the control of the United States Railroad Administration, the USRA ordered the joint use of the line and its bridges by the S.P. and peacetime rival Western Pacific. Again during World War 2 the cutoff carried massive amounts of freight for the war effort. In peacetime, it served to drastically shorten times and distances between San Francisco and destinations in the Pacific northwest and in the east, proving a vital economic and transportation link. During the 1920s, heavy freight traffic from the Dumbarton Cutoff into San Francisco was a factor in renewed consideration by Southern Pacific to electrification of this and Peninsula lines, and to completing the Peninsula lines to their ultimate 4-track mainline design; ultimately, the Great Depression obviated such need.

By the 1970s, "hotshot" freight trains from the Overland Route used the Dumbarton Cutoff to access San Francisco, and late in that decade the railroad began to replace the timber trestles with ones of reinforced concrete. Then, a shift in shipping from the port of San Francisco to the Port of Oakland caused a substantial and irreversible decline in traffic into San Francisco. Hard on the heels of its improvements to the Dumbarton Cutoff, S.P. closed the line in May 1982. In the early 1990s, Caltrain planners began considering use of the line for commuter rail, and electrification was again discussed. Today, the line is owned by the San Mateo County Transportation Agency, which is pursuing re-opening the line for commuter rail use. This effort will require rehabilitation of the bridges, leading to preparation of this evaluation.

In terms of the bridge types involved, the timber pile trestle as a type finds its antecedants in Colonial America. By the time these were built, the Southern Pacific Railroad had adopted a standard design, first during the Harriman era, and later updated that standardization. The trestle elements of these bridges conform to plans C.S. 1600, "Southern Pacific Lines Common Standard Ballasted Deck Pile Trestle, Single Track, Six-Pile Bents, Five-Strunger Creosoted Packed Chords, Adopted May 18, 1937," and C.S. 1602, "Southern Pacific Lines Common Standard Ballasted Deck Pile Trestle, Single Track, Seven-Pile Bents, Six-Stringer Creosoted Packed Chords, Adopted May 18, 1937." The abutments conform to C.S. 1660, "Southern Pacific Lines Common Standard Straight Timber Bulkhead for Ballasted Deck Trestle C.S. 1600, Adopted October 10, 1931. Since period accounts identiry the original trestles as having 6-pile bents, those at the east end of the Dumbarton Bridge and at both ends of the Newark Slough Bridge appear to date from 1908-9.

Plate girder spans came into railroad use during the 1840s, first in iron, later in steel. The deck girder spans found at the Newark Slough and Dumbarton Bridges conform to Harriman Common Standard deck girders as adopted in 1905.

As a type, the Pratt truss dates to 1844 when Thomas and Caleb Pratt patented the design. Most of the first examples were so-called "combination" trusses, using wood for chords, endposts, and compression members, and iron tension members. The design offered lower initial cost and slightly longer life than its immediate predecessors. With the onset of iron bridge construction, American railroads quickly adopted the Pratt, first in iron, later in steel. Today it is the most common truss bridge type in the United States. The Pratt truss spans found at the Dumbarton Bridge are Harriman Common Standard riveted through trusses, as adopted in 1905. The Pennsylvania (Petit) truss, as used in the Dumbarton swing span, is a derivative of the Parker truss (itself a derivative of the basic Pratt truss), and was developed by the Pennsylvania Railroad circa1875, using a series of sub-struts and sub-ties for greater strength and carrying capacity. (The Parker truss uses a curved top chord, allowing deeper trusses of greater strength, and is usually used for longer spans that those achievable with the Pratt truss.)

Movable bridges are required for low level crossings where there is a necessity to provide for a navigable passage. Of the three types of movable bridges--swing, vertical lift, and bascule--the swing bridge is the least expensive to build. Among their disadvantages, however, are the facts that they are slow to operate, require a large pier in the center of the navigable channel, and have to be fully opened for even small vessels. There are two types of swing bridges, the center-bearing and the rim-bearing. Both of the subject bridges are center-bearing. When in the closed position, the center-bearing bridge has three points of support: the center pier and the end piers; when open, the weight of the bridge rests entirely on the large phosphor bronze center bearing. In operation, the operator releases a series of wedges and brakes that secure the ends of the swing span, then engages the motor drive system whereby power is transmitted through a pinion-gear drive train to a curved rack gear atop the center pier, opening the draw span. Normally, swing bridges only rotate ninety degrees.

The Southern Pacific Dumbarton Bridge is a contributive element of the Southern Pacific Dumbarton Cutoff, a property that appears to meet the eligibility criteria of the National Register of Historic Places, at the local level of significance in transportation and engineering. It retains integrity of location, setting, feeling, and association; trestle replacements from the 1970s constitute a very minor compromise to integrity of design, materials, and workmanship. Under criterion A, it is associated with the system-wide improvements to the Southern Pacific that gave the railroad its 20th century form and made it the standard railroad of the West. It is inextricably linked with the economic growth of San Francisco and its port in the first half of the 20th century, and with the national defense efforts during both world wars. Under criterion B, it is associated with the life of E.H. Harriman, the genius of whom drove the modernization of the S.P. during the first two decades of this century, even beyond his death. Harriman saw the need for, and directed the building of, the Dumbarton Cutoff. Under criterion C, contributive elements of the Cutoff, such as the Dumbarton and Newark Slough Bridges, are representative examples of their type (Harriman Common Standard timber trestle, deck girder, and through truss bridges), period (first decade of the 20th century), and method of construction. Built in 1908-9, they are among the oldest of their type in California, with only the Southern Pacific's Sacramento River Bridge at Tehama (1898) known to predate them. In addition, the Southern Pacific Dumbarton Bridge appears to be individually eligible for the National Register under criterion A, as the first successful bridging of San Francisco Bay.

B12.

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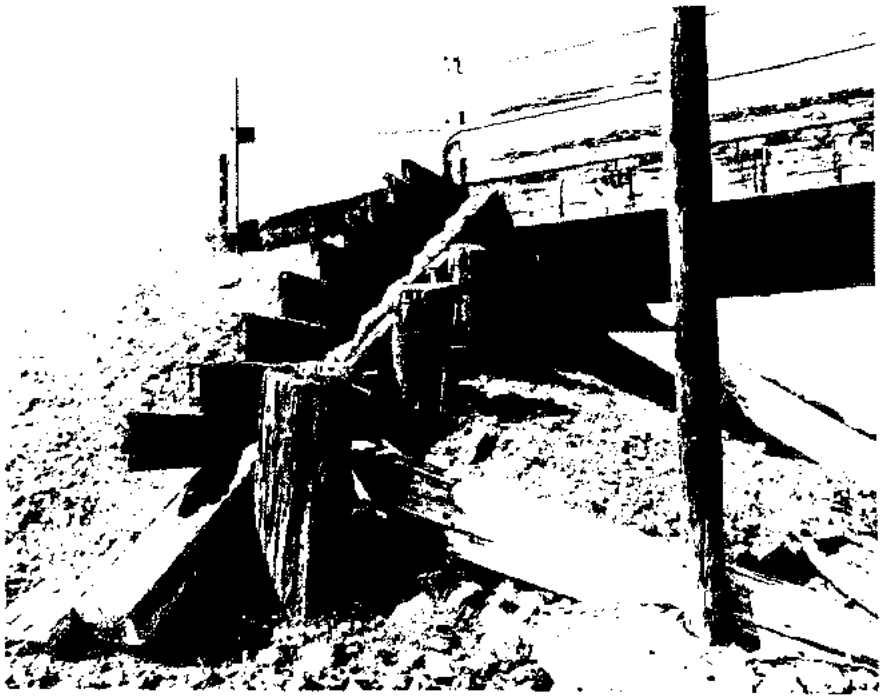
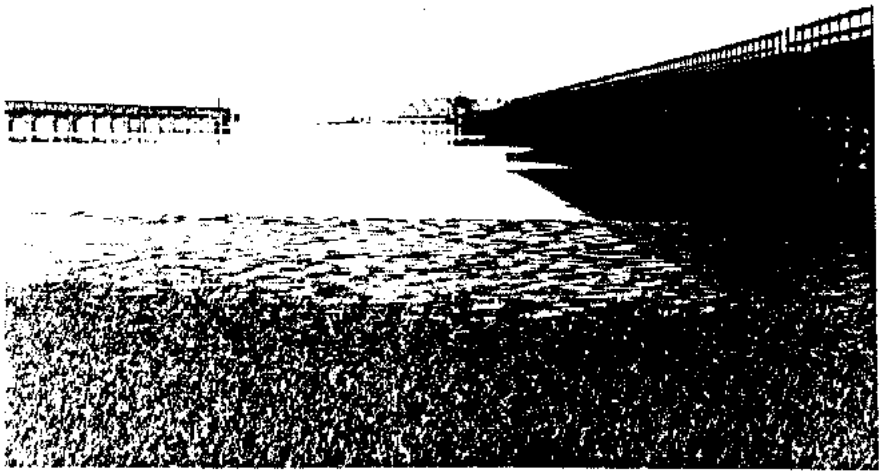
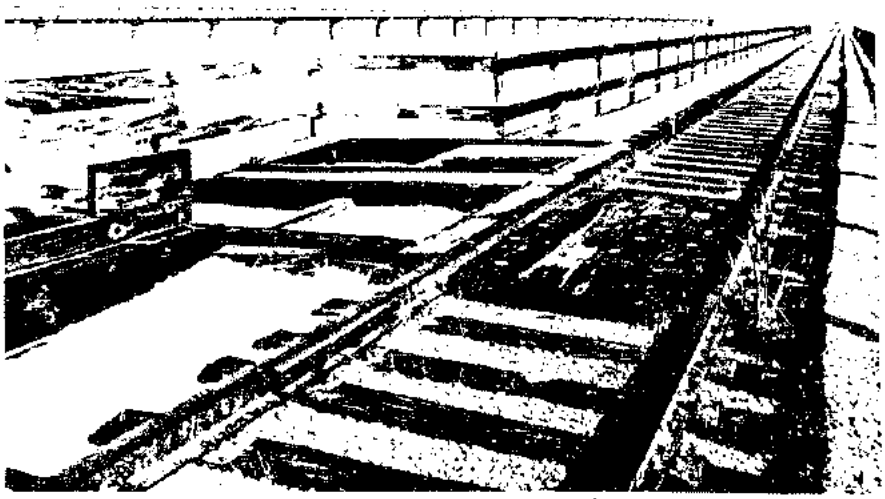


View to northwest of west abutment.

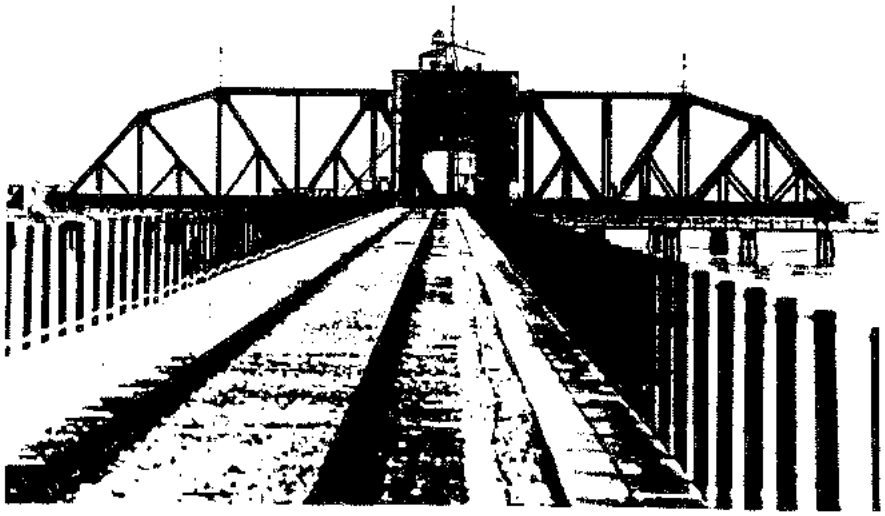
View to north of western timber trestle approach spans, from south side of western abutment.



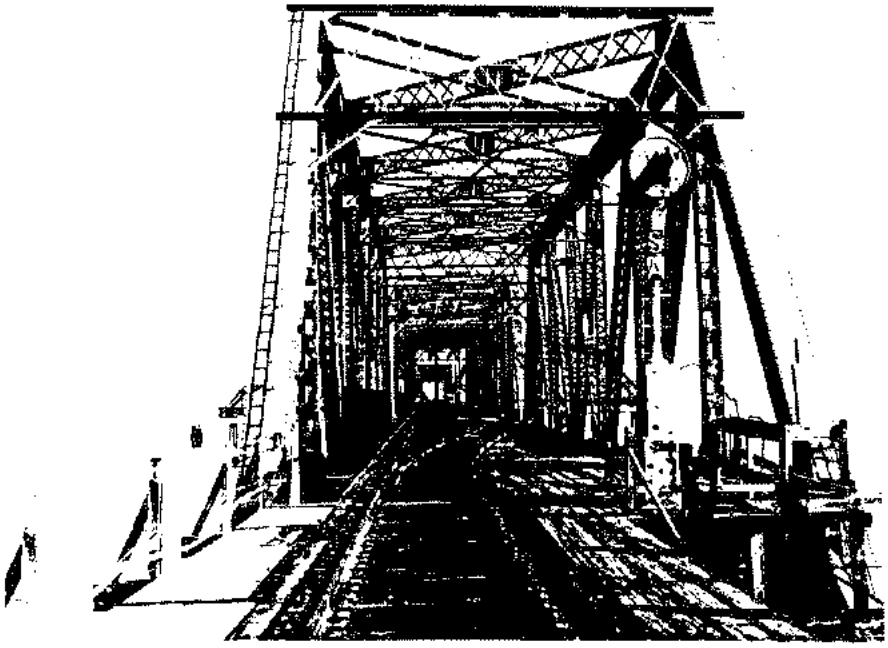
View to east of western timber trestle approach spans, from north side of western abutment, with open draw span visible at center. Hetch Hetchy pipeline bridge at left.



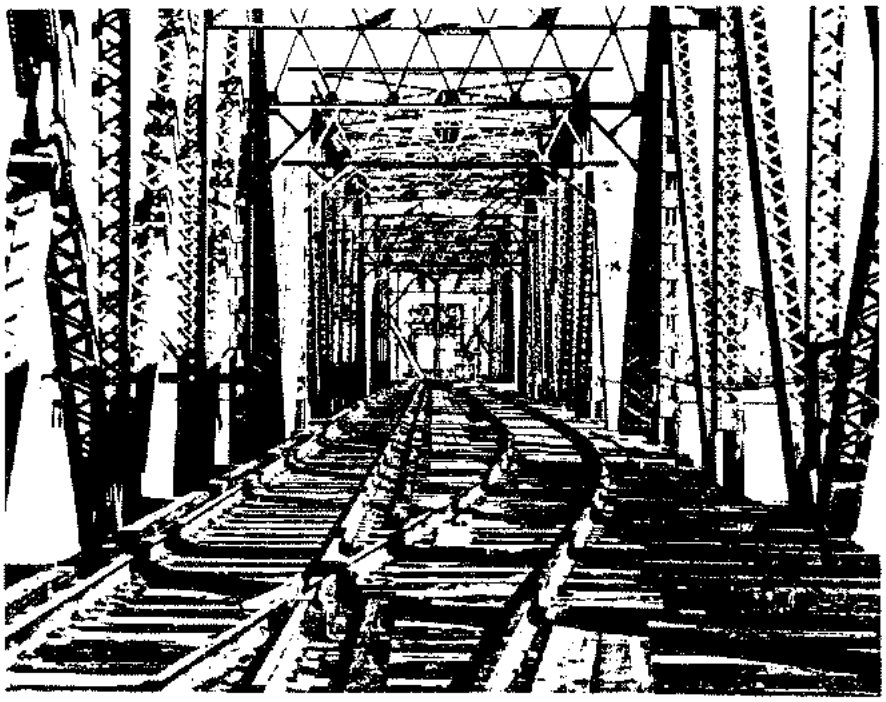
View to north of handcar/speeder setout platform on north side of western approach trestle. Hetch Hetchy pipeline bridge at left.



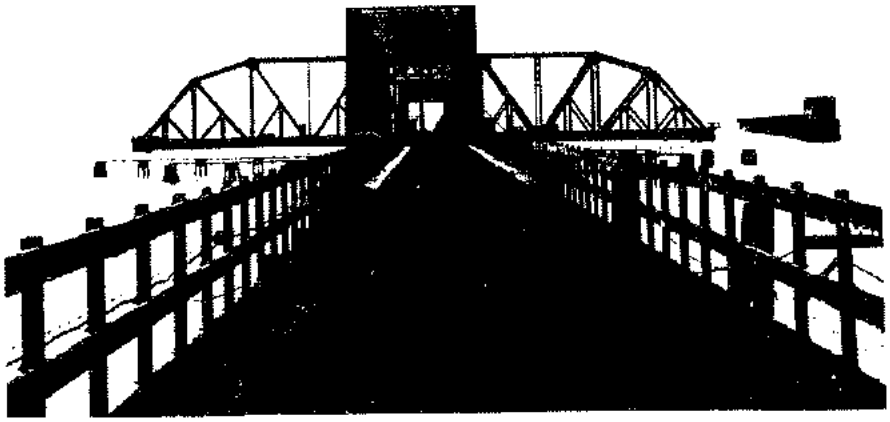
View to northeast toward truss approach spans and open draw span from western concrete trestle.



View to northeast of Harriman Common Standard through truss western approach spans (span 6 nearest camera). Note siding on bridge, draw span approach signal at right.

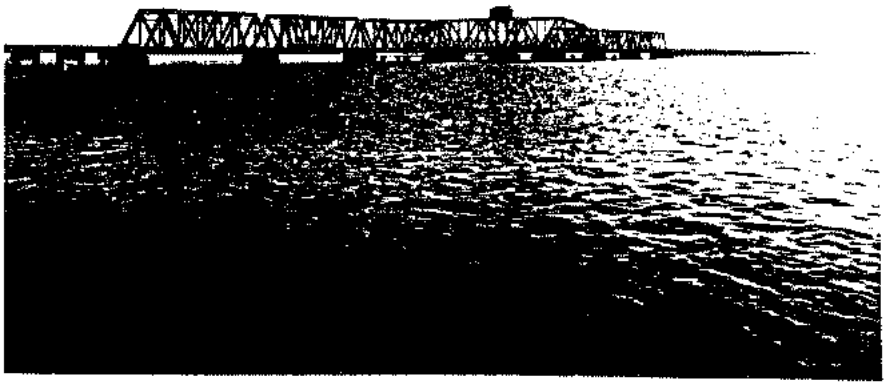


View to northeast through span 6 toward spans 5, 4, and open draw span. Span 3 of eastern approach visible beyond open draw span.



View to southwest from eastern timber trestle approach toward truss approach span 1, with open draw span beyond.

View to southwest through eastern truss approach span 3 toward open draw span, with western approach truss span 4 visible beyond.



View to south of Dumbarton Bridge..

View to south of truss spans of Dumbarton Bridge. From left to right: Spans 1, 2, 3, draw span, Spans 4, 5, 6.

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

PRIMARY RECORD

Previous Documentation - NOT FOR REVIEW

NRHP Status Code

Other Listings
Review Code ____ Reviewer ____ Date ____

Resource Name or #: (Assigned by recorder) Southern Pacific RR Newark Slough Bridge

P1. **Other Identifier:** Samtrans Newark Slough Bridge

P2. **Location:** ☐ Not for Publication ☒ Unrestricted a. **County** Alameda

and (P2b and P2c or P2d. Attach a Location Map as necessary.)

b. USGS 7.5' Quad Newark Date 1959-80 T 5S ; R 2W ; 1/4 of 1/4 of Sec ; B.M.

c. Address: City Zip

d. UTM: (Give more than one for large and/linear resources) 10 ; 581220 mE/ 4152020 mN

e. Other Locational Data (Enter Parcel #, legal description, directions to resource, elevation, etc., as appropriate)

Crossing Newark Slough in Alameda County, southwest of Newark.

Parcel No.

P3. **Description** (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries)

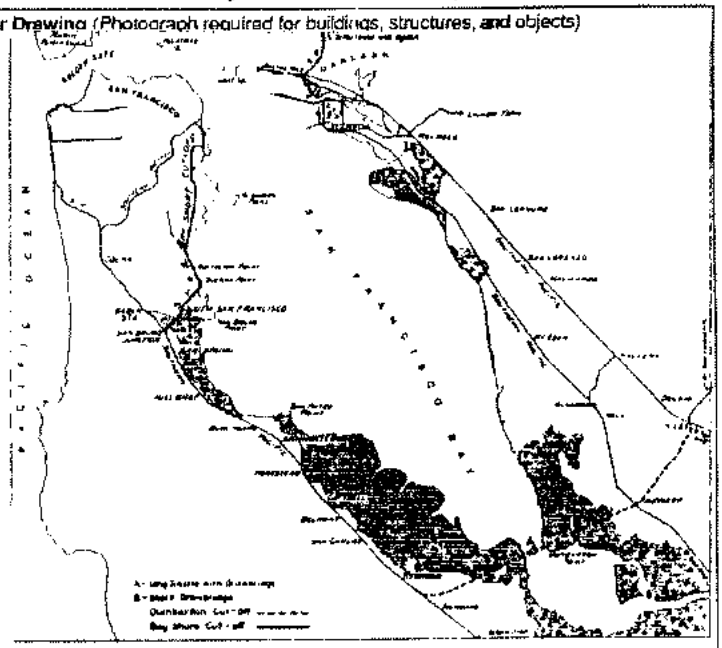
An element of the Southern Pacific Railroad Dumbarton Cutoff linking the railroad's Sunset Route (San Francisco-New Orleans) line with the Ogden (San Francisco-Ogden) and Shasta (San Francisco-Portland) lines, and providing a cutoff from a former route that required trains to transit via San Jose, are the Southern Pacific Railroad Newark Slough Bridge, located at milepost 34.53, carrying the cutoff over the navigable waters of Newark Slough, and the Dumbarton Bridge, located at milepost 31.51, carrying the cutoff across the south end of San Francisco Bay between Dumbarton Point in Alameda County and East Palo Alto in San Mateo County. See continuation sheet for complete description.

The Dumbarton Cutoff is 16.4 miles long, connecting the two main lines between Niles, Alameda County, and Redwood Junction, San Mateo County. The cutoff is a single-track rail line with attendant spurs and sidings, turnouts and searchlight-type block and bridge approach signals. It crosses marsh areas on dredged fill, and crosses San Francisco Bay and Newark Slough on through truss swing bridges.

P3b. **Resource Attributes:** (List attributes and codes) HP29 - Railroad Grade;

P4. **Resources Present** ☐ Building ☒ Structure ☐ Object ☐ Site ☒ District ☒ Element of District ☐ Other (Isolates, etc.)

P5a. **Photograph or Drawing** (Photograph required for buildings, structures, and objects)



Map of Bay Shore and Dumbarton Cut-Offs of the Southern Pacific.

P5b. *Description of Photo:* (View, date, accession #)
See continuation sheets

P6. **Date Constructed/Age and Sources:**
☐ Prehistoric ☒ Historic ☐ Both

1907-10 (factual); research; 1909 (factual); date plate on bridges

P7. **Owner and Address**
San Mateo County Transportation Agency
1250 San Carlos Avenue
San Carlos, California

P8. **Recorded by:** (Name, affiliation, and address)
John W. Snyder, P.S. Preservation Services
P.O. Box 191275
Sacramento CA 95819-1275

P9. **Date Recorded:** *11/29/96*

P10. **Survey Type:** (Describe)
Intensive - Section 106.

P11. **Report Citation:** (Cite survey report and other sources, or enter "none")
P.S. Preservation Services, November 1996, Historic Resource Evaluation Report, Southern Pacific Railroad Dumbarton and Newark Slough Bridges, prepared

Attachments ☐ NONE ☒ Continuation Sheet ☐ District Record ☐ Rock Art Record ☐ Other: (List)
☒ Location Map ☒ Building, Structure, and Object Record ☐ Linear Feature Record ☐ Artifact Record
☐ Sketch Map ☐ Archaeological Record ☐ Milling Station Record ☐ Photograph Record

3. Description (continued) The Newark Slough Bridge is a 182-foot double-track, riveted steel Baltimore (Petit) through truss, with sub-struts and sub-ties, center-bearing swing span. Its built-up members are as described for the Dumbarton Bridge truss spans, above. Its control cabin, clad in V-rustic siding and with gable roof with clipped eaves, is carried atop the center of the trusses. Remnants of protective dolphins, tied together with cables, can be seen in the channel. Approach spans on both ends are single-track Harriman Common Standard ballast-deck timber trestle approach spans on 6-pile timber bents, with each span comprising two lines of five timber stringers each below the rails, and a single timber stringer at each outer edge, with timber posts supporting timber guardrails; there are 450 feet of approach spans on the west, and 150 feet of approach spans on the east. The final approach span on each end is a sixteen-foot open-deck steel deck girder span, supported on 6-pile timber bents. Though the swing span is a double-track structure, it carries only one track, on the north side of centerline.

Mainline rail east of the Newark Slough Bridge is largely 112-pound rail, rolled in 1935 and 1939. There is a handcar setout platform just east of the east approach spans to the Newark Slough Bridge, on the south side of the mainline.

All along the mainline track and on the trestle approaches to the bridges, ties still carry date nails from 1926, 1928, the 1930s and the 1940s; coupled with the rolling dates observed on the rails, these indicate a high degree of integrity of materials for this line.

P3b. Resource Attributes (continued) HP19 - Bridge.

P11. Report Citation (continued) for San Mateo County Transportation Agency.

Resource Name or #: (Assigned by recorder) Southern Pacific RR Newark Slough Bridge

B1. Historic Name: Southern Pacifid Railroad Newark Slough Bridge
B2. Common Name: Samtrans Newark Slough Bridge
B3. Original Use: Railroad Bridge B4. Present Use: *Abandoned*
B5. Architectural Style: Baltimore (Petit) truss; timber pile trestle; steel deck girder
B6. Construction History: (Construction date, alterations, and date of alterations)
Fabricated by American Bridge Company at Ambridge, Pennsylvania, and erected 1908-9 by Southern Pacific Railroad.

B7. **Moved?** ☒ No ☐ Yes ☐ Unknown Date : Original Location:
B8. **Related Features:** Southern Pacific Railroad Dumbarton Cutoff, connecting Newark in Alameda County with Redwood Junction in San Mateo County.

B9a. Architect: Engineering Department, Southern Pacific b. Builder: American Bridge Company ; S.P. Railroad
B10. **Significance: Theme:** Transportation Area: Engineering
Period of Significance: 1909-45 **Property Type:** Bridge **Applicable Criteria:** A,B,C
(Discuss importance in terms of historical or architectural context as defined by theme, period and geographic scope. Also address integrity.)

By the 1890s, the Central Pacific and Southern Pacific Railroads were under the control of Colis P. Huntington, sole survivor of the "Big Four" who had undertaken construction of the Central Pacific portion of the transcontinental railroad beginning in 1863 (the others had been, of course, Charles Crocker, Mark Hopkins, and Leland Stanford). Huntington was parsimonious in his management, and the S.P. was in a period of retrenchment during this era, helped along by the Panic of 1893 that affected railroads nationwide. After Huntington's death, however, railroad magnate Edward H. Harriman was able in 1901 to obtain control of Huntington's interest in the S.P. from his heirs, adding that railroad to the Union Pacific, Illinois Central, and others under his control. In contrast to the frugality of the Huntington era, Harriman immediately initiated large expenditures that began a series of system-wide improvements to the S.P. to improve its efficiency (and hence its rate of return to him and company stockholders). During the next two decades then, these improvements, representing engineering and construction on a scale not seen on the S.P. since the initial construction of the Central Pacific, shaped both the physical plant and the operations of the railroad into what we see today.

B11. Additional Resource Attributes: (List attributes and codes) HP19 - Bridge

B12. References:

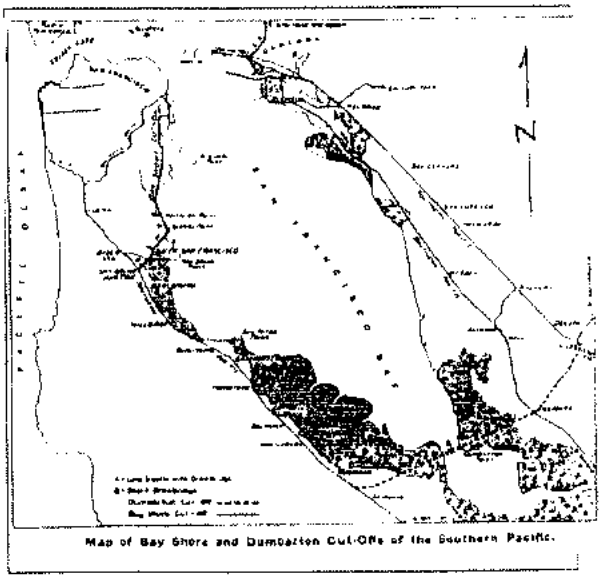
Books

Beebe, Lucius. *The Central Pacific & The Southern Pacific Railroads*. Berkeley: Howell-North, 1963.

B13. Remarks:

B14. Evaluator: John W. Snyder
Date of Evaluation: *11/22/96*

(This space reserved for official comments.)



Map of Bay Shore and Dumbarton Cut-Offs of the Southern Pacific.

3. The cutoff was built in conjunction with the Bayshore Cutoff and other Peninsula rail improvements during the administration of E.H. Harriman to expedite rail freight shipment between San Francisco and the Southern Pacific's Ogden and Shasta routes.

The Baltimore (Petit) truss, as used in the Newark Slough swing span, is a derivative of the basic Pratt truss using a series of sub-struts and sub-ties for greater strength and carrying capacity, and was developed by the Pennsylvania Railroad in 1871.

B10. Significance (continued) Under Harriman's direction, beginning in 1903 the engineering and maintenance of way departments of all the railroads under his control undertook standardization of virtually all elements, from track spikes to locomotives, and from bridges to stations. This allowed the companies to achieve greater economies as they expanded and improved. Among the standardized bridge types developed at this period were the timber pile trestles, deck plate girders, and through truss types used on the S.P. Newark Slough Bridge. At the same time, the S.P. began to modernize its locomotive and car fleet, transitioning to much larger and heavier locomotives (including the first of the articulated Mallet engines that were to become its hallmark), converting to oil fuel, and to all-steel passenger cars; freight cars likewise increased in size and capacity. Harriman invested in oil lands so that the oil-hungry Southern Pacific would not be dependent on outside sources, amassing some of the largest oil holdings in the nation.

In addition, Harriman began massive construction projects all around the S.P. system to increase operating efficiency, and to upgrade lines and bridges for modern traffic loadings; often these efforts took the form of newly-incorporated railroads that were totally S.P.-controlled, and that would be subsumed by the parent company upon their completion; more about this later. He also instituted an enlightened plan of formal training for employees, and built employee club houses to offer an alternative to bars and saloons. By late 1910, his efforts had resulted in the once-moribund Southern Pacific becoming one of only three railroads in the United States with an annual gross income of more than $100 million!

By 1904 Harriman had completed the Lucin Cutoff across the Great Salt Lake, eliminating the original Central Pacific/Union Pacific route around the north end of the lake (and in the process bypassing the meeting site at Promontory Summit). In 1905 the S.P. began improvements to main lines between San Francisco and the Pacific northwest, between San Francisco and Ogden, and between San Francisco and New Orleans, where S.P. steamships connected to New York. Harriman authorized more than 400 miles of new line system-wide, at a cost of $14 million, and gained concessions for 775 miles of new line for S.P.'s wholly-owned subsidiary in Mexico. During this period Harriman obtained a $2 million loan from New York banks, and is alleged to have told S.P. General Manager Julius Kruttschnitt that it was all to be spent improving mainline track in California. According to author, Lucius Beebe, Harriman called to uttschnitt as the latter was leaving the Thursday meeting, saying, "Spend it this week." While apocryphal, the story illustrates Harriman's impact upon the S.P. By the end of the year, S.P. had installed automatic block signals on 1,038 miles of track, with 664 more miles projected to be so signalled in 1906. In the San Francisco area, the company began construction of the Bayshore Cutoff between San Francisco and San Bruno to replace the circuitous and hilly line that had originally been built into the city by the predecessor San Francisco and San Jose Railroad in 1863. The new line, built in tunnels and on fill across Visitacion Bay, would be shorter and virtually level, and would include a major new yard and shops on 200 acres of reclaimed land at Visitacion. The Bayshore Cutoff would materially shorten running times between San Francisco and San Jose, and would facilitate freight shipment into San Francisco.

Related to this, and to facilitate freight shipments between San Francisco and the Ogden and Shasta lines, Harriman also directed the incorporation of the Central California Railway, to build a 16.4 mile line between Niles in Alameda County, and Redwood Junction in San Mateo County. This would obviate the need to ship freight across the Bay by ferry, or by rail south to San Jose and then back up the east side of the Bay, a trip of more than 100 miles; it would also be a logical link in conjunction with the new Bayshore Cutoff, then building. Completion of the two cutoffs would unify and improve the railroad's terminal facilities in San Francisco, shortening the trip around the south end of the Bay by 50 miles, and dispensing with the need for two car ferry transfers of freight. While conceived before the April 18, 1906 disaster in San Francisco, that event demonstrated to Harriman the need to improve access to and from the city.

The Central California Railway incorporated on October 3, 1904 with a capital stock of $1 million, to build a standard gauge railroad, with all appurtenances, from Niles to Dumbarton Point, across San Francisco Bay to Redwood City, and then to a point near San Mateo. While the articles of incorporation made no mention of the Southern Pacific, save in noting the two end connections with the S.P. mainlines, the makeup of the Board of Directors left no doubt as to the seat of control of the Central California: Director, Nathaniel T. Smith was Treasurer of the Southern Pacific; Director, William Hood was S.P.'s Chief Engineer; Director, Edgar E. Calvin was a Southern Pacific Vice-President; Director, John E. Foulds was an S.P. attorney; only Director, Frank Shay of Oakland seemingly had no connection to Southern Pacific. (Even more telling was the allocation of shares in 1912: members of the Board of Directors of the Central California held 300 shares; the Southern Pacific Railroad held 49,700 shares!)

.n 1906 the railroad built a new ferryboat facility at Alameda for both freight and passengers, replacing one built in the 1880s. It built new stations, including completing a stylish new Mission Revival station at Santa Barbara. When San Francisco was devastated by earthquake and fire on April 18, Harriman directed the railroad's response: in eighteen days the railroad carried in 1,252 cars of relief supplies, and carried out 115,295 passengers, 78,560 of which were carried free, some as far as Chicago. Harriman himself came west to the stricken city to direct efforts. In the southern part of the state, the Colorado River left its channel and began to flood the Imperial Valley, creating the Salton Sea. Forced to move its tracks five times, S.P. finally undertook the efforts, which would consume two years, to close the breach and force the river back into its natural channel. This year also saw Harriman decide to build a new line in Oregon to replace the steep and dangerous Siskiyou line; to build a cutoff line through eastern California to shorten times between Sparks, Nevada and Portland. In the few years remaining before his death in 1909, Harriman also began a major reconstruction of the original Central Pacific route over the Sierras. Under Harriman's presidency the Southern Pacific joined in cooperation with rival Santa Fe to build the Northwestern Pacific Railroad north from Willits to Eureka; such cooperation was hardly surprising, since Harriman owned controlling stock in Santa Fe.

The year 1906 saw Harriman and the S.P. investigating railroad electrification, including consideration of electrifying the S.P. main line over Donner Summit. Southern Pacific began acquisition of power generating plants and sites in the Sierras, but ultimately backed away from the expense when new, larger, oil-fired, and more efficient steam locomotives arrived. In the Bay Area, Harriman moved to electrify local lines in Oakland and the East Bay, with the ultimate intent to electrify all S.P. lines on both sides of the Bay, though his death, coupled with uncertainties related to government anti-trust proceedings would quash that effort. Related to this was the construction of the Dumbarton Cutoff, which would have carried electric-powered trains around the south end of the Bay.

Niles is located on the Southern Pacific mainline at the south end of Alameda County. Though Central Pacific crews had conducted initial surveys for a bridge between Dumbarton Point and Ravenswood as early as March 1875, the first actual rail link had been a narrow-gauge line projected between Santa Clara and Newark, intended to transport strawberries and other Santa Clara Valley produce to a steamer landing at Alviso, for transhipment to San Francisco. The company went bankrupt long before completion of the effort, and it fell upon Alfred Davis and the South Pacific Coast Railroad to complete it. Eventually connecting Oakland and Alameda with Santa Cruz, the narrow gauge SPC joined San Jose to Newark by 1877. Southern Pacific acquired the company in 1887, and eventually standard-gauged the line beginning in 1906, in conjunction with the other Harriman system improvements. Newark was to be the staging point for construction of the Dumbarton Cutoff and its attendant bridges.

.ne first surveying crews had actually arrived in 1905, setting off local speculation that the project would result in Newark receiving major yards and shops that would boost the local economy--speculation that was reinforced by similar reports in *The Railroad Gazette*; alas, this was not to be. Still, the little town boomed--sometimes literally with the off-loading and assembly of bridge steel--for the duration of the $15 million-dollar project to build the Dumbarton Cutoff. Bridge materials and other supplies arrived at Newark by rail from Oakland. Crews were busy grading the five miles between Niles and Newark, and the eleven miles between Newark and Redwood Junction. The most difficult work was to the west, for just outside Newark lay the tidal marshes of San Francisco Bay. By mid-1908, workers had completed nearly seven miles of track and an additional seven miles of grading, and were at work on the bridges. Construction steel, fabricated by American Bridge Company in Pennsylvania, was delivered by rail and off-loaded to the subassembly site at Dumbarton Point. Working from both sides of the Bay, and in several locations at once, crews began constructing the timber pile trestle approaches for the drawbridges at Newark Slough (subject of a separate form and evaluation) and at Dumbarton. At Dumbarton, piledrivers rode both ends of isolated sections of trestles as crews built toward each other.

At Newark Slough (and at Dumbarton), crews erected an elaborate system of timber pile dolphins topped by a timber truss falsework placed parallel to the navigable channel, allowing shipping to proceed relatively unimpeded during construction. With the falsework in place, they built a vertical steel guiding frame to place the steel shell of the central pivot pier. When they had placed the outside shell of the pier, the workers then proceeded to dredge the inside to a predetermined depth, after which they drove a forest of timber piles, finally filling the shell with concrete. (The two-column bents for the rest piers were constructed in similar fashion.) They then pulled out the timber pile dolphins surrounding the pivot pier. With the pivot pier in place, workers began the task of assembling the swing span. They began assembly of the massive through truss, with subassemblies delivered by barge.

On land, crews used dredgers to build three miles of new railroad grade above the marsh, while in San Mateo County that scene was repeated to reach from the solid ground to the western trestle approaches of the Dumbarton Bridge. The line was finally completed on September 12, 1910 and the bridge was formally opened on September 24, amid festivities that included an all-night dance, a barbecue, special trains, and the obligatory speeches. As soon as construction was completed, the line was leased to the Central Pacific and was ultimately sold to the C.P. (itself a subsidiary of the S.P.) on February 29, 1912.

The Dumbarton Cutoff proved to be the valuable freight link that Harriman had foreseen, though he had died in 1909, before its completion. During World War 1, when U.S. railroads came under the control of the United States Railroad Administration, the USRA ordered the joint use of the line and its bridges by the S.P. and peacetime rival Western Pacific. Again during World War 2 the cutoff carried massive amounts of freight for the war effort. In peacetime, it served to drastically shorten times and distances between San Francisco and destinations in the Pacific northwest and in the east, proving a vital economic and transportation link. During the 1920s, heavy freight traffic from the Dumbarton Cutoff into San Francisco was a factor in renewed consideration by Southern Pacific to electrification of this and Peninsula lines, and to completing the Peninsula lines to their ultimate 4-track mainline design; ultimately, the Great Depression obviated such need.

By the 1970s, "hotshot" freight trains from the Overland Route used the Dumbarton Cutoff to access San Francisco, and late in that decade the railroad began to replace the timber trestles with ones of reinforced concrete. Then, a shift in shipping from the port of San Francisco to the Port of Oakland caused a substantial and irreversible decline in traffic into San Francisco. Hard on the heels of its improvements to the Dumbarton Cutoff, S.P. closed the line in May 1982. In the early 1990s, Caltrain planners began considering use of the line for commuter rail, and electrification was again discussed. Today, the line is owned by the San Mateo County Transportation Agency, which is pursuing re-opening the line for commuter rail use. This effort will require rehabilitation of the bridges, leading to preparation of this evaluation.

In terms of the bridge types involved, the timber pile trestle as a type finds its antecedants in Colonial America. By the time these were built, the Southern Pacific Railroad had adopted a standard design, first during the Harriman era, and later updated that standardization. The trestle elements of these bridges conform to plans C.S. 1600, "Southern Pacific Lines Common Standard Ballasted Deck Pile Trestle, Single Track, Six-Pile Bents, Five-Strunger Creosoted Packed Chords, Adopted May 18, 1937," and C.S. 1602, "Southern Pacific Lines Common Standard Ballasted Deck Pile Trestle, Single Track, Seven-Pile Bents, Six-Stringer Creosoted Packed Chords, Adopted May 18, 1937." The abutments conform to C.S. 1660, "Southern Pacific Lines Common Standard Straight Timber Bulkhead for Ballasted Deck Trestle C.S. 1600, Adopted October 10, 1931." Since period accounts identiry the original trestles as having 6-pile bents, those at the east end of the Dumbarton Bridge and at both ends of the Newark Slough Bridge appear to date from 1908-9.

Plate girder spans came into railroad use during the 1840s, first in iron, later in steel. The deck girder spans found at the Newark Slough and Dumbarton Bridges conform to Harriman Common Standard deck girders as adopted in 1905.

a type, the Pratt truss dates to 1844 when Thomas and Caleb Pratt patented the design. Most of the first examples were so-called combination" trusses, using wood for chords, endposts, and compression members, and iron tension members. The design offered lower initial cost and slightly longer life than its immediate predecessors. With the onset of iron bridge construction, American railroads quickly adopted the Pratt, first in iron, later in steel. Today it is the most common truss bridge type in the United States. The Baltimore (Petit) truss span found at the Newark Slough Bridge is a derivative of the Harriman Common Standard riveted through Pratt trusses, as adopted in 1905. The Baltimore (Petit) truss, as used in the Newark Slough swing span, was developed by the Pennsylvania Railroad in 1871, using a series of sub-struts and sub-ties for greater strength and carrying capacity.

Movable bridges are required for low level crossings where there is a necessity to provide for a navigable passage. Of the three types of movable bridges--swing, vertical lift, and bascule--the swing bridge is the least expensive to build. Among their disadvantages, however, are the facts that they are slow to operate, require a large pier in the center of the navigable channel, and have to be fully opened for even small vessels. There are two types of swing bridges, the center-bearing and the rim-bearing. The Newark Slough Bridge is center-bearing. When in the closed position, the center-bearing bridge has three points of support: the center pier and the end piers; when open, the weight of the bridge rests entirely on the large phosphor bronze center bearing. In operation, the operator releases a series of wedges and brakes that secure the ends of the swing span, then engages the motor drive system whereby power is transmitted through a pinion-gear drive train to a curved rack gear atop the center pier, opening the draw span. Normally, swing bridges only rotate ninety degrees.

ne Southern Pacific Dumbarton Cutoff appears to meet the eligibility criteria of the National Register of Historic Places, at the local level of significance in transportation and engineering. It retains integrity of location, setting, feeling, and association; trestle replacements from the 1970s constitute a very minor compromise to integrity of design, materials, and workmanship. Under criterion A, it is associated with the system-wide improvements to the Southern Pacific that gave the railroad its 20th century form and made it the standard railroad of the West. It is inextricably linked with the economic growth of San Francisco and its port in the first half of the 20th century, and with the national defense efforts during both world wars. Under criterion B, it is associated with the life of E.H. Harriman, the genius of whom drove the modernization of the S.P. during the first two decades of this century, even beyond his death. Harriman saw the need for, and directed the building of, the Dumbarton Cutoff. Under criterion C, contributive elements of the Cutoff, such as the Dumbarton and Newark Slough Bridges, are representative examples of their type (Harriman Common Standard timber trestle, deck girder, and through truss bridges), period (first decade of the 20th century), and method of construction. Built in 1908-9, they are among the oldest of their type in California, with only the Southern Pacific's Sacramento River Bridge at Tehama (1898) known to predate them.

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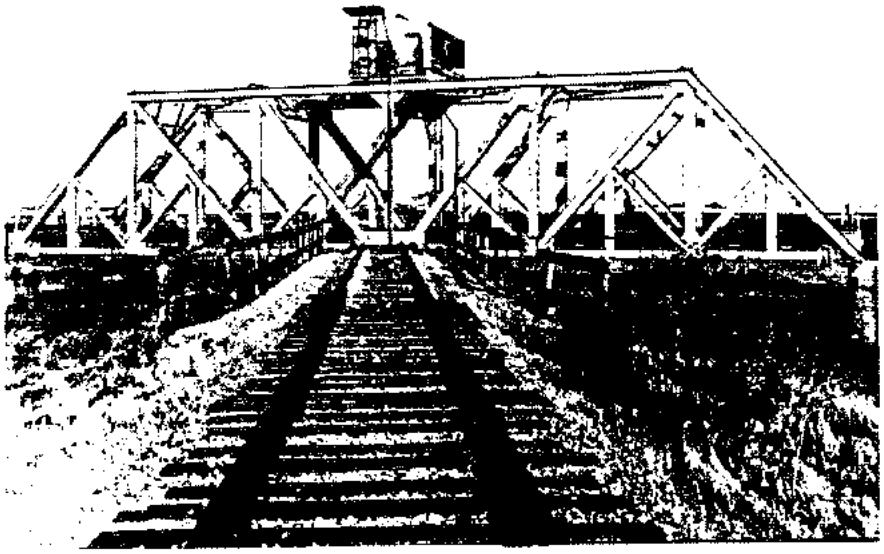
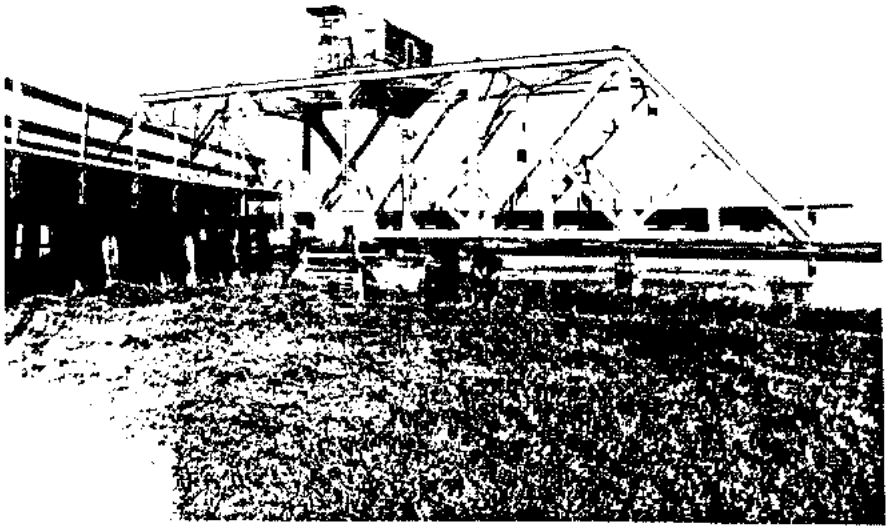
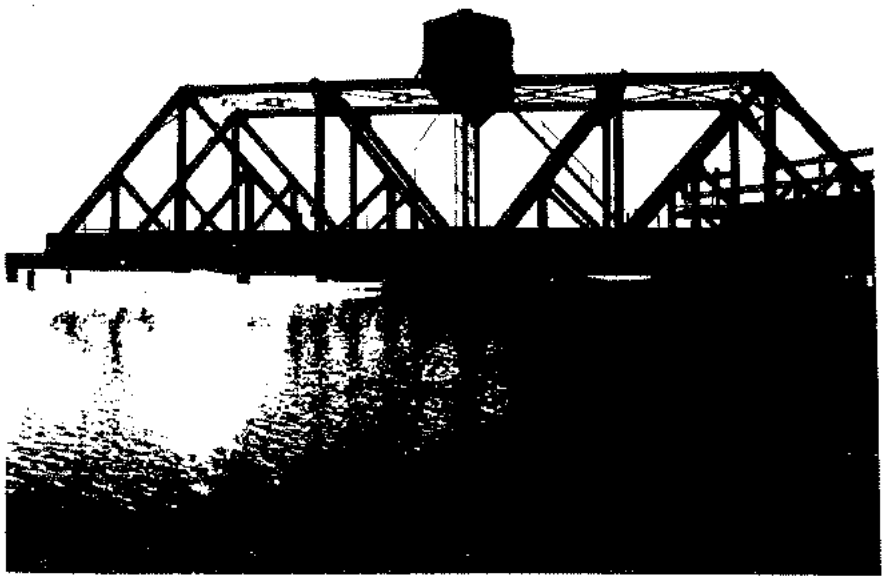


View to northeast of Newark Slough Bridge from just west of western approach. Swing span is in open position.



View to northeast of Newark Slough Bridge, from south side of western approach.

View to southwest of Newark Slough Bridge, from eastern approach.



View to southwest of Newark Slough Bridge, from south side of eastern approach.

Appendix 3.9

Biological Resources Assessments and Bird Safe Design

H. T. HARVEY & ASSOCIATES
Ecological Consultants
50 years of field notes, exploration, and excellence

Willow Village Master Plan
Biological Resources Report

Project #3375-17

Prepared for:

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Peninsula Innovation Partners
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Prepared by:

H. T. Harvey & Associates

February 24, 2022

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Section 1. Introduction

This report describes the biological resources present in and adjacent to the area of Meta Platforms, Inc.'s (Meta) proposed Willow Village Master Plan project (project), as well as the potential impacts of the proposed project and measures necessary to reduce impacts to less-than-significant levels under the California Environmental Quality Act (CEQA). This report was prepared to facilitate CEQA review of the Willow Village Master Plan by the City of Menlo Park. In addition, this report contains the information needed to satisfy Mitigation Measure BIO-1 from the ConnectMenlo General Plan Environmental Impact Report (EIR) (Placeworks 2016), which requires preparation of a biological resources assessment containing information specified in that mitigation measure.

1.1 Project Description

The proposed project entails the redevelopment of the former Menlo Science and Technology Park, as well as an adjacent area west of Willow Road, to create a contemporary mixed-use district including housing, community-serving retail, new public parks and landscaped areas, and a new campus district to provide additional workspace for Meta. The approximately 64.0-acre project site (inclusive of the "main project site" east of Willow Road and "Hamilton Avenue Parcels North and South" west of Willow Road) is located within Menlo Park's Bayfront Area and is bounded by Willow Road and commercial development to the west, the Dumbarton Rail Corridor to the north, the Hetch Hetchy right-of-way corridor and Mid-Peninsula High School to the south, and an existing life science complex to the east (Figure 1). To the west are existing commercial and multi-family uses and Menlo Park's Belle Haven neighborhood.

The main project site is currently occupied by 20 office, industrial, and warehouse buildings that compose approximately 1,000,000 square feet (ft^2) of improvements, as well as surface parking (Figure 2). The Hamilton Avenue Parcels North and South portion of the project site is occupied primarily by restaurants and a gas station. Following the approval of the 2014-2016 update of the Land Use and Circulation Elements of the City of Menlo Park General Plan, identified as ConnectMenlo (City of Menlo Park 2016), Meta undertook an extensive planning effort for the Willow Village Master Plan. The project has been carefully designed to conform to the updated zoning requirements, including the provision for "master planned projects" which allows for a single project or phased development project on sites that exceed 15 acres in size and contain different zoning designations to aggregate density and uses across the entire project site. In addition, the project would aim to comply with all other development standards in the office and residential mixed-use zoning districts, including parking, setbacks, open space, paseos, building design (including bird-friendly design), green and sustainable building, and heritage trees.

Willow Village proposes to replace more than 1,000,000 ft^2 of existing industrial, office, and warehouse space in the Menlo Science and Technology Park with a new, mixed-used village that includes up to 1,735 residential units, 200,000 ft^2 of retail uses, a hotel with up to 193 rooms and accessory uses, 1,250,000 ft^2 of office uses,

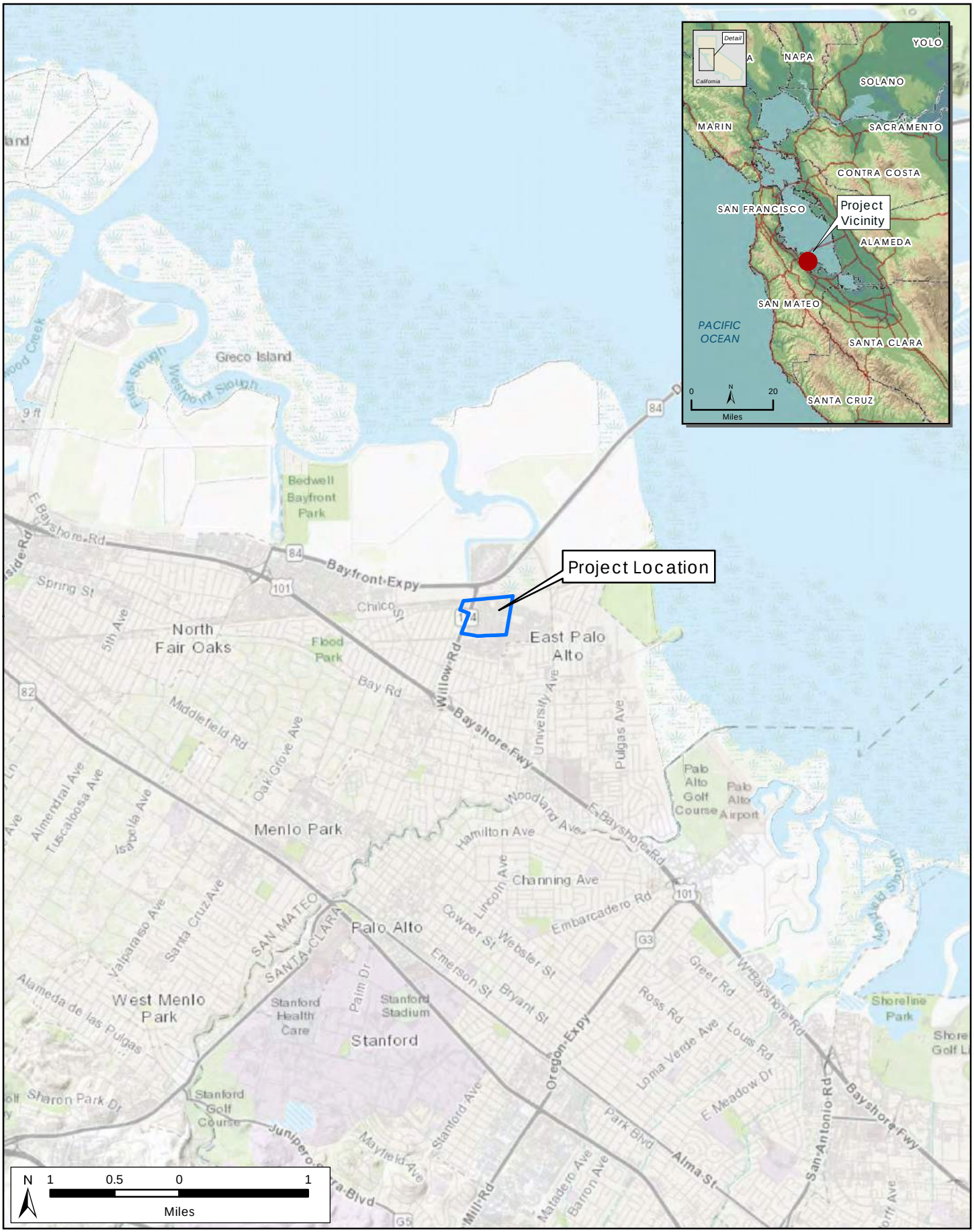

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Figure 1. Vicinity Map
Willow Village Master Plan Biological Resources Report (3375-21)
February 2022

N:\Projects3300\3375-01\21\Reports\BRR\Fig 2 Study Area.mxd

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Figure 2. Study Area

Willow Village Master Plan Biological Resources Report (3375-21)

February 2022

and 500,000 square feet of accessory uses. The plan will require demolition of all existing site improvements consisting of buildings, streets, and utilities. Proposed improvements include site grading to elevate the property above the FEMA base flood elevation and to create buildable pads, construction of new circulation improvements to accommodate vehicles, bicycles, and pedestrians, utilities, park and open space improvements, residential mixed-use buildings, a hotel, and an office campus. Additional improvements will be completed at key connection points at O'Brien Drive, Park Street, Adams Court, and Hamilton Avenue. Mixed-use buildings will range in height from 55–80 ft; office buildings and associated accessory buildings will have a maximum height of 110 ft and would comply with the average heights as established by *ConnectMenlo's* zoning standards.

In order to accommodate the realignment of Hamilton Avenue (to connect to New Hamilton) and to construct the western access (ramp and elevator) to an elevated park, some of the existing development on the block located at the northwest corner and a portion of the block located at the southwest corner of Willow Road and the existing Hamilton Avenue may need to be reconfigured. The block on the northwest corner is approximately 1.83 acres and currently is developed with approximately 16,000 square feet of retail buildings. The portion of the block located at the southwest corner is approximately 1.34 acres and currently is developed with a gas station with approximately 4,500 sf of retail. Both sites are zoned C-2-S Neighborhood Commercial District Special. To accommodate the Hamilton Avenue road realignment, the gas station would be relocated further north in the retail site. In addition, the existing retail may be removed and replaced with new retail buildings in a new site configuration. It is anticipated that the replacement development would be similar to the existing development in size and use potentially adding 5,000 sf in shops, which could include an additional drive through option. Any construction related activities would occur in Phase 2 of the schedule.

The site lighting for Willow Village will comply with Title 24 and Menlo Park's lighting guidelines for both the Residential Mixed-use and Office zoning districts. All fixtures will be energy-efficient, reduce glare and unnecessary light spillage, while providing safe routes of travel for vehicles and pedestrians.

It is anticipated that all trees on the project site would be removed. Heritage trees, as defined by the City of Menlo Park, would be replaced at a ratio of 2:1 (replacement trees:impacted heritage tree) in accordance with City policies for commercial applicants[1]. The conceptual landscape plan envisions a combination of native, drought-tolerant, and adapted species from around the world and calls for approximately 800 new trees to be planted. Consistent with Menlo Park municipal codes on landscape design, no invasive species or noxious weeds would be used in landscaping for the redeveloped areas.

A chain of publicly accessible open spaces will be located along Main Street, and a new 2.1-acre elevated pedestrian and bike-friendly publicly accessible park is designed to accommodate pedestrian walking trails, bicycle paths, gardens with native drought-tolerant and adapted species, lawn areas, interpretive horticultural exhibits, seating areas, children's play areas, recreation areas, shading canopies, water features, cafés, picnic areas, and public restrooms, as well as security and safety infrastructure. The elevated park would be constructed

[1] https://menlopark.org/DocumentCenter/View/833/Heritage-Tree-Replacement-Procedures

above grade, providing views south over Willow Village and Town Square, north to the Don Edwards San Francisco Bay National Wildlife Refuge, and east towards San Francisco Bay.

Offsite improvements will be made as well. Safe crossing design improvements will be incorporated in the northwest corner of the site to provide safe pedestrian, bicycle, and vehicular movements at Hamilton Avenue and between the two adjoining office campuses. Improvements along Willow Road will include widening of the right-of-way to accommodate additional left turn pockets, installation of new traffic signals, utility points of connections, sidewalk improvements, and landscape improvements. At the southeast corner of the site, in the Residential/Shopping District, a new intersection is proposed at O'Brien Drive, requiring new traffic signals and roadway layout alterations. Along the southern property line, an existing open channel located both on and off-site within the study area directs storm water flows to an existing storm drain main along the east property line. To accommodate site improvements, the drainage flows within this channel will be undergrounded and the channel filled.

It is currently anticipated that Willow Village will be constructed in two primary phases, with Phase 1 being divided into two sub-phases. Construction will commence on the southern portion of the site and move northward. Each construction phase will include the grading of that phase and construction of the circulation (including transit, auto, bicycle, and pedestrian) and utility infrastructure necessary to serve that phase. There may be some overlap in construction phases.

1.2 Bird-Safe Design

In 2014, the City of Menlo Park initiated the process of updating its General Plan Land Use and Circulation Elements as well as its zoning for the M-2 area (also known as the Bayfront Area) in the northern portion of Menlo Park. Collectively, this update to the General Plan and zoning is known as *ConnectMenlo*. On November 29, 2016, the City Council certified the *ConnectMenlo: General Plan Land Use & Circulation Elements and M-2 Area Zoning Update Environmental Impact Report* (ConnectMenlo EIR) and approved the General Plan Land Use and Circulation Elements. The Willow Village project is located within the ConnectMenlo area.

Mitigation Measure BIO-1 of the ConnectMenlo EIR requires measures to ensure that the project reduces bird collisions with new buildings. Pursuant to Mitigation Measure BIO-1, the project must comply with bird-safe design requirements subsequently incorporated into Municipal Code Sections 16.43.150(6) and 16.43.130(6), which include measures to reduce bird collisions. These requirements are as follows:

A. No more than 10% of façade surface area shall have non-bird-friendly glazing.

B. Bird-friendly glazing includes, but is not limited to, opaque glass, covering the outside surface of clear glass with patterns, paned glass with fenestrations, frit or etching patterns, and external screens over nonreflective glass. Highly reflective glass is not permitted.

C. Occupancy sensors or other switch control devices with an astronomic time clock shall be installed on nonemergency lights and shall be programmed to shut off during non-work hours and between 10:00 p.m. and sunrise.

D. Placement of buildings shall avoid the potential funneling of flight paths towards a building façade.

E. Glass skyways or walkways, free-standing (see-through) glass walls and handrails, and transparent building corners shall not be allowed.

F. Transparent glass shall not be allowed at the rooflines of buildings, including in conjunction with roof decks, patios and roofs with landscape vegetation.

G. Use of rodenticides shall not be allowed.

A project may receive a waiver from requirements A through F, subject to the submittal of a site-specific evaluation from a qualified biologist and review and approval by the Planning Commission. A waiver from requirement G is not authorized.

The Willow Village Master Plan incorporates robust bird-safe design measures to minimize bird collisions with project buildings, in accordance with Mitigation Measure BIO-1. H. T. Harvey & Associates (2021a) prepared a *Willow Village Master Plan Bird-Safe Design Assessment* that assessed the potential for bird collisions with various Master Plan components based on the locations of those components and the project's conceptual Conditional Development Permit (CDP) application. For that bird-safe design assessment, H. T. Harvey worked with Meta's design team to identify features of the architecture of project buildings and lighting principles that would reduce the frequency of avian collisions; the components of the City's bird-safe design requirements (from Mitigation Measure BIO-1 of the ConnectMenlo EIR) that Master Plan components could comply with; and proposed waivers from the requirements identified in Municipal Code Sections 16.43.150(6) and 16.43.130(6) and alternative measures that the project would incorporate to meet the intent and effectiveness of any City bird-safe design requirements that the project could not comply with to the letter. In addition, H. T. Harvey also proposed mitigation measures to further minimize impacts related to bird collisions. The *Willow Village Master Plan Bird-Safe Design Assessment* documents that with implementation of these design features, lighting principles, bird-safe design requirements or alternative measures, and mitigation measures, project impacts due to bird collisions with buildings would be reduced to less-than-significant levels under CEQA.

Section 2. Methods

2.1 Background Review

Prior to conducting initial field work, H. T. Harvey & Associates ecologists reviewed the original project plans and description provided by Meta in November 2017; aerial images (Google Inc. 2021); a U.S. Geological Survey (USGS) topographic map; the California Department of Fish and Wildlife's (CDFW's) California Natural Diversity Database (CNDDB 2021); and other relevant scientific literature and technical databases. Previous reports prepared for the project and vicinity were also reviewed, including the arborist report for the main project site (SBCA Tree Consulting 2017); the Final EIRs for the nearby Menlo Park Facebook Campus (Atkins 2012) and the Facebook Campus Expansion Project (ICF International 2016); the Final EIR for the ConnectMenlo: General Plan Land Use & Circulation Elements and M-2 Area Zoning Update for the City of Menlo Park (PlaceWorks 2016); and the Comprehensive Conservation Plan and Environmental Assessment for the Don Edwards San Francisco Bay National Wildlife Refuge (NWR) (USFWS 2012). In addition, for plants, we reviewed all species on current California Native Plant Society (CNPS) California Rare Plant Rank (CRPR) 1A, 1B, 2A, and 2B lists occurring in the *Palo Alto, California* USGS quadrangle and surrounding eight quadrangles (*Woodside, San Mateo, Redwood Point, Newark, Mountain View, Cupertino, Mindego Hill,* and *La Honda, California*). Quadrangle-level results are not maintained for CRPR 3 and 4 species, so we also conducted a search of the CNPS Inventory records for these species occurring in San Mateo County (CNPS 2021). In addition, we queried the CNDDB (2021) for natural communities of special concern that occur in the project region. For the purposes of this report, the "project vicinity" encompasses a 5-mile (mi) radius surrounding the project site.

After the Willow Village design and program were revised in May 2020, we reviewed the updated plans (Peninsula Innovation Partners 2020) and current CNDDB and CNPS information to ensure that our updated assessment of the project's potential impacts on biological resources was based on up-to-date information.

In addition, H. T. Harvey & Associates (2021b) performed a delineation of jurisdictional wetlands and other waters of the U.S./State within the study area in 2021. A field visit for that delineation was conducted in August 2021, and a follow-up visit to assess conditions in a drainage ditch was conducted on December 31, 2021.

2.2 Site Visits

The project site discussed in this report includes the area enclosed by the project boundary shown in Figure 2. For the purposes of ensuring evaluation of all potential direct, indirect, and cumulative effects on biological resources, the project's biological resources study area includes the project site (main site and Hamilton Avenue Parcels North and South) and areas within 100 ft beyond the project boundary (Figure 2). Reconnaissance-level field surveys of the main project site, as well as areas within the Dumbarton Rail Corridor both east and west of Willow Road, were initially conducted by H. T. Harvey & Associates senior wildlife ecologist Steve Rottenborn, Ph.D., on October 26, 2017 and by H. T. Harvey & Associates wildlife ecologist, Stephen L.

Peterson, M.S., and plant ecologist Matthew Mosher, B.S., on November 13, 2017, with an additional visit by M. Mosher on November 15, 2017. After the project was redesigned in 2019, S. Rottenborn visited the main project site again on April 22, 2019. After the project was redesigned in 2020, H. T. Harvey & Associates senior wildlife ecologist Robin Carle, M.S., visited the Hamilton Avenue Parcels North and South portion of the site on June 10, 2020 and H. T. Harvey & Associates senior plant ecologist Mark Bibbo, M.S., visited this area on June 12, 2020. The purpose of these surveys was to provide a project-specific impact assessment for the proposed project as described above. Specifically, surveys were conducted to (1) assess existing biotic habitats and general plant and wildlife communities in the study area, (2) assess the potential for the project to impact special-status species or their habitats, and (3) identify potential jurisdictional habitats, such as Waters of the U.S./State and riparian habitat.

In addition, focused surveys for Congdon's tarplant (*Centromadia parryi* var. *congdonii*) were conducted by H. T. Harvey & Associates plant ecologists on November 13, 2017 (main project site) and June 12, 2020 (Hamilton Avenue Parcels North and South). These surveys targeted areas of potential suitable habitat along the Dumbarton Rail Corridor in the northern portion of the study area.

Section 3. Regulatory Setting

Biological resources on the project site are regulated by a number of federal, state, and local laws and ordinances, as described below.

3.1 Federal

3.1.1 Clean Water Act

The Clean Water Act (CWA) functions to maintain and restore the physical, chemical, and biological integrity of Waters of the U.S., which include, but are not limited to, tributaries to traditionally navigable waters currently or historically used for interstate or foreign commerce, and adjacent wetlands. Historically, in non-tidal waters, U.S. Army Corp of Engineers (USACE) jurisdiction extends to the ordinary high water (OHW) mark, which is defined in Title 33, Code of Federal Regulations (CFR), Part 328.3. If there are wetlands adjacent to channelized features, the limits of USACE jurisdiction extend beyond the OHW mark to the outer edges of the wetlands. Wetlands that are not adjacent or tributaries to Waters of the U.S. are termed "isolated wetlands" and, depending on the circumstances, typically are not subject to USACE jurisdiction. In tidal waters, USACE jurisdiction extends to the landward extent of vegetation associated with salt or brackish water or the high tide line. The high tide line is defined in 33 CFR Part 328.3 as "the line of intersection of the land with the water's surface at the maximum height reached by a rising tide."

Construction activities within jurisdictional waters are regulated by the USACE. The placement of fill into such waters must comply with permit requirements of the USACE. No USACE permit will be effective in the absence of Section 401 Water Quality Certification. The State Water Resources Control Board (SWRCB) is the state agency (together with the Regional Water Quality Control Boards [RWQCBs] charged with implementing water quality certification in California.

Project Applicability: The project site itself does not support wetland or aquatic habitats. A small, isolated segment of forested wetland that may be claimed as Waters of the U.S. is located in a drainage ditch along the northern edge of the study area, just outside the project boundary (H. T. Harvey & Associates 2021b). Similarly, a linear area of herbaceous-dominated seasonal wetland is present in the Dumbarton Rail Corridor immediately north of the Hamilton Avenue Parcels North and South portion of the project site. Another herbaceous seasonal wetland is present just outside the northeast corner of the project boundary (H. T. Harvey & Associates 2021b). These seasonal wetlands might also be claimed as Waters of the U.S. The San Francisco office of the USACE would ultimately determine whether or not these features are subject to USACE jurisdiction under Section 404 of the CWA (under either current regulations or any amended regulations). It is our understanding that the project will avoid to the extent feasible placing fill in those features, in which case no permit from the USACE would be needed for activities associated with these features even if determined to be jurisdictional. However, if these features are determined to be jurisdictional and are impacted by project grading, a Section

404 permit from the USACE would be required., and mitigation of impacts would be required as described in Mitigation Measures BIO-11 and 12 in Section 6.2.1.

A ditch located partially on-site and partially within the Hetch Hetchy easement corridor immediately south of the main project site (and within the study area) was dominated by upland (non-wetland) vegetation during our April 2019 site visit (as well as the August 2021 site visit for the delineation of waters of the U.S./State [H. T. Harvey & Associates 2021b]), is concrete-lined in at least some locations, and is excavated in uplands to collect stormwater runoff from the surrounding development. A visit to the site on December 31, 2021, after a prolonged, heavy rain event, revealed evidence of only a very small amount of runoff that had flowed through this ditch during the storm. As such, we do not expect this feature to be claimed as Waters of the U.S. by the USACE.

Brackish marsh habitat is present outside and well to the north and northeast of the study area. We expect that this brackish marsh would be considered Waters of the U.S. under both current and proposed definitions of Waters of the U.S. because it is adjacent to tidal channels that would either be considered navigable or tributaries to navigable waters. This brackish marsh habitat is located well off-site, however, and no impacts to this marsh would result from the proposed project.

3.1.2 Rivers and Harbors Act

Section 10 of the Rivers and Harbors Act of 1899 prohibits the creation of any obstruction to the navigable capacity of Waters of the U.S., including discharge of fill and the building of any wharfs, piers, jetties, and other structures without Congressional approval or authorization by the Chief of Engineers and Secretary of the Army (33 U.S.C. 403).

Navigable Waters of the U.S., which are defined in 33 CFR, Part 329.4, include all waters subject to the ebb and flow of the tide, and those which are presently or have historically been used to transport commerce. The shoreward jurisdictional limit of tidal waters is further defined in 33 CFR, Part 329.12 as "the line on the shore reached by the plane of the mean (average) high water." It is important to understand that the USACE does not regulate wetlands under Section 10, only the aquatic or open waters component of bay habitat, and that there is overlap between Section 10 jurisdiction and Section 404 jurisdiction. According to 33 CFR, Part 329.9, a waterbody that was once navigable in its natural or improved state retains its character as "navigable in law" even though it is not presently used for commerce as a result of changed conditions or the presence of obstructions. Historical Section 10 Waters may occur behind levees in areas that are not currently exposed to tidal or muted-tidal influence, and meet the following criteria: (1) the area is presently at or below the mean high water line; (2) the area was historically at or below mean high water in its "unobstructed, natural state"; and (3) there is no evidence that the area was ever above mean high water.

As mentioned above, Section 404 of the CWA authorizes the USACE to issue permits to regulate the discharge of dredged or fill material into Waters of the U.S. If a project also proposes to discharge of dredged or fill

material or introduce of other potential obstructions in navigable Waters of the U.S., a Letter of Permission authorizing these impacts must be obtained from the USACE under Section 10 of the Rivers and Harbors Act.

Project Applicability: Based on mapping of the historical margins of San Francisco Bay marshes (Nichols and Wright 1971), which depict the margins of baylands being located well north of the project site, no current or historical Section 10 waters are present within the project boundary or elsewhere within the study area (e.g., in the wetlands immediately north and northeast of the project boundary). Therefore, no Section 10 Letter of Permission from the USACE is required for the project.

3.1.3 Federal Endangered Species Act

The Federal Endangered Species Act (FESA) protects federally listed wildlife species from harm or "take", which is broadly defined as "to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, collect, or attempt to engage in any such conduct." Take can also include habitat modification or degradation that directly results in death or injury of a listed wildlife species. An activity can be defined as "take" even if it is unintentional or accidental. Generally, listed plant species are provided less protection than listed wildlife species. Listed plant species are legally protected from take under the FESA only if they occur on federal lands.

The U.S. Fish and Wildlife Service (USFWS) and the National Marine Fisheries Service (NMFS) have jurisdiction over federally listed, threatened, and endangered species under FESA. The USFWS also maintains lists of proposed and candidate species. Species on these lists are not legally protected under FESA, but may become listed in the near future and are often included in their review of a project.

Project Applicability: No suitable habitat for any federally listed plant or animal species occurs in the study area. Thus, no federally listed species are reasonably expected to occur in the study area.

3.1.4 Magnuson-Stevens Fishery Conservation and Management Act

The Magnuson-Stevens Fishery Conservation and Management Act governs all fishery management activities that occur in federal waters within the United States' 200-nautical-mile limit. The Act establishes eight Regional Fishery Management Councils responsible for the preparation of fishery management plans (FMPs) to achieve the optimum yield from U.S. fisheries in their regions. These councils, with assistance from NMFS, establish Essential Fish Habitat (EFH) in FMPs for all managed species. Federal agencies that fund, permit, or implement activities that may adversely affect EFH are required to consult with NMFS regarding potential adverse effects of their actions on EFH, and respond in writing to recommendations by NMFS.

Project Applicability: No EFH is present in the study area.

3.1.5 Federal Migratory Bird Treaty Act

The federal Migratory Bird Treaty Act (MBTA), 16 U.S.C. Section 703, prohibits killing, possessing, or trading of migratory birds except in accordance with regulations prescribed by the Secretary of the Interior. The MBTA

protects whole birds, parts of birds, and bird eggs and nests, and it prohibits the possession of all nests of protected bird species whether they are active or inactive. An active nest is defined as having eggs or young, as described by the USFWS in its June 14, 2018 memorandum "Destruction and Relocation of Migratory Bird Nest Contents". Nest starts (nests that are under construction and do not yet contain eggs) and inactive nests are not protected from destruction.

In its June 14, 2018 memorandum, the USFWS clarified that the destruction of an active nest "while conducting any activity where the intent of the action is not to kill migratory birds or destroy their nests or contents" is not prohibited by the MBTA. On February 3, 2020, the USFWS published a proposed rule to codify the scope of the MBTA as it applies to activities resulting in the injury or death of migratory birds (85 FR 5915-5926); the USFWS is currently considering comments on the proposed rule.

Project Applicability: All native bird species that occur in the study area are protected under the MBTA. Mitigation Measures BIO-13, 14, 15, and 16 shall be implemented to ensure that project activities comply with the MBTA as described in Section 6.4.1.

3.2 State

3.2.1 Porter-Cologne Water Quality Control Act

The SWRCB works in coordination with the nine RWQCBs to preserve, protect, enhance, and restore water quality. Each RWQCB makes decisions related to water quality for its region, and may approve, with or without conditions, or deny projects that could affect Waters of the State. Their authority comes from the CWA and the State's Porter-Cologne Water Quality Control Act (Porter-Cologne). Porter-Cologne broadly defines Waters of the State as "any surface water or groundwater, including saline waters, within the boundaries of the state." Because Porter-Cologne applies to any water, whereas the CWA applies only to certain waters, California's jurisdictional reach overlaps and may exceed the boundaries of Waters of the U.S. For example, Water Quality Order No. 2004-0004-DWQ states that "shallow" Waters of the State include headwaters, wetlands, and riparian areas. Moreover, the San Francisco Bay Region RWQCB's Assistant Executive Director has stated that, in practice, the RWQCBs may claim jurisdiction over riparian areas. Where riparian habitat is not present, such as may be the case at headwaters, jurisdiction is taken to the top of bank.

On April 2, 2019, the SWRCB adopted the State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State. In these new guidelines, riparian habitats are not specifically described as Waters of the State but instead as important buffer habitats to streams that do conform to the State Wetland Definition. The Procedures describe riparian habitat buffers as important resources that may both be included in required mitigation packages for permits for impacts to Waters of the State.

Pursuant to the CWA, projects that are regulated by the USACE must also obtain a Section 401 Water Quality Certification permit from the RWQCB. This certification ensures that the proposed project will uphold state water quality standards. Because California's jurisdiction to regulate its water resources is much broader than

that of the federal government, proposed impacts on Waters of the State may require Waste Discharge Requirements even if the area occurs outside of USACE jurisdiction. Moreover, the RWQCB may impose mitigation requirements even if the USACE does not, for example for riparian habitats which are buffers to Waters of the State. Under the Porter-Cologne, the SWRCB and the nine regional boards also have the responsibility of granting CWA National Pollutant Discharge Elimination System (NPDES) permits and Waste Discharge Requirements for certain point-source and non-point discharges to waters. These regulations limit impacts on aquatic and riparian habitats from a variety of urban sources.

Project Applicability: No aquatic, wetland, or riparian habitats are present within the project boundary. However, as noted above in Section 3.1.1, a small, isolated segment of forested wetland that would likely be claimed as Waters of the State is located in a drainage ditch along the northern edge of and within the study area, just outside the project boundary (H. T. Harvey & Associates 2021b). Similarly, a linear area of herbaceous-dominated seasonal wetland is present in the Dumbarton Rail Corridor immediately north of the Hamilton Avenue Parcels North and South portion of the project site. Another herbaceous seasonal wetland is present just outside the northeast corner of the project boundary (H. T. Harvey & Associates 2021b). These seasonal wetlands might also be claimed as Waters of the State. It is our understanding that the project will avoid to the extent feasible placing fill in those wetlands, in which case no permit from the RWQCB would be needed for activities associated with wetlands even if these features are determined to be jurisdictional. However, if these features are determined to be jurisdictional and are impacted by the project, Section 401 water quality certification or Waste Discharge Requirements from the RWQCB would be required, and mitigation of impacts would be required as described in Mitigation Measures BIO-11 and 12 in Section 6.2.1. A ditch located partially on-site and partially within the Hetch Hetchy easement corridor immediately south of the main project site (but within the study area) was dominated by upland (non-wetland) vegetation during our April 2019 site visit, is concrete lined in at least some locations, and is excavated in uplands to collect stormwater runoff from the surrounding development. As such, we do not expect this feature to be claimed as Waters of the State by the RWQCB (H. T. Harvey & Associates 2021b).

Brackish marsh habitat is present well to the north and northeast of the study area. We expect that this brackish marsh would be considered Waters of the State because it is adjacent to tidal channels that would either be considered navigable or tributaries to navigable waters. This brackish marsh habitat is located well off-site, however, and no impacts to this marsh would result from the proposed project.

3.2.2 California Endangered Species Act

The California Endangered Species Act (CESA; California Fish and Game Code, Chapter 1.5, Sections 2050-2116) prohibits the take of any plant or animal listed as an endangered, threatened, or candidate species. In accordance with the CESA, the CDFW has jurisdiction over state-listed species (Fish and Game Code 2070). The CDFW regulates activities that may result in "take" of individuals (i.e., "hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill"). Habitat degradation or modification is not expressly included in the definition of "take" under the California Fish and Game Code. The CDFW, however, has

interpreted "take" to include the "killing of a member of a species which is the proximate result of habitat modification."

Project Applicability: No suitable habitat for any state listed plant or animal species occurs in the study area, and thus no state listed species are expected to occur in the study area.

3.2.3 California Environmental Quality Act

CEQA is a state law that requires state and local agencies to document and consider the environmental implications of their actions and to refrain from approving projects with significant environmental effects if there are feasible alternatives or mitigation measures that can substantially lessen or avoid those effects. CEQA requires the full disclosure of the environmental effects of agency actions, such as approval of a general plan update or the projects covered by that plan, on resources such as air quality, water quality, cultural resources, and biological resources. The State Resources Agency promulgated guidelines for implementing CEQA are known as the State CEQA Guidelines.

Section 15380(b) of the State CEQA Guidelines provides that a species not listed on the federal or state lists of protected species may be considered rare if the species can be shown to meet certain specified criteria. These criteria have been modeled after the definitions in the FESA and the CESA and the section of the California Fish and Game Code dealing with rare or endangered plants and animals. This section was included in the guidelines primarily to deal with situations in which a public agency is reviewing a project that may have a significant effect on a species that has not yet been listed by either the USFWS or CDFW or species that are locally or regionally rare.

The CDFW has produced three lists (amphibians and reptiles, birds, and mammals) of "species of special concern" that serve as "watch lists". Species on these lists are of limited distribution or the extent of their habitats has been reduced substantially, such that threat to their populations may be imminent. Thus, their populations should be monitored. They may receive special attention during environmental review as potential rare species, but do not have specific statutory protection. All potentially rare or sensitive species, or habitats capable of supporting rare species, are considered for environmental review per the CEQA Section 15380(b).

The CNPS, a non-governmental conservation organization, has developed CRPRs for plant species of concern in California in the Inventory of Rare and Endangered Plants (CNPS 2021). The CRPRs include lichens, vascular, and non-vascular plants, and are defined as follows:

- CRPR 1A Plants considered extinct.
- CRPR 1B Plants rare, threatened, or endangered in California and elsewhere.
- CRPR 2A Plants considered extinct in California but more common elsewhere.
- CRPR 2B Plants rare, threatened, or endangered in California but more common elsewhere.
- CRPR 3 Plants about which more information is needed - review list.

- CRPR 4 Plants of limited distribution-watch list.

The CRPRs are further described by the following threat code extensions:

- .1—seriously endangered in California;
- .2—fairly endangered in California;
- .3—not very endangered in California.

Although the CNPS is not a regulatory agency and plants on these lists have no formal regulatory protection, plants appearing as CRPR 1B or 2 are, in general, considered to meet CEQA's Section 15380 criteria, and adverse effects on these species may be considered significant. Impacts on plants that are listed by the CNPS as CRPR 3 or 4 are also considered during CEQA review, although because these species are typically not as rare as those of CRPR 1B or 2, impacts on them are less frequently considered significant.

Compliance with CEQA Guidelines Section 15065(a) requires consideration of plant or animal natural communities. Vegetation types of "special concern" are tracked in Rarefind (CNDDB 2021). Further, the CDFW ranks sensitive vegetation alliances based on their global (G) and state (S) rankings analogous to those provided in the CNDDB. Global rankings (G1–G5) of natural communities reflect the overall condition (rarity and endangerment) of a habitat throughout its range, whereas S rankings are a reflection of the condition of a habitat within California. If an alliance is marked as a G1–G3, all of the associations within it would also be of high priority. The CDFW provides the Vegetation Classification and Mapping Program's currently accepted list of vegetation alliances and associations (CDFW 2010).

Project Applicability: All potential impacts on biological resources will be considered during CEQA review of the project. This Biological Resources Report assesses these impacts to facilitate CEQA review of the project by the City of Menlo Park. Project impacts are discussed in Section 6 below.

3.2.4 California Fish and Game Code

Ephemeral and intermittent streams, rivers, creeks, dry washes, sloughs, blue line streams on USGS maps, and watercourses with subsurface flows generally fall under CDFW jurisdiction. Canals, aqueducts, irrigation ditches, and other means of water conveyance may also be considered streams if they support aquatic life, riparian vegetation, or stream-dependent terrestrial wildlife. A *stream* is defined in Title 14, California Code of Regulations Section 1.72, as "a body of water that flows at least periodically or intermittently through a bed or channel having banks and that supports fish and other aquatic life. This includes watercourses having surface or subsurface flow that supports or has supported riparian vegetation." Using this definition, CDFW extends its jurisdiction to encompass riparian habitats that function as a part of a watercourse. California Fish and Game Code Section 2786 defines *riparian habitat* as "lands which contain habitat which grows close to and which depends upon soil moisture from a nearby freshwater source." The lateral extent of a stream and associated riparian habitat that would fall under the jurisdiction of CDFW can be measured in several ways, depending on the particular situation and the type of fish or wildlife at risk. At minimum, CDFW would claim jurisdiction

over a stream's bed and bank. In areas that lack a vegetated riparian corridor, CDFW jurisdiction would be the same as USACE jurisdiction. Where riparian habitat is present, the outer edge of riparian vegetation is generally used as the line of demarcation between riparian and upland habitats.

Pursuant to California Fish and Game Code Section 1603, CDFW regulates any project proposed by any person that will "substantially divert or obstruct the natural flow or substantially change the bed, channel, or bank of any river, stream, or lake designated by the department, or use any material from the streambeds." California Fish and Game Code Section 1602 requires an entity to notify CDFW of any proposed activity that may modify a river, stream, or lake. If CDFW determines that proposed activities may substantially adversely affect fish and wildlife resources, a Lake and Streambed Alteration Agreement (LSAA) must be prepared. The LSAA sets reasonable conditions necessary to protect fish and wildlife, and must comply with CEQA. The applicant may then proceed with the activity in accordance with the final LSAA.

Certain sections of the California Fish and Game Code describe regulations pertaining to protection of certain wildlife species. For example, Code Section 2000 prohibits take of any bird, mammal, fish, reptile, or amphibian except as provided by other sections of the code.

The California Fish and Game Code Sections 3503, 3513, and 3800 (and other sections and subsections) protect native birds, including their nests and eggs, from all forms of take. Disturbance that causes nest abandonment and/or loss of reproductive effort is considered "take" by the CDFW. Raptors (i.e., eagles, hawks, and owls) and their nests are specifically protected in California under Code Section 3503.5. Section 3503.5 states that it is "unlawful to take, possess, or destroy any birds in the order Falconiformes or Strigiformes (birds of prey) or to take, possess, or destroy the nest or eggs of any such bird except as otherwise provided by this code or any regulation adopted pursuant thereto."

Bats and other non-game mammals are protected by California Fish and Game Code Section 4150, which states that all non-game mammals or parts thereof may not be taken or possessed except as provided otherwise in the code or in accordance with regulations adopted by the commission. Activities resulting in mortality of non-game mammals (e.g., destruction of an occupied nonbreeding bat roost, resulting in the death of bats), or disturbance that causes the loss of a maternity colony of bats (resulting in the death of young), may be considered "take" by the CDFW.

Project Applicability: The drainage ditches located along the northern and southern edges of the study area are not downstream continuations of terrestrial streams and only collect localized runoff from the surrounding development. Additionally, no flows continue downstream of these features out to the Bay or other stream or slough. As such, these features are not considered rivers or streams and are not regulated by the CDFW under California Fish and Game Code Section 1603 (H. T. Harvey & Associates 2021b).

Most native bird, mammal, and other wildlife species that occur on the project site and in the immediate vicinity are protected by the California Fish and Game Code. Mitigation Measures BIO-13, 14, 15, and 16 shall be

implemented to ensure that project activities comply with the Fish and Game Code with respect to nesting birds, as described in Section 6.4.1.

3.3 Local

3.3.1 Menlo Park Municipal Code

The City of Menlo Park Municipal Code contains all ordinances for Menlo Park. Title 16, Zoning, includes regulations relevant to biological resources on the project site as discussed below.

Bird-Friendly Design. Sections 16.43.140 (6) (with respect to the O District) and 16.45.130(6) (with respect to the RMU District) require all new construction, regardless of size, to implement the following bird-friendly design measures:

- No more than 10% of facade surface area shall have non-bird-friendly glazing.
- Bird-friendly glazing includes, but is not limited to, opaque glass, covering of clear glass surface with patterns, paned glass with fenestration patterns, and external screens over non-reflective glass.
- Placement of buildings shall avoid the potential funneling of flight paths towards a building facade.
- Glass skyways or walkways, freestanding glass walls, and transparent building corners shall not be allowed.
- Transparent glass shall not be allowed at the rooflines of buildings, including in conjunction with green roofs.
- Use of rodenticides shall not be allowed.

A project may receive a waiver from one (1) or more of the items listed in subsections (6)(A) to (F) of this section, subject to the submittal of a site-specific evaluation from a qualified biologist and review and approval by the planning commission. (Ord. 1024 § 3 (part), 2016).

Project Applicability: Bird-friendly design will be incorporated into the project design as required by the City of Menlo Park Municipal Code. The project's incorporation of bird-safe design is discussed in Sections 1.2 and 6.5.2.

Landscape Design Plan. Chapter 12.44.090(a)(1)(G) provides that the use of invasive or noxious plant species is strongly discouraged. Invasive species are defined as those plants not historically found in California that spread outside cultivated areas and can damage environmental or economic resources. A noxious weed refers to any weed designated by the weed control regulations in the Weed Control Act and identified on a regional district noxious weed control list.

Project Applicability: No invasive and/or noxious plant species will be used in the project's landscape design plan.

Heritage Trees. Chapter 13.24, Heritage Trees, establishes regulations for the preservation of heritage trees, defined as:

- Trees of historical significance, special character or community benefit, specifically designated by resolution of the City Council;
- An oak tree (*Quercus* sp.), which is native to California and has a trunk with a circumference of 31.4 inches (diameter of 10 inches) or more, measured at 54 inches above natural grade; and
- All trees other than oaks, which have a trunk with a circumference of 47.1 inches (diameter of 15 inches) or more, measured 54 inches above natural grade, with the exception of trees that are less than 12 ft in height, which will be exempt from this section.

To protect heritage trees, Section 13.24.025 requires that a tree protection plan prepared by a certified arborist be submitted for any work performed within a tree protection zone, which is an area ten times the diameter of the tree. Furthermore, all tree protection plans should be reviewed and approved by the Public Works Director or his or her designee prior to issuance of any permit for grading or construction.

The removal of heritage trees or pruning of more than one-fourth of the branches or roots within a 12-month period requires a permit from the City's Director of Public Works or his or her designee and payment of a fee. The Director of Public Works may issue a permit when the removal or major pruning of a heritage tree is reasonable based on a number of criteria, including condition of the tree, need for removal to accommodate proposed improvements, the ecological and long-term value of the tree, and feasible alternatives that would allow for tree preservation.

Project Applicability: The project site includes 274 trees that qualify as heritage trees under the City ordinance (SBCA Tree Consulting 2017, Peninsula Innovation Partners 2020). It is anticipated that 269 heritage trees would be removed as part of the proposed project. Therefore, a permit from the City would be required.

3.3.2 Menlo Park General Plan

The City of Menlo Park General Plan includes goals, policies, and programs relevant to the environmental factors potentially affected by the proposed project, including the following:

- *Goal LU-4:* Promote the development and retention of business uses that provide goods or services needed by the community that generate benefits to the City, and avoid or minimize potential environmental and traffic impacts.
    - *Policy LU-4.5: Business Uses and Environmental Impacts.* Allow modifications to business operations and structures that promote revenue-generating uses for which potential environmental impacts can be mitigated.
- *Goal LU-6:* Preserve open-space lands for recreation; protect natural resources and air and water quality; and protect and enhance scenic qualities.

- *Policy LU-6.5: Open Space Retention*. Maximize the retention of open space on larger tracts (e.g., portions of the St. Patrick's Seminary site) through means such as rezoning consistent with existing uses, clustered development, acquisition of a permanent open space easement, and/or transfer of development rights.
- *Policy LU 6.6: Public Bay Access*. Protect and support public access to the Bay for the scenic enjoyment of open water, sloughs, and marshes, including restoration efforts, and completion of the Bay Trail.
- *Policy LU-6.7: Habitat Preservation*. Collaborate with neighboring jurisdictions to preserve and enhance the Bay, shoreline, San Francisquito Creek, and other wildlife habitat and ecologically fragile areas to the maximum extent possible.
- *Policy LU-6.8: Landscaping in Development*. Encourage extensive and appropriate landscaping in public and private development to maintain the City's tree canopy and to promote sustainability and healthy living, particularly through increased trees and water-efficient landscaping in large parking areas and in the public right-of-way.
- *Policy LU-6.11. Baylands Preservation.* Allow development near the Bay only in already developed areas.
    - *Program LU-6.D: Design for Birds*. Require new buildings to employ façade, window, and lighting design features that make them visible to birds as physical barriers and eliminate conditions that create confusing reflections to birds.

- Goal OSC1: Maintain, Protect, and Enhance Open Space and Natural Resources.
    - *Policy OSC1.1: Natural Resources Integration with Other Uses*. Protect Menlo Park's natural environment and integrate creeks, utility corridors, and other significant natural and scenic features into development plans.
    - *Policy OSC1.2: Habitat for Open Space and Conservation Purposes*. Preserve, protect, maintain, and enhance water, water-related areas, plant and wildlife habitat for open space and conservation purposes.
    - *Policy OSC1.3: Sensitive Habitats*. Require new development on or near sensitive habitats to provide baseline assessments prepared by qualified biologists, and specify requirements relative to the baseline assessments.
    - *Policy OSC1.4: Habitat Enhancement*. Require new development to minimize the disturbance of natural habitats and vegetation, and require revegetation of disturbed natural habitat areas with native or non-invasive naturalized species.
    - *Policy OSC1.5: Invasive, Non-Native Plant Species*. Avoid the use of invasive, non-native species, as identified on the lists of invasive plants maintained at the California Invasive Plant Inventory and United States Department of Agriculture invasive and noxious weeds database, or other authoritative sources, in landscaping on public property.

- *Policy OSC1.15: Heritage Trees*. Protect Heritage Trees, including during construction activities through enforcement of the Heritage Tree Ordinance (Chapter 13.24of the Municipal Code).

Project Applicability: The project is located within the Menlo Park General Plan area and would conform to all applicable requirements.

Section 4. Environmental Setting

4.1 General Project Area Description

The 81.1-acre study area (including the approximately 64-acre project site) is located in the *Palo Alto*, *California* 7.5-minute USGS quadrangle. The approximately 64-acre project site (inclusive of the "main project site" east of Willow Road and "Hamilton Avenue Parcels North and South" west of Willow Road) is bounded by Willow Road to the west, the Hetch Hetchy easement corridor to the south, an existing life science complex to the east, and a drainage ditch, rail line, and Extra Space Storage self-storage units to the north. A review of historical aerial photographs indicates that the study area was largely agriculture in 1943. By 1991, the project site was developed with numerous buildings and parking lots known as the Menlo Science and Technology Park. Currently, the site is occupied by 21 office, industrial, and warehouse buildings (Figure 2).

The site is generally level, with elevations ranging from approximately 6 to 13 ft (North American Vertical Datum of 1988) above sea level. The site is underlain by one soil type, Urban land-Orthents, reclaimed complex, 0 to 2 percent slopes (NRCS 2021). This soil type has a variable profile to a depth of approximately 40 inches, with silty clay generally occurring from 40 to 60 inches, and is considered a well-drained soil.

4.2 Biotic Habitats

Reconnaissance-level surveys identified four habitat types/land uses in the study area: developed/landscaped (77.16 acres), California annual grassland (3.66 acres), forested wetland (0.07 acre[2]), and herbaceous seasonal wetlands (0.07 acre) (Figure 3). These habitats are described in detail below. Plant species observed during the reconnaissance survey are listed in Appendix A.

4.2.1 Developed/Landscaped

Vegetation. The entire project site, and the vast majority of the study area, are occupied by developed/landscaped land uses (Photo 1) that include office buildings, restaurants, a gas station, parking lots, walking paths, mulched and irrigated areas, and extensive plantings

Photo 1. Developed/Landscaped habitat.

[2] The depression comprising the footprint of the forested wetland is 0.07 acre in size; the canopy of the willows rooted within that wetland comprise an additional 0.13 acre.

N:\Projects3300\3375-01\211\Reports\BRR\Fig 3 Habitats Map.mxd

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Figure 3. Habitats Map
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of ornamental trees and other landscaping species. Species characteristic of this area include Canary Island pine (*Pinus canariensis*), Chinese pistache (*Pistacia chinensis*), London plane (*Platanus* x*hispanica*), eucalyptus (*Eucalyptus* sp.), and crepe myrtle (*Lagerstroemia* sp.). Common understory plants include buckbrush (*Ceanothus* sp.) and rosemary (*Rosmarinus officinalis*). Immediately outside the southern edge of the project boundary (but within an area where off-site improvements will be made), a ditch is located partially on-site and partially within the Hetch Hetchy easement area (Photo 2). This ditch was dominated by upland (non-wetland) vegetation during our April 2019 site visit, as well as during the August 2021 site visit conducted for the delineation of waters of the U.S./State, and is concrete lined in at least some locations (H. T. Harvey & Associates 2021b). The ditch collects some water from the surrounding uplands and flows into a stormdrain. However, a visit to the site on December 31, 2021, after a prolonged, heavy rain event, revealed evidence of only a very small amount of runoff in this ditch during the storm. It is evident that this ditch receives little runoff from surrounding areas.

Photo 2. A drainage ditch in the southeastern part of the site.

Wildlife. The wildlife most often associated with developed/landscaped areas are those that are tolerant of periodic human disturbances, including introduced species such as the European starling (*Sturnus vulgaris*), rock pigeon (*Columba livia*), house mouse (*Mus musculus*), Norway rat (*Rattus norvegicus*), and black rat (*Rattus rattus*). Numerous common, native species are also able to utilize these habitats, especially the landscaped areas, including the western fence lizard (*Sceloporus occidentalis*), striped skunk (*Mephitis mephitis*), and a variety of birds, such as the American crow (*Corvus brachyrhynchos*), Anna's hummingbird (*Calypte anna*), California towhee (*Melozone crissalis*), bushtit (*Psaltriparus minimus*), chestnut-backed chickadee (*Poecile rufescens*), and California scrub-jay (*Aphelocoma californica*), all of which were observed on the project site during the reconnaissance survey. In addition, the eaves of the buildings on the project site may be attractive to other nesting and/or roosting bird species in the area, such as the black phoebe (*Sayornis nigricans*). Further, a number of large eucalyptus trees found in the northern portion of the project site may provide suitable nesting habitat for a pair of raptors, such as the red-tailed hawk (*Buteo jamaicensis*), which was observed in the study area during the reconnaissance survey. However, a focused survey of the study area detected no evidence (i.e., old nests) of raptors having previously nested on the site. Similarly, an examination of trees and structures on the site failed to find any large cavities that might provide suitable bat roosting habitat. Therefore, large roosting or maternity colonies of bats are not expected to occur in the study area. The ditch immediately south of the project boundary provides no aquatic habitat, and therefore no aquatic or wetland-associated wildlife species are associated with this feature.

4.2.2 California Annual Grassland

Photo 3. California annual grassland habitat in the northeast corner of the study area.

Vegetation. California annual grassland habitat occurs in the northern portion of the study area along the Dumbarton Rail Corridor, primarily outside of the project boundary, but with a very small area encroaching into the project boundary in the northeast corner of the main project site (Photo 3). At the time of the reconnaissance survey, this habitat was dominated by non-native grasses and forbs such as wild oat (*Avena* sp.), fennel (*Foeniculum vulgare*), bull mallow (*Malva nicaeensis*), black mustard (*Brassica nigra*), and bristly ox-tongue (*Helminthotheca echioides*). Many of these non-native plant species are ranked as moderately or highly invasive by the California Invasive Plant Council (Cal-IPC 2021). For example, fennel is highly invasive and has severe ecological impacts on physical processes, plant and animal communities, and vegetation structure. Moderately invasive species, such as wild oats and black mustard, have substantial and apparent ecological impacts (Cal IPC 2021).

Wildlife. Wildlife use of California annual grasslands in the study area is limited by frequent human disturbance, the abundance of non-native and invasive species, and isolation of the grassland habitat remnants from more xtensive grasslands. As a result, wildlife species associated with more extensive grasslands, such as the grasshopper sparrow (*Ammodramus savannarum*) and western meadowlark (*Sturnella neglecta*), are absent from the small patches of grassland in the study area. Most of the bird species using this habitat during the breeding season nest in nearby landscaped habitats, using the California annual grassland only for foraging. Such species include the mourning dove (*Zenaida macroura*), lesser goldfinch (*Spinus psaltria*), dark-eyed junco (*Junco hyemalis*), American crow, and Brewer's blackbird (*Euphagus cyanocephalus*). Similarly, a few species nesting on nearby buildings, such as the cliff swallow (*Petrochelidon pyrrhonota*), barn swallow (*Hirundo rustica*), rock pigeon (*Columba livia*), black phoebe, and European starling, also forage on or over the California annual grassland habitat. Several other species of birds use the California annual grassland habitat during the nonbreeding season. These species, which include the golden-crowned sparrow (*Zonotrichia atricapilla*), savannah sparrow (*Passerculus sandwichensis*), and white-crowned sparrow (*Zonotrichia leucophrys*), forage on the ground or in herbaceous vegetation, primarily for seeds.

Few species of reptiles and amphibians occur in the California annual grassland in the study area due to its disturbed nature and low habitat heterogeneity. Nevertheless, reptiles such as the western fence lizard and

gopher snake (*Pituophis melanoleucus*) occur in this type of habitat, and amphibians such as the Sierran chorus frog (*Pseudacris sierra*) and western toad (*Anaxyrus boreas*), which breed in freshwater marshes in the area, forage in this habitat. Small mammals expected to be present include the native western harvest mouse (*Reithrodontomys megalotis*) and nonnative house mouse, Norway rat, and black rat. Small burrowing mammals, such as the Botta's pocket gopher (*Thomomys bottae*) and California ground squirrel (*Spermophilus beecheyi*), are also present. Larger mammals, such as the striped skunk, Virginia opossum (*Didelphis virginiana*), raccoon (*Procyon lotor*), and black-tailed jackrabbit (*Lepus californicus*) are also likely to occur here.

4.2.3 Forested Wetland

Vegetation. A small, isolated segment of forested wetland occurs in a drainage ditch along the northern edge of the study area, just outside of the project boundary (Photo 4). This segment of the ditch is characterized by a dense overstory of willow (*Salix* sp.), with minimal groundcover predominantly consisting of tall flatsedge (*Cyperus eragrostis*) and poison oak (*Toxicodendron diversilobum*). The wetland hydrology here is supported by localized freshwater runoff from the surrounding area, which pools in or saturates the soils in the lowest portion of the drainage ditch during the wet season. No standing water was observed during the November 2017 site visit, but shallow water was pooled here during the April 2019 visit.

Photo 4. Willow dominated isolated forested wetland located in the northern potions of the study area.

Wildlife. Due to its small size, isolation, and lack of pooled water, wildlife diversity in the isolated forested wetland is fairly low. However, the dense foliage provided by this willow stand is likely to support several species of nesting birds and provide cover and foraging habitat for others. Bird species that may forage in this habitat include many of the same species as described in the habitats above, as well as species such as the Bewick's wren (*Thryomanes bewickii*), northern mockingbird (*Mimus polyglottos*), and the yellow-rumped warbler (*Setophaga coronata*). Amphibians such as the Sierran chorus frog and western toad may also be present in this habitat, and if water ponds long enough in this ditch, these species could potentially breed there.

4.2.4 Herbaceous Seasonal Wetlands

Vegetation. An herbaceous seasonal wetland is located off-site within the Dumbarton Rail Corridor between Willow Street and Chilco Street in the extreme northwest part of the study area, entirely outside the project boundary. Another herbaceous seasonal wetland is located just outside of the northeast corner of the project

boundary. These wetlands are characterized by slight depressions. The northwestern herbaceous seasonal wetland is dominated by Italian rye grass (*Festuca perenne*), Bermuda grass (*Cynodon dactylon*) and bird's foot trefoil (*Lotus corniculatus*), with obligate species such as narrow-leaved cattail (*Typha angustifolia*) and chairmaker's bulrush (*Schoenoplectus americanus*) scattered throughout the feature (Photo 5). The northeastern herbaceous seasonal wetland is dominated by narrow-leaved cattail, with saltmarsh baccharis (*Baccharis glutinosa*) and dallis grass (*Paspalum dilatatum*) also present. Freshwater hydrology in these areas is likely a result of localized runoff and possibly groundwater upwelling that reaches the rooting zone but does not typically cause inundation. At the time of the wetland delineation survey, there was no ponding water observed, but soils were saturated approximately 6 inches below the ground's surface.

Photo 5. Seasonal freshwater wetland located north of the railway between Willow Street and Chilco Street.

Wildlife. The herbaceous seasonal wetlands in the study area provide only marginal habitat for most wildlife species due to their limited extent and limited depth and duration of ponding, if these wetlands even support ponding at all, and wildlife diversity is expected to be low. However, many of the same bird species described in the developed/landscaped and California annual grassland habitats above may forage in the herbaceous seasonal wetlands, such as the dark-eyed junco, white-crowned sparrow, and California towhee, all of which were observed during the reconnaissance survey. Amphibians such as the native Sierran chorus frog and western toad may also be present in this habitat during wet times of the year but are not expected to breed due to the limited depth and duration of ponding.

4.2.5 Nearby Land Uses and Biotic Habitats outside the Study Area

Outside the study area, developed/landscaped land uses dominate surrounding areas to the west and south for miles in each direction. East of the study area, developed lands associated with existing commercial land uses are present, and north of the study area, beyond the inactive Dumbarton Rail Corridor, a storage facility is present. A large brackish marsh is present north of the storage area and on both the north and south sides of the old rail line farther north and northeast. This brackish marsh, which extends north to State Route 84 and east to University Avenue, is dominated by salt marsh and brackish marsh plants and contains several channels. As a result, marsh-associated wildlife species such as the San Francisco common yellowthroat (*Geothlypis trichas sinuosa*), Alameda song sparrow (*Melospiza melodia pusillula*), northern harrier (*Circus hudsonius*), and possibly the

salt marsh harvest mouse (*Reithrodontomys raviventris*) may occur in that brackish marsh. Farther to the north and northeast are former salt ponds, now managed as waterbird habitat, and the waters and marshes of San Francisco Bay.

Section 5. Special-Status Species and Sensitive Habitats

CEQA requires assessment of the effects of a project on species that are protected as "threatened, rare, or endangered"; such species are typically described as "special-status species". For the purpose of the environmental review of the project, special-status species have been defined as described below. Impacts on these species are regulated by some of the federal, state, and local laws and ordinances described in Section 3.0 above.

For purposes of this analysis, "special-status" plants are considered plant species that are:

- Listed under FESA as threatened, endangered, proposed threatened, proposed endangered, or a candidate species.
- Listed under CESA as threatened, endangered, rare, or a candidate species.
- Listed by the CNPS as CRPR 1A, 1B, 2, 3, or 4.

For purposes of this analysis, "special-status" animals are considered animal species that are:

- Listed under FESA as threatened, endangered, proposed threatened, proposed endangered, or a candidate species.
- Listed under CESA as threatened, endangered, or a candidate threatened or endangered species.
- Designated by the CDFW as a California species of special concern.
- Listed in the California Fish and Game Code as fully protected species (fully protected birds are provided in Section 3511, mammals in Section 4700, reptiles and amphibians in Section 5050, and fish in Section 5515).

Information concerning threatened, endangered, and other special-status species that potentially occur in the study area was collected from several sources and reviewed by H. T. Harvey & Associates biologists as described in Section 2.1 above. Figure 4 depicts CNDDB records of special-status plant species in the general vicinity of the project site and Figure 5 depicts CNDDB records of special-status animal species. These generalized maps show areas where special-status species are known to occur or have occurred historically.

5.1 Special-Status Plant Species

The CNPS (2021) and CNDDB (2021) identify 89 special-status plant species as potentially occurring in at least one of the nine USGS quadrangles containing or surrounding the study area for CRPR 1 or 2 species, or in San Mateo County for CRPR 3 and 4 species. Eighty-eight of those potentially occurring special-status plant species were determined to be absent from the study area for at least one of the following reasons: (1) lack of suitable habitat types; (2) absence of specific microhabitat or edaphic requirements, such as serpentine soils; (3) the elevation range of the species is outside of the range on the study area; or (4) the species is considered extirpated

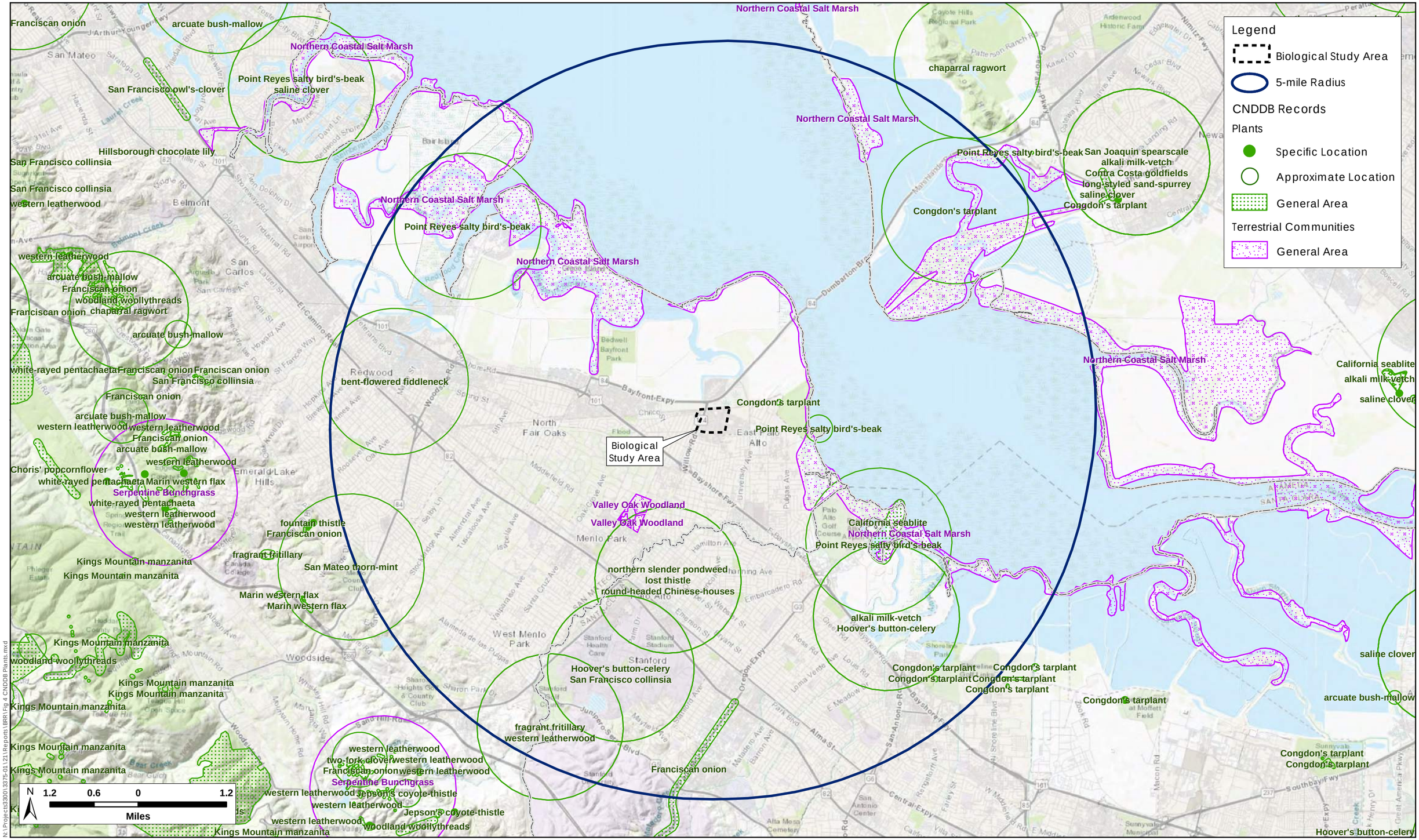

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Figure 4. CNDDB-Mapped Records of Special-Status Plant Species
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Figure 5. CNDDB-Mapped Records of Special-Status Animal Species
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from the project vicinity. Appendix B lists these plants along with the basis for the determination of absence. Suitable habitat, edaphic requirements, and elevation range were determined to be present in the study area for one plant species, Congdon's tarplant (*Centromadia parryi* ssp. *congdonii*), which can persist in disturbed grasslands and has been documented by the CNDDB in the project vicinity (Figure 4). While no suitable habitat occurs on the project site itself, there is suitable habitat for Congdon's tarplant within the study area, in the California annual grassland along the old rail line immediately north of the project boundary. However, this species should still have been flowering and detectable during our November 2017 reconnaissance survey, and a focused survey for the species was conducted in the Dumbarton Rail Corridor on June 12[3], yet no individuals of this species were observed. Therefore, this species is determined to be absent from the study area.

5.2 Special-Status Animal Species

The protected classifications and likelihood of occurrence in the study area of special-status animal species known to occur, or potentially occurring, in the pregion are presented in Table 1. Most of the special-status species listed in Table 1 are not expected to occur in the study area because it lacks suitable habitat, is outside the known range of the species, or is isolated from the nearest known extant populations by development or otherwise unsuitable habitat. Special-status animal species not expected to occur on the project site for these reasons include the Crotch bumble bee (*Bombus crotchii*), western bumble bee (*Bombus occidentalis*), green sturgeon (*Acipenser medirostris*), Central California coast steelhead (*Oncorhynchus mykiss*), California tiger salamander (*Ambystoma californiense*), California red-legged frog (*Rana draytonii*), western pond turtle (*Actinemys marmorata*), San Francisco garter snake (*Thamnophis sirtalis tetrataenia*), California Ridgway's rail (*Rallus obsoletus obsoletus*), California black rail (*Laterallus jamaicensis coturniculus*), western snowy plover (*Charadrius alexandrinus nivosus*), California least tern (*Sterna antillarum browni*), black skimmer (*Rynchops niger*), burrowing owl (*Athene cunicularia*), northern harrier, loggerhead shrike (*Lanius ludovicianus*), salt marsh harvest mouse, salt marsh wandering shrew (*Sorex vagrans halicoetes*) and American badger (*Taxidea taxus*). Although some of these species, such as the northern harrier, loggerhead shrike, white-tailed kite (*Elanus leucurus*), salt marsh harvest mouse, and salt marsh wandering shrew, may occur in wetland habitats not far outside the study area to the north and northeast, they are absent from the study area itself (including areas of proposed off-site improvements), and the proposed development footprint is well removed from suitable habitat for these species. Several other special-status species have some potential to occur in the study area only as visitors, migrants, or transients, but are not expected to reside or breed on the project site, to occur in large numbers, or otherwise to make substantial use of the project site. These include the San Francisco common yellowthroat, Alameda song sparrow, and pallid bat (*Antrozous pallidus*).

[3] Congdon's tarplant was documented flowering at the Sunnyvale Baylands Park, which is 9.4 miles southeast of the study area, on June 10, 2020. Therefore, given that this species was documented as flowering at a site that is relatively near the study area (but not located on the project site) on June 10, 2020, this species would have been detectable at the time of the June 12, 2020 site visit.

Table 1. Special-Status Animal Species, Their Status, and Potential Occurrence in the Study Area

Name	*Status	Habitat	Potential for Occurrence in the Study Area
Federal or State Endangered, Rare, or Threatened Species			
Crotch bumble bee (*Bombus crotchii*)	SC	Occurs in open grassland and scrub habitats. Like most other species of bumble bees, nests primarily underground (Williams et al. 2014). Generalist foragers that visit a variety of floral resources.	**Absent.** There is one historical record of the species approximately 4 miles southwest of the project site (CNDDB 2021), but there are no recent records in the vicinity. Although the species was historically found throughout the southern two-thirds of California, it now appears to be absent from most of its former range (Xerces Society 2018). It is not recently or currently known from the project area and is not expected to occur currently due to these recent range contractions.
Western bumble bee (*Bombus occidentalis occidentalis*)	SC	Occurs in meadows and grasslands with abundant floral resources. Nests are primarily underground.	**Absent.** There are several records of this species from the project vicinity, but all records are historical (CNDDB 2021). Although this species was historically found throughout much of central and northern California, it is now confined to high elevation sites and a small number of records on the northern California coast (Xerces Society 2018). It is not expected to occur in the project area due to these recent range contractions.
Green sturgeon (*Acipenser medirostris*)	FT, CSSC	Spawns in large river systems such as the Sacramento River; forages in nearshore oceanic waters, bays, and estuaries.	**Absent.** No suitable aquatic habitat is present in the study area. Green sturgeon may forage infrequently, and in low numbers in the open Bay, which is 1.5 mi north and east of the project site; however, there is no aquatic connection between the Bay and the project site. Determined to be absent.
Central California Coast steelhead (*Oncorhynchus mykiss*)	FT	Cool streams with suitable spawning habitat and conditions allowing migration between spawning and marine habitats.	**Absent.** No suitable aquatic habitat is present in the study area. Steelhead may forage in the open Bay, which is 1.5 mi north and east of the project site; however, there is no aquatic connection between the Bay and the project site. Determined to be absent.
California tiger salamander (*Ambystoma californiense*)	FT, ST	Vernal or temporary pools in annual grasslands or open woodlands.	**Absent.** No suitable habitat is present in the surrounding study area. Further, populations have largely been extirpated from San Mateo County due to habitat loss, and the species is now considered absent from the majority of the project vicinity, including the study area. The closest occurrence in the project vicinity is at Lake Lagunita on the Stanford campus, which is 4 mi south of the study area (CNDDB 2021). Determined to be absent.

Name	*Status	Habitat	Potential for Occurrence in the Study Area
San Francisco garter snake (*Thamnophis sirtalis tetrataenia*)	FE, SE	Prefer densely vegetated freshwater habitats. May use upland burrows for aestivation.	**Absent.** No suitable habitat is present in the study area. Furthermore, the project vicinity is outside of the known range of the species. Determined to be absent.
California red-legged frog (*Rana draytonii*)	FT, CSSC	Streams, freshwater pools, and ponds with emergent or overhanging vegetation.	**Absent.** No suitable habitat is present in the study area. Further, this species has been extirpated from the majority of the project vicinity, due to development, the alteration of hydrology of its aquatic habitats, and the introduction of non-native predators such as non-native fishes and bullfrogs (*Lithobates catesbeianus*). The most recent record of the species in the project vicinity is from 2016 near Bear Gulch reservoir, over 4.8 mi to the southwest of the study area (CNDDB 2021). Determined to be absent.
California Ridgway's rail (*Rallus obsoletus obsoletus*)	FE, SE, SP	Salt marshes characterized by large expanses of saltmarsh cordgrass (*Spartina* spp.) or pickleweed (*Salicornia* spp.), with well-developed tidal channels.	**Absent.** Although the species is known to occur in the Palo Alto Baylands and the Ravenswood Open Space Preserve located 1 mi east of the study area, as well as on Greco Island 1 mi northwest of the study area, no salt marsh habitat is present in the study area. Further, the only marsh habitat located within 700 ft of the project site (which is equivalent to the size of the non-disturbance buffer typically required around active nests by the USFWS and CDFW) is a mosaic of both fresh water and salt marsh habitats located north of the study area. This marsh habitat lacks extensive patches of cordgrass or pickleweed and tidally influenced, braided channels, and therefore is not considered suitable habitat for the California Ridgway's rail. Determined to be absent.
California black rail (*Laterallus jamaicensis coturniculus*)	ST, SP	Breeds in fresh, brackish, and tidal salt marsh.	**Absent.** This species occurs in the project region primarily as a scarce winter visitor, with individuals recently recorded as close as a slough 0.5 mi north of the study area (CNDDB 2021). However, no suitable nesting or foraging habitat for the California black rail is present in the study area. Determined to be absent.
Western snowy plover (*Charadrius nivosus nivosus*)	FT, CSSC	Sandy beaches on marine and estuarine shores and salt pans in Bay saline managed ponds.	**Absent.** Although western snowy plovers are known to nest in salt panne habitat within 0.5 mi to the northwest, north, and east of the study area in the NWR's Ravenswood complex (CNDDB 2021), no suitable nesting or foraging habitat is present in the study area. Determined to be absent.

Name	*Status	Habitat	Potential for Occurrence in the Study Area
California least tern (*Sternula antillarum browni*)	FE, SE, SP	Nests along the coast on bare or sparsely vegetated, flat substrates. In the South Bay, nests in salt pannes and on an old airport runway. Forages for fish in open waters.	**Absent**. Suitable nesting habitat for the California least tern is not present in the study area. Least terns have been recorded in the project vicinity during the post-breeding season, and have been known to forage in the Redwood City salt ponds, 2.5 mi west of the study area (CNDDB 2021). Least terns have also been known to forage infrequently along the shores of the Palo Alto Baylands Preserve, located 3 mi southeast of the study area. However, least terns are not expected to forage in the study area due to the lack of any open water habitats supporting fish. Determined to be absent.
Salt marsh harvest mouse (*Reithrodontomys raviventris*)	FE, SE, SP	Salt marsh habitat dominated by common pickleweed or alkali bulrush.	**Absent.** The species has been recorded in salt marsh habitat in the project vicinity, including on the NWR to the north and east of the site (CNDDB 2021), and suitable pickleweed/alkali bulrush-dominated salt marsh habitat is present within several hundred feet northeast of the study area. However, no suitable habitat is present in the study area itself. Determined to be absent.
California Species of Special Concern			
Western pond turtle (*Actinemys marmorata*)	CSSC	Permanent or nearly permanent water in a variety of habitats.	**Absent.** No suitable aquatic habitat is present in the study area. Determined to be absent.
Northern harrier (*Circus cyaneus*)	CSSC (nesting)	Nests in marshes and moist fields, forages over open areas.	**Absent.** Northern harriers nest and forage in the wetlands immediately north and northeast of the study area, but they are not expected to nest or forage in the study area due to a lack of suitable habitat.
Black skimmer (*Rynchops niger*)	CSSC (nesting)	Nests on sparsely vegetated beaches, isolated islands, and levees.	**Absent.** No suitable nesting or foraging habitat is present in or near the study area. Determined to be absent.
Burrowing owl (*Athene cunicularia*)	CSSC	Nests and roosts in open grasslands and ruderal habitats with suitable burrows, usually those made by California ground squirrels (*Spermophilus beecheyi*).	**Absent.** No nesting burrowing owls are known to occur in the surrounding project vicinity (CNDDB 2021), and no suitable burrowing owl roosting or nesting habitat (i.e., open grasslands with ground squirrel burrows) is present in the study area. The narrow strip of California annual grassland at the northern edge of the study area is too limited and too hemmed in by trees and development to provide good burrowing owl habitat. Thus, the species is not expected to occur in the study area.

Name	*Status	Habitat	Potential for Occurrence in the Study Area
Loggerhead shrike (*Lanius ludovicianus*)	CSSC (nesting)	Nests in tall shrubs and dense trees; forages in grasslands, marshes, and ruderal habitats.	**Absent.** No suitable breeding habitat is present in the study area, and the California annual grasslands in the study area are not sufficiently extensive to provide suitable foraging habitat. Determined to be absent.
San Francisco common yellowthroat (*Geothlypis trichas sinuosa*)	CSSC	Nests in herbaceous vegetation, usually in wetlands or moist floodplains.	**Absent as Breeder.** The San Francisco common yellowthroat breeds commonly in wetlands immediately north and northeast of the study area, but no suitable breeding habitat is present in the study area itself. Small numbers may occasionally forage along the northern edge of the study area.
Alameda song sparrow (*Melospiza melodia pusillula*)	CSSC	Nests in salt marsh, primarily in marsh gumplant and cordgrass along channels.	**Absent as Breeder.** Song sparrows breed commonly in wetlands immediately north and northeast of the study area, but no suitable breeding habitat is present in the study area itself. Small numbers may occasionally forage along the northern edge of the study area.
Salt marsh wandering shrew (*Sorex vagrans halicoetes*)	CSSC	Medium to high marsh 6 to 8 ft above sea level with abundant driftwood and common pickleweed.	**Absent.** Suitable pickleweed-dominated salt marsh habitat is present within several hundred feet northeast of the study area. However, no suitable habitat is present in the study area itself. Determined to be absent.
Pallid bat (*Antrozous pallidus*)	CSSC	Forages over many habitats; roosts in caves, rock outcrops, buildings, and hollow trees.	**Absent as Breeder.** Historically, pallid bats were likely present in a number of locations throughout the project region, but their populations have declined in recent decades. This species has been extirpated as a breeder from urban areas close to the Bay, as is the case in the study area. No suitable roosting habitat is present on the project site or in the study area and no known maternity colonies are present on or adjacent to the study area. There is a low probability that the species occurs in the project vicinity at all due to urbanization; however, individuals from more remote colonies could potentially forage over the study area on rare occasions.
American badger (*Taxidea taxus*)	CSSC	Burrows in grasslands and occasionally in infrequently disked agricultural areas.	**Absent.** Badgers are not known to occur in the project region due to the lack of extensive grasslands and agricultural areas with friable soils, needed for digging burrows. No suitable habitat is present on the project site or in the study area. Determined to be absent.

California Fully Protected Species			
White-tailed kite (*Elanus leucurus*)	SP	Nests in trees and forages in extensive grasslands or marshes.	**Absent.** No suitable breeding habitat is present in the study area, and the California annual grasslands in the study area are not sufficiently extensive to provide suitable foraging habitat. May nest north and northeast of the study area, but determined to be absent from the study area itself.

SPECIAL-STATUS SPECIES CODE DESIGNATIONS

FE = Federally Listed Endangered
FT = Federally Listed Threatened
SE = State Listed Endangered
ST = State Listed Threatened
SC = Candidate for State Listing
CSSC = California Species of Special Concern
SP = State Fully Protected Species

5.3 Sensitive Natural Communities, Habitats, and Vegetation Alliances

Natural communities have been considered part of the Natural Heritage Conservation triad, along with plants and animals of conservation significance, since the state inception of the Natural Heritage Program in 1979. The CDFW determines the level of rarity and imperilment of vegetation types, and tracks sensitive communities in its Rarefind database (CNDDB 2021). Global rankings (G) of natural communities reflect the overall condition (rarity and endangerment) of a habitat throughout its range, whereas state (S) rankings are a reflection of the condition of a habitat within California. Natural communities are defined using NatureServe's standard heritage program methodology as follows (Faber-Langendoen et al. 2012):

G1/S1: Critically imperiled

G2/S2: Imperiled

G3/S3: Vulnerable.

G4/S4: Apparently secure

G5/S4: Secure

In addition to tracking sensitive natural communities, the CDFW also ranks vegetation alliances, defined by repeating patterns of plants across a landscape that reflect climate, soil, water, disturbance, and other environmental factors (Sawyer et al. 2009). If an alliance is marked G1-G3, all of the vegetation associations within it will also be of high priority (CDFW 2021). The CDFW provides the Vegetation Classification and Mapping Program's (VegCAMP) currently accepted list of vegetation alliances and associations (CDFW 2021).

Impacts on CDFW sensitive natural communities, vegetation alliances/associations, or any such community identified in local or regional plans, policies, and regulations, must be considered and evaluated under CEQA (Title 14, Division 6, Chapter 3, Appendix G of the California Code of Regulations). Furthermore, aquatic, wetland and riparian habitats are also protected under applicable federal, state, or local regulations, and are generally subject to regulation, protection, or consideration by the USACE, RWQCB, CDFW, and/or the USFWS.

5.3.1 CDFW Sensitive Habitats

A query of sensitive habitats in Rarefind (CNDDB 2021) identified three sensitive habitats as occurring within the nine USGS quadrangles containing or surrounding the study area: serpentine bunchgrass grassland (Rank G2/S2.2), valley oak woodland (G3/S2.1), and northern coastal salt marsh (Rank G3/S3.2). Serpentine bunchgrass occurs only on serpentine soils, which do not occur in the study area. Valley oak woodland is characterized by valley oak (*Quercus lobata*) as the dominant or co-dominant species in the tree canopy. While some valley oak individuals do occur in the study area, they are ornamental plantings along buildings and roadways, and thus do not constitute this sensitive habitat type. The last sensitive habitat type, northern coastal

salt marsh, is described by Holland (1986) as occurring along sheltered inland margins of bays, often co-dominated by pickleweed (*Salicornia* spp.), cordgrass (*Spartina* spp.), and sometimes saltgrass (*Distichlis spicata*). None of these species was noted in the study area, thus this habitat type is also absent.

5.3.2 CDFW Sensitive Vegetation Alliances

CDFW Sensitive alliances are not present on the project site (CDFW 2021).

5.3.3 Sensitive Habitats (Waters of the U.S./State)

As described above our surveys did not identify any wetlands or other waters that would fall under the jurisdiction of the USACE (Waters of the U.S.), or under the jurisdiction of the RWQCB or CDFW (Waters of the State), on the project site itself. Outside the project boundary, but within the study area, an isolated forested wetland depression is located immediately north of the main project site. One linear area of herbaceous seasonal wetland is located immediately north of the Hamilton Avenue Parcels North and South. Another herbaceous seasonal wetland is located just outside the northeast corner of the project boundary. As discussed in Section 3.1.1 above, the USACE may claim these features as jurisdictional Waters of the U.S., and the RWQCB could consider these wetlands (and possibly an additional 0.13-acre area where the canopy of willows extends outside the 0.07-acre forested wetland footprint within which the willows are rooted) to be Waters of the State. It is our understanding that the project will avoid to the extent feasible placing fill in those wetlands, in which case no permits from the USACE or RWQCB would be needed for activities associated with wetlands even if these features are determined to be jurisdictional. However, if these features are determined to be jurisdictional and are impacted by the project, permits from the USACE and RWQCB would be required, and mitigation of impacts would be required as described in Mitigation Measures BIO-11 and 12 in Section 6.2.1.

These wetlands would be considered sensitive habitats for CEQA assessment purposes. These wetlands are not associated with a stream and would therefore not constitute sensitive riparian habitat claimed by CDFW.

A ditch located partially on-site and partially in the Hetch Hetchy easement area immediately south of the main project site, but within the study area, is dominated by upland (non-wetland) vegetation, receives relatively little runoff from surrounding areas, and drains to the City stormwater system, and is therefore not considered sensitive or expected to be jurisdictional (H. T. Harvey & Associates 2021b). Brackish marsh habitat well north and northeast of the site provides higher-quality habitat than any wetland or aquatic features within the study area, but it is located well outside of the study area.

5.4 Non-Native and Invasive Species

Several non-native, invasive plant species occur in the study area in the California annual grassland habitat. Of these, fennel has the potential to cause the more severe ecological impacts. In addition, black mustard and wild oats were observed in the study area and can have substantial and apparent ecological impacts if they spread into native, sensitive habitats (Cal-IPC 2021). However, all of these species are also present in abundance in

and around the wetland/grassland habitats to the north and northeast of the study area. The remainder of the project vicinity is developed/landscaped, and invasive species would not result in adverse effects on developed and landscaped areas.

Section 6. Impacts and Mitigation Measures

The State CEQA Guidelines provide direction for evaluating the impacts of projects on biological resources and determining which impacts will be significant. CEQA defines a "significant effect on the environment" as "a substantial adverse change in the physical conditions which exist in the area affected by the proposed project." Under State CEQA Guidelines Section 15065, a project's impacts on biological resources are deemed significant if the project would:

A. "substantially reduce the habitat of a fish or wildlife species"
B. "cause a fish or wildlife population to drop below self-sustaining levels"
C. "threaten to eliminate a plant or animal community"
D. "reduce the number or restrict the range of a rare or endangered plant or animal"

In addition to the Section 15065 criteria that trigger mandatory findings of significance, Appendix G of State CEQA Guidelines provides a checklist of other potential impacts to consider when analyzing the significance of project effects. The impacts listed in Appendix G may or may not be significant, depending on the level of the impact. For biological resources, these impacts include whether the project would:

A. "have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service"

B. "have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service"

C. "have a substantial adverse effect on state or federally protected wetlands" (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling hydrological interruption, or other means)

D. "interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites"

E. "conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance"

F. "conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan"

The impact assessment below is structured based on the six significance criteria (A-F) listed above.

6.1 Impacts on Special-Status Species: Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the CDFW or USFWS (Less than Significant with Mitigation)

6.1.1 Impacts on Special-Status Species during Demolition and Construction (Less than Significant)

No special-status plants are present within the study area, and therefore, none will be impacted by demolition of existing structures, construction of the project, or any other project components. No special-status animals are expected to breed in the study area. However, as noted in Table 1, nonbreeding individuals of the San Francisco common yellowthroat, Alameda song sparrow, and pallid bat could possibly forage on the site on occasion. San Francisco common yellowthroats and Alameda song sparrows breeding in the off-site brackish marsh to the north and northeast of the site may disperse (particularly during the nonbreeding season) along the Dumbarton Rail Corridor to the dense vegetation along the northern edge of the site, where they may forage. Pallid bats are expected to occur on or near the site rarely, if at all, but dispersing individuals could occasionally forage on the site. Due to the absence of high-quality roosting sites for pallid bats, this species is not expected to roost on the project site.

During demolition and construction, the removal of vegetation, as well as noise and operation of heavy equipment, could disturb foraging yellowthroats and song sparrows, and disturbance of existing vegetation could result in loss or degradation of foraging habitat and declines in food resources for these bird species as well as the pallid bat. However, the project site does not provide high-quality habitat for any of these species, in its current state. These species would not be likely to occur on the site, or close enough to the project site to be disturbed by demolition or construction activities. Given the project site's relatively urban characteristics, the amount of habitat that may be degraded and the number of individuals of these species that would be disturbed by project activities are minimal.

Construction on offsite areas could include the placement of utilities lines under existing rights-of-way, construction of roundabout, and improvements to a Pacific Gas and Electric Company substation. All of these areas are developed and have no natural features that provide habitat for special-status species. Construction of offsite project components will not result in impacts to special-status species or other sensitive biological resources.

Therefore, project activities would not result in substantial impacts to these species' population and habitat, and such impacts would be less than significant.

6.1.2 Impacts on Wildlife from Artificial Lighting (Less than Significant with Mitigation)

The installation of lighting on buildings and around roads, paths, and parking lots may result in potential impacts on animal species. Many animals, both special-status and common species, are sensitive to light cues,

which influence their physiology and shape their behaviors, particularly during the breeding season (Ringer 1972, de Molenaar et al. 2006). Artificial light has been used as a means of manipulating breeding behavior and productivity in captive birds for decades (de Molenaar et al. 2006), and has been shown to influence the territorial singing behavior of wild birds (Longcore and Rich 2004, Miller 2006, de Molenaar et al. 2006). While it is difficult to extrapolate results of experiments on captive birds to wild populations, it is known that photoperiod (the relative amount of light and dark in a 24-hour period) is an essential cue triggering physiological processes as diverse as growth, metabolism, development, breeding behavior, and molting (de Molenaar et al. 2006). This holds true for mammals and other taxa as well (Beier 2006), suggesting that increases in ambient light may interfere with these processes across a wide range of species, resulting in impacts on wildlife populations.

Artificial lighting may also indirectly affect animals by increasing the nocturnal activity of predators such as owls, hawks, and mammalian predators (Negro et al 2000, Longcore and Rich 2004, DeCandido and Allen 2006, Beier 2006). The presence of artificial light may influence habitat use by rodents (Beier 2006) and breeding birds (Rogers et al. 2006, de Molenaar et al. 2006) by causing avoidance of well-lit areas, resulting in a net loss of habitat availability and quality.

The *Willow Village Master Plan Bird-Safe Design Assessment*, provides a comprehensive analysis of lighting impacts for the Willow Village Master Plan based on the project's conceptual Conditional Development Permit (CDP) application. The report provides documentation of the lighting measures that will be incorporated into the project to ensure that (1) project impacts due to lighting are reduced to less-than-significant levels under CEQA, and (2) the project complies with City of Menlo Park lighting requirements. CEQA mitigation measures related to minimizing lighting impacts are identified below.

For all exterior lighting in the northern portion of the main project site (i.e., areas north of Main Street and Office Buildings 03 and 05 surrounding the hotel, Town Square retail pavilion, Office Building 04, event building, and North Garage):

- **Mitigation Measure BIO-1.** To the maximum extent feasible, up-lighting (i.e., lighting that projects upward above the fixture) shall be avoided in the project design. All lighting shall be fully shielded to block illumination from shining upward above the fixture.

  If up-lighting cannot be avoided in the project design, up-lights shall be shielded and/or directed such that no luminance projects above/beyond objects at which they are directed (e.g., trees and buildings) and such that the light would not shine directly into the eyes of a bird flying above the object. If the objects themselves can be used to shield the lights from the sky beyond, no substantial adverse effects on migrating birds are anticipated.

- **Mitigation Measure BIO-2.** All lighting shall be fully shielded to block illumination from shining outward towards San Francisco Bay habitats to the north. No light trespass shall be permitted more than 80 feet beyond the site's northern property line (i.e., beyond the JPB rail corridor).

- **Mitigation Measure BIO-3.** Exterior lighting shall be minimized (i.e., total outdoor lighting lumens shall be reduced by at least 30% or extinguished, consistent with recommendations from the International Dark-Sky Association [2011]) from 10:00 p.m. until sunrise, except as needed for safety and City code compliance.

- **Mitigation Measure BIO-4.** Temporary lighting that exceeds minimal site lighting requirements may be used for nighttime social events. This lighting shall be switched off no later than midnight. No exterior up-lighting (i.e., lighting that projects upward above the fixture, including spotlights) shall be used during events.

Due to the potential for lighting within the stair/elevator towers to result in bird collisions, the project will implement the following measure:

- **Mitigation Measure BIO-5.** Lights shall be shielded and directed so that lighting does not spill outwards from the elevator/stair towers into adjacent areas.

Due to the potential for interior lighting within the buildings within the atrium to spill outwards to the north and affect birds, the project shall implement the following mitigation measure for interior lights within the buildings within the atrium to minimize impacts due to lighting:

- **Mitigation Measure BIO-6.** Interior or exterior blinds shall be programmed to close on north-facing windows of interior buildings within the atrium from 10:00 p.m. to sunrise in order to block lighting from spilling outward from these windows.

If birds are able to distinguish illuminated interior vegetation, trees, and structures within the atrium at night, collisions with the building are expected to be appreciably higher as birds attempt to fly through glazing to reach these features (e.g., during descent from migration at dawn). The project shall implement Mitigation Measures BIO-1 and BIO-3 above as well as Mitigation Measure BIO-7 below to ensure that structures, trees, and vegetation in the atrium are not illuminated by up-lighting or accent lighting such that they are more conspicuous to birds from outside compared to ambient conditions (i.e., lighting levels from fixtures within the atrium that do not specifically illuminate these features). Structures, trees, and vegetation are considered 'more conspicuous' to birds when they would be more conspicuous when viewed by the human eye from outside the atrium at any elevation.

- **Mitigation Measure BIO-7.** Accent lighting within the atrium shall not be used to illuminate trees or vegetation. OR

  The applicant shall provide documentation to the satisfaction of a qualified biologist that the illumination of vegetation and/or structures within the atrium by accent lighting and/or up-lighting will not make these features more conspicuous to the human eye from any elevation outside the atrium compared to ambient conditions within the atrium. The biologist shall submit a report to the City following the completion of the lighting design documenting compliance with this requirement.

For Office Buildings 01, 02, 03, 05, and 06 and the residential/mixed-use buildings, the project shall implement Mitigation Measure BIO-1 above as well as the following mitigation measure to minimize impacts due to increased lighting:

- **Mitigation Measure BIO-8.** Exterior lighting shall be minimized (i.e., total outdoor lighting lumens shall be reduced by at least 30% or extinguished, consistent with recommendations from the International Dark-Sky Association [2011]) from midnight until sunrise, except as needed for safety and City code compliance.

6.1.3 Impacts on Wildlife from Feral Cat Predation (Less than Significant with Mitigation)

Mammalian predation of birds and small mammals is a natural process. However, when natural levels of predation are increased due to the presence of non-native species, the health of local animal populations, including populations of special-status species, can be adversely affected. Feral cats (*Felis catus*) have been implicated as a major predator on many native wildlife species, including birds and small mammals such as the salt marsh harvest mouse, which is known to occur in wetlands north and northeast of the study area (CNDDB 2021). Not only does predation by feral cats have a potential impact on animal populations, but feral cat feeding stations also attract other predators such as raccoons and skunks, increasing predation pressure on native species in these locations.

During the reconnaissance survey on November 13, 2017, multiple feral cats were observed on the main project site and in the surrounding study area. Implementation of the proposed project has the potential to result in an increase in the feral cat population, for example as a result of an influx of renters and their pets or the establishment of feral cat feeding stations by residents or workers. This impact would be potentially significant under CEQA due to the impact on native wildlife species (Criterion A). Implementation of Mitigation Measure BIO-9 will reduce potential impacts due to feral cats to a less-than-significant level.

Mitigation Measure BIO-9. Feral Cat Management Program. The developer shall implement a Feral Cat Management Program similar to the program developed in conjunction with the Peninsula Humane Society and the Society for the Prevention of Cruelty to Animals for Meta's East Campus in 2013. For one week, every three months (i.e., each quarter), three live trap cages designed to trap cats shall be placed around the perimeter of the main Project Site in locations where feral cats are likely to prey upon native wildlife species. Each trap cage shall be monitored and maintained on a daily basis during the week the traps have been set to determine whether a feral cat has been caught and whether the trap has inadvertently captured a non-target species. If a feral cat is caught, a representative from a pest control operator (or a similar service organization/company) shall be contacted and dispatched to transport the trapped cat to either the Humane Society of San Mateo County, a local cat shelter, a local cat rescue facility, or other local facility that accepts feral cats. If an animal other than a feral cat is caught in one of the traps, it shall be released immediately at the trap location.

6.2 Impacts on Sensitive Communities: Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service

6.2.1 Impacts on Riparian Habitat or Other Sensitive Natural Communities (Less than Significant with Mitigation)

No riparian habitats or other sensitive natural communities are present on the project site itself. A small, isolated segment of forested wetland is located in a drainage ditch along the northern edge of the study area, just outside the project boundary. A linear area of herbaceous seasonal wetland is present immediately north of the Hamilton Avenue Parcels North and South portion of the project site. Another herbaceous seasonal wetland is present just outside the northeast corner of the project boundary. These wetlands are small and isolated, being in depressional areas, rather than having a surface connection to more extensive wetlands. Due to their small, isolated nature and lack of high-quality habitat for wildlife, these are not high-quality habitat features. Nevertheless, forested wetlands are relatively scarce along the edge of the bay, and seasonal wetlands along the edge of the bay have declined due to development and fill. Therefore, we consider these wetlands to be sensitive habitat areas.

Although these wetlands are outside of the project's property boundary, it is possible that these features may be impacted, either temporarily or permanently, during project grading. Elevation of the site and construction of a bicycle/pedestrian path along the northern edge of the main project site will require import of fill into that area, and although a retaining wall may be constructed to support the trail, some clearing of vegetation within, and fill of, these wetlands (or portions of these wetlands) may occur. As a result, it is possible that up to the entire 0.07-acre isolated forested wetland (as well as an additional 0.13-acre area where the canopy of willows extends outside the 0.07-acre forested wetland footprint within which the willows are rooted) and 0.07-acre herbaceous seasonal wetlands may be lost due to fill. Even if these wetlands are not permanently impacted, temporary impacts to wetlands may occur due to construction access, potentially resulting in degradation of wetland vegetation or hydrology. Owing to the scarcity of forested wetlands along the edge of the bay and the decline in seasonal wetlands in the region, this impact would be significant (Criterion B). Implementation of Mitigation Measures BIO-10, 11, and 12 will reduce this impact to a less-than-significant level. Indirect impacts on these wetlands will be avoided and minimized as described under *Impacts on Wetlands and Water Quality* below.

Mitigation Measure BIO-10. Avoidance and Minimization. To the extent feasible, construction activities should avoid or minimize the removal of wetland vegetation or the placement of fill in the wetlands immediately north and northeast of the project site. If all direct impacts to wetlands (i.e., vegetation removal and fill) are avoided, Mitigation Measures BIO-11 and BIO-12 do not need to be implemented, but if any wetland vegetation needs to be removed from the wetlands, or any fill needs to be placed in the wetlands, Measure BIO-11 (and Measure BIO-12, if permanent impacts will occur) will be implemented.

Mitigation Measure BIO-11. In-Situ Restoration of Temporary Impacts. If impacts to the wetlands immediately north and northeast of the project site are temporary, resulting in vegetation removal or temporary fill, but no permanent fill of the wetland is necessary, then the wetland area will be restored by the Project Sponsor following construction. The herbaceous seasonal wetlands are likely to become recolonized easily without the need for seeding and planting, as long as their existing hydrology and topography are restored following temporary impacts. Depending on the level of impact, there is potential for the arroyo willow clumps in the isolated forested wetland to regrow from cut stumps. In such a case, the in-situ restoration would involve simply protecting the area with exclusion fencing following construction to allow for re-growth of vegetation. For temporary impacts that may have removed willow root masses, but where in-situ restoration is still an option, a more detailed restoration plan will need to be developed. The mitigation should, at a minimum, achieve no net loss of wetland acreage (i.e., jurisdictional wetlands lost to fill will be replaced by creation or restoration of wetland habitat, of the same type that was impacted [either forested or herbaceous seasonal] at a minimum 1:1 ratio, on an acreage basis, or as otherwise required by any state or federal permitting agencies) or ecological functions and values through the restoration and enhancement of the impacted wetland that are equal to or greater than the baseline conditions for the existing wetlands. An in-situ restoration approach could involve salvage of wetland plant material prior to construction (e.g., willow cuttings or salvage of willow clumps, in the case of the isolated forested wetland) and then replanting those clumps if the seasonal timing of the construction were appropriate. USACE and/or RWQCB approvals may be required to authorize temporary impacts to these features.

Mitigation Measure BIO-12. Compensatory Mitigation. If any permanent fill of the isolated forested wetland or the herbaceous seasonal wetlands will occur, the project proponent will provide new wetland habitat of the same type that was impacted (either forested or herbaceous seasonal) to offset this impact, either through the creation enhancement, or restoration of wetlands in an appropriate location or via the purchase of mitigation credits in a USACE or RWQCB-approved wetland mitigation bank. The purchase of such credits shall serve as full mitigation for impacts to these wetland features. If project-specific creation, enhancement, or restoration of wetland habitat is implemented, habitat will be restored or created at a minimum ratio of 2:1 (compensation : impact) on an acreage basis, or as otherwise required by any state of federal permitting agencies. This ratio is not higher due to the relatively low quality of the wetlands in the study area relative to more extensive, less fragmented wetlands elsewhere in the region, but it is not lower due to the temporal loss of wetland functions and values that would result from the lag between impacts to the wetlands and maturation of the mitigation habitat. USACE and/or RWQCB approvals may be required to authorize permanent impacts to this feature.

To the extent compensatory mitigation is not provided by purchasing mitigation credits from a USACE- or RWQCB-approved wetland mitigation back, then, if feasible, compensation will be provided by creating, enhancing, or restoring wetland habitat so as to achieve the 2:1 ratio somewhere in San Mateo County, or as otherwise required by any state or federal permitting agencies. A qualified biologist shall develop a "Wetland Mitigation and Monitoring Plan" describing the mitigation, which will contain the following components (or as otherwise modified by regulatory agency permitting conditions):

- Summary of habitat impacts and proposed mitigation ratios
- Goal of the restoration to achieve no net loss of habitat functions and values
- Location of mitigation site(s) and description of existing site conditions
- Mitigation design:
    - Existing and proposed site hydrology
    - Grading plan if appropriate, including bank stabilization or other site stabilization features
    - Soil amendments and other site preparation elements as appropriate
    - Planting plan
    - Irrigation and maintenance plan
    - Remedial measures and adaptive management
- Monitoring plan (including final and performance criteria, monitoring methods, data analysis, reporting requirements, and monitoring schedule). Success criteria will include quantifiable measurements of wetland vegetation type (e.g., dominance by natives) and extent appropriate for the restoration location, and provision of ecological functions and values equal to or exceeding those in the wetland habitat affected. At a minimum, success criteria will include following:
    - At Year 5 post-mitigation, at least 75 percent of the mitigation site will be dominated by native hydrophytic vegetation.

The Wetland Mitigation and Monitoring Plan must be approved by the City of Menlo Park prior to the wetland impacts, and implementation of the Plan must begin within one year after the discharge of fill into these wetland features.

Alternately, off-site mitigation could be provided via the purchase of mitigation credits at an agency-approved mitigation bank, as noted above.

6.2.2 Impacts Caused by Non-Native and Invasive Species (Less than Significant)

Several non-native, invasive plant species occur in the California annual grassland habitat located along the northern edge of the study area. Invasive species can spread quickly and can be difficult to eradicate. Many non-native, invasive plant species produce seeds that germinate readily following disturbance. Further, disturbed areas are highly susceptible to colonization by non-native, invasive species that occur locally, or whose propagules are transported by personnel, vehicles, and other equipment.

Development undertaken because of the proposed project would result in a large portion of the site being subject to soil disturbance due to replacement of the existing outdated industrial complex with a new, mixed-used campus. Activities such as trampling, equipment staging, and vegetation removal are all factors that would also contribute to disturbance. Areas of disturbance could serve as the source for promoting the spread of non-

native species, which could degrade the ecological values of wetlands that occur immediately adjacent to the project site, and adversely affect native plants and wildlife that occur there. Local propagule sources of one highly invasive weed, fennel, and other moderately invasive weeds such as wild oats and black mustard were observed on and surrounding the northern portion of the study area during the November 2017 and April 2019 surveys. Although no invasive weeds were observed on the project site itself, it is possible that some off-site grading in areas along the northern edge of the site will be necessary. Such grading may mobilize weeds within the immediate vicinity of the grading. However, given the minimal amount of disturbance in this off-site area, and the fact that surrounding areas are already developed, we do not expect this disturbance to result in an increased source population for the spread of non-native, invasive species into sensitive habitat areas.

Further, the project would comply with the City of Menlo Park Municipal Code, Chapter 12.44.090(a)(1)(G), which discourages the use of invasive or noxious plant species for landscaping. Thus, project activities would not result in the introduction of invasive species onto the project site or facilitate the spread of invasive plants into sensitive habitats (e.g., wetlands) surrounding the project site. In addition, the invasive species observed in the study area are already present in or around wetland habitats to the north and northeast, and the remainder of the surrounding area is developed/landscaped and thus not susceptible to habitat degradation by the spread of invasive plants. Therefore, the project would result in no impact due to the spread of non-native, invasive species.

6.3 Impacts on Wetlands: Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling hydrological interruption, or other means.

6.3.1 Impacts on Wetlands and Water Quality (Less than Significant with Mitigation)

No wetlands occur on the project site, but an isolated forested wetland and herbaceous seasonal wetlands are located to the north of the project site and to the northeast of the project site within the study area , and further, brackish wetlands occur to the north and northeast of the study area boundary. The isolated forested wetland, herbaceous seasonal wetlands, and brackish marsh may be subject to the regulatory jurisdiction of the USACE and RWQCB. Wetlands serve a variety of important functions, such as sediment stabilization, sediment/toxicant retention, nutrient removal/transformation, and terrestrial wildlife species habitat. Even though the acreage of these wetlands in the study area is small, wetlands are relatively scarce regionally, and even small wetland areas have disproportionate contributions to water quality, groundwater recharge, watershed function, and wildlife habitat in the region. In particular, forested wetlands are scarce along the edges of San Francisco Bay.

As discussed under *Impacts on Riparian Habitat or Other Sensitive Natural Communities* above, while the project proposes to avoid these features to the extent feasible, it is possible that the 0.07-acre isolated forested wetland (as well as an additional 0.13-acre area where the canopy of willows extends outside the 0.07-acre forested wetland footprint within which the willows are rooted) and 0.07-acre seasonal wetlands along the northern edge

of the site may be impacted, either temporarily or permanently, during project grading. Owing to the scarcity of wetlands along the edge of the bay, this direct impact would be significant (Criterion C). Implementation of Mitigation Measures BIO-10, 11, and 12 will reduce impacts from the direct loss or modification of wetlands to a less-than-significant level. The brackish wetlands are located approximately 220 ft from the nearest proposed building and are separated from the main project site by an approximately 25 – 40 ft tall self-storage business. The project would not cause any direct impacts on these brackish wetlands.

Redevelopment has the potential to cause indirect impacts on nearby wetlands or water quality within those wetlands based on site runoff patterns. Currently during the 100-year storm, approximately 16% of the main project site's runoff flows overland to the brackish wetlands located northeast of the study area, with the rest flowing west to the Willow Road storm drain (Sherwood Design Engineers 2017). The project is expected to increase the area of overland flow that drains to the northeast corner of the main project site during the 100-year storm event somewhat, but would detain water on-site to not exceed existing peak flow rates. Such infrequent storm events are not expected to shape the species composition or habitat quality of wetlands to the north and northeast, as those habitats are governed by much more regular/frequent physical and ecological processes. As a result, an increase in runoff from the main project site during 100-year storm events would not have substantial impacts on wetlands to the north and northeast of the study area. The proposed project's storm drainage system would be designed to convey the 10-year storm event and lesser events from the entire main project site to the existing Willow Road storm drain main. During such 10-year and lesser events, no runoff would flow overland to the brackish wetlands located north and northeast of the study area. Therefore, due to the infrequency with which overland flows would enter off-site wetlands, the potential impact on wetland community composition or quality due to an influx of freshwater during large storm events is considered less than significant. Additionally, because the peak flow rate will not be increased to the marsh in large storm events over the existing condition, no significant erosion or sedimentation impacts would occur to the brackish marsh during site discharges to the area in large storm events.

In addition, the project would install stormwater infrastructure to collect site run-off and direct it into the City's storm drain system, rather than into the isolated forested wetland or herbaceous seasonal wetlands adjacent to the project boundary. This would prevent post-construction changes in run-off, including run-off carrying sediment or oil and grease, that could degrade water quality from entering the feature. Construction projects in California causing land disturbances that are equal to 1 acre or greater must comply with State requirements to control the discharge of stormwater pollutants under the NPDES *General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities* (Construction General Permit; Water Board Order No. 2009-0009-DWQ). Prior to the start of construction/demolition, a Notice of Intent must be filed with the State Water Board describing the project. A Storm Water Pollution Prevention Plan (SWPPP) must be developed and maintained during the project and it must include the use of Best Management Practices (BMPs) to protect water quality until the site is stabilized. Standard permit conditions under the Construction General Permit require that the applicant utilize various measures including: on-site sediment control best management practices, damp street sweeping, temporary cover of disturbed land surfaces to control erosion during construction, and utilization of stabilized construction entrances or wash racks, among other elements.

Finally, in many Bay Area counties, including San Mateo County, projects must also comply with the *California Regional Water Quality Control Board, San Francisco Bay Region, Municipal Regional Stormwater NPDES Permit* (MRP) (Water Board Order No. R2-2015-0049). This MRP requires that all projects implement BMPs and incorporate Low Impact Development practices into the design to prevent stormwater runoff pollution, promote infiltration, and hold/slow down the volume of water coming from a site after construction has been completed. In order to meet these permit and policy requirements, projects must incorporate the use of green roofs, impervious surfaces, tree planters, grassy swales, bioretention and/or detention basins, among other factors. These same features will be used to treat any stormwater that flows to the off-site brackish marsh during large storm events.

Reductions in ambient light levels in wetland habitat can lead to a decrease in the amount of aquatic vegetation present, which results in a reduction in primary production, as well as the amount of cover and herbaceous food available in the wetland habitat. The proposed project would result in an increase in the maximum height of buildings on the project site from approximately 34 ft currently to 110 ft. Thus, the project has the potential to affect vegetation near taller buildings due to changes in ambient lighting (i.e., shading). However, the increased height of the proposed buildings is not expected to result in a substantial change in the ambient light reaching nearby wetlands. The isolated forested wetlands immediately north of the project boundary are currently bordered to the south by an area of tall trees that already provide some shade, and under the proposed project, regardless of the height of buildings that are constructed nearby, these wetlands would still have exposure to the eastern sky, unimpeded by new buildings. Thus, shading of this wetland under the proposed project is not expected to increase substantially over current levels.

The herbaceous seasonal wetland immediately outside the northeast corner of the project site is in an open area, with no substantive shading from trees or buildings. The herbaceous seasonal wetland immediately north of the Hamilton Avenue Parcels North and South portion of the project site is currently bordered to the south by shrubs and small trees that provide minimal shade, as well as two approximately 20-foot tall buildings located approximately 15–25 feet from the wetland that also shade portions of the wetlands. Shading of both herbaceous seasonal wetlands by new buildings would reduce the amount of light received by wetland plants, potentially affecting the health and growth of these plants, and we would expect some degradation of the wetland habitat over time as a result. However, these wetlands would still have exposure to the eastern sky, unimpeded by new buildings, so they would not be completely shaded. Because these herbaceous seasonal wetlands in the study area would continue to receive adequate lighting, impacts to their functions and values would not rise to a level of significance under CEQA.

The brackish marsh to the north of the study area is located approximately 220 ft from the nearest proposed building and is separated from the main project site by an approximately 25 – 40 ft tall self-storage business. Thus, shading of the marsh by the existing storage units currently have an effect on aquatic vegetation, and the net increase in shading from the proposed project would be insignificant given the project site's distance from the marsh. Shade from the proposed buildings would only reach the marsh for short periods of the day when the sun is low in the sky and ambient light is dimmer and providing less photosynthetic input. Further, because

of the open nature of the proposed development, with extensive open space, the project would not result in one large, continuous shadow but would allow light to penetrate through the campus. Therefore, shading impacts on wetlands from the proposed buildings would be less than significant.

Compliance with state requirements to control the discharge of stormwater pollutants during construction under the NPDES Construction General Permit and the RWQCB required SWPPP, and post-construction measures and design features required by the MRP would reduce the project's potential impact on water quality to a less-than-significant level.

6.4 Impacts on Wildlife Movement: Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites (Less than Significant)

6.4.1 Impacts on Wildlife Movement and Native Wildlife Nursery Sites (Less than Significant)

For many species, a typical urban landscape is a mosaic of suitable and unsuitable habitat types. Environmental corridors are segments of land that provide a link between these different habitats while also providing cover. Development that fragments natural habitats (i.e., breaks them into smaller, disjunct pieces) can have a twofold impact on wildlife: first, as habitat patches become smaller they are unable to support as many individuals (patch size), and second, the area between habitat patches may be unsuitable for wildlife species to traverse (connectivity).

All proposed project activities are located within an already developed footprint that is surrounded by existing development. Therefore, the project would not result in fragmentation of natural habitats. Further, the proposed project includes extensive open space. Thus, any common, urban adapted species that currently move through the project site would continue to be able to do so following project construction, and the project would not interfere with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors.

Construction disturbance during the avian breeding season (February 1 through August 31, for most species) could result in the incidental loss of eggs or nestlings, either directly through the destruction or disturbance of active nests or indirectly by causing the abandonment of nests. Due to the absence of sensitive habitats from the project site, the habitats on the project site support only regionally common, urban-adapted breeding birds and support only a very small proportion of these species' regional populations. In addition, many birds are expected to continue to nest and forage on the project site after project construction is completed. These birds are habituated to disturbance related to the existing technology park, and the project incorporates trees, shrubs, and forbs into the landscape design, which will provide some food and structural resources for the common, urban-adapted birds of the area, as well as for migrants that may use the area during spring and fall migration. Therefore, project impacts on nesting and foraging birds that use the site, due to habitat impacts or disturbance

of nesting birds, would not rise to the CEQA standard of having a substantial adverse effect, and these impacts would not constitute a significant impact on these species or their habitats under CEQA. However, all native bird species are protected from direct take by federal and state statutes (see Sections 3.1.5 and 3.2.4). Therefore, Mitigation Measures BIO-13, 14, 15, and 16 shall be implemented to ensure that project activities comply with the MBTA and California Fish and Game Code:

Mitigation Measure BIO-13. Avoidance. To the extent feasible, construction activities should be scheduled to avoid the nesting season. If construction activities are scheduled to take place outside the nesting season, all impacts on nesting birds protected under the MBTA and California Fish and Game Code will be avoided. The nesting season for most birds in San Mateo County extends from February 1 through August 31.

Mitigation Measure BIO-14. Preconstruction/Pre-disturbance Surveys. If it is not possible to schedule construction activities between September 1 and January 31 then preconstruction surveys for nesting birds should be conducted by a qualified ornithologist to ensure that no nests of migratory birds will be disturbed during project implementation. We recommend that these surveys be conducted no more than seven days prior to the initiation of construction activities for each construction phase. During this survey, the ornithologist will inspect all trees and other potential nesting habitats (e.g., trees, shrubs, California annual grasslands, buildings) in and immediately adjacent to the impact areas for migratory bird nests.

Mitigation Measure BIO-15. Buffers. If an active nest is found within trees or other potential nesting habitats that would be disturbed by these activities, the ornithologist will determine the extent of a construction-free buffer zone to be established around the nest (typically 300 ft for raptors and 100 ft for other species), to ensure that no nests of species protected by the MBTA and California Fish and Game Code will be disturbed during Project implementation.

Mitigation Measure BIO-16. Inhibition of Nesting. If construction activities will not be initiated until after the start of the nesting season, all potential nesting substrates (e.g., bushes, trees, grasses, and other vegetation) that are scheduled to be removed by the project may be removed prior to the start of the nesting season (e.g., prior to February 1). This will preclude the initiation of nests in this vegetation, and prevent the potential delay of the project due to the presence of active nests in these substrates.

6.5 Impacts due to Conflicts with Local Policies: Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance (Less than Significant)

6.5.1 Impacts Related to Compliance with Municipal Code Chapter 13.24, Heritage Trees (Less than Significant)

Per City of Menlo Park Municipal Code Chapter 13.24, Heritage Trees, permits from the City's Director of Public Works or his or her designee and payment of a fee are required for the removal of any trees which meets the definition of heritage tree, as defined in Section 3.3.1 above. Of the 925 trees currently present on the

project site, including 292 that qualify as heritage trees, 821 (including 269 heritage trees) are expected to be removed during project construction activities (SBCA Tree Consulting 2017, Peninsula Innovation Partners 2020). The removal or pruning of trees protected by the City of Menlo Park municipal code is considered potentially significant under CEQA (Criterion I). However, the project would comply with the City's heritage tree ordinance Sections 16.43.140(6) (with respect to the O District) and 16.45.130(6) (with respect to the RMU District), including obtaining a permit from the City to remove protected trees and paying any applicable fee. The project proposes to provide replacement trees for all heritage trees removed by the project, so that a greater number of trees will be planted than removed. Therefore, impacts related to conflict with local policies or ordinances protecting heritage trees would be less than significant.

6.5.2 Impacts Related to Compliance with Municipal Code Chapters 16.43.140(6) and 16.45.130(6), Bird Safe Design (Less than Significant with Mitigation)

Development of the proposed project would result in the replacement of existing multi-story buildings with new multi-story buildings on the main project site, and the new buildings will incorporate glazing into their facades. Glass windows and building facades can result in injury or mortality of birds due to collisions with these surfaces. Because birds do not perceive glass as an obstruction the way humans do, they may collide with glass when the sky or vegetation is reflected in glass (e.g., they see the glass as sky or vegetated areas); when transparent windows allow birds to perceive an unobstructed flight route through the glass (such as at corners); and when the combination of transparent glass and interior vegetation (such as in planted atria) results in attempts by birds to fly through glass to reach that vegetation.

The majority of avian collisions with buildings occur within the first 60 ft of the ground (City of San Francisco 2011), where birds spend the majority of their time engaged in foraging, territorial defense, nesting, and roosting activities, and where vegetation is most likely to be reflected in glazed surfaces. However, very tall buildings (e.g., buildings 500 ft or more high) may pose a threat to birds that are migrating through the area, particularly to nocturnal migrants that may not see the buildings or that may be attracted to lights on the buildings.

Currently, terrestrial land uses and habitat conditions in and adjacent to the project site consist primarily of developed and landscaped uses such as buildings, parking lots, and roads. Vegetation in these areas is limited in extent, and consists primarily of non-native landscaped trees and shrubs. Although a number of bird species will use such vegetation, they typically do so in low numbers. Non-native vegetation supports fewer of the resources required by native birds than native vegetation, and the structural simplicity of the vegetation (without well-developed ground cover, understory, and canopy layers) further limits resources available to birds. In addition, although numerous waterbirds are known to congregate at the Don Edwards San Francisco Bay NWR to the north and east of the project site, because the area surrounding the project site to the west and south is heavily urbanized and contains no habitats of high value to estuarine birds using the NWR, we do not expect large numbers of waterbirds to be flying over the project site at altitudes low enough for bird-strike mortality to occur. The bird species with the greatest potential to collide with any buildings would consist primarily of the common, urban-adapted passerine species that currently use the project site, as these are the species that would spend the most time in the vicinity of the new buildings.

Zoning regulations set forth in Municipal Code Chapter 16.43.140 (6) require projects such as the Willow Village project to implement the following bird-safe design measures to reduce collision risk:

- No more than 10% of facade surface area shall have non-bird-friendly glazing.
- Bird-friendly glazing includes, but is not limited to opaque glass, covering of clear glass surface with patterns, paned glass with fenestration patterns, and external screens over non-reflective glass.
- Placement of buildings shall avoid the potential funneling of flight paths towards a building facade.
- Glass skyways or walkways, freestanding glass walls, and transparent building corners shall not be allowed.
- Transparent glass shall not be allowed at the rooflines of buildings, including in conjunction with green roofs.
- Use of rodenticides shall not be allowed.

However, these regulations allow that a project may receive a waiver from one or more of the items listed above, excluding the prohibition on use of rodenticides, subject to the submittal of a project-specific evaluation from a qualified biologist and review and approval by the planning commission (Ord. 1024 § 3 (part), 2016). To provide such a project-specific evaluation for the Willow Village project, H. T. Harvey & Associates (2021a) prepared the *Willow Village Master Plan Bird-Safe Design Assessment*, which comprehensively analyzes bird collision risk for the Willow Village Master Plan based on the project's conceptual Conditional Development Permit (CDP) application. The report provides documentation of the bird-safe design measures and mitigation measures that will be incorporated into the project to ensure that project impacts due to bird collisions with buildings are reduced to less-than-significant levels under CEQA.

Based on the *Willow Village Master Plan Bird-Safe Design Assessment*, the project shall comply with the following for purposes of addressing the potential for avian collision risk associated with the project:

1. The "beneficial project features" identified in Appendix A of the *Willow Village Master Plan Bird-Safe Design Assessment* (H. T. Harvey & Associates 2021a). These are features of the proposed buildings' architecture that would reduce the frequency of avian collisions by making the buildings' facades appear conspicuous to birds.
2. City Bird-Safe Design Requirements
    a. The City Bird-Safe Design Requirements identified in Mitigation Measure BIO-1 of the *ConnectMenlo: General Plan Land Use & Circulation Elements and M-2 Area Zoning Update Environmental Impact Report* (ConnectMenlo EIR), certified by the City of Menlo Park in 2016 and codified in Sections 16.43.140(6) and 16.45.130(6) of the City's Municipal Code (collectively referred to as the "City Bird-Safe Design Requirements"), as described in Sections 5.2.2.1, 5.3.2.1, 5.4.2.1, 5.5.2.1, and 6.2.2 of the Bird-Safe Design Assessment.
    b. Subject to City approval of waivers to certain City Bird-Safe Design Requirements, the Alternative Measures Proposed, as described in Sections 5.2.2.2, 5.3.2.2, 5.4.2.2, 5.5.2.2, and 6.2.2 of the Bird-Safe Design Assessment. These Alternative Measures are derived from the

City of Menlo Park's requirements but are tailored specifically to the Willow Village Master Plan to achieve a reduction in collision risk commensurate with the City Bird-Safe Design Requirements.

3. The "lighting design principles," as described in Section 6.2.1 of the Bird-Safe Design Assessment.
4. Additional mitigation measures, including BIO-1 through BIO-8 described above for impacts on wildlife from artificial lighting, and BIO-17 through BIO-21 described below for the atrium.

As described in the *Willow Village Master Plan Bird-Safe Design Assessment*, an assessment of the conceptual design of most of the proposed structures in the Master Plan area (i.e., the hotel, residential/mixed-use buildings, office campus buildings, and event building and nearby buildings) determined that impacts from bird collisions with these buildings would be less than significant under CEQA with incorporation of beneficial project features, compliance with City Bird-Safe Design Requirements, implementation of Alternative Measures as described above, and implementation of Mitigation Measures BIO-1 through BIO-8 described above for impacts on wildlife from artificial lighting. As such, no additional mitigation measures (i.e., related to the buildings' facades) for impacts related to avian collisions are proposed for those buildings.

However, due to the unique design of the atrium, incorporation of beneficial project features, compliance with City Bird-Safe Design Requirements, and implementation of Alternative Measures may not reduce collision impacts with this structure sufficiently to avoid a significant impact under CEQA. Therefore, additional CEQA mitigation measures are necessary to reduce impacts. With the implementation of the following mitigation measures, which go above and beyond the City's bird-safe design requirements, impacts due to bird collisions with the atrium will be reduced to less-than-significant levels under CEQA, in our professional opinion.

- **Mitigation Measure BIO-17.** The project shall treat 100% of glazing on the 'dome-shaped' portions of the atrium's façades (i.e., all areas of the north façade, and all areas of the south façade above the elevated park) with a bird-safe glazing treatment to reduce the frequency of collisions. This glazing shall have a Threat Factor[4] of 15 or lower.

  Because a Threat Factor is a nonlinear index, its value is not equivalent to the percent reduction in collisions that a glazing product provides. However, products with lower threat factors result in fewer bird collisions. Because the City's bird-safe design requirements (and requirements of other municipalities in the Bay Area) do not specify the effectiveness of required bird-safe glazing, Mitigation Measure BIO-17 goes above and beyond what would ordinarily be acceptable to the City, as well as what is considered the industry standard for the Bay Area.

[4] A material's Threat Factor is assigned by the American Bird Conservancy, and refers to the level of danger posed to birds based on birds' ability to perceive the material as an obstruction, as tested using a "tunnel" protocol (a standardized test that uses wild birds to determine the relative effectiveness of various products at deterring bird collisions). The higher the Threat Factor, the greater the risk that collisions will occur. An opaque material will have a Threat Factor of 0, and a completely transparent material will have a Threat Factor of 100. Threat Factors for many commercially available façade materials can be found at https://abcbirds.org/wp-content/uploads/2021/01/Master-spreadsheet-1-25-2021.xlsx.

- **Mitigation Measure BIO-18.** The project shall treat 100% of glazing on the atrium's east and west facades with a bird-safe glazing treatment to reduce the frequency of collisions. This glazing shall have a Threat Factor of 15 or lower.

- **Mitigation Measure BIO-19.** Interior trees and woody shrubs will be set back from the atrium's east, west, and non-sloped (i.e., vertical/perpendicular to the ground) portions of the south facades by at least 50 feet to reduce the potential for collisions with these facades due to the visibility of interior trees. This 50-foot distance is greater than the distance used in the project design for the north and sloped portions of the south facades (e.g., 20-25 feet for the north façade) due to the vertical nature of the east, west, and non-sloped portions of the south facades, as opposed to the articulated nature of the north and sloped portions of the south facades (which is expected to reduce the visibility of internal vegetation to some extent), as well as the direct line-of-sight views between interior and exterior vegetation through the east, west, and non-sloped portions of the south facades compared to the north façade (where internal vegetation is elevated above exterior vegetation). Interior trees and shrubs that are not visible through the east, west, and south facades may be planted closer than 50 feet to glass facades.

- **Mitigation Measure BIO-20.** Because the glass production process can result in substantial variations in the effectiveness of bird-safe glazing, a qualified biologist will review physical samples of all glazing to be used on the atrium to confirm that the bird-safe frit will be visible to birds in various lighting conditions, and is expected to be effective.

- **Mitigation Measure BIO-21.** The project shall monitor bird collisions around the atrium for a minimum of two years following completion of construction of the atrium to identify if there are any collision "hotspots" (i.e., areas where collisions occur repeatedly).

  A monitoring plan for the atrium shall be developed by a qualified biologist that includes focused surveys for bird collisions in late April–May (spring migration), September–October (fall migration), and mid-November–mid-January (winter) to maximize the possibility that the surveys will detect any bird collisions that might occur. Surveys of the atrium will be conducted daily for three weeks during each of these periods (i.e., 21 consecutive days during each season, for a total of 63 surveys per year). In addition, for the two-year monitoring period, surveys of the atrium will be conducted the day following all nighttime events held in the atrium during which temporary lighting exceeds typical levels (i.e., levels specified in the International Dark-Sky Association's defined lighting zone LZ-2 from dusk until 10:00 p.m., or 30% below these levels from 10:00 p.m. to midnight, as described in Section 6.5 below). The applicant can assign responsibility for tracking events and notifying the biologist when a survey is needed to a designated individual who is involved in the planning and scheduling of atrium events. The timing of the 63 seasonal surveys (e.g., morning or afternoon) will vary on different days to the extent feasible; surveys conducted specifically to follow nighttime events will be conducted in the early morning.

  At a frequency of no less than every six months, a qualified biologist will review the bird collision data for the atrium in consultation with the City to determine whether any potential hotspots are present (i.e., if collisions have occurred repeatedly in the same locations). A "potential hotspot" is defined as a cluster of three or more collisions that occur within one of the three-week monitoring periods described above at a

given "location" on the atrium. The "location" shall be identified by the qualified biologist as makes sense for the observed collision pattern and may consist of a single pane of glass, an area of glass adjacent to a landscape tree or light fixture, the 8,990 square-foot vertical façade beneath the elevated park, the façade adjacent to vegetation on the elevated park, the atrium's east façade, the atrium's west façade, or another defined area where the collision pattern is observed. "Location" shall be defined based on observations of (1) collision patterns and (2) architectural, lighting, and/or landscape features contributing to the collisions, and not arbitrarily (e.g., by assigning random grids).

If any potential hotspots are found, the qualified biologist will provide an opinion regarding whether the potential hotspot will impact bird populations over the long-term to the point that additional measures (e.g., adjustments to lighting or the placement of vegetation) are needed to reduce the frequency of bird strikes at the hotspot location in order to reduce impacts to a less-than-significant level under CEQA (i.e., whether it constitutes an actual "hotspot"). This will be determined based on the number and species of birds that collide with the atrium over the monitoring period. In addition, a "hotspot" is automatically defined if a cluster of five or more collisions are identified at a given "location" on the atrium within one of the three-week monitoring periods described above. If a hotpot is identified, additional measures will be implemented at the potential hotspot location at the atrium; these may include one or more of the following options in the area of the hotspot depending on the cause of the collisions:

- The addition of a visible bird-safe frit pattern, netting, exterior screens, art, printed sheets, interior shades, grilles, shutters, exterior shades, or other features to untreated glazing (i.e., on the façade below the elevated park) to help birds recognize the façade as a solid structure.
- Installing interior or exterior blinds in the buildings within the atrium to prevent light from spilling outward though glazed facades at night.
- Reducing lighting by dimming fixtures, redirecting fixtures, turning lights off, and/or adjusting programmed timing of dimming/shutoff.
- Replacing certain light fixtures with new fixtures to provide increased shielding or redirect lighting.
- Adjusting or reducing lighting during events.
- Adjusting the timing of events to reduce the frequency of events during certain times of year (e.g., spring and/or fall migration) when relatively high numbers of collisions occur.
- Adjusting landscape vegetation by removing, trimming, or relocating trees or other plants (e.g., moving them farther from glass), or blocking birds' views of vegetation through glazing (e.g., using a screen or other opaque feature).

If modifications to the atrium are implemented to reduce collisions at a hotspot, one year of subsequent focused monitoring of the hotspot location will be performed to confirm that the modifications effectively reduce bird collisions to a less-than-significant level under CEQA. This monitoring may or may not extend beyond the two-year monitoring period described above, depending on the timing of the hotspot detection.

It is our understanding that the project proposes to use a frit consisting of ¼-inch white dots spaced in a 2x2-inch grid (i.e., similar in specifications to the Solyx SX-BSFD Frost Dot Bird Safety Film product rated with a Threat Factor of 15 by the American Bird Conservancy) for all treated façade areas on the atrium. We further understand that the atrium's glazing will have a dark gray thermal frit treatment (e.g., dark dots incorporated into the glass) in addition to the lighter-toned frit pattern that composes the bird-safe treatment. The extent of thermal frit will vary from the lower portions of the atrium to the upper portions of the atrium, with the upper portions incorporating more extensive (i.e., greater percent cover) thermal frit. Based on our review of preliminary physical glass samples supporting potential combinations of thermal frit and bird-safe frit, provided by the project team, it is our opinion that the combination of the bird-safe frit treatment with the thermal frit would produce very low Threat Factors. We are unaware of any glazing products that incorporate thermal frit patterns and have been assigned a Threat Factor by the American Bird Conservancy; however, the U.S. Green Building Council allows Threat Factors to be determined via any of the following options: (1) using a glass product that has been tested and rated by the American Bird Conservancy; (2) using a glass product with the same characteristics as a product that has been tested and rated by the American Bird Conservancy; or (3) using a glass product that has not been tested and rated, and asking the American Bird Conservancy to provide their opinion regarding an appropriate Threat Factor. We reached out to Dr. Christine Sheppard at the American Bird Conservancy to request her concurrence that the presence of the solar frit would not reduce the effectiveness of the bird-safe frit (and may even increase the effectiveness of the bird-safe frit). Dr. Sheppard responded in an email dated April 9, 2021 agreeing that the solar frit should make the lighter bird-safe frit dots more visible, and the proposed bird-safe treatment would have a Threat Factor of 15 as long as the bird-safe frit dots are ¼-inch in diameter (Sheppard 2021). Thus, the proposed bird-safe glazing treatment is appropriate for the atrium facades and goes above and beyond the City's minimum requirements, as well as the local standard for the San Francisco Bay Area.

The project will also implement Mitigation Measures BIO-1 through BIO-8 to minimize the contribution of project lighting on bird collision risk.

Prior to City approval of each Architectural Control Plan ("ACP") for the project, a qualified biologist shall review the final ACP to confirm that the above features, requirements, alternative measures, and mitigation measures, or other alternative features, requirements, alternative measures, and mitigation measures proposed by the applicant and reasonably acceptable to the qualified biologist, are incorporated into the final design, such that project impacts due to bird collisions would be less than significant under CEQA as indicated in the Bird-Safe Design Assessment.

6.5.3 Impacts Related to Compliance with General Plan Policy OSC1.3, Sensitive Habitats (Less than Significant with Mitigation)

General Plan Policy OSC1.3, Sensitive Habitats, requires new development on or near sensitive habitats to (1) provide a baseline assessment prepared by qualified biologists and specify requirements relative to the baseline assessments, (2) consult with appropriate regulatory and resource agencies, (3) incorporate appropriate avoidance and minimization measures, and (4) obtain necessary permits/authorizations. Further, Mitigation

Measure BIO-1 of the ConnectMenlo EIR (PlaceWorks 2016) specifies that the required biological resources assessment must address a number of specific requirements. The following summarizes the project's compliance with the requirements of General Plan Policy OSC1.3 and ConnectMenlo Mitigation Measure BIO-1.

- The baseline biological resources report is required to provide a determination on whether any sensitive biological resources, including jurisdictional wetlands and waters, essential habitat for special-status species, and sensitive natural communities, are present on the site or on any adjacent undeveloped lands that could be affected by the project and lands of the NWR. In compliance with this requirement, Section 4.2 of this report describes the biotic habitat types present in the study area. Sections 5.1 and 5.2 discuss the potential for these habitats to support special-status plants and animals and analyze the potential for special-status species to occur on the study area or close enough to be impacted by proposed project activities; Section 6.1 analyzes potential impacts to special-status species. No plant or animal species listed as threatened or endangered by the USFWS or CDFW are expected to occur within the study area. Further, no species designated as a species of special concern is expected to breed in the study area.

  Section 5.3 addresses the presence of sensitive habitats in the project vicinity, and Sections 6.2 and 6.3 analyze the potential for the project to result in impacts on such habitats. No habitats under the jurisdiction of the USFWS, CDFW, USACE, or RWQCB were determined to be present on the project site, but 0.07 acre of isolated forested wetland (and an additional 0.13-acre area where the canopy of willows extends outside the 0.07-acre forested wetland footprint within which the willows are rooted) and 0.07 acre of herbaceous seasonal wetlands are present immediately north and northeast of the site, and could potentially be impacted by construction. Implementation of Mitigation Measures BIO-10, 11, and 12 as described in Section 6.2.1 would reduce impacts on sensitive/jurisdictional habitats to less-than-significant levels.

- The baseline biological resources report is required to incorporate guidance from relevant regional conservation plans related to determining the potential presence or absence of sensitive biological resources. As described above, Sections 5.1 and 5.2 analyze the potential for special-status plant or animal species to occur on the project site. This analysis incorporates information from the NWR Comprehensive Conservation Plan and Environmental Assessment (U.S. Fish and Wildlife Service 2012), which includes a discussion of all the special-status species potentially occurring on the NWR.

- The baseline biological resources report is required to include an evaluation of the potential effects of the project on sensitive biological resources. The potential for the proposed project to result in significant impacts on sensitive biological resources is analyzed in Section 6 of this report. This analysis takes into consideration the habitat types present in the study area (Section 4.2), the potential for special-status species to be present in the study area (Sections 5.1 and 5.2), and the proximity of the project site to sensitive habitats (Section 5.3). Based on the analysis, it is determined that the project

would not result in significant impacts on special-status plant or animal species. The project could potentially result in impacts on sensitive habitats under the jurisdiction of the USACE and RWQCB, in the form of the small areas of isolated forested wetland (0.07 acre plus an additional 0.13-acre area where the canopy of willows extends outside the 0.07-acre forested wetland footprint within which the willows are rooted) and herbaceous seasonal wetlands (0.07 acre) present immediately north and northeast of the site. Implementation of Mitigation Measures BIO-10, 11, and 12 as described in Section 6.2.1 would reduce impacts on sensitive/jurisdictional habitats to less-than-significant levels.

- The baseline biological resources report is required to include avoidance, minimization, and mitigation measures for adverse impacts. Based on the *Willow Village Master Plan Bird-Safe Design Assessment*, Mitigation Measures BIO-1 through BIO-8, described in Section 6.1.2, were identified to reduce impacts of project lighting on wildlife and help to mitigate bird collision risk with project buildings, and Mitigation Measures BIO-17 through BIO-21, described in Section 6.5.2, will reduce impacts from bird collisions with the proposed atrium. Mitigation Measure BIO-9, described in Section 6.1.3, will reduce potential impacts of feral cats on native animals. Mitigation Measures BIO-10, 11, and 12, as described in Section 6.2.1, will reduce impacts on sensitive/jurisdictional habitats. Mitigation Measures BIO-13, 14, 15, and 16, described in Section 6.4.1, will avoid project conflicts with the MBTA and California Fish and Game Code related to nesting birds. Collectively all these mitigation measures will reduce Master Plan impacts on biological resources to less-than-significant levels.
- Per Mitigation Measure BIO-1 of the ConnectMenlo EIR, if sensitive biological resources are determined to be present on the project site or may be present on any adjacent parcel containing natural habitat, coordination with the appropriate regulatory and resource agencies must occur. The project could potentially result in impacts on sensitive habitats under the jurisdiction of the USACE and RWQCB, if these habitats are jurisdictional, in the form of the small areas of isolated forested wetland (0.07 acre plus an additional 0.13-acre area where the canopy of willows extends outside the 0.07-acre forested wetland footprint within which the willows are rooted) and herbaceous seasonal wetlands (0.07 acre) present immediately north and northeast of the site. As discussed in Mitigation Measure 2 of this biological resources report, the project will avoid and minimize impacts to these features to the extent feasible. If all direct impacts can be avoided, so that no clearing of wetland vegetation or fill of these wetlands will occur, no regulatory permitting related to these features would be necessary even if these habitats are jurisdictional. However, if these habitats are jurisdictional and will be impacted by vegetation clearing or fill, the applicant will obtain the necessary 404/401 permits from the USACE and RWQCB.

  The project would not result in impacts on plant or animal species listed as threatened or endangered by the USFWS or CDFW, and therefore, no coordination with regulatory agencies regarding impacts on special-status species is warranted. Resource agencies would be provided the opportunity to comment on the proposed project as part of the CEQA process for the project.

- Per Mitigation Measure BIO-1, where jurisdictional waters or federally or State listed special-status species would be affected by the project, appropriate authorizations shall be obtained by the project applicant. As described above, the applicant will obtain any necessary 404/401 permits from the USACE and RWQCB if the off-site isolated forested wetland and/or herbaceous seasonal wetlands are determined to be jurisdictional and will be impacted by vegetation clearing or fill. The project would not result in impacts on plant or animal species listed as threatened or endangered by the USFWS or CDFW. The project would comply with the City's heritage tree ordinance, including obtaining a permit from the City to remove protected trees and paying any applicable fee, as described in Section 6.5.1.

Thus, provided that this project incorporates the mitigation measures described in this biological resources report, the project will not conflict with General Plan Policy OSC1.3. This biological resources report represents compliance with ConnectMenlo EIR Mitigation Measure BIO-1 by providing all the information required by that mitigation measure for a biological resources assessment.

6.6 Impact due to Conflicts with an Adopted Habitat Conservation Plan: Conflict with the provisions of an adopted habitat conservation plan, natural community conservation plan, or other approved local, regional, or state habitat conservation plan (No Impact)

6.6.1 Impacts due to Conflicts with an Adopted Habitat Conservation Plan (No Impact)

The project site is not located within an area covered by an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan. Therefore, the project would not conflict with any such documents.

6.7 Cumulative Impacts

Cumulative impacts arise due to the linking of impacts from past, current, and reasonably foreseeable future projects in the region. Future development activities in the City of Menlo Park will result in impacts on the same habitat types and species that will be affected by the proposed project. The proposed project, in combination with other projects in the area and other activities that impact the species that are affected by this project, could contribute to cumulative effects on special-status species. Other projects in the area include office/retail/commercial development, mixed use, and residential projects that could adversely affect these species, as well as restoration projects (e.g., the South Bay Salt Pond Restoration Project Phase 2, SAFER Bay Project) that will benefit these species. The South Bay Salt Pond Restoration Project has active restoration sites approximately 750 feet north of the Hamilton Avenue Parcel North component of the project.

The cumulative impact on biological resources resulting from the project in combination with other projects in the project area and larger region would be dependent on the relative magnitude of adverse effects of these projects on biological resources compared to the relative benefit of impact avoidance and minimization efforts prescribed by planning documents, CEQA mitigation measures, and permit requirements for each project;

compensatory mitigation and proactive conservation measures associated with each project. In the absence of such avoidance, minimization, compensatory mitigation, and conservation measures, cumulatively significant impacts on biological resources would occur.

However, the project would comply with applicable law regarding protection of biological resources, including among others federal and state law related to jurisdictional waters, federal and state law related to migratory birds, and local regulations regarding bird safety. In addition, the Menlo Park General Plan contains conservation measures that would benefit biological resources, as well as measures to avoid, minimize, and mitigate impacts on these resources. Further, the project would implement mitigation measures (Measures BIO-1-21) to mitigate impacts on sensitive and regulated habitats, and to minimize impacts on nesting and migratory birds, as described above. Thus, the project will make a less than cumulatively considerable contribution to cumulative impacts on biological resources.

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Appendix A. Plants Observed

Family	Scientific Name	Common Name
Aceraceae	*Acer palmatum*	Japanese maple
Aceraceae	*Acer rubrum*	red maple
Anacardiaceae	*Pistacia chinensis*	Chinese pistache
Anacardiaceae	*Schinus molle*	Peruvian pepper
Anacardiaceae	*Toxicodendron diversilobum*	poison oak
Apiaceae	*Foeniculum vulgare*	fennel
Araliaceae	*Hedera helix*	English ivy
Arecaceae	*Pheonix canariensis*	Canary Island palm
Asteraceae	*Baccharis pilularis*	coyote brush
Asteraceae	*Helminthotheca echioides*	bristly ox-tongue
Betulaceae	*Alnus cordata*	Italian alder
Bignoniaceae	*Jacaranda mimosifolia*	jacaranda
Brassicaeae	*Brassica nigra*	black mustard
Brassicaeae	*Raphanus sativus*	cultivated radish
Casuarinaceae	*Casuarina cunninghamiana*	casuarina
Cupresaceae	*Sequoia sempervirens*	coast redwood
Cupressaceae	*Cupressus sempervirens*	Italian cypress
Cyperaceae	*Cyperus eragrostis*	tall flatsedge
Fabaceae	*Acacia melanoxylon*	blackwood acacia
Fagaceae	*Quercus agrifolia*	coast live oak
Fagaceae	*Quercus lobata*	valley oak
Fagaceae	*Quercus rubra*	red oak
Ginkgoaceae	*Ginkgo biloba*	maidenhair
Lamiaceae	*Rosmarinus officinalis*	rosemary
Lythraceae	*Lagerstroemia spp.*	crepe myrtle
Magnoliaceae	*Magnolia soulangeana*	saucer magnolia
Malvaceae	*Malva nicaeensis*	bull mallow
Moraceae	*Ficus carica*	fig
Myrtaceae	*Eucalyptus camaldulensis*	red river gum
Myrtaceae	*Eucalyptus globulus*	Tasmanian blue gum
Myrtaceae	*Eucalyptus polyanthemos*	silver dollar gum
Myrtaceae	*Lophostemon confertus*	Brisbane box
Oleaceae	*Fraxinus oxycarpa 'Raywood'*	raywood ash
Oleaceae	*Fraxinus pennslyvanica*	Pennsylvania ash
Oleaceae	*Fraxinus uhdie*	shamel ash
Oleaceae	*Olea europaea*	olive
Papaveraceae	*Eschscholzia californica*	California poppy
Pinaceae	*Cedrus atlantica*	atlas cedar
Pinaceae	*Cedrus deodara*	deodar cedar
Pinaceae	*Pinus canariensis*	Canary Island pine

Pinaceae	*Pinus halepensis*	aleppo pine
Pinaceae	*Pinus pinea*	Italian stone pine
Pinaceae	*Pinus radiata*	Monterey pine
Platanaceae	*Planatus xhispanica*	London plane
Poaceae	*Avena* sp.	Wild oats
Poaceae	*Bromus diandrus*	ripgut brome
Poaceae	*Phragmites australis*	common reed
Poaceae	*Stipa miliaceae* var. *miliacea*	smilo grass
Podocarpaceae	*Afrocarpus gracilior*	African fern pine
Polygonaceae	*Rumex crispus*	curly dock
Rhamnaceae	*Rhamnus alaternus*	Italian buckthorn
Rosaceae	*Prunus cerasifera 'Krauter Vesuvis'*	purple leaf plum
Rosaceae	*Prunus serrulata*	cherry
Rosaceae	*Pyrus calleryana*	flowering pear
Rosaceae	*Pyrus kawakamii*	evergreen pear
Salicaceae	*Salix babylonica*	weeping willow
Salicaceae	*Salix* sp.	willow

Appendix B. Special-Status Plants Considered for Potential Occurrence

Common Name	Scientific Name	Suitable Habitat Absent	Edaphic Conditions Absent	Outside Elevation Range	Extirpated from Project Vicinity
alkali milk-vetch	Astragalus tener var. tener	x	x		
Anderson's manzanita	Arctostaphylos andersonii	x		x	
arcuate bush-mallow	Malacothamnus arcuatus	x		x	
bay buckwheat	Eriogonum umbellatum var. bahiiforme	x	x	x	
Ben Lomond buckwheat	Eriogonum nudum var. decurrens	x		x	
bent-flowered fiddleneck	Amsinckia lunaris	x			
Brewer's calandrinia	Calandrinia breweri	x		x	
Brewer's clarkia	Clarkia breweri	x	x	x	
bristly leptosiphon	Leptosiphon acicularis	x		x	
California androsace	Androsace elongata ssp. acuta	x		x	
California seablite	Suaeda californica	x			
caper-fruited tropidocarpum	Tropidocarpum capparideum	x	x		
chaparral ragwort	Senecio aphanactis	x		x	
Choris' popcornflower	Plagiobothrys chorisianus var. chorisianus	x			
clay buckwheat	Eriogonum argillosum	x	x	x	
clustered lady's-slipper	Cypripedium fasciculatum	x	x	x	
coast iris	Iris longipetala	x			
coast lily	Lilium maritimum	x			
coastal marsh milk-vetch	Astragalus pycnostachyus var. pycnostachyus	x			
Congdon's tarplant	Centromadia parryi ssp. congdonii				
Contra Costa goldfields	Lasthenia conjugens	x	x		
cotula navarretia	Navarretia cotulifolia	x	x		
Crystal Springs fountain thistle	Cirsium fontinale var. fontinale	x	x	x	
Crystal Springs lessingia	Lessingia arachnoidea	x	x	x	
Davidson's bush-mallow	Malacothamnus davidsonii	x		x	
Delta woolly-marbles	Psilocarphus brevissimus var. multiflorus	x		x	
Dudley's lousewort	Pedicularis dudleyi	x		x	
dusky-fruited malacothrix	Malacothrix phaeocarpa	x		x	
elongate copper moss	Mielichhoferia elongata	x	x		
fragrant fritillary	Fritillaria liliacea	x	X		
Franciscan onion	Allium peninsulare var. franciscanum	x		x	
Gairdner's yampah	Perideridia gairdneri ssp. gairdneri	x			
hairless popcornflower	Plagiobothrys glaber			x	x

Common Name	Scientific Name	Suitable Habitat Absent	Edaphic Conditions Absent	Outside Elevation Range	Extirpated from Project Vicinity
Hickman's popcornflower	Plagiobothrys chorisianus var. hickmanii	x		x	
Hillsborough chocolate lily	Fritillaria biflora var. ineziana	x	x	x	
Hoover's button-celery	Eryngium aristulatum var. hooveri	x			
Howell's onion	Allium howellii var. howellii	x		x	
Jepson's coyote-thistle	Eryngium jepsonii	x			
Jepson's woolly sunflower	Eriophyllum jepsonii	x		x	
Kings Mountain manzanita	Arctostaphylos regismontana	x	x	x	
large-flowered leptosiphon	Leptosiphon grandiflorus	x			
legenere	Legenere limosa	x			
Loma Prieta hoita	Hoita strobilina	x	x	x	
long-styled sand-spurrey	Spergularia macrotheca var. longistyla	x			
lost thistle	Cirsium praeteriens				x
maple-leaved checkerbloom	Sidalcea malachroides	x			
Marin western flax	Hesperolinon congestum	x	x		
Methuselah's beard lichen	Usnea longissima	x		x	
Mexican mosquito fern	Azolla microphylla	x		x	
Michael's rein orchid	Piperia michaelii	x			
minute pocket moss	Fissidens pauperculus	x		x	
Montara manzanita	Arctostaphylos montaraensis	x		x	
Mt. Diablo cottonweed	Micropus amphibolus	x		x	
narrow-petaled rein orchid	Piperia leptopetala	x		x	
Oakland star-tulip	Calochortus umbellatus	x	x	x	
Oregon polemonium	Polemonium carneum	x			
Patterson's navarretia	Navarretia paradoxiclara	x	x	x	
phlox-leaf serpentine bedstraw	Galium andrewsii ssp. gatense	x	x	x	
pincushion navarretia	Navarretia myersii ssp. myersii	x		x	
Point Reyes salty bird's-beak	Chloropyron maritimum ssp. palustre	x			
round-headed Chinese-houses	Collinsia corymbosa	x			
round-leaved filaree	California macrophylla	x		x	
saline clover	Trifolium hydrophilum	x			
San Antonio Hills monardella	Monardella antonina ssp. antonina	x		x	
San Francisco Bay spineflower	Chorizanthe cuspidata var. cuspidata	x			
San Francisco campion	Silene verecunda ssp. verecunda	x		x	
San Francisco collinsia	Collinsia multicolor	x		x	
San Francisco owl's-clover	Triphysaria floribunda	x		x	
San Francisco wallflower	Erysimum franciscanum	x			
San Joaquin spearscale	Extriplex joaquinana	x			
San Mateo thorn-mint	Acanthomintha duttonii	x	x	x	

Common Name	Scientific Name	Suitable Habitat Absent	Edaphic Conditions Absent	Outside Elevation Range	Extirpated from Project Vicinity
San Mateo woolly sunflower	Eriophyllum latilobum	x		x	
Santa Clara red ribbons	Clarkia concinna ssp. automixa	x		x	
Santa Clara thorn-mint	Acanthomintha lanceolata	x		x	
Satan's goldenbush	Isocoma menziesii var. diabolica	x		x	
serpentine leptosiphon	Leptosiphon ambiguus	x		x	
short-leaved evax	Hesperevax sparsiflora var. brevifolia	x			
slender-leaved pondweed	Stuckenia filiformis ssp. alpina	x		x	
South Coast Range morning-glory	Calystegia collina ssp. venusta	x	x	x	
spring lessingia	Lessingia tenuis	x		x	
stinkbells	Fritillaria agrestis	x		x	
sylvan microseris	Microseris sylvatica	x	x	x	
Tracy's eriastrum	Eriastrum tracyi	x		x	
two-fork clover	Trifolium amoenum	x			
western leatherwood	Dirca occidentalis	x		x	
white-flowered rein orchid	Piperia candida	x		x	
white-rayed pentachaeta	Pentachaeta bellidiflora	x	x	x	
woodland woollythreads	Monolopia gracilens	x	x		
woolly-headed lessingia	Lessingia hololeuca	x		x	

H. T. HARVEY & ASSOCIATES
Ecological Consultants
50 years of field notes, exploration, and excellence

Willow Village Tunnel and North Ramp Biological Resources Assessment

Project #10704

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Section 1. Introduction

H. T. Harvey & Associates has conducted a background review and field survey to assess the potential for sensitive biological resources identified in the *ConnectMenlo: General Plan Land Use & Circulation Elements and M-2 Area Zoning Update Environmental Impact Report* (ConnectMenlo EIR) to occur on the Willow Village Tunnel and North Ramp project site, or close enough to the site to be affected by project activities. It is our understanding that the proposed project entails the construction of a tunnel beneath Willow Road to connect Facebook's Willow Village Campus with its Bayfront Expansion Campus. The project site is currently occupied by a commercial office building, associated landscape vegetation, existing roadways, and a small portion of the Dumbarton Rail Corridor. This report provides our assessment of biological resources on the project site, and identifies appropriate avoidance and minimization measures to comply with Mitigation Measure BIO-1 of the ConnectMenlo EIR.

1.1 Background

In 2014, the City of Menlo Park initiated the process of updating its General Plan Land Use and Circulation Elements as well as its zoning for the M-2 area (also known as the Bayfront Area), which is located the northern portion of Menlo Park. Collectively, this update to the General Plan and zoning is known as *ConnectMenlo*. On November 29, 2016, the City Council certified the ConnectMenlo EIR and approved the General Plan Land Use and Circulation Elements. The Willow Village Tunnel and North Ramp project is located within the ConnectMenlo area, and subject to the requirements of the ConnectMenlo EIR.

Mitigation Measure BIO-1 of the ConnectMenlo EIR requires all new construction and building addition projects, regardless of size, to have a qualified biologist prepare a project-specific baseline biological resources assessment if the project would occur on or adjacent to a parcel containing natural habitat with features such as mature and native trees, unused structures that could support special-status species, other sensitive biological resources, and/or active nests of common birds protected under the Migratory Bird Treaty Act (MBTA). The Willow Village Tunnel and North Ramp project site supports suitable habitat that may contain active nests of common birds protected under the MBTA; hence, a baseline biological resources assessment is required for the project.

1.2 Project Description

The project site is located at the intersection of Willow Road and the Dumbarton Rail Corridor in Menlo Park, just south of State Route 84 (Figure 1). The project proposes to construct a tunnel beneath Willow Road to connect the future Willow Village Campus with Facebook's existing Bayfront Expansion Campus. The provision of a new, direct diagonal crossing below Willow Village would significantly reduce the crossing signal usage by pedestrians and bicyclists, which impedes the flow of vehicular traffic on Willow Road. A 200-foot-long ramp will be constructed east of Facebook Building MPK20 west of Willow Road, and a 230-foot-long

ramp will be constructed east of Willow Road at the Willow Village Campus. These ramps would lead tram, bicycle and pedestrian traffic under Willow Road and then back up to the surface. Existing pedestrian and bicycle pathways and vehicle roadways located east of Building MPK20 will also be realigned and modified to accommodate the new connection.

The project is envisioned to be constructed using cut-and-cover methods. Construction would be conducted in two phases to allow traffic on Willow Road to flow on detours achieved by locally widening the roadway. The first phase would involve removing a section of Willow Road pavement as well as the railroad tracks within the Willow Road right-of-way. The railroad tracks would be stored and subsequently reinstalled at their original location following conclusion of tunnel construction. The second phase of the tunnel construction would require temporary relocation of Facebook Way and its intersection with Willow Road to the north to allow completion of the cut-and-cover tunnel and north portal under Facebook Way.

Section 2. Methods

2.1 Background Review

Prior to conducting field work, H. T. Harvey & Associates ecologists reviewed the project plans and description provided by Signature Development Group in June 2021; aerial photos (Google Inc. 2021) and topographic maps; the *Don Edwards San Francisco Bay National Wildlife Refuge Comprehensive Conservation Plan* (U.S. Fish and Wildlife Service [USFWS] 2012); the *South Bay Salt Pond Restoration Project Final Environmental Impact Statement/Report* (EDAW et al. 2007); the *Recovery Plan for Tidal Marsh Ecosystems of Northern and Central California* (USFWS 2013); the *Recovery Plan for the Pacific Coast Population of the Western Snowy Plover* (USFWS 2007); USFWS species accounts, listing notices, and critical habitat notices; the California Department of Fish and Wildlife's (CDFW's) California Natural Diversity Database (CNDDB) (2021); the Calflora database on special-status plant occurrences (2021); the California Native Plant Society (CNPS) Inventory of Rare and Endangered Plants of California (CNPS 2021); bird records from the project vicinity reported to the eBird database (Cornell Lab of Ornithology 2021), which has been established by the Cornell University Laboratory of Ornithology to archive records of birds seen worldwide; and other relevant scientific literature and technical databases in order to assess the current distribution of special-status plants and animals in the site vicinity. In addition, for plants, we reviewed all species currently ranked by the CNPS as California Rare Plant Rank (CRPR) 1A, 1B, 2, or 3 occurring in the *Palo Alto, California* 7.5-minute U.S. Geological Survey 7.5-minute quadrangle and eight surrounding quadrangles (*Woodside, San Mateo, Redwood Point, Newark, Mountain View, Cupertino,* and, *Mindego Hill*). We also considered the CNPS plant list for San Mateo County, as the CNPS does not maintain quadrangle-level records for CRPR 4 species. In addition, we reviewed the *Willow Village Master Plan Biological Resources Report* (H. T. Harvey & Associates 2020), because the proposed project overlaps a portion of the Master Plan area east of Willow Road.

2.2 Site Visit

Following our background review, H. T. Harvey & Associates senior wildlife ecologist Robin Carle, M.S., conducted a reconnaissance-level survey of the project site on June 9, 2021. The purpose of this survey was to identify existing biological conditions and the site's potential to support special-status species of plants and animals; other legally protected animals, such as migratory birds; and sensitive/regulated habitats such as jurisdictional wetlands and other waters of the U.S. regulated under Section 404 of the Clean Water Act, potential waters of the state regulated under Section 401 of the Clean Water Act and the Porter-Cologne Water Quality Control Act, and riparian habitats regulated under Section 1602 of the California Fish and Game Code. The survey included an assessment of habitats for special-status species and other protected animals both on the site and in adjacent areas (e.g., in developed and landscaped areas on adjacent properties) that could be impacted either directly or indirectly by proposed activities, as well as an assessment of adjacent habitats that could potentially support source populations of sensitive species that could then disperse onto the project site.

A focused survey for Congdon's tarplant (*Centromadia parryi* var. *congdonii*) was conducted on the project site by H. T. Harvey & Associates plant ecologist Mark Bibbo, M.S., on June 12, 2020 in support of the Willow Village Master Plan Biological Resources Report (H. T. Harvey & Associates 2020). That survey targeted all areas of suitable habitat along the Dumbarton Rail Corridor within the boundaries of the Willow Village Tunnel and North Ramp project. Because the remaining portions of the project site are completely occupied by developed land uses, no additional suitable habitat for special-status plants is present on the site. As a result, additional focused botanical surveys to support this assessment were not warranted.

Section 3. Environmental Setting

3.1 General Project Area Description

The project site is surrounded by dense commercial and residential development in Menlo Park. The site is generally bordered by California State Route 84 to the north, commercial development and a large brackish marsh to the east, and commercial development to the west and south (Figure 2). The site is bisected by Willow Road, which is oriented north to south, and the Dumbarton Rail Corridor, which is oriented east to west.

Elevations on the project site range from approximately 6.1 to 12.9 feet above sea level (North American Vertical Datum of 1988). The Natural Resources Conservation Service has mapped two soil units on the project site: urban land-orthents reclaimed complex, 0–2% slopes; and Novato clay, 0–1% slopes (Natural Resources Conservation Service 2021). In soil taxonomy, orthents are defined as young soils that lack horizon development due to either steep slopes or parent materials that lack weatherable minerals. Typically, these are very shallow soils. Novato clay soils are deep, poorly drained soils that form in alluvium deposits along bay margins (Natural Resources Conservation Service 2021).

3.2 Biotic Habitats

The project site and surrounding areas have been heavily modified by anthropogenic activities as a result of urbanization and the development of commercial buildings and roadways. The reconnaissance-level survey identified two habitat/land use types on the project site: developed/landscaped and ruderal grassland (Figure 3). These habitat/land use types are described in detail below.

3.2.1 Developed/Landscaped

Vegetation. West of Willow Road, developed portions of the project site consist of paved pedestrian pathways and vehicle roadways with surrounding areas of landscape vegetation (Photo 1). Landscape trees within these areas include native coast live oak (*Quercus agrifolia*) and nonnative Monterey cypress (*Hesperocyparis macrocarpa*), ginkgo (*Ginkgo biloba*), and desert willow (*Chilopsis linearis*). Landscape plants within these areas include native California fuchsia (*Epilobium canum*) and nonnative trumpet vine (*Vampsis radicans*), ceanothus (*Ceanothus* sp.), and deer grass (*Muhlenbergia rigens*). East of Willow Road, developed portions of the project site are located entirely within a paved parking area (Photo 2).

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Figure 1. Vicinity Map

Willow Village Tunnel and North Ramp Biological Resources Assessment (10704)
July 2021

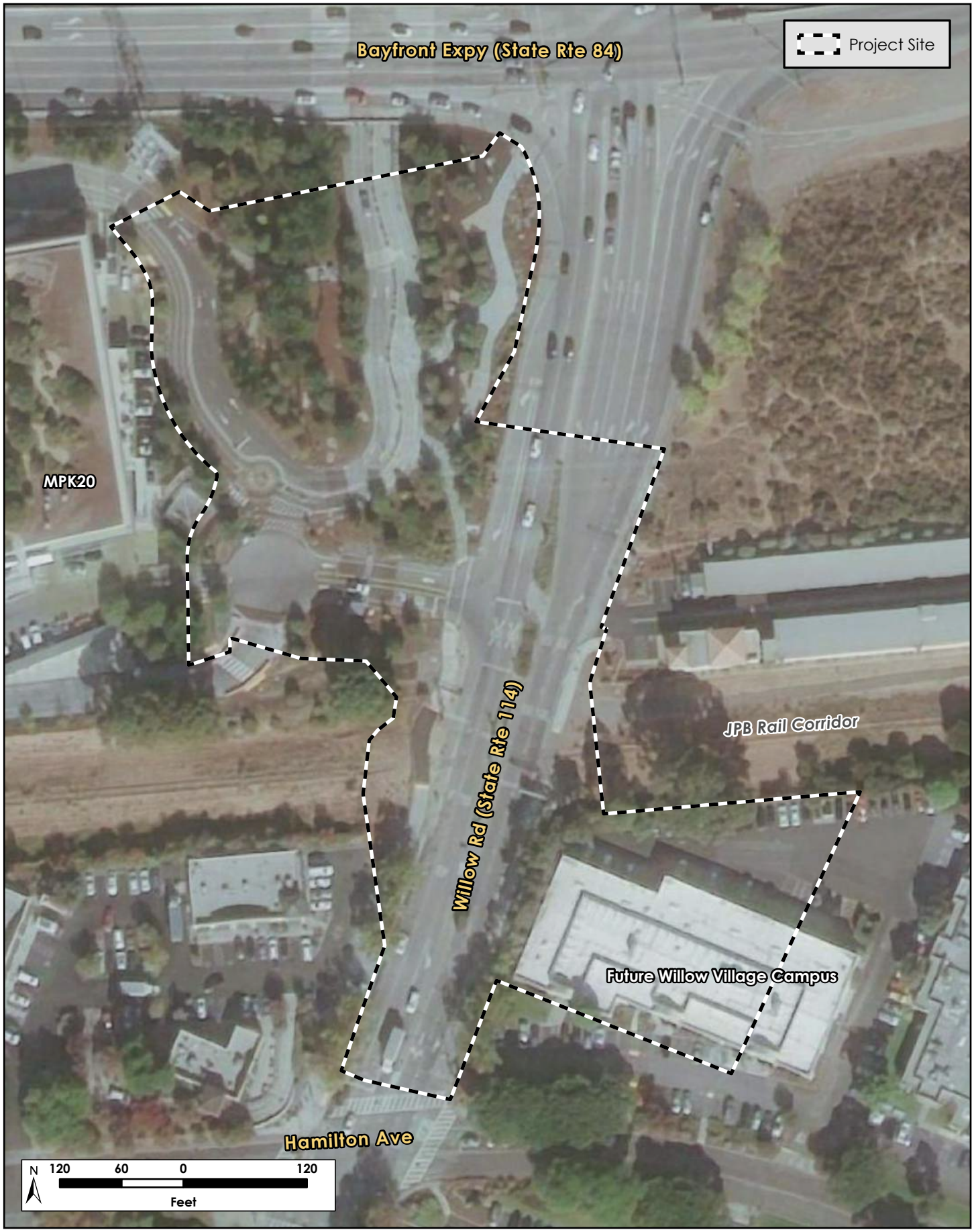

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Figure 2. Project Site

Willow Village Tunnel and North Ramp Biological Resources Assessment (10704)
July 2021

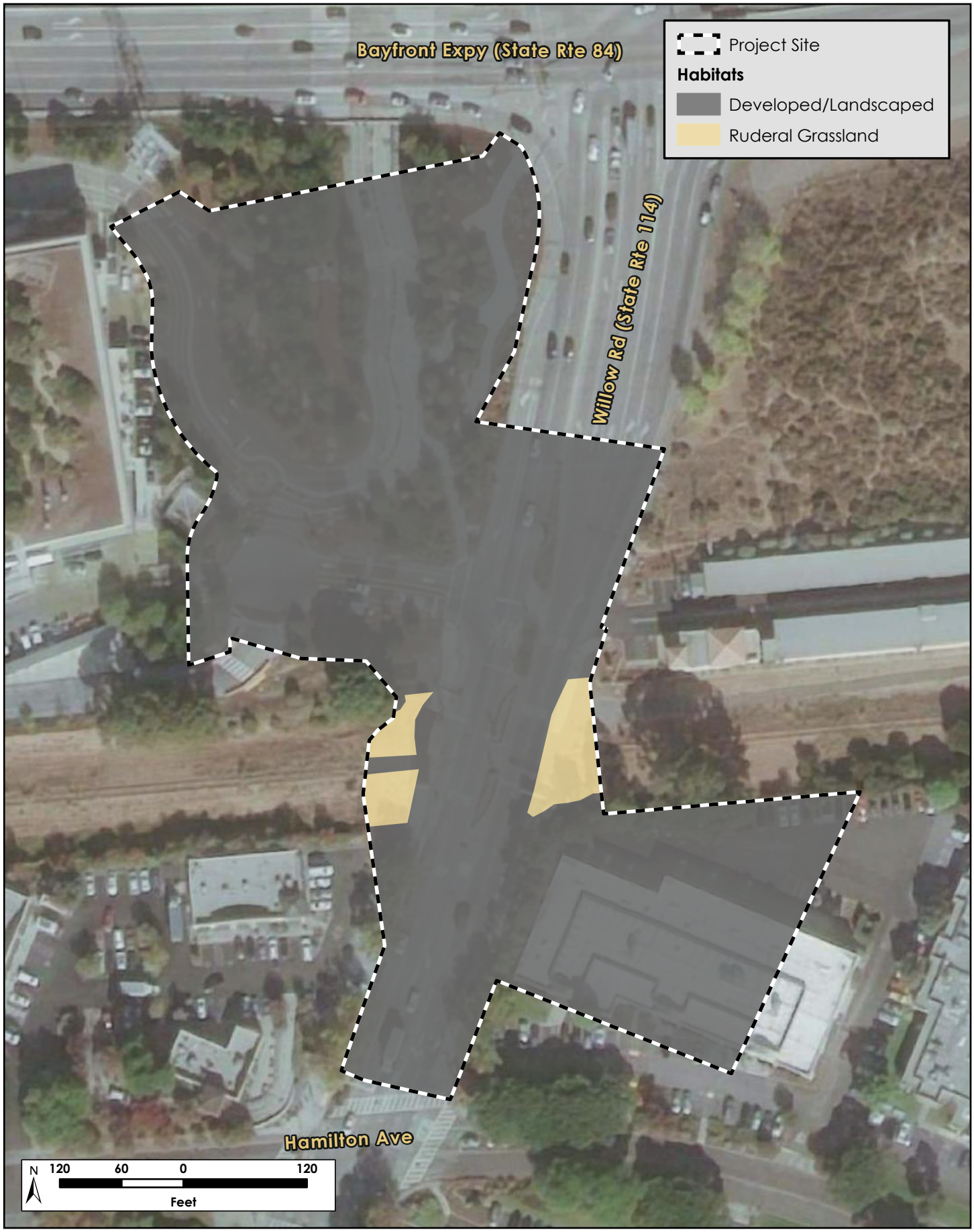

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Figure 3. Habitats Map
Willow Village Tunnel and North Ramp Biological Resources Assessment (10704)
July 2021

Photo 1. Developed/landscaped habitat on the project site west of Willow Road.

Photo 2. Developed/landscaped habitat on the project site east of Willow Road.

Wildlife. The developed/landscaped habitat on the project site provides nesting and foraging opportunities for some urban-adapted species of birds. Bird species that occur in these areas include the native Anna's hummingbird (*Calypte anna*), house finch (*Haemorhous mexicanus*), lesser goldfinch (*Spinus psaltria*), dark-eyed junco (*Junco hyemalis*), and American crow (*Corvus brachyrhynchos*). These species may use the trees or ground vegetation on the site for nesting. No nests of raptors (e.g., hawks, owls, and falcons) were observed on the project site or in immediately adjacent areas during the reconnaissance-level survey, although larger trees on the site provide suitable nesting habitat for raptors such as the Cooper's hawk (*Accipiter cooperii*).

No signs of the presence of roosting bats (e.g., guano, urine staining, or visual or auditory detections of bats) were observed during the June 2021 survey, and no suitable roosting habitat for bats (e.g., cavities, crevices or exfoliating bark) was observed in the trees on the site.

Common urban-adapted mammal species that may occur in developed areas of the project site include the native raccoon (*Procyon lotor*) and nonnative house mouse (*Mus musculus*), Norway rat (*Rattus norvegicus*), black rat (*Rattus rattus*), and eastern gray squirrel (*Sciurus carolinensis*). In addition, small numbers of burrows of California ground squirrels (*Otospermophilus beecheyi*) and Botta's pocket gophers (*Thomomys bottae*) were observed within landscaped areas west of Willow Road.

3.2.2 Ruderal Grassland

Vegetation. Ruderal grassland habitat occurs within the portion of the project site that falls along the Dumbarton Rail Corridor (Photo 3). At the time of the June 2021 survey, this habitat had been recently mown. This habitat is dominated by non-native grasses and forbs such as wild oat (*Avena* sp.), fennel (*Foeniculum vulgare*), bull mallow (*Malva nicaeensis*), black mustard (*Brassica nigra*), and bristly ox-tongue (*Helminthotheca echioides*). Many of these plant species are ranked as moderately or highly invasive by the California Invasive Plant Council (2021).

Wildlife. Wildlife use of ruderal grassland habitat on the project site is limited by frequent human disturbance, the abundance of nonnative and invasive species, and isolation of this habitat from more extensive grasslands in the region. As a result, wildlife species associated with more extensive grasslands, such as the grasshopper sparrow (*Ammodramus savannarum*) and western meadowlark (*Sturnella neglecta*), are absent from the small area of grasslands on the project site.

Photo 3. Ruderal grassland habitat on the project site.

The majority of bird species that use grasslands on the project site inhabit nearby developed/landscaped areas and use grasslands primarily for foraging. Such species include the mourning dove (*Zenaida macroura*), lesser goldfinch, dark-eyed junco, American crow, and Brewer's blackbird (*Euphagus cyanocephalus*). Several other species of birds use the ruderal grassland habitat during the nonbreeding season. These include the golden-crowned sparrow (*Zonotrichia atricapilla*), savannah sparrow (*Passerculus sandwichensis*), and white-crowned sparrow (*Zonotrichia leucophrys*), all of which forage on the ground or in herbaceous vegetation, primarily for seeds.

Few species of reptiles and amphibians occur in the ruderal grassland habitat on the site due to its disturbed nature and low habitat heterogeneity. Nevertheless, reptiles such as the western fence lizard (*Sceloporus occidentalis*) and gopher snake (*Pituophis melanoleucus*) occur in this type of habitat. No burrows of small fossorial mammals, such as the California ground squirrel and Botta's pocket gopher, were observed in grasslands on the site during the June 2021 survey. Common small mammal species expected to occur in this area include the native western harvest mouse (*Reithrodontomys megalotis*) and nonnative house mouse, Norway rat, and black rat. Larger native mammal species that are associated with developed areas such as the striped skunk (*Mephitis mephitis*), Virginia opossum (*Didelphis virginiana*), and raccoon are also likely to occur here.

3.3 Adjacent and Surrounding Areas

A large brackish marsh is present approximately 215 feet northeast of the project site, north of the Dumbarton Rail Corridor and east of Willow Road. This brackish marsh, which extends north to State Route 84 and east to University Avenue, is dominated by salt marsh and brackish marsh plants and contains several channels. As a result, marsh-associated wildlife species such as the San Francisco common yellowthroat (*Geothlypis trichas sinuosa*), Alameda song sparrow (*Melospiza melodia pusillula*), northern harrier (*Circus hudsonius*), and possibly the salt marsh harvest mouse (*Reithrodontomys raviventris*) may occur in that brackish marsh.

An area of native upland vegetation that surrounds the marsh is present approximately 43 feet northeast of the project site (Photo 4). This area is planted with native shrubs including coyote brush (*Baccharis pilularis*), California sagebrush (*Artemisia californica*), and toyon (*Heteromeles arbutifolia*). Nonnative grasses and forbs including wild oat, stinkwort (*Dittricia graveolens*), prickly lettuce (*Lactuca serriola*), and Italian thistle (*Carduus pychnocephala*) are also present in this area. At the time of the June 2021 survey, this habitat was disturbed by apparent homeless activity and scattered garbage present throughout this area. No sensitive wildlife species inhabit this area; however, sensitive species that inhabit the nearby marsh will forage opportunistically in these uplands.

Photo 4. An upland area planted with native woody vegetation is present east of Willow Road near the project site.

Sensitive biological areas identified in the ConnectMenlo EIR are also present in the site vicinity, but at greater distances from the project site. The Don Edwards San Francisco Bay National Wildlife Refuge (NWR) is located north of the project site; salt pond R3 is approximately 340 feet to the northwest, and salt pond SF2 is approximately 0.6 mile to the northeast. Ravenswood Open Space Preserve is located approximately 0.9 mile east of the project site. These areas provide foraging habitat for waterbirds such as the American coot (*Fulica americana*), bufflehead (*Bucephala albeola*), American wigeon (*Mareca americana*), and northern shoveler (*Spatula clypeata*), which occur in flocks of varying size during winter and migration. In addition, the coastal salt marsh habitat, mudflats, and tidal channels provide important shorebird habitat. Many species of shorebirds such as the western sandpiper (*Calidris mauri*), black-bellied plover (*Pluvialis squatarola*), marbled godwit (*Limosa fedoa*), dunlin (*Calidris alpina*), long-billed curlew (*Numenius americanus*), and American avocet (*Recurvirostra americana*) forage in the mudflats in this area, often also in flocks. Special-status species such as the California Ridgway's rail (*Rallus obsoletus obsoletus*), salt marsh harvest mouse, and others occur in these sensitive areas; however, as discussed in Section 4 below, the closest suitable habitat for Ridgway's rails is located approximately 0.5 mile to the east, and suitable habitat for salt marsh harvest mice approximately 340 feet to the north is isolated from the site by dense urban development and California State Route 84. As a result, special-status species that inhabit these areas are not expected to occur on or adjacent to the project site, or to be impacted by the project.

Section 4. Special-Status Species and Sensitive Habitats

Mitigation Measure BIO-1 requires an assessment of the effects of a project on "special-status" species. For the purpose of this report, special-status plants are considered plant species that are:

- Listed under the Federal Endangered Species Act as threatened, endangered, proposed threatened, proposed endangered, or a candidate species.
- Listed under the California Endangered Species Act as threatened, endangered, rare, or a candidate species.
- Listed by the CNPS as CRPR 1A, 1B, 2, 3, or 4.

In addition, "special-status" animals are considered animal species that are:

- Listed under the Federal Endangered Species Act as threatened, endangered, proposed threatened, proposed endangered, or a candidate species.
- Listed under the California Endangered Species Act as threatened, endangered, or a candidate threatened or endangered species.
- Designated by the CDFW as a California species of special concern.
- Listed in the California Fish and Game Code as fully protected species (fully protected birds are provided in Section 3511, mammals in Section 4700, reptiles and amphibians in Section 5050, and fish in Section 5515).

Information concerning threatened, endangered, and other special-status species that potentially occur on the project site was collected from several sources and reviewed by H. T. Harvey & Associates biologists as described in Section 2.1 above. Figures 4 and 5 depict CNDDB records of special-status plant and animal species in the general vicinity of the project site, respectively. These generalized maps show areas where special-status species are known to occur or have occurred historically.

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Figure 4. CNDDB-Mapped Records of Special-Status Plants

Willow Village Tunnel and North Ramp Biological Resources Assessment (10704)
July 2021

Legend

- Project Site
- 5-mile Radius

CNDDB Records

Wildlife

- Specific Location
- Approximate Location
- General Area

Note: CTS = California Tiger Salamander, CRLF = California Red-legged Frog

N 1.1 0.55 0 1.1 Miles

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Figure 5. CNDDB-Mapped Records of Special-Status Animals

Willow Village Tunnel and North Ramp Biological Resources Assessment (10704)
June 2021

4.1 Special-Status Plant Species

The CNPS (2021) and CNDDB (2021) identify a number of special-status plant species as potentially occurring in at least one of the nine U.S. Geological Survey 7.5-minute quadrangles containing or surrounding the project site for species in CRPR 1 and 2, or in San Mateo County for CRPR 3 and 4 species. However, the site is dominated by heavily disturbed anthropogenic habitat (i.e., developed/landscaped areas), which precludes the presence of special-status plant species that occur in more natural habitats in the region. The majority of the special-status plant species identified as potentially occurring in the region were determined to be absent from the project site for at least one of the following reasons: (1) absence of suitable habitat types; (2) lack of specific microhabitat or edaphic requirements, such as serpentine soils; (3) the elevation range of the species is outside of the range on the project site; and/or (4) the species is considered extirpated from the project region.

Suitable habitat, edaphic requirements, and elevation range were determined to be present on the project site for one special-status plant species: Congdon's tarplant. This species can persist in disturbed grasslands and has been documented by the CNDDB in the project vicinity (Figure 4). Suitable habitat for Congdon's tarplant is present on the project site within the small area of ruderal grassland habitat along the Dumbarton Rail Corridor. However, a focused survey for Congdon's tarplant was conducted within this area on June 12, 2020[1], and no individuals of this species were observed. Therefore, this species is determined to be absent from the project site.

4.2 Special-Status Animal Species

A number of special-status animal species are known to occur in the general project vicinity, including the western snowy plover (*Charadrius alexandrinus nivosus*), white-tailed kite (*Elanus leucurus*), California Ridgway's rail, California black rail (*Laterallus jamaicensis coturniculus*), northern harrier, loggerhead shrike (*Lanius ludovicianus*), Alameda song sparrow, Bryant's savanna sparrow (*Passerculus sandwichensis alaudinus*), San Francisco common yellowthroat, salt marsh harvest mouse, and salt marsh wandering shrew (*Sorex vagrans halicoetes*) (CNDDB 2021) (Figure 5). However, the dense urban surroundings and absence of specific habitat features favored by various special-status animal species make the site unsuitable for all of these species, as follows:

- The western snowy plover, federally listed as threatened, nests on dry, relatively homogenous salt pond bottoms surrounding the San Francisco Bay. Snowy plovers are known to nest in Don Edwards NWR, including at salt pond R3 located approximately 340 feet northwest of the project site and at salt pond SF2 located approximately 0.6 mile northeast of the project site (CNDDB 2021). However, no suitable foraging or nesting habitat is present on or adjacent to the project site, and the site is separated from these nesting areas by dense urban development and California State Route 84.
- The white-tailed kite, a California fully protected species, nests in tall shrubs and trees and forages in grasslands, marshes, and ruderal habitats. Tall trees on and adjacent to the project site provide ostensibly

[1] Congdon's tarplant was documented flowering at the Sunnyvale Baylands Park on June 15, 2020. Thus, this species would have been detectable at the time of the June 12, 2020 site visit.

suitable nesting sites for white-tailed kites, and open marsh areas to the north and east provide suitable foraging habitat. However, high levels of human disturbance on the project site preclude this species from nesting and foraging in this area. Thus, white-tailed kites may nest and forage in open space areas located near the site, but they are not expected to occur on the site itself.

- The California Ridgway's rail, state and federally listed as endangered and a California fully protected species, is a secretive marsh bird that is endemic to marshes of the San Francisco Bay. California Ridgway's rails nest in salt and brackish marshes along the edge of the Bay, and are most abundant in extensive salt marshes and brackish marshes dominated by Pacific cordgrass (*Spartina foliosa*), pickleweed (*Salicornia* spp.), and marsh gumplant (*Grindelia stricta*) and that contain complex networks of tidal channels. A population of California Ridgway's rails is known to occur in the wider portions of Ravenswood Slough approximately 0.5 mile northeast of the site and in Ravenswood Open Space Preserve approximately 0.9 mile east of the project site (CNDDB 2021). However, no suitable foraging or nesting habitat for this species is present on or adjacent to the project site, and the site is separated from suitable habitat areas by dense urban development.

- The California black rail, state listed as threatened and a California fully protected species, is a secretive marsh bird that nests in fresh, brackish, and tidal salt marshes. California black rails have been observed in the Faber-Laumeister Marsh, a coastal salt marsh located approximately 1.1 miles east of the project site (CNDDB 2021), and suitable habitat for this species is also present along wider portions of Ravenswood Slough approximately 0.5 mile northeast of the site, and in Ravenswood Open Space Preserve approximately 0.9 mile east of the site. However, no suitable foraging or nesting habitat for this species is present on or adjacent to the project site, and the site is separated from suitable habitat areas by dense urban development.

- The northern harrier, a California species of special concern, nests and forages in the large brackish marsh located 215 feet northeast of the project site. No suitable marsh habitat or open fields to support nesting or foraging by this species occurs on the project site itself, and high levels of human disturbance along Willow Road are expected to preclude nesting by this species in portions of the marsh located near the project site. Northern harriers are expected to nest in portions of this marsh located farther to the east, away from human disturbance.

- The loggerhead shrike, a California species of special concern, may nest in dense stands of coyote brush and other woody vegetation surrounding the large brackish marsh northeast of the site. However, Bay-area populations have declined substantially, and if the species breeds in or near this area, no more than one pair is expected to be present. In addition, high levels of disturbance along Willow Road are expected to preclude nesting by this species in portions of this habitat located close to (i.e., within at least 100 feet of) the project site.

- The Alameda song sparrow, a California species of special concern, is a subspecies of song sparrow that is endemic to the Central and South San Francisco Bay. This subspecies breeds in salt marsh habitats, primarily in marsh gumplant and cordgrass (*Spartina* sp.) along channels. Alameda song sparrows are known to commonly breed and occur in the brackish marsh approximately 215 feet northeast of the project site,

and in other wetlands in the site vicinity. However, no suitable foraging or nesting habitat is present on the project site or in adjacent areas.

- The Bryant's savannah sparrow, a California species of special concern, nests in pickleweed-dominant salt marsh and adjacent ruderal grasslands. This subspecies nests and occurs in the brackish marsh approximately 215 feet northeast of the project site, and in grasslands adjacent to the marsh. However, no suitable foraging or nesting habitat is present on the project site or in adjacent areas.

- The San Francisco common yellowthroat, a California species of special concern, is a subspecies of common yellowthroat that nests in fresh and saltwater marshes near the edge of the Bay. San Francisco common yellowthroats are known to commonly breed and occur in the brackish marsh approximately 215 feet northeast of the project site, and in other wetlands in the site vicinity. However, no suitable foraging or nesting habitat is present on the project site or in adjacent areas.

- The salt marsh harvest mouse, state and federally listed as endangered and a California fully protected species, and the salt marsh wandering shrew, a California species of special concern, are rodents endemic to salt and brackish marshes and adjacent tidally influenced areas of the San Francisco Bay estuary. Salt marsh harvest mice are known to occur in tidal marshes in the vicinity of the project site, including the salt marshes of Ravenswood Open Space Preserve approximately 0.9 mile to the east and in Faber-Laumeister Marsh approximately 1.1 miles to the east (CNDDB 2021). Suitable habitat for this species is also present in the brackish marsh approximately 215 feet northeast of the project site. However, no suitable habitat for salt marsh harvest mice is present on or adjacent to the project site, and the site is isolated from suitable habitat areas by dense urban development. The distribution of salt marsh wandering shrews in the project vicinity is poorly known, but this species can potentially occur in the same areas as the salt marsh harvest mouse.

- No suitable aquatic habitat to support special-status fish species is present on the project site. Suitable habitat for special-status fish species is present within Ravenswood Slough, which extends as close as 260 feet north of the site. However, the project site is not hydrologically connected to Ravenswood Slough, and is isolated from Ravenswood Slough by State Route 84. Thus, special-status fish species are determined to be absent from the site, adjacent areas, and downstream areas that would potentially be affected by the project.

- Although the Crotch bumble bee (*Bombus crotchii*) and western bumble bee (*Bombus occidentalis*) were historically found in the project vicinity, they are not expected to occur on the site or in nearby areas due to recent range contractions.

- The pallid bat (*Antrozous pallidus*), a California species of special concern, may forage aerially over habitats in the site vicinity, and several historical records of pallid bats are located in the site vicinity (CNDDB 2021). However, the buildings and trees on the site do not provide suitable roosting habitat for pallid bats, and the site does not provide suitable foraging habitat for this species.

- The California red-legged frog (*Rana draytonii*) is known to occur in less developed areas in San Mateo County, but is not known or expected to be present in valley-floor areas as heavily urbanized as the project

site. The closest California red-legged frog occurrences to the project site are more than 4.0 miles to the south in the Atherton Channel and at Stanford University (CNDDB 2021). However, no suitable aquatic or upland habitat to support California red-legged frogs is present on or near the site, and the project site is effectively isolated from the closest records of this species by dense urban development.

- The western pond turtle (*Emys pallida*) is known to occur approximately 9.3 miles to the east near Crystal Springs Reservoir, 6.7 miles to the southeast at Moffett Federal Airfield, and 6.7 miles to the south at Jasper Ridge (CNDDB 2021). No suitable foraging habitat for western pond turtles is present on the site or in adjacent areas. Further, the site is not hydrologically connected to any known populations of western pond turtles in the region. This species is considered absent from the project site and the surrounding vicinity.

The western snowy plover, white-tailed kite, California Ridgway's rail, California black rail, northern harrier, loggerhead shrike, Alameda song sparrow, Bryant's savanna sparrow, San Francisco common yellowthroat, saltmarsh harvest mouse, salt marsh wandering shrew, special-status fish, Crotch bumble bee, western bumble bee, pallid bat, California red-legged frog, western pond turtle, and other special-status animals are therefore not expected to nest, roost, or breed on or immediately adjacent to the project site, and are not expected to be affected by proposed site redevelopment. In addition, per the regional conservation plans reviewed as described in Section 2.1 above, no sensitive biological resources for special-status animals are identified on the project site.

4.3 Sensitive and Regulated Habitats

Sensitive and regulated habitats are rare, ecologically valuable, and/or protected by federal, state, regional, and/or local laws. Generally, such habitats require permits from regulatory agencies if they are to be disturbed, altered, or lost. The CDFW ranks certain rare or threatened plant communities, such as wetlands, tracked in the CNDDB. The most commonly regulated habitats are wetland and aquatic habitats including rivers, streams, ponds, and seasonal wetlands, which fall under the jurisdiction of the U. S. Army Corps of Engineers (USACE) via Section 404 of the Clean Water Act, the Regional Water Quality Control Board (RWQCB) via Section 401 of the Clean Water Act and the Porter-Cologne Water Quality Control Act, and/or the CDFW via Section 1602 of the California Fish and Game Code.

No potentially jurisdictional features (e.g., wetlands or drainages that would be subject to jurisdiction of any resource agencies) were identified on or immediately adjacent to the project site during the reconnaissance-level survey. Thus, sensitive and regulated habitats are determined to be absent from the project site.

4.4 Wildlife Movement

For many species, the landscape is a mosaic of suitable and unsuitable habitat types. Environmental corridors are segments of land that provide a link between patches of suitable habitat and that allow animals to move among suitable habitat patches. Development that fragments natural habitats (i.e., breaks them into smaller, disjunct pieces) can have a twofold impact on wildlife: first, as habitat patches become smaller they are unable

to support as many individuals (patch size), and second, the area between habitat patches may be unsuitable for wildlife species to traverse (connectivity).

All proposed project activities are located within, or are surrounded by, existing development that is surrounded by a dense urban matrix of residential and commercial development to the east, west, and south and California State Route 84 to the north. Therefore, the project would not result in the fragmentation of natural habitats. Any common, urban-adapted wildlife species that currently move through the project site would continue to be able to do so following project construction, and any wildlife species associated with open habitats along the San Francisco Bay would also continue to be able to move past the site following construction. Thus, the project would not interfere with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors in the site vicinity.

Section 5. Project Impacts on Sensitive Biological Resources and Identification of Avoidance and Minimization Measures

Mitigation Measure BIO-1 requires consideration of a number of issues related to sensitive biological resources. Issues that do not apply to the project, along with explanations regarding why they do not apply, are as follows:

- As discussed in Section 4.3 above, no jurisdictional wetlands are present on the project site or are expected to be impacted by the project.
- No undeveloped lands that support sensitive biological resources are present on or adjacent to the site such that they could be affected by the project, and the project will have no effect on sensitive biological resources at the Don Edwards San Francisco Bay NWR.
- No regional conservation plans apply to the project site.
- No take of state or federally listed species or California fully protected species will occur due to redevelopment of the project site.
- No species protected under the Marine Mammal Protection Act or the Magnuson-Stevens Fishery Conservation and Management Act are present on or immediately adjacent to the project site, or will be impacted by the project.
- No areas subject to the jurisdiction of the San Francisco Bay Conservation and Development Commission will be impacted by the project.
- Suitable habitat for or occurrences of special-status species are not present on the project site, and roosting bats are absent from the project site.
- No sensitive natural communities are present on the project site.
- There are no important movement corridors for wildlife on the project site.
- No buildings with glazed facades are proposed as part of the project; hence, no bird-safe design measures are required.

Sensitive biological resource issues that are required to be addressed under Mitigation Measure BIO-1 are related to the presence of common bird species protected under the MBTA and California Fish and Game Code. Section 5.1 below provides a discussion of project impacts on these resources and identifies appropriate avoidance and minimization measures to comply with Mitigation Measure BIO-1.

5.1 Impacts on Common Nesting Birds

A variety of common, urban-adapted bird species could nest on the site. Construction disturbance during the bird nesting season could result in the incidental loss of eggs or nestlings, either directly through the destruction or disturbance of active nests or indirectly by causing the abandonment of nests.

The project is also expected to increase the number of human users of the project site, potentially subjecting nesting birds to increased human disturbance. However, the project site is already heavily used by pedestrians, cyclists, and vehicles. The increase in human activity on the site as a result of this project is not expected to contribute substantially to human disturbance of birds that may nest on the site or in nearby areas.

All native birds that may nest in trees and vegetation on or immediately adjacent to the project site are protected under the MBTA and/or California Fish and Game Code. The removal of vegetation supporting active nests may cause the direct loss of eggs or young, while construction-related activities located near an active nest may cause adults to abandon their eggs or young. Therefore, per the requirements of Mitigation Measure BIO-1, measures to ensure that the project avoids impacts on nesting birds protected by the MBTA and California Fish and Game Code are required; recommended measures are provided below.

Measure 1. Nesting-Season Avoidance. To the extent feasible, construction activities should be scheduled to avoid the nesting season. If construction activities are scheduled to take place outside the nesting season, all impacts to nesting birds protected under the MBTA and California Fish and Game Code would be avoided. The nesting season for most birds in San Mateo County extends from February 1 through August 31, inclusive.

Measure 2. Preconstruction/Pre-Disturbance Surveys and Buffers. If it is not possible to schedule construction activities and/or tree removal between September 1 and January 31, preconstruction surveys for nesting birds shall be conducted by a qualified ornithologist to ensure that no nests shall be disturbed during project implementation. These surveys shall be conducted no more than seven days prior to the initiation of demolition or construction activities, including tree removal and pruning. During this survey, the ornithologist shall inspect all trees and other potential nesting habitats (e.g., trees, shrubs, ruderal grasslands, buildings) in and immediately adjacent to the impact areas for nests. If an active nest is found sufficiently close to work areas to be disturbed by these activities, the ornithologist shall determine the extent of a construction-free buffer zone to be established around the nest (typically 300 feet for raptors and 100 feet for other species), to ensure that no nests of species protected by the MBTA and California Fish and Game Code shall be disturbed during project implementation.

5.2 Impacts on Brackish Marsh Habitat

As discussed in Section 3.3 above, a large brackish marsh is present approximately 215 northeast of the project site, north of the Dumbarton Rail Corridor and east of Willow Road. A number of sensitive wildlife species may occur in this marsh, such as the San Francisco common yellowthroat, Alameda song sparrow, northern

harrier, and possibly the salt marsh harvest mouse. The areas in between the project site and the brackish marsh consist of a storage facility, the Dumbarton Rail Corridor, Willow Road, and an area of uplands planted with native vegetation. Due to the intervening 215-foot distance between the project site and the brackish marsh, and because the planted uplands surrounding the marsh are elevated above both the marsh and the project site, no direct or indirect impacts on the brackish marsh habitat, or sensitive species that may occur in this habitat, will occur as a result of the project.

Section 6. Additional Requirements

6.1 Coordination with Appropriate Agencies

Per Mitigation Measure BIO-1, if sensitive biological resources are determined to be present on the project site or may be present on any adjacent parcel containing natural habitat, coordination with the appropriate regulatory and resource agencies must occur.

As described above, we reviewed information from the Don Edwards San Francisco Bay NWR, USFWS, and CDFW, such as the NWR's *Comprehensive Conservation Plan* and information on special-status species regulated by those agencies, in enough detail to determine that the project will not have any impacts on the NWR or on sensitive species regulated by those agencies. As a result, no agency coordination (e.g., with the CDFW, USFWS, or Don Edwards NWR) regarding potential effects of the project on sensitive species is necessary, and no such coordination occurred.

6.2 Obtain Necessary Permits/Authorizations

Per Mitigation Measure BIO-1, where jurisdictional waters or federally and/or state-listed special-status species would be affected by the project, appropriate authorizations shall be obtained by the project applicant.

As described above, the project will not result in direct impacts on jurisdictional waters, or any impacts on federally and/or state-listed species. Therefore, permits from the USACE, RWQCB, CDFW, USFWS, National Marine Fisheries Service, San Francisco Bay Conservation and Development Commission, or other agencies are not required.

6.3 Applicable Zoning Regulations

Per Mitigation Measure BIO-1, the project will comply with zoning regulations enacted by the following ordinances:

- 16.43 O-Office District.
- 16.43.080 Corporate housing.
- 16.43.140 Green and sustainable building.
- 16.44 LS-Life Science District.
- 16.44.130 Green and sustainable building.

Section 7. Conclusions

The proposed project complies with the requirements of Mitigation Measure BIO-1 by documenting sensitive biological and regulated resources associated with the Willow Village Tunnel and North Ramp project site, the effects of the proposed project on these resources and on sensitive lands in the vicinity (such as Don Edwards NWR), and measures that the project will implement to avoid and minimize impacts on these resources.

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H. T. HARVEY & ASSOCIATES
Ecological Consultants
50 years of field notes, exploration, and excellence

Willow Village Master Plan
Bird-Safe Design Assessment

Project #3375-21

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Appendices

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Section 1. Introduction and Purpose

Per the request of Peninsula Innovation Partners, H. T. Harvey & Associates has performed an assessment of avian collision risk for the proposed Willow Village Master Plan project (Master Plan) located in Menlo Park, California.

It is our understanding that the project proposes to replace more than one million square feet of existing industrial, office, and warehouse space in the 59-acre Menlo Science and Technology Park with a new residential/mixed-used village that includes up to 1,730 residential units, up to 200,000 square feet of retail uses, a hotel with up to 193 rooms and accessory uses, approximately 1,600,000 square feet of space for office and accessory uses (with a maximum of 1,250,000 square feet of office uses and the balance 350,000 square feet [if office use is maximized] of accessory uses) on the project site. The site is bounded by Willow Road to the west, the Joint Powers Board (JPB) rail corridor to the north, the Hetch Hetchy right-of-way corridor and Mid-Peninsula High School to the south, and an existing life science complex to the east. To allow for the transformation of the site into a vibrant residential/mixed-use community, the plan will require demolition of all existing site improvements consisting of buildings, streets, and utilities.

This report provides an analysis of bird collision hazards associated with the conceptual design for the Master Plan and documents the bird-safe design measures that will be incorporated into the project to ensure that (1) project impacts due to bird collisions with buildings are reduced to less-than-significant levels under the California Environmental Quality Act (CEQA), and (2) the project complies with City of Menlo Park bird-safe design requirements.

This assessment is based on the project's Conditional Development Permit (CDP) application, as well as additional design details for the various Master Plan components identified in Appendix A to support our assessment. We will also review the final Architectural Control Plans (ACPs) and produce a subsequent final report for each Master Plan component to document (1) compliance with the CEQA mitigation measures the project will implement to mitigate significant CEQA impacts; and (2) compliance with City of Menlo Park bird-safe design requirements (with requests for waivers of certain requirements as permitted by the City bird-safe design requirements and including compliance with alternative City measures, where appropriate); and (3) compliance with the lighting design principles identified herein. If we find that modifications are needed to the ACPs to ensure that impacts are reduced to less-than-significant levels under CEQA and/or compliance with City requirements, we will provide recommended modifications in our reports for individual ACPs.

Section 2. City Bird-Safe Design Requirements

In 2014, the City of Menlo Park initiated the process of updating its General Plan Land Use and Circulation Elements as well as its zoning for the M-2 area (also known as the Bayfront Area) in the northern portion of Menlo Park. Collectively, this update to the General Plan and zoning is known as *ConnectMenlo*. On November 29, 2016, the City Council certified the *ConnectMenlo: General Plan Land Use & Circulation Elements and M-2 Area Zoning Update Environmental Impact Report* (ConnectMenlo EIR) and approved the General Plan Land Use and Circulation Elements. The Willow Village project is located within the ConnectMenlo area.

Mitigation Measure BIO-1 of the ConnectMenlo EIR requires measures to ensure that the project reduces bird collisions with new buildings. For the purpose of this report, we assume that the project will comply with City of Menlo Park bird-safe design requirements (including obtaining waivers, as permitted by the City bird-safe design requirements, where applicable) provided in Municipal Code Sections 16.43.140(6) and 16.45.130(6), which include measures to reduce bird collisions. Hereafter, the bird-safe design measures in the ConnectMenlo EIR and the City's Municipal Code are referred to together as *City bird-safe design requirements*. These requirements are as follows:

A. No more than 10% of facade surface area shall have non-bird-friendly glazing.

B. Bird-friendly glazing includes, but is not limited to, opaque glass, covering the outside surface of clear glass with patterns, paned glass with fenestration, frit or etching patterns, and external screens over nonreflective glass. Highly reflective glass is not permitted.

C. Occupancy sensors or other switch control devices with an astronomic time clock shall be installed on nonemergency lights and shall be programmed to shut off during non-work hours and between 10:00 p.m. and sunrise.

D. Placement of buildings shall avoid the potential funneling of flight paths towards a building facade.

E. Glass skyways or walkways, free-standing (see-through) glass walls and handrails, and transparent building corners shall not be allowed.

F. Transparent glass shall not be allowed at the rooflines of buildings, including in conjunction with roof decks, patios and roofs with landscape vegetation.

G. Use of rodenticides shall not be allowed.

A project may receive a waiver from requirements A through F, subject to the submittal of a site-specific evaluation from a qualified biologist (defined as an ornithologist familiar with local bird communities and populations and with expertise assessing avian collision risk) and review and approval by the planning commission. A waiver from requirement G is not authorized. The project will comply with requirement G, and this requirement is not discussed further in the body of this report.

However, to address collision risk with the project buildings, tailored alternative bird-safe design measures, derived from the City of Menlo Park's requirements with appropriate waivers, are provided in Section 5 of this report based on the conceptual designs in the project's CDP application to reduce collision impacts to less-than-significant levels under CEQA (hereafter, these alternative measures are referred to as *alternative City measures*). Sections 5 and 6 of this report provides a discussion of how the Master Plan components will comply with the City's bird-safe design requirements, as well as examples of locations where waivers to the City requirements are, in our professional opinion, appropriate in areas of low collision risk. Waivers are requested in order for the project to achieve design excellence (e.g., related to aesthetics, energy efficiency, or project objectives). Waivers are requested only where strict adherence to the City's bird-safe design requirements (a) is not necessary to reduce project impacts to less-than-significant levels under CEQA and (b) would not substantively reduce bird collision risk beyond the alternative City measures proposed in Sections 5 and 6 (discussed in detail in Sections 5 and 6 below).

This report documents the CEQA mitigation measures and alternative City measures the project will implement to reduce impacts to less-than-significant levels and comply with the City's bird-safe design requirements. Documentation of compliance with this report will be provided in subsequent reports for each ACP for the project.

Section 3. Project Site Conditions

3.1 Existing Conditions

Habitat conditions and bird occurrence in the immediate vicinity of the project site (i.e., on the site and on immediately adjacent lands) are typical of much of the urbanized San Francisco Bay area. The approximately 64.0-acre project site currently supports office buildings, roadways, restaurants, a gas station, parking lots, walking paths, mulched and irrigated areas, and landscape areas (Photos 1–4). The site is located across the inactive JPB rail corridor from a storage facility and large brackish marsh to the north, and is otherwise surrounded by high-density commercial and residential development to the east, west, and south (Figure 1).

Photo 1. Office buildings, parking lots, and landscape areas on the project site.

Photo 2. Landscape areas and trees on the project site.

Photo 3. An overgrown wooded area with landscape trees on the project site.

Photo 4. Office buildings and landscape trees on the project site.

Figure 1. The project site (delineated in yellow) is surrounded by commercial and residential development to the east, west, and south. The inactive JPB rail corridor, a storage facility, and a large brackish marsh are located to the north.

Habitat conditions on the site are of low quality for most native birds found in the region due to the scarcity of vegetation, the lack of well-layered vegetation (e.g., with ground cover, shrub, and canopy tree layers in the same areas), and the small size of the vegetated habitat patches. Landscaped areas on the site support nonnative Canary Island pine (*Pinus canariensis*), Chinese pistache (*Pistacia chinensis*), London plane (*Platanus* x *hispanica*), eucalyptus (*Eucalyptus* sp.), and crepe myrtle (*Lagerstroemia* sp.) trees. Common understory plants include nonnative buckbrush (*Ceanothus* sp.) and rosemary (*Rosmarinus officinalis*). Nonnative vegetation supports fewer of the resources required by native birds compared to native vegetation, and the structural simplicity of the vegetation further limits resources available to birds (Anderson 1977, Mills et al. 1989). Nevertheless, there is a suite of common, urban-adapted bird species that occur in such urban areas that are expected to occur on the site regularly. These include the native Anna's hummingbird (*Calypte anna*), American crow (*Corvus brachyrhynchos*), Bewick's wren (*Thryomanes bewickii*), bushtit (*Psaltriparus minimus*), dark-eyed junco (*Junco hyemalis*), and house finch (*Haemorhous mexicanus*), as well as the non-native European starling (*Sturnus vulgaris*) and house sparrow (*Passer domesticus*). All of these birds are year-round residents that can potentially nest on or immediately adjacent to the project site. A number of other species, primarily migrants or winter visitors (i.e., nonbreeders), are expected to occur occasionally on the site as well, including the white-crowned sparrow (*Zonotrichia leucophrys*), golden-crowned sparrow (*Zonotrichia atricapilla*), and yellow-rumped warbler (*Setophaga coronata*). All of the species expected to occur regularly are regionally abundant species, and no special-status birds (i.e., species of conservation concern) are expected to nest or occur regularly on the site.

The habitat conditions located to the east, west, and south of the project site are very similar to those on the project site itself. These areas are dominated by commercial and residential uses and have landscaping similar to that on the project site (Figure 1). As a result, bird use of these surrounding areas is as described above for the project site.

A large brackish marsh is present approximately 150 feet north of the project site, north of the inactive JPB rail corridor and a storage facility (Figure 1). This brackish marsh, which extends north to State Route 84 and east to University Avenue, is dominated by salt marsh and brackish marsh plants and contains several channels. As a result, marsh-associated special-status birds such as the San Francisco common yellowthroat (*Geothlypis trichas sinuosa*), Alameda song sparrow (*Melospiza melodia pusillula*), and northern harrier (*Circus hudsonius*) – all of which are California species of special concern – may occur in this area. However, state and federally listed birds associated with tidal salt marshes, salt pannes, and aquatic habitats, such as the California Ridgway's rail (*Rallus obsoletus obsoletus*), California black rail (*Laterallus jamaicensis coturniculus*), western snowy plover (*Charadrius nivosus nivosus*), and California least tern (*Sternula antillarum browni*), are absent from these habitats.

Further to the northeast and northwest are former salt ponds, now managed as waterbird habitat, and the waters and marshes of the San Francisco Bay. Ravenswood Pond R3 is located approximately 750 feet north of the site, and is separated from the site by the inactive JPB rail corridor, commercial development, and Highway 84 (Figure 1). Ravenswood Pond SF2 is located approximately 1,760 feet northeast of the site, and is separated from the site by the inactive JPB rail corridor, a large brackish marsh (discussed above), and University Avenue (Figure 1). These ponds provide foraging habitat for a wide variety of waterbirds such as the American avocet (*Recurvirostra americana*), western sandpiper (*Calidris mauri*), marbled godwit (*Limosa fedoa*), ruddy duck (*Oxyura jamaicensis*), semipalmated plover (*Charadrius semipalmatus*), dunlin (*Calidris alpina*), least sandpiper (*Calidris minutilla*), red knot (*Calidris canutus*), long-billed dowitcher (*Limnodromus scolopaceus*), northern shoveler (*Spatula clypeata*), green-winged teal (*Anas crecca*), canvasback (*Aythya valisineria*), American white pelican (*Pelecanus erythrorhynchos*), black-bellied plover (*Pluvialis squatarola*) and others (Cornell Lab of Ornithology 2021). The federally threatened western snowy plover also nests and forages in Pond SF2.

Due to their location along the edge of the San Francisco Bay and the extensive areas of habitat present, the managed ponds located northeast and northwest of the project site support relatively high numbers of species of birds compared to areas located farther inland in San Mateo (Figure 2). Based on observations by birders over the years, approximately 138 species of birds have been recorded at pond SF2 and 136 species along the Bay Trail adjacent to Pond R3, including year-round resident, migrant, and wintering landbirds (associated with upland areas), shorebirds (associated with the shoreline), and waterbirds (associated with open water habitat) (Cornell Lab of Ornithology 2021). Ebird records suggest that some species of shorebirds and waterbirds can occur in these areas in large numbers (i.e., 1,000 individuals), but the majority of these species occur in smaller flocks. A number of migrant bird species will remain in this area for days to weeks to rest and forage. Resident birds that are present in the vicinity year-round are similarly attracted to the open habitats within these salt ponds in relatively large numbers for foraging opportunities (Cornell Lab of Ornithology 2021).

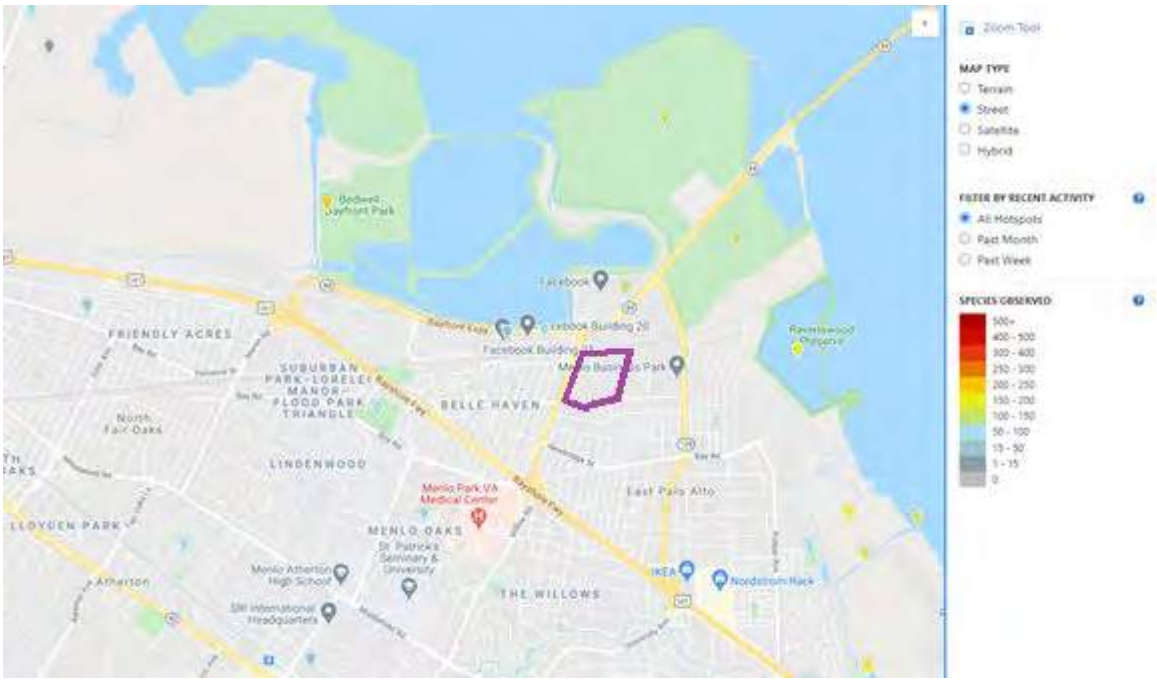

Figure 2. Map of eBird hotspots in the site vicinity. The project site is outlined in purple.

3.2 Proposed Conditions

The project would construct office and accessory space, parking garages, a hotel, retail, residential, and residential/mixed-use buildings on the majority of the site. A portion of the office and accessory space would be located inside a glass atrium. We do not expect these artificial structures to provide high-quality habitat for birds. However, the project will also create approximately 20 acres of open space areas consisting of paved pedestrian areas and landscape vegetation. The conceptual planting plans for these areas predominantly include nonnative trees, shrubs, and herbaceous plants (Appendix B). Nonnative trees to be planted on the site may include red maple (*Acer rubrum*), deodar cedar (*Cedrus deodara*), Canary Island pine, European olive (*Olea europea*), Mexican fan palm (*Washingtonia robusta*), agave (*Agave* sp.), ginkgo (*Ginkgo biloba*), Chinese elm (*Ulmus parvifolia*), crape myrtle, London plane, Brisbane box (*Lophostemon confertus*), coast redwood (*Sequoia sempervirens*) (which is not locally native to the project site), and red alder (*Alnus rubra*). In addition, native California sycamores (*Platanus racemosa*) and coast live oaks (*Quercus agrifolia*) may be planted on the site. Shrubs, forbs, and grasses that may be planted on the site include nonnative European grey sedge (*Carex divulsa*), small cape rush (*Chondropetalum tectorum*), horsetails (*Equisetum hyemale*), slender weavers (*Bambusa textilis*), bougainvillea (*Bougainvillea* sp.), and New Zealand flax (*Phormium* sp.); natives include common yarrow (*Achillea millefolium*), California wild rose (*Rosa californica*), California lilac (*Ceanothus* spp.), toyon (*Heteromeles arbutifolia*), and common rush (*Juncus patens*). While we understand that the exact species to be planted may change, we assume for purposes of this report that the characterization of proposed conditions as a mix of native and nonnative tree and plant species, with predominantly nonnative species, will remain the same.

In general, native plant species provide higher-quality food, nesting, roosting, and cover resources for native birds compared to nonnative plant species. Thus, under proposed conditions, the predominantly nonnative tree and plant species to be planted on the site will provide resources such as food (e.g., seeds, fruits, nectar, or foliage that supports insect prey), nesting sites, roosting sites, and cover from predators that is similar to existing conditions. However, due to the anticipated greater extent of this vegetation compared to existing conditions, this vegetation is expected to attract greater numbers of landbirds, including both resident birds and migrating birds, to the site compared to existing conditions. Nocturnal migrant landbirds that travel along the edge of San Francisco Bay are expected to be attracted to vegetated open space areas on the site following construction, as these areas will be visible from the San Francisco Bay as potential nesting, roosting, and foraging opportunities along a densely developed urban shoreline. Such migrants are expected to descend from their migration flights to the project site to rest and forage. Thus, a slight increase in the abundance of resident birds and a somewhat larger increase in the abundance of migrating birds is expected as a result of the proposed landscaping. Still, due to the extent of hardscape proposed in these open space areas, bird use will be much lower than in natural areas in the region.

Section 4. Method of Analysis

This assessment was prepared by H. T. Harvey & Associates wildlife ecologists/ornithologists Steve Rottenborn, Ph.D., and Robin Carle, M.S. Their qualifications are provided in Appendix C. Reconnaissance-level field surveys of the portion of the site located east of Willow Road, as well as areas within the JPB rail corridor east and west of Willow Road, were initially conducted by S. Rottenborn on October 26, 2017. After the project was redesigned in 2019, S. Rottenborn visited the project site again on April 22, 2019.

Although the subject of bird-friendly design is relatively new to the West Coast, S. Rottenborn and R. Carle have performed avian collision risk assessments and identified measures to reduce collision risk for several projects in the Bay Area, including projects in the cities of San Francisco, Oakland, Berkeley, South San Francisco, Redwood City, Menlo Park, Palo Alto, Mountain View, Santa Clara, Sunnyvale, and San José. The methods of analysis used for this report are consistent with the methods of analysis used for these other projects in the San Francisco Bay Area.

Section 5. Project Analysis

5.1 Analysis of Overall Project Site Conditions

Because birds do not necessarily perceive glass as an obstacle (Sheppard and Phillips 2015), windows or other structures that reflect the sky, trees, or other habitat may not be perceived as obstacles, and birds may collide with these structures. Similarly, transparent windows can result in bird collisions when they allow birds to perceive an unobstructed flight route through the glass (such as at corners), and when the combination of transparent glass and interior vegetation results in attempts by birds to fly through glass to reach vegetation. A number of factors play a role in determining the risk of bird collisions with buildings, including the amount and type of glass used, lighting, properties of the building (e.g., size, design, and orientation), type and location of vegetation around the building, and building location.

As noted above, moderate numbers of native, resident birds occur in the project vicinity. Because resident birds are present within an area year-round, they are more familiar with their surroundings and can be less likely to collide with buildings compared with migrant birds (discussed below). However, the numbers of resident birds that collide with buildings can still be relatively high over time. Young birds that are more naïve regarding their surroundings are more likely to collide with glass compared to adult birds. In addition, although adult birds are often more familiar with their surroundings, they still collide with glass with some frequency, especially when they are startled (e.g., by a predator) and have limited time to assess their intended flight path to avoid glazed facades. As a result, a moderate number of resident (i.e., breeding or overwintering) landbirds may collide with the project buildings over time.

Nocturnal migrant landbirds are also expected to be attracted to the project vicinity, especially the marsh and scrub habitat to the north of the site, during migration periods in the spring and fall. When these birds arrive in the site vicinity they are tired from flying all night, they are hungry, and they are less likely to be aware of risks such as glass compared to well-fed, local resident, summering, or wintering birds familiar with their surroundings. As these migrants descend from higher elevations, they will seek suitable resting and foraging resources in the new landscape vegetation adjacent to the buildings. During this reorientation process, migrants will be susceptible to collisions with the buildings if they cannot detect the glass as a solid structure to be avoided. Migrant birds that use structures for roosting and foraging (such as swifts and swallows) will also be vulnerable to collisions if they perceive building interiors as potential habitat and attempt to enter the buildings through glass walls.

Once migrants have descended and decided to settle into vegetation on or adjacent to the project site, they may collide with the glass because they do not detect it as a solid surface and think they can fly through the building (e.g., if they are on the west side of the building and try to fly through a glazed corner to reach trees on the north side). Foggy conditions may exacerbate collision risk, as birds may be even less able to perceive that glass is present in the fog. The highest collision risk would likely occur when inclement weather enters the region on

a night of heavy bird migration, when clouds and fog make it difficult for birds to find high-quality stopover sites once they reach ground level.

The project site is located in a highly urbanized area, and is surrounded on three sides by high-intensity development (Figure 1). As a result, relatively low numbers of birds are expected to occur in the general vicinity of the site to the east, west, and south (i.e., away from less developed, higher-quality habitats along the edge of the baylands to the north).

In addition, several features of the proposed buildings' architecture would further reduce the frequency of avian collisions (referred to in this report as *beneficial project features*) (Appendix A). For instance, the presence of beneficial project features such as overhangs and awnings on many of the project buildings may reduce the potential for bird collisions with buildings by helping buildings to appear as more solid structures from a distance (San Francisco Planning Department 2011, Sheppard and Phillips 2015), and we expect that birds using habitats on the project site or in adjacent areas would be more likely to interpret the building as a solid structure (rather than as reflected sky or vegetation) due to the presence of these beneficial project features. At a more localized scale, these beneficial project features reduce collisions by blocking views of glazing to birds using areas of trees or roof vegetation located above the overhangs and awnings. However, overhangs and awnings do not eliminate issues related to reflections or transparency, or block the view of birds unless birds are located above the overhang or awning (San Francisco Planning Department 2011, Sheppard and Phillips 2015). Thus, these beneficial project features are typically used in combination with bird-safe glazing treatments, such as incorporation of visible patterns on the glass, as scientific trial studies have documented that these treatments effectively reduce bird collisions. Incorporation of the beneficial project features identified in this Assessment as depicted on the figures included in Appendix A will be required as a condition of the CDP so that they are part of the project description for CEQA review of the Master Plan.

Many of the project buildings are also articulated, with numerous features that break up the building's exterior surfaces so they do not appear smooth and unbroken. Well-articulated buildings are better perceived by birds as solid structures, particularly as birds approach buildings from a distance (San Francisco Planning Department 2011); as discussed above for awnings and overhangs, this is expected to reduce bird collisions. At a more localized/closer scale, building articulations can influence the potential for collisions in different ways. A recent study (Riding et al. 2020) found that buildings with alcoves (i.e., indentations/concavities in the building outline when viewed from above) experienced higher collision rates compared to other façade types (including flat facades), possibly because these features "trap" birds within an area where they are surrounded on three sides by glazing. These findings suggest that alcoves represent high-risk collision hazards to birds that are attracted to vegetation within the alcoves. In contrast, porticos (i.e., areas where an overhang creates a covered paved walkway), which are present in several locations on the Master Plan buildings, have been found to have relatively low collision rates compared to other façade types (Riding et al 2020). However, if porticos are vegetated (rather than entirely paved) or located immediately adjacent to native vegetation and trees that will attract birds, collision rates are expected to be higher because birds would be drawn towards the glass by the vegetation. In addition, porticos on the project buildings include transparent glass corners, which represent high-risk collision

hazards. Thus, it is necessary to consider the presence of collision hazards at porticos that may be created by vegetation and/or transparent glass corners when determining if porticos should be used independently, or in combination with bird-safe glazing treatments, to ensure that collision hazards are effectively addressed.

The project includes landscape vegetation that will be planted immediately adjacent to glazed facades in a number of locations, especially at the elevated park adjacent to the south façade of the atrium and in landscape areas adjacent to the north façade of the atrium. Where landscape vegetation must be planted adjacent to buildings, some agencies recommend planting the vegetation very close to (i.e., within 3 feet of) glazed facades to reduce bird collisions, as this obscures reflections of the vegetation in glazing and reduces fatal collisions by reducing birds' flight speed if they should fly into the glass (Klem 1990, New York City Audubon Society, Inc. 2007). However, not all studies have documented a reduction in bird collisions when resources are placed within 3 feet of windows (Kummer and Bayne 2015), and birds are fragile enough that they may still be killed due to window collisions when flying at relatively slow speeds (Klem 2008). In our professional opinion, vegetation that is (1) dense enough that birds cannot fly swiftly through it to reach glazed windows, and (2) located close enough to windows that birds will not be flying fast when they leave the vegetation and hit the glass, reduces the potential for collisions with glazing that is immediately adjacent to the vegetation. However, while dense shrubs and herbaceous plants will reduce collision hazards with immediately adjacent glazing, they will not protect glazing located above or to the side of the vegetation. Similarly, while a dense crown of a tree located immediately adjacent to a façade will reduce collision hazards on the adjacent glass, birds may still have a relatively high collision risk with glass located below the crown, where there is no dense vegetation. All trees and vegetation also grow and are trimmed over time, and areas of adjacent facades with higher or lower collision risk are expected to change accordingly over time. As a result, although planting vegetation adjacent to facades is expected to reduce collision hazards with immediately adjacent glazing, the effectiveness of this strategy is limited because (1) birds may still be killed or injured even when they fly into windows at relatively low speeds; (2) the vegetation only reduces the collision hazard where it is dense very close to the façade, and not in adjacent areas; and (3) vegetation is not uniformly shaped, and grows or is trimmed back over time, and so does not provide uniform or consistent protection for entire facades over time.

There are also some features evident in the project's plans where bird collisions may be more frequent than at other features because they may not be easily perceived by birds as physical obstructions; these features are related to the presence of a location-related hazard on the site as well as feature-related hazards on the proposed new buildings. A *location-related hazard* occurs where new construction is located within 300 feet of an *urban bird refuge*, which is defined as an open space 2 acres or larger dominated by vegetation (San Francisco Planning Department 2011). The project is located immediately adjacent to open areas to the north that provide habitat for birds. In addition, the project will construct new landscape areas on the site within approximately 20 acres of open space (composed of extensive paved areas with some landscape vegetation) that is accessible to birds. The connectivity of the new open space on the site with open habitats to the north is expected to draw birds onto the site, especially where trees are present to attract migrant birds. The northern portion of the site is expected to attract the highest numbers of birds due to its proximity to open habitats along the edge of San Francisco Bay. Although some birds will also occur farther south within the project site, the number of

individuals is likely to decline farther south due to the urbanized conditions that will be present on the project site and urbanization present to the west, south, and east.

Within areas of relatively high collision risk, the greatest potential for bird collisions is where a feature-related hazard is located adjacent to a location-related hazard. A *feature-related hazard* is a design feature that represents a high-risk collision hazard regardless of its location. Feature-related hazards on the site include free-standing glass railings, transparent glass corners with clear sight lines through a building, and alcoves and atria surrounded by glazing. In addition, feature-related hazards include areas of extensive glazing, as the extent of glazing on a building and the presence of vegetation opposite the glazing are known to be two of the strongest predictors of avian collision rates (Gelb and Delacretaz 2009, Borden et al. 2010, San Francisco Planning Department 2011, Cusa et al. 2015, Sheppard and Phillips 2015, Riding et al. 2020). The risk of collision is highest when a feature-related hazard is located adjacent to a location-related hazard, especially when vegetation is present on either side of the hazard, creating a perceived "flight path" through the glazing. Where these features are located along potential flight paths that birds may use when traveling to and from landscape vegetation on the site or in nearby areas, the risk of bird collisions is higher because birds may not perceive the intervening glass and may therefore attempt to fly to vegetation on the far side of the glass.

5.2 Hotel and Residential/Mixed-Use Buildings

The hotel and residential/mixed-use buildings are discussed together because the conceptual designs indicate that their facades are predominantly opaque (with the exception of retail areas on the lower levels of the buildings) and they are located in portions of the site with less extensive vegetation. Thus, bird collisions with these buildings are generally expected to be lower compared to other buildings on the project site, although certain facades of these buildings face areas of landscape vegetation (e.g., parks and courtyards) where bird collisions are generally expected to be relatively higher.

5.2.1 Building Descriptions

5.2.1.1 Hotel

A hotel is located at the eastern end of the Town Square District, adjacent to Willow Road; the hotel will be a maximum of 120 feet tall (Figure 3). The conceptual design of the hotel includes a central courtyard on Level 1, a pool deck on Level 3, and balconies on Level 6 (Figure 4). A bridge will connect the hotel's Level 3 pool deck to the elevated park to the north. The facades of the hotel are intended to be predominantly opaque, with extensive glazing on Level 1 on the west, east, and south facades as well as all Level 1 facades surrounding the courtyard (Figure 5). Free-standing glass railings may be included in the hotel design, and landscape vegetation may be present on roof terraces.

Figure 3. Illustration of buildings in the northern portion of the site showing the proposed atrium, elevated park, hotel, Town Square, Office Building 04, and event building.

Figure 4. The conceptual hotel plan includes a central courtyard on Level 1, a pool deck on Level 3, and vegetated balconies on Level 6.

Figure 5. The conceptual east (top left), north (top right), west (bottom left), and south (bottom right) facades of the hotel.

Birds using open marsh and scrub habitats, or migrating, north of the site may be attracted to landscape vegetation along the façades of the hotel. The conceptual project plans show vegetation and trees at the elevated park to the northeast within the Town Square to the east, and within the hotel's central courtyard (Figures 3 and 5). Street trees and limited vegetation are proposed along Willow Road to the northwest and future Main Street to the southwest (Figure 5).

Although the hotel is located in the northern portion of the site and adjacent to the elevated park (i.e., in areas where higher numbers of birds are expected to be present, compared to areas farther south within the Master Plan area), the extensive opaque panels on the exterior facades as shown in the conceptual design are beneficial project features that substantially reduce the expected frequency of bird collisions with this building by helping the building appear as a solid structure from a distance (Figure 5). Features of the architecture of the hotel where collision risk is expected to be relatively highest include transparent glass corners (through which sight lines between vegetation on either side of the corners create collision hazards for birds), at roofs with landscape vegetation (which are expected to attract birds towards glazing on the building), in the central courtyard (where birds are surrounded on three or three sides by glazed facades), and at areas of contiguous glazing that face landscape vegetation within approximately 60 feet of the ground.

5.2.1.2 Residential/Mixed-Use Buildings

The residential/mixed-use buildings on Parcels 2–7 are assessed together because they are similar in structure, and collision hazards with these buildings are expected to be similar. These buildings are located in the southeast portion of the Master Plan area (Figure 6) and will be a maximum of 85 feet tall. Figures 7 and 8, which show the Parcel 2 building, are representative of the conceptual appearance of the residential/mixed-use buildings: their facades are intended to be predominantly opaque with residential windows, with more extensive glazing typically present at ground-floor public spaces. All buildings incorporate courtyards and open space areas, and landscape vegetation may be present on roof terraces. Free-standing glass railings may be included in the building designs.

Figure 6. Illustrative site plan showing the proposed residential/mixed-use buildings and associated open space areas. Facades with relatively highest collision risk are delineated in red.

Figure 7. The conceptual Parcel 2 residential/mixed-use building plan includes open space courtyards on Level 3.

Figure 8. The conceptual east (top), west (middle), south (bottom left), and north (bottom right) facades of the Parcel 2 residential/mixed-use building.

Birds are expected to use landscape vegetation planted adjacent to the façades of the residential/mixed-use buildings within public areas (e.g., street trees), planted landscape areas, and parks. However, according to the conceptual designs, the majority of the residential/mixed-use buildings are not located adjacent to large open space areas; as a result, fewer birds are expected to occur along these buildings compared to other buildings on the project site. In general, higher numbers of birds are expected to be present at the approximately 3.5-acre publicly accessible park on Parcel A and at the Town Square to the north/northeast of Parcels 2 and 3, and fewer birds are expected to be present in smaller/narrower vegetated areas (e.g., in between buildings).

Beneficial project features of the architecture of residential/mixed-use buildings that would reduce the frequency of avian collisions include opaque panels, overhangs, mullions, and porticos that are not vegetated or located immediately adjacent to vegetation (Figure 8). Nevertheless, some bird collisions with these façades are expected to occur despite the presence of certain features that reduce collision risk. Features of the architecture of the facades of the residential/mixed-use buildings where collision risk is expected to be relatively highest include transparent glass corners (through which sight lines between vegetation on either side of the corners create collision hazards for birds), at alcoves (which surround trees and vegetation that are expected to attract birds), at green roofs (which are expected to attract birds towards glazing on the building), in courtyards (where birds are surrounded on three or four sides by glazed facades), and at areas of contiguous glazing that face landscape vegetation within approximately 60 feet of the ground (Figure 8). At transparent glass corners, the collision hazard extends as far from the corner as it is possible to see through the corner (and can potentially extend through an entire floor or section of a building, if it is possible to see through from one side of the building to the other).

5.2.2 Compliance with City Bird-Safe Design Requirements

Collision risk for the hotel and residential/mixed-use buildings is expected to be lower compared with other buildings in the Master Plan area because the conceptual designs indicate that their facades are predominantly opaque (with the exception of retail areas on the lower levels of the buildings) and they are located in portions of the site with less extensive vegetation. To address collision risk, the project will comply with City bird-safe design requirements, with requests for appropriate waivers, as permitted by the City bird-safe design requirements, by focusing bird-safe treatment of glazing within areas of relatively highest collision risk.

5.2.2.1 Requirements for which No Waiver is Requested

As currently proposed, the hotel and residential/mixed-use buildings anticipate complying with City bird-safe design requirements B, D, and G without requesting waivers; requirements B and D are listed below. Where the project's bird-safe design strategy is more specific than the City's requirements, sub-bullets specify how the project will comply with those requirements.

B. Bird-friendly glazing includes, but is not limited to, opaque glass, covering the outside surface of clear glass with patterns, paned glass with fenestration, frit or etching patterns, and external screens over nonreflective glass. Highly reflective glass is not permitted.

- Specifically, glazing used on the hotel and residential/mixed-use buildings shall have the following specifications:

    a. Vertical elements of the window patterns should be at least 0.25 inches wide at a maximum spacing of four inches and/or have horizontal elements at least 0.125 inches wide at a maximum spacing of two inches;

    OR

    b. Bird-safe glazing shall have a Threat Factor[1] less than or equal to 30.

- To reduce reflections of clouds and vegetation in glass and help ensure that bird-safe treatments on the lower surfaces of glass are visible below any reflections, all glazing on the hotel and residential/mixed-use buildings will have a visible reflectance of 15% or lower.

D. Placement of buildings shall avoid the potential funneling of flight paths towards a building facade.

Discussion of project compliance with City requirement C, related to occupancy sensors, is provided in Section 6.2.2 below.

[1] A material's Threat Factor is assigned by the American Bird Conservancy, and refers to the level of danger posed to birds based on birds' ability to perceive the material as an obstruction, as tested using a "tunnel" protocol (a standardized test that uses wild birds to determine the relative effectiveness of various products at deterring bird collisions). The higher the Threat Factor, the greater the risk that collisions will occur. An opaque material will have a Threat Factor of 0, and a completely transparent material will have a Threat Factor of 100. Threat Factors for many commercially available façade materials can be found at https://abcbirds.org/wp-content/uploads/2021/01/Master-spreadsheet-1-25-2021.xlsx.

5.2.2.2 Requirements for which Waivers will be Requested

Waivers Requested. As currently proposed, the project anticipates complying with City bird-safe requirements A, E, and F by requesting waivers for the hotel and residential/mixed-use buildings, as permitted by the City bird-safe design requirements. These waivers are requested in order for the project to achieve design excellence. City requirements A, E, and F are as follows:

A. No more than 10% of facade surface area shall have non-bird-friendly glazing.

E. Glass skyways or walkways, free-standing (see-through) glass walls and handrails, and transparent building corners shall not be allowed.

F. Transparent glass shall not be allowed at the rooflines of buildings, including in conjunction with roof decks, patios and roofs with landscape vegetation.

Alternative City Measures Proposed. As an alternative to these requirements, to ensure that the project meets the City's intent of designing bird-safe buildings and addresses high-risk collision hazards, the project proposes to implement the following alternative City measures:

- The hotel and residential/mixed-use buildings shall focus bird-friendly glazing treatments within areas of extensive glazing on lower floors and roof terraces that face the approximately 3.5-acre publicly accessible park (Parcel A), Town Square, and elevated park (i.e., the north, east, and south facades of the hotel; the north and south façades of the Parcel 2 building; the north/northeast facades of the Parcel 3 buildings; a portion of the south façade of the Parcel 4 building; and the west façades of the Parcel 6 building as indicated on Figure 6), as these represent areas of heightened collision risk. The focal façade areas to be treated shall be identified by a qualified biologist on building-specific façade views; no more than 10% of these areas shall have non-bird-friendly glazing.
- If free-standing glass railings are included on the hotel and/or residential/mixed-use buildings, all glazing on free-standing glass railings shall be 100% treated with a bird-safe glazing treatment.
    - Specifically, all glazing on free-standing glass railings on the buildings shall have a Threat Factor (see footnote 1 above) less than or equal to 15. This Threat Factor is relatively low (and the effectiveness of the bird-safe treatment correspondingly high) due to the relatively high risk of bird collisions with free-standing glass railings.
- All glazed features of the hotel and residential/mixed-use with clear sight lines between vegetation on either side of the feature (e.g., at glazed corners) shall be 100% treated with a bird-safe glazing treatment where they are located within or adjacent to (i.e., on both sides of a corner where one side of the corner falls within a focal treatment area) the focal treatment areas identified by the qualified biologist. These transparent building corners shall treated as far from the corner as it is possible to see through to the other side of the corner.

With respect to the bird-safe glazing treatments recommended in connection with these alternatives, Figure 9 provides an example of identified areas that would be required to be treated on the conceptual Parcel 2 residential/mixed-use building based on the January 2021 façade elevations.

Figure 9. An example mark-up of areas (shown in blue) that would be required to be treated on north (top left), south (top right), east (middle) and west (bottom) facades of the conceptual Parcel 2 residential/mixed-use building to ensure that avian collisions are less-than-significant. Transparent glass corner delineations are estimated; these corners should be treated as far from the corner as it is possible to see through the corner. Free-standing glass railings are not indicated on this figure but are required to be treated in all locations.

In lieu of complying with City requirements A, E, and F per se, this proposed approach would reduce bird collisions at the locations where bird collisions are most likely to occur and, in our professional opinion, adequately meet the objective of the City's requirements (i.e., to minimize bird collisions with the buildings). Therefore, the requested waivers to the City's bird-safe design requirements are appropriate. Alternatively, if the City does not grant a waiver for requirements A, E, and F, the project will comply with these City requirements. In our professional opinion, this strategy (i.e., compliance with City requirements or compliance via approved waivers, as permitted by the City bird-safe design requirements, and alternative City measures) will avoid significant CEQA impacts for these buildings.

5.2.3 Additional Mitigation Measures Proposed Under CEQA

Based on our assessment of the conceptual design of the hotel and residential/mixed-use buildings, we have determined that there is an overall low likelihood of collisions with the buildings. With the project's compliance with City requirements (either via compliance with the listed requirements or by requesting waivers, as permitted by the City bird-safe design requirements, and proposing alternative City measures, where

appropriate), it is our professional opinion that project impacts due to bird collisions with the hotel and residential/mixed-use buildings would be less than significant under CEQA. As such, no additional mitigation measures under CEQA for impacts related to avian collisions are proposed.

5.2.4 CEQA Impacts Summary

The hotel and residential/mixed-use buildings will comply with the City's bird-safe design requirements by implementing requirements B, D, and G; requesting waivers for requirements A, E, and F, as permitted by the City bird-safe design requirements; and implementing alternative City measures for requirements A, E, and F. Compliance with requirement C is discussed in Section 6.2.2 below. No additional mitigation measures under CEQA for impacts related to avian collisions are proposed. As stated above, with compliance with City requirements (including the implementation of the proposed alternative City measures), it is our professional opinion that project impacts due to bird collisions with the hotel and residential/mixed-use buildings would be less than significant under CEQA.

A subsequent report prepared by a qualified biologist will accompany the final ACPs for each of the residential/mixed-use buildings and the hotel. It is our understanding based on coordination with the design teams that (1) the final ACP designs for the residential/mixed-use buildings and hotel will substantially conform with the conceptual designs reviewed for this report, such that our analysis and conclusions are expected to be valid for the final designs; (2) the proposed bird-safe treatments within the areas where such treatments are expected to be necessary (per the example shown in Figure 9) are feasible; and (3) the project will implement alternative City measures as described herein. Nevertheless, because the designs and renderings for the hotel and residential/mixed-use buildings that were reviewed for this assessment are conceptual, a qualified biologist shall review the final ACPs for the hotel and residential/mixed-use buildings to confirm that the alternative City measures described herein, or other alternative measures reasonably acceptable to the qualified biologist[2], are incorporated into the final design, such that project impacts due to bird collisions would be less than significant under CEQA as indicated herein.

5.3 Office Campus

Office Buildings 01, 02, 03, 05, and 06 are assessed together because the conceptual designs indicate that they are similar in structure, and collision hazards with these buildings are expected to be similar.

5.3.1 Building Descriptions

5.3.1.1 Office Buildings 01, 02, 03, 05, and 06

Office Buildings 01, 02, 03, 05, and 06 will be a maximum of 120 feet tall. As shown on Figure 13 in Section 5.4.1.2 below, Office Building 04 is representative of the appearance of all proposed office buildings; their facades are predominantly glazed, although portions of the lower levels incorporate opaque wall panels. All

[2] If alternative measures are used that are not discussed in this report for the project's CDP, those measures will be submitted to the City for review in accordance with the City's Zoning Code and CEQA with the project's ACPs.

buildings have open space areas on rooftops that may support landscape vegetation. Free-standing glass railings may be included in the design of Office Buildings 01, 02, 03, 05, and 06.Birds are expected to use landscape vegetation along the façades of the office buildings. In general, higher numbers of birds are expected to be present in larger vegetated open space areas (e.g., in the plaza north of Office Building 05), and fewer birds are expected to be present in smaller/narrower vegetated areas (e.g., in between Office Building 06 and the South Garage) (Figure 10).

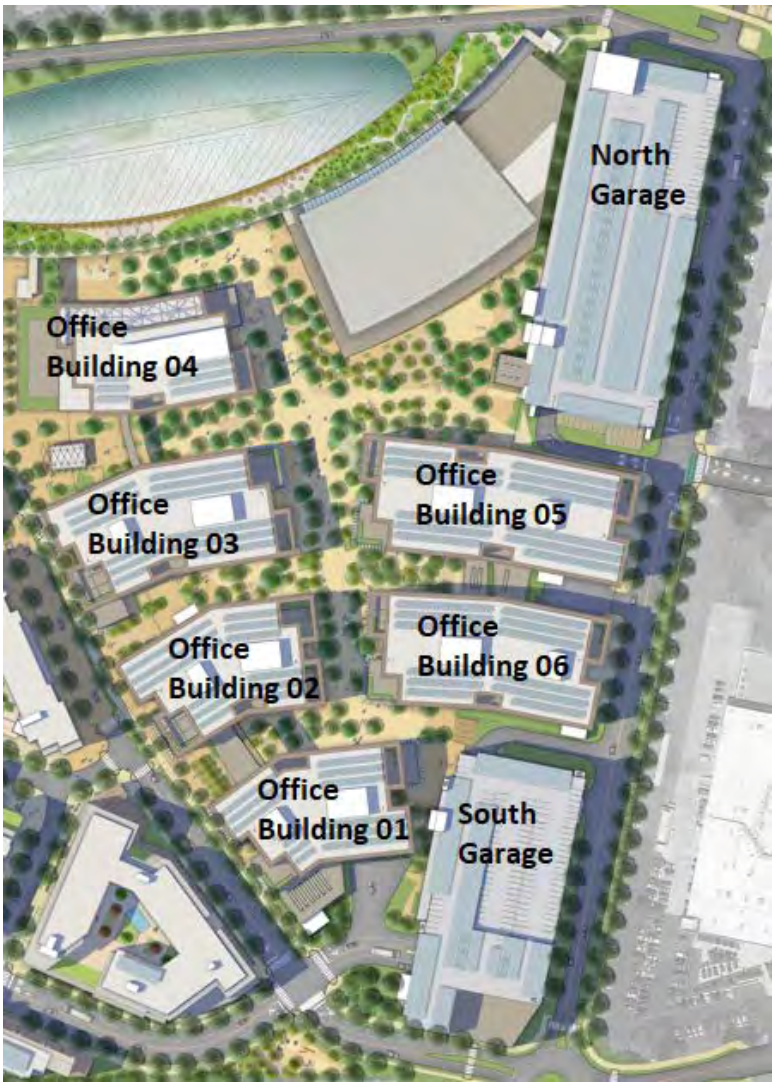

Figure 10. Conceptual site plan showing the locations of proposed office buildings and garages, as well as the proposed extent of landscape vegetation and trees.

Beneficial project features of the architecture of office building facades that would reduce the frequency of avian collisions include opaque panels, exterior vertical and horizontal solar shades, overhangs, mullions, and porticos that are not vegetated or located immediately adjacent to native vegetation. Nevertheless, because (1) the façades of the office buildings are extensively glazed and (2) this glazing faces landscape vegetation, bird

collisions with these façades are expected to occur despite the presence of certain features that reduce collision risk. Features of the architecture of the facades of the office buildings where collision risk is expected to be relatively highest include transparent glass corners (through which sight lines between vegetation on either side of the corners create collision hazards for birds), at alcoves (which surround trees and vegetation that are expected to attract birds), at roofs with landscape vegetation (which are expected to attract birds towards glazing on the building), at free-standing glass railings, and at areas of contiguous glazing that face landscape vegetation within approximately 60 feet of the ground. At transparent glass corners, the collision hazard extends as far from the corner as it is possible to see through the corner (and can potentially extend through an entire floor or section of a building, if it is possible to see through from one side of the building to the other).

5.3.1.2 Parking Garages

The North Garage is located in the northeast corner of the project site and the South Garage is located in the southeast corner of the project site (Figure 10). These garages are similar in structure, and will be a maximum of 120 feet tall. The conceptual plans indicate that the facades of the garages are predominantly opaque, with limited glazing only on two approximately 15-foot wide elevator towers on the west and north facades on all levels (Figure 11). Free-standing glass railings may be included in the project design, and landscape vegetation may be present above the ground level.

Figure 11. Conceptual North Garage elevations: east (top), west (middle), north (bottom left), and south (bottom right). The building facades are predominantly opaque; glazed areas are located on all levels the elevator towers on the west and north facades.

Birds using open marsh and scrub habitats, or migrating, north of the site may use landscape vegetation along the façades of the North Garage and South Garage. In general, higher numbers of birds are expected to be present opposite the north façade of the North Garage (which faces open habitats associated with the San Francisco Bay) and in larger vegetated open space areas (e.g., in the plaza southwest of the North Garage), and

fewer birds are expected to be present in smaller/narrower vegetated areas opposite the garage facades (e.g., in between the North Garage and Office Building 05).

The extensive opaque facades on the North Garage and South Garage shown on the conceptual plans are beneficial project features that will substantially reduce bird collisions with these buildings. Nevertheless, bird collisions are expected to occur where glazing is present opposite open space areas and landscape vegetation, at free-standing glass railings, and at roofs where landscape vegetation is located adjacent to glazing. No high-risk collision hazards (e.g., transparent glass corners) are present on these buildings.

5.3.2 Compliance with City Bird-Safe Design Requirements

Although a number of beneficial project features in the project design mentioned above will reduce bird collisions (e.g., opaque facades, exterior solar shades, mullions, and porticos), the number of collisions with Office Buildings 01, 02, 03, 05, and 06 as well as the North Garage and South Garage is expected to be relatively higher compared with certain other buildings in the Master Plan area (e.g., the hotel and mixed-use buildings described above) because (1) the building facades incorporate extensive glazing, and (2) this glazing faces landscape vegetation that will be used by birds. To address collision risk, the project will comply with City bird-safe design requirements, with appropriate waivers, as permitted by the City bird-safe design requirements.

5.3.2.1 Requirements for which No Waiver is Requested

As currently proposed, Office Buildings 01, 02, 03, 05, and 06 as well as the North Garage and South Garage anticipate complying with City bird-safe design requirements A, B, C, D, and G without requesting waivers; requirements A, B, C, and D are listed below. Where the project's bird-safe design strategy is more specific than the City's requirements, sub-bullets specify how the project will comply with those requirements.

A. No more than 10% of facade surface area shall have non-bird-friendly glazing.

   - Specifically, all portions of Office Buildings 01, 02, 03, 05, and 06 shall be treated with a bird-safe glazing treatment with the exception of certain portions of the facades on Level 1. The area of untreated glazing shall be less than 10% of the total surface area of the atrium. Specific treatment areas on the North Garage and South Garage are unknown, but will comply with this requirement.

B. Bird-friendly glazing includes, but is not limited to, opaque glass, covering the outside surface of clear glass with patterns, paned glass with fenestration, frit or etching patterns, and external screens over nonreflective glass. Highly reflective glass is not permitted.

   - Specifically, glazing used on Office Buildings 01, 02, 03, 05, and 06 as well as the North Garage and South Garage shall have the following specifications:

     c. Vertical elements of the window patterns should be at least 0.25 inches wide at a maximum spacing of four inches and/or have horizontal elements at least 0.125 inches wide at a maximum spacing of two inches;

     OR

d. Bird-safe glazing shall have a Threat Factor (see footnote 1 above) less than or equal to 30.

- To reduce reflections of clouds and vegetation in glass and help ensure that bird-safe treatments on the lower surfaces of glass are visible below any reflections, all glazing on Office Buildings 01, 02, 03, 05, and 06 as well as the North Garage and South Garage will have a visible reflectance of 15% or lower.

D. Placement of buildings shall avoid the potential funneling of flight paths towards a building facade.

Discussion of project compliance with City requirement C, related to occupancy sensors is provided in Section 6.2.2 below.

5.3.2.2 Requirements for which Waivers will be Requested

Waivers Requested. As currently proposed, the project anticipates complying with City bird-safe design requirements E and F by requesting waivers for Office Buildings 01, 02, 03, 05, and 06 as well as the North Garage and South Garage, as permitted by the City bird-safe design requirements. City requirements E and F are as follows:

E. Glass skyways or walkways, free-standing (see-through) glass walls and handrails, and transparent building corners shall not be allowed.

F. Transparent glass shall not be allowed at the rooflines of buildings, including in conjunction with roof decks, patios and roofs with landscape vegetation.

Alternative City Measures Proposed. As an alternative to these requirements, to ensure that the project meets the City's intent of designing bird-safe buildings and addresses high-risk collision hazards, the project proposes to implement the following alternative City measures:

- All glazed features with clear sight lines between vegetation on either side of the feature (e.g., at glazed corners and free-standing glass railings) shall be 100% treated with a bird-safe glazing treatment. Transparent building corners shall be treated as far from the corner as it is possible to see through to the other side of the corner (and will potentially extend through an entire floor or section of a building, if it is possible to see through from one side of the building to the other).
- All glazing above Level 1 of Office Buildings 01, 02, 03, 05, and 06 (i.e., all glazing adjacent to roof terraces with landscape vegetation) will be 100% treated with a bird-safe glazing treatment. Specific treatment areas on the North Garage and South Garage are unknown, but no more than 10% of the façade surface area shall have non-bird-friendly glazing.
- All transparent glass at the rooflines adjacent to vegetated roof decks will be 100% treated with a bird-safe glazing treatment. The only untreated glazing on for Office Buildings 01, 02, 03, 05, and 06 will be located on the ground level, which does not create a collision hazard due to landscape vegetation on roofs. No vegetated roof decks are proposed for the North Garage and South Garage, and all transparent glass at the rooflines of these buildings will be 100% treated with a bird-safe glazing treatment.

- If free-standing glass railings are included on Office Buildings 01, 02, 03, 05 and/or 06, all glazing on free-standing glass railings shall be 100% treated with a bird-safe glazing treatment.
    - Specifically, all glazing on free-standing glass railings on the building shall have a Threat Factor (see footnote 1 above) less than or equal to 15. This Threat Factor is relatively low (and the effectiveness of the bird-safe treatment correspondingly high) due to the relatively high risk of bird collisions with free-standing glass railings.

In lieu of complying with City requirements E and F per se, this proposed approach would reduce bird collisions at the locations where bird collisions are most likely to occur and, in our professional opinion, adequately meet the objective of the City's requirements (i.e., to minimize bird collisions with the buildings). Therefore, the requested waivers to the City's bird-safe design requirements are appropriate. Alternatively, if the City does not grant a waiver for requirements E and F, the project will comply with these City requirements. In our professional opinion, this strategy (i.e., compliance with City requirements or compliance via approved waivers, as permitted by the City bird-safe design requirements, and alternative City measures) will avoid significant CEQA impacts for these buildings.

5.3.3 Additional Mitigation Measures Proposed Under CEQA

With the project's compliance with City requirements (either via compliance with the listed requirements or by requesting waivers, as permitted by the City bird-safe design requirements, and proposing alternative City measures, where appropriate), it is our professional opinion that project impacts due to bird collisions with Office Buildings 01, 02, 03, 05, and 06 would be less than significant under CEQA. As such, no additional mitigation measures under CEQA for impacts related to avian collisions are proposed.

5.3.4 CEQA Impacts Summary

Office Buildings 01, 02, 03, 05, and 06 as well as the North Garage and South Garage will comply with the City's bird-safe design requirements by implementing requirements A, B, C, D, and G; requesting waivers for requirements E and F, as permitted by the City bird-safe design requirements; and implementing alternative City measures for requirements E and F. Compliance with requirement C is discussed in Section 6.2.2 below. No additional mitigation measures under CEQA for impacts related to avian collisions are proposed. As stated above, with compliance with City requirements (including the implementation of the proposed alternative City measures), it is our professional opinion that project impacts due to bird collisions with Office Buildings 01, 02, 03, 05, and 06 as well as the North Garage and South Garage would be less than significant under CEQA.

A subsequent report prepared by a qualified biologist will accompany the final ACPs for Office Buildings 01, 02, 03, 05, and 06 as well as the North Garage and South Garage. It is our understanding based on coordination with the design teams that (1) the final ACP designs for these buildings will substantially conform with the conceptual designs reviewed for this report, such that our analysis and conclusions are expected to be valid for the final designs; (2) the proposed bird-safe treatments within the areas where such treatments are expected to be necessary are feasible; and (3) the project will implement alternative City measures as described herein.

Nevertheless, because the designs and renderings for Office Buildings 01, 02, 03, 05, and 06 as well as the North Garage and South Garage that were reviewed for this assessment are conceptual, a qualified biologist shall review the final ACPs for these buildings to confirm that the alternative City measures described herein, or other alternative measures reasonably acceptable to the qualified biologist (see footnote 2 above), are incorporated into the final design such that project impacts due to bird collisions would be less than significant under CEQA as indicated herein.

5.4 Event Building and Nearby Buildings

The event building, Office Building 04, Town Square retail pavilion, pavilions SP1 and SP2, and stair/elevator towers are discussed together because the conceptual designs indicate that they are located in the northern portion of the project site reasonably close to open space areas with extensive trees and landscape vegetation (Figure 3). Because these open space areas are relatively large compared to other areas of the project site, and because the structures addressed in this section all incorporate extensive glazing, avian collision risk with these buildings is expected to be relatively higher than on the other office campus buildings, hotel, and residential/mixed-use buildings discussed in Sections 5.2 and 5.3 above.

5.4.1 Building Descriptions

5.4.1.1 Event Building

An event building is located southeast of the atrium (Figure 3), and it will have a maximum height of 120 feet. The northwest façade of this facility abuts the elevated park, and the facility connects directly with the atrium via a partially glazed passageway that extends beneath the elevated park (Figure 12). The southwest and northeast facades of the event building will be entirely opaque, and the lower portions of the northwest and southeast facades will also be opaque (Figure 12). Glazing will be present on the upper portions of the northwest and southeast facades; this glazing will face the vegetation at the adjacent elevated park (Figure 12). Landscape vegetation may be present on the sides of the building above the ground level, and free-standing glass railings may be included in the project design.

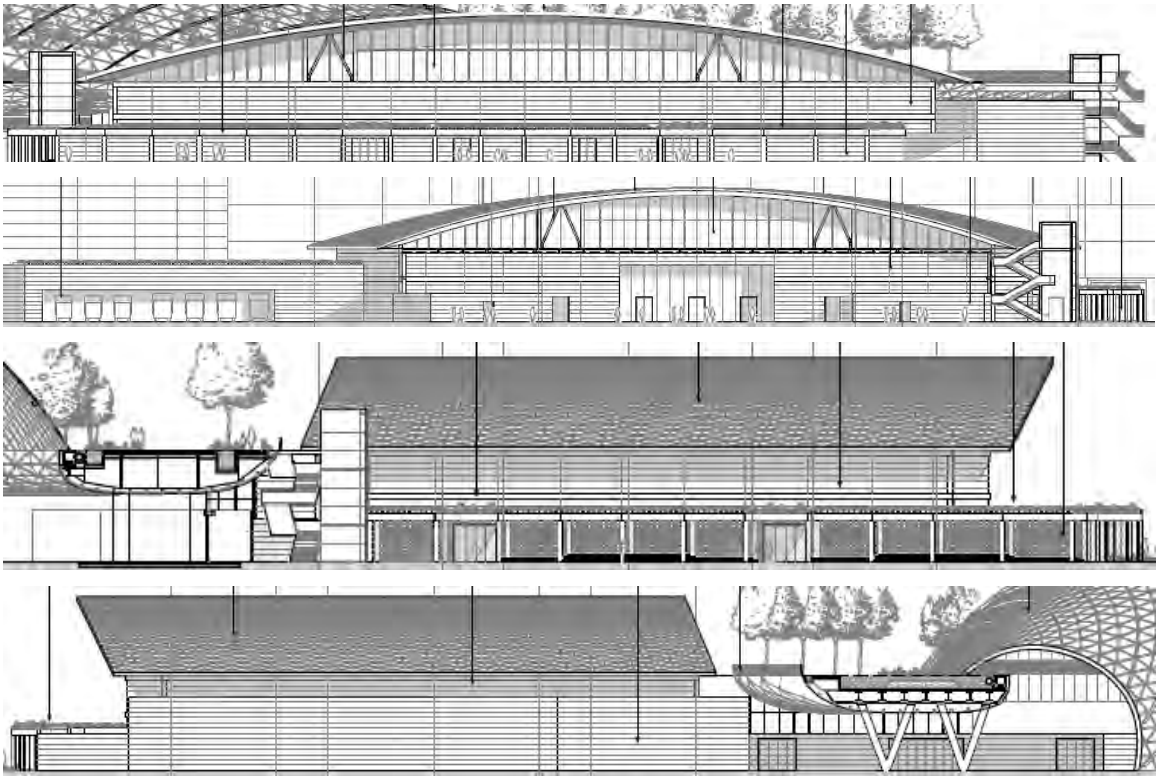

Figure 4. Illustration of the event building façades. Top to bottom: the southeast, northwest, northeast, and southwest facades.

Birds using open marsh and scrub habitats, or migrating, north of the site may be attracted to landscape vegetation along the façades of the event building. Because the conceptual plans show that the event building is surrounded by vegetated open space areas, including the elevated park to the northwest and a plaza with landscape vegetation to the southwest and southeast, relatively high numbers of birds are expected to be present around the building (Figure 3).

The extensive opaque facades on the event building are beneficial project features that will substantially reduce bird collisions with the building. However, bird collisions are expected to occur in several locations where glazing is present. For instance, birds using vegetation at the elevated park northwest of the event building will be able to see vegetation within the open space area southeast of the building, and vice-versa, through the glazing on the building's northwest and southeast facades. In addition, birds using vegetation adjacent to the glazed passageway will also be able to see vegetation on the other side of this feature. The risk of bird collisions at these locations is expected to be relatively high because birds may not perceive the intervening glass and may therefore attempt to fly to vegetation on the far side of the glass. Bird collisions are also expected to be relatively high where vegetation above the ground level is located adjacent to glazing, and at free-standing glass railings.

5.4.1.2 Office Building 04

Office Building 04 will have a maximum height of 120 feet. Open space areas will be located on rooftop terraces that may support landscape vegetation, and free-standing glass railings may be included in the project design.

Figure 13 shows the facades of Office Building 04, which are predominantly glazed, although portions of the lower levels incorporate opaque wall panels.

Figure 13. Conceptual Office Building 04 elevations: west (top left), east (top right), north (middle), and south (bottom).

Birds using open marsh and scrub habitats, or migrating, north of the site may be attracted to landscape vegetation along the façades of Office Building 04. Higher numbers of birds are expected to be present around this building compared to buildings located farther south on the project site (e.g., Office Buildings 01–03 and 05–06, which are discussed in Section 5.3 above) due to the presence of large open space areas with landscape vegetation in the northern portion of the site. The conceptual plans show vegetation and trees at the elevated park north of Office Building 04 and within open space areas at grade level to the east, west, and south of this building (Figure 10).

Features of the architecture of the facades of Office Building 04 (and connected building TS3) that represent beneficial project features that would reduce the frequency of avian collisions include opaque panels, exterior vertical and horizontal solar shades, overhangs, mullions, and porticos that are not vegetated or located immediately adjacent to native vegetation (Figure 13). Nevertheless, because (1) the façades of the office building are extensively glazed and (2) this glazing faces landscape vegetation, bird collisions with these façades are expected to occur despite the presence of certain features that reduce collision risk. Features of the architecture of the building where collision risk is expected to be relatively highest include transparent glass corners (through which sight lines between vegetation on either side of the corners create collision hazards for birds), at roofs with landscape vegetation (which are expected to attract birds towards glazing on the building), at free-standing glass railings, and at areas of contiguous glazing that face landscape vegetation within approximately 60 feet of the ground. At transparent glass corners, the collision hazard extends as far from the

corner as it is possible to see through the corner (and can potentially extend through an entire floor or section of a building, if it is possible to see through from one side of the building to the other).

5.4.1.3 Town Square

The Town Square is located east of the hotel, south of the elevated park, and west of Office Building 04 (Figure 3). This area includes a new access road (West Street), a below-grade parking garage, a paved plaza with landscape vegetation and trees, several seating areas, bicycle parking, and a retail pavilion (Figure 14). Glazing will be present on the facades of the retail pavilion, which will have a maximum height of 120 feet (Figure 15). Free-standing glass railings may be included in the Town Square design, and landscape vegetation may be present on the roof of the retail pavilion.

Figure 14. The conceptual Town Square includes a paved plaza with landscape vegetation and trees, seating areas, a glazed elevator to the elevated park, bicycle parking, and a retail pavilion.

Figure 15. The conceptual west (top left), east (top right), south (middle), and north (bottom) facades of the Town Square retail pavilion.

Birds using open marsh and scrub habitats, or migrating north of the site may be attracted to landscape vegetation in the Town Square. The Town Square is an open space area with paved pedestrian areas as well as landscape vegetation and trees, and vegetation is also present to the north of the Town Square at the elevated park (Figures 3 and 14).

Beneficial project features of the Town Square retail pavilion that would reduce the frequency of avian collisions include opaque panels and mullions (Figure 15). Nevertheless, because (1) the façades of the retail pavilion are extensively glazed and (2) this glazing faces landscape vegetation, bird collisions with these façades are expected to occur despite the presence of certain features that reduce collision risk. Features of the architecture of the pavilion where collision risk is expected to be relatively highest include transparent glass corners (through which sight lines between vegetation on either side of the corners create collision hazards for birds), at the roof (which is expected to attract birds towards glazing on the pavilion due to the potential presence of landscape vegetation), at free-standing glass railings, and at areas of contiguous glazing that face landscape vegetation. In addition, birds using vegetation north of the pavilion will be able to see vegetation south of the pavilion, and vice-versa, though the glazing on the pavilion's north and south facades. The risk of bird collisions at these locations is expected to be relatively high because birds may not perceive the intervening glass and may therefore attempt to fly to vegetation on the far side of the glass.

5.4.1.4 Security Pavilions

Accessory buildings Security Pavilions 1 and 2 (SP1 and SP2) are located in the northern portion of the site: SP1 in between Office Buildings 03 and 04, and SP2 at the southwest corner of the North Garage (Figure 10). These pavilions are discussed together because they are similar in structure, and collision risk with the pavilions' facades is expected to be similar. SP1 and SP2 will have a maximum height of 120 feet. Figure 16 is

representative of the appearance of these buildings, and indicates that glazing will be present on all sides of the buildings and pergolas will be present above the roofs. Free-standing glass railings may be included in the design of the pavilions, and landscape vegetation may be present on the building's roofs.

Figure 16. The conceptual south (top left), west (top right), north (bottom left), and east (bottom right) facades of buildings SP1 and SP2.

Birds using open marsh and scrub habitats, or migrating, north of the site may be attracted to landscape vegetation along the pavilions. Higher numbers of birds are expected to be present around these buildings compared to buildings located farther south on the project site (e.g., Office Buildings 01–03 and 05–06, which are discussed in Section 5.3 above) due to the presence of large open space areas with landscape vegetation in the northern portion of the site. The conceptual project plans show vegetation and trees in large open space areas/plazas surrounding buildings SP1 and SP2 (Figure 10).

Features of the architecture of the pavilions that represent beneficial project features that would reduce the frequency of avian collisions include opaque panels and mullions (Figure 16). Nevertheless, because the facades of these pavilions incorporate extensive glazing that faces landscape vegetation, bird collisions with these facades are expected to occur despite the presence of certain features that reduce collision risk. Features of the architecture of the pavilions where collision risk is expected to be relatively highest include transparent glass corners (through which sight lines between vegetation on either side of the corners create collision hazards for birds), at free-standing glass railings, where rooftop vegetation is located adjacent to glazing, and at areas of contiguous glazing that face landscape vegetation. In addition, birds using vegetation east of the pavilions will be able to see vegetation west of the pavilions, and vice-versa, though the glazing on the pavilion's east and west facades (Figure 16). The risk of bird collisions at these locations is expected to be relatively high because birds may not perceive the intervening glass and may therefore attempt to fly to vegetation on the far side of the glass.

5.4.1.5 Stair/Elevator Towers

Five stair/elevator towers are present that connect the ground level with the elevated park in the following locations (Figure 3):

- At the eastern end of the elevated park
- At the northwest corner of the event building (also see Figure 12)
- At the Town Square (also see Figure 14)
- At the hotel (also see Figure 5)
- At the western end of the elevated park

The conceptual plans indicate that the stair/elevator towers incorporate extensive glazing; as a result, bird collisions with facades of these towers are expected to occur. Because these towers create clear sight lines between vegetation on either side of the towers, the risk of bird collisions at these locations is expected to be relatively high because birds may not perceive the intervening glass and may therefore attempt to fly to vegetation on the far side of the glass.

5.4.2 Compliance with City Bird-Safe Design Requirements

To address collision risk, the project will comply with City bird-safe design requirements, with appropriate waivers, as permitted by the City bird-safe design requirements.

5.4.2.1 Requirements for which No Waiver is Requested

As currently proposed, the event building, Office Building 04, Town Square retail pavilion, security pavilions, and elevator towers shall anticipate complying with City bird-safe design requirements A–D and G without requesting waivers; requirements A–D are listed below. Where the project's bird-safe design strategy is more specific than the City's requirements, sub-bullets specify how the project will comply with those requirements.

A. No more than 10% of facade surface areas shall have non-bird-friendly glazing.

B. Bird-friendly glazing includes, but is not limited to, opaque glass, covering the outside surface of clear glass with patterns, paned glass with fenestration, frit or etching patterns, and external screens over nonreflective glass. Highly reflective glass is not permitted.

   - Specifically, glazing used on the event building, Office Building 04, Town Square retail pavilion, security pavilions, and elevator towers shall have the following specifications:

     e. Vertical elements of the window patterns should be at least 0.25 inches wide at a maximum spacing of four inches and/or have horizontal elements at least 0.125 inches wide at a maximum spacing of two inches;

     OR

     f. Bird-safe glazing shall have a Threat Factor (see footnote 1 above) less than or equal to 30.

   - To reduce reflections of clouds and vegetation in glass and help ensure that bird-safe treatments on the lower surfaces of glass are visible below any reflections, all glazing on the event building, Office

Building 04, Town Square retail pavilion, security pavilions, and elevator towers will have a visible reflectance of 15% or lower.

D. Placement of buildings shall avoid the potential funneling of flight paths towards a building facade.

Discussion of project compliance with City requirement C, related to occupancy sensors, is provided in Section 6.2.2 below.

5.4.2.2 Requirements for which Waivers will be Requested

Waivers Requested. As currently proposed, the project anticipates complying with City bird-safe design requirements E and F by requesting waivers for the event building, Office Building 04, Town Square retail pavilion, security pavilions, and elevator towers, as permitted by the City bird-safe design requirements. City requirements E and F are as follows:

E. Glass skyways or walkways, free-standing (see-through) glass walls and handrails, and transparent building corners shall not be allowed.

F. Transparent glass shall not be allowed at the rooflines of buildings, including in conjunction with roof decks, patios and roofs with landscape vegetation.

Alternative City Measures Proposed. As an alternative to these requirements, to ensure that the project meets the City's intent of designing bird-safe buildings and addresses high-risk collision hazards, the project proposes to implement the following alternative City measures:

- All glazed features of the event building, Office Building 04, Town Square retail pavilion, security pavilions, and elevator towers with clear sight lines between vegetation on either side of the feature (e.g., at glazed corners) shall be 100% treated with a bird-safe glazing treatment. Transparent building corners of these buildings shall be treated as far from the corner as it is possible to see through to the other side of the corner (and will potentially extend through an entire floor or section of a building, if it is possible to see through from one side of the building to the other).
- Any glazing of the event building, Office Building 04, Town Square retail pavilion, security pavilions, and elevator towers that creates see-through conditions where vegetation will be visible from one side of the building to the other shall be 100% treated. Examples include the north and south facades of the event building, the north and south facades of the Town Square retail pavilion, and facades of pavilions SP1 and SP2.
- If free-standing glass railings are included on the event building, Office Building 04, Town Square retail pavilion, security pavilions, and elevator towers, all glazing on free-standing glass railings shall be 100% treated with a bird-safe glazing treatment.
    - Specifically, all glazing on free-standing glass railings on the event building, Office Building 04, Town Square retail pavilion, security pavilions, and elevator towers shall have a Threat Factor (see footnote 1 above) less than or equal to 15. This Threat Factor is relatively low (and the effectiveness of the bird-

safe treatment correspondingly high) due to the relatively high risk of bird collisions with free-standing glass railings.

- All glazing above Level 1 of Office Building 04 (i.e., all glazing adjacent to roof terraces with landscape vegetation) will be 100% treated with a bird-safe glazing treatment.

In lieu of complying with City requirements E and F per se, this proposed approach would reduce bird collisions at the locations where bird collisions are most likely to occur and, in our professional opinion, adequately meet the objective of the City's requirements (i.e., to minimize bird collisions with the buildings). Therefore, the requested waivers to the City's bird-safe design requirements are appropriate. Alternatively, if the City does not grant a waiver for requirements E and F, the project will comply with these City requirements. In our professional opinion, this strategy (i.e., compliance with City requirements or compliance via approved waivers, as permitted by the City bird-safe design requirements, and alternative City measures) will avoid significant CEQA impacts for these buildings.

5.4.3 Additional Mitigation Measures Proposed Under CEQA

With the project's compliance with City requirements (either via compliance or by requesting waivers, as permitted by the City bird-safe design requirements, and proposing alternative City measures, where appropriate), it is our professional opinion that project impacts due to bird collisions with the event building and nearby buildings would be less than significant under CEQA. As such, no additional mitigation measures under CEQA for impacts related to avian collisions are proposed.

5.4.4 CEQA Impacts Summary

The Town Square retail pavilion, security pavilions, and stair/elevator towers will comply with the City's bird-safe design requirements by implementing requirements A–D and G, requesting waivers for requirements E and F, as permitted by the City bird-safe design requirements, and implementing alternative City measures for requirements E and F. Compliance with requirement C is discussed in Section 6.2.2 below. No additional mitigation measures under CEQA for impacts related to avian collisions are proposed. As stated above, with compliance with City requirements (including the implementation of the proposed alternative City measures), it is our professional opinion that project impacts due to bird collisions with the Town Square retail pavilion, security pavilion, and stair/elevator towers would be less than significant under CEQA.

A subsequent report prepared by a qualified biologist will accompany the final ACPs for the event building, Office Building 04, the Town Square retail pavilion, the security pavilions, and the stair/elevator towers. It is our understanding based on coordination with the design teams that (1) the final ACP designs for these buildings will substantially conform with the conceptual designs reviewed for this report, such that our analysis and conclusions are expected to be valid for the final designs; (2) the proposed bird-safe treatments within the areas where such treatments are expected to be necessary are feasible; and (3) the project will implement alternative City measures as described herein. Nevertheless, because the designs and renderings for the event building, Office Building 04, the Town Square retail pavilion, the security pavilions, and the stair/elevator

towers that were reviewed for this assessment are conceptual, a qualified biologist shall review the final ACPs for these buildings to confirm that the alternative City measures described herein, or other alternative measures reasonably acceptable to the qualified biologist (see footnote 2 above), are incorporated into the final design such that project impacts due to bird collisions are less than significant under CEQA as described herein.

5.5 Atrium

Due to the unique structure of the atrium and the potential for bird collisions with the atrium to occur, additional supporting information from the project's ACP for the atrium was referenced for this analysis (Appendix A). Although the ACP for the atrium is not yet final, it is our understanding based on considerable coordination with the design teams that the designs in the final ACP for the atrium will substantially conform with the designs referenced in this report, such that our analysis and conclusions are expected to be valid for the final design. Incorporation of the beneficial project features identified in this Assessment as depicted on the figures included in Appendix A will be required as a condition of the CDP so that they are part of the project description for CEQA review of the Master Plan.

5.5.1 Building Description

5.5.1.1 Overall Description of the Atrium Structure

The structure located north of the elevated park is proposed to be covered by an approximately 117-foot tall, 129,000 square-foot glass atrium (hereafter referred to as the *atrium*) with four interior levels of office and accessory space and approximately 3.7 acres of interior open space that will include paved pedestrian areas, landscape vegetation, and trees. For the purpose of these sections, landscape vegetation, structures, and features outside the atrium are referred to as *exterior*, and landscape vegetation, structures, and features within the atrium are referred to as *interior*. The interior of the atrium will not be accessible to birds. The northern side of the atrium faces open marsh and scrub habitats and the San Francisco Bay, and the southern side of the atrium faces the remainder of the project site. A roadway, an open space area, and a bicycle park will be constructed along the northern side of the atrium (Figure 3). An approximately 36-foot tall elevated park will be constructed along the southern side of the atrium, and an event building, office building, town square, and hotel will be located immediately south of the elevated park (Figure 3). Vegetation and trees at the elevated park and in the area immediately north of the atrium will be planted as close to the atrium's north and south façades as feasible (this is discussed as a general 'good practice' in Section 5 above).

The lower approximately 12.5 feet[3] of the atrium's south façade will consist of vertical glazing with several building entrances, and the remaining areas of the atrium's north and south facades will be composed of a network of glass panels that create a curved 'dome' shape (Figure 17). At its eastern end along the south façade, the atrium is connected to the event building via a partially glazed passageway; this connection is discussed in Section 5.4 above. A visitor center is located on the ground floor below the elevated park at the western end of

[3] The vertical façade beneath the elevated park consists of 12.5-foot tall contiguous untreated glazing below a solid roof, and a 4.5-foot tall zone of framed glass louvers in between the roof and the elevated park. The total height of the glazed façade beneath the elevated park is 18.5 feet.

the atrium, and connects with the atrium's westernmost interior building. Glass facades surround the visitor center (Figure 18) and are contiguous with the atrium's vertical south façade (Figure 17). The eastern and western ends of the atrium are closed off via large vertical predominantly glazed facades that are approximately 45–50 feet tall (Figure 18).

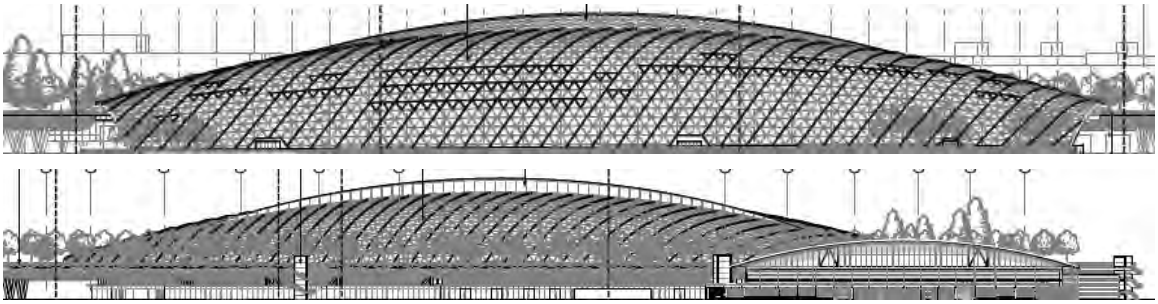

Figure 17. Conceptual drawings of the north façade (top) and south façade (bottom) of the atrium. Trees to be planted along the north façade are not shown.

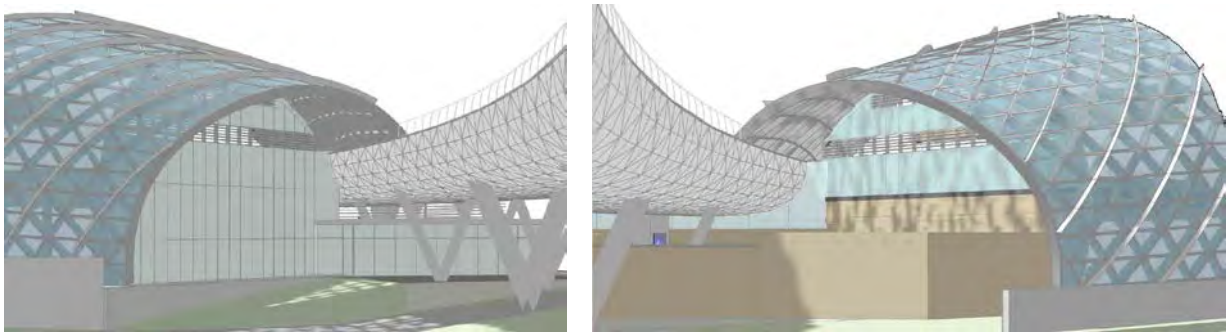

Figure 18. An illustration of the appearance of the vertical glass facades at the western (left) and eastern (right) ends of the atrium.

Figure 19 provides illustrative overhead views of proposed vegetation on each level inside the atrium. The vegetation in the atrium's interior will be similar in character to the exterior vegetation described in Section 3.2 (i.e., predominantly nonnative plant species).

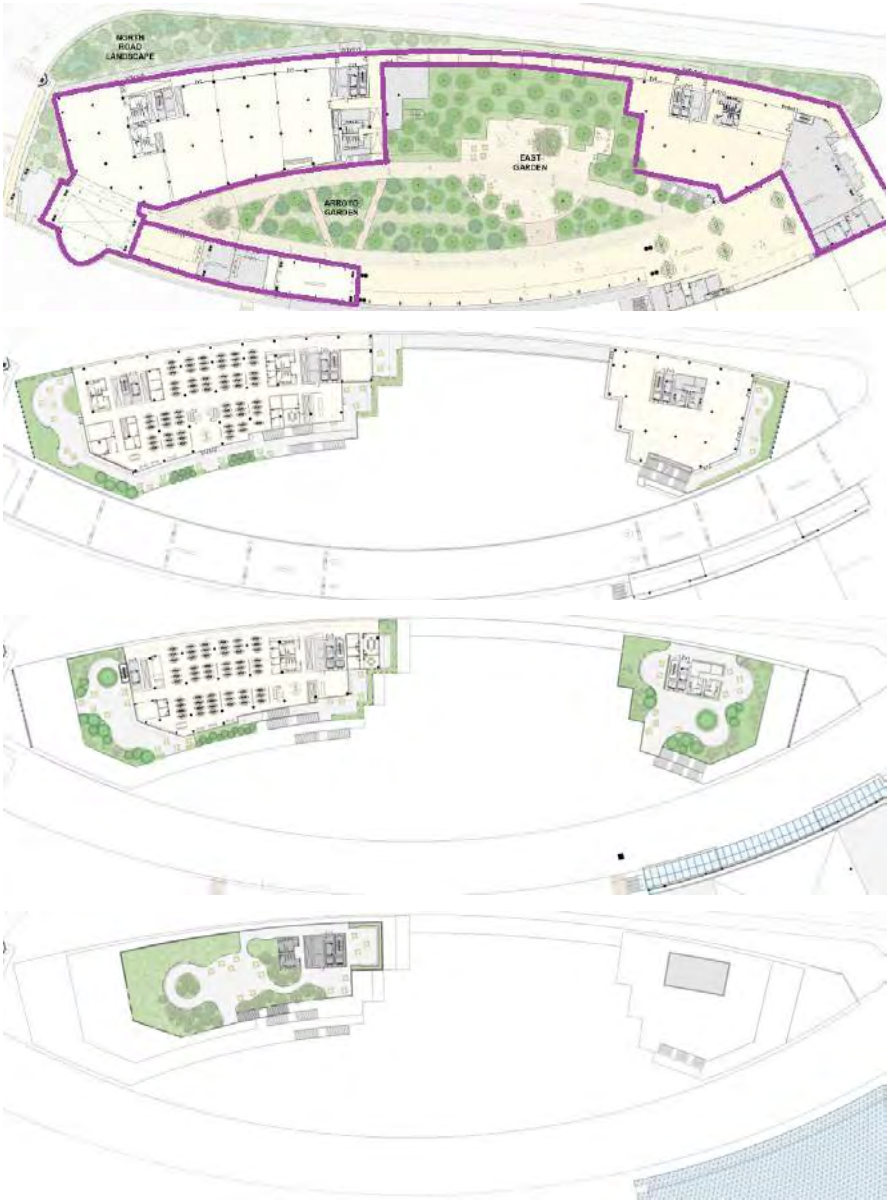

Figure 19. From top to bottom, illustrative views of landscape vegetation on Levels 1, 2, 3, and 4 of the atrium's interior. The interior building footprints and the connection between them are outlined in purple on the top image.

One four-story building and one three-story building will be located within the atrium, and the atrium's north façade composes the north façades of these buildings (Figure 19). These buildings incorporate vegetated terraces approximately 37 feet high on Level 2, 56 feet high on Level 3, and (on the westernmost building only) 75 feet high on Level 4 (Figure 19). A raised walkway connects the two buildings at Level 2 along the atrium's north facade; the area beneath the raised walkway is open with the exception of structural support beams. A security office and café with glass facades will be located beneath the elevated park; however, no interior structures will be located along the atrium's south façade; rather, this area will consist of open space gardens

with landscape vegetation and pedestrian pathways (Figure 19). An approximately 12.5-foot tall vertical glass façade is present along the base of the atrium's south facade beneath the elevated park, with several doorways/entrances that connect with the Town Square and courtyards to the south. As mentioned above and discussed in Section 5.4, a passageway directly connects the atrium with the event building to the south. In addition, a visitor center with glazed facades and a glazed entrance in the shape of a half-circle projects outwards from beneath the elevated park near the atrium's western end, connecting the interior building with the Town Square to the south, and a security office and café with glazed facades are located immediately east of this entrance beneath the elevated park (Figure 19). The only vegetation proposed beneath the elevated park consists of small low interior planters adjacent to the event building near the eastern end of the atrium and small low exterior planters adjacent to a bicycle parking area near the western end of the atrium.

The potential for avian collisions differs between the north, south, east, and west facades of the atrium due to differences in the designs of these facades; the habitats located opposite the façades; and the presence, location, and orientation of interior vegetation, structures, and features within the atrium. Due to these differences, Sections 5.5.1.2, 5.5.1.3, and 5.5.1.4 provide separate assessments of the frequency of bird collisions with the north, south, and east/west facades of the atrium, respectively. The atrium will be sealed such that birds are not expected to be able to enter the atrium's interior; as a result, bird collisions with the interior surfaces of the atrium and/or building facades within the atrium would not occur, and no bird-safe treatment of glazing inside the atrium would be necessary.

5.5.1.2 North Façade

Birds using habitats or descending from migration flights to the north of the site may be attracted to the exterior landscape vegetation along the northern façade of the atrium. There is also some potential for higher-flying birds (e.g., birds descending from migration) to be attracted to the interior vegetation within the atrium; however, the visibility of this interior vegetation to birds located north of the structure will be very limited for the following reasons: (1) interior structures located along the northern facade of the atrium will block the view of the majority of interior vegetation from the north, and (2) the articulated shape of the atrium's facades will substantially reduce the visibility of interior vegetation to birds.

The majority of interior vegetation planted on Level 1 of the atrium's interior will be entirely screened from view to birds located at grade level to the north by the presence of interior buildings along the northern periphery of the atrium (Figure 19). Although some interior trees will be partially visible to birds to the north beneath the walkway that connects the two interior buildings, most will be blocked from view by terraces of the East Garden. No exterior trees will be planted immediately adjacent to the atrium's north façade along the East Garden such that birds would be attracted to this section of the façade where they would be able to see interior vegetation within the East Garden.

Some interior trees planted on roof terraces on Levels 2, 3, and 4 of interior buildings will be visible to birds from the north; however, all trees on these terraces will be set back from the atrium's north façade by approximately 20 feet on Levels 2 and 3, and 25 feet on Level 4 (Figure 19). As a result, birds using exterior

vegetation and trees north of the atrium will have limited line-of-sight views to interior trees at grade level and no line-of-sight views to trees on rooftops. This reduces the potential for bird collisions with the atrium's north façade by blocking direct "flight paths" for birds between interior and exterior vegetation.

The articulated structure of the atrium is a beneficial project feature that will substantially reduce the visibility of all interior vegetation to birds, especially from a distance (Figure 20), reducing the likelihood that birds will collide with glazing on the north façade (in any location) because they are attempting to reach interior vegetation. The architect for the Willow Village atrium has indicated that a good comparison, with respect to birds' ability to view vegetation inside the atrium, is the Jewel Changi Airport in Singapore (Figure 20), which was also designed by the same architecture firm. Although the Jewel Changi Airport building also contains extensive vegetation in its interior, like the Jewel Changi Airport building, the articulated glass surface and fins at the Willow Village atrium (see Figure 21) would combine to mask the visibility of that vegetation, so that birds flying outside the Willow Village atrium will not be able to clearly see, and therefore will not be attracted to, interior vegetation.

Figure 20. The Jewel Changi Airport building, which has a comparable design and exterior appearance to the proposed atrium. Although extensive vegetation is present inside this building, it is largely invisible from outside the atrium.

Fin-like mullions on the exterior surface of the atrium's façade are a beneficial project feature that will help break up the smooth surface and increase the visibility of the façade to birds (Figure 21). As a result, birds located north of the atrium that are attracted to the project site are more likely to view the atrium as a solid structure and are less likely to collide with the atrium.

Figure 21. Fin-like mullions on the exterior surface of the conceptual north and south facades of the atrium will break up the smooth surface and increase the visibility of the facades to birds, especially from a distance.

5.5.1.3 South Façade

Birds are expected to be attracted to exterior landscape vegetation along the south side of the atrium, especially at the elevated park located immediately adjacent to the atrium's south façade. Vegetation will also be present in open space courtyards and at the Town Square to the south, and some birds are expected to be attracted to these areas as well. Interior vegetation consisting of small low planters adjacent to the event building will be present below the elevated park; these planters will be screened from the outside by the event building and an adjacent enclosed room, and hence will not be directly visible to birds on the atrium's exterior. Additional exterior vegetation proposed beneath the elevated park consists of small low planters adjacent to a bicycle parking area near the western end of the south façade.

The visibility of vegetation within the glass atrium to birds using vegetation at the elevated park will be limited for the following reasons: (1) interior solar shades will block the view of interior vegetation from the south in certain locations, and (2) the articulated shape of the atrium's façades will substantially reduce the visibility of interior vegetation to birds, as indicated in Figure 20. In addition, vegetation located at the elevated park will be planted immediately adjacent to glass, as feasible, so that birds' flight speeds may be reduced as they approach the glazing, further reducing the potential for collisions.

Interior operable, suspended solar shades along a large portion of the south façade are a beneficial project feature that will block views of interior vegetation to birds located south of the atrium (Figure 22). As a result, birds using exterior vegetation and trees or flying in certain areas south of the atrium (i.e., areas from which the solar shades block views of vegetation in the atrium's interior) will not have line-of-sight views to interior vegetation where these shades are present. This reduces the potential for bird collisions with portions of the atrium's south façade by preventing that interior vegetation from being a strong attractant to birds. However, birds located elsewhere along the south façade (i.e., areas where the solar shades do not block views of vegetation in the atrium's interior) would have line-of-sight views to interior vegetation. As discussed above for the north façade, the articulated structure of the atrium will substantially reduce the visibility of interior vegetation to birds on the atrium's south facade, especially from a distance (Figure 20), reducing the likelihood

that birds will collide with glazing on the south façade because they are attempting to reach interior vegetation. In addition, fin-like mullions on the exterior surface of the façade will help break up the smooth surface and increase the visibility of the façade to birds (Figure 21).

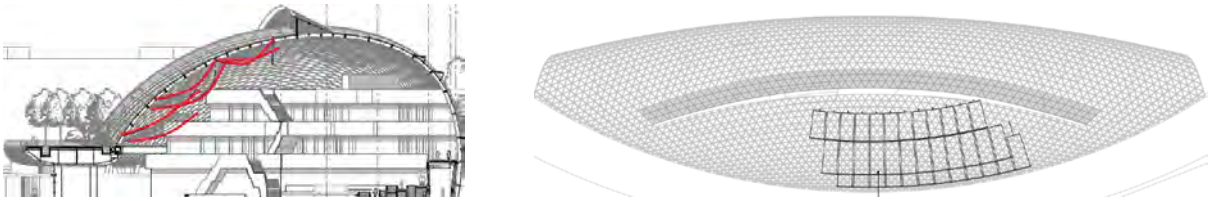

Figure 22. Interior sail shades, shown in red on the left cross-section image, are located along portions of the south façade of the atrium and will block views of interior vegetation to birds located at the elevated park or flying overhead. The approximate extent of the sail shades is shown in dark gray on the right (overhead) image.

To the extent feasible, exterior vegetation at the elevated park will be planted such that high-branching clear-stemmed trees are set back from the glass façade, and dense trees, shrubs, and other plants would be located immediately adjacent to glass facades (Figure 23). As discussed above, we expect this planting strategy to reduce the frequency of collisions with glazing that is immediately adjacent to the vegetation by obscuring reflections of the vegetation in glazing, and to reduce fatal collisions by reducing birds' flight speed if they should fly into the glass. However, even with this orientation of plantings, (1) birds may still be killed or injured even when they fly into windows at relatively low speeds; (2) the vegetation only reduces the collision hazard where it is dense very close to the façade, and not in adjacent areas; and (3) vegetation is not uniformly shaped, and grows or is trimmed back over time, and so does not provide uniform or consistent protection for entire facades over time. As a result, while this strategy represents a good practice for bird-safe design, collisions with the facades adjacent to the elevated park are still expected to occur.

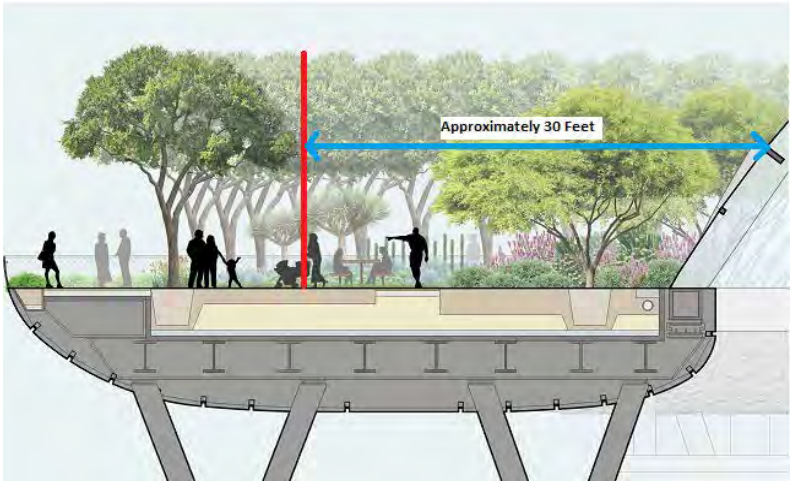

Figure 23. To the extent feasible, vegetation at the elevated park south of the site will be planted such that trees are set back from the glass façade, and dense shrubs and plants are located immediately adjacent to glass facades.

We expect potential bird collisions with the approximately 12.5-foot tall vertical glass façade beneath the elevated park to be reduced due to the following:

- The elevated park is approximately 50–65 feet wide, and trees on Level 1 within the atrium will be set back approximately 50 feet from the vertical glass façade. The resulting more than 50-foot distance of separation is expected to reduce the visibility of trees in the atrium to birds in the Town Square and courtyard.
- Birds would need to traverse more than 50 feet of minimally vegetated areas to attempt to travel in between trees in the Town Square/courtyard and the atrium's interior. Although some birds are expected to attempt to travel along this flight path, in our professional opinion the majority of birds will choose to travel to the immediately adjacent trees at the elevated park due to the closer proximity of these resources.
- A recent study (Riding et al. 2020) found that glass facades located at porticos (i.e., areas where an overhang creates a covered paved walkway, such as beneath the elevated park) have relatively low collision rates compared to other façade types. Thus, the overhang created by the elevated park, in combination with the lack of vegetation beneath the park, is expected to reduce the potential for collision risk.

Nevertheless, due to the presence of vegetation on either side of the atrium's south facade, birds are expected to collide with glazing on this façade when attempting to reach vegetation inside the atrium. Based on the project plans, this is especially true where vegetation on the Level 2 and 3 terraces are located adjacent to the atrium's south façade, because both of these areas are elevated at similar heights (Figure 19).

5.5.1.4 East and West Facades

Birds are expected to be attracted to exterior landscape vegetation along the east and west sides of the atrium. Within the atrium, Level 1 immediately adjacent to the west façade consists of the interior of a building, Level 2 consists of a vegetated roof terrace set back 30 feet from the facade, and Levels 3 and 4 consist of open air with vegetated roof terraces set back farther from the façade (Figure 19). Within the atrium immediately adjacent to the east façade, Level 1 consists of the interior of a building, Level 2 consists of a vegetated roof terrace set back 30 feet from the facade, Level 3 consists of open air with a vegetated roof terrace set back farther from the façade, and Level 4 consists of open air with an unvegetated roof terrace (Figure 19). Vegetation on the Level 2 terraces will be directly visible to birds using landscape vegetation in exterior areas east and west of the atrium. Vegetation on the Level 3 terraces will have limited visibility to birds east and west of the building due to the height of these terraces and because they are set back from the facades (Figure 19). Vegetation on the Level 4 terrace on the westernmost building is not expected to be visible to birds through the atrium's west façade (Figure 19).

Due to the presence of vegetation on either side of the atrium's east and west facades, birds are expected to collide with glazing on these facades when attempting to reach vegetation inside the atrium, especially at the Level 2 and 3 terraces.

5.5.2 Compliance with City Bird-Safe Design Requirements

To address collision risk with the atrium in part, the project will comply with City bird-safe design requirements, with appropriate waivers, as permitted by the City bird-safe design requirements.

5.5.2.1 Requirements for which No Waiver is Requested

As currently proposed, the atrium anticipates complying with City bird-safe design requirements A–D and G without requesting waivers; requirements A–D are listed below. Where the project's bird-safe design strategy is more specific than the City's requirements, sub-bullets specify how the project will comply with those requirements.

A. No more than 10% of facade surface area shall have non-bird-friendly glazing.
    - Specifically, all portions of the atrium shall be treated with a bird-safe glazing treatment with the exception of the vertical façade on the south side of the atrium below the elevated park. The area of untreated glazing shall be no more than 10% of the total surface area of the atrium.

B. Bird-friendly glazing includes, but is not limited to, opaque glass, covering the outside surface of clear glass with patterns, paned glass with fenestration, frit or etching patterns, and external screens over nonreflective glass. Highly reflective glass is not permitted.
    - Specifically, to reduce reflections of clouds and vegetation in glass and help ensure that bird-safe treatments on the lower surfaces of glass are visible below any reflections, all glazing on the atrium will have a visible reflectance of 15% or lower.

D. Placement of buildings shall avoid the potential funneling of flight paths towards a building facade.

Discussion of project compliance with City requirement C, related to occupancy sensors, is provided in Section 6.2.2 below.

5.5.2.2 Requirements for which Waivers will be Requested

Waivers Requested. As currently proposed, the project anticipates complying with the City's bird-safe design requirements E and F by requesting waivers for the atrium, as permitted by the City bird-safe design requirements. These waivers are requested in order for the project to achieve design excellence. City requirements E and F are as follows:

E. Glass skyways or walkways, free-standing (see-through) glass walls and handrails, and transparent building corners shall not be allowed.

F. Transparent glass shall not be allowed at the rooflines of buildings, including in conjunction with roof decks, patios and roofs with landscape vegetation.

Alternative City Measures Proposed. As an alternative to these requirements, to ensure that the project meets the City's intent of designing bird-safe buildings and addresses high-risk collision hazards, the project proposes to implement the following alternative City measures for the atrium:

- All glazed features of the atrium with clear sight lines between vegetation on either side of the feature (e.g., at glazed corners) shall be 100% treated with a bird-safe glazing treatment. Transparent building corners shall be treated in all locations where it is possible to see through to the other side of the visitor center.
- If free-standing glass railings are included in the project design in exterior areas adjacent to the atrium (e.g., at the elevated park), all glazing on free-standing glass railings shall be 100% treated with a bird-safe glazing treatment.
    - Specifically, all glazing on free-standing glass railings in exterior areas adjacent to the atrium shall have a Threat Factor (see footnote 1 above) less than or equal to 15. This Threat Factor is relatively low (and the effectiveness of the bird-safe treatment correspondingly high) due to the relatively high risk of bird collisions with free-standing glass railings.
- All transparent glass at the rooflines of the atrium adjacent to roof decks (i.e., the elevated park) will be 100% treated with a bird-safe glazing treatment. The only untreated glazing on the atrium will be located on the vertical façade beneath the elevated park, which does not create a collision hazard due to landscape vegetation on roofs.

In lieu of complying with City requirements E and F per se, this proposed approach would reduce bird collisions at the locations where bird collisions are most likely to occur and, in our professional opinion, adequately meet the objective of the City's requirements (i.e., to minimize bird collisions with the buildings). Therefore, the requested waivers to the City's bird-safe design requirements are appropriate. Alternatively, if the City does not grant a waiver for requirements E and F, the project will comply with these City requirements.

5.5.3 Additional Mitigation Measures Proposed Under CEQA

Due to the unique design of the atrium, compliance with City bird-safe design requirements (either via compliance with the listed requirements or by requesting waivers, as permitted by the City bird-safe design requirements, and proposing alternative City measures, where appropriate) may not reduce collision impacts with this structure sufficiently to avoid significant impacts under CEQA, and therefore these impacts may be potentially significant even with incorporation of the alternative City measures provided in Section 5.5.2 above. Therefore, additional CEQA mitigation measures are necessary to reduce impacts. With the implementation of the following mitigation measures, which go above and beyond the City's bird-safe design requirements as well as the alternative City measures, impacts due to bird collisions with the atrium will be reduced to less-than-significant levels under CEQA, in our professional opinion.

- **Mitigation Measure 1.** The project shall treat 100% of glazing on the 'dome-shaped' portions of the atrium's façades (i.e., all areas of the north façade, and all areas of the south façade above the elevated park)

with a bird-safe glazing treatment to reduce the frequency of collisions. This glazing shall have a Threat Factor (see footnote 1 above) of 15 or lower.

Because a Threat Factor is a nonlinear index, its value is not equivalent to the percent reduction in collisions that a glazing product provides. However, products with lower threat factors result in fewer bird collisions. Because the City's bird-safe design requirements (and requirements of other municipalities in the Bay Area) do not specify the effectiveness of required bird-safe glazing, Mitigation Measure 1 goes above and beyond what would ordinarily be acceptable to the City, as well as what is considered the industry standard for the Bay Area.

- **Mitigation Measure 2.** The project shall treat 100% of glazing on the atrium's east and west facades with a bird-safe glazing treatment to reduce the frequency of collisions. This glazing shall have a Threat Factor[1] of 15 or lower.

- **Mitigation Measure 3.** Interior trees and woody shrubs will be set back from the atrium's east, west, and non-sloped (i.e., vertical/perpendicular to the ground) portions of the south facades by at least 50 feet to reduce the potential for collisions with these facades due to the visibility of interior trees. This 50-foot distance is greater than the distance used in the project design for the north and sloped portions of the south facades (e.g., 20-25 feet for the north façade) due to the vertical nature of the east, west, and non-sloped portions of the south facades, as opposed to the articulated nature of the north and sloped portions of the south facades (which is expected to reduce the visibility of internal vegetation to some extent), as well as the direct line-of-sight views between interior and exterior vegetation through the east, west, and non-sloped portions of the south facades compared to the north façade (where internal vegetation is elevated above exterior vegetation). Interior trees and shrubs that are not visible through the east, west, and south facades may be planted closer than 50 feet to glass facades.

- **Mitigation Measure 4.** Because the glass production process can result in substantial variations in the effectiveness of bird-safe glazing, a qualified biologist will review physical samples of all glazing to be used on the atrium to confirm that the bird-safe frit will be visible to birds in various lighting conditions, and is expected to be effective.

- **Mitigation Measure 5.** The project shall monitor bird collisions around the atrium for a minimum of two years following completion of construction of the atrium to identify if there are any collision "hotspots" (i.e., areas where collisions occur repeatedly).

  A monitoring plan for the atrium shall be developed by a qualified biologist that includes focused surveys for bird collisions in late April–May (spring migration), September–October (fall migration), and mid-November–mid-January (winter) to maximize the possibility that the surveys will detect any bird collisions that might occur. Surveys of the atrium will be conducted daily for three weeks during each of these periods (i.e., 21 consecutive days during each season, for a total of 63 surveys per year). In addition, for the two-year monitoring period, surveys of the atrium will be conducted the day following all nighttime events held in the atrium during which temporary lighting exceeds typical levels (i.e., levels specified in the International Dark-Sky Association's defined lighting zone LZ-2 from dusk until 10:00 p.m., or 30% below these levels

from 10:00 p.m. to midnight, as described in Section 6.5 below). The applicant can assign responsibility for tracking events and notifying the biologist when a survey is needed to a designated individual who is involved in the planning and scheduling of atrium events. The timing of the 63 seasonal surveys (e.g., morning or afternoon) will vary on different days to the extent feasible; surveys conducted specifically to follow nighttime events will be conducted in the early morning.

At a frequency of no less than every six months, a qualified biologist will review the bird collision data for the atrium in consultation with the City to determine whether any potential hotspots are present (i.e., if collisions have occurred repeatedly in the same locations). A "potential hotspot" is defined as a cluster of three or more collisions that occur within one of the three-week monitoring periods described above at a given "location" on the atrium. The "location" shall be identified by the qualified biologist as makes sense for the observed collision pattern and may consist of a single pane of glass, an area of glass adjacent to a landscape tree or light fixture, the 8,990 square-foot vertical façade beneath the elevated park, the façade adjacent to vegetation on the elevated park, the atrium's east façade, the atrium's west façade, or another defined area where the collision pattern is observed. "Location" shall be defined based on observations of (1) collision patterns and (2) architectural, lighting, and/or landscape features contributing to the collisions, and not arbitrarily (e.g., by assigning random grids).

If any potential hotspots are found, the qualified biologist will provide an opinion regarding whether the potential hotspot will impact bird populations over the long-term to the point that additional measures (e.g., adjustments to lighting or the placement of vegetation) are needed to reduce the frequency of bird strikes at the hotspot location in order to reduce impacts to a less-than-significant level under CEQA (i.e., whether it constitutes an actual "hotspot"). This will be determined based on the number and species of birds that collide with the atrium over the monitoring period. In addition, a "hotspot" is automatically defined if a cluster of five or more collisions are identified at a given "location" on the atrium within one of the three-week monitoring periods described above. If a hotpot is identified, additional measures will be implemented at the potential hotspot location at the atrium; these may include one or more of the following options in the area of the hotspot depending on the cause of the collisions:

- The addition of a visible bird-safe frit pattern, netting, exterior screens, art, printed sheets, interior shades, grilles, shutters, exterior shades, or other features to untreated glazing (i.e., on the façade below the elevated park) to help birds recognize the façade as a solid structure.
- Installing interior or exterior blinds in the buildings within the atrium to prevent light from spilling outward though glazed facades at night.
- Reducing lighting by dimming fixtures, redirecting fixtures, turning lights off, and/or adjusting programmed timing of dimming/shutoff.
- Replacing certain light fixtures with new fixtures to provide increased shielding or redirect lighting.
- Adjusting or reducing lighting during events.
- Adjusting the timing of events to reduce the frequency of events during certain times of year (e.g., spring and/or fall migration) when relatively high numbers of collisions occur.

- Adjusting landscape vegetation by removing, trimming, or relocating trees or other plants (e.g., moving them farther from glass), or blocking birds' views of vegetation through glazing (e.g., using a screen or other opaque feature).

If modifications to the atrium are implemented to reduce collisions at a hotspot, one year of subsequent focused monitoring of the hotspot location will be performed to confirm that the modifications effectively reduce bird collisions to a less-than-significant level under CEQA. This monitoring may or may not extend beyond the two-year monitoring period described above, depending on the timing of the hotspot detection.

It is our understanding that the project proposes to use a frit consisting of ¼-inch white dots spaced in a 2x2-inch grid (i.e., similar in specifications to the Solyx SX-BSFD Frost Dot Bird Safety Film product rated with a Threat Factor of 15 by the American Bird Conservancy) for all treated façade areas on the atrium. We further understand that the atrium's glazing will have a dark gray thermal frit treatment (e.g., dark dots incorporated into the glass) in addition to the lighter-toned frit pattern that composes the bird-safe treatment. The extent of thermal frit will vary from the lower portions of the atrium to the upper portions of the atrium, with the upper portions incorporating more extensive (i.e., greater percent cover) thermal frit. Based on our review of preliminary physical glass samples supporting potential combinations of thermal frit and bird-safe frit, provided by the project team, it is our opinion that the combination of the bird-safe frit treatment with the thermal frit would produce very low Threat Factors (Figure 24). We are unaware of any glazing products that incorporate thermal frit patterns and have been assigned a Threat Factor by the American Bird Conservancy; however, the U.S. Green Building Council allows Threat Factors to be determined via any of the following options: (1) using a glass product that has been tested and rated by the American Bird Conservancy; (2) using a glass product with the same characteristics as a product that has been tested and rated by the American Bird Conservancy; or (3) using a glass product that has not been tested and rated, and asking the American Bird Conservancy to provide their opinion regarding an appropriate Threat Factor. We reached out to Dr. Christine Sheppard at the American Bird Conservancy to request her concurrence that the presence of the solar frit would not reduce the effectiveness of the bird-safe frit (and may even increase the effectiveness of the bird-safe frit). Dr. Sheppard responded in an email dated April 9, 2021 agreeing that the solar frit should make the lighter bird-safe frit dots more visible, and the proposed bird-safe treatment would have a Threat Factor of 15 as long as the bird-safe frit dots are ¼-inch in diameter (Sheppard 2021). Thus, the proposed bird-safe glazing treatment is appropriate for the atrium facades and goes above and beyond the City's minimum requirements, as well as the local standard for the San Francisco Bay Area.

Figure 24. Two preliminary glass samples that combine the dark gray thermal frit and lighter-toned bird-safe frit were reviewed by H. T. Harvey & Associates. The frit on these samples had very good visibility in different lighting conditions due to the contrast between the light and dark frit, and in our professional opinion are likely to reduce bird collisions with the atrium.

It is our understanding that only the proposed 12.5-foot tall vertical glazed facades on the south side of the atrium will remain untreated. This untreated area is relatively large (approximately 8,990 square feet, per the August 2021 ACPs); however, it will be less than 10% of the entire façade area in compliance with City bird-safe design requirements. Some collisions with this glazing are expected to occur when birds attempt to fly from trees and vegetation within the Town Square and courtyard located south of the elevated park to trees and vegetation within the atrium. As discussed above, because trees on either side of the untreated vertical glass façade will be separated by a distance of approximately 50 feet, and because the vertical glazed façade is located beneath the elevated park (creating a 'portico'), it is our opinion that the potential for collisions with this glazing would be low.

5.5.4 CEQA Impacts Summary

The atrium will comply with the City's bird-safe design requirements by implementing requirements A–D and G, requesting waivers for requirements E and F, as permitted by the City bird-safe design requirements, and implementing alternative City measures for requirements E and F. Compliance with requirement C is discussed in Section 6.2.2 below. In addition, the project will implement Mitigation Measures 1–5 above to reduce impacts to less-than-significant levels under CEQA. As stated above, with compliance with City requirements (including the implementation of proposed alternative City measures) and Mitigation measures 1–5 above, it is our professional opinion that project impacts due to bird collisions with the atrium would be less than significant under CEQA.

A subsequent report prepared by a qualified biologist will accompany the final ACP for the atrium. It is our understanding based on coordination with the design team that (1) the final ACP design for the atrium will

substantially conform with the designs reviewed for this report, such that our analysis and conclusions are expected to be valid for the final design; (2) the proposed bird-safe treatments within the areas where such treatments are expected to be necessary are feasible; and (3) the project will implement alternative City measures and CEQA mitigation measure as described herein. Nevertheless, because the designs and renderings for the atrium were based on conceptual CDP plans and preliminary ACP designs, a qualified biologist shall review the final ACP for the atrium to confirm that the alternative City measures and CEQA mitigation measures described herein , or other alternative measures reasonably acceptable to the qualified biologist (see footnote 2 above) are incorporated into the final design such that project impacts due to bird collisions are reduced to less-than-significant levels under CEQA as described herein.

Section 6. Assessment of Lighting Impacts on Birds

6.1 Overview of Potential Impacts on Birds from Artificial Lighting

Numerous studies indicate that artificial lighting associated with development can have an impact on both local birds and migrating birds. Below is an overview of typical impacts on birds from artificial lighting, including lighting impacts related to general site lighting conditions and up-lighting.

6.1.1 Impacts Related to General Site Lighting Conditions

Evidence that migrating birds are attracted to artificial light sources is abundant in the literature as early as the late 1800s (Gauthreaux and Belser 2006). Although the mechanism causing migrating birds to be attracted to bright lights is unknown, the attraction is well documented (Longcore and Rich 2004, Gauthreaux and Belser 2006). Migrating birds are frequently drawn from their migratory flight paths into the vicinity of an artificial light source, where they will reduce their flight speeds, increase vocalizations, and/or end up circling the lit area, effectively "captured" by the light (Herbert 1970, Gauthreaux and Belser 2006, Sheppard and Phillips 2015, Van Doren et al. 2017). When birds are drawn to artificial lights during their migration, they may become disoriented and possibly blinded by the intensity of the light (Gauthreaux and Belser 2006). The disorienting and blinding effects of artificial lights directly impact migratory birds by causing collisions with light structures, buildings, communication and power structures, or even the ground (Gauthreaux and Belser 2006). Indirect impacts on migrating birds might include orientation mistakes and increased length of migration due to light-driven detours.

6.1.2 Impacts Related to Up-Lighting

Up-lighting refers to light that projects upwards above the fixture. There are two primary ways in which the luminance of up-lights might impact the movements of birds. First, local birds using habitats on a site may become disoriented during flights among foraging areas and fly toward the lights, colliding with the lights or with nearby structures. Second, nocturnally migrating birds may alter their flight direction or behavior upon seeing lights; the birds may be drawn toward the lights or may become disoriented, potentially striking objects such as buildings, adjacent power lines, or even the lights themselves. These two effects are discussed separately below.

Local Birds. Seabirds may be especially vulnerable to artificial lights because many species are nocturnal foragers that have evolved to search out bioluminescent prey (Imber 1975, Reed et al. 1985, Montevecchi 2006), and thus are strongly attracted to bright light sources. When seabirds approach an artificial light, they seem unwilling to leave it and may become "trapped" within the sphere of the light source for hours or even days, often flying themselves to exhaustion or death (Montevecchi 2006). Seabirds using habitats associated with the San Francisco Bay to the north include primarily gulls and terns. Although none of these species are primarily nocturnal foragers, there is some possibility that gulls, which often fly at night, may fly in areas where they

would be disoriented by project up-lights under conditions dark enough that the lights would affect the birds. Shorebirds forage along the San Francisco Bay nocturnally as well as diurnally, and move frequently between foraging locations in response to tide levels and prey availability. Biologists and hunters have long used sudden bright light as a means of blinding and trapping shorebirds (Gerstenberg and Harris 1976, Potts and Sordahl 1979), so evidence that shorebirds are affected by bright light is well established. Though impacts of a consistent bright light are undocumented, it is possible that shorebirds, like other bird species, may be disoriented by a very bright light in their flight path.

Passerine species have been documented responding to increased illumination in their habitats with nocturnal foraging and territorial defense behaviors (Longcore and Rich 2004, Miller 2006, de Molenaar et al. 2006), but absent significant illumination, they typically do not forage at night, leaving them less susceptible to the attraction and disorientation caused by luminance when they are not migrating.

Migrating Birds. Hundreds of bird species migrate nocturnally in order to avoid diurnal predators and minimize energy expenditures. Bird migration over land typically occurs at altitudes of up to 5,000 feet, but is highly variable by species, region, and weather conditions (Kerlinger 1995, Newton 2008). In general, night-migrating birds optimize their altitude based on local conditions, and most songbird and soaring bird migration over land occurs at altitudes below 2,000 feet while waterfowl and shorebirds typically migrate at higher altitudes (Kerlinger 1995, Newton 2008).

It is unknown what light levels adversely affect migrating birds, and at what distances birds respond to lights (Sheppard and Phillips 2015). In general, vertical beams are known to capture higher numbers of birds flying at lower altitudes. High-powered 7,000-watt (equivalent to 105,000-lumen) spotlights that reach altitudes of up to 4 miles (21,120 feet) in the sky have been shown to capture birds migrating at varying altitudes, with most effects occurring below 2,600 feet (where most migration occurs); however, effects were also documented at the upper limits of bird migration at approximately 13,200 feet (Van Doren et al. 2017). A study of bird responses to up-lighting from 250-watt (equivalent to 3,750-lumen) spotlights placed on the roof of a 533-foot tall building and directed upwards at a company logo documented behavioral changes in more than 90% of the birds that were visually observed flying over the building at night (Haupt and Schillemeit 2011). One study of vertical lights projecting up to 3,280 feet found that higher numbers of birds were captured at altitudes below 650 feet, but this effect was influenced by wind direction and the birds' flight speed (Bolshakov et al. 2013). These studies have not analyzed the capacity for vertical lights to attract migrating birds flying beyond their altitudinal range, and the potential for the project up-lights to affect birds flying at various altitudes is unknown. Thus, birds that encounter beams from up-lights are likely to respond to the lights, and may become disoriented or attracted to the lights to the point that they collide with buildings or other nearby structures, but the range of the effect of the lights is unknown.

Observations of bird behavioral responses to up-lights indicate that their behaviors return to normal quickly once up-lights are completely switched off (Van Doren et al. 2017), but no studies are available that demonstrate bird behavioral responses to reduced or dimmed up-lights. In general, up-lights within very dark areas are more

likely to "capture" and disorient migrating birds, whereas up-lights in brightly lit areas (e.g., highly urban areas, such as Menlo Park) are less likely to capture birds (Sheppard 2017). Birds are also known to be more susceptible to capture by artificial light when they are descending from night migration flights in the early mornings compared to when they ascend in the evenings; as a result, switching off up-lights after midnight can minimize adverse effects on migrating birds (Sheppard 2017). However, more powerful up-lights (e.g., 3,000 lumen spotlights) may create issues for migrating birds regardless of the time of night they are used (Sheppard 2017).

6.2 Lighting Design Principles

To address potential impacts from artificial project lighting, the CDP requires the project to implement (i) certain lighting design principles as well as (ii) the occupancy sensor requirement in the City's bird-safe design requirements, as described below. For all Master Plan components, because the project's lighting plan has not yet been developed, a qualified biologist shall review the final lighting design as part of each ACP to ensure that the lighting design principles provided in Sections 6.2.1 and 6.2.2 below are incorporated into the final design.

The International Dark-Sky Association (2021a) recommends using lighting with a color temperature of no more than 3,000 Kelvins to minimize harmful effects on humans and wildlife. However, the effects of different light wavelengths on various species of birds are not consistent (Owens et al. 2020). Some studies have shown that using blue and green lights may be less disorienting to birds compared to red lights (Poot et al. 2008), but it is known that birds can be disoriented by red lights (Sheppard et al. 2015) and blue lights (Zhao et al. 2020). The American Bird Conservancy's Bird-Friendly Building Design guidance states that manipulating light color shows promise in its potential to reduce bird collisions with buildings, but additional study is needed to determine what colors should be used (Sheppard and Phillips 2015). Instead, the American Bird Conservancy recommends reducing exterior building and site lighting, which has been proven to reduce bird mortality (Sheppard and Phillips 2015). The City of San Francisco's Standards for Bird-Safe Buildings recommends that project proponents "consider" reducing red wavelengths where lighting is necessary, but this measure is not required; rather, they require avoidance of uplighting in lighting designs (San Francisco Planning Department 2011). As a result, the principles provided in Sections 6.5.2.1 to 6.4.2.4 below focus on minimizing lighting, rather than restricting lighting temperatures. Reducing, shielding, and directing lights on the project site and avoiding uplighting effectively limits the effects of lights by minimizing skyglow and the spillage of light outwards into adjacent natural areas, and is consistent with local (City of San Francisco) and national (American Bird Conservancy) standards for minimizing bird collisions.

6.2.1 Design Principles

The advancement of luminaires has substantially improved lighting design in recent years, and the project will employ a scientific approach to reduce overall lighting levels as well as Backlight, Up-light, and Glare ("BUG") ratings for individual fixtures to avoid and minimize the lighting impacts on birds discussed above. Accordingly, the CDP requires the following design principles to avoid and minimize potential lighting impacts on birds:

- Fixtures shall comply with lighting zone LZ-2, *Moderate Ambient*, as recommended by the International Dark-Sky Association (2011) for light commercial business districts and high-density or mixed-use residential districts. The allowed total initial luminaire lumens for the Master Plan area is 2.5 lumens per square foot of hardscape, and the BUG rating for individual fixtures shall not exceed B3-U2-G2, as follows:
    - B3: 2,500 lumens high (60–80 degrees), 5,000 lumens mid (30–60 degrees), 2,500 lumens low (0–30 degrees)
    - U2: 50 lumens (90–180 degrees)
    - G2: 225 lumens (forward/back light 80–90 degrees), 5,000 (forward 60–80 degrees), 1,000 (back light 60–80 degrees asymmetrical fixtures), 5,000 (back light 60–80 degrees quadrilateral symmetrical fixtures)
- Unshielded fixtures, flood lights, drop and sag lens fixtures, unshielded bollards, widely and poorly aimed lights, and searchlights shall be avoided. All lights shall be well-shielded and aimed appropriately to minimize up-light and glare. The materials of illuminated objects shall be considered to minimize up-lighting effects, and low-glare lighting shall be prioritized (e.g., fixtures shall be aimed no more than 25 degrees from vertical).
- Full cutoff fixtures, shielded fixtures, shielded walkway bollards, shielded and properly aimed lights, and flush-mounted fixtures will be encouraged. Full glare control and concealed sources shall be provided to minimize light trespass.
- Lighting controls such as automatic timers, photo sensors, and motion sensors shall be used. Luminaires not on emergency controls shall have occupancy sensors and an astronomic time clock.
- Low-level and human-scale lighting shall be prioritized while emphasizing areas of activity.
- All exterior luminaires shall be dimmable, and overall brightness at night shall be minimized.
- Exterior lighting along the perimeter of the Master Plan area shall be minimized.
- Soft transitions and low contrast shall be created between lighter and darker exterior spaces.
- Interior office lighting shall be directed and shielded to light task areas and minimize spillage outside of buildings.
- All energy efficiency standards shall be met.

With the adoption of these principles, the potential for lighting impacts on birds will be greatly reduced. In our professional opinion, compliance these design principles will reduce impacts due to overall lighting levels on birds to less-than-significant levels under CEQA. However, because the project lighting design has not yet been developed, and due to the sensitivity of the Master Plan area (which faces habitats along the San Francisco Bay) as well as the potential for collisions with certain project components (e.g., the atrium and stair/elevator towers), additional mitigation measures are needed in the absence of a finalized design to ensure that impacts of project lighting on birds are reduced to less-than-significant levels (see Section 6.3.1.2 below).

6.2.2 City Occupancy Sensor Requirements

As currently proposed, the project anticipates complying with City bird-safe design requirement C by implementing the requirement as stated or by requesting waivers where compliance is not feasible, as permitted by the City bird-safe design requirements. City requirement C is as follows:

C. Occupancy sensors or other switch control devices with an astronomic time clock shall be installed on nonemergency lights and programmed to shut off during non-work hours and between 10:00 p.m. and sunrise.

For the purpose of this report, we assume that the City intends this requirement to apply to interior lights only. No additional lighting measures are required as part of the City's bird-safe design requirements.

The two buildings inside the atrium, visitor center, Town Square retail pavilion, event building, Office Buildings 01–06, stair/elevator towers, security pavilions, North Garage, South Garage, hotel, and mixed-use buildings shall comply with City occupancy sensor requirements where feasible. However, occupancy sensors may not be feasible in some areas (e.g., because the space is occupied 24 hours per day). In addition, events at the atrium may extend later than 10:00 p.m. The applicant shall request waivers for areas where occupancy sensors are not feasible, as well as for events that extend later than 10:00 p.m., as permitted by the City bird-safe design requirements.

Alternative City Measures Proposed. As an alternative to this requirement, to ensure that the project meets the City's intent of minimizing the spill of lighting outwards from buildings at night and addresses high-risk collision hazards, the project proposes to implement the following alternative City measures to minimize lighting:

- When occupancy sensors are not feasible, the visitor center, Town Square retail pavilion, Office Building 04, event building, and North Garage shall program interior or exterior blinds to close on exterior windows during non-work hours and between 11:00 p.m. and sunrise in order to block lighting from spilling outward from the buildings.
- During events at the atrium, occupancy sensors shall be programmed so that interior lights shut off no later than midnight.
- For the remaining buildings on the project site (i.e., the two buildings within the atrium, hotel, residential/mixed-use buildings; Office Buildings 01, 02, 03, 05, and 06; stair/elevator towers; security pavilions, and the South Garage), if occupancy sensors or other switch control devices are not feasible, and/or interior lights cannot be programmed to shut off during non-work hours and between 10:00 p.m. and sunrise (e.g., because the space is occupied 24 hours per day or is residential), no alternative City measures are proposed.

In lieu of complying with City requirement C per se, this proposed approach would reduce bird collisions at the locations where bird collisions are most likely to occur and, in our professional opinion, adequately meet

the objective of the City's requirements (i.e., to minimize bird collisions with the buildings). Therefore, the requested waivers to the City's bird-safe design requirements are appropriate. Alternatively, if the City does not grant a waiver for requirement C, the project will comply with this requirement.

6.3 Analysis of Potential Impacts on Birds due to Lighting

No detailed information regarding the proposed lighting design for the project was available for review as part of this assessment. Nevertheless, construction of the project will create new sources of lighting on the project site. Lighting would emanate from light fixtures illuminating buildings, building architectural lighting, pedestrian lighting, and artistic lighting. Depending on the location, direction, and intensity of exterior lighting, this lighting can potentially spill into adjacent natural areas, thereby resulting in an increase in lighting compared to existing conditions. Areas to the south, east, and west of the project site are entirely developed as urban (i.e., within a city or town) habitats that do not support diverse or sensitive bird communities that might be substantially affected by illuminance from the project. Birds inhabiting more natural habitat areas along the San Francisco Bay to the north and/or the future vegetated open space areas on the project site may be affected by an increase in lighting. However, the number of shorebirds foraging near or flying over the project site is expected to be relatively low, as shorebirds do not congregate in large numbers at or near the project site.

Thus, lighting from the project has some potential to attract and/or disorient birds, especially during inclement weather when nocturnally migrating birds descend to lower altitudes. As a result, some birds moving along the San Francisco Bay at night may be (1) attracted to the site, where they are more likely to collide with buildings; and/or (2) disoriented by night lighting, potentially causing them to collide with the buildings. Certain migrant birds that use structures for roosting and foraging (such as swifts and swallows) would be vulnerable to collisions if they perceive illuminated building interiors as potential roosting habitat and attempt to enter the buildings through glass walls. Similarly, migrant and resident birds would be vulnerable to collisions if they perceive illuminated vegetation within buildings as potential habitat and attempt to enter a building through glass walls.

Potential impacts on birds due to lighting within the various Master Plan components, as well as applicable CEQA mitigation measures, are discussed Sections 6.3.1 to 6.3.4 below. For purposes of this analysis, Master Plan components are grouped together in these sections based on lighting impacts within these areas as well as the lighting design principles necessary to reduce impacts under CEQA, as follows:

- Master Plan components within the northern portion of the project site (i.e., areas north of Main Street and Office Buildings 03 and 05 surrounding the hotel, Town Square retail pavilion, Office Building 04, event building, and North Garage, but not including buildings within the atrium) are discussed together because lighting within these areas has a greater potential to (1) spill northwards into sensitive habitats along the San Francisco Bay, and (2) attract and/or disorient migrating birds during the spring and fall compared to areas farther south on the project site.

- The stair/elevator towers are discussed separately due to the potential for lighting of these towers to attract birds (especially migrants) towards these structures where they would able to see roosting opportunities behind glazed façades, and potentially collide with the glass.
- Due its unique structure and location along the northern boundary of the project site, the atrium and buildings within the atrium are discussed separately.
- Master Plan components within the southern portion of the project site (i.e., Office Buildings 01, 02, 03, 05, and 06 and the residential/mixed-use buildings) are discussed together because they have a lower potential to affect migrating birds due to the greater distance between these areas and the San Francisco Bay, the extensive opaque facades on these buildings, and the less extensive vegetation present compared to the northern portion of the site.

6.3.1 Potential Impacts due to Lighting within the Northern Portion of the Project Site

6.3.1.1 Description of Potential Impacts

As discussed above, birds inhabiting more natural habitat areas along the San Francisco Bay to the north and/or the future vegetated open space areas on the project site itself may be affected by an increase in lighting on the site. Because buildings within the northern portion of the site are located in closer proximity to natural habitats along the San Francisco Bay as well as proposed extensive vegetation on the project site itself (e.g., at the elevated park), lighting associated with the hotel, Town Square retail pavilion, Office Building 04, event building, and North Garage has a greater potential to (1) spill northwards into sensitive habitats along the San Francisco Bay, and (2) attract and/or disorient migrating birds during the spring and fall, compared to buildings located farther south on the project site. Due to the potential for birds to collide with glazing on these buildings, CEQA mitigation measures to minimize lighting at these locations are provided in Section 6.3.1.2 below to ensure that these impacts are minimized.

6.3.1.2 Additional Mitigation Measures Proposed Under CEQA

Due to the potential for lighting within the northern portion of the project site to affect birds, the City's requirement to include occupancy sensors in the project design (or the alternative City measures provided in Section 6.2.2 above) in combination with the lighting design principles provided in Section 6.2 may not reduce lighting-related impacts within this area sufficiently to avoid significant impacts under CEQA. While the project's lighting design principles provide a general strategy for lighting design and specify a BUG rating for exterior fixtures, these principles are not specific enough to ensure that the spill of lighting upwards and outwards into adjacent natural areas will be minimized to an appropriate level. With the implementation of Mitigation Measures 6–9 below, which provide greater specificity to ensure that lighting impacts are minimized, impacts on birds due to lighting in the northern portion of the site will be reduced to less-than-significant levels under CEQA, in our professional opinion.

For all exterior lighting in the northern portion of the project site (i.e., areas north of Main Street and Office Buildings 03 and 05 surrounding the hotel, Town Square retail pavilion, Office Building 04, event building, and North Garage):

- **Mitigation Measure 6.** To the maximum extent feasible, up-lighting (i.e., lighting that projects upward above the fixture) shall be avoided in the project design. All lighting shall be fully shielded to block illumination from shining upward above the fixture.

  If up-lighting cannot be avoided in the project design, up-lights shall be shielded and/or directed such that no luminance projects above/beyond objects at which they are directed (e.g., trees and buildings) and such that the light would not shine directly into the eyes of a bird flying above the object. If the objects themselves can be used to shield the lights from the sky beyond, no substantial adverse effects on migrating birds are anticipated.

- **Mitigation Measure 7.** All lighting shall be fully shielded to block illumination from shining outward towards San Francisco Bay habitats to the north. No light trespass shall be permitted more than 80 feet beyond the site's northern property line (i.e., beyond the JPB rail corridor).

- **Mitigation Measure 8.** Exterior lighting shall be minimized (i.e., total outdoor lighting lumens shall be reduced by at least 30% or extinguished, consistent with recommendations from the International Dark-Sky Association [2011]) from 10:00 p.m. until sunrise, except as needed for safety and City code compliance.

- **Mitigation Measure 9.** Temporary lighting that exceeds minimal site lighting requirements may be used for nighttime social events. This lighting shall be switched off no later than midnight. No exterior up-lighting (i.e., lighting that projects upward above the fixture, including spotlights) shall be used during events.

6.3.1.3 CEQA Impacts Summary

The project will implement the lighting design principles in Section 6.2 as well as Mitigation Measures 6–9 above and comply with City requirements (either via compliance with requirement C or the implementation of the proposed alternative City measures) to reduce impacts due to lighting in the northern portion of the project site to less-than-significant levels under CEQA. By incorporating these principles and measures, it is our professional opinion that project impacts due to bird collisions with the buildings in the northern portion of the project site would be less than significant under CEQA.

Subsequent reports prepared by a qualified biologist will accompany each of the final ACPs for the hotel, Town Square retail pavilion, Office Building 04, event building, and North Garage. It is our understanding based on considerable coordination with the design team that (1) the proposed lighting design principles, City measures, and mitigation measures are feasible, and (2) the project will implement the lighting design principles, City requirements or alternative City measures, and mitigation measures as described herein. Nevertheless, because detailed information about project lighting design was not available as part of this assessment, a qualified biologist shall review the final ACPs to confirm that the lighting design principles, City requirements or

alternative City measures, and mitigation measures described herein are incorporated into the final design such that project impacts due to bird collisions are reduced to less-than-significant levels under CEQA as described herein.

6.3.2 Potential Impacts Related to the Stair/Elevator Towers

6.3.2.1 Description of Potential Impacts

Five stair/elevator towers connect the plaza south of the atrium with the elevated park. These towers will be lit at night. As discussed above, certain migrant birds that use structures for roosting and foraging (such as swifts and swallows) would be vulnerable to collisions if they perceive illuminated building interiors as potential roosting habitat and attempt to enter the buildings through glass walls. Lighting of these towers is expected to illuminate their interiors, potentially attracting birds (especially migrants) towards these areas when they are able to see roosting opportunities behind glazed façades. Due to the potential for birds to collide with this glazing, CEQA mitigation measures to minimize lighting at these locations are provided in Section 6.3.2.2 below to ensure that impacts due to lighting at stair/elevator towers are minimized.

6.3.2.2 Additional Mitigation Measures Proposed Under CEQA

Due to the potential for lighting within the stair/elevator towers to result in bird collisions, the City's requirement to include occupancy sensors in the project design (or the alternative City measures provided in Section 6.2.2 above) in combination with the lighting design principles provided in Section 6.2 may not reduce collision impacts with these towers sufficiently to avoid significant impacts under CEQA. While the project's lighting design principles provide a general strategy for lighting design and specify a BUG rating for exterior fixtures, these principles are not specific enough to ensure that the spill of lighting outwards from the glass stair/elevator towers will be minimized to an appropriate level. With the implementation of Mitigation Measure 10 below, impacts due to lighting of the stair/elevator towers will be reduced to less-than-significant levels under CEQA, in our professional opinion.

- **Mitigation Measure 10.** Lights shall be shielded and directed so that lighting does not spill outwards from the elevator/stair towers into adjacent areas.

6.3.2.3 CEQA Impacts Summary

The project will implement the lighting design principles in Section 6.2 as well as Mitigation Measure 10 above and comply with City requirements (either via compliance with requirement C or the implementation of the proposed alternative City measures) to reduce impacts due to lighting within the stair/elevator towers to less-than-significant levels under CEQA. By incorporating these principles, requirements, and measures, it is our professional opinion that project impacts due to bird collisions with the stair/elevator towers would be less than significant under CEQA.

Subsequent reports prepared by a qualified biologist will accompany the final ACPs for the project components that include elevator towers (i.e., the hotel, Town Square, Office Building 04, event building, and atrium). It is

our understanding based on considerable coordination with the design team that (1) the proposed lighting design principles, City requirements or alternative City measures, and mitigation measures are feasible; and (2) the project will implement the lighting design principles, City requirements or alternative City measures, and mitigation measures as described herein. Nevertheless, because detailed information about project lighting design was not available as part of this assessment, a qualified biologist shall review the final ACPs to confirm that the lighting design principles, City requirements or alternative City measures, and mitigation measures described herein are incorporated into the final design such that project impacts due to bird collisions are reduced to less-than-significant levels under CEQA as described herein.

6.3.3 Potential Impacts Related to the Atrium

6.3.3.1 Description of Potential Impacts

In addition to the general site lighting impacts and up-lighting impacts discussed above, lighting within the atrium will illuminate interior vegetation and structures. The architectural features described above that are expected to make it difficult for birds to see interior vegetation during daytime would still mask the appearance of interior vegetation at night to some extent. However, if illumination makes interior vegetation more visible to birds (e.g., in early morning or late evening hours when exterior light levels are low), birds that are active between dusk and dawn may fly into the glazing on the atrium where they can see vegetation and/or structures (e.g., for roosting) on the other side of the glass. As discussed above, collisions by resident birds are expected to occur year-round; however, these birds are generally familiar with their surroundings and can be less likely to collide with buildings compared with migrant birds. In addition, resident birds are primarily active during the day. In contrast, nocturnal migrant landbirds may be attracted to lighting, and are less likely to be aware of risks such as glass compared to resident birds. As a result, relatively higher numbers of collisions by birds, especially migrant birds, could occur if vegetation and/or structures within the atrium are made more conspicuous between dusk and dawn due to interior illumination.

Conceptual views of night lighting levels within the atrium are provided in Figure 25. As discussed in Section 5 above, the visibility of interior vegetation to birds is limited within the atrium due to the presence of interior buildings and solar shades that partially block the view of this vegetation from the north and south, respectively. Nevertheless, lighting is expected to illuminate interior vegetation and structures such that they may be visible to birds outside of the atrium as follows:

- Birds located north of the atrium at any elevation will be able to see illuminated interiors of structures within the atrium. Birds flying at elevations 37 feet or higher will be able to see illuminated interior vegetation and structures on rooftops (Figure 19). The presence of exterior trees and other vegetation immediately adjacent to the north façade is expected to screen illuminated interior vegetation less than or equal to the height of these trees to birds from a distance, with the exception of the area along the East Garden (where no trees will be planted along the atrium's north façade).
- Birds located south of the atrium will be able to see illuminated interior structures and vegetation except where interior solar shades are present in between the birds and interior features (Figure 22). In addition,

the presence of exterior trees and other vegetation immediately adjacent to the south façade along the elevated park is expected to screen illuminated interior vegetation less than or equal to the height of these trees to birds from a distance.

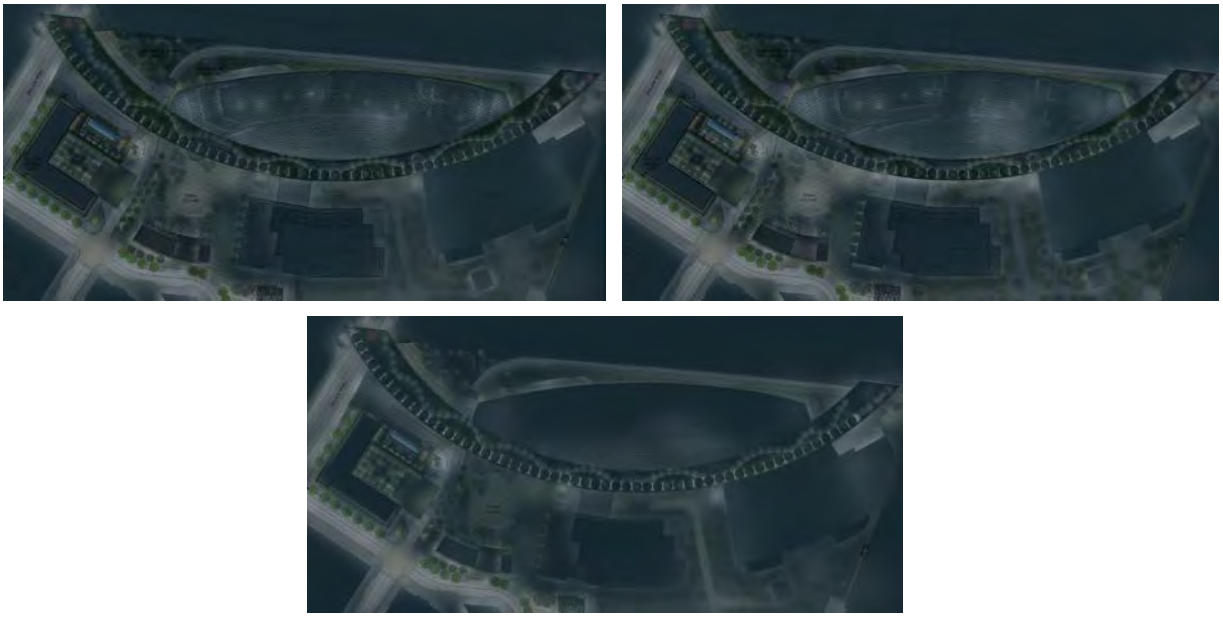

Figure 5. Anticipated conceptual lighting conditions within the atrium and immediately surrounding areas during evening hours (top left), events (top right), and after hours (bottom).

Due to the potential for birds to collide with glazing on the atrium if interior structures and vegetation are illuminated, CEQA mitigation measures to minimize the attraction of birds towards the atrium by minimizing light radiating outward from the atrium being perceived as a bright attractant to nocturnal migrants, as well as the illumination of vegetation and structures within the atrium, are provided in Section 6.3.3.2 below to ensure that impacts due to lighting within the atrium are minimized.

6.3.3.2 Additional Mitigation Measures Proposed Under CEQA

Buildings within the Atrium. Due to the potential for interior lighting within the buildings within the atrium to spill outwards to the north and affect birds, the City's requirement to include occupancy sensors in the project design (or the alternative City measures provided in Section 6.2.2 above), in combination with the lighting design principles provided in Section 6.2 above, may not reduce collisions with the atrium's north façade sufficiently to avoid significant impacts under CEQA. While the project's lighting design principles provide a general strategy for lighting design and specify a BUG rating for exterior fixtures, these principles do not ensure that any security lighting and lighting within occupied spaces will not spill outwards from these buildings towards sensitive habitats to the north. The project shall implement the following mitigation measure for interior lights within the buildings within the atrium to minimize impacts due to lighting:

- **Mitigation Measure 11.** Interior or exterior blinds shall be programmed to close on north-facing windows of interior buildings within the atrium from 10:00 p.m. to sunrise in order to block lighting from spilling outward from these windows.

Atrium. If birds are able to distinguish illuminated interior vegetation, trees, and structures within the atrium at night, collisions with the building are expected to be appreciably higher as birds attempt to fly through glazing to reach these features (e.g., during descent from migration at dawn). The project shall implement Mitigation Measures 6 and 8 above as well as the Mitigation Measure 12 below to ensure that structures, trees, and vegetation in the atrium are not illuminated by up-lighting or accent lighting such that they are more conspicuous to birds from outside compared to ambient conditions (i.e., lighting levels from fixtures within the atrium that do not specifically illuminate these features). Structures, trees, and vegetation are considered 'more conspicuous' to birds when they would be more conspicuous when viewed by the human eye from outside the atrium at any elevation.

- **Mitigation Measure 12.** Accent lighting within the atrium shall not be used to illuminate trees or vegetation. OR

  The applicant shall provide documentation to the satisfaction of a qualified biologist that the illumination of vegetation and/or structures within the atrium by accent lighting and/or up-lighting will not make these features more conspicuous to the human eye from any elevation outside the atrium compared to ambient conditions within the atrium. The biologist shall submit a report to the City following the completion of the lighting design documenting compliance with this requirement.

6.3.3.3 CEQA Impacts Summary

The project will implement the lighting design principles in Section 6.21 as well as Mitigation Measures 6, 8, 11, and 12 above and comply with City requirements (either via compliance with requirement C or the implementation of the proposed alternative City measures) to reduce impacts due to lighting within the atrium and the buildings within the atrium to less-than-significant levels under CEQA. By incorporating these principles and measures, it is our professional opinion that project impacts due to lighting within these areas would be less than significant under CEQA.

Subsequent reports prepared by a qualified biologist will accompany the final ACP for the atrium. It is our understanding based on considerable coordination with the design team that (1) the proposed lighting design principles, City requirements or alternative City measures, and mitigation measures are feasible; and (2) the project will implement the lighting design principles, City requirements or alternative City measures, and mitigation measures as described herein. Nevertheless, because detailed information about project lighting design was not available as part of this assessment, a qualified biologist shall review the final ACP to confirm that the lighting design principles, City requirements or alternative City measures, and mitigation measures described herein are incorporated into the final design such that project impacts are reduced to less-than-significant levels under CEQA as described herein.

6.3.4 Potential Impacts Related to the Southern Portion of the Project Site

6.3.4.1 Description of Potential Impacts

As discussed above, birds inhabiting more natural habitat areas along the San Francisco Bay to the north and/or the future vegetated open space areas on the project site itself may be affected by an increase in lighting on the site. Because buildings within the southern portion of the site are located farther from natural habitats along the San Francisco Bay as well as proposed extensive vegetation on the project site itself (e.g., at the elevated park), the potential for lighting associated with Office Buildings 01, 02, 03, 05, and 06 and the residential/mixed-use buildings is not expected to spill into sensitive habitats north of the site (due to the presence of buildings in between these areas and habitats to the north), and has a lower potential to attract and/or disorient migrating birds during the spring and fall compared to buildings located farther north on the project site. Nevertheless, due to the potential for birds to collide with glazing on these buildings due to lighting within these areas, CEQA mitigation measures to minimize lighting within this area are provided in Section 6.3.4.2 below to ensure that these impacts are less than significant.

6.3.4.2 Additional Mitigation Measures Proposed Under CEQA

Due to the potential for lighting within the southern portion of the project site to affect birds, the City's requirement to include occupancy sensors in the project design (or the alternative City measures provided in Section 6.2.2 above) in combination with the lighting design principles provided in Section 6.2.1 may not reduce collision impacts with Office Buildings 01, 02, 03, 05, and 06 and the residential/mixed-use buildings to less-than-significant levels under CEQA. While the project's lighting design principles provide a general strategy for lighting design and specify a BUG rating for exterior fixtures, these principles are not specific enough to ensure that lighting will be minimized sufficiently to avoid significant impacts under CEQA. With the implementation of Mitigation Measures 6 and 13, which provide greater specificity to ensure that lighting impacts are minimized, impacts due to lighting in the southern portion of the site will be reduced to less-than-significant levels under CEQA, in our professional opinion.

For Office Buildings 01, 02, 03, 05, and 06 and the residential/mixed-use buildings, the project shall implement Mitigation Measure 6 above as well as the following mitigation measure to minimize impacts due to increased lighting:

- **Mitigation Measure 13.** Exterior lighting shall be minimized (i.e., total outdoor lighting lumens shall be reduced by at least 30% or extinguished, consistent with recommendations from the International Dark-Sky Association [2011]) from midnight until sunrise, except as needed for safety and City code compliance.

6.3.4.3 CEQA Impacts Summary

The project will implement the lighting design principles in Section 6.2.1 as well as Mitigation Measures 6 and 13 and comply with City requirements (either via compliance with requirement C or the implementation of the proposed alternative City measures) to reduce impacts due to lighting in the southern portion of the project site to less-than-significant levels under CEQA. By incorporating these principles, requirements, and measures,

it is our professional opinion that project impacts due to lighting within this area would be less than significant under CEQA.

Subsequent reports prepared by a qualified biologist will accompany each of the final ACPs for Office Buildings 01, 02, 03, 05, and 06 and the residential/mixed-use buildings. It is our understanding based on considerable coordination with the design team that (1) the proposed lighting design principles, City requirements or alternative City measures, and mitigation measures are feasible; and (2) the project will implement the lighting design principles, City requirements or alternative City measures, and mitigation measures as described herein. Nevertheless, because detailed information about project lighting design was not available as part of this assessment, a qualified biologist shall review the final ACPs to confirm that the lighting design principles, City requirements or alternative City measures, and mitigation measures described herein are incorporated into the final design such that project impacts due to bird collisions are reduced to less-than-significant levels under CEQA as described herein.

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Appendix A. Additional Supporting Design Detail

The project will generally conform with the designs reviewed for this report, as depicted on the figures in this Appendix A to support H. T. Harvey & Associates analysis of bird collision hazards associated with the project. In addition, the CDP will require that the project comply with the specific beneficial project features identified in this Assessment as depicted on the figures in this Appendix A, in addition to the City bird-safe design requirements, City alternative measures, mitigation measures, and lighting design principles discussed in the Assessment, to avoid or reduce to less-than-significant levels under the California Environmental Quality Act project impacts due to bird collisions.

The images provided herein were used as the basis for the Willow Village Master Plan bird-safe design analysis; however, these images are conceptual and represent design intent rather than the final project design. Because the final design may differ from the images provided in Appendix A, a qualified biologist shall review the final ACPs for each project component to confirm that the final design is consistent with this bird-safe design assessment.

Hotel

Figure 6. Illustration of buildings in the northern portion of the site showing the proposed atrium, elevated park, hotel, Town Square, Office Building 04, and event building.

Figure 4. The conceptual hotel plan includes a central courtyard on Level 1, a pool deck on Level 3, and vegetated balconies on Level 6.

Figure 5. The conceptual east (top left), north (top right), west (bottom left), and south (bottom right) facades of the hotel.

Residential/Mixed-Use Buildings

Figure 6. Illustrative site plan showing the proposed residential/mixed-use buildings and associated open space areas. Facades with highest collision risk are delineated in red.

Figure 7. The conceptual Parcel 2 residential/mixed-use building plan includes open space courtyards on Level 3.

Figure 8. The conceptual east (top), west (middle), south (bottom left), and north (bottom right) facades of the Parcel 2 residential/mixed-use building.

Figure 9. An example mark-up of areas (shown in blue) that would be required to be treated on north (top left), south (top right), east (middle) and west (bottom) facades of the conceptual Parcel 2 residential/mixed-use building to ensure that avian collisions are less-than-significant. Transparent glass corner delineations are estimated; these corners should be treated as far from the corner as it is possible to see through the corner. Free-standing glass railings are not indicated on this figure but are required to be treated in all locations.

Office Buildings

Figure 10. Conceptual site plan showing the locations of proposed office buildings and garages, as well as the proposed extent of landscape vegetation and trees.

Parking Garages

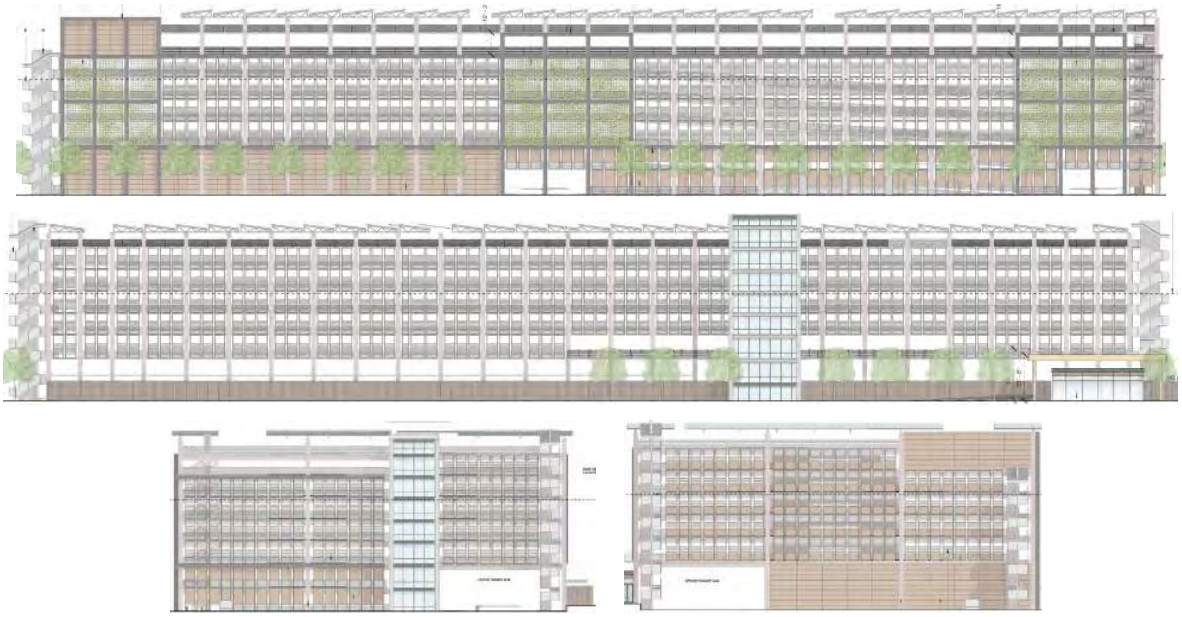


Figure 11. Conceptual North Garage elevations: east (top), west (middle), north (bottom left), and south (bottom right). The building facades are predominantly opaque; glazed areas are located on all levels the elevator towers on the west and north facades.

Event Building

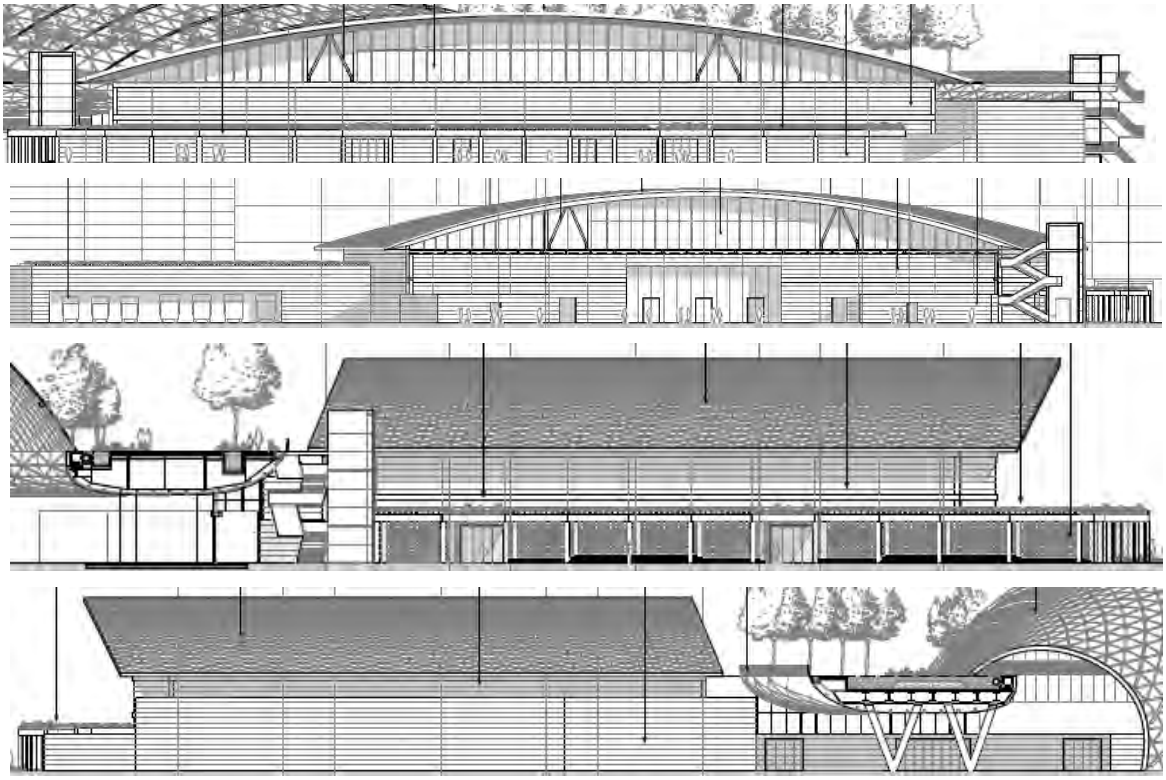


Figure 13. Illustration of the event building façades. Top to bottom: the southeast, northwest, northeast, and southwest facades.

Office Building 04

Figure 14. Conceptual Office Building 04 elevations: west (top left), east (top right), north (middle), and south (bottom).

Town Square

Figure 14. The conceptual Town Square includes a paved plaza with landscape vegetation and trees, seating areas, a glazed elevator to the elevated park, bicycle parking, and a retail pavilion.

Figure 15. The conceptual west (top left), east (top right), south (middle), and north (bottom) facades of the Town Square retail pavilion.

Security Pavilions

Figure 16. The conceptual south (top left), west (top right), north (bottom left), and east (bottom right) facades of buildings SP1 and SP2.

Atrium

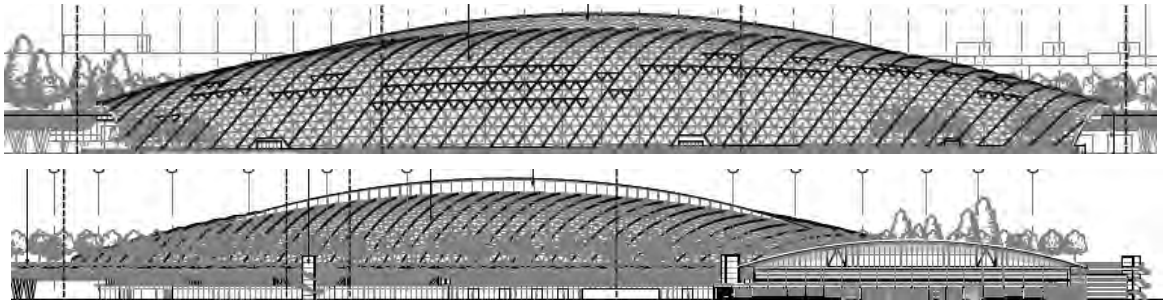


Figure 17. Conceptual drawings of the north façade (top) and south façade (bottom) of the atrium. Trees to be planted along the north façade are not shown.

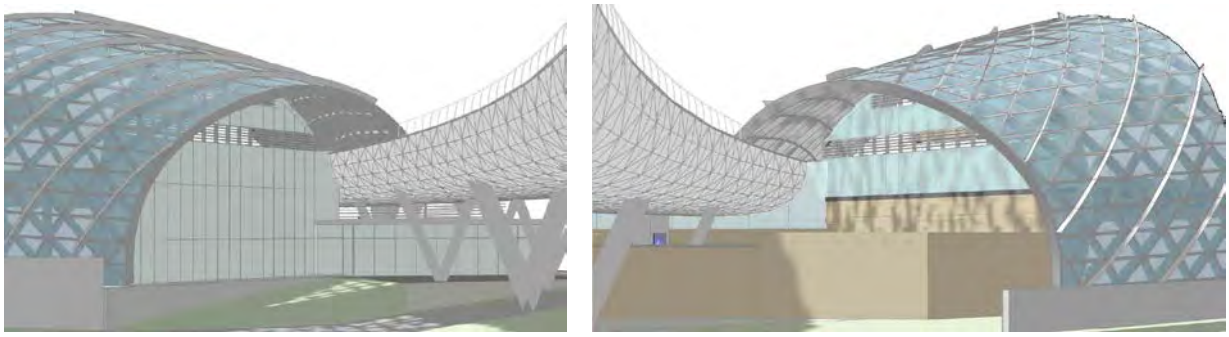


Figure 18. An illustration of the appearance of the vertical glass facades at the western (left) and eastern (right) ends of the atrium.

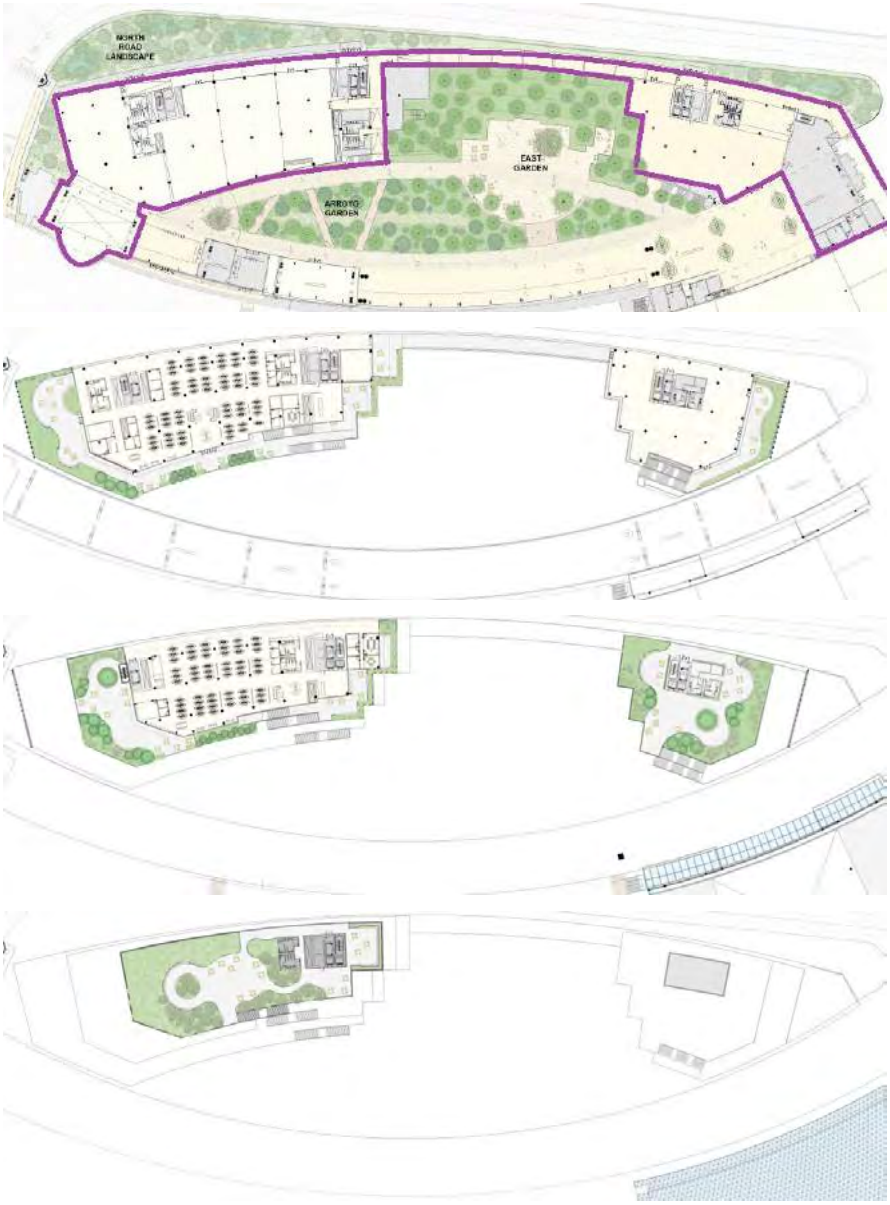


Figure 19. From top to bottom, illustrative views of landscape vegetation on Levels 1, 2, 3, and 4 of the atrium's interior. The interior building footprints and the connection between them are outlined in purple on the top image.

Figure 21. Fin-like mullions on the exterior surface of the conceptual north and south facades of the atrium will break up the smooth surface and increase the visibility of the facades to birds, especially from a distance.

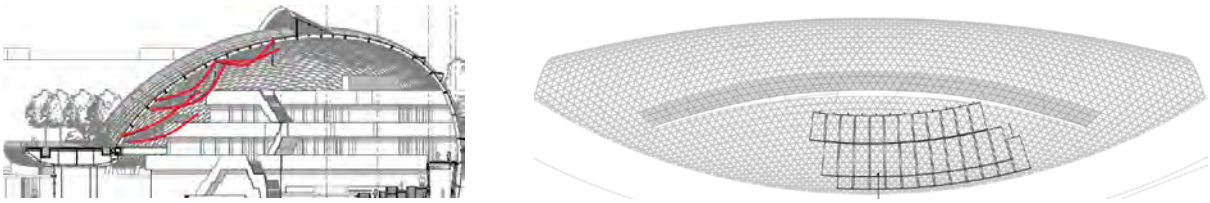


Figure 22. Interior sail shades, shown in red on the left cross-section image, are located along portions of the south façade of the atrium and will block views of interior vegetation to birds located at the elevated park or flying overhead. The approximate extent of the sail shades is shown in dark gray on the right (overhead) image.

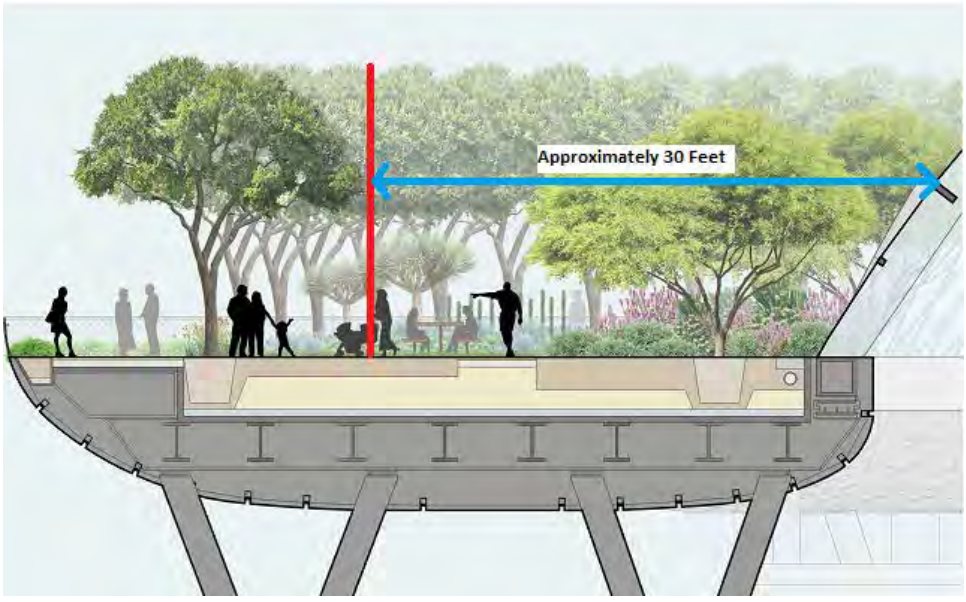


Figure 23. To the extent feasible, vegetation at the elevated park south of the site will be planted such that trees are set back from the glass façade, and dense shrubs and plants are located immediately adjacent to glass facades.

Lighting

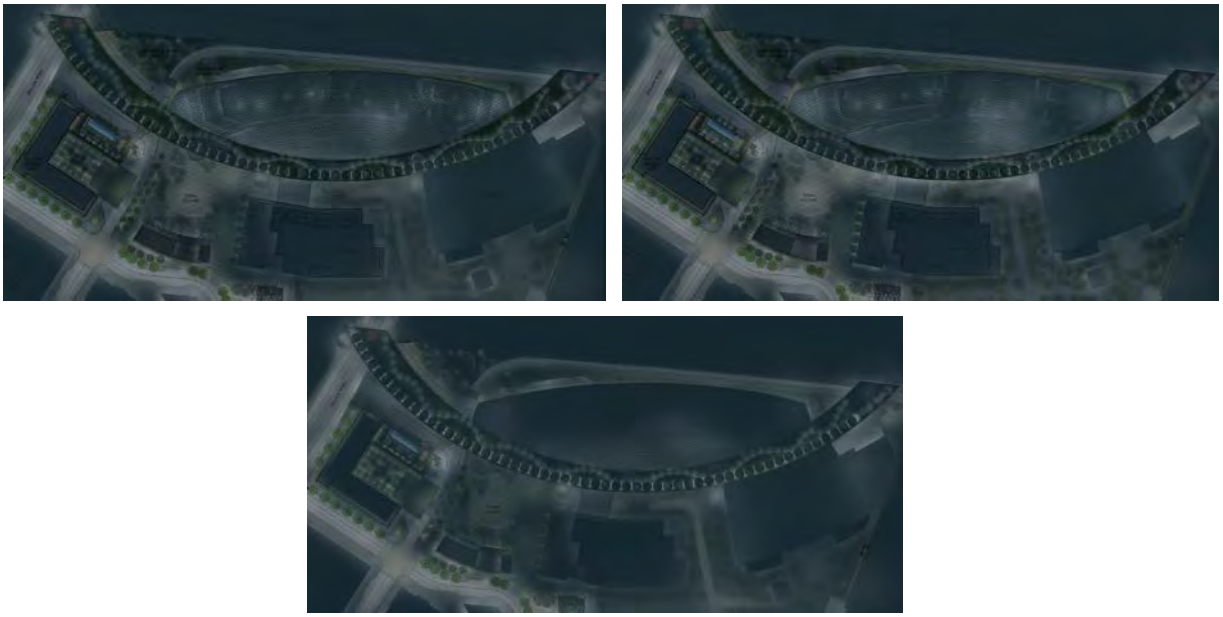
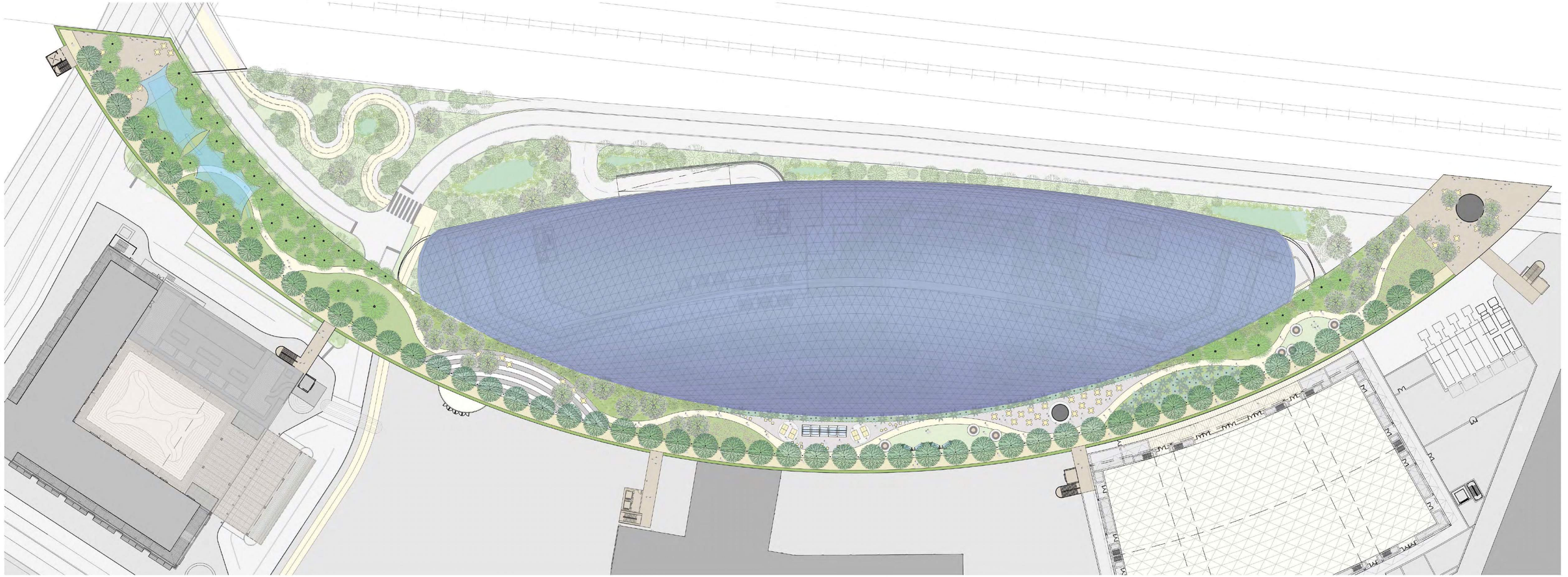


Figure 7. Anticipated conceptual lighting conditions within the atrium and immediately surrounding areas during evening hours (top left), events (top right), and after hours (bottom).

Beneficial Project Features

- The extensive opaque panels on the exterior facades of the hotel (Figure 5)
- Opaque panels, overhangs, mullions, and porticos that are not vegetated or located immediately adjacent to vegetation on the residential/mixed-use buildings (Figure 8)
- The extensive opaque facades on the North Garage and South Garage (Figure 11)
- The extensive opaque facades on the event building (Figure 13)
- Opaque panels, exterior vertical and horizontal solar shades, overhangs, mullions, and porticos that are not vegetated or located immediately adjacent to native vegetation on Office Buildings 01–06 (Figure 14)
- Opaque panels and mullions on the Town Square retail pavilion (Figure 15)
- Opaque panels and mullions on the security pavilions (Figure 16).
- The articulated structure of the atrium (Figure 20)
- Fin-like mullions on the exterior surface of the atrium's façade (Figure 21)
- Interior operable, suspended solar shades along a large portion of the south façade of the atrium Figure 22)

Appendix B. Conceptual Planting Plans and Plant Palettes



1 min. Walk

0 40 80 120 160 200 240 320'

1" = 40' at 22" x 34"

PARCEL 1 - MCS
Peninsula Innovation Partners
Conditional Development Permit

WILLOW VILLAGE

Menlo Park, CA

L1.00
Conceptual Landscape Plan
January 8, 2021

TREES

Sydney Red Gum
Angophora costata

Manzanita
Arctostaphylos manzanita

Brisbane Box
Lophostemon confertus

Chilean Myrtle
Luma apiculata

Catalina Ironwood
Lyonothamnus floribundus

Palo Verde
Parkinsonia ' Desert Museum'

African Sumac
Rhus lancea

Norfolk Island Palm
Auracaria heterophylla

Yew Plum Pine
Podocarpus spp.

London Plane Tree
Platanus x acerifolia

Chinese Elm
Ulmus parvifolia

Oak Tree
Quercus spp.

Quiver Tree
Aloe dichotoma

Ponytail Palm
Beaucarnea recurvata

Illawarra Flame Tree
Bracychiton acerifolius

Sago Palm
Cycas revoluta

Dragon Tree
Dracaena draco

UNDERSTORY PLANTING

Tree Houseleek
Aeonium spp.

Fox Tail Agave
Agave attenuate 'Boutin Blue'

Coral Aloe
Aloe striata

Blue Grama
Bouteloua gracilis

Leafy Reed Grass
Calamagrostis foliosa

California Lilac
Ceanothus horizontalis

Silk Floss Tree
Chorisia speciosa

Finger Aloe
Cotyledon orbiculata var. oblonga

Sunshine Bush Cone
Leucadendron spp.

Giant Dioon
Dioon spp.

Chalk Dudleya
Dudleya spp.

Mexican Snowball
Echeveria spp.

Golden Barrel Cactus
Echinocactus grusonii

California Fuscia
Epilobium canum

Red Buckwheat Erigonum
Eriogonum grande 'Rubescens'

California Fescue
Festuca californica

Lavander
Lavandula angustifolia

Blue Chalk Sticks
Senecio mandraliscae

Blue Lyme Grass
Leymus spp

Silver Bush Lupine
Lupinus albifrons

Burrawang
Macrozamia spp.

Bush Monkey Flower
Mimulus aurantiacus

Scarlet Bugler
Penstemon centranthifolius

Coffeeberry
Rhamnus californica

Firecracker Plant
Russelia equisetiformis

Protea
Protea spp.

Beaked Yucca
Yucca rostrata

Honeysuckle
Banksia spp.

White Sage
Salvia apiana

Western Sword Fern
Polystichum munitum

Woolybush
Adenanthos sericeus

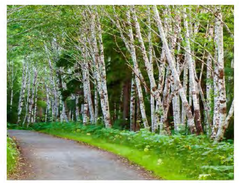
Puya
Puya venusta

Giant Chain Fern
Woodwardia fimbriata

LEVEL 1

TREES

Kauri Pine
Agathis robusta



Red Alder
Alnus rubra

Norfolk Island Pine
Auracaria heterophyla

Black Olive
Bucida buceras

Karaka
Corynocarpus laevigatus

Brisbane Box
Lophostemon confertus

Champak
Michelia champaca

Yew Plum Pine
Podocarpus spp.

Umbrella Tree
Schefflera actinophylla

UNDERSTORY PLANTING

Indian Mallow
Abutilon spp.

Japanese Rush
Acorus gramineus

Azalea
Azalea spp.

Rushes
Baumea spp.

Sedges
Carex spp.

Tree Ferns
Cyathea spp.

Rabbits Foot Fern
Davallia denticulata

Green Island Ficus
Ficus microcarpa 'Green Island'

Walking Iris
Neomarica gracilis

Western Sword Fern
Polystichum munitum

Rhododendron
Vireya rhododendron

Giant Chain Fern
Woodwardia fimbriata

Boston Fern
Nephrolepis exaltata

LEVEL 2-4

TREES

Alii Fig
Ficus alii

Weeping Fig
Ficus benjamina

Chinese Banyan
Ficus microcarpa

Rusty Leaf Fig
Ficus rubiginosa

Brisbane Box
Lophostemon confertus

Champak
Michelia alba

European Olive
Olea europaea

Umbrella Tree
Schefflera actinophylla

UNDERSTORY PLANTING

Calathea
Calathea zebrina

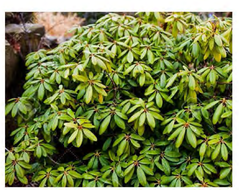
Spider Lily
Hymenocalis speciosa

Shell Ginger
Alpinia zerumbet

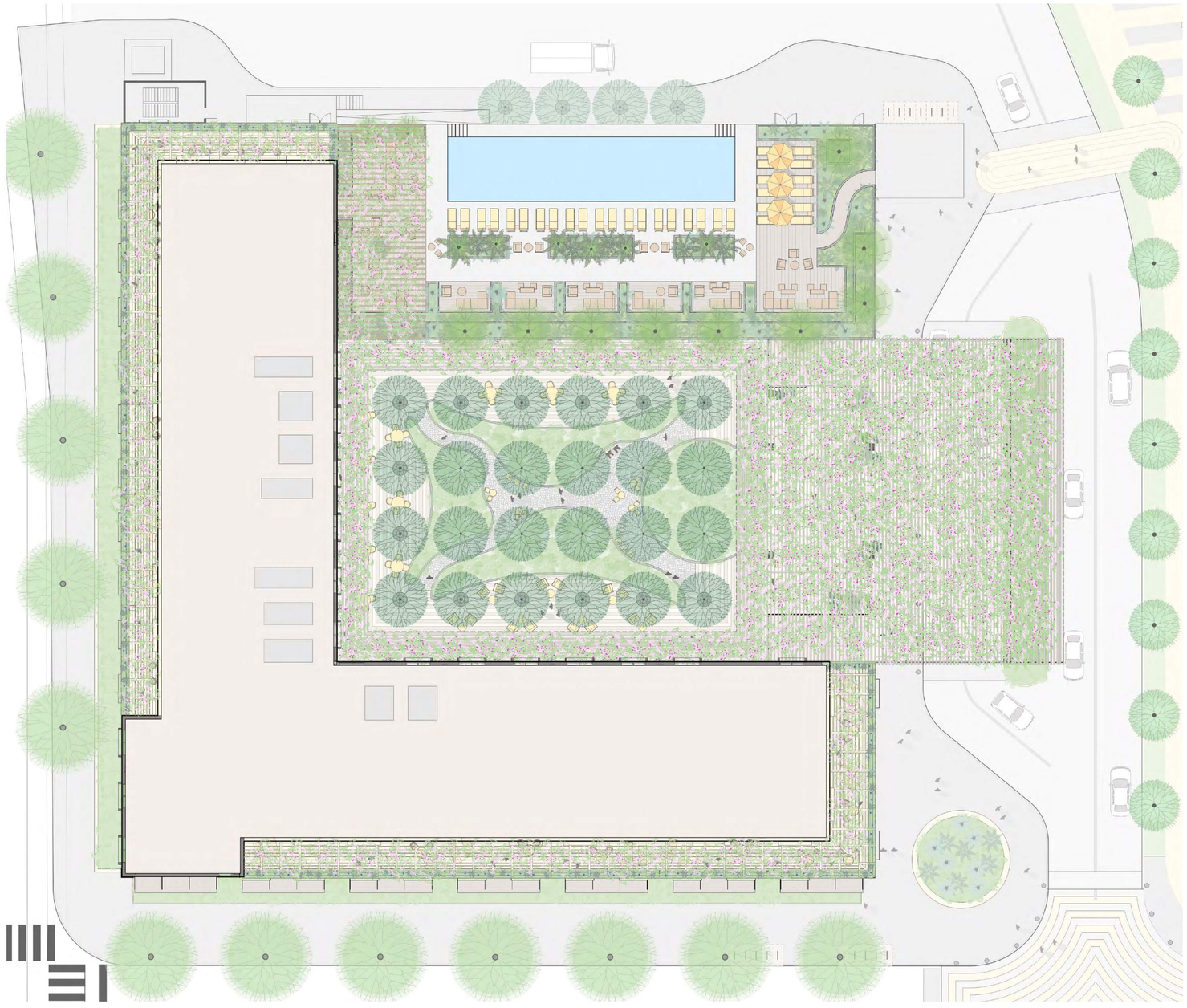
Mint Geranium
Pelargonium tomentosum

Asparagus Fern
Asparagus densiflorus 'Sprengeri'

Rattlesnake Plant
Calathea lancifolia



Dwarf Umbrella Tree
Schefflera arboricola



0 8 16 32'

1/16" = 1'-0" at 22" x 34"

PARCEL 1-HOTEL
Peninsula Innovation Partners
Conditional Development Permit

WILLOW VILLAGE

Menlo Park, CA

L1.00
CONCEPTUAL LANDSCAPE PLAN
January 8, 2021

LEVEL 1

TREES

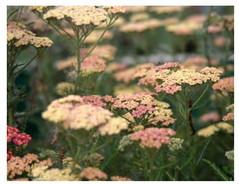
Eastern Redbud
Cercis canadensis

European Olive
Olea europaea

Brisbane Box
Lophostemon confertus

UNDERSTORY PLANTING

Foxtail Agave
Agave attenuata 'Nova'



Yarrow
Achillea spp.

Tree Houseleek
Aeonium spp.

Kangaroo Paw
Anigozanthos spp.

Wormwood
Artemisia

Rabbit's Foot Fern
Davallia spp.

Mexican Snowball
Echeveria spp.

Mediterranean Spurge
Euphorbia characias

Spider Flower
Grevillea

Sage
Salvia spp.

Lace Fern
Microlepia strigosa

Boston Fern
Nephrolepis exaltata

Western Sword Fern
Polystichum munitum

Giant Chain Fern
Woodwardia fimbriata

Carpet Geranium
Geranium incanum

Japanese Wisteria
Wisteria floribunda

California Lilac
Ceanothus horizontalis

Coffeeberry
Rhamnus californica

LEVEL 3

TREES AND PALMS

King Palm
Archontophoenix spp.

Mediterranean Fan Palm
Chamaerops humilis 'Cerifera'

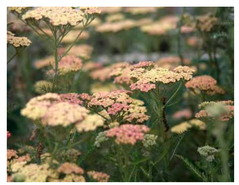
Kentia Palm
Howea forsteriana

Fruitless Olive
Olea europaea 'Swan Hill'

Pygmy Date Palm
Phoenix roebelenii

UNDERSTORY PLANTING

Foxtail Agave
Agave attenuata



Yarrow
Achillea spp.

Tree Houseleek
Aeonium spp.

Wormwood
Artemisia

Mexican Snowball
Echeveria spp.

Mediterranean Spurge
Euphorbia characias

Lavender
Lavandula spp.

LEVEL 6

Tree Houseleek
Aeonium spp.

Agave
Agave 'Blue Flame'

Mexican Snowball
Echeveria spp.

Blue Finger
Senecio talinoides spp. mandraliscae

Japanese Wisteria
Wisteria floribunda

Bougainvillea
Bougainvillea spp.

PARCEL 1-TOWN SQUARE
Peninsula Innovation Partners
Conditional Development Permit

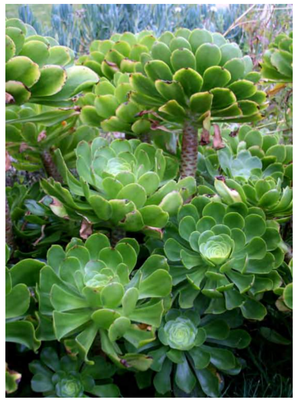
WILLOW VILLAGE

Menlo Park, CA

L1.00
Conceptual Landscape Plan
January 8, 2020

Peppermint Tree
Agonis flexuosa

London Plane Tree*
Platnus x acerifolia



Aeonium
Aeonium spp.

Kangaroo Paw
Anigozanthos cv.

Black Anther Flax Lily
Dianella revoluta

Lavender
Lavandula spp.

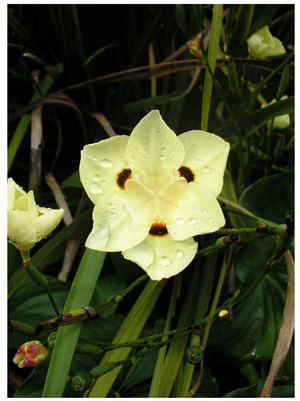
New Zealand Flax
Phormium cv.

Jacaranda
Jacaranda mimosifolia

Chinese Evergreen Elm
Ulmus parvifolia cv.

Agave
Agave spp.

Berkeley Sedge
Carex divulsa



Dietes
Dietes spp.

Lily Turf
Liriope muscari cv.

California Sword Fern
Polystichum californicum

Brisbane Box*
Lophostemon confertus

Zelkova*
Zelkova serrata cv.

Aloe
Aloe spp.

Small Cape Rush
Chondropetalum tectorum

Spurge
Euphorbia spp.

Deer Grass
Muhlenburgia rigens

Sage
Salvia spp.

1 min. Walk

0 80 160 240 320 400 480 640'

1" = 80' at 22" x 34"

1/4 ac

1/8 ac

PARCEL 1(PORTION) & 8
Peninsula Innovation Partners
Conditional Development Permit

WILLOW VILLAGE

Menlo Park, CA

L1.00

January 8, 2021

CHINESE PISTACHE

Pistacia chinensis

CHINESE PISTACHE

Pistacia chinensis multi-trunk

CALIFORNIA SYCAMORE

Platanus racemosa

CALIFORNIA SYCAMORE

Platanus racemosa multi-stem

SHUMARD OAK

Quercus shumardii

COASTAL REDWOOD

Sequoia sempervirens 'Aptos Blue'

ELM

Ulmus 'Accolade'

CHINESE ELM

Ulmus parviflora 'True Green'

OLIVE TREE

Olea europaea 'Mission'

MYRICA CALIFORNICA

Pacific Wax Myrtle

PARCEL 1(PORTION) & 8
Peninsula Innovation Partners
Conditional Development Permit

WILLOW VILLAGE

Menlo Park, CA

L1.01
Conceptual Representative Planting Palette
January 8, 2021

BLONDE AMBITION BLUE GRAMA

Bouteloua gracilis 'Blonde Ambition'

BERKELEY SEDGE

Carex divulsa (C. tumulicola)

SMALL CAPE RUSH

Chondropetalum tectorum

BLUE OAT GRASS

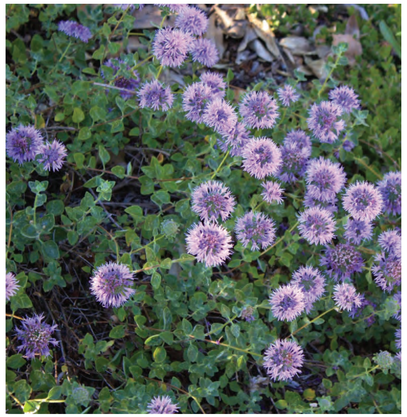
Helictotrichon sempervirens

SEA PINK

Armeria maritima

COREOPSIS

Coreopis grandiflora



COYOTE MINT

Monardella villosa

FOOTHILL PENSTEMON

Penstemon heterophyllus 'Blue Springs'

STONE CROP

Sedum sp. (many)

EMERALD CARPET MANZANITA

Arctostaphylos 'Emerald Carpet'

WAYNE RODERICK DAISY

Erigeron glaucus 'Wayne Roderick'

CALIFORNIA POPPY

Eschscholzia californica

COASTAL GUM PLANT

Grindelia stricta platyphylla

CREEPING SAGE

Salvia sonomensis

MOLATE FESCUE

Festuca rubra 'molate'

HOOKER'S MANZANITA

Arctostaphylos hookeri

ROCKROSE

Cistus spp.

LITTLE SUR COFFEEBERRY

Rhamnus californica 'Little Sur'

PARCEL 1(PORTION) & 8
Peninsula Innovation Partners
Conditional Development Permit

WILLOW VILLAGE

Menlo Park, CA

L1.01
Conceptual Representative Planting Palette

January 8, 2021

STICKY MONKEY

Mimulus aurantiacus

RED-FLOWERED BUCKWHEAT

Eriogonum grande var. rubescens

DEER GRASS

Muhlenbergia rigens

COMMON COYOTE MINT

Monardella villosa

CENTENNIAL CEANOTHUS

Ceanothus Centennial

BEE'S BLISS SAGE

Salvia 'Bee's Bliss'

DWARF SILVERGRASS

Miscanthus sp. 'Adagio'

CANYON PRINCE WILD RYE

Leymus condensatus 'Canyon Prince'

SIX HILLS GIANT CATMINT

Nepeta faassenii 'Six Hills Giant'

SPANISH LAVENDER

Lavandula otto quast

COMPACT MEXICAN SAGE

Salvia leucantha 'Santa Barbara'

UPRIGHT ROSEMARY

Rosmarinus officinalis 'Tuscan'

LITTLE OLLIE DWARF OLIVE

Olea europaea 'Little Ollie'

MOUNTAIN FLAX

Phormium cookianum

WYNYABBIE COAST ROSEMARY

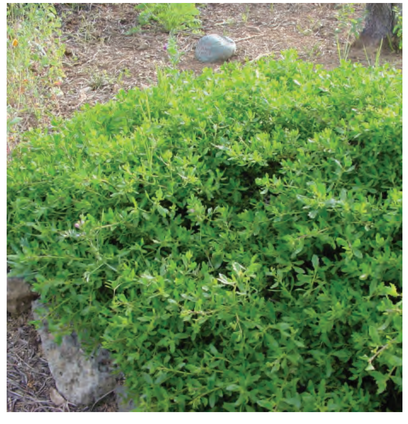
Westringia fruticosa 'Wynyabbie Gem'

COMMON YARROW

Achillea millefolium

FORTNIGHT LILY

Dietes iridioides



DWARF COYOTE BRUSH

Baccharis pilularis 'Twin Peaks'

PARCEL 1(PORTION) & 8
Peninsula Innovation Partners
Conditional Development Permit

WILLOW VILLAGE

Menlo Park, CA

L1.01
Conceptual Representative Planting Palette

January 8, 2021

WILLOW RD

PARK ST

MAIN ST

WEST ST

30 seconds Walk

0 20 40 60 80 100 120 160'

1" = 20' at 22" x 34"

PARCEL 2
Peninsula Innovation Partners
Conditional Development Permit

WILLOW VILLAGE

Menlo Park, CA

L1.00
Conceptual Landscape Plan

January 8, 2021

TREE PALETTE

Platanus × acerifolia
London Plane

Magnolia grandiflora
Magnolia Tree

Zelkova serrata
Japanese Zelkova

Platanus × acerifolia
London Plane

Quercus suber
Cork Oak

Arbutus Marina
Strawberry Tree

Quercus virginiana
Southern Live Oak

Olea europaea ‘Swan Hill’
Swan Hill Olive

Lyonothamnus floribundus
Catalina Ironwood

Myrica californica
Pacific Wax myrtle

Prunus ilicifolia
Hollyleaf cherry

Ceanothus
California lilacs

UNDERSTORY PALETTE

Verbena lilacina
Purple Cedros Island Verbena

Arctostaphylos ‘John Dourley’
John Dourley Manzanita

Bouteloua gracilis ‘Blonde Ambition’
mosquito grass

Arctostaphylos manzanita
whiteleaf manzanita

Aristida purpurea
Purple three-awn

Carpenteria californica
Tree Anemone

Ceanothus thyrsiflorus
Blue blossom ceanothus

Daphne x transatlantica
Eternal Fragrance

Agave attenuata
Foxtail Agave

Lessingia filaginifolia
California Dune Aster

Rosmarinus officinalis ‘Tuscan Blue
Italian Rosemary

Festuca mairei
Mt. Atlas Fescue

Kniphofia uvaria hybrids
Red-hot Poker

Olea europaea ‘Little Ollie’
Dwarf Olive

Sporobolus airoides
Sporobolus airoides

Achillea millefolium ‘coronation gold’
Common Yarrow

Myrica californica
Pacific Wax myrtle

Calycanthus occidentalis
Spice Bush

Salvia rosmarinus
Rosemary

Salvia sonomensis Bee’s Bliss
Bee’s Bliss Sage

30 sec. walk

0 20 40 60 80 100 120 160'

1" = 20' *at 24" x 36"*

PARCEL 3
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TREES

Chinese Elm
Ulmus parvifolia

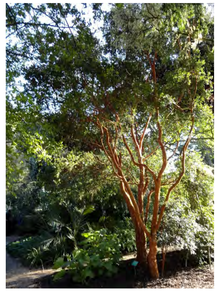
Zelkova
Zelkova serrata cv.

Ginkgo 'Autumn Gold'
Ginkgo biloba 'Autumn

Guadalupe Fan Palm
Brahea edulis

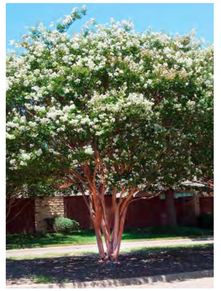
Peppermint Tree
Agonis flexuosa

Swan Hill Olive
Olea europaea 'Swan Hill'



Chilean Myrtle
Luma apiculate

Arapaho Crape Myrtle
Lagerstroemia indica x faueri 'Arapaho'

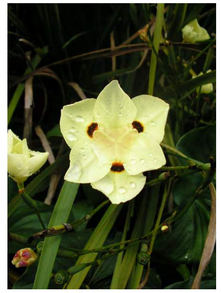


Natchez Crape Myrtle
Lagerstroemia indica x fauriei 'Natchez'

Jade Butterfly Ginkgo
Ginkgo biloba 'Jade Butterfly'

Venus Dogwood
Cornus 'Venus'

SHRUBS, PERENNIALS, GRASSES AND GROUND COVERS



Dieties
Dieties spp.

Baby Bliss Flax Lily
Dianella revoluta 'Baby Bliss'

Dwarf Red Kangaroo Paw
Anigozanthos 'Dwarf Red'

Weeping Lantana
Lantana montevidensis 'White Lightning'

Finescape Lomandra
Lomandra confertifolia

Platinum Beauty Lomandra
Lomandra longifolia 'Platinum Beauty'

Breeze Dwarf Mat Rush
Lomandra longifolia

Dwarf Germander
Teucrium chamaedrys 'nanum'

Snow in Summer
Cerastium tomentosum

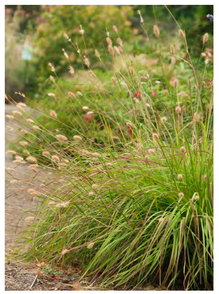
Elijah Blue Fescue
Festuca glauca 'Elijah Blue'

Small Cape Rush
Chondropetalum tectorum

Sheep's Fescue
Festuca amethystina

Berkeley Sedge
Carex divulsa

Amazing Red New Zealand Flax
Phormium 'Amazing Red'



Red Bunny Tails Fountain Grass
Pennisetum massaicum

Blue Oat Grass
Helictotrichon sempervirens

Mexican Feather Grass
Stipa tennuissima

30 seconds Walk

0 20 40 60 80 100 120 160'

1" = 20' at 22" x 34"

PARCEL 4
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TREE PALETTE

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London Plane

Magnolia grandiflora
Magnolia Tree

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Japanese Zelkova

Platanus × acerifolia
London Plane

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Cork Oak

Arbutus Marina
Strawberry Tree

Quercus virginiana
Southern Live Oak

Olea europaea 'Swan Hill'
Swan Hill Olive

Lyonothamnus floribundus
Catalina Ironwood

Myrica californica
Pacific Wax myrtle

Prunus ilicifolia
Hollyleaf cherry

Ceanothus
California lilacs

UNDERSTORY PALETTE

Verbena lilacina
Purple Cedros Island Verbena

Arctostaphylos 'John Dourley'
John Dourley Manzanita

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mosquito grass

Arctostaphylos manzanita
whiteleaf manzanita

Aristida purpurea
Purple three-awn

Carpenteria californica
Tree Anemone

Ceanothus thyrsiflorus
Blue blossom ceanothus

Daphne x transatlantica
Eternal Fragrance

Agave attenuata
Foxtail Agave

Lessingia filaginifolia
California Dune Aster

Rosmarinus officinalis 'Tuscan Blue
Italian Rosemary

Festuca mairei
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Sporobolus airoides

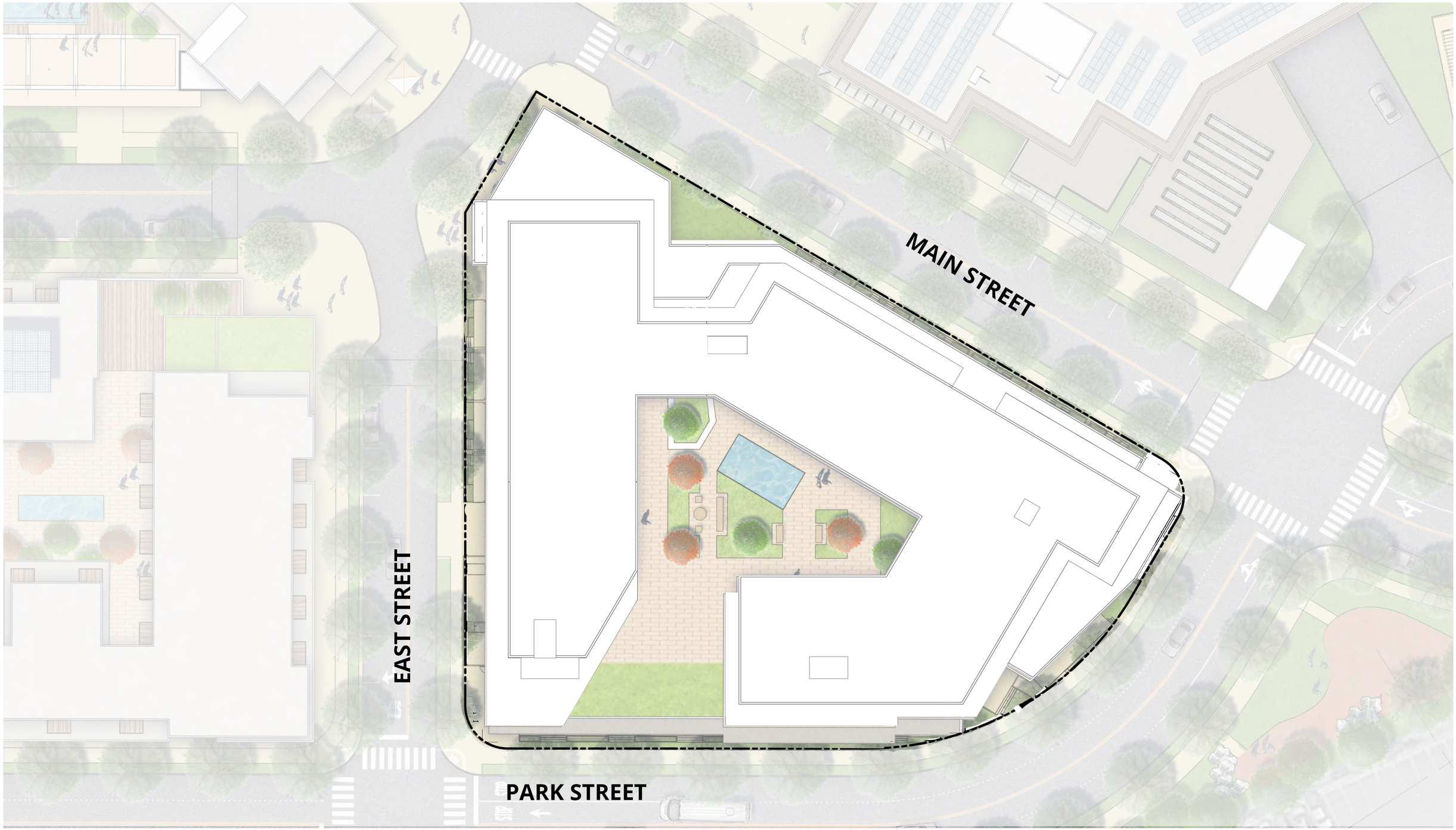
Achillea millefolium 'coronation gold'
Common Yarrow

Myrica californica
Pacific Wax myrtle

Calycanthus occidentalis
Spice Bush

Salvia rosmarinus
Rosemary

Salvia sonomensis Bee's Bliss
Bee's Bliss Sage



PARCEL 5
Peninsula Innovation Partners
Conditional Development Permit

WILLOW VILLAGE

Menlo Park, CA

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TREE PALETTE

Platanus × acerifolia
London Plane

Magnolia grandiflora
Magnolia Tree

Zelkova serrata
Japanese Zelkova

Platanus × acerifolia
London Plane

Quercus suber
Cork Oak

Arbutus Marina
Strawberry Tree

Quercus virginiana
Southern Live Oak

Olea europaea 'Swan Hill'
Swan Hill Olive

Lyonothamnus floribundus
Catalina Ironwood

Myrica californica
Pacific Wax myrtle

Prunus ilicifolia
Hollyleaf cherry

Ceanothus
California lilacs

UNDERSTORY PALETTE

Verbena lilacina
Purple Cedros Island Verbena

Arctostaphylos 'John Dourley'
John Dourley Manzanita

Bouteloua gracilis 'Blonde Ambition'
mosquito grass

Arctostaphylos manzanita
whiteleaf manzanita

Aristida purpurea
Purple three-awn

Carpenteria californica
Tree Anemone

Ceanothus thyrsiflorus
Blue blossom ceanothus

Daphne x transatlantica
Eternal Fragrance

Agave attenuata
Foxtail Agave

Lessingia filaginifolia
California Dune Aster

Rosmarinus officinalis 'Tuscan Blue
Italian Rosemary

Festuca mairei
Mt. Atlas Fescue

Kniphofia uvaria hybrids
Red-hot Poker

Olea europaea 'Little Ollie'
Dwarf Olive

Sporobolus airoides
Sporobolus airoides

Achillea millefolium 'coronation gold'
Common Yarrow

Myrica californica
Pacific Wax myrtle

Calycanthus occidentalis
Spice Bush

Salvia rosmarinus
Rosemary

Salvia sonomensis Bee's Bliss
Bee's Bliss Sage

30 seconds Walk

0 20 40 60 80 100 120 160'

1" = 20' at 24" x 36"

PARCEL 6
Peninsula Innovation Partners
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Carex divulsa
European Grey Sedge

Chondropetalum tectorum
Small Cape Rush

Juncus patens
Common Rush

Symphoricarpos albus
Common Snowberry

Acer rubrum 'Armstrong'
Armstrong Red Maple

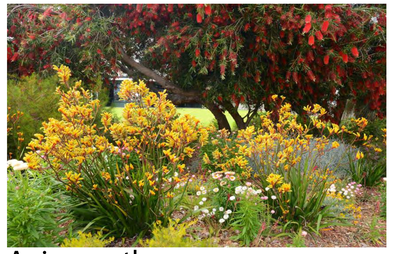
Cedrus deodara
Deodar Cedar

Gingko biloba 'Princeton Sentry'
Princeton Sentry Maidenhair Tree

Pinus canariensis
Canary Island Pine

Salvia elegans
Pineapple Sage

Lomandra longifolia
Spiny Headed Mat Rush



Anigozanthos var.
Kangaroo Paw

Calamagrostis x acutiflora 'Karl Foerster'
Feather Reed Grass

Hesperaloe parviflora
Red Yucca

Bouteloua gracilis 'Blonde Ambition'
Blonde Ambition Blue Grama Grass

Muhlenbergia capillaris 'Pink Muhly'
Pink Muhly Grass

Salvia 'Anthony Parker'
Anthony Parker Bush Sage

Aspidistra elatior
Cast Iron Plant

Dicksonia Antarctica
Soft Tree Fern

Salvia spathacea
Humming Bird Sage

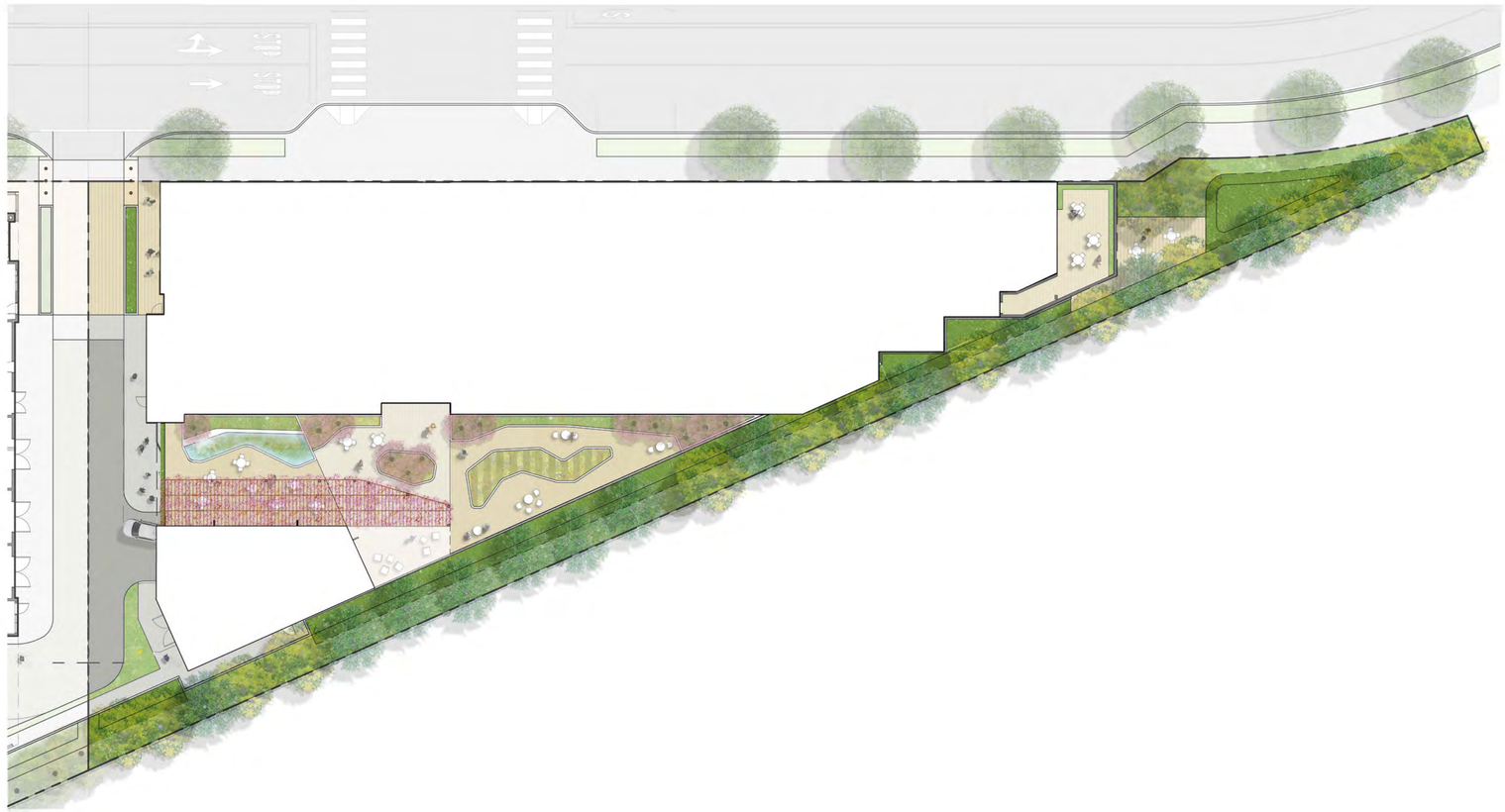
Woodwardia fimbriata
Giant Chain Fern

Agave attenuata
Century Plant

Calamagrostis foliosa
Leafy Reedgrass

Euphorbia rigida
Gopher Spurge

Washingtonia Robusta
Mexican Fan Palm



30 seconds Walk

0 20 40 60 80 100 120 160'

1" = 20' at 24" x 36"

PARCEL 7
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WILLOW VILLAGE

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Carex divulsa
European Grey Sedge

Chondropetalum tectorum
Small Cape Rush

Juncus patens
Common Rush

Symphoricarpos Albus
Common Snowberry

Acer rubrum 'Armstrong'
Armstrong Red Maple

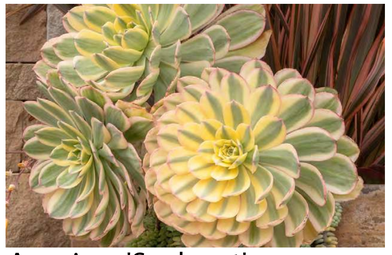
Cedrus deodara
Deodar Cedar

Gingko biloba 'Princeton Sentry'
Princeton Sentry Maidenhair Tree

Pinus canariensis
Canary Island Pine

Heuchera maxima
Island Alum Root

Polystichum munitum
Western Sword Fern



Aeonium 'Sunburst'
Copper Pinwheel

Gardenia jasminoides 'Leetwo'
Gardenia

Lavandula x intermedia
Lavender

Olea europaea 'Montra'
Little Ollie Dwarf Olive

Perovskia atriplicifolia
Russian Sage

Rosemary officinalis 'Chef's Choice'
Chef's Choice Rosemary

Salvia microphylla 'Killer Cranberry'
Autumn Sage

Salvia microphylla 'Little Kiss'
Cherry Sage

Westringia fruticosa
Coastal Rosemary

Bambusa multiplex 'Golden Goddess'
Golden Goddess Bamboo

Bambusa textilis 'Gracilis'
Slender Weavers

Anigozanthos Hybrid
Kangaroo Paw

Bouteloua 'Blonde Ambition'
Blue Grama Grass

Calandrinia Grandiflora
Rock Purslane

LEGEND

	BOTANIC NAME (COMMON NAME)	QUANTITY	SIZE	WUCOLS
	Existing Tree to Remain *Pinus canariensis* (Canary Island Pine)	23	-	-
	Alnus rhombifolia (White Alder)	10	48" box	High
	Arbutus 'Marina' (Marina Arbutus)	13	48" box	Low
	Magnolia grandiflora (Southern Magnolia)	21	48" box	Medium
	Pinus canariensis (Canary Island Pine)	33	48" box	Low
	Pistacia chinensis (Chinese Pistache)	2	48" box	Low
	Platanus x *acerifolia* 'Morton Circle' (Exclamation London Plane Tree)	118	48" box	Medium
	Platanus racemosa (California Sycamore)	53	48" box	Medium
	Ulmus parvifolia cv. (Chinese Elm)	38	48" box	Low
	Zelkova serrata cv. (Zelkova)	68	60" box	Medium
	Total Proposed Tree	356		

Note: Structural soil to be used under sidewalk and plaza adjoining street trees.

TREE VALUATION

QUANTITY	UNIT SIZE	UNIT VALUE	VALUE
0	#5	$ 100	$ -
55	#5	$ 200	$ 11,000
369	24" box	$ 400	$ 147,000
103	36" box	$ 1,200	$ 123,000
670	48" box	$ 5,000	$ 3,350,000
110	60" box	$ 7,000	$ 770,000
294	72" box	$ 10,000	$ 2,940,000
12	84" box	$ 12,000	$ 144,000
34	96" box	$ 15,000	$ 510,000
2	108" box	$ 17,000	$ 34,000
2	120" box	$ 20,000	$ 40,000
1,651			$ 8,070,000

Note: Current valuation includes all proposed trees within Willow Village, and excludes the publicly accessible park. Pending park design.

White Alder
Alnus rhombifolia

Marina Arbutus
Arbutus 'Marina'

Southern Magnolia
Magnolia grandiflora

Canary Island Pine
Pinus canariensis

Chinese Pistache
Pistacia chinensis

Exclamation London Plane Tree
Platanus x acerifolia 'Morton Circle'

California Sycamore
Platanus racemosa

Chinese Evergreen Elm
Ulmus parvifolia cv.

Zelkova
Zelkova serrata cv.

WATER USE ESTIMATION & IRRIGATION SCHEDULE - PUBLIC REALM

WATER TYPE	Recycled
CITY	Palo Alto
ETO	43.1
DATE	

Nearest City to project with published ET data

REGULAR LANDSCAPE AREAS

STATION/HYDROZONE	GPM	AREA (sq.ft) (HA)	WATER USE TYPE (LW=LOW, MW=MOD, HW=HIGH)	PLANT TYPE	IRRIGATION TYPE	PLANT FACTOR (PF)	IRRIGATION EFFICIENCY (IE)	PRECIP. RATE/ APPLICATION RATE (IN/HR)	ETAF (PF/IE)	CYCLES PER DAY	DAYS PER WEEK	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEP	OCT	NOV	DEC	ETWU (GALLONS PER YEAR)	PERCENTAGE OF LANDSCAPE
												MONTHLY ETO													
												1.5	1.8	2.8	3.8	5.2	5.3	6.2	5.6	5.0	3.2	1.7	1.0		
												TOTAL RUN TIME IN MINUTES PER DAY													
Trees - Low	0	21737	LW	SHRUB DC LW	DRIP LINE 12"	0.3	0.81	0.9	0.4	2	2	0.0	0.0	8.0	11.0	15.0	15.0	18.0	16.0	14.0	9.0	5.0	0.0	215,132	18%
Trees - Med	0	48086	MW	SHRUB DC LW	DRIP LINE 12"	0.5	0.81	0.9	0.6	2	2	0.0	0.0	14.0	18.0	25.0	25.0	29.0	27.0	24.0	15.0	8.0	0.0	793,182	41%
Trees - High	0	1000	HW	SHRUB DC HW	DRIP LINE 12"	0.8	0.81	0.9	1.0	2	3	0.0	0.0	14.0	19.0	25.0	27.0	31.0	29.0	25.0	15.0	9.0	0.0	26,392	1%
Shrubs	0	53909	LW	SHRUB DC LW	DRIP LINE 12"	0.3	0.81	0.9	0.4	2	2	0.0	0.0	8.0	11.0	15.0	15.0	18.0	16.0	14.0	9.0	5.0	0.0	324,712	28%
BTA	0	14936	LW	SHRUB DC LW	SPRAY	0.3	0.75	1.6	0.4	2	2	0.0	0.0	5.0	7.0	9.0	9.0	11.0	10.0	9.0	6.0	3.0	0.0	159,680	13%
	TOTAL	118,571																					TOTAL	1,554,706	66%

SPECIAL LANDSCAPE AREAS

HYDROZONE #	HYDROZONE NAME	AREA (sq.ft) (HA)	Percentage of Landscape
ALL		118,571	
		118,571	100%

MAWA	GALLONS/YR	3,188,454
	ACRE FEET/YR	9.72
	HCF/YR	4,235.90
ETWU	GALLONS/YR	1,554,706
	ACRE FEET/YR	3.18
	HCF/YR	1,383.30

SITE IRRIGATION EFFICIENCY	SITE PLANT FACTOR	MAWA COMPLIANT
65.4%	0.26	YES

ETAF Calculations

REGULAR LANDSCAPE AREAS	
TOTAL ETAF x AREA	38,721
TOTAL AREA	118,571
AVG. ETAF	32.66%

THE IRRIGATION VALVE SCHEDULE SHOWN ABOVE IS INTENDED TO BE USED AS A GUIDELINE ONLY AND INDICATES THE APPROXIMATE RUN TIMES IN MINUTES FOR EACH VALVE BASED ON ESTIMATED WEEKLY WATER REQUIREMENTS FOR ESTABLISHED PLANT MATERIAL. THE TIMES SHOWN ARE APPROXIMATE AND HAVE BEEN DEVELOPED FROM LOCAL AND CURRENT AVERAGES FOR EVAPOTRANSPIRATION, AND REFLECTIVE WATER REQUIREMENTS OF THE PLANT MATERIAL BASED ON PLANT TYPE AND THE APPROXIMATE PRECIPITATION OR APPLICATION RATES OF THE IRRIGATION SYSTEM TYPE. ACTUAL RUN TIMES MAY BE DIFFERENT DEPENDING ON A VARIETY OF FACTORS INCLUDING TOPOGRAPHY, SOIL STRUCTURE, SUN AND WIND EXPOSURE, WEATHER, ACTUAL PLANT WATER REQUIREMENTS, OVERALL PRECIPITATION RATE OF ZONE, ETC.

MAWA FORMULA
MAXIMUM APPLIED WATER ALLOWANCE (MAWA) GALLONS PER YEAR
MAWA = (ETo)(0.62)(LA x 0.45) + (0.55 x SLA)]

ETo = REFERENCE EVAPOTRANSPIRATION

0.45= ET ADJUSTMENT FACTOR

LA=LANDSCAPED AREA (SQUARE FEET)
0.62 = CONVERSION FACTOR (GALLONS/SQ.FT/YR)

ETWU FORMULA
ESTIMATED TOTAL WATER USE (ETWU) GALLONS PER YEAR
ETWU= (ETO)(.62)(ETAF x LA))

ETo = REFERENCE EVAPOTRANSPIRATION

PF = PLANT FACTOR FOR HYDROZONES

HA = HYDROZONE AREA (SQ.FT)
0.62 = CONVERSION FACTOR (GALLONS/SQ.FT/YR)

IE = IRRIGATION EFFICIENCY (0.81)-BUBBLER/DRIP

IE = IRRIGATION EFFICIENCY (0.75)-ROTORS/SPRAY

California Sycamore
Platanus racemosa

Chinese Evergreen Elm
Ulmus parvifolia cv.

Zelkova
Zelkova serrata cv.

Agave
Agave spp.

Berkeley Sedge
Carex divulsa

Dietes
Dietes spp.

New Zealand Flax
Phormium cv.

Aloe
Aloe spp.

California Wild Lilac
Ceanothus spp.

Grevillea
Grevillea 'Noelii'

Rosemary
Rosmarinus officinalis cv.

Kangaroo Paw
Anigozanthos cv.

Small Cape Rush
Chondropetalum tectorum

Pine Muhly
Muhlenburgia dubia

Sage
Salvia spp.

Appendix C. Résumés

Robin J. Carle, MS

Wildlife Ecology

rcarle@harveyecology.com
408.458.3241

H. T. HARVEY & ASSOCIATES
Ecological Consultants
50 years of field notes, exploration, and excellence

HIGHLIGHTS

- 14 years of experience
- Avian ecology
- Environmental impact assessment
- Endangered Species Act consultation and compliance
- Nesting bird and burrowing owl surveys and monitoring
- Other special-status wildlife surveys and habitat assessments
- Bird-safe design

EDUCATION

MS, Fish and Wildlife Management, Montana State University

BS, Ecology, Behavior, and Evolution, University of California, San Diego

PERMITS AND LICENSES

Listed under CDFW letter permits to assist with research on bats, California tiger salamanders, California Ridgway's rails, and California black rails

USFWS 10(a)(1)(A) for California tiger salamander

PROFESSIONAL EXPERIENCE

Associate ecologist, H. T. Harvey & Associates, 2007–present

Volunteer bird bander, San Francisco Bay Bird Observatory, 2010–20

Avian field technician, West Virginia University, 2006

Graduate teaching assistant, Montana State University, 2003–06

Avian field technician, Point Blue Conservation Science (formerly PRBO Conservation Science), 2004

PROFESSIONAL PROFILE

Robin Carle is an associate wildlife ecologist and ornithologist at H. T. Harvey & Associates, with more than 14 years of experience working in the greater San Francisco Bay Area. Her expertise is in the nesting ecology of passerine birds, and her graduate research focused on how local habitat features and larger landscape-level human effects combine to influence the nesting productivity of passerine birds in the Greater Yellowstone region. She also banded, sexed, and aged resident and migrant passerine birds with the San Francisco Bay Bird Observatory for 10 years.

With an in-depth knowledge of regulatory requirements for special-status species, Robin has contributed to all aspects of client projects including NEPA/CEQA documentation, bird-safe design assessments, biological constraints analyses, special-status species surveys, nesting bird and raptor surveys and monitoring, construction implementation/permit compliance, Santa Clara Valley Habitat Plan/Natural Community Conservation Plan applications and compliance support, and natural resource management plans. Her strong understanding of CEQA, FESA, and CESA allows her to prepare environmental documents that fully satisfy the regulatory requirements of the agencies that issue discretionary permits. She manages field surveys, site assessments, report preparation, agency and client coordination, and large projects.

BIRD-SAFE DESIGN EXPERIENCE

Provides bird-safe design support for **development projects for major technology companies in Sunnyvale and Mountain View** including the preparation of avian collision risk assessments, sections of CEQA documents, assessments of project compliance with City requirements, design recommendations, avian collision monitoring plans, and calculations of qualification for LEED Pilot Credit 55.

Provided bird-safe design support for a **development project in Berkeley** including the preparation of an avian collision risk assessment and development of bird-safe design features.

Served as project manager for the preparation of an **avian collision risk assessment for the CityView Plaza project** in San José, and prepared recommendations to minimize the potential for bird nesting and perching on the building following construction.

Served as project manager for the preparation of **avian collision risk assessments for the Menlo Uptown and Menlo Portal** projects in Menlo Park, which included assessments of the potential for avian collisions to occur with the proposed buildings and the potential significance (e.g., under CEQA) of such an impact.

Provided bird-safe design support for **development at Oyster Point in South San Francisco** including the preparation of an avian collision risk assessment and providing project-specific bird-safe design measures to ensure project compliance with CEQA requirements.

Stephen C. Rottenborn, PhD
Principal, Wildlife Ecology

srottenborn@harveyecology.com
408.458.3205

H. T. HARVEY & ASSOCIATES
Ecological Consultants
50 years of field notes, exploration, and excellence

HIGHLIGHTS

- 28 years of experience
- Avian ecology
- Wetlands and riparian systems ecology
- Endangered Species Act consultation
- Environmental impact assessment
- Management of complex projects

EDUCATION

PhD, Biological Sciences, Stanford University

BS, Biology, College of William and Mary

PROFESSIONAL EXPERIENCE

Principal, H. T. Harvey & Associates, 1997–2000, 2004–present

Ecology section chief/environmental scientist, Wetland Studies and Solutions, Inc., 2000–04

Independent consultant, 1989–97

MEMBERSHIPS AND AFFILIATIONS

Chair, California Bird Records Committee, 2016–19

Member, Board of Directors, Western Field Ornithologists, 2014–20

Scientific associate/advisory board, San Francisco Bay Bird Observatory, 1999–2004, 2009–18

Member, Board of Directors, Virginia Society of Ornithology, 2000–04

PUBLICATIONS

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PROFESSIONAL PROFILE

Dr. Steve Rottenborn is a principal in the wildlife ecology group in H. T. Harvey & Associates' Los Gatos office. He specializes in resolving issues related to special-status wildlife species and in meeting the wildlife-related requirements of federal and state environmental laws and regulations. Combining his research and training as a wildlife biologist and avian ecologist, Steve has built an impressive professional career that is highlighted by a particular interest in wetland and riparian communities, as well as the effects of human activities on bird populations and communities. Steve's experience extends to numerous additional special-status animal species. The breadth of his ecological training and project experience enables him to expertly manage multidisciplinary projects involving a broad array of biological issues.

He has contributed to more than 800 projects involving wildlife impact assessment, NEPA/CEQA documentation, biological constraints analysis, endangered species issues (including California and Federal Endangered Species Act consultations), permitting, and restoration. Steve has conducted surveys for a variety of wildlife taxa, including a number of threatened and endangered species, and contributes to the design of habitat restoration and monitoring plans. In his role as project manager and principal-in-charge for numerous projects, he has supervised data collection and analysis, report preparation, and agency and client coordination.

PROJECT EXAMPLES

Principal-in-charge for **bird-safe design support for more than 40 development projects** in more than 10 cities throughout the San Francisco Bay area. This work has entailed preparation of avian collision risk assessments, sections of CEQA documents, assessments of project compliance with requirements of the lead agency, design recommendations (e.g., related to the selection of bird-safe glazing), and avian collision monitoring plans.

Senior wildlife ecology expert on the South Bay Salt Pond restoration project — the largest (~15,000-acre) restoration project of its kind in the western United States.

Served on the **Technical Advisory Committees/Expert Panels for the Santa Clara Valley Water District's Upper Penitencia Creek, One Water, Science Advisory Hub, San Tomas/Calabazas/Pond A8 Restoration, and Coyote Creek Native Ecosystem Enhancement Tool** efforts; selected to serve on these panels for his expertise in South Bay wildlife, restoration, and riparian ecology.

Led H. T. Harvey's work on the biological CEQA assessment and permitting for extensive/regional **facilities and habitat management programs for the Santa Clara Valley Water District, San Jose Water Company, County of San Mateo, and Midpeninsula Regional Open Space District**.

Contract manager/principal-in-charge for **Santa Clara Valley Water District's Biological Resources On-Call contract** (four successive contracts, with over 120 task orders, since 2009).

Appendix 3.13

Housing Needs Assessment

KEYSER MARSTON ASSOCIATES

HOUSING NEEDS ASSESSMENT

WILLOW VILLAGE MASTER PLAN PROJECT

Prepared for:
City of Menlo Park

Prepared by:
Keyser Marston Associates, Inc.

April 2022

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1.0 EXECUTIVE SUMMARY

This Housing Needs Assessment (HNA) provides an analysis of housing supply and housing demand impacts of the proposed Willow Village Master Plan Project (Project) in the City of Menlo Park (City) and evaluates the potential that the proposed Project could contribute to displacement of existing residents within the City of East Palo Alto (East Palo Alto) and the Belle Haven neighborhood of Menlo Park (Belle Haven), two proximate communities identified as having risk factors for displacement. The HNA is part of a range of analyses provided to decision makers and the community to inform and assist in the decision-making and entitlement process for the proposed Project. Preparation of this HNA is required under the terms of a 2017 Settlement Agreement between the cities of Menlo Park and East Palo Alto but is not required by the California Environmental Quality Act (CEQA)[1].

Following is a summary of the key findings of the HNA:

- **Regional Housing Availability[2] Impact** – The proposed Project results in an 815-unit net decrease in housing availability within the region, which is based on the difference between the estimated 2,545-unit regional employee[3] housing demand from new employees and the 1,730 new housing units included in the proposed Project. See Section 1.2 to 1.4 for additional information, including a breakout by affordability level.

- **Housing Availability Increase in Menlo Park** – The net impact on housing availability in Menlo Park is based on an estimated Menlo Park share of the 2,545-unit total regional employee housing demand and the 1,730 new units added by the proposed Project. The Menlo Park share of regional employee housing demand is estimated using two commute share scenarios, based on current commute patterns (7.4% of Meta Platforms, Inc. ("Meta") employees and 5.9% of other employees living in Menlo Park), and based on an increased commute share of 20% that reflects a goal to house a greater share of Menlo Park's workforce in the future.
    - Current Commute Share Estimate – Assuming existing commute patterns hold, there is an estimated net increase in available housing in Menlo Park of 1,553 units, based on the 1,730 new units in the Project, less an estimated Menlo Park share of regional employee housing demand of 177 units.

[1] In 2016, the City updated its General Plan, specifically the land use and circulation elements, commonly referred to as ConnectMenlo. The City completed and certified a program level EIR for ConnectMenlo, which determined that there would be a less than significant impact on population and housing, except cumulative impacts projected to be reduced to less than significant following an update of the Association of Bay Area Governments' regional forecasts. Pursuant to the terms of the 2017 City of East Palo Alto v. City of Menlo Park Settlement Agreement, preparation of this HNA is required.

[2] See Section 1.2 for a discussion of the term "Housing Availability"

[3] The terms "employee" and "worker" are used interchangeably in this report. Employment figures identified in the HNA are inclusive of both Meta and non-Meta employees within the office, retail, hotel, and multi-family residential components of the proposed Project. Not all employees will be physically present each day.

- Increased Commute Share Estimate – Assuming an increased 20% share of workers are housed in the city, there is an estimated net increase in available housing in Menlo Park of 1,221 units, considering the 1,730 new units in the Project less an estimated Menlo Park share of regional employee housing demand of 509 units.

See Table 1-1 for a summary and Section 1.5 for additional information, including a breakout by affordability level.

Table 1-1. Summary of Housing Availability Impacts

	Regional Total	Menlo Park Share	
		Current Commute Share Estimate	Increased Commute Share Estimate at 20%
A. Added Housing Supply (New Units)	1,730 Units	1,730 Units	1,730 Units
B. Added Employee Housing Demand	2,545 Units	177 Units	509 Units
C. Housing Availability, Net Impact [A. - B.]	(815 Unit) Net Decrease in Available Housing in Region	1,553 Unit Net Increase in Available Housing in Menlo Park	1,221 Units Net Increase in Available Housing in Menlo Park

- **Potential to Contribute to Displacement** – The new jobs, housing, and amenities added by the proposed Project create competing influences on the local housing market and displacement pressures in East Palo Alto and Belle Haven. The large addition to the housing supply from the proposed Project will expand availability of market rate and affordable housing in the local area, which will tend to moderate or counteract displacement pressures to some degree by relieving market pressures on the existing local housing stock. Jobs added by the Project will contribute to regional market pressures on the housing market and may create modest upward pressure on housing costs. However, a comparative analysis of real estate trends in East Palo Alto and Belle Haven to other communities vulnerable to displacement did not find clear evidence of a localized influence on housing costs from the existing Meta campuses. The new parks and shopping opportunities added by the proposed Project offer amenities that may benefit surrounding residential areas and create additional interest in living nearby, which could in turn influence housing costs. While it is challenging to determine which of the competing influences on the housing market and displacement pressures is likely to be most impactful, and a precise prediction of outcomes is not possible, on balance, the analysis suggests the proposed Project would likely, at most, represent a minor contributing factor to the substantial pre-existing displacement pressures in East Palo Alto and Belle Haven. See Section 1.6 for additional information.

1.1 Project Overview

Peninsula Innovation Partners, LLC (Project Sponsor), a subsidiary of Meta, is proposing a multi-phase, mixed-use development that includes up to approximately 1.6 million square feet of office and accessory space (consisting of meeting, collaboration, and conference space), of

which a maximum of 1.25 million square feet may be office space, up to approximately 200,000 square feet of non-office commercial/retail uses, a 193-key hotel, up to 1,730 multifamily residential units, parking, and open space improvements. The existing approximately 1,004,000 square feet of office, lab, and warehouse space on the 59-acre main Project Site, currently known as the Menlo Science and Technology Park, would be demolished. In addition, the proposed Project alters two parcels on the west side of Willow Road occupied by retail, restaurants and a service station, known as the Hamilton Avenue North and South parcels, to accommodate realignment of Hamilton Avenue at Willow Road.

A summary of the proposed Project is provided in Table 1-2, below.

Table 1-2. Project Summary

	Building Area	Units / Keys	
	square feet		
Proposed			
Office and Accessory Space [(1)]	1,600,000		
Dining	23,000		
Grocery	36,000		
Retail Shops	141,000		
Hamilton Ave: Retail / Restaurant [(2)]	28,162		
Subtotal Office and Commercial	1,828,162		
Residential	1,695,976	1,730	Units
Hotel	172,000	193	Keys
Total New	3,696,138		
Existing			
Office / Lab / Warehouse	1,003,910		
Hamilton Ave: Retail / Restaurant	20,477		
Total Existing	1,024,387		
Net Change	2,671,751	1,730	Units
		193	Keys

Source: Project Description, Willow Village Master Plan Project. ICF International.
Building area excludes parking.
(1) Of the 1.6 million sf of office and accessory space, a maximum of 1.25 million sf may be office and the balance (350,000 sf if the office sf is maximized) is for accessory uses such as meeting and collaboration space, orientation space, training space, and event space.
(2) Includes 15,702 sf of existing space proposed to remain, 4,775 sf to be relocated and rebuilt and 7,685 sf net added sf.

1.2 Housing Availability

The term “housing availability” is used to refer to the combined net housing supply and housing demand impacts of the proposed Project taking into consideration:

a) Construction of new housing units, which adds to housing availability through additions to the housing supply; and

b) Addition of jobs, which reduces housing availability by increasing demand for housing by employees.

HNAs prepared for projects that are exclusively non-residential have not used the term "housing availability" because these projects impact only the demand, or need, for housing. For purposes of a project that includes a residential component, a new term is introduced to describe combined effects on supply and demand for housing.

1.3 Estimated Impacts on Housing Supply and Housing Demand

The proposed Project will have impacts on both the supply and demand for housing. New residential units increase the supply of housing while the non-residential project components increase employment and result in demand for additional housing for workers within commuting distance. The terms "housing need" and "housing demand" are using interchangeably in this report.

- **Added Housing Supply** – The proposed Project would increase housing supply through construction of 1,730 new housing units at full buildout, of which approximately 18 percent (308 units) would be Below Market Rate (BMR) units[4] and the balance would be market rate.

- **Added Housing Demand** – New jobs added by the proposed Project would result in new worker households who need housing somewhere within commuting distance to Menlo Park. The proposed Project creates a demand for an estimated 2,545 additional housing units at full buildout. This includes an estimated need for 2,271 housing units based on the 4,332 jobs[5] added on-site plus an estimated demand for 274 housing units for workers in off-site services to new residents such as restaurants, retail, education, medical care and others. The number of jobs is translated into an estimate of employee housing demand based on an average of 1.91 workers per housing unit.

The proposed Project would result in a net decrease in housing availability of 815 units regionally (within commuting distance of Menlo Park) based on the estimated 1,730 new

[4] The BMR proposal is subject to review and action by the City Council as part of the project entitlements and is subject to change.

[5] For purposes of this analysis, on-site jobs includes both Meta and non-Meta employees who will work within the office, retail, hotel, and multi-family residential components of the proposed Project. Not all employees will be physically present each day.

residential units added to the housing supply minus the 2,545 units of added employee housing demand, as summarized in Table 1-3.

Table 1-3. Summary of Housing Availability Impacts Regionally (Within Commuting Distance)	
A. Added Housing Supply (New Units)	1,730 Units
B. Added Employee Housing Demand Within Commuting Distance	2,545 Units
C. Net Decrease in Housing Availability [A. - B.]	(815 Units)

1.4 Housing Demand and Housing Supply by Income Category

Housing demand and housing supply added by the proposed Project are identified by income category using the following six affordability categories, each expressed in relation to local Area Median Income (AMI):

- Extremely Low Income – households up to 30% of AMI;
- Very Low Income – households from 31% to 50% of AMI;
- Low Income – households from 51% to 80% of AMI;
- Moderate Income – households from 81% to 120% of AMI;
- Above Moderate Income – households from 121% to 150% of AMI; and
- Over 150% of AMI – households over 150% of AMI.

According to the California Department of Housing and Community Development (HCD), the AMI for a family of four in San Mateo County, is $149,600 as of 2021. Section 2 provides income limits applicable to each of the identified income categories. The affordability categories from 0% through 120% AMI reflect those addressed by statewide housing programs such as the Regional Housing Needs Allocation (RHNA) process. In addition, the Above Moderate Income tier is included in the analysis for consistency with HNAs prepared for prior projects in Menlo Park and to provide decision makers with information regarding a broad spectrum of housing affordability levels. Above Moderate Income households also face affordable housing challenges in Menlo Park as well as in the broader Bay Area. In fact, due to the high cost of housing, housing affordability challenges also extend to households earning over 150% of AMI[6], particularly in the for-sale housing market. The Over 150% of AMI category captures households with incomes that exceed 150% AMI and includes all households not included within one of the other income categories.

[6] An income of approximately 221% of AMI is estimated to be needed to afford the median priced home in Menlo Park. The median priced home in Menlo Park is $2.35 million based on home sales from December 2019 through December 2020 from real estate data service provider CoreLogic. Estimates assume a down payment of 30% based on the median down payment for home purchases with a mortgage in Menlo Park estimated from CoreLogic data during this period, 35% of income spent on housing, and a mortgage interest rate of 3.1% based on the average 30-year fixed mortgage rate from January through December 2020 from Freddie Mac Primary Mortgage Market Survey.

The income categories applicable to added employee housing demand are estimated by combining several data sources to estimate the household incomes of employees. Household incomes are then compared to income criteria published by HCD to identify housing demand by income category. Sources include the U.S. Bureau of Labor Statistics Occupational Employment Survey and the U.S. Census. Section 4 provides the supporting analysis for on-site workers and Section 5 provides the analysis for workers within off-site services to new residents such as retail, education, and medical care.

Residential units added by the proposed Project are identified by income category based on the Project Sponsor's proposal for compliance with the City's BMR Program guidelines. For market rate units, affordability level is based on estimated market rate rents and the household income necessary to afford these rents. The supporting analysis is presented in Section 3.

Table 1-4 presents the results of the analysis identifying added housing supply, added employee housing demand regionally (within commuting distance of Menlo Park), and the net decrease in regional housing availability by income category.

Table 1-4. Housing Availability Impacts Regionally (Within Commuting Distance)

	A. Added Housing Supply (New Units)	B. Added Employee Housing Demand Regionally (Within Commuting Distance)	C. Net Decrease in Regional Housing Availability [1] [= A. - B.]
Extremely Low	83	210	(127)
Very Low	37	307	(270)
Low	38	765	(727)
Moderate	496[2]	426	70
Subtotal: 0% to 120% AMI	654	1,708	(1,054)
Above Moderate	1,076	368	708
Subtotal: 0% to 150% AMI	1,730	2,076	(346)
Over 150% AMI	0	469	(469)
Total	1,730	2,545	(815)

(1) Negative figure represents a net decrease in housing availability in the region (added housing demand exceeds added housing supply).
(2) Includes 150 Moderate BMR units and 346 market rate studio units estimated to be affordable to Moderate Income.

As shown in Table 1-4, the 815-unit net decrease in housing availability in the region is comprised of 127 Extremely Low, 270 Very Low, 727 Low, and 469 Over 150% AMI units, partially offset by net increases in available housing within the Moderate and Above Moderate Income categories of 70 and 708 units, respectively. The net increase in available housing in the Moderate and Above Moderate categories results from the number of new housing units exceeding the added employee housing demand within these income categories.

Added housing supply within the Extremely Low, Very Low and Low Income categories identified in Table 1-4 reflect deed-restricted BMR units. Added housing supply within the

Moderate Income category includes 150 proposed Moderate Income deed-restricted BMR units and 346 market rate studio units with estimated rents that fall within a range affordable to Moderate Income households based on the analysis in Section 3. Market rate studio units would not be restricted for occupancy by Moderate Income households and could be occupied by households that have incomes that exceed income criteria for Moderate Income. Market rents are also free to adjust in response to rental market conditions and therefore affordability of the market rate units may adjust as well.

1.5 Menlo Park Share of Housing Supply and Housing Demand Impacts

This section provides an estimate of the share of the proposed Project's impacts on regional housing supply and demand that occur in the City of Menlo Park. All new residential units added by the proposed Project are in the City of Menlo Park; therefore, all 1,730 units are identified as additional housing supply in Menlo Park. The share of the added employee housing demand within Menlo Park is estimated based on commute data identifying the share of those working in Menlo Park who also live in Menlo Park.

Commute Data

According to the U.S. Census 2015-2019 American Community Survey (ACS), 5.9% of those who currently work in the City of Menlo Park also live in the City of Menlo Park. This has declined since the 2000 Census which showed that 7.2% of those who work in Menlo Park live in the city. This share is low compared to most other cities in the Bay Area,[7] attributable to a range of factors such as affordability constraints that already limit workers' ability to find housing within the city and the large number of jobs in Menlo Park relative to the size of the housing stock. Another contributing factor is the location and boundary configuration of the city making many other jurisdictions within a short commute distance.

The share of Meta employees at the company's Menlo Park campuses and leased offices who also live in Menlo Park is approximately 7.4%[8], slightly higher than the overall average of 5.9% of Menlo Park workers that both live and work in the city per the U.S. Census. Many factors influence how people select where to live, including, but not limited to, weather, family, community and cultural factors, housing affordability, quality of schools, access to employment and unit type. The reasons for a somewhat higher than average share of Meta employees living in Menlo Park are not known.

Commute Share Scenarios for Added Employee Housing Demand

To estimate Menlo Park's share of the total regional housing need from the proposed Project, the analysis considers two scenarios, a Current Commute Share Estimate, and an Increased

[7] See Appendix A Table 22 for comparable information for other cities.

[8] Based on data provided by Meta applicable to employees at its existing Menlo Park facilities as of March 2020.

Commute Share Estimate regarding the percentage share of workers who are likely to seek and find housing within Menlo Park:

1. ***Current Commute Share Estimate*** (7.4% for Meta workers / 5.9% for other workers) – The current commute share estimate uses data on existing commute patterns to estimate the number of workers who will live in Menlo Park. The 7.4% existing share of Meta workers who live in Menlo Park is used for workers within the office component of the proposed Project. For all other workers, the 5.9% city-wide average share of Menlo Park's workforce that lives in the city is used.

2. ***Increased Commute Share Estimate at 20%*** *(based on 2000 Nexus Study)* – The City Council has expressed an interest in improving the jobs housing balance and obtaining data to inform the goal of increasing the number of workers who live and work in Menlo Park. Therefore, for informational purposes, the report provides an additional goal-based estimate of housing units in Menlo Park based on a 20% commute share, which was a goal identified in the City's 2000 Commercial Linkage Fee Nexus Study. The possibility that availability and affordability of housing have contributed to a downward trend in Menlo Park's commute share is a primary reason for including this additional goal-based commute share estimate. The goal-based estimate also illustrates a scenario in which the residential units added by the proposed Project encourages a larger share of workers to live in Menlo Park[9].

Menlo Park Share of Regional Housing Supply and Housing Demand Impacts

The percent of workers residing locally with the current and increased commute share estimates are applied to the total regional housing need to calculate the number of workers in the proposed Project that are estimated to seek and find housing in Menlo Park. The two scenarios regarding the Menlo Park share of regional housing demand are then combined with the number of new residential units in Menlo Park to estimate the net impacts on housing availability in Menlo Park.

Current Commute Share Estimate – Results under the Current Commute Share Estimate are presented in Table 1-5, indicating the Menlo Park share of added housing supply, added housing demand, and net impacts on housing availability by income category. As shown, the Menlo Park share of added regional worker housing demand is estimated to total 177 units. The 1,730 new residential units added in Menlo Park by the proposed Project exceed the estimated 177 units of added employee housing demand in Menlo Park by 1,553 units, resulting in a net increase in housing availability in Menlo Park of 1,553 units.

[9] The Project Sponsor has indicated that there will not be any preference or priority for Meta employees to occupy the proposed residential units.

The 1,553-unit estimated net increase in housing availability in Menlo Park with the Current Commute Share Estimate consists of 70 Extremely Low, 15 Very Low, 466 Moderate, and 1,050 Above Moderate units, partially offset by net decreases in housing availability of 14 and 34 units within the Low and Over 150% of AMI categories, respectively. The net decrease in housing availability within the Low and Over 150% AMI categories is a result of added housing demand exceeding added housing supply within these income categories.

Table 1-5. Estimated Menlo Park Share of Regional Housing Availability Impacts - Current Commute Share Estimate

	A. Added Housing Supply in Menlo Park (New Units)	B. Menlo Park Share of Added Regional Worker Housing Demand with Current Commute Share (1)	C. Net Increase in Housing Availability in Menlo Park (2) [= A. - B.]
Extremely Low	83	13	70
Very Low	37	22	15
Low	38	52	(14)
Moderate	496 (3)	30	466
Subtotal: 0% to 120% AMI	654	117	537
Above Moderate	1,076	26	1,050
Subtotal: 0% to 150% AMI	1,730	143	1,587
Over 150% AMI	0	34	(34)
Total	1,730	177	1,553

(1) Current Commute Share is estimated at 7.4% for Meta workers, based on commute data provided by the Project Sponsor and 5.9% for all other workers based on Census data. Assumes distribution by income consistent with total housing need per Table 1-4.
(2) Negative figures represent a net decrease in housing availability (added housing demand exceeds added housing supply).
(3) Includes 150 Moderate BMR units and 346 market rate studio units estimated to be affordable to Moderate Income.

Increased Commute Share Estimate – Results under the Increased Commute Share Estimate (20%) are presented in Table 1-6. Applying an increased commute share of 20% to the total added regional employee housing demand results in an estimated Menlo Park share of regional housing need of 509 units. The 1,730 added residential units exceed the estimated 509 units of added employee housing demand in Menlo Park by 1,221 units with the Increased Commute Share Estimate, resulting in a net increase in housing availability in Menlo Park of 1,221 units.

The 1,221-unit estimated net increase in housing availability in Menlo Park with the Increased Commute Share Estimate consists of 42 Extremely Low, 411 Moderate, and 1,002 Above Moderate units, partially offset by a net decrease in housing availability of 25, 115, and 94 units within the Very Low, Low, and Over 150% of AMI categories, respectively. The net decrease in housing availability within the Very Low, Low, and Over 150% AMI categories is a result of added housing demand exceeding added housing supply within these income categories.

Table 1-6. Estimated Menlo Park Share of Regional Housing Availability Impacts – Increased Commute Share Estimate at 20%			
	A. Housing Supply Added (New Units)	B. Menlo Park Share of Net Increase in Regional Worker Housing Demand with Increased Commute Share (1)	C. Net Increase in Housing Availability in Menlo Park (2) [= A. - B.]
Extremely Low	83	41	42
Very Low	37	62	(25)
Low	38	153	(115)
Moderate	496 (3)	85	411
Subtotal: 0% to 120% AMI	654	341	313
Above Moderate	1,076	74	1,002
Subtotal: 0% to 150% AMI	1,730	415	1,315
Over 150% AMI	0	94	(94)
Total	1,730	509	1,221

(1) Uses 20% Increased commute share as described above. Assumes distribution by income consistent with total housing need per Table 1-3.
(2) Negative figures represent a net decrease in housing availability (added housing demand exceeds added housing supply).
(3) Includes 150 Moderate BMR units and 346 market rate studio units estimated to be affordable to Moderate Income.

The percentage factors used to estimate the Menlo Park share of housing need are applied uniformly across each of the income tiers. The actual distribution by income tier in Menlo Park would likely vary from these estimates based on factors such as the existing housing stock, limited availability of affordable units, and the production of market rate and affordable units in Menlo Park.

1.6 Displacement Analysis

Displacement occurs when housing or neighborhood conditions force existing residents to move, or households feel like their move is involuntary. Displacement can be caused by a range of physical, economic and social factors including but not limited to foreclosure, condominium conversion, building deterioration or condemnation, increased taxes, natural disasters, eminent domain and increases in housing costs[10, 11, 12]. The HNA is focused on economic drivers of displacement, specifically the potential for the proposed Project to affect the local housing market and contribute to increasing housing costs, although these economic drivers may also be associated with physical or social factors.

[10] Center for Community Innovation (2020). Investment and Disinvestment as Neighbors, A Study of Baseline Housing Conditions in the Bay Area Peninsula.

[11] Zuk, M. et. al. 2017. Gentrification, Displacement, and the Role of Public Investment. Journal of Planning Literature. Journal of Planning Literature 1-14.

[12] Bradshaw, K. (2019). Uneven Ground: How unequal land use harms communities in southern San Mateo County. Palo Alto Online. https://paloaltoonline.atavist.com/uneven-ground.

While displacement is not an impact for the purposes of the California Environmental Quality Act (CEQA), displacement has become an increasing regional concern in the Bay Area. A map produced by the Urban Displacement Project, a research and action initiative of UC Berkeley that aims to understand and describe the nature of gentrification and displacement, identifies numerous communities as undergoing displacement or at risk of displacement that extend from San Francisco down the Peninsula to many neighborhoods in San Jose and the East Bay.

The displacement analysis addresses the potential for the proposed Project to contribute to displacement of existing residents in two nearby communities, East Palo Alto and Belle Haven. These communities have risk factors for displacement based on their relatively lower-income existing population that includes a high percentage of households who spend 35% or more of their income on housing. They are identified by the Urban Displacement Project[13] as experiencing on-going gentrification and/or displacement or being at risk of displacement. Another recent study of baseline housing conditions in Belle Haven, East Palo Alto, and North Fair Oaks, prepared by the UC Berkeley Center for Community Innovation and its Y-PLAN initiative, identified similar conclusions[14].

The cost of housing in East Palo Alto and Belle Haven has been increasing rapidly, consistent with trends for the County and the greater Bay Area, which contribute to displacement pressures. These increases in housing costs partly reflect recovery from a decrease in housing prices during the housing market downturn and foreclosure crises during roughly the 2007 to 2012 period. However, during the subsequent economic expansion, the housing market moved well past its prior peak in 2006, although market conditions for some types of housing weakened during the early phases of the global pandemic. The displacement analysis component of the HNA evaluates the potential for the proposed Project to be a contributing factor to displacement pressures in East Palo Alto and Belle Haven by:

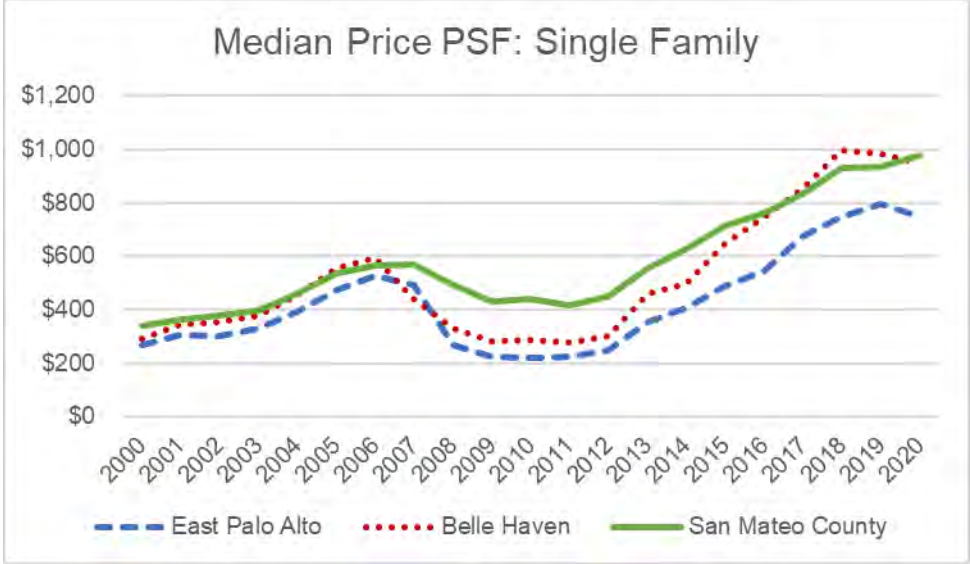
1) Evaluating historic relationships between job growth and real estate trends and using historic relationships to estimate the potential indirect influence on housing prices and rents.
2) Quantifying the net housing supply and housing demand impacts from the proposed Project within Menlo Park and East Palo Alto, combined.
3) Reviewing real estate trends in East Palo Alto and Belle Haven since Meta and its affiliates first began occupying its existing campuses in Menlo Park in comparison to other Bay Area communities that are also vulnerable to displacement to evaluate whether there are signs of a localized influence on housing market conditions.

[13]Zuk, M., & Chapple, K. (2019). Urban Displacement Project. http://www.urbandisplacement.org/

[14] Center for Community Innovation (2020). Investment and Disinvestment as Neighbors, A Study of Baseline Housing Conditions in the Bay Area Peninsula.

Home Price Trends

Home prices in East Palo Alto and Belle Haven have generally tracked broader trends in the county housing market, which has experienced significant escalation in prices. During the housing market downturn from 2007 to 2012, prices in the two communities fell further than the county overall but outpaced the county in the subsequent recovery. This pattern likely reflects the impacts of the foreclosure crisis during the housing market downturn, which is reported to have heavily impacted East Palo Alto[15]. Over the entire period from 2000 to 2020 shown in the chart below, escalation in housing prices in East Palo Alto matches that of the county while Belle Haven outpaced the county by an annualized rate of approximately 0.6% per year. Median home prices per square foot (PSF) in 2020 are now nearly 3 times what they were in 2000 in both East Palo Alto and the county overall and are more than 3 times the 2000 price level in Belle Haven.



Source: CoreLogic

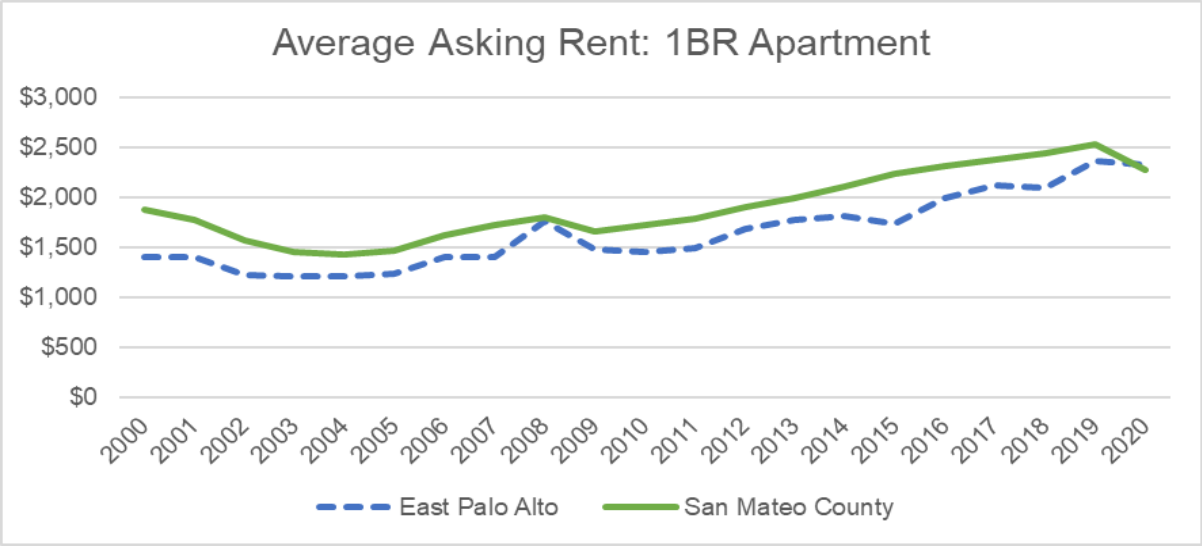
Rental Market Trends

Trends in asking rents for available apartments in East Palo Alto were compared to the San Mateo County average for the period from 2000 to 2020. Belle Haven is not presented in the chart due to limited rental market data[16]. Rents increased significantly over the time period

[15] Urban Displacement Project. 2015. East Palo Alto: An Island of Affordability in a Sea of Wealth.

[16] Only approximately 160 units (20%) built before 2016 out of the total 795-unit Belle Haven rental housing stock per the U.S. Census is covered by the historic CoStar data used in the trends analysis. Most rental housing has historically consisted of single-family or small multifamily structures with fewer than five units which are less likely to report rents regularly for purposes of the commercially available data source used in this analysis. Since 2016, two new apartment projects have added approximately 340 units to the rental housing stock, but rents of new apartments tend to command a premium relative to the existing supply and cannot be used for purposes of historic trends at the neighborhood scale. Appendix C Table 13 provides the historic data that is available.

consistent with regional trends. According to CoStar, a commercial provider of multifamily market data, asking rents in East Palo Alto have increased over the period by approximately 67% versus 21% for the county. As indicated in the chart below, rents in East Palo Alto are now similar to the county average.[17]



Source: Mean Asking Rents per CoStar. Includes all one-bedroom apartments regardless of year built.

Indirect Housing Market Effects

Job growth, especially high-income job growth, exerts upward pressure on home prices and rents throughout the region. Potential indirect housing market effects of the proposed Project are analyzed by using a simple linear regression analysis to identify how real estate conditions in San Mateo County and job growth, adjusted for new housing units, have been correlated over the period from 2000 through 2020.[18] The regression analysis findings are then applied to the jobs added by the proposed Project, adjusted for the Project's housing units, to estimate the potential range of effects on the local housing market. Key findings of this analysis are that:

- Rents are highly correlated with job growth; and
- Home prices do correlate with job growth, but the correlation is weaker than for rental housing. Other factors such as interest rates, credit availability, and other economic trends appear to have been more influential for home prices over the 2000 to 2020 period.

[17] Multifamily rental data in this section includes both new and existing buildings. In contrast, the comparison communities analysis excludes new buildings for purposes of the comparison of rental trends in East Palo Alto and eight comparison communities.

[18] Selection of 2000 as the earliest date analyzed was based on availability of rental data from CoStar for 2000 onward. Employment data for 2020 reflects an average of the first three quarters because the Quarterly Census of Employment and Wages had yet to release annual data for 2020.

The potential influence of the proposed Project on housing costs for newly vacated units is estimated to range from a 0.1% increase at the lower end up to a 1.1% increase at the upper end. These findings reflect a range of approaches to the regression analysis designed to provide an estimate of the upper and lower bounds of potential market influence from the proposed Project within East Palo Alto and Belle Haven.

Table 1-7. Analysis of Indirect Housing Market Effects
Potential Percentage Influence on Rents and Sales Prices

	Lower Estimate (3-County Analysis)	Upper Estimate (Single County Analysis)
Correlation with All Job Growth		
Rents	0.12%	0.67%
Sales Prices	0.10%	0.61%
Correlation with High-Wage Job Growth *[to capture potential multiplier effect]*		
Rents	0.18%	1.04%
Sales Prices	0.14%	1.12%

The upper estimate of potential influence on housing costs is based on a "single-county" regression analysis which attributes variation in local rents and home prices to job growth within San Mateo County. The reality is that the San Mateo County economy and housing market are highly integrated with that of the larger Bay Area. Approximately 38% of workers who live in San Mateo County work in San Francisco or Santa Clara counties. Therefore, the upper estimate that attributes changes only to San Mateo County job growth likely overstates the impacts.

The lower estimate is based on a "three-county" analysis that includes San Francisco and Santa Clara counties. A combined 95% of all workers who live in San Mateo County work in one of the three selected counties as shown in Table 7-5. Most San Mateo County workers either work within the county or commute to San Francisco or Santa Clara counties. Job growth in these three counties was anticipated to be most influential on local housing prices and rents. Alameda County was not included because just 3% of workers that live in San Mateo County commute east to jobs in Alameda County. Despite its proximity and accessibility, job growth occurring in Alameda County was assumed to be less influential on the housing market in San Mateo County because few San Mateo County residents commute to jobs located in Alameda County. The three-county analysis may understate the influence of local job growth by treating jobs added anywhere within the three counties as having an equal influence on housing costs in San Mateo County. Since the majority of San Mateo County residents work within the county (57%), job growth within San Mateo County likely has somewhat more of an influence than job growth in Santa Clara County or San Francisco.

The analysis tests how housing costs are correlated with all categories of job growth as well as a separate test of the correlation with high-wage job growth. Technology, bio-tech, and other high-wage sectors help to drive growth in other sectors of the local economy such as retail, food, and transportation supported by spending by these businesses and their workforce. Employment and economic growth generated through subsequent business and employee spending is commonly referred to as the "multiplier effect". The high-wage jobs analysis is an approach to capturing potential "multiplier effects." To the extent multiplier effects associated with the high-wage jobs are an influence on local home prices and rents, the effects would be captured in the correlation between high-wage job growth and housing costs. Consistent with this, estimated market effects of the proposed Project are higher for the scenario specifically analyzing high-wage jobs. The high-wage analysis assumes, but does not prove, that high wage jobs are the primary influence on the housing market and that lower wage jobs either have less of an influence on the market or are an indirect result of the high-wage jobs by virtue of the associated multiplier effects.

The analysis of indirect housing market effects has the potential to overstate impacts by not distinguishing the effects of other important contributing factors that are correlated with job growth. Following are examples of factors that are correlated with job growth for which the effects may be ascribed to job growth, overstating the influence of job growth on the housing market:

- *Rising Incomes* – Rising incomes of existing Bay Area households, especially those of higher-income households, enable these households to compete for limited housing supply in the most desirable locations in the Bay Area, contributing to rising housing costs.

- *New Units Coming Online* – Some communities in San Mateo County, such as Redwood City, have seen construction of a significant number of new rental units that offer superior amenities and command premium rental rates. Inclusion of these new units in the data set could bring up averages even if rents for existing units are not increasing, or not increasing at the same pace. Therefore, one contributing factor to rising rents within the county overall may simply be the addition of newer units that can command higher rents.

For rental housing, the midpoint of the upper and lower percentage impact estimates presented in Table 1-7 are 0.39% based on all jobs and 0.61% based on high-wage jobs. With for-sale housing, the midpoints are 0.36% based on all jobs and 0.63% based on high-wage jobs. The percentage findings presented in Table 1-7 may be converted to a potential dollar influence on housing costs. Multiplying the percentages applicable to rental housing by the average effective East Palo Alto rent of $2,766 per month (per CoStar for the year 2020), yields an estimated potential impact in the range of $11 to $17 per month. For for-sale housing, a comparable analysis applying the percentages to current median home prices and mortgage rates translates

to a potential monthly mortgage payment increase for potential purchasers of homes available for sale in East Palo Alto and Belle Haven of between $10 and $22 per month.

Menlo Park has already issued building permits for 1,416 housing units during the current RHNA planning cycle for 2015 to 2023 and East Palo Alto has issued building permits for 222 units for a combined 1,638 units[19]. Menlo Park has a RHNA allocation for the 2023 to 2031 planning period of 2,946 units and East Palo Alto has an allocation of 829 units for a combined 3,775 units. In addition to the proposed Project, Menlo Park has over 1,500 additional housing units in the development pipeline in the vicinity and East Palo Alto has a pipeline of nearly 1,000 new units,[20] resulting in a combined 2,500 additional pipeline units in the vicinity, of which approximately 600 units would be below market rate (BMR) affordable units[21]. Estimates of potential impact on rents and home prices are before considering any offsetting effects of this additional new housing construction that is expected to absorb additional housing demand and moderate or offset the potential effects that are estimated.

Increase in Housing Availability in East Palo Alto and Menlo Park Combined

The proposed Project results in a net increase in housing availability of 1,195 units in Menlo Park and East Palo Alto combined. This estimate considers the 1,730 new units added and a 535-unit estimated combined share of employee housing demand within Menlo Park and East Palo Alto, for a net increase in housing availability of 1,195 units. Estimated housing demand in Menlo Park is conservatively based on the Increased Commute Share Estimate while the estimated share of housing demand in East Palo Alto is based on existing commute share data. The net addition in available housing is within the Extremely Low, Moderate and Above Moderate Income categories. The 1,195-unit estimated net increase in available housing in East Palo Alto and Menlo Park is an indication that the proposed Project will help to absorb existing and future housing demand within the two communities, which will help to offset or moderate displacement pressures.

[19] 2020 Housing Element Annual Progress Reports for Menlo Park and East Palo Alto.

[20] October 6, 2020 City of East Palo Alto Staff Report to the City Council RE: Follow-Up on Study Session Related to the Affordable Housing Component of the Euclid Improvements (Woodland Park) Project, Attachment 1. East Palo Alto Housing Breakdown, which indicates approved, planned, proposed or under construction housing units totaling 969 units, not including rebuilt units.

[21] Pipeline total of approximately 600 additional BMR units is summarized from prior HNA's prepared by KMA for projects in the Bayfront Area, the applicant proposals for 123 Independence, the City of Menlo Park summary of pipeline projects in the Bayfront Area, and the staff report referenced in the prior footnote with respect to East Palo Alto pipeline projects.

Comparative Analysis of Real Estate Trends

To inform an understanding of the extent to which localized market trends in East Palo Alto and Belle Haven varied from broader regional trends since Meta and its affiliates began occupying its existing facilities in Menlo Park in 2011, real estate market trends in both communities since 2011 were analyzed in comparison to trends within other Bay Area locations that are also vulnerable to displacement.

For the comparative review of real estate trends, a total of eight comparison geographies were selected. Seven were selected based on comparable demographic, housing market, or displacement risk conditions. In addition, San Mateo County was included to provide a reference point for broader market conditions. The list of comparison geographies is as follows:

- Downtown Redwood City
- Hayward (selected zip codes)
- Bayfair / San Leandro
- Fruitvale/Oakland
- West Berkeley
- North Richmond
- East San Jose
- San Mateo County

The comparative review of real estate trends since Meta and its affiliates first began occupying its existing Menlo Park facilities does not show clear evidence of a localized influence on market conditions distinguishable from regional trends. While East Palo Alto and Belle Haven have experienced significant increases in home prices, the increases are within the range of other comparison communities in the Bay Area. The increase in apartment rents in East Palo Alto, while higher than most comparison communities, is still less than the increase that has occurred in Bayfair / San Leandro and comparable to rent growth in Hayward.

1. *Home Price Trends* – Trends in home prices for East Palo Alto and Belle Haven were compared to eight other communities for the period from 2011 to 2020 since Meta and its affiliates first began occupying its existing Menlo Park facilities. Home prices increased significantly for all the communities consistent with regional trends. East Palo Alto and Belle Haven each experienced an approximately 230% to 240% increase in pricing over the period. This increase was below the 380% increase in North Richmond and the 280% increase in Oakland's Fruitvale neighborhood. The other comparison communities ranged from a 134% to a 214% increase. These across-the-board increases are a reflection of the booming Bay Area economy over most of the past decade as well as recovery from the housing market crash and foreclosure crisis. The data indicates the very significant increases in home prices for East Palo Alto and Belle Haven are within the same range as other comparison communities in the Bay Area.

2. *Rental Market Trends* – Trends in asking rents for available, existing market rate apartments in East Palo Alto were compared to five other communities for the period from 2011 to 2020 since Meta and its affiliates first began occupying its existing campuses. Rents increased significantly for all the communities consistent with regional trends. Rents in East Palo Alto increased by 56% over the period, below the 62% increase in San Leandro, about the same as the increase in Hayward, and above the other comparisons, which ranged from a 34% to a 49% increase. Reliable data for Belle Haven, North Richmond, Fruitvale, and West Berkeley was not available.

Potential for Project to Contribute to Displacement in East Palo Alto and Belle Haven

The new jobs, housing, and amenities added by the proposed Project create competing influences on the local housing market and displacement pressures in East Palo Alto and Belle Haven. New jobs added by the Project may have a minor potential influence on housing costs by contributing to regional market pressures, as detailed in the analysis of the historical relationship between regional job growth and housing costs. While housing costs in East Palo Alto and Belle Haven are susceptible to regional market pressures, the comparative analysis of local real estate trends does not identify clear evidence of an additional, localized influence of job growth at the existing Meta campuses that can be distinguished from what many Bay Area communities experienced during the economic expansion of the prior decade. New residential units added by the Project will help to offset new housing demand generated by new workers. The expansion in the availability of market rate and affordable housing in the local area will tend to moderate or counteract displacement pressures to some degree by relieving market pressures on the existing housing stock, as has been demonstrated in recent research on the localized market effects of new housing development.[22] Finally, the new publicly accessible open spaces and shopping opportunities added by the proposed Project offer amenities that

[22] Asquith, Brian J., Evan Mast, and Davin Reed. 2019. "Supply Shock Versus Demand Shock: The Local Effects of New Housing in Low-Income Areas." Upjohn Institute Working Paper 19-316. W. E. Upjohn Institute for Employment Research. https://doi.org/10.17848/wp19-316

Damiano, Anthony, Frenier, Chris. 2020. “Build Baby Build?: Housing Submarkets and the Effects of New Construction on Existing Rents” University of Minnesota CURA Center for Urban and Regional Affairs. https://www.tonydamiano.com/project/new-con/bbb-wp.pdf

Li, Xiaodi. 2019. “Do New Housing Units in Your Backyard Raise Your Rents?” NYU Wagner and NYU Furman Center. https://72187189-93c1-48bc-b596-fc36f4606599.filesusr.com/ugd/7fc2bf_2fc84967cfb945a69a4df7baf8a4c387.pdf

Mast, Evan. 2019. “The Effect of New Market-Rate Housing Construction on the Low-Income Housing Market” Upjohn Institute Working Paper 19-307 W. E. Upjohn Institute for Employment Research. https://research.upjohn.org/cgi/viewcontent.cgi?article=1325&context=up_workingpapers

Pennington, Kate. 2021. “Does Building New Housing Cause Displacement?: The Supply and Demand Effects of Construction in San Francisco.” Department of Agricultural and Resource Economics, University of California, Berkeley. https://www.dropbox.com/s/oplls6utgf7z6ih/Pennington_JMP.pdf?dl=0

Phillips, Shane, Manville, Michael, Lens Michael. 2021. “Research Roundup: The Effect of Market-Rate Development on Neighborhood Rents” UCLA Lewis Center for Regional Policy Studies. https://www.lewis.ucla.edu/research/market-rate-development-impacts/

may also benefit surrounding residential areas and may create additional interest in living in nearby areas, which could in turn influence housing costs. While it is challenging to determine which of the competing influences on the housing market and displacement pressures is likely to be most impactful, and a precise prediction of outcomes is not possible, on balance, the analysis suggests the proposed Project would likely, at most, represent a minor contributing factor to the substantial pre-existing displacement pressures in East Palo Alto and Belle Haven.

2.0 INTRODUCTION

This Housing Needs Assessment (HNA) provides an analysis of the proposed Project's impact on housing supply and housing demand and evaluates its potential to contribute to displacement of existing residents of the City of East Palo Alto (East Palo Alto) and the Belle Haven neighborhood of Menlo Park (Belle Haven), two proximate communities identified as having risk factors for displacement. The report has been prepared by Keyser Marston Associates (KMA) for the City of Menlo Park under a subcontract agreement with ICF International, prime consultant responsible for preparation of the Environmental Impact Report (EIR).

In 2016, the City updated its General Plan, specifically the land use and circulation elements, and its Zoning Ordinance (commonly referred to as ConnectMenlo). The City completed and certified a program level EIR for ConnectMenlo, which determined that there would be a less than significant impact on population and housing, except cumulative impacts projected to be reduced to less than significant following an update of ABAG regional forecasts. However, pursuant to the terms of the 2017 City of East Palo Alto v. City of Menlo Park Settlement Agreement (Settlement Agreement), preparation of this HNA is required. This HNA has been prepared consistent with the terms of that settlement agreement.

The following housing-related topics are addressed in this HNA:

1) Net impact on housing availability by income level, considering the combined effects of added housing supply and added employee housing demand;

2) Share of housing availability impacts estimated to occur within the City of Menlo Park; and

3) Potential for the proposed Project to contribute to rising housing costs and displacement of existing residents in East Palo Alto and Belle Haven.

These housing-related impacts are not required to be analyzed under the California Environmental Quality Act (CEQA) since economic or social changes are not considered significant effects on the environment. Nevertheless, this information is required by the settlement agreement and may be of interest to decision-makers and/or the public in evaluating the merits of the proposed Project.

2.1 Project Description

Peninsula Innovation Partners, LLC (Project Sponsor), a subsidiary of Meta, is proposing a multi-phase, mixed-use development that includes up to approximately 1.6 million square feet of office and accessory space (consisting of meeting, collaboration, and conference space), of which a maximum of 1.25 million square feet may be office space, up to approximately 200,000 square feet of non-office commercial/retail uses, a 193-key hotel, up to 1,730 multifamily residential units, parking, and open space improvements. The existing approximately 1,004,000

square feet of office, lab, and warehouse space on the 59-acre Project site currently known as the Menlo Science and Technology Park would be demolished. In addition, the proposed Project also alters two parcels on the west side of Willow Road occupied by retail, restaurants and a service station, known as the Hamilton Avenue North and Hamilton Avenue South parcels, to accommodate realignment of Hamilton Avenue at Willow Road and increase building area by approximately 7,700 square feet. The Project site encompasses the following addresses:

Main project site: 1350–1390 Willow Road, 925–1098 Hamilton Avenue, 1005–1275 Hamilton Court; and

Hamilton Avenue Parcels North and South: 871–883 Hamilton Avenue, and 1399-1401 Willow Road.

A summary of the proposed Project is provided in Table 2-1, below.

Table 2-1. Project Summary

	Building Area	Units / Keys	
	square feet		
Proposed			
Office and Accessory Space (1)	1,600,000		
Dining	23,000		
Grocery	36,000		
Retail Shops	141,000		
Hamilton Ave: Retail / Restaurant (2)	28,162		
Subtotal Office and Commercial	1,828,162		
Residential	1,695,976	1,730	Units
Hotel	172,000	193	Keys
Total New	3,696,138		
Existing			
Office / Lab / Warehouse	1,003,910		
Hamilton Ave: Retail / Restaurant	20,477		
Total Existing	1,024,387		
Net Change	2,671,751	1,730	Units
		193	Keys

Source: Project Description, Willow Village Master Plan Project. ICF International.
Building area excludes parking.
(1) Of the 1.6 million sf of office and accessory space, a maximum of 1.25 million sf may be office and the balance (350,000 sf if the office sf is maximized) is for accessory uses such as meeting and collaboration space, orientation space, training space, and event space.
(2) Includes 15,702 sf of existing space proposed to remain, 4,775 sf to be relocated and rebuilt and 7,685 sf net added sf.

The Project is comprised of three distinct districts including a:

- Residential/Shopping District encompassing the proposed residential units, grocery, and a portion of the dining and retail shops;
- Town Square District including the hotel, dining and retail uses; and
- Campus District encompassing the office and accessory space, parking and a portion of the retail space.

See the Draft Environmental Impact Report for the Willow Village Master Plan Project, Project Description for more information regarding the proposed Project.

2.2 Estimated On-Site Employment

The proposed Project is estimated to accommodate a total of approximately 8,128 employees, representing a net increase of 4,332 employees from the 3,796 existing on-site employees, as summarized in Table 2-2. Employment figures identified in Table 2-2 and throughout the HNA are inclusive of both Meta and non-Meta employees within the office, retail, hotel, and multi-family residential components of the proposed Project. Not all employees will be physically present each workday considering remote work, vacations, and other factors.

Table 2-2. Estimated Net Change in On-Site Employment

New Employment	8,128	Employees
Existing Employment	3,796	Employees
Net Change	4,332	Employees

Source: *Project Description, Willow Village Master Plan Project. ICF International, 2021.*

Table 2-3 provides a breakdown of employment by project component. Within the Campus District, employment in food service and building services such as maintenance, janitorial, and security are broken out separately as these services are often provided by separate contractors. Separately identifying employees of these service providers allows differences in compensation levels to be considered in the analysis. Employment estimates are drawn from the DEIR or provided by the Project Sponsor except as otherwise noted in footnotes to Table 2-3.

Table 2-3. Estimated Net Change in On-Site Employment				
Project Component	Development			Employment
	Square Feet	Units/Keys		
Proposed				
Office and Accessory Space				
Office employment				6,950
Food Service employment				198
Fitness Center employment				17
Building Services employment [1]				189
Campus District Total	1,600,000 [4]			7,354
Retail				
Dining	23,000			160
Grocery	36,000			75
Shops	141,000			130
Subtotal Main Project Site Retail	200,000			365
Hamilton Ave Retail	28,162			164
Retail Total	228,162			529
Hotel	172,000	193	Keys	210
Residential	1,695,976	1,730	Units	35
Total New Employment	3,696,138			8,128
Existing				
Main Project Site				
Meta employees				3,500
Other Existing Tenants [2]				70
Building Services [1] [3]				96
Total Main Project Site	1,003,910			3,666
Hamilton Ave: Retail	20,477			130
Total Existing	1,024,387			3,796
Net Change	2,671,751			4,332

Sources: *DEIR Project Description, Willow Village Master Plan Project. ICF International*.

(1) Includes security, janitorial and maintenance employment. Security and janitorial employment estimated by Project Sponsor based on existing employment levels. Maintenance employment estimated based upon International Facility Management Association (IFMA), Operations and Maintenance Benchmarks Research Report #33. For proposed employment, the estimate is based on one employee per 50,000 square feet, which reflects a 20% increase over indicated averages due to employment density in excess of the typical range for office. For existing, the estimate is based on 60,000 square feet per employee, without the upward adjustment for employment density.
(2) Other existing tenants include a dialysis clinic, a non-profit hub, and other tenants within the existing warehousing and industrial uses.
(3) Estimated based on the ratio between the Project Sponsor estimate of janitorial and security employment in the proposed development and office employment in the proposed development, plus maintenance employment estimated consistent with footnote 1.
(4) Of the 1.6 million sf of office and accessory space, a maximum of 1.25 million sf may be office and the balance (350,000 sf if the office sf is maximized) is for accessory uses such as meeting and collaboration space, orientation space, training space, and event space.

2.3 Multiplier Effects

Technology, bio-tech, and other high-wage sectors of the local economy can drive growth in other sectors such as retail, food, transportation, construction and professional services that are supported by the spending of these businesses and their workforce. Economic growth generated through business and employee spending is commonly referred to as the "multiplier effect." Multiplier effects include indirect effects, which relate to businesses that provide goods and services supporting the operations of the business or project under study, and induced impacts, which relate to economic activity generated as workers spend their incomes in the local economy. The Settlement Agreement requires an evaluation, to the extent possible, of the effect that indirect and induced employment may have on the housing market and displacement. The requirement to analyze the potential impacts associated with "multiplier effects" on the local housing market is addressed in two ways, as described below, consistent with the methodology used by other recent HNAs prepared for the City since the Settlement Agreement was adopted.

For residential uses, indirect and induced jobs located off-site in retail, restaurants, education, medical care and other services to residents are quantified through the analysis presented in Section 5. These off-site jobs are quantified using the IMPLAN (IMpact Analysis for PLANning) model, a model widely used to quantify the impacts of changes in a local economy. Off-site jobs are estimated and included in the analysis of housing availability and displacement impacts.

For non-residential uses, potential effects on the housing market and displacement related to multiplier effects are taken into account through the analysis in Section 7. The approach is to capture potential housing market effects by analyzing historical relationships between local rents and sales prices and growth of jobs in high-wage sectors of the local economy that are primary drivers of multiplier effects. This approach allows potential housing market and displacement effects arising from multiplier effects to be assessed directly. Businesses occupying the non-residential project components are likely to utilize services or purchase supplies from off-site businesses that are more widely dispersed relative to the spending patterns of residents. For example, specialized legal or accounting services might be provided by a firm in San Francisco or Washington D.C., or wherever the relevant expertise is identified. Induced jobs supported by the spending of employees within non-residential project components will also be more widely distributed, mirroring the commute patterns of employees as identified in Table 6-5. Given the mixed-use nature of the proposed Project, with on-site retail and restaurant uses, a share of indirect and induced impacts will be internalized and included as part of on-site employment totals. Rather than attempt to quantify the number and location of off-site indirect and induced jobs and then assesses housing market and displacement impacts arising from those jobs, the analysis takes a more direct approach of assessing potential housing market and displacement effects associated with multiplier effects through an analysis of historical data, as described in Section 7. The Section 7 analysis of potential housing market effects from added jobs identifies greater impacts in the scenario designed to capture potential multiplier effects, consistent with the concept that multiplier effects could lead to greater impacts.

2.4 Income Definitions

The income levels or tiers used in the analysis are expressed in relation to local Area Median Income (AMI). For example, Extremely Low Income is defined as households earning up to 30% of AMI. The AMI for each county or group of counties is issued annually by the U.S. Department of Housing and Urban Development (HUD), and released by the California Department of Housing and Community Development. Most housing programs and policies in California and its jurisdictions utilize these income definitions. The City of Menlo Park is covered by and utilizes the AMI information provided for San Mateo County.

Per HCD and statewide programs, the analysis includes households earning less than 120% AMI. In addition, an Above Moderate Income tier covering 120% to 150% AMI is presented in this analysis because this income tier also faces affordable housing challenges in Menlo Park and the greater Bay Area. In fact, due to the high cost of housing in Menlo Park, housing affordability challenges even extend to households earning more than 150% of AMI[23], especially in the for-sale housing market. As with HNAs prepared for prior projects in Menlo Park, the Above Moderate Income tier was included to provide decision makers more information on the housing needs of a broad spectrum of housing affordability levels.

In summary, the income tiers used in the analysis are:

- Extremely Low Income – households up to 30% of AMI;
- Very Low Income – households from 31% to 50% of AMI;
- Low Income – households from 51% to 80% of AMI;
- Moderate Income – households from 81% to 120% of AMI;
- Above Moderate Income – households from 121% to 150% of AMI; and
- Over 150% of AMI – households over 150% of AMI.

The 2021 income limits by household size are presented below in Table 2-4.

[23] An income of approximately 221% of AMI, is estimated to be needed to afford the median priced home in Menlo Park. The median priced home in Menlo Park is $2.35 million based on home sales from December 2019 through December 2020 from real estate data service provider CoreLogic. Estimates assume a down payment of 30% based on the median down payment for home purchases with a mortgage in Menlo Park estimated from CoreLogic data during this period, 35% of income spent on housing, and a mortgage interest rate of 3.1% based on the average 30-year fixed mortgage rate from January through December 2020 from Freddie Mac Primary Mortgage Market Survey.

Table 2-4. 2021 Household Income Limits							
		Income Limit by Household Size					
Income Category	Percent of AMI	1-person	2-person	3-person	4-person	5-person	6-person
Extremely Low	30% of AMI	$38,400	$43,850	$49,350	$54,800	$59,200	$63,600
Very Low Income	50% of AMI	$63,950	$73,100	$82,250	$91,350	$98,700	$106,000
Low Income	80% of AMI	$102,450	$117,100	$131,750	$146,350	$158,100	$169,800
Moderate Income	120% of AMI	$125,650	$143,600	$161,550	$179,500	$193,850	$208,200
Above Moderate	150% of AMI	$157,050	$179,550	$202,000	$224,400	$242,350	$260,350
Median Income	100% of AMI	$104,700	$119,700	$134,650	$149,600	$161,550	$173,550

AMI = Area Median Income, San Mateo County 2021
Source: California Department of Housing and Community Development

2.5 Report Organization

This report is organized into eight sections and three appendices:

- Section 1.0 provides an Executive Summary;
- Section 2.0 provides an Introduction;
- Section 3.0 identifies the income categories applicable to the new residential units;
- Section 4.0 provides an analysis of worker housing needs for added on-site jobs;
- Section 5.0 estimates housing demand by income for off-site workers in services to new residents such as restaurants, retail and health care;
- Section 6.0 combines the findings of Sections 3, 4 and 5 to estimate the net impact on housing availability and the share of net impacts occurring within the City of Menlo Park;
- Section 7.0 provides a discussion of the potential for the proposed Project to contribute to displacement of existing residents in East Palo Alto and Belle Haven;
- Section 8.0 provides an analysis of the Increased Residential Density Variant addressed in the DEIR;
- Appendix A provides supporting tables on worker occupation and incomes;
- Appendix B includes a summary of U.S. Census data for East Palo Alto and Belle Haven; and
- Appendix C provides supporting technical tables for the displacement analysis.

2.6 Data Sources and Qualifications

The analysis in this report has been prepared using the best and most recent data available. Sources include the American Community Survey (ACS) of the U.S. Census[24], the U.S. Bureau of Labor Statistics Quarterly Census of Employment and Wages and Occupational Employment Survey, commercial data providers CoStar, CoreLogic, ESRI Business Analyst, and employee commute data from Meta. Local data was used wherever possible. Other sources are noted in the text and footnotes. While KMA believes all sources utilized are sufficiently accurate for the purposes of the analysis, KMA cannot guarantee their accuracy. KMA assumes no liability for information from these or other sources.

[24] Much of the U.S. Census data utilized in this report is from the 2015-2019 American Community Survey (ACS). Data from the 2020 Decennial Census is partially available as of the date of preparation but data relevant to the HNA is yet to be released.

3.0 HOUSING UNITS ADDED BY THE PROJECT BY INCOME CATEGORY

This section estimates how the 1,730 new residential units added by the proposed Project will be distributed by income or affordability category.

3.1 Below Market Rate Housing Units

The City's Below Market Rate (BMR) Housing Program codified in Chapter 16.96 of the City's Zoning Code requires residential development projects with twenty or more units to provide no less than 15% BMR affordable units. Non-residential projects are required to provide BMR units on site or off site or pay an in-lieu fee. The Project Sponsor has proposed to comply with residential and non-residential BMR requirements by including 308 BMR affordable units on-site, representing approximately 17.8% of the total units. Therefore, of the 1,730 total units, 1,422 units would be market rate units and 308 would be BMR affordable units. Up to 120 of the BMR units would be part of a senior housing community. BMR rental units are required by the City's BMR ordinance and guidelines to be affordable to Low Income households. Alternative affordability levels are permitted under the City's BMR guidelines if determined to be roughly equivalent to providing all BMR units at Low Income. The Project Sponsor is proposing to provide a mix of Extremely Low, Very Low, Low and Moderate Income BMR units, as summarized in Table 3-1. In addition, the Project Sponsor is requesting the City remove the requirement established in the City's BMR guidelines that rents for BMR units be no higher than 75% of comparable market rate rents through the conditional development permit (CDP) that would regulate development of the main Project Site.

Table 3-1. Market Rate and BMR Units

		Residential Units	Percent of Units
Market Rate Rental Units		1,422	82.2%
	Proposed % AMI		
BMR Senior - Extremely Low	25% and 30%	83	4.8%
BMR Senior - Very Low	50%	37	2.1%
BMR Inclusionary - Low	80%	38	2.2%
BMR Inclusionary - Moderate	90%, 100%, 110%, 120%	150	8.7%
Subtotal BMR Units		308	17.8%
Total Units		1,730	100.0%

AMI = Area Median Income

3.2 Affordability Level of Market Rate Units

The proposed Project will include 1,422 market rate rental units including a mix of studios, one-, two- and three-bedroom units. The proposed number of units by square footage and bedroom size is summarized in Table 3-2. Market rate studio units are estimated to be affordable to households in the Moderate Income category while market rate one-, two-, and three-bedroom units are estimated to be affordable for households with Above Moderate Income. Estimated

affordability levels are based on estimated market rate rents for the units. Market rate units will not be deed restricted; therefore, the affordability level could change over time as market conditions and the income criteria used to determine affordability level change.

Table 3-2. Proposed Unit Size and Bedroom Mix

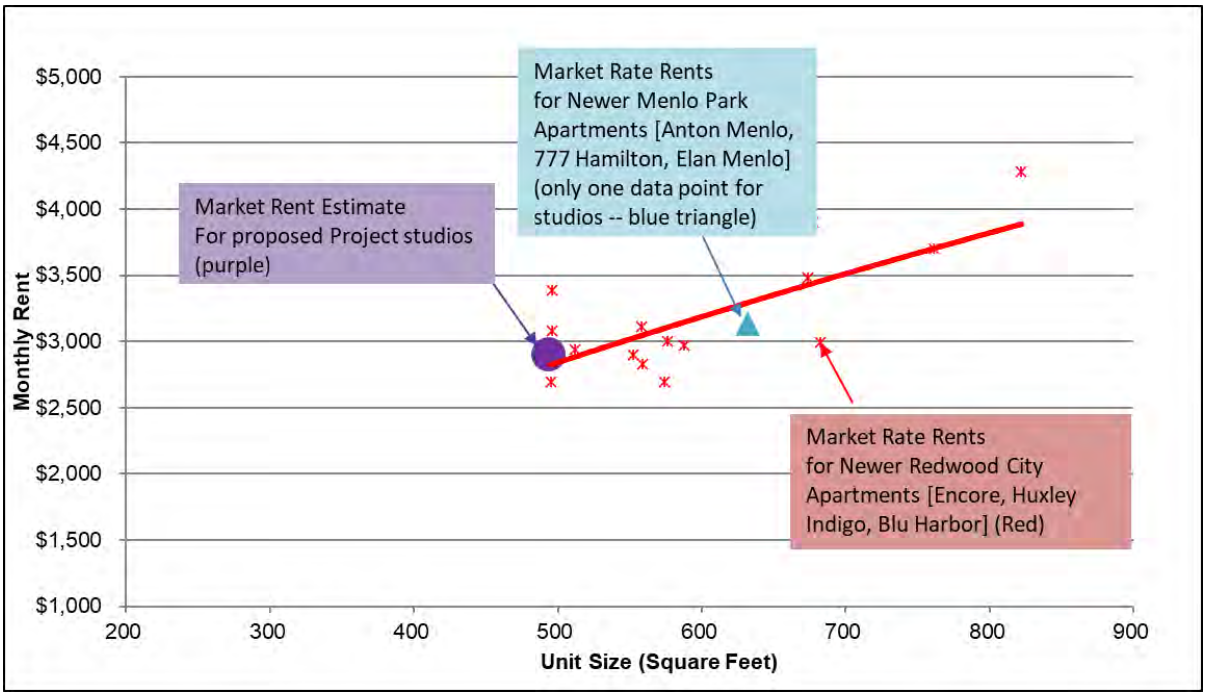
	Unit Size Range (square feet)	Market Rate Units	BMR Units	Total Units
Studio	450 - 538	346	155	501
1-BR	633 - 745	466	95	561
1-BR Plus	800 - 905	158	0	158
2- BR	929 – 1,090	407	52	459
3-Bedroom	1,125 – 1,491	45	6	51
Total		1,422	308	1,730

Source: Project Sponsor.

Market rents were estimated by KMA based on three newer rental properties in Menlo Park located on the north side of U.S. 101, the Anton Menlo at 3639 Haven (built 2017), the Elan Menlo at 3645 Haven (built 2017) and 777 Hamilton (built 2016). Data on rents for newer apartment properties in Menlo Park was supplemented with data for newly built apartments in Redwood City including the Encore at 849 Veterans Blvd (built 2019), Huxley at 1355 El Camino Real (built 2018), Indigo at 675 Bradford (built 2016) and Blu Harbor at 1 Blu Harbor Boulevard (built 2017). Market rents reflect data as of June 2020 that was accessed for prior HNAs. From June 2020 through February 2022, rents for available units in the three Menlo Park properties declined an average of 4%, which represents a partial recovery of rents from more significant declines earlier in the pandemic. Decreases in rents are consistent with trends experienced for newer apartments elsewhere in the Bay Area and are driven by increased flexibility many office workers have had to work remotely during the pandemic. Market rents as of June 2020 are used on the assumption that subsequent decreases in rents are not reflective of longer-term conditions and that rents will continue to rebound from the declines experienced during the pandemic.

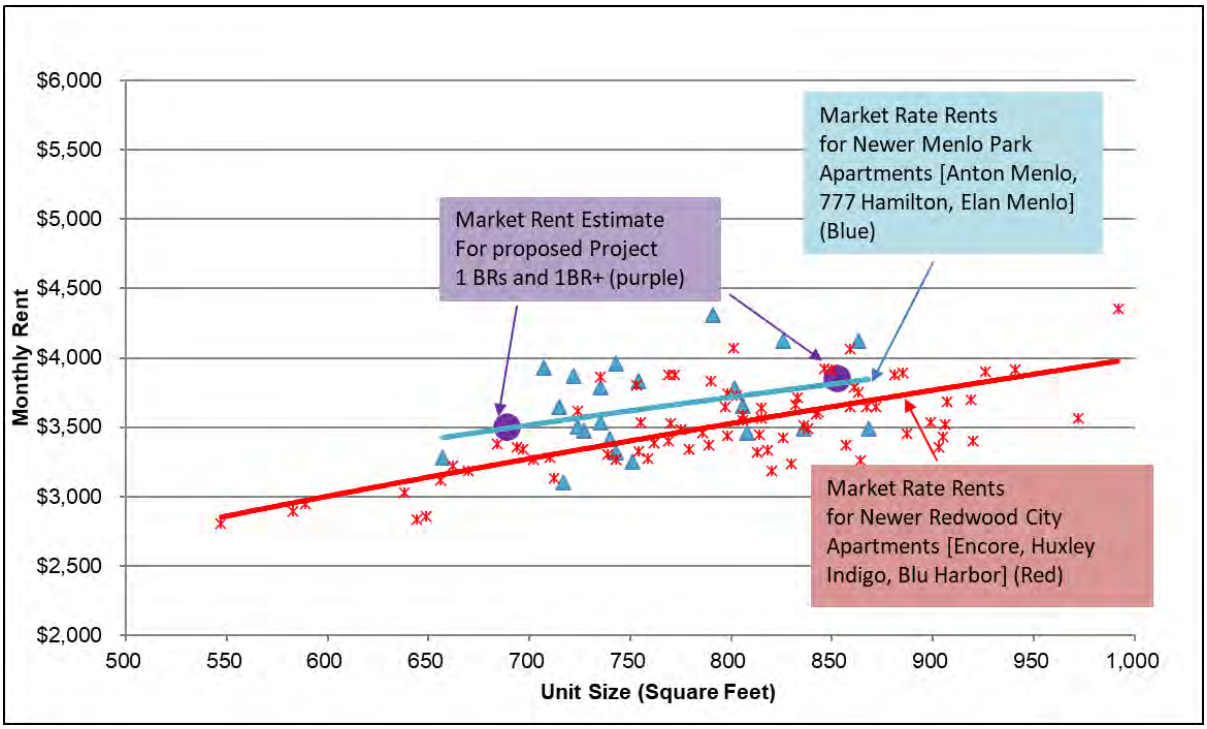
Average rental rates for the comparison properties by bedroom size are shown in Table 3-3 and Charts 1 through 4. Each data point in Charts 1 through 4 represents the average effective market rate rent for units of a specific square footage size. Separate trend lines are fit to actual rents for the Menlo Park comparison properties (blue) and the Redwood City comparison properties (red). Estimated rents for the proposed Project are identified by purple circles. Square footage sizes for units within the proposed Project identified in the charts reflect the midpoint of the ranges provided by the Project Sponsor. Based on the market data and the unit sizes for the proposed Project, studios are estimated to rent for approximately $2,850 per month, one bedrooms for $3,500 per month, the larger one-bedroom “plus” units for $3,850 per month, two bedrooms for $4,200, and three bedrooms for $5,300 per month.

Chart 1 – Newer Studio Apartment Market Rate Rents and Estimated Rents for proposed Project



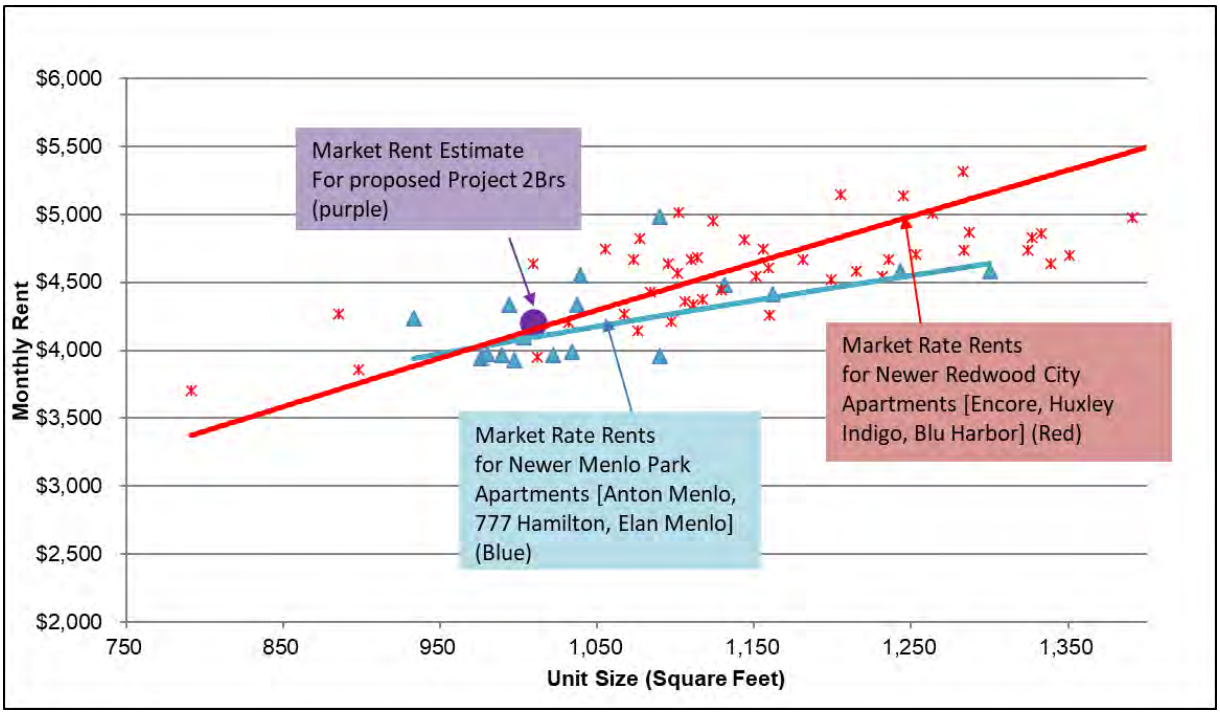
Source: CoStar and KMA

Chart 2 – Newer One Bedroom Market Rate Rents and Estimated Rents for proposed Project



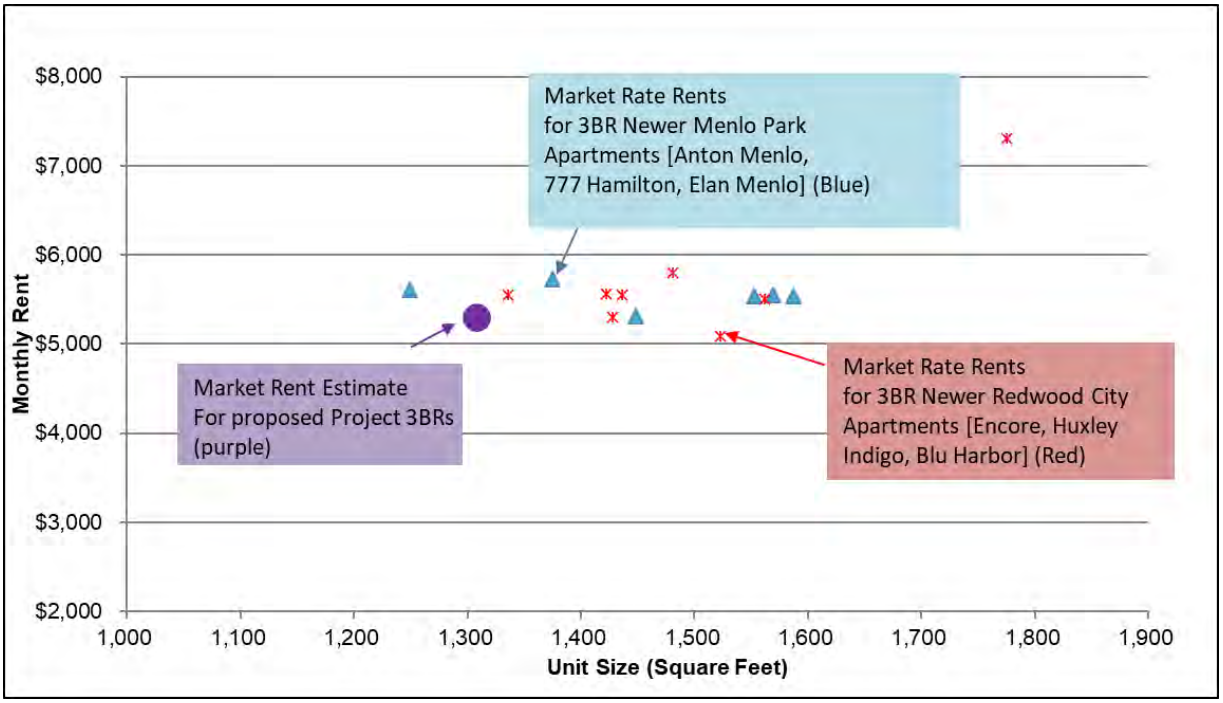
Source: CoStar and KMA

Chart 3 – Newer Two Bedroom Market Rate Rents and Estimated Rents for proposed Project



Source: CoStar and KMA

Chart 4 – Newer Three-Bedroom Market Rate Rents and Estimated Rents for proposed Project



Source: CoStar and KMA. Note: trendlines not shown due to limited data.

Table 3-3. Rents for Comparable Apartments and Estimate for Proposed Project													
	Studios			1-Bedroom				2-Bedrooms			3-Bedrooms		
	Size (SF)	Avg Rent	Avg Rent PSF		Size (SF)	Avg Rent	Avg Rent PSF	Size (SF)	Avg Rent	Avg Rent PSF	Size (SF)	Avg Rent	Avg Rent PSF
Estimate for Project	494	$2,850	$5.77	1-br	689	$3,500	$5.08	1,010	$4,200	$4.16	1,308	$5,300	$4.05
				1-br+	853	$3,850	$4.52						
Comparable Apartments													
Menlo Park													
North of US101													
Anton Menlo	632	$3,139	$4.97		757	$3,546	$4.69	1,096	$4,413	$4.03	1,554	$5,536	$3.56
777 Hamilton					741	$3,834	$5.17	1,051	$4,590	$4.37	1,391	$5,672	$4.08
Elan Menlo Park					763	$3,550	$4.65	1,017	$3,966	$3.90	1,249	$5,606	$4.49
Redwood City													
Encore	674	$3,478	$5.16		823	$3,769	$4.58	1,128	$4,747	$4.21	1,399	$5,561	$3.97
Huxley	646	$3,561	$5.51		782	$3,436	$4.39	1,159	$4,735	$4.09			
Indigo	547	$2,912	$5.32		759	$3,428	$4.52	1,174	$4,923	$4.19	1,481	$5,799	$3.92
Blu Harbor	588	$2,968	$5.05		836	$3,367	$4.03	1,265	$4,629	$3.66	1,547	$5,653	$3.65

Source: Effective rents per CoStar, Estimate for proposed Project per KMA. Square footage sizes for the Project based on the midpoint of size ranges identified by the Project Sponsor.

Market rate rents were then used to estimate the affordability level of the units. As shown in Table 3-4, the market rate studio units are estimated to be affordable to Moderate Income households and one, two and three-bedroom units are estimated to be affordable to Above Moderate Income households. While studios are estimated to be affordable at the Moderate Income level, units would not be deed-restricted so it is possible occupants would have incomes that exceed income criteria for Moderate Income and affordability of the units could change over time.

Table 3-4. Estimated Affordability Level Applicable to Market Rate Apartments					
	Studio	1-BR	1-BR plus	2-BR	3-BR
Estimated Monthly Rent (1)	$2,850	$3,500	$3,850	$4,200	$5,300
Utilities (2)	$118	$128	$128	$170	$218
Total Monthly Rent + Utilities	$2,968	$3,628	$3,978	$4,370	$5,518
Annual Housing Cost	$35,616	$43,536	$47,736	$52,440	$66,216
Percent of Income Spent on Housing (3)	30%	30%	30%	30%	30%
Annual Household Income Required	$118,720	$145,120	$159,120	$174,800	$220,720
2021 Median Income (4)	$104,700	$119,700	$119,700	$134,650	$149,600
Percent of AMI Needed to Afford Market Units	113%	121%	133%	130%	148%
Affordability Level of Market Units	Moderate (not deed restricted)	Above Moderate	Above Moderate	Above Moderate	Above Moderate

(1) KMA estimate based on market rents for comparable new apartment properties.
(2) Tenant paid utilities estimated based on County Housing Authority utility allowance schedule.
(3) Per California Health and Safety Code Section 50053.
(4) HCD Income Limits for applicable household size for 2021.

3.3 New Residential Units by Income Level

Table 3-5 provides a summary of the income level applicable to the new residential units, combining the findings of Section 3.1 and 3.2. As shown, the proposed Project includes 83 Extremely Low Income, 37 Very Low Income, 38 Low Income, and 150 Moderate Income BMR units, 346 market rate studio units affordable to Moderate Income, and 1,076 market rate one, two and three-bedroom units affordable to households with Above Moderate Incomes.

Table 3-5. Estimated Affordability Level of New Residential Units									
	Below Market Rate (BMR) Units					Market Rate			
Unit Size	Extremely Low	Very Low	Low	Moderate	Total BMR Units	Moderate	Above Moderate	Total Market Rate	Total Residential Units
Studio	75	32	10	38	155	346	0	346	501
1-BR	8	4	17	66	95	0	466	466	561
1-BR Plus	0	0	0	0	0	0	158	158	158
2- BR	0	1	10	41	52	0	407	407	459
3-Bedroom	0	0	1	5	6	0	45	45	51
Total	83	37	38	150	308	346	1,076	1,422	1,730

4.0 ADDED WORKER HOUSING NEEDS FROM INCREASE IN ON-SITE EMPLOYMENT

This section summarizes the analysis of housing needs associated with on-site employment attributable to the proposed Project. The analysis begins by quantifying the change in on-site employment by project component and type. Then, the analysis proceeds through a series of steps to estimate how the changes in on-site jobs translate into a change in worker housing need by income level. A brief overview of the methodology and structure of the analysis is provided, followed by a walk-through of the analysis steps to the output and conclusions.

4.1 Methodology

To estimate the linkages between added employment, worker households, and housing needs by affordability levels, KMA employed the same methodology used for nexus studies in support of jobs housing linkage programs. The KMA jobs housing nexus methodology was developed for analyses supporting housing linkage programs, such as Menlo Park's. The methodology has also been refined and modified for use in quantifying the housing impacts of specific large projects. The analysis inputs are all local data, to the extent possible, and are fully documented.

The analysis estimates the changes in on-site employment by type from removal of existing improvements and development of the office and accessory space, retail, and hotel components. The estimated changes in employment are then translated into an estimated impact on worker housing demand based on relationships between jobs and housing demand derived from the U.S. Census. Finally, the income level associated with the housing demand is estimated using a combination of data sources including the U.S. Bureau of Labor Statistics occupation and wage data and U.S. Census data.

4.2 Analysis Steps

Following is a description of each step in the analysis.

Analysis Step 1 – Net Change in On-Site Employment

A total of 8,128 workers are estimated upon completion of the proposed Project, representing a net increase of 4,332 jobs, as summarized in Table 4-1.

Table 4-1. Estimated Net Change in On-Site Employment by Project Component or Type			
Project Component	Existing Employees	Employees with Proposed Project	Employees Added by Proposed Project (Net Increase)
Meta Offices	3,500	6,950	3,450
Food Service	0	198	198
Fitness Center	0	17	17
Building Services	96	189	93
Dining	0	160	160
Grocery	0	75	75
Shops	0	130	130
Hamilton Ave Retail	130	164	34
Hotel	0	210	210
Residential Property Mgmt	0	35	35
Other Existing Tenants	70	0	(70)
Total	3,796	8,128	4,332

Note: employment figures are summarized from Table 2-3. See notes to Table 2-3 for additional information.

Existing office, lab and R&D space on the project site is primarily occupied by Meta, with an estimated 3,500 existing on-site workers. An estimated 70 additional on-site workers are employed by other existing tenants within the Menlo Science and Technology Park. Building services staff including janitorial and security is estimated proportionate to figures provided by the Project Sponsor upon completion of the proposed Project. Maintenance employment is estimated using ratios derived from data reported by the International Facility Management Association (IFMA). Building services workers are evaluated separately because services are typically provided by separate contract service providers. Finally, there are an estimated 130 employees within the existing retail, restaurant, and service station uses within the Hamilton Avenue North and South parcels.

A total of 8,128 employees are estimated upon completion of the proposed Project. This includes 6,950 employees[25] within the office space and 1,178 employees within the other project components comprised of 198 in food service, 189 in building services, 160 in on-site restaurants, 75 in the grocery store, 130 in the retail shops, 164 in the Hamilton Avenue North and South parcels, 210 in the hotel, 17 in the fitness center, and 35 employees in property management of the residential units.

Employment estimates are from the DEIR Project Description and were originally provided by the Project Sponsor with the exception of the estimated number of maintenance workers included within the building services staffing estimate and the number of workers within the Hamilton Avenue North and South parcels. Maintenance staff are estimated using ratios derived from data reported by the International Facility Management Association (IFMA). The number of workers for the Hamilton Avenue North and South Parcels is estimated using a combination of sources

[25] Corresponds to the 6,950 seated workers in the Meta campus.

including employment densities derived from National Restaurant Association data and the average number of employees per store for the existing Jack in the Box and Starbucks stores calculated from data reported in 10k filings with the U.S. Securities and Exchange Commission.

Step 2 – Adjustment from Employees to Employee Households

Step 2 converts the number of employees to the number of employee households, an adjustment that accounts for multiple-earner households. This step recognizes that there is, on average, more than one worker per household, and thus the number of housing units in demand would be reduced. The workers per worker household ratio eliminates from the equation all non-working households, such as households comprised of retired persons or students. The calculation is shown in Table 4-2.

KMA derived the worker per worker household figure from ACS data for 2015 to 2019. The ACS data provide estimates of the total number of workers in San Mateo County, and the total number of households with at least one working household member. The ratio of the two figures for San Mateo County is 1.91 workers per worker household. The San Mateo County figure is used in the analysis because workers will be more similar to the County as a whole than the smaller City of Menlo Park profile, which has an average of 1.73 workers per worker household. The workers per worker household ratio is used to translate the on-site employment added by the proposed Project to a change in employee households as shown in Table 4-2.

The 4,332 jobs added by the proposed Project is divided by the 1.91 workers per worker household ratio to estimate the net increase of 2,271 employee households. Table 4-2 shows the estimated number of employee households added by each component of the proposed Project.

Table 4-2. Estimated Net Change in On-Site Employee Households

Project Component	Net Change in On-Site Employment (from Table 4-1)	Net Change in Employee Households at 1.91 workers per household (1)
Meta Offices	3,450	1,809
Food Service	198	104
Fitness Center	17	9
Building Services	93	49
Dining	160	84
Grocery	75	40
Shops	130	69
Hamilton Ave Retail	34	18
Hotel	210	111
Residential Property Mgmt	35	19
Other Existing Tenants	(70)	(37)
Total	4,332	2,271

(1) Derived from 2015-2019 U.S. Census American Community Survey data for San Mateo County

Multiple-earner households have two or more workers and take a variety of forms, such as roommates and housemates, couples, and multi-generational households. The analysis makes an adjustment to recognize that if an added employee lives in a household with one or more other workers, that added employee is not responsible for creating demand for an entire housing unit, only a portion of a unit.

There is no implicit assumption in the calculation that Project employees would live with one another. Multiple-earner households are a factor that must be recognized in the analysis, irrespective of where the other working member(s) of the household is employed. Were the adjustment for multiple-earner households to be limited to the special case of Project employees living with one another in the same unit, housing needs of Project employees would be overstated by allotting an entire housing unit to one worker, even if that worker shares a housing unit with another worker who is employed elsewhere. Such an approach would result in double counting a portion of the housing demand. The following two examples provide further illustrations as to why an adjustment to account for multiple-earner households is necessary regardless of where the other working member(s) of the household is employed:

- *Example #1* – Consider a Meta worker added by the proposed Project who lives with a worker who has taken a job at another growing tech company. If it were assumed that each new worker (added by expansions at two separate companies) would require their own housing unit, the total housing demand would be overstated as a result of double counting the one unit that is shared by the two workers.

- *Example #2* – Consider two Meta workers added by the Project as well as two workers at long-established local employers. Say the two workers at long-established employers live with one another and the two Meta workers live with one another. There would be a need for two housing units in total. Now, instead say that each of the two Meta workers are in separate units, each with one of the workers at a long-established employer. There is still a need for two housing units in total. There is no difference in housing demand whether the two Meta workers live with one another or live separately with a worker who holds a job elsewhere.

Step 3 – Occupational Distribution

Occupational distribution for employees added by the proposed Project is based on data from a national survey by the Bureau of Labor Statistics (BLS). Occupation refers to job description, such as management, sales clerk, cashier, etc. The survey provides the occupational distribution for various employment “industries.” The following industry categories were identified as representative for the proposed Project:

- *Meta Offices* – NAICS code 519100, Other Information Services is used to represent the occupation profile of workers within the Meta office space.

- *Food Service* – NAICS 722500, Restaurants and Other Eating Places is used. Sales occupations are removed from the occupation profile based on Meta's practice of providing food free of charge and delivery-related occupations are removed from the occupation profile as food service would be for on-site workers.

- *Dining* – NACIS 722500, Restaurants and Other Eating Places, 722400 Drinking Paces (Alcoholic Beverages), and 722300 Special Food Services are used to represent the occupation profile of dining uses on the main project site and added jobs on the Hamilton Avenue North parcel, which are assumed to be primarily food-related consistent with existing tenants[26].

- *Retail Shops* – NAICS codes corresponding to a mix of retailers are used including health and personal care (NAICS 445100), home furnishings (NAICS 442200), electronics (443100), personal care services (812100), clothing stores (448100), dry cleaning and laundry services (812300), pharmacies and drug stores (446110), and others.

- *Hotel* – NAICS 721100, Traveler Accommodation, is used with an adjustment to remove casino hotels.

- *Building Services* – NAICS 561700, Services to Buildings and Dwellings, and NAICS 561600, Investigation and Security Services, are used to represent occupations associated with janitorial, maintenance, security and other building services.

- *Other Existing Tenants* – NAICS 621400, Outpatient Care Centers, is used to represent the dialysis clinic, NAICS 813300, Social Advocacy Organizations, and NAICS 541100, Legal Services, are used to represent the non-profit hub (which includes Community Legal Services in East Palo Alto), and NAICS 541710, Research and Development in the Physical, Engineering, and Life Sciences is used to represent other tenants within the existing office, lab and warehouse space.

For on-site property management and maintenance of residential units and the Campus District fitness facility, KMA selected representative occupations from the BLS data as shown in Appendix A Tables 13 and 18.

Table 4-3 provides a summary of worker occupations by major category. Appendix A provides a further breakdown of worker occupations by Standard Occupational Classification (SOC) System codes.

[26] A pharmacy is proposed to be located either within the main Project Site or the Hamilton Avenue Parcel North site. For purposes of the HNA, the pharmacy is assumed to be part of the retail shops located on the main Project Site.

Table 4-3. Net Change in On-Site Employee Households by Land Use and Occupation Category

Occupation Category	Office	Food Svc	Fitness Center	Dining	Grocery	Shops	Ham. Ave Retail	Hotel	Res. Prop. Mgmt	Building Services	Other Existing Tenants	Total	% of Total
Management Occupations	234.6	2.6	0.0	2.0	0.7	2.0	0.4	5.1	3.7	1.1	(4.5)	247.8	11%
Business and Financial Operations	243.8	0.3	0.0	0.2	0.2	0.6	0.0	1.8	0.0	0.6	(2.9)	244.6	11%
Computer and Mathematical	383.6	0.0	0.0	0.0	0.0	0.2	0.0	0.1	0.0	0.2	(2.8)	381.4	17%
Architecture and Engineering	2.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	(2.7)	(0.3)	0%
Life, Physical, and Social Science	2.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	(5.2)	(2.3)	0%
Community and Social Services	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	(2.5)	(1.7)	0%
Legal	13.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	(1.4)	11.9	1%
Education, Training, and Library	154.5	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	(0.2)	154.4	7%
Arts, Design, Entertainment, Sports, and Media	192.5	0.0	0.5	0.0	0.1	0.8	0.0	0.3	0.0	0.0	(0.4)	193.9	9%
Healthcare Practitioners and Technical	0.0	0.0	0.5	0.0	0.9	7.0	0.0	0.0	0.0	0.0	(5.9)	1.7	0%
Healthcare Support	0.0	0.0	0.0	0.0	0.0	1.2	0.0	0.5	0.0	0.0	(1.7)	0.0	0%
Protective Service	8.3	0.1	0.5	0.1	0.1	0.2	0.0	1.6	0.0	24.9	(0.1)	35.8	2%
Food Preparation and Serving Related	0.4	99.0	0.0	75.0	5.4	0.3	15.9	25.7	0.0	0.0	(0.1)	221.7	10%
Building and Grounds Cleaning and Maint.	14.6	0.3	0.0	0.3	0.3	0.2	0.1	34.4	7.3	16.2	(0.2)	73.5	3%
Personal Care and Service	4.9	0.0	6.8	0.0	0.0	6.1	0.0	4.2	0.0	0.2	(0.3)	22.0	1%
Sales and Related	262.7	0.0	0.0	2.9	15.2	34.6	0.6	2.7	0.0	0.7	(0.4)	319.6	14%
Office and Administrative Support	273.1	0.6	0.5	0.5	2.9	5.1	0.1	23.1	0.0	2.2	(4.5)	303.9	13%
Farming, Fishing, and Forestry	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	(0.0)	0.0	0%
Construction and Extraction	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.2	0.0	0.1	(0.1)	0.4	0%
Installation, Maintenance, and Repair	11.0	0.2	0.0	0.2	0.1	1.6	0.0	6.4	7.3	2.2	(0.3)	28.8	1%
Production	0.0	0.6	0.0	0.4	3.0	3.7	0.1	2.8	0.0	0.0	(0.4)	10.3	0%
Transportation and Material Moving	5.6	0.0	0.0	2.2	10.2	4.1	0.5	1.3	0.0	0.1	(0.2)	23.7	1%
Totals (rounded)	1,809	104	9	84	39	68	18	110	18	49	(37)	2,271	100%

Source: Bureau of Labor Statistics Occupational Employment Survey, 2020.
See Appendix A Tables 2 to 18 for more detailed breakdown of occupation categories.

Step 4 – Estimate of Employee Wage and Salary Distribution

The employee wage and salary distribution is based on the occupational distribution from Step 3 in combination with 2020 wage and salary information for each occupation for the San Francisco-Oakland-Hayward metropolitan statistical area, which includes San Mateo County from the BLS Occupational Employment Survey (OES). In addition to the average compensation levels, the analysis also utilizes BLS data regarding the percentile distribution of wages within individual occupation categories in estimating the distribution of worker compensation levels. The data on employee wages and salaries utilized in the analysis is presented in Appendix A.

Step 5 – Household Size Distribution

In this step, the household size distribution of workers is estimated using U.S. Census 2015-2019 ACS data for San Mateo County. Data for the County is used since workers are more representative of the larger area in which workers live (the County) than the City of Menlo Park. In addition to the distribution in household sizes, the data also accounts for a range in the number of workers in households of various sizes. Table 4-4 indicates the percentage distribution utilized in the analysis.

Table 4-4. Percent of Households by Size and No. of Workers

No. of Persons in Household	No. of Workers in Household	Percent of Total Households
1	1	14.7%
2	1	13.1%
	2	17.4%
3	1	7.3%
	2	10.1%
	3+	3.9%
4	1	4.9%
	2	8.9%
	3+	6.4%
5	1	1.9%
	2	3.4%
	3+	2.5%
6	1	1.3%
	2	2.4%
	3+	1.7%
Total		100%

Source: 2015-2019 American Community Survey data for San Mateo County.

Step 6 – Estimate of Households that meet HCD Size and Income Criteria

This step in the analysis calculates the number of employee households that fall into each income category for each size household. This calculation is based on the employee wage and

salary distribution (Step 4), the worker household distribution (Step 5) and the 2021 HCD income limits for San Mateo County, as described above.

Household incomes are estimated based upon ratios between individual employee income and household income derived from U.S. Census data shown in Table 4-5. The ratios adjust employee incomes upward even for households with only one worker in consideration of non-wage/salary income sources such as child support, disability, social security, investment income and others. The resulting household income estimates are shown in Appendix A.

Table 4-5. Ratio of Household Income to Individual Worker Income

Individual Worker Income	One Worker Households	Two Worker Households	Three or More Workers
$25,000 to $50,000	1.31	2.86	3.50
$50,001 to $75,000	1.15	2.21	2.55
$75,001 to $100,000	1.09	1.97	2.12
$100,001 to $150,000	1.06	1.77	1.84
$150,001 to $200,000	1.04	1.60	1.63
$200,001 to $250,000	1.04	1.54	1.54
$250,001 to $300,000	1.02	1.47	1.47
$300,001 to $500,000	1.04	1.32	1.32
$500,001 and above	1.02	1.25	1.25

Source: KMA analysis of 2015 to 2019 American Community Survey PUMS data for San Francisco Bay Area.

Estimated household incomes are compared to HCD income criteria to determine the percentage that qualify within each income category. The comparison is made for each potential household size/number of workers combination. The result is multiplied by the percentage distribution of household sizes and number of workers per household from Step 5 to calculate the distribution of worker households by income.

Table 4-6 presents the estimated number of households in each income tier by worker occupation category. It represents the output of the analysis, after completing Step 4 (employee compensation levels), Step 5 (household size distribution of worker households), and Step 6 which uses this information to calculate the number of households that fall into each income category.

TABLE 4-6
EMPLOYEE HOUSEHOLDS BY OCCUPATION AND INCOME (STEPS 4, 5, WILLOW VILLAGE MASTER PLAN PROJECT HOUSING NEEDS ASSESSMENT MENLO PARK, CA

	Meta Offices							Food Service						
	Extremely Low	Very Low	Low	Moderate	Above Moderate	Over 150% AMI	Total	Extremely Low	Very Low	Low	Moderate	Above Moderate	Over 150% AMI	Total
Step 4, 5, & 6 - Employee Households within Major Occupation Categories														
Management	-	2.1	16.0	17.5	35.4	163.5	234	0.1	0.4	0.9	0.5	0.4	0.5	2.6
Business and Financial Operations	1.6	21.2	55.4	56.2	64.4	44.9	244	-	-	-	-	-	-	-
Computer and Mathematical	0.4	10.8	57.7	59.1	89.9	165.6	384	-	-	-	-	-	-	-
Architecture and Engineering	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Life, Physical and Social Science	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Community and Social Services	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Legal	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Education Training and Library	2.9	26.4	48.5	41.4	34.4	0.8	154	-	-	-	-	-	-	-
Arts, Design, Entertainment, Sports, & Media	3.0	22.2	50.5	46.4	43.9	26.4	192	-	-	-	-	-	-	-
Healthcare Practitioners and Technical	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Healthcare Support	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Protective Service	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Food Preparation and Serving Related	-	-	-	-	-	-	-	27.4	16.0	49.7	5.5	0.4	-	99.0
Building Grounds and Maintenance	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Personal Care and Service	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sales and Related	11.5	37.9	88.5	48.6	44.1	32.1	263	-	-	-	-	-	-	-
Office and Admin	35.9	54.4	107.5	59.5	14.7	0.9	273	-	-	-	-	-	-	-
Farm, Fishing, and Forestry	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Construction and Extraction	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Installation Maintenance and Repair	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Production	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Transportation and Material Moving	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Households: Major Occupations	55.3	175.1	424.2	328.8	326.8	434.1	1,744	27.5	16.4	50.5	6.0	0.8	0.5	101.6
Households: all other occupations[(1)]	2.0	6.4	15.6	12.1	12.0	16.0	64	0.6	0.4	1.1	0.1	0.0	0.0	2.2
Total Households	**57.3**	**181.5**	**439.8**	**340.9**	**338.9**	**450.1**	**1,808**	**28.1**	**16.7**	**51.6**	**6.1**	**0.8**	**0.5**	**103.8**
Total Households - Rounded	57	182	440	341	339	450	1,809	28	17	52	6	1	-	104

Notes:

[(1)] Represents occupation categories which have a minor amount of employment and for which detailed compensation analysis was not completed. These worker households are assumed to have a similar income distribution to other employees in the same industry. See Appendix A Tables 1 to 18 for information on major and detailed occupation categories identified for detailed compensation analysis.

TABLE 4-6
EMPLOYEE HOUSEHOLDS BY OCCUPATION AND INCOME (STEPS 4, 5,
WILLOW VILLAGE MASTER PLAN PROJECT
HOUSING NEEDS ASSESSMENT
MENLO PARK, CA

	Shops							Building Services						
	Extremely Low	Very Low	Low	Moderate	Above Moderate	Over 150% AMI	Total	Extremely Low	Very Low	Low	Moderate	Above Moderate	Over 150% AMI	Total
Step 4, 5, & 6 - Employee Households within Major Occupation Categories														
Management	-	0.1	0.3	0.2	0.4	1.2	2.0	-	0.0	0.2	0.1	0.2	0.6	1.1
Business and Financial Operations	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Computer and Mathematical	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Architecture and Engineering	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Life, Physical and Social Science	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Community and Social Services	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Legal	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Education Training and Library	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Arts, Design, Entertainment, Sports, & Media	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Healthcare Practitioners and Technical	0.3	0.8	1.5	1.3	1.1	1.9	7.0	-	-	-	-	-	-	-
Healthcare Support	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Protective Service	-	-	-	-	-	-	-	5.0	3.9	11.0	4.0	1.0	-	24.9
Food Preparation and Serving Related	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Building Grounds and Maintenance	-	-	-	-	-	-	-	3.0	3.6	8.1	1.4	0.1	-	16.2
Personal Care and Service	1.6	1.1	2.8	0.5	0.0	-	6.1	-	-	-	-	-	-	-
Sales and Related	8.8	5.6	16.9	2.7	0.4	0.2	34.6	-	-	-	-	-	-	-
Office and Admin	0.7	1.1	2.0	1.1	0.2	0.0	5.1	0.2	0.5	0.9	0.5	0.1	0.0	2.2
Farm, Fishing, and Forestry	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Construction and Extraction	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Installation Maintenance and Repair	0.2	0.3	0.6	0.4	0.2	0.0	1.6	0.2	0.5	0.9	0.5	0.2	0.0	2.2
Production	0.9	0.6	1.7	0.4	0.1	0.0	3.7	-	-	-	-	-	-	-
Transportation and Material Moving	0.9	0.7	1.8	0.6	0.2	0.0	4.1	-	-	-	-	-	-	-
Households: Major Occupations	13.3	10.3	27.5	7.2	2.6	3.3	64.2	8.5	8.5	21.0	6.5	1.6	0.7	46.7
Households: all other occupations[(1)]	0.8	0.6	1.7	0.4	0.2	0.2	3.7	0.4	0.4	0.9	0.3	0.1	0.0	2.0
Total Households	**14.1**	**11.0**	**29.2**	**7.6**	**2.8**	**3.5**	**68.1**	**8.8**	**8.9**	**21.9**	**6.7**	**1.7**	**0.7**	**48.7**
Total Households - Rounded	14	11	29	8	3	3	68	9	9	22	6	2	1	49

Notes:
(1) Represents occupation categories which have a minor amount of employment and for which detailed compensation analysis was not completed. These worker households are assumed to have a similar income distribution to other employees in the same industry. See Appendix A Tables 1 to 18 for information on major and detailed occupation categories identified for detailed compensation analysis.

TABLE 4-6
EMPLOYEE HOUSEHOLDS BY OCCUPATION AND INCOME (STEPS 4, 5, WILLOW VILLAGE MASTER PLAN PROJECT HOUSING NEEDS ASSESSMENT MENLO PARK, CA

	Dining							Grocery						
	Extremely Low	Very Low	Low	Moderate	Above Moderate	Over 150% AMI	Total	Extremely Low	Very Low	Low	Moderate	Above Moderate	Over 150% AMI	Total
Step 4, 5, & 6 - Employee Households within Major Occupation Categories														
Management	0.0	0.3	0.6	0.4	0.3	0.4	2.0	-	-	-	-	-	-	-
Business and Financial Operations	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Computer and Mathematical	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Architecture and Engineering	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Life, Physical and Social Science	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Community and Social Services	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Legal	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Education Training and Library	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Arts, Design, Entertainment, Sports, & Media	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Healthcare Practitioners and Technical	-	-	-	-	-	-	-	0.0	0.1	0.2	0.2	0.1	0.3	0.9
Healthcare Support	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Protective Service	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Food Preparation and Serving Related	20.8	12.1	37.6	4.2	0.3	-	75.0	1.5	0.8	2.9	0.2	0.0	-	5.4
Building Grounds and Maintenance	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Personal Care and Service	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sales and Related	0.8	0.5	1.5	0.1	0.0	-	2.9	4.0	2.6	7.7	0.9	0.1	-	15.2
Office and Admin	-	-	-	-	-	-	-	0.4	0.6	1.2	0.7	0.1	0.0	2.9
Farm, Fishing, and Forestry	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Construction and Extraction	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Installation Maintenance and Repair	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Production	-	-	-	-	-	-	-	0.6	0.5	1.4	0.4	0.1	0.0	3.0
Transportation and Material Moving	0.5	0.4	0.9	0.3	0.1	-	2.2	2.7	1.6	4.9	0.9	0.1	0.0	10.2
Households: Major Occupations	22.1	13.3	40.6	4.9	0.7	0.4	82.1	9.3	6.2	18.2	3.1	0.6	0.3	37.7
Households: all other occupations[(1)]	0.5	0.3	0.9	0.1	0.0	0.0	1.8	0.4	0.3	0.8	0.1	0.0	0.0	1.6
Total Households	**22.6**	**13.6**	**41.5**	**5.0**	**0.7**	**0.4**	**83.9**	**9.7**	**6.4**	**19.0**	**3.3**	**0.6**	**0.3**	**39.3**
Total Households - Rounded	23	14	41	5	1	-	84	10	6	19	3	1	-	39

Notes:
(1) Represents occupation categories which have a minor amount of employment and for which detailed compensation analysis was not completed. These worker households are assumed to have a similar income distribution to other employees in the same industry. See Appendix A Tables 1 to 18 for information on major and detailed occupation categories identified for detailed compensation analysis.

TABLE 4-6
EMPLOYEE HOUSEHOLDS BY OCCUPATION AND INCOME (STEPS 4, 5, WILLOW VILLAGE MASTER PLAN PROJECT HOUSING NEEDS ASSESSMENT MENLO PARK, CA

	Fitness Center							Hamilton Ave Retail						
	Extremely Low	Very Low	Low	Moderate	Above Moderate	Over 150% AMI	Total	Extremely Low	Very Low	Low	Moderate	Above Moderate	Over 150% AMI	Total
Step 4, 5, & 6 - Employee Households within Major Occupation Categories														
Management	-	-	-	-	-	-	-	0.0	0.1	0.1	0.1	0.1	0.1	0.4
Business and Financial Operations	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Computer and Mathematical	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Architecture and Engineering	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Life, Physical and Social Science	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Community and Social Services	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Legal	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Education Training and Library	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Arts, Design, Entertainment, Sports, & Media	0.0	0.1	0.1	0.2	0.0	-	0.5	-	-	-	-	-	-	-
Healthcare Practitioners and Technical	0.0	0.1	0.2	0.1	0.0	-	0.5	-	-	-	-	-	-	-
Healthcare Support	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Protective Service	0.2	0.1	0.3	0.0	-	-	0.5	-	-	-	-	-	-	-
Food Preparation and Serving Related	-	-	-	-	-	-	-	4.4	2.6	8.0	0.9	0.1	-	15.9
Building Grounds and Maintenance	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Personal Care and Service	0.5	1.5	2.8	1.1	0.8	-	6.8	-	-	-	-	-	-	-
Sales and Related	-	-	-	-	-	-	-	0.2	0.1	0.3	0.0	0.0	-	0.6
Office and Admin	0.1	0.1	0.2	0.1	0.0	-	0.5	-	-	-	-	-	-	-
Farm, Fishing, and Forestry	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Construction and Extraction	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Installation Maintenance and Repair	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Production	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Transportation and Material Moving	-	-	-	-	-	-	-	0.1	0.1	0.2	0.1	0.0	-	0.5
Households: Major Occupations	0.8	2.0	3.7	1.5	0.9	-	8.9	4.7	2.8	8.6	1.0	0.2	0.1	17.4
Households: all other occupations[(1)]	-	-	-	-	0.0	-	-	0.1	0.1	0.2	0.0	0.0	0.0	0.4
Total Households	**0.8**	**2.0**	**3.7**	**1.5**	**0.9**	**-**	**8.9**	**4.8**	**2.9**	**8.8**	**1.1**	**0.2**	**0.1**	**17.8**
Total Households - Rounded	1	2	4	1	1	-	9	5	3	9	1	-	-	18

Notes:
(1) Represents occupation categories which have a minor amount of employment and for which detailed compensation analysis was not completed. These worker households are assumed to have a similar income distribution to other employees in the same industry. See Appendix A Tables 1 to 18 for information on major and detailed occupation categories identified for detailed compensation analysis.

TABLE 4-6
EMPLOYEE HOUSEHOLDS BY OCCUPATION AND INCOME (STEPS 4, 5, WILLOW VILLAGE MASTER PLAN PROJECT HOUSING NEEDS ASSESSMENT MENLO PARK, CA

	Hotel							Residential Property Mgmt						
	Extremely Low	Very Low	Low	Moderate	Above Moderate	Over 150% AMI	Total	Extremely Low	Very Low	Low	Moderate	Above Moderate	Over 150% AMI	Total
Step 4, 5, & 6 - Employee Households within Major Occupation Categories														
Management	0.0	0.3	0.9	0.9	1.2	1.7	5.1	0.0	0.5	0.9	0.9	0.7	0.7	3.7
Business and Financial Operations	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Computer and Mathematical	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Architecture and Engineering	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Life, Physical and Social Science	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Community and Social Services	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Legal	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Education Training and Library	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Arts, Design, Entertainment, Sports, & Media	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Healthcare Practitioners and Technical	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Healthcare Support	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Protective Service	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Food Preparation and Serving Related	6.7	4.1	12.5	2.1	0.3	0.0	25.7	-	-	-	-	-	-	-
Building Grounds and Maintenance	6.0	7.6	15.3	5.3	0.1	-	34.4	0.9	1.4	3.3	1.2	0.6	-	7.3
Personal Care and Service	1.1	0.7	2.1	0.3	0.0	-	4.2	-	-	-	-	-	-	-
Sales and Related	0.3	0.4	1.1	0.4	0.3	0.2	2.7	-	-	-	-	-	-	-
Office and Admin	4.0	3.9	9.9	4.2	1.2	0.0	23.1	-	-	-	-	-	-	-
Farm, Fishing, and Forestry	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Construction and Extraction	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Installation Maintenance and Repair	0.6	1.1	2.7	1.1	0.8	0.1	6.4	0.7	1.4	3.3	1.2	0.8	0.0	7.3
Production	0.7	0.5	1.3	0.3	0.0	0.0	2.8	-	-	-	-	-	-	-
Transportation and Material Moving	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Households: Major Occupations	19.4	18.7	45.7	14.5	4.0	2.0	104.3	1.6	3.2	7.5	3.2	2.1	0.7	18.3
Households: all other occupations[(1)]	1.1	1.0	2.5	0.8	0.2	0.1	5.7	-	-	-	-	-	0.0	-
Total Households	**20.4**	**19.8**	**48.2**	**15.3**	**4.2**	**2.2**	**110.1**	**1.6**	**3.2**	**7.5**	**3.2**	**2.1**	**0.7**	**18.3**
Total Households - Rounded	21	20	48	15	4	2	110	2	3	7	3	2	1	18

Notes:
(1) Represents occupation categories which have a minor amount of employment and for which detailed compensation analysis was not completed. These worker households are assumed to have a similar income distribution to other employees in the same industry. See Appendix A Tables 1 to 18 for information on major and detailed occupation categories identified for detailed compensation analysis.

TABLE 4-6
EMPLOYEE HOUSEHOLDS BY OCCUPATION AND INCOME (STEPS 4, 5, WILLOW VILLAGE MASTER PLAN PROJECT HOUSING NEEDS ASSESSMENT MENLO PARK, CA

	Other Existing Tenants						
	Extremely Low	Very Low	Low	Moderate	Above Moderate	Over 150% AMI	Total
Step 4, 5, & 6 - Employee Households within Major Occupation Categories							
Management	(0.0)	(0.1)	(0.3)	(0.4)	(0.8)	(3.0)	(4.5)
Business and Financial Operations	(0.0)	(0.3)	(0.7)	(0.7)	(0.8)	(0.5)	(2.9)
Computer and Mathematical	(0.0)	(0.1)	(0.4)	(0.4)	(0.7)	(1.2)	(2.8)
Architecture and Engineering	(0.0)	(0.1)	(0.5)	(0.5)	(0.8)	(0.8)	(2.7)
Life, Physical and Social Science	(0.0)	(0.2)	(0.9)	(1.0)	(1.4)	(1.7)	(5.2)
Community and Social Services	(0.2)	(0.4)	(0.9)	(0.6)	(0.3)	(0.1)	(2.5)
Legal	(0.0)	(0.1)	(0.2)	(0.2)	(0.2)	(0.7)	(1.4)
Education Training and Library	-	-	-	-	-	-	-
Arts, Design, Entertainment, Sports, & Media	-	-	-	-	-	-	-
Healthcare Practitioners and Technical	(0.0)	(0.3)	(0.9)	(1.0)	(1.4)	(2.3)	(5.9)
Healthcare Support	(0.2)	(0.4)	(0.6)	(0.4)	(0.1)	-	(1.7)
Protective Service	-	-	-	-	-	-	-
Food Preparation and Serving Related	-	-	-	-	-	-	-
Building Grounds and Maintenance	-	-	-	-	-	-	-
Personal Care and Service	-	-	-	-	-	-	-
Sales and Related	-	-	-	-	-	-	-
Office and Admin	(0.4)	(0.9)	(1.7)	(1.1)	(0.4)	(0.0)	(4.5)
Farm, Fishing, and Forestry	-	-	-	-	-	-	-
Construction and Extraction	-	-	-	-	-	-	-
Installation Maintenance and Repair	-	-	-	-	-	-	-
Production	-	-	-	-	-	-	-
Transportation and Material Moving	-	-	-	-	-	-	-
Households: Major Occupations	(0.9)	(2.8)	(7.1)	(6.2)	(6.8)	(10.3)	(34.1)
Households: all other occupations[(1)]	(0.1)	(0.2)	(0.5)	(0.5)	(0.5)	(0.8)	(2.6)
Total Households	**(1.0)**	**(3.0)**	**(7.7)**	**(6.7)**	**(7.3)**	**(11.0)**	**(36.7)**
Total Households - Rounded	(1)	(3)	(8)	(7)	(7)	(11)	(37)

Notes:
(1) Represents occupation categories which have a minor amount of employment and for which detailed compensation analysis was not completed. These worker households are assumed to have a similar income distribution to other employees in the same industry. See Appendix A Tables 1 to 18 for information on major and detailed occupation categories identified for detailed compensation analysis.

4.3 Summary by Income Level

Table 4-7 summarizes estimates of the additional on-site worker housing demand within commuting distance of Menlo Park by affordability level as a result of increased on-site employment from the proposed Project.

Table 4-7. Added On-Site Employee Households by Income

	Extremely Low	Very Low	Low	Moderate	Above Moderate	Over 150% AMI	Total
Meta Offices	57	182	440	341	339	450	1,809
Food Service	28	17	52	6	1	0	104
Fitness Center	1	2	4	1	1	0	9
Building Services	9	9	22	6	2	1	49
Dining	23	14	41	5	1	0	84
Grocery	10	6	19	3	1	0	39
Shops	14	11	29	8	3	3	68
Hamilton Ave Retail	5	3	9	1	0	0	18
Hotel	21	20	48	15	4	2	110
Residential Property Mgmt	2	3	7	3	2	1	18
Other Existing Tenants to be removed	(1)	(3)	(8)	(7)	(7)	(11)	(37)
Subtotal Other On-Site Employee Households	112	82	223	41	8	(4)	462
Added On-site Employee Households	169	264	663	382	347	446	2,271

The net increase in on-site employment with the proposed Project is estimated to result in demand for an additional 2,271 housing units consisting of an estimated 169 Extremely Low, 264 Very Low, 663 Low, 382 Moderate, 347 Above Moderate Income and 446 Over 150% AMI units.

5.0 HOUSING DEMAND OF OFF-SITE WORKERS IN SERVICES TO NEW RESIDENTS

The following section provides an analysis of the linkages between development of the new residential units on the Project site, jobs generated in off-site services such as retail and restaurants, and the housing needs of the workers who hold these off-site jobs. As described in Section 2, off-site jobs addressed in this section are incorporated into the analysis consistent with the terms of the Settlement Agreement which requires, to the extent possible, consideration of multiplier effects.

The analysis of housing demands for off-site workers starts with the estimated rental rate for the new units and moves through a series of linkages from the estimated income of the household that rents the unit, the portion of income available for expenditures on goods and services, jobs associated with the purchase and delivery of those services, the income of the workers doing those jobs and, ultimately, the affordability level of the housing needed by the workers.

The number of jobs by industry that are generated from the household spending of residents living in the proposed Project is estimated using the IMPLAN (IMpact Analysis for PLANning) model, a model widely used to quantify the impacts of changes in a local economy. The number of jobs by industry is then used to estimate worker housing need by income level using the same approach as in Section 4.

5.1 Estimated Household Incomes of New Residents

The estimated household incomes of residents in the new market rate residential units are drawn from the analysis provided in Section 3.2. For BMR units, household income is estimated based on the mid-point of the income range that would qualify for a BMR unit. Household income figures are then multiplied by the number of units to estimate the aggregate household income for all residents of the proposed Project as shown in Table 5-1. Aggregate household income is used to estimate household spending, the input to the IMPLAN model that is used to quantify the number of off-site jobs associated with household spending of new residents.

Table 5-1. Aggregate Household Income of New Residents

	Estimated Household Income [1]					Number of Units					
	Ext. Low	Very Low	Low	BMR Moderate	Market Rate	Ext. Low	Very Low	Low	BMR Mod	Market Rate	Aggregate Income
Studio	$34,219	$51,175	$83,200	$114,050	$118,720	75	32	10	38	346	$50,447,020
1-BR	$40,196	$58,475	$95,100	$130,350	$145,120	8	4	17	66	466	$78,401,187
1-BR Plus	$40,196	$58,475	$95,100	$130,350	$159,120	0	0	0	0	158	$25,140,960
2- BR	n/a	$65,800	$107,000	$146,650	$174,800	0	1	10	41	407	$78,292,050
3-Bedroom	n/a	n/a	$118,850	$162,925	$220,720	0	0	1	5	45	$10,865,875
Total						83	37	38	150	1,422	$243,147,092
Average Per Household											$140,547

(1) For market rate units, see Table 3-4. For BMR units, figures are based on the mid-point of the qualifying income range. For BMR Moderate and Extremely Low units, the distribution of income levels within these categories proposed by the Project Sponsor is reflected as a weighted average.

Income Available for Expenditures

The input into the IMPLAN model used in this analysis is the net income available for expenditures. To arrive at income available for expenditures, gross income must be adjusted for Federal and State income taxes, contributions to Social Security and Medicare, savings, and payments on household debt. Per KMA correspondence with the producers of the IMPLAN model (IMPLAN Group LLC), other taxes including sales tax and property tax are handled internally within the model as part of the analysis of expenditures. Payroll deductions for medical benefits and pre-tax medical expenditures are also handled internally within the model. Table 5-2 shows the calculation of the percentage of household income available for expenditures.

Table 5-2. Percent of Income Available for Expenditures (1)	
Gross Income	100%
Less:	
Federal Income Taxes (2)	11.1%
State Income Taxes (3)	5%
FICA Tax Rate (4)	7.65%
Savings & other deductions (5)	6%
Subtotal deductions	30%
Percent of Income Available for Expenditures (6)	*70%*

(1) Calculated as gross income after deduction of taxes and savings. Income available for expenditures is the input to the IMPLAN model which is used to estimate the resulting employment impacts. Housing costs are not deducted as part of this adjustment step because they are addressed separately as expenditures within the IMPLAN model.
(2) Reflects average tax rates (as opposed to marginal) based on U.S. Internal Revenue Services, Tax Statistics, Tables 1.2 and 2.1 for 2018.Tax rates reflect averages for applicable income range. Assumes the standard deduction.
(3) Average tax rate estimated by KMA based on marginal rates per the California Franchise Tax Board and ratios of taxable income to gross income estimated based on U.S. Internal Revenue Service data.
(4) For Social Security and Medicare.
(5) Household savings including retirement accounts like 401k / IRA and other deductions such as interest costs on credit cards, auto loans, etc., necessary to determine the amount of income available for expenditures. The 6% rate used in the analysis is based on and average for the 2001 to 2020 period computed from U.S. Bureau of Economic Analysis data, specifically the National Income and Product Accounts, Table 2.1 Personal Income and Its Disposition.
(6) Deductions from gross income to arrive at the income available for expenditures are consistent with the way the IMPLAN model and National Income and Product Accounts (NIPA) defines income available for personal consumption expenditures. Income taxes, contributions to Social Security and Medicare, and savings are deducted; however, property taxes and sales taxes are not. Housing costs are not deducted as part of the adjustment because they are addressed separately as expenditures within the IMPLAN model.

Income available for expenditures is estimated at approximately 70% of gross income. Federal tax rates are estimated at 11% of gross income based upon Internal Revenue Service data. State taxes are estimated to average 5% of gross income based on tax rates per the California Franchise Tax Board. The employee share of FICA payroll taxes for Social Security and Medicare is 7.65% of gross income. A ceiling of $147,000 per employee applies to the 6.3% Social Security portion of this tax rate.

Savings and repayment of household debt represent another necessary adjustment to gross income. Savings includes various IRA and 401 K type programs as well as non-retirement

household savings and investments. Debt repayment includes auto loans, credit cards, and all other non-mortgage debt. Savings and repayment of debt are estimated to represent a combined 6% of gross income based on the average for the 2001 to 2020 period derived from United States Bureau of Economic Analysis data.

The percentage of income available for expenditure for input into the IMPLAN model is prior to deducting housing costs. The reason is for consistency with the IMPLAN model which defines housing costs as expenditures. The IMPLAN model addresses the fact that expenditures on housing do not generate employment to the degree other expenditures such as retail or restaurants do, but there is some maintenance and property management employment generated.

After deducting income taxes, Social Security, Medicare, savings, and repayment of debt, the estimated income available for expenditures is 70% of gross household.

Another adjustment made to spending is to account for standard operational vacancy in rental units of 5%, a level of vacancy considered average for rental units in a healthy market.

Table 5-3 presents the estimate of household income available for expenditures in the local economy after adjustments to income available for expenditures and vacancy:

Table 5-3. Income Available for Expenditures	
Aggregate Annual Household Income, New Residents (Table 5-1)	$243,147,092
Percent Available for Expenditure (Table 5-2)	70%
Adjustment for 5% rental vacancy	95%
Aggregate Household Income Available	$161,693,000

The estimated household income available for expenditure associated with the up to 1,730 new residential units is the input into the IMPLAN model.

5.2 The IMPLAN Model

Consumer spending by residents of new housing units will create jobs, particularly in sectors such as restaurants, health care, and retail, which are closely connected to the expenditures of residents. The widely used economic analysis tool, IMPLAN, was used to quantify these new jobs by industry sector.

5.2.1 IMPLAN Model Description

The IMPLAN model is an economic analysis software package now commercially available through the IMPLAN Group, LLC. IMPLAN was originally developed by the U.S. Forest Service, the Federal Emergency Management Agency, and the U.S. Department of the Interior Bureau of Land Management and has been in use since 1979 and refined over time. It has become a widely used tool for analyzing economic impacts for a broad range of applications from major construction projects to natural resource programs.

IMPLAN is based on an input-output accounting of commodity flows within an economy from producers to intermediate and final consumers. The model establishes a matrix of supply chain relationships between industries and also between households and the producers of household goods and services. Assumptions about the portion of inputs or supplies for a given industry likely to be met by local suppliers, and the portion supplied from outside the region or study area are derived internally within the model using data on the industrial structure of the region.

The output or result of the model is generated by tracking changes in purchases for final use (final demand) as they filter through the supply chain. Industries that produce goods and services for final demand or consumption must purchase inputs from other producers, which in turn, purchase goods and services. The model tracks these relationships through the economy to the point where leakages from the region stop the cycle. This allows the user to identify how a change in demand for one industry will affect a list of over 500 other industry sectors. The projected response of an economy to a change in final demand can be viewed in terms of economic output, employment, or income.

Data sets are available for each county and state, so the model can be tailored to the specific economic conditions of the region being analyzed. This analysis utilizes the data set for San Mateo County. As will be discussed, much of the employment impact is in local-serving sectors, such as retail, eating and drinking establishments, and medical services. It is likely that many off-site employment impacts will occur in Menlo Park and other nearby jurisdictions; however, employment impacts will also extend throughout the county and beyond based on where residents of the proposed Project will shop, dine, seek medical care and other services. Consistent with the approach taken in most residential affordable housing nexus analyses, the analysis includes job impacts throughout the county.

The Covid-19 pandemic has modified consumer spending patterns due to shelter-in-place orders, business closures, and altered consumer preferences and shopping patterns in response to the virus. It is assumed that the pandemic is a temporary condition which is not representative of future conditions when the proposed Project would be completed and occupied. Spending may mostly revert to pre-pandemic patterns as the pandemic subsides. However, it is possible that some changes in response to the virus, such as an accelerated shift toward online retail, could endure to some degree post-pandemic. Since there is no data on

post-pandemic spending patterns, the analysis uses the most recent IMPLAN data set available, which is representative of the pre-pandemic pattern.

5.2.2 Application of the IMPLAN Model to Estimate Job Growth

The IMPLAN model was applied to link income to household expenditures to job growth. The estimated annual household spending of the residents of the up to 1,730 new housing units is the input to the IMPLAN model. The IMPLAN model then distributes spending among various types of goods and services (industry sectors) based on data from the Consumer Expenditure Survey and the Bureau of Economic Analysis Benchmark input-output study, to estimate the number of off-site jobs.

Job creation, driven by increased demand for products and services, was projected for each of the industries that will serve the new households. A total of 644 jobs are estimated to be generated by spending of the residents, as summarized in Table 5-4. Of the estimated 644 jobs, 121 are estimated to be captured as part of on-site employment totals for grocery, retail, and dining uses, based on the analysis in Appendix A Table 21, which are already considered as part of the Section 4 analysis addressing on-site jobs. While residents are anticipated to meet a significant share of needs within the on-site uses, not all retail categories will be available on-site and services like medical care and schools will be located off-site. On-site retail and dining will also likely serve a wider customer base that includes local residents, workers, and hotel guests, in addition to new residents of the proposed Project.

Table 5-4. Jobs Generated from Household Spending of 1,730 Residential Units	
Aggregate Household Expenditures, 1,730 units	$161,693,000
Estimated Number of Jobs Generated	644.5
Less: Estimated Portion Included in On-Site Employment Totals [(1)]	(121.4)
Estimated Number of Off-site Jobs	523.1

[(1)] See Appendix A Table 21 for supporting analysis.

The proposed Project would add new residential units to Menlo Park, increasing the population and creating net new demand for products and services, the jobs associated with delivery of these products and services are also estimated to be net new jobs. A portion of household needs will be met through the mix of retail and restaurant uses proposed to be included on-site as part of the Project while others needs such as health care are anticipated to be met off-site. While there may be an ability for existing off-site health care facilities, schools and other services to absorb a share of new demand to some extent, existing establishments will still require additional employees in many cases. For example, individual health care providers are only able to see so many patients in a day. Employment in sectors that serve residents tends to expand with population. As indicated in Section 5.2.3, the ratio between employment in resident-serving sectors of the economy and the number of housing units is relatively consistent at the city and county geographic scales, indicating resident-serving jobs tend to be proportionate to the number of housing units and population.

Table 5-5 provides a detailed breakdown of the employment by industry sorted by projected employment. The Consumer Expenditure Survey published by the Bureau of Labor Statistics tracks expenditure patterns by income level. IMPLAN utilizes this data to reflect the pattern by income bracket. Estimated employment is shown for each IMPLAN industry sector representing 1% or more of total employment. The jobs that are generated are heavily retail jobs, jobs in restaurants and other eating establishments, and in services that are provided locally such as health care.

Table 5-5. Off-Site Jobs Generated by Industry from Housing Spending		
Industry Category	Off-Site Jobs Total [1]	Percent
Full-service restaurants	25.5	5%
Limited-service restaurants	14.8	3%
All other food and drinking places	8.9	2%
Subtotal Restaurant	48.6	9%
Retail - Building material and garden equipment and supplies stores	4.6	1%
Retail - Clothing and clothing accessories stores	9.9	2%
Retail - Electronics and appliance stores	4.7	1%
Retail - Food and beverage stores	11.7	2%
Retail - Furniture and home furnishings stores	5.0	1%
Retail - General merchandise stores	16.0	3%
Retail - Health and personal care stores	5.2	1%
Retail - Miscellaneous store retailers	9.1	2%
Retail - Motor vehicle and parts dealers	4.9	1%
Retail – Non-store retailers	9.6	2%
Retail - Sporting goods, hobby, musical instrument and bookstores	3.9	1%
Personal care services	8.4	2%
Subtotal Retail and Service	93.0	18%
Offices of dentists	13.5	3%
Offices of other health practitioners	8.5	2%
Outpatient care centers	11.6	2%
Offices of physicians	16.8	3%
Medical and diagnostic laboratories	1.6	0%
Other ambulatory health care services	2.3	0%
Home health care services	8.7	2%
Hospitals	18.0	3%
Subtotal Healthcare	81.0	15%
Elementary and secondary schools	7.2	1%
Junior colleges, colleges, universities, and professional schools	10.5	2%
Other educational services	5.3	1%
Subtotal Education	22.9	4%
Individual and family services	32.9	6.3%
Automotive repair and maintenance, except car washes	15.2	2.9%
Child day care services	9.8	1.9%
Religious organizations	7.5	1.4%
Other personal services	7.4	1.4%
Transit and ground passenger transportation	6.6	1.3%
Car washes	6.4	1.2%
Other financial investment activities	11.1	2.1%
Non-depository credit intermediation and related activities	5.6	1.1%
Transit and ground passenger transportation	6.6	1.3%
All Other	168.6	32%
Total Number of Off-Site Jobs Generated	523.1	100%

(1) Estimated off-site employment generated by household expenditures of Project residents for industries representing more than 1% of total employment. Employment estimates are based on the IMPLAN Group's economic model, IMPLAN, for San Mateo County (uses 2019 IMPLAN data set, the most recent available as of June 2020). See Appendix A Table 21 for supporting analysis of the portion of total jobs generated by household spending that are located off-site. Includes both full- and part-time jobs.

5.2.3 Cross-Check Based on Existing Number of Resident-Serving Jobs

As context for the estimated number of off-site jobs and a secondary cross-check for reasonableness, Table 5-6 provides comparisons to the existing ratio of resident-serving jobs in sectors such as health care, retail, food service and education and the number of residential units within Menlo Park and San Mateo County. In Menlo Park, there are 9,072 existing jobs in resident-serving sectors based on data from the U.S. Census and 14,124 residential units based on data from the California Department of Finance. These figures translate to a ratio of approximately 1,111 resident-serving jobs for every 1,730 residential units[27]. The ratio for San Mateo County is similar at 984 resident-serving jobs for every 1,730 residential units. Based on existing relationships between resident-serving jobs and residential units for both the city and the county, estimates for the proposed Project appear reasonable.

Estimates for the proposed Project reflect a lower ratio of resident serving jobs to housing units than overall averages based on the characteristics of the proposed Project which consists of 71% studio and one-bedroom units. Households occupying the proposed Project are estimated to average 2.03 persons[28], which is smaller than the average household size for the city of 2.64 persons per household and 2.88 persons per household for the county per the California Department of Finance. Smaller household sizes will correspond to lower demand for services compared to overall averages, particularly for services like health care and education that are driven by population. In addition, the proposed Project includes 17.8% BMR units. Residents of BMR units will have lower household incomes and will drive a lower level of demand for services, particularly in sectors like restaurants that are driven more by discretionary spending. Finally, the City and County averages include employment within the identified sectors associated with serving the business and visitor population as well as residents, resulting in higher ratios than would be the case for jobs associated with residents alone. Therefore, the ratio between the estimated number of resident-serving jobs and the number of residential units for the proposed Project is appropriately less than citywide or countywide averages.

[27] Calculated as 9,072 jobs divided by 14,124 residential units and multiplied by 1,730 units. This 1,730-unit figure is selected for ready comparison to the proposed Project. Since Menlo Park residents will additionally use retail and services located in other nearby communities, the relationship for San Mateo County as a whole is also provided.

[28] Based on the unit mix of the standard for relating unit size to household size specified in California Health and Safety Code Section 50052.5, the proposed Project is estimated to correspond to an average household size of approximately 2.03 persons.

Table 5-6. Comparison to Existing City and County Relationships Between Number of Residential Units and Number of Jobs in Key Resident Serving Sectors					
	Existing Jobs [1]		Jobs Per 1,730 Residential Units		
	City of Menlo Park	San Mateo County	Actual: City of Menlo Park [4]	Actual: San Mateo County [4]	Estimate for Proposed Project [5]
Key Resident-Serving Sectors					
Health Care	3,065	41,812	375.4	256.2	151.3
Retail Trade	1,564	33,825	191.6	207.3	113.5
Food Service	2,005	39,255	245.6	240.6	99.6
Education	1,123	24,010	137.6	147.1	22.7
Other Services [2]	1,040	15,264	127.4	93.5	75.1
Arts, Entertainment, and Recreation	275	6,469	33.7	39.6	18.8
Subtotal Resident-Serving	9,072	160,635	1,111	984	481
Other Sectors	39,476	257,325	4,835	1,577	163
Total All Sectors	48,548	417,960	5,946	2,561	645
Number of Residential Units [3]	14,124	282,299			

(1) U.S. Census Longitudinal Employer-Household Dynamics, 2018 data for workplace geography.

(2) Includes a broad range of services from auto repair to dry cleaning, to religious organizations.

(3) Number of housing units as of January 1, 2021, per California Department of Finance Table E-5, Population and Housing Estimates for Cities, Counties, and the State, 2011-2021 with 2010 Census Benchmark.

(4) Calculated by dividing the total number of jobs by the number of residential units and multiplying by 1,730 units.

(5) For comparison purposes, figures from Appendix A Table 21, prior to the adjustment to remove jobs included in on-site employment totals, are used

Note: The number of jobs by industry from the HNA have been aggregated by major industry category to allow ready comparison to actual existing jobs in the City of Menlo Park and in San Mateo County.

5.3 Analysis of Housing Need by Income

This section presents a summary of the analysis linking the number of off-site jobs associated with the new residential units to the estimated number of housing units required in each of six income categories. The analysis is based on the same methodology as Section 4 and consists of the following analysis steps.

Step 1 – Adjustment from Employees to Employee Households

This step (Table 5-7) converts the number of employees identified in Table 5-5 to the number of employee households, recognizing that there is, on average, more than one worker per household, and thus the number of housing units in demand for new workers is reduced. The workers-per-worker-household ratio eliminates from the equation all non-working households, such as retired persons and students. The San Mateo County average of 1.91 workers per worker household derived from the U. S. Census Bureau 2015-2019 American Community Survey is used for this step in the analysis, consistent with Section 4. The estimated 523 off-site jobs is divided by 1.91 to estimate the number of worker households of 274.

Table 5-7. Estimated Net Change in On-Site Employee Households	
Off-Site Jobs in Services to New Residents	523.1
Number of Employee Households - Off-site workers (at 1.91 workers per household) (1)	274.2

(1) Derived from 2015-2019 U.S. Census American Community Survey data for San Mateo County

Step 2 – Occupational Distribution of Employees

The occupational breakdown of employees is the first step to arrive at income level. The output from the IMPLAN model provides the number of employees by industry sector, shown in Table 5-5. The IMPLAN output is then paired with data from the Department of Labor, Bureau of Labor Statistics Occupational Employment Survey (OES) to estimate the occupational composition of employees for each industry sector. As shown in Table 5-8, new jobs will be distributed across a variety of occupational categories. The three largest occupational categories are sales and related (12.4%), office and administrative support (13.1%), and healthcare support (10%). Table 5-8 indicates the percentage and number of employee households by occupation for off-site workers.

Table 5-8. Worker Households by Occupation – Jobs in Off-Site Services to New Residential Units		
Occupation Category	Number of Worker Households	% of Jobs
Management Occupations	14.0	5.1%
Business and Financial	13.8	5.0%
Computer and Mathematical	5.6	2.0%
Architecture and Engineering	0.6	0.2%
Sciences	1.1	0.4%
Community & Social Services	6.7	2.5%
Legal	1.8	0.6%
Education, and Library	9.7	3.5%
Arts, Design, Entertainment	3.9	1.4%
Healthcare Practitioners	21.6	7.9%
Healthcare Support	27.3	10.0%
Protective Service	3.2	1.2%
Food Prep and Serving	26.4	9.6%
Building and Grounds.	10.6	3.9%
Personal Care and Service	12.7	4.6%
Sales and Related	34.0	12.4%
Office and Admin Support	35.8	13.1%
Farming, Fishing, Forestry	0.2	0.1%
Construction and Extraction	2.4	0.9%
Installation, Maint. and Repair	12.8	4.7%
Production	4.4	1.6%
Transportation	25.7	9.4%
Totals	274.2	100.0%

See Appendix A Tables 19 and 20 for additional detail.

Step 3 – Estimates of Employee Households by Income

In this step, occupations are translated to employee incomes based on recent wage and salary information for workers in San Mateo County from the BLS Occupational Employment Survey. The wage and salary information summarized in Appendix A Table 20 provided the income inputs to the analysis.

For each occupational category shown in Table 5-8, the OES data provides a distribution of specific occupations within the category. For example, within the Food Preparation and Serving Category, there are Supervisors, Cooks, Bartenders, Waiters and Waitresses, Dishwashers, etc. In total, there are approximately 100 detailed occupation categories included in the analysis, as shown in the Appendix A Table 20. Each of these occupation categories has a different distribution of wages, which was obtained from BLS and is specific to workers in the County as of 2020.

Household incomes are estimated from employee incomes using ratios between individual employee income and household income derived from 2015-2019 ACS data for the San Francisco Bay Area. Ratios used in this section are the same as those used in Section 4 and presented in Table 4-5.

Estimated household incomes are compared to the income criteria shown in Table 2-4 to determine the percentage that qualify within each income category for each potential household size/number of workers combination.

Step 4 – Distribution of Household Size and Number of Workers

In this step, we account for the distribution in household sizes and number of workers using local data obtained from the U.S. Census. 2015-2019 ACS data is used to develop a set of percentage factors representing the distribution of household sizes and number of workers within working households. The percentage factors are the same as used in Section 4 and presented in Table 4-4. Application of these percentage factors accounts for the following:

- Households have a range in size and a range in the number of workers.
- Large households generally have more workers than smaller households.

The result of this step is a distribution of working households by number of workers and household size.

Step 5 – Estimate of Number of Households that Meet Size and Income Criteria

Step 5 is the final step to calculate the number of worker households meeting the size and income criteria for the six income tiers. The calculation combines the results from Step 3 on percentage of worker households that would meet the income criteria at each potential household size / number of workers combination, with Step 4, the percentage of worker household having a given household size / number of workers combination. The result is the

percent of households that fall into each income tier. The percentages are then multiplied by the number of households from Step 1 to arrive at number of households in each income tier.

Table 5-9 presents the resulting estimates of the number of households within each income category by worker occupation category.

Table 5-9. Employee Households by Occupation and Income (Steps 3, 4, and 5) for Workers in Off-Site Services to New Residents

Major Occupation Category [1]	Extremely Low	Very Low	Low	Moderate	Above Moderate	Over 150% AMI	Total
Management	0.1	0.5	1.9	1.8	2.5	7.2	14.0
Business and Financial Operations	0.0	1.1	2.7	2.9	3.7	3.4	13.8
Computer and Mathematical	-	-	-	-	-	-	-
Architecture and Engineering	-	-	-	-	-	-	-
Life, Physical and Social Science	-	-	-	-	-	-	-
Community and Social Services	0.5	1.1	2.2	1.8	0.9	0.3	6.7
Legal	-	-	-	-	-	-	-
Education Training and Library	1.1	1.8	3.3	2.8	0.6	0.1	9.7
Arts, Design, Entertainment, Sports, & Media	-	-	-	-	-	-	-
Healthcare Practitioners and Technical	0.1	0.8	2.8	3.8	4.8	9.2	21.6
Healthcare Support	6.5	5.1	12.1	3.1	0.5	-	27.3
Protective Service	-	-	-	-	-	-	-
Food Preparation and Serving Related	7.1	4.4	12.7	2.0	0.2	-	26.4
Building Grounds and Maintenance	2.3	1.9	5.3	0.9	0.1	0.0	10.6
Personal Care and Service	2.9	2.1	5.7	1.5	0.4	-	12.7
Sales and Related	7.6	5.6	15.9	3.3	1.0	0.6	34.0
Office and Admin	4.0	7.3	13.1	9.2	2.1	0.1	35.8
Farm, Fishing, and Forestry	-	-	-	-	-	-	-
Construction and Extraction	-	-	-	-	-	-	-
Installation Maintenance and Repair	0.8	2.3	4.1	3.6	1.8	0.1	12.8
Production	-	-	-	-	-	-	-
Transportation and Material Moving	4.9	5.1	11.5	3.4	0.7	-	25.7
Households: Major Occupations	37.9	39.2	93.6	40.1	19.5	21.0	251.1
Households: all other occupations [2]	3.5	3.6	8.6	3.7	1.8	1.9	23.1
Total Households	**41.4**	**42.8**	**102.2**	**43.7**	**21.2**	**22.9**	**274.2**
Rounded	**41.0**	**43.0**	**102.0**	**44.0**	**21.0**	**23.0**	**274.0**

[1] See Appendix A Tables 19- 20 for information on major and detailed occupation categories identified for detailed compensation analysis.
[2] Represents occupation categories which have a minor amount of employment, and for which detailed compensation analysis was not completed. These worker households are assumed to have a similar income distribution to other employees.

5.4 Summary of Housing Need by Income, Off-site Workers

Table 5-10 summarizes the demand for housing by workers in off-site services to the up to 1,730 new residential units by income category.

Table 5-10. Estimated Off-Site Employee Households by Income

	Extremely Low	Very Low	Low	Moderate	Above Moderate	Over 150% AMI	Total
Worker Households by Income	41	43	102	44	21	23	274

As shown in Table 5-10, the up to 1,730 residential units are estimated to create a demand for an additional 274 housing units for off-site workers in services such as retail, restaurants, and education. Housing demand for new off-site workers is distributed across the income tiers with the greatest number of households in the Low Income category. The finding that the jobs associated with consumer spending tend to be low-paying jobs where the workers will require housing affordable at the lower income levels is not surprising. As noted above, consumer spending results in employment that is concentrated in lower paid occupations including food preparation, administrative, and retail sales.

6.0 NET IMPACT ON HOUSING AVAILABILITY

This section combines the findings of the prior three sections to estimate the net impact on housing availability from the proposed Project by income. Net impacts on housing availability represent the combined housing supply and demand effects of the proposed Project including from:

- Added housing supply from construction of new residential units, from Section 3; and
- Added housing demand from added jobs, including on-site jobs, drawn from the analysis in Section 4 and off-site jobs in services to residents, drawn from the Section 5 analysis.

Additions to housing supply increase housing availability while increases in housing demand reduce housing availability.

Section 6.1 addresses total housing availability impacts regardless of location. Section 6.2 provides an estimate specific to impacts occurring within Menlo Park.

6.1 Net Impact on Housing Availability Regionally

The proposed Project is estimated to result in net decrease in available housing units of 815 units regionally, as shown in Table 6-1. This estimate reflects the combined effect of:

- Addition of up to 1,730 new residential units to the housing supply; and
- 2,545 units of added housing demand from new on-site and off-site workers.

Table 6-1. Estimated Net Impact of Project on Housing Availability Regionally

A. Added Housing Supply (Section 3)	1,730 Units
B. Added Worker Housing Demand	
Housing Demand for On-site workers (Section 4)	2,271 Units
Housing Demand for Off-site workers in services to new residents (Section 5)	274 Units
Subtotal Added Worker Housing Demand	2,545 Units
C. Net Decrease in Housing Availability [A. - B.]	(815 Units)

The 815-unit net decrease in regional housing availability represents an increase in housing demand that exceeds the number of new residential units added to the housing supply.

Table 6-2 provides a breakout of the findings by income category. As shown, the 815-unit net decrease in available housing throughout the region consists of 127 Extremely Low, 270 Very Low, 727 Low and 469 Over 150% AMI units. The decrease in housing availability in the Extremely Low, Very Low, Low and Over 150% AMI categories is partially offset by increases in available housing in the Moderate and Above Moderate categories of 70 and 708 units,

respectively, resulting from added housing supply that exceeds added housing demand in these income categories.

Table 6-2. Net Impacts on Regional Housing Availability by Income Level

	Extremely Low	Very Low	Low	Moderate	Above Moderate	Over 150% AMI	Total
A. Housing Supply Added (New Units)	83	37	38	496	1,076	0	1,730
B. Added Worker Housing Demand							
On-site workers: Meta Offices	57	182	440	341	339	450	1,809
On-site workers: Other Uses	112	82	223	41	8	(4)	462
Off-site workers in services to new residents	41	43	102	44	21	23	274
Subtotal Added Worker Housing Demand	210	307	765	426	368	469	2,545
C. Net Decrease in Available Housing (1) [= A. - B.]	(127)	(270)	(727)	70	708	(469)	(815)

(1) Negative figure represents a net decrease in housing availability resulting from housing demand that exceeds added housing supply.

6.2 Menlo Park Share of Impact on Housing Supply and Housing Demand

KMA estimated the share of housing supply and housing demand that would occur within the City of Menlo Park. Estimates represent an allocation of the total housing availability impacts presented in Table 6-2 based on where housing units included in the proposed Project will be constructed (in Menlo Park) and where workers will live (a share in Menlo Park and a share outside of Menlo Park). Two scenarios are presented regarding the share of workers who will seek and find housing within the City of Menlo Park:

A. ***Current Commute Share Estimate*** (7.4% for Meta workers / 5.9% for other workers) – The current commute share estimate uses data on existing commute patterns to estimate the number of workers who will live in Menlo Park. For Meta workers, the 7.4% existing share of Meta workers who live in Menlo Park is used. For all other workers, the 5.9% city-wide average share of Menlo Park's workforce that lives in the city is used.

B. ***Increased Commute Share Estimate at 20%*** (based on 2000 Nexus Study) – The City Council has expressed an interest in improving the jobs housing balance and obtaining data to inform the goal of increasing the number of workers who live and work in Menlo Park. Therefore, for informational purposes, the report provides an additional goal-based estimate of housing units in Menlo Park based on a 20% commute share, which was a goal identified in the City's 2000 Commercial Linkage Fee Nexus Study. The possibility that availability and affordability of housing have contributed to a downward trend in Menlo Park's commute share is a primary reason for including this additional goal-based commute share estimate. The goal-based estimate also illustrates a scenario in which

the residential units added by the proposed Project encourage a larger share of workers to live in Menlo Park[29].

The current (7.4% for Meta and 5.9% for other workers) and 20% commute shares, described above, are applied to estimate the number of employees that will live in Menlo Park.

The analysis under the two commute share scenarios is described below and is followed by additional discussion of the commute shares.

A. Current Commute Share Estimate

The analysis of housing availability impacts within Menlo Park under the Current Commute Share reflects the following allocation of total regional impacts identified in Section 6.1:

(1) **Menlo Park Share of Added Housing Supply –** All residential units added by the proposed Project are in the City of Menlo Park; therefore, all 1,730 units are identified as additional housing supply in Menlo Park.

(2) **Menlo Park Share of Added Housing Demand –** 177 units of 2,545 total units of housing need from added jobs are estimated to be within Menlo Park based on the existing share of Menlo Park workers who live in the city. This result is based on combining the findings on worker housing need by income level summarized in Table 6-2 with a 7.4% commute share factor for Meta workers and a 5.9% commute share factor for other workers, as shown in Table 6-3.

With the Current Commute Share Estimate, the 1,730 units of added housing supply exceed the 177-units of added housing demand in Menlo Park by 1,553 units resulting in a 1,553-unit net increase in housing availability in Menlo Park. As shown in Table 6-3, the estimated 1,553-unit increase in housing availability is comprised of 70 Extremely Low, 15 Very Low, 466 Moderate, and 1,050 Above Moderate Income units, partially offset by a net decrease in housing availability within the Low and Over 150% AMI categories of 14 and 34 units, respectively, as a result of added employee housing demand exceed the added housing supply within these income categories.

[29] The Project Sponsor has indicated that there will not be any preference or priority for Meta employees to occupy the proposed residential units.

Table 6-3. Estimated Menlo Park Share of Net Impacts on Housing Availability by Income Level – Current Commute Share Estimate								
	Basis for Allocation to Menlo Park	Extremely Low	Very Low	Low	Moderate	Above Moderate	Over 150% AMI	Total
A. Added Housing Supply (New Units)	*all units are in Menlo Park*	83	37	38	496	1,076	-	1,730
B. Menlo Park Share of Added Worker Housing Demand								
Meta Offices	*7.4% Menlo Park commute share for Meta workers*	4	14	33	25	25	33	134
Other Uses	*5.9% Menlo Park commute share from Census*	7	5	13	2	-	-	27
Off-site workers		2	3	6	3	1	1	16
Subtotal Demand		13	22	52	30	26	34	177
C. Net Increase in Housing Availability (1) [= A. - B.]		70	15	(14)	466	1,050	(34)	1,553

(1) Negative figures represent a net increase in housing demand that exceeds added housing supply within the particular income category.

The commute share factors are applied uniformly across each of the household income tiers to arrive at estimates of Menlo Park's "share" of the worker housing demand for each income tier. The actual distribution by income tier in Menlo Park would likely vary from these estimates based on factors, such as the existing housing stock in Menlo Park, limited availability of affordable units, and the future production of market rate and affordable units in Menlo Park.

B. Increased Commute Share Estimate

The Increased Commute Share Estimate is based on the City's 2000 Nexus Study which incorporated a commute share assumption of 20%. This 20% commute share assumption reflects a goal to house a larger share of the city's workforce locally that was approximately double the 10% commute share for Menlo Park as of the time the Nexus Study was prepared[30]. As stated in the 2000 Nexus Study:

[30] Per the 1990 Census, Menlo Park's commute share was 10% based on a total number working in Menlo Park of 26,048 of which 2,662 lived in Menlo Park. Figures do not include those who work out of their homes rather than commute to a separate workplace. The 1990 Census was the most recent data available at the time the 2000 Nexus Study was prepared as the 2000 Census data was not yet released. The 2000 Nexus Study references a separate factor of 23%, also as of 1990, which is not comparable to the 10% commute share in 1990. This 23% factor represents the share of Menlo Park *employed residents* (residents who are employed) who work in Menlo Park versus commute out of Menlo Park to a job located in another city.

Using a relatively higher number provides a goal for the City to achieve. Although inflated housing prices in the 1990's have resulted in a decrease in the percentage of Menlo Park workers who can afford to live in Menlo Park, the City's goal is to encourage local workers to live in Menlo Park in order to achieve a better jobs/housing balance.

This Increased Commute Share Estimate provides additional information regarding how analysis findings would vary were the City to seek to house 20% of the added workforce locally consistent with the goal identified in the 2000 Nexus Study.

With the Increased Commute Share Estimate, application of the 20% goal-based commute share results in allocation of 509 out of 2,545 units of added housing demand from new jobs. The 1,730 units of added housing supply exceed the 509-units of added housing demand in Menlo Park by 1,221 units, resulting in a 1,221-unit net increase in housing availability in Menlo Park.

Table 6-4 presents the findings by income level with the Increased Commute Share Estimate. As shown, the estimated 1,221-unit net increase in available housing units in Menlo Park consists of 42 Extremely Low, 411 Moderate, and 1,002 Above Moderate units, offset by a net decrease in housing availability within the Very Low, Low, and Over 150% AMI categories of 25, 115, and 94 units, respectively.

Table 6-4. Estimated Menlo Park Share of Net Impacts on Housing Availability by Income Level – Increased Commute Share Estimate

	Basis for Allocation to Menlo Park	Extremely Low	Very Low	Low	Moderate	Above Moderate	Over 150% AMI	Total
A. Added Housing Supply (New Units)	*all units are in Menlo Park*	83	37	38	496	1,076	-	1,730
B. Menlo Park Share of Added Worker Housing Demand								
Meta Offices	*7.4% Menlo Park commute share for Meta workers*	11	37	88	68	68	90	362
Other Uses	*5.9% Menlo Park commute share from Census*	22	16	45	8	2	(1)	92
Off-site workers		8	9	20	9	4	5	55
Subtotal Demand		41	62	153	85	74	94	509
C. Net Increase in Housing Availability (1) [= A. - B.]		42	(25)	(115)	411	1,002	(94)	1,221

(1) Negative figures represent a net increase in housing demand that exceeds added housing supply within the particular income category.

6.3 Additional Discussion of Commute Share

According to the U.S. Census 2015-2019 American Community Survey (ACS), 5.9% of those who currently work in the City of Menlo Park also live in the City of Menlo Park. The remaining 94.1% of the workforce commutes in from outside of the city. The existing percentage of workers commuting in from other jurisdictions is attributable to a number of factors including the supply of housing relative to the number of jobs and the high cost of housing in Menlo Park. Nevertheless, 5.9% does provide a benchmark for the propensity of Menlo Park workers to seek and find housing within the city.

The percentage of workers in Menlo Park who also live in the city has been generally decreasing over the decades with 10% of workers living in the city as of the 1990 Census, decreasing to 7.2% with the 2000 Census to 5.9% in the most recent ACS data. Workers most everywhere tend to commute more in recent years than in the past and, in addition, Menlo Park has become less affordable over time. The relationship between job growth in Menlo Park relative to the amount and affordability level of housing that has been added over time is likely a significant factor in this trend. However, in any metropolitan region such as the Bay Area, there are numerous individual factors that influence how workers, in general, select their neighborhoods or communities to live in beyond basic housing supply, price/rent, and proximity to work considerations. Examples listed below are by no means exhaustive and no hierarchy is implied by the order:

- Type of unit; people tend to be looking for a specific kind of housing – an apartment, a condo, a detached home. These choices are tied to stage of life as well as affordability and other factors.
- Commute to work – Travel time to work and commute options are important to those with a regular commute. In many households, more than one household member works, so a residential location may be a compromise to make commuting in multiple directions acceptable.
- Proximity to social, ethnic and religious communities.
- Accessibility to recreational resources. This can be general like proximity to parks and playgrounds, or specific to certain recreational interests ranging from jogging trails, to golf, to just about any recreational pursuit.
- Quality of schools – either indicated by specific measures or purely perception. This is mainly a factor of concern for those with children or seeking housing with future children in mind.
- Accessibility to culture and entertainment.
- Public safety – like schools either based on hard data or simply perceptions and reputation which may not be supported by hard data.

- Air quality is a commonly cited factor in the Los Angeles basin, but far less so in the Bay Area.
- Weather and microclimates in the Bay Area dictate communities of choice for many. People tend to either hate the cool fog near the ocean or love it.

Although many factors influence housing decisions, because the number of workers that both live and work in Menlo Park is so low and the cost of housing is so high, it is possible that the 5.9% existing commute share does not reflect the proportion of workers who would live in Menlo Park if they could find housing and could afford it. The possibility that availability and affordability of housing have contributed to a downward trend in Menlo Park's commute share is a primary reason for including a separate Increased Commute Share Estimate, described above.

Meta provided data on commute patterns for its existing Menlo Park workforce. The data provided by Meta indicates that approximately 7.4% of Meta's Menlo Park workforce lives in Menlo Park, somewhat higher than the percentage for Menlo Park workers overall per the ACS data. The reasons for Meta worker's slightly higher propensity to live in Menlo Park are not known. This Meta-specific commute data is applied for purposes of estimating the share of Meta workers who would seek and find housing in Menlo Park with the Current Commute Share Estimate.

The current commute shares of 5.9% for all Menlo Park workers and 7.4% for Meta workers are applied for purposes of the Current Commute Share Estimate as these factors represent the best and most current data available on the share of workers likely to seek and find housing in Menlo Park. Following is a discussion of factors that suggest a higher commute share could be possible in the future as well as opposing factors that suggest the current commute share likely provides a good indicator.

Factors that Suggest Potential for Increased Commute Share

There are several factors that suggest that an increase in the share of workers who live in Menlo Park might be possible:

1. The 1,730-unit size of the proposed Project represents an approximately 12% increase in the size of the existing Menlo Park housing stock of 14,124 units[31]. Given the large number of units being added, which would represent a material expansion of the city's existing housing stock, the proposed Project could potentially contribute to an increase in the percentage share of workers living locally.

[31] Number of housing units as of January 1, 2021 per California Department of Finance Table E-5, Population and Housing Estimates for Cities, Counties, and the State, 2011-2021 with 2010 Census Benchmark.

2. The number of housing units added by the proposed Project exceeds added housing demand in Menlo Park based on existing commute shares, resulting in an increase in housing availability that could accommodate a potential increase in the share of workers that live locally.

3. New housing added by the proposed Project would be very accessible to jobs within the Project as well as Meta's other nearby facilities. This could make the new housing uniquely desirable for Meta workers, attracting a larger share to live locally. Although, Meta workers would not receive any preference or priority to lease the units according to the Project Sponsor and, as discussed above, many factors affect choices about where to live.

4. In addition to the residential units within the proposed Project, several housing developments are currently going through the entitlement process or were recently approved in the vicinity of the proposed Project including the Menlo Uptown Project with 483 units, Menlo Portal Project with 335 units, 111 Independence Drive with 105 units, Menlo Flats with 158 units, and 123 Independence with 432 units. Combined with the 1,730 units included in the proposed Project, a total of over 3,000 new units are proposed in the vicinity. These proposed units will increase the opportunities for workers to live in Menlo Park and create the potential for an increase in the percentage share of workers who live locally. Construction of new housing can be expected to contribute toward increasing the number of workers that live locally by providing additional housing opportunities in Menlo Park.

Factors That Suggest Current Commute Share Provides Good Indicator

While the factors described previously suggest an increase in commute share could be possible, following are opposing factors that suggest that the Current Commute Share Estimate likely provides a good indicator of the share of workers who would live in Menlo Park, or that any increase in commute share is likely to be modest:

1. Census data for Menlo Park since 1990 do not show a correlation between job growth and number of Menlo Park workers residing locally. The number of jobs in Menlo Park increased by 17,478 or 67% from the 1990 Census to the 2015 - 2019 ACS. During the same period, the number who both live and work in Menlo Park, excluding those who work out of their homes, decreased from 2,662 to 2,589 (a 3% decrease). An analysis of compensation levels for jobs added since 1990 was not prepared; however, anecdotally one can observe that the employment growth during this period probably included a number of highly compensated jobs. Despite the addition of over 17,000 jobs during this period, of which at least a portion were likely highly compensated, the number of workers who both live and work in Menlo Park declined.

2. The expanding size of the Bay Area's job and housing markets combined with an increase in multiple-earner households has created more options for where to live and work and more households who must take locations of multiple jobs into account in selecting a residential location.

3. The proposed Project is very accessible to freeways including US-101 and SR-84 / the Dumbarton Bridge. It is arguably one of the most conducive locations in Menlo Park for commuting from other jurisdictions.

4. Menlo Park is viewed as a highly desirable place to live. Workers in the proposed Project who wish to live in Menlo Park would be competing for a limited amount of available housing with many other households in the Peninsula / Silicon Valley housing market who may also be seeking to live in Menlo Park.

5. Some jobs in off-site services such as retail, medical care, and restaurants may be in nearby cities rather than in Menlo Park. For those who work in nearby cities, the propensity to live in Menlo Park is expected to be less than the 5.9% commute share for Menlo Park workers[32].

6. The experience of remote work during the coronavirus pandemic has led several high-profile tech companies, including Meta, to announce plans to provide additional flexibility to work remotely on a more permanent basis. For employees that split their time between remote and in-person work, this additional flexibility may encourage employees to explore housing options further from the office, which could become an additional contributing factor to a declining share of workers who live in Menlo Park.

7. The focus of the commute shares described in this report are on the percentage share of those who work in Menlo Park that also live in Menlo Park. However, it is also possible to look at commuting from the opposite direction: considering residents of Menlo Park who are in the workforce, what share work in Menlo Park and what share commute out of the city to a job located elsewhere? Data from the ACS indicates that, 17% of working residents of Menlo Park work in Menlo Park while the remaining 83% commute out to jobs in other cities. The fact that many residents commute out to jobs elsewhere suggests a limit to how much Menlo Park's commute share could be increased by adding additional housing.

[32] For example, around 3.9% of those who work in Palo Alto live in Menlo Park based on data from the American Community Survey, lower than the 5.9% share for Menlo Park workers.

6.4 Estimated Commute Shed for Proposed Project

It is anticipated that workers at the proposed Project would commute to the Project site from throughout the region. Table 6-5 presents data on commuting by jurisdiction. The estimates reflect the same data sources as used for the Current Commute Share Estimate described above. Based on the data in Table 6-5, it is anticipated that approximately two thirds of workers would live in Santa Clara and San Mateo counties. Remaining workers are estimated to commute primarily from San Francisco and Alameda counties. Approximately 4% are estimated to commute from other counties.

The Increased Commute Share Estimate is not presented in Table 6-5 because the 20% goal is focused on Menlo Park's commute share and does not identify targets for any other specific jurisdiction. Progress toward the 20% commute share goal would tend to reduce commuting from other jurisdictions relative to levels indicated in Table 6-5 by increasing the share of workers that live in Menlo Park.

TABLE 6-5
ESTIMATED COMMUTE SHED FOR PROJECT
WILLOW VILLAGE MASTER PLAN PROJECT
HOUSING NEEDS ASSESSMENT
MENLO PARK, CA

Place of Residence:	Place of Residence for All Menlo Park Workers [3]	Place of Residence for Meta Workers [1]	Weighted Average for Project Employees [4]
Page 1 of 3			
San Mateo County	**38.7%**	**27.2%**	**29.6%**
Atherton	0.9%	0.1%	0.3%
Belmont	0.9%	1.3%	1.2%
Broadmoor	0.1%	0.0%	0.0%
Burlingame	0.7%	0.6%	0.6%
Colma	0.0%	0.0%	0.0%
Daly City	1.5%	0.3%	0.5%
East Palo Alto	3.1%	0.5%	1.0%
El Granada	0.3%	0.0%	0.1%
Emerald Lake Hills	0.2%	0.0%	0.0%
Foster City	1.2%	1.8%	1.7%
Half Moon Bay	0.5%	0.1%	0.2%
Highlands-Baywood Park	0.2%	0.0%	0.0%
Hillsborough	0.5%	0.1%	0.2%
La Honda CDP, California	0.1%	0.0%	0.0%
Ladera CDP, California	0.1%	0.0%	0.0%
Menlo Park	**5.9%**	**7.4%**	**7.1%**
Millbrae	0.4%	0.2%	0.2%
North Fair Oaks	1.3%	0.0%	0.3%
Pacifica	0.6%	0.2%	0.3%
Portola Valley	0.5%	0.1%	0.2%
Redwood City	9.1%	8.0%	8.3%
San Bruno	1.1%	0.3%	0.4%
San Carlos	1.6%	1.9%	1.8%
San Mateo	3.7%	3.4%	3.4%
South San Francisco	1.0%	0.3%	0.4%
West Menlo Park	0.5%	0.0%	0.1%
Woodside	0.5%	0.1%	0.2%
Balance of County [2]	2.1%	0.5%	0.9%

TABLE 6-5
ESTIMATED COMMUTE SHED FOR PROJECT
WILLOW VILLAGE MASTER PLAN PROJECT
HOUSING NEEDS ASSESSMENT
MENLO PARK, CA

Place of Residence:	Place of Residence for All Menlo Park Workers [3]	Place of Residence for Meta Workers [1]	Weighted Average for Project Employees [4]
Page 2 of 3			
Santa Clara County	**30.4%**	**37.5%**	**36.1%**
Alum Rock	0.0%	0.0%	0.0%
Cambrian Park	0.0%	0.0%	0.0%
Campbell	0.7%	0.6%	0.6%
Cupertino	1.1%	1.5%	1.4%
Gilroy	0.2%	0.1%	0.1%
Lexington Hills	0.0%	0.0%	0.0%
Los Altos	1.1%	1.3%	1.3%
Los Altos Hills	0.4%	0.1%	0.2%
Los Gatos	0.3%	0.6%	0.5%
Loyola	0.1%	0.0%	0.0%
Milpitas	0.4%	0.9%	0.8%
Monte Sereno	0.0%	0.0%	0.0%
Morgan Hill	0.1%	0.2%	0.2%
Mountain View	4.9%	7.8%	7.2%
Palo Alto	4.0%	4.0%	4.0%
San Jose	8.8%	7.9%	8.1%
San Martin	0.1%	0.0%	0.0%
Santa Clara	1.7%	2.9%	2.6%
Saratoga	0.5%	0.7%	0.6%
Stanford	0.3%	0.1%	0.1%
Sunnyvale	5.3%	8.8%	8.1%
Balance of County [2]	0.4%	0.0%	0.1%

TABLE 6-5
ESTIMATED COMMUTE SHED FOR PROJECT
WILLOW VILLAGE MASTER PLAN PROJECT
HOUSING NEEDS ASSESSMENT
MENLO PARK, CA

Place of Residence:	Place of Residence for All Menlo Park Workers [3]	Place of Residence for Meta Workers [1]	Weighted Average for Project Employees [4]
Page 3 of 3			
Alameda County	**12.2%**	**18.4%**	**17.1%**
Alameda	0.2%	0.4%	0.3%
Albany	0.1%	0.1%	0.1%
Ashland	0.4%	0.0%	0.1%
Berkeley	0.3%	0.4%	0.4%
Castro Valley	0.5%	0.3%	0.3%
Cherryland	0.1%	0.0%	0.0%
Dublin	0.5%	0.6%	0.5%
Emeryville	0.1%	0.1%	0.1%
Fairview	0.1%	0.0%	0.0%
Fremont	3.8%	8.4%	7.5%
Hayward	1.6%	0.6%	0.8%
Livermore	0.3%	0.2%	0.2%
Newark	1.0%	2.4%	2.2%
Oakland	1.3%	2.2%	2.0%
Pleasanton	0.5%	0.6%	0.6%
San Leandro	0.4%	0.2%	0.2%
San Lorenzo	0.2%	0.1%	0.1%
Union City	0.9%	1.7%	1.6%
Balance of County [2]	0.0%	0.1%	0.1%
San Francisco	**12.0%**	**13.2%**	**13.0%**
Contra Costa County	**2.1%**	**1.3%**	**1.4%**
Santa Cruz County	**0.5%**	**0.5%**	**0.5%**
Marin, Napa, Sonoma	**0.7%**	**0.3%**	**0.4%**
Other Counties	**3.5%**	**1.6%**	**2.0%**
	100.0%	100.0%	100.0%

Notes:

[1] Based on data provided by Meta for its Menlo Park employees as of March 2020.

[2] Includes workers residing in jurisdictions for which the relevant commute data has been suppressed by the U.S. Census.

[3] Data is derived from the 2012-2016 American Community Survey, the most recent available complete commute distribution data at the jurisdiction level. The share of Menlo Park's worker-force living in Menlo Park is an exception for which more recent data is available from the 2015-2019 American Community Survey. A reconciliation adjustment to the Balance of San Mateo County was made to account for the 0.6% reduction in the Menlo Park Share since the prior data.

[4] Weighted based on the share of total employment within the office component of the project, anticipated to be occupied by Meta.

Sources: U.S. Census Bureau, American Community Survey 2012-2016 Five-year estimates. Special Tabulation: Census Transportation Planning; American Community Survey 2015-2019; Project Sponsor.

7.0 DISPLACEMENT ANALYSIS

This section provides an evaluation of the potential for the proposed Project to contribute to displacement of existing residents and neighborhood change in two proximate communities known to be vulnerable to displacement, East Palo Alto and Belle Haven. As noted above, displacement is not an environmental impact for purposes of CEQA, but this analysis is provided for informational purposes and consistent with the requirements of the 2017 Settlement Agreement.

Displacement occurs when housing or neighborhood conditions force existing residents to move, or households feel like their move is involuntary. Displacement can be caused by a range of physical, economic and social factors including but not limited to foreclosure, condominium conversion, building deterioration or condemnation, increased taxes, natural disasters, eminent domain, and increases in housing costs[33, 34, 35]. The HNA is focused on economic drivers of displacement, specifically the potential for the proposed Project to affect the local housing market and housing costs.

Lower income communities in the Bay Area have become increasingly vulnerable to displacement of existing residents. Employment growth, constrained housing production, and rising income inequality are among the factors that have contributed to increased displacement pressures, especially within lower income communities in locations accessible to employment centers where many households are housing-cost burdened.

Location of Proposed Project Relative to Belle Haven and East Palo Alto

The aerial image below shows the location of the proposed Project relative to Belle Haven and East Palo Alto. The Project site is located on the site of the existing Menlo Science and Technology Park in Menlo Park and is bounded by Willow Road, the currently inactive Dumbarton Rail Corridor, and the Menlo Park Labs business park to the south and east. Belle Haven is a residential neighborhood located across Willow Road to the east of the Project site generally bounded by U.S. 101, Willow Road and the Dumbarton Rail Corridor, outlined in red on the aerial image below. East Palo Alto is located west and south of the Project site beyond the Menlo Park Labs business park, outlined in green on the aerial image below.

[33] Zuk, M. et. al. 2017. Gentrification, Displacement, and the Role of Public Investment. Journal of Planning Literature. Journal of Planning Literature 1-14.

[34] Center for Community Innovation (2020). Investment and Disinvestment as Neighbors, A Study of Baseline Housing Conditions in the Bay Area Peninsula.

[35] Bradshaw, K. (2019). Uneven Ground: How unequal land use harms communities in southern San Mateo County. Palo Alto Online. https://paloaltoonline.atavist.com/uneven-ground

Map 1 - Proposed Project, Belle Haven and East Palo Alto Location

Source: Google Maps

7.1 Analysis Approach

Given the complex array of factors that influence housing markets and neighborhood change, precise estimates or projections of outcomes are not feasible; rather, the analysis provides information and context that will be useful in gauging the potential range of impacts. The following analyses were completed to provide this context:

1. *Estimated Impact on Housing Availability* – Similar to the analysis of housing availability impacts in Section 6.2, net impacts on housing availability are estimated for Menlo Park and East Palo Alto combined. This is useful for understanding whether the proposed Project will add to existing demand for housing in the two communities or help to absorb it.

2. *Comparison to countywide real estate trends* – Real estate market trends in East Palo Alto and Belle Haven since 2000 were analyzed in comparison to countywide trends. The purpose is to help understand how localized trends relate to the broader county housing market.

3. *Review of employment trends* – Employment trends were reviewed for San Mateo County and adjacent counties. Employment data is delineated by compensation level so that growth in higher-income and lower-income jobs can be separately understood.

4. *Historical Relationship Between Job Growth and Housing Costs* – The extent to which employment growth and housing costs have been correlated with one another was analyzed using linear regression. Findings are used to identify the potential range of impacts on rents and home prices that could be experienced as a result of the proposed Project.

5. *Comparison of real estate trends to other Bay Area communities vulnerable to displacement* – Real estate market trends in East Palo Alto and Belle Haven since Meta and its affiliates first began occupying its existing Menlo Park facilities are analyzed in comparison to trends in other Bay Area communities identified as vulnerable to displacement. The objective is to examine whether there are indications that Meta's existing campuses have a localized influence on the housing market.

The above analyses all contribute to understanding the potential for the proposed Project to contribute to increases in home prices, rents and displacement pressures in East Palo Alto and Belle Haven.

7.2 Risk of Displacement

East Palo Alto and Belle Haven both have risk factors for displacement. Both have a relatively lower-income existing population that includes a high percentage of households who spend 35% or more of their income on housing. A review of demographics and displacement risk factors specific to the two communities is provided in Appendix B. East Palo Alto's rent control and just cause eviction ordinance provides significant protection to existing renters within multi-family buildings built prior to 1988 but does not preclude the potential for longer-term neighborhood change. The Urban Displacement Project,[36] an initiative of UC Berkeley "aimed at understanding the nature of gentrification and displacement in the Bay Area" has identified the Belle Haven census tract and census tracts within East Palo Alto as areas experiencing "ongoing gentrification and/or displacement" or "at risk of displacement." A separate analysis by the Urban Displacement Project[37] indicates that, despite risk factors for displacement, East Palo Alto had not experienced significant gentrification during the 2000 to 2013 period, potentially due to policies aimed at preventing displacement including rent control and just cause eviction protections. For additional background, see also the Urban Displacement Project report, "East Palo Alto: An Island of Affordability in a Sea of Wealth"[38].

A recent study by UC Berkeley's Center for Community Innovation and its Y-PLAN initiative, titled *Investment and Disinvestment as Neighbors: A Study of Baseline Housing Conditions in the Bay Area Peninsula*, provided an assessment of the baseline housing conditions in Belle

[36] Zuk, M., & Chapple, K. (2019). Urban Displacement Project. http://www.urbandisplacement.org/

[37] Crispell, M, Harris L.R., and Cespedes S. March 2016. San Mateo County's East Palo Alto. Urban Displacement Project.

[38] Zuk, M., & Chapple, K. (2015). East Palo Alto: An Island of Affordability in a Sea of Wealth. Urban Displacement Project.

Haven, East Palo Alto, and North Fair Oaks neighborhood (unincorporated San Mateo County). The study found indications of recent changes including increased population turnover, declining school age population, and an increase in homelessness. The study also identified a high incidence of rent burdened households and disproportionate pressure on the local housing market compared to the rest of San Mateo County. The study found more signs of disinvestment in East Palo Alto and more indications of real estate speculation in Belle Haven[39].

East Palo Alto has been described as an "island" of affordability within the higher-priced Silicon Valley / Peninsula housing market. Belle Haven is also historically affordable relative to other neighborhoods in Menlo Park as well as many high-priced communities in San Mateo County and Silicon Valley. However, over the past two decades, home prices in East Palo Alto have increased at the same rapid pace as the county median, while home prices in Belle Haven are now slightly greater than the county median on a per square foot basis. Market rents for available one-bedroom apartments in East Palo Alto average approximately $2,337 per month which is approximately the same as the county average of around $2,305, based on CoStar data as of April 2021. While many existing residents in East Palo Alto are shielded from escalating housing costs through rent control or having purchased homes when prices were lower, the comparatively high cost of entering East Palo Alto's housing market relative to other more affordable locations in the Bay Area suggests that longer-term neighborhood change is likely.

The City of East Palo Alto has adopted policies focused on protecting affordability in the face of displacement pressures, including a rent control and just cause eviction policy described below.

East Palo Alto's Rent Control Ordinance

The City of East Palo Alto regulates rent increases and eviction procedures through the Rent Stabilization and Just Cause for Eviction Ordinance (East Palo Alto Municipal Code Chapter 14.04). The ordinance limits annual rent increases to 80% of the increase in the Consumer Price Index over the prior year. Just cause provisions of the ordinance require landlords to present a valid for-cause basis for terminating a tenancy. Tenants are also protected from retaliation and harassment. Rent control applies to all rental units except single family homes, units in owner-occupied properties of three units or less, new units built after 1988 (other than replacement units), and certain non-profit / group-quarters living arrangements. As required by state law, rents are free to reset to market rate upon turnover. The rent control ordinance shields existing renters from increases in market rents and economic displacement. Because rents reset to market upon vacancy, the ordinance does not preclude neighborhood change over the longer term.

[39] Center for Community Innovation. (2020). Investment and Disinvestment as Neighbors, A Study of Baseline Housing Conditions in the Bay Area Peninsula.

7.3 Net Increase in Available Housing in Menlo Park and East Palo Alto Combined

The net impact of the proposed Project on housing supply and housing demand in Menlo Park is illustrated in Section 6.2. Here, findings are broadened to include East Palo Alto. Demand for housing by income in Menlo Park and East Palo Alto, combined, is estimated using data on commute patterns. Then, estimated demand is compared to added housing supply to calculate the net impact on housing availability.

Commute Data for East Palo Alto, Belle Haven and Balance of Menlo Park

Commute data provided by Meta indicates that approximately 0.5% of Meta's Menlo Park employees reside in East Palo Alto, while another 0.4% reside in Belle Haven. Data from the U.S. Census indicates approximately 3.1% of those who work in Menlo Park commute from East Palo Alto. For Belle Haven, an allocation of the citywide commute share for Menlo Park is necessary as data specific to Belle Haven is not available from the U.S. Census. This allocation is made in proportion to the number of occupied housing units and results in an estimated commute share for Belle Haven of 0.7%. Combined, approximately 7.9% of Meta workers and 9% of all Menlo Park workers reside in Menlo Park and East Palo Alto. The two data sources are combined to estimate a weighted average commute share of 8.1% for East Palo Alto and Menlo Park combined. Commute share figures are summarized in Table 7-1.

Table 7-1. Estimated Percent of Employees Residing in East Palo Alto, Belle Haven, and Balance of Menlo Park

	Based on Meta Employee Commute Flows[1]	Based on Census Average [2]	Weighted Average [3]
Live in East Palo Alto	0.5%	3.1%	1.0%
Live in Belle Haven	0.4%	0.7%	0.5%
Live in Other Menlo Park Neighborhoods	7.0%	5.2%	6.6%
Subtotal East Palo Alto + Menlo Park	7.9%	9.0%	8.1%
Live Elsewhere	92.1%	91.0%	91.9%
Total	100%	100%	100.0%

[1] Based on data provided by Meta for its existing Menlo Park employees in March 2020.
[2] Data for East Palo Alto per U.S. Census Bureau, American Community Survey 2012-2016 Five-year estimates. Special Tabulation: Census Transportation Planning. Figure for Belle Haven based on American Community Survey 2015-2019 for City of Menlo Park allocated to Belle Haven in proportionate to the number of occupied housing units.
[3] Weighted based on employment within the office component, anticipated to be occupied by Meta, as a share of the total employment within the proposed Project.

The substantial housing component of the proposed Project creates a potential for an increase in Menlo Park's commute share, as described in Section 6.3. In recognition of this possibility, and to provide a more conservative analysis, the 20% goal-based Increased Commute Share Estimate is used to illustrate the combined Menlo Park and East Palo Alto share of housing demand. The combined commute share for the two communities would be 21% assuming the 20% commute goal for Menlo Park and using the 1% weighted average existing commute share for East Palo Alto from Table 7-1. The calculation is shown in Table 7-2.

Table 7-2. Estimated Percent of Workers Residing in East Palo Alto and Menlo Park, with 20% Increased Commute Share Goal for Menlo Park	
Live in East Palo Alto	1.0%
Live in Menlo Park	20% Goal
Total East Palo Alto + Menlo Park	21%

Estimated Housing Availability Impacts for East Palo Alto and Menlo Park Combined

The commute shares described above are applied to the total housing demand figures in Section 6.1 to estimate the share of housing demand within East Palo Alto and Menlo Park combined. Applying a 21% combined commute share to the total regional housing need of 2,545 units, results in an estimated demand for 535 total units in East Palo Alto and Menlo Park. Based on the 1,730 new units added to the housing supply minus the estimated demand for 535 units in East Palo Alto and Menlo Park combined, there is an estimated net increase in available housing of 1,195 units. This 1,195-unit estimated net increase in available housing consists of 40 Extremely Low, 407 Moderate, and 998 Above Moderate Income units, partially offset by net decreases in available housing in the Very Low, Low and Over 150% AMI categories of 28, 123, and 99 units, respectively. As in Section 6, housing demand by income category is allocated proportionate to total demand; however, the actual distribution by income category will vary based on the housing units that become available through new construction or turnover of existing units.

Table 7-3. Estimate of Net Impact on Housing Availability in Menlo Park and East Palo Alto Combined

	Extremely Low	Very Low	Low	Moderate	Above Moderate	Over 150% AMI	Total
A. Added Housing Supply (New Units)	83	37	38	496	1,076	-	1,730
B. Added Housing Demand in East Palo Alto and Menlo Park Combined (based on 21% Combined Commute Share)	43	65	161	89	78	99	535
C. Net Increase in Available Housing Units (1) [= A. - B.]	40	(28)	(123)	407	998	(99)	1,195

(1) Negative figures represent a net increase in housing demand that exceeds added housing supply.

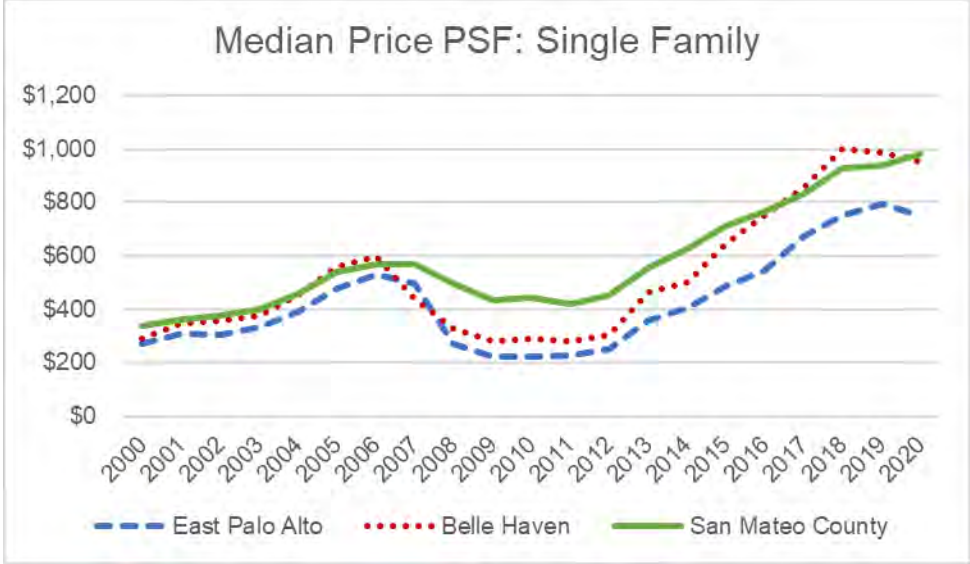
The 1,195-unit estimated net increase in housing availability in East Palo Alto and Menlo Park, inclusive of Belle Haven, is an indication that the proposed Project will help to absorb existing and future housing demand within the two communities, which will tend to moderate or reduce displacement pressures to some degree.

7.4 Real Estate Trends Since 2000

This section reviews data on real estate market trends for East Palo Alto, Belle Haven, and San Mateo County since 2000.

1. Home Prices

The chart below shows trends in median home price over the period from 2000 to 2020. In 2000, the median sales price per square foot in East Palo Alto of $270/SF represented approximately 80% of the county median of $338/SF, while the median price in Belle Haven of $291 per square foot represented 86% of the county median. In both East Palo Alto and Belle Haven, home prices decreased significantly during the housing market downturn and foreclosure crisis, reaching a low of 50% and 65% of the county median, respectively, in 2010. However, prices in both communities have escalated more rapidly than the county median over the subsequent decade. As of 2020, the median sales price in East Palo Alto of $748 per square foot is once again roughly 80% of the county median of $980 per square foot, while the price per square foot in Belle Haven has approached or exceeded the county median for the past five years and was $951 per square foot in 2020.



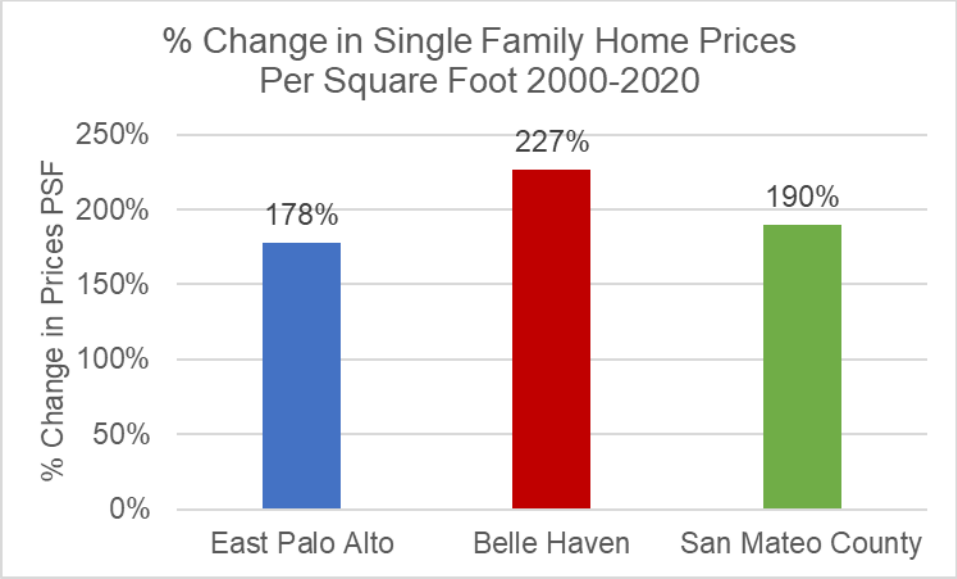
Source: CoreLogic

Table 7-4 shows how single family home prices per square foot in East Palo Alto and Belle Haven have changed over time relative to the county median.

Table 7-4. East Palo Alto and Belle Haven Median Price PSF as Percent of County		
	East Palo Alto as % of County Median Price PSF*	**Belle Haven as % of County Median Price PSF***
2000	80%	86%
2001	84%	96%
2002	80%	94%
2003	83%	94%
2004	85%	99%
2005	89%	104%
2006	93%	105%
2007	87%	77%
2008	54%	66%
2009	52%	65%
2010	50%	65%
2011	54%	67%
2012	55%	67%
2013	64%	83%
2014	65%	80%
2015	68%	90%
2016	71%	98%
2017	81%	103%
2018	81%	108%
2019	85%	105%
2020	76%	97%

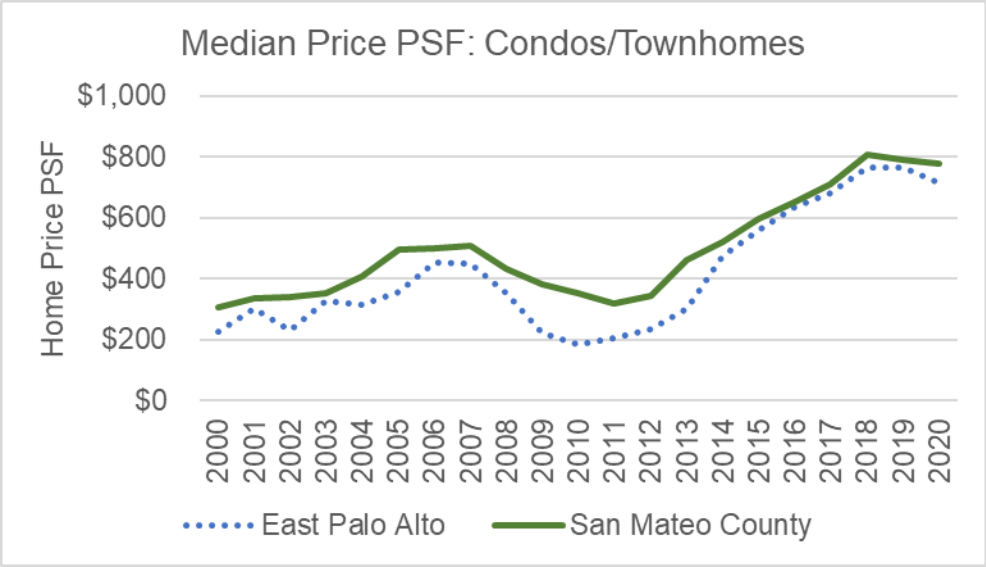
*for single family detached units

Overall, single family median home prices in East Palo Alto have increased by approximately 180% since 2000, approaching the cumulative percent increase in the county median home price of 190% over the same time period. Median single family home prices in Belle Haven increased 227%, outpacing the county. Some of the factors that likely contributed to rising home prices over the period include strong economic growth and housing demand, limited construction of new housing, favorable interest rates and credit terms, and confidence in the Bay Area economy and housing market.



Source: CoreLogic

For condos and townhomes, the median price per square foot in East Palo Alto grew from 74% of the county median in 2000 to nearly match the county median over the past seven years. Condos and townhomes represent a smaller share of the market in East Palo Alto than do single family units (20 condo/townhome sales per year on average as compared to an average of approximately 160 single family sales per year). No condo/townhome sales were recorded in Belle Haven.



Source: CoreLogic

Home prices in East Palo Alto and Belle Haven have experienced more rapid escalation in the period from 2010 to 2020, in part, due to a recovery from the housing / foreclosure crisis. Belle Haven and East Palo Alto have both experienced a steep decline in the *number* of home sales

from 2010. The number of sales in East Palo Alto fell from 260 units in 2010 to an average of 180 units per year from 2015 to 2020. In Belle Haven, the number of sales fell from 70 units in 2010 to an average of 36 units per year from 2015 to 2020. In contrast, the average number of home sales countywide from 2015 to 2020 is roughly unchanged from 2010.[40] This trend is consistent with a higher incidence of distressed sales activity in 2010 as reportedly occurred in East Palo Alto.[41] Distressed and foreclosure sales were prevalent nationally during this period and disproportionately impacted lower-income communities. Homeowners unable to sustain mortgage payments would fall into foreclosure, forcing a foreclosure sale, in some cases after an extended foreclosure process where the property was not being properly maintained. Distressed sales would drive home values in the area down and had the effect of inducing additional homeowners to go "underwater" (market value less than the mortgage debt) and let homes go to foreclosure, further exacerbating the condition, driving up the number of sales and driving down values. In some cases, homes were purchased out of foreclosure by investors who converted them to rental units. With recovery from the foreclosure crisis, the number of sales has now been reduced from the elevated levels that occurred during the foreclosure crises. Additional details on home price and sale trends are included in Appendix C Table 12. While it could be interpreted that existing homeowners will benefit from home price increases, in communities such as East Palo Alto and Belle Haven where more than a third of single-family homes are renter-occupied, rapid growth in home prices may present a heightened risk of renter displacement to the extent it encourages the sale of single family rental properties to new owner-occupants.

2. Apartment Rents

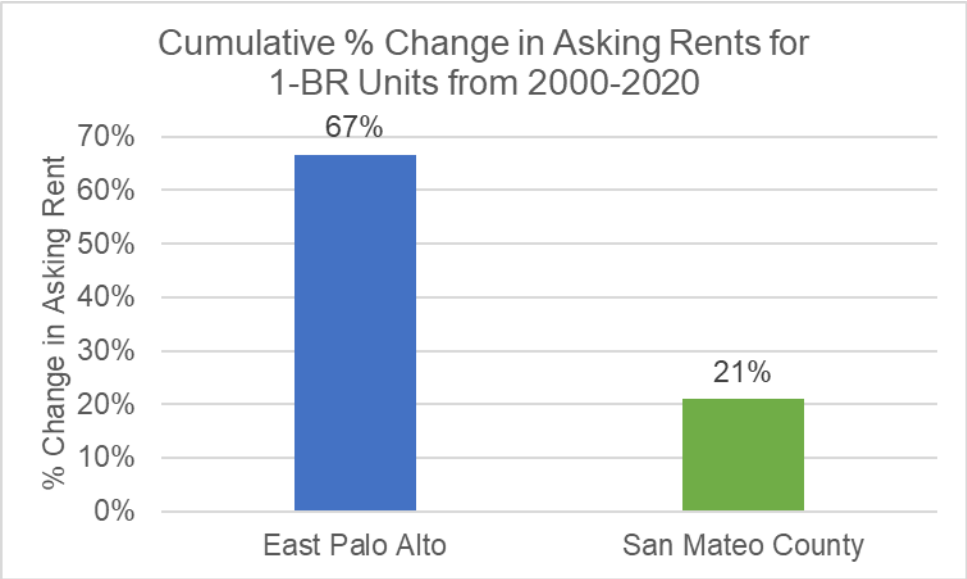
According to data from CoStar Group, which surveys multifamily buildings, apartment rents in San Mateo County increased by approximately 21% from 2000 to 2020. Rent growth in East Palo Alto outpaced the county with a 67% increase, as shown in the charts below. These rental rates reflect asking rents for one-bedroom units that have been vacated and are available for rent. For communities that have rent control, existing tenants in multifamily buildings are shielded from increases in market rents in excess of a predetermined rate (80% of CPI, in the case of East Palo Alto) as long as they remain in their current unit.

Rental market data for Belle Haven is not presented in the chart below as the data appears too limited to be reliable. CoStar data for Belle Haven is limited because three-quarters of rental units built prior to 2016 are for buildings with 10 or fewer units, less likely to be covered by published market surveys. Only approximately 160 (20%) of the 795-unit Belle Haven rental housing stock built before 2016 per the U.S. Census is covered by the historic CoStar data used in the trends analysis. While Costar data also covers two large apartment projects completed

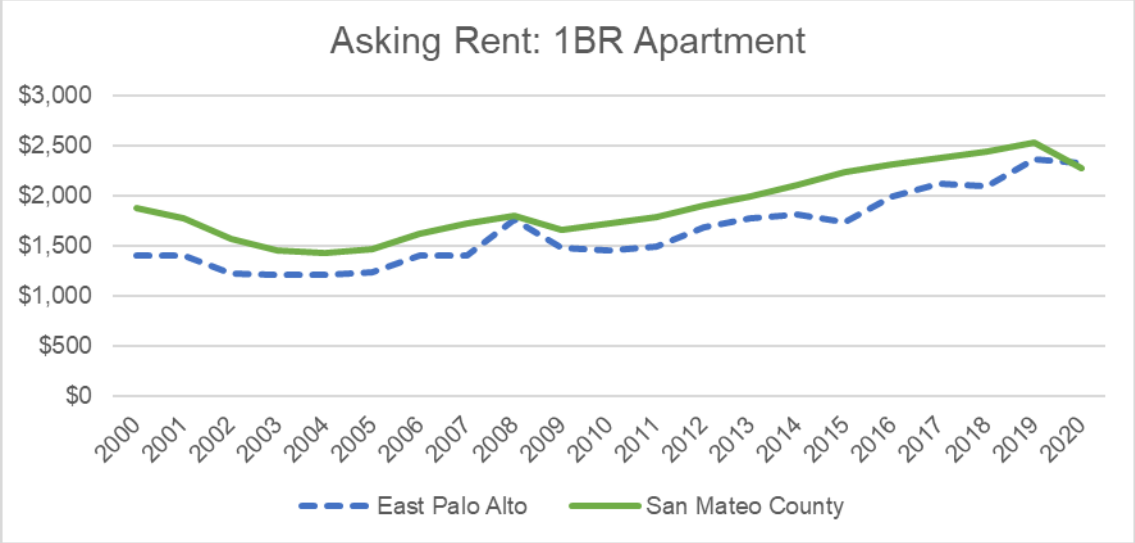
[40] All communities experienced a drop in sales volumes in 2020, likely a result of the coronavirus pandemic.

[41] KQED News. 2013. Can East Palo Alto Weather the Tech Boom and Increasing Gentrification? http://ww2.kqed.org/news/2013/07/18/104008/. The article indicates that from 2008 to 2013, 1,422 of approximately 4,000 single family homes in East Palo Alto had entered some stage of the foreclosure process.

since 2016, rents at these projects reflect a premium for new construction which does not apply to the broader rental market in Belle Haven. Appendix C Table 13 provides the historical data that is available, excluding these recently built projects.



Source: CoStar. Includes all one-bedroom apartments regardless of year built.



Source: CoStar. Includes all one-bedroom apartments regardless of year built.

Following a period of robust job growth and limited housing production, home prices and rents have been rising throughout the Bay Area. The historically affordable communities of East Palo Alto and Belle Haven have either kept pace with or exceeded the significant increases that have been occurring in the county as a whole.

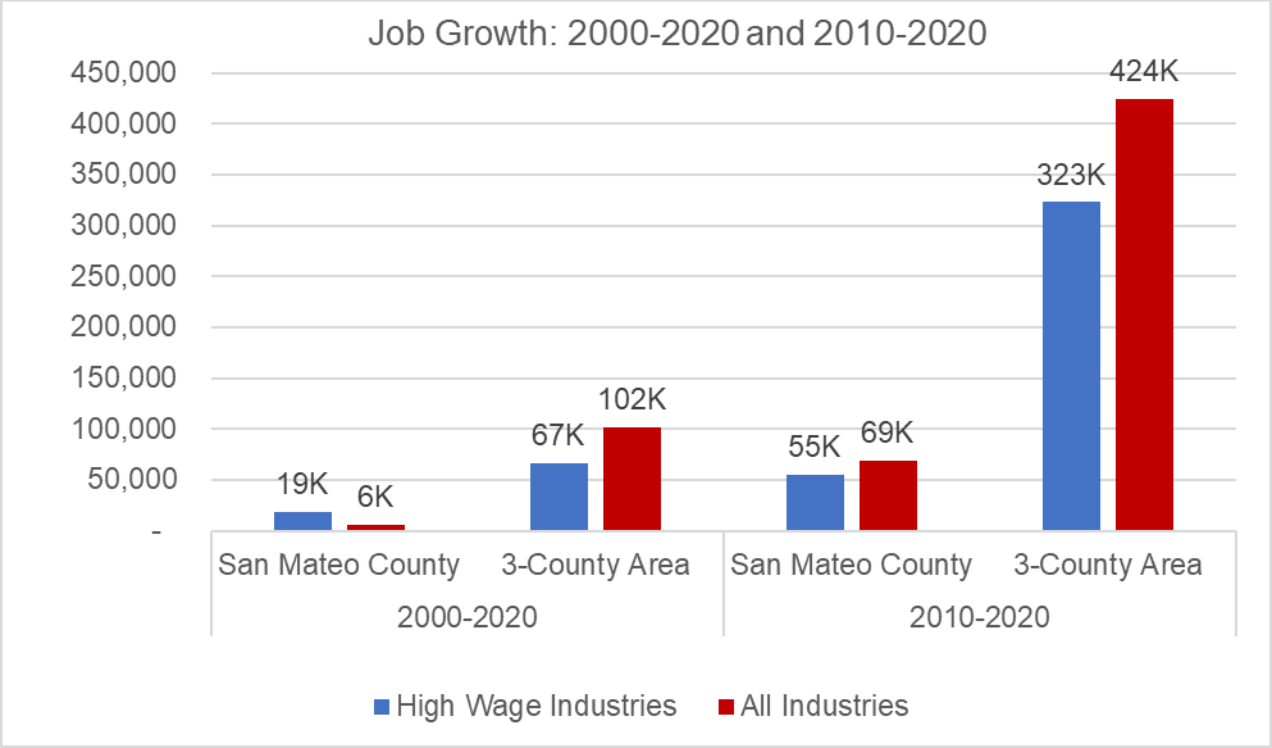
7.5 Employment Trends

Employment growth is an important driver of housing demand both at the local level and regionally. Employment growth over the past decade has likely contributed to significant upward pressure on the housing market as evidenced in the rent and price increases documented above. This section assembles data on historical employment trends since 2000 for San Mateo as well as Santa Clara and San Francisco counties. Approximately 95% of workers living in San Mateo County commute to jobs located in one of these three counties based on U.S. Census data.

According to the Quarterly Census of Employment and Wages, over the period from 2010 to 2019, a total of approximately 591,000 jobs were added in San Mateo, Santa Clara, and San Francisco counties (referred to in the chart below as the "three-county area").[42] More than half of the total job growth occurred in high-wage sectors. For purposes of this analysis, high-wage industry sectors are defined as those with average annual employee compensation above $100,000 as of 2016. From 2010 to 2019, high-wage industries posted annual job growth of 4.6% versus 3.4% annual growth for all industries. Job growth for the longer period from the peak of a previous boom cycle in 2000 to 2019 is less due to significant job losses from 2000 to 2004, offsetting more recent job growth.

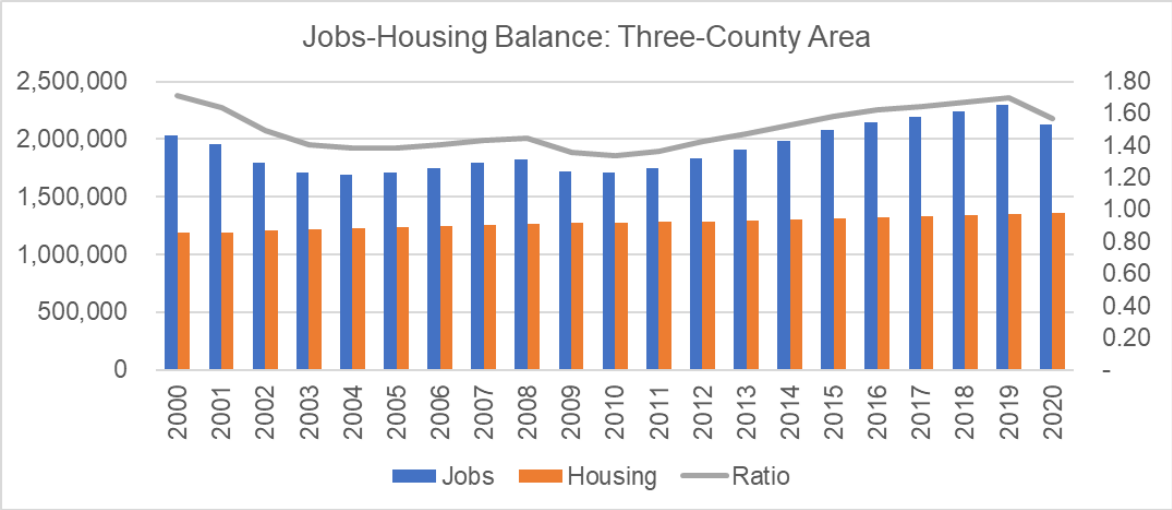
The 2020 economic recession caused by the coronavirus pandemic eliminated a portion of the jobs added over the past decade. Data for the first three quarters of 2020 shows a significant decline in total employment in the three-county area. In the second quarter of 2020, total employment in the three-county area declined by 12% in all sectors and by 3% in high-wage sectors compared to the prior quarter. While some jobs were recovered in the third quarter of the year, total employment was still 6% below the first quarter in all sectors and 1% below the first quarter in high-wage sectors.

[42] Employment data for last quarter of 2020 was not yet available from the Quarterly Census of Employment and Wages as of mid-2021 when this analysis was prepared.



Source: Quarterly Census of Employment and Wages. Note: 2020 job estimate reflects first three quarters of calendar year.

Housing production has not kept pace with job growth in San Mateo County and adjacent counties. As illustrated in the chart below, the ratio of jobs to housing units steadily increased in San Mateo, Santa Clara and San Francisco counties over the prior decade. The jobs-housing ratio in 2019 neared the peak of the previous boom cycle, an imbalance that has undoubtedly contributed to increasing prices and rents. In 2020, the jobs-housing ratio declined as a result of job losses associated with the coronavirus pandemic.



Sources: Quarterly Census of Employment and Wages and California Department of Finance

7.6 Analysis of Historical Relationship Between Housing Costs and Job Growth

The following section analyzes the extent to which employment growth and real estate trends have been correlated with one another to provide context for understanding the degree of indirect influence the proposed Project may have on local home prices and rents. Simple linear regression is used to quantify the potential change in rents or home prices associated with a given change in jobs based on annual data from 2000 to 2020. Simple linear regression shows whether two variables are correlated with one another but does not prove that there is a causal relationship.

Geographic Scale

The regression analyses are performed for two geographic scales with respect to job growth:

a) San Mateo County ("single county"); and

b) San Mateo, Santa Clara, and San Francisco counties combined ("three-county").

The single-county analysis likely provides an upper-end estimate of the indirect influence of employment growth on local real estate trends, since it attributes all variation in local rents and home prices to job growth within the county. In reality, job growth in other counties would also have an influence, along with separate factors that may be correlated with job growth such as growth in incomes. Therefore, the single county analysis likely overstates the impacts.

The three-county analysis provides a lower estimate of the influence of employment growth on local real estate trends, at least for purposes of understanding the proposed Project's influence, since the analysis assumes that job growth across the three counties has a uniform influence on rents and home prices within San Mateo County. For workers who live in San Mateo County, 95% work in San Francisco, San Mateo, or Santa Clara counties as shown in Table 7-5. Comparatively few workers who live in San Mateo County commute east into Alameda County (3%). Therefore, job growth within the three selected counties is anticipated to have the greatest influence on housing prices and rents within San Mateo County. The three-county analysis may understate the influence of local job growth by treating jobs added anywhere within the three counties as having an equal influence on rents in San Mateo County. Since the majority of San Mateo County residents work within the county (57%), as shown in Table 7-5, job growth within San Mateo County likely has somewhat more of an influence than job growth in Santa Clara County or San Francisco.

Table 7-5. County of Work, Workers Residing in San Mateo County		
Workplace	Number Workers	Percent
San Mateo County	222,355	57%
San Francisco	84,195	22%
Santa Clara County	61,165	16%
Subtotal	367,715	95%
Alameda County	12,940	3%
Other Counties	6,936	2%
Grand Total	387,591	100%

U.S. Census Bureau, 2012-2016 American Community Survey 5-Year Estimates, County-to-County Commuting Flows.

Approach to Capturing Multiplier Effects: High-Wage Jobs Analysis

The regression analysis evaluated the relationship of home prices and rents to both total job growth and high-wage job growth. High-wage job growth is defined for purposes of the analysis as employment within industries that have average pay above $100,000 per year as of 2016.

The high-wage analysis is an approach to capturing the impact of "multiplier effects." Technology, bio-tech, and other high-wage sectors help drive growth in other sectors of the local economy such as retail, food, and transportation through spending by these businesses and their workforce. Employment and economic growth stimulated through this spending is commonly referred to as the "multiplier effect". Examining the relationship between housing costs and jobs in high-wage industries, specifically, enables the impact that potential multiplier effects have on housing costs to be captured. To the extent high-wage jobs are responsible for additional job creation through multiplier effects, potential impacts would be captured in the market data on home prices and rents and reflected as part of the correlative relationship identified by the analysis.

Adjustments for Inflation and Added Housing

Two adjustments were made to the real estate and employment data used in the regression analysis:

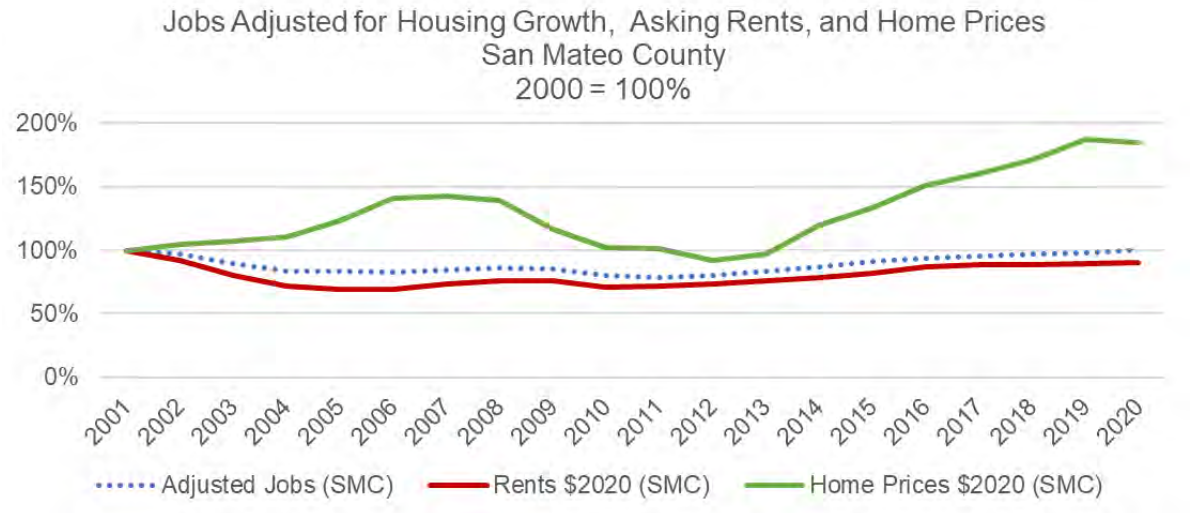
1. *Inflation adjustment* – Rent and sales price data for San Mateo County is expressed in constant 2020 dollars, adjusting for inflation based upon the Bureau of Labor Statistics Consumer Price Index for All Urban Consumers (CPI-U).

2. *Adjusted Jobs (net of housing growth)* – Employment data was adjusted to reflect the portion of job growth since 2000 that can be accommodated by housing construction since that time, using the same 1.91 workers per household factor applied in Sections 4 and 5 as detailed in Appendix C Tables 10 and 11. For example, as of 2010, there were

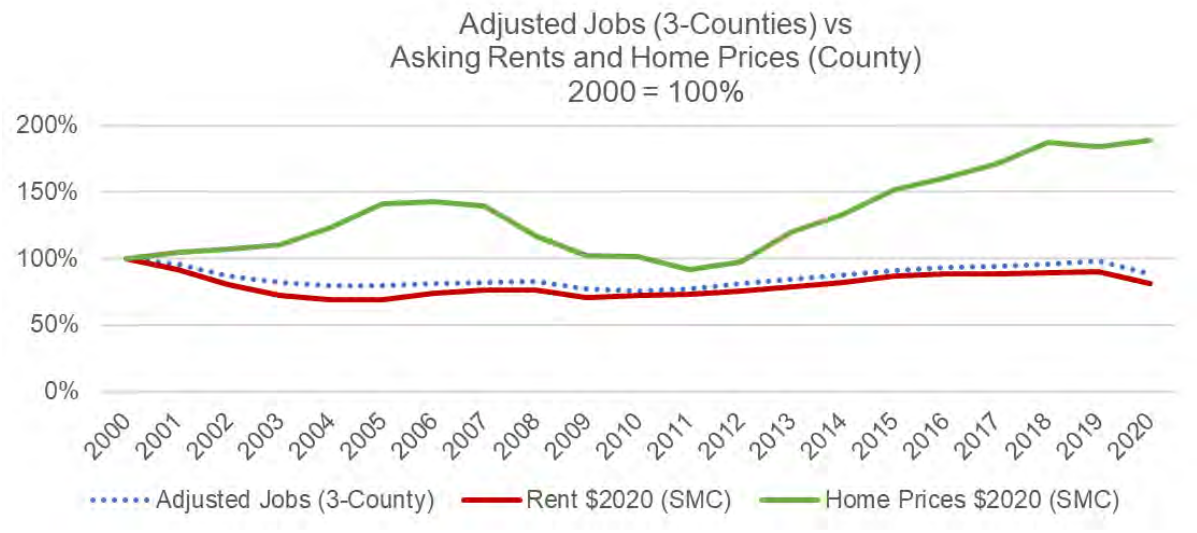
approximately 317,600 jobs in San Mateo County and 271,000 housing units, of which 10,400 units were built since 2000. The number of jobs accommodated by housing units built from 2000 to 2010 (10,400 housing units x 1.91 workers per household = approximately 19,900) is subtracted from total 2010 employment (317,600 jobs) to arrive at the adjusted estimate of 297,700 jobs as of 2010. In the case of the three-county analysis, employment within the three-county area is similarly adjusted by housing growth within the three-county area. Thus, the linear regression analyses estimate the relationship between inflation-adjusted rents and home prices and employment growth, net of the offsetting influence of housing growth.

Summary of the Data

The following two charts compare historical inflation-adjusted rents and home prices with changes in employment for San Mateo County and the three-county area including San Francisco and Santa Clara counties, respectively. The charts present the trends as an index relative to 2000 levels. Rents have generally trended down when the number of jobs was decreasing and up when jobs were added, suggesting a relatively strong correlation between rents and jobs. Rents decreased further than the number of jobs, in percentage terms, following the "dot com crash" around 2000 and were still below 2000 levels in inflation-adjusted terms as of 2020. Real home prices, on the other hand, grew from 2000 to 2006 by over 40% even as employment fell by approximately 15%. Jobs and home prices were positively correlated over the past decade; however, it is likely that interest rates and mortgage credit availability are as important, if not more important, than employment growth in explaining historical variation in home prices.



Sources: Quarterly Census of Employment and Wages, California Department of Finance, CoStar, CoreLogic, Bureau of Labor Statistics Consumer Price Index.



Sources: Quarterly Census of Employment and Wages, California Department of Finance, CoStar, CoreLogic, Bureau of Labor Statistics Consumer Price Index.

Regression Analysis Findings

Table 7-6 presents the results of the regression analysis for the eight separate scenarios tested. Additional supporting information is included in Appendix C. The primary findings of the analysis are:

- Rents have a positive, statistically significant correlation with job growth in all scenarios.
- Job growth was found to have a weak positive correlation to home prices in all scenarios tested.
- Each 10,000 total jobs added to the county (net of offsetting housing growth) is correlated with a 3.9% increase in rents and 3.6% increase in home prices and each 10,000 jobs within the three-county area is correlated with a 0.7% increase in rents and a 0.6% increase in home prices. As discussed below, the single-county and three-county findings are used to bracket an upper and lower estimate of the impacts.
- Each 10,000 high-wage jobs (net of offsetting housing growth) added to the county is correlated with a 6.1% increase in rents and 6.5% increase in home prices and each 10,000 high-wage jobs within the three-county area is correlated with a 1.0% increase in rents and a 0.8% increase in home prices.

Table 7-6. Summary of Regression Analysis Results				
	Scenario	Percent increase per 10,000 adjusted jobs	P-Value (statistically significant values = <0.05)	Adjusted R-Squared (1= perfect correlation; 0= no correlation)
	Single County Analysis [Upper Estimate]			
1	Correlation with All Job Growth			
	Rents	3.9%	<.05	0.90
	Sales Prices	3.6%	<.05	0.28
2	Correlation with High-Wage Job Growth			
	[proxy for inclusion of multiplier-effect]			
	Rents	6.1%	<.05	0.76
	Sales Prices	6.5%	<.05	0.34
	Three-County Analysis [Lower Estimate]			
3	Correlation with All Job Growth			
	Rents	0.7%	<.05	0.92
	Sales Prices	0.6%	<.05	0.22
4	Correlation with High-Wage Job Growth			
	[proxy for inclusion of multiplier-effect]			
	Rents	1.0%	<.05	0.85
	Sales Prices	0.8%	<.05	0.17

Regression Analysis Metrics

The following provides additional information regarding the regression analysis metrics identified in Table 7-6:

Adjusted R-squared – The adjusted R-squared is an indicator of the model's ability to explain historical variation in the dependent variable (rents or home prices) in relation to employment. An adjusted R-squared of 1 indicates a perfect correlation. An adjusted R-squared of 0 indicates no correlation. As would be expected based on the trends described above, the regression model explains most of the variation in rents but no more than one third of the variation in home prices.

P-Value – The p-value indicates the probability of no relationship between the independent and dependent variables. P-values of 0.05 and less indicate there is less than a 5% chance that the observed relationship can be explained by random chance and is a common threshold used to identify statistical significance. P-values for all of the scenarios are below the .05 threshold and are thus identified as significant.

Single-County Versus Three-County Results

The single-county analysis provides a more conservative estimate of the response of local housing costs to a given change in employment compared to the single-county analysis. The estimated change in asking rents and sale prices per 10,000 jobs is approximately six times larger under the single-county analysis versus the three-county analysis. The three-county analysis assumes jobs created anywhere in the three-county area have an equal influence on rents as jobs within San Mateo County. While regional employment dynamics are important, jobs added within San Mateo County probably have a more pronounced influence on local real estate conditions within the county. Thus, the change in rents and sales prices for a given change in jobs is likely to fall somewhere in between the value suggested by the single-county and three-county analysis.

The single-county regression model appears to explain most of the variation in local rents; however, it is important to recognize that job growth within San Mateo County is highly correlated with regional job growth. The single-county analysis will not distinguish the effects of county versus regional job growth and, as a result, will tend to overstate the relationship between job growth in the county and rents.

Analysis Limitations and Potential to Overstate Influence of Job Growth

The analysis relies on a very simple statistical technique to test for correlation but does not prove that the identified relationship between job growth and housing costs is causal. The approach likely overstates the importance of job growth by not distinguishing the effects of other important contributing factors that are correlated with job growth. For example, rising incomes, especially those of higher-income households, enable these households to compete for limited housing supply in the most desirable locations, contributing to rising housing costs. Some communities in San Mateo County, such as Redwood City, have seen construction of a significant number of new rental units that offer superior amenities and command a premium in the market. The inclusion of these newer units in the data set will tend to bring up averages due to higher rents being charged for the new units; however, this does not necessarily mean costs for existing units are increasing. The analysis technique will tend to attribute effects of other factors that are correlated with job growth to the job growth itself, which results in overstating the influence of job growth.

Application of Findings to Estimate Potential Project-Related Impacts

This section examines the potential for the proposed Project to contribute to displacement through an indirect influence on housing market conditions in East Palo Alto and Belle Haven. To the extent the proposed Project generates upward pressure on the housing market, effects are also likely to be experienced locally within the subject communities.

Findings from the regression analysis were applied to the jobs added by the proposed Project to estimate the potential range of impacts. The number of jobs is adjusted for the number of

housing units added by the proposed Project consistent with the adjusted jobs independent variable used in the regression analysis, as described above, and shown in Appendix C Tables 1 and 5. Findings regarding the potential influence of the Project on rents and sales prices are shown in Table 7-7. As shown, a wide range of potential influence is found, from a 0.12% and 0.10% increase in rents and sales prices, respectively, based on the finding of the three-county analysis for all jobs, up to a 1.04% and 1.12% increase in rents and sales prices, respectively, based on the single-county results for high-wage jobs. As discussed earlier, the high-wage jobs analysis is an approach to capturing potential multiplier effects in the analysis.

Table 7-7. Potential Percentage Influence on Rents and Sales Prices

	Lower Estimate (3-County Analysis)	Upper Estimate (SM County Analysis)	Midpoint (of Upper & Lower)
Correlation with All Job Growth			
Rents	0.12%	0.67%	0.39%
Sales Prices	0.10%	0.61%	0.36%
Correlation with High-Wage Job Growth *[captures potential multiplier effect]*			
Rents	0.18%	1.04%	0.61%
Sales Prices	0.14%	1.12%	0.63%

Since the upper and lower percentage impact estimates presented in Table 7-7 likely bracket the range, for purposes of the rental analysis, the midpoints of 0.39% based on all jobs and 0.61% based on high-wage jobs are used. For purposes of the for-sale analysis, the midpoints are 0.36% based on all jobs and 0.63% based on high-wage jobs. The percentage findings presented in Table 7-7 may be converted to a potential dollar influence on rents and home prices. Applying the percentages from the rental analysis to the $2,766 average effective monthly rent in East Palo Alto as of 2020 per CoStar yields an estimated dollar impact of $11 and $17, respectively. Applying the percentages from the for-sale analysis to the 2020 median home prices in East Palo Alto of $870,000[43] yields a potential dollar influence on home prices of $3,100 and $5,500, which translates to a monthly mortgage payment difference of $10 and $19 per month[44], respectively. For Belle Haven, based on the 2020 median home price of $1,010,000[45] and applying the same percentage factors, the impact to home prices is estimated between $3,600 and $6,400, which translates into an estimated monthly mortgage payment difference of between $12 and $22 per month[46]. These estimated dollar impacts on rents and

[43] Price based on CoreLogic home sales data for 2020.

[44] This estimate is based on a mortgage interest rate of 3% as of June 2021 based on the average for 30-year mortgages per the Freddie Mac Primary Mortgage Market Survey and assumes a 20% down payment.

[45] Price based on CoreLogic home sales data for 2020.

[46] This estimate is based on a mortgage interest rate of 3% as of June 2021 based on the average for 30-year mortgages per the Freddie Mac Primary Mortgage Market Survey and assumes a 20% down payment.

sales prices could have a minor influence on residential location decisions; however, estimates are likely overstated for the following reasons:

- **Analysis Approach Will Tend to Overstate Importance of Job Growth** – the analysis will tend to overstate the influence of job growth by omitting other important variables that also affect housing costs. Two such variables include rising household incomes, which can influence housing costs through increased price competition, and addition of new rental and for-sale housing with modern finishes and amenities and higher prices and rents, which can bring up averages but does not necessarily mean costs for existing units are increasing. Both factors are correlated with job growth. The analysis approach will tend to ascribe the impact of these factors to job growth alone, overstating the potential effects of the proposed Project.

- **Offsetting Effects of Nearby Housing Construction Not Reflected** – New housing construction can absorb new demand and moderate or offset the minor potential rent and home price effects estimated. The City has already issued building permits for 1,416 housing units during the current RHNA planning cycle and has over 1,500 housing units proposed in the vicinity of the proposed Project, within the Bayfront Area, in addition to the 1,730 units included within the proposed Project. East Palo Alto has issued building permits for 222 units during the current RHNA planning cycle[47] and has nearly 1,000 new housing units in the development pipeline[48]. Combined, there are over 2,500 housing units currently in the development pipeline in Menlo Park and East Palo Alto, beyond the 1,730 units included in the proposed Project, including approximately 600 below market rate (BMR) affordable units[49] in addition to the 308 below market rate units included in the proposed Project. These 2,500 additional market rate and affordable units currently in the development pipeline in East Palo Alto and Menlo Park will tend to moderate or offset the potential rent and price effects described above; however, moderating effects are not taken into account in the analysis. Therefore, estimates of potential rent and price effects are likely overstated.

7.7 Comparison Communities Analysis

To assist in evaluating whether there are indications that Meta's existing Menlo Park campuses have contributed to recent escalation in home prices and rents in East Palo Alto and Belle

[47] East Palo Alto 2020 Housing Element Annual Progress Report.

[48] October 6, 2020 City of East Palo Alto Staff Report to the City Council RE: Follow-Up on Study Session Related to the Affordable Housing Component of the Euclid Improvements (Woodland Park) Project, Attachment 1. East Palo Alto Housing Breakdown, which indicates approved, planned, proposed or under construction housing units totaling 969 units, not including 108 rebuilt units.

[49] Pipeline total of 600 BMR units summarized from prior HNA's prepared by KMA for projects in the Bayfront Area and the applicant proposal for 123 Independence, the City of Menlo Park summary of pipeline projects in the Bayfront Area and the staff report referenced in the prior footnote with respect to East Palo Alto pipeline projects.

Haven, market trends for East Palo Alto and Belle Haven since initial occupancy of Meta's existing campuses were reviewed in comparison to eight other comparison geographies summarized in Table 7-8.

Table 7-8. Areas Selected for Comparative Review of Real Estate Trends	
Areas	Boundaries
Downtown Redwood City	Zip Code 94063
Hayward (selected zip codes)	Zip Codes 94544, 94541
Bayfair / San Leandro	Zip Code 94578
Fruitvale/ Oakland	Zip Code 94601
West Berkeley	Zip Code 94710
North Richmond	Zip Code 94801
East San Jose	Zip Code 95116
San Mateo County	County

The comparison areas were selected in part based on information from the Urban Displacement Project,[50] an initiative of U.C. Berkeley "aimed at understanding the nature of gentrification and displacement in the Bay Area." Most of the selected areas are identified as vulnerable to displacement of existing residents based on market and demographic conditions, according to the classification system used by the Urban Displacement Project. Five including, Hayward, Fruitvale, West Berkeley, North Richmond, and East San Jose, are in cities that also have some level of rent control beyond what State law requires (maximum limits on rent increases vary). Table 7-9 identifies the "Displacement Typology" for each of the comparison geographies per the Urban Displacement Project.

[50] Source: Zuk, M., & Chapple, K. (2015). Urban Displacement Project.

Table 7-9. Displacement Risk Per Urban Displacement Project

Geography	Boundaries			Primary Displacement Typology[1]	Local Rent Control?
East Palo Alto	City			LISD	yes
Belle Haven	Census Tract:	6117		LISD	no
DT Redwood City	Zip:	94063		LISD	no
Hayward	Zip:	94544,	94541	SMMI	yes
Bayfair/ San Leandro	Zip:	94578		LISD	no[2]
Fruitvale	Zip:	94601		ARG	yes
West Berkeley	Zip:	94710		LISD	yes
North Richmond	Zip:	94801		ARG	yes
East San Jose	Zip:	95116		LISD	yes
San Mateo County	County			SMMI	varies

Displacement Typology Key		
	LISD	Low-Income/Susceptible To Displacement
	ARG	At Risk Of Gentrification
	SMMI	Stable Moderate/Mixed Income

[1] Primary Displacement Typology within area, weighted by population, from Chapple, K. & Thomas, T. (2020). Urban Displacement Project. Displacement typologies indicate risk/stage of displacement at the Census tract level, based on a variety of indicators including loss of affordable units, out-migration of low-income households, and real estate market trends.

[2] In San Leandro, tenants may request an independent review of rent increases above 7%.

The comparison areas were also selected in part based on shared demographic characteristics with East Palo Alto and Belle Haven, including racial/ethnic composition, household income, household size, median age, home values, and housing tenure, as summarized in Table 7-10. San Mateo County is included as an additional point of comparison and indicator of broader housing market conditions, although countywide demographics and market conditions differ from East Palo Alto and Belle Haven.

Table 7-10. Demographics: East Palo Alto, Belle Haven & Comparison Geographies (2020)

Geography [1]	Population	Avg. HH Size	Owner Occ'd % Units	Median Income	Median Home Value	Latino % Pop.	Black % Pop.
East Palo Alto	28,561	4.1	38%	$72,208	$880,910	65%	17%
Belle Haven	8,157	3.7	35%	$79,938	$949,905	69%	19%
DT Redwood City	36,984	3.1	30%	$59,118	$844,940	65%	3%
Hayward	143,743	3.2	48%	$80,767	$613,853	46%	10%
Bayfair/ San Leandro	40,604	2.7	42%	$64,628	$613,173	34%	15%
Fruitvale	53,379	3.4	32%	$52,747	$506,069	53%	14%
West Berkeley	8,452	2.4	35%	$84,537	$854,221	26%	18%
North Richmond	32,640	3.2	43%	$52,761	$351,186	60%	21%
East San Jose	53,028	3.9	38%	$60,887	$653,869	61%	2%
San Mateo County	746,752	2.8	56%	$127,547	$1,212,130	25%	3%

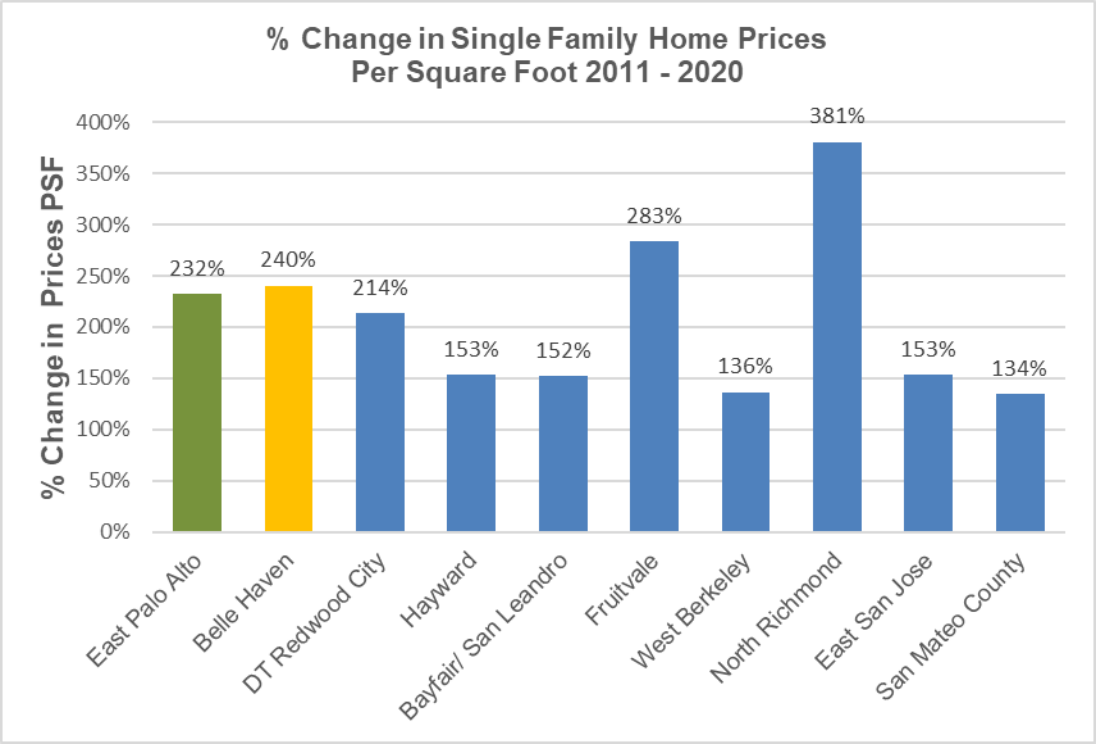
[1] See Table 7-8 for boundary definitions of comparison geographies.
Source: ESRI Business Analyst 2021.

7.8 Real Estate Trends in Comparison Communities, 2011 to 2020

The following summarizes real estate trends in East Palo Alto, Belle Haven, and the eight comparison geographies for the period 2011 to 2020:

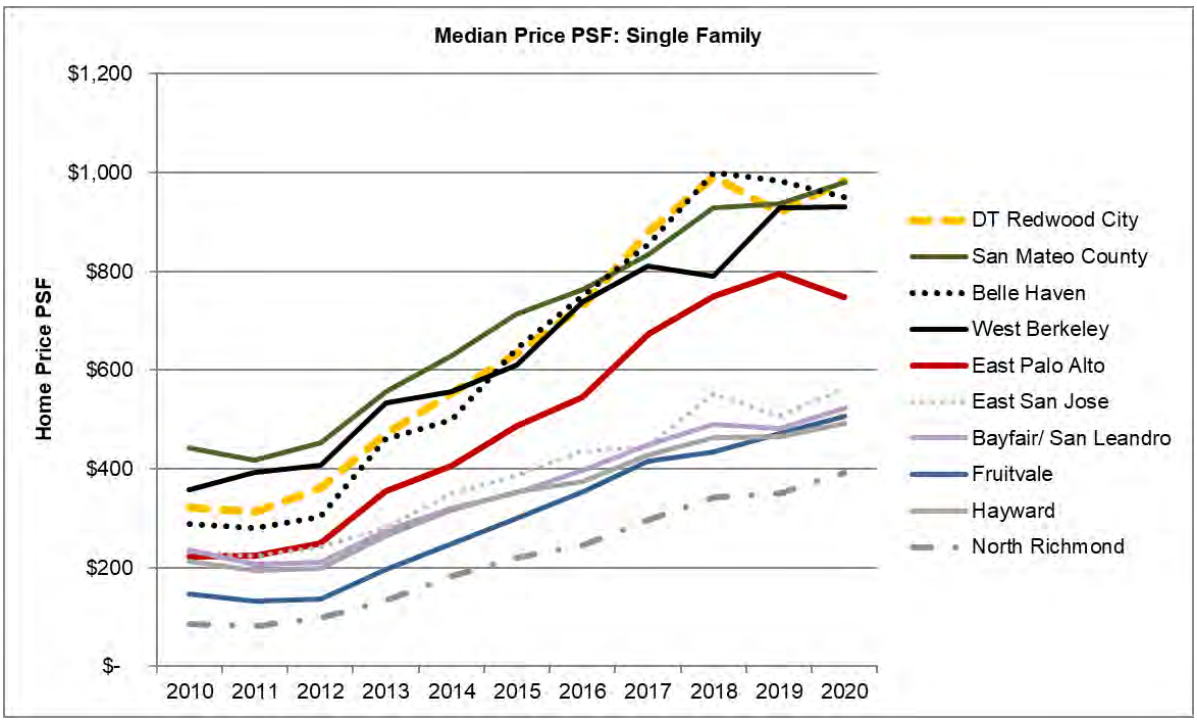
1. Single family Home Prices

Growth in single family home prices in East Palo Alto and Belle Haven has outpaced most selected comparison areas. From 2011 to 2020, the median sales price per square foot for single family homes in East Palo Alto and Belle Haven increased by 232% and 240%, respectively, trailing only Fruitvale and North Richmond. Downtown Redwood City experienced a 214% increase in home prices, while growth in remaining communities ranged from 134% to 153%.



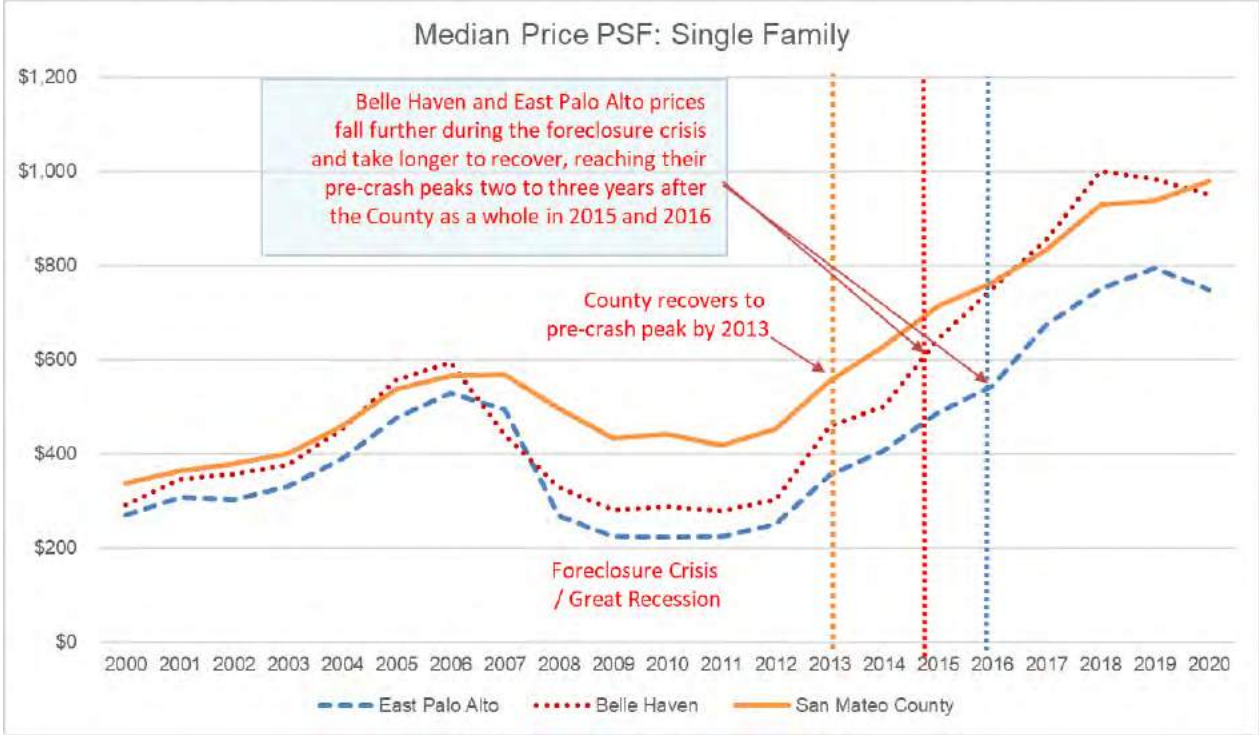
Source: CoreLogic

In 2011, the median sales price per square foot in East Palo Alto of $225/SF represented approximately one-half of the County median of $418/SF. By 2020, the median sales price in East Palo Alto at $748 per square foot was roughly 80% of the County median of $980. Appendix C Table 16 provides the supporting data.

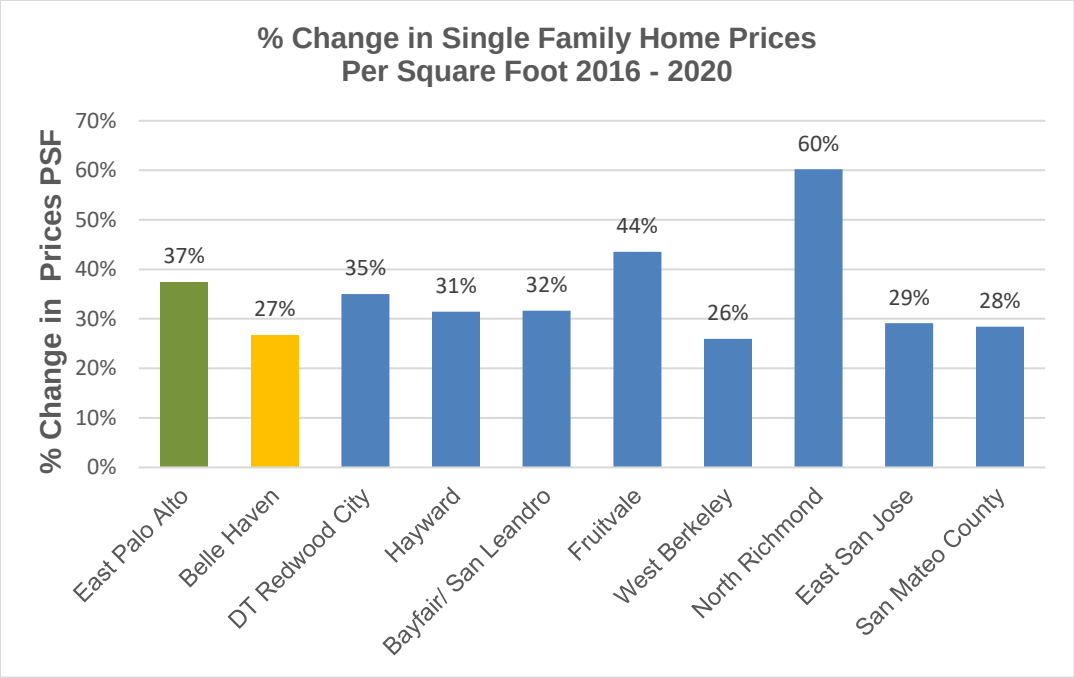


Source: CoreLogic

The percentage increase in single family home prices in East Palo Alto and Belle Haven relative to the county over the 2011 to 2020 period is partly driven by the impacts of the foreclosure crisis that began in 2008. Declines in prices during the crisis were deeper and the recovery took longer in East Palo Alto and Belle Haven than in the county as a whole. Home prices in the county had recovered to their pre-2008 peak by 2013, while prices in Belle Haven took until 2015 to recover and prices in East Palo Alto took until 2016 to reach their prior peak. The chart below provides an illustration of price trends over the longer period since 2000 to illustrate.

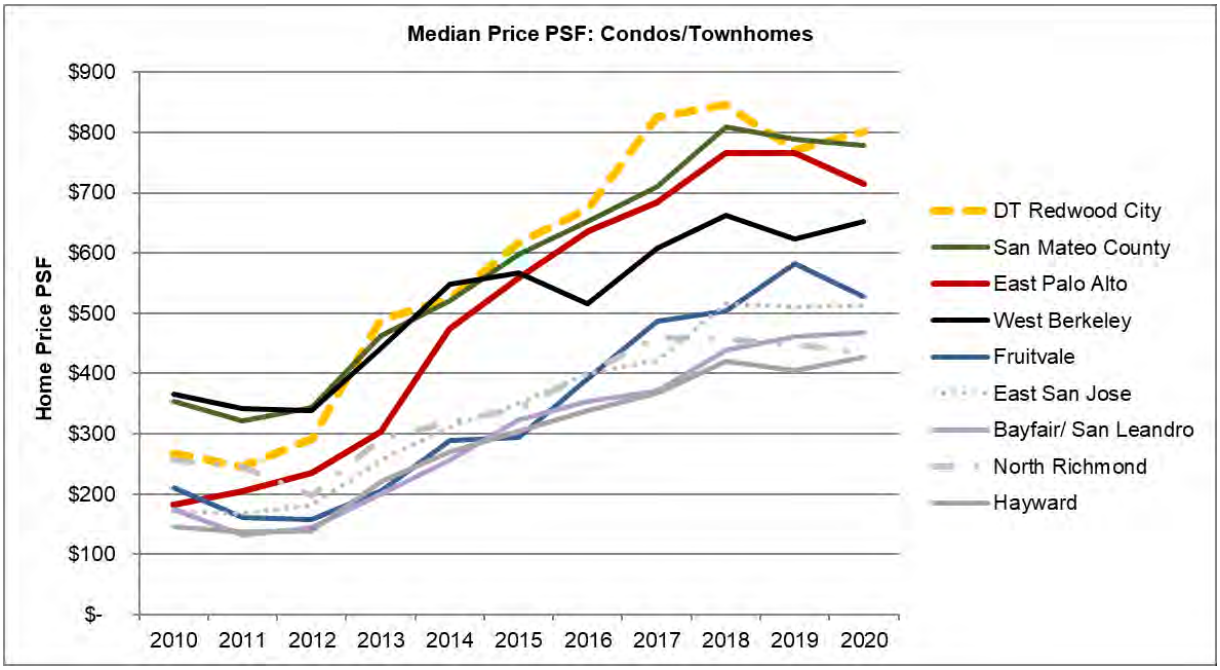


Focusing on trends from 2016 onward, once East Palo Alto had recovered to its pre-2008 peak, yields a different picture of the comparison, as illustrated in the chart below. Since 2016, prices in East Palo Alto increased by 37% and prices in Belle Haven increased 27%, more in line with the County and the other comparison communities, except Fruitvale and North Richmond which experienced greater price increases of 44% and 60%, respectively, as in the longer 2011-2020 period.



2. Condominium and Townhome Prices

For condos and townhomes, the median price per square foot in East Palo Alto grew faster from 2011 to 2020 than all comparison areas except Bayfair/San Leandro, which started from a very low median price in 2011. Condos and townhomes represent a smaller share of the market in East Palo Alto than do single family units (20 condo/townhome sales per year on average as compared to an average of 160 single family sales per year). No condo/townhome sales were recorded in Belle Haven. Appendix C Tables 16 and 17 provide the supporting data.



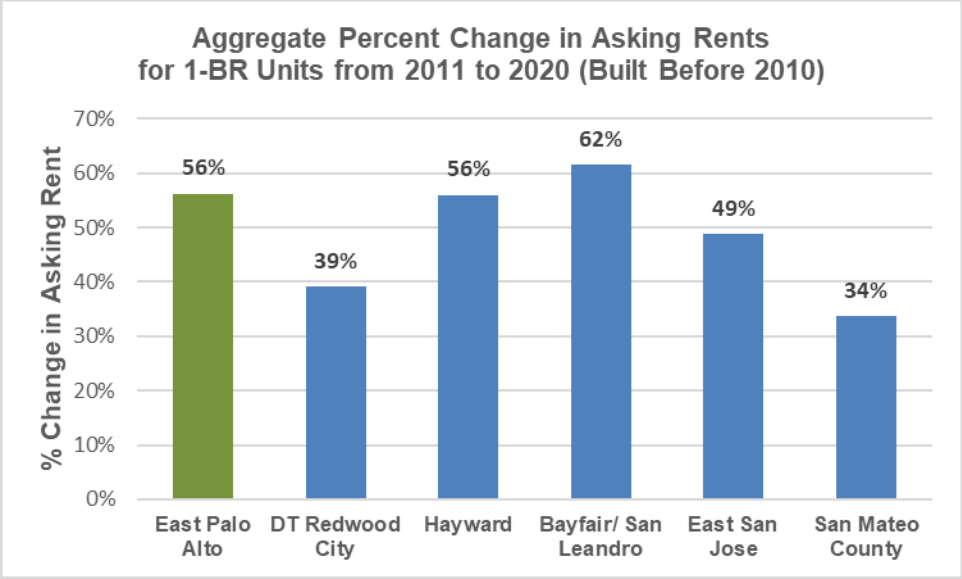
Source: CoreLogic

3. Apartment Rents

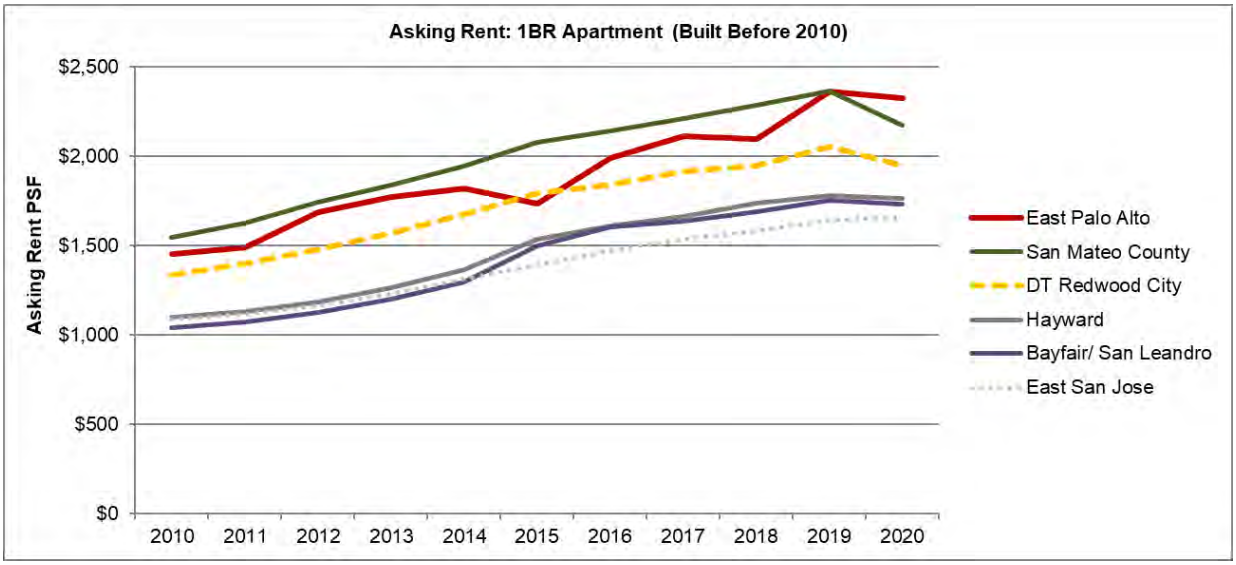
From 2011 to 2020, apartment rents across all comparison areas increased significantly. According to data from CoStar, which surveys multifamily buildings, East Palo Alto experienced one of the greatest increases in rents among the comparison areas. The average asking rent for a one-bedroom apartment grew by 62% in Bayfair / San Leandro, 56% in East Palo Alto[51] and Hayward, and 34% to 49% in the remaining communities. The average asking rent for a 1-bedroom in East Palo Alto, previously 10% less than the County average, has exceeded the County average for the past three years. These trends are presented in the charts below with additional details provided in Appendix C Table 18.

The rental trend data excludes apartments built since 2010, which tend to command higher rents than existing buildings. Reliable data on rents was not available for Belle Haven, Oakland / Fruitvale, North Richmond, and West Berkeley as the rental housing stock in these areas consists primarily of small buildings with less than 20 units that are less likely to report asking rents to CoStar.

[51] While East Palo Alto has rent control, rents reset to market upon vacancy. The 56% increase pertains to rents for units which have been vacated and are available for lease.



Source: CoStar



Source: CoStar

These rental rates reflect asking rents for units that have been vacated and available for rent. Pursuant to State law, existing tenants in multifamily buildings are shielded from annual increases in market rents in excess of 5% plus a local cost of living adjustment, as long as they remain in their current unit. For communities that have a local rent control ordinance, including East Palo Alto, the limit on market rent increases is less than the State threshold, usually no more than the rate of inflation.

Summary of Comparison Communities Analysis

Over the course of a decade-long economic expansion that concluded in early 2020, robust job growth and limited housing production caused housing market conditions to tighten across the

Bay Area with reduced vacancy and rising pricing/rents. Rent and home price trends indicate that the historically affordable communities of East Palo Alto and Belle Haven have experienced among the largest increases in housing prices for both rental and ownership housing types relative to comparable areas elsewhere in the South Bay and East Bay, as well as San Mateo County. Home price increases in East Palo Alto and Belle Haven during the first half of the last decade represented a recovery from the great recession and foreclosure crises, which resulted in a more pronounced decline in home prices in Belle Haven and East Palo Alto than in the County as a whole. Home price increases in the second half of the last decade (2016-2020) were more in line with countywide and comparison community trends, with the exception of North Richmond and Fruitvale, which experienced more pronounced price escalation than Belle Haven or East Palo Alto.

The 2020 economic recession caused by the coronavirus pandemic eliminated a portion of the jobs added over the past decade, which led to temporarily weaker demand for some types of housing. Apartment rents and attached home prices declined in 2020 in nearly all communities analyzed, including East Palo Alto. In contrast, single family home prices increased in 2020 in all areas except East Palo Alto and Belle Haven.

While East Palo Alto and Belle Haven have experienced significant increases in housing costs since Meta first began occupying its existing Menlo Park facilities, increases are within the range of the other comparison communities that are not adjacent to a major tech campus but which are vulnerable to displacement. Therefore, the comparison communities analysis does not indicate clear evidence of a localized influence on market prices and rents based on proximity to the existing Meta campuses that can be distinguished from broader regional trends.

7.9 Displacement Analysis Conclusion

Belle Haven and all areas of East Palo Alto are identified by the Urban Displacement Project as either at risk of or undergoing displacement. East Palo Alto's rent control ordinance shields existing renters in eligible units from rent increases; however, protections do not extend to the more than one third of single-family homes in East Palo Alto that are renter-occupied or to rentals in Belle Haven. Escalating rents and home prices have made these communities far less affordable than they once were. This makes longer term neighborhood change likely as units come available through rental unit turnover or sale of owner-occupied housing because newcomers will generally need to have higher incomes than existing residents to afford the cost of available units.

The proposed Project is likely to create competing influences on displacement pressures in East Palo Alto and Belle Haven, with the large addition to the housing supply pointing toward a moderating influence that could reduce pre-existing displacement pressures while other factors suggest the potential for a modest incremental increase in pre-existing displacement pressures. These competing factors are summarized as follows:

1. *Added Housing Supply Likely to Have Moderating Influence on Displacement Pressures:*

- The 1,730 new units in the proposed Project equate to an approximately 12% increase in the existing 14,124-unit Menlo Park housing stock and a 0.6% increase in the 282,299-unit housing stock of San Mateo County[52]. After taking into consideration additional housing demand in Menlo Park and East Palo Alto added by the proposed Project, there is an estimated 1,195-unit net increase in housing availability in Menlo Park and East Palo Alto combined at rents affordable to Extremely Low, Moderate and Above Moderate Income households. This 1,195-unit increase in housing availability will substantially increase housing opportunities in a very competitive market.

- Several recent studies have explored the effects of new market rate housing development on housing costs and displacement pressures within the immediate vicinity of new housing development[53]. The studies found that new residential development has moderating effects on rents and displacement pressures at the local level. New residential developments were found to decrease rents in the area surrounding the new housing either in absolute terms or relative to market trend. The research suggests the 1,730-unit residential component of the proposed Project is likely to have a moderating influence that will tend to reduce pre-existing displacement pressures in East Palo Alto and Belle Haven.

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[52] Number of housing units as of January 1, 2020 per California Department of Finance Table E-5, Population and Housing Estimates for Cities, Counties, and the State, 2011-2020 with 2010 Census Benchmark.

[53] Asquith, Brian J., Evan Mast, and Davin Reed. 2019. "Supply Shock Versus Demand Shock: The Local Effects of New Housing in Low-Income Areas." Upjohn Institute Working Paper 19-316. W. E. Upjohn Institute for Employment Research. https://doi.org/10.17848/wp19-316

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Phillips, Shane, Manville, Michael, Lens Michael. 2021. “Research Roundup: The Effect of Market-Rate Development on Neighborhood Rents” UCLA Lewis Center for Regional Policy Studies. https://www.lewis.ucla.edu/research/market-rate-development-impacts/

2. ***Comparative Analysis of Real Estate Trends Does Not Show Clear Evidence of Localized Influence on East Palo Alto and Belle Haven Housing Market****:*

   - The comparative analysis of real estate trends over the past decade since Meta first began to occupy its campuses in Menlo Park does not show clear evidence of a localized influence on market prices and rents based on proximity to the existing Meta campuses distinguishable from broader market trends. The analysis suggests that market trends in East Palo Alto and Belle Haven are within the same range as the other comparison communities reviewed.

   - The proposed Project is located in an existing commercial area separate from Belle Haven and East Palo Alto, and will not physically alter either community.

3. ***Added Employment and Amenities May Create Modest Upward Pressure on Housing Costs:***

   - The analysis of the potential influence of added jobs on housing costs suggests a potential impact on monthly housing costs of up to $10 to $22 for newly vacated units, depending on the analysis approach. Were an impact of this magnitude to occur, it would likely represent a minor influence on residents' decisions regarding where to live. Residents of rent control housing and existing homeowners would be protected from any increase. Further, even though a minor amount, the estimated impact is likely overstated because it is based on a methodology that does not isolate the effects of job growth from other contributing factors. In addition, while the analysis approach accounts for the new housing units proposed within the Project itself, it does not account for the significant pipeline of new housing proposed as part of nearby developments in the vicinity.

   - The proposed Project creates a new mixed-use environment that adds shopping, dining, and an elevated park that will connect Belle Haven to the Project site. Studies examining the impact of proximity to parks, open space and retail show a connection between convenient access to these amenities and higher home values.[54] Convenient access to the new park and retail amenities could potentially increase interest in living in nearby

[54] Wiley, Jonathan. 2015. "The Impact of Commercial Development on Surrounding Residential Property Values." Georgia State University. https://www.gamls.com/images/jonwiley.pdf

Matthews, John. 2007. "Retail Proximity and Residential Values or Do Nearby Stores Really Run Down Property Values?" Working Paper 07-21. Georgia State University. https://www.issuelab.org/resources/4941/4941.pdf

Crompton, John. L. April 2020. "How Much Impact Do Parks Have on Property Values?" Parks and Recreation Magazine. https://www.nrpa.org/parks-recreation-magazine/2020/april/how-much-impact-do-parks-have-on-property-values/

areas of East Palo Alto and Belle Haven, which may contribute to upward pressure on rents and sales prices for available units.

The added housing, added jobs, and new amenities with the proposed Project create competing influences on the local housing market and displacement pressures in East Palo Alto and Belle Haven. While precise outcomes are not possible to predict, on balance, the analysis suggests the proposed Project would likely, at most, represent a minor contributing factor to the substantial pre-existing displacement pressures in East Palo Alto and Belle Haven.

8.0 INCREASED RESIDENTIAL DENSITY VARIANT

The DEIR evaluates an Increased Residential Density Variant with a total of up to 1,930 residential units, an increase of 200 units over the up to 1,730 units included in the proposed Project. The 200 additional residential units in the Increased Residential Density Variant are accommodated through an increase in building height and do not reduce or modify non-residential components of the proposed Project. All 200 additional units are market rate units available through utilization of either the density bonus provision of the City's BMR Program Guidelines, which allow one additional market rate unit for each BMR Unit that is provided, up to a maximum of 15% above the maximum density (100 du/ac) that is otherwise allowed by R-MU zoning, or the State Density Bonus Law.

Housing Availability Impacts with Increased Residential Density Variant

KMA modified the analyses described in Sections 3, 4, 5 and 6 to reflect the 200 additional market rate units with the Increased Residential Density Variant. The resulting modified findings regarding net impact on housing availability with the Increased Residential Density Variant are summarized below:

- **Regional Housing Availability Impact with Increased Residential Density Variant** – The Increased Residential Density Variant results in a 651-unit net decrease in housing availability within the region, which is based on the difference between the estimated 2,581-unit regional employee housing demand from new employees and the 1,930 new housing units.

- **Housing Availability Increase in Menlo Park with Increased Residential Density Variant** – The net impact on housing availability in Menlo Park is based on an estimated Menlo Park share of the 2,581-unit total regional employee housing demand and the 1,930 new units added. The Menlo Park share of regional employee housing demand is estimated under the same two commute share scenarios described previously.
    - Current Commute Share Estimate – Assuming existing commute patterns hold, there is an estimated net increase in available housing in Menlo Park of 1,750 units, based on the 1,930 new units in the Increased Residential Density Variant, less an estimated Menlo Park share of regional employee housing demand of 180 units.
    - Increased Commute Share Estimate – Assuming an increased 20% share of workers are housed in the city, there is an estimated net increase in available housing in Menlo Park of 1,414 units, considering the 1,930 new units in the Increased Residential Density Variant, less an estimated Menlo Park share of regional employee housing demand of 516 units.

  Table 8-1 provides a summary of housing availability impact findings for the Increased Residential Density Variant.

Table 8-1. Summary of Housing Availability Impacts, Increased Residential Density Variant			
		Menlo Park Share	
	Regional Total	Current Commute Share Estimate	Increased Commute Share Estimate at 20%
Increased Residential Density Variant Findings (with 1,930 residential units)			
A. Added Housing Supply (New Units)	1,930 Units	1,930 Units	1,930 Units
B. Added Employee Housing Demand	2,581 Units	180 Units	516 Units
C. Housing Availability, Net Impact [A. - B.]	(651 Unit) Net Decrease in Available Housing in Region	1,750 Unit Net Increase in Available Housing in Menlo Park	1,414 Units Net Increase in Available Housing in Menlo Park
Comparison to Findings for Proposed Project (with 1,730 residential units)			
D. Findings for proposed Project at 1,730 units (from Table 1-1)	(815 Unit) Net Decrease in Available Housing in Region	1,553 Unit Net Increase in Available Housing in Menlo Park	1,221 Units Net Increase in Available Housing in Menlo Park
E. Net Difference in Findings with Increased Residential Density Variant [C. – D.]	(+) 164 Units of Available Housing in Region	(+) 197 Units of Available Housing in Menlo Park	(+) 193 Units of Available Housing in Menlo Park

The net differences in housing availability impacts with the Increased Residential Density Variant, compared to the proposed Project with 1,730 units, are shown in Row E of Table 8-1. The 200 added units do not translate into a one-to-one increase in housing availability because on-site and off-site employee housing demand associated with the residential units also increase and partially offset the 200-unit incremental increase in housing supply.

Table 8-2 provides a breakout of the estimated net impacts on housing availability by income level with the Increased Residential Density Variant.

Table 8-2. Net Impacts on Housing Demand and Housing Supply by Income Level, Increased Residential Density Variant							
	Extremely Low	Very Low	Low	Moderate	Above Moderate	Over 150% AMI	Total
Regional Total	(132)	(275)	(741)	113	856	(472)	(651)
Menlo Park Share							
Current Commute Share Estimate	69	15	(15)	515	1,201	(35)	1,750
Increased Commute Share Estimate (20%)	41	(26)	(118)	459	1,152	(94)	1,414

Note: Negative figure represents a net decrease in housing availability resulting from housing demand that exceeds added housing supply.

Regional Housing Availability Impact with Increased Residential Density Variant – The 651-unit estimated net decrease in housing availability in the region with the Increased Residential Density Variant is comprised of 132 Extremely Low, 275 Very Low, 741 Low, and 472 Over 150% AMI units, partially offset by net increases in available housing within the Moderate and Above Moderate Income categories of 113 and 856 units, respectively.

Menlo Park Housing Availability Increase with Current Commute Share Estimate and Increased Residential Density Variant – The 1,750-unit estimated net increase in housing availability in Menlo Park with the Current Commute Share Estimate and the Increased Residential Density Variant consists of 69 Extremely Low, 15 Very Low, 515 Moderate, and 1,201 Above Moderate units, partially offset by net decreases in housing availability of 15 and 35 units within the Low and Over 150% of AMI categories, respectively.

Menlo Park Housing Availability Increase by Income with Increased Commute Share Estimate and Increased Residential Density Variant – The 1,414-unit estimated net increase in housing availability in Menlo Park with the Increased Commute Share Estimate and the Increased Residential Density Variant consists of 41 Extremely Low, 459 Moderate, and 1,152 Above Moderate units, partially offset by a net decrease in housing availability of 26, 118, and 94 units within the Very Low, Low, and Over 150% of AMI categories, respectively.

Displacement Impacts with Increased Residential Density Variant

The substantial addition to the housing supply with the proposed Project is one of several competing influences on displacement pressures, as described in Sections 1.6 and 7.9. Expansion in the availability of market rate and affordable housing in the local area is a factor that would tend to moderate or counteract displacement pressures to some degree by relieving market pressures on the existing local housing stock. The Increased Residential Density Variant results in a greater expansion in the availability of housing than the proposed Project, with respect to market rate housing. Accordingly, the counteractive effect on displacement pressures from increased availability of housing would be incrementally greater with the Increased Residential Density Variant, and the potential for displacement impacts incrementally less. The overall displacement analysis conclusion, that on balance, the proposed Project would likely, at most, represent a minor contributing factor to the substantial pre-existing displacement pressures in East Palo Alto and Belle Haven, which conclusion considers the addition to housing supply alongside other competing influences on displacement pressures, continues to hold with the Increased Residential Density Variant.

APPENDIX A – WORKER OCCUPATIONS AND COMPENSATION LEVELS

APPENDIX A TABLE 1
ESTIMATED WORKER OCCUPATION DISTRIBUTION, 2020
OFFICE WORKERS
HOUSING NEEDS ASSESSMENT: WILLOW VILLAGE
CITY OF MENLO PARK, CA

Major Occupations (2% or more)	Worker Occupation Distribution Office
Management Occupations	*13.0%*
Business and Financial Operations Occupations	*13.5%*
Computer and Mathematical Occupations	*21.2%*
Educational Instruction and Library Occupations	*8.5%*
Arts, Design, Entertainment, Sports, and Media Occupations	*10.6%*
Sales and Related Occupations	*14.5%*
Office and Administrative Support Occupations	*15.1%*
All Other Worker Occupations - Office	*3.5%*
TOTAL	100.0%

Source: Bureau of Labor Statistics
Keyser Marston Associates, Inc.
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APPENDIX A TABLE 2
AVERAGE ANNUAL WORKER COMPENSATION AND ESTIMATED HOUSEHOLD INCOME, 2020
OFFICE WORKER OCCUPATIONS
HOUSING NEEDS ASSESSMENT: WILLOW VILLAGE
CITY OF MENLO PARK, CA

Occupation [3]	2020 Avg. Worker Compensation[1]	Household Income Estimate [4] One Worker	Two Workers	Three+ Workers	% of Total Occupation Group [2]	% of Total Office Workers
Page 1 of 4						
Management Occupations						
Chief Executives	$234,200	$243,000	$360,000	$360,000	2.0%	0.3%
General and Operations Managers	$162,300	$169,000	$260,000	$264,000	22.1%	2.9%
Marketing Managers	$196,300	$205,000	$315,000	$320,000	15.9%	2.1%
Sales Managers	$173,500	$181,000	$278,000	$282,000	12.5%	1.6%
Administrative Services and Facilities Managers	$130,900	$139,000	$232,000	$241,000	2.8%	0.4%
Computer and Information Systems Managers	$212,500	$220,000	$327,000	$327,000	20.4%	2.6%
Financial Managers	$191,400	$200,000	$307,000	$312,000	7.0%	0.9%
Human Resources Managers	$174,700	$182,000	$280,000	$284,000	3.1%	0.4%
Personal Service Managers, All Other; Entertainment and Recreation Managers,	$173,900	$181,000	$279,000	$283,000	7.5%	1.0%
Other Management Occupations	$184,700	$193,000	$296,000	$301,000	6.8%	0.9%
Weighted Mean Annual Wage	***$184,700***	**$192,000**	**$294,000**	**$297,000**	**100.0%**	**13.0%**
Business and Financial Operations Occupations						
Buyers and Purchasing Agents	$82,100	$90,000	$162,000	$174,000	2.5%	0.3%
Human Resources Specialists	$93,700	$102,000	$185,000	$198,000	8.3%	1.1%
Management Analysts	$115,200	$122,000	$204,000	$212,000	6.2%	0.8%
Training and Development Specialists	$89,100	$97,000	$176,000	$189,000	4.8%	0.6%
Market Research Analysts and Marketing Specialists	$96,200	$105,000	$190,000	$204,000	39.9%	5.4%
Project Management Specialists and Business Operations Specialists, All Other	$97,700	$107,000	$192,000	$207,000	15.9%	2.1%
Accountants and Auditors	$101,100	$107,000	$179,000	$186,000	10.0%	1.3%
Financial and Investment Analysts, Financial Risk Specialists, and Financial Spe	$120,400	$127,000	$214,000	$222,000	4.8%	0.6%
Other Business and Financial Operations Occupations	$98,500	$108,000	$194,000	$208,000	7.7%	1.0%
Weighted Mean Annual Wage	***$98,500***	**$107,000**	**$190,000**	**$202,000**	**100.0%**	**13.5%**
Computer and Mathematical Occupations						
Computer Systems Analysts	$125,400	$133,000	$223,000	$231,000	4.6%	1.0%
Computer User Support Specialists	$78,700	$86,000	$155,000	$167,000	8.3%	1.8%
Computer Network Architects	$148,300	$157,000	$263,000	$273,000	2.3%	0.5%
Network and Computer Systems Administrators	$106,700	$113,000	$189,000	$197,000	4.1%	0.9%
Database Administrators and Architects	$114,700	$121,000	$204,000	$211,000	2.9%	0.6%
Computer Programmers	$125,400	$133,000	$223,000	$231,000	2.5%	0.5%
Software Developers and Software Quality Assurance Analysts and Testers	$144,700	$153,000	$257,000	$267,000	52.2%	11.1%
Web Developers and Digital Interface Designers	$113,900	$121,000	$202,000	$210,000	11.2%	2.4%
Computer Occupations, All Other	$125,500	$133,000	$223,000	$231,000	4.6%	1.0%
Data Scientists and Mathematical Science Occupations, All Other	$148,700	$157,000	$264,000	$274,000	2.9%	0.6%
Other Computer and Mathematical Occupations	$130,700	$138,000	$232,000	$241,000	4.6%	1.0%
Weighted Mean Annual Wage	***$130,700***	**$139,000**	**$233,000**	**$243,000**	**100.0%**	**21.2%**

Source: U.S. Bureau of Labor Statistics
Keyser Marston Associates, Inc.
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APPENDIX A TABLE 2
AVERAGE ANNUAL WORKER COMPENSATION AND ESTIMATED HOUSEHOLD INCOME, 2020
OFFICE WORKER OCCUPATIONS
HOUSING NEEDS ASSESSMENT: WILLOW VILLAGE
CITY OF MENLO PARK, CA

Occupation [3]	2020 Avg. Worker Compensation[1]	Household Income Estimate [4] One Worker	Two Workers	Three+ Workers	% of Total Occupation Group [2]	% of Total Office Workers
Page 2 of 4						
Educational Instruction and Library Occupations						
Adult Basic Education, Adult Secondary Education, and English as a Second Lar	$95,500	$104,000	$188,000	$202,000	2.5%	0.2%
Tutors and Teachers and Instructors, All Other	$50,000	$58,000	$111,000	$127,000	7.9%	0.7%
Archivists	$93,500	$102,000	$184,000	$198,000	2.2%	0.2%
Curators	$81,000	$88,000	$160,000	$171,000	2.1%	0.2%
Librarians and Media Collections Specialists	$79,500	$87,000	$157,000	$168,000	38.8%	3.3%
Other Educational Instruction and Library Occupations	$76,500	$84,000	$151,000	$162,000	46.6%	4.0%
Weighted Mean Annual Wage	***$76,500***	**$84,000**	**$152,000**	**$164,000**	**100.0%**	**8.5%**
Arts, Design, Entertainment, Sports, and Media Occupations						
Art Directors	$144,700	$153,000	$257,000	$267,000	3.4%	0.4%
Special Effects Artists and Animators	$102,600	$109,000	$182,000	$189,000	3.4%	0.4%
Graphic Designers	$80,800	$88,000	$159,000	$171,000	6.6%	0.7%
Producers and Directors	$106,900	$113,000	$190,000	$197,000	11.0%	1.2%
News Analysts, Reporters, and Journalists	$82,500	$90,000	$163,000	$175,000	13.1%	1.4%
Public Relations Specialists	$88,600	$97,000	$175,000	$187,000	8.6%	0.9%
Editors	$93,000	$102,000	$183,000	$197,000	31.8%	3.4%
Writers and Authors	$104,300	$110,000	$185,000	$192,000	7.8%	0.8%
Other Arts, Design, Entertainment, Sports, and Media Occupations	$95,300	$104,000	$188,000	$202,000	14.3%	1.5%
Weighted Mean Annual Wage	***$95,300***	**$103,000**	**$182,000**	**$194,000**	**100.0%**	**10.6%**
Sales and Related Occupations						
First-Line Supervisors of Non-Retail Sales Workers	$85,400	$93,000	$168,000	$181,000	3.2%	0.5%
Advertising Sales Agents	$112,900	$120,000	$200,000	$208,000	14.6%	2.1%
Sales Representatives of Services, Except Advertising, Insurance, Financial Ser	$88,400	$97,000	$174,000	$187,000	57.0%	8.3%
Sales Representatives, Wholesale and Manufacturing, Except Technical and Sci	$84,600	$92,000	$167,000	$179,000	7.8%	1.1%
Real Estate Sales Agents	$73,000	$84,000	$162,000	$186,000	3.3%	0.5%
Other Sales and Related Occupations	$91,500	$100,000	$180,000	$194,000	14.1%	2.0%
Weighted Mean Annual Wage	***$91,500***	**$100,000**	**$177,000**	**$190,000**	**100.0%**	**14.5%**

Source: U.S. Bureau of Labor Statistics
Keyser Marston Associates, Inc.
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APPENDIX A TABLE 2
AVERAGE ANNUAL WORKER COMPENSATION AND ESTIMATED HOUSEHOLD INCOME, 2020
OFFICE WORKER OCCUPATIONS
HOUSING NEEDS ASSESSMENT: WILLOW VILLAGE
CITY OF MENLO PARK, CA

Occupation [3]	2020 Avg. Worker Compensation[1]	Household Income Estimate [4] One Worker	Two Workers	Three+ Workers	% of Total Occupation Group [2]	% of Total Office Workers
Page 3 of 4						
Office and Administrative Support Occupations						
First-Line Supervisors of Office and Administrative Support Workers	$75,800	$83,000	$149,000	$160,000	10.3%	1.6%
Bookkeeping, Accounting, and Auditing Clerks	$55,400	$64,000	$123,000	$141,000	4.8%	0.7%
Customer Service Representatives	$49,900	$65,000	$143,000	$175,000	31.7%	4.8%
Library Assistants, Clerical	$39,600	$52,000	$113,000	$139,000	15.8%	2.4%
Production, Planning, and Expediting Clerks	$65,300	$75,000	$145,000	$166,000	2.0%	0.3%
Executive Secretaries and Executive Administrative Assistants	$86,200	$94,000	$170,000	$182,000	4.9%	0.7%
Secretaries and Administrative Assistants, Except Legal, Medical, and Executive	$52,500	$60,000	$116,000	$134,000	6.1%	0.9%
Data Entry Keyers	$42,800	$56,000	$122,000	$150,000	2.2%	0.3%
Office Clerks, General	$49,600	$65,000	$142,000	$174,000	11.5%	1.7%
Other Office and Administrative Support Occupations	$53,700	$62,000	$119,000	$137,000	10.7%	1.6%
Weighted Mean Annual Wage	***$53,700***	**$66,000**	**$135,000**	**$159,000**	**100.0%**	**15.1%**

96.5%

[1] The methodology utilized by the Bureau of Labor Statistics (BLS) assumes hourly paid employees are employed full-time. BLS data is adjusted by KMA to reflect the local minimum wage. Annual compensation is calculated by BLS by multiplying hourly wages by 40 hours per work week and by 52 weeks.

[2] Occupation percentages are based on the 2020 National Industry - Specific Occupational Employment survey compiled by the Bureau of Labor Statistics. Wages are based on Occupational Employment Survey data applicable to San Mateo County as of 2020.

[3] Including occupations representing 2% or more of the major occupation group.

[4] Household income estimated based average worker compensation and ratios between employee income and household income identified in Table 4-5.

Source: U.S. Bureau of Labor Statistics
Keyser Marston Associates, Inc.
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APPENDIX A TABLE 3
ESTIMATED WORKER OCCUPATION DISTRIBUTION, 2020
FOOD SERVICE WORKERS
HOUSING NEEDS ASSESSMENT: WILLOW VILLAGE
CITY OF MENLO PARK, CA

	Worker Occupation Distribution Food Service
Major Occupations (2% or more)	
Management Occupations	*2.5%*
Food Preparation and Serving Related Occupations	*95.4%*
Sales and Related Occupations	*not included based on practice of providing food free of charge.*
Transportation and Material Moving Occupations	not included as serve on-site rather than delivery
All Other Worker Occupations - Food Service	*2.1%*
TOTAL	100.0%

Source: Bureau of Labor Statistics
Keyser Marston Associates, Inc.
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APPENDIX A TABLE 4
AVERAGE ANNUAL WORKER COMPENSATION AND ESTIMATED HOUSEHOLD INCOME, 2020
FOOD SERVICE WORKER OCCUPATIONS
HOUSING NEEDS ASSESSMENT: WILLOW VILLAGE
CITY OF MENLO PARK, CA

Occupation [3]	2020 Avg. Worker Compensation[1]	Household Income Estimate [4] One Worker	Two Workers	Three+ Workers	% of Total Occupation Group [2]	% of Total ood Service Workers
Management Occupations						
General and Operations Managers	$162,300	$169,000	$260,000	$264,000	31.6%	0.8%
Food Service Managers	$67,200	$77,000	$149,000	$171,000	66.3%	1.7%
Other Management Occupations	$97,900	$107,000	$193,000	$207,000	2.1%	0.1%
Weighted Mean Annual Wage	***$97,900***	**$107,000**	**$185,000**	**$201,000**	**100.0%**	**2.5%**
Food Preparation and Serving Related Occupations						
First-Line Supervisors of Food Preparation and Serving Workers	$50,000	$58,000	$111,000	$127,000	8.3%	7.9%
Cooks, Fast Food	$31,700	$42,000	$91,000	$111,000	6.5%	6.2%
Cooks, Restaurant	$40,000	$52,000	$114,000	$140,000	11.6%	11.1%
Food Preparation Workers	$34,800	$46,000	$99,000	$122,000	4.8%	4.6%
Bartenders	$38,900	$51,000	$111,000	$136,000	2.7%	2.6%
Fast Food and Counter Workers	$34,000	$45,000	$97,000	$119,000	34.2%	32.6%
Waiters and Waitresses	$40,900	$54,000	$117,000	$143,000	19.6%	18.7%
Dining Room and Cafeteria Attendants and Bartender Helpers	$37,700	$49,000	$108,000	$132,000	2.8%	2.7%
Dishwashers	$34,400	$45,000	$98,000	$120,000	3.6%	3.4%
Hosts and Hostesses, Restaurant, Lounge, and Coffee Shop	$37,000	$49,000	$106,000	$129,000	3.4%	3.3%
Other Food Preparation and Serving Related Occupations	$37,700	$49,000	$108,000	$132,000	2.3%	2.2%
Weighted Mean Annual Wage	***$37,700***	**$49,000**	**$105,000**	**$128,000**	**100.0%**	**95.4%**
Sales and Related Occupations	*Assumes food service continues to be provided free of charge. Therefore, no sales staff.*					
Transportation and Material Moving Occupations	*not included given on-site food service not delivery.*					
						97.9%

[1] The methodology utilized by the Bureau of Labor Statistics (BLS) assumes hourly paid employees are employed full-time. BLS data is adjusted by KMA to reflect the local minimum wage. Annual compensation is calculated by BLS by multiplying hourly wages by 40 hours per work week and by 52 weeks.

[2] Occupation percentages are based on the 2020 National Industry - Specific Occupational Employment survey compiled by the Bureau of Labor Statistics. Wages are based on Occupational Employment Survey data applicable to San Mateo County as of 2020.

[3] Including occupations representing 2% or more of the major occupation group.

[4] Household income estimated based average worker compensation and ratios between employee income and household income identified in Table 4-5.

Source: U.S. Bureau of Labor Statistics
Keyser Marston Associates, Inc.
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APPENDIX A TABLE 5
ESTIMATED WORKER OCCUPATION DISTRIBUTION, 2020
RETAIL SHOP WORKERS
HOUSING NEEDS ASSESSMENT: WILLOW VILLAGE
CITY OF MENLO PARK, CA

	Worker Occupation Distribution Retail Shop
Major Occupations (2% or more)	
Management Occupations	*3.0%*
Healthcare Practitioners and Technical Occupations	*10.2%*
Personal Care and Service Occupations	*8.9%*
Sales and Related Occupations	*50.7%*
Office and Administrative Support Occupations	*7.5%*
Installation, Maintenance, and Repair Occupations	*2.4%*
Production Occupations	*5.5%*
Transportation and Material Moving Occupations	*6.1%*
All Other Worker Occupations - Retail Shop	*5.7%*
TOTAL	100.0%

Source: Bureau of Labor Statistics
Keyser Marston Associates, Inc.
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APPENDIX A TABLE 6
AVERAGE ANNUAL WORKER COMPENSATION AND ESTIMATED HOUSEHOLD INCOME, 2020
RETAIL SHOP WORKER OCCUPATIONS
HOUSING NEEDS ASSESSMENT: WILLOW VILLAGE
CITY OF MENLO PARK, CA

Occupation [3]	2020 Avg. Worker Compensation[1]	Household Income Estimate [4] One Worker	Two Workers	Three+ Workers	% of Total Occupation Group [2]	% of Total Retail Shop Workers
Page 1 of 2						
Management Occupations						
General and Operations Managers	$162,300	$169,000	$260,000	$264,000	75.7%	2.3%
Sales Managers	$173,500	$181,000	$278,000	$282,000	12.1%	0.4%
Other Management Occupations	$163,800	$171,000	$263,000	$267,000	12.2%	0.4%
Weighted Mean Annual Wage	***$163,800***	**$171,000**	**$263,000**	**$267,000**	**100.0%**	**3.0%**
Healthcare Practitioners and Technical Occupations						
Pharmacists	$154,600	$161,000	$248,000	$252,000	36.7%	3.8%
Pharmacy Technicians	$56,000	$65,000	$124,000	$143,000	57.1%	5.8%
Opticians, Dispensing	$54,200	$62,000	$120,000	$138,000	2.4%	0.2%
Other Healthcare Practitioners and Technical Occupations	$93,500	$102,000	$184,000	$198,000	3.8%	0.4%
Weighted Mean Annual Wage	***$93,500***	**$102,000**	**$172,000**	**$185,000**	**100.0%**	**10.2%**
Personal Care and Service Occupations						
Supervisors of Personal Service and Entertainment and Rec Workers	$59,000	$68,000	$131,000	$150,000	4.4%	0.4%
Barbers	$34,600	$45,000	$99,000	$121,000	3.6%	0.3%
Hairdressers, Hairstylists, and Cosmetologists	$38,600	$51,000	$110,000	$135,000	61.3%	5.5%
Manicurists and Pedicurists	$32,000	$42,000	$91,000	$112,000	17.6%	1.6%
Skincare Specialists	$43,900	$58,000	$126,000	$154,000	8.1%	0.7%
Other Personal Care and Service Occupations	$38,600	$51,000	$110,000	$135,000	5.0%	0.4%
Weighted Mean Annual Wage	***$38,600***	**$51,000**	**$108,000**	**$133,000**	**100.0%**	**8.9%**
Sales and Related Occupations						
First-Line Supervisors of Retail Sales Workers	$50,400	$58,000	$112,000	$128,000	11.4%	5.8%
Cashiers	$34,500	$45,000	$99,000	$121,000	16.9%	8.6%
Counter and Rental Clerks	$41,100	$54,000	$118,000	$144,000	2.3%	1.2%
Retail Salespersons	$37,800	$50,000	$108,000	$132,000	61.0%	31.0%
Sales Representatives of Services	$88,400	$97,000	$174,000	$187,000	5.7%	2.9%
Other Sales and Related Occupations	$41,800	$55,000	$120,000	$146,000	2.7%	1.4%
Weighted Mean Annual Wage	***$41,800***	**$53,000**	**$111,000**	**$134,000**	**100.0%**	**50.7%**

Source: U.S. Bureau of Labor Statistics
Keyser Marston Associates, Inc.
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APPENDIX A TABLE 6
AVERAGE ANNUAL WORKER COMPENSATION AND ESTIMATED HOUSEHOLD INCOME, 2020
RETAIL SHOP WORKER OCCUPATIONS
HOUSING NEEDS ASSESSMENT: WILLOW VILLAGE
CITY OF MENLO PARK, CA

Occupation [3]	2020 Avg. Worker Compensation[1]	Household Income Estimate [4] One Worker	Two Workers	Three+ Workers	% of Total Occupation Group [2]	% of Total Retail Shop Workers
Page 2 of 2						
Office and Administrative Support Occupations						
First-Line Supervisors of Office and Admin Support Workers	$75,800	$83,000	$149,000	$160,000	6.2%	0.5%
Billing and Posting Clerks	$57,200	$66,000	$127,000	$146,000	2.1%	0.2%
Bookkeeping, Accounting, and Auditing Clerks	$55,400	$64,000	$123,000	$141,000	10.9%	0.8%
Customer Service Representatives	$49,900	$65,000	$143,000	$175,000	21.5%	1.6%
Receptionists and Information Clerks	$42,200	$55,000	$121,000	$148,000	17.8%	1.3%
Shipping, Receiving, and Inventory Clerks	$44,700	$59,000	$128,000	$156,000	10.3%	0.8%
Secretaries and Administrative Assistants, Except Legal, Medical, and Exec	$52,500	$60,000	$116,000	$134,000	5.6%	0.4%
Office Clerks, General	$49,600	$65,000	$142,000	$174,000	16.3%	1.2%
Other Office and Administrative Support Occupations	$50,500	$58,000	$112,000	$129,000	9.3%	0.7%
Weighted Mean Annual Wage	***$50,500***	**$63,000**	**$131,000**	**$156,000**	**100.0%**	**7.5%**
Installation, Maintenance, and Repair Occupations						
First-Line Supervisors of Mechanics, Installers, and Repairers	$92,800	$101,000	$183,000	$196,000	4.9%	0.1%
Computer, Automated Teller, and Office Machine Repairers	$47,200	$62,000	$135,000	$165,000	27.1%	0.6%
Electronic Equipment Installers and Repairers, Motor Vehicles	$48,500	$64,000	$139,000	$170,000	2.6%	0.1%
Audiovisual Equipment Installers and Repairers	$63,200	$73,000	$140,000	$161,000	10.8%	0.3%
Home Appliance Repairers	$59,100	$68,000	$131,000	$150,000	12.5%	0.3%
Maintenance and Repair Workers, General	$58,100	$67,000	$129,000	$148,000	8.8%	0.2%
Installation, Maintenance, and Repair Workers, All Other	$58,400	$67,000	$129,000	$149,000	5.7%	0.1%
Other Installation, Maintenance, and Repair Occupations	$57,000	$66,000	$126,000	$145,000	27.4%	0.7%
Weighted Mean Annual Wage	***$57,000***	**$68,000**	**$134,000**	**$156,000**	**100.0%**	**2.4%**
Production Occupations						
First-Line Supervisors of Production and Operating Workers	$78,100	$85,000	$154,000	$165,000	6.5%	0.4%
Miscellaneous Assemblers and Fabricators	$44,400	$58,000	$127,000	$155,000	3.6%	0.2%
Laundry and Dry-Cleaning Workers	$38,800	$51,000	$111,000	$136,000	52.4%	2.9%
Pressers, Textile, Garment, and Related Materials	$32,900	$43,000	$94,000	$115,000	16.3%	0.9%
Sewing Machine Operators	$35,400	$46,000	$101,000	$124,000	2.5%	0.1%
Tailors, Dressmakers, and Custom Sewers	$55,200	$64,000	$122,000	$141,000	4.6%	0.2%
Inspectors, Testers, Sorters, Samplers, and Weighers	$50,100	$58,000	$111,000	$128,000	2.4%	0.1%
Jewelers and Precious Stone and Metal Workers	$37,300	$49,000	$107,000	$131,000	4.1%	0.2%
Other Production Occupations	$41,700	$55,000	$119,000	$146,000	7.7%	0.4%
Weighted Mean Annual Wage	***$41,700***	**$53,000**	**$112,000**	**$135,000**	**100.0%**	**5.5%**
Transportation and Material Moving Occupations						
First-Line Supervisors of Transportation & Material Moving Workers	$70,400	$81,000	$156,000	$179,000	3.4%	0.2%
Driver/Sales Workers	$37,800	$50,000	$108,000	$132,000	10.4%	0.6%
Light Truck Drivers	$52,400	$60,000	$116,000	$133,000	24.9%	1.5%
Laborers and Freight, Stock, and Material Movers, Hand	$41,800	$55,000	$120,000	$146,000	15.6%	0.9%
Stockers and Order Fillers	$38,000	$50,000	$109,000	$133,000	41.2%	2.5%
Other Transportation and Material Moving Occupations	$43,500	$57,000	$124,000	$152,000	4.5%	0.3%
Weighted Mean Annual Wage	***$43,500***	**$55,000**	**$115,000**	**$137,000**	**100.0%**	**6.1%**
						94.3%

[1] The methodology utilized by the Bureau of Labor Statistics (BLS) assumes hourly paid employees are employed full-time. BLS data is adjusted by KMA to reflect the local minimum wage. Annual compensation is calculated by BLS by multiplying hourly wages by 40 hours per work week and by 52 weeks.

[2] Occupation percentages are based on the 2020 National Industry - Specific Occupational Employment survey compiled by the Bureau of Labor Statistics. Wages are based on Occupational Employment Survey data applicable to San Mateo County as of 2020.

[3] Including occupations representing 2% or more of the major occupation group.

[4] Household income estimated based average worker compensation and ratios between employee income and household income identified in Table 4-5.

Source: U.S. Bureau of Labor Statistics
Keyser Marston Associates, Inc.
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APPENDIX A TABLE 7
ESTIMATED WORKER OCCUPATION DISTRIBUTION, 2020
HOTEL WORKERS
HOUSING NEEDS ASSESSMENT: WILLOW VILLAGE
CITY OF MENLO PARK, CA

	Worker Occupation Distribution Hotel
Major Occupations (2% or more)	
Management Occupations	*4.6%*
Food Preparation and Serving Related Occupations	*23.4%*
Building and Grounds Cleaning and Maintenance Occupations	*31.2%*
Personal Care and Service Occupations	*3.8%*
Sales and Related Occupations	*2.4%*
Office and Administrative Support Occupations	*21.0%*
Installation, Maintenance, and Repair Occupations	*5.8%*
Production Occupations	*2.5%*
All Other Worker Occupations - Hotel	*5.2%*
TOTAL	100.0%

Source: Bureau of Labor Statistics
Keyser Marston Associates, Inc.
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APPENDIX A TABLE 8
AVERAGE ANNUAL WORKER COMPENSATION AND ESTIMATED HOUSEHOLD INCOME, 2020
HOTEL WORKER OCCUPATIONS
HOUSING NEEDS ASSESSMENT: WILLOW VILLAGE
CITY OF MENLO PARK, CA

Occupation [3]	2020 Avg. Worker Compensation[1]	Household Income Estimate [4] One Worker	Two Workers	Three+ Workers	% of Total Occupation Group [2]	% of Total Hotel Workers
Page 1 of 2						
Management Occupations						
General and Operations Managers	$162,300	$169,000	$260,000	$264,000	21.2%	1.0%
Sales Managers	$173,500	$181,000	$278,000	$282,000	7.4%	0.3%
Administrative Services and Facilities Managers	$130,900	$139,000	$232,000	$241,000	4.3%	0.2%
Financial Managers	$191,400	$200,000	$307,000	$312,000	4.2%	0.2%
Human Resources Managers	$174,700	$182,000	$280,000	$284,000	2.1%	0.1%
Food Service Managers	$67,200	$77,000	$149,000	$171,000	8.5%	0.4%
Lodging Managers	$105,600	$112,000	$187,000	$195,000	45.5%	2.1%
Personal Service Managers, All Other; Entertainment and Recreatic	$173,900	$181,000	$279,000	$283,000	3.1%	0.1%
Other Management Occupations	$128,400	$136,000	$228,000	$237,000	3.8%	0.2%
Weighted Mean Annual Wage	***$128,400***	**$136,000**	**$219,000**	**$227,000**	**100.0%**	**4.6%**
Food Preparation and Serving Related Occupations						
Chefs and Head Cooks	$71,500	$82,000	$158,000	$182,000	2.9%	0.7%
First-Line Supervisors of Food Preparation and Serving Workers	$50,000	$58,000	$111,000	$127,000	6.0%	1.4%
Cooks, Restaurant	$40,000	$52,000	$114,000	$140,000	16.1%	3.8%
Food Preparation Workers	$34,800	$46,000	$99,000	$122,000	2.1%	0.5%
Bartenders	$38,900	$51,000	$111,000	$136,000	8.0%	1.9%
Fast Food and Counter Workers	$34,000	$45,000	$97,000	$119,000	4.5%	1.1%
Waiters and Waitresses	$40,900	$54,000	$117,000	$143,000	30.2%	7.1%
Food Servers, Nonrestaurant	$36,800	$48,000	$105,000	$129,000	6.1%	1.4%
Dining Room and Cafeteria Attendants and Bartender Helpers	$37,700	$49,000	$108,000	$132,000	12.1%	2.8%
Dishwashers	$34,400	$45,000	$98,000	$120,000	6.0%	1.4%
Hosts and Hostesses, Restaurant, Lounge, and Coffee Shop	$37,000	$49,000	$106,000	$129,000	3.6%	0.8%
Other Food Preparation and Serving Related Occupations	$40,400	$53,000	$116,000	$141,000	2.3%	0.5%
Weighted Mean Annual Wage	***$40,400***	**$52,000**	**$112,000**	**$136,000**	**100.0%**	**23.4%**
Building and Grounds Cleaning and Maintenance Occupations						
First-Line Supervisors of Housekeeping and Janitorial Workers	$54,600	$63,000	$121,000	$139,000	6.5%	2.0%
Janitors and Cleaners, Except Maids and Housekeeping	$42,300	$55,000	$121,000	$148,000	5.3%	1.7%
Maids and Housekeeping Cleaners	$44,600	$58,000	$128,000	$156,000	85.9%	26.8%
Other Building and Grounds Cleaning and Maintenance Occupation	$45,100	$59,000	$129,000	$158,000	2.3%	0.7%
Weighted Mean Annual Wage	***$45,100***	**$58,000**	**$127,000**	**$155,000**	**100.0%**	**31.2%**
Personal Care and Service Occupations						
Supervisors of Personal Service, Entertainment and Recr Workers	$59,000	$68,000	$131,000	$150,000	6.0%	0.2%
Ushers, Lobby Attendants, and Ticket Takers	$34,600	$45,000	$99,000	$121,000	2.0%	0.1%
Amusement and Recreation Attendants	$32,900	$43,000	$94,000	$115,000	18.1%	0.7%
Locker Room, Coatroom, and Dressing Room Attendants	$37,400	$49,000	$107,000	$131,000	4.0%	0.2%
Skincare Specialists	$43,900	$58,000	$126,000	$154,000	3.4%	0.1%
Baggage Porters and Bellhops	$34,800	$46,000	$99,000	$122,000	28.8%	1.1%
Concierges	$46,100	$60,000	$132,000	$161,000	16.5%	0.6%
Recreation Workers	$37,900	$50,000	$108,000	$133,000	8.0%	0.3%
Other Personal Care and Service Occupations	$39,000	$51,000	$112,000	$136,000	13.1%	0.5%
Weighted Mean Annual Wage	***$39,000***	**$51,000**	**$109,000**	**$133,000**	**100.0%**	**3.8%**

Source: U.S. Bureau of Labor Statistics
Keyser Marston Associates, Inc.
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APPENDIX A TABLE 8
AVERAGE ANNUAL WORKER COMPENSATION AND ESTIMATED HOUSEHOLD INCOME, 2020
HOTEL WORKER OCCUPATIONS
HOUSING NEEDS ASSESSMENT: WILLOW VILLAGE
CITY OF MENLO PARK, CA

Occupation [3]	2020 Avg. Worker Compensation[1]	Household Income Estimate [4] One Worker	Two Workers	Three+ Workers	% of Total Occupation Group [2]	% of Total Hotel Workers
Page 2 of 2						
Sales and Related Occupations						
First-Line Supervisors of Retail Sales Workers	$50,400	$58,000	$112,000	$128,000	3.9%	0.1%
First-Line Supervisors of Non-Retail Sales Workers	$85,400	$93,000	$168,000	$181,000	4.0%	0.1%
Cashiers	$34,500	$45,000	$99,000	$121,000	18.6%	0.5%
Retail Salespersons	$37,800	$50,000	$108,000	$132,000	11.1%	0.3%
Sales Reps of Services, Except Advertising, Insurance, Financial	$88,400	$97,000	$174,000	$187,000	54.3%	1.3%
Sales Reps, Wholesale & Manufacturing, Except Tech & Scientific	$84,600	$92,000	$167,000	$179,000	2.6%	0.1%
Other Sales and Related Occupations	$70,000	$81,000	$155,000	$178,000	5.5%	0.1%
Weighted Mean Annual Wage	***$70,000***	**$79,000**	**$149,000**	**$165,000**	**100.0%**	**2.4%**
Office and Administrative Support Occupations						
Supervisors of Office and Admin Support Workers	$75,800	$83,000	$149,000	$160,000	9.4%	2.0%
Bookkeeping, Accounting, and Auditing Clerks	$55,400	$64,000	$123,000	$141,000	5.1%	1.1%
Hotel, Motel, and Resort Desk Clerks	$42,200	$55,000	$121,000	$148,000	74.4%	15.6%
Secretaries & Admin Assistants, Except Legal, Medical, Executive	$52,500	$60,000	$116,000	$134,000	2.0%	0.4%
Other Office and Administrative Support Occupations	$46,600	$61,000	$133,000	$163,000	9.1%	1.9%
Weighted Mean Annual Wage	***$46,600***	**$59,000**	**$125,000**	**$150,000**	**100.0%**	**21.0%**
Installation, Maintenance, and Repair Occupations						
First-Line Supervisors of Mechanics, Installers, and Repairers	$92,800	$101,000	$183,000	$196,000	7.5%	0.4%
Maintenance and Repair Workers, General	$58,100	$67,000	$129,000	$148,000	89.6%	5.2%
Other Installation, Maintenance, and Repair Occupations	$60,800	$70,000	$135,000	$155,000	2.9%	0.2%
Weighted Mean Annual Wage	***$60,800***	**$70,000**	**$133,000**	**$152,000**	**100.0%**	**5.8%**
Production Occupations						
First-Line Supervisors of Production and Operating Workers	$78,100	$85,000	$154,000	$165,000	2.0%	0.1%
Bakers	$38,600	$51,000	$110,000	$135,000	5.0%	0.1%
Laundry and Dry-Cleaning Workers	$38,800	$51,000	$111,000	$136,000	87.6%	2.2%
Other Production Occupations	$39,600	$52,000	$113,000	$139,000	5.4%	0.1%
Weighted Mean Annual Wage	***$39,600***	**$52,000**	**$112,000**	**$137,000**	**100.0%**	**2.5%**
						94.8%

[1] The methodology utilized by the Bureau of Labor Statistics (BLS) assumes hourly paid employees are employed full-time. BLS data is adjusted by KMA to reflect the local minimum wage. Annual compensation is calculated by BLS by multiplying hourly wages by 40 hours per work week and by 52 weeks.

[2] Occupation percentages are based on the 2020 National Industry - Specific Occupational Employment survey compiled by the Bureau of Labor Statistics. Wages are based on Occupational Employment Survey data applicable to San Mateo County as of 2020.

[3] Including occupations representing 2% or more of the major occupation group.

[4] Household income estimated based average worker compensation and ratios between employee income and household income identified in Table 4-5.

Source: U.S. Bureau of Labor Statistics
Keyser Marston Associates, Inc.
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APPENDIX A TABLE 9
ESTIMATED WORKER OCCUPATION DISTRIBUTION, 2020
RESTAURANT WORKERS
HOUSING NEEDS ASSESSMENT: WILLOW VILLAGE
CITY OF MENLO PARK, CA

	Worker Occupation Distribution Restaurant
Major Occupations (2% or more)	
Management Occupations	*2.4%*
Food Preparation and Serving Related Occupations	*89.5%*
Sales and Related Occupations	*3.4%*
Transportation and Material Moving Occupations	*2.6%*
All Other Worker Occupations - Restaurant	*2.1%*
TOTAL	100.0%

Source: Bureau of Labor Statistics
Keyser Marston Associates, Inc.
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APPENDIX A TABLE 10
AVERAGE ANNUAL WORKER COMPENSATION AND ESTIMATED HOUSEHOLD INCOME, 2020
RESTAURANT WORKER OCCUPATIONS
HOUSING NEEDS ASSESSMENT: WILLOW VILLAGE
CITY OF MENLO PARK, CA

Occupation [3]	2020 Avg. Worker Compensation [1]	Household Income Estimate [4] One Worker	Two Workers	Three+ Workers	% of Total Occupation Group [2]	% of Total Restaurant Workers
Management Occupations						
General and Operations Managers	$162,300	$169,000	$260,000	$264,000	32.1%	0.8%
Food Service Managers	$67,200	$77,000	$149,000	$171,000	65.7%	1.6%
Other Management Occupations	$98,400	$107,000	$194,000	$208,000	2.1%	0.1%
Weighted Mean Annual Wage	***$98,400***	**$107,000**	**$186,000**	**$202,000**	**100.0%**	**2.4%**
Food Preparation and Serving Related Occupations						
First-Line Supervisors of Food Preparation and Serving Workers	$50,000	$58,000	$111,000	$127,000	8.3%	7.4%
Cooks, Fast Food	$31,700	$42,000	$91,000	$111,000	6.4%	5.8%
Cooks, Restaurant	$40,000	$52,000	$114,000	$140,000	11.6%	10.4%
Food Preparation Workers	$34,800	$46,000	$99,000	$122,000	4.7%	4.2%
Bartenders	$38,900	$51,000	$111,000	$136,000	3.6%	3.2%
Fast Food and Counter Workers	$34,000	$45,000	$97,000	$119,000	33.6%	30.1%
Waiters and Waitresses	$40,900	$54,000	$117,000	$143,000	19.6%	17.5%
Dining Room and Cafeteria Attendants and Bartender Helpers	$37,700	$49,000	$108,000	$132,000	2.8%	2.5%
Dishwashers	$34,400	$45,000	$98,000	$120,000	3.6%	3.2%
Hosts and Hostesses, Restaurant, Lounge, and Coffee Shop	$37,000	$49,000	$106,000	$129,000	3.4%	3.1%
Other Food Preparation and Serving Related Occupations	$37,700	$49,000	$108,000	$132,000	2.4%	2.1%
Weighted Mean Annual Wage	***$37,700***	**$49,000**	**$105,000**	**$128,000**	**100.0%**	**89.5%**
Sales and Related Occupations						
Cashiers	$34,500	$45,000	$99,000	$121,000	93.8%	3.2%
Retail Salespersons	$37,800	$50,000	$108,000	$132,000	3.4%	0.1%
Other Sales and Related Occupations	$34,600	$45,000	$99,000	$121,000	2.8%	0.1%
Weighted Mean Annual Wage	***$34,600***	**$45,000**	**$99,000**	**$121,000**	**100.0%**	**3.4%**
Transportation and Material Moving Occupations						
Driver/Sales Workers	$37,800	$50,000	$108,000	$132,000	87.4%	2.3%
Light Truck Drivers	$52,400	$60,000	$116,000	$133,000	9.4%	0.2%
Other Transportation and Material Moving Occupations	$39,200	$51,000	$112,000	$137,000	3.1%	0.1%
Weighted Mean Annual Wage	***$39,200***	**$51,000**	**$109,000**	**$132,000**	**100.0%**	**2.6%**
						97.9%

[1] The methodology utilized by the Bureau of Labor Statistics (BLS) assumes hourly paid employees are employed full-time. BLS data is adjusted by KMA to reflect the local minimum wage. Annual compensation is calculated by BLS by multiplying hourly wages by 40 hours per work week and by 52 weeks.

[2] Occupation percentages are based on the 2020 National Industry - Specific Occupational Employment survey compiled by the Bureau of Labor Statistics. Wages are based on Occupational Employment Survey data applicable to San Mateo County as of 2020.

[3] Including occupations representing 2% or more of the major occupation group.

[4] Household income estimated based average worker compensation and ratios between employee income and household income identified in Table 4-5.

Source: U.S. Bureau of Labor Statistics
Keyser Marston Associates, Inc.
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APPENDIX A TABLE 11
ESTIMATED WORKER OCCUPATION DISTRIBUTION, 2020
GROCERY WORKERS
HOUSING NEEDS ASSESSMENT: WILLOW VILLAGE
CITY OF MENLO PARK, CA

	Worker Occupation Distribution Grocery
Major Occupations (2% or more)	
Healthcare Practitioners and Technical Occupations	*2.3%*
Food Preparation and Serving Related Occupations	*13.8%*
Sales and Related Occupations	*38.7%*
Office and Administrative Support Occupations	*7.5%*
Production Occupations	*7.7%*
Transportation and Material Moving Occupations	*25.9%*
All Other Worker Occupations - Grocery	*4.1%*
TOTAL	100.0%

Source: Bureau of Labor Statistics
Keyser Marston Associates, Inc.
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APPENDIX A TABLE 12
AVERAGE ANNUAL WORKER COMPENSATION AND ESTIMATED HOUSEHOLD INCOME, 2020
GROCERY WORKER OCCUPATIONS
HOUSING NEEDS ASSESSMENT: WILLOW VILLAGE
CITY OF MENLO PARK, CA

Occupation [3]	2020 Avg. Worker Compensation[1]	Household Income Estimate [4] One Worker	Two Workers	Three+ Workers	% of Total Occupation Group [2]	% of Total Grocery Workers
Page 1 of 2						
Healthcare Practitioners and Technical Occupations						
Pharmacists	$154,600	$161,000	$248,000	$252,000	37.6%	0.9%
Pharmacy Technicians	$56,000	$65,000	$124,000	$143,000	61.9%	1.4%
Other Healthcare Practitioners and Technical Occupations	$93,300	$102,000	$184,000	$197,000	0.5%	0.0%
Weighted Mean Annual Wage	***$93,300***	**$101,000**	**$171,000**	**$184,000**	**100.0%**	**2.3%**
Food Preparation and Serving Related Occupations						
First-Line Supervisors of Food Preparation and Serving Workers	$50,000	$58,000	$111,000	$127,000	7.6%	1.1%
Cooks, Restaurant	$40,000	$52,000	$114,000	$140,000	2.0%	0.3%
Cooks, Short Order	$35,300	$46,000	$101,000	$124,000	3.0%	0.4%
Food Preparation Workers	$34,800	$46,000	$99,000	$122,000	47.5%	6.6%
Fast Food and Counter Workers	$34,000	$45,000	$97,000	$119,000	32.5%	4.5%
Other Food Preparation and Serving Related Occupations	$35,900	$47,000	$103,000	$126,000	7.2%	1.0%
Weighted Mean Annual Wage	***$35,900***	**$47,000**	**$100,000**	**$122,000**	**100.0%**	**13.8%**
Sales and Related Occupations						
First-Line Supervisors of Retail Sales Workers	$50,400	$58,000	$112,000	$128,000	13.6%	5.3%
Cashiers	$34,500	$45,000	$99,000	$121,000	73.7%	28.5%
Retail Salespersons	$37,800	$50,000	$108,000	$132,000	10.9%	4.2%
Other Sales and Related Occupations	$37,100	$49,000	$106,000	$130,000	1.9%	0.7%
Weighted Mean Annual Wage	***$37,100***	**$47,000**	**$102,000**	**$123,000**	**100.0%**	**38.7%**
Office and Administrative Support Occupations						
First-Line Supervisors of Office and Administrative Support Workers	$75,800	$83,000	$149,000	$160,000	18.1%	1.4%
Bookkeeping, Accounting, and Auditing Clerks	$55,400	$64,000	$123,000	$141,000	7.2%	0.5%
Customer Service Representatives	$49,900	$65,000	$143,000	$175,000	45.9%	3.4%
Shipping, Receiving, and Inventory Clerks	$44,700	$59,000	$128,000	$156,000	11.8%	0.9%
Secretaries and Administrative Assistants, Except Legal, Medical, and	$52,500	$60,000	$116,000	$134,000	2.8%	0.2%
Office Clerks, General	$49,600	$65,000	$142,000	$174,000	7.1%	0.5%
Other Office and Administrative Support Occupations	$54,800	$63,000	$121,000	$140,000	6.9%	0.5%
Weighted Mean Annual Wage	***$54,800***	**$67,000**	**$139,000**	**$164,000**	**100.0%**	**7.5%**
Production Occupations						
First-Line Supervisors of Production and Operating Workers	$78,100	$85,000	$154,000	$165,000	9.5%	0.7%
Bakers	$38,600	$51,000	$110,000	$135,000	23.9%	1.8%
Butchers and Meat Cutters	$41,200	$54,000	$118,000	$144,000	51.9%	4.0%
Meat, Poultry, and Fish Cutters and Trimmers	$37,100	$49,000	$106,000	$130,000	7.5%	0.6%
Food Batchmakers	$37,100	$49,000	$106,000	$130,000	3.5%	0.3%
Other Production Occupations	$43,700	$57,000	$125,000	$153,000	3.8%	0.3%
Weighted Mean Annual Wage	***$43,700***	**$56,000**	**$118,000**	**$143,000**	**100.0%**	**7.7%**

Sources: U.S. Bureau of Labor Statistics, California Employment Development Department
Keyser Marston Associates, Inc.
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APPENDIX A TABLE 12
AVERAGE ANNUAL WORKER COMPENSATION AND ESTIMATED HOUSEHOLD INCOME, 2020
GROCERY WORKER OCCUPATIONS
HOUSING NEEDS ASSESSMENT: WILLOW VILLAGE
CITY OF MENLO PARK, CA

Occupation [3]	2020 Avg. Worker Compensation[1]	Household Income Estimate [4] One Worker	Two Workers	Three+ Workers	% of Total Occupation Group [2]	% of Total Grocery Workers
Page 2 of 2						
Transportation and Material Moving Occupations						
First-Line Supervisors of Transportation and Material Moving Workers	$70,400	$81,000	$156,000	$179,000	4.0%	1.0%
Laborers and Freight, Stock, and Material Movers, Hand	$41,800	$55,000	$120,000	$146,000	4.5%	1.2%
Packers and Packagers, Hand	$35,900	$47,000	$103,000	$126,000	14.7%	3.8%
Stockers and Order Fillers	$38,000	$50,000	$109,000	$133,000	74.3%	19.2%
Other Transportation and Material Moving Occupations	$39,200	$51,000	$112,000	$137,000	2.5%	0.7%
Weighted Mean Annual Wage	***$39,200***	**$51,000**	**$111,000**	**$134,000**	**100.0%**	**25.9%**
						95.9%

[1] The methodology utilized by the Bureau of Labor Statistics (BLS) assumes hourly paid employees are employed full-time. BLS data is adjusted by KMA to reflect the local minimum wage. Annual compensation is calculated by BLS by multiplying hourly wages by 40 hours per work week and by 52 weeks.

[2] Occupation percentages are based on the 2020 National Industry - Specific Occupational Employment survey compiled by the Bureau of Labor Statistics. Wages are based on Occupational Employment Survey data applicable to San Mateo County as of 2020.

[3] Including occupations representing 2% or more of the major occupation group.

[4] Household income estimated based average worker compensation and ratios between employee income and household income identified in Table 4-5.

Sources: U.S. Bureau of Labor Statistics, California Employment Development Department
Keyser Marston Associates, Inc.
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APPENDIX A TABLE 13
AVERAGE ANNUAL WORKER COMPENSATION AND ESTIMATED HOUSEHOLD INCOME, 2020
FITNESS CENTER WORKER OCCUPATIONS
HOUSING NEEDS ASSESSMENT: WILLOW VILLAGE
CITY OF MENLO PARK, CA

Representative Occupations [2]	Estimated Number[2]	2020 Avg. Worker Compensation[1]	Household Income Estimate [4] One Worker	Two Workers	Three+ Workers	% of Total Occupation Group	% of Total Fitness Ctr Workers
Coaches and Scouts	1	$55,500	$64,000	$123,000	$141,000	5.9%	5.9%
Lifeguards, Ski Patrol, and Other Recreational Protective Service Workers	1	$34,200	$45,000	$98,000	$120,000	5.9%	5.9%
Athletic Trainers	1	$61,100	$70,000	$135,000	$156,000	5.9%	5.9%
First-Line Supervisors of Personal Service and Entertainment and Recreation	1	$59,000	$68,000	$131,000	$150,000	7.7%	5.9%
Amusement and Recreation Attendants	2	$32,900	$43,000	$94,000	$115,000	15.4%	11.8%
Exercise Trainers and Group Fitness Instructors	10	$62,900	$72,000	$139,000	$160,000	76.9%	58.8%
Receptionists and Information Clerks	1	$42,200	$55,000	$121,000	$148,000	5.9%	5.9%
	17						
							100.0%

[1] The methodology utilized by the Bureau of Labor Statistics (BLS) assumes hourly paid employees are employed full-time. BLS data is adjusted by KMA to reflect the local minimum wage. Annual compensation is calculated by BLS by multiplying hourly wages by 40 hours per work week and by 52 weeks.

[2] Representative employee occupations selected by KMA from OES data.

[3] Household income estimated based average worker compensation and ratios between employee income and household income identified in Table 4-5.

Source: U.S. Bureau of Labor Statistics
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APPENDIX A TABLE 14
ESTIMATED WORKER OCCUPATION DISTRIBUTION, 2020
BUILDING SERVICES WORKERS
HOUSING NEEDS ASSESSMENT: WILLOW VILLAGE
CITY OF MENLO PARK, CA

	Worker Occupation Distribution (1) Building Services
Major Occupations (2% or more)	
Management Occupations	*2.3%*
Protective Service Occupations	*51.2%*
Building and Grounds Cleaning and Maintenance Occupations	*33.2%*
Office and Administrative Support Occupations	*4.6%*
Installation, Maintenance, and Repair Occupations	*4.5%*
All Other Worker Occupations - Building Services	*4.2%*
TOTAL	100.0%

Notes:
(1) Reflects blended average of Services to Buildings and Dwellings (NAICS 561600) and Investigation and Security Services (NAICS 561700). Figures reflect application of weighting factor to adjust to expected percentage of maintenance and janitorial versus security staff in the Project.

Source: Bureau of Labor Statistics
Keyser Marston Associates, Inc.
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APPENDIX A TABLE 15
AVERAGE ANNUAL WORKER COMPENSATION AND ESTIMATED HOUSEHOLD INCOME, 2020
BUILDING SERVICES WORKER OCCUPATIONS
HOUSING NEEDS ASSESSMENT: WILLOW VILLAGE
CITY OF MENLO PARK, CA

Occupation [3]	2020 Avg. Worker Compensation[1]	Household Income Estimate [4] One Worker	Two Workers	Three+ Workers	% of Total Occupation Group [2]	% of Total Bldg Svcs Workers
Page 1 of 2						
Management Occupations						
General and Operations Managers	$162,300	$169,000	$260,000	$264,000	74.7%	1.7%
Administrative Services and Facilities Managers	$130,900	$139,000	$232,000	$241,000	4.9%	0.1%
Other Management Occupations	$160,400	$167,000	$257,000	$261,000	20.4%	0.5%
Weighted Mean Annual Wage	***$160,400***	**$167,000**	**$258,000**	**$262,000**	**100.0%**	**2.3%**
Protective Service Occupations						
Miscellaneous First-Line Supervisors, Protective Service Workers	$68,900	$79,000	$153,000	$175,000	4.7%	2.4%
Security Guards	$42,100	$55,000	$120,000	$147,000	91.9%	47.0%
Other Protective Service Occupations	$43,400	$57,000	$124,000	$152,000	3.5%	1.8%
Weighted Mean Annual Wage	***$43,400***	**$56,000**	**$122,000**	**$148,000**	**100.0%**	**51.2%**
Building and Grounds Cleaning and Maintenance Occupations						
First-Line Supervisors of Housekeeping and Janitorial Workers	$54,600	$63,000	$121,000	$139,000	3.0%	1.0%
First-Line Supervisors of Landscaping, Lawn Service, and Groundskeeping Worke	$69,500	$80,000	$154,000	$177,000	4.1%	1.4%
Janitors and Cleaners, Except Maids and Housekeeping Cleaners	$42,300	$55,000	$121,000	$148,000	47.2%	15.7%
Maids and Housekeeping Cleaners	$44,600	$58,000	$128,000	$156,000	5.4%	1.8%
Other Building and Grounds Cleaning and Maintenance Occupations	$45,000	$59,000	$129,000	$157,000	40.3%	13.4%
Weighted Mean Annual Wage	***$45,000***	**$58,000**	**$126,000**	**$153,000**	**100.0%**	**33.2%**
Office and Administrative Support Occupations						
First-Line Supervisors of Office and Administrative Support Workers	$75,800	$83,000	$149,000	$160,000	6.6%	0.3%
Bookkeeping, Accounting, and Auditing Clerks	$55,400	$64,000	$123,000	$141,000	7.0%	0.3%
Tellers	$37,200	$49,000	$106,000	$130,000	2.6%	0.1%
Customer Service Representatives	$49,900	$65,000	$143,000	$175,000	23.8%	1.1%
Interviewers, Except Eligibility and Loan	$56,800	$65,000	$126,000	$145,000	2.2%	0.1%
Couriers and Messengers	$44,100	$58,000	$126,000	$154,000	2.6%	0.1%
Dispatchers, Except Police, Fire, and Ambulance	$57,400	$66,000	$127,000	$146,000	11.1%	0.5%
Production, Planning, and Expediting Clerks	$65,300	$75,000	$145,000	$166,000	2.2%	0.1%
Secretaries and Administrative Assistants, Except Legal, Medical, and Executive	$52,500	$60,000	$116,000	$134,000	9.2%	0.4%
Office Clerks, General	$49,600	$65,000	$142,000	$174,000	16.5%	0.8%
Other Office and Administrative Support Occupations	$53,600	$62,000	$119,000	$136,000	16.1%	0.7%
Weighted Mean Annual Wage	***$53,600***	**$65,000**	**$132,000**	**$156,000**	**100.0%**	**4.6%**
Installation, Maintenance, and Repair Occupations						
First-Line Supervisors of Mechanics, Installers, and Repairers	$92,800	$101,000	$183,000	$196,000	8.2%	0.4%
Security and Fire Alarm Systems Installers	$52,200	$60,000	$116,000	$133,000	66.2%	3.0%
Locksmiths and Safe Repairers	$65,300	$75,000	$145,000	$166,000	17.7%	0.8%
Other Installation, Maintenance, and Repair Occupations	$58,300	$67,000	$129,000	$148,000	7.8%	0.4%
Weighted Mean Annual Wage	***$58,300***	**$67,000**	**$128,000**	**$145,000**	**100.0%**	**4.5%**
						95.8%

[1] The methodology utilized by the Bureau of Labor Statistics (BLS) assumes hourly paid employees are employed full-time. BLS data is adjusted by KMA to reflect the local minimum wage. Annual compensation is calculated by BLS by multiplying hourly wages by 40 hours per work week and by 52 weeks.

[2] Occupation percentages are based on the 2020 National Industry - Specific Occupational Employment survey compiled by the Bureau of Labor Statistics. Wages are based on Occupational Employment Survey data applicable to San Mateo County as of 2020.

[3] Including occupations representing 2% or more of the major occupation group.

[4] Household income estimated based average worker compensation and ratios between employee income and household income identified in Table 4-5.

Source: U.S. Bureau of Labor Statistics
Keyser Marston Associates, Inc.
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APPENDIX A TABLE 16
ESTIMATED WORKER OCCUPATION DISTRIBUTION, 2020
OTHER EXISTING TENANT WORKERS
HOUSING NEEDS ASSESSMENT: WILLOW VILLAGE
CITY OF MENLO PARK, CA

	Worker Occupation Distribution Other Existing Tenant
Major Occupations (2% or more)	
Management Occupations	*12.3%*
Business and Financial Operations Occupations	*7.8%*
Computer and Mathematical Occupations	*7.5%*
Architecture and Engineering Occupations	*7.5%*
Life, Physical, and Social Science Occupations	*14.2%*
Community and Social Service Occupations	*6.9%*
Legal Occupations	*3.9%*
Healthcare Practitioners and Technical Occupations	*16.0%*
Healthcare Support Occupations	*4.5%*
Office and Administrative Support Occupations	*12.4%*
All Other Worker Occupations - Other Existing Tenant	*7.0%*
TOTAL	100.0%

Source: Bureau of Labor Statistics
Keyser Marston Associates, Inc.
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APPENDIX A TABLE 17
AVERAGE ANNUAL WORKER COMPENSATION AND ESTIMATED HOUSEHOLD INCOME, 2020
OTHER EXISTING TENANT WORKER OCCUPATIONS
HOUSING NEEDS ASSESSMENT: WILLOW VILLAGE
CITY OF MENLO PARK, CA

Occupation [3]	2020 Avg. Worker Compensation[1]	Household Income Estimate [4] One Worker	Two Workers	Three+ Workers	% of Total Occupation Group [2]	% of Total Existing Tenant Workers
Page 1 of 3						
Management Occupations						
Chief Executives	$234,200	$243,000	$360,000	$360,000	2.4%	0.3%
General and Operations Managers	$162,300	$169,000	$260,000	$264,000	16.9%	2.1%
Marketing Managers	$196,300	$205,000	$315,000	$320,000	4.0%	0.5%
Sales Managers	$173,500	$181,000	$278,000	$282,000	2.2%	0.3%
Administrative Services and Facilities Managers	$130,900	$139,000	$232,000	$241,000	3.9%	0.5%
Computer and Information Systems Managers	$212,500	$220,000	$327,000	$327,000	7.3%	0.9%
Financial Managers	$191,400	$200,000	$307,000	$312,000	5.8%	0.7%
Industrial Production Managers	$153,900	$161,000	$247,000	$251,000	2.6%	0.3%
Human Resources Managers	$174,700	$182,000	$280,000	$284,000	2.1%	0.3%
Architectural and Engineering Managers	$193,100	$201,000	$310,000	$314,000	6.8%	0.8%
Medical and Health Services Managers	$156,100	$163,000	$250,000	$254,000	12.3%	1.5%
Natural Sciences Managers	$221,500	$229,000	$341,000	$341,000	16.5%	2.0%
Social and Community Service Managers	$71,100	$82,000	$157,000	$181,000	3.0%	0.4%
Personal Service Managers, All Other; Entertainment and Recreation	$173,900	$181,000	$279,000	$283,000	8.7%	1.1%
Other Management Occupations	$180,200	$188,000	$289,000	$293,000	5.5%	0.7%
Weighted Mean Annual Wage	***$180,200***	**$188,000**	**$287,000**	**$291,000**	**100.0%**	**12.3%**
Business and Financial Operations Occupations						
Buyers and Purchasing Agents	$82,100	$90,000	$162,000	$174,000	5.3%	0.4%
Compliance Officers	$98,000	$107,000	$193,000	$207,000	8.4%	0.7%
Human Resources Specialists	$93,700	$102,000	$185,000	$198,000	8.1%	0.6%
Logisticians	$84,500	$92,000	$166,000	$179,000	3.2%	0.2%
Management Analysts	$115,200	$122,000	$204,000	$212,000	6.9%	0.5%
Fundraisers	$83,300	$91,000	$164,000	$176,000	3.5%	0.3%
Training and Development Specialists	$89,100	$97,000	$176,000	$189,000	4.8%	0.4%
Market Research Analysts and Marketing Specialists	$96,200	$105,000	$190,000	$204,000	7.7%	0.6%
Project Management Specialists and Business Operations Specialists	$97,700	$107,000	$192,000	$207,000	31.6%	2.5%
Accountants and Auditors	$101,100	$107,000	$179,000	$186,000	11.6%	0.9%
Financial and Investment Analysts, Financial Risk Specialists, and Fir	$120,400	$127,000	$214,000	$222,000	3.8%	0.3%
Other Business and Financial Operations Occupations	$97,600	$107,000	$192,000	$207,000	5.1%	0.4%
Weighted Mean Annual Wage	***$97,600***	**$106,000**	**$187,000**	**$200,000**	**100.0%**	**7.8%**
Computer and Mathematical Occupations						
Computer Systems Analysts	$125,400	$133,000	$223,000	$231,000	11.5%	0.9%
Information Security Analysts	$136,900	$145,000	$243,000	$252,000	4.4%	0.3%
Computer and Information Research Scientists	$163,300	$170,000	$262,000	$266,000	5.5%	0.4%
Computer User Support Specialists	$78,700	$86,000	$155,000	$167,000	5.7%	0.4%
Computer Network Architects	$148,300	$157,000	$263,000	$273,000	4.3%	0.3%
Network and Computer Systems Administrators	$106,700	$113,000	$189,000	$197,000	6.5%	0.5%
Database Administrators and Architects	$114,700	$121,000	$204,000	$211,000	3.0%	0.2%
Computer Programmers	$125,400	$133,000	$223,000	$231,000	3.9%	0.3%
Software Developers and Software Quality Assurance Analysts and T	$144,700	$153,000	$257,000	$267,000	33.8%	2.5%
Computer Occupations, All Other	$125,500	$133,000	$223,000	$231,000	5.9%	0.4%
Operations Research Analysts	$113,800	$120,000	$202,000	$210,000	3.1%	0.2%
Statisticians	$127,100	$135,000	$226,000	$234,000	5.9%	0.4%
Data Scientists and Mathematical Science Occupations, All Other	$148,700	$157,000	$264,000	$274,000	3.0%	0.2%
Other Computer and Mathematical Occupations	$132,000	$140,000	$234,000	$243,000	3.5%	0.3%
Weighted Mean Annual Wage	***$132,000***	**$140,000**	**$234,000**	**$243,000**	**100.0%**	**7.5%**

Source: U.S. Bureau of Labor Statistics
Keyser Marston Associates, Inc.
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APPENDIX A TABLE 17
AVERAGE ANNUAL WORKER COMPENSATION AND ESTIMATED HOUSEHOLD INCOME, 2020
OTHER EXISTING TENANT WORKER OCCUPATIONS
HOUSING NEEDS ASSESSMENT: WILLOW VILLAGE
CITY OF MENLO PARK, CA

Occupation [3]	2020 Avg. Worker Compensation[1]	Household Income Estimate [4] One Worker	Two Workers	Three+ Workers	% of Total Occupation Group [2]	% of Total Existing Tenant Workers
Page 2 of 3						
Architecture and Engineering Occupations						
Aerospace Engineers	$127,900	$135,000	$227,000	$236,000	4.9%	0.4%
Bioengineers and Biomedical Engineers	$122,900	$130,000	$218,000	$226,000	3.2%	0.2%
Chemical Engineers	$107,700	$114,000	$191,000	$198,000	2.7%	0.2%
Computer Hardware Engineers	$135,000	$143,000	$240,000	$249,000	6.2%	0.5%
Electrical Engineers	$122,700	$130,000	$218,000	$226,000	8.7%	0.6%
Electronics Engineers, Except Computer	$118,900	$126,000	$211,000	$219,000	6.4%	0.5%
Industrial Engineers	$116,100	$123,000	$206,000	$214,000	8.5%	0.6%
Mechanical Engineers	$124,200	$131,000	$220,000	$229,000	16.2%	1.2%
Engineers, All Other	$116,200	$123,000	$206,000	$214,000	12.4%	0.9%
Electrical and Electronic Engineering Technologists and Technicians	$72,700	$84,000	$161,000	$185,000	4.3%	0.3%
Mechanical Engineering Technologists and Technicians	$69,200	$80,000	$153,000	$176,000	2.6%	0.2%
Calibration Technologists and Technicians and Engineering Technolo	$65,400	$75,000	$145,000	$167,000	7.4%	0.6%
Other Architecture and Engineering Occupations	$112,400	$119,000	$199,000	$207,000	16.5%	1.2%
Weighted Mean Annual Wage	***$112,400***	**$120,000**	**$204,000**	**$214,000**	**100.0%**	**7.5%**
Life, Physical, and Social Science Occupations						
Biochemists and Biophysicists	$128,800	$136,000	$229,000	$237,000	10.3%	1.5%
Biological Scientists, All Other	$107,400	$114,000	$191,000	$198,000	6.3%	0.9%
Medical Scientists, Except Epidemiologists	$130,300	$138,000	$231,000	$240,000	27.9%	4.0%
Physicists	$164,400	$171,000	$264,000	$268,000	2.9%	0.4%
Chemists	$100,900	$107,000	$179,000	$186,000	6.4%	0.9%
Social Science Research Assistants	$55,700	$64,000	$123,000	$142,000	3.0%	0.4%
Life, Physical, and Social Science Technicians, All Other	$71,300	$82,000	$158,000	$182,000	4.5%	0.6%
Other Life, Physical, and Social Science Occupations	$118,300	$125,000	$210,000	$218,000	38.7%	5.5%
Weighted Mean Annual Wage	***$118,300***	**$126,000**	**$211,000**	**$220,000**	**100.0%**	**14.2%**
Community and Social Service Occupations						
Marriage and Family Therapists	$69,600	$80,000	$154,000	$177,000	4.1%	0.3%
Rehabilitation Counselors	$52,200	$60,000	$116,000	$133,000	2.2%	0.2%
Substance Abuse, Behavioral Disorder, and Mental Health Counselor	$63,600	$73,000	$141,000	$162,000	34.4%	2.4%
Child, Family, and School Social Workers	$63,500	$73,000	$141,000	$162,000	5.3%	0.4%
Healthcare Social Workers	$100,400	$106,000	$178,000	$185,000	7.8%	0.5%
Mental Health and Substance Abuse Social Workers	$85,700	$94,000	$169,000	$181,000	15.3%	1.1%
Health Education Specialists	$77,600	$85,000	$153,000	$164,000	3.0%	0.2%
Social and Human Service Assistants	$48,400	$63,000	$138,000	$169,000	18.2%	1.3%
Community Health Workers	$57,900	$67,000	$128,000	$147,000	4.0%	0.3%
Community and Social Service Specialists, All Other	$60,500	$70,000	$134,000	$154,000	2.7%	0.2%
Other Community and Social Service Occupations	$67,300	$78,000	$149,000	$171,000	2.9%	0.2%
Weighted Mean Annual Wage	***$67,300***	**$77,000**	**$148,000**	**$167,000**	**100.0%**	**6.9%**
Legal Occupations						
Lawyers	$201,900	$209,000	$311,000	$311,000	59.9%	2.3%
Paralegals and Legal Assistants	$75,800	$83,000	$149,000	$160,000	34.6%	1.3%
Other Legal Occupations	$155,700	$162,000	$250,000	$254,000	5.6%	0.2%
Weighted Mean Annual Wage	***$155,700***	**$163,000**	**$252,000**	**$256,000**	**100.0%**	**3.9%**

Source: U.S. Bureau of Labor Statistics
Keyser Marston Associates, Inc.
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APPENDIX A TABLE 17
AVERAGE ANNUAL WORKER COMPENSATION AND ESTIMATED HOUSEHOLD INCOME, 2020
OTHER EXISTING TENANT WORKER OCCUPATIONS
HOUSING NEEDS ASSESSMENT: WILLOW VILLAGE
CITY OF MENLO PARK, CA

Occupation [3]	2020 Avg. Worker Compensation[1]	Household Income Estimate [4] One Worker	Two Workers	Three+ Workers	% of Total Occupation Group [2]	% of Total Existing Tenant Workers
Page 3 of 3						
Healthcare Practitioners and Technical Occupations						
Physician Assistants	$143,800	$152,000	$255,000	$265,000	2.5%	0.4%
Registered Nurses	$149,200	$158,000	$265,000	$275,000	36.1%	5.8%
Nurse Practitioners	$177,800	$185,000	$285,000	$289,000	4.6%	0.7%
Physicians, All Other; and Ophthalmologists, Except Pediatric	$187,400	$195,000	$301,000	$305,000	2.9%	0.5%
Clinical Laboratory Technologists and Technicians	$74,500	$86,000	$165,000	$190,000	6.0%	1.0%
Radiologic Technologists and Technicians	$116,300	$123,000	$206,000	$214,000	3.4%	0.5%
Surgical Technologists	$79,200	$86,000	$156,000	$168,000	2.5%	0.4%
Licensed Practical and Licensed Vocational Nurses	$74,500	$86,000	$165,000	$190,000	7.8%	1.3%
Medical Dosimetrists, Medical Records Specialists, and Health Techn	$63,500	$73,000	$141,000	$162,000	12.3%	2.0%
Other Healthcare Practitioners and Technical Occupations	$121,700	$129,000	$216,000	$224,000	21.7%	3.5%
Weighted Mean Annual Wage	***$121,700***	**$130,000**	**$222,000**	**$235,000**	**100.0%**	**16.0%**
Healthcare Support Occupations						
Home Health and Personal Care Aides	$34,500	$45,000	$99,000	$121,000	12.6%	0.6%
Nursing Assistants	$48,400	$63,000	$138,000	$169,000	11.6%	0.5%
Dental Assistants	$53,500	$62,000	$118,000	$136,000	4.5%	0.2%
Medical Assistants	$54,000	$62,000	$120,000	$137,000	49.3%	2.2%
Medical Equipment Preparers	$65,300	$75,000	$145,000	$166,000	3.3%	0.1%
Phlebotomists	$50,300	$58,000	$111,000	$128,000	3.2%	0.1%
Healthcare Support Workers, All Other	$55,200	$64,000	$122,000	$141,000	2.5%	0.1%
Other Healthcare Support Occupations	$50,700	$58,000	$112,000	$129,000	13.0%	0.6%
Weighted Mean Annual Wage	***$50,700***	**$60,000**	**$119,000**	**$138,000**	**100.0%**	**4.5%**
Office and Administrative Support Occupations						
First-Line Supervisors of Office and Administrative Support Workers	$75,800	$83,000	$149,000	$160,000	7.1%	0.9%
Billing and Posting Clerks	$57,200	$66,000	$127,000	$146,000	4.4%	0.5%
Bookkeeping, Accounting, and Auditing Clerks	$55,400	$64,000	$123,000	$141,000	5.4%	0.7%
Customer Service Representatives	$49,900	$65,000	$143,000	$175,000	7.5%	0.9%
Receptionists and Information Clerks	$42,200	$55,000	$121,000	$148,000	8.5%	1.1%
Production, Planning, and Expediting Clerks	$65,300	$75,000	$145,000	$166,000	2.2%	0.3%
Executive Secretaries and Executive Administrative Assistants	$86,200	$94,000	$170,000	$182,000	7.3%	0.9%
Legal Secretaries and Administrative Assistants	$76,400	$83,000	$150,000	$162,000	5.4%	0.7%
Medical Secretaries and Administrative Assistants	$52,000	$60,000	$115,000	$132,000	13.3%	1.6%
Secretaries and Administrative Assistants, Except Legal, Medical, and	$52,500	$60,000	$116,000	$134,000	12.7%	1.6%
Office Clerks, General	$49,600	$65,000	$142,000	$174,000	14.2%	1.8%
Other Office and Administrative Support Occupations	$57,600	$66,000	$128,000	$147,000	11.9%	1.5%
Weighted Mean Annual Wage	***$57,600***	**$68,000**	**$133,000**	**$154,000**	**100.0%**	**12.4%**
						93.0%

[1] The methodology utilized by the Bureau of Labor Statistics (BLS) assumes hourly paid employees are employed full-time. BLS data is adjusted by KMA to reflect the local minimum wage. Annual compensation is calculated by BLS by multiplying hourly wages by 40 hours per work week and by 52 weeks.

[2] Occupation percentages are based on the 2020 National Industry - Specific Occupational Employment survey compiled by the Bureau of Labor Statistics. Wages are based on Occupational Employment Survey data applicable to San Mateo County as of 2020.

[3] Including occupations representing 2% or more of the major occupation group.

[4] Household income estimated based average worker compensation and ratios between employee income and household income identified in Table 4-5.

Source: U.S. Bureau of Labor Statistics
Keyser Marston Associates, Inc.
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APPENDIX A TABLE 18
AVERAGE ANNUAL WORKER COMPENSATION AND ESTIMATED HOUSEHOLD INCOME, 2020
APARTMENT PROPERTY MANAGEMENT WORKER OCCUPATIONS
HOUSING NEEDS ASSESSMENT: WILLOW VILLAGE
CITY OF MENLO PARK, CA

Representative Occupations [2]	2020 Avg. Worker Compensation[1]	Household Income Estimate [3] One Worker	Two Workers	Three+ Workers	% of Total Prop Mgmt Workers
Property, Real Estate, and Community Association Managers	$103,800	$110,000	$184,000	$191,000	20.0%
Maintenance and Repair Workers, General	$58,100	$67,000	$129,000	$148,000	40.0%
Grounds Maintenance Workers, All Other	$52,500	$60,000	$116,000	$134,000	40.0%
					100.0%

[1] The methodology utilized by the Bureau of Labor Statistics (BLS) assumes hourly paid employees are employed full-time. BLS data is adjusted by KMA to reflect the local minimum wage. Annual compensation is calculated by BLS by multiplying hourly wages by 40 hours per work week and by 52 weeks.

[2] Representative employee occupations selected by KMA from OES data.
[3] Household income estimated based average worker compensation and ratios between employee income and household income identified in Table 4-5.

Sources: U.S. Bureau of Labor Statistics
Keyser Marston Associates, Inc.
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APPENDIX A TABLE 19
WORKER OCCUPATION DISTRIBUTION, 2020
SERVICES TO NEW RESIDENTS
WILLOW VILLAGE MASTER PLAN PROJECT HOUSING NEEDS ASSESSMENT
MENLO PARK, CA

Major Occupations (2% or more)	Worker Occupation Distribution[1] Services to New Residents
Management Occupations	*5.0%*
Business and Financial Operations Occupations	*4.9%*
Community and Social Service Occupations	*2.4%*
Educational Instruction and Library Occupations	*3.4%*
Healthcare Practitioners and Technical Occupations	*7.6%*
Healthcare Support Occupations	*9.6%*
Food Preparation and Serving Related Occupations	*9.3%*
Building and Grounds Cleaning and Maintenance Occupations	*3.7%*
Personal Care and Service Occupations	*4.5%*
Sales and Related Occupations	*12.0%*
Office and Administrative Support Occupations	*12.7%*
Installation, Maintenance, and Repair Occupations	*4.5%*
Transportation and Material Moving Occupations	*9.1%*
All Other Worker Occupations - Services to New Residents	*11.3%*
INDUSTRY TOTAL	100.0%

[1] Distribution of employment by industry is per the IMPLAN model and the distribution of occupational employment within those industries is based on the Bureau of Labor Statistics Occupational Employment Survey.

Source: Bureau of Labor Statistics, IMPLAN
Keyser Marston Associates, Inc.
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APPENDIX A TABLE 20
AVERAGE ANNUAL WORKER COMPENSATION, 2020
SERVICES TO NEW RESIDENTS
WILLOW VILLAGE MASTER PLAN PROJECT HOUSING NEEDS ASSESSMENT
MENLO PARK, CA

Occupation [3]	2020 Avg. Compensation [1]	% of Total Occupation Group [2]	% of Total No. of Service Workers
Page 1 of 4			
Management Occupations			
General and Operations Managers	$170,200	32.6%	1.6%
Sales Managers	$165,500	4.4%	0.2%
Administrative Services and Facilities Managers	$138,200	3.4%	0.2%
Computer and Information Systems Managers	$209,500	4.2%	0.2%
Financial Managers	$195,300	8.6%	0.4%
Food Service Managers	$73,200	3.1%	0.2%
Medical and Health Services Managers	$159,500	7.1%	0.4%
Property, Real Estate, and Community Association Managers	$88,900	8.4%	0.4%
Social and Community Service Managers	$67,000	3.8%	0.2%
Personal Service Managers, All Other; Entertainment and Recreation Mana	$180,900	4.0%	0.2%
All other Management Occupations (Avg. All Categories)	$155,600	20.4%	1.0%
Weighted Mean Annual Wage	***$155,600***	**100.0%**	**5.0%**
Business and Financial Operations Occupations			
Human Resources Specialists	$94,900	6.5%	0.3%
Management Analysts	$118,500	5.3%	0.3%
Training and Development Specialists	$87,000	3.6%	0.2%
Market Research Analysts and Marketing Specialists	$99,900	8.6%	0.4%
Project Management Specialists and Business Operations Specialists, All (	$99,300	12.9%	0.6%
Accountants and Auditors	$96,500	15.8%	0.8%
Personal Financial Advisors	$168,200	9.5%	0.5%
Financial and Investment Analysts, Financial Risk Specialists, and Financia	$128,200	10.5%	0.5%
All Other Business and Financial Operations Occupations (Avg. All Catego	$112,300	27.4%	1.3%
Weighted Mean Annual Wage	***$112,300***	**100.0%**	**4.9%**
Community and Social Service Occupations			
Educational, Guidance, and Career Counselors and Advisors	$75,800	5.2%	0.1%
Marriage and Family Therapists	$65,500	3.9%	0.1%
Rehabilitation Counselors	$49,500	4.7%	0.1%
Substance Abuse, Behavioral Disorder, and Mental Health Counselors	$62,000	17.9%	0.4%
Child, Family, and School Social Workers	$68,500	8.8%	0.2%
Healthcare Social Workers	$92,800	7.7%	0.2%
Mental Health and Substance Abuse Social Workers	$89,100	6.6%	0.2%
Social and Human Service Assistants	$51,400	19.6%	0.5%
Clergy	$82,300	8.0%	0.2%
Directors, Religious Activities and Education	$72,600	4.8%	0.1%
All Other Community and Social Service Occupations (Avg. All Categories)	$67,800	12.7%	0.3%
Weighted Mean Annual Wage	***$67,800***	**100.0%**	**2.4%**

Sources: Bureau of Labor Statistics, IMPLAN
Keyser Marston Associates, Inc.
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APPENDIX A TABLE 20
AVERAGE ANNUAL WORKER COMPENSATION, 2020
SERVICES TO NEW RESIDENTS
WILLOW VILLAGE MASTER PLAN PROJECT HOUSING NEEDS ASSESSMENT
MENLO PARK, CA

Occupation [3]	2020 Avg. Compensation [1]	% of Total Occupation Group [2]	% of Total No. of Service Workers
Page 2 of 4			
Educational Instruction and Library Occupations			
Preschool Teachers, Except Special Education	$48,800	19.1%	0.7%
Elementary School Teachers, Except Special Education	$90,800	6.6%	0.2%
Secondary School Teachers, Except Special and Career/Technical Educat	$99,800	4.9%	0.2%
Self-Enrichment Teachers	$55,400	8.6%	0.3%
Substitute Teachers, Short-Term	$47,500	3.1%	0.1%
Tutors and Teachers and Instructors, All Other	$47,000	5.7%	0.2%
Teaching Assistants, Except Postsecondary	$41,800	15.2%	0.5%
All Other Educational Instruction and Library Occupations (Avg. All Categor	$56,100	36.8%	1.3%
Weighted Mean Annual Wage	***$56,100***	**100.0%**	**3.4%**
Healthcare Practitioners and Technical Occupations			
Dentists, General	$221,000	3.3%	0.3%
Pharmacists	$145,100	3.4%	0.3%
Physical Therapists	$110,800	3.2%	0.2%
Registered Nurses	$151,200	27.6%	2.1%
Physicians, All Other; and Ophthalmologists, Except Pediatric	$180,700	4.0%	0.3%
Dental Hygienists	$119,400	6.9%	0.5%
Pharmacy Technicians	$56,000	4.7%	0.4%
Licensed Practical and Licensed Vocational Nurses	$74,600	9.9%	0.8%
Medical Dosimetrists, Medical Records Specialists, and Health Technologis	$66,300	3.5%	0.3%
All Other Healthcare Practitioners and Technical Occupations (Avg. All Cat	$128,400	33.5%	2.5%
Weighted Mean Annual Wage	***$128,400***	**100.0%**	**7.6%**
Healthcare Support Occupations			
Home Health and Personal Care Aides	$31,900	57.6%	5.5%
Nursing Assistants	$52,700	15.8%	1.5%
Dental Assistants	$58,100	8.5%	0.8%
Medical Assistants	$54,800	8.3%	0.8%
All Other Healthcare Support Occupations (Avg. All Categories)	$40,100	9.9%	1.0%
Weighted Mean Annual Wage	***$40,100***	**100.0%**	**9.6%**
Food Preparation and Serving Related Occupations			
First-Line Supervisors of Food Preparation and Serving Workers	$50,600	7.6%	0.7%
Cooks, Fast Food	$29,600	4.6%	0.4%
Cooks, Institution and Cafeteria	$42,900	3.9%	0.4%
Cooks, Restaurant	$42,300	9.2%	0.9%
Food Preparation Workers	$34,700	6.8%	0.6%
Bartenders	$42,300	5.7%	0.5%
Fast Food and Counter Workers	$34,200	29.4%	2.7%
Waiters and Waitresses	$44,500	16.9%	1.6%
Dishwashers	$35,600	3.6%	0.3%
All Other Food Preparation and Serving Related Occupations (Avg. All Cat	$39,200	12.3%	1.2%
Weighted Mean Annual Wage	***$39,200***	**100.0%**	**9.3%**

Sources: Bureau of Labor Statistics, IMPLAN
Keyser Marston Associates, Inc.
\\SF-FS2\wp\12\12095\011\HNA - Willow Village 3-1-22.xlsm; 2/25/2022; dd

APPENDIX A TABLE 20
AVERAGE ANNUAL WORKER COMPENSATION, 2020
SERVICES TO NEW RESIDENTS
WILLOW VILLAGE MASTER PLAN PROJECT HOUSING NEEDS ASSESSMENT
MENLO PARK, CA

Occupation [3]	2020 Avg. Compensation [1]	% of Total Occupation Group [2]	% of Total No. of Service Workers
Page 3 of 4			
Building and Grounds Cleaning and Maintenance Occupations			
First-Line Supervisors of Landscaping, Lawn Service, and Groundskeeping	$71,700	3.7%	0.1%
Janitors and Cleaners, Except Maids and Housekeeping Cleaners	$38,900	42.7%	1.6%
Maids and Housekeeping Cleaners	$43,300	12.7%	0.5%
Pest Control Workers	$49,900	4.2%	0.2%
Landscaping and Groundskeeping Workers	$45,400	30.9%	1.2%
All Other Building and Grounds Cleaning and Maintenance Occupations (A	$43,400	5.8%	0.2%
Weighted Mean Annual Wage	***$43,400***	**100.0%**	**3.7%**
Personal Care and Service Occupations			
First-Line Supervisors of Personal Service and Entertainment and Recreati	$57,500	5.7%	0.3%
Animal Caretakers	$37,400	11.0%	0.5%
Amusement and Recreation Attendants	$32,600	3.4%	0.2%
Funeral Attendants	$44,600	4.9%	0.2%
Morticians, Undertakers, and Funeral Arrangers	$67,900	3.7%	0.2%
Hairdressers, Hairstylists, and Cosmetologists	$35,200	16.2%	0.7%
Manicurists and Pedicurists	$31,200	4.4%	0.2%
Childcare Workers	$39,900	17.5%	0.8%
Exercise Trainers and Group Fitness Instructors	$59,700	8.4%	0.4%
Recreation Workers	$41,300	6.5%	0.3%
All Other Personal Care and Service Occupations (Avg. All Categories)	$42,800	18.4%	0.8%
Weighted Mean Annual Wage	***$42,800***	**100.0%**	**4.5%**
Sales and Related Occupations			
First-Line Supervisors of Retail Sales Workers	$50,300	9.0%	1.1%
Cashiers	$35,700	23.1%	2.8%
Counter and Rental Clerks	$41,900	5.2%	0.6%
Retail Salespersons	$38,600	36.9%	4.4%
Securities, Commodities, and Financial Services Sales Agents	$110,500	4.4%	0.5%
Sales Representatives of Services, Except Advertising, Insurance, Financia	$86,400	5.8%	0.7%
Sales Representatives, Wholesale and Manufacturing, Except Technical ar	$84,400	4.1%	0.5%
All Other Sales and Related Occupations (Avg. All Categories)	$48,000	11.6%	1.4%
Weighted Mean Annual Wage	***$48,000***	**100.0%**	**12.0%**

Sources: Bureau of Labor Statistics, IMPLAN
Keyser Marston Associates, Inc.
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APPENDIX A TABLE 20
AVERAGE ANNUAL WORKER COMPENSATION, 2020
SERVICES TO NEW RESIDENTS
WILLOW VILLAGE MASTER PLAN PROJECT HOUSING NEEDS ASSESSMENT
MENLO PARK, CA

Occupation [3]	2020 Avg. Compensation [1]	% of Total Occupation Group [2]	% of Total No. of Service Workers
Page 4 of 4			
Office and Administrative Support Occupations			
First-Line Supervisors of Office and Administrative Support Workers	$75,800	7.5%	0.9%
Bookkeeping, Accounting, and Auditing Clerks	$59,100	8.0%	1.0%
Customer Service Representatives	$53,000	14.4%	1.8%
Receptionists and Information Clerks	$45,400	9.8%	1.2%
Medical Secretaries and Administrative Assistants	$53,900	5.7%	0.7%
Secretaries and Administrative Assistants, Except Legal, Medical, and Exe	$55,900	10.5%	1.3%
Office Clerks, General	$49,700	17.1%	2.2%
All Other Office and Administrative Support Occupations (Avg. All Categori	$54,700	27.0%	3.4%
Weighted Mean Annual Wage	***$54,700***	**100.0%**	**12.7%**
Installation, Maintenance, and Repair Occupations			
First-Line Supervisors of Mechanics, Installers, and Repairers	$91,200	8.3%	0.4%
Automotive Body and Related Repairers	$59,900	9.8%	0.4%
Automotive Service Technicians and Mechanics	$67,800	25.8%	1.2%
Bus and Truck Mechanics and Diesel Engine Specialists	$69,800	5.5%	0.2%
Maintenance and Repair Workers, General	$57,700	26.5%	1.2%
All Other Installation, Maintenance, and Repair Occupations (Avg. All Cate	$66,000	24.0%	1.1%
Weighted Mean Annual Wage	***$66,000***	**100.0%**	**4.5%**
Transportation and Material Moving Occupations			
First-Line Supervisors of Transportation and Material Moving Workers, Exc	$64,400	4.3%	0.4%
Driver/Sales Workers	$38,400	4.5%	0.4%
Heavy and Tractor-Trailer Truck Drivers	$58,200	11.6%	1.1%
Light Truck Drivers	$53,400	7.1%	0.6%
Passenger Vehicle Drivers, Except Bus Drivers, Transit and Intercity	$42,700	9.6%	0.9%
Parking Attendants	$37,900	3.6%	0.3%
Cleaners of Vehicles and Equipment	$35,800	7.9%	0.7%
Laborers and Freight, Stock, and Material Movers, Hand	$43,700	16.5%	1.5%
Stockers and Order Fillers	$40,000	18.1%	1.6%
All Other Transportation and Material Moving Occupations (Avg. All Categc	$45,400	16.9%	1.5%
Weighted Mean Annual Wage	***$45,400***	**100.0%**	**9.1%**
			88.7%

[1] The methodology utilized by the Bureau of Labor Statistics (BLS) assumes hourly paid employees are employed full-time. Annual compensation is calculated by multiplying hourly wages by 40 hours per work week by 52 weeks.

[2] Occupation percentages are based on the 2019 National Industry - Specific Occupational Employment survey compiled by the Bureau of Labor Statistics. Wages are based on Occupational Employment Survey data applicable to San Mateo County as of First Quarter 2020.

[3] Including occupations representing 3% or more of the major occupation group

Sources: Bureau of Labor Statistics, IMPLAN
Keyser Marston Associates, Inc.
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APPENDIX A TABLE 21
JOBS GENERATED BY INDUSTRY FROM HOUSEHOLD SPENDING [IMPLAN OUTPUT] AND ESTIMATED PORTION
WILLOW VILLAGE MASTER PLAN PROJECT HOUSING NEEDS ASSESSMENT
MENLO PARK, CA

Industry Category	Total Jobs	Less: Estimated Portion Accounted for in On-Site Employment Totals (2)		Off-Site Total	Percent
Full-service restaurants	42.5	40%	(17.0)	25.5	5%
Limited-service restaurants	37.0	60%	(22.2)	14.8	3%
All other food and drinking places	20.8	60%	(12.5)	8.9	2%
Retail - Building material and garden equipment and s	4.6	0%	0.0	4.6	1%
Retail - Clothing and clothing accessories stores	12.4	20%	(2.5)	9.9	2%
Retail - Electronics and appliance stores	5.8	20%	(1.2)	4.7	1%
Retail - Food and beverage stores	23.5	50%	(11.7)	11.7	2%
Retail - Furniture and home furnishings stores	5.5	10%	(0.6)	5.0	1%
Retail - Gasoline stores	3.5	50%	(1.8)	1.8	0%
Retail - General merchandise stores	16.0	0%	0.0	16.0	3%
Retail - Health and personal care stores	10.4	50%	(5.2)	5.2	1%
Retail - Miscellaneous store retailers	11.4	20%	(2.3)	9.1	2%
Retail - Motor vehicle and parts dealers	6.1	20%	(1.2)	4.9	1%
Retail - Nonstore retailers	9.6	0%	0.0	9.6	2%
Retail - Sporting goods, hobby, musical instrument an	5.6	30%	(1.7)	3.9	1%
Personal care services	12.0	30%	(3.6)	8.4	2%
Offices of dentists	13.5	0%	0.0	13.5	3%
Offices of other health practitioners	8.5	0%	0.0	8.5	2%
Outpatient care centers	11.6	0%	0.0	11.6	2%
Offices of physicians	16.8	0%	0.0	16.8	3%
Nursing and community care facilities	21.1	0%	0.0	21.1	4%
Medical and diagnostic laboratories	1.6	0%	0.0	1.6	0%
Mental health, substance abuse and other facilities	4.3	0%	0.0	4.3	1%
Other ambulatory health care services	2.3	0%	0.0	2.3	0%
Home health care services	8.7	0%	0.0	8.7	2%
Hospitals	18.0	0%	0.0	18.0	3%
Elementary and secondary schools	7.2	0%	0.0	7.2	1%
Junior colleges, colleges, universities, and professiona	10.5	0%	0.0	10.5	2%
Other educational services	5.3	0%	0.0	5.3	1%
Individual and family services	32.9	0%	0.0	32.9	6%
Automotive repair and maintenance, except car washe	15.2	0%	0.0	15.2	3%
Child day care services	9.8	0%	0.0	9.8	2%
Religious organizations	7.5	0%	0.0	7.5	1%
Other personal services	7.4	0%	0.0	7.4	1%
Transit and ground passenger transportation	6.6	0%	0.0	6.6	1%
Car washes	6.4	0%	0.0	6.4	1%
Fitness and recreational sports centers	6.0	50%	(3.0)	3.0	1%
Other financial investment activities	11.1	0%	0.0	11.1	2%
Nondepository credit intermediation and related activit	5.6	0%	0.0	5.6	1%
Legal services	4.5	0%	0.0	4.5	1%
Wholesale - Grocery and related product wholesalers	4.4	0%	0.0	4.4	1%
Dry-cleaning and laundry services	3.8	0%	0.0	3.8	1%
Labor and civic organizations	3.5	0%	0.0	3.5	1%
Performing arts companies	3.3	0%	0.0	3.3	1%
Transit and ground passenger transportation	6.6	0%	0.0	6.6	1%
All Other	153.8	23%	(35.0)	118.8	23%
Total Number of Jobs Generated	644.5		(121.4)	523.1	100%

(1) Estimated employment generated by household expenditures of Project residents for Industries representing more than 1% of total employment. Employment estimates are based on the IMPLAN Group's economic model, IMPLAN, for San Mateo County (uses 2018 IMPLAN data set, the most recent available as of April 2020). Includes both full- and part-time jobs.

(2) Estimate of the share of new jobs associated with residents' household spending that would be located on-site as part of the project. Estimate is based on the proposed mix of on-site, dining, grocery, retail shops, and the existing gas station. It is expected that the actual portion of residents' needs met by on-site businesses will vary depending on the actual mix of retailers.

APPENDIX A TABLE 22
COMMUTE PATTERNS FOR OTHER SAN MATEO COUNTY JURISDICTIONS
WILLOW VILLAGE MASTER PLAN PROJECT HOUSING NEEDS ASSESSMENT
HOUSING NEEDS ASSESSMENT
MENLO PARK, CA

	Pct. of All Workers who Live & Work in City
	ACS 2015-19
San Mateo County[1]	
Burlingame	9.1%
Daly City	35.1%
Foster City	10.4%
Menlo Park	5.9%
Redwood City	17.7%
San Bruno	15.9%
San Carlos	12.7%
San Mateo	22.2%
South San Francisco	12.7%
Select Cities in Santa Clara County	
Mountain View	13.4%
Palo Alto	7.4%

Notes:
1. Percentages computed excluding those workers who worked from home.

Sources:
US Census Bureau, ACS 2015-2019 5yr estimate.

APPENDIX B – CENSUS DATA FOR EAST PALO ALTO AND BELLE HAVEN

The following Appendix section summarizes U.S. Census data on housing conditions and demographics for East Palo Alto and Belle Haven. In addition, data for San Mateo County as a whole is provided as a point of comparison. East Palo Alto and Belle Haven differ in several respects from San Mateo County averages including: a higher share of renter households, a concentration of households overspending on housing, a higher percentage living in overcrowded conditions, larger household sizes, a younger population, lower incomes, and an above average percentage of households below the poverty level.

1. Number of Housing Units and Tenure

East Palo Alto has an estimated 8,342 housing units. Approximately 60% of occupied units are rental and 40% are owner-occupied. Approximately 1,800 units of the rental units in East Palo Alto (39%) are part of the multi-building Woodland Park Apartments property acquired by Sand Hill Property Company in 2016 and located along the boundary with the City of Palo Alto on the West side of U.S. 101.

Belle Haven has approximately 1,670 housing units. Approximately 55% of the occupied units are rental and 45% are owner-occupied.

Housing Units by Tenure

	East Palo Alto		Belle Haven[1]		San Mateo County	
Housing Units by Tenure	Number	% of Occupied Units	Number	% of Occupied Units	Number	% of Occupied Units
Renter Occupied	4,648	60%	795	55%	105,000	40%
Owner Occupied	3,076	40%	656	45%	158,543	60%
Total Occupied Housing Units	*7,724*	100%	*1,451*	100%	*263,543*	100%
Vacant	618		219		14,230	
Total Housing Units	*8,342*		*1,670*		*277,773*	
Percent of County-wide Housing Stock	3.0%		0.6%			

(1) Reflects data for Census Tract 6117 which includes the Belle Haven neighborhood.

Source: 2015-2019 American Community Survey estimates, Table DP04

East Palo Alto represents about 3% of the total housing stock in San Mateo County and less than 1% of the more than 950,000 housing units in San Mateo and Santa Clara counties combined. Belle Haven represents approximately 0.6% of the total housing stock in San Mateo County and a fraction of the combined housing stock in the two counties.

2. Housing Units by Type

Approximately 58% of units in East Palo Alto are single family compared to 68% in Belle Haven and 65% county-wide. The balance of units are in multi-family and other structures.

Housing Units by Type

	East Palo Alto		Belle Haven[1]		San Mateo	
	Housing Units	% of Total	Housing Units	% of Total	Housing Units	% of Total
Single Family	4,848	58%	1,137	68%	179,731	65%
2- 4 unit buildings	250	3%	184	11%	19,743	7%
Five+ unit buildings	3,081	37%	331	20%	75,096	27%
Mobile Home, Boat, RV, etc.	163	2%	18	1%	3,203	1%
Total Housing Units	8,342	100%	1,670	100%	277,773	100%

(1) Reflects data for Census Tract 6117 corresponding to the Belle Haven neighborhood.
Source: 2015-2019 American Community Survey 5-Year Estimates.

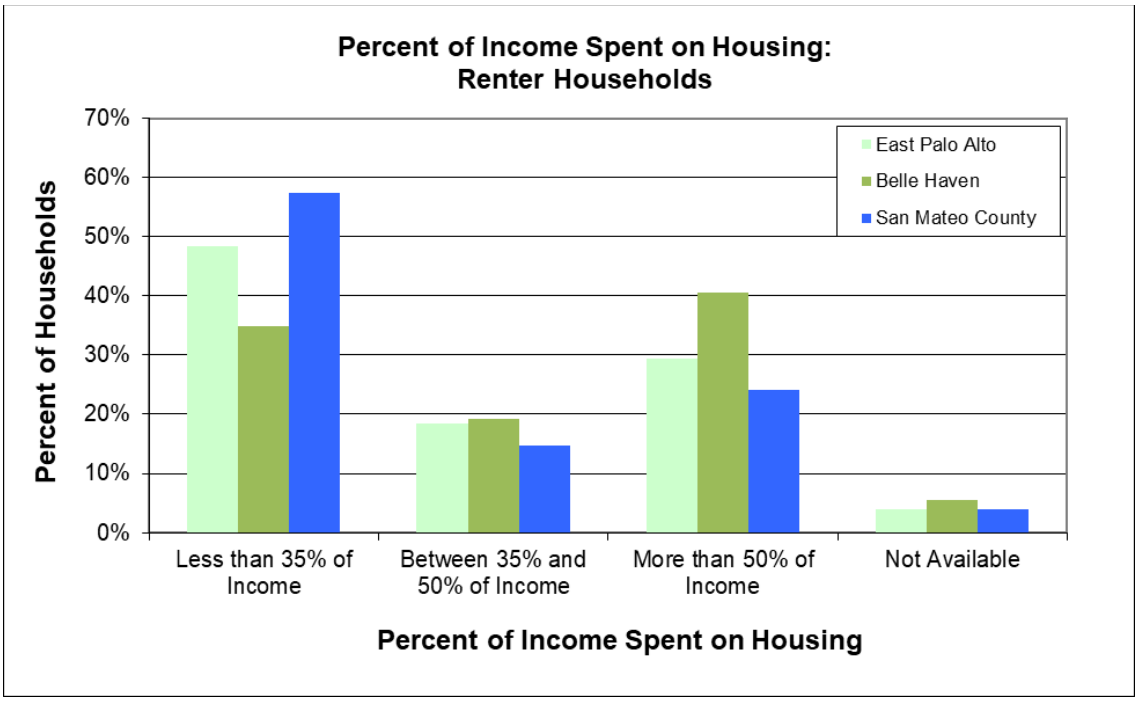
3. Percent of Income Spent on Housing

In East Palo Alto, approximately 48% of renter households and 35% of homeowner households spend more than 35% of their income on housing, a general criterion for overspending, particularly for renters. In Belle Haven, the share spending more than 35% of their income on housing is 60% for renter households and 27% for homeowners. The percent spending more than 35% of their income on housing exceeds county averages in both communities.

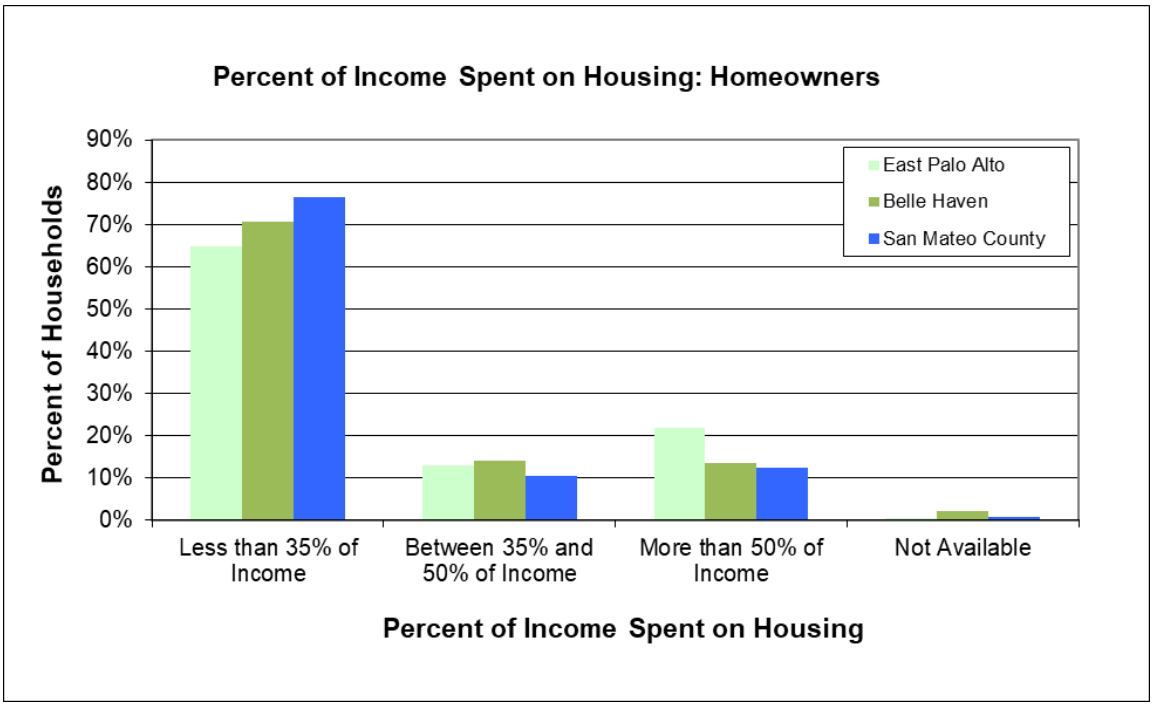
Percent of Income Spent on Housing

	East Palo Alto		Belle Haven[1]		San Mateo County	
	Renter	Homeowner	Renter	Homeowner	Renter	Homeowner
Less than 35% of Income	48%	65%	35%	71%	57%	76%
Between 35% and 50% of Income	18%	13%	19%	14%	15%	10%
More than 50% of Income	29%	22%	41%	13%	24%	12%
Subtotal Over 35% of Income	48%	35%	60%	27%	39%	23%
Not Available	4%	0%	6%	2%	4%	1%

(1) Reflects data for Census Tract 6117 corresponding to the Belle Haven neighborhood.
Source: 2015-2019 American Community Survey 5-Year Estimates.



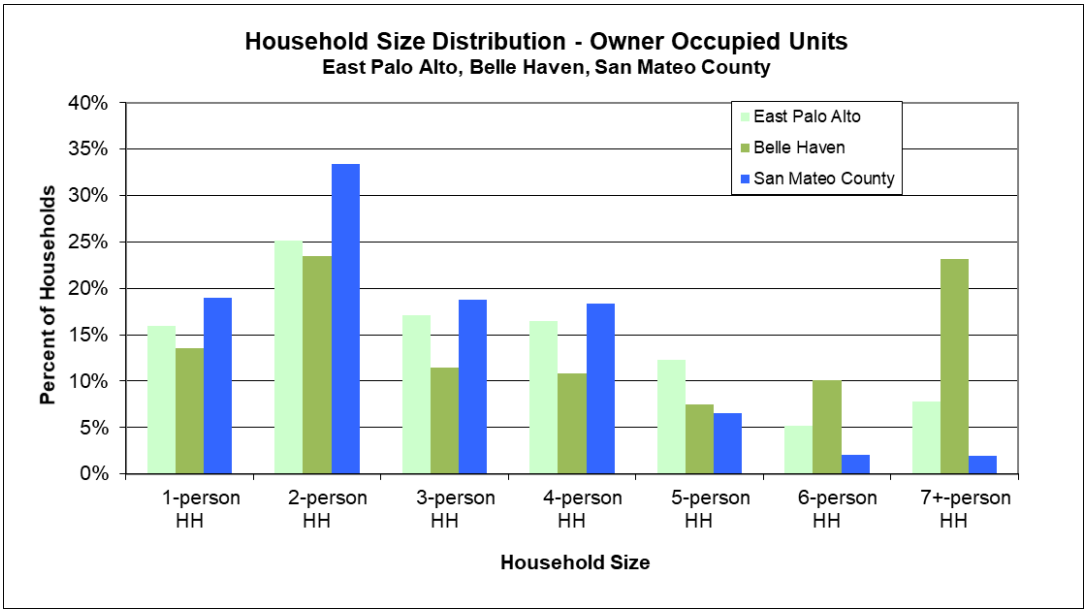
Source: 2015-2019 American Community Survey 5-Year Estimates.

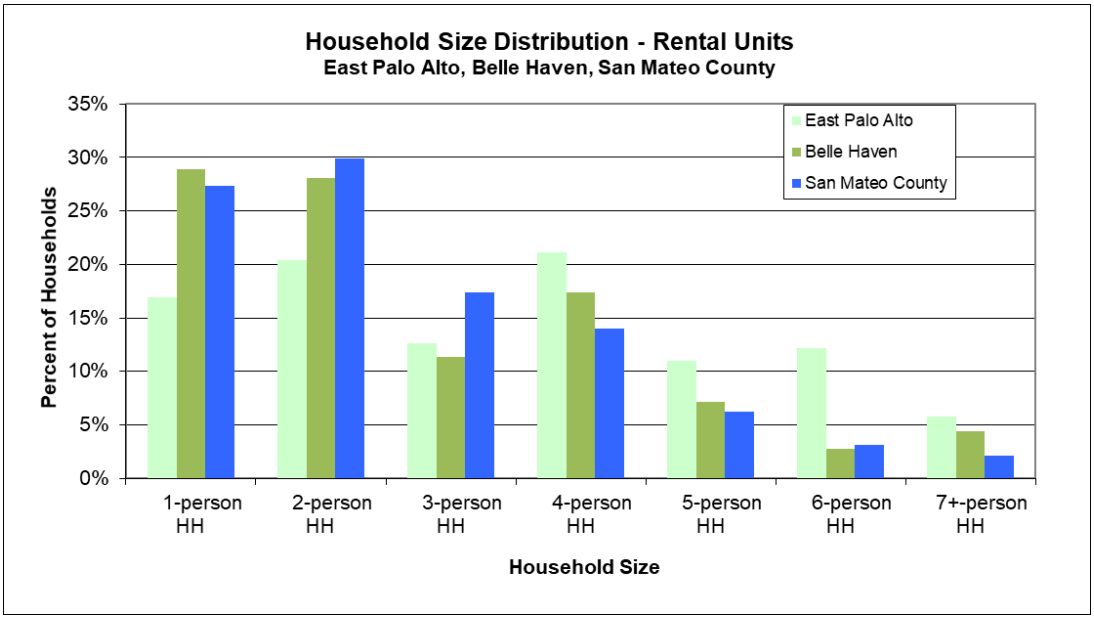


Source: 2015-2019 American Community Survey 5-Year Estimates.

4. Household Size

Household sizes in East Palo Alto and Belle Haven are larger than county averages as shown in the charts below:

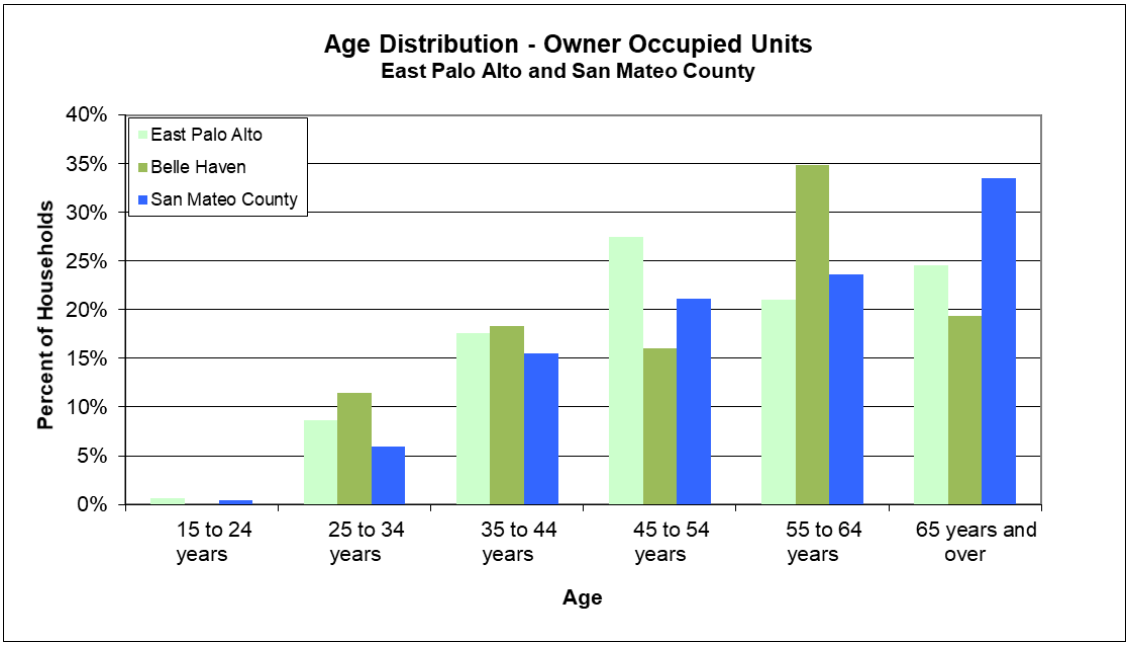


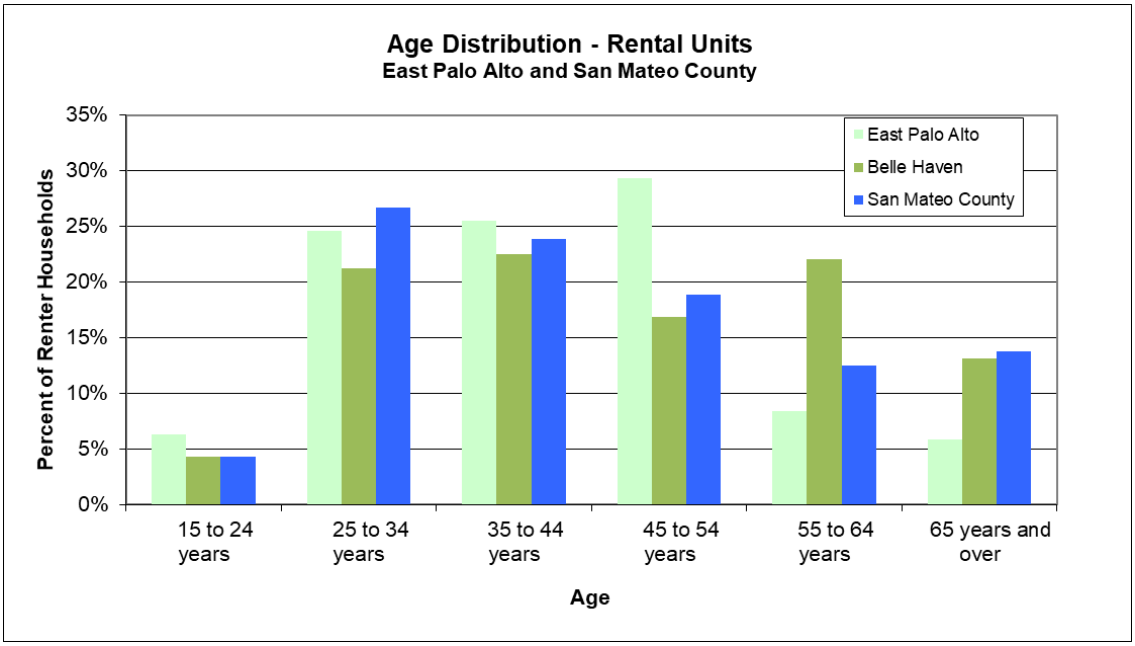


Source: American Community Survey, 2015-2019, Table B25009

5. Age

The population of East Palo Alto and Belle Haven is younger than for the county as a whole:

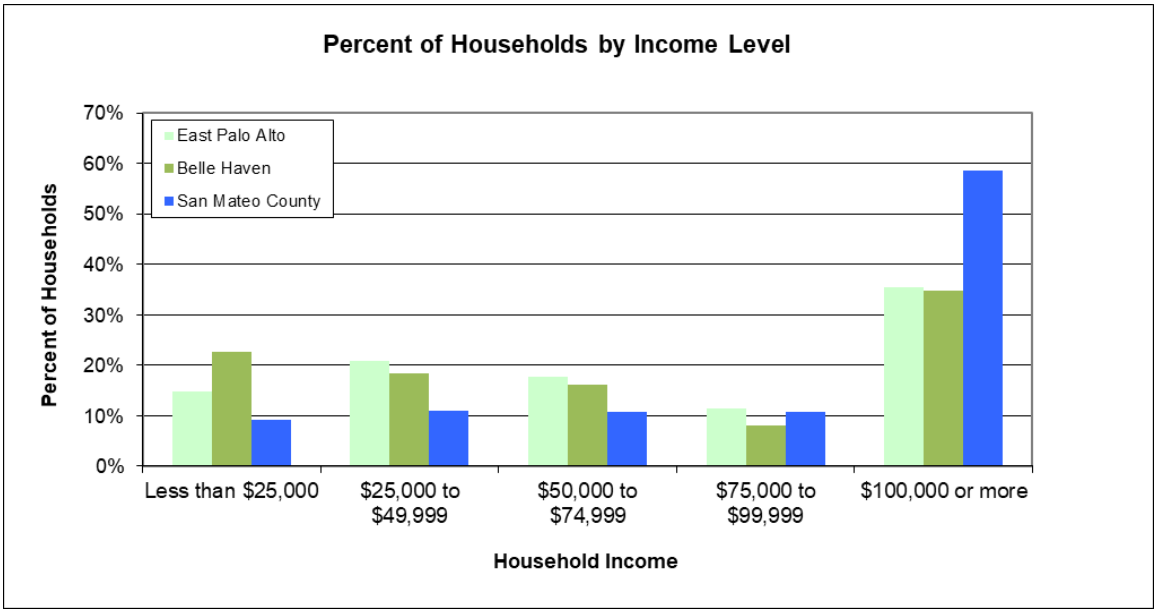




Source: American Community Survey, 2015-2019, Table B25007

6. Income and Employment status

East Palo Alto and Belle Haven households have lower incomes than county averages and a higher percentage of families below the poverty line. Unemployment levels in East Palo Alto and Belle Haven are similar to the county average.



Source: 2015-2019 American Community Survey 5-Year Estimates

Employment Status, Median Income, Poverty

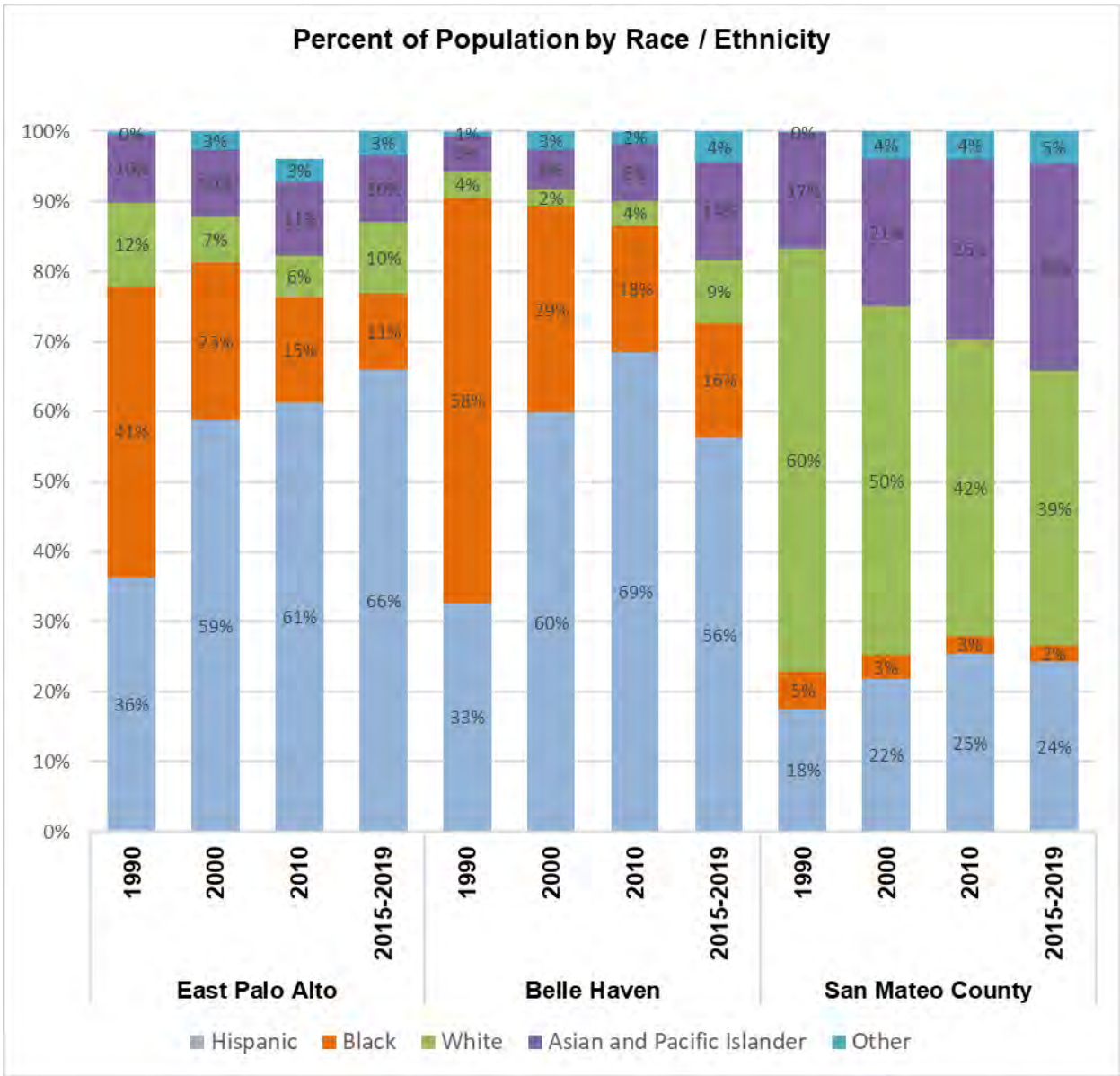
	East Palo Alto		Belle Haven		San Mateo County	
	Number	Percent	Number	Percent	Number	Percent
Employment Status						
Employed	15,507	69%	3,139	69%	414,747	66%
Unemployed	712	3%	145	3%	16,104	3%
Not in Labor Force	6,170	28%	1,252	28%	194,832	31%
Total Population Over 16 Years	22,413	100%	4,536	100%	625,917	100%
Median Household Income (2019 dollars)		$67,087		$65,613		$122,641
Percent of Families Below Poverty Level		10.60%		12.10%		4.00%

Source: 2015-2019 American Community Survey 5-Year Estimates

7. Race and Ethnicity

Approximately two-thirds of East Palo Alto and 56% of Belle Haven residents are Hispanic, compared to the county average of 24%. African American residents represent 11% and 16% of the population in East Palo Alto and Belle Haven, respectively. The Hispanic population of both

communities has increased since 1990 while the African American population has declined, as shown in the chart below. The most recent ACS data suggests a shift in longer-term trends within Belle Haven including a reversal of the trend toward increasing Hispanic population and an increase in the white and Asian populations.

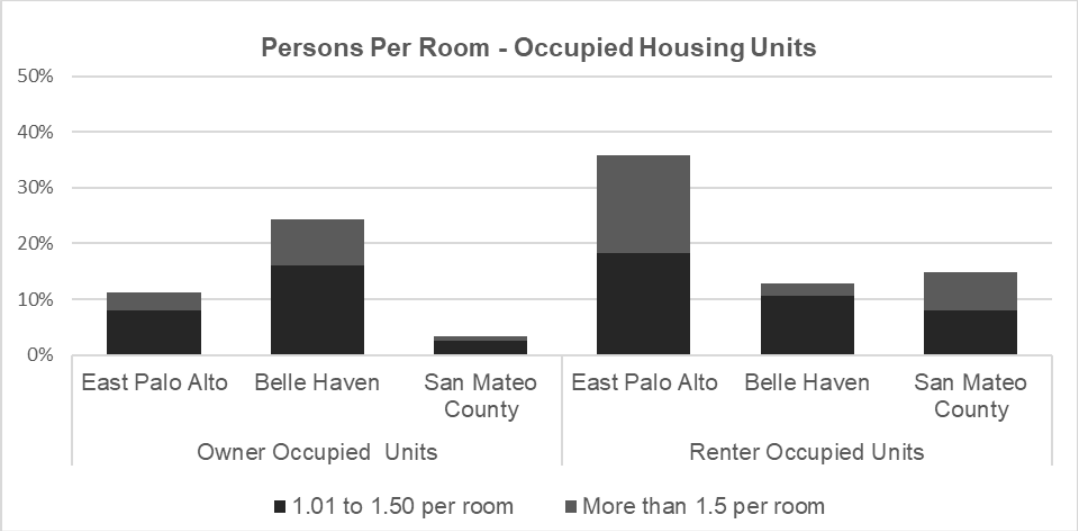


Sources: 1990, 2000, 2010 Census; 2015-2019 American Community Survey

8. Overcrowding

Overcrowding is generally defined as an occupancy level above one person per room. In East Palo Alto, about 11% of owner-occupied units and 36% of renter-occupied units have more than one person per room. The incidence of over-crowding in East Palo Alto is significantly greater than San Mateo County as a whole, especially in the rental stock. In Belle Haven, overcrowding

in owner occupied housing is also above the county average while crowding in the rental housing stock is similar to the county average.



Source: 2015-2019 American Community Survey 5-Year Estimates.

Occupants Per Room

Occupants Per Room	Owner Occupied			Renter Occupied		
	East Palo Alto	Belle Haven	San Mateo County	East Palo Alto	Belle Haven	San Mateo County
1 Person or fewer per room	89%	76%	97%	64%	87%	85%
1.01 to 1.50 per room	8%	16%	3%	18%	11%	8%
1.51 to 2.00 per room	2%	5%	1%	11%	2%	5%
2.01 or more per room	1%	3%	0%	6%	0%	2%
1.01 Per Room or more[(1)]	**11%**	**24%**	**3%**	**36%**	**13%**	**15%**
Total	100%	100%	100%	100%	100%	100%

(1) The Census has no official definition of over-crowding but it is sometimes defined as more than one person per room.

Source: 2015-2019 American Community Survey 5-Year Estimates.

Both conditions of overspending and overcrowding are directly linked to the high cost of housing relative to residents' incomes. Households are forced to spend a high percentage of their income on housing if lower cost housing is not available. Overcrowding is a direct response to high housing costs, as households make do with smaller units or double up with other family members, roommates, etc.

APPENDIX C – DISPLACEMENT ANALYSIS SUPPORTING TABLES

APPENDIX C TABLE 1
REGRESSION ANALYSIS (SINGLE-COUNTY)
ESTIMATED PROJECT IMPACT ON LOCAL RENTS/ HOME PRICES
BASED ON RELATIONSHIP BETWEEN LOCAL JOBS AND LOCAL HOUSING MARKET
WILLOW VILLAGE MASTER PLAN PROJECT
MENLO PARK, CA

San Mateo County Analysis	Total Jobs Analysis		High-Wage Jobs Analysis	
	Impact on Rents	Impact on Home Prices	Impact on Rents	Impact on Home Prices
Linear Regression				
X (Independent) Variable	Total Adjusted Jobs (1)		Adjusted High-Wage Jobs (1)	
Y (Dependent) Variable[2]	Asking Rent/ SF (One-Bedroom)	Home Price/SF	Asking Rent/ SF (One-Bedroom)	Home Price/SF
Correlation (Adjusted R-Square) (0 = no correlation, 1 = perfect correlation)	0.90 (strong)	0.28 (weak)	0.76 (strong)	0.34 (weak)
P-Value (<.05 = significant)	<.05 significant	<.05 significant	<.05 significant	<.05 significant
Estimated % Increase per 10,000 adjusted jobs[1]	3.9%	3.6%	6.1%	6.5%
Estimated Project Impact				
Added Jobs[3]	4,332	4,332	4,332	4,332
(less) Employees Housed[4]	2,612	2,612	2,612	2,612
Adjusted Jobs[1]	1,720	1,720	1,720	1,720
Upper Estimate of Potential % Increase in County Rents / Sales Prices Due to Project	0.67%	0.61%	1.04%	1.12%

[1] Jobs figures reflect an adjustment for the number of jobs that can be accommodated by housing growth since 2000. See Appendix C Table 10 for calculation.

[2] Asking rents and home prices are adjusted for inflation in linear regression analysis. See Appendix C Table 9.

[3] Reflects on-site jobs. Potential rent and price effects associated with multiplier effects are captured through the high-wage jobs analysis as described in the report text.

[4] Based on 1,730 units and a workers per worker household ratio of 1.51, modified from the 1.91 countywide average used elsewhere based on the unit mix of the proposed Project. Modified ratio calculated from Public Use Microdata for Alameda, San Mateo, San Francisco and San Mateo counties for multifamily buildings with 50+ units and based on the specific bedroom mix in the Project.

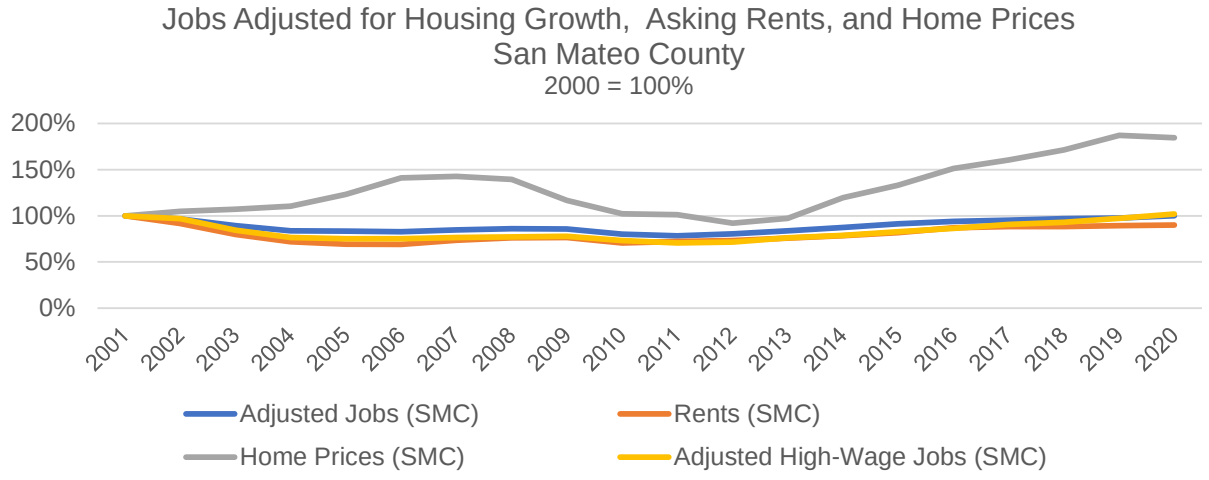
APPENDIX C TABLE 2
REGRESSION ANALYSIS (SINGLE-COUNTY)
REGRESSION ANALYSIS INPUTS
WILLOW VILLAGE MASTER PLAN PROJECT
MENLO PARK CA

	x-variables		y-variables (dependent)	
	Adjusted[1] Total Jobs San Mateo Cty.	Adjusted[1, 2] High-Wage Jobs San Mateo Cty.	Asking Rent/SF[3] All Units San Mateo Cty.	Home Price/SF[3] All Units San Mateo Cty.
2000	380,137	146,968	$4.01	$498
2001	367,626	142,197	$3.68	$522
2002	339,584	123,802	$3.21	$533
2003	318,566	112,328	$2.88	$549
2004	316,782	110,240	$2.78	$614
2005	314,000	110,632	$2.77	$702
2006	321,539	112,251	$2.95	$711
2007	326,479	113,526	$3.06	$694
2008	325,625	114,122	$3.07	$581
2009	304,788	107,415	$2.83	$509
2010	297,701	103,778	$2.90	$504
2011	305,337	105,362	$2.93	$458
2012	317,984	111,964	$3.04	$484
2013	332,191	115,938	$3.16	$596
2014	347,480	121,514	$3.28	$662
2015	356,895	126,783	$3.49	$754
2016	362,151	133,391	$3.55	$799
2017	368,822	136,599	$3.55	$853
2018	370,922	142,679	$3.59	$932
2019	380,382	149,793	$3.61	$918
2020	347,720	149,195	$3.24	$939

[1] Adjusted jobs defined as total employment less the number of jobs that can be accommodated by housing growth since 2000, based on a factor of 1.91 workers per household. Housing growth adjustment for high-wage jobs reflects a lesser adjustment based on high-wage job share of overall jobs. See Appendix C Table 10 and 11 for calculations.

[2] High wage jobs defined as industries with $100k or more average annual wages in 2016.

[3] Asking rents and home prices are adjusted for inflation in linear regression analysis. See Appendix C Table 9.

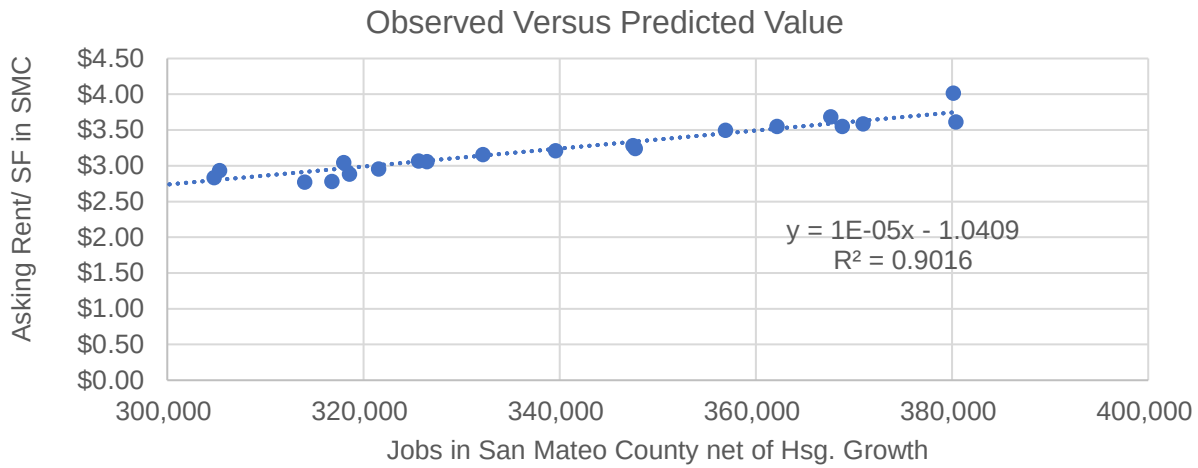


APPENDIX C TABLE 3A
REGRESSION ANALYSIS (SINGLE-COUNTY)
RELATIONSHIP OF MULTIFAMILY ASKING RENTS AND JOBS IN SAN MATEO COUNTY
WILLOW VILLAGE MASTER PLAN PROJECT
MENLO PARK CA

Variables	
Y Variable:	*Asking Rents/SF (San Mateo County)*
X Variable	*Adjusted Jobs (San Mateo County)*

Implied Impact	
2020 Rent/SF (All Units)	$3.24
% Increase/ 10,000 Unhoused Jobs	3.9%

Regression Statistics	
Multiple R	0.94954
R Square	0.90163
Adjusted R Square	0.89645
Standard Error	0.11210
Observations	21



ANOVA

	df	*SS*	*MS*	*F*	*Significance F*
Regression	1	2.188313	2.18831	174.15111	5.11967E-11
Residual	19	0.238746	0.01257		
Total	20	2.427059			

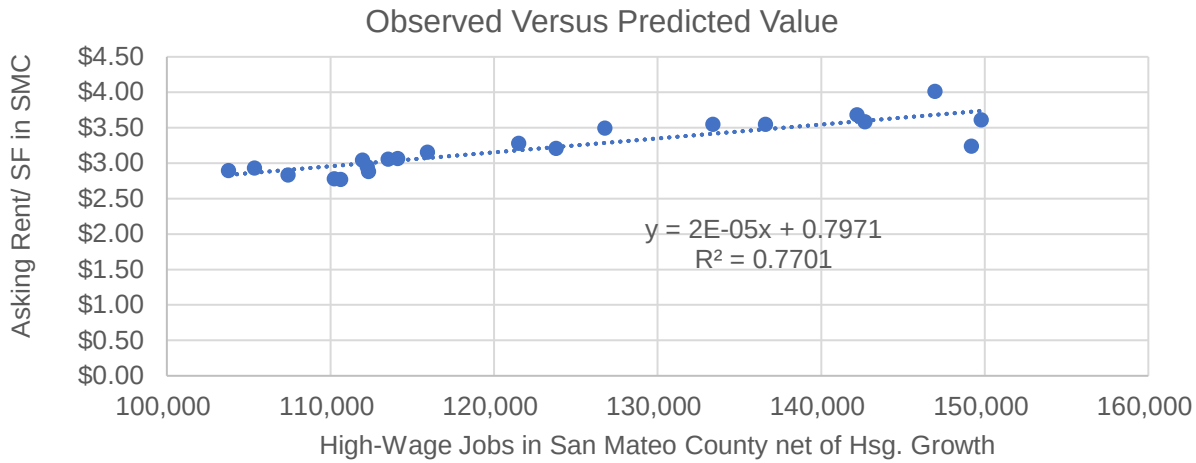
	Coefficients	*Standard Error*	*t Stat*	*P-value*	*Lower 95%*	*Upper 95%*
Intercept	-1.04087	0.32369	-3.21566	0.00455	-1.71835	-0.36338
X Variable 1	1.25933E-05	9.54282E-07	13.19663242	5.11967E-11	1.0596E-05	1.45906E-05

APPENDIX C TABLE 3B
REGRESSION ANALYSIS (SINGLE-COUNTY)
RELATIONSHIP OF MULTIFAMILY ASKING RENTS AND HIGH-WAGE JOBS IN SAN MATEO COUNTY
WILLOW VILLAGE MASTER PLAN PROJECT
MENLO PARK CA

Variables	
Y Variable:	*Asking Rents/SF (San Mateo County)*
X Variable	*Adjusted High-Wage Jobs (San Mateo County)*

Implied Impact	
2020 Rent/SF (All Units)	$3.24
% Increase/ 10,000 Adj High-Wage Jobs	6.1%

Regression Statistics	
Multiple R	0.87753
R Square	0.77006
Adjusted R Square	0.75796
Standard Error	0.17138
Observations	21



ANOVA

	df	*SS*	*MS*	*F*	*Significance F*
Regression	1	1.86898	1.86898	63.62960	1.74973E-07
Residual	19	0.55808	0.02937		
Total	20	2.42706			

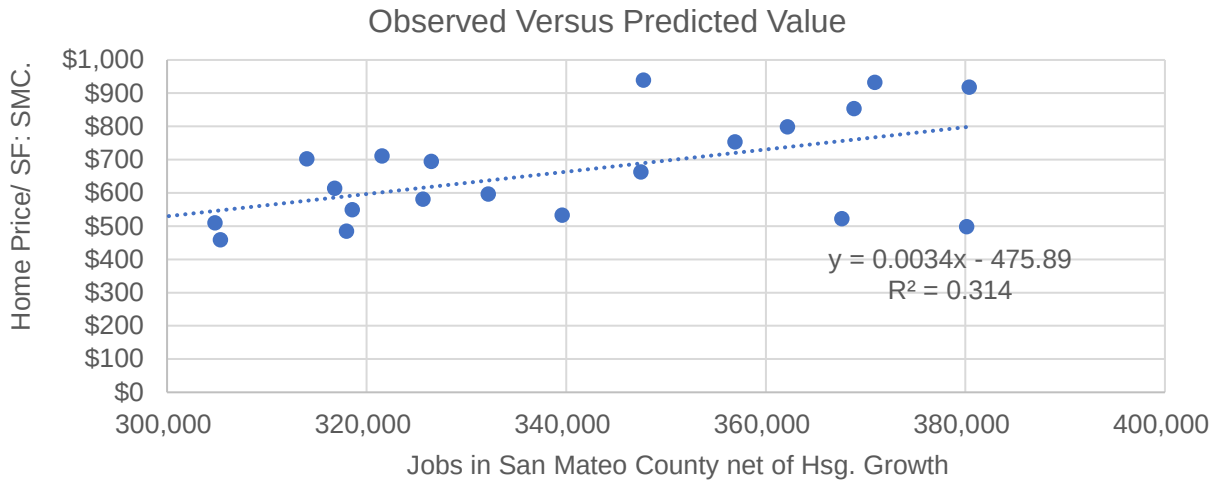
	Coefficients	*Standard Error*	*t Stat*	*P-value*	*Lower 95%*	*Upper 95%*
Intercept	0.79712	0.30585	2.60627	0.01735	0.15697	1.43726
X Variable 1	1.963E-05	2.461E-06	7.977E+00	1.750E-07	1.448E-05	2.478E-05

APPENDIX C TABLE 4A
REGRESSION ANALYSIS (SINGLE-COUNTY)
RELATIONSHIP OF HOME PRICES AND JOBS IN SAN MATEO COUNTY
WILLOW VILLAGE MASTER PLAN PROJECT
MENLO PARK CA

Variables	
Y Variable:	*Sale Price/SF (San Mateo County)*
X Variable	*Adjusted Jobs (San Mateo County)*

Implied Impact	
2020 Price/SF	$939
% Increase/ 10,000 Adjusted Jobs	3.6%

Regression Statistics	
Multiple R	0.56037
R Square	0.31402
Adj R Square	0.27791
Standard Error	133.49459
Observations	21



ANOVA

	df	*SS*	*MS*	*F*	*Significance F*
Regression	1	154,996	154,996	8.6975	0.0082
Residual	19	338,595	17,821		
Total	20	493,592			

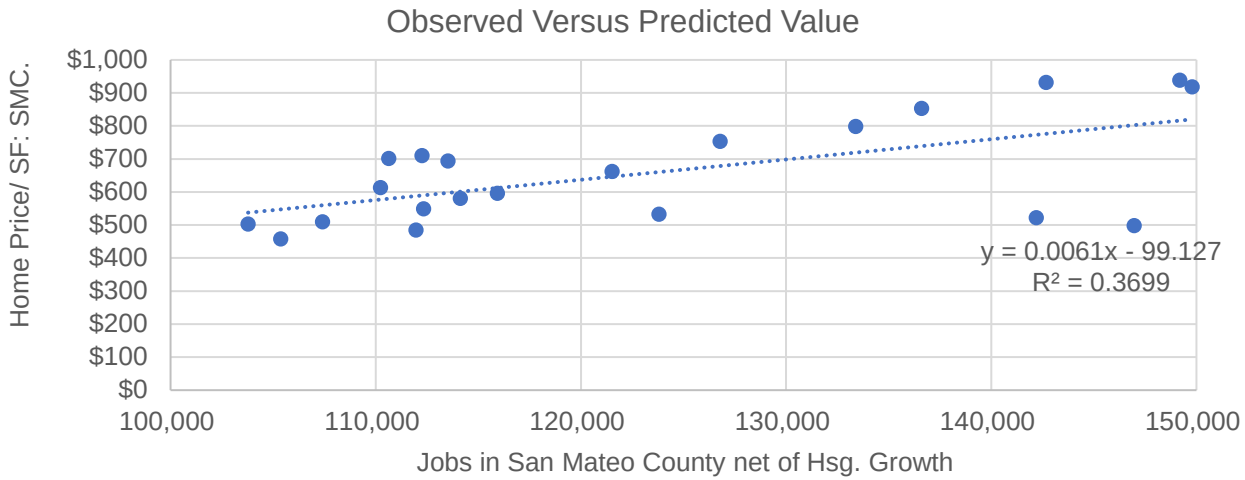
	Coefficients	*Standard Error*	*t Stat*	*P-value*	*Lower 95%*	*Upper 95%*
Intercept	-475.88586	385.47587	-1.23454	0.23205	-1282.70	330.92
X Variable 1	0.00335	0.00114	2.94915	0.00824	0.00097	0.00573

APPENDIX C TABLE 4B
REGRESSION ANALYSIS (SINGLE-COUNTY)
RELATIONSHIP OF HOME PRICES AND JOBS IN SAN MATEO COUNTY
WILLOW VILLAGE MASTER PLAN PROJECT
MENLO PARK CA

Variables	
Y Variable:	*Sale Price/SF (San Mateo County)*
X Variable	*Adjusted High Wage Jobs (San Mateo County)*

Implied Impact	
2020 Price/SF	$939
% Increase/ 10,000 Adjusted HW Jobs	6.5%

Regression Statistics	
Multiple R	0.60820
R Square	0.36991
Adj R Square	0.33675
Standard Error	127.94080
Observations	21



ANOVA

	df	*SS*	*MS*	*F*	*Significance F*
Regression	1	182,584	182,584	11.15433	0.00344
Residual	19	311,008	16,369		
Total	20	493,592			

	Coefficients	*Standard Error*	*t Stat*	*P-value*	*Lower 95%*	*Upper 95%*
Intercept	-99.1275	228.3183	-0.4342	0.6691	-577.0033	378.7483
X Variable 1	0.006135	0.001837	3.339810	0.00344	0.002290	0.009980

APPENDIX C TABLE 5
REGRESSION ANALYSIS (THREE-COUNTY)
ESTIMATED PROJECT IMPACT ON LOCAL RENTS / HOME PRICES
BASED ON RELATIONSHIP BETWEEN REGIONAL JOBS & LOCAL HOUSING MARKET
WILLOW VILLAGE MASTER PLAN PROJECT
MENLO PARK CA

Three-County Analysis [3]	Total Jobs Analysis		High-Wage Jobs Analysis	
	Impact on Rents	Impact on Home Prices	Impact on Rents	Impact on Home Prices
Linear Regression				
X (Independent) Variable	Total Adjusted Jobs (1)		Adjusted High-Wage Jobs (1)	
Y (Dependent) Variable[2]	Asking Rent/ SF (One-Bedroom)	Home Price/SF	Asking Rent/ SF (One-Bedroom)	Home Price/SF
Correlation (Adjusted R-Square) (0 = no correlation, 1 = perfect correlation)	0.92 (strong)	0.22 (weak)	0.85 (strong)	0.17 (very weak)
P-Value	<.05 significant	<.05 significant	<.05 significant	<.05 significant
Estimated % Increase per 10,000 adjusted jobs[1]	0.7%	0.6%	1.0%	0.8%
Estimated Project Impact				
Added Jobs[4]	4,332	4,332	4,332	4,332
(less) Employees Housed[5]	2,612	2,612	2,612	2,612
Adjusted Jobs[1]	1,720	1,720	1,720	1,720
Lower Estimate of Potential % Increase in County Rents / Sales Prices Due to Project	0.12%	0.10%	0.18%	0.14%

1 Adjusted jobs defined as total employment less the number of jobs that can be accommodated by housing growth since 2000, based on a factor of 1.91 workers per household. Housing growth adjustment for high-wage jobs reflects a lesser adjustment based on high-wage job share of overall jobs. See Appendix C Table 10 and 11 for calculations.

[2] Asking rents and home prices are for San Mateo County and are adjusted for inflation in linear regression analysis. See Appendix C Table 9.

[3] San Mateo, Santa Clara, and San Francisco counties.

[4] Reflects on-site jobs. Potential rent and price effects associated with multiplier effects are captured through the high-wage jobs analysis as described in the report text.

[5] Based on 1,730 units and a workers per worker household ratio of 1.51, modified from the 1.91 countywide average used elsewhere based on the unit mix of the proposed Project. Modified ratio calculated from Public Use Microdata for Alameda, San Mateo, San Francisco and San Mateo counties for multifamily buildings with 50+ units and based on the specific bedroom mix in the Project.

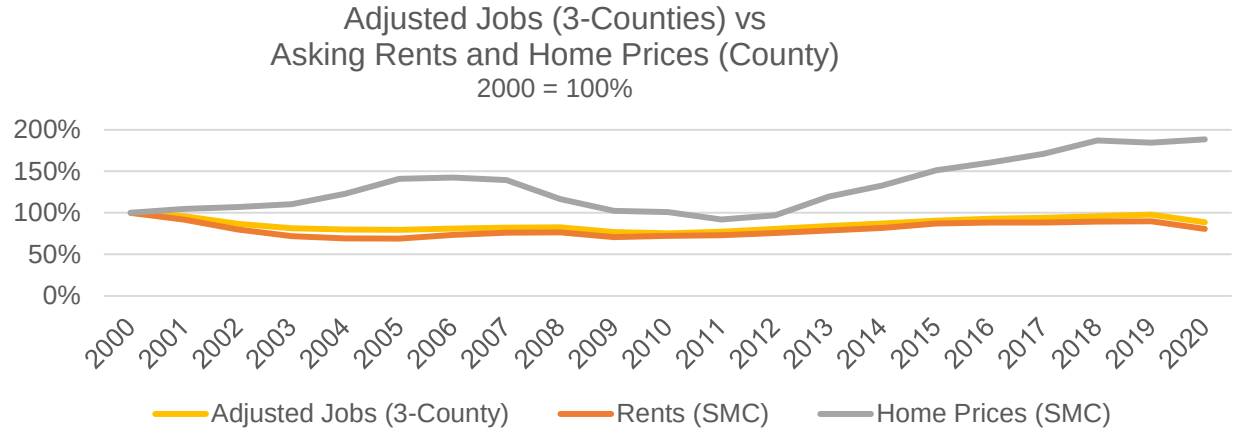
APPENDIX C TABLE 6
REGRESSION ANALYSIS (THREE-COUNTY)
REGRESSION ANALYSIS INPUTS
WILLOW VILLAGE MASTER PLAN PROJECT
MENLO PARK CA

	x-variable		y-variables (dependent)	
	Adjusted [1] Total Jobs 3-County Area[3]	Adjusted [1] High-Wage Jobs	Asking Rent/SF[2] All Units San Mateo Cty.	Home Price/SF[2] All Units San Mateo Cty.
2000	2,028,395	915,210	$4.01	$498
2001	1,943,792	871,789	$3.68	$522
2002	1,762,584	739,323	$3.21	$533
2003	1,655,461	666,344	$2.88	$549
2004	1,620,207	639,007	$2.78	$614
2005	1,615,110	637,263	$2.77	$702
2006	1,641,486	648,744	$2.95	$711
2007	1,669,794	657,641	$3.06	$694
2008	1,677,613	659,165	$3.07	$581
2009	1,560,325	606,861	$2.83	$509
2010	1,529,354	590,842	$2.90	$504
2011	1,569,715	616,987	$2.93	$458
2012	1,638,973	644,341	$3.04	$484
2013	1,706,534	673,336	$3.16	$596
2014	1,770,797	706,888	$3.28	$662
2015	1,837,223	741,905	$3.49	$754
2016	1,884,353	771,508	$3.55	$799
2017	1,911,783	790,030	$3.55	$853
2018	1,944,343	823,623	$3.59	$932
2019	1,984,264	854,658	$3.61	$918
2020	1,799,843	829,621	$3.24	$939

[1] Adjusted jobs defined as total employment less the number of jobs that can be accommodated by housing growth since 2000, based on a factor of 1.91 workers per household. See Appendix 2 for calculation.

[2] Asking rents and home prices are adjusted for inflation in linear regression analysis. See Appendix 1.

[3] San Mateo, Santa Clara, and San Francisco counties.

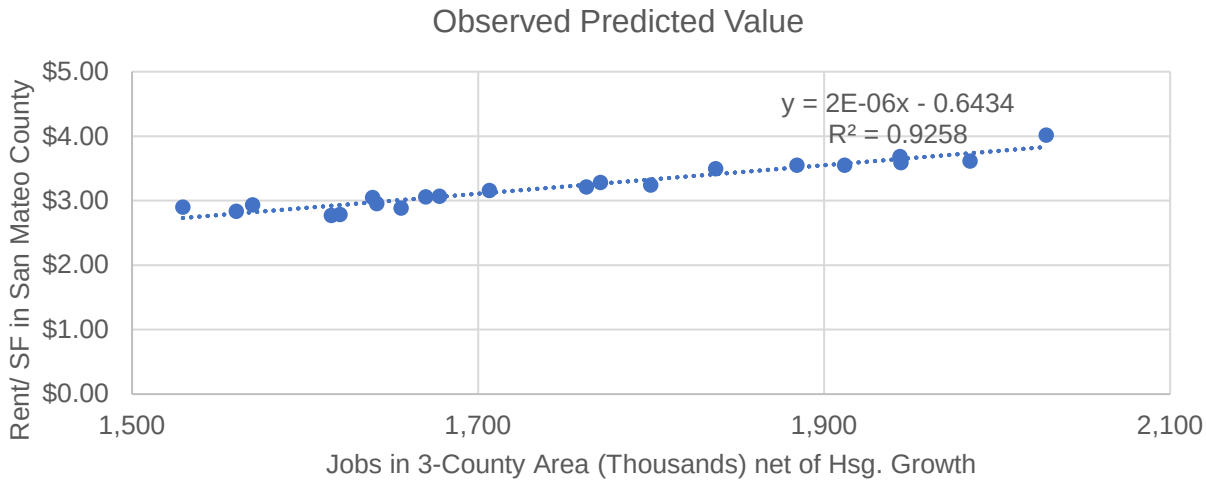


APPENDIX C TABLE 7A
REGRESSION ANALYSIS (THREE-COUNTY)
RELATIONSHIP OF MULTIFAMILY ASKING RENTS IN SAN MATEO COUNTY AND JOBS IN THREE-COUNTY AREA
WILLOW VILLAGE MASTER PLAN PROJECT
MENLO PARK CA

Variables	
Y Variable:	*Asking Rent/SF (San Mateo County)*
X Variable:	*Adjusted Jobs (Three-County Area)*

Implied Impact	
2020 Rent/SF (All Units)	$3.24
% Increase/ 10,000 Adjusted Jobs	0.7%

Regression Statistics	
Multiple R	0.962173
R Square	0.925777
Adjusted R Square	0.921870
Standard Error	0
Observations	21



ANOVA

	df	*SS*	*MS*	*F*	*Significance F*
Regression	1	2.246915	2.246915	236.9841	3.48409E-12
Residual	19	0.180144	0.009481		
Total	20	2.427059			

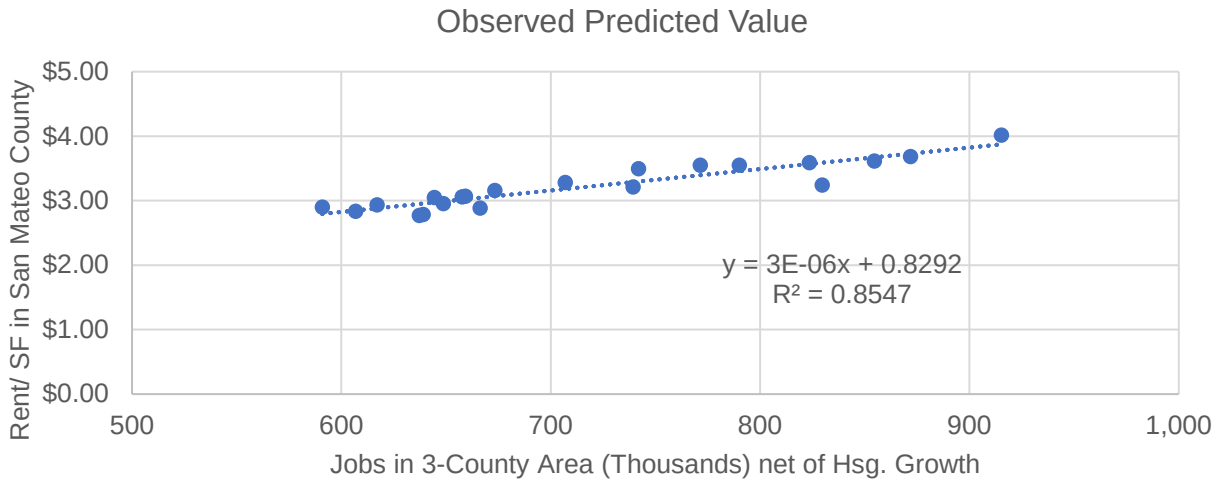
	Coefficients	*Standard Error*	*t Stat*	*P-value*	*Lower 95%*	*Upper 95%*
Intercept	-0.64344	0.25177	-2.55570	0.01932	-1.17039	-0.11649
X Variable 1	2.207E-06	1.433E-07	1.539E+01	3.484E-12	1.907E-06	2.507E-06

APPENDIX C TABLE 7B
REGRESSION ANALYSIS (THREE-COUNTY)
RELATIONSHIP OF MULTIFAMILY ASKING RENTS IN SAN MATEO COUNTY AND HIGH-WAGE JOBS IN THREE-COUNTY AREA
WILLOW VILLAGE MASTER PLAN PROJECT
MENLO PARK CA

Variables	
Y Variable:	*Asking Rent/SF (San Mateo County)*
X Variable:	*Adjusted High-Wage Jobs (Three-County Area)*

Implied Impact	
2020 Rent/SF (All Units)	$3.24
% Increase/ 10,000 Adjusted HW Jobs	1.0%

Regression Statistics	
Multiple R	0.92452
R Square	0.85474
Adjusted R Square	0.84709
Standard Error	0.13622
Observations	21



ANOVA

	df	*SS*	*MS*	*F*	*Significance F*
Regression	1	2.07450	2.07450	111.79915	2.128E-09
Residual	19	0.35256	0.01856		
Total	20	2.42706			

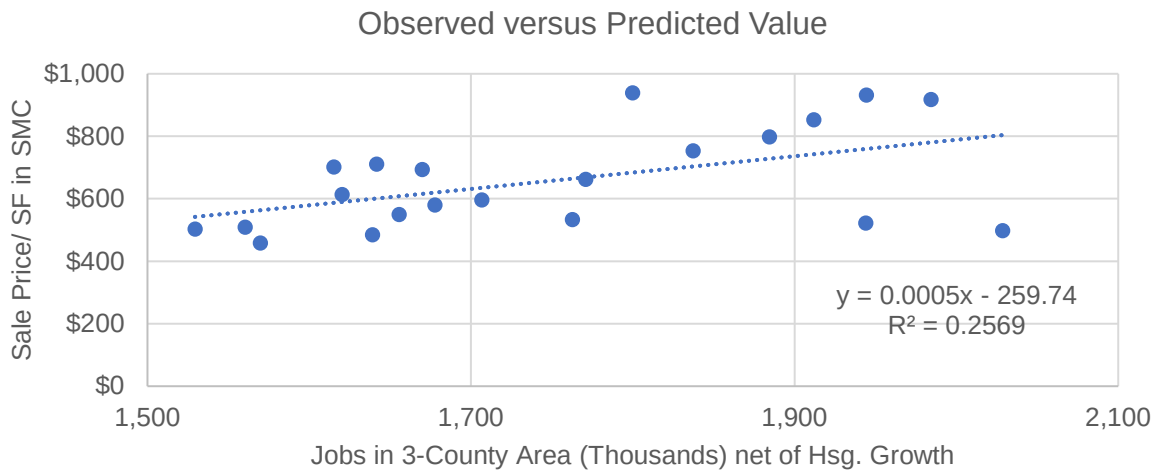
	Coefficients	*Standard Error*	*t Stat*	*P-value*	*Lower 95%*	*Upper 95%*
Intercept	0.82915	0.22792	3.63789	0.00175	0.35211	1.30620
X Variable 1	3.3262E-06	3.1458E-07	1.0574E+01	2.1276E-09	2.6678E-06	3.9846E-06

APPENDIX C TABLE 8A
REGRESSION ANALYSIS (THREE-COUNTY)
RELATIONSHIP OF HOME PRICES IN SAN MATEO COUNTY AND JOBS IN THREE-COUNTY AREA
WILLOW VILLAGE MASTER PLAN PROJECT
MENLO PARK CA

Variables	
Y Variable:	*Sale Price/SF (San Mateo County)*
X Variable:	*Adjusted Jobs (Three-County Area)*

Implied Impact	
2020 Price/SF	$939
% Increase/ 10,000 Adjusted Jobs	0.6%

Regression Statistics	
Multiple R	0.506850
R Square	0.256897
Adjusted R Square	0.217786
Standard Error	138.941413
Observations	21



ANOVA

	df	*SS*	*MS*	*F*	*Significance F*
Regression	1	126,802.10	126,802.10	6.5684516	0.0190307
Residual	19	366,789.61	19,304.72		
Total	20	493,591.71			

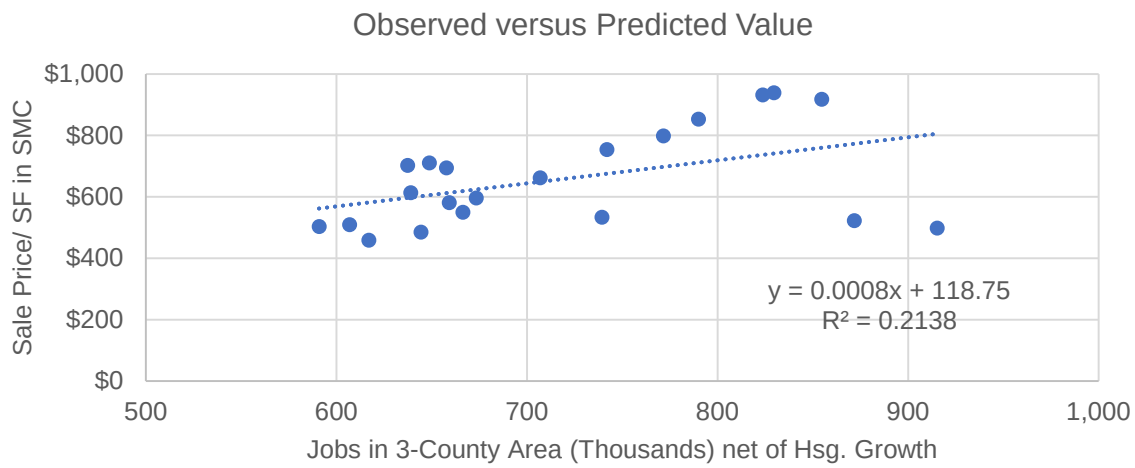
	Coefficients	*Standard Error*	*t Stat*	*P-value*	*Lower 95%*	*Upper 95%*
Intercept	-259.74356	359.24885	-0.72302	0.47848	-1011.66003	492.17292
X Variable 1	0.000524	0.000205	2.56290	0.01903	0.00010	0.00095

APPENDIX C TABLE 8B
REGRESSION ANALYSIS (THREE-COUNTY)
RELATIONSHIP OF HOME PRICES IN SAN MATEO COUNTY AND HIGH-WAGE JOBS IN THREE-COUNTY AREA
WILLOW VILLAGE MASTER PLAN PROJECT
MENLO PARK CA

Variables	
Y Variable:	*Sale Price/SF (San Mateo County)*
X Variable:	*Adjusted High-Wage Jobs (Three-County Area)*

Implied Impact	
2020 Price/SF	$939
% Increase/ 10,000 Adjusted HW Jobs	0.8%

Regression Statistics	
Multiple R	0.4624
R Square	0.2138
Adjusted R Square	0.1725
Standard Error	142.9105
Observations	21



ANOVA

	df	*SS*	*MS*	*F*	*Significance F*
Regression	1	105,546.72	105,546.72	5.16793	0.034801
Residual	19	388,044.99	20,423.42		
Total	20	493,591.71			

	Coefficients	*Standard Error*	*t Stat*	*P-value*	*Lower 95%*	*Upper 95%*
Intercept	118.745615	239.117388	0.496600	0.62517	-381.732831	619.224060
X Variable 1	0.0007503	0.0003300	2.2733072	0.03480	0.0000595	0.0014410

APPENDIX C TABLE 9
BASELINE DATA
INFLATION-ADJUSTED RENTAL AND SALES PRICING
WILLOW VILLAGE MASTER PLAN PROJECT
MENLO PARK CA

Source: CoreLogic, Costar, Bureau of Labor Statistics

A. Inflation-Adjusted Sales Price Per Square Foot - San Mateo County (All Units)

	Attached 21%	Detached 79%	Weighted Average	Inflation Adjust.*	Inflation Adjusted $
	App.C, Tab. 12	App.C, Tab. 12		BLS-CPI	
2000	$305	$338	$331	1.50	$498
2001	$335	$363	$357	1.46	$522
2002	$342	$378	$371	1.44	$533
2003	$355	$400	$391	1.41	$549
2004	$408	$458	$448	1.37	$614
2005	$497	$538	$530	1.33	$702
2006	$502	$567	$554	1.28	$711
2007	$508	$568	$556	1.25	$694
2008	$435	$496	$483	1.20	$581
2009	$381	$433	$422	1.21	$509
2010	$354	$442	$424	1.19	$504
2011	$321	$418	$398	1.15	$458
2012	$344	$452	$430	1.13	$484
2013	$463	$556	$536	1.11	$596
2014	$520	$628	$606	1.09	$662
2015	$597	$714	$690	1.09	$754
2016	$652	$764	$741	1.08	$799
2017	$711	$833	$808	1.06	$853
2018	$809	$929	$904	1.03	$932
2019	$789	$938	$907	1.01	$918
2020	$778	$980	$939	1.00	$939

APPENDIX C TABLE 9
BASELINE DATA
INFLATION-ADJUSTED RENTAL AND SALES PRICING
WILLOW VILLAGE MASTER PLAN PROJECT
MENLO PARK CA

Source: CoreLogic, Costar, Bureau of Labor Statistics

B. Inflation-Adjusted Asking Rent Per Square Foot - San Mateo County (All Units)

	Nominal Rent	CPI Factor	Adjusted $
	App.C, Tab. 13	BLS-CPI	
2000	$2.67	1.50	$4.01
2001	$2.52	1.46	$3.68
2002	$2.23	1.44	$3.21
2003	$2.05	1.41	$2.88
2004	$2.03	1.37	$2.78
2005	$2.09	1.33	$2.77
2006	$2.30	1.28	$2.95
2007	$2.45	1.25	$3.06
2008	$2.55	1.20	$3.07
2009	$2.35	1.21	$2.83
2010	$2.44	1.19	$2.90
2011	$2.55	1.15	$2.93
2012	$2.70	1.13	$3.04
2013	$2.84	1.11	$3.16
2014	$3.00	1.09	$3.28
2015	$3.20	1.09	$3.49
2016	$3.29	1.08	$3.55
2017	$3.36	1.06	$3.55
2018	$3.48	1.03	$3.59
2019	$3.57	1.01	$3.61
2020	$3.24	1.00	$3.24

APPENDIX C TABLE 10
BASELINE DATA
JOBS ADJUSTED FOR HOUSNG GROWTH - ALL JOBS
WILLOW VILLAGE MASTER PLAN PROJECT
MENLO PARK CA

Source: Quarterly Census of Employment and Wages & California Department of Finance

A. San Mateo County

	Total Jobs	Housing Units	Hsg Growth Since 2000	Jobs Adjusted for Housing Growth
	App.C, Tab. 14	App.C, Tab. 15		1.91 jobs/unit
2000	380,137	260,578	0	380,137
2001	369,868	261,753	1,175	367,626
2002	345,137	263,489	2,911	339,584
2003	327,080	265,041	4,463	318,566
2004	327,152	266,014	5,436	316,782
2005	326,536	267,149	6,571	314,000
2006	334,910	267,587	7,009	321,539
2007	340,640	268,001	7,423	326,479
2008	342,361	269,351	8,773	325,625
2009	323,195	270,227	9,649	304,788
2010	317,576	270,996	10,418	297,701
2011	326,055	271,438	10,860	305,337
2012	340,075	272,158	11,580	317,984
2013	354,891	272,477	11,899	332,191
2014	372,192	273,532	12,954	347,480
2015	383,668	274,612	14,034	356,895
2016	391,640	276,036	15,458	362,151
2017	400,511	277,189	16,611	368,822
2018	404,242	278,044	17,466	370,922
2019	415,999	279,248	18,670	380,382
2020*	386,449	280,879	20,301	347,720

APPENDIX C TABLE 10
BASELINE DATA
JOBS ADJUSTED FOR HOUSNG GROWTH - ALL JOBS
WILLOW VILLAGE MASTER PLAN PROJECT
MENLO PARK CA

Source: Quarterly Census of Employment and Wages & California Department of Finance

B. San Mateo, Santa Clara, and San Francisco counties

	Total Jobs	Housing Units	Hsg Growth Since 2000	Jobs Adjusted for Housing Growth
	App.C, Tab. 14	App.C, Tab. 15		1.91 jobs/unit
2000	2,028,395	1,186,434	0	2,028,395
2001	1,958,590	1,194,191	7,757	1,943,792
2002	1,797,930	1,204,962	18,528	1,762,584
2003	1,712,501	1,216,334	29,900	1,655,461
2004	1,692,626	1,224,395	37,961	1,620,207
2005	1,706,403	1,234,289	47,855	1,615,110
2006	1,748,924	1,242,752	56,318	1,641,486
2007	1,793,726	1,251,398	64,964	1,669,794
2008	1,821,874	1,262,054	75,620	1,677,613
2009	1,721,849	1,271,103	84,669	1,560,325
2010	1,705,878	1,278,966	92,532	1,529,354
2011	1,751,586	1,281,769	95,335	1,569,715
2012	1,829,666	1,286,393	99,959	1,638,973
2013	1,905,422	1,290,689	104,255	1,706,534
2014	1,986,238	1,299,366	112,932	1,770,797
2015	2,075,385	1,311,276	124,842	1,837,223
2016	2,140,877	1,320,901	134,467	1,884,353
2017	2,188,876	1,331,683	145,249	1,911,783
2018	2,243,210	1,343,097	156,663	1,944,343
2019	2,296,413	1,350,059	163,625	1,984,264
2020*	2,130,195	1,359,601	173,167	1,799,843

* Jobs total reflects average of first three quarters.

APPENDIX C TABLE 11
BASELINE DATA
JOBS ADJUSTED FOR HOUSING GROWTH - HIGH WAGE JOBS
WILLOW VILLAGE MASTER PLAN PROJECT
MENLO PARK CA

Source: Quarterly Census of Employment and Wages & California Department of Finance

A. San Mateo County

	Total Jobs High-Wage	Housing Units	Hsg Growth Since 2000	Ratio: High Wage Jobs to Total Jobs	Jobs Adjusted for Housing Growth
	App.C, Tab. 14	App.C, Tab. 15			1.91 jobs/unit X HW/total job ratio
2000	146,968	260,578	0	0.387	146,968
2001	143,064	261,753	1,175	0.387	142,197
2002	125,827	263,489	2,911	0.365	123,802
2003	115,330	265,041	4,463	0.353	112,328
2004	113,849	266,014	5,436	0.348	110,240
2005	115,049	267,149	6,571	0.352	110,632
2006	116,919	267,587	7,009	0.349	112,251
2007	118,450	268,001	7,423	0.348	113,526
2008	119,988	269,351	8,773	0.350	114,122
2009	113,902	270,227	9,649	0.352	107,415
2010	110,706	270,996	10,418	0.349	103,778
2011	112,511	271,438	10,860	0.345	105,362
2012	119,743	272,158	11,580	0.352	111,964
2013	123,860	272,477	11,899	0.349	115,938
2014	130,156	273,532	12,954	0.350	121,514
2015	136,294	274,612	14,034	0.355	126,783
2016	144,253	276,036	15,458	0.368	133,391
2017	148,336	277,189	16,611	0.370	136,599
2018	155,496	278,044	17,466	0.385	142,679
2019	163,819	279,248	18,670	0.394	149,793
2020*	165,812	280,879	20,301	0.429	149,195

APPENDIX C TABLE 11
BASELINE DATA
JOBS ADJUSTED FOR HOUSING GROWTH - HIGH WAGE JOBS
WILLOW VILLAGE MASTER PLAN PROJECT
MENLO PARK CA

Source: Quarterly Census of Employment and Wages & California Department of Finance

B. San Mateo, Santa Clara, and San Francisco counties

	Total Jobs	Housing Units	Hsg Growth Since 2000	Ratio: High Wage Jobs to Total Jobs	Jobs Adjusted for Housing Growth
	App.C, Tab. 14	App.C, Tab. 15			1.91 jobs/unit X HW/total job ratio
2000	915,210	1,186,434	0	0.451	915,210
2001	878,426	1,194,191	7,757	0.448	871,789
2002	754,149	1,204,962	18,528	0.419	739,323
2003	689,304	1,216,334	29,900	0.403	666,344
2004	667,569	1,224,395	37,961	0.394	639,007
2005	673,284	1,234,289	47,855	0.395	637,263
2006	691,205	1,242,752	56,318	0.395	648,744
2007	706,451	1,251,398	64,964	0.394	657,641
2008	715,848	1,262,054	75,620	0.393	659,165
2009	669,683	1,271,103	84,669	0.389	606,861
2010	659,039	1,278,966	92,532	0.386	590,842
2011	688,473	1,281,769	95,335	0.393	616,987
2012	719,309	1,286,393	99,959	0.393	644,341
2013	751,810	1,290,689	104,255	0.395	673,336
2014	792,890	1,299,366	112,932	0.399	706,888
2015	838,079	1,311,276	124,842	0.404	741,905
2016	876,536	1,320,901	134,467	0.409	771,508
2017	904,536	1,331,683	145,249	0.413	790,030
2018	950,223	1,343,097	156,663	0.424	823,623
2019	989,106	1,350,059	163,625	0.431	854,658
2020*	981,894	1,359,601	173,167	0.461	829,621

* Jobs total reflects average of first three quarters.

APPENDIX C TABLE 12
BASELINE DATA
HOME SALES TRENDS IN SELECTED SUBMARKETS
WILLOW VILLAGE MASTER PLAN PROJECT
MENLO PARK CA

Source: CoreLogic

A. Home Sales

Attached

	East Palo Alto	Belle Haven	San Mateo Cnty
2000	11		2,263
2001	5		1,719
2002	8		2,292
2003	23		2,363
2004	35		2,790
2005	22		2,293
2006	83		2,023
2007	64		1,681
2008	40		1,206
2009	14		1,362
2010	12		1,242
2011	18		1,335
2012	25		1,495
2013	20		1,655
2014	34		1,581
2015	33		1,520
2016	22		1,433
2017	16		1,443
2018	19		1,243
2019	18		1,268
2020	22		1,207

No attached sales reported in Belle Haven

Detached

	East Palo Alto	Belle Haven	San Mateo Cnty
2000	343	47	8,894
2001	295	69	7,042
2002	271	44	8,787
2003	324	84	9,490
2004	395	67	9,750
2005	384	77	8,601
2006	306	66	7,120
2007	166	95	5,801
2008	231	39	5,059
2009	276	60	5,265
2010	248	71	5,442
2011	262	63	5,669
2012	221	52	6,484
2013	140	44	6,264
2014	169	51	5,905
2015	168	39	5,565
2016	205	47	5,371
2017	167	41	5,439
2018	157	42	5,108
2019	140	29	4,795
2020	108	20	4,999

APPENDIX C TABLE 12
BASELINE DATA
HOME SALES TRENDS IN SELECTED SUBMARKETS
WILLOW VILLAGE MASTER PLAN PROJECT
MENLO PARK CA

Source: CoreLogic

B. Median Price PSF

Attached

	East Palo Alto	Belle Haven	San Mateo Cnty	
2000	$225		$305	*No attached sales*
2001	$302		$335	*reported in Belle Haven*
2002	$233		$342	
2003	$327		$355	
2004	$317		$408	
2005	$357		$497	
2006	$456		$502	
2007	$449		$508	
2008	$353		$435	
2009	$221		$381	
2010	$183		$354	
2011	$205		$321	
2012	$235		$344	
2013	$304		$463	
2014	$474		$520	
2015	$560		$597	
2016	$636		$652	
2017	$683		$711	
2018	$765		$809	
2019	$766		$789	
2020	$714		$778	
CAGR 00-20	5.9%		4.8%	
CAGR 10-20	14.6%		8.2%	

APPENDIX C TABLE 12
BASELINE DATA
HOME SALES TRENDS IN SELECTED SUBMARKETS
WILLOW VILLAGE MASTER PLAN PROJECT
MENLO PARK CA

Source: CoreLogic

B. Median Price PSF (continued)

Detached

	East Palo Alto	Belle Haven	San Mateo Cnty
2000	$270	$291	$338
2001	$306	$347	$363
2002	$302	$357	$378
2003	$332	$376	$400
2004	$391	$453	$458
2005	$477	$557	$538
2006	$529	$595	$567
2007	$495	$439	$568
2008	$268	$329	$496
2009	$224	$281	$433
2010	$221	$288	$442
2011	$225	$279	$418
2012	$250	$302	$452
2013	$356	$460	$556
2014	$406	$500	$628
2015	$488	$645	$714
2016	$545	$750	$764
2017	$674	$856	$833
2018	$750	$1,000	$929
2019	$794	$984	$938
2020	$748	$951	$980
CAGR 00-20	5.2%	6.1%	5.5%
CAGR 10-20	12.9%	12.7%	8.3%

APPENDIX C TABLE 13
BASELINE DATA
MULTIFAMILY RENTAL TRENDS IN SELECTED SUBMARKETS
WILLOW VILLAGE MASTER PLAN PROJECT
MENLO PARK CA

Source: Costar for market rate multifamily properties

A. Average Asking Rent Per SF (All Bedrooms)

	East Palo Alto	Belle Haven*	San Mateo County
2000	$2.07	$1.68	$2.67
2001	$2.09	$1.70	$2.52
2002	$1.82	$1.48	$2.23
2003	$1.80	$1.33	$2.05
2004	$1.79	$1.31	$2.03
2005	$1.83	$1.35	$2.09
2006	$2.06	$1.51	$2.30
2007	$2.07	$1.62	$2.45
2008	$2.59	$1.67	$2.55
2009	$2.17	$1.59	$2.35
2010	$2.13	$1.58	$2.44
2011	$2.19	$1.58	$2.55
2012	$2.50	$1.63	$2.70
2013	$2.62	$1.69	$2.84
2014	$2.70	$1.75	$3.00
2015	$2.75	$1.83	$3.20
2016	$3.09	$1.86	$3.29
2017	$3.30	$1.89	$3.36
2018	$3.21	$1.93	$3.48
2019	$3.63	$1.95	$3.57
2020	$3.59	$1.96	$3.24

B. Occupancy

Year	East Palo Alto	Belle Haven*	San Mateo County
2000	99.4%	93.4%	97.1%
2001	97.8%	91.8%	94.7%
2002	94.1%	90.2%	94.1%
2003	91.8%	89.7%	93.9%
2004	95.3%	90.5%	94.2%
2005	99.1%	92.3%	95.9%
2006	98.1%	92.3%	96.3%
2007	96.2%	91.8%	96.4%
2008	96.0%	91.4%	95.8%
2009	93.8%	90.2%	94.9%
2010	85.0%	88.6%	94.5%
2011	96.2%	91.1%	95.6%

* Excluding additions to the inventory since 2010 which command higher rents vs. existing product.

APPENDIX C TABLE 13
BASELINE DATA
MULTIFAMILY RENTAL TRENDS IN SELECTED SUBMARKETS
WILLOW VILLAGE MASTER PLAN PROJECT
MENLO PARK CA

Source: Costar for market rate multifamily properties

Occupancy Continued

Year	East Palo Alto	Belle Haven*	San Mateo County
2012	95.4%	90.9%	95.2%
2013	94.5%	91.1%	95.5%
2014	96.5%	91.7%	95.8%
2015	96.9%	91.4%	95.1%
2016	95.6%	91.1%	95.0%
2017	93.9%	90.1%	94.6%
2018	92.5%	90.3%	94.0%
2019	93.2%	90.3%	94.3%
2020	88.6%	85.7%	90.5%

C. Inventory

Year	East Palo Alto	Belle Haven	San Mateo County
2000	2,301	160	54,754
2001	2,301	160	55,571
2002	2,301	160	55,601
2003	2,301	160	55,580
2004	2,301	160	55,591
2005	2,301	160	55,596
2006	2,301	160	55,598
2007	2,301	160	55,650
2008	2,301	160	55,878
2009	2,301	160	55,890
2010	2,289	160	56,091
2011	2,289	160	55,943
2012	2,289	160	55,973
2013	2,289	160	55,933
2014	2,289	160	56,214
2015	2,289	160	56,828
2016	2,289	355	57,459
2017	2,289	501	58,344
2018	2,289	501	59,250
2019	2,289	501	59,615
2020	2,289	501	59,799

* Excluding additions to the inventory since 2010 which command higher rents vs. existing product.

APPENDIX C TABLE 14
BASELINE DATA
JOBS AND EARNINGS IN SAN MATEO COUNTY AND ADJACENT COUNTIES
WILLOW VILLAGE MASTER PLAN PROJECT
MENLO PARK CA

Source: Quarterly Census of Employment and Wages

1/2	Jobs in High-Wage[(1)] Industries				Jobs in All Industries			
	San Mateo	Santa Clara	San Francisco	Total	San Mateo	Santa Clara	San Francisco	Total
2000	146,968	506,070	262,172	915,210	380,137	1,036,582	611,676	2,028,395
2001	143,064	490,253	245,109	878,426	369,868	1,002,637	586,085	1,958,590
2002	125,827	415,977	212,345	754,149	345,137	905,489	547,304	1,797,930
2003	115,330	375,626	198,348	689,304	327,080	852,513	532,908	1,712,501
2004	113,849	366,703	187,017	667,569	327,152	845,040	520,434	1,692,626
2005	115,049	369,430	188,805	673,284	326,536	854,927	524,940	1,706,403
2006	116,919	379,296	194,990	691,205	334,910	877,710	536,304	1,748,924
2007	118,450	385,785	202,216	706,451	340,640	896,685	556,401	1,793,726
2008	119,988	390,464	205,396	715,848	342,361	906,502	573,011	1,821,874
2009	113,902	364,423	191,358	669,683	323,195	848,938	549,716	1,721,849
2010	110,706	361,704	186,629	659,039	317,576	842,581	545,721	1,705,878
2011	112,511	378,714	197,248	688,473	326,055	866,541	558,990	1,751,586
2012	119,743	387,238	212,328	719,309	340,075	903,053	586,538	1,829,666
2013	123,860	403,468	224,482	751,810	354,891	937,924	612,607	1,905,422
2014	130,156	421,188	241,546	792,890	372,192	973,668	640,378	1,986,238
2015	136,294	441,959	259,826	838,079	383,668	1,017,071	674,646	2,075,385
2016	144,253	450,064	282,219	876,536	391,640	1,046,049	703,188	2,140,877
2017	148,336	463,456	292,744	904,536	400,511	1,071,448	716,917	2,188,876
2018	155,496	484,241	310,486	950,223	404,242	1,098,089	740,879	2,243,210
2019	163,819	498,284	327,003	989,106	415,999	1,119,639	760,775	2,296,413
2020P[(2)]	165,812	496,642	319,440	981,894	386,449	1,051,518	692,228	2,130,195
CAGR								
00-20	0.6%	-0.1%	1.0%	0.4%	0.1%	0.1%	0.6%	0.2%
10-20	4.1%	3.2%	5.5%	4.1%	2.0%	2.2%	2.4%	2.2%

[(1)] Defined as industries with an average wage above $100K as of 2016. Industries included vary by county.
[(2)] Average for 3 quarters of 2020.

APPENDIX C TABLE 14
BASELINE DATA
JOBS AND EARNINGS IN SAN MATEO COUNTY AND ADJACENT COUNTIES
WILLOW VILLAGE MASTER PLAN PROJECT
MENLO PARK CA

Source: Quarterly Census of Employment and Wages

2/2

	Earnings in High-Wage[(1)] Industries				Earnings in All Industries			
	San Mateo	Santa Clara	San Francisco	Total	San Mateo	Santa Clara	San Francisco	Total
2000	$16,727M	$59,775M	$21,988M	$98,490M	$25,501M	$79,147M	$35,308M	$139,956M
2001	$13,916M	$46,416M	$22,045M	$82,377M	$23,038M	$66,104M	$35,791M	$124,934M
2002	$10,795M	$38,046M	$18,364M	$67,205M	$19,759M	$57,096M	$32,023M	$108,878M
2003	$10,936M	$37,222M	$17,331M	$65,490M	$19,499M	$56,088M	$31,354M	$106,941M
2004	$11,538M	$39,829M	$18,065M	$69,431M	$20,438M	$59,435M	$32,459M	$112,332M
2005	$12,740M	$41,768M	$19,914M	$74,422M	$21,739M	$62,147M	$34,956M	$118,842M
2006	$12,995M	$45,960M	$21,840M	$80,795M	$22,773M	$67,912M	$37,932M	$128,617M
2007	$14,340M	$50,094M	$24,328M	$88,762M	$24,628M	$74,336M	$41,800M	$140,764M
2008	$14,193M	$48,170M	$24,569M	$86,931M	$24,686M	$73,247M	$43,270M	$141,203M
2009	$14,906M	$44,222M	$22,267M	$81,395M	$24,725M	$68,192M	$40,459M	$133,375M
2010	$13,567M	$50,764M	$23,039M	$87,370M	$23,581M	$75,328M	$41,672M	$140,581M
2011	$14,277M	$56,684M	$25,667M	$96,628M	$24,861M	$82,170M	$45,096M	$152,128M
2012	$23,930M	$59,222M	$28,459M	$111,611M	$35,110M	$86,622M	$48,948M	$170,681M
2013	$24,804M	$64,107M	$30,854M	$119,765M	$36,595M	$92,442M	$52,521M	$181,559M
2014	$24,934M	$72,206M	$36,206M	$133,346M	$37,770M	$102,607M	$58,836M	$199,213M
2015	$25,567M	$82,072M	$40,762M	$148,401M	$39,432M	$115,325M	$65,486M	$220,243M
2016	$27,611M	$88,157M	$45,649M	$161,417M	$42,089M	$123,484M	$71,483M	$237,057M
2017	$31,031M	$97,854M	$51,007M	$179,893M	$46,547M	$135,760M	$78,217M	$260,524M
2018	$35,664M	$108,909M	$58,784M	$203,357M	$51,100M	$147,873M	$87,751M	$286,725M
2019	$37,499M	$114,071M	$67,537M	$219,107M	$54,003M	$154,816M	$98,760M	$307,578M
2020P[(2)]	$42,577M	$121,615M	$68,046M	$232,237M	$57,946M	$160,712M	$98,054M	$316,712M
CAGR								
00-20	4.8%	3.6%	5.8%	4.4%	4.2%	3.6%	5.2%	4.2%
10-20	12.1%	9.1%	11.4%	10.3%	9.4%	7.9%	8.9%	8.5%

(1) Defined as industries with an average wage above $100K as of 2016. Industries included vary by county.

(2) Average for 3 quarters of 2020.

APPENDIX C TABLE 15
BASELINE DATA
HOUSING GROWTH BY COUNTY
WILLOW VILLAGE MASTER PLAN PROJECT
MENLO PARK CA

Source: California Department of Finance, E-5 and E-8 Housing Estimates

Year	San Mateo	San Francisco	Santa Clara	Total
2000	260,578	346,527	579,329	1,186,434
2001	261,753	348,119	584,319	1,194,191
2002	263,489	350,971	590,502	1,204,962
2003	265,041	354,811	596,482	1,216,334
2004	266,014	356,866	601,515	1,224,395
2005	267,149	359,090	608,050	1,234,289
2006	267,587	361,813	613,352	1,242,752
2007	268,001	364,789	618,608	1,251,398
2008	269,351	368,285	624,418	1,262,054
2009	270,227	372,397	628,479	1,271,103
2010 [1]	270,996	376,243	631,728	1,278,966
2011	271,438	377,188	633,143	1,281,769
2012	272,158	377,487	636,748	1,286,393
2013	272,477	378,766	639,446	1,290,689
2014	273,532	381,143	644,691	1,299,366
2015	274,612	384,657	652,007	1,311,276
2016	276,036	387,505	657,360	1,320,901
2017	277,189	392,619	661,875	1,331,683
2018	278,044	397,083	667,970	1,343,097
2019	279,248	399,372	671,439	1,350,059
2020	280,879	404,164	674,558	1,359,601
Total New Units				
2000-2019	18,670	52,845	92,110	163,625
2000-2020	20,301	57,637	95,229	173,167

[1] Average of 2000 and 2010 series estimates.

APPENDIX C TABLE 16
HOME PRICES: EAST PALO ALTO AND COMPARISON JURISDICTIONS
HOUSING DISPLACEMENT ANALYSIS
WILLOW VILLAGE MASTER PLAN PROJECT
MENLO PARK CA

Median Sales Price Per Square Foot By Geography [1]	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	YTD 2021	% Change [2] 2010-20	2011-20	2016-20
A. Condos/Town Homes															
East Palo Alto	$183	$205	$235	$304	$474	$560	$636	$683	$765	$766	$714	$728	291%	248%	12%
Belle Haven	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	
DT Redwood City	$268	$246	$292	$489	$523	$617	$674	$826	$846	$770	$802	$730	199%	226%	19%
Hayward	$145	$137	$139	$222	$270	$305	$338	$368	$421	$404	$427	$463	194%	211%	26%
Bayfair/ San Leandro	$176	$132	$144	$201	$257	$323	$354	$371	$439	$461	$469	$470	167%	256%	33%
Fruitvale	$211	$161	$158	$205	$288	$294	$391	$486	$504	$582	$528	$544	150%	229%	35%
West Berkeley	$366	$342	$338	$442	$549	$566	$516	$608	$662	$624	$652	$667	78%	91%	26%
North Richmond	$256	$246	$198	$292	$320	$343	$402	$460	$458	$449	$433	$483	69%	76%	8%
East San Jose	$172	$168	$181	$257	$311	$351	$400	$422	$516	$512	$513	$534	198%	205%	28%
San Mateo County	$354	$321	$344	$463	$520	$597	$652	$711	$809	$789	$778	$756	120%	143%	19%
B. Single Family															
East Palo Alto	$221	$225	$250	$356	$406	$488	$545	$674	$750	$794	$748	$782	238%	232%	37%
Belle Haven	$288	$279	$302	$460	$500	$645	$750	$856	$1,000	$984	$951	$973	230%	240%	27%
DT Redwood City	$321	$314	$362	$471	$553	$635	$729	$879	$993	$920	$985	$954	207%	214%	35%
Hayward	$214	$195	$199	$265	$315	$353	$375	$429	$464	$465	$493	$537	131%	153%	31%
Bayfair/ San Leandro	$237	$207	$211	$274	$320	$352	$397	$449	$490	$481	$522	$576	121%	152%	32%
Fruitvale	$146	$132	$137	$196	$248	$301	$353	$416	$434	$472	$507	$604	247%	283%	44%
West Berkeley	$358	$393	$408	$533	$556	$610	$739	$811	$791	$928	$931	$1,164	160%	136%	26%
North Richmond	$86	$82	$97	$134	$183	$221	$245	$298	$342	$351	$392	$380	357%	381%	60%
East San Jose	$232	$223	$243	$282	$349	$386	$436	$445	$552	$507	$564	$567	143%	153%	29%
San Mateo County	$442	$418	$452	$556	$628	$714	$764	$833	$929	$938	$980	$990	122%	134%	28%

Source: CoreLogic

Notes

[1] See Section 7 for boundary definitions of comparison geographies.

[2] Percent change in home prices in Belle Haven, EPA, and North Richmond may be partly attributable to fewer sales of foreclosed properties. Per Table 2, these locations experienced the largest decline in average annual single family home sales from 2015 to 2020 compared to 2010, when bank repossessions were at their peak.

APPENDIX C TABLE 17
HOME SALES: EAST PALO ALTO AND COMPARISON JURISDICTIONS
HOUSING DISPLACEMENT ANALYSIS
WILLOW VILLAGE MASTER PLAN PROJECT
MENLO PARK CA

Home Sales By Geography [1]	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	YTD 2021	Avg. 2015-20	2015-20 vs. 2010
A. Condos/Townhomes														
East Palo Alto	12	18	25	20	34	33	22	16	19	18	22	2	22	45%
Belle Haven	0	0	0	0	0	0	0	0	0	0	0	0		
DT Redwood City	9	6	11	12	22	24	17	17	20	23	26	6	21	57%
Hayward	151	222	247	191	212	213	196	194	210	163	155	27	189	20%
Bayfair/ San Leandro	88	82	79	48	59	51	57	63	58	56	36	11	54	-64%
Fruitvale	18	39	36	21	22	14	38	54	44	30	32	11	35	49%
West Berkeley	17	20	13	17	19	11	16	10	14	7	19	1	13	-32%
North Richmond	17	24	30	16	26	43	34	27	32	38	43	16	36	53%
East San Jose	176	168	127	119	110	125	119	128	86	72	103	31	106	-67%
San Mateo County	1,242	1,335	1,495	1,655	1,581	1,520	1,433	1,443	1,243	1,268	1,207	276	1,352	8%
B. Single Family														
East Palo Alto	248	262	221	140	169	168	205	167	157	140	108	16	158	-57%
Belle Haven	71	63	52	44	51	39	47	41	42	29	20	9	36	-95%
DT Redwood City	140	142	129	100	112	99	98	115	89	103	102	19	101	-39%
Hayward	446	511	487	426	436	434	445	458	404	385	410	87	423	-6%
Bayfair/ San Leandro	286	279	316	265	226	230	257	270	265	227	207	43	243	-18%
Fruitvale	323	266	291	265	268	242	238	234	211	211	206	58	224	-44%
West Berkeley	27	30	43	33	42	32	40	36	30	42	28	6	35	22%
North Richmond	434	351	294	251	219	244	262	281	227	168	194	51	229	-89%
East San Jose	300	301	244	213	209	231	227	217	188	195	145	58	201	-50%
San Mateo County	5,442	5,669	6,484	6,264	5,905	5,565	5,371	5,439	5,108	4,795	4,999	817	5,213	-4%

Source: CoreLogic

Notes
[1] See Section 7 for boundary definitions of comparison geographies.

APPENDIX C TABLE 18
ASKING RENTS AND BUILDING OCCUPANCY (MULTIFAMILY): EAST PALO ALTO AND COMPARISON JURISDICTIONS
HOUSING DISPLACEMENT ANALYSIS
WILLOW VILLAGE MASTER PLAN PROJECT
MENLO PARK CA

Geography [1]	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	YTD 2021	% Change 2010-20	% Change 2011-20
I. Monthly Asking Rent (One-Bedroom Units in Buildings Constructed Before 2010) [2]														
East Palo Alto	$1,450	$1,489	$1,689	$1,771	$1,818	$1,732	$1,992	$2,114	$2,097	$2,365	$2,326	$2,337	60%	56%
DT Redwood City	$1,334	$1,398	$1,478	$1,567	$1,676	$1,794	$1,842	$1,917	$1,946	$2,055	$1,946	$1,862	46%	39%
Hayward	$1,096	$1,130	$1,186	$1,265	$1,365	$1,535	$1,607	$1,663	$1,735	$1,781	$1,763	$1,737	61%	56%
Bayfair/ San Leandro	$1,040	$1,073	$1,125	$1,198	$1,296	$1,498	$1,602	$1,635	$1,690	$1,752	$1,734	$1,731	67%	62%
East San Jose	$1,087	$1,115	$1,160	$1,232	$1,310	$1,392	$1,473	$1,534	$1,585	$1,640	$1,660	$1,662	53%	49%
San Mateo County	$1,548	$1,626	$1,742	$1,840	$1,947	$2,076	$2,143	$2,211	$2,288	$2,365	$2,174	$2,216	40%	34%
II. Average Occupancy Rate (All Units in Buildings Constructed Before 2010) [2]														
East Palo Alto	85%	96%	95%	95%	97%	97%	96%	94%	93%	93%	89%	89%	4%	-8%
DT Redwood City	93%	96%	96%	96%	97%	96%	96%	95%	95%	95%	91%	92%	-2%	-5%
Hayward	96%	96%	96%	97%	97%	97%	97%	96%	97%	96%	96%	96%	0%	-1%
Bayfair/ San Leandro	96%	96%	96%	97%	97%	97%	96%	96%	97%	96%	96%	96%	0%	-1%
East San Jose	97%	96%	97%	97%	97%	97%	97%	97%	97%	98%	96%	96%	-1%	-1%
San Mateo County	94%	96%	95%	95%	96%	96%	95%	95%	95%	95%	91%	91%	-4%	-5%

Source: Costar

Notes

[1] See Section 7 for boundary definitions of comparison geographies.

[2] Rental data not shown for Belle Haven, Fruitvale, West Berkeley, and North Richmond as the data appears to be too limited to be reliable. In these areas, the rental housing stock primarily consists of small multifamily buildings with less than 20 units that are less likely to report asking rents to Costar.

Appendix 3.15
Water Supply Assessment

FEBRUARY 2022

Willow Village Project
Water Supply Assessment

PREPARED FOR

Menlo Park Municipal Water

CITY OF
MENLO PARK

PREPARED BY

WEST YOST
Water. Engineered.

Willow Village Project
Water Supply Assessment

Prepared for

Menlo Park Municipal Water

Project No. 648-60-20-08

Project Manager: Elizabeth Drayer, PE	02-02-22 Date
QA/QC Review: Polly Boissevain, PE	02-02-22 Date

WEST YOST
Water. Engineered.

FEBRUARY 2022

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LIST OF ACRONYMS AND ABBREVIATIONS

AF	Acre-Feet
AWSP	Alternative Water Supply Planning Program
BAWSCA	Bay Area Water Supply and Conservation Agency
CEQA	California Environmental Quality Act
City	City of Menlo Park
DWR	State of California Department of Water Resources
EIR	Environmental Impact Report
FERC	Federal Energy Regulatory Commission
gpm	Gallons Per Minute
ISG	Individual Supply Guarantee
MG	Million Gallons
MG/yr	Million Gallons Per Year
mgd	Million Gallons Per Day
MPMW	Menlo Park Municipal Water
MWELO	Model Water Efficient Landscape Ordinance
Proposed Project	Willow Village Project
RWS	San Francisco Public Utilities Commission Regional Water System
SB	Senate Bill
SFPUC	San Francisco Public Utilities Commission
SGMA	Sustainable Groundwater Management Act
SWRCB	State Water Resources Control Board
UWMP	Urban Water Management Plan
WBSD	West Bay Sanitary District
WRF	Water Reuse Facility

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WSA	Water Supply Assessment
WSAP	Water Shortage Allocation Plan
WSCP	Water Shortage Contingency Plan
WSE Study	Water Supply Evaluation Study
WSIP	Water System Improvement Program

EXECUTIVE SUMMARY

Overview

This Water Supply Assessment (WSA) has been prepared for Menlo Park Municipal Water (MPMW) by West Yost in accordance with California Water Code sections 10910 through 10915 in connection with the proposed Willow Village Project (Proposed Project). The Proposed Project is located in the Bayfront Area of the City of Menlo Park (City) within the Lower Zone of MPMW's service area. The Bayfront Area is between Highway 101 and Bayfront Expressway and is generally comprised of office, life sciences, mixed use residential, light industrial, commercial, and commercial business park land uses.

In 2016, the City completed a multi-year planning effort to update the Land Use and Circulation Elements of its General Plan for the 2040 planning horizon. This General Plan Update process was known as ConnectMenlo. ConnectMenlo reaffirmed existing remaining development potential throughout the City and incorporated land use changes in the Bayfront Area, including development potential for up to 4,500 new multi-family residential units, 2.3 million square feet of new non-residential uses, and 400 new hotel rooms.

The Proposed Project is within this development capacity and includes up to 1,730 multi-family residential dwelling units (with the potential for an additional 200 dwelling units under one of the project variants), up to 200,000 square feet of retail and non-office commercial uses, a hotel with up to 193 rooms, up to 1.6 million square feet of office and accessory space, consisting of up to 1.25 million square feet of office space and the balance (i.e., 350,000 square feet if office space is maximized) of accessory space in multiple buildings, and an approximately 3.5-acre public neighborhood park.

The Proposed Project would also alter parcels west of the industrial site, across Willow Road, on both the north and south sides of Hamilton Avenue (Hamilton Avenue Parcels North and South) to support realignment of the Hamilton Avenue right-of-way and provide access to the new elevated park. This would require demolition and reconstruction of a service station (Chevron gas station) at Hamilton Avenue Parcel South and possibly include the addition of up to 6,700 square feet of retail uses at the existing neighborhood shopping center (Belle Haven Retail Center) on Hamilton Avenue Parcel North.

Projected Water Demands

The projected water demands for buildout of the Proposed Project and the project variants have been calculated based on CALGreen and Model Water Efficient Landscape Ordinance (MWELO) standards. The total projected water demand for the Proposed Project ranges from 150 to 162 million gallons per year (MG/yr), depending on the project variant. Approximately 63 to 64 percent of the total water demand is potable water demand and the remaining 36 to 37 percent is non-potable water demand that will be met with recycled water. The existing potable water demand at the project site is estimated to be approximately 19 MG/yr and is assumed to be entirely replaced by the Proposed Project demand. Therefore, the net increase in potable water demand for the Proposed Project is estimated to range from 75 to 85 MG/yr, depending on the project variant.

ConnectMenlo identifies the maximum development that could occur in the ConnectMenlo study area, including potential bonus-level increased development, and the ConnectMenlo EIR further studied the maximum development potential by more specific land uses. MPMW and the City's Planning Division are actively tracking projects within the ConnectMenlo study area on a cumulative basis to ensure that developed projects remain within the maximum development permitted through ConnectMenlo and that the approved projects would be consistent with the ConnectMenlo EIR. The Proposed Project, if approved, would be within this permitted cumulative development total identified in ConnectMenlo and studied in the EIR. Because the Proposed Project is within the maximum development studied in ConnectMenlo, the water demand for the Proposed Project is included in the ConnectMenlo EIR and MPMW 2020 Urban Water Management Plan (UWMP) water demand assumptions.

The Proposed Project will include the use of recycled water to meet non-potable water demands and will include the installation of water efficient fixtures and implementation of water conservation practices.

Water Supply Availability and Reliability

As discussed in this WSA, MPMW purchases all of its potable water supplies from the Regional Water System (RWS), which is operated by the San Francisco Public Utilities Commission (SFPUC). MPMW is a Wholesale Customer of the SFPUC. The availability and reliability of MPMW's water supplies as described in this WSA are based primarily on information contained in the MPMW 2020 UWMP and the SFPUC 2020 UWMP. The MPMW 2020 UWMP is incorporated by reference into this WSA.

The reliability of the SFPUC RWS supply is highly dependent on the assumption of whether or not the 2018 Bay-Delta Plan Amendment is implemented. The Bay-Delta Plan Amendment was adopted in December 2018 by the State Water Resources Control Board (SWRCB) to establish water quality objectives to maintain the health of the Bay-Delta ecosystem. The adopted Bay-Delta Plan Amendment was developed with the stated goal of increasing salmonid populations in three San Joaquin River tributaries (the Stanislaus, Merced, and Tuolumne Rivers) and the Bay-Delta. The Bay-Delta Plan Amendment requires the release of 40 percent of the "unimpaired flow" on the three tributaries from February through June in every year type, whether wet, normal, dry, or critically dry. The implementation of the Bay-Delta Plan Amendment significantly impacts the SFPUC RWS supply reliability in dry years; however, the actual implementation of the Bay-Delta Plan Amendment is uncertain.

Because of the uncertainties surrounding the implementation of the Bay-Delta Plan Amendment, this WSA presents findings for two scenarios, one assuming the Bay-Delta Plan Amendment is implemented and one assuming that the Bay-Delta Plan Amendment is not implemented.

Under the scenario where it is assumed the Bay-Delta Plan Amendment is implemented, the total projected water supplies determined to be available for the Proposed Project in normal years will meet the projected water demand associated with the Proposed Project, in addition to MPMW's existing and planned future uses through 2040. However, with the implementation of the Bay-Delta Plan Amendment, significant supply shortfalls are projected in dry years for agencies that receive water supplies from the SFPUC RWS, as well as other agencies whose water supplies would be affected by the Amendment. For MPMW, supply shortfalls are projected in single dry years (ranging from 27 to 32 percent) and in multiple dry years (ranging from 27 to 44 percent) through 2040, with similar supply shortfalls through 2045 based on SFPUC's analysis.

If supply shortfalls do occur, MPMW expects to meet these supply shortfalls through water demand reductions and other shortage response actions by implementation of its Water Shortage Contingency Plan (WSCP). The projected single dry-year shortfalls would require implementation of Stage 3 or 4 of the MPMW WSCP, and the projected multiple dry-year shortfalls would require implementation of Stage 3, 4 or 5 of the MPMW WSCP. The Proposed Project would be subject to the same water conservation and water use restrictions as other water users within the MPMW system.

Under the scenario where it is assumed the Bay-Delta Plan Amendment is not implemented, the total projected water supplies determined to be available for the Proposed Project in normal years, single dry years, and multiple dry years will meet the projected water demand associated with the Proposed Project, in addition to MPMW's existing and planned future uses through 2040. A 16.5 percent supply shortfall is projected during the fourth and fifth consecutive dry years for base year 2045 based on SFPUC's analysis. These projected supply shortfalls are significantly less than the projected supply shortfalls if the Bay-Delta Plan Amendment is implemented. If supply shortfalls do occur, MPMW expects to meet these supply shortfalls through water demand reductions and other shortage response actions by implementation of its WSCP. The projected multiple dry year shortfall in 2045 would require implementation of Stage 2 of the MPMW WSCP. The Proposed Project would be subject to the same water conservation and water use restrictions as other water users within the MPMW system.

As described in this WSA, the SFPUC is implementing an Alternative Water Supply Planning Program to investigate and plan for new water supplies to address future long-term water supply reliability challenges and vulnerabilities on the RWS. Also, MPMW is implementing an Emergency Water Storage/Supply Project to provide a backup water supply to MPMW's Lower Zone, which the project site is located within.

A significant portion of the projected water demand for the Proposed Project (about 37 percent) is non-potable water demand that will be met with recycled water. The Project Applicant has evaluated two alternative scenarios to provide recycled water for the Proposed Project: Scenario 1 involves connecting to a new off-site water reuse facility owned and operated by the West Bay Sanitary District (WBSD) and Scenario 2 involves constructing on-site water reuse facilities to treat wastewater from the site. Under both scenarios, the Proposed Project would be able to achieve an approximate 37 percent reduction in potable water demand by serving nearly all of the non-potable water demands (including cooling, irrigation, and toilet flushing) with recycled water. The Project Applicant is currently pursuing Scenario 1 in coordination with WBSD. WBSD has completed a feasibility study exploring the viability of a Resource Recovery Center at WBSD's former treatment plant behind Bedwell Bayfront Park, which could produce approximately 500,000 gallons per day of recycled water for reuse (the MPMW 2020 UWMP projects an annual recycled water supply of 72 MG/yr from this new facility). The study concluded that the project is feasible. In a public/private partnership with Meta (the Project Applicant), the WBSD Board of Directors spearheaded the effort to install 2,800 feet of purple recycled water pipe parallel with the storm drainpipe Meta was replacing on Chilco Street. This pipe will be used to distribute recycled water in the area. According to WBSD, recycled water will be used for irrigation, industrial purposes, firefighting, public fill stations and toilet flushing in the Bayfront Area. Recycled water is estimated to be available during all hydrologic years at a volume that meets MPMW's projected recycled water demands.

1.0 INTRODUCTION

The Willow Village Project (Proposed Project) would comprehensively redevelop an approximately 59-acre project site in the Bayfront Area of the City of Menlo Park (City) in the Menlo Park Municipal Water (MPMW) service area. The site would be redeveloped to remove existing non-residential uses on the site and construct new infrastructure, housing, office uses, commercial uses (including a 193-room hotel), open space, and bicycle and pedestrian paths.

The purpose of this Water Supply Assessment (WSA) is to support the Environmental Impact Report (EIR) for the Proposed Project. The following sections describe the legal requirement for the WSA and the project background.

1.1 Legal Requirement for a Water Supply Assessment

California Senate Bill 610 (SB 610) and Senate Bill 221 (SB 221) amended state law, effective January 1, 2002, to improve the link between information on water supply availability and certain land use decisions made by cities and counties. SB 610 and SB 221 were companion measures which sought to promote more collaborative planning between local water suppliers and cities and counties. Both statutes require detailed information regarding water availability to be provided to the city and county decision-makers prior to approval of specified large development projects. The purpose of this coordination is to ensure that prudent water supply planning has been conducted, and that planned water supplies are adequate to meet existing demands, anticipated demands from approved projects and tentative maps, and the demands of proposed projects.

SB 610 amended California Water Code sections 10910 through 10915 (inclusive) to require land use lead agencies to:

- Identify any public water purveyor that may supply water for a proposed development project[1]
- Request a WSA from the identified water purveyor

The purpose of the WSA is to demonstrate the sufficiency of the purveyor's water supplies to satisfy the water demands of the proposed project, while still meeting the water purveyor's existing and planned future uses. Water Code sections 10910 through 10915 delineate the specific information that must be included in the WSA.

SB 221 amended State law (California Government Code section 66473.7) to require that approval by a city or county of certain residential subdivisions[2] requires an affirmative written verification of sufficient water supply. SB 221 was intended as a failsafe mechanism to ensure that collaboration on finding the needed water supplies to serve a new large residential subdivision occurs before construction begins.

[1] The definition of a "project" is provided in Water Code section 10912(a) and is discussed further in Section 3.1 of this WSA.

[2] Per Government Code Section 66473.7(a)(1) subdivision means a proposed residential development of more than 500 dwelling units.

1.2 Need for and Purpose of Water Supply Assessment

The purpose of this WSA is to perform the evaluation required by SB 610 (Water Code sections 10910 through 10915) in connection with the Proposed Project, located within MPMW's service area. This WSA also satisfies the SB 221 requirements as the Proposed Project does include a residential subdivision with more than 500 dwelling units.

This WSA does not reserve water, or function as a "will serve" letter or any other form of commitment to supply water (see Water Code section 10914). The provision of water service will continue to be undertaken in a manner consistent with applicable policies and procedures, consistent with existing law.

This WSA for the Proposed Project has been prepared by West Yost, as requested by MPMW, the responsible water purveyor for the Proposed Project.

1.3 Water Supply Assessment Preparation, Format, and Organization

The format of this WSA is intended to follow Water Code sections 10910 through 10915 to clearly delineate compliance with the specific requirements for a WSA. This WSA includes the following sections:

Section 1: Introduction
Section 2: Description of the Proposed Project
Section 3: Required Determinations
Section 4: Menlo Park Municipal Water System
Section 5: Menlo Park Municipal Water Demands
Section 6: Menlo Park Municipal Water Supplies
Section 7: Water Supply Reliability
Section 8: Determination of Water Supply Sufficiency Based on the Requirements of SB 610
Section 9: Verification of Water Supply Sufficiency Based on the Requirements on SB 221
Section 10: Water Supply Assessment Approval Process
Section 11: References

Relevant citations of Water Code sections 10910 through 10915 are included throughout this WSA in *italics* to demonstrate compliance with the specific requirements of SB 610.

2.0 DESCRIPTION OF THE PROPOSED PROJECT

The following sections describe the Proposed Project, including the Proposed Project's location, proposed land uses, and projected water demand.

2.1 Proposed Project Location and Overview

The Proposed Project is located in the Bayfront Area of the City, in MPMW's service area. The Bayfront Area is generally comprised of office, life sciences, mixed use residential, light industrial, commercial, and commercial business park land uses between Highway 101 and the Bayfront Expressway.

The 59-acre Proposed Project main site currently consists of approximately 1 million square feet (sf) of existing non-residential uses to be redeveloped. The Proposed Project main site is bounded by Willow Road to the west, the Joint Powers Board (JPB) rail corridor to the north, the Hetch Hetchy right of way and Mid-Peninsula High School to the south, and an existing life sciences complex to the east. The Proposed Project main site is shown on Figure 2-1.

Source: Willow Village Master Plan Conditional Development Permit, Existing Condition Aerial Map, prepared by Peninsula Innovation Partners, dated December 2021.

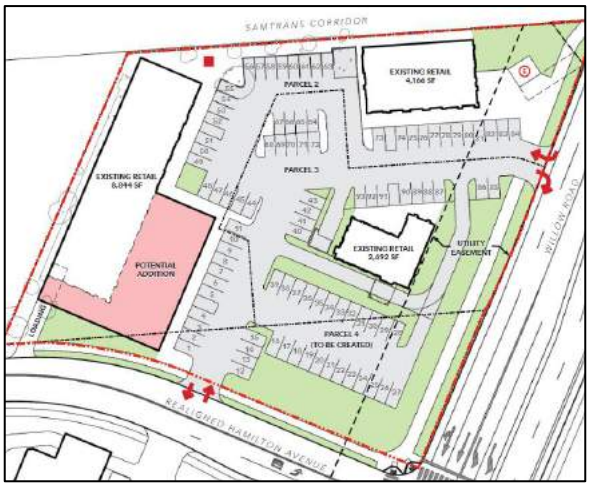
Figure 2-1. Proposed Project Location

The Proposed Project includes up to 1,730 multi-family residential dwelling units (with the potential for an additional 200 dwelling units under one of the project variants), up to 200,000 square feet of retail and non-office commercial uses, a hotel with up to 193 rooms, up to 1.6 million square feet of office and accessory space, consisting of up to 1.25 million square feet of office space and the balance (i.e., 350,000 square feet if office space is maximized) of accessory space in multiple buildings, and an approximately 3.5-acre public neighborhood park. The Proposed Project site plan is shown on Figure 2-2.

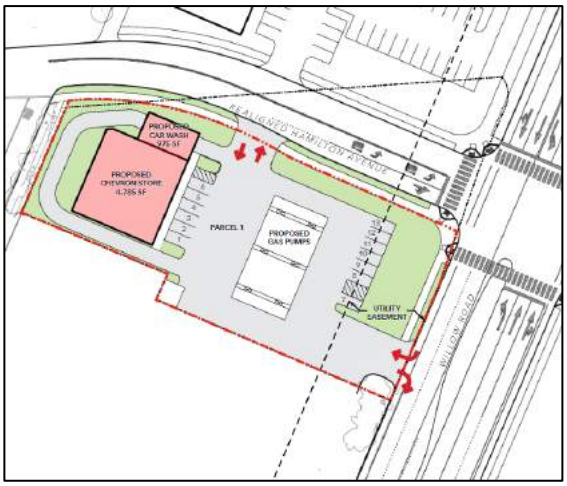
Source: Willow Village Master Plan Conditional Development Permit, Conceptual Master Plan, prepared by Peninsula Innovation Partners, dated December 2021.

Figure 2-2. Proposed Project Site Plan

The Proposed Project would also alter parcels west of the industrial site, across Willow Road, on both the north and south sides of Hamilton Avenue (Hamilton Avenue Parcels North and South) to support realignment of the Hamilton Avenue right-of-way and provide access to the new elevated park. This would require demolition and reconstruction of a service station (Chevron gas station) at Hamilton Avenue Parcel South and possibly include the addition of up to 6,700 square feet of retail uses at the existing neighborhood shopping center (Belle Haven Retail Center) on Hamilton Avenue Parcel North. Proposed development plans for the Hamilton Avenue Parcels North and South are shown on Figure 2-3.



Hamilton Avenue Parcel North



Hamilton Avenue Parcel South

Source: Willow Village Master Plan Conditional Development Permit, Conceptual Hamilton Parcels, prepared by Peninsula Innovation Partners, dated December 2021.

Figure 2-3. Proposed Development Plan for Hamilton Avenue Parcels North and South

The City has identified four project variants for the Proposed Project for analysis in the EIR:

- **Variant I: Increased Residential Density.** The Increased Residential Density Variant would increase the number of residential dwelling units by approximately 200 units, to a total of 1,930 residential units. No other changes to the Project development program would occur under this variant.
- **Variant II: No Hamilton Avenue Realignment.** In the event that the Project Applicant does not receive approval from Caltrans or affected property owners for the modifications to Willow Road necessary to realign Hamilton Avenue, the intersection of Willow Road and Hamilton Avenue would remain in the existing location and the circulation network east of Willow Road would be altered. In addition, West Street would be adjusted to terminate into Willow Road. The overall Project development program would remain unchanged; however, under this variant, no changes would occur to the existing land uses on the Hamilton Avenue Parcels North and South.
- **Variant III: No Willow Road Tunnel.** In the event that Caltrans does not approve the proposed Willow Road Tunnel, the Meta trams would utilize the public street network, Bayfront Expressway and Willow Road to access the Campus District. The overall Project development program would remain unchanged.
- **Variant IV: On-site Recycled Water.** In the event that that West Bay Sanitary District (WBSD) does not construct its proposed Bayfront Recycled Water Plant (which would be a source to provide recycled water to the Proposed Project), the On-Site Recycled Water Variant would provide recycled water to the Proposed Project through the on-site treatment of wastewater. Under this variant, the on-site treatment and production of recycled water would capture wastewater supplies, including blackwater (toilet flushing, food preparation drains), from all buildings within the Proposed Project. The overall Project development program would remain unchanged.

2.2 Projected Water Demand for the Proposed Project

The Proposed Project site has General Plan Land Use Designations of Office and Mixed-Use Residential. The site is zoned Office-Bonus (O-B) and Residential Mixed Use-Bonus (R-MU-B) under the Menlo Park Zoning Ordinance. As such, its development is required to comply with the City Municipal Code Chapter 16.43 O Office District and Chapter 16.45 R-MU Residential Mixed Use District. Both chapters of the Municipal Code include requirements for green and sustainable building, including the following specific requirements for water use efficiency and recycled water use:

> 16.43.140 (3) and 16.45.140 (3) Water Use Efficiency and Recycled Water.
>
> A. Single pass cooling systems shall be prohibited in all new buildings.
>
> B. All new buildings shall be built and maintained without the use of well water.
>
> C. Applicants for a new building more than one hundred thousand (100,000) square feet of gross floor area shall prepare and submit a proposed water budget and accompanying calculations following the methodology approved by the City. For all new buildings two hundred fifty thousand (250,000) square feet or more in gross floor area, the water budget shall account for the potable water demand reduction resulting from the use of an alternative water source for all City-approved non-potable applications. The water budget and calculations shall be reviewed and approved by the City's Public Works Director prior to certification of occupancy. Twelve (12) months after the date of the certification of occupancy, the building owner shall submit data and information sufficient to allow the City to compare the actual water use to the allocation in the approved water budget. In the event that actual water consumption exceeds the water budget, a water conservation program, as approved by the City's Public Works Director, shall be implemented. Twelve (12) months after City approval of the water conservation program, the building owner shall submit data and information sufficient to allow the City to determine compliance with the conservation program. If water consumption exceeds the budgeted amount, the City's Public Works Director may prohibit the use of water for irrigation or enforce compliance as an infraction pursuant to Chapter 1.12 until compliance with the water budget is achieved.
>
> D. All new buildings shall be dual plumbed for the internal use of recycled water.
>
> E. All new buildings two hundred fifty thousand (250,000) square feet or more in gross floor area shall use an alternate water source for all City-approved non-potable applications. An alternative water source may include, but is not limited to, treated non-potable water such as graywater. An alternate water source assessment shall be submitted that describes the alternative water source and proposed non-potable application. Approval of the alternate water source assessment, the alternative water source and its proposed uses shall be approved by the City's Public Works Director and Community Development Director. If Menlo Park Municipal Water has not designated a recycled water purveyor and/or municipal recycled water source is not available prior to planning project approval, applicants may propose conservation measures to meet the requirements of this section subject to approval of the City Council. The conservation measures shall achieve a reduction in potable water use equivalent to the projected demand of City-approved non-potable applications, but in no case shall the reduction be less than 30 percent (30%) compared to the water budget in subsection (3)(C) of this section. The conservation measures may include on-site measures, off-site measures or a combination thereof.

F. Potable water shall not be used for dust control on construction projects.

G. Potable water shall not be used for decorative features, unless the water recirculates.

As required by the City Municipal Code described above, the Project Applicant prepared a Water Use Budget for the Proposed Project. Also, because the Proposed Project includes more than 250,000 square feet of gross floor area in its proposed new buildings, an Alternative Water Source Assessment is also required and has been prepared. A copy of the Willow Village Project Water Demand, Alternative Water Source Assessment and Water Modeling Memorandum prepared by Freyer & Laureta, Inc., a consulting firm retained by the Project Applicant to prepare the water demand estimates for the Proposed Project, is included in Appendix A of this WSA. The Alternative Water Source Assessment examined two scenarios to supply the Proposed Project with non-potable water:

- Scenario 1: Connect to a new off-site water reuse facility owned and operated by the West Bay Sanitary District (WBSD)
- Scenario 2: Construct on-site water reuse facilities (WRFs) to treat wastewater from the site

Under both scenarios, the Proposed Project would be able to achieve a 36 to 37 percent reduction in potable water demand by serving nearly all of the non-potable water demands (including cooling, irrigation, and toilet flushing) with recycled water.

The Project Applicant is currently pursuing Scenario 1 in coordination with WBSD. WBSD has completed a feasibility study exploring the viability of a Resource Recovery Center at WBSD's former treatment plant behind Bedwell Bayfront Park, which could produce 500,000 gallons per day of recycled water for reuse (the MPMW 2020 UWMP projects an annual recycled water supply of 72 MG/yr from this new facility). The study concluded that the project is feasible. In a public/private partnership with Meta (the Project Applicant), the WBSD Board of Directors spearheaded the effort to install 2,800 feet of purple recycled water pipe parallel with the storm drainpipe Meta was replacing on Chilco Street. This pipe will be used to distribute recycled water in the area. According to WBSD, recycled water will be used for irrigation, industrial purposes, firefighting, public fill stations and toilet flushing in the Bayfront Area.

The Project Applicant estimated water use for the Proposed Project using the following assumptions:

- Water usage for plumbing fixtures (including water closets, urinals, public lavatories, kitchen faucets and showerheads) was estimated using 2019 CALGreen flow rates and LEED frequency of fixture use and duration times
- Water usage factors from literature were used for some retail programs such as grocery and food and beverage
- Water usage for water-based cooling systems for office building and event space was estimated using the variance in the mean monthly temperature for Menlo Park
- Water usage for irrigation was estimated in accordance with Menlo Park Municipal Code Chapter 12.44 Water Efficient Landscape Ordinance
- All non-potable demands were applied a leakage factor of 10 percent to account for losses in fixtures, broken sprinkler head, etc.

A summary of the water demands for the Proposed Project, as well as the four project variants, as estimated by the Project Applicant, is provided in Table 2-1. As shown, the total projected water demand for the Proposed Project ranges from 150 to 162 MG/yr, depending on the project variant. Approximately 63 to 64 percent of the total water demand is potable water demand and the remaining 36 to 37 percent is non-potable water demand that will be met with recycled water. As shown in Table 2-1, the existing potable water demand at the project site is estimated to be approximately 19 MG/yr and is assumed to be entirely replaced by the Proposed Project demand. Therefore, the net increase in potable water demand for the Proposed Project is estimated to range from 75 to 85 MG/yr, depending on the project variant.

Table 2-1. Projected Water Demand for the Proposed Project

Water Use	Projected Annual Water Demand, MG/yr			
	Proposed Project	Variant I: Increased Residential Density	Variant II: No Hamilton Avenue Realignment	Variant III: No Willow Road Tunnel and Variant IV: On-Site Recycled Water
Indoor Potable	98	104	94	98
Toilet Flushing (non-potable)	21	22	21	21
Cooling (non-potable)	9	9	9	9
Irrigation (non-potable)	27	27	26	27
Total Projected Water Demand	**155**	**162**	**150**	**155**
Projected Water Demand (potable)	98 (63%)	104 (64%)	94 (63%)	98 (63%)
Projected Water Demand (non-potable)	57 (37%)	58 (36%)	56 (37%)	57 (37%)
Existing Potable Water Use at Proposed Project Site[(a)]	19	19	19	19
Net increase in Potable Water Demand[(b)]	**79**	**85**	**75**	**79**

Source: Freyer & Laureta, Inc., January 2022.

(a) Existing potable water demand at the project site based on 2015 data (18.2 MG/yr plus 6 percent for unaccounted for water) and is assumed to be replaced by the Proposed Project.

(b) Assumes the existing potable water demand at the project site is replaced by the Proposed Project demand.

As shown in Table 2-1, Variant I: Increased Residential Density has the highest water demand, with a total water demand of 162 MG/yr, a potable water demand of 104 MG/yr and a non-potable water demand of 58 MG/yr. As such, the remainder of this WSA is based on the projected water demand for Variant I, as it represents the highest potential water demands for the Proposed Project, and therefore includes within it the projected water demand associated with development of the Proposed Project or any of the project variants described above.

Additional information on the water demand projections for the Proposed Project and the project variants is provided in Appendix A.

2.3 Proposed Project Relationship to ConnectMenlo

In 2016, the City completed a multi-year planning effort to update the Land Use and Circulation Elements of its General Plan for the 2040 planning horizon. This General Plan Update process was known as ConnectMenlo. ConnectMenlo reaffirmed existing remaining development potential within the City and incorporated land use changes in the Bayfront Area, including development potential for up to 4,500 new multi-family residential units, 2.3 million square feet of new non-residential uses, and 400 new hotel rooms.

A program-level EIR was prepared for ConnectMenlo. In conjunction with the ConnectMenlo EIR, a Water Supply Evaluation Study (WSE Study) was prepared to evaluate whether there would be sufficient water supply to meet the current and planned water demands within the service area during normal and dry hydrologic years over a 20-year time horizon. More specifically, the WSE Study includes:

- A summary of the WSA requirements articulated in Water Code §10910-10915 and a description of how they have been addressed in the WSE Study
- A description and analysis of the current and projected future water demands for ConnectMenlo through the year 2040
- A description and analysis of the historical, current, and projected future water demands for the MPMW service area through the year 2040
- A description and analysis of the current and projected future water supplies for the MPMW service area through the year 2040
- A comparison of the water supplies and demands for MPMW's water service area, including the projected water demands associated with ConnectMenlo

The data in the WSE Study were based primarily on the MPMW 2010 UWMP, the draft MPMW 2015 UWMP (which was being developed at the same time as the WSE Study), information from City staff, and specific information from PlaceWorks (preparer of the 2016 ConnectMenlo General Plan Update and program-level EIR). The final adopted MPMW 2015 UWMP and the MPMW 2020 UWMP incorporated the ConnectMenlo projections.

ConnectMenlo identifies the maximum development potential that could occur within the ConnectMenlo study area, including potential bonus-level increased development, and the associated program-level EIR further defines the maximum development that can occur by specific land uses. MPMW and the City's Planning Division are actively tracking projects within the ConnectMenlo study area on a cumulative basis to ensure that developed projects remain within the maximum development permitted by ConnectMenlo and are consistent with the program-level EIR.[3] The Proposed Project, if approved, would be within this permitted cumulative development total for both ConnectMenlo and the associated program-level EIR.

[3] For projects that require a water budget, the City includes Conditions of Approval requiring annual monitoring to document water usage at or below the limits identified in the approved water budget. Exempt projects (below the water budget threshold) are not tracked.

Table 2-2 shows the Proposed Project's impact on the cumulative water demand permitted for the ConnectMenlo study area based on the potable water demand for Variant I, which represents the highest potential water demand for the Proposed Project or any of the project variants discussed above. As such, the projected water demand associated with development of the Proposed Project or any of the project variants described above is included within the demand estimate for Variant I.

Table 2-2. Proposed Project Impact on ConnectMenlo Study Area Potable Water Demand

Demand Source	Annual Water Demand, MG/yr
ConnectMenlo Total Potable Water Demand at Buildout[(a)]	343
Proposed Project Net Potable Water Demand Increase[(b)]	85
Remaining Potable Water Demand for Other Projects within ConnectMenlo Study Area[(c)]	**258**

(a) Water Supply Evaluation Study for ConnectMenlo – General Plan and M-2 Area Zoning Update (Table 2), prepared by EKI, February 2016. The Water Supply Evaluation Study assumed that total water demand in the ConnectMenlo study area would be met using potable water.

(b) From Table 2-1 above; net increase in Potable Water Demand due to Proposed Project (Variant I).

(c) Other projects in the ConnectMenlo study area currently in the planning stages include 1350 Adams Court with a projected potable water demand of approximately 5 MG/yr and Commonwealth Building 3 with a projected potable water demand of approximately 14 MG/yr. These projects are still in the planning stage, so their projected water demands are subject to change. Recently approved projects subject to water budgets and annual water usage limits include Menlo Portal and Menlo Uptown which are anticipated to use 12.6 and 9.1 MG/yr, respectively.

The remaining potable water demand for other projects within the ConnectMenlo study area shown in Table 2-2 is available to serve both approved, but not yet constructed, and future projects (whether or not they require a WSA).

3.0 REQUIRED DETERMINATIONS

The following sections describe the required determinations for a WSA.

3.1 Does SB 610 Apply to the Proposed Project?

10910 (a) Any city or county that determines that a project, as defined in Section 10912, is subject to the California Environmental Quality Act (Division 13 (commencing with Section 21000) of the Public Resources Code) under Section 21080 of the Public Resources Code shall comply with this part.

10912 (a) "Project" means any of the following:

(1) A proposed residential development of more than 500 dwelling units.

(2) A proposed shopping center or business establishment employing more than 1,000 persons or having more than 500,000 square feet of floor space.

(3) A proposed commercial office building employing more than 1,000 persons or having more than 250,000 square feet of floor space.

(4) A proposed hotel or motel, or both, having more than 500 rooms.

(5) A proposed industrial, manufacturing, or processing plant, or industrial park planned to house more than 1,000 persons, occupying more than 40 acres of land, or having more than 650,000 square feet of floor area.

(6) A mixed-use project that includes one or more of the projects specified in this subdivision.

(7) A project that would demand an amount of water equivalent to, or greater than, the amount of water required by a 500-dwelling unit project.

As shown in Table 3-1, the Proposed Project does meet the definition of a "Project" as specified in Water Code section 10912(a). The Proposed Project has not been the subject of a previously adopted WSA and has not been included in an adopted WSA for a larger project. Therefore, according to Water Code section 10910(a), a WSA is required for the Proposed Project.

Table 3-1. Does the Proposed Project Meet the SB 610 Definition of a "Project"?

SB 610 Project Definition Components	Proposed Project Quantity	Meets the SB 610 Definition of a "Project"?
Residential > 500 dwelling units	Up to 1,730 units (or up to 1,930 units under Variant I)	YES
Retail > 1,000 employees or > 500,000 sf	200,000 sf	NO
Commercial Office Building > 1,000 employees or > 250,000 sf	1.6 million sf	YES
Hotel/Motel > 500 rooms	193 rooms	NO
Industrial Plant/Park > 1,000 employees or > 40 acres or > 650,000 sf	N/A	NO
Mixed Use Project that includes one or more of the above	YES	YES
A Project that would demand the amount of water required by a 500-dwelling unit project	YES	YES
SB 610 Required?	--	**YES**

The City has also determined that the Proposed Project is subject to the California Environmental Quality Act (CEQA) and that an EIR is required. Because the Proposed Project's location and development parameters are consistent with ConnectMenlo, the ConnectMenlo Program-level EIR serves as the first tier environmental analysis for the Project. However, an EIR will be prepared for the Proposed Project to address impacts that need further discussion and/or mitigation beyond that provided in the ConnectMenlo EIR, as well as to satisfy the requirements of a settlement agreement between the City of Menlo Park and the City of East Palo Alto. The EIR will utilize the findings of this WSA as appropriate in the EIR for the Proposed Project.

3.2 Does SB 221 Apply to the Proposed Project?

In 2001, SB 221 amended State law to require that approval by a city or county of certain residential subdivisions requires an affirmative written verification of sufficient water supply. Per California Government Code section 66473.7(a)(1), a subdivision means a proposed residential development of more than 500 dwelling units. The Proposed Project, with up to 1,730 new residential dwelling units (with the potential for an additional 200 dwelling units under one of the project variants) in MPMW's water service area, is therefore subject to the requirements of SB 221.

3.3 Who is the Identified Public Water System?

> *10910(b) The city or county, at the time that it determines whether an environmental impact report, a negative declaration, or a mitigated negative declaration is required for any project subject to the California Environmental Quality Act pursuant to Section 21080.1 of the Public Resources Code, shall identify any water system that is, or may become as a result of supplying water to the project identified pursuant to this subdivision, a public water system, as defined by Section 10912, that may supply water for the project*
>
> *10912 (c) "Public water system" means a system for the provision of piped water to the public for human consumption that has 3,000 or more service connections…*

The Proposed Project is located in the City within MPMW's service area. MPMW's service area consists of three zones: the Lower Zone (located north and east of El Camino Real and serves residential, small commercial, and light industrial land uses), the High Pressure Zone (located in northern Menlo Park between Highway 101 and Bayfront Expressway, north of Chilco Street, and serves multi-family residential, commercial and light industrial, and a mobile home park outside the City's northern-most boundary), and the Upper Zone (located in the southwest portion of Menlo Park near Interstate 280 and geographically and hydraulically disconnected from the other pressure zones). The Proposed Project is located in MPMW's Lower Zone. Therefore, MPMW is the identified public water system for the Proposed Project.

3.4 Does the Identified Public Water Supplier have an adopted UWMP and does the UWMP include the projected water demand for the Proposed Project?

10910(c)(1) The city or county, at the time it makes the determination required under Section 21080.1 of the Public Resources Code, shall request each public water system identified pursuant to subdivision (b) to determine whether the projected water demand associated with a proposed project was included as part of the most recently adopted urban water management plan adopted pursuant to Part 2.6 (commencing with Section 10610).

The City's most recently adopted UWMP is the 2020 UWMP, which was adopted in May 2021. The MPMW 2020 UWMP is incorporated by reference into this WSA.

The MPMW 2020 UWMP incorporated the future population, employment and water demand projections for buildout of the General Plan, including the additional allowable development associated with ConnectMenlo and other major development projects within the MPMW service area.[4] As described in Section 2.3 of this WSA, ConnectMenlo identifies the maximum development potential that could occur within the ConnectMenlo study area, including potential bonus-level increased development, and the associated program level EIR further defines the maximum development that can occur by specific land uses. MPMW and the City's Planning Division are actively tracking projects within the ConnectMenlo study area on a cumulative basis to ensure that developed projects remain within the maximum development permitted in ConnectMenlo and would be consistent with the program-level EIR. The Proposed Project, if approved, would be within this permitted total development potential permitted for both ConnectMenlo and the associated program-level EIR. Therefore, the water demand for the Proposed Project is included in the MPMW 2020 UWMP water demand.

Table 3-2 presents the projected future water demand for buildout of the General Plan, which would include the Proposed Project, in normal years as presented in the MPMW 2020 UWMP. Additional discussion on the MPMW's existing and projected water demands is provided in Section 5 of this WSA.

Table 3-2. Projected Future Water Demand – Normal Years

	Projected Water Demand after Passive and Active Conservation, MG			
2020 (Actual), MG	2025	2030	2035	2040
1,069	1,296	1,345	1,410	1,483

Source: MPMW 2020 UWMP, Table 4-5.

[4] MPMW 2020 UWMP, Section 3.2 Land Uses within Service Area, page 18.

4.0 MENLO PARK MUNICIPAL WATER SYSTEM

The following sections describe the MPMW existing water service area, including existing and projected population.

4.1 Water Service Area

MPMW is located within the City, along the San Francisco Peninsula in San Mateo County, between the cities of Palo Alto, East Palo Alto, and Redwood City. MPMW provides water service to approximately half of the City, serving an area of approximately 9 square miles. The remainder of the City is served by California Water Service, O'Connor Tract Co-operative Water Company, and Palo Alto Park Mutual Water Company.

There were 4,296 MPMW service connections as of 2020. Land uses throughout the water service area consist primarily of residential, commercial, and industrial land uses. Customer service connections include residential users, industrial connections, commercial service connections, irrigation accounts, and 'Other' connections (including temporary services and sales, private fire services, and hydrant services).

4.2 Population

The MPMW service area is largely built-out, with future growth trends principally due to redevelopment within the Bayfront Area. As shown in Table 4-1, the total population within the MPMW service area is projected to increase to 30,184 people by 2040, a 65 percent increase from the current 2020 population of 18,276 people. The City's Planning Division expects more than 40 percent of the projected population increase to occur within the next five years (2020 through 2025) based on approved and pending projects in the Bayfront Area (driven by the ConnectMenlo General Plan). The MPMW service area includes areas outside of the Bayfront Area; however, given the focus of the ConnectMenlo General Plan Update on land use changes within the Bayfront Area, most population growth through 2040 is expected to occur in that geographic area.[5]

Table 4-1. MPMW Service Area Existing and Projected Population

Year	2020	2025	2030	2035	2040
Population Served	18,276	23,383	25,166	27,675	30,184

Source: MPMW 2020 UWMP, Table 3-1.

[5] The City is conducting the required update to its Housing Element that would likely increase population growth outside of the Bayfront Area, some of which may be located within the MPMW's Upper Zone.

5.0 MENLO PARK MUNICIPAL WATER DEMANDS

10910(c)(2) If the projected water demand associated with the proposed project was accounted for in the most recently adopted urban water management plan, the public water system may incorporate the requested information from the urban water management plan in preparing the elements of the assessment required to comply with subdivisions (d), (e), (f) and (g).

The descriptions provided below for the City's water demands are based on the MPMW 2020 UWMP (adopted in May 2021).

5.1 Historical and Existing Water Demand

Table 5-1 shows the MPMW water demand (based on water production) for 2010 through 2020. According to MPMW's 2020 UWMP, from 2010 through 2020, the service area population had grown by about 24 percent, while the total volume of water sold increased by just 1.6 percent. The decrease in water demand from 2013 to 2016 can be attributed to mandatory statewide restrictions issued by the State Water Resources Control Board (SWRCB) during the drought and water conservation efforts by the City's residents and businesses. Since 2016, there has been a rebound in demand.

Table 5-1. Historical Water Demand

Year	Potable Water Demand, MG
2010	1,052
2011	1,033
2012	1,079
2013	1,189
2014	1,030
2015	883
2016	898
2017	1,003
2018	1,108
2019	1,028
2020	1,069

Source: MPMW 2020 UWMP, Table 4-2.

5.2 Future Water Demand

Table 5-2 shows MPMW's projected normal year water demands through 2040 as included in MPMW's 2020 UWMP. These projections are based on anticipated future water demands corresponding to buildout of the City's current General Plan, including development of ConnectMenlo and other planned projects within MPMW's service area. The projected increase in demand reflects a rebound in water use following the end of the suppressed demands due to the 2015-2016 drought and an accelerated growth in employment due to planned development projects.

Table 5-2. Projected Future Water Demand – Normal Years				
	Projected Water Demand after Passive and Active Conservation, MG			
2020 (Actual), MG	2025	2030	2035	2040
1,069	1,296	1,345	1,410	1,483
Source: MPMW 2020 UWMP, Table 4-5.				

5.3 Dry Year Water Demand

As shown in Table 5-1, MPMW's 2015 and 2016 demands were significantly lower than the demand in previous years. This reduction in demands occurred in response to the drought and mandated statewide reductions in urban potable water usage.

Following the drought, MPMW updated the stages of action to be taken in response to water supply shortages. The updated stages of action are reflected in MPMW's Water Shortage Contingency Plan (WSCP) and are included in Chapter 8 of the MPMW 2020 UWMP. MPMW has also implemented a demand management program with mandatory prohibitions that are in force at all times, as described in Chapter 8 of the MPMW 2020 UWMP. The projected future water demand presented in Table 5-2 includes continued implementation of the existing demand management program and is based on future normal hydrologic years.

Under dry water year conditions, MPMW anticipates implementing the demand reduction measures outlined in the WSCP as appropriate to reduce water demands to match the reduction in the supply. However, to be conservative, the MPMW 2020 UWMP and this WSA do not assume additional water conservation will occur in single dry or multiple dry years, even though additional water conservation is likely to occur during dry years or other water supply shortages as a result of MPMW implementing additional water conservation measures.

Table 5-3 presents the projected future single and multiple dry year water demand, as presented in the MPMW 2020 UWMP.

Table 5-3. Projected Future Water Demand – Dry Years					
Hydrologic Condition	Demand Reduction[a]	Projected Water Demand, MG			
		2025	2030	2035	2040
Single Dry Year[b]	0%	1,296	1,345	1,410	1,483
Multiple Dry Years[c,d]	0%	1,296	1,345	1,410	1,483

(a) Conservatively assumes no demand reduction in dry years. Demands may be reduced in dry years as a result of MPMW's implementation of its Water Shortage Contingency Plan; however, such a demand reduction is not assumed or relied upon for the purposes of the Single Dry Year and Multiple Dry Year evaluations for this WSA.

(b) Source: MPMW 2020 UWMP, Table 7-5.

(c) Source: MPMW 2020 UWMP, Table 7-6.

(d) Represents demands for each year of the 5-year multiple dry year period.

6.0 MENLO PARK MUNICIPAL WATER SUPPLIES

10910(c)(2) If the projected water demand associated with the proposed project was accounted for in the most recently adopted urban water management plan, the public water system may incorporate the requested information from the urban water management plan in preparing the elements of the assessment required to comply with subdivisions (d), (e), (f) and (g).

10910(d)(1) The assessment required by this section shall include an identification of any existing water supply entitlements, water rights, or water service contracts relevant to the identified water supply for the proposed project, and a description of the quantities of water received in prior years by the public water system…under the existing water supply entitlements, water rights, or water service contracts.

10910(e) If no water has been received in prior years by the public water system…under the existing water supply entitlements, water rights, or water service contracts, the public water system…shall also include in its water supply assessment…an identification of the other public water systems or water service contract holders that receive a water supply or have existing water supply entitlements, water rights, or water service contracts, to the same source of water as the public water system.

10910(f) If a water supply for a proposed project includes groundwater, the following additional information shall be included in the water supply assessment.

(1) A review of any information contained in the urban water management plan relevant to the identified water supply for the proposed project.

(2) A description of any groundwater basin or basins from which the proposed project will be supplied. For those basins for which a court or the board has adjudicated the rights to pump groundwater, a copy of the order or decree adopted by the court or the board and a description of the amount of groundwater the public water system, or the city or county if either is required to comply with this part pursuant to subdivision (b), has the legal right to pump under the order or decree. For basins that have not been adjudicated, information as to whether the department has identified the basin or basins as overdrafted or has projected that the basin will become overdrafted if present management conditions continue, in the most recent bulletin of the department that characterizes the condition of the groundwater basin, and a detailed description by the public water system, or the city or county if either is required to comply with this part pursuant to subdivision (b), of the efforts being undertaken in the basin or basins to eliminate the long-term overdraft condition.

(3) A detailed description and analysis of the amount and location of groundwater pumped by the public water system, or the city or county if either is required to comply with this part pursuant to subdivision (b), for the past five years from any groundwater basin from which the proposed project will be supplied. The description and analysis shall be based on information that is reasonably available, including, but not limited to, historical use records.

(4) A detailed description and analysis of the amount and location of groundwater that is projected to be pumped by the public water system, or the city or county if either is required to comply with this part pursuant to subdivision (b), from any basin from which the proposed project will be supplied. The description and analysis shall be based on information that is reasonably available, including, but not limited to, historical use records.

(5) An analysis of the sufficiency of the groundwater from the basin or basins from which the proposed project will be supplied to meet the projected water demand associated with the proposed project. A water assessment shall not be required to include the information required by this paragraph if the public water system determines, as part of the review required by paragraph (1), that the sufficiency of groundwater necessary to meet the initial and projected water demand associated with the project was addressed in the description and analysis required by paragraph (4) of subdivision (b) of Section 10631.

As described in Section 3.4 of this WSA, the projected water demand associated with buildout of ConnectMenlo, which includes the Proposed Project, was accounted for in MPMW's most recently adopted Urban Water Management Plan. The descriptions provided below for MPMW's water supplies are based on the MPMW 2020 UWMP (adopted in May 2021) and the SFPUC 2020 UWMP (adopted in June 2021).

6.1 Water Supply Overview

MPMW currently purchases all of its potable water supplies from the SFPUC RWS. MPMW has reservoirs in its Upper Zone to provide for emergency supply and an emergency groundwater well has been constructed at MPMW's Corporation Yard. Additional groundwater wells and reservoirs for emergency supply are in the planning stages for the Lower Zone and the High Pressure Zone.

Recycled water supplied by West Bay Sanitary District (WBSD) is currently utilized within the MPMW service area for irrigation at the Sharon Heights Golf & Country Club and is under development for the Bayfront Area. According to the MPMW 2020 UWMP, MPMW plans to utilize up to 120 MG/yr of recycled water from WBSD for landscape and golf course irrigation and commercial non-potable applications at Sharon Heights and in the Bayfront Area.

6.2 Water Supply from the SFPUC RWS

The SFPUC RWS supplies water to both retail and wholesale customers. Retail customers include residents, businesses, and industries located within the City and County of San Francisco's boundaries. Wholesale customers include 26 cities and water supply agencies in Alameda, San Mateo and Santa Clara counties, including MPMW.

MPMW is a member agency of Bay Area Water Supply and Conservation Agency (BAWSCA) and purchases treated water from the SFPUC RWS in accordance with the November 2018 Amended and Restated Water Supply Agreement between the City and County of San Francisco and Wholesale Customers in Alameda, San Mateo and Santa Clara Counties, which was adopted in 2019. The term of the agreement is 25 years, with a beginning date of July 1, 2009 and an expiration date of June 30, 2034. Per the agreement, MPMW has an Individual Supply Guarantee (ISG) of 4.456 million gallons per day (mgd), or 1,630 million gallons per year, supplied by the SFPUC RWS. Over the last five years (2016-2020) MPMW has purchased between 52 percent and 66 percent of its ISG.

Additional discussion of the SFPUC RWS water supplies is provided in MPMW's 2020 UWMP and SFPUC's 2020 UWMP.

6.3 Groundwater Supply

MPMW does not rely upon groundwater supplies for its potable water supply since the entirety of the MPMW supply is purchased from the SFPUC RWS. However, MPMW has undertaken a multi-year Emergency Water Storage/Supply Project to construct emergency groundwater wells. As such, this WSA evaluates groundwater basin conditions pursuant to Section 10910(f).

6.3.1 Groundwater Basin Description

The MPMW service area overlies the southern end of the Santa Clara Valley Groundwater Basin's San Mateo Plain Groundwater Subbasin (DWR basin number 2-9.03; DWR, 2004; or "subbasin"). The

subbasin is not adjudicated, nor has it been found by the Department of Water Resources (DWR) to be in a condition of overdraft. As part of the implementation of the Sustainable Groundwater Management Act (SGMA), the subbasin was ranked as a "very low priority" basin under the California Statewide Groundwater Elevation Monitoring basin prioritization process. As such, the basin is not subject to the requirements of SGMA.

Located within the 45-square mile San Francisquito Creek Watershed, the MPMW service area contains both mountainous bedrock terrain and comparatively flat alluvial deposits. Coarse- and fine-grained alluvial deposits from the San Francisquito Creek can be found in the MPMW service area. There is a shallow aquifer and a deep aquifer that has an upper and a lower zone in the MPMW service area. Both aquifers lie beneath a laterally extensive confining layer. The shallow aquifer is unconfined while the deep aquifer is semi-confined. Pump tests and empirical transmissivity data show that it is feasible to develop a municipal supply from the groundwater subbasin. It is estimated that the groundwater subbasin can be as thick as 1,000 feet in some locations.

Groundwater in the Santa Clara Valley Groundwater Basin naturally flows toward the San Francisco Bay from the uplands in the southwest. Reverse groundwater gradients, from the San Francisco Bay toward the uplands, have been seen when pumping has exceeded the rate of recharge. The estimated annual recharge rate of the San Francisquito Creek watershed ranges from 4,000 to 8,000 acre-feet per year, equivalent to 3.6 to 7.2 mgd.

Additional discussion of the groundwater conditions and groundwater management is provided in MPMW's 2020 UWMP.

6.3.2 MPMW Emergency Water Storage/Supply Project

The MPMW Emergency Water Storage/Supply Project intends to provide a backup water supply to MPMW's Lower Zone, which lacks emergency storage, in the event water from the SFPUC RWS is reduced or unavailable. The MPMW Emergency Water Storage/Supply Project will provide a total capacity of up to 3,000 gpm, or approximately 4.32 mgd, between two to three wells at separate locations. MPMW initiated the project in 2010 and completed site screening, site ranking, and detailed engineering and hydrologic evaluation in 2013, including extensive community engagement. The City selected the Corporation Yard at 333 Burgess Drive for the first well, completed the CEQA evaluation in 2016, and drilled the well in 2017. Construction of the well facility (e.g., generator, disinfection equipment, associated piping) was completed in late 2020, and MPMW is working with the State Water Resources Control Board (SWRCB) to permit the well. MPMW is also investigating locations for a future underground reservoir for the Lower Zone and High Pressure Zone.

The SWRCB Division of Drinking Water classifies wells as "active" or "standby." Active wells, with water quality testing requirements every 3 years, must meet all primary and secondary standards and have no restrictions on when the well can be used. Standby wells, with water quality testing requirements every 9 years, must meet all primary standards (but not secondary standards) and have restrictions that the well cannot be used for more than 14 days per year or more than 5 consecutive days. To provide flexibility, the City plans to permit its emergency wells as "active" wells as long as primary and secondary standards can be met. The City's plan is to use the wells for emergency purposes only but have the flexibility to provide well water during emergencies that last more than 14 days per year or more than 5 consecutive days.

6.4 Recycled Water Supply

WBSD provides wastewater collection services to the MPMW service area. WBSD also acts as the recycled water purveyor in MPMW's Upper Zone and WBSD is developing a recycled water system to serve the Lower Zone and High Pressure Zone.

Currently, recycled water is only used at the Sharon Heights Golf & Country Club, which is a 170-acre property located in the Upper Zone of MPMW's service area. The recycled water system consists of the Sharon Heights Recycled Water Facility, a pump station, recycled water distribution pipelines to the golf course irrigation system, and a solids disposal pipeline. In 2020, the satellite wastewater treatment plant (WWTP) provided 20 MG of recycled water to the Sharon Heights Golf & Country Club, offsetting demand in potable water purchased from SFPUC. A second phase of the project, in the very early planning stages, could supply approximately 28 MG of recycled water over seven months a year to the Stanford Linear Accelerator Center for irrigation and industrial uses such as for cooling towers.

Planning for a similar recycled water facility in the Bayfront Area is ongoing. WBSD has completed a feasibility study exploring the viability of a Resource Recovery Center at WBSD's former treatment plant behind Bedwell Bayfront Park, which could produce approximately 500,000 gallons per day of recycled water for reuse (the MPMW 2020 UWMP projects an annual recycled water supply of 72 MG/yr from this new facility). The feasibility study concluded that the project is feasible. In a public/private partnership with Meta (the Project Applicant), the WBSD Board of Directors spearheaded the effort to install 2,800 feet of purple recycled water pipe parallel with the storm drainpipe Meta was replacing on Chilco Street. This pipe will be used to distribute recycled water in the area. According to WBSD, recycled water will be used for irrigation, industrial purposes, firefighting, public fill stations and toilet flushing in the Bayfront Area.

6.5 Summary of Existing and Additional Planned Future Water Supplies

Table 6-1 provides a summary of MPMW's current and projected future normal year supplies as presented in MPMW's 2020 UWMP. The availability and reliability of MPMW's water supplies in dry years is discussed in Section 7 of this WSA.

Table 6-1. MPMW Current and Projected Future Water Supplies – Normal Years

Water Source	Water Supply, MG				
	2020 Actual[a,b]	2025[c]	2030[c]	2035[c]	2040[c]
Potable Water - Purchased from SFPUC RWS	1,069	1,630	1,630	1,630	1,630
Recycled Water – Sharon Heights Recycled Water Facility	20	48	48	48	48
Recycled Water – Bayfront Recycled Water Facility	--	0	72	72	72
Total	**1,089**	**1,678**	**1,750**	**1,750**	**1,750**

(a) 1,069 MG represents only 65.5% of the ISG to MPMW.
(b) Source: MPMW 2020 UWMP, Table 4-7.
(c) Source: MPMW 2020 UWMP, Table 6-9.

7.0 WATER SUPPLY RELIABILITY

10910(c)(4) If the city or county is required to comply with this part pursuant to subdivision (b), the water supply assessment for the project shall include a discussion with regard to whether the total projected water supplies, determined to be available by the city or county for the project during normal, single dry, and multiple dry water years during a 20-year projection, will meet the projected water demand associated with the proposed project, in addition to existing and planned future uses, including agricultural and manufacturing uses.

10911(a) If, as a result of its assessment, the public water system concludes that its water supplies are, or will be, insufficient, the public water system shall provide to the city or county its plans for acquiring additional water supplies, setting forth the measures that are being undertaken to acquire and develop those water supplies. If the city or county, if either is required to comply with this part pursuant to subdivision (b), concludes as a result of its assessment, that water supplies are, or will be, insufficient, the city or county shall include in its water supply assessment its plans for acquiring additional water supplies, setting forth the measures that are being undertaken to acquire and develop those water supplies. Those plans may include, but are not limited to, information concerning all of the following:

(1) The estimated total costs, and the proposed method of financing the costs, associated with acquiring the additional water supplies.

(2) All federal, state, and local permits, approvals, or entitlements that are anticipated to be required in order to acquire and develop the additional water supplies.

(3) Based on the consideration set forth in paragraphs (1) and (2), the estimated timeframes within which the public water system, or the city or county if either is required to comply with this part pursuant to subdivision (b), expects to able to acquire additional water supplies.

The current reliability of MPMW's water supply is largely dependent upon its water supply contract with SFPUC and SFPUC's water supply reliability. The reliability discussion provided below is based on the MPMW 2020 UWMP (adopted in May 2021) and the SFPUC 2020 UWMP (adopted in June 2021). It should be noted that SFPUC's 2020 UWMP extends to a 2045 horizon year, which is beyond the statutorily required horizon year of 2040 presented in the MPMW 2020 UWMP.

7.1 SFPUC RWS Reliability

Information regarding the reliability of the SFPUC RWS was provided to MPMW by BAWSCA, in coordination with SFPUC, during the preparation of the MPMW 2020 UWMP. The following sections describe the potential impacts of the 2018 Bay-Delta Plan Amendment on SFPUC RWS reliability, allocation of RWS supplies during supply shortages, as well as SFPUC's Alternative Water Supply Planning Program designed to investigate and plan for new water supplies to address future long-term water supply reliability challenges and vulnerabilities on the RWS.

7.1.1 Potential Impacts of the 2018 Bay-Delta Plan Amendment on SFPUC RWS Reliability

In December 2018, the SWRCB adopted amendments to the Water Quality Control Plan for the San Francisco Bay Sacramento-San Joaquin Delta Estuary (Bay-Delta Plan Amendment) to establish water quality objectives to maintain the health of the Bay-Delta ecosystem. The SWRCB is required by law to regularly review this plan. The adopted Bay-Delta Plan Amendment was developed with the stated goal of increasing salmonid populations in three San Joaquin River tributaries (the Stanislaus, Merced, and Tuolumne Rivers) and the Bay-Delta. The Bay-Delta Plan Amendment requires the release of 40 percent of the "unimpaired flow" on the three tributaries from February through June in every year type, whether wet, normal, dry, or critically dry.

The SWRCB has stated that it intends to implement the Bay-Delta Plan Amendment on the Tuolumne River in 2022, assuming all required approvals are obtained by that time. But implementation of the Plan Amendment is uncertain for several reasons:

- Since adoption of the Bay-Delta Plan Amendment, over a dozen lawsuits have been filed in both state and federal court, challenging the SWRCB's adoption of the Bay-Delta Plan Amendment, including two legal challenges filed by the federal government, at the request of the U.S. Department of Interior, Bureau of Reclamation in state and federal courts. These cases are in the early stage and there have been no dispositive court rulings to date.
- The Bay-Delta Plan Amendment is not self-implementing and does not allocate responsibility for meeting its new flow requirements to the SFPUC or any other water rights holders. Rather, the Plan Amendment merely provides a regulatory framework for flow allocation, which must be accomplished by other regulatory and/or adjudicatory proceedings, such as a comprehensive water rights adjudication or, in the case of the Tuolumne River, the 401 certification process in the Federal Energy Regulatory Commission's (FERC) relicensing proceeding for Don Pedro Dam. The license amendment process is currently expected to be completed in the 2022-23 timeframe. This process and the other regulatory and/or adjudicatory proceedings would likely face legal challenges and have lengthy timelines, and quite possibly could result in a different assignment of flow responsibility (and therefore a different water supply impact on the SFPUC).
- In recognition of the obstacles to implementation of the Bay-Delta Plan Amendment, SWRCB Resolution No. 2018-0059 adopting the Bay-Delta Plan Amendment directed staff to help complete a "Delta watershed-wide agreement, including potential flow measures for the Tuolumne River" by March 1, 2019, and to incorporate such agreements as an "alternative" for a future amendment to the Bay-Delta Plan to be presented to the SWRCB "as early as possible after December 1, 2019." In accordance with the SWRCB's instruction, on March 1, 2019, SFPUC, in partnership with other key stakeholders, submitted a proposed project description for the Tuolumne River that could be the basis for a voluntary substitute agreement with the SWRCB ("March 1st Proposed Voluntary Agreement"). On March 26, 2019, the Commission adopted Resolution No. 19-0057 to support SFPUC's participation in the Voluntary Agreement negotiation process. To date, those negotiations are ongoing under the California Natural Resources Agency and California Environmental Protection Agency and the leadership of the Newsom administration. The negotiations for a voluntary agreement have made significant progress since an initial framework was presented to the SWRCB on December 12, 2018. The package submitted on March 1, 2019 is the product of renewed discussions since Governor Newsom took office. While significant work remains, the package represents an important step forward in bringing together diverse California water interests.[6]

[6] In late October 2021, State regulators announced that these negotiations stopped before an agreement was reached. It is unclear whether or when negotiations might be reinitiated.

Because of the uncertainties surrounding the implementation of the Bay-Delta Plan Amendment, the SFPUC 2020 UWMP analyzed two supply scenarios, one with the Bay-Delta Plan Amendment assuming implementation starting in 2023, and one without the Bay-Delta Plan Amendment. Results of these analyses are summarized as follows[7]:

- If the Bay-Delta Plan Amendment is implemented, SFPUC will be able to meet its contractual obligations to its wholesale customers as presented in the SFPUC 2020 UWMP in normal years but would experience significant supply shortages in dry years. In single dry years, supply shortages would range from 36 to 46 percent. In multiple dry years, supply shortages would range from 36 to 54 percent. Implementation of the Bay-Delta Plan Amendment will require rationing in all single dry and multiple dry years through 2045.
- If the Bay-Delta Plan Amendment is not implemented, SFPUC would be able to meet 100 percent of the projected purchases of its wholesale customers during all year types through 2045 except during the fourth and fifth consecutive dry years for base year 2045 when 15 percent wholesale supply shortages are projected.

In June 2021, in response to various comments from wholesale customers regarding the reliability of the RWS as described in SFPUC's 2020 UWMP, the SFPUC provided a memorandum describing SFPUC's efforts to remedy the potential effects of the Bay-Delta Plan Amendment. As described in the memorandum (included in Appendix B of this WSA), SFPUC's efforts include the following:

- Pursuing a Tuolumne River Voluntary Agreement
- Evaluating the drought planning scenario in light of climate change
- Pursuing alternative water supplies
- In litigation with the State over the Bay-Delta Plan Amendment
- In litigation with the State over the proposed Don Pedro FERC Water Quality Certification

7.1.2 Allocation of RWS Supplies During Supply Shortages

The wholesale customers and SFPUC adopted the November 2018 Amended and Restated Water Supply Agreement in 2019, which included a Water Shortage Allocation Plan (WSAP) to allocate water from the RWS to retail and wholesale customers during system-wide shortages of 20 percent or less, including such shortages occurring as a result of implementation of the Bay-Delta Plan Amendment. The WSAP has two tiers which are described below.

- The Tier One Plan allocates water between SFPUC and the wholesale customers collectively based on the level of the shortage (up to 20 percent). This plan applies only when SFPUC determines that a system-wide water shortage exists and issues a declaration of a water shortage emergency under California Water Code Section 350. The SFPUC may also opt to request voluntary cutbacks from San Francisco and the wholesale customers to achieve

[7] BAWSCA Drought Allocation Tables by Agency (Table E: Percent Cutback to the Wholesale Customers with Bay-Delta Plan and Table N: Percent Cutback to the Wholesale Customers Without Bay-Delta Plan), dated April 1, 2021.

necessary water use reductions during drought periods. The allocations outlined in the Tier One Plan are provided in Table 7-1.

Table 7-1. Tier One Plan Water Shortage Allocations

System-Wide Reduction Required, percent	Share of Available Water, percent	
	SFPUC	Wholesale Customers
≤ 5	35.5	64.5
6 to 10	36.0	64.0
11 to 15	37.0	63.0
16 to 20	37.5	62.5

- The Tier Two Plan allocates the collective wholesale customer share among the wholesale customers based on a formula that accounts for each wholesale customer's ISG, seasonal use of all available water supplies, and residential per capita use. BAWSCA calculates each wholesale customer's Allocation Factors annually in preparation for a potential water shortage emergency.

BAWSCA recognizes that the Tier Two Plan was not designed for RWS shortages greater than 20 percent, and in a memorandum dated March 1, 2021, BAWSCA provided a refined methodology to allocate RWS supplies during projected future single dry and multiple dry years in the instance where supply shortfalls are greater than 20 percent for the purposes of the BAWSCA member agencies' 2020 UWMPs. The revised methodology developed by BAWSCA allocates the wholesale supplies as follows:

- When the average Wholesale Customers' RWS shortages are 10 percent or less, an equal percent reduction will be applied across all agencies. This is consistent with the existing Tier Two requirements in a Tier Two application scenario.
- When average Wholesale Customers' shortages are between 10 and 20 percent, the Tier Two Plan will be applied.
- When the average Wholesale Customers' RWS shortages are greater than 20 percent, an equal percent reduction will be applied across all agencies.

In another memorandum dated February 18, 2021, BAWSCA explains that in actual RWS shortages greater than 20 percent, BAWSCA Member Agencies would have the opportunity to negotiate and agree upon a more nuanced and equitable approach. This would likely consider basic health and safety needs, the water needs to support critical institutions, and minimizing economic impacts on individual communities and the region. As such, the allocation method described in the MPMW 2020 UWMP is only intended to serve as the preliminary basis for the 2020 UWMP supply reliability analysis. The analysis provided in the SFPUC 2020 UWMP and the MPMW 2020 UWMP does not in any way imply an agreement by BAWSCA member agencies as to the exact allocation methodology. BAWSCA member agencies are in discussions about jointly developing an allocation method that would consider additional equity factors in the event that SFPUC is not able to deliver its contractual supply volume, and its cutbacks to the RWS supply exceed 20 percent.

7.1.3 Alternative Water Supply Program

In early 2020, the SFPUC began implementation of the Alternative Water Supply Planning Program (AWSP), a program designed to investigate and plan for new water supplies to address future long-term water supply reliability challenges and vulnerabilities of the RWS particularly in light of the possible implementation of the Bay-Delta Plan Amendment.

Included in the AWSP is a suite of diverse, non-traditional supply projects that, to a great degree, leverage regional partnerships and are designed to meet the water supply needs of the SFPUC Retail and Wholesale Customers through 2045. As of the most recent Alternative Water Supply Planning Quarterly Update, SFPUC has budgeted $264 million over the next ten years to fund water supply projects. The drivers for the program include: (1) the adoption of the Bay-Delta Plan Amendment and the resulting potential limitations to RWS supply during dry years; (2) the net supply shortfall following the implementation of SFPUC's Water System Improvement Plan (WSIP)[8]; (3) San Francisco's perpetual obligation to supply 184 mgd to the Wholesale Customers; (4) adopted Level of Service Goals to limit rationing to no more than 20 percent system-wide during droughts; and, (5) the potential need to identify water supplies that would be required to offer permanent status to interruptible customers.

The SFPUC is considering several water supply options and opportunities to meet all foreseeable water supply needs, including surface water storage expansion, recycled water expansion, water transfers, desalination, and potable reuse. These efforts and their expected benefit to supply reliability are listed below, and described in further detail in the MPMW 2020 UWMP and SFPUC 2020 UWMP:

- Daly City Recycled Water Expansion (Regional; Normal and Dry-Year Supply)
- Alameda County Water District – Union Sanitary District Purified Water Partnership (Regional; Normal and Dry-Year Supply)
- Crystal Springs Purified Water (Regional; Normal and Dry-Year Supply)
- Los Vaqueros Reservoir Expansion (Regional; Dry Year Supply)
- Bay Area Brackish Water Desalination (Regional; Normal and Dry-Year Supply)
- Calaveras Reservoir Expansion (Regional; Dry Year Supply)
- Groundwater Banking (Dry Year Supply)
- Inter-Basin Collaborations

Capital projects under consideration would be costly and are still in the early feasibility and conceptual planning stages. The exact yields from these projects are not quantified at this time, as these supply

[8] The Water System Improvement Program (WSIP) is a $4.8 billion dollar, multi-year capital program to upgrade the SFPUC's regional and local water systems. The program repairs, replaces, and seismically upgrades crucial portions of the Hetch Hetchy Regional Water System. The program consists of 87 projects (35 local projects located within San Francisco and 52 regional projects) spread over seven counties from the Sierra foothills to San Francisco. The San Francisco portion of the program is 100 percent complete as of October 2020. The Regional portion is approximately 99 percent complete. The current forecasted date to complete the overall WSIP is May 2023. Additional information on the WSIP is provided in Chapter 7 of MPMW's 2020 UWMP.

projects would take 10 to 30 years to implement and the exact amount of water that can be reasonably developed is currently unknown.

As with traditional infrastructure projects, there is a need to progress systematically from planning to environmental review, and then on to detailed design, permitting and construction of these alternative water supply projects. Given the complexity and inherent challenges, these projects will require a long lead time to develop and implement. SFPUC staff have developed an approach and timeline to substantially complete planning and initiate environmental review by July 2023 for a majority of the alternative water supply projects under consideration.

Additional information on the AWSP is provided in Chapter 7 of MPMW's 2020 UWMP.

7.2 MPMW Water Supply Reliability

In the MPMW 2020 UWMP, projected normal year supplies are shown to be adequate to satisfy MPMW's projected normal year demands. However, in the MPMW 2020 UWMP, and this WSA, MPMW's purchased supplies from the SFPUC RWS assume dry year supply reductions as a result of the implementation of the Bay-Delta Plan Amendment, which significantly reduces dry year allocations for SFPUC wholesale customers. Recycled water is estimated to be available during all hydrologic years at a volume that meets MPMW's projected recycled water demands.

Table 7-2 shows MPMW's projected supplies during normal, single dry and multiple dry years through 2040 based on the assumptions in the MPMW 2020 UWMP which assumes implementation of the Bay-Delta Plan Amendment. Based on the SFPUC's analysis, similar water supply quantities would be available to MPMW in 2045 under the various hydrologic conditions.[9]

Table 7-2. Projected MPMW Water Supplies with Bay-Delta Plan Amendment

Hydrologic Condition	Projected Water Supply, MG[(a)]			
	2025	2030	2035	2040
Normal Year[(b)]	1,678	1,750	1,750	1,750
Single Dry Year[(c)]	877	978	1,018	1,062
Multiple Dry Years – Year 1[(d)]	877	978	1,018	1,062
Multiple Dry Years – Year 2[(d)]	760	854	887	927
Multiple Dry Years – Year 3[(d)]	760	854	887	927
Multiple Dry Years – Year 4[(d)]	760	854	887	832
Multiple Dry Years – Year 5[(d)]	760	854	824	832

(a) Includes projected potable water supply from the SFPUC RWS and projected recycled water supply (48 MG/yr in 2025 and 120 MG/yr for 2030 to 2040) (see Table 6-1).
(b) Source: MPMW 2020 UWMP, Table 7-4.
(c) Source: MPMW 2020 UWMP, Table 7-5.
(d) Source: MPMW 2020 UWMP, Table 7-6

[9] BAWSCA Drought Allocation Tables by Agency (Table K: Individual Agency Drought Allocations, Base Year 2045, With Bay-Delta Plan), dated April 1, 2021.

The water supply estimates provided in Table 7-2 use the best available data at the time of the MPMW 2020 UWMP, but do not account for the following factors:

- Potential changes to the implementation of the Bay-Delta Plan Amendment as discussed in Section 7.1.1 of this WSA
- Climate change impacts on the SFPUC RWS
- Potential delays in completion of the WSIP[10]

For comparison purposes, the SFPUC 2020 UWMP also evaluated a scenario without implementation of the Bay-Delta Plan Amendment. Table 7-3 shows MPMW's projected supplies during normal, single dry and multiple dry years for 2025 through 2040 assuming that the Bay-Delta Plan Amendment is not implemented. SFPUC's analysis indicated that it would be able to meet 100 percent of the wholesale projected purchases during all year types through 2045 except during the fourth and fifth consecutive dry years for base year 2045 when a 16.5 percent supply shortfall is projected for MPMW (note that 2045 supplies are not shown in Table 7-3 as they were not shown in MPMW's 2020 UWMP).

As required under SB 610, in light of these identified water supply shortages, Section 8 of this WSA describes MPMW's proposals for reducing water demands and developing additional water supplies, including measures that are being undertaken to acquire and develop those water supplies.

Table 7-3. Projected MPMW Water Supplies without Bay-Delta Plan Amendment

Hydrologic Condition	Projected Water Supply, MG[(a)]			
	2025	2030	2035	2040
Normal Year[(b)]	1,678	1,750	1,750	1,750
Single Dry Year[(c)]	1,344	1,465	1,530	1,603
Multiple Dry Years – Year 1[(c)]	1,344	1,465	1,530	1,603
Multiple Dry Years – Year 2[(c)]	1,344	1,465	1,530	1,603
Multiple Dry Years – Year 3[(c)]	1,344	1,465	1,530	1,603
Multiple Dry Years – Year 4[(c,d)]	1,344	1,465	1,530	1,603
Multiple Dry Years – Year 5[(c,d)]	1,344	1,465	1,530	1,603

(a) Includes projected potable water supply from the SFPUC RWS (based on projected purchases) and projected recycled water supply (48 MG/yr in 2025 and 120 MG/yr for 2030 to 2040) (see Table 6-1).

(b) Source: MPMW 2020 UWMP, Table 7-4.

(c) Source: BAWSCA Drought Allocation Tables by Agency (Table A: Wholesale RWS Actual Purchases in 2020 and Projected Purchases for 2025, 2030, 2035, 2040 and 2045), dated April 1, 2021. Totals include projected recycled water supply.

(d) A 16.5 percent reduction in supply from the SFPUC RWS is projected for MPMW in the fourth and fifth years of a multiple dry year drought, but not until 2045 (BAWSCA Drought Allocation Tables by Agency (Table O2: Individual Agency Drought Allocations, Base Year 2045, Without Bay-Delta Plan), dated April 1, 2021.

[10] The San Francisco portion of the WSIP is 100 percent complete as of October 2020. The Regional portion of the WSIP is approximately 99 percent complete. The current forecasted date to complete the overall WSIP is May 2023.

8.0 DETERMINATION OF WATER SUPPLY SUFFICIENCY BASED ON THE REQUIREMENTS OF SB 610

> *10910(c)(4) If the city or county is required to comply with this part pursuant to subdivision (b), the water supply assessment for the project shall include a discussion with regard to whether the total projected water supplies, determined to be available by the city or county for the project during normal, single dry, and multiple dry water years during a 20-year projection, will meet the projected water demand associated with the proposed project, in addition to existing and planned future uses, including agricultural and manufacturing uses.*
>
> *10911 (a) If, as a result of its assessment, the public water system concludes that its water supplies are, or will be, insufficient, the public water system shall provide to the city or county its plans for acquiring additional water supplies, setting forth the measures that are being undertaken to acquire and develop those water supplies.*

Because of the uncertainties surrounding the implementation of the Bay-Delta Plan Amendment, this WSA presents findings for two scenarios, one assuming the Bay-Delta Plan Amendment is implemented and one assuming that the Bay-Delta Plan Amendment is not implemented.

Table 8-1 summarizes the scenario where it is assumed the Bay-Delta Plan Amendment is implemented. Under this scenario, the total projected water supplies determined to be available for the Proposed Project in normal years will meet the projected water demand associated with the Proposed Project, in addition to MPMW's existing and planned future uses, through 2040. However, with the implementation of the Bay-Delta Plan Amendment, significant supply shortfalls are projected in dry years for agencies that receive water supplies from the SFPUC RWS, as well as other agencies whose water supplies would be affected by the Amendment. For MPMW, supply shortfalls are projected in single dry years (ranging from 27 to 32 percent) and in multiple dry years (ranging from 27 to 44 percent) through 2040. Based on SFPUC's analysis, similar supply shortfalls would occur through 2045.

If supply shortfalls do occur, MPMW expects to meet these supply shortfalls through water demand reductions and other shortage response actions by implementation of its WSCP.[11] The projected single dry year shortfalls would require implementation of Stage 3 or 4 of the MPMW WSCP, and the projected multiple dry year shortfalls would require implementation of Stage 3, 4 or 5 of the MPMW WSCP.

As described in Section 7.1.3 of this WSA, the SFPUC is implementing an Alternative Water Supply Planning Program to investigate and plan for new water supplies to address future long-term water supply reliability challenges and vulnerabilities on the RWS. Also, as described in Section 6.3.2 of this WSA, MPMW is implementing an Emergency Water Storage/Supply Project to provide a backup water supply to MPMW's Lower Zone. However, because these potential additional supplies are still being developed, they are not included in Table 8-1.

[11] A main focus of MPMW's planned demand reduction measures is to increase public outreach and keep customers informed of the water shortage emergency and actions they can take to reduce consumption. The City will utilize its emergency supply well(s) as supply augmentation during WSCP Stages 5 and 6. Other actions that the City will take will include coordination with other agencies, implementing drought surcharge, increasing water waste patrols, etc. Additional information on MPMW's WSCP is provided in Chapter 8 of MPMW's 2020 UWMP.

Table 8-1. MPMW Summary of Water Demand Versus Supply with Bay-Delta Plan Amendment During Hydrologic Normal, Single Dry, and Multiple Dry Years

Hydrologic Condition		Supply and Demand Comparison, MG			
		2025	2030	2035	2040
Normal Year					
Available Water Supply[(a)]		1,678	1,750	1,750	1,750
Total Water Demand[(b)]		1,296	1,345	1,410	1,483
Potential Surplus (Deficit)		382	405	340	267
Percent Shortfall of Demand		-	-	-	-
Single Dry Year					
Available Water Supply[(c)]		877	978	1,018	1,062
Total Water Demand[(d)]		1,296	1,345	1,410	1,483
Potential Surplus (Deficit)		(419)	(367)	(392)	(421)
Percent Shortfall of Demand		32%	27%	28%	28%
Multiple Dry Years					
Multiple-Dry Year 1	Available Water Supply[(c)]	877	978	1,018	1,062
	Total Water Demand[(d)]	1,296	1,345	1,410	1,483
	Potential Surplus (Deficit)	(419)	(367)	(392)	(421)
	Percent Shortfall of Demand	32%	27%	28%	28%
Multiple-Dry Year 2	Available Water Supply[(c)]	760	854	887	927
	Total Water Demand[(d)]	1,296	1,345	1,410	1,483
	Potential Surplus (Deficit)	(536)	(491)	(523)	(557)
	Percent Shortfall of Demand	41%	37%	37%	38%
Multiple-Dry Year 3	Available Water Supply[(c)]	760	854	887	927
	Total Water Demand[(d)]	1,296	1,345	1,410	1,483
	Potential Surplus (Deficit)	(536)	(491)	(523)	(557)
	Percent Shortfall of Demand	41%	37%	37%	38%
Multiple-Dry Year 4	Available Water Supply[(c)]	760	854	887	832
	Total Water Demand[(d)]	1,296	1,345	1,410	1,483
	Potential Surplus (Deficit)	(536)	(491)	(523)	(652)
	Percent Shortfall of Demand	41%	37%	37%	44%
Multiple-Dry Year 5	Available Water Supply[(c)]	760	854	824	832
	Total Water Demand[(d)]	1,296	1,345	1,410	1,483
	Potential Surplus (Deficit)	(536)	(491)	(586)	(652)
	Percent Shortfall of Demand	41%	37%	42%	44%

(a) From Table 6-1 of this WSA.
(b) From Table 5-2 of this WSA.
(c) From Table 7-2 of this WSA.
(d) From Table 5-3 of this WSA.

Table 8-2 summarizes the scenario where it is assumed the Bay-Delta Plan Amendment is not implemented. Under this scenario, the total projected water supplies determined to be available for the Proposed Project in normal years, single dry years and multiple dry years will meet the projected water demand associated with the Proposed Project, in addition to MPMW's existing and planned future uses through 2040. As described in Section 7.2 of this WSA, based on SFPUC's analysis, a 16.5 percent supply shortfall is projected during the fourth and fifth consecutive dry years for base year 2045 (note that 2045 supplies and demands are not shown in Table 8-2 as they were not shown in MPMW's 2020 UWMP). These projected supply shortfalls are significantly less than the projected supply shortfalls if the Bay-Delta Plan Amendment is implemented.

If supply shortfalls do occur, MPMW expects to meet these supply shortfalls through water demand reductions and other shortage response actions by implementation of its WSCP.[12] The projected multiple dry year shortfalls in 2045 would require implementation of Stage 2 of the MPMW WSCP.

The water demand associated with buildout of ConnectMenlo, which includes the Proposed Project, is included in the MPMW water demand projections in its 2020 UWMP, and the Proposed Project would be subject to the same water conservation and water use restrictions as other water users within the MPMW system.

[12] A main focus of MPMW's planned demand reduction measures is to increase public outreach and keep customers informed of the water shortage emergency and actions they can take to reduce consumption. The City will utilize its emergency supply well(s) as supply augmentation during WSCP Stages 5 and 6. Other actions that the City will take will include coordination with other agencies, implementing drought surcharge, increasing water waste patrols, etc. Additional information on MPMW's WSCP is provided in Chapter 8 of MPMW's 2020 UWMP.

Table 8-2. MPMW Summary of Water Demand Versus Supply without Bay-Delta Plan Amendment During Hydrologic Normal, Single Dry, and Multiple Dry Years

Hydrologic Condition		Supply and Demand Comparison, MG			
		2025	2030	2035	2040
Normal Year					
Available Water Supply[(a)]		1,678	1,750	1,750	1,750
Total Water Demand[(b)]		1,296	1,345	1,410	1,483
	Potential Surplus (Deficit)	382	405	340	267
	Percent Shortfall of Demand	-	-	-	-
Single Dry Year					
Available Water Supply[(c)]		1,344	1,465	1,530	1,603
Total Water Demand[(d)]		1,296	1,345	1,410	1,483
	Potential Surplus (Deficit)	48	120	120	120
	Percent Shortfall of Demand	-	-	-	-
Multiple Dry Years					
Multiple-Dry Year 1	Available Water Supply[(c)]	1,344	1,465	1,530	1,603
	Total Water Demand[(d)]	1,296	1,345	1,410	1,483
	Potential Surplus (Deficit)	48	120	120	120
	Percent Shortfall of Demand	-	-	-	-
Multiple-Dry Year 2	Available Water Supply[(c)]	1,344	1,465	1,530	1,603
	Total Water Demand[(d)]	1,296	1,345	1,410	1,483
	Potential Surplus (Deficit)	48	120	120	120
	Percent Shortfall of Demand	-	-	-	-
Multiple-Dry Year 3	Available Water Supply[(c)]	1,344	1,465	1,530	1,603
	Total Water Demand[(d)]	1,296	1,345	1,410	1,483
	Potential Surplus (Deficit)	48	120	120	120
	Percent Shortfall of Demand	-	-	-	-
Multiple-Dry Year 4	Available Water Supply[(c)]	1,344	1,465	1,530	1,603
	Total Water Demand[(d)]	1,296	1,345	1,410	1,483
	Potential Surplus (Deficit)	48	120	120	120
	Percent Shortfall of Demand	-	-	-	-
Multiple-Dry Year 5	Available Water Supply[(c)]	1,344	1,465	1,530	1,603
	Total Water Demand[(d)]	1,296	1,345	1,410	1,483
	Potential Surplus (Deficit)	48	120	120	120
	Percent Shortfall of Demand	-	-	-	-

(a) From Table 6-1 of this WSA.
(b) From Table 5-2 of this WSA.
(c) From Table 7-3 of this WSA.
(d) From Table 5-3 of this WSA.

9.0 VERIFICATION OF WATER SUPPLY SUFFICIENCY BASED ON THE REQUIREMENTS OF SB 221

The Proposed Project, with up to 1,730 residential dwelling units, is also subject to the requirements of SB 221 (Government Code section 66473.7). SB 221 applies to residential development projects of more than 500 dwelling units (such as the Proposed Project) and requires that the water supplier (MPMW) provide a written verification that the water supply for the Proposed Project is sufficient.

Verification must demonstrate supply sufficiency by showing that water supplies available during Normal, Single Dry and Multiple Dry years within a projected 20-year period will meet the projected demand associated with the Proposed Project, in addition to existing and planned future uses, including, but not limited to, agriculture and industrial uses. Per the requirements of SB 221, the following must be considered:

- Historical water deliveries for the previous 20 years
- Urban water shortage contingency analysis prepared for the UWMP
- Supply reduction for specific water use sectors
- Amount of water expected from specified supply projects

The specific considerations to be evaluated for the SB 221 verification are described below and reference applicable sections of the MPMW 2020 UWMP and this WSA.

9.1 Historical Water Deliveries

MPMW's water supplies are described in Section 6 of this WSA and Chapter 6 of the MPMW 2020 UWMP. Table 9-1 presents MPMW's historical use of these supplies over the past 20 years. The use of these supplies will continue into the future with increasing recycled water usage, as described in Section 6 of this WSA.

Table 9-1. MPMW Historical Water Supplies

Water Source	Historical Water Supply, MG				
	2000	2005	2010	2015	2020
Potable Water Purchased Water from the SFPUC RWS	1,354[(a)]	1,268[(b)]	1,052[(c)]	883[(c)]	1,069[(c)]
Recycled Water Purchased from WBSD	--	--	--	--	20[(d)]
Total	**1,354**	**1,268**	**1,052**	**883**	**1,089**

(a) MPMW 2015 UWMP, Appendix E, Table 4
(b) MPMW 2015 UWMP, Table 3-1.
(c) MPMW 2020 UWMP, Table 4-2.
(d) MPMW 2020 UWMP, Table 4-7.

Water supply availability and reliability during Normal, Single Dry and Multiple Dry years is described in Section 7 of this WSA.

9.2 Projected Water Demand by Customer Sector

Projected potable and recycled water demands in the MPMW service area are described in Section 5.2 of this WSA based on information provided in Chapter 4 of MPMW's 2020 UWMP. Projected potable water demand by customer sector within MPMW's service area is documented in the MPMW's 2020 UWMP (Chapter 4) and is summarized in Table 9-2.

Table 9-2. Actual and Projected Potable Water Demands

Water Use Type	Water Demand, MG				
	2020 (Actual)[a]	2025[b]	2030[b]	2035[b]	2040[b]
Single Family	361	306	299	293	288
Multi-Family	113	158	176	203	230
Commercial	203	346	345	373	401
Industrial	140	134	122	112	102
Institutional/ Governmental	98	98	105	115	126
Landscape	139	95	61	71	85
Losses	12	110	116	122	128
Other Potable	3	1	1	1	2
Total	**1,069**	**1,248**	**1,225**	**1,290**	**1,362**

(a) MPMW 2020 UWMP, Table 4-1.
(b) MPMW 2020 UWMP, Table 4-6.

As described in Section 2.2 of this WSA, the water demand for the Proposed Project is included in the MPMW 2020 UWMP under the approved ConnectMenlo development limit. The projected potable water demand for the Proposed Project will be reduced through the use of recycled water supplies to meet the non-potable water demands for the Proposed Project.

9.3 Water Shortage Contingency Analysis

Chapter 8 and Appendix J of the MPMW 2020 UWMP provide a Water Shortage Contingency Plan to address situations when catastrophic water supply interruptions occur due to regional power outage, earthquake, or other disasters; and when drought occurs. The primary objective of the WSCP is to ensure that MPMW has adequate resources and management responses needed to protect health and human safety, minimize economic disruption, and preserve environmental and community assets during a water supply shortage or interruption. The plan is based on Menlo Park Municipal Code Section 7.35, requiring water rationing and conservation and granting MPMW the authority to enforce penalties.

The MPMW 2020 WSCP builds upon the WSCP established in 2015, including additional provisions required by California Water Code. On an annual basis, MPMW in coordination with BAWSCA will evaluate water supply information provided by SFPUC or BAWSCA to determine if a water shortage exists, as well as the severity of a particular water shortage. In response to water use reductions required by SFPUC or another governing body, City Council may declare a water shortage. The MPMW 2020 WSCP defines six water shortage stages ranging from 10 percent to greater than 50 percent water shortage, in addition to

water waste prohibitions that are in effect at all times. MPMW monitors water use in its service area through monthly meter readings, which allows high water use to be identified and resolved during a water shortage. In addition, MPMW plans to install advanced metering infrastructure over the next two fiscal years to provide automated real-time water use data, and allow MPMW to aggressively target leaks and high water use.

If an emergency or drought condition were to occur that requires MPMW to implement its WSCP, all MPMW customers, including those within the Proposed Project, would be subject to the same water conservation and water use restrictions included in the 2020 WSCP.

9.4 Verification of Sufficient Water Supply

As described in Section 8 of this WSA, the sufficiency of supplies to meet the Proposed Project demands depends on the assumed reliability of the SFPUC RWS supplies, which depends on the assumed implementation of the Bay-Delta Plan Amendment. If it is assumed the Bay-Delta Plan Amendment is implemented, projected supplies during normal years are sufficient to meet the Proposed Project demands, but significant supply shortfalls are projected in dry years for agencies that receive water supplies from the SFPUC RWS, as well as other agencies whose water supplies would be affected by the Amendment. For MPMW, supply shortfalls are projected in single dry years (ranging from 27 to 32 percent) and in multiple dry years (ranging from 27 to 44 percent) through 2040, with similar findings through 2045 based on SFPUC's analysis. If it is assumed the Bay-Delta Plan Amendment is not implemented, projected supplies during normal years, single dry years and multiple dry years are sufficient to meet the Proposed Project demands through 2040; a 16.5 percent supply shortfall is projected during the fourth and fifth consecutive dry years for base year 2045 based on SFPUC's analysis.

As described in Section 8 of this WSA, if supply shortfalls occur, MPMW expects to meet these supply shortfalls through water demand reductions and other shortage response actions by implementation of its WSCP. Under the scenario which assumes the Bay-Delta Plan Amendment is implemented, the projected single dry year and multiple dry year shortfalls would require implementation of Stages 3, 4 or 5 of the MPMW WSCP. Under the scenario which assumes the Bay-Delta Plan Amendment is not implemented, the projected multiple dry year shortfalls in 2045 would require implementation of Stage 2 of the MPMW WSCP. The Proposed Project would be subject to the same water conservation and water use restrictions as other water users within the MPMW system.

10.0 WATER SUPPLY ASSESSMENT APPROVAL PROCESS

> *10910 (g)(1) Subject to paragraph (2), the governing body of each public water system shall submit the assessment to the city or county not later than 90 days from the date on which the request was received. The governing body of each public water system, or the city or county if either is required to comply with this act pursuant to subdivision (b), shall approve the assessment prepared pursuant to this section at a regular or special meeting.*

The Menlo Park City Council must approve this WSA at a regular or special meeting. This WSA will be included in the Draft EIR being prepared for the Proposed Project.

11.0 REFERENCES

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Appendix A

Willow Village Project Water Demand, Alternative Water Source Assessment and Modeling Memorandum (January 2022)

FREYER & LAURETA, INC.

TECHNICAL MEMORANDUM

January 27, 2022

To: Eric Harrison
Senior Vice President
Signature Development Group

From: Richard Laureta, PE

RE: Willow Village Project Water Demand, Alternative Water Source Assessment, and Water Modelling Memorandum

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BACKGROUND

This memorandum presents how the subject project is meeting the City's Water Use Budget Guidelines for New Developments in the Office, Life Sciences and Residential Mixed-Use Zoning Districts as described in Sections 16.43.140 and 16.45.130 "Green and sustainable building" of the Municipal Code. The anticipated water consumption for the proposed development has been developed using industry-standard literature references, information from similar, mixed-use developments and from applicable building certification programs, such as USGBC's LEED framework and the CALGreen code. While water use by parcel and by program are provided herein, our understanding is that the City will take a comprehensive look at the water budget across all parcels and programs. The data presented in the Technical Memorandum includes data for the baseline project and updated values for an increase of 200 residential units to the baseline project. This Technical Memorandum also presents the estimated percent savings the total Water Demand for the project will benefit from with the use of recycled water for non-potable uses, for both the baseline and 200-unit variant scenarios.

Also attached to this Technical Memorandum as Appendices are the Water Use Budget per Parcel for both the baseline and 200-unit variant scenarios, and the Water Flow Rate Criteria for Water System Modelling Technical Memorandum.

The Project team is available to meet and discuss this information with the City staff and their consultants should any questions arise or should any additional information be required. Thank you for the opportunity to present this information to the City of Menlo Park.

WATER USE BUDGET

The Willow Village Project exceeds 250,000 square feet in gross floor area and thus must submit a proposed water budget with accompanying calculations, per Section 16.43.140.3.C and 16.45.130.3.C of the Municipal code. The water budget accounts for the potable water demand reduction resulting from the use of an alternative water source for all City-approved non-potable applications. Table 1 below presents a summary of the Baseline Project water use budget. Please refer to the accompanying Microsoft Excel spreadsheet document titled "Willow Village Water Use Budget baseline" for the supporting calculations for Table 1. Table 2 below presents a summary of the Project EIR Increased Residential Density Variant. Please refer to the accompanying Microsoft Excel spreadsheet document titled "Willow Village Water Use Budget residential 200-unit variant" for the supporting calculations for Table 2.

Indoor Water Demands

Water budget calculations are presented in terms of building use (program) for non-residential and residential mixed-use spaces. Occupancy information was either provided by the Project architects or is based off Table 1004.5 Occupant Load in the 2019 California Building Code (CBC). Fixture demands are developed based on 2019 CALGreen fixture flow rates and LEED frequency of fixture use and duration times. Note that water demand factors from literature were used for some retail programs (grocery and food and beverage) to better represent water demands for these water-intense retail spaces. Refer to "Indoor" tab in the attached spreadsheet for the unit demands and estimated water demands.

Cooling demands are presented for the two programs that will be met with water-based cooling: office buildings and event space. Monthly water use demands are calculated using the variance in mean monthly temperature for Menlo Park. Refer to "Cooling" tab in the attached spreadsheet for cooling demands for these two spaces.

Outdoor Water Demands

Planning level irrigation demands are calculated in accordance with Menlo Park Municipal Code Chapter 12.44 Water-Efficient Landscaping Ordinance. Evapotranspiration data was found in the CIMIS Reference Evapotranspiration Zone Map, Department of Water Resources, 1999. Per Section 12.44.030.xxx, areas irrigated with recycled water are deemed a "Special landscape area (SLA)". Section 12.44.030.s states that special landscape areas shall not exceed an ET adjustment factor (ETAF) value of 1.0. As outlined in a following section of this memo, an alternate water supply is expected for this project and thus an ETAF of 1.0 was used in the calculations. Refer to the "Irrigation" tab in the previously described spreadsheets for these planning level demands.

Water Losses

It is anticipated that some water losses would occur on-site through the distribution system and fixtures. For example, leaky fixtures, pipe connections, broken sprinkler heads and taps unintentionally left running can be sources of unplanned water use. The Project team has included a 10% leakage factor in each water demand to adequately account for these scenarios. As a nearby jurisdictional precedent, this buffer aligns with values used by the SFPUC potable water allocation program.

Table 1 Water Use Budget Summary – Baseline Project

TOTAL DEMANDS					
	Demand (Mgal/month)				
Month	Indoor Potable	Toilet Flushing	Irrigation	Cooling	Total
January	8.30	1.80	1.02	0.20	11.32
February	7.49	1.62	1.23	0.24	10.58
March	8.30	1.80	1.87	0.62	12.59
April	8.03	1.74	2.63	0.59	12.99
May	8.30	1.80	3.06	0.92	14.08
June	8.03	1.74	3.45	1.10	14.32
July	8.30	1.80	3.57	1.11	14.77
August	8.30	1.80	3.40	1.39	14.88
September	8.03	1.74	2.63	1.00	13.40
October	8.30	1.80	2.04	0.94	13.07
November	8.03	1.74	1.32	0.43	11.52
December	8.30	1.80	1.02	0.26	11.37
Annual	**97.67**	**21.17**	**27.24**	**8.80**	**154.89**

Table 2 Water Use Budget Summary – Increase Residential Density Variant

TOTAL DEMANDS					
	Demand (Mgal/month)				
Month	Indoor Potable	Toilet Flushing	Irrigation	Cooling	Total
January	8.79	1.88	1.02	0.20	11.90
February	7.94	1.70	1.23	0.24	11.11
March	8.79	1.88	1.87	0.62	13.17
April	8.51	1.82	2.63	0.59	13.55
May	8.79	1.88	3.06	0.92	14.66
June	8.51	1.82	3.45	1.10	14.89
July	8.79	1.88	3.57	1.11	15.35
August	8.79	1.88	3.40	1.39	15.47
September	8.51	1.82	2.63	1.00	13.96
October	8.79	1.88	2.04	0.94	13.65
November	8.51	1.82	1.32	0.43	12.08
December	8.79	1.88	1.02	0.26	11.96
Annual	**103.55**	**22.18**	**27.24**	**8.80**	**161.77**

UNIT WATER DEMAND FACTORS

Water demand factors for similar, mixed-use projects are presented below for interior demands and seasonal demands (cooling demands and irrigation demands). It is our project team's understanding that the WSA study will use these values to calculate water demands for the Project. The following sections describe the proposed water demand factors for each program area.

Interior Demands

Table 3 presents water demands for each program per person and per area for ease of reference and includes the increased residential variant. Office, residential and hotel demands were developed by "building-up" an occupant's daily water demand through fixture flow rates and expected frequency of use. These values were equated to water demand per area for comparison to the retail demands, available as gallon per building floor area in the literature. References are provided for each demand factor.

TABLE 3: Interior demands and associated water demand factors (Increased Residential Variant)

Program	Water Demand, MGY (excluding leakage factor)	Gross Floor Area (GFA, sq. ft.)	Occupancy (capita)	Water Demand Factors		Demand Breakdown		*Reference*
				gal/ca-d	gal/sf-d	Potable (%)	Non-Potable (%)	
Office	30.3	1,250,000	7,993	14.16	0.07	78	22	*4*
Event Space	1.6	350,000	320	13.7	0.01	78	22	*4*
Residential (per unit)	61.9	1,930	3,860	44.0	87.90	80	20	*4*
Hotel (per room)	6.6	193	444	40.7	93.56	85	15	*1, 4*
Grocery	1.9	36,500	-	-	0.14	73	27	*5*
Food and Beverage	6.4	23,000	441	39.9	0.77	73	27	*1,2,3,4*
Coworking / Office	0.2	6,000	92	6.2	0.10	51	49	*4*
Fitness	0.6	20,000	460	3.5	0.08	83	17	*4*
Pharmacy	0.1	14,000	268	1.1	0.02	43	57	*2, 4*
Cinema	0.2	20,000	383	1.1	0.02	43	57	*2, 4*
Bowling	0.2	20,000	383	1.1	0.02	43	57	*2, 4*
Parcels West of Willow								
Retail	0.2	11,339	247	1.98	0.04	44	56	*4*
Food Service	3.7	11,339	247	41.1	0.90	98	2	*1,2,3,4*
Service Station	0.5	5,500	120	10.8	0.24	8	92	
TOTAL	**114.3**							

References:

1. Pacific Institute, "Waste Not, Want Not: Appendix E", 2003
2. California Building Code 2019, Table 1004.5 Occupant Load
3. Crites & Tchobanoglous, "Small and Decentralized Wastewater Management Systems", Table 4-2
4. Build-up based on anticipated occupancy, CalGreen fixture flows and LEED frequency of use.
5. AWWA, "Commercial and Institutional End Uses of Water", 2000

Office

The proposed office demand factor of 14.16 gal/ca-d is based primarily on CalGreen fixture flow rates for offices and fixture frequency of use per LEED. Water demands for offices include restrooms and the occasional shower user. Additional amenities are planned as part of the proposed office program including onsite cafe and a private fitness center. The water use associated with these amenities has been estimated using data measured at similar facilities in operation. Water demand at the cafes is built up based on meals per person per day and gallons of water use per meal using these data. Water demand at the fitness center includes additional showering.

The projected average daily occupancy in the proposed offices is calculated at the annual level to account for weekends and holidays. Occupancy values anticipate that 100% of staff are present on weekdays and 15% of staff occupy the office buildings on weekends and holidays; an additional 15% of unseated, support staff are also included. The resulting occupancy factor is 73%, or about 268 days of the year when offices are at full occupancy. Accounting for this anticipated occupancy, the proposed demand factor is 0.07 gal/sf-d.

Event Center

Events of varying scales will be held at the proposed event center throughout the year, ranging from 100 to 5,000 occupants per event. It is estimated that the event center will host 55 events per year. The proposed demand factor is estimated by assuming those participating in events would use an equivalent amount of water per day to that of a full-time employee (restroom and food facilities). Over the course of a year, it is estimated that there will be 117,500 event attendees. The total annual water demand for the events center is divided across the 350,000 square feet of gross floor area to calculate a proposed water demand factor of 0.01 gal/sf-d.

Residential

The Project plan proposes 1,930 residential units and estimates an average of two occupants per unit. Using residential fixture flow rates from the 2019 CalGreen Building Standards Code, Section 4.303, a residential demand factor of 44.0 gal/ca-d was developed. This value aligns with published municipal values such as in San Francisco, where SFPUC reports residential water demand to be approximately 41 gal/ca-d.[1] Each residential unit is estimated to use 88.0 gal/d.

[1] SFPUC Water Resources Report FY '16-'17: https://sfwater.org/modules/showdocument.aspx?documentid=11472

Hotel
The Project proposes 193 hotel rooms and estimates an average of two occupants per room. It is assumed that there would be an additional 15% support staff. Similar to the residential demand factors, the hotel demand factor was built-up using CalGreen fixture flow rates for toilets, sinks and showers. CalGreen does not present values for commercial laundry in hotels nor demands for the hotel kitchen and icemakers. As such a demand factor for these additional demands was applied using another reference.[2] These sources yield a demand factor of 93.6 gallons per room per day.

Retail and Commercial
Demands at retail and commercial spaces can vary depending on the type of establishment. Retail spaces are expected to have demands associated with restrooms for employees and transients (customers). Restaurants have a much higher water demand for activities including cooking, cleaning, and consumption.

Typical retail demands, which were applied to pharmacy, cinema, and bowling areas, were developed using CalGreen fixture flow rates and an expected customer load of 60 sf/ca based on the 2019 California Building Code (CBC), Table 1004.5. Transients demands are associated with using retail restroom facilities. Retail employees are estimated to be 15% of total customers and are expected to use the same amount of water as someone in an office building over the course of a day. This approach yields a demand factor of 0.02 gal/sf-d.

The American Water Works Association (AWWA) conducts a water submetering study periodically that provides demand factors for program types not available in other literature. The grocery store demand factor is taken from the most recent such study.[3]

The food and beverage unit demand factor is built up from a gallon per restaurant seat value. The CBC density for restaurants (60 sf/ca) was used to estimate that there would be 383 restaurant seats. Each seat serves 5 meals per day[2] and 9 gallons per meal.[4] Accounting for an additional 15% occupancy for employees yields a unit demand for restaurants of 0.77 gal/sf-d.

The public retail fitness water demands were built up using CalGreen fixture flow rates and an increased shower and laundry demand. Using a density of 50 sf/ca[5] and accounting for an additional 15% occupancy for employees yields a unit demand factor for fitness of 0.08 gal/sf-d.

Lastly, the coworking and office space is estimated to have the same core fixture demands as the campus office space, excluding cafe and fitness amenities. It is expected that the

[2] 2000 Pacific Institute study “Commercial Water Use and Potential Savings: Appendix E”
[3] 2000 AWWA study “Commercial and Institutional End Uses of Water”.
[4] Crites & Tchobanoglous, "Small and Decentralized Wastewater Management Systems", Table 4-2
[5] California Building Code 2019, Table 1004.5 Occupant Load

coworking and office space would have twice the density of the campus office and will use 0.10 gal/sf-d.

Seasonal Demands

Cooling Demand
It is anticipated that retail and residential program areas will employ air-based cooling technologies; therefore, a water demand for mechanical cooling has not been assigned to those buildings. Water demands for cooling were estimated for the campus and event space only. Cooling technology selection has not been finalized and will impact these demands. Project mechanical engineers estimate that cooling demands for the campus space will range between 2.8-4.8 gal/sf-year and the event space will use 1.4 - 4.5 gal/sf-year. Conservatively using the high end of these ranges results in an annual demand of 8.0 MGY.

Irrigation Demand
There will be an estimated 18 acres of irrigated landscape within the Project area, including potential green roofs. Irrigated areas are outlined in Table 3. These are estimated values and are based on preliminary landscape concepts that will be further refined during the design process.

TABLE 4: Planning level irrigated areas and potential annual irrigation demands

Parcel	Area	Irrigated Area (gsf)	Irrigation Demands (gallons per year)	Notes
Parcels 2 – 7	Retail/Residential	292,000	9,043,000	Irrigated area is calculated as 50% of parcel area.
Parcel 1	Event Building	161,032	4,987,000	Includes 2.1-acre elevated park.
Parcel 1	Office Campus	103,623	3,209,000	
Parcels A & B	Park	169,884	5,261,000	Assume 100% of parcel is irrigated.
Parcels C, D, E	Private Street Medians	42,000	1,301,000	Assumes equivalent of 10% of parcel is street median and irrigated area.
Public ROW	Public ROW Street Medians	19,000	-	
TOTAL IRRIGATED AREA		768,539	23.8 MGY	
Parcels West of Willow		31,117	1.0 MGY	
TOTAL		799,656	24.8 MGY	

Water Losses
This water budgets presented in Tables 1 and 2 include a 10% leakage factor for water losses. It is anticipated that some water losses would occur on-site through leaky fixtures, pipe connections and taps unintentionally left running, for example.

ALTERNATIVE WATER SOURCE ASSESSMENT

As previously noted, the proposed project exceeds 250,000 square feet of new construction, which under Section 16.43.140.3.E and 16.45.130.3.E of the Municipal code, requires an alternative water source assessment. Two scenarios to supply the project with recycled water for non-potable water uses have been contemplated:

- Scenario 1: Connect to a new off-site water reuse facility owned and operated by the West Bay Sanitary District (WBSD)
- Scenario 2: Construct on-site water reuse facilities (WRFs) to treat wastewater from the site

Under both scenarios, the proposed project with increased residential units would be able to achieve an approximate 36 percent reduction in potable water demand by serving nearly all of the non-potable water demands (including cooling, irrigation, and toilet flushing) with recycled water.

The Project Applicant is currently pursuing Scenario 1 in coordination with WBSD. WBSD has completed a feasibility study exploring the viability of a Resource Recovery Center at WBSD's former treatment plant behind Bedwell Bayfront Park, which could produce 500,000 gallons per day of recycled water for reuse. In a public/private partnership with Facebook (the Project Applicant), the WBSD Board of Directors spearheaded the effort to install 2,800 feet of purple recycled water pipe parallel with the sanitary sewer and storm drainpipe Facebook was replacing on Chilco Street. This pipe will be used to distribute recycled water in the area. Recycled water will be used for irrigation, industrial purposes, firefighting, public fill stations and toilet flushing in the Bayfront Area.

Table 5 below presents a summary of the reduction in potable water demand for both the baseline and 200-unit variant scenarios, by serving nearly all non-potable water demands with recycled water.

TABLE 5: Percentage of Water Demand Savings

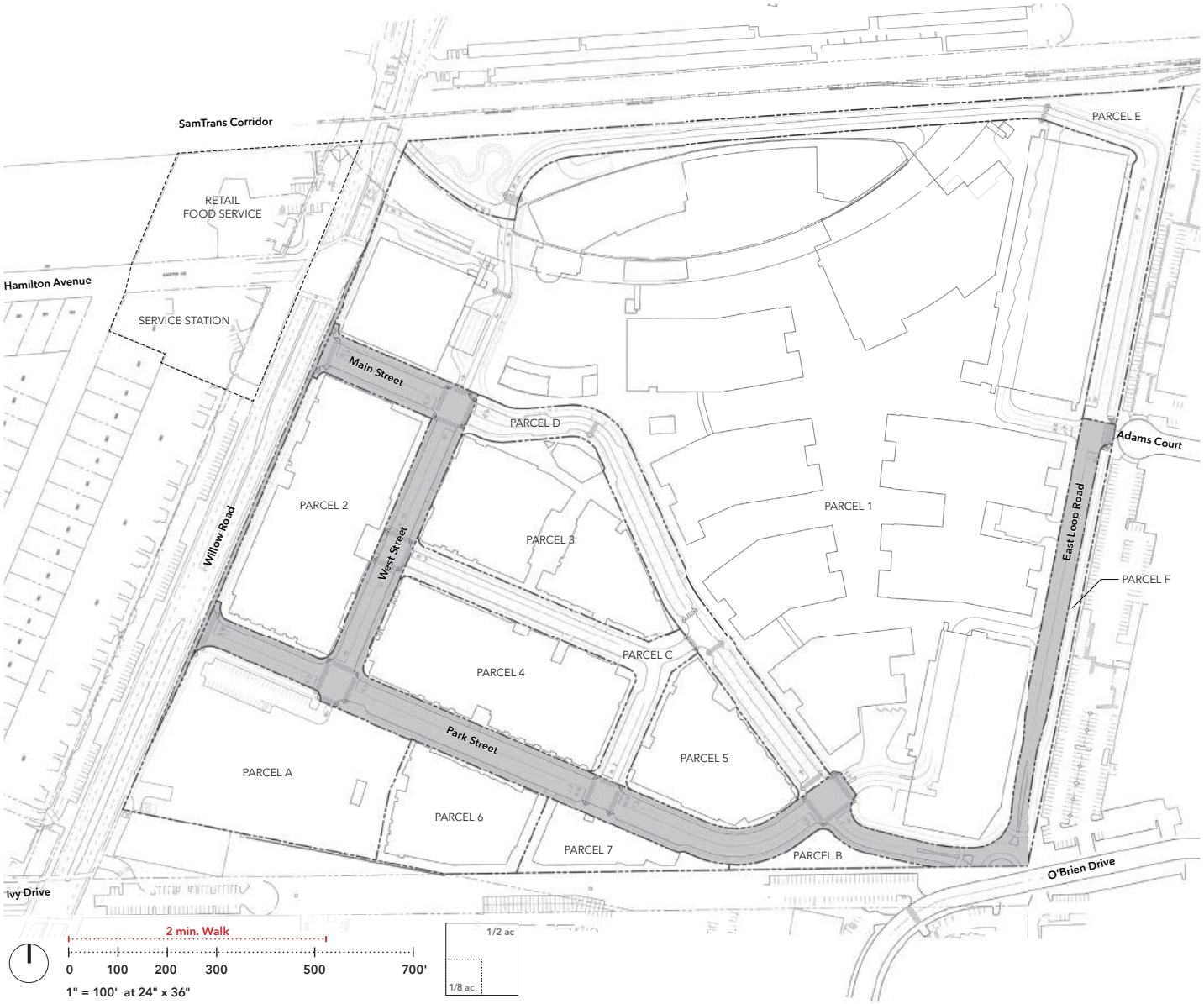
Development Scenario	Total Water Demand (Mgal/year)	Recycled Water Use (Mgal/year)	Reduction Percentage (%)
Baseline	154.89	57.21	37
Baseline with 200 Unit Variant	161.77	58.22	36

January 27, 2022

APPEDIX A

Water Use Budget per Parcel
Baseline and Residential Unit Variant Scenarios

FREYER & LAURETA, INC.



LEGEND	
	Public Right of Way

Peninsula Innovation Partners

WILLOW VILLAGE

Menlo Park, CA

Conceptual Parcel Plan

Janurary 27, 2022

PARCEL BY PARCEL

Land Use	Parcel	Demand (MGY)				
		Indoor Water Use		Irrigation	Cooling	Total
		Potable	NP			
Willow Village						
Retail	Parcel 1	30.79	8.01	10.89	8.00	57.70
Park + Open Space	Parcel A	0.00	0.00	4.86	0.00	4.86
Park + Open Space	Parcel B	0.00	0.00	0.40	0.00	0.40
Roads	Parcel C	0.00	0.00	0.14	0.00	0.14
Retail + Residential	Parcel 2	11.50	2.24	1.54	0.00	15.27
Retail + Residential	Parcel 3	16.28	3.77	1.38	0.00	21.43
Residential	Parcel 4	11.24	1.92	1.27	0.00	14.43
Retail + Residential	Parcel 5	7.93	1.48	0.78	0.00	10.19
Residential	Parcel 6	4.55	0.78	0.72	0.00	6.04
Residential	Parcel 7	2.74	0.47	0.36	0.00	3.57
Roads	Public ROW	0.00	0.00	0.23	0.00	0.23
Roads	Parcel D	0.00	0.00	0.37	0.00	0.37
Roads	Parcel E	0.00	0.00	0.56	0.00	0.56
Park + Open Space	Parcel F	0.00	0.00	0.30	0.00	0.30
Sub-Total Willow Village		85.04	18.65	23.80	8.00	135.49
Parcels West of Willow (proposed total)						
Retail	871-883 Hamilton Ave.	0.08	0.10			
Food Service	and 1401 Willow Road	3.64	0.06	0.96	0.00	5.32
Service Station	1399 Willow Road	0.04	0.43			
Sub-Total Parcels West of Willow		3.76	0.60	0.96	0.00	5.32
Leakage Factor		10%	10%	10%	10%	10%
TOTAL		**97.67**	**21.17**	**27.24**	**8.80**	**154.89**

Water Demand by Parcel - Baseline Scenario

PARCEL BY PARCEL

Land Use	Parcel	Demand (MGY)				
		Indoor Water Use		Irrigation	Cooling	Total
		Potable	NP			
Willow Village						
Retail	Parcel 1	30.79	8.01	10.89	8.00	57.70
Park + Open Space	Parcel A	0.00	0.00	4.86	0.00	4.86
Park + Open Space	Parcel B	0.00	0.00	0.40	0.00	0.40
Roads	Parcel C	0.00	0.00	0.14	0.00	0.14
Retail + Residential	Parcel 2	11.50	2.24	1.54	0.00	15.27
Retail + Residential	Parcel 3	16.28	3.77	1.38	0.00	21.43
Residential	Parcel 4	16.58	2.83	1.27	0.00	20.68
Retail + Residential	Parcel 5	7.93	1.48	0.78	0.00	10.19
Residential	Parcel 6	4.55	0.78	0.72	0.00	6.04
Residential	Parcel 7	2.74	0.47	0.36	0.00	3.57
Roads	Public ROW	0.00	0.00	0.23	0.00	0.23
Roads	Parcel D	0.00	0.00	0.37	0.00	0.37
Roads	Parcel E	0.00	0.00	0.56	0.00	0.56
Park + Open Space	Parcel F	0.00	0.00	0.30	0.00	0.30
Sub-Total Willow Village		90.38	19.56	23.80	8.00	141.74
Parcels West of Willow (proposed total)						
Retail	871-883 Hamilton Ave.	0.08	0.10			
Food Service	and 1401 Willow Road	3.64	0.06	0.96	0.00	5.32
Service Station	1399 Willow Road	0.04	0.43			
Sub-Total Parcels West of Willow		3.76	0.60	0.96	0.00	5.32
Leakage Factor		10%	10%	10%	10%	10%
TOTAL		**103.55**	**22.18**	**27.24**	**8.80**	**161.77**

Water Demand by Parcel - Residential Variant Scenario

January 27, 2022

APPEDIX B

Water Flow Rate Criteria for Water System Modelling Technical Memorandum

FREYER & LAURETA, INC.

WATER FLOW RATE CRITERIA FOR WATER SYSTEM MODELLING TECHNICAL MEMORANDUM

WILLOW VILLAGE

100% Submittal

January 27, 2022

Prepared by:

FREYER & LAURETA, INC.

1.0 Background

This Technical Memorandum provides criteria for water system modeling for the Willow Village Development. Willow Village has two development scenarios, a Baseline Scenario and a scenario that increases the Baseline Scenario by 200 residential units, referred to as the Residential Variant Scenario in this technical memorandum. The Baseline development scenario includes up to 1,730 multi-family residential dwelling units, up to 200,000 square feet of retail and non-office commercial uses, a hotel with up to 193 rooms, up to 1.6 million square feet of office and accessory space, consisting of up to 1.25 million square feet of office space and the balance (i.e., 350,000 square feet if office space is maximized) of accessory space in multiple buildings, and an approximately 3.5-acre public neighborhood park. The Residential Variant development scenario increase residential units to up to 1,930 multi-family residential dwelling units.

2.0 Criteria for Water Model

Water Connections

There are four (4) connections to existing water mains proposed for the Willow Village water system, as shown in Figure 1.

Domestic Water Demand

Water demands for each scenario is presented in the Willow Village Project Water Demand and Alternative Source Assessment Technical Memorandum dated January 26, 2022, and shown in Table 1 below.

TABLE 5: Percentage of Water Demand Savings

Development Scenario	Total Water Demand (Mgal/year)	Potable Water Use (Mgal/year)	Recycled Water Use (Mgal/year)
Baseline	154.89	97.68	57.21
Residential Variant	161.77	103.55	58.22

Projected potable water demand for the site is much less that the fire flow required for each building, and fire flow is typically the water demand volume used in system modeling. For this model, we recommend using the Fire Flow Demand for the system water model.

Fire Flow Demand

Specific building types are still being determined and hydrant spacing may be subject to change, however Fire Flow Demand is derived from the Menlo Fire Protection District Ordinance No. 45-2019, an Ordinance of the Menlo Park Fire Protection District Adopting the 2018 Edition of the International Fire Code with the 2018 California Fire Code and Local Amendments.

Table B105.2 from Ordinance No.45-2019 lists allowed fire flow reductions should sprinkler systems be installed. As shown in the table, the Ordinance allows for 50% reduction for sprinklered buildings.

TABLE B105.2
REQUIRED FIRE FLOW FOR BUILDINGS OTHER THAN ONE-AND TWO-FAMILY DWELLINGS, GROUP R-3 AND R-4 BUILDINGS AND TOWNHOMES

AUTOMATIC SPRINKLER SYSTEM (Design Standard)	MINIMUM FIRE FLOW (gallons per minute)	FLOW DURATION (hours)
No automatic sprinkler system	Value in Table B105.1(2)	Duration in Table B105.1(2)
Section 903.3.1.1 of the California Fire Code	50% of the value in Table B105.1(2)[a]	Duration in Table B105.1(2) at the reduced flow rate
Section 903.3.1.2 of the California Fire Code	50% of the value in Table B105.1(2)[b]	Duration in Table B105.1(2) at the reduced flow rate

For SI: 1 gallon per minute = 3.785L/m
a. The reduced fire flow shall not be less than 1,000 gallons per minute
b. The reduced fire flow shall not be less than 1,500 gallons per minute

Table B105.1(2) lists fire flow requirements in gallons per minute and flow duration required. For purposes of this modeling effort, the maximum flow rate in the Table is used, which is 8,000 gpm at 20 pounds per square inch (psi) with 4 hours of flow duration. Since buildings will be sprinkled, the flow rate value is reduced by 50%.

For modeling purposes to size the on-site water system, the flow rate per building should be 4,000 gpm at 20 psi at 4 hours of flow duration. As also shown in Table B105.2, reduced fire flow shall not be less than 1,500 gpm. For purposes of the model, 4,000 gpm fire flow demand is proposed to be modeled distributed across two fire hydrants closest to each building, using two hydrants at 2,000 gpm each. Fire hydrants are numbered and shown on Figure 1. Proposed fire flow distribution modeling is shown in Table 2.

Recycled Water Demand

It is anticipated that recycled water will be used for a portion of the site including irrigation at the parks at Parcels A, B and the elevated park at Parcel 9. Potential sources of recycled water include an off-site water reuse facility, currently being actively pursued with the West Bay Sanitary District, or onsite water reuse facilities. Recycled water demands for the site include landscape irrigation, toilet fixture flushing and cooling applications for mechanical systems.

Fire Flow Hydrant Tests

Fire flow tests have been on two existing hydrants on-site. The flow test results are included in this memo.

LEGEND

- DW — EXISTING PUBLIC DOMESTIC WATER
- DW — PUBLIC DOMESTIC WATER
- DW — PRIVATE DOMESTIC WATER
- DOMESTIC WATER STUB
- FW — PRIVATE FIRE WATER
- FIRE WATER STUB
- WATER POINT OF CONNECTION
- WATER POINT OF CONNECTION
- FIRE HYDRANT

SAMTRANS CORRIDOR
NORTH LOOP ROAD
PARCEL E
FH (TYP)
BUILDING 08
ELEVATED PARK
BUILDING 07
NORTH GARAGE
BUILDING 09
HOTEL SERVICE RD
HOTEL
CONNECTION TO EXISTING WATER
ADAMS CT
BUILDING 04
PARCEL 1
BUILDING 05
HAMILTON AVE
CONNECTION TO EXISTING WATER
EAST LOOP ROAD
BUILDING 03
BUILDING 06
PARCEL 2
PARCEL 3
BUILDING 02
PARCEL D
WILLOW ROAD
CENTER ST
PARCEL C
MAIN ST
BUILDING 01
SOUTH GARAGE
WEST ST
PARCEL 4
PARCEL 5
PARCEL F
PARK ST
EAST ST
CONNECTION TO EXISTING WATER
PARCEL A
PARCEL 6
PARCEL 7
PARCEL B
MAIN ST
O'BRIEN DR
O'BRIEN DR
MID PENINSULA HIGH SCHOOL
NORTH
SCALE
1" = 200'

FIGURE 1
PROPOSED WATER SYSTEM

FREYER & LAURETA, INC.
CIVIL ENGINEERS • SURVEYORS • CONSTRUCTION MANAGERS
144 North San Mateo Drive • San Mateo, CA 94401
(650)344-9901 • Fax (650)344-9920 • www.freyerlaureta.com

DATE:	11/27/22
SCALE:	AS SHOWN
DESIGNED:	-
DRAWN:	IRP
CHECKED:	RJL
PROJ. ENGR:	LH

Table 2 - Willow Village Water Loads

Fire Hydrant & Building Demands

		Hydrant Number																																		
Building	**Type**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**	**21**	**22**	**23**	**24**	**25**	**26**	**27**	**28**	**29**	**30**	**31**	**32**	**33**	**34**	**Total Flow (gpm)**
Parcel 1																																				
Hotel	Hotel																																2000	2000		4,000
O1	Office														2000	2000																				4,000
O2	Office															2000	2000																			4,000
O3	Office																2000		2000																	4,000
O4	Office																		2000	2000																4,000
O5	Office									2000	2000																									4,000
O6	Office										2000	2000																								4,000
O7	Office					2000	2000																													4,000
O8	Office				2000	2000																														4,000
O9	Office	2000																															2000			4,000
elevated park (2.1 acres)	Open Space	2000				2000																														4,000
North Garage	Parking							2000	2000																											4,000
South Garage	Parking											2000	2000																							4,000
PARCEL 2	Mixed use																				2000							2000								4,000
PARCEL 3	Mixed Use																	2000						2000												4,000
PARCEL 4	Residential																									2000	2000									4,000
PARCEL 5	Residential																								2000										2000	4,000
PARCEL 6	Mixed Use																									2000	2000									4,000
PARCEL 7	Residential																									2000									2000	4,000
Minimum Demand per Hydrant (gpm)		**2000**	**0**	**0**	**2000**	**2000**	**2000**	**2000**	**2000**	**2000**	**2000**	**2000**	**2000**	**0**	**2000**	**2000**	**2000**	**2000**	**2000**	**2000**	**2000**	**0**	**0**	**2000**	**2000**	**2000**	**2000**	**2000**	**0**	**0**	**0**	**0**	**2000**	**2000**	**2000**	

Fire Flow Test Report

City of Menlo Park - Fire Flow Test Data

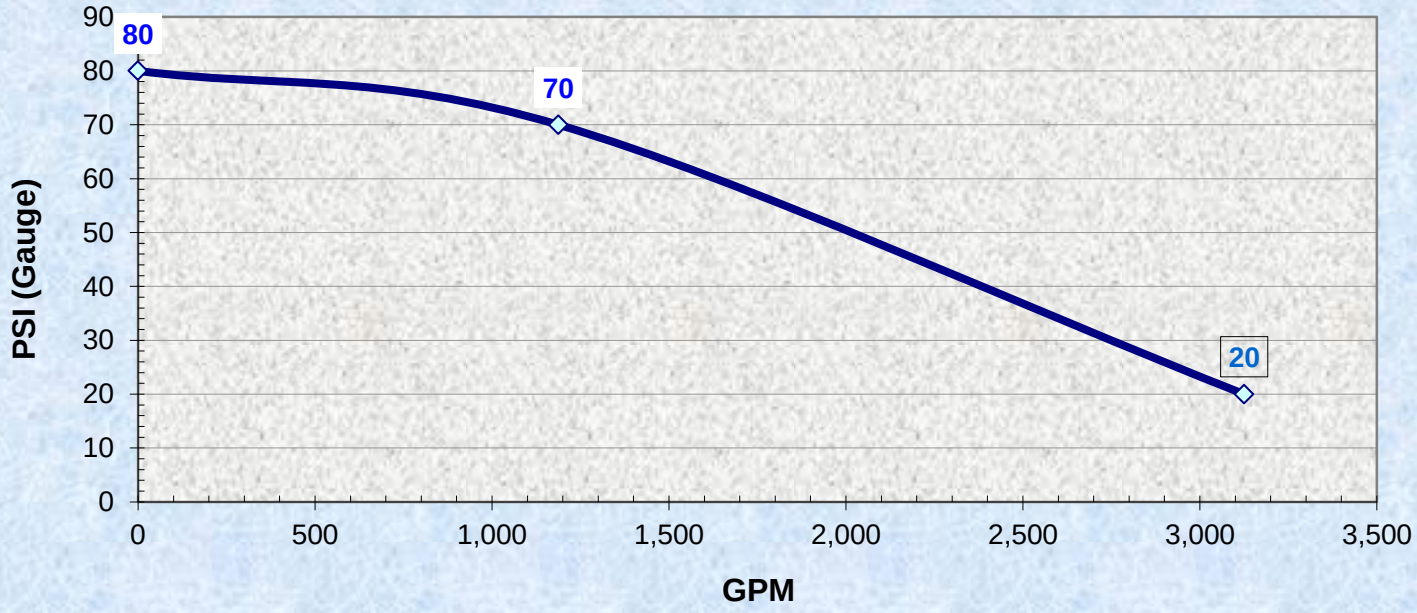
Test Crew Names	*E.D, D.K.*	Test Date	*09/12/17*
	1240 Hamilton(Facebook 980)	Press Zone	Lower

Test Hydrant Location	1240 Hamilton	Hydrant No.	M9pg.H7	Static	**80** PSI
				Residual	**70** PSI

Flow Hydrant #1 Location	1098 Hamilton Bldg#59	Hydrant No.	M8pg.H7	Pitot	**52** PSI
				coefficient	**0.9**
				Flow	**1,188** GPM
Flow Hydrant #2 Location		Hydrant No.		Pitot	PSI
				coefficient	
				Flow	GPM
Flow Hydrant #3 Location		Hydrant No.		Pitot	PSI
				coefficient	
				Flow	GPM
				Total Flow	**1,188** GPM

Fire Flow Test Calculator ***Calculated Flow @ 20 PSI*** **3,125 GPM**

Hydrant Flow Curve



Fire Flow Test Report

City of Menlo Park - Fire Flow Test Data

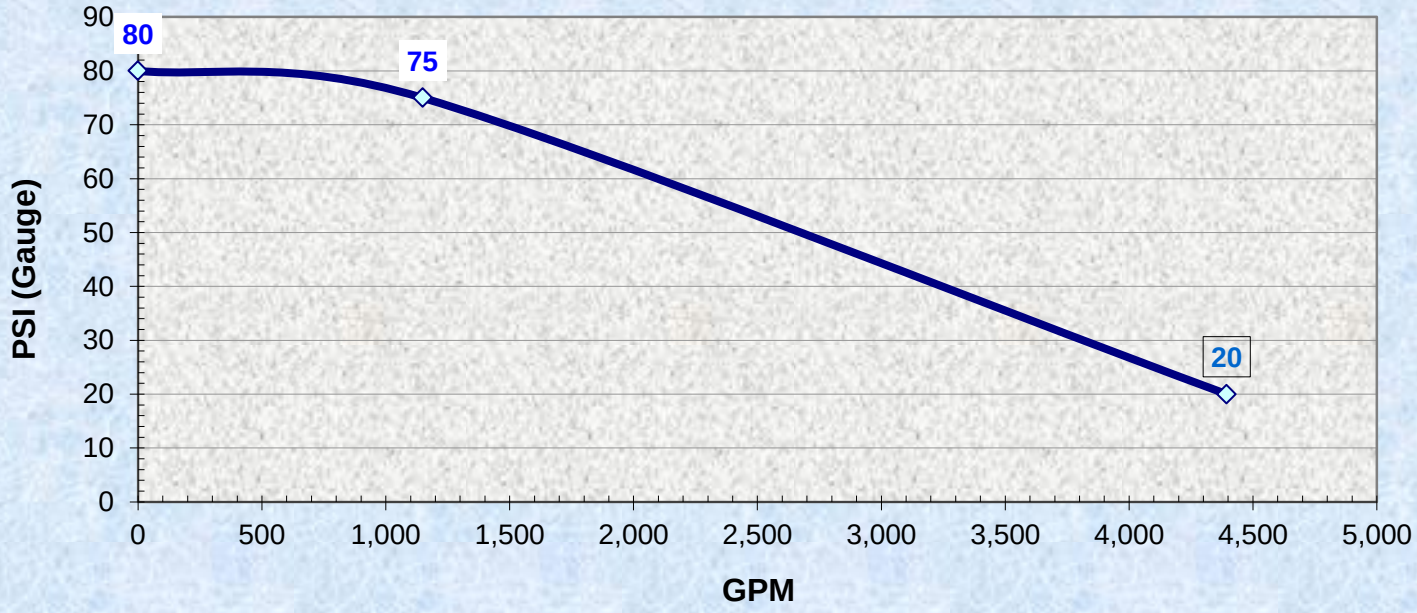
Test Crew Names	*E.D, D.K.*	Test Date	*09/12/17*
	1390 Willow Rd.	Press Zone	Lower

Test Hydrant Location	1390 Willow Rd.	Hydrant No.	M39pg.H7	Static	80 PSI
				Residual	75 PSI

Flow Hydrant #1 Location	1370 Willow Rd.	Hydrant No.	M40pg.H7	Pitot	49 PSI
				coefficient	0.9
				Flow	1,148 GPM
Flow Hydrant #2 Location		Hydrant No.		Pitot	PSI
				coefficient	
				Flow	GPM
Flow Hydrant #3 Location		Hydrant No.		Pitot	PSI
				coefficient	
				Flow	GPM
				Total Flow	1,148 GPM

Fire Flow Test Calculator — ***Calculated Flow @ 20 PSI*** 4,394 GPM

Hydrant Flow Curve



Appendix B

Regional Water System Supply Reliability and UWMP 2020 Memorandum (June 2021)

San Francisco
Water Power Sewer
Services of the San Francisco Public Utilities Commission

525 Golden Gate Avenue, 13th Floor
San Francisco, CA 94102
T 415.554.3155
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TO: SFPUC Wholesale Customers

FROM: Steven R. Ritchie, Assistant General Manager, Water

DATE: June 2, 2021

RE: Regional Water System Supply Reliability and UWMP 2020

This memo is in response to various comments from Wholesale Customers we have received regarding the reliability of the Regional Water System supply and San Francisco's 2020 Urban Water Management Plan (UWMP).

As you are all aware, the UWMP makes clear the potential effect of the amendments to the Bay-Delta Water Quality Control Plan adopted by the State Water Resources Control Board on December 12, 2018 should it be implemented. Regional Water System-wide water supply shortages of 40-50% could occur until alternative water supplies are developed to replace those shortfalls. Those shortages could increase dramatically if the State Water Board's proposed Water Quality Certification of the Don Pedro Federal Energy Regulatory Commission (FERC) relicensing were implemented.

We are pursuing several courses of action to remedy this situation as detailed below.

Pursuing a Tuolumne River Voluntary Agreement

The State Water Board included in its action of December 12, 2018 a provision allowing for the development of Voluntary Agreements as an alternative to the adopted Plan. Together with the Modesto and Turlock Irrigation Districts, we have been actively pursuing a Tuolumne River Voluntary Agreement (TRVA) since January 2017. We believe the TRVA is a superior approach to producing benefits for fish with a much more modest effect on our water supply. Unfortunately, it has been a challenge to work with the State on this, but we continue to persist, and of course we are still interested in early implementation of the TRVA.

Evaluating our Drought Planning Scenario in light of climate change

Ever since the drought of 1987-92, we have been using a Drought Planning Scenario with a duration of 8.5 years as a stress test of our Regional Water System supplies. Some stakeholders have criticized this methodology as being too conservative. This fall we anticipate our Commission convening a workshop

regarding our use of the 8.5-year Drought Planning Scenario, particularly in light of climate change resilience assessment work that we have funded through the Water Research Foundation. We look forward to a valuable discussion with our various stakeholders and the Commission.

Pursuing Alternative Water Supplies

The SFPUC continues to aggressively pursue Alternative Water Supplies to address whatever shortfall may ultimately occur pending the outcome of negotiation and/or litigation. The most extreme degree of Regional Water System supply shortfall is modeled to be 93 million gallons per day under implementation of the Bay-Delta Plan amendments. We are actively pursuing more than a dozen projects, including recycled water for irrigation, purified water for potable use, increased reservoir storage and conveyance, brackish water desalination, and partnerships with other agencies, particularly the Turlock and Modesto Irrigation Districts. Our goal is to have a suite of alternative water supply projects ready for CEQA review by July 1, 2023.

In litigation with the State over the Bay-Delta Plan Amendments

On January 10, 2019, we joined in litigation against the State over the adoption of the Bay-Delta Water Quality Control Plan Amendments on substantive and procedural grounds. The lawsuit was necessary because there is a statute of limitations on CEQA cases of 30 days, and we needed to preserve our legal options in the event that we are unsuccessful in reaching a voluntary agreement for the Tuolumne River. Even then, potential settlement of this litigation is a possibility in the future.

In litigation with the State over the proposed Don Pedro FERC Water Quality Certification

The State Water Board staff raised the stakes on these matters by issuing a Water Quality Certification for the Don Pedro FERC relicensing on January 15, 2021 that goes well beyond the Bay-Delta Plan amendments. The potential impact of the conditions included in the Certification appear to virtually double the water supply impact on our Regional Water System of the Bay-Delta Plan amendments. We requested that the State Water Board reconsider the Certification, including conducting hearings on it, but the State Water Board took no action. As a result, we were left with no choice but to once again file suit against the State. Again, the Certification includes a clause that it could be replaced by a Voluntary Agreement, but that is far from a certainty.

I hope this makes it clear that we are actively pursuing all options to resolve this difficult situation. We remain committed to creating benefits for the Tuolumne River while meeting our Water Supply Level of Service Goals and Objectives for our retail and wholesale customers.

cc.: SFPUC Commissioners
Nicole Sandkulla, CEO/General Manager, BAWSCA

Appendix 5

Air Quality Project Variants Analysis

RAMBOLL

ENVIRONMENT
& HEALTH

DRAFT MEMORANDUM

Date: February 20, 2022

To: Eric Harrison, Signature Development Group

From: Michael Keinath
Sarah Manzano

Subject: **Air Quality, Greenhouse Gas, and Energy Analysis of the Willow Village Project Variants**

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1. PURPOSE OF MEMORANDUM

As a supplemental analysis to the CEQA Air Quality, Greenhouse Gas, and Health Risk Assessment Technical Report prepared for the construction and operation of the proposed mixed-use development at Willow Village in Menlo Park, California (referred to hereafter as "the Project"), Ramboll evaluated potential criteria air pollutant (CAP) emissions, greenhouse gas (GHG) emissions, and health impacts associated with the Project variants at the maximally exposed individual receptor (MEIR) as described below. Variants are elements that may or may not be proposed as part of the Project for particular reasons.

2. PROJECT VARIANTS

2.1 Increased Residential Density Variant

The Increased Residential Density Variant would increase the number of residential dwelling units by approximately 200 units, to a total of up to 1,930 residential units. These additional dwelling units would be included in Parcel 4, which is one of the last buildings to be built. No other changes to the Project would occur under this Variant. Updates to the land use summary can be found in **Table 1V**.

An analysis consistent with the Project analysis was performed to evaluate the potential impacts associated with the increase in dwelling units. Table references included herein correspond to the similar tables in the Technical Report that would be replaced by the changes associated with the Increased Residential Density Variant.

2.1.1 *Construction Emissions and Health Risk Assessment*

This Variant results in additional construction activity to build the additional 200 dwelling units. The Project Applicant indicated that there would be no change to the foundations or excavation necessary to accommodate the additional dwelling units. However, the core and shell phase for Parcel 4 would be increased by one month and tenant improvements would increase by three months. Both phases would use the same equipment information for the extended construction period. This increased activity

would result in additional emissions, which are shown in **Table 12V**[1] for construction architectural coating off-gassing emissions, **Table 13V** for unmitigated criteria air pollutant emissions, **Table 14V** for mitigated criteria air pollutant emissions and **Table 15V** for GHG emissions. As shown in these tables, emissions would increase slightly, but conclusions would not change.

The increase in emissions would also affect health impacts. A health risk assessment was performed using the same methodology as was used in the Technical Report with these additional emissions. Results are shown in **Tables 59V**, **60V** and **61V**. Additional discussion on findings is in **Section 2.1.3.**

2.1.2 *Operational Emissions and Health Risk Assessment*

Increasing the density of the residential area by 200 units, or roughly 12% compared to the original 1,730 units, would be expected to increase the residential emissions associated with consumer products, architectural coatings, water use, and energy use by approximately the same margin. Landscaping and generator emissions are not expected to change because the additional units would be installed by increasing the height of existing apartment buildings, leaving landscaping and generator requirements the same. The impacted building operational capacity can be found in **Table 16V**.

The Transportation Engineer provided increased traffic associated with this Variant, which increases the daily average residential trip rate and VMT from 7,359 trips and 69,910 miles to 8,210 trips and 77,992 miles, respectively.

The emissions due to increased traffic and operational emissions associated with this Variant can be found in **Tables 17V**, **18V**, **21aV**, **21bV**, **22V**, **23V**, **24aV**, **24bV**, **25aV**, **25bV**, **28V**, **30V-36V**, **38V**, and **39V**. A summary of increased emissions can be found in **Tables 40V**, **41V**, and **42V**.

The total construction and operations emissions increase from this Variant can be found in **Tables 43V** and **44V**. As shown in **Table 44V**, an additional 200 DU is not expected to change significance findings compared to the Project.

The increase in dwelling units would also increase the traffic volumes on certain roadways. Analysis comparing volumes by roadways at the MEIR from the Technical Report was performed to determine the impact of the additional traffic. **Table 47V** shows how traffic volumes scale by segment. As shown in **Table 59V**, operational emissions due to this Variant would increase the operational only lifetime excess cancer risk from 3.3 in a million to 3.4 in a million for the On-Site MEIR and from 3.4 to 3.6 in a million for the Off-Site MEIR. Based on these results, the increase in cancer risk associated with this Variant is minor and remains below the Bay Area Air Quality Management District cancer risk threshold of 10 in a million.

The potential for exposure to the increased traffic volumes to result in adverse chronic noncancer effects and excess $PM_{2.5}$ concentrations were evaluated by conservatively scaling the Project operations chronic noncancer hazard index and excess $PM_{2.5}$ concentrations by the maximum change in traffic volumes for any segment. The impact from the Increased Residential Density Variant remains below threshold.

[1] Table numbers referenced herein correspond to the similar table in the Air Quality, Greenhouse Gas, and Health Risk Assessment Technical Report.

2.1.3 *Combined Construction and Operational Health Impacts*

Similar to the analysis for the Project, health impacts from Increased Residential Variant construction and operations were added together to estimate the combined health impacts of construction activities and operation. A breakdown of excess lifetime cancer risk from construction, operational generators, and operational traffic at the Project MEIR is shown in **Table 59V**. The table also shows the Scenario for which the maximum was identified. Similar breakdowns for chronic HI and $PM_{2.5}$ concentration are shown in **Table 60V** and **Table 61V**, respectively. These tables also show the Scenario for which the maximums were identified, as well as the year for which the maximum occurred since chronic HI and $PM_{2.5}$ concentrations are annual impacts.

All health impacts remain below thresholds, except **Table 59V** shows a maximum cancer risk of 10.6 in a million for the new on-site residents, which exceeds the BAAQMD threshold of significance for cancer risk of 10 in a million.

Building code requires new residences to be equipped with MERV-13 filtration. Filters that meet MERV-13 rating filter particulates at a rate of 80-90%.[2] Estimated health impacts conservatively do not incorporate this filtration. Therefore, residents would be exposed to lower concentrations of diesel particulate matter than used to estimate health impacts. The filtration associated with the MERV-13 filters are expected to reduce health impacts to the new on-site residents to less than the BAAQMD threshold of significance.

2.1.4 *Other Air Impacts*

This Variant also would not change conclusions of the odor, carbon monoxide and cumulative assessments. This Variant would not substantially change emissions of odor and would not increase traffic volumes to above the screening levels discussed in the carbon monoxide assessment in the Technical Report. This Variant also would not change the MEIR, so the cumulative assessment would not change, and cumulative health impacts would remain below thresholds.

2.1.5 *Energy*

This Variant would increase energy use associated with construction and operations. However, increases in energy use would be minor, similar to the increase in emissions, and significance findings would not change.

2.2 No Hamilton Avenue Realignment Variant

The No Hamilton Avenue Realignment Variant assumes that no changes would occur to the existing land uses on the Hamilton Avenue Parcels and that the intersection of Willow Road and Hamilton Avenue would remain in the existing location. This would alter the circulation network east of Willow Road to accommodate retaining the Willow Road and Hamilton Avenue intersection in its current alignment. This Variant would result from forces outside of the Project's control, such as not receiving approval from Caltrans or affected property owners.

2.2.1 *Construction Emissions and Health Risk Assessment*

This Variant results in less construction activity due to the lack of construction of the Hamilton Avenue Realignment and lack of increase in retail and relocation of the service station at the

[2] United States Environmental Protection Agency. 2009. Residential Air Cleaners, A Summary of Available Information. EPA 402-F-09-002. August. Available online at: https://19january2017snapshot.epa.gov/indoor-air-quality-iaq/residential-air-cleaners-second-edition-summary-available-information_.html

Hamilton Avenue Parcels North and South. Therefore, construction emissions would be reduced. However, emissions would not be reduced to a level that would change significance findings of construction criteria air pollutant emissions since construction associated with these parcels were relatively minor.

As a result of the emissions reduction due to the reduction in equipment activity, health impacts would also be reduced. However, the reduction in emissions is far from the MEIR reported in our Technical Report. Therefore, the reduction in construction activity would not have a substantial change in health impacts reported in the Technical Report due to the dispersion of the emissions at the MEIR. The reduction also would not substantially reduce required mitigation of construction equipment.

2.2.2 *Operational Emissions and Health Risk Assessment*

Operational emissions would be reduced as a result of the reduction in additional retail associated with the Hamilton Avenue Parcels North and South. Emissions from architectural coatings, consumer products, landscaping, mobile, energy use, water, waste and emergency generators would be reduced as a result of the reduction in additional retail with this Variant. For context, the Hamilton Avenue Parcels North and South account for only 0.7% of daily trips and 0.4% of daily vehicle miles traveled of the Project at Full Buildout. This Variant would decrease Project traffic emissions by a similarly insubstantial margin. Therefore, the change in emissions associated with this Variant would be minimal and would not change significance findings.

The overall effect on the operational health impacts of the Project is expected to be negligible. Considering both the relatively small decrease in emissions and the Hamilton Avenue Parcels being approximately 0.25 miles to the onsite MEIR and 0.5 miles to offsite MEIR, it is unlikely that this Variant would produce a meaningful reduction to the health impacts associated with the Project.

2.2.3 *Other Air Impacts*

This Variant also would not change conclusions of the odor, carbon monoxide and cumulative assessments. This Variant would not substantially change emissions of odor and would not increase traffic volumes to above the screening levels discussed in the carbon monoxide assessment in the Technical Report. This Variant also would not change the MEIR, so the cumulative assessment would not change, and cumulative health impacts would remain below thresholds.

2.2.4 *Energy*

This Variant would not have an appreciable effect on energy use compared to the Project. As mentioned above, construction activity would be reduced with this Variant due to the reduction in activity at the Hamilton Avenue Parcels North and South. Therefore, construction fuel use would be minorly reduced. However, the reduction in fuel use would not change any significance findings due to the minor reduction.

Project building related energy use would also be minorly reduced due to the reduction in new retail space. The minor change in traffic patterns associated with this Variant would have a negligible impact on energy use associated with vehicle travel. These changes would not change any significance findings due to the minor changes.

2.3 No Willow Road Tunnel Variant

The No Willow Road Tunnel Variant assumes the tunnel from the northwest corner of the Project site to the southeast corner of the Bayfront campus would not be constructed, resulting from

forces outside of the Project's control. With this Variant, the trams would continue to operate, but would use Willow Road instead of the tunnel. Pedestrians and bicyclists would use the sidewalk and on-street bike lanes to move along the Willow Road corridor.

2.3.1 *Construction Emissions and Health Risk Assessment*

This Variant results in less construction activity due to the lack of construction of the Willow Road Tunnel. Therefore, construction emissions will be reduced. However, emissions would not be reduced to a level that would change significance findings of construction criteria air pollutant emissions.

As a result of the emissions reduction due to the reduction in equipment activity, health impacts would also be reduced. However, the reduction in emissions is far from the MEIR reported in our Technical Report. Therefore, the reduction in construction activity would not have a substantial change in health impacts reported in the Technical Report due to the dispersion of the emissions at the MEIR. The reduction also would not substantially reduce required mitigation of construction equipment.

2.3.2 *Operational Emissions and Health Risk Assessment*

Emissions from architectural coatings, consumer products, energy use, and emergency generators would not be affected by this Variant. Landscaping emissions may change slightly due to the change in landscape in this area. However, the parameters used to estimate emissions from landscaping, as prescribed in CalEEMod, would not change. Therefore, any change in landscaping emissions would be small.

This Variant would move trams, pedestrians and bicyclists from the tunnel to Willow Road. Pedestrians and bicyclists do not release emissions. The tram and shuttle schedule would not be affected by the lack of tunnel under Willow Road. The slight change in distance traveled by the trams and shuttles would be negligible and would not change emissions associated with their travel.

The change in travel patterns for the trams and shuttles also would not affect the health impacts from traffic reported in the Technical Report. The onsite and offsite MEIR is far from where this change in location of emissions would occur and the change in location of emissions is small. Therefore, this Variant would have a negligible change on reported health impacts. Furthermore, without the Project, the trams and shuttles would travel on this segment of Willow Road. Therefore, the change in health impacts to sensitive receptors near the tunnel with this Variant would be negligible.

2.3.3 *Other Air Impacts*

This Variant also would not change conclusions of the odor, carbon monoxide and cumulative assessments. This Variant would not substantially change emissions of odor and would not increase traffic volumes to above the screening levels discussed in the carbon monoxide assessment in the Technical Report. This Variant also would not change the MEIR, so the cumulative assessment would not change, and cumulative health impacts would remain below thresholds.

2.3.4 *Energy*

This Variant would not have an appreciable effect on energy use compared to the Project. As mentioned above, construction activity would be reduced with this Variant. Therefore, construction fuel use would be minorly reduced. However, the reduction in fuel use would not change any significance findings due to the minor reduction. Building related energy use would not be affected

by this Variant. The minor change in traffic patterns associated with this Variant would have a negligible impact on energy use associated with vehicle travel.

2.4 On-site Recycled Water Variant

The On-Site Recycled Water Variant would provide recycled water to Willow Village through the on-site treatment of wastewater. The on-site treatment and production of recycled water would capture wastewater supplies, including blackwater, from all Willow Village buildings by providing four water reuse facilities. The recycled water would be utilized for irrigation, toilet flushing and cooling. This Variant would be included in the Project if the West Bay Sanitary District does not construct its proposed Bayfront Recycled Water Plant and associated improvements to convey recycled water to the Project Site.

2.4.1 *Construction Emissions and Health Risk Assessment*

This Variant results in very little change in construction activity. Any equipment to be used to install the water treatment facility would already be on-site for the other components of construction and any activity associated with the installation would be encompassed in the existing schedule. Therefore, construction emissions would not be expected to change as a result of the On-site Recycled Water Variant.

Since emissions are not expected to change, health impacts are also not expected to change as a result of the On-site Recycled Water Variant.

2.4.2 *Operational Emissions and Health Risk Assessment*

Emissions from architectural coatings, consumer products, landscaping, mobile, waste and emergency generators would not be affected by this Variant. Any increase in on-site energy use associated with the on-site treatment would be offset by the reduction in energy to pump the water to a central treatment facility and energy the central treatment facility would use to treat the water. As a result, this Variant would not alter emissions as compared to the Project.

Similarly, health impacts of operations would not change as a result of this Variant.

2.4.3 *Other Air Impacts*

This Variant also would not change conclusions of the odor, carbon monoxide and cumulative assessments. Recycled water systems that employ biological treatment are capable of removing odor causing organic compounds and sulfides. These odorous compounds are oxidized to carbon dioxide, sulfates and water by microorganisms in the biological reactor in the presence of dissolved oxygen. Any remaining compounds that might volatilize are quickly diluted by the surrounding air. Therefore, this Variant would not change odor impacts. This Variant would not change traffic volumes, so the carbon monoxide assessment would not change. This Variant also would not change the MEIR, so the cumulative assessment would not change, and cumulative health impacts would remain below thresholds.

2.4.4 *Energy*

This Variant would not have an appreciable effect on energy use compared to the Project. Any increase in on-site energy use due to the water treatment would be offset by the reduction in energy use at a central treatment plant and the energy to pump the water to the treatment plant.

TABLES

Table 1V
Land Use Summary
Willow Village - Increased Residential Variant Analysis
Menlo Park, California

Land Use[1]	CalEEMod® Land Use	Size	Units[2]	Square Footage
Existing Conditions (2019)				
Office	General Office Building	252	ksf	251,530
R&D	Research and Development	124	ksf	123,870
Warehouse	Unrefrigerated Warehouse-No Rail	501	ksf	500,780
Lab & Manufacture	Manufacturing	24	ksf	23,570
Health Center	Health Club	24	ksf	24,060
Former Fire Department Building	General Light Industry	80	ksf	80,100
Parking	Enclosed Parking with Elevator	2,300	Spaces	920,000

Partial Buildout by Year[3]			
Land Use Type[4]	**Percent Operational by Year**		
	Year 4	**Year 5**	**Year 6**
Office	3.1%	58%	95%
Retail	10%	59%	98%
Residential	0%	16%	64%
Hotel	0%	41%	100%
Parking	53%	75%	96%
Park	89%	95%	100%

Full Buildout			
Land Use Type[4]	**Size**	**Units[2]**	**Square Footage**
Office	1,600	ksf	1,600,000
Retail	208	ksf	207,690
Residential	1,930	DU	1,892,043
Hotel	193	Rooms	172,000
Parking	1,869	ksf	1,869,240
Park	404	ksf	403,837

Notes:

1. Land uses analyzed based on information provided by the Project Applicant, as found in the Project Description. "Office" land use mapped to General Office Building and Research and Development; "Office/Lab" mapped to General Office Building, Research and Development, Health Club, and Manufacturing; "Warehouse" mapped to Unrefrigerated Warehouse-No Rail and General Light Industry, and "Warehouse/Office" mapped to Unrefrigerated Warehouse-No Rail and Research and Development CalEEMod land use types on a building-by-building basis.
2. The Project Applicant provided Project land uses in units of square footage, hotel rooms, and dwelling units. For the existing parking land use, each parking space is assumed to be 400 sqft. This assumption is based on CalEEMod defaults.
3. Partial buildout for Year 4, Year 5, and Year 6 were calculated based on the portion of building area for each land use type that becomes operational each year, based on the construction schedule, as shown in Table 2.
4. For Hamilton Avenue Parcels North and South, only net new square footage was included in the analysis. This is under the conservative assumption that the existing retail area and the retail land use that will replace it have similar operational emissions.

Abbreviations:

DU - dwelling unit
ksf - 1,000 square feet
sqft - square foot
CalEEMod® - California Emissions Estimator Model

References:

California Air Pollution Control Officers Association (CAPCOA). California Emissions Estimator Model (CalEEMod®), Version 2020.4.0. Available online at http://www.caleemod.com/

Table 12V
Project Construction Architectural Coating Off-Gassing Emissions
Willow Village - Increased Residential Variant Analysis
Menlo Park, CA

Coating Category	Unmitigated Interior	Mitigated Interior	Exterior
VOC Content (g/L)[1,2]	100	10	150
Emission Factor (lb/ft^2)[3]	0.0046	0.00046	0.0070
Land Use	Fraction of Surface Area Painted[3] (%)		Painted Area Multiplier[3]
	Interior	Exterior	
Residential	75%	25%	2.7
Non-Residential	75%	25%	2
Parking	0%	6%	--

Building or Parcel	Land Use[4]	Start Year	End Year	Building Square Footage[5]			Painted Surface Area		Unmitigated ROG Emissions	Mitigated ROG Emissions
				Residential Area	Non-Residential Area	Parking Area	Interior	Exterior		
				ft^2	ft^2	ft^2	ft^2	ft^2	tons	tons
Parcel 2	Residential	Year 4	Year 5	320,569	--	--	649,152	216,384	2.3	0.90
	Non-Residential			--	40,000	--	60,000	20,000	0.21	0.083
	Parking			--	--	216,862	--	13,012	0.045	0.045
Parcel 3	Residential	Year 4	Year 5	410,760	--	--	831,788	277,263	2.9	1.2
	Non-Residential			--	55,000	--	82,500	27,500	0.29	0.11
	Parking			--	--	233,000	--	13,980	0.049	0.049
North Garage	Parking	Year 2	Year 3	--	--	840,056	--	50,403	0.18	0.18
Office Building 4	Non-Residential	Year 4		--	269,934	--	404,902	134,967	1.4	0.56
Meeting, Collaboration, Park	Non-Residential	Year 5	Year 6	--	454,563	--	681,844	227,281	2.4	0.95
Hotel	Non-Residential	Year 5		--	172,000	--	258,000	86,000	0.90	0.36
Other	Non-Residential	Year 4		--	6,085	--	9,127	3,042	0.032	0.013
	Parking			--	--	13,600	--	816	2.8E-03	2.8E-03
Parcel 7	Residential	Year 4	Year 5	117,640	--	--	238,221	79,407	0.83	0.33
	Parking			--	--	9,547	--	573	2.0E-03	2.0E-03
Parcel 6	Residential	Year 5		174,499	--	--	353,361	117,787	1.2	0.49
	Parking			--	--	26,809	--	1,609	5.6E-03	5.6E-03
South Garage	Parking	Year 3	Year 4	--	--	446,830	--	26,810	0.093	0.093
Office Building 3	Non-Residential	Year 4	Year 5	--	212,805	--	319,207	106,402	1.1	0.44
Office Building 1	Non-Residential	Year 4		--	134,237	--	201,355	67,118	0.70	0.28
Office Building 2	Non-Residential	Year 4	Year 5	--	164,078	--	246,118	82,039	0.86	0.34
Office Building 5	Non-Residential	Year 4	Year 5	--	236,320	--	354,481	118,160	1.2	0.49
Office Building 6	Non-Residential	Year 4	Year 5	--	221,978	--	332,967	110,989	1.2	0.46
Parcels 4 + 5	Residential	Year 5	Year 6	868,575	--	--	1,758,864	586,288	6.1	2.4
	Non-Residential			--	5,000	--	7,500	2,500	0.026	0.010
	Parking			--	--	82,536	--	4,952	0.017	0.017
Hamilton Avenues Parcels North and South	Non-Residential	Year 5		--	7,690	--	11,535	3,845	0.040	0.016
								Total Year 2[6]	0.025	0.025
								Total Year 3[6]	0.20	0.20
								Total Year 4[6]	7.5	3.1
								Total Year 5[6]	9.9	4.0
								Total Year 6[6]	6.4	2.6

Table 12V
Project Construction Architectural Coating Off-Gassing Emissions
Willow Village - Increased Residential Variant Analysis
Menlo Park, CA

Notes:

1. VOC content of paint is assumed to be consistent with BAAQMD Regulation 8, Rule 3 for flat and nonflat coatings. VOC is assumed to be equivalent to ROG for these purposes.
2. Paint VOC content is consistent with or more stringent than BAAQMD Regulation 8 Rule 3 (Architectural Coatings). Emissions are estimated assuming that indoor painting will utilize "super-compliant" VOC architectural coatings that meet the more stringent limits in South Coast Air Quality Management District Rule 1113. For outdoor paint, assumes use of coatings with VOC content of 150 g/L, consistent with BAAQMD requirements. VOC is assumed to be equivalent to ROG for these purposes.
3. The emission factor is calculated using CalEEMod default architectural coating emissions parameters. The default assumptions account for the painting surface area relative to the floor square footage assuming 1 gallon of paint covers 180 sqft of surface area.
4. Consistent with CalEEMod Appendix A, recreational areas were excluded from the floor square footage in calculating VOC emissions due to architectural coatings.
5. Project square footage by land use was provided by the Project Applicant.
6. ROG emissions are allocated to each year based on the construction schedule for each building or parcel.

Abbreviations:

BAAQMD - Bay Area Air Quality Management District
CalEEMod - California Emissions Estimator MODel
CEQA - California Environmental Quality Act
ft^2 - square feet
g - gram
gal - gallons
L - liters
lb - pounds
ROG - reactive organic gas
sqft - square feet
VOC - volatile organic compound

References:

BAAQMD. 2009. Regulation 8 Rule 3 Architectural Coatings. Accessed November 2020. Available at: https://www.baaqmd.gov/~/media/dotgov/files/rules/reg-8-rule-3-architectural-coatings/documents/rg0803_0709.pdf?la=en.

California Air Pollution Control Officers Association (CAPCOA). 2016. Appendix A. Available at: http://www.caleemod.com

Table 13V
Summary of Unmitigated Project Construction Criteria Air Pollutant Emissions
Willow Village - Increased Residential Variant Analysis
Menlo Park, CA

Off-Road Emissions[1,2]

Construction Area[3]	Construction Subphase	Year	Unmitigated Construction CAP Emissions			
			ROG	NO_X	PM_{10}	$PM_{2.5}$
			lb/year			
Area 1	Demolition	Year 1	34	376	15	14
		Year 2	196	2,133	82	76
	Grading and Utilities	Year 2	436	4,632	159	146
Parcel 2 Foundations		Year 3	285	2,758	163	150
Parcel 2 Core and Shell		Year 3	31	296	16	15
		Year 4	57	451	25	23
Parcel 2 Tenant Improvements		Year 4	52	371	24	22
		Year 5	32	302	18	16
Parcel 2 Landscaping		Year 5	134	896	70	65
Parcel 3 Foundations		Year 3	373	3,494	219	202
		Year 4	2.4	21	1.3	1.2
Parcel 3 Core and Shell		Year 4	128	938	54	50
Parcel 3 Tenant Improvements		Year 4	30	235	13	12.2
		Year 5	52	531	28	25
Parcel 3 Landscaping		Year 5	160	1,093	87	80
North Garage		Year 2	62	644	20	19
		Year 3	152	1,615	62	57
Office Building 4		Year 3	132	1,355	54	50
		Year 4	17	227	7.3	6.8
Meeting, Collaboration, Park		Year 2	102	992	31	29
		Year 3	433	4,090	159	147
		Year 4	96	1,075	24	22
		Year 5	81	842	18	17
		Year 6	26	229	8.0	7.4
Hotel Excavation		Year 2	99	995	34	31
		Year 3	421	4,048	173	160
Hotel Construction		Year 4	94	1,011	27	25
		Year 5	71	845	18	16
Town Square		Year 3	608	5,208	301	277
		Year 4	256	2,207	120	111
		Year 5	26	218	3.7	3.4
Area 2	Demolition	Year 2	112	1,219	47	43
	Grading and Utilities	Year 2	198	2,106	72	67
		Year 3	289	2,620	132	122
Parcel 7 Foundations		Year 4	200	1,666	113	104
Parcel 7 Core and Shell		Year 4	63	482	28	26
Parcel 7 Tenant Improvements		Year 4	6.0	41	2.7	2.5
		Year 5	48	438	26	24
Parcel 7 Landscaping		Year 5	110	704	55	51
Parcel 6 Foundations		Year 4	202	1,728	113	104
Parcel 6 Core and Shell		Year 4	58	410	24	22
		Year 5	27	256	14	13
Parcel 6 Tenant Improvements		Year 5	54	538	29	27
Parcel 6 Landscaping		Year 5	64	426	34	32
		Year 6	74	488	40	37
South Garage		Year 3	188	1,854	77	71
		Year 4	83	889	32	29
Office Building 3		Year 3	168	1,611	72	66
		Year 4	35	442	13	12
		Year 5	3.9	58	1.6	1.5
Office Building 1		Year 3	147	1,427	62	57
		Year 4	33	411	13	12
Office Building 2		Year 3	142	1,366	60	56
		Year 4	36	448	14	13
		Year 5	0.44	6.4	0.18	0.17
Office Building 5		Year 3	197	1,875	84	78
		Year 4	33	418	13	12
		Year 5	3.6	52	1.5	1.4

Table 13V
Summary of Unmitigated Project Construction Criteria Air Pollutant Emissions
Willow Village - Increased Residential Variant Analysis
Menlo Park, CA

Construction Area[3]	Construction Subphase	Year	Unmitigated Construction CAP Emissions			
			ROG	NO_X	PM_{10}	$PM_{2.5}$
			lb/year			
Office Building 6		Year 3	189	1,775	82	75
		Year 4	39	476	14	13
		Year 5	7.6	112	3.2	3.0
Area 3	Grading and Utilities	Year 3	49	443	22	21
	Tunnel Construction	Year 3	145	1,476	68	63
		Year 4	71	710	33	31
	Foundations	Year 4	86	725	47	43
		Year 5	333	2,939	190	174
	Core and Shell	Year 5	174	1,563	82	75
	Tenant Improvements	Year 5	17	157	7.5	6.9
		Year 6	113	1,065	50	46
	Landscaping	Year 6	210	1,522	119	110
Hamilton Avenue Parcels North and South	Demolition	Year 4	42	428	23	21
	Grading and Utilities	Year 4	2.1	20	1.2	1.1
		Year 5	45	441	25	23
	Foundations	Year 5	35	309	20	18
	Core and Shell	Year 5	18	189	7.9	7.3
	Tenant Improvements	Year 5	14	141	7.1	6.5
Substation Upgrade	PG&E Substation Work	Year 3	223	1,749	142	131
Feeder Line	PG&E Offsite Work	Year 3	180	1,438	99	91
	Surface Improvements	Year 3	20	186	11	10
Intersection Improvements	O'Brien and Kavanaugh	Year 3	8.4	66	5.3	4.9
	Adams and O'Brien	Year 3	5.6	44	3.6	3.3
	Willow Road and Ivy Drive	Year 3	5.6	44	3.6	3.3

On-Road and Paving[1]

Construction Area[3]	Construction Subphase	Year	Unmitigated Construction CAP Emissions			
			ROG	NO_X	PM_{10}	$PM_{2.5}$
			lb/year			
Area 1	Demolition	Year 1	10	513	4.6	4.4
		Year 2	56	3,017	23	22
	Grading and Utilities	Year 2	132	2,549	17	17
Area 1 Town Square and Residential/Shopping District	Foundations	Year 3	1.6	90	0.92	0.88
		Year 4	0.0064	0.38	3.8E-03	3.7E-03
	Core and Shell	Year 3	0.45	26	0.26	0.25
		Year 4	1.2	68	0.69	0.66
	Tenant Improvements	Year 4	0.95	56	0.56	0.54
		Year 5	1.0	64	0.63	0.61
	Landscaping	Year 5	0.72	44	0.44	0.42
	Town Square and Residential/Shopping District Worker Mobile Trips	Year 3	300	219	3.9	3.6
		Year 4	328	230	4.4	4.1
		Year 5	210	142	2.9	2.6
	Landscaping Worker Mobile Trips	Year 5	39	26	0.53	0.49
Campus District	Foundations + Core and Shell	Year 2	2.3	111	1.1	1.0
		Year 3	10	576	5.9	5.6
		Year 4	9.3	548	5.5	5.3
		Year 5	8.4	515	5.1	4.9
	Tenant Improvements	Year 4	3.8	223	2.2	2.1
		Year 5	4.6	281	2.8	2.7
		Year 6	0.74	47	0.46	0.44
	O4 and NG Worker Mobile Trips	Year 2	53	41	0.69	0.64
		Year 3	309	226	4.1	3.7
		Year 4	230	162	3.1	2.8
	MCS Worker Mobile Trips	Year 2	40	31	0.52	0.48
		Year 3	232	169	3.1	2.8
		Year 4	219	153	2.9	2.7
		Year 5	205	139	2.8	2.6
		Year 6	34	22	0.47	0.43
Area 2	Demolition	Year 2	58	3,480	27	25
	Grading and Utilities	Year 2	48	1,273	8.7	8.3
		Year 3	43	1,129	8.3	7.9
Area 2 Town Square and Residential/Shopping District	Foundations	Year 4	1.2	68	0.69	0.66
	Core and Shell	Year 4	1.4	83	0.83	0.79
		Year 5	0.42	26	0.26	0.25

Table 13V
Summary of Unmitigated Project Construction Criteria Air Pollutant Emissions
Willow Village - Increased Residential Variant Analysis
Menlo Park, CA

Construction Area[3]	Construction Subphase	Year	Unmitigated Construction CAP Emissions			
			ROG	NO_X	PM_{10}	$PM_{2.5}$
			lb/year			
Area 2 Town Square and Residential/Shopping District	Tenant Improvements	Year 4	0.16	10	0.10	0.093
		Year 5	2.1	126	1.3	1.2
	Landscaping	Year 5	0.54	33	0.32	0.31
		Year 6	0.17	11	0.11	0.10
	Town Square and Residential/Shopping District Worker Mobile Trips	Year 4	326	228	4.4	4.0
		Year 5	277	187	3.8	3.5
	Landscaping Worker Mobile Trips	Year 5	29	19	0.39	0.36
		Year 6	10	6.2	0.13	0.12
Campus District	Foundations + Core and Shell	Year 3	7.8	447	4.5	4.3
		Year 4	8.2	486	4.9	4.7
	Tenant Improvements	Year 4	7.0	410	4.1	3.9
		Year 5	5.0	306	3.0	2.9
	Worker Mobile Trips	Year 3	516	377	6.8	6.3
		Year 4	627	440	8.4	7.7
		Year 5	275	186	3.8	3.5
Area 3	Grading and Utilities	Year 3	45	196	1.7	1.6
	Tunnel Construction	Year 3	686	779	12	11
		Year 4	319	355	5.6	5.2
	Foundations	Year 4	88	107	1.6	1.5
		Year 5	343	407	6.4	6.0
	Core and Shell	Year 5	556	716	11	10
	Tenant Improvements	Year 5	115	148	2.3	2.1
		Year 6	758	960	15	14
	Landscaping	Year 6	10	71	0.77	0.73
Hamilton Avenue Parcels North and South	Demolition	Year 4	2.1	66.3	0.58	0.55
	Grading and Utilities	Year 4	0.077	1.3	0.010	9.2E-03
		Year 5	5.0	27	0.21	0.20
	Foundations	Year 5	0.80	49	0.49	0.47
	Core and Shell	Year 5	0.72	44	0.44	0.42
	Tenant Improvements	Year 5	0.90	55	0.55	0.52
	Worker Mobile Trips	Year 5	72	48	1.0	0.90
Substation Upgrade	PG&E Substation Work	Year 3	5.5	24	0.27	0.26
Feeder Line	PG&E Offsite Work	Year 3	15	56	0.65	0.62
	Surface Improvements	Year 3	4.3	5.4	0.063	0.059
Intersection Improvements	O'Brien and Kavanaugh	Year 3	1.0	10	0.11	0.10
	Adams and O'Brien	Year 3	0.83	10	0.11	0.10
	Willow Road and Ivy Drive	Year 3	0.83	10	0.11	0.10

Summary of Project Construction Unmitigated Annual CAP Emissions by Year				
Year	Emissions[4]			
	ROG	NO_X	PM_{10}	$PM_{2.5}$
	ton/year			
Year 1	0.022	0.44	0.010	9.0E-03
Year 2	0.82	12	0.26	0.24
Year 3	3.5	23	1.06	0.98
Year 4	9.5	9.8	0.41	0.38
Year 5	12	8.3	0.40	0.37
Year 6	7.0	2.2	0.12	0.11
Total	33	55	2.3	2.1

Summary of Project Construction Unmitigated Daily CAP Emissions by Year				
Year	Emissions			
	ROG	NO_X	PM_{10}	$PM_{2.5}$
	lb/day			
Year 1	2.8	56	1.2	1.1
Year 2	4.5	64	1.4	1.3
Year 3	19	124	5.8	5.4
Year 4	52	53	2.3	2.1
Year 5	64	46	2.2	2.0
Year 6	43	14	0.72	0.67
Threshold[5]	54	54	82	54

Notes:

1. Construction emissions were estimated with methodology equivalent to CalEEMod 2020.4.0. Emissions were estimated using on-road emissions factors from EMFAC2021 and off-road construction equipment emission factors from OFFROAD2017. Onroad trips and offroad construction equipment use were provided by the Project Applicant.

2. Unmitigated construction emissions from offroad equipment are calculated using fleet-average emission factors.

Table 13V
Summary of Unmitigated Project Construction Criteria Air Pollutant Emissions
Willow Village - Increased Residential Variant Analysis
Menlo Park, CA

[3] Area 1 includes Parcel 2, Parcel 3, North Garage, Office Building 4, Hotel, Town Square, and Meeting, Collaboration, Park. Area 2 includes Parcel 6, Parcel 7, South Garage, Office Building 1, Office Building 2, Office Building 3, Office Building 5, and Office Building 6. Area 3 includes Parcel 4 and Parcel 5, along with the Tunnel Construction.

[4] The mass emissions shown above are converted from pound per year to gram per second for the health risk assessment. The conversion is based on 365 days per year and 11 hours per day, consistent with the modeled hours from 7 AM - 6 PM.

[5] Thresholds are from BAAQMD California Environmental Quality Act (CEQA) Guidelines. Bolded values indicate threshold exceedances. Fugitive emissions sources are excluded from comparison to this threshold.

Abbreviations:

CAP - criteria air pollutant
CalEEMod - California Emissions Estimate Model
ROG - reactive organic gases
NO_X - nitrous oxide

Table 14V
Summary of Mitigated Project Construction Criteria Air Pollutant Emissions
Willow Village - Increased Residential Variant Analysis
Menlo Park, CA

Off-Road Emissions[1,2]

Construction Area[3]	Construction Subphase	Year	Mitigated Construction CAP Emissions			
			ROG	NO_X	PM_{10}	$PM_{2.5}$
			lb/year			
Area 1	Demolition	Year 1	13	168	2.4	2.4
		Year 2	79	1,045	15	15
	Grading and Utilities	Year 2	189	2,033	36	35
Parcel 2 Foundations		Year 3	48	933	8.4	8.4
Parcel 2 Core and Shell		Year 3	7.3	81	1.4	1.4
		Year 4	13	143	2.5	2.4
Parcel 2 Tenant Improvements		Year 4	9.3	133	1.8	1.7
		Year 5	6.8	95	1.1	1.0
Parcel 2 Landscaping		Year 5	10	165	1.3	1.3
Parcel 3 Foundations		Year 3	53	1,008	9.5	9.4
		Year 4	0.33	6.2	0.059	0.058
Parcel 3 Core and Shell		Year 4	24	333	4.3	4.2
Parcel 3 Tenant Improvements		Year 4	6.1	102	1.11	1.09
		Year 5	13	207	1.9	1.9
Parcel 3 Landscaping		Year 5	11	215	1.3	1.3
North Garage		Year 2	31	310	5.7	5.7
		Year 3	57	568	11	11.0
Office Building 4		Year 3	46	562	8.4	8.4
		Year 4	7.0	138	1.2	1.2
Meeting, Collaboration, Park		Year 2	50	453	9.3	9.3
		Year 3	172	1,532	32	32
		Year 4	55	818	10	10
		Year 5	50	561	7.2	7.2
		Year 6	12	69	1.8	1.8
Hotel Excavation		Year 2	50	441	10	9
		Year 3	160	1,462	32	32
Hotel Construction		Year 4	63	814	13	13
		Year 5	42	643	6.1	6.1
Town Square		Year 3	141	1,493	27	27
		Year 4	67	676	13	13
		Year 5	21	147	3.4	3.4
Area 2	Demolition	Year 2	45	597	8.7	8.6
	Grading and Utilities	Year 2	86	924	16	16
		Year 3	83	886	16	16
Parcel 7 Foundations		Year 4	25	412	4.4	4.4
Parcel 7 Core and Shell		Year 4	14	139	2.7	2.7
Parcel 7 Tenant Improvements		Year 4	1.1	14	0.21	0.20
		Year 5	10	126	1.6	1.6
Parcel 7 Landscaping		Year 5	8.6	153	1.1	1.1
Parcel 6 Foundations		Year 4	27	474	4.7	4.6
Parcel 6 Core and Shell		Year 4	11	138	1.9	1.9
		Year 5	6.1	75	0.91	0.89
Parcel 6 Tenant Improvements		Year 5	13	198	2.0	2.0
Parcel 6 Landscaping		Year 5	4.6	96	0.54	0.54
		Year 6	5.4	112	0.63	0.63
South Garage		Year 3	68	674	13	13
		Year 4	34	372	6.5	6.5
Office Building 3		Year 3	55	532	10	10
		Year 4	14	289	2.4	2.4
		Year 5	1.8	35	0.25	0.25
Office Building 1		Year 3	48	492	9.2	9.1
		Year 4	13	269	2.2	2.2
Office Building 2		Year 3	46	454	8.8	8.8
		Year 4	14	293	2.5	2.4
		Year 5	0.20	3.8	0.029	0.028
Office Building 5		Year 3	63	617	12	12
		Year 4	13	271	2.3	2.3
		Year 5	1.7	31	0.23	0.23

Table 14V
Summary of Mitigated Project Construction Criteria Air Pollutant Emissions
Willow Village - Increased Residential Variant Analysis
Menlo Park, CA

Construction Area[3]	Construction Subphase	Year	Mitigated Construction CAP Emissions			
			ROG	NO_X	PM_{10}	$PM_{2.5}$
			lb/year			
Office Building 6		Year 3	60	540	11	11
		Year 4	16	316	2.7	2.7
		Year 5	3.6	67	0.50	0.49
Area 3	Grading and Utilities	Year 3	14	150	2.7	2.7
	Tunnel Construction	Year 3	43	557	7.6	7.5
		Year 4	21	275	3.7	3.7
	Foundations	Year 4	12	208	2.2	2.1
		Year 5	49	796	6.5	6.5
	Core and Shell	Year 5	47	512	6.8	6.7
	Tenant Improvements	Year 5	5.6	70	0.81	0.79
		Year 6	38	479	5.5	5.4
	Landscaping	Year 6	18	336	2.2	2.2
Hamilton Avenue Parcels North and South	Demolition	Year 4	9.0	200	1.5	1.5
	Grading and Utilities	Year 4	0.34	6.8	0.062	0.061
		Year 5	7.2	138	1.1	1.1
	Foundations	Year 5	5.4	97	0.78	0.78
	Core and Shell	Year 5	8.1	117	1.4	1.4
	Tenant Improvements	Year 5	3.6	54	0.51	0.50
Substation Upgrade	PG&E Substation Work	Year 3	10	68	2.4	2.4
Feeder Line	PG&E Offsite Work	Year 3	30	207	6.5	6.5
	Surface Improvements	Year 3	3.3	22	0.66	0.65
Intersection Improvements	O'Brien and Kavanaugh	Year 3	0.36	2.6	0.091	0.091
	Adams and O'Brien	Year 3	0.24	1.7	0.061	0.061
	Willow Road and Ivy Drive	Year 3	0.24	1.7	0.061	0.061

On-Road and Paving[1]

Construction Area[3]	Construction Subphase	Year	Mitigated Construction CAP Emissions			
			ROG	NO_X	PM_{10}	$PM_{2.5}$
			lb/year			
Area 1	Demolition	Year 1	10	513	4.6	4.4
		Year 2	56	3,017	23	22
	Grading and Utilities	Year 2	132	2,549	17	17
Area 1 Town Square and Residential/Shopping District	Foundations	Year 3	1.6	90	0.92	0.88
		Year 4	6.4E-03	0.38	3.8E-03	3.7E-03
	Core and Shell	Year 3	0.45	26	0.26	0.25
		Year 4	1.2	68	0.69	0.66
	Tenant Improvements	Year 4	0.95	56	0.56	0.54
		Year 5	1.0	64	0.63	0.61
	Landscaping	Year 5	0.72	44	0.44	0.42
	Town Square and Residential/Shopping District Worker Mobile Trips	Year 3	300	219	3.9	3.6
		Year 4	328	230	4.4	4.1
		Year 5	210	142	2.9	2.6
	Landscaping Worker Mobile Trips	Year 5	39	26	0.53	0.49
Area 1 Campus District	Foundations + Core and Shell	Year 2	2.3	111	1.1	1.0
		Year 3	10	576	5.9	5.6
		Year 4	9.3	548	5.5	5.3
		Year 5	8.4	515	5.1	4.9
	Tenant Improvements	Year 4	3.8	223	2.2	2.1
		Year 5	4.6	281	2.8	2.7
		Year 6	0.74	47	0.46	0.44
	O4 and NG Worker Mobile Trips	Year 2	53	41	0.69	0.64
		Year 3	309	226	4.1	3.7
		Year 4	230	162	3.1	2.8
	MCS Worker Mobile Trips	Year 2	40	31	0.52	0.48
		Year 3	232	169	3.1	2.8
		Year 4	219	153	2.9	2.7
		Year 5	205	139	2.8	2.6
		Year 6	34	22	0.47	0.43
Area 2	Demolition	Year 2	58	3,480	27	25
	Grading and Utilities	Year 2	48	1,273	8.7	8.3
		Year 3	43	1,129	8.3	7.9
Area 2 Town Square and Residential/Shopping District	Foundations	Year 4	1.2	68	0.69	0.66
	Core and Shell	Year 4	1.4	83	0.83	0.79
		Year 5	0.42	26	0.26	0.25

Table 14V
Summary of Mitigated Project Construction Criteria Air Pollutant Emissions
Willow Village - Increased Residential Variant Analysis
Menlo Park, CA

Construction Area[3]	Construction Subphase	Year	Mitigated Construction CAP Emissions			
			ROG	NO_X	PM_{10}	$PM_{2.5}$
			lb/year			
Area 2 Town Square and Residential/Shopping District	Tenant Improvements	Year 4	0.16	10	0.10	0.093
		Year 5	2.1	126	1.3	1.2
	Landscaping	Year 5	0.54	33	0.3	0.31
		Year 6	0.17	11	0.11	0.10
	Town Square and Residential/Shopping District Worker Mobile Trips	Year 4	326	228	4.4	4.0
		Year 5	277	187	3.8	3.5
	Landscaping Worker Mobile Trips	Year 5	29	19	0.39	0.36
		Year 6	10	6.2	0.13	0.12
Campus District	Foundations + Core and Shell	Year 3	7.8	447	4.5	4.3
		Year 4	8.2	486	4.9	4.7
	Tenant Improvements	Year 4	7.0	410	4.1	3.9
		Year 5	5.0	306	3.0	2.9
	Worker Mobile Trips	Year 3	516	377	6.8	6.3
		Year 4	627	440	8.4	7.7
		Year 5	275	186	3.8	3.5
Area 3	Grading and Utilities	Year 3	45	196	1.7	1.6
	Tunnel Construction	Year 3	686	779	12	11
		Year 4	319	355	5.6	5.2
	Foundations	Year 4	88	107	1.6	1.5
		Year 5	343	407	6.4	6.0
	Core and Shell	Year 5	556	716	11	10
	Tenant Improvements	Year 5	115	148	2.3	2.1
		Year 6	758	960	15	14
	Landscaping	Year 6	10	71	0.77	0.73
Hamilton Avenue Parcels North and South	Demolition	Year 4	2.1	66.3	0.58	0.55
	Grading and Utilities	Year 4	0.077	1.3	0.010	9.2E-03
		Year 5	5.0	27	0.21	0.20
	Foundations	Year 5	0.80	49	0.49	0.47
	Core and Shell	Year 5	0.72	44	0.44	0.42
	Tenant Improvements	Year 5	0.90	55	0.55	0.52
	Worker Mobile Trips	Year 5	72	48	0.98	0.90
Substation Upgrade	PG&E Substation Work	Year 3	5.5	24	0.27	0.26
Feeder Line	PG&E Offsite Work	Year 3	15	56	0.65	0.62
	Surface Improvements	Year 3	4.3	5.4	0.063	0.059
Intersection Improvements	O'Brien and Kavanaugh	Year 3	1.0	10	0.11	0.10
	Adams and O'Brien	Year 3	0.83	10	0.11	0.10
	Willow Road and Ivy Drive	Year 3	0.83	10	0.11	0.10

Summary of Project Construction Mitigated Annual CAP Emissions by Year				
Year	Emissions[4]			
	ROG	NO_X	PM_{10}	$PM_{2.5}$
	ton/year			
Year 1	0.012	0.34	3.5E-03	3.4E-03
Year 2	0.48	8.2	0.089	0.087
Year 3	1.9	8.6	0.142	0.140
Year 4	4.4	5.3	0.069	0.067
Year 5	5.2	4.1	0.049	0.047
Year 6	3.0	1.06	0.014	0.013
Total	15	28	0.37	0.36

Summary of Project Construction Mitigated Daily CAP Emissions by Year				
Year	Emissions			
	ROG	NO_X	PM_{10}	$PM_{2.5}$
	lb/day			
Year 1	1.5	43	0.44	0.42
Year 2	2.7	45	0.49	0.48
Year 3	10	47	0.78	0.77
Year 4	24	29	0.38	0.37
Year 5	29	22	0.27	0.26
Year 6	19	6.5	0.084	0.080
Threshold[5]	54	54	82	54

Notes:

1. Construction emissions were estimated with methodology equivalent to CalEEMod® 2020.4.0. Emissions were estimated using on-road emissions factors from EMFAC2021 and off-road construction equipment emission factors from OFFROAD. Onroad trips and offroad construction equipment use were provided by the Project Applicant.
2. Mitigated construction emissions from offroad equipment are calculated using Tier 4 Final emission factors for 95 percent of the equipment before residents move on-site in Year 5 and 98 percent of the equipment after residents move on-site in Year 5. The other 5 percent and 2 percent (before and after on-site residents, repspectively) of non-Tier 4 equipment are assumed to be Tier 2.
3. Area 1 includes Parcel 2, Parcel 3, North Garage, Office Building 4, Hotel, Town Square, and Meeting, Collaboration, Park. Area 2 includes Parcel 6, Parcel 7, South Garage, Office Building 1, Office Building 2, Office Building 3, Office Building 5, and Office Building 6. Area 3 includes Parcel 4 and Parcel 5, along with the Tunnel Construction.
4. The mass emissions shown above are converted from pound per year to gram per second for the health risk assessment. The conversion is based on 365 days per year and 11 hours per day, consistent with the modeled hours from 7 AM - 6 PM.
5. Thresholds are from BAAQMD California Environmental Quality Act (CEQA) Guidelines. Fugitive emissions sources are excluded from comparison to this threshold.

Abbreviations:

Table 14V
Summary of Mitigated Project Construction Criteria Air Pollutant Emissions
Willow Village - Increased Residential Variant Analysis
Menlo Park, CA

CAP - criteria air pollutant
CalEEMod® - California Emissions Estimate Model
ROG - reactive organic gases
NO_X - nitrous oxide

Table 15V
Summary of Project Construction Greenhouse Gas Emissions
Willow Village - Increased Residential Variant Analysis
Menlo Park, CA

Off-Road Emissions[1]

Construction Area[2]	Construction Subphase	Year	Construction GHG Emissions[3]			
			CO_2	CH_4	N_2O	CO_2e
			MT/year			
Area 1	Demolition	Year 1	45	8.0E-03	2.3E-03	46
		Year 2	287	5.2E-02	1.5E-02	292
	Grading and Utilities	Year 2	705	1.5E-01	2.5E-02	716
Parcel 2 Foundations		Year 3	179	2.3E-02	1.3E-02	184
Parcel 2 Core and Shell		Year 3	24	4.7E-03	1.0E-03	24
		Year 4	43	8.5E-03	1.8E-03	44
Parcel 2 Tenant Improvements		Year 4	29	4.5E-03	1.9E-03	30
		Year 5	22	3.5E-03	1.5E-03	23
Parcel 2 Landscaping		Year 5	32	6.0E-03	1.6E-03	32
Parcel 3 Foundations		Year 3	200	2.7E-02	1.4E-02	205
		Year 4	1.2	1.7E-04	8.5E-05	1.3
Parcel 3 Core and Shell		Year 4	83	1.5E-02	4.2E-03	84
Parcel 3 Tenant Improvements		Year 4	21	2.6E-03	1.8E-03	22
		Year 5	45	5.5E-03	3.7E-03	46
Parcel 3 Landscaping		Year 5	32	6.1E-03	1.6E-03	32
North Garage		Year 2	118	2.9E-02	2.6E-03	119
		Year 3	206	4.9E-02	3.9E-03	208
Office Building 4		Year 3	162	3.8E-02	4.0E-03	164
		Year 4	29	3.7E-03	2.3E-03	29.7
Meeting, Collaboration, Park		Year 2	192	4.9E-02	2.9E-03	194
		Year 3	640	1.7E-01	8.6E-03	647
		Year 4	190	4.3E-02	5.8E-03	193
		Year 5	185	4.3E-02	5.0E-03	187
		Year 6	45	1.2E-02	3.4E-04	45
Hotel Excavation		Year 2	185	4.8E-02	2.6E-03	187
		Year 3	529	1.2E-01	8.1E-03	535
Hotel Construction		Year 4	193	3.5E-02	4.2E-03	195
		Year 5	156	2.9E-02	6.4E-03	158
Town Square		Year 3	545	1.3E-01	1.4E-02	553
		Year 4	261	6.3E-02	6.0E-03	264
		Year 5	83	2.2E-02	1.2E-03	84
Area 2	Demolition	Year 2	164	3.0E-02	8.4E-03	167
	Grading and Utilities	Year 2	320	7.0E-02	1.1E-02	326
		Year 3	319	7.0E-02	1.1E-02	324
Parcel 7 Foundations		Year 4	87	1.6E-02	4.4E-03	88
Parcel 7 Core and Shell		Year 4	48	9.5E-03	2.0E-03	48
Parcel 7 Tenant Improvements		Year 4	3.3	5.2E-04	2.2E-04	3.4
		Year 5	33	5.3E-03	2.2E-03	34
Parcel 7 Landscaping		Year 5	28	5.0E-03	1.6E-03	28
Parcel 6 Foundations		Year 4	97	1.6E-02	5.7E-03	99
Parcel 6 Core and Shell		Year 4	36	6.5E-03	1.9E-03	37
		Year 5	21	3.9E-03	1.1E-03	22
Parcel 6 Tenant Improvements		Year 5	47	5.8E-03	3.9E-03	48
Parcel 6 Landscaping		Year 5	13	2.4E-03	7.2E-04	13
		Year 6	15	2.8E-03	8.4E-04	16
South Garage		Year 3	255	6.2E-02	5.3E-03	258
		Year 4	120	2.7E-02	2.5E-03	122
Office Building 3		Year 3	201	5.1E-02	3.5E-03	204
		Year 4	49	7.7E-03	3.0E-03	50
		Year 5	8.4	9.4E-04	7.4E-04	8.6
Office Building 1		Year 3	178	4.4E-02	3.4E-03	180
		Year 4	45	7.2E-03	2.8E-03	46
Office Building 2		Year 3	171	4.3E-02	3.1E-03	173
		Year 4	49	8.0E-03	3.0E-03	50
		Year 5	0.94	1.1E-04	8.3E-05	0.97
Office Building 5		Year 3	234	5.9E-02	4.0E-03	237
		Year 4	47	7.4E-03	3.0E-03	48
		Year 5	7.7	8.6E-04	6.8E-04	7.9

Table 15V
Summary of Project Construction Greenhouse Gas Emissions
Willow Village - Increased Residential Variant Analysis
Menlo Park, CA

Off-Road Emissions[1]

Phase	Construction Subphase	Year	Construction GHG Emissions[3]			
			CO_2	CH_4	N_2O	CO_2e
			MT/year			
Office Building 6		Year 3	224	5.8E-02	3.2E-03	226
		Year 4	52	8.5E-03	2.9E-03	53
		Year 5	16	1.8E-03	1.5E-03	17
Area 3	Grading and Utilities	Year 3	56	1.2E-02	2.1E-03	57
	Tunnel Construction	Year 3	156	2.6E-02	9.4E-03	159
		Year 4	77	1.3E-02	4.6E-03	79
	Foundations	Year 4	40	7.0E-03	2.1E-03	41
		Year 5	163	2.9E-02	8.4E-03	167
	Core and Shell	Year 5	139	2.7E-02	6.1E-03	142
	Tenant Improvements	Year 5	16	2.2E-03	1.1E-03	16
		Year 6	107	1.5E-02	7.6E-03	110
	Landscaping	Year 6	54	9.6E-03	3.1E-03	55
Hamilton Avenue Parcels North and South	Demolition	Year 4	35	3.8E-03	2.9E-03	36
	Grading and Utilities	Year 4	1.6	2.0E-04	1.3E-04	1.7
		Year 5	35	4.4E-03	2.9E-03	36
	Foundations	Year 5	17	2.1E-03	1.1E-03	18
	Core and Shell	Year 5	24	2.2E-03	1.4E-03	24
	Tenant Improvements	Year 5	12	2.0E-03	6.6E-04	12
Substation Upgrade	PG&E Substation Work	Year 3	34	9.8E-03	0	34
Feeder Line	PG&E Offsite Work	Year 3	108	3.1E-02	0	109
	Surface Improvements	Year 3	12	2.3E-03	0	12
Intersection Improvements	O'Brien and Kavanaugh	Year 3	1.3	3.7E-04	0	1.3
	Adams and O'Brien	Year 3	0.85	2.5E-04	0	0.85
	Willow Road and Ivy Drive	Year 3	0.85	2.5E-04	0	0.85

On-Road Emissions[1]

Phase[2]	Construction Subphase	Year	Construction GHG Emissions[3]			
			CO_2	CH_4	N_2O	CO_2e
			MT/year			
Area 1	Demolition	Year 1	112	2.5E-04	1.7E-02	117
		Year 2	717	1.4E-03	1.1E-01	750
	Grading and Utilities	Year 2	585	3.1E-03	8.5E-02	610
Area 1 Town Square and Residential/Shopping District	Foundations	Year 3	27	3.3E-05	4.3E-03	28
		Year 4	0.12	1.4E-07	1.9E-05	0.13
	Core and Shell	Year 3	7.7	9.5E-06	1.2E-03	8.1
		Year 4	22	2.4E-05	3.4E-03	23
	Tenant Improvements	Year 4	18	2.0E-05	2.8E-03	18
		Year 5	21	2.2E-05	3.3E-03	22
	Landscaping	Year 5	15	1.5E-05	2.3E-03	15
	Town Square and Residential/Shopping District Worker Mobile Trips	Year 3	340	1.1E-02	9.6E-03	344
		Year 4	391	1.2E-02	1.0E-02	395
		Year 5	261	7.7E-03	6.7E-03	263
	Landscaping Worker Mobile Trips	Year 5	48	1.4E-03	1.2E-03	49
Campus District	Foundations + Core and Shell	Year 2	28	4.8E-05	4.5E-03	30
		Year 3	173	2.1E-04	2.7E-02	181
		Year 4	172	2.0E-04	2.7E-02	180
		Year 5	170	1.8E-04	2.7E-02	177
	Tenant Improvements	Year 4	70	7.9E-05	1.1E-02	73
		Year 5	92	9.7E-05	1.5E-02	97
		Year 6	16	1.6E-05	2.5E-03	17
	O4 and NG Worker Mobile Trips	Year 2	58	2.1E-03	1.7E-03	58
		Year 3	351	1.2E-02	9.9E-03	355
		Year 4	275	8.6E-03	7.3E-03	277
	MCS Worker Mobile Trips	Year 2	43	1.6E-03	1.3E-03	44
		Year 3	263	8.9E-03	7.4E-03	266
		Year 4	261	8.2E-03	7.0E-03	263
		Year 5	255	7.5E-03	6.5E-03	257
		Year 6	44	1.2E-03	1.1E-03	45

Table 15V
Summary of Project Construction Greenhouse Gas Emissions
Willow Village - Increased Residential Variant Analysis
Menlo Park, CA

On-Road Emissions[1]

Phase[2]	Construction Subphase	Year	Construction GHG Emissions[3]			
			CO_2	CH_4	N_2O	CO_2e
			MT/year			
Area 2	Demolition	Year 2	821	1.3E-03	1.3E-01	859
	Grading and Utilities	Year 2	290	1.5E-03	4.2E-02	302
		Year 3	286	1.3E-03	4.2E-02	298
Area 2 Town Square and Residential/Shopping District	Foundations	Year 4	22	2.4E-05	3.4E-03	23
	Core and Shell	Year 4	26	3.0E-05	4.1E-03	27
		Year 5	8.5	8.9E-06	1.3E-03	8.9
	Tenant Improvements	Year 4	3.1	3.5E-06	4.8E-04	3.2
		Year 5	42	4.4E-05	6.6E-03	44
	Landscaping	Year 5	11	1.1E-05	1.7E-03	11
		Year 6	3.7	3.6E-06	5.9E-04	3.9
	Town Square and Residential/Shopping District Worker Mobile Trips	Year 4	388	1.2E-02	1.0E-02	392
		Year 5	345	1.0E-02	8.8E-03	348
	Landscaping Worker Mobile Trips	Year 5	36	1.0E-03	9.1E-04	36
		Year 6	12	3.4E-04	3.0E-04	12
Campus District	Foundations + Core and Shell	Year 3	134	1.7E-04	2.1E-02	141
		Year 4	153	1.7E-04	2.4E-02	160
	Tenant Improvements	Year 4	129	1.5E-04	2.0E-02	135
		Year 5	101	1.1E-04	1.6E-02	106
	Worker Mobile Trips	Year 3	587	2.0E-02	1.6E-02	592
		Year 4	748	2.4E-02	2.0E-02	754
		Year 5	342	1.0E-02	8.8E-03	345
Area 3	Grading and Utilities	Year 3	83	1.5E-03	7.4E-03	85
	Tunnel Construction	Year 3	859	2.6E-02	3.5E-02	870
		Year 4	420	1.2E-02	1.7E-02	425
	Foundations	Year 4	119	3.3E-03	5.1E-03	120
		Year 5	481	1.3E-02	2.0E-02	487
	Core and Shell	Year 5	797	2.0E-02	3.5E-02	808
	Tenant Improvements	Year 5	165	4.2E-03	7.3E-03	167
		Year 6	1130	2.7E-02	4.9E-02	1145
	Landscaping	Year 6	34	3.4E-04	3.8E-03	35
Hamilton Avenue Parcels North and South	Demolition	Year 4	19	6.4E-05	2.9E-03	20
	Grading and Utilities	Year 4	0.36	2.5E-06	4.7E-05	0.37
		Year 5	7.7	5.2E-05	1.0E-03	8.0
	Foundations	Year 5	16	1.7E-05	2.5E-03	17
	Core and Shell	Year 5	14	1.5E-05	2.3E-03	15
	Tenant Improvements	Year 5	18	1.9E-05	2.8E-03	19
	Worker Mobile Trips	Year 5	89	2.6E-03	2.3E-03	90
Substation Upgrade	PG&E Substation Work	Year 3	12	2.1E-04	1.1E-03	12
Feeder Line	PG&E Offsite Work	Year 3	30	5.6E-04	2.6E-03	31
	Surface Improvements	Year 3	2.9	5.4E-05	2.5E-04	3.0
Intersection Improvements	O'Brien and Kavanaugh	Year 3	3.6	2.4E-05	4.9E-04	3.8
	Adams and O'Brien	Year 3	3.4	1.7E-05	4.9E-04	3.6
	Willow Road and Ivy Drive	Year 3	3.4	1.7E-05	4.9E-04	3.6

Summary of Project Construction Annual GHG Emissions by Year				
Year	Emissions[4,5]			
	CO_2	CH_4	N_2O	CO_2e
	MT/year			
Year 1	157	0.0083	0.020	163
Year 2	4,514	0.44	0.44	4,657
Year 3	7,605	1.1	0.30	7,722
Year 4	4,871	0.40	0.25	4,954
Year 5	4,471	0.29	0.23	4,548
Year 6	1,462	0.069	0.070	1,484
			Total	23,528

Notes:

1. Emissions were estimated using onroad emissions factors from EMFAC2021 and offroad construction equipment emission factors from OFFROAD. Onroad trips and offroad construction equipment use were provided by the Project Applicant.
2. Area 1 includes Parcel 2, Parcel 3, North Garage, Office Building 4, Hotel, Town Square, and Meeting, Collaboration, Park. Area 2 includes Parcel 6, Parcel 7, South Garage, Office Building 1, Office Building 2, Office Building 3, Office Building 5, and Office Building 6. Area 3 includes Parcel 4 and Parcel 5, along with the Tunnel Construction.
3. Carbon dioxide equivalent emissions were determined using IPCC 5th Assessment Report Global Warming Potentials for CH_4 and N_2O.
4. The Summary of Project Construction Annual GHG Emissions by Year is the sum of the values represented above as well as Construction Water Use Emissions, shown in Table 10.
5. The BAAQMD does not have an adopted Threshold of Significance for construction-related GHG emissions.

Abbreviations:

CalEEMod® - California Emissions Estimate Model
GHG - greenhouse gases
CH_4 - methane
CO_2 - carbon dioxide
N_2O - nitrous oxide
CO_2e - carbon dioxide equivalent
MT - metric ton
IPCC - Intergovernmental Panel on Climate Change

Table 16V
Building Operational Capacity For Emissions Scaling
Willow Village - Increased Residential Variant Analysis
Menlo Park, California

Building or Parcel[1]		Percent Breakdown of Land Use Type by Building						Percent of Year Building is Operational[2]		
		Office	Retail	Residential	Hotel	Parking	Park	Year 4	Year 5	Year 6
North Garage		--	--	--	--	45%	--	100%	100%	100%
Office Building 4		11%	48%	--	--	--	--	21%	100%	100%
Meeting, Collaboration, Park		28%	--	--	--	--	--	0%	0%	82%
Hotel Construction		--	--	--	100%	--	--	0%	41%	100%
Town Square		--	--	--	--	--	14%	0%	58%	100%
Parcel 2		--	19%	17%	--	12%	--	0%	34%	100%
Parcel 3		--	26%	22%	--	12%	--	0%	10%	100%
Other		0.38%	--	--	--	0.73%	86%	100%	100%	100%
South Garage		--	--	--	--	23.9%	--	29%	100%	100%
Office Building 3		13%	--	--	--	--	--	0%	76%	100%
Office Building 1		8.4%	--	--	--	--	--	5%	100%	100%
Office Building 2		10%	--	--	--	--	--	0%	98%	100%
Office Building 5		15%	--	--	--	--	--	0%	78%	100%
Office Building 6		14%	--	--	--	--	--	0%	53%	100%
Parcel 6		--	--	9%	--	1.4%	--	0%	0%	88%
Parcel 7		--	--	6.2%	--	0.5%	--	0%	99%	100%
Parcels 4 + 5		--	2.4%	46%	--	4.4%	--	0%	0%	11%
Hamilton Avenue Parcels North and South		--	3.7%	--	--	--	--	0%	54%	100%
Partial Buildout by Year and Land Use Type[3]	**Year 4**	3.1%	10%	0%	0%	53%	86%			
	Year 5	58%	59%	14%	41%	75%	94%			
	Year 6	95%	98%	58%	100%	96%	100%			

Notes:

1. Construction area/subphasing information and full buildout square footage by building provided by Project Applicant.
2. The percentage of year that each building is operational is calculated using the last day of construction for each building. For each partial year of construction, the building is assumed to be operational during the fraction of the year between the last day of construction and the end of that year. The building is assumed to be 0% operational for each full year of construction and 100% operational for each year full year after the end of construction.
3. Partial buildout for Year 4, Year 5, and Year 6 were calculated based on the portion of building area that becomes operational each year over the total building area for each land use type.

Abbreviations:

% - percent

Table 17V
Traffic Data Provided by the Transportation Engineer
Willow Village - Increased Residential Variant Analysis
Menlo Park, California

Daily Trips Rates and VMT

Land Use	Fleet Type / Land Use	Trip Rate Units[1]	Weekday Trips per Day per Unit[1]	Weekday daily VMT[2]
			TOTAL	TOTAL
Main Project Site - Existing Conditions	Cars	per 1,000 s.f.	9.19	110,860
	Trucks	per 1,000 s.f.	0.22	2,640
	Shuttles	per 1,000 s.f.	0.66	21,088
	On-Demand	per 1,000 s.f.	0.66	7,919
Campus District - Full Buildout	Cars	per 1,000 s.f.	10.05	178,766
	Trucks	per 1,000 s.f.	0.23	4,056
	Shuttles	per 1,000 s.f.	0.44	21,088
	On-Demand	per 1,000 s.f.	0.68	12,168
Town Square and the Residential/Shopping District - Full Buildout	Residential	per d.u.	4.35	79,792
	Retail[3]	per 1,000 s.f.	25.07	33,594
	Hamilton Avenue Parcels North and South[3]	per 1,000 s.f.	28.31	1,461
	Park	per acre	42.80	1,147
	Hotel	per room	6.69	14,814

Notes:

1. Daily project trip rates were provided by the Transportation Engineer in terms of trip rates per land use amount.
2. Daily Project VMT provided by the Transportation Engineer include reductions for pass-by and diverted trips. Daily VMT is given in VMT per day. For the increased residential variant, the residential trips and VMT are based on an increasing the residential dwelling units by 200, to a total of 1930 residential dwelling units.
3. The trip rates and VMT for Hamilton Avenue Parcels North and South were provided separately and added to retail totals in calculations.

Abbreviations:

VMT - Vehicle miles traveled
s.f. - Square feet
d.u. - Dwelling unit

Table 18V
Trip Rates and VMT for Existing Conditions and Project Operations
Willow Village - Increased Residential Variant Analysis
Menlo Park, California

Project Area[1]	Land Use	Fleet Type[2]	Total Weekday Daily VMT[3]	Total Weekday Daily Trips[3]	Total Average Daily VMT[4]	Total Average Daily Trips[4]	Total Annual VMT[5]	Total Annual Trips[5]
			VMT/day	trips/day	VMT/day	trips/day	VMT/year	trips/year
Existing Conditions	Campus District	Cars	110,860	9,221	84,225	7,006	30,742,244	2,557,040
		Trucks	2,640	220	2,005	167	731,958	60,882
		Shuttles	21,088	659	15,063	470	3,916,358	122,319
		On-Demand	7,919	659	5,656	470	1,470,590	122,319
Year 4	Campus District	Cars	5,480	493	4,079	367	1,488,677	133,874
		Trucks	124	11	93	8.3	33,776	3,037
		Shuttles	646	22	462	15	120,048	3,996
		On-Demand	373	34	266	24	69,267	6,229
	Residential	San Mateo	0	0	0	0	0	0
	Retail	San Mateo	3,563	510	3,442	492	1,256,238	179,684
	Park	San Mateo	987	147	3,652	545	1,332,917	198,943
	Hotel	San Mateo	0	0	0	0	0	0
Year 5	Campus District	Cars	104,523	9,400	77,797	6,996	28,395,923	2,553,590
		Trucks	2,371	213	1,765	159	644,259	57,937
		Shuttles	12,330	410	8,807	293	2,289,859	76,227
		On-Demand	7,114	640	5,082	457	1,321,238	118,816
	Residential	San Mateo	11,209	1,180	10,956	1,153	3,999,096	420,957
	Retail	San Mateo	20,794	2,974	20,085	2,873	7,331,178	1,048,602
	Park	San Mateo	1,080	161	3,993	596	1,457,557	217,546
	Hotel	San Mateo	6,049	527	5,816	507	2,122,939	184,925
Year 6	Campus District	Cars	169,737	15,264	126,336	11,361	46,112,784	4,146,833
		Trucks	3,851	346	2,866	258	1,046,226	94,085
		Shuttles	20,023	667	14,302	476	3,718,554	123,787
		On-Demand	11,553	1,039	8,252	742	2,145,589	192,949
	Residential	San Mateo	46,475	4,892	45,427	4,782	16,580,889	1,745,357
	Retail	San Mateo	34,307	4,907	33,137	4,740	12,095,154	1,730,009
	Park	San Mateo	1,147	171	4,243	633	1,548,641	231,140
	Hotel	San Mateo	14,814	1,290	14,244	1,241	5,199,035	452,878
Full Buildout	Campus District	Cars	178,766	16,076	133,057	11,966	48,565,689	4,367,418
		Trucks	4,056	365	3,019	271	1,101,879	99,090
		Shuttles	21,088	702	15,063	501	3,916,358	130,371
		On-Demand	12,168	1,094	8,691	782	2,259,721	203,212
	Residential	San Mateo	79,792	8,399	77,992	8,210	28,467,226	2,996,550
	Retail	San Mateo	35,055	5,014	33,860	4,843	12,358,799	1,767,718
	Park	San Mateo	1,147	171	4,243	633	1,548,641	231,140
	Hotel	San Mateo	14,814	1,290	14,244	1,241	5,199,035	452,878

Table 18V
Trip Rates and VMT for Existing Conditions and Project Operations
Willow Village - Increased Residential Variant Analysis
Menlo Park, California

Notes:

1. Partial years are scaled from the full buildout based on the portion of each land use that becomes operational for each year of construction. See VariantTable 16 for more details.
2. The fleet type for each land use was provided by the Transportation Engineer. The Campus District will have various fleets for specific uses. Town Square and the Residential/Shopping District land uses (Residential, Retail, Park, and Hotel) are analyzed assuming a default San Mateo fleet. Hamilton Avenue Parcels North and South are combined with retail land uses. See AQTR Table 19 for more information.
3. Daily VMT and trip rates were provided by the Transportation Engineer on October 5, 2021. Total trip rates are calculated using land uses in AQTR Table 1.
4. Weekday VMT and trip rates provided by the Transportation Engineer were scaled to average trip rates using the ratio between CalEEMod® weekday and weekend one-way trip rates.
5. Annual trips and VMT are calculated by multiplying daily values by 365 for all fleets with the exception of shuttles and on-demand, which are multiplied by 260 days/year.

Abbreviations:

VMT - vehicle miles traveled

References:

California Air Pollution Control Officers Association (CAPCOA). California Emissions Estimator Model (CalEEMod®), Version 2020.4.0. Available online at http://www.caleemod.com/

Table 21aV
Mobile CAP Emissions Before EV Reductions
Willow Village - Increased Residential Variant Analysis
Menlo Park, California

Year	Land Use[1]	Fleet Type	Annual Trips[2]	Annual VMT[2]	CAP Emissions[3,4]							
					ROG	NOX	PM_{10}	$PM_{2.5}$	ROG	NOX	PM_{10}	$PM_{2.5}$
			trips/year	VMT/year	tons/year				lb/day			
Existing Conditions	Campus District	Cars	2,557,040	30,742,244	4.9	4.1	3.1	0.59	27	22	17	3.3
		Trucks	60,882	731,958	0.18	2.0	0.17	0.068	1.0	11	0.92	0.37
		Shuttles	122,319	3,916,358	0.027	1.8	0.59	0.15	0.15	10	3.3	0.80
		On-Demand	122,319	1,470,590	0.19	0.15	0.15	0.028	1.1	0.85	0.81	0.15
			2,862,559	**36,861,150**	**5.3**	**8.0**	**4.0**	**0.84**	**29**	**44**	**22**	**4.6**
Partial Buildout - Year 4	Campus District	Cars	133,874	1,488,677	0.19	0.12	0.15	0.028	1.1	0.65	0.82	0.15
		Trucks	3,037	33,776	0.0041	0.035	0.0065	0.0020	0.023	0.19	0.036	0.011
		Shuttles	3,996	120,048	0.0011	0.071	0.018	0.0046	0.0058	0.39	0.10	0.025
		On-Demand	6,229	69,267	0.0077	0.0046	0.0069	0.0013	0.042	0.025	0.038	0.0071
	Residential	San Mateo	0	0	0	0	0	0	0	0	0	0
	Retail	San Mateo	179,684	1,256,238	0.19	0.21	0.13	0.027	1.1	1.2	0.74	0.15
	Park	San Mateo	198,943	1,332,917	0.21	0.23	0.14	0.029	1.2	1.2	0.78	0.16
	Hotel	San Mateo	0	0	0	0	0	0	0	0	0	0
			525,763	**4,300,922**	**0.61**	**0.67**	**0.46**	**0.092**	**3.4**	**3.7**	**2.5**	**0.50**
Partial Buildout - Year 5	Campus District	Cars	2,553,590	28,395,923	3.6	2.1	2.9	0.53	20	11	16	2.9
		Trucks	57,937	644,259	0.073	0.60	0.12	0.037	0.40	3.3	0.68	0.20
		Shuttles	76,227	2,289,859	0.021	1.4	0.35	0.089	0.11	7.4	1.9	0.49
		On-Demand	118,816	1,321,238	0.14	0.081	0.13	0.025	0.78	0.45	0.72	0.13
	Residential	San Mateo	420,957	3,999,096	0.49	0.57	0.43	0.085	2.7	3.1	2.3	0.47
	Retail	San Mateo	1,048,602	7,331,178	1.1	1.1	0.78	0.16	5.9	6.3	4.3	0.86
	Park	San Mateo	217,546	1,457,557	0.22	0.23	0.16	0.031	1.2	1.3	0.85	0.17
	Hotel	San Mateo	184,925	2,122,939	0.23	0.29	0.23	0.045	1.3	1.6	1.2	0.25
			4,678,601	**47,562,050**	**5.8**	**6.3**	**5.1**	**1.0**	**32**	**35**	**28**	**5.5**
Partial Buildout - Year 6	Campus District	Cars	4,146,833	46,112,784	5.6	3.1	4.6	0.86	31	17	25	4.7
		Trucks	94,085	1,046,226	0.11	0.89	0.20	0.059	0.62	4.9	1.1	0.33
		Shuttles	123,787	3,718,554	0.034	2.2	0.57	0.15	0.19	12	3.1	0.80
		On-Demand	192,949	2,145,589	0.22	0.12	0.21	0.040	1.2	0.68	1.2	0.22
	Residential	San Mateo	1,745,357	16,580,889	1.9	2.2	1.8	0.35	11	12	9.7	1.9
	Retail	San Mateo	1,730,009	12,095,154	1.7	1.8	1.3	0.26	9.3	10	7.1	1.4
	Park	San Mateo	231,140	1,548,641	0.22	0.23	0.17	0.033	1.2	1.3	0.91	0.18
	Hotel	San Mateo	452,878	5,199,035	0.55	0.65	0.55	0.11	3.0	3.6	3.0	0.60
			8,717,037	**88,446,872**	**10**	**11**	**9.4**	**1.9**	**57**	**61**	**52**	**10**
Full Buildout	Campus District	Cars	4,367,418	48,565,689	5.9	3.3	4.9	0.91	32	18	27	5.0
		Trucks	99,090	1,101,879	0.12	0.94	0.21	0.062	0.65	5.2	1.2	0.34
		Shuttles	130,371	3,916,358	0.036	2.3	0.61	0.15	0.20	13	3.3	0.84
		On-Demand	203,212	2,259,721	0.23	0.13	0.23	0.042	1.3	0.71	1.2	0.23
	Residential	San Mateo	2,996,550	28,467,226	3.3	3.7	3.0	0.60	18	21	17	3.3
	Retail	San Mateo	1,767,718	12,358,799	1.7	1.8	1.3	0.26	9.5	10	7.2	1.4
	Park	San Mateo	231,140	1,548,641	0.22	0.23	0.17	0.033	1.2	1.3	0.91	0.18
	Hotel	San Mateo	452,878	5,199,035	0.55	0.65	0.55	0.11	3.0	3.6	3.0	0.60
			10,248,378	**103,417,346**	**12**	**13**	**11**	**2.2**	**66**	**72**	**60**	**12**

Table 21aV
Mobile CAP Emissions Before EV Reductions
Willow Village - Increased Residential Variant Analysis
Menlo Park, California

Notes:

1. Hamilton Avenue Parcels North and South were provided separately and added to the retail land use totals.
2. Trip counts and VMTs by land use type were broken out by year using a scaling factor representing the percent of each fleet that is operational in a given year leading up to full buildout. This percent was determined based on the square footage of the land use associated with each fleet that is operational in a given year relative to that land use's full buildout square footage. See Table 16 for more details on scaling. See Table 18 for Project Trip Rates and VMT.
3. Criteria air pollutants are calculated by year using emission factors for the associated year and fleet from EMFAC2021. Electric vehicles are not included in the emission factors for Campus District fleets (all fleet types except San Mateo Fleet), as reductions associated with EVs are considered separately. Project emission factors are shown in AQTR Table 20a.
4. Full buildout emissions are conservatively calculated using 2026 emission factors.

Abbreviations:

EV - electric vehicle
lb - pound
NO_x - nitrogen oxides
VMT- vehicle miles traveled
PM_{10} - particulate matter less than 10 microns in diameter
$PM_{2.5}$ - particulate matter less than 2.5 microns in diameter
ROG - reactive organic gases

References:

California Air Resources Board. EMFAC2021. Available at: https://arb.ca.gov/emfac/

Table 21bV
Summary of Mobile GHG Emissions Before EV Reductions
Willow Village
Menlo Park, California - Increased Residential Variant Analysis

Year	Land Use[1]	Fleet Type	Annual Trips[2]	Annual VMT[2]	GHGs Emissions[3,4]			
					CO_2	CH_4	N_2O	CO_2e
			trips/year	VMT/year	MT/year			
Existing Conditions	Campus District	Cars	2,557,040	30,742,244	9,997	0.41	0.32	10,104
		Trucks	60,882	731,958	834	0.043	0.082	859
		Shuttles	122,319	3,916,358	4,965	0.019	0.78	5,199
		On-Demand	122,319	1,470,590	444	0.017	0.014	448
			2,862,559	**36,861,150**	**16,240**	**0.48**	**1.2**	**16,610**
Full Buildout	Campus District	Cars	4,367,418	48,565,689	14,353	0.41	0.34	14,465
		Trucks	99,090	1,101,879	1,086	0.040	0.11	1,119
		Shuttles	130,371	3,916,358	4,772	0.0037	0.75	4,996
		On-Demand	203,212	2,259,721	611	0.016	0.015	616
	Residential	San Mateo	2,996,550	28,467,226	9,942	0.33	0.40	10,069
	Retail	San Mateo	1,767,718	12,358,799	4,351	0.17	0.19	4,411
	Park	San Mateo	231,140	1,548,641	546	0.022	0.024	554
	Hotel	San Mateo	452,878	5,199,035	1,809	0.055	0.070	1,831
			10,248,378	**103,417,346**	**37,469**	**1.0**	**1.9**	**38,060**

Notes:
1. Hamilton Avenue Parcels North and South were provided separately and added to the retail land use totals.
2. VMT and trip rates for the increased residential variant were provided by the Transportation Engineer on February 9, 2022, and are summarized in Table 1
3. Greenhouse Gases are calculated by year using emission factors for the associated year and fleet from EMFAC2021. Electric vehicles are not included in the emission factors for Campus District fleets (all fleet types except San Mateo Fleet), as reductions associated with EVs are considered separately. Project emission factors are shown in AQTR Table 20b.
4. Full buildout emissions are conservatively calculated using 2026 emission factors.

Abbreviations:

GHG - Greenhouse Gas
CO_2 - carbon dioxide
CH_4 - methane
N_2O - Nitrous Oxide
CO_2e - Carbon dioxide equivalent
EV - electric vehicle
MT - Metric Ton
VMT- vehicle miles traveled

References:

California Air Resources Board. EMFAC2021. Available at: https://arb.ca.gov/emfac/

Table 22V
EV Assumptions for Campus District
Willow Village - Increased Residential Variant Analysis
Menlo Park, California

Campus District EV Parameters

Description	Units	Value
Electricity required per mile charged[1]	kWh/mi	0.30
Total Charging Energy of Meta Campuses[2]	kWh/year	3,791,856
Total Area of Meta Campuses[2]	sqf	4,753,594
Total Meta Campus Energy per Area[2]	kWh/sqf	0.80
Existing Conditions Fleet eVMT per Total VMT[3]	Percent	5.5%
Full Buildout Fleet MSS eVMT per Total VMT[4]	Percent	14%
Electricity Loss Factor[5]	Percent	10%
Existing Conditions Charging Energy Usage[6]	kWh/year	534,955
Full Buildout Charging Energy Usage[7]	kWh/year	2,925,608

eVMTs from Project Chargers at the proposed Campus District

Year	Land Use Category[8]	Project Increase in Annual eVMTs[9]
		eVMT/year
Existing Conditions	Campus District	1,783,182
Partial Buildout - Year 4		298,927
Partial Buildout - Year 5		5,701,922
Partial Buildout - Year 6		9,259,481
Full Buildout		9,752,026

Notes:

1. An average EV fuel economy of 0.30 kWh per mile was used. The fuel economy is based on electric fleet data from fueleconomy.gov. Available at: https://www.fueleconomy.gov/.
2. Meta provided energy usage and areas for EV charging at their existing campuses: Classic, Bayfront, Chilco, Willow, Gateway. The provided data was used to evaluate an average ratio of EV charging energy usage per campus area.
3. The percent eVMT for existing conditions is calculated by dividing the eVMT in existing conditions by the annual VMT from the 'Car' and 'On-Demand' vehicle types in existing conditions. For existing conditions VMT, see Variant Table 18.
4. ARB is currently preparing its 2020 Mobile Source Strategy (MSS) update to the ARB VISION Model (version 2.1) estimating future fleet characteristics. The Mobile Source Strategy projects eVMTs reflecting the aspirational target identified in EO N-79-20, assuming 100% of passenger vehicle sales in California are ZEV or PHEV, and GHG emissions assumed to have reduced by 2.0% per year from 2026 to 2035. The increase in annual eVMTs charged by the Campus District is scaled from the increase in fleet eVMT from existing conditions to full buildout.
5. A 10% Loss Factor was applied to the annual project energy uses to account for expected losses. Source available at: https://www.fueleconomy.gov/
6. The EV charging energy consumption for existing conditions was based on existing charger energy usage data for Willow Village for 2019 provided by the Project applicant. The total energy usage was reduced assuming a 10% loss factor.

Table 22V
EV Assumptions for Campus District
Willow Village - Increased Residential Variant Analysis
Menlo Park, California

7. The EV charging energy consumption for the Project at full buildout was determined using an average ratio of existing charging sites kWh/sqf and multiplying it by the Campus District land use area at full buildout (1.6 million sqf). This number was scaled by the increase in fleet eVMT from existing conditions to full buildout based on the MSS scenario of the VISION model. A 10% loss factor was applied to the total energy usage per year. All relevant data sources were provided by the Project applicant.
8. Meta offers an EV charging program to its workers. Charging on campus is free and valets move cars into chargers to maximize charging time. Therefore, the EV charging annual electricity for the Campus District was provided based on studies from Meta's existing campuses in the area. The electricity for EV charging at the Project would be supplied with 100% renewable energy.
9. For years where the Campus District is only operational a proportion of the year, the annual kWh is multiplied by a scaling fraction for the Campus District land use, found in Table 16.

Abbreviations:

EV - Electric vehicle (includes battery electric or plug-in hybrid technology)
eVMT- Electric vehicle miles traveled
kWh - Kilowatt hour
sqf- Square foot
MSS - Mobile Source Strategy

References:

City of Menlo Park Nonresidential EV Charging Requirements. Published July 17, 2019. Available at: https://www.menlopark.org/DocumentCenter/View/22382/Nonresidential-EV-Charging-Requirements

California Air Resources Board. Vision Scenario Planning. Available at: https://ww2.arb.ca.gov/resources/documents/vision-scenario-planning

CalEEMod Appendix D. Available at: http://www.aqmd.gov/docs/default-source/caleemod/user-guide-2021/appendix-d2020-4-0-full-merge.pdf?sfvrsn=12

Table 23V
EV Assumptions for Town Square and the Residential/Shopping District
Willow Village - Increased Residential Variant Analysis
Menlo Park, CA

EV Assumptions

Description	Units	Input
Miles Charged per Hour Charged[1]	(miles/hr)	21
Scenario1[2]	-	Reference
Scenario 2[2]	-	MSS
Number of Chargers[3]	Total #	249
Average Daily Hours for Charging per Charger[4]	hr	10
Annual Days of Charger Activity[4]	days/yr	365

eVMTs from Project Chargers - Reference Scenario

Year	Total Annual Project Trips[5,6]	Total Annual Project VMT[5,6]	% of total Fleet using Electric Fuel[2]	Annual Project EV Trips[6]	Annual Project Electric VMT[6]	Number of Project EV Chargers Available[7]	Total Annual EV Charge Hours Available from Project Chargers[8]	Number of EV Annual VMT Available from Project Chargers[8]	Project Chargers at Capacity Relative to Project Electric VMT[9]	Total Annual eVMTs Charged by Project[9]
	trips/year	VMT/year		trips/year	eVMT/year		hours/year	eVMT/year		
Partial Buildout - Year 4	378,626	2,589,154	**4.7%**	17,714	121,137	131	477,218	10,021,583	Under Capacity	**121,137**
Partial Buildout - Year 5	1,872,030	14,910,770	**5.2%**	97,457	776,244	187	683,944	14,362,828	Under Capacity	**776,244**
Partial Buildout - Year 6	4,159,383	35,423,719	**5.6%**	231,865	1,974,696	239	871,770	18,307,160	Under Capacity	**1,974,696**
Full Buildout	5,448,287	47,573,700	**5.9%**	322,805	2,818,688	249	908,850	19,085,850	Under Capacity	**2,818,688**

eVMTs from Project Chargers - Mobile Source Strategy (MSS) Scenario

Year	Total Annual Project Trips[5,6]	Total Annual Project VMT[5,6]	% of total Fleet using Electric Fuel[2]	Annual Project EV Trips[6]	Annual Project Electric VMT[6]	Number of Project EV Chargers Available[7]	Total Annual EV Charge Hours Available from Project Chargers[8]	Number of EV Annual VMT Available from Project Chargers[8]	Project Chargers at Capacity Relative to Project Electric VMT[9]	Total Annual eVMTs Charged by Project[9]
	trips/year	VMT/year		trips/year	eVMT/year		hours/year	eVMT/year		
Partial Buildout - Year 4	378,626	2,589,154	**8.3%**	31,482	215,280	131	477,218	10,021,583	Under Capacity	**215,280**
Partial Buildout - Year 5	1,872,030	14,910,770	**10.6%**	198,125	1,578,074	187	683,944	14,362,828	Under Capacity	**1,578,074**
Partial Buildout - Year 6	4,159,383	35,423,719	**13.1%**	543,454	4,628,372	239	871,770	18,307,160	Under Capacity	**4,628,372**
Full Buildout	5,448,287	47,573,700	**15.8%**	860,576	7,514,434	249	908850	19,085,850	Under Capacity	**7,514,434**

Notes:

1. The miles charged per hour charged is representative of a typical charge rate for an EV of 6.25 kWh per hour and a fuel economy of 0.30 kWh per mile. The charge rate is based on capability of existing battery-electric vehicles and Level 2 charging stations. Reference: Chargepoint. 2017. Level Up Your EV Charging Knowledge. Available at: https://www.chargepoint.com/blog/level-your-ev-charging-knowledge/. The fuel economy is based on electric fleet data from fueleconomy.gov. Available at: https://www.fueleconomy.gov/.
2. The two scenarios analyzed are the Reference and the Mobile Source Strategy scenarios. ARB is currently preparing its 2020 Mobile Source Strategy (MSS) update to the ARB VISION Model (version 2.1). The 2020 MSS uses "scenario planning to take an integrated approach to identifying the technology trajectories and programmatic concepts" to model projected years of electric vehicle miles for assessed scenarios. The Mobile Source Strategy projects eVMTs reflecting the aspirational target identified in EO N-79-20, assuming 100% of passenger vehicle sales in California are ZEV or PHEV, and GHG emissions assumed to have reduced by 2.0% per year from 2026 to 2035. The 2020 update only considers passenger vehicles (LDA, LDT1, LDT2, and MDV). To determine the eVMT percent of the passenger vehicle fleets, the 2020 MSS update was downloaded in July 13, 2021. The increase in annual eVMTs charged by the Project from the Reference Scenario to the MSS Scenario is used to determine the eVMTs the Project can take credit for based on providing additional charging infrastructure for the state to reach aspirational EV fleet penetration.
3. The number of chargers in the Town Square and the Residential/Shopping District was provided by the Project Applicant in the Willow Village Mixed Use Development Concept Level Energy Use Summary, dated June 14, 2021, detailing chargers available for all mixed-use traffic. 249 EV Charging Stations are available to serve the 1,694 residential spaces and 500 commercial spaces.
4. Meta offers a valet service to charge EVs from 7am to 7pm, average daily hours of availability for charging per charger is conservatively assumed to be 10 hours per day. When demand is met, the full 10 hours will be used for charging, with each vehicle cycling out of the charging spot before or as the car reaches full charge. The number of chargers are available for all Town Square and the Residential/Shopping District land uses, and it is expected that there will be 10 hours a day of active charging taking place due to the frequency of turnover associated with retail, restaurant, hotel, and park land uses. Town Square and the Residential/Shopping District land uses are assumed to operate 365 days per year. Any charging inefficiencies associated with cars remaining plugged in after reaching full charge is assumed to balance out due the likelihood of more than 10 hours of activity a day associated with Town Square and the Residential/Shopping District activity.
5. Town Square and the Residential/Shopping District Total VMT and trips includes all proposed Project residential, retail, park, and hotel land uses, consistent with Table 18. Retail land uses include Hamilton Parcels North and South and are added to total VMT and trips.
6. EV Annual Trips and EV Annual VMT are determined based on Project trips and VMTs and the VISION Reference Scenario percent of Electric Fleet. These eVMTs (electric vehicle miles traveled) represents the number of project VMTs that are driven by electric vehicles.
7. 249 EV Charging Stations are proposed for the full buildout. To reflect the EV charging stations that will come online during construction in the partial years leading up to full buildout, a scaling factor was applied based on the ratio of square feet of the parking land use that is built out in a given year to the total square feet that will be built. The scaling factor for a given year was applied to the 249 chargers at full buildout. To see scaling factors used, refer to the parking land use from Table 16.
8. Total annual charge hours available from the project are determined by multiplying the average daily hours of charging per charger (10 hours) by the annual days of charger activity (365 days). The annual charge hours available from the project are then multiplied by 25 miles charged per charge hour to determine the number of eVMT available from the project.
9. The Project EV chargers for Town Square and the Residential/Shopping District land uses are determined to be at capacity, meaning used fully for all available charge hours per day, when the electric vehicle miles associated with the Project are in excess of the maximum electric vehicle miles the Project chargers can charge. If there is a surplus of chargers relative to EVs coming to the site, then the Project chargers are under-capacity, and only a fraction of chargers will be used as the number of EVs coming to the site are fewer than the total number of charger capacity. If there is a surplus of EVs coming to the site relative to the chargers at the site, all chargers will be used and the site will be at capacity. In the scenario when the chargers are at capacity, the full capacity of VMTs the site can charge are assumed to be charged.

Abbreviations:

EV - electric vehicle (includes battery electric or plug-in hybrid technology)
Hr - hour
TDM - Transportation Demand Management
VMT - vehicle miles travelled
eVMT - electric vehicle mile traveled

References:

U.S. Census. 2019. Factfinder. Available at: https://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?src=bkmk
California Air Pollution Control Officers Association (CAPCOA). California Emissions Estimator Model (CalEEMod), Version 2016.3.2. Available online at http://www.caleemod.com/
California Air Resources Board. EMFAC2021. Available at: https://arb.ca.gov/emfac/
California Air Resources Board. Vision Scenario Planning. Available at: https://ww2.arb.ca.gov/resources/documents/vision-scenario-planning

Table 24aV
EV CAP Emissions Reductions Summary
Willow Village - Increased Residential Variant Analysis
Menlo Park, California

Town Square and the Residential/Shopping District

Year	Scenario	Miles Charged by Project Chargers[1]	EV Trips Charged by Project Chargers[1]	eVMT from Additional Project Chargers[2]	Trip Counts from additional Project Chargers[2]	Electric VMT CAP Emissions Reduction (lb/year)[3,4]			
				eVMT/year	trips/year	ROG	NOx	PM_{10}	$PM_{2.5}$
Existing Conditions	Reference	0	0	0	0	0	0	0	0
	MSS	0	0						
Year 4	Reference	121,137	17,714	94,143	13,767	-33	-18	-0.34	-0.31
	MSS	215,280	31,482						
Year 5	Reference	776,244	97,457	801,830	100,669	-246	-133	-2.7	-2.5
	MSS	1,578,074	198,125						
Year 6	Reference	1,974,696	231,865	2,653,676	311,589	-752	-400	-8.4	-7.7
	MSS	4,628,372	543,454						
Full Buildout	Reference	2,818,688	322,805	4,695,746	537,771	-1,311	-700	-15	-14
	MSS	7,514,434	860,576						

Campus District

Year	eVMT from Additional Project Chargers[5]	Trip Counts from additional Project Chargers[5,6]	Electric VMT CAP Emissions Reduction (lb/year)[3,4]			
	eVMT/year	trips/year	ROG	NOx	PM_{10}	$PM_{2.5}$
Existing Conditions	1,783,182	148,319	-564	-472	-7.6	-7.0
Year 4	298,927	26,882	-78	-47	-1.0	-0.91
Year 5	5,701,922	512,763	-1,432	-833	-18	-17
Year 6	9,259,481	832,687	-2,249	-1,262	-28	-26
Full Buildout	9,752,026	876,981	-2,369	-1,329	-30	-27

Year	Electric VMT CAP Emissions Reduction (lb/year)			
	ROG	NOx	PM_{10}	$PM_{2.5}$
Existing Conditions	-564	-472	-7.6	-7.0
Partial Buildout- Year 4	-111	-65	-1.3	-1.2
Partial Buildout- Year 5	-1,677	-966	-21	-19
Partial Buildout- Year 6	-3,002	-1,662	-37	-34
Full Buildout	-3,680	-2,030	-45	-41

Notes:

1. Expected eVMT and trips charged by the Project chargers in Town Square and the Residential/Shopping District land uses are calculated based on the San Mateo Fleet, charger usage assumptions, ARB's Vision Model, and traffic data provided by the Transportation Engineer. For calculation details, see Table 23.
2. Emissions reductions from EV charging represent the decrease in emissions from increases in electric vehicle use due to the installation of EV chargers throughout the site. For Town Square and the Residential/Shopping District land uses, the eVMT and trips from additional Project chargers is calculated based on the difference between the MSS scenario and the baseline scenario, representing the additional eVMT due to the installation of additional chargers.
3. Emissions reductions use emission factors developed in EMFAC2021 that represent passenger vehicles (LDA, LDT1, LDT2, MCY). The eVMTs determined for Town Square and the Residential/Shopping District are based on ARB's VISION Model, which includes expected electric vehicle fleet % for passenger vehicles only (LDA, LDT1, LDT2, MCY).
4. EVs emit particulate matter brake wear and tire wear, therefore those emissions are not considered in the reductions.
5. Expected eVMT charged by additional Project chargers is measured based on anticipated charging energy usage provided by the Project Applicant. For calculation details see Variant Table 22.
6. Trip counts from Project chargers were calculated by dividing the increased eVMTs from project chargers by the average VMTs per trip for the passenger vehicles (Cars) in a given year, based on traffic data provided by the Transportation Engineer.

Abbreviations:

eVMT - electric vehicle miles traveled
lb - pound
EV - electric vehicle
ROG - reactive organic gases
NOx - nitrogen oxides
PM_{10} - particulate matter less than 10 microns in diameter
$PM_{2.5}$ - particulate matter less than 2.5 microns in diameter

References:

California Air Resources Board. Vision Scenario Planning. Available at: https://ww2.arb.ca.gov/resources/documents/vision-scenario-planning

Table 24bV
EV GHG Emissions Reductions Summary
Willow Village - Increased Residential Variant Analysis
Menlo Park, California

Town Square and the Residential/Shopping District

Year	Scenario	Miles Charged by Project Chargers[1]	EV Trips Charged by Project Chargers[1]	eVMT from Additional Project Chargers[2]	Trip Counts from additional Project Chargers[2]	Electric VMT GHG Emissions Reduction (MT/year)[3,4]			
				eVMT/year	trips/year	CO_2	CH_4	N_2O	CO_2e
Full Buildout	Reference	2,818,688	322,805	4,695,746	537,771	-1,396	-0.047	-0.037	-1,408
	MSS	7,514,434	860,576						

Campus District

Year	eVMT from Additional Project Chargers[4]	Trip Counts from additional Project Chargers[4,5]	Electric VMT GHG Emissions Reduction (MT/year)[3]			
	eVMT/year	trips/year	CO_2	CH_4	N_2O	CO_2e
Existing Conditions	1,783,182	148,319	-580	-0.024	-0.019	-586
Full Buildout	9,752,026	876,981	-2,882	-0.082	-0.069	-2,905

Year	Electric VMT GHG Emissions Reduction (MT/year)			
	CO_2	CH_4	N_2O	CO_2e
Existing Conditions	-580	-0.024	-0.019	-586
Full Buildout	-4,278	-0.13	-0.11	-4,313

Notes:

1. Expected eVMT and trips charged by the Project chargers in Town Square and the Residential/Shopping District land uses are calculated based on the San Mateo Fleet, charger usage assumptions, ARB's Vision Model, and traffic data provided by the Transportation Engineer. For calculation details, see Table 23.

2. Emissions reductions from EV charging represent the decrease in emissions from increases in electric vehicle use due to the installation of EV chargers throughout the site. For Town Square and the Residential/Shopping District land uses, the eVMT and trips from additional Project chargers is calculated based on the difference between the MSS scenario and the baseline scenario, representing the additional eVMT due to the installation of additional chargers.
3. Emissions reductions use emission factors developed in EMFAC2021 that represent passenger vehicles (LDA, LDT1, LDT2, MCY). The eVMTs determined for Town Square and the Residential/Shopping District are based on ARB's VISION Model, which includes expected electric vehicle fleet % for passenger vehicles only (LDA, LDT1, LDT2, MCY).
4. Expected eVMT charged by additional Project chargers is measured based on anticipated charging energy usage provided by the Project Applicant. For calculation details see Table 22.
5. Trip counts from Project chargers were calculated by dividing the increased eVMTs from project chargers by the average VMTs per trip for the passenger vehicles (Cars) in a given year, based on traffic data provided by the Transportation Engineer.

Abbreviations:

GHG - Greenhouse Gas
CO_2 - carbon dioxide
CH_4 - methane
N_2O - Nitrous Oxide
CO_2e - Carbon dioxide equivalent
eVMT - electric vehicle miles traveled
MT - metric ton
EV - electric vehicle

References:

California Air Resources Board. Vision Scenario Planning. Available at: https://ww2.arb.ca.gov/resources/documents/vision-scenario-planning

Table 25aV
Summary of Mobile CAP Emissions
Willow Village - Increased Residential Variant Analysis
Menlo Park, California

Total Emissions Before Reductions:[1]

Year	CAP Emissions without Reductions (ton/year)			
	ROG	NO_x	PM_{10}[2]	$PM_{2.5}$[2]
Total Emissions by Year				
Existing Conditions[3]	5.0	8.0	4.0	0.84
Year 4	0.61	0.67	0.46	0.092
Year 5	5.8	6.3	5.1	1.0
Year 6	10	11	9.4	1.9
Full Buildout	12	13	11	2.2
Net Emissions by Year				
Full Buildout	**7.1**	**5.1**	**7.0**	**1.3**

Total Emissions with Reductions:[4]

Year	CAP Emissions with Reductions (ton/year)			
	ROG	NO_x	PM_{10}[2]	$PM_{2.5}$[2]
Total Emissions by Year				
Existing Conditions[3]	5.0	8.0	4.0	0.84
Year 4	0.56	0.64	0.46	0.091
Year 5	5.0	5.9	5.1	1.0
Year 6	8.9	10	9.4	1.8
Full Buildout	**10**	**12**	**11**	**2.2**
Net Emissions by Year				
Full Buildout	**5.3**	**4.1**	**7.0**	**1.3**

Notes:

1. Calculations of CAP emissions before reductions are shown in detail in Table 21a. Net emissions subtract the emissions from the existing conditions in 2019.
2. PM10 and PM2.5 emissions include exhaust, tire wear, brake wear, and fugitive dust. Fugitive dust emissions factors are calculated in AQTR Table 8.
3. The Existing Conditions includes EV reductions associated with existing Project Site chargers.
4. CAP Emissions after reductions account for the reductions associated with EVs as shown in Table 24a. The emissions reductions are subtracted from the total Project emissions.

Abbreviations:

lb - pound
MT - metric ton
EV - electric vehicle
ROG - reactive organic gases
NOx - nitrogen oxides
PM_{10} - particulate matter less than 10 microns in diameter
$PM_{2.5}$ - particulate matter less than 2.5 microns in diameter

References:

California ARB. 2021. Miscellaneous Processes Methodologies - Paved Entrained Road Dust. Available online at: https://ww3.arb.ca.gov/ei/areasrc/fullpdf/2021_paved_roads_7_9.pdf

California Air Resources Board. EMFAC2021. Available at: https://arb.ca.gov/emfac/

Table 25bV
Summary of Mobile GHG Emissions
Willow Village - Increased Residential Variant Analysis
Menlo Park, California

Total Emissions Before Reductions:[1]

Year	GHG Emissions without Reductions (MT/year)			
	CO_2	CH_4	N_2O	CO_2e
Total Emissions by Year				
Existing Conditions[2]	15,660	0.46	1.2	16,024
Full Buildout	37,469	1.0	1.9	38,060
Net Emissions				
Full Buildout	**21,809**	**0.58**	**0.71**	**22,035**

Total Emissions with Reductions:[3]

Year	GHG Emissions with Reductions (MT/year)			
	CO_2	CH_4	N_2O	CO_2e
Total Emissions by Year				
Existing Conditions[2]	15,660	0.46	1.2	16,024
Full Buildout	33,191	0.92	1.8	33,747
Net Emissions				
Full Buildout	**17,531**	**0.45**	**0.61**	**17,723**

Notes:

1. Calculations of GHG emissions before reductions are shown in detail in AQTR Table 21b. Net emissions subtract the emissions from the existing conditions in 2019.
2. The Existing Conditions includes EV reductions associated with existing Project Site chargers.
3. GHG Emissions after reductions account for the reductions associated with EVs as shown in Table 24b. The emissions reductions are subtracted from the total Project emissions.

Abbreviations:

GHG - Greenhouse Gas
CO_2 - carbon dioxide
CH_4 - methane
N_2O - Nitrous Oxide
CO_2e - Carbon dioxide equivalent
MT - metric ton
EV - electric vehicle

References:

California ARB. 2021. Miscellaneous Processes Methodologies - Paved Entrained Road Dust. Available online at: https://ww3.arb.ca.gov/ei/areasrc/fullpdf/2021_paved_roads_7_9.pdf

California Air Resources Board. EMFAC2021. Available at: https://arb.ca.gov/emfac/

Table 28V
Energy Usage for Existing Conditions and Project Operations
Willow Village - Increased Residential Variant Analysis
Menlo Park, California

Land Use	Floor Area (sqft) (DU - Residential)	Annual Electricity Use (MWh/yr)	Annual Natural Gas Use (MMBtu/yr)
Existing Conditions (2019)[1]			
All	1,923,910	12,050	30,039
Total Existing Energy Usage		**12,050**	**30,039**
Full Buildout[2,3]			
Office	1,600,000	23,828	0
Retail	207,690	4,517	2,195
Residential	1,930	18,804	0
Hotel	172,000	2,528	0
Parking	1,869,240	32,183	0
Park	403,837	38	0
Total Full Buildout Energy Usage		**81,898**	**2,195**

Notes:

1. Energy use rates for existing conditions were provided for 2019 by the Project Applicant via email on August 10, 2021.
2. Electricity and natural gas usage rates for the retail, residential, and parking land uses were provided by PAE in the June 14, 2021 memorandum. Electricity usage rates for Office, Hotel, and Park were provided by Hines on June 21, 2021. The hotel and office do not use natural gas. The electricity usage includes 27,986 MWh/year of electricity use associated with the Campus District EV charging stations, which is summarized in the parking land use category. Electricity and energy use rates for the Willow Road Retail were calculated based on the CalEEMod defaults the retail land use type in Climate Zone 5.
3. Natural gas for the project is only used for Hamilton Avenue Parcels North and South and the supermarket and restaurant land uses, which are summarized in the retail category.

Abbreviations:

CalEEMod - California Emissions Estimator Model
DU - dwelling unit
kBTU - thousand British Thermal Units
kWh - kilowatt-hour
MMBTU - million British Thermal Units
MWh - Megawatt-hour
sqft - square feet
yr - year

References:

California Air Pollution Control Officers Association (CAPCOA). California Emissions Estimator Model (CalEEMod), Version 2020.4.0. Available online at http://www.caleemod.com

Table 30V
Energy Usage Emissions from Existing Conditions and Project Operations
Willow Village - Increased Residential Variant Analysis
Menlo Park, California

Location	Natural Gas Emissions[1,2]					Electricity Emissions[1,2]
	ROG	NOx	PM_{10}	$PM_{2.5}$	CO_2e	
	(tons/yr)				(MT/yr)	
Existing Conditions (2019)						
All	0.16	1.5	0.11	0.11	1,613	0
Total Existing Emissions	**0.16**	**1.5**	**0.11**	**0.11**	**1,613**	**0**
Full Buildout						
Retail	0.012	0.11	8.2E-03	8.2E-03	118	0
Total Full Buildout Emissions	**0.012**	**0.11**	**8.2E-03**	**8.2E-03**	**118**	**0**
Partial Buildout[3]						
Total Year 4 Emissions	0.0012	0.011	8.3E-04	8.3E-04	12	0
Total Year 5 Emissions	0.0070	0.064	4.9E-03	4.9E-03	70	0
Total Year 6 Emissions	0.012	0.11	8.0E-03	8.0E-03	115	0

Notes:

1. CAP emissions result from the combustion of natural gas. As a result, CAP emissions were only calculated for natural gas usage. In compliance with the City of Menlo Park Municipal Code, natural gas usage for the Project will be offset; however, since the carbon intensity of the offset production is not known at this time, GHG emissions from natural gas were conservatively included alongside electricity GHG emissions.
2. Emissions were calculated based on energy use, shown in Table 28, and energy emission factors, shown in AQTR Table 29. Existing electricity is sourced from PCE. Project electricity will be sourced from 100% renewable sources; as such, emissions from Project electricity use are expected to be zero. Project natural gas will only be used in retail land uses for commercial cooking equipment.
3. Partial buildout emissions were calculated from full buildout using scaling factors by land use type and year, as shown in Table 16.

Abbreviations:

CAP - Criteria Air Pollutants
CO_2e - carbon dioxide equivalents
GHG - Greenhouse Gas
MT - metric ton(s)
NOx - nitrogen oxides
PM - particulate matter
$PM_{2.5}$ - PM less than 2.5 microns in diameter
PM_{10} - PM less than 10 microns in diameter
ROG - reactive organic gases
yr - year

References:

California Air Pollution Control Officers Association (CAPCOA). California Emissions Estimator Model (CalEEMod), Version 2020.4.0. Available online at http://www.caleemod.com

Table 31V
Water Usage for Existing Conditions and Project Operations
Willow Village - Increased Residential Variant Analysis
Menlo Park, California

Water Usage

Land Use	CalEEMod® Land Use Subtype	Size	Size Metric	Indoor Water (million gal/year)	Outdoor Water (million gal/year)
Existing Conditions (2019)[1]					
Office	General Office Building	251,530	sqft	45	27
Commercial	Research and Development	123,870	sqft	61	0
Industrial - Warehouse	Unrefrigerated Warehouse-No Rail	500,780	sqft	116	0
Industrial - Manufacturing	Manufacturing	23,570	sqft	5.5	0
Recreational	Health Club	24,060	sqft	1.4	0.87
Light Industrial	General Light Industry	80,100	sqft	19	0
Parking	Enclosed Parking with Elevator	920,000	sqft	0	0
Full Buildout[2]					
Office		1,600,000	sqft	35	10
Retail		207,690	sqft	4.2	0.36
Residential		1,892,043	sqft	75	7.0
Hotel		172,000	sqft	7.6	2.5
Parking		1,869,240	sqft	0	1.4
Park		403,837	sqft	0	14
Partial Buildout[3]					
			Total Year 4 Usage[3]	1.5	13
			Total Year 5 Usage[3]	37	23
			Total Year 6 Usage[3]	89	32

Notes:

1. Existing water use was calculated using the CalEEMod default water consumption profile for each land use.
2. Project indoor water use rates and outdoor water use for all parcels except Willow Road Retail were provided by the Project Applicant on June 14, 2021. Indoor and outdoor water use rates for Willow Road Retail were calculated using the CalEEMod default water consumption profile for the retail land use type.
3. Partial buildout usage rates were calculated from full buildout using scaling factors by land use type and year, as shown in Table 16.

Abbreviations:

CalEEMod - California Emissions Estimator Model

gal - gallon

kWh - kilowatt-hours

ksf - thousand square feet

sqft - square feet

References:

California Air Pollution Control Officers Association (CAPCOA). California Emissions Estimator Model (CalEEMod®), Version 2020.4.0. Available online at http://www.caleemod.com

Table 32V
Water Usage and Wastewater Emissions from Existing Conditions and Project Operations
Willow Village - Increased Residential Variant Analysis
Menlo Park, California

Land Use	Electricity Indirect Emissions[1,2] (MT CO_2e/yr)	Septic Tank Direct Emissions[1,2] (MT CO_2e/yr)	Aerobic Direct Emissions[1,2] (MT CO_2e/yr)	Facultative Lagoon Direct Emissions[1,2] (MT CO_2e/yr)	Total Emissions (MT CO2e/yr)
Existing Conditions (2019)					
Office	37	27	24	10	98
Commercial	36	37	33	13.1	119
Industrial - Warehouse	68	71	62	25	226
Industrial - Manufacturing	3.2	3.3	2.9	1.2	10.6
Recreational	1.2	0.87	0.76	0.30	3.1
Light Industrial	11	11.3	9.9	4.0	36
Parking	0	0	0	0	0
Total Existing Emissions	**156**	**151**	**132**	**53**	**492**
Full Buildout					
Office	19	21	19	7.5	67
Retail	2.0	2.6	2.3	0.91	7.8
Residential	36	46	40	16	138
Hotel	4.1	4.6	4.1	1.6	14
Parking	0.42	0	0	0	0.42
Park	4.2	0	0	0	4.2
Total Full Buildout Emissions	**65**	**74**	**65**	**26**	**231**
Partial Buildout[3]					
Total Year 4 Emissions[3]	5.0	0.92	0.81	0.32	7.1
Total Year 5 Emissions[3]	24	22	20	7.9	74
Total Year 6 Emissions[3]	49	54	48	19	170

Notes:

1. Emissions shown in this table were calculated using default values and methods from CalEEMod Version 2020.4.0. The Water Electricity Intensity, Water Treatment Types, and Wastewater Treatment Direct Emission Factors used in the calculation can be found in Tables 9.2, 9.3 and 9.4 of Appendix D of the CalEEMod user guide, respectively. These calculations were performed using water use rates, shown in Table 31, and energy emission factors, shown in AQTR Table 29.
2. Consistent with CalEEMod, indoor water use was assumed to be processed as wastewater and outdoor water use was assumed to not be processed as wastewater.
3. Partial buildout direct emissions from Septic Tank, Aerobic, and Facultative Lagoon wastewater treatment were calculated from full buildout using scaling factors by land use type and year, as shown in Table 1. For partial buildout indirect electricity emissions from water usage and wastewater treatment, usage rates rather than emission were scaled to account for year specific energy emission factors from PG&E, as shown in AQTR Table 29.

Abbreviations:

CalEEMod - California Emissions Estimator Model
CO_2e - carbon dioxide equivalents
MT - metric ton
yr - year

References:

California Air Pollution Control Officers Association (CAPCOA). California Emissions Estimator Model (CalEEMod®), Version 2020.4.0. Available online at http://www.caleemod.com

Table 33V
Solid Waste Generation for Existing Conditions and Project Operations
Willow Village - Increased Residential Variant Analysis
Menlo Park, California

Solid Waste Generation[1]

Land Use	Size	Units	Solid Waste Disposal Rate (ton/year)
Existing Conditions (2019)			
Office	251,530	sqft	42
Commercial	123,870	sqft	10
Industrial - Warehouse	500,780	sqft	471
Industrial - Manufacturing	23,570	sqft	29
Recreational	24,060	sqft	137
Light Industrial	80,100	sqft	99
Parking	920,000	sqft	0
Full Buildout Conditions			
Office	1,600,000	sqft	268
Retail	207,690	sqft	218
Residential	1,930	DU	888
Hotel	193	Rooms	106
Parking	1,869,240	sqft	0
Park	403,837	sqft	0.83

Notes:

1. Solid Waste Generation Rates are from Table 10.1 of Appendix D of the CalEEMod User's Guide. An 82% diversion rate, provided by the Project Applicant via email communication dated August 2, 2021, is applied to default solid waste generation rates for the existing and project office land use to account for recycling and composting. The diversion rate is generated using data from Recology with the assumption that all bins are at 100% capacity and 0% contamination.

Abbreviations:

CalEEMod - California Emissions Estimator Model

DU - dwelling unit

sqft - square feet

References

California Air Pollution Control Officers Association (CAPCOA). California Emissions Estimator Model (CalEEMod®), Version 2020.4.0. Available online at http://www.caleemod.com

Table 34V
Solid Waste Emissions from Existing Conditions and Project Operations
Willow Village - Increased Residential Variant Analysis
Menlo Park, California

Solid Waste Emissions[1]

Location	CalEEMod® Land Use Subtype	CO_2 (MT/year)	CH_4 (MT/year)	CO_2e (MT/year)
Existing Conditions (2019)				
Office	General Office Building	8.5	0.51	21
Commercial	Research and Development	2.0	0.12	5.0
Industrial - Warehouse	Unrefrigerated Warehouse-No Rail	96	5.6	237
Industrial - Manufacturing	Manufacturing	5.9	0.35	15
Recreational	Health Club	28	1.6	69
Light Industrial	General Light Industry	20	1.2	50
Parking	Enclosed Parking with Elevator	0	0	0
Total Existing Emissions		**160**	**9.5**	**397**
Full Buildout Conditions				
Office		54	3.2	135
Retail		44	2.6	110
Residential		180	10.7	446
Hotel		22	1.3	53
Parking		0	0	0
Park		0.17	0.010	0.42
Total Full Buildout Emissions		**301**	**18**	**745**
Partial Buildout[2]				
Total Year 4 Emissions[2]		6.3	0.37	16
Total Year 5 Emissions[2]		92	5.5	229
Total Year 6 Emissions[2]		222	13	549

Notes:

1. Emissions shown in this table were calculated using default values and methods from CalEEMod Version 2020.4.0. These calculations were performed using default waste use rates by land use type and an 82% diversion rate for office land use types provided by the Project Applicant, shown in Table 33, and default solid waste landfill gas emission factors from Table 10.2 of CalEEMod User's Guide Appendix D.
2. Partial buildout emissions were calculated from full buildout using scaling factors by land use type and year, as shown in Table 16.

Abbreviations:

CalEEMod - California Emissions Estimator Model
CH_4 - methane
CO_2 - carbon dioxide
CO_2e - carbon dioxide equivalents
LFG - Landfill Gas
MT - metric ton

References:

California Air Pollution Control Officers Association (CAPCOA). California Emissions Estimator Model (CalEEMod®), Version 2020.4.0. Available online at http://www.caleemod.com

Table 35V
Unmitigated Architectural Coating Emissions from Existing Conditions and Project Operations
Willow Village - Increased Residential Variant Analysis
Menlo Park, California

Land Use	Floor Area	Building Surface Area[1]	Application Rate[2]	Indoor Paint VOC EF[3]	Outdoor Paint VOC EF[3]	Architectural Coating VOC Emissions[4]
	(sqft)	(sqft)		(g/L)	(g/L)	(lb/yr)
Existing Conditions (2019)						
Office	251,530	503,060	10%	100	150	262
Commercial	123,870	247,740	10%	100	150	129
Industrial - Warehouse	500,780	1,001,560	10%	100	150	522
Industrial - Manufacturing	23,570	47,140	10%	100	150	25
Recreational	24,060	48,120	10%	100	150	25
Light Industrial	80,100	160,200	10%	100	150	84
Parking	920,000	55,200	10%	0	150	9.6
Total Existing Conditions Emissions						**1,057**
Full Buildout						
Office	1,600,000	3,200,000	10%	100	150	1,669
Retail	207,690	415,380	10%	100	150	217
Residential	1,892,043	5,108,515	10%	100	150	2,664
Hotel	172,000	344,000	10%	100	150	179
Parking	1,869,240	112,154	10%	0	150	19
Park	403,837	0	10%	0	0	0
Total Full Buildout Emissions						**4,749**
Partial Buildout[5]						
Total Year 4 Emissions[5]						83
Total Year 5 Emissions[5]						1,567
Total Year 6 Emissions[5]						3,547

Notes:

1. Consistent with CalEEMod Appendix A, residential building surface area was assumed to be 2.7 times the floor area, and non-residential 2 times the floor area. Also consistent with CalEEMod Appendix E, the parking painted area was assumed to be 6% of the total surface area for surface lots.
2. Consistent with CalEEMod Appendix A, 10% of all surfaces were assumed to be coated each year.
3. Consistent with CalEEMod Appendix D Table 6.1, which is based on BAAQMD Regulation 8 Rule 3 paint VOC regulations, use VOC EF of 100 g/L for flat paints, generally used indoors, and 150 g/L for all other architectural coatings.
4. Uses CalEEMod Appendix A assumption that 1 gallon of paint covers 180 square feet. Building surface area is assumed to be 75% indoors and 25% outdoors, consistent with CalEEMod Appendix A. Parking garages are assumed to have no indoor surfaces.
5. Partial buildout emissions were calculated from full buildout using scaling factors by land use type and year, as shown in Table 16.

Abbreviations:

BAAQMD - Bay Area Air Quality Management District
CalEEMod - California Emissions Estimator Model
EF - emission factor
g - grams
L - liters
lb - pound
sqft - square feet
VOC - volatile organic compound
yr - year

References:

BAAQMD. 2009. Regulation 8 Rule 3 Architectural Coatings. Accessed November 2020. Available at: https://www.baaqmd.gov/~/media/dotgov/files/rules/reg-8-rule-3-architectural-coatings/documents/rg0803_0709.pdf?la=en.

California Air Pollution Control Officers Association (CAPCOA). California Emissions Estimator Model (CalEEMod®), Version 2020.4.0. Available online at http://www.caleemod.com/

Table 36V
Mitigated Architectural Coating Emissions from Existing Conditions and Project Operations
Willow Village - Increased Residential Variant Analysis
Menlo Park, California

Land Use	Floor Area	Building Surface Area[1]	Application Rate[2]	Indoor Paint VOC EF[3]	Outdoor Paint VOC EF[3]	Architectural Coating VOC Emissions[4]
	(sqft)	(sqft)		(g/L)	(g/L)	(lb/yr)
Full Buildout						
Office	1,600,000	3,200,000	10%	10	150	668
Retail	207,690	415,380	10%	10	150	87
Residential	1,892,043	5,108,515	10%	10	150	1,066
Hotel	172,000	344,000	10%	10	150	72
Parking	1,869,240	112,154	10%	0	150	19
Park	403,837	0	10%	0	0	0
Total Full Buildout Emissions						**1,911**
Partial Buildout[5]						
Total Year 4 Emissions[5]						40
Total Year 5 Emissions[5]						635
Total Year 6 Emissions[5]						1,430

Notes:

1. Consistent with CalEEMod Appendix A, residential building surface area was assumed to be 2.7 times the floor area, and non-residential 2 times the floor area. Also consistent with CalEEMod Appendix E, the parking painted area was assumed to be 6% of the total surface area for surface lots.
2. Consistent with CalEEMod Appendix A, 10% of all surfaces were assumed to be coated each year.
3. Paint VOC content is consistent with or more stringent than BAAQMD Regulation 8 Rule 3 (Architectural Coatings). Emissions were estimated assuming that indoor painting will utilize "super-compliant" VOC architectural coatings that meet the more stringent limits in South Coast Air Quality Management District Rule 1113. For outdoor paint, assumed use of coatings with VOC content of 150 g/L, consistent with BAAQMD requirements. VOC was assumed to be equivalent to ROG for these purposes.
4. Uses CalEEMod Appendix A assumption that 1 gallon of paint covers 180 square feet. Building surface area is assumed to be 75% indoors and 25% outdoors, consistent with CalEEMod Appendix A. Parking garages are assumed to have no indoor surfaces.
5. Partial buildout emissions were calculated from full buildout using scaling factors by land use type and year, as shown in Table 16.

Abbreviations:

BAAQMD - Bay Area Air Quality Management District
CalEEMod - California Emissions Estimator Model
EF - emission factor
g - grams
L - liters
lb - pound
sqft - square feet
VOC - volatile organic compound
yr - year

References:

BAAQMD. 2009. Regulation 8 Rule 3 Architectural Coatings. Accessed November 2020. Available at: https://www.baaqmd.gov/~/media/dotgov/files/rules/reg-8-rule-3-architectural-coatings/documents/rg0803_0709.pdf?la=en.

California Air Pollution Control Officers Association (CAPCOA). California Emissions Estimator Model (CalEEMod®), Version 2020.4.0. Available online at http://www.caleemod.com/

South Coast Air Quality Management District. Super Compliant Architectural Coatings per Rule 1113. Accessed July 2021. Available at: http://www.aqmd.gov/home/programs/business/business-detail?title=super-compliant-coatings&parent=other-low-voc-products.

Table 38V
Consumer Product Emissions from Existing Conditions and Project Operations
Willow Village
Menlo Park, California

Land Use	Building Area (sqft)	Consumer Products VOC EF[1,2] (lb/sqft/day)	Days per Year	Consumer Products VOC emissions (lb/yr)
Existing Conditions (2019)				
Office	251,530	1.8E-05	365	1,670
Commercial	123,870	1.8E-05	365	822
Industrial - Warehouse	500,780	1.8E-05	365	3,324
Industrial - Manufacturing	23,570	1.8E-05	365	156
Recreational	24,060	1.8E-05	365	160
Light Industrial	80,100	1.8E-05	365	532
Parking	920,000	3.5E-07	365	119
Existing Conditions Emissions				**6,783**
Full Buildout				
Office	1,600,000	1.8E-05	365	10,621
Retail	207,690	1.8E-05	365	1,379
Residential	1,892,043	1.8E-05	365	12,560
Hotel	172,000	1.8E-05	365	1,142
Parking	1,869,240	3.5E-07	365	242
Park	403,837	5.2E-08	365	7.6
Total Full Buildout Emissions				**25,950**
Partial Buildout[3]				
Total Year 4 Emissions[3]				599
Total Year 5 Emissions[3]				9,447
Total Year 6 Emissions[3]				20,130

Notes:

1. The consumer products VOC EF for office, retail, and residential land uses was derived using methodology consistent with CalEEMod with adjusted parameters for San Mateo County, as described in AQTR Table 37. The default emissions factor assumes 2020 consumer products VOC inventory for San Mateo County. The default building square footage used is from 2010, which was updated to 2020 using population growth of San Mateo County, as shown in AQTR Table 37.
2. Consumer product VOC EFs for parking and open space were taken from CalEEMod 2020.4.0. These defaults take into account pesticide and fertilizer use in city parks and degreaser use in parking areas.
3. Partial buildout emissions were calculated from full buildout using scaling factors by land use type and year, as shown in Table 16.

Abbreviations:

ARB - Air Resources Board
CalEEMod - California Emissions Estimator Model
EF - emission factor
lb - pound
sqft - square feet
VOC - volatile organic compound
yr - year

References:

California Air Pollution Control Officers Association (CAPCOA). California Emissions Estimator Model (CalEEMod®), Version 2020.4.0. Available online at http://www.caleemod.com/

Table 39V
Landscaping Emissions from Existing Conditions and Project Operations
Willow Village - Increased Residential Variant Analysis
Menlo Park, California

Year[2]	Emissions from Landscaping Equipment[1]				
	ROG	NOx	PM_{10}	$PM_{2.5}$	CO_2e
	(tons/yr)				(MT/yr)
Existing Conditions	2.9E-03	2.8E-04	1.1E-04	1.1E-04	0.063
Year 4	0.37	0.14	0.068	0.068	21
Year 5	0.41	0.16	0.075	0.075	23
Year 6	0.43	0.17	0.079	0.079	24
Full Buildout	**0.43**	**0.17**	**0.079**	**0.079**	**24**

Notes:

1. Landscape emissions calculated using CalEEMod 2020.4.0 based on information regarding building square footage and acreage, shown in Appendix D.
2. Emissions in partial years were calculated by scaling full buildout emissions by the maximum percentage of land uses operational during that year.

Abbreviations:

CalEEMod - California Emissions Estimator Model
CO_2e - carbon dioxide equivalents
MT - metric ton(s)
NO_x - nitrogen oxides
PM - particulate matter
$PM_{2.5}$ - PM less than 2.5 microns in diameter
PM_{10} - PM less than 10 microns in diameter
ROG - reactive organic gases
yr - year

References:

California Air Pollution Control Officers Association (CAPCOA). California Emissions Estimator Model (CalEEMod®), Version 2020.4.0. Available online at http://www.caleemod.com

Table 40V
Summary of Unmitigated Operational CAP Emissions
Willow Village - Increased Residential Variant Analysis
Menlo Park, California

Emissions Source	CAP Emissions[1]							
	(ton/year)				(lb/day)[2]			
	ROG	NO_x	PM_{10}	$PM_{2.5}$	ROG	NO_x	PM_{10}	$PM_{2.5}$
Existing Conditions (2019)[3]								
Architectural Coating	0.53	--	--	--	2.9	--	--	--
Consumer Products	3.4	--	--	--	19	--	--	--
Landscaping	2.9E-03	2.8E-04	1.1E-04	1.1E-04	0.016	1.5E-03	6.0E-04	6.0E-04
Natural Gas Use	0.16	1.5	0.11	0.11	0.89	8.1	0.61	0.61
Mobile	5.0	8.0	4.0	0.84	27	44	22	4.6
Emergency Generators	2.9E-03	0.051	2.7E-03	2.7E-03	0.016	0.28	0.015	0.015
Total Emissions	9.1	10	4.1	0.95	50	52	23	5.2
Full Buildout Conditions[4]								
Architectural Coating	2.4	--	--	--	13	--	--	--
Consumer Products	13	--	--	--	71	--	--	--
Landscaping	0.43	0.17	0.079	0.079	2.4	0.90	0.44	0.44
Natural Gas Use[5]	0.012	0.11	8.2E-03	8.2E-03	0.065	0.59	0.045	0.045
Mobile	10	12	11	2.2	56	66	60	12
Emergency Generators	0.15	1.3	0.047	0.047	0.79	7.0	0.26	0.26
Total Emissions	26	14	11	2.3	144	75	61	13
Partial Buildout Emissions[6]								
Total Year 4 Emissions	1.3	1.1	0.54	0.17	7.2	6.0	2.9	0.94
Total Year 5 Emissions	11	6.7	5.2	1.1	60	37	28	6.0
Total Year 6 Emissions	21	12	9.5	2.0	117	63	52	11
Net Emissions[7]								
Net Year 4 Emissions	-7.8	-8.4	-3.6	-0.78	-43	-46	-20	-4.3
Net Year 5 Emissions	1.9	-2.8	1.0	0.15	11	-15	5.6	0.81
Net Year 6 Emissions	12	2.0	5.4	1.0	67	11	29	5.6
Net Full Buildout Emissions	17	4.1	7.0	1.3	94	23	38	7.4

Notes:

1. Emissions estimated using methods consistent with CalEEMod® version 2020.4.0.
2. Operational emissions shown represent activity and emissions across 365 days per year.
3. Operational emissions from existing conditions were calculated using CalEEMod® default data and emission factors based on the existing land use type and energy use rates provided by the Project Applicant.
4. Full buildout operational emissions are based on electricity, natural gas, and water usage rates provided by the Project Applicant alongside CalEEMod® defaults for architectural coating, consumer product, landscaping, and waste emissions. Net emissions were calculated as the difference between full buildout emissions and existing condition emissions.
5. Natural gas usage for the project would be used exclusively for supermarket and commercial cooking.
6. Partial buildout emissions were calculated from full buildout using scaling factors by land use type and year, as shown in Table 16.
7. Net emissions were calculated as the difference between partial buildout emissions for each year and existing condition emissions.

Abbreviations:

BAAQMD - Bay Area Air Quality Management District
CalEEMod® - California Emissions Estimator Model
CAP - Criteria Air Pollutant
CO_2e - carbon dioxide equivalent
GHG - greenhouse gas
lb - pounds
MT - metric ton
NOx - nitrogen oxides
PM - particulate matter
$PM_{2.5}$ - PM less than 2.5 microns in diameter
PM_{10} - PM less than 10 microns in diameter
PM - particulate matter
ROG - reactive organic gases
yr - year

References:

CalEEMod® Version 2020.4.0 Available Online at: http://www.caleemod.com

Table 41V
Summary of Mitigated Operational CAP Emissions
Willow Village - Increased Residential Variant Analysis
Menlo Park, California

Emissions Source	CAP Emissions[1]							
	(ton/year)				(lb/day)[2]			
	ROG	NO_x	PM_{10}	$PM_{2.5}$	ROG	NO_x	PM_{10}	$PM_{2.5}$
Existing Conditions (2019)[3]								
Architectural Coating	0.53	--	--	--	2.9	--	--	--
Consumer Products	3.4	--	--	--	19	--	--	--
Landscaping	2.9E-03	2.8E-04	1.1E-04	1.1E-04	0.016	1.5E-03	6.0E-04	6.0E-04
Natural Gas Use	0.16	1.5	0.11	0.11	0.89	8.1	0.61	0.61
Mobile	5.0	8.0	4.0	0.84	27	44	22	4.6
Emergency Generators	2.9E-03	0.051	2.7E-03	2.7E-03	0.016	0.28	0.015	0.015
Total Emissions	9.1	9.5	4.1	0.95	50	52	23	5.2
Full Buildout Conditions[4]								
Architectural Coating	0.96	--	--	--	5.2	--	--	--
Consumer Products	13	--	--	--	71	--	--	--
Landscaping	0.43	0.17	0.079	0.079	2.4	0.90	0.44	0.44
Natural Gas Use[5]	0.012	0.11	8.2E-03	8.2E-03	0.065	0.59	0.045	0.045
Mobile	10	12	11	2.2	56	66	60	12
Emergency Generators	0.15	1.3	0.047	0.047	0.79	7.0	0.26	0.26
Total Emissions	25	14	11	2.3	136	75	61	13
Partial Buildout Emissions[6]								
Total Year 4 Emissions	1.3	1.1	0.54	0.17	7.1	6.0	2.9	0.94
Total Year 5 Emissions	10.5	6.7	5.2	1.1	58	37	28	6.0
Total Year 6 Emissions	20	11.6	9.5	2.0	111	63	52	11
Net Emissions[7]								
Net Year 4 Emissions	-7.8	-8.4	-3.6	-0.78	-43	-46	-20	-4.3
Net Year 5 Emissions	1.5	-2.8	1.0	0.15	8.0	-15	5.6	0.81
Net Year 6 Emissions	11.1	2.0	5.4	1.0	61	11.1	29	5.6
Net Full Buildout Emissions	16	4.1	7.0	1.3	86	23	38	7.4

Notes:

1. Emissions estimated using methods consistent with CalEEMod® version 2020.4.0. The mitigated scenario for the Project is equivalent to the unmitigated scenario for all sources except Architectural Coating, as shown in Table 36.
2. Operational emissions shown represent activity and emissions across 365 days per year.
3. Operational emissions from existing conditions were calculated using CalEEMod® default data and emission factors based on the existing land use type and energy use rates provided by the Project Applicant.
4. Full buildout operational emissions are based on electricity, natural gas, and water usage rates provided by the Project Applicant alongside CalEEMod® defaults for architectural coating, consumer product, landscaping, and waste emissions.
5. Natural gas usage for the project would be used exclusively for supermarket and commercial cooking.
6. Partial buildout emissions were calculated from full buildout using scaling factors by land use type and year, as shown in Table 16.
7. Net emissions were calculated as the difference between partial buildout emissions for each year and existing condition emissions.

Abbreviations:

BAAQMD - Bay Area Air Quality Management District
CalEEMod® - California Emissions Estimator Model
CAP - Criteria Air Pollutant
CO_2e - carbon dioxide equivalent
GHG - greenhouse gas
lb - pounds
MT - metric ton
NOx - nitrogen oxides
PM - particulate matter
$PM_{2.5}$ - PM less than 2.5 microns in diameter
PM_{10} - PM less than 10 microns in diameter
PM - particulate matter
ROG - reactive organic gases
yr - year

References:

CalEEMod Version 2020.4.0 Available Online at: http://www.caleemod.com

Table 42V
Summary of Operational GHG Emissions
Willow Village - Increased Residential Variant Analysis
Menlo Park, California

Emissions Source	GHG Emissions[1] (MT/yr) CO_2e	
	Existing Conditions (2019)[2]	Full Buildout Conditions[3]
Landscaping	0.063	24
Electricity Use	0	0
Natural Gas Use[4]	1,613	118
Water Use	492	231
Waste Disposed	397	745
Emergency Generators	8.5	399
Total Emissions	2,509	1,516
Net Emissions[5]		-993

Notes:

1. Emissions estimated using methods consistent with CalEEMod® version 2020.4.0.
2. Operational emissions from existing conditions were calculated using CalEEMod® default data and emission factors based on the existing land use type and energy use rates provided by the Project Applicant.
3. Full buildout operational emissions are based on electricity, natural gas, and water usage rates provided by the Project Applicant alongside CalEEMod® defaults for architectural coating, consumer product, landscaping, and waste emissions.
4. Natural gas usage for the project would be used exclusively for supermarket and commercial cooking.
5. Net emissions were calculated as the difference between partial buildout emissions for each year and existing condition emissions.

Abbreviations:

CalEEMod® - California Emissions Estimator Model
CO_2e - carbon dioxide equivalent
GHG - greenhouse gas
MT - metric ton
yr - year

References:

CalEEMod® Version 2020.4.0 Available Online at: http://www.caleemod.com

Table 43V
Unmitigated Construction and Net New Operational CAP Emissions by Year
Willow Village - Increased Residential Variant Analysis
Menlo Park, California

Year	Average Daily CAP Emissions[1,2] (lb/day)											
	Construction Emissions Only				Net Operational Emissions[3]				Construction and Net Operational Emissions[3]			
	ROG	NO_x	PM_{10}	$PM_{2.5}$	ROG	NO_x	PM_{10}	$PM_{2.5}$	ROG	NO_x	PM_{10}	$PM_{2.5}$
Year 1	0.12	2.4	0.053	0.050	-50	-52	-23	-5.2	-50	-50	-23	-5.2
Year 2	4.5	64	1.4	1.3	-50	-52	-23	-5.2	-45	11	-21	-3.9
Year 3	19	124	5.8	5.4	-50	-52	-23	-5.2	-31	72	-17	0.15
Year 4	52	53	2.3	2.1	-43	-46	-20	-4.3	9.5	7.2	-17	-2.2
Year 5	64	46	2.2	2.0	11	-15	5.6	0.81	75	30	7.8	2.8
Year 6	43	14	0.72	0.67	67	11	29	5.6	110	25	30	6.3
Full Buildout	--	--	--	--	94	23	38	7.4	94	23	38	7.4
BAAQMD Significance Threshold									54	54	82	54

Notes:

1. Emissions estimated using methods consistent with CalEEMod® version 2020.4.0.
2. Net new operational emissions are scaled for partial years of phased operations by the percent that each parcel is operational for each year relative to full buildout, as shown in Table 16.
3. Unmitigated construction emissions can be found in Table 13. Net unmitigated operational emissions were calculated by subtracting the emissions from the existing conditions from the project emissions, as reported in Table 42.

Abbreviations:

CalEEMod - California Emissions Estimator Model
CAP - Criteria Air Pollutant
lb - pounds
NO_x - nitrogen oxides
PM - particulate matter
$PM_{2.5}$ - PM less than 2.5 microns in diameter
PM_{10} - PM less than 10 microns in diameter
ROG - reactive organic gases
yr - year

References:

CalEEMod Version 2020.4.0 Available Online at: http://www.caleemod.com

Table 44V
Mitigated Construction and Net New Operational CAP Emissions by Year
Willow Village - Increased Residential Variant Analysis
Menlo Park, California

Year	Average Daily CAP Emissions[1,2] (lb/day)											
	Construction Emissions Only[3]				Net Operational Emissions Only[3]				Construction and Net Operational Emissions[3]			
	ROG	NO_x	PM_{10}	$PM_{2.5}$	ROG	NO_x	PM_{10}	$PM_{2.5}$	ROG	NO_x	PM_{10}	$PM_{2.5}$
Year 1	0.064	1.9	0.019	0.019	-50	-52	-23	-5.2	-50	-50	-23	-5.2
Year 2	2.7	45	0.49	0.48	-50	-52	-23	-5.2	-47	-7.6	-22	-4.7
Year 3	10	47	0.78	0.77	-50	-52	-23	-5.2	-40	-5.1	-22	-4.4
Year 4	24	29	0.38	0.37	-43	-46	-20	-4.3	-19	-17	-19	-3.9
Year 5	29	22	0.27	0.26	8	-15	5.6	0.81	37	7.0	5.8	1.1
Year 6	19	6.5	0.084	0.080	61	11.1	29	5.6	80	18	30	5.7
Full Buildout	--	--	--	--	86	22.6	38	7.4	86	23	38	7.4
BAAQMD Significance Threshold									54	54	82	54

Notes:

1. Emissions estimated using methods consistent with CalEEMod® version 2020.4.0.
2. Net new operational emissions are scaled for partial years of phased operations by the percent that each parcel is operational for each year relative to full buildout, as shown in Table 16.
3. Mitigated construction emissions can be found in Table 14. Net mitigated operational emissions were calculated by subtracting the emissions from the existing conditions from the project emissions, as reported in Table 43.

Abbreviations:

CalEEMod - California Emissions Estimator Model
CAP - Criteria Air Pollutant
lb - pounds
NO_x - nitrogen oxides
PM - particulate matter
$PM_{2.5}$ - PM less than 2.5 microns in diameter
PM_{10} - PM less than 10 microns in diameter
ROG - reactive organic gases
yr - year

References:

CalEEMod Version 2020.4.0 Available Online at: http://www.caleemod.com

DRAFT

Table 47V
Summary of Full Buildout Traffic Volumes by Roadway Segment
Willow Village
Menlo Park, CA

Offsite Roadways[1]

Source Group Name	Distance (m)	Facebook Campus District						Project + Variant Town Square and Residential/Shopping District[2]		Total Project + Variant Volume and VMT[2]		Total Project Volume and VMT[2]	
		Cars		On-Demand		Trucks		San Mateo Default Fleet		San Mateo Default Fleet		San Mateo Default Fleet	
		Volume (vehicles/day)	VMT (mi/day)	Volume (vehicles/day)	VMT (mi/day)	Volume (vehicles/day)	VMT (mi/day)	Volume (vehicles/day)	VMT (mi/day)	Volume (vehicles/day)	VMT (mi/day)	Volume (vehicles/day)	VMT (mi/day)
ADAMS_CT	223	62	8.6	4.2	0.58	1.4	0.19	88	12	156	22	155	21
ADAMSD01	57	0	0	0	0	0	0	81	2.9	81	2.9	80	2.9
ADAMSD02	160	0	0	0	0	0	0	81	8.1	81	8.1	80	8.0
ADAMSD03	76	66	3.1	4.5	0.21	1.5	0.071	7.9	0.37	80	3.8	80	3.8
ADAMSD04	83	66	3.4	4.5	0.23	1.5	0.077	7.9	0.40	80	4.1	80	4.1
ADAMSD05	147	66	6.0	4.5	0.41	1.5	0.14	7.9	0.71	80	7.3	80	7.3
ADAMSD06	81	66	3.3	4.5	0.23	1.5	0.076	7.9	0.40	80	4.1	80	4.0
BAY_EAST	1,185	657	484	45	33	15	11	1,598	1,177	2,315	1,705	2,252	1,658
BAY_EFB	718	0	0	0	0	0	0	1,709	762	1,709	762	1,566	698
BAY_M01	110	525	36	36	2.4	12	0.81	1,650	113	2,223	152	2,130	146
BAY_M02	135	525	44	36	3.0	12	1.0	1,650	138	2,223	186	2,130	179
BAY_M03	117	525	38	36	2.6	12	0.86	1,650	119	2,223	161	2,130	154
BAY_M04	143	525	47	36	3.2	12	1.1	1,650	146	2,223	197	2,130	189
BAY_M05	350	525	114	36	7.8	12	2.6	1,650	358	2,223	483	2,130	463
BAY_WFB1	419	0	0	0	0	0	0	1,401	365	1,401	365	1,284	334
BAY_WFB2	210	0	0	0	0	0	0	1,401	183	1,401	183	1,284	168
BAY_WFB3	124	0	0	0	0	0	0	1,401	108	1,401	108	1,284	99
BAY_WFB4	328	0	0	0	0	0	0	1,401	286	1,401	286	1,284	262
BAY_WFB5	113	0	0	0	0	0	0	1,709	120	1,709	120	1,566	110
BAY_WFB6	542	0	0	0	0	0	0	1,709	576	1,709	576	1,566	527
BAY_WFB7	136	0	0	0	0	0	0	1,709	144	1,709	144	1,566	132
OBRIEN01	320	1,480	294	101	20	34	6.7	1,032	205	2,646	526	2,605	518
OBRIEN02	138	1,480	127	101	8.7	34	2.9	1,032	89	2,646	227	2,605	224
OBRIEN03	35	1,480	33	101	2.2	34	0.74	1,032	23	2,646	58	2,605	57
OBRIEN04	29	1,480	27	101	1.8	34	0.61	1,032	19	2,646	48	2,605	47
OBRIEN05	28	1,480	26	101	1.8	34	0.59	1,032	18	2,646	46	2,605	46
OBRIEN06	52	1,480	48	101	3.3	34	1.1	1,032	33	2,646	85	2,605	84
OBRIEN07	43	3,842	103	262	7.0	87	2.3	2,568	69	6,759	181	6,589	176
OBRIEN08	20	3,842	49	262	3.3	87	1.1	2,568	32	6,759	85	6,589	83
OBRIEN09	20	3,842	47	262	3.2	87	1.1	2,568	32	6,759	83	6,589	81
OBRIEN10	21	3,842	50	262	3.4	87	1.1	2,568	33	6,759	87	6,589	85
OBRIEN11	44	3,842	105	262	7.2	87	2.4	2,568	70	6,759	185	6,589	180
OBRIEN12	102	3,842	243	262	17	87	5.5	2,568	162	6,759	427	6,589	416
OBRIEN13	32	3,842	76	262	5.2	87	1.7	2,568	51	6,759	133	6,589	130
OBRIEN14	112	3,842	268	262	18	87	6.1	2,568	179	6,759	471	6,589	459
OBRIEN15	242	3,870	581	263	40	88	13	2,494	374	6,715	1,008	6,546	983
OBRIEN16	48	3,870	115	263	7.8	88	2.6	2,494	74	6,715	200	6,546	195
OBRIEN17	54	3,870	130	263	8.8	88	2.9	2,494	84	6,715	225	6,546	219
UNIV_01	110	339	23	23	1.6	7.7	0.53	355	24	725	50	679	46
UNIV_02	91	339	19	23	1.3	7.7	0.43	355	20	725	41	679	38
UNIV_03	222	339	47	23	3.2	7.7	1.1	355	49	725	100	679	94
UNIV_04	121	339	26	23	1.7	7.7	0.58	355	27	725	55	679	51
UNIV_05	80	339	17	23	1.2	7.7	0.38	355	18	725	36	679	34
UNIV_06	69	339	15	23	1.0	7.7	0.33	355	15	725	31	679	29
UNIV_07	258	339	54	23	3.7	7.7	1.2	355	57	725	116	679	109
UNIV_08	185	410	47	28	3.2	9.3	1.1	560	64	1,007	116	963	110
UNIV_09	142	3,255	287	222	20	74	6.5	1,826	161	5,377	473	5,258	463
UNIV_10	310	3,243	624	221	42	74	14	1,845	355	5,382	1,036	5,275	1,015
UNIV_11	115	3,243	232	221	16	74	5.3	1,845	132	5,382	384	5,275	377
UNIV_12	63	3,243	128	221	8.7	74	2.9	1,845	73	5,382	212	5,275	208
UNIV_13	128	3,243	258	221	18	74	5.8	1,845	147	5,382	427	5,275	419
UNIV_14	201	3,243	405	221	28	74	9.2	1,845	230	5,382	672	5,275	659
UNIV_15	647	3,243	1,304	221	89	74	30	1,845	742	5,382	2,164	5,275	2,121
WILLOW01	97	89	5.3	6.0	0.36	2.0	0.12	3,143	189	3,240	194	3,073	184
WILLOW02	174	89	10	6.0	0.65	2.0	0.22	3,143	339	3,240	350	3,073	332
WILLOW03	45	0	0	0	0	0	0	0	0	0	0	0	0
WILLOW04	185	0	0	0	0	0	0	0	0	0	0	0	0
WILLOW05	201	0	0	0	0	0	0	6,780	848	6,780	848	6,362	796
WILLOW06	110	0	0	0	0	0	0	6,780	465	6,780	465	6,362	436
WILLOW07	281	580	101	39	6.9	13	2.3	7,304	1,276	7,937	1,387	7,508	1,312
WILLOW08	93	580	33	39	2.3	13	0.76	7,304	422	7,937	459	7,508	434
WILLOW09	39	580	14	39	0.95	13	0.32	7,304	176	7,937	191	7,508	181
WILLOW10	31	580	11	39	0.76	13	0.25	7,304	141	7,937	153	7,508	145
WILLOW11	180	580	65	39	4.4	13	1.5	7,304	818	7,937	889	7,508	841
WILLOW12	256	580	92	39	6.3	13	2.1	7,304	1,162	7,937	1,262	7,508	1,194
WILLOW13	216	580	78	39	5.3	13	1.8	7,304	980	7,937	1,065	7,508	1,007

Onsite Roadways[3]

Source Group Name	Distance (m)	Volume (vehicles/day)	VMT (mi/day)
ONSITE - Project	2570	10,782	17,217
ONSITE - Project + Variant	2570	11,219	17,915

Intercampus Shuttles[4]

Source Group Name	Distance (m)	Volume (vehicles/day)	VMT (mi/day)
SHUTTLES	7278	361	1,633

Notes:

1. Net new offsite traffic volumes for both the Campus District and the Town Square were provided by Hexagon in the data request received in February 2022. Offsite traffic for the Campus District was modeled using a percent breakdown of the fleet (88% cars, 6% on-demand, 2% trucks), provided by Hexagon. Offsite traffic for the Town Square and Residential/Shopping District was modeled as the default San Mateo fleet. A summary of fleet mix categories can be found in AQTR Table 19. Modeled offsite roadway segments can be found in AQTR Figure 8.

2. The increased residential variant increases the traffic for the Town Square and Residential/Shopping District. Total traffic volumes and VMT are calculated by summing the Facebook Campus District fleets with the Town Square and Residential/Shopping District fleet. The total Project volume and VMT without contributions from the variant are shown for comparison purposes.

3. Net new onsite traffic volumes were provided by Hexagon in the data request received in February 2022 which include the increased traffic volumes due to the residential variant. Onsite traffic volumes were taken as the sum of all net new onsite traffic volumes divided by two to account for round trips. Onsite traffic was modeled exclusively as the cars fleet type. A summary of the cars fleet mix can be found in Table 19. Modeled onsite roadway segments can be found in AQTR Figure 7.

4. Shuttle traffic volumes, which account for the remaining 4% of the offsite fleet mix, were conservatively modeled as the sum of all inbound and outbound vehicle trips across all regions and routes, divided by two to account for round trips. Inbound and outbound vehicle trips were provided by the Project Applicant in June 2021. A summary of the shuttles fleet mix can be found in AQTR Table 19. Modeled shuttle roadway segments can be found in AQTR Figure 9.

Abbreviations:
VMT - Vehicle Miles Traveled m - meter mi - mile

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Table 59V
Project Cancer Risk at Off-Site and On-Site MEIR
Willow Village - Increased Residential Variant Analysis
Menlo Park, California

Source Category	Lifetime Excess Cancer Risk[1] (in a million)					
	Construction + Operations				Operations Only	
	Unmitigated[2]		Mitigated[2]			
Project Contribution	On-Site MEIR[3,5]	Off-Site MEIR[4,5]	On-Site MEIR[3,5]	Off-Site MEIR[4,5]	On-Site MEIR[3,5]	Off-Site MEIR[4,5]
	Scenario 3	Scenario 2	Scenario 3	Scenario 2	Scenario 3	Scenario 4
Construction	172	57	8.06	7.6	--	--
Operational Generators	1.6	0.65	1.40	0.65	1.4	0.55
Operational Traffic	1.2	0.93	1.16	0.93	2.0	3.0
Total Project Contribution	175	58	10.6	9.2	3.4	3.6

Notes:

1. Excess lifetime cancer risk from construction and operations are combined since cancer risk is evaluated over a 30-year lifetime. Thus, the risk takes into account exposure to Project emissions beginning during construction and continuing through operations. Off-site receptors are exposed to all Project construction and subsequent Project operations. On-site receptors are exposed to overlapping construction emissions and subsequent Project operations.

   The cancer risks were estimated using the following equation:

   Riskinh = Ci x CF x IFinh x CPFi x ASF
   Where:
   Riskinh = Cancer Risk for the Inhalation Pathway (unitless)
   Ci = Annual Average Air Concentration for Chemical "i" (µg/m3)
   CF = Conversion Factor (mg/µg)
   IFinh = Intake Factor for Inhalation (m3/kg-day)
   CPFi = Cancer Potency Factor for Chemical "i" (mg/kg-day)-1

2. The Unmitigated Project reflects default construction off-road equipment fleet. The Mitigated Project reflects use of 95 percent Tier 4 construction off-road equipment before residents move on-site and 98 percent Tier 4 construction off-road equipment after residents move on-site. The other 5 percent and 2 percent (before and after on-site residents, respectively) are assumed to have Tier 2 engines. Unmitigated emissions are estimated to be much larger than mitigated emissions as a result of two assumptions made during the calculations: 1) the emission factor for Tractors/Loaders/Backhoes with low HP ratings is significantly higher than that of subsequently higher HP ranges and many construction equipment fall under this classification; and 2) many pieces of construction equipment such as Bobcats were conservatively classified as Tractors/Loaders/Backhoes rather than other equipment types with lower emission factors.

3. On-site Project MEIR was identified as the on-site sensitive receptor location with the maximum total cancer risk attributed to the emissions associated with the Project.

4. Off-site Project MEIR was identified as the off-site sensitive receptor location with the maximum total cancer risk attributed to the emissions associated with the Project.

5. On-site and off-site MEIR locations are documented below:

Table 59V
Project Cancer Risk at Off-Site and On-Site MEIR
Willow Village - Increased Residential Variant Analysis
Menlo Park, California

MEIR by Scenario	MEIR Location[6]					
	Construction + Operations				Operations Only	
	On-Site MEIR[3]	Off-Site MEIR[4]	On-Site MEIR[3]	Off-Site MEIR[4]	On-Site MEIR[3]	Off-Site MEIR[4]
	Scenario 3	Scenario 2	Scenario 3	Scenario 2	Scenario 3	Scenario 4
UTMx (m)	575,225	575,500	575,245	575,500	575,275	574,840
UTMy (m)	4,148,065	4,147,960	4,148,135	4,147,960	4,148,145	4,147,800
Receptor Height (m)	4.8	1.8	4.8	1.8	1.8	1.8
Receptor Type	Residential	Residential	Residential	Residential	Residential	Residential

6. Three exposure scenarios were modeled. Scenario 1 evaluates off-site receptors and begins at the start of construction. Scenario 2 evaluates off-site receptors and begins at the start of Area 2 Grading and Utilities construction. Scenario 3 evaluates on-site receptors and begins at the conclusion of Town Center and Residential/Shopping District construction when Area 1 residents move in.

Abbreviations:

kg - kilogram
m - meter
MEIR - maximally exposed individual receptor
mg - miligram
UTMx - Universal Transverse Mercator x-coordinate
UTMy - Universal Transverse Mercator y-coordinate
ug - microgram

References:

OEHHA. 2015. Air Toxics Hot Spots Program. Risk Assessment Guidelines. Guidance Manual for Preparation of Health Risk Assessments. February. Available online at: https://oehha.ca.gov/media/downloads/crnr/2015guidancemanual.pdf

Table 60V
Project Chronic Hazard Index at Off-Site and On-Site MEIR
Willow Village - Increased Residential Variant Analysis
Menlo Park, California

Source Category	Lifetime Excess Chronic Hazard Index[1] (unitless)					
	Construction + Operations				Operations Only	
	Unmitigated[2]		Mitigated[2]			
Project Contribution	On-Site MEIR[4,6]	Off-Site MEIR[5,6]	On-Site MEIR[4,6]	Off-Site MEIR[5,6]	On-Site MEIR[4,6]	Off-Site MEIR[5,6]
	Scenario 3	Scenario 1	Scenario 3	Scenario 1	Scenario 3	Scenario 1
Construction	0.23	0.11	9.1E-03	0.011	--	--
Operational Generators	4.0E-04	6.6E-04	4.0E-04	2.1E-04	3.3E-04	3.0E-03
Operational Traffic[3]	2.1E-03	1.4E-03	2.1E-03	3.3E-03	6.0E-03	1.3E-03
Total Project Contribution	0.23	0.11	0.012	0.014	6.3E-03	4.3E-03

Notes:

1. The potential for exposure to result in adverse chronic non-cancer effects is evaluated by comparing the estimated annual average air concentration (which is equivalent to the average daily air concentration) from construction and operations to the non-cancer chronic REL for each chemical. When calculated for a single chemical, the comparison yields a ratio termed a hazard quotient or HQ. To evaluate the potential for adverse chronic non-cancer health effects from simultaneous exposure to multiple chemicals, the hazard quotients for all chemicals are summed, yielding a hazard index or HI.

   The chronic HI for each receptor was estimated using the following equation:

   HIinh =Ci / cREL
   Where:
   HIinh = Chronic HI for the Inhalation Pathway (unitless)
   Ci = Annual Average Air Concentration for Chemical "i" (µg/m3)
   cREL = Chronic Reference Exposure Level (µg/m3)

2. The Unmitigated Project reflects default construction off-road equipment fleet. The Mitigated Project reflects use of 95 percent Tier 4 construction off-road equipment before residents move on-site and 98 percent Tier 4 construction off-road equipment after residents move on-site. The other 5 percent and 2 percent (before and after on-site residents, respectively) are assumed to have Tier 2 engines. Unmitigated emissions are estimated to be much larger than mitigated emissions as a result of two assumptions made during the calculations: 1) the emission factor for Tractors/Loaders/Backhoes with low HP ratings is significantly higher than that of subsequently higher HP ranges and many construction equipment fall under this classification; and 2) many pieces of construction equipment such as Bobcats were conservatively classified as Tractors/Loaders/Backhoes rather than other equipment types with lower emission factors.

3. The operational traffic analysis reflects impacts from the Project. If traffic risks are conservatively scaled by the maximum change in vehicle miles traveled due to the Residential Increase Variant, chronic risks remain significantly below threshold.

4. On-site Project MEIR was identified as the on-site sensitive receptor location with the maximum chronic HI attributed to the emissions associated with the Project.

5. Off-site Project MEIR was identified as the off-site sensitive receptor location with the maximum chronic HI attributed to the emissions associated with the Project.

6. On-site and off-site MEIR locations are documented below:

Table 60V
Project Chronic Hazard Index at Off-Site and On-Site MEIR
Willow Village - Increased Residential Variant Analysis
Menlo Park, California

MEIR by Scenario	MEIR Location					
	Construction + Operations				Operations Only	
	On-Site MEIR[3]	Off-Site MEIR[4]	On-Site MEIR[3]	Off-Site MEIR[4]	On-Site MEIR[3]	Off-Site MEIR[4]
	Scenario 3	Scenario 1	Scenario 3	Scenario 1	Scenario 3	Scenario 1
UTMx (m)	575,235	575,160	575,235	575,400	575,385	574,980
UTMy (m)	4,148,065	4,148,040	4,148,065	4,148,040	4,148,085	4,148,040
Receptor Height (m)	4.8	1.8	4.8	1.8	1.8	1.8
Receptor Type	Residential	High School	Residential	Elementary School	Recreational	High School
Year	Year 5	Year 4	Year 5	Year 3	Year l	Year l

Abbreviations:

µg - microgram
kg - kilogram
m - meter
MEIR - maximally exposed individual receptor
TRU - Transportation Refrigeration Unit
UTMx - Universal Transverse Mercator x-coordinate
UTMy - Universal Transverse Mercator y-coordinate

References:

OEHHA. 2015. Air Toxics Hot Spots Program. Risk Assessment Guidelines. Guidance Manual for Preparation of Health Risk Assessments. February. Available online at:

Table 61V
Project $PM_{2.5}$ Concentration at Off-Site and On-Site MEIR
Willow Village - Increased Residential Variant Analysis
Menlo Park, California

Source Category	Excess $PM_{2.5}$ Concentration[1] (µg/m3)					
	Construction + Operations				Operations Only	
	Unmitigated[2]		Mitigated[2]			
Project Contribution	On-Site MEIR[4,6]	Off-Site MEIR[5,6]	On-Site MEIR[4,6]	Off-Site MEIR[5,6]	On-Site MEIR[4,6]	Off-Site MEIR[5,6]
	Scenario 3	Scenario 1	Scenario 3	Scenario 1	Scenario 3	Scenario 1
Construction	1.1	0.52	0.040	0.063	--	--
Operational Generators	2.0E-03	3.3E-03	1.7E-03	1.3E-03	1.6E-03	1.3E-03
Operational Traffic	0.040	0.030	0.092	0.12	0.11	0.12
Total Project Contribution	1.1	0.56	0.13	0.18	0.11	0.12

Notes:

1. PM2.5 concentrations at off-site receptors include contributions from multiple phases of Project construction and subsequent Project operations. PM2.5 concentrations at on-site receptors include contributions from overlapping construction emissions and subsequent Project operations.

   The PM2.5 concentration at each receptor was estimated using the following equation:

   Ci =E x Di
   Where:
   C = Concentration of PM2.5 at receptor "i" (µg/m3)
   Di = Dispersion factor associated with unit emissions at receptor "i" (µg/m3)/(g/s)
   E = Emission Rate (g/s)

2. The Unmitigated Project reflects default construction off-road equipment fleet. The Mitigated Project reflects use of 95 percent Tier 4 construction off-road equipment before residents move on-site and 98 percent Tier 4 construction off-road equipment after residents move on-site. The other 5 percent and 2 percent (before and after on-site residents, respectively) are assumed to have Tier 2 engines. Unmitigated emissions are estimated to be much larger than mitigated emissions as a result of two assumptions made during the calculations: 1) the emission factor for Tractors/Loaders/Backhoes with low HP ratings is significantly higher than that of subsequently higher HP ranges and many construction equipment fall under this classification; and 2) many pieces of construction equipment such as Bobcats were conservatively classified as Tractors/Loaders/Backhoes rather than other equipment types with lower emission factors.

3. The operational traffic analysis reflects excess $PM_{2.5}$ concentration from the Project. If traffic concentrations are conservatively scaled by the maximum change in vehicle miles traveled due to the Residential Increase Variant, $PM_{2.5}$ concentrations remain significantly below threshold.

4. On-site Project MEIR was identified as the on-site sensitive receptor location with the maximum chronic HI attributed to the emissions associated with the Project.

5. Off-site Project MEIR was identified as the off-site sensitive receptor location with the maximum chronic HI attributed to the emissions associated with the Project.

6. On-site and off-site MEIR locations are documented below:

Table 61V
Project $PM_{2.5}$ Concentration at Off-Site and On-Site MEIR
Willow Village - Increased Residential Variant Analysis
Menlo Park, California

MEIR by Scenario	MEIR Location					
	Construction + Operations				Operations Only	
	On-Site MEIR[3]	Off-Site MEIR[4]	On-Site MEIR[3]	Off-Site MEIR[4]	On-Site MEIR[3]	Off-Site MEIR[4]
	Scenario 3	Scenario 1	Scenario 3	Scenario 1	Scenario 3	Scenario 1
UTMx (m)	575,235	575,160	575,265	575,420	575,385	575,420
UTMy (m)	4,148,065	4,148,040	4,148,115	4,147,980	4,148,085	4,147,980
Receptor Height (m)	4.8	1.8	1.8	1.8	1.8	1.8
Receptor Type	Residential	High School	Residential	Daycare Child (18 months +)	Recreational	Daycare Child (18 months +)

Abbreviations:

µg - microgram
kg - kilogram
m - meter
MEIR - maximally exposed individual receptor
TRU - Transportation Refrigeration Unit
UTMx - Universal Transverse Mercator x-coordinate
UTMy - Universal Transverse Mercator y-coordinate

References:

OEHHA. 2015. Air Toxics Hot Spots Program. Risk Assessment Guidelines. Guidance Manual for Preparation of Health Risk Assessments. February. Available online at: https://oehha.ca.gov/media/downloads/crnr/2015guidancemanual.pdf

Appendix 6
Air Quality Alternatives Calculations

Table 1
Land Use Summary
Willow Village - Base Project Alternative Analysis
Menlo Park, California

Land Use[1]	CalEEMod® Land Use	Size	Units[2]	Square Footage
Existing Conditions (2019)				
Office	General Office Building	252	ksf	251,530
R&D	Research and Development	124	ksf	123,870
Warehouse	Unrefrigerated Warehouse-No Rail	501	ksf	500,780
Lab & Manufacture	Manufacturing	24	ksf	23,570
Health Center	Health Club	24	ksf	24,060
Former Fire Department Building	General Light Industry	80	ksf	80,100
Parking	Enclosed Parking with Elevator	2,300	Spaces	920,000

Partial Buildout by Year[3]			
Land Use Type[4]	**Percent Operational by Year**		
	Year 4	**Year 5**	**Year 6**
Office	3.1%	58%	95%
Retail	10%	59%	98%
Residential	0%	16%	64%
Hotel	0%	41%	100%
Parking	53%	75%	96%
Park	86%	94%	100%

Full Buildout			
Land Use Type[4]	**Size**	**Units[2]**	**Square Footage**
Office	714	ksf	713,841
Retail	279	ksf	279,386
Residential	523	DU	678,390
Hotel	193	Rooms	172,000
Parking	733	ksf	733,041
Park	404	ksf	403,837

Notes:

1. Land uses analyzed based on information provided by the Project Applicant, as found in the Project Description. "Office" land use mapped to General Office Building and Research and Development; "Office/Lab" mapped to General Office Building, Research and Development, Health Club, and Manufacturing; "Warehouse" mapped to Unrefrigerated Warehouse-No Rail and General Light Industry, and "Warehouse/Office" mapped to Unrefrigerated Warehouse-No Rail and Research and Development CalEEMod land use types on a building-by-building basis.
2. The Project Applicant provided Project land uses in units of square footage, hotel rooms, and dwelling units. For the existing parking land use, each parking space is assumed to be 400 sqft. This assumption is based on CalEEMod defaults.
3. Partial buildout for Year 4, Year 5, and Year 6 were calculated based on the portion of building area for each land use type that becomes operational each year, based on the construction schedule, as shown in Table 2.
4. For Hamilton Avenue Parcels North and South, only net new square footage was included in the analysis. This is under the conservative assumption that the existing retail area and the retail land use that will replace it have similar operational emissions.

Abbreviations:

DU - dwelling unit
ksf - 1,000 square feet
sqft - square foot
CalEEMod® - California Emissions Estimator Model

References:

California Air Pollution Control Officers Association (CAPCOA). California Emissions Estimator Model (CalEEMod®), Version 2020.4.0. Available online at http://www.caleemod.com/

Table 17
Traffic Data Provided by the Transportation Engineer
Willow Village - Base Project Alternative Analysis
Menlo Park, California

Daily Trips Rates and VMT

Land Use	Fleet Type / Land Use	Trip Rate Units[1]	Weekday Trips per Day per Unit[1]	Weekday daily VMT[2]
			TOTAL	TOTAL
Main Project Site - Existing Conditions	Cars	per 1,000 s.f.	9.19	110,860
	Trucks	per 1,000 s.f.	0.22	2,640
	Shuttles	per 1,000 s.f.	0.66	21,088
	On-Demand	per 1,000 s.f.	0.66	7,919
Campus District - Full Buildout	Cars	per 1,000 s.f.	10.05	79,756
	Trucks	per 1,000 s.f.	0.23	1,810
	Shuttles	per 1,000 s.f.	0.44	9,408
	On-Demand	per 1,000 s.f.	0.68	5,429
Town Square and the Residential/Shopping District - Full Buildout	Residential	per d.u.	4.35	21,622
	Retail[3]	per 1,000 s.f.	25.07	47,098
	Hamilton Avenue Parcels North and South[3]	per 1,000 s.f.	28.31	1,461
	Park	per acre	42.80	1,147
	Hotel	per room	6.69	14,814

Notes:

1. Daily project trip rates were provided by the Transportation Engineer in terms of trip rates per land use amount.
2. Daily Project VMT provided by the Transportation Engineer include reductions for pass-by and diverted trips. Daily VMT is given in VMT per day. The Project trips and VMT have been scaled based on the Base Alternative's land uses in Table 1.
3. The trip rates and VMT for Hamilton Avenue Parcels North and South were provided separately and added to retail totals in calculations.

Abbreviations:

VMT - Vehicle miles traveled
s.f. - Square feet
d.u. - Dwelling unit

Table 18
Trip Rates and VMT for Existing Conditions and Project Operations
Willow Village - Base Project Alternative Analysis
Menlo Park, California

Project Area[1]	Land Use	Fleet Type[2]	Total Weekday Daily VMT[3]	Total Weekday Daily Trips[3]	Total Average Daily VMT[4]	Total Average Daily Trips[4]	Total Annual VMT[5]	Total Annual Trips[5]
			VMT/day	trips/day	VMT/day	trips/day	VMT/year	trips/year
Existing Conditions	Campus District	Cars	110,860	9,221	84,225	7,006	30,742,244	2,557,040
		Trucks	2,640	220	2,005	167	731,958	60,882
		Shuttles	21,088	659	15,063	470	3,916,358	122,319
		On-Demand	7,919	659	5,656	470	1,470,590	122,319
Year 4	Campus District	Cars	2,445	220	1,820	164	664,174	59,728
		Trucks	55	5.0	41	3.7	15,069	1,355
		Shuttles	288	10	206	6.9	53,559	1,783
		On-Demand	166	15	119	11	30,903	2,779
	Residential	San Mateo	0	0	0	0	0	0
	Retail	San Mateo	4,787	692	4,624	669	1,687,805	244,097
	Park	San Mateo	987	147	3,652	545	1,332,917	198,943
	Hotel	San Mateo	0	0	0	0	0	0
Year 5	Campus District	Cars	46,633	4,194	34,709	3,121	12,668,859	1,139,286
		Trucks	1,058	95	787	71	287,436	25,849
		Shuttles	5,501	183	3,929	131	1,021,622	34,009
		On-Demand	3,174	285	2,267	204	589,471	53,010
	Residential	San Mateo	3,389	357	3,312	349	1,208,975	127,261
	Retail	San Mateo	27,938	4,040	26,986	3,903	9,849,726	1,424,505
	Park	San Mateo	1,080	161	3,993	596	1,457,557	217,546
	Hotel	San Mateo	6,049	527	5,816	507	2,122,939	184,925
Year 6	Campus District	Cars	75,728	6,810	56,365	5,069	20,573,247	1,850,112
		Trucks	1,718	155	1,279	115	466,775	41,976
		Shuttles	8,933	297	6,381	212	1,659,035	55,228
		On-Demand	5,154	464	3,682	331	957,256	86,084
	Residential	San Mateo	13,765	1,449	13,455	1,416	4,911,036	516,951
	Retail	San Mateo	46,093	6,666	44,521	6,439	16,250,317	2,350,182
	Park	San Mateo	1,147	171	4,243	633	1,548,641	231,140
	Hotel	San Mateo	14,814	1,290	14,244	1,241	5,199,035	452,878
Full Buildout	Campus District	Cars	79,756	7,172	59,363	5,338	21,667,612	1,948,526
		Trucks	1,810	163	1,347	121	491,604	44,209
		Shuttles	9,408	313	6,720	224	1,747,285	58,165
		On-Demand	5,429	488	3,878	349	1,008,176	90,663
	Residential	San Mateo	21,622	2,276	21,135	2,225	7,714,176	812,018
	Retail	San Mateo	47,098	6,811	45,492	6,579	16,604,534	2,401,410
	Park	San Mateo	1,147	171	4,243	633	1,548,641	231,140
	Hotel	San Mateo	14,814	1,290	14,244	1,241	5,199,035	452,878

Notes:

1. Partial years are scaled from the full buildout based on the portion of each land use that becomes operational for each year of construction. See Table 16 for more details.

Table 18
Trip Rates and VMT for Existing Conditions and Project Operations
Willow Village - Base Project Alternative Analysis
Menlo Park, California

2. The fleet type for each land use was provided by the Transportation Engineer. The Campus District will have various fleets for specific uses. Town Square and the Residential/Shopping District land uses (Residential, Retail, Park, and Hotel) are analyzed assuming a default San Mateo fleet. Hamilton Avenue Parcels North and South are combined with retail land uses. See AQTR Table 19 for more information.
3. Daily VMT and trip rates were provided by the Transportation Engineer on October 5, 2021. Total trip rates are calculated using land uses in AQTR Table 1.
4. Weekday VMT and trip rates provided by the Transportation Engineer were scaled to average trip rates using the ratio between CalEEMod® weekday and weekend one-way trip rates.
5. Annual trips and VMT are calculated by multiplying daily values by 365 for all fleets with the exception of shuttles and on-demand, which are multiplied by 260 days/year.

Abbreviations:
VMT - vehicle miles traveled

References:
California Air Pollution Control Officers Association (CAPCOA). California Emissions Estimator Model (CalEEMod®), Version 2020.4.0. Available online at http://www.caleemod.com/

Table 21a
Mobile CAP Emissions Before EV Reductions
Willow Village - Base Project Alternative Analysis
Menlo Park, California

Year	Land Use[1]	Fleet Type	Annual Trips[2]	Annual VMT[2]	CAP Emissions[3,4]							
					ROG	NOX	PM_{10}	$PM_{2.5}$	ROG	NOX	PM_{10}	$PM_{2.5}$
			trips/year	VMT/year	tons/year				lb/day			
Existing Conditions	Campus District	Cars	2,557,040	30,742,244	4.9	4.1	3.1	0.59	27	22	17	3.3
		Trucks	60,882	731,958	0.18	2.0	0.17	0.068	1.0	11	0.92	0.37
		Shuttles	122,319	3,916,358	0.027	1.8	0.59	0.15	0.15	10	3.3	0.80
		On-Demand	122,319	1,470,590	0.19	0.15	0.15	0.028	1.1	0.85	0.81	0.15
			2,862,559	**36,861,150**	**5.3**	**8.0**	**4.0**	**0.84**	**29**	**44**	**22**	**4.6**
Full Buildout	Campus District	Cars	1,948,526	21,667,612	2.6	1.5	2.2	0.41	14	8.1	12	2.2
		Trucks	44,209	491,604	0.053	0.42	0.094	0.028	0.29	2.3	0.52	0.15
		Shuttles	58,165	1,747,285	0.016	1.0	0.27	0.068	0.088	5.7	1.5	0.38
		On-Demand	90,663	1,008,176	0.10	0.058	0.10	0.019	0.57	0.32	0.55	0.10
	Residential	San Mateo	812,018	7,714,176	0.9	1.0	0.8	0.16	4.9	5.6	4.5	0.9
	Retail	San Mateo	2,401,410	16,604,534	2.3	2.4	1.8	0.35	13	13	10	1.9
	Park	San Mateo	231,140	1,548,641	0.22	0.23	0.17	0.033	1.2	1.3	0.91	0.18
	Hotel	San Mateo	452,878	5,199,035	0.55	0.65	0.55	0.11	3.0	3.6	3.0	0.60
			6,039,011	**55,981,062**	**6.8**	**7.3**	**6.0**	**1.2**	**37**	**40**	**33**	**6.5**

Notes:

1. Hamilton Avenue Parcels North and South were provided separately and added to the retail land use totals.
2. Trip counts and VMTs by land use type were broken out by year using a scaling factor representing the percent of each fleet that is operational in a given year leading up to full buildout. This percent was determined based on the square footage of the land use associated with each fleet that is operational in a given year relative to that land use's full buildout square footage. See Table 16 for more details on scaling. See Table 18 for Project Trip Rates and VMT.
3. Criteria air pollutants are calculated by year using emission factors for the associated year and fleet from EMFAC2021. Electric vehicles are not included in the emission factors for Campus District fleets (all fleet types except San Mateo Fleet), as reductions associated with EVs are considered separately. Project emission factors are shown in AQTR Table 20a.
4. Full buildout emissions are conservatively calculated using 2026 emission factors.

Abbreviations:

EV - electric vehicle
lb - pound
NO_x - nitrogen oxides
VMT- vehicle miles traveled
PM_{10} - particulate matter less than 10 microns in diameter
$PM_{2.5}$ - particulate matter less than 2.5 microns in diameter
ROG - reactive organic gases

References:

California Air Resources Board. EMFAC2021. Available at: https://arb.ca.gov/emfac/

Table 21b
Summary of Mobile GHG Emissions Before EV Reductions
Willow Village - Base Project Alternative Analysis
Menlo Park, California

Year	Land Use[1]	Fleet Type	Annual Trips[2]	Annual VMT[2]	GHGs Emissions[3,4]			
					CO_2	CH_4	N_2O	CO_2e
			trips/year	VMT/year	MT/year			
Existing Conditions	Campus District	Cars	2,557,040	30,742,244	9,997	0.41	0.32	10,104
		Trucks	60,882	731,958	834	0.043	0.082	859
		Shuttles	122,319	3,916,358	4,965	0.019	0.78	5,199
		On-Demand	122,319	1,470,590	444	0.017	0.014	448
			2,862,559	**36,861,150**	**16,240**	**0.48**	**1.2**	**16,610**
Full Buildout	Campus District	Cars	1,948,526	21,667,612	6,403	0.18	0.15	6,454
		Trucks	44,209	491,604	485	0.018	0.047	499
		Shuttles	58,165	1,747,285	2,129	0.0016	0.34	2,229
		On-Demand	90,663	1,008,176	273	0.0071	0.0065	275
	Residential	San Mateo	812,018	7,714,176	2,694	0.09	0.11	2,728
	Retail	San Mateo	2,401,410	16,604,534	5,847	0.23	0.25	5,928
	Park	San Mateo	231,140	1,548,641	546	0.022	0.024	554
	Hotel	San Mateo	452,878	5,199,035	1,809	0.055	0.070	1,831
			6,039,011	**55,981,062**	**20,186**	**0.60**	**1.0**	**20,498**

Notes:

1. Hamilton Avenue Parcels North and South were provided separately and added to the retail land use totals.
2. VMT and trip rates are summarized in Table 18.
3. Greenhouse Gases are calculated by year using emission factors for the associated year and fleet from EMFAC2021. Electric vehicles are not included in the emission factors for Campus District fleets (all fleet types except San Mateo Fleet), as reductions associated with EVs are considered separately. Project emission factors are shown in AQTR Table 20b.
4. Full buildout emissions are conservatively calculated using 2026 emission factors.

Abbreviations:

GHG - Greenhouse Gas
CO_2 - carbon dioxide
CH_4 - methane
N_2O - Nitrous Oxide
CO_2e - Carbon dioxide equivalent
EV - electric vehicle
MT - Metric Ton
VMT- vehicle miles traveled

References:

California Air Resources Board. EMFAC2021. Available at: https://arb.ca.gov/emfac/

Table 22
EV Assumptions for Campus District
Willow Village - Base Project Alternative Analysis
Menlo Park, California

Campus District EV Parameters

Description	Units	Value
Electricity required per mile charged[1]	kWh/mi	0.30
Total Charging Energy of Meta Campuses[2]	kWh/year	3,791,856
Total Area of Meta Campuses[2]	sqf	4,753,594
Total Meta Campus Energy per Area[2]	kWh/sqf	0.80
Existing Conditions Fleet eVMT per Total VMT[3]	Percent	5.5%
Full Buildout Fleet MSS eVMT per Total VMT[4]	Percent	14%
Electricity Loss Factor[5]	Percent	10%
Existing Conditions Charging Energy Usage[6]	kWh/year	534,955
Full Buildout Charging Energy Usage[7]	kWh/year	1,305,262

eVMTs from Project Chargers at the proposed Campus District

Year	Land Use Category[8]	Project Increase in Annual eVMTs[9]
		eVMT/year
Existing Conditions	Campus District	1,783,182
Partial Buildout - Year 4		133,367
Partial Buildout - Year 5		2,543,916
Partial Buildout - Year 6		4,131,123
Full Buildout		4,350,873

Notes:

1. An average EV fuel economy of 0.30 kWh per mile was used. The fuel economy is based on electric fleet data from fueleconomy.gov. Available at: https://www.fueleconomy.gov/.
2. Meta provided energy usage and areas for EV charging at their existing campuses: Classic, Bayfront, Chilco, Willow, Gateway. The provided data was used to evaluate an average ratio of EV charging energy usage per campus area.
3. The percent eVMT for existing conditions is calculated by dividing the eVMT in existing conditions by the annual VMT from the 'Car' and 'On-Demand' vehicle types in existing conditions. For existing conditions VMT, see Table 18.
4. ARB is currently preparing its 2020 Mobile Source Strategy (MSS) update to the ARB VISION Model (version 2.1) estimating future fleet characteristics. The Mobile Source Strategy projects eVMTs reflecting the aspirational target identified in EO N-79-20, assuming 100% of passenger vehicle sales in California are ZEV or PHEV, and GHG emissions assumed to have reduced by 2.0% per year from 2026 to 2035. The increase in annual eVMTs charged by the Campus District is scaled from the increase in fleet eVMT from existing conditions to full buildout.
5. A 10% Loss Factor was applied to the annual project energy uses to account for expected losses. Source available at: https://www.fueleconomy.gov/
6. The EV charging energy consumption for existing conditions was based on existing charger energy usage data for Willow Village for 2019 provided by the Project applicant. The total energy usage was reduced assuming a 10% loss factor.

Table 22
EV Assumptions for Campus District
Willow Village - Base Project Alternative Analysis
Menlo Park, California

7. The EV charging energy consumption for the Project at full buildout was determined using an average ratio of existing charging sites kWh/sqf and multiplying it by the Campus District land use area at full buildout (714 thousand sqf). This number was scaled by the increase in fleet eVMT from existing conditions to full buildout based on the MSS scenario of the VISION model. A 10% loss factor was applied to the total energy usage per year. All relevant data sources were provided by the Project applicant.

8. Meta offers an EV charging program to its workers. Charging on campus is free and valets move cars into chargers to maximize charging time. Therefore, the EV charging annual electricity for the Campus District was provided based on studies from Meta's existing campuses in the area. The electricity for EV charging at the Project would be supplied with 100% renewable energy.

9. For years where the Campus District is only operational a proportion of the year, the annual kWh is multiplied by a scaling fraction for the Campus District land use, found in Table 16.

Abbreviations:

EV - Electric vehicle (includes battery electric or plug-in hybrid technology)
eVMT- Electric vehicle miles traveled
kWh - Kilowatt hour
sqf- Square foot
MSS - Mobile Source Strategy

References:

City of Menlo Park Nonresidential EV Charging Requirements. Published July 17, 2019. Available at: https://www.menlopark.org/DocumentCenter/View/22382/Nonresidential-EV-Charging-Requirements

California Air Resources Board. Vision Scenario Planning. Available at: https://ww2.arb.ca.gov/resources/documents/vision-scenario-planning

CalEEMod Appendix D. Available at: http://www.aqmd.gov/docs/default-source/caleemod/user-guide-2021/appendix-d2020-4-0-full-merge.pdf?sfvrsn=12

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Table 23
EV Assumptions for Town Square and the Residential/Shopping District
Willow Village - Base Project Alternative Analysis
Menlo Park, CA

EV Assumptions

Description	Units	Input
Miles Charged per Hour Charged[1]	(miles/hr)	21
Scenario1[2]	-	Reference
Scenario 2[2]	-	MSS
Number of Chargers[3]	Total #	249
Average Daily Hours for Charging per Charger[4]	hr	10
Annual Days of Charger Activity[4]	days/yr	365

eVMTs from Project Chargers - Reference Scenario

Year	Total Annual Project Trips[5,6]	Total Annual Project VMT[5,6]	% of total Fleet using Electric Fuel[2]	Annual Project EV Trips[6]	Annual Project Electric VMT[6]	Number of Project EV Chargers Available[7]	Total Annual EV Charge Hours Available from Project Chargers[8]	Number of EV Annual VMT Available from Project Chargers[8]	Project Chargers at Capacity Relative to Project Electric VMT[9]	Total Annual eVMTs Charged by Project[9]
	trips/year	VMT/year		trips/year	eVMT/year		hours/year	eVMT/year		
Partial Buildout - Year 4	443,039	3,020,721	**4.7%**	20,728	141,328	131	477,218	10,021,583	Under Capacity	**141,328**
Partial Buildout - Year 5	1,954,236	14,639,198	**5.2%**	101,736	762,106	187	683,944	14,362,828	Under Capacity	**762,106**
Partial Buildout - Year 6	3,551,151	27,909,029	**5.6%**	197,959	1,555,790	239	871,770	18,307,160	Under Capacity	**1,555,790**
Full Buildout	3,897,447	31,066,385	**5.9%**	230,919	1,840,648	249	908,850	19,085,850	Under Capacity	**1,840,648**

eVMTs from Project Chargers - Mobile Source Strategy (MSS) Scenario

Year	Total Annual Project Trips[5,6]	Total Annual Project VMT[5,6]	% of total Fleet using Electric Fuel[2]	Annual Project EV Trips[6]	Annual Project Electric VMT[6]	Number of Project EV Chargers Available[7]	Total Annual EV Charge Hours Available from Project Chargers[8]	Number of EV Annual VMT Available from Project Chargers[8]	Project Chargers at Capacity Relative to Project Electric VMT[9]	Total Annual eVMTs Charged by Project[9]
	trips/year	VMT/year		trips/year	eVMT/year		hours/year	eVMT/year		
Partial Buildout - Year 4	443,039	3,020,721	**8.3%**	36,837	251,163	131	477,218	10,021,583	Under Capacity	**251,163**
Partial Buildout - Year 5	1,954,236	14,639,198	**10.6%**	206,826	1,549,333	187	683,944	14,362,828	Under Capacity	**1,549,333**
Partial Buildout - Year 6	3,551,151	27,909,029	**13.1%**	463,984	3,646,522	239	871,770	18,307,160	Under Capacity	**3,646,522**
Full Buildout	3,897,447	31,066,385	**15.8%**	615,615	4,907,045	249	908,850	19,085,850	Under Capacity	**4,907,045**

Notes:

1. The miles charged per hour charged is representative of a typical charge rate for an EV of 6.25 kWh per hour and a fuel economy of 0.30 kWh per mile. The charge rate is based on capability of existing battery-electric vehicles and Level 2 charging stations. Reference: Chargepoint. 2017. Level Up Your EV Charging Knowledge. Available at: https://www.chargepoint.com/blog/level-your-ev-charging-knowledge/. The fuel economy is based on electric fleet data from fueleconomy.gov. Available at: https://www.fueleconomy.gov/.
2. The two scenarios analyzed are the Reference and the Mobile Source Strategy scenarios. ARB is currently preparing its 2020 Mobile Source Strategy (MSS) update to the ARB VISION Model (version 2.1). The 2020 MSS uses "scenario planning to take an integrated approach to identifying the technology trajectories and programmatic concepts" to model projected years of electric vehicle miles for assessed scenarios. The Mobile Source Strategy projects eVMTs reflecting the aspirational target identified in EO N-79-20, assuming 100% of passenger vehicle sales in California are ZEV or PHEV, and GHG emissions assumed to have reduced by 2.0% per year from 2026 to 2035. The 2020 update only considers passenger vehicles (LDA, LDT1, LDT2, and MDV). To determine the eVMT percent of the passenger vehicle fleets, the 2020 MSS update was downloaded in July 13, 2021. The increase in annual eVMTs charged by the Project from the Reference Scenario to the MSS Scenario is used to determine the eVMTs the Project can take credit for based on providing additional charging infrastructure for the state to reach aspirational EV fleet penetration.
3. The number of chargers in the Town Square and the Residential/Shopping District was provided by the Project Applicant in the Willow Village Mixed Use Development Concept Level Energy Use Summary, dated June 14, 2021, detailing chargers available for all mixed-use traffic. 249 EV Charging Stations are available to serve the 1,694 residential spaces and 500 commercial spaces.
4. Meta offers a valet service to charge EVs from 7am to 7pm, average daily hours of availability for charging per charger is conservatively assumed to be 10 hours per day. When demand is met, the full 10 hours will be used for charging, with each vehicle cycling out of the charging spot before or as the car reaches full charge. The number of chargers are available for all Town Square and the Residential/Shopping District land uses, and it is expected that there will be 10 hours a day of active charging taking place due to the frequency of turnover associated with retail, restaurant, hotel, and park land uses. Town Square and the Residential/Shopping District land uses are assumed to operate 365 days per year. Any charging inefficiencies associated with cars remaining plugged in after reaching full charge is assumed to balance out due the likelihood of more than 10 hours of activity a day associated with Town Square and the Residential/Shopping District activity.
5. Town Square and the Residential/Shopping District Total VMT and trips includes all proposed Project residential, retail, park, and hotel land uses, consistent with Table 18. Retail land uses include Hamilton Parcels North and South and are added to total VMT and trips.
6. EV Annual Trips and EV Annual VMT are determined based on Project trips and VMTs and the VISION Reference Scenario percent of Electric Fleet. These eVMTs (electric vehicle miles traveled) represents the number of project VMTs that are driven by electric vehicles.
7. 249 EV Charging Stations are proposed for the full buildout. To reflect the EV charging stations that will come online during construction in the partial years leading up to full buildout, a scaling factor was applied based on the ratio of square feet of the parking land use that is built out in a given year to the total square feet that will be built. The scaling factor for a given year was applied to the 249 chargers at full buildout. To see scaling factors used, refer to the parking land use from Table 16.
8. Total annual charge hours available from the project are determined by multiplying the average daily hours of charging per charger (10 hours) by the annual days of charger activity (365 days). The annual charge hours available from the project are then multiplied by 25 miles charged per charge hour to determine the number of eVMT available from the project.
9. The Project EV chargers for Town Square and the Residential/Shopping District land uses are determined to be at capacity, meaning used fully for all available charge hours per day, when the electric vehicle miles associated with the Project are in excess of the maximum electric vehicle miles the Project chargers can charge. If there is a surplus of chargers relative to EVs coming to the site, then the Project chargers are under-capacity, and only a fraction of chargers will be used as the number of EVs coming to the site are fewer than the total number of charger capacity. If there is a surplus of EVs coming to the site relative to the chargers at the site, all chargers will be used and the site will be at capacity. In the scenario when the chargers are at capacity, the full capacity of VMTs the site can charge are assumed to be charged.

Abbreviations:

EV - electric vehicle (includes battery electric or plug-in hybrid technology)
Hr - hour
TDM - Transportation Demand Management
VMT - vehicle miles travelled
eVMT - electric vehicle mile traveled

References:

U.S. Census. 2019. Factfinder. Available at: https://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?src=bkmk
California Air Pollution Control Officers Association (CAPCOA). California Emissions Estimator Model (CalEEMod), Version 2016.3.2. Available online at http://www.caleemod.com/
California Air Resources Board. EMFAC2021. Available at: https://arb.ca.gov/emfac/
California Air Resources Board. Vision Scenario Planning. Available at: https://ww2.arb.ca.gov/resources/documents/vision-scenario-planning

RAMBOLL

Table 24a
EV CAP Emissions Reductions Summary
Willow Village - Base Project Alternative Analysis
Menlo Park, California

Town Square and the Residential/Shopping District

Year	Scenario	Miles Charged by Project Chargers[1]	EV Trips Charged by Project Chargers[1]	eVMT from Additional Project Chargers[2]	Trip Counts from additional Project Chargers[2]	Electric VMT CAP Emissions Reduction (lb/year)[3,4]			
				eVMT/year	trips/year	ROG	NOx	PM_{10}	$PM_{2.5}$
Existing Conditions	Reference	0	0	0	0	0	0	0	0
	MSS	0	0						
Year 4	Reference	141,328	20,728	109,835	16,109	-39	-21	-0.39	-0.36
	MSS	251,163	36,837						
Year 5	Reference	762,106	101,736	787,226	105,090	-251	-134	-2.7	-2.5
	MSS	1,549,333	206,826						
Year 6	Reference	1,555,790	197,959	2,090,732	266,025	-623	-326	-6.7	-6.2
	MSS	3,646,522	463,984						
Full Buildout	Reference	1,840,648	230,919	3,066,397	384,696	-906	-475	-10	-9
	MSS	4,907,045	615,615						

Campus District

Year	eVMT from Additional Project Chargers[5]	Trip Counts from additional Project Chargers[5,6]	Electric VMT CAP Emissions Reduction (lb/year)[3,4]			
	eVMT/year	trips/year	ROG	NOx	PM_{10}	$PM_{2.5}$
Existing Conditions	1,783,182	148,319	-564	-472	-7.6	-7.0
Year 4	133,367	11,993	-35	-21	-0.44	-0.41
Year 5	2,543,916	228,769	-639	-372	-8.1	-7.5
Year 6	4,131,123	371,504	-1,004	-563	-13	-12
Full Buildout	4,350,873	391,266	-1,057	-593	-13	-12

Year	Electric VMT CAP Emissions Reduction (lb/year)			
	ROG	NOx	PM_{10}	$PM_{2.5}$
Existing Conditions	-564	-472	-7.6	-7.0
Partial Buildout- Year 4	-73	-42	-0.84	-0.77
Partial Buildout- Year 5	-890	-505	-11	-10
Partial Buildout- Year 6	-1,627	-889	-19	-18
Full Buildout	-1,963	-1,068	-23	-21

Notes:

1. Expected eVMT and trips charged by the Project chargers in Town Square and the Residential/Shopping District land uses are calculated based on the San Mateo Fleet, charger usage assumptions, ARB's Vision Model, and traffic data provided by the Transportation Engineer. For calculation details, see Table 23.

2. Emissions reductions from EV charging represent the decrease in emissions from increases in electric vehicle use due to the installation of EV chargers throughout the site. For Town Square and the Residential/Shopping District land uses, the eVMT and trips from additional Project chargers is calculated based on the difference between the MSS scenario and the baseline scenario, representing the additional eVMT due to the installation of additional chargers.

3. Emissions reductions use emission factors developed in EMFAC2021 that represent passenger vehicles (LDA, LDT1, LDT2, MCY). The eVMTs determined for Town Square and the Residential/Shopping District are based on ARB's VISION Model, which includes expected electric vehicle fleet % for passenger vehicles only (LDA, LDT1, LDT2, MCY).

4. EVs emit particulate matter brake wear and tire wear, therefore those emissions are not considered in the reductions.

5. Expected eVMT charged by additional Project chargers is measured based on anticipated charging energy usage provided by the Project Applicant. For calculation details see Table 22.

6. Trip counts from Project chargers were calculated by dividing the increased eVMTs from project chargers by the average VMTs per trip for the passenger vehicles (Cars) in a given year, based on traffic data provided by the Transportation Engineer.

Abbreviations:

eVMT - electric vehicle miles traveled
lb - pound
EV - electric vehicle
ROG - reactive organic gases
NOx - nitrogen oxides
PM_{10} - particulate matter less than 10 microns in diameter
$PM_{2.5}$ - particulate matter less than 2.5 microns in diameter

References:

California Air Resources Board. Vision Scenario Planning. Available at: https://ww2.arb.ca.gov/resources/documents/vision-scenario-planning

Table 24b
EV GHG Emissions Reductions Summary
Willow Village - Base Project Alternative Analysis
Menlo Park, California

Town Square and the Residential/Shopping District

Year	Scenario	Miles Charged by Project Chargers[1]	EV Trips Charged by Project Chargers[1]	eVMT from Additional Project Chargers[2]	Trip Counts from additional Project Chargers[2]	Electric VMT GHG Emissions Reduction (MT/year)[3,4]			
				eVMT/year	trips/year	CO_2	CH_4	N_2O	CO_2e
Full Buildout	Reference	1,840,648	230,919	3,066,397	384,696	-914	-0.033	-0.025	-922
	MSS	4,907,045	615,615						

Campus District

Year	eVMT from Additional Project Chargers[4]	Trip Counts from additional Project Chargers[4,5]	Electric VMT GHG Emissions Reduction (MT/year)[3]			
	eVMT/year	trips/year	CO_2	CH_4	N_2O	CO_2e
Existing Conditions	1,783,182	148,319	-580	-0.024	-0.019	-586
Full Buildout	4,350,873	391,266	-1,286	-0.037	-0.031	-1,296

Year	Electric VMT GHG Emissions Reduction (MT/year)			
	CO_2	CH_4	N_2O	CO_2e
Existing Conditions	-580	-0.024	-0.019	-586
Full Buildout	-2,200	-0.070	-0.056	-2,218

Notes:

1. Expected eVMT and trips charged by the Project chargers in Town Square and the Residential/Shopping District land uses are calculated based on the San Mateo Fleet, charger usage assumptions, ARB's Vision Model, and traffic data provided by the Transportation Engineer. For calculation details, see Table 23.

2. Emissions reductions from EV charging represent the decrease in emissions from increases in electric vehicle use due to the installation of EV chargers throughout the site. For Town Square and the Residential/Shopping District land uses, the eVMT and trips from additional Project chargers is calculated based on the difference between the MSS scenario and the baseline scenario, representing the additional eVMT due to the installation of additional chargers.

3. Emissions reductions use emission factors developed in EMFAC2021 that represent passenger vehicles (LDA, LDT1, LDT2, MCY). The eVMTs determined for Town Square and the Residential/Shopping District are based on ARB's VISION Model, which includes expected electric vehicle fleet % for passenger vehicles only (LDA, LDT1, LDT2, MCY).

4. Expected eVMT charged by additional Project chargers is measured based on anticipated charging energy usage provided by the Project Applicant. For calculation details see Table 22.

5. Trip counts from Project chargers were calculated by dividing the increased eVMTs from project chargers by the average VMTs per trip for the passenger vehicles (Cars) in a given year, based on traffic data provided by the Transportation Engineer.

Abbreviations:

GHG - Greenhouse Gas
CO_2 - carbon dioxide
CH_4 - methane
N_2O - Nitrous Oxide
CO_2e - Carbon dioxide equivalent
eVMT - electric vehicle miles traveled
MT - metric ton
EV - electric vehicle

References:

California Air Resources Board. Vision Scenario Planning. Available at: https://ww2.arb.ca.gov/resources/documents/vision-scenario-planning

Table 25a
Summary of Mobile CAP Emissions
Willow Village - Base Project Alternative Analysis
Menlo Park, California

Total Emissions Before Reductions:[1]

Year	CAP Emissions without Reductions (ton/year)			
	ROG	NO_x	PM_{10}[2]	$PM_{2.5}$[2]
Total Emissions by Year				
Existing Conditions[3]	5.0	8.0	4.0	0.84
Year 4	0.57	0.62	0.40	0.081
Year 5	3.8	4.1	3.1	0.62
Year 6	6.3	6.7	5.5	1.1
Full Buildout	6.8	7.3	6.0	1.2
Net Emissions by Year				
Full Buildout	**1.8**	**-0.70**	**1.9**	**0.35**

Total Emissions with Reductions:[4]

Year	CAP Emissions with Reductions (ton/year)			
	ROG	NO_x	PM_{10}[2]	$PM_{2.5}$[2]
Total Emissions by Year				
Existing Conditions[3]	5.0	8.0	4.0	0.84
Year 4	0.53	0.59	0.40	0.081
Year 5	3.3	3.8	3.1	0.61
Year 6	5.5	6.3	5.5	1.1
Full Buildout	**5.8**	**6.8**	**6.0**	**1.2**
Net Emissions by Year				
Full Buildout	**0.9**	**-1.2**	**1.9**	**0.34**

Notes:

1. Calculations of CAP emissions before reductions are shown in detail in Table 21a. Net emissions subtract the emissions from the existing conditions in 2019.
2. PM10 and PM2.5 emissions include exhaust, tire wear, brake wear, and fugitive dust. Fugitive dust emissions factors are calculated in AQTR Table 8.
3. The Existing Conditions includes EV reductions associated with existing Project Site chargers.
4. CAP Emissions after reductions account for the reductions associated with EVs as shown in Table 24a. The emissions reductions are subtracted from the total Project emissions.

Abbreviations:

lb - pound
MT - metric ton
EV - electric vehicle
ROG - reactive organic gases
NOx - nitrogen oxides
PM_{10} - particulate matter less than 10 microns in diameter
$PM_{2.5}$ - particulate matter less than 2.5 microns in diameter

References:

California ARB. 2021. Miscellaneous Processes Methodologies - Paved Entrained Road Dust. Available online at: https://ww3.arb.ca.gov/ei/areasrc/fullpdf/2021_paved_roads_7_9.pdf

California Air Resources Board. EMFAC2021. Available at: https://arb.ca.gov/emfac/

Table 25b
Summary of Mobile GHG Emissions
Willow Village - Base Project Alternative Analysis
Menlo Park, California

Total Emissions Before Reductions:[1]

Year	GHG Emissions without Reductions (MT/year)			
	CO_2	CH_4	N_2O	CO_2e
Total Emissions by Year				
Existing Conditions[2]	15,660	0.46	1.2	16,024
Full Buildout	20,186	0.60	1.0	20,498
Net Emissions				
Full Buildout	**4,525**	**0.14**	**-0.19**	**4,473**

Total Emissions with Reductions:[3]

Year	GHG Emissions with Reductions (MT/year)			
	CO_2	CH_4	N_2O	CO_2e
Total Emissions by Year				
Existing Conditions[2]	15,660	0.46	1.2	16,024
Full Buildout	17,986	0.53	0.9	18,279
Net Emissions				
Full Buildout	**2,326**	**0.074**	**-0.24**	**2,255**

Notes:

1. Calculations of GHG emissions before reductions are shown in detail in AQTR Table 21b. Net emissions subtract the emissions from the existing conditions in 2019.
2. The Existing Conditions includes EV reductions associated with existing Project Site chargers.
3. GHG Emissions after reductions account for the reductions associated with EVs as shown in Table 24b. The emissions reductions are subtracted from the total Project emissions.

Abbreviations:

GHG - Greenhouse Gas
CO_2 - carbon dioxide
CH_4 - methane
N_2O - Nitrous Oxide
CO_2e - Carbon dioxide equivalent
MT - metric ton
EV - electric vehicle

References:

California ARB. 2021. Miscellaneous Processes Methodologies - Paved Entrained Road Dust. Available online at: https://ww3.arb.ca.gov/ei/areasrc/fullpdf/2021_paved_roads_7_9.pdf

California Air Resources Board. EMFAC2021. Available at: https://arb.ca.gov/emfac/

Table 28
Energy Usage for Existing Conditions and Project Operations
Willow Village - Base Project Alternative Analysis
Menlo Park, California

Land Use	Floor Area (sqft) (DU - Residential)	Annual Electricity Use (MWh/yr)	Annual Natural Gas Use (MMBtu/yr)
Existing Conditions (2019)[1]			
All	1,923,910	12,050	30,039
Total Existing Energy Usage		**12,050**	**30,039**
Full Buildout[2,3]			
Office	713,841	10,631	0
Retail	279,386	6,106	2,966
Residential	0,523	5,095	0
Hotel	172,000	2,528	0
Parking	733,041	12,621	0
Park	403,837	38	0
Total Full Buildout Energy Usage		**37,019**	**2,966**

Notes:

1. Energy use rates for existing conditions were provided for 2019 by the Project Applicant via email on August 10, 2021.
2. Electricity and natural gas usage rates for the retail, residential, and parking land uses were provided by PAE in the June 14, 2021 memorandum. Electricity usage rates for Office, Hotel, and Park were provided by Hines on June 21, 2021. The hotel and office do not use natural gas. The electricity usage includes 27,986 MWh/year of electricity use associated with the Campus District EV charging stations, which is summarized in the parking land use category. Electricity and energy use rates for the Willow Road Retail were calculated based on the CalEEMod defaults the retail land use type in Climate Zone 5.
3. Natural gas for the project is only used for Hamilton Avenue Parcels North and South and the supermarket and restaurant land uses, which are summarized in the retail category.

Abbreviations:

CalEEMod - California Emissions Estimator Model
DU - dwelling unit
kBTU - thousand British Thermal Units
kWh - kilowatt-hour
MMBTU - million British Thermal Units
MWh - Megawatt-hour
sqft - square feet
yr - year

References:

California Air Pollution Control Officers Association (CAPCOA). California Emissions Estimator Model (CalEEMod), Version 2020.4.0. Available online at http://www.caleemod.com

Table 30
Energy Usage Emissions from Existing Conditions and Project Operations
Willow Village - Base Project Alternative Analysis
Menlo Park, California

Location	Natural Gas Emissions[1,2]					Electricity Emissions[1,2]
	ROG	NOx	PM_{10}	$PM_{2.5}$	CO_2e	
	(tons/yr)				(MT/yr)	
Existing Conditions (2019)						
All	0.16	1.5	0.11	0.11	1,613	0
Total Existing Emissions	**0.16**	**1.5**	**0.11**	**0.11**	**1,613**	**0**
Full Buildout						
Retail	1.6E-02	0.15	1.1E-02	1.1E-02	159	0
Total Full Buildout Emissions	**1.6E-02**	**0.15**	**1.1E-02**	**1.1E-02**	**159**	**0**
Partial Buildout[3]						
Total Year 4 Emissions	1.6E-03	1.5E-02	1.1E-03	1.1E-03	16	0
Total Year 5 Emissions	9.5E-03	0.086	6.6E-03	6.6E-03	94	0
Total Year 6 Emissions	0.016	0.142	0.011	0.011	156	0

Notes:

1. CAP emissions result from the combustion of natural gas. As a result, CAP emissions were only calculated for natural gas usage. In compliance with the City of Menlo Park Municipal Code, natural gas usage for the Project will be offset; however, since the carbon intensity of the offset production is not known at this time, GHG emissions from natural gas were conservatively included alongside electricity GHG emissions.
2. Emissions were calculated based on energy use, shown in Table 28, and energy emission factors, shown in AQTR Table 29. Existing electricity is sourced from PCE. Project electricity will be sourced from 100% renewable sources; as such, emissions from Project electricity use are expected to be zero. Project natural gas will only be used in retail land uses for commercial cooking equipment.
3. Partial buildout emissions were calculated from full buildout using scaling factors by land use type and year, as shown in Table 16.

Abbreviations:

CAP - Criteria Air Pollutants
CO_2e - carbon dioxide equivalents
GHG - Greenhouse Gas
MT - metric ton(s)
NOx - nitrogen oxides
PM - particulate matter
$PM_{2.5}$ - PM less than 2.5 microns in diameter
PM_{10} - PM less than 10 microns in diameter
ROG - reactive organic gases
yr - year

References:

California Air Pollution Control Officers Association (CAPCOA). California Emissions Estimator Model (CalEEMod), Version 2020.4.0. Available online at http://www.caleemod.com

Table 31
Water Usage for Existing Conditions and Project Operations
Willow Village - Base Project Alternative Analysis
Menlo Park, California

Water Usage

Land Use	CalEEMod® Land Use Subtype	Size	Size Metric	Indoor Water (million gal/year)	Outdoor Water (million gal/year)
Existing Conditions (2019)[1]					
Office	General Office Building	251,530	sqft	45	27
Commercial	Research and Development	123,870	sqft	61	0
Industrial - Warehouse	Unrefrigerated Warehouse-No Rail	500,780	sqft	116	0
Industrial - Manufacturing	Manufacturing	23,570	sqft	5.5	0
Recreational	Health Club	24,060	sqft	1.4	0.87
Light Industrial	General Light Industry	80,100	sqft	19	0
Parking	Enclosed Parking with Elevator	920,000	sqft	0	0
Full Buildout[2]					
Office		713,841	sqft	16	4.5
Retail		279,386	sqft	6.2	0.84
Residential		678,390	sqft	20	1.9
Hotel		172,000	sqft	7.6	2.5
Parking		733,041	sqft	0	0.56
Park		403,837	sqft	0	14
Partial Buildout[3]					
			Total Year 4 Usage[3]	1.1	13
			Total Year 5 Usage[3]	19	18
			Total Year 6 Usage[3]	41	24

Notes:

1. Existing water use was calculated using the CalEEMod default water consumption profile for each land use.
2. Project indoor water use rates and outdoor water use for all parcels except Willow Road Retail were provided by the Project Applicant on June 14, 2021. Indoor and outdoor water use rates for Willow Road Retail were calculated using the CalEEMod default water consumption profile for the retail land use type.
3. Partial buildout usage rates were calculated from full buildout using scaling factors by land use type and year, as shown in Table 16.

Abbreviations:

CalEEMod - California Emissions Estimator Model
gal - gallon
kWh - kilowatt-hours
ksf - thousand square feet
sqft - square feet

References:

California Air Pollution Control Officers Association (CAPCOA). California Emissions Estimator Model (CalEEMod®), Version 2020.4.0. Available online at http://www.caleemod.com

Table 32
Water Usage and Wastewater Emissions from Existing Conditions and Project Operations
Willow Village - Base Project Alternative Analysis
Menlo Park, California

Land Use	Electricity Indirect Emissions[1,2] (MT CO_2e/yr)	Septic Tank Direct Emissions[1,2] (MT CO_2e/yr)	Aerobic Direct Emissions[1,2] (MT CO_2e/yr)	Facultative Lagoon Direct Emissions[1,2] (MT CO_2e/yr)	Total Emissions (MT CO2e/yr)
Existing Conditions (2019)					
Office	37	27	24	10	98
Commercial	36	37	33	13.1	119
Industrial - Warehouse	68	71	62	25	226
Industrial - Manufacturing	3.2	3.3	2.9	1.2	10.6
Recreational	1.2	0.87	0.76	0.30	3.1
Light Industrial	11	11.3	9.9	4.0	36
Parking	0	0	0	0	0
Total Existing Emissions	**156**	**151**	**132**	**53**	**492**
Full Buildout					
Office	8	10	8	3.4	30
Retail	3.0	3.8	3.3	1.33	11.5
Residential	10	12	11	4	37
Hotel	4.1	4.6	4.1	1.6	14
Parking	0.16	0	0	0	0.16
Park	4.2	0	0	0	4.2
Total Full Buildout Emissions	**30**	**30**	**27**	**11**	**97**
Partial Buildout[3]					
Total Year 4 Emissions[3]	4.7	0.68	0.60	0.24	6.2
Total Year 5 Emissions[3]	15	12	10	4.1	41
Total Year 6 Emissions[3]	26	25	22	9	82

Notes:

1. Emissions shown in this table were calculated using default values and methods from CalEEMod Version 2020.4.0. The Water Electricity Intensity, Water Treatment Types, and Wastewater Treatment Direct Emission Factors used in the calculation can be found in Tables 9.2, 9.3 and 9.4 of Appendix D of the CalEEMod user guide, respectively. These calculations were performed using water use rates, shown in Table 31, and energy emission factors, shown in AQTR Table 29.
2. Consistent with CalEEMod, indoor water use was assumed to be processed as wastewater and outdoor water use was assumed to not be processed as wastewater.
3. Partial buildout direct emissions from Septic Tank, Aerobic, and Facultative Lagoon wastewater treatment were calculated from full buildout using scaling factors by land use type and year, as shown in Table 1. For partial buildout indirect electricity emissions from water usage and wastewater treatment, usage rates rather than emission were scaled to account for year specific energy emission factors from PG&E, as shown in AQTR Table 29.

Abbreviations:

CalEEMod - California Emissions Estimator Model
CO_2e - carbon dioxide equivalents
MT - metric ton
yr - year

References:

California Air Pollution Control Officers Association (CAPCOA). California Emissions Estimator Model (CalEEMod®), Version 2020.4.0. Available online at http://www.caleemod.com

Table 33
Solid Waste Generation for Existing Conditions and Project Operations
Willow Village - Base Project Alternative Analysis
Menlo Park, California

Solid Waste Generation[1]

Land Use	Size	Units	Solid Waste Disposal Rate (ton/year)
Existing Conditions (2019)			
Office	251,530	sqft	42
Commercial	123,870	sqft	10
Industrial - Warehouse	500,780	sqft	471
Industrial - Manufacturing	23,570	sqft	29
Recreational	24,060	sqft	137
Light Industrial	80,100	sqft	99
Parking	920,000	sqft	0
Full Buildout Conditions			
Office	713,841	sqft	119
Retail	279,386	sqft	293
Residential	0,523	DU	241
Hotel	193	Rooms	106
Parking	733,041	sqft	0
Park	403,837	sqft	0.83

Notes:

1. Solid Waste Generation Rates are from Table 10.1 of Appendix D of the CalEEMod User's Guide. An 82% diversion rate, provided by the Project Applicant via email communication dated August 2, 2021, is applied to default solid waste generation rates for the existing and project office land use to account for recycling and composting. The diversion rate is generated using data from Recology with the assumption that all bins are at 100% capacity and 0% contamination.

Abbreviations:

CalEEMod - California Emissions Estimator Model
DU - dwelling unit
sqft - square feet

References

California Air Pollution Control Officers Association (CAPCOA). California Emissions Estimator Model (CalEEMod®), Version 2020.4.0. Available online at http://www.caleemod.com

Table 34
Solid Waste Emissions from Existing Conditions and Project Operations
Willow Village - Base Project Alternative Analysis
Menlo Park, California

Solid Waste Emissions[1]

Location	CalEEMod® Land Use Subtype	CO_2 (MT/year)	CH_4 (MT/year)	CO_2e (MT/year)
Existing Conditions (2019)				
Office	General Office Building	8.5	0.51	21
Commercial	Research and Development	2.0	0.12	5.0
Industrial - Warehouse	Unrefrigerated Warehouse-No Rail	96	5.6	237
Industrial - Manufacturing	Manufacturing	5.9	0.35	15
Recreational	Health Club	28	1.6	69
Light Industrial	General Light Industry	20	1.2	50
Parking	Enclosed Parking with Elevator	0	0	0
	Total Existing Emissions	**160**	**9.5**	**397**
Full Buildout Conditions				
Office		24	1.4	60
Retail		60	3.5	148
Residential		49	2.9	121
Hotel		22	1.3	53
Parking		0	0	0
Park		0.17	0.010	0.42
	Total Full Buildout Emissions	**154**	**9.1**	**382**
Partial Buildout[2]				
	Total Year 4 Emissions[2]	6.9	0.41	17
	Total Year 5 Emissions[2]	66	3.9	164
	Total Year 6 Emissions[2]	134	7.9	332

Notes:

1. Emissions shown in this table were calculated using default values and methods from CalEEMod Version 2020.4.0. These calculations were performed using default waste use rates by land use type and an 82% diversion rate for office land use types provided by the Project Applicant, shown in Table 33, and default solid waste landfill gas emission factors from Table 10.2 of CalEEMod User's Guide Appendix D.
2. Partial buildout emissions were calculated from full buildout using scaling factors by land use type and year, as shown in Table 16.

Abbreviations:

CalEEMod - California Emissions Estimator Model
CH_4 - methane
CO_2 - carbon dioxide
CO_2e - carbon dioxide equivalents
LFG - Landfill Gas
MT - metric ton

References:

California Air Pollution Control Officers Association (CAPCOA). California Emissions Estimator Model (CalEEMod®), Version 2020.4.0. Available online at http://www.caleemod.com

Table 35
Unmitigated Architectural Coating Emissions from Existing Conditions and Project Operations
Willow Village - Base Project Alternative Analysis
Menlo Park, California

Land Use	Floor Area	Building Surface Area[1]	Application Rate[2]	Indoor Paint VOC EF[3]	Outdoor Paint VOC EF[3]	Architectural Coating VOC Emissions[4]
	(sqft)	(sqft)		(g/L)	(g/L)	(lb/yr)
Existing Conditions (2019)						
Office	251,530	503,060	10%	100	150	262
Commercial	123,870	247,740	10%	100	150	129
Industrial - Warehouse	500,780	1,001,560	10%	100	150	522
Industrial - Manufacturing	23,570	47,140	10%	100	150	25
Recreational	24,060	48,120	10%	100	150	25
Light Industrial	80,100	160,200	10%	100	150	84
Parking	920,000	55,200	10%	0	150	9.6
Total Existing Conditions Emissions						**1,057**
Full Buildout						
Office	713,841	1,427,682	10%	100	150	745
Retail	279,386	558,772	10%	100	150	291
Residential	678,390	1,831,653	10%	100	150	955
Hotel	172,000	344,000	10%	100	150	179
Parking	733,041	43,982	10%	0	150	8
Park	403,837	0	10%	0	0	0
Total Full Buildout Emissions						**2,178**
Partial Buildout[5]						
Total Year 4 Emissions[5]						56
Total Year 5 Emissions[5]						837
Total Year 6 Emissions[5]						1,787

Notes:

1. Consistent with CalEEMod Appendix A, residential building surface area was assumed to be 2.7 times the floor area, and non-residential 2 times the floor area. Also consistent with CalEEMod Appendix E, the parking painted area was assumed to be 6% of the total surface area for surface lots.
2. Consistent with CalEEMod Appendix A, 10% of all surfaces were assumed to be coated each year.
3. Consistent with CalEEMod Appendix D Table 6.1, which is based on BAAQMD Regulation 8 Rule 3 paint VOC regulations, use VOC EF of 100 g/L for flat paints, generally used indoors, and 150 g/L for all other architectural coatings.
4. Uses CalEEMod Appendix A assumption that 1 gallon of paint covers 180 square feet. Building surface area is assumed to be 75% indoors and 25% outdoors, consistent with CalEEMod Appendix A. Parking garages are assumed to have no indoor surfaces.
5. Partial buildout emissions were calculated from full buildout using scaling factors by land use type and year, as shown in Table 16.

Abbreviations:

BAAQMD - Bay Area Air Quality Management District
CalEEMod - California Emissions Estimator Model
EF - emission factor
g - grams
L - liters
lb - pound
sqft - square feet
VOC - volatile organic compound
yr - year

References:

BAAQMD. 2009. Regulation 8 Rule 3 Architectural Coatings. Accessed November 2020. Available at: https://www.baaqmd.gov/~/media/dotgov/files/rules/reg-8-rule-3-architectural-coatings/documents/rg0803_0709.pdf?la=en.

California Air Pollution Control Officers Association (CAPCOA). California Emissions Estimator Model (CalEEMod®), Version 2020.4.0. Available online at http://www.caleemod.com/

Table 36
Mitigated Architectural Coating Emissions from Existing Conditions and Project Operations
Willow Village - Base Project Alternative Analysis
Menlo Park, California

Land Use	Floor Area	Building Surface Area[1]	Application Rate[2]	Indoor Paint VOC EF[3]	Outdoor Paint VOC EF[3]	Architectural Coating VOC Emissions[4]
	(sqft)	(sqft)		(g/L)	(g/L)	(lb/yr)
Full Buildout						
Office	713,841	1,427,682	10%	10	150	298
Retail	279,386	558,772	10%	10	150	117
Residential	678,390	1,831,653	10%	10	150	382
Hotel	172,000	344,000	10%	10	150	72
Parking	733,041	43,982	10%	0	150	8
Park	403,837	0	10%	0	0	0
Total Full Buildout Emissions						**876**
Partial Buildout[5]						
Total Year 4 Emissions[5]						25
Total Year 5 Emissions[5]						338
Total Year 6 Emissions[5]						719

Notes:

1. Consistent with CalEEMod Appendix A, residential building surface area was assumed to be 2.7 times the floor area, and non-residential 2 times the floor area. Also consistent with CalEEMod Appendix E, the parking painted area was assumed to be 6% of the total surface area for surface lots.
2. Consistent with CalEEMod Appendix A, 10% of all surfaces were assumed to be coated each year.
3. Paint VOC content is consistent with or more stringent than BAAQMD Regulation 8 Rule 3 (Architectural Coatings). Emissions were estimated assuming that indoor painting will utilize "super-compliant" VOC architectural coatings that meet the more stringent limits in South Coast Air Quality Management District Rule 1113. For outdoor paint, assumed use of coatings with VOC content of 150 g/L, consistent with BAAQMD requirements. VOC was assumed to be equivalent to ROG for these purposes.
4. Uses CalEEMod Appendix A assumption that 1 gallon of paint covers 180 square feet. Building surface area is assumed to be 75% indoors and 25% outdoors, consistent with CalEEMod Appendix A. Parking garages are assumed to have no indoor surfaces.
5. Partial buildout emissions were calculated from full buildout using scaling factors by land use type and year, as shown in Table 16.

Abbreviations:

BAAQMD - Bay Area Air Quality Management District
CalEEMod - California Emissions Estimator Model
EF - emission factor
g - grams
L - liters
lb - pound
sqft - square feet
VOC - volatile organic compound
yr - year

References:

BAAQMD. 2009. Regulation 8 Rule 3 Architectural Coatings. Accessed November 2020. Available at: https://www.baaqmd.gov/~/media/dotgov/files/rules/reg-8-rule-3-architectural-coatings/documents/rg0803_0709.pdf?la=en.

California Air Pollution Control Officers Association (CAPCOA). California Emissions Estimator Model (CalEEMod®), Version 2020.4.0. Available online at http://www.caleemod.com/

South Coast Air Quality Management District. Super Compliant Architectural Coatings per Rule 1113. Accessed July 2021. Available at: http://www.aqmd.gov/home/programs/business/business-detail?title=super-compliant-coatings&parent=other-low-voc-products.

Table 38
Consumer Product Emissions from Existing Conditions and Project Operations
Willow Village - Base Project Alternative Analysis
Menlo Park, California

Land Use	Building Area (sqft)	Consumer Products VOC EF[1,2] (lb/sqft/day)	Days per Year	Consumer Products VOC emissions (lb/yr)
Existing Conditions (2019)				
Office	251,530	1.8E-05	365	1,670
Commercial	123,870	1.8E-05	365	822
Industrial - Warehouse	500,780	1.8E-05	365	3,324
Industrial - Manufacturing	23,570	1.8E-05	365	156
Recreational	24,060	1.8E-05	365	160
Light Industrial	80,100	1.8E-05	365	532
Parking	920,000	3.5E-07	365	119
			Existing Conditions Emissions	**6,783**
Full Buildout				
Office	713,841	1.8E-05	365	4,739
Retail	279,386	1.8E-05	365	1855
Residential	678,390	1.8E-05	365	4,503
Hotel	172,000	1.8E-05	365	1,142
Parking	733,041	3.5E-07	365	95
Park	403,837	5.2E-08	365	7.6
			Total Full Buildout Emissions	**12,340**
Partial Buildout[3]				
			Total Year 4 Emissions[3]	390
			Total Year 5 Emissions[3]	5,121
			Total Year 6 Emissions[3]	10,421

Notes:

1. The consumer products VOC EF for office, retail, and residential land uses was derived using methodology consistent with CalEEMod with adjusted parameters for San Mateo County, as described in AQTR Table 37. The default emissions factor assumes 2020 consumer products VOC inventory for San Mateo County. The default building square footage used is from 2010, which was updated to 2020 using population growth of San Mateo County, as shown in AQTR Table 37.
2. Consumer product VOC EFs for parking and open space were taken from CalEEMod 2020.4.0. These defaults take into account pesticide and fertilizer use in city parks and degreaser use in parking areas.
3. Partial buildout emissions were calculated from full buildout using scaling factors by land use type and year, as shown in Table 16.

Abbreviations:

ARB - Air Resources Board
CalEEMod - California Emissions Estimator Model
EF - emission factor
lb - pound
sqft - square feet
VOC - volatile organic compound
yr - year

References:

California Air Pollution Control Officers Association (CAPCOA). California Emissions Estimator Model (CalEEMod®), Version 2020.4.0. Available online at http://www.caleemod.com/

Table 40
Summary of Unmitigated Operational CAP Emissions
Willow Village - Base Project Alternative Analysis
Menlo Park, California

Emissions Source	CAP Emissions[1]							
	(ton/year)				(lb/day)[2]			
	ROG	NO_x	PM_{10}	$PM_{2.5}$	ROG	NO_x	PM_{10}	$PM_{2.5}$
Existing Conditions (2019)[3]								
Architectural Coating	0.53	--	--	--	2.9	--	--	--
Consumer Products	3.4	--	--	--	19	--	--	--
Landscaping	2.9E-03	2.8E-04	1.1E-04	1.1E-04	0.016	1.5E-03	6.0E-04	6.0E-04
Natural Gas Use	0.16	1.5	0.11	0.11	0.89	8.1	0.61	0.61
Mobile	5.0	8.0	4.0	0.84	27	44	22	4.6
Emergency Generators	2.9E-03	0.051	2.7E-03	2.7E-03	0.016	0.28	0.015	0.015
Total Emissions	**9.1**	**10**	**4.1**	**0.95**	**50**	**52**	**23**	**5.2**
Full Buildout Conditions[4]								
Architectural Coating	1.1	--	--	--	6.0	--	--	--
Consumer Products	6.2	--	--	--	34	--	--	--
Landscaping	0.39	0.15	0.071	0.071	2.1	0.81	0.39	0.39
Natural Gas Use[5]	0.016	0.15	1.1E-02	1.1E-02	0.088	0.80	0.061	0.061
Mobile	5.8	6.8	6.0	1.2	32	37	33	6.4
Emergency Generators	0.15	1.3	0.047	0.047	0.79	7.0	0.26	0.26
Total Emissions	**14**	**8.3**	**6.1**	**1.3**	**75**	**46**	**33**	**7.1**
Partial Buildout Emissions[6]								
Total Year 4 Emissions	1.1	1.0	0.48	0.15	6.2	5.7	2.6	0.84
Total Year 5 Emissions	7	4.7	3.2	0.71	37	26	18	3.9
Total Year 6 Emissions	12	7.5	5.6	1.2	66	41	31	6.6
Net Emissions[7]								
Net Year 4 Emissions	-7.9	-8.5	-3.7	-0.80	-44	-47	-20	-4.4
Net Year 5 Emissions	-2.3	-4.9	-0.9	-0.24	-13	-27	-5.1	-1.31
Net Year 6 Emissions	3.1	-2.0	1.5	0.2	17	-11	8.0	1.4
Net Full Buildout Emissions	**4.6**	**-1.2**	**1.9**	**0.4**	**25**	**-6.5**	**11**	**1.9**

Notes:

1. Emissions estimated using methods consistent with CalEEMod® version 2020.4.0.
2. Operational emissions shown represent activity and emissions across 365 days per year.
3. Operational emissions from existing conditions were calculated using CalEEMod® default data and emission factors based on the existing land use type and energy use rates provided by the Project Applicant.
4. Full buildout operational emissions are based on electricity, natural gas, and water usage rates provided by the Project Applicant alongside CalEEMod® defaults for architectural coating, consumer product, landscaping, and waste emissions. Net emissions were calculated as the difference between full buildout emissions and existing condition emissions.
5. Natural gas usage for the project would be used exclusively for supermarket and commercial cooking.
6. Partial buildout emissions were calculated from full buildout using scaling factors by land use type and year, as shown in Table 16.
7. Net emissions were calculated as the difference between partial buildout emissions for each year and existing condition emissions.

Abbreviations:

BAAQMD - Bay Area Air Quality Management District
CalEEMod® - California Emissions Estimator Model
CAP - Criteria Air Pollutant
CO_2e - carbon dioxide equivalent
GHG - greenhouse gas
lb - pounds
MT - metric ton
NOx - nitrogen oxides
PM - particulate matter
$PM_{2.5}$ - PM less than 2.5 microns in diameter
PM_{10} - PM less than 10 microns in diameter
PM - particulate matter
ROG - reactive organic gases
yr - year

References:

CalEEMod® Version 2020.4.0 Available Online at: http://www.caleemod.com

Table 41
Summary of Mitigated Operational CAP Emissions
Willow Village - Base Project Alternative Analysis
Menlo Park, California

Emissions Source	CAP Emissions[1]							
	(ton/year)				(lb/day)[2]			
	ROG	NO_x	PM_{10}	$PM_{2.5}$	ROG	NO_x	PM_{10}	$PM_{2.5}$
Existing Conditions (2019)[3]								
Architectural Coating	0.53	--	--	--	2.9	--	--	--
Consumer Products	3.4	--	--	--	19	--	--	--
Landscaping	2.9E-03	2.8E-04	1.1E-04	1.1E-04	0.016	1.5E-03	6.0E-04	6.0E-04
Natural Gas Use	0.16	1.5	0.11	0.11	0.89	8.1	0.61	0.61
Mobile	5.0	8.0	4.0	0.84	27	44	22	4.6
Emergency Generators	2.9E-03	0.051	2.7E-03	2.7E-03	0.016	0.28	0.015	0.015
Total Emissions	**9.1**	**9.5**	**4.1**	**0.95**	**50**	**52**	**23**	**5.2**
Full Buildout Conditions[4]								
Architectural Coating	0.44	--	--	--	2.4	--	--	--
Consumer Products	6.2	--	--	--	34	--	--	--
Landscaping	0.39	0.15	0.071	0.071	2.1	0.81	0.39	0.39
Natural Gas Use[5]	0.016	0.15	1.1E-02	1.1E-02	0.088	0.80	0.061	0.061
Mobile	5.8	6.8	6.0	1.2	32	37	33	6.4
Emergency Generators	0.15	1.3	0.047	0.047	0.79	7.0	0.26	0.26
Total Emissions	**13**	**8.3**	**6.1**	**1.3**	**71**	**46**	**33**	**7.1**
Partial Buildout Emissions[6]								
Total Year 4 Emissions	1.1	1.0	0.48	0.15	6.1	5.7	2.6	0.84
Total Year 5 Emissions	6.5	4.7	3.2	0.71	36	26	18	3.9
Total Year 6 Emissions	12	7.5	5.6	1.2	64	41	31	6.6
Net Emissions[7]								
Net Year 4 Emissions	-8.0	-8.5	-3.7	-0.80	-44	-47	-20	-4.4
Net Year 5 Emissions	-2.6	-4.9	-0.93	-0.24	-14	-27	-5.1	-1.3
Net Year 6 Emissions	2.5	-2.0	1.5	0.25	14	-11	8.0	1.4
Net Full Buildout Emissions	**3.9**	**-1.2**	**1.9**	**0.35**	**22**	**-6.5**	**11**	**1.9**

Notes:

1. Emissions estimated using methods consistent with CalEEMod® version 2020.4.0. The mitigated scenario for the Project is equivalent to the unmitigated scenario for all sources except Architectural Coating, as shown in Table 36.
2. Operational emissions shown represent activity and emissions across 365 days per year.
3. Operational emissions from existing conditions were calculated using CalEEMod® default data and emission factors based on the existing land use type and energy use rates provided by the Project Applicant.
4. Full buildout operational emissions are based on electricity, natural gas, and water usage rates provided by the Project Applicant alongside CalEEMod® defaults for architectural coating, consumer product, landscaping, and waste emissions.
5. Natural gas usage for the project would be used exclusively for supermarket and commercial cooking.
6. Partial buildout emissions were calculated from full buildout using scaling factors by land use type and year, as shown in Table 16.
7. Net emissions were calculated as the difference between partial buildout emissions for each year and existing condition emissions.

Abbreviations:

BAAQMD - Bay Area Air Quality Management District
CalEEMod® - California Emissions Estimator Model
CAP - Criteria Air Pollutant
CO_2e - carbon dioxide equivalent
GHG - greenhouse gas
lb - pounds
MT - metric ton
NOx - nitrogen oxides
PM - particulate matter
$PM_{2.5}$ - PM less than 2.5 microns in diameter
PM_{10} - PM less than 10 microns in diameter
PM - particulate matter
ROG - reactive organic gases
yr - year

References:

CalEEMod Version 2020.4.0 Available Online at: http://www.caleemod.com

Table 42
Summary of Operational GHG Emissions
Willow Village - Base Project Alternative Analysis
Menlo Park, California

Emissions Source	GHG Emissions[1] (MT/yr) CO_2e	
	Existing Conditions (2019)[2]	Full Buildout Conditions[3]
Landscaping	0.063	22
Electricity Use	0	0
Natural Gas Use[4]	1,613	159
Water Use	492	97
Waste Disposed	397	382
Emergency Generators	8.5	399
Total Emissions	**2,509**	**1,059**
	Net Emissions[5]	**-1,450**

Notes:

1. Emissions estimated using methods consistent with CalEEMod® version 2020.4.0.
2. Operational emissions from existing conditions were calculated using CalEEMod® default data and emission factors based on the existing land use type and energy use rates provided by the Project Applicant.
3. Full buildout operational emissions are based on electricity, natural gas, and water usage rates provided by the Project Applicant alongside CalEEMod® defaults for architectural coating, consumer product, landscaping, and waste emissions.
4. Natural gas usage for the project would be used exclusively for supermarket and commercial cooking.
5. Net emissions were calculated as the difference between partial buildout emissions for each year and existing condition emissions.

Abbreviations:

CalEEMod® - California Emissions Estimator Model
CO_2e - carbon dioxide equivalent
GHG - greenhouse gas
MT - metric ton
yr - year

References:

CalEEMod® Version 2020.4.0 Available Online at: http://www.caleemod.com

Table 43
Unmitigated Construction and Net New Operational CAP Emissions by Year
Willow Village - Base Project Alternative Analysis
Menlo Park, California

Year	Average Daily CAP Emissions[1,2] (lb/day)											
	Construction Emissions Only				Net Operational Emissions[3]				Construction and Net Operational Emissions[3]			
	ROG	NO_x	PM_{10}	$PM_{2.5}$	ROG	NO_x	PM_{10}	$PM_{2.5}$	ROG	NO_x	PM_{10}	$PM_{2.5}$
Year 1	0.12	2.4	0.053	0.050	-50	-52	-23	-5.2	-50	-50	-23	-5.2
Year 2	4.5	64	1.4	1.3	-50	-52	-23	-5.2	-45	11	-21	-3.9
Year 3	19	124	5.8	5.4	-50	-52	-23	-5.2	-31	72	-17	0.15
Year 4	52	53	2.3	2.1	-44	-47	-20	-4.4	8.5	7.0	-18	-2.3
Year 5	63	45	2.1	2.0	-13	-27	-5.1	-1.3	50	18	-3.0	0.67
Year 6	31	11	0.60	0.55	17	-11	8.0	1.4	48	-0.32	9	1.9
Full Buildout	--	--	--	--	25	-6.5	11	1.9	25	-6.5	11	1.9
BAAQMD Significance Threshold									54	54	82	54

Notes:

1. Emissions estimated using methods consistent with CalEEMod® version 2020.4.0.
2. Net new operational emissions are scaled for partial years of phased operations by the percent that each parcel is operational for each year relative to full buildout, as shown in Table 16.
3. Unmitigated construction emissions can be found in Table 13. Net unmitigated operational emissions were calculated by subtracting the emissions from the existing conditions from the project emissions, as reported in Table 42.

Abbreviations:

CalEEMod - California Emissions Estimator Model
CAP - Criteria Air Pollutant
lb - pounds
NO_x - nitrogen oxides
PM - particulate matter
$PM_{2.5}$ - PM less than 2.5 microns in diameter
PM_{10} - PM less than 10 microns in diameter
ROG - reactive organic gases
yr - year

References:

CalEEMod Version 2020.4.0 Available Online at: http://www.caleemod.com

Table 44
Mitigated Construction and Net New Operational CAP Emissions by Year
Willow Village - Base Project Alternative Analysis
Menlo Park, California

Year	Average Daily CAP Emissions[1,2] (lb/day)											
	Construction Emissions Only[3]				Net Operational Emissions Only[3]				Construction and Net Operational Emissions[3]			
	ROG	NO_x	PM_{10}	$PM_{2.5}$	ROG	NO_x	PM_{10}	$PM_{2.5}$	ROG	NO_x	PM_{10}	$PM_{2.5}$
Year 1	0.064	1.9	0.019	0.019	-50	-52	-23	-5.2	-50	-50	-23	-5.2
Year 2	2.7	45	0.49	0.48	-50	-52	-23	-5.2	-47	-7.6	-22	-4.7
Year 3	10	47	0.78	0.77	-50	-52	-23	-5.2	-40	-5.1	-22	-4.4
Year 4	24	29	0.38	0.37	-44	-47	-20	-4.4	-20	-18	-20	-4.0
Year 5	28	22	0.26	0.25	-14	-27	-5.1	-1.3	14	-4.7	-4.9	-1.1
Year 6	13	4.8	0.060	0.058	14	-11	8.0	1.4	27	-6.2	8.1	1.4
Full Buildout	--	--	--	--	22	-6.5	11	1.9	22	-6.5	11	1.9
BAAQMD Significance Threshold									54	54	82	54

Notes:

1. Emissions estimated using methods consistent with CalEEMod® version 2020.4.0.
2. Net new operational emissions are scaled for partial years of phased operations by the percent that each parcel is operational for each year relative to full buildout, as shown in Table 16.
3. Mitigated construction emissions can be found in Table 14. Net mitigated operational emissions were calculated by subtracting the emissions from the existing conditions from the project emissions, as reported in Table 43.

Abbreviations:

CalEEMod - California Emissions Estimator Model
CAP - Criteria Air Pollutant
lb - pounds
NO_x - nitrogen oxides
PM - particulate matter
$PM_{2.5}$ - PM less than 2.5 microns in diameter
PM_{10} - PM less than 10 microns in diameter
ROG - reactive organic gases
yr - year

References:

CalEEMod Version 2020.4.0 Available Online at: http://www.caleemod.com